Data Repository item 2003090

TABLE DR1. $^{40}Ar/^{39}Ar$ ANALYTICAL DATA

T(°C)	^{40}Ar x10^{-14} moles		^{39}Ar x10^{-14} moles		^{38}Ar x10^{-14} moles		^{37}Ar x10^{-14} moles		^{36}Ar x10^{-14} moles		$^{40}Ar^*/^{39}Ar$	$^{39}Ar_K$ (% of total)	$\%^{40}Ar^*$	K/Ca	Age (Ma)	±	2ω
SV97-03 plagioclase; wt. = 68.60 mg, J = 0.00510																	
650	432.784	± 20.972	60.472	± 0.145	0.865	± 0.066	630.457	± 0.903	0.537	± 0.035	5.376	1.71	74.6	5.32	48.80	±	1.01
700	947.887	± 21.329	116.484	± 0.205	1.735	± 0.061	1210.429	± 1.058	1.371	± 0.038	5.503	3.29	67.2	5.30	49.93	±	0.87
750	1121.891	± 21.472	178.045	± 0.315	2.435	± 0.060	1875.880	± 1.771	1.061	± 0.038	5.395	5.04	85.1	5.38	48.97	±	0.58
800	1414.567	± 21.319	253.882	± 0.425	3.258	± 0.060	2622.603	± 2.388	0.895	± 0.035	5.368	7.18	95.8	5.27	48.73	±	0.40
850	1683.464	± 21.027	306.137	± 0.425	4.177	± 0.082	3205.380	± 3.337	1.013	± 0.037	5.370	8.66	97.1	5.34	48.74	±	0.39
900	1676.615	± 20.538	308.296	± 0.371	3.979	± 0.055	3213.712	± 2.829	0.870	± 0.034	5.450	8.72	99.6	5.32	49.46	±	0.35
1000	2125.293	± 20.071	386.615	± 0.519	5.222	± 0.099	3974.093	± 2.834	1.215	± 0.036	5.402	10.93	97.7	5.24	49.03	±	0.36
1200	1701.954	± 21.315	301.756	± 0.382	4.064	± 0.077	2996.018	± 3.601	1.055	± 0.036	5.412	8.53	95.4	5.07	49.12	±	0.37
1300	1120.573	± 21.330	201.135	± 0.397	2.686	± 0.143	2019.855	± 2.290	0.680	± 0.046	5.386	5.69	96.1	5.12	48.88	±	0.85
1400	3779.884	± 21.081	685.409	± 0.664	9.438	± 0.110	7060.086	± 6.970	1.991	± 0.052	5.493	19.38	99.0	5.26	49.84	±	0.33
1501	4076.351	± 26.038	737.721	± 1.490	10.131	± 0.099	7802.813	± 15.944	2.007	± 0.056	5.581	20.86	100.4	5.40	50.63	±	0.37
															Integrated age = 49.53 Ma		
												Weighted mean plateau age (650-1300°C) = 49.5 ± 0.16 Ma					
SV97-06 groundmass; wt. = 75.79 mg, J = 0.005005																	
450	13468.380	± 31.987	318.743	± 0.506	17.297	± 0.243	177.315	± 1.907	40.283	± 0.148	4.950	0.91	11.7	0.28	44.15	±	4.44
550	7263.328	± 23.044	407.198	± 0.513	11.887	± 0.368	305.199	± 1.503	17.362	± 0.107	5.293	1.16	29.7	0.38	47.17	±	1.58
600	4402.659	± 22.217	613.974	± 0.539	10.148	± 0.118	347.295	± 1.448	3.342	± 0.096	5.603	1.75	78.2	0.29	49.89	±	0.35
650	7143.126	± 23.962	1161.739	± 1.270	15.935	± 0.101	634.126	± 1.577	1.889	± 0.094	5.707	3.31	92.9	0.28	50.81	±	0.27
700	15923.800	± 25.448	2698.800	± 2.043	35.632	± 0.180	1267.615	± 2.169	1.791	± 0.096	5.737	7.68	97.3	0.24	51.07	±	0.23
750	27748.730	± 32.999	4825.425	± 3.802	62.335	± 0.264	1723.035	± 2.569	1.976	± 0.098	5.653	13.73	98.4	0.18	50.34	±	0.22
800	37699.030	± 27.753	6742.938	± 3.036	86.329	± 0.334	1919.112	± 2.155	1.486	± 0.095	5.543	19.19	99.2	0.15	49.37	±	0.21
850	38759.850	± 27.768	7045.407	± 3.645	92.238	± 0.296	1820.060	± 2.133	0.745	± 0.092	5.486	20.05	99.8	0.13	48.86	±	0.20
900	29271.480	± 31.908	5358.671	± 4.314	71.126	± 0.286	1303.611	± 2.121	0.529	± 0.093	5.448	15.25	99.8	0.12	48.53	±	0.21
1000	20786.730	± 24.517	3781.511	± 2.486	59.562	± 0.200	1042.477	± 1.887	0.670	± 0.091	5.462	10.76	99.4	0.14	48.65	±	0.21
1300	6714.360	± 22.860	1215.220	± 0.832	25.365	± 0.130	2577.831	± 3.006	1.383	± 0.097	5.357	3.46	96.9	1.08	47.73	±	0.23
1550	5447.775	± 30.800	964.120	± 0.889	30.011	± 0.213	2406.788	± 2.263	1.274	± 0.130	5.459	2.74	96.5	1.27	48.63	±	0.26
															Integrated age = 49.23 Ma		
															No age plateau		

TABLE DR1. CONTINUED

T(°C)	^{40}Ar x10^{-14} moles		^{39}Ar x10^{-14} moles		^{38}Ar x10^{-14} moles		^{37}Ar x10^{-14} moles		^{36}Ar x10^{-14} moles		$^{40}Ar^*/^{39}Ar$	$^{39}Ar_K$ (% of total)	$\%^{40}Ar^*$	K/Ca	Age (Ma)	±	2ω
SV97-07 groundmass; wt.= 71.46 mg, J = 0.005005																	
450	13658.840	±	31.549	230.876 ±	0.615	16.196 ±	0.141	87.040 ±	1.954	41.400 ±	0.148	6.199	0.69	10.5	0.19	55.13 ±	6.33
550	6257.067	±	23.226	686.062 ±	0.776	13.954 ±	0.598	309.388 ±	1.574	8.031 ±	0.102	5.692	2.06	62.4	0.23	50.68 ±	0.54
600	16881.340	±	26.027	1335.805 ±	1.325	25.796 ±	0.205	748.523 ±	1.552	32.603 ±	0.112	5.466	4.01	43.3	0.29	48.69 ±	0.93
650	12988.790	±	23.396	2339.360 ±	1.823	32.499 ±	0.185	1297.846 ±	1.868	0.582 ±	0.103	5.518	7.03	99.5	0.28	49.15 ±	0.22
700	26443.720	±	31.338	4817.827 ±	3.584	63.461 ±	0.258	2191.370 ±	3.726	0.887 ±	0.097	5.466	14.48	99.7	0.23	48.69 ±	0.21
750	35932.570	±	32.605	6600.013 ±	4.864	86.030 ±	0.439	2205.513 ±	2.520	0.906 ±	0.098	5.425	19.84	99.7	0.17	48.34 ±	0.21
800	38333.410	±	30.187	7034.966 ±	3.423	92.030 ±	0.280	1616.219 ±	2.129	0.689 ±	0.095	5.433	21.14	99.8	0.12	48.40 ±	0.20
850	28352.790	±	24.841	5197.764 ±	2.542	69.573 ±	0.329	1013.455 ±	2.159	0.796 ±	0.092	5.420	15.62	99.4	0.10	48.29 ±	0.20
900	13797.760	±	22.927	2496.357 ±	1.492	34.959 ±	0.179	510.300 ±	1.580	0.791 ±	0.092	5.445	7.50	98.6	0.10	48.50 ±	0.21
1000	9360.891	±	22.273	1648.095 ±	0.942	27.032 ±	0.133	445.796 ±	1.538	1.584 ±	0.092	5.412	4.95	95.4	0.14	48.22 ±	0.22
1300	3871.521	±	22.880	694.581 ±	0.721	12.374 ±	0.591	5748.343 ±	6.625	1.531 ±	0.152	5.594	2.09	99.9	4.22	49.81 ±	0.82
1550	1019.482	±	30.607	191.987 ±	0.322	3.784 ±	0.198	2967.095 ±	2.927	0.835 ±	0.130	5.280	0.58	98.5	7.89	47.06 ±	0.65
															Integrated age = 48.59 Ma		
															Weighted mean plateau age (750-1000°C) = 48.35 ± 0.10 Ma		
SV98-02 groundmass; wt. = 74.32 mg, J = 0.005005																	
450	23187.770	±	36.657	275.586 ±	0.410	40.404 ±	0.208	204.005 ±	1.909	72.455 ±	0.171	6.507	1.14	7.7	0.38	57.82 ±	9.07
550	3554.317	±	22.729	353.631 ±	0.398	7.811 ±	0.291	249.489 ±	1.383	6.060 ±	0.100	5.039	1.46	50.1	0.36	44.94 ±	0.75
650	12056.230	±	22.706	2001.960 ±	1.270	27.490 ±	0.180	1267.605 ±	2.018	4.583 ±	0.097	5.392	8.27	89.6	0.32	48.04 ±	0.24
750	43445.270	±	32.997	7880.009 ±	3.862	100.662 ±	0.350	2364.657 ±	2.698	3.468 ±	0.100	5.402	32.55	98.1	0.15	48.13 ±	0.21
850	35159.740	±	26.193	6444.495 ±	3.089	82.232 ±	0.236	2126.273 ±	2.242	1.413 ±	0.096	5.412	26.62	99.3	0.17	48.22 ±	0.20
950	12267.450	±	23.853	2242.606 ±	1.659	29.504 ±	0.179	1360.038 ±	1.776	0.845 ±	0.090	5.403	9.26	98.8	0.31	48.14 ±	0.21
1050	14265.890	±	24.101	2608.916 ±	1.766	35.467 ±	0.174	1522.681 ±	2.031	1.157 ±	0.091	5.379	10.78	98.4	0.30	47.93 ±	0.21
1150	9632.468	±	22.511	1733.759 ±	0.832	26.967 ±	0.142	6235.326 ±	5.237	2.203 ±	0.096	5.469	7.16	98.3	1.83	48.71 ±	0.22
1250	1038.622	±	22.788	175.825 ±	0.380	3.963 ±	0.105	4505.755 ±	4.635	1.262 ±	0.109	5.882	0.73	97.9	13.07	52.34 ±	0.98
1550	2942.942	±	30.872	489.194 ±	0.723	10.806 ±	0.296	8859.349 ±	12.643	2.747 ±	0.132	5.835	2.02	95.9	9.24	51.93 ±	0.43
															Integrated age = 48.34 Ma		
															Weighted mean plateau age (650-1050°C) = 48.10 ± 0.10 Ma		

TABLE DR1. CONTINUED

T(°C)	^{40}Ar x10^{-14} moles		^{39}Ar x10^{-14} moles		^{38}Ar x10^{-14} moles		^{37}Ar x10^{-14} moles		^{36}Ar x10^{-14} moles		$^{40}Ar^*/^{39}Ar$	$^{39}Ar_K$ (% of total)	$\%^{40}Ar^*$	K/Ca	Age (Ma)	± 2ω
SV97-14 groundmass; wt. = 75.31 mg, J = 0.005038																
450	15236.450	± 44.523	231.204	± 0.664	16.300	± 0.130	113.330	± 1.888	44.625	± 0.147	8.901	0.56	13.5	0.25	79.14	± 6.93
550	4638.677	± 22.826	487.230	± 0.550	8.403	± 0.203	229.647	± 1.409	6.118	± 0.099	5.843	1.17	61.4	0.24	52.34	± 0.58
600	6250.020	± 22.300	1095.571	± 0.884	14.011	± 0.109	524.895	± 1.495	0.971	± 0.095	5.476	2.63	96.1	0.24	49.10	± 0.23
650	11926.660	± 26.529	2135.443	± 2.261	26.997	± 0.159	932.672	± 2.167	0.836	± 0.095	5.499	5.13	98.5	0.22	49.30	± 0.23
700	27443.580	± 33.311	4984.903	± 4.756	64.056	± 0.250	1776.962	± 2.332	1.071	± 0.099	5.465	11.98	99.4	0.18	49.00	± 0.21
750	27566.830	± 33.816	5041.895	± 4.192	63.858	± 0.274	1378.783	± 1.825	0.687	± 0.097	5.444	12.12	99.7	0.14	48.81	± 0.21
800	40003.020	± 33.706	7356.447	± 3.702	94.001	± 0.285	1767.184	± 2.000	0.839	± 0.093	5.418	17.68	99.7	0.12	48.58	± 0.21
850	39002.420	± 26.802	7178.785	± 3.093	91.578	± 0.295	1482.406	± 1.827	0.834	± 0.094	5.410	17.26	99.7	0.11	48.51	± 0.20
900	25651.680	± 24.953	4709.031	± 3.204	59.884	± 0.350	866.361	± 1.540	0.594	± 0.092	5.419	11.32	99.6	0.09	48.60	± 0.21
1000	20232.200	± 24.799	3699.890	± 2.539	48.776	± 0.247	692.655	± 1.577	1.025	± 0.090	5.396	8.89	98.8	0.10	48.39	± 0.21
1300	22997.670	± 26.842	4157.409	± 5.355	59.288	± 0.257	6102.748	± 5.852	3.608	± 0.102	5.390	9.99	97.4	0.75	48.33	± 0.23
1550	3766.666	± 160.787	520.622	± 0.974	9.361	± 0.653	1546.643	± 11.89	3.427	± 0.669	5.527	1.25	76.3	1.52	49.55	± 0.42
Integrated age = 48.89 Ma																
Weighted mean plateau age (800-1300°C) = 48.49 ± 0.10 Ma																
SV97-29 amphibole; wt. = 43.03 mg, J = 0.005140																
850	893.021	± 5.641	27.599	± 0.145	1.097	± 0.046	49.718	± 0.234	2.563	± 0.026	5.052	0.51	15.6	0.92	46.25	± 4.71
950	703.593	± 5.505	65.346	± 0.239	3.554	± 0.063	268.067	± 0.619	1.301	± 0.024	5.216	1.21	48.3	2.09	47.73	± 1.47
1000	1807.944	± 5.550	268.590	± 0.408	14.165	± 0.117	1249.929	± 2.487	1.492	± 0.026	5.466	4.97	81.0	2.37	49.98	± 0.52
1050	12941.180	± 9.434	2191.276	± 1.769	114.897	± 0.374	10418.657	± 9.526	6.380	± 0.039	5.429	40.59	91.7	2.43	49.66	± 0.26
1070	12095.890	± 9.452	2174.894	± 1.493	112.072	± 0.335	10386.136	± 8.357	3.917	± 0.032	5.415	40.28	97.1	2.44	49.53	± 0.24
1090	1979.404	± 5.924	335.876	± 0.424	16.140	± 0.278	1594.601	± 1.467	1.024	± 0.021	5.375	6.22	91.0	2.42	49.17	± 0.37
1110	536.303	± 5.587	67.605	± 0.170	3.643	± 0.073	361.109	± 0.559	0.719	± 0.021	5.223	1.25	65.6	2.73	47.79	± 1.24
1120	547.420	± 5.586	72.330	± 0.262	3.870	± 0.068	403.784	± 0.841	0.744	± 0.040	4.979	1.34	65.6	2.85	45.59	± 1.55
1130	270.747	± 5.519	25.972	± 0.145	1.390	± 0.051	148.025	± 0.372	0.430	± 0.022	6.001	0.48	57.4	2.91	54.80	± 2.97
1140	211.310	± 5.548	15.276	± 0.111	0.883	± 0.038	89.743	± 0.314	0.404	± 0.020	6.505	0.28	46.9	3.00	59.33	± 4.25
1150	277.733	± 5.570	24.940	± 0.107	1.324	± 0.038	139.889	± 0.376	0.590	± 0.022	4.597	0.46	41.1	2.86	42.13	± 2.98
1175	699.742	± 5.741	78.990	± 0.267	4.159	± 0.095	454.302	± 0.870	1.090	± 0.031	5.244	1.46	59.0	2.93	47.98	± 1.54
1200	450.545	± 5.725	50.211	± 0.117	2.771	± 0.058	357.642	± 0.655	0.743	± 0.021	5.176	0.93	57.4	3.63	47.37	± 1.55
Integrated age = 49.47 Ma																
Weighted mean plateau age (1000-1090°C) = 49.55 ± 0.16 Ma																

TABLE DR1. CONTINUED

T(°C)	^{40}Ar x10^{-14} moles		^{39}Ar x10^{-14} moles		^{38}Ar x10^{-14} moles		^{37}Ar x10^{-14} moles		^{36}Ar x10^{-14} moles		$^{40}Ar^*/^{39}Ar$	$^{39}Ar_K$ (% of total)	$\%^{40}Ar^*$	K/Ca	Age (Ma)	± 2ω
SV97-33 biotite; wt. = 20.84 mg, J = 0.005005																
600	6119.220	± 14.420	171.936	± 0.388	14.161	± 0.165	31.353	± 0.206	18.503	± 0.047	3.801	0.92	10.7	0.09	34.00	± 3.90
700	3782.114	± 14.906	326.705	± 0.476	14.308	± 0.257	44.903	± 0.294	6.938	± 0.033	5.308	1.76	45.9	0.07	47.30	± 0.88
800	12261.080	± 19.292	1910.961	± 1.609	63.885	± 0.215	31.013	± 0.240	5.683	± 0.031	5.534	10.28	86.3	0.01	49.29	± 0.27
850	13129.680	± 16.464	2278.671	± 1.556	73.489	± 0.299	24.790	± 0.222	1.850	± 0.022	5.518	12.26	95.9	0.01	49.15	± 0.22
900	16825.280	± 16.814	2903.182	± 2.546	94.779	± 0.262	29.010	± 0.259	2.731	± 0.024	5.513	15.62	95.2	0.01	49.11	± 0.22
925	11736.640	± 17.705	2011.411	± 1.661	64.842	± 0.255	21.436	± 0.188	1.965	± 0.022	5.542	10.82	95.1	0.01	49.36	± 0.23
950	8479.698	± 16.314	1464.030	± 1.116	46.859	± 0.245	15.700	± 0.187	1.356	± 0.022	5.514	7.88	95.3	0.01	49.12	± 0.23
975	6411.402	± 14.203	1114.283	± 0.954	34.539	± 0.145	13.940	± 0.144	1.013	± 0.019	5.481	5.99	95.4	0.01	48.83	± 0.22
1000	5711.707	± 13.760	993.664	± 0.847	31.987	± 0.205	15.150	± 0.186	0.905	± 0.019	5.475	5.35	95.3	0.01	48.77	± 0.22
1025	6097.714	± 14.155	1060.341	± 0.794	32.672	± 0.156	40.523	± 0.207	1.054	± 0.021	5.455	5.70	95.0	0.02	48.60	± 0.23
1050	6237.502	± 15.217	1087.878	± 0.905	34.158	± 0.157	12.478	± 0.188	0.957	± 0.020	5.470	5.85	95.5	0.01	48.73	± 0.23
1100	13036.440	± 14.757	2299.490	± 1.505	72.959	± 0.323	27.819	± 0.225	1.748	± 0.023	5.441	12.37	96.1	0.01	48.47	± 0.21
1150	5453.604	± 14.510	965.297	± 0.963	30.251	± 0.186	11.512	± 0.247	0.504	± 0.019	5.491	5.19	97.3	0.01	48.91	± 0.23
Integrated age = 48.81 Ma																
Weighted mean plateau age (800-950°C) = 49.20 ± 0.10 Ma																
SV97-37 biotite; wt. = 24.97 mg, J = 0.004970																
600	3869.566	± 14.253	92.605	± 0.336	5.383	± 0.141	8.271	± 0.162	11.412	± 0.041	5.373	0.36	12.9	0.05	47.54	± 4.59
700	3070.049	± 14.526	392.565	± 0.496	14.728	± 0.162	8.381	± 0.127	3.108	± 0.027	5.478	1.51	70.1	0.01	48.46	± 0.44
800	12384.230	± 15.475	2056.025	± 1.667	71.276	± 0.186	16.373	± 0.163	3.849	± 0.025	5.466	7.90	90.8	0.00	48.36	± 0.23
850	11647.750	± 16.754	2086.229	± 1.612	71.227	± 0.342	9.323	± 0.112	1.035	± 0.021	5.432	8.02	97.4	0.00	48.06	± 0.21
900	13208.000	± 16.219	2393.215	± 1.722	82.171	± 0.396	9.322	± 0.183	0.687	± 0.019	5.430	9.19	98.5	0.00	48.04	± 0.21
925	11357.260	± 15.826	2059.699	± 1.502	69.673	± 0.278	13.364	± 0.225	0.513	± 0.021	5.436	7.91	98.7	0.00	48.09	± 0.21
950	9428.071	± 14.662	1705.139	± 0.954	58.148	± 0.283	13.141	± 0.186	0.589	± 0.019	5.423	6.55	98.2	0.00	47.98	± 0.21
975	7415.587	± 14.391	1338.081	± 0.739	44.618	± 0.225	9.323	± 0.140	0.370	± 0.018	5.456	5.14	98.5	0.00	48.27	± 0.21
1000	6762.953	± 13.744	1219.896	± 0.848	41.247	± 0.225	10.681	± 0.186	0.375	± 0.018	5.449	4.69	98.4	0.00	48.21	± 0.21
1025	7939.871	± 14.924	1432.318	± 0.903	48.870	± 0.206	24.485	± 0.228	0.683	± 0.020	5.399	5.50	97.5	0.01	47.77	± 0.21
1050	10204.180	± 15.471	1836.973	± 1.450	64.327	± 0.296	24.366	± 0.247	0.749	± 0.024	5.431	7.06	97.9	0.01	48.05	± 0.21
1100	23989.350	± 15.672	4341.770	± 3.533	156.982	± 0.360	128.846	± 0.465	1.505	± 0.023	5.420	16.68	98.2	0.02	47.96	± 0.21
1150	22160.310	± 49.888	4023.712	± 5.524	158.279	± 0.605	457.097	± 1.231	1.074	± 0.025	5.433	15.46	98.7	0.06	48.07	± 0.24
1200	5731.296	± 18.927	1050.538	± 2.117	42.779	± 0.223	149.137	± 0.561	0.201	± 0.020	5.406	4.04	99.2	0.07	47.83	± 0.26
Integrated age = 48.06 Ma																
Weighted mean plateau age (600-1000°C) = 48.14 ± 0.08 Ma																

Note: Data corrected for blanks, radioactive decay, mass discrimination and interfering Ca-, Cl- and K-derived isotopes of argon

TABLE DR2. MAJOR ELEMENT, TRACE ELEMENT, AND ISOTOPIC COMPOSITIONS OF SUNLIGHT ROCKS

Strat Group:	Black Mountain + Jim Mountain									Lower Trout Peak Trachyandesite										
Sample:	SV97-23	SV97-24	SV97-25	SV97-28	SV98-4	SV97-3	SV97-6	SV97-29	SV97-5	SV97-7	SV97-13	SV97-12	SV97-8	SV97-9	SV97-11	SV98-9	SV97-19	SV97-18	SV97-10	SV97-15
Unnormalized major element results (wt%)																				
SiO_2	51.73	52.02	52.44	53.75	55.59	56.23	56.41	56.42	56.73	52.77	52.81	52.89	52.93	53.00	53.03	53.91	53.95	54.30	54.32	54.53
Al_2O_3	16.31	16.50	16.93	16.95	16.53	18.47	17.22	17.19	17.63	15.87	16.25	15.76	15.62	15.58	16.14	17.25	16.96	16.96	17.99	18.37
$Fe_2O_3^T$	9.91	9.96	9.51	8.86	8.67	7.20	8.73	7.93	7.82	9.37	8.42	9.16	9.21	9.10	9.28	7.12	8.24	8.59	7.79	7.47
TiO_2	0.85	0.86	0.87	0.87	1.02	0.86	1.00	0.71	0.97	0.88	0.81	0.80	0.80	0.79	0.94	0.90	0.95	0.93	0.91	0.90
MnO	0.15	0.15	0.14	0.11	0.11	0.10	0.09	0.13	0.12	0.13	0.12	0.14	0.12	0.12	0.13	0.13	0.12	0.12	0.09	0.10
CaO	9.13	9.16	8.60	7.89	6.22	6.24	5.28	6.75	5.29	7.51	8.14	8.40	8.22	8.39	7.57	6.64	7.10	6.87	6.90	5.93
MgO	6.34	6.72	5.23	4.96	4.50	2.78	3.12	4.54	3.61	6.04	6.57	6.53	6.56	6.70	5.64	4.08	3.81	4.28	3.52	3.51
K_2O	2.16	2.98	3.13	3.34	3.91	4.19	4.12	3.63	4.20	3.05	3.02	2.97	2.90	2.91	3.30	3.82	3.76	3.63	3.71	3.79
Na_2O	2.99	2.10	2.14	2.66	3.24	2.89	3.55	2.86	3.52	3.66	3.21	3.01	3.09	3.01	3.55	4.20	3.77	3.80	3.91	4.30
P_2O_5	0.31	0.32	0.35	0.37	0.56	0.45	0.63	0.35	0.61	0.55	0.46	0.43	0.42	0.42	0.51	0.64	0.51	0.51	0.57	0.62
Total	99.89	100.45	99.00	99.38	99.79	98.95	99.53	100.16	99.89	99.29	99.36	99.65	99.45	99.61	99.58	98.06	98.66	99.48	99.14	98.90
Trace elements (ppm)																				
Ni	21	26	13	12	34	16	21	13	19	46	63	55	58	56	55	36	27	27	26	20
Cr	110	112	57	75	67	39	48	34	43	149	151	167	167	167	180	114	75	65	38	32
Sc	29	31	25	22	13	14	15	21	11	22	16	25	26	26	26	23	21	19	13	16
V	229	226	204	214	181	155	148	165	153	203	171	207	198	191	214	204	226	206	190	184
Ba	955	933	1295	1596	1652	1590	1724	1525	1666	1591	1526	1365	1319	1334	1849	2835	2003	1955	1979	1984
Rb	57	51	39	58	107	62	113	64	119	90	81	60	66	61	102	115	91	87	98	118
Sr	866	853	1114	1004	1178	1365	1194	1153	1225	999	1087	969	900	921	1321	1678	1471	1466	1324	1355
Zr	102	101	125	116	236	160	253	133	252	149	143	124	121	119	154	172	166	165	171	184
Y	16	17	15	15	20	15	21	13	20	16	14	14	14	13	17	17	16	16	15	16
Nb	4.9	5.0	7.3	6.5	15.6	8.6	17.2	5.6	17.3	8.7	6.5	6.3	5.6	5.7	8.5	8.6	8.6	8.4	8.8	9.1
Pb	12	9	13	14	27	23	32	15	26	17	19	12	13	13	16	25	20	20	25	23
Th	5	7	7	6	16	5	17	7	14	5	8	2	5	4	4	9	10	9	6	7
La	*28*		*42.0*				*78.4*									58.2				
Ce	*50.5*		*77.0*				*148.2*									98.6				
Pr																10.78				
Nd	*21*		*36.0*				*52.1*									40.9				
Sm	*5.3*		*5.5*				*8.89*									6.68				
Eu	1.58		1.73				*2.35*									2.05				
Gd																4.90				
Tb	*0.5*		*0.68*				*1.01*									0.65				
Dy																3.36				
Ho																0.64				
Er																1.64				
Tm																0.23				
Yb	*1.7*		*1.8*				*2.5*									1.4				
Lu	*0.29*		*0.21*				*0.31*									0.23				
$(^{87}Sr/^{86}Sr)_i$			0.704337				0.704285									0.704798				
$(^{143}Nd/^{144}Nd)_i$			0.511501				0.511767									0.511689				

TABLE DR2. CONTINUED

Strat Group:	Lower Trout Peak Trachy.			Upper Trout Peak Trachyandesite						Copper Lakes Intrusive Series										
Sample:	SV97-14	SV98-1	SV97-16	SV98-3	SV98-4	SV98-6	SV98-8	SV98-5	SV98-2	SV97-39	SV99-10	SV97-41	SV99-3	SV99-5	SV99-15	SV99-9	SV99-6	SV99-11	SV97-37	SV99-4
Unnormalized major element results (wt%)																				
SiO_2	54.89	55.37	55.39	49.61	49.90	50.15	50.55	50.64	51.49	52.21	52.30	53.74	55.94	56.12	56.22	57.95	59.75	60.47	60.98	60.99
Al_2O_3	18.36	17.04	18.40	12.15	12.15	12.20	12.80	12.30	16.79	16.62	16.12	18.26	19.04	19.69	20.07	20.14	18.24	18.60	18.10	19.38
$Fe_2O_3^T$	7.69	6.93	7.13	8.42	8.31	8.45	8.49	8.63	8.81	9.96	8.84	5.91	5.65	4.69	6.00	4.65	4.62	4.27	4.42	4.31
TiO_2	0.92	0.87	0.89	0.69	0.69	0.69	0.69	0.69	0.88	1.04	0.99	0.79	0.60	0.47	0.65	0.48	0.41	0.37	0.40	0.39
MnO	0.12	0.17	0.10	0.14	0.14	0.14	0.14	0.14	0.13	0.21	0.17	0.11	0.14	0.23	0.07	0.12	0.12	0.09	0.09	0.06
CaO	5.73	5.66	5.77	8.24	8.55	8.63	7.82	8.40	8.15	7.05	7.65	5.25	4.22	2.91	2.32	2.94	3.41	2.90	3.26	1.84
MgO	3.47	3.17	2.67	13.46	13.57	13.48	12.47	12.90	5.12	4.61	5.17	2.71	2.80	1.98	2.35	1.74	2.09	1.69	2.08	0.82
K_2O	3.83	3.48	3.84	2.73	2.66	2.93	3.57	2.16	3.13	3.55	3.82	4.76	5.27	5.41	4.71	5.71	5.87	6.43	5.95	6.27
Na_2O	4.24	4.66	4.35	2.08	2.32	1.82	1.98	3.03	3.41	3.43	3.83	5.39	4.62	5.75	5.85	4.83	4.44	4.47	4.47	5.32
P_2O_5	0.57	0.68	0.59	0.51	0.51	0.50	0.54	0.52	0.68	0.78	0.76	0.67	0.61	0.39	0.45	0.44	0.31	0.29	0.30	0.19
Total	99.25	97.36	98.54	97.52	98.28	98.49	98.51	99.41	98.58	99.46	98.89	96.92	98.28	97.25	98.24	98.55	98.94	99.29	99.75	99.38
Trace elements (ppm)																				
Ni	6	54	9	399	390	388	378	400	48	8	33	15	13	4	10	5	19	18	22	3
Cr	19	144	21	828	846	836	751	839	80	31	94	31	27	10	15	8	53	44	49	6
Sc	9	16	19	23	26	25	20	26	22	17	22	11	7	9	14	9	6	8	8	4
V	197	184	168	168	174	177	184	175	193	253	251	164	123	80	99	92	83	77	72	78
Ba	2242	2963	2122	2035	2009	1990	2161	2058	3036	2594	2486	2998	2627	2723	3436	2500	3212	2605	2515	1566
Rb	101	127	117	74	98	105	147	153	134	89	113	137	135	174	165	126	123	126	125	124
Sr	1453	1456	1454	979	997	917	1002	961	1410	2107	1967	2335	2686	2212	1905	2816	2198	1935	1830	1259
Zr	178	162	183	120	120	117	123	120	160	195	160	217	196	181	159	206	241	217	237	169
Y	17	16	16	13	14	14	13	14	17	21	18	15	12	9	10	12	14	12	13	7
Nb	8.5	8.2	10.0	6.1	5.1	6.1	6.7	5.9	8.2	11.3	12.1	17.0	20.5	17.3	17	18.8	17.8	17.0	24.6	16.6
Pb	23	23	20	13	17	17	18	18	25	15	22	24	40	56	73	33	35	41	16	34
Th	11	6	7	7	5	5	3	3	5	5	9	7	16	12	9	17	15	15	18	13
La				*30.2*	31.4			33.2	45.0	*58.5*					45.25					26.24
Ce				*57.1*	56.7	*113*		57.9	79.9	*109.5*					72.85					40.08
Pr					6.44			6.59	8.91	-					7.47					4.17
Nd				*27.0*	25.9			26.7	36.1	*41.0*					25.71					14.38
Sm				*5.15*	5.11			5.27	6.63	*8.2*					4.09					2.38
Eu				1.51	1.54			1.56	2.01	*2.5*					1.34					0.96
Gd					4.00			4.13	5.23	-					2.58					1.56
Tb				*0.57*	0.53			0.55	0.69	*0.8*					0.33					0.22
Dy					2.78			2.86	3.56	-					1.83					1.28
Ho					0.51			0.53	0.65	-					0.34					0.25
Er					1.29			1.31	1.63	-					0.90					0.69
Tm					0.18			0.18	0.22	-					0.14					0.11
Yb				*1.5*	1.1			1.1	1.3	*2.2*					0.88					0.73
Lu				*0.20*	0.18			0.18	0.22	*0.3*					0.15					0.12
$(^{87}Sr/^{86}Sr)_i$				0.705079				0.704967	0.704970	0.705210										
$(^{143}Nd/^{144}Nd)_i$				0.511722	0.511742			0.511741	0.511637	0.511742										

TABLE DR2. CONTINUED

Strat Group:	Copper Lakes Intrusive Series				Dikes													
Sample:	SV99-1	SV99-16	SV97-38	SV99-7	SV97-31	SV98-18	SV99-17	SV98-20	SV98-11	SV97-30	SV98-13	SV98-7	SV97-22	SV98-17	SV97-2	SV98-12	SV97-33	SV99-18
Unnormalized major element results (wt%)																		
SiO_2	61.22	62.94	63.76	64.13	51.99	52.07	52.64	52.66	53.25	53.73	53.75	53.81	54.84	55.19	55.24	57.38	60.58	76.54
Al_2O_3	18.24	17.68	17.14	18.10	16.03	14.50	13.75	15.46	17.26	17.56	17.94	17.31	19.68	19.61	18.10	19.44	17.93	13.38
$Fe_2O_3^T$	4.46	3.42	3.52	3.26	8.82	7.48	8.30	8.37	6.66	7.12	6.32	8.69	5.69	5.24	7.76	4.54	4.22	0.24
TiO_2	0.39	0.26	0.31	0.32	1.00	0.75	0.79	0.88	0.83	0.84	0.84	0.96	0.86	0.84	0.92	0.65	0.38	0.01
MnO	0.11	0.08	0.11	0.06	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.15	0.09	0.10	0.11	0.10	0.10	B.D.
CaO	3.27	2.30	2.79	2.13	7.19	8.46	8.14	7.64	4.85	5.21	4.50	7.53	5.54	4.94	5.20	3.67	3.48	2.52
MgO	1.70	0.88	1.60	1.05	5.16	9.55	8.05	4.58	3.87	3.76	3.31	3.92	2.56	2.09	3.02	1.48	1.74	0.09
K_2O	6.25	5.91	5.72	5.95	3.36	2.78	2.64	3.71	4.20	3.44	4.29	3.62	3.89	5.73	4.48	5.79	4.36	3.99
Na_2O	4.43	5.63	4.19	4.43	4.61	3.35	4.70	4.69	6.01	6.52	6.03	3.12	5.39	3.68	4.43	4.78	5.55	2.88
P_2O_5	0.28	0.15	0.18	0.22	0.76	0.50	0.64	0.64	0.76	0.80	0.78	0.60	0.58	0.55	0.56	0.43	0.26	0.03
Total	100.07	99.10	99.14	99.42	98.29	99.06	99.14	98.11	97.05	98.31	97.09	99.11	98.54	97.42	99.26	98.25	98.60	99.68
Trace elements (ppm)																		
Ni	16	10	23	16	51	242	148	67	37	40	32	28	23	8	7	4	18	2
Cr	39	21	49	33	120	505	353	164	108	69	70	86	32	10	17	1	41	B.D.
Sc	7	4	6	3	22	23	21	21	12	11	7	22	7	9	17	8	5	B.D.
V	86	62	58	53	238	173	198	192	182	204	165	234	136	146	197	77	78	6
Ba	2545	2465	3210	3189	2907	2486	2783	2737	3949	3566	4068	2104	3361	2721	3821	3195	2545	1059
Rb	127	123	125	122	135	89	102	151	174	207	161	69	119	98	120	140	121	116
Sr	2001	1507	2167	2214	1526	1052	1218	1251	1236	1421	1574	1299	1756	1319	1019	1244	2115	742
Zr	215	353	246	202	180	137	119	160	173	179	190	148	220	180	160	206	262	21
Y	12	14	12	10	17	15	13	16	17	17	15	17	16	15	17	19	13	3
Nb	17.7	20.5	23.7	20.2	9.8	7.0	6.4	9.2	10.3	11.6	11.4	7.2	13.0	10.8	10.0	13.1	19.0	1.0
Pb	24	44	44	23	24	20	25	21	36	32	35	16	31	23	24	24	28	25
Th	16	23	17	22	9	5	6	8	6	8	8	7	8	9	7	10	16	39
La			*70.5*	70.01		36.9		35.5	59.6					61.5		59.5	*66.0*	77.2
Ce			*111.1*	102.16		65.3		62.7	101.0					104.1		101.0	*107.0*	122.54
Pr				9.57		7.20		6.92	10.89					11.05		10.79	-	11.62
Nd			*37.6*	30.80		27.9		27.6	41.0					41.7		39.9	*40.5*	39.26
Sm			*4.65*	4.39		5.52		5.54	7.04					6.81		6.60	*5.2*	5.77
Eu			1.27	1.22		1.59		1.65	2.14					2.02		2.08	*1.47*	0.77
Gd				2.82		4.09		4.22	5.08					4.64		4.79	-	3.18
Tb			*0.55*	0.38		0.57		0.59	0.64					0.61		0.65	*0.73*	0.30
Dy				2.05		2.97		3.13	3.20					3.25		3.47	-	1.10
Ho				0.41		0.54		0.60	0.58					0.60		0.65	-	0.15
Er				1.11		1.38		1.54	1.48					1.52		1.70	-	0.29
Tm				0.17		0.19		0.22	0.21					0.22		0.25	-	0.03
Yb			*1.4*	1.15		1.1		1.3	1.2					1.3		1.6	*1.2*	0.2
Lu			*0.19*	0.19		0.18		0.21	0.21					0.22		0.26	*0.14*	0.03
$(^{87}Sr/^{86}Sr)_i$			0.704212					0.705126	0.705137					0.704544		0.704734	0.704270	-
$(^{143}Nd/^{144}Nd)_i$			0.511974					0.511679	0.511641					0.511637		0.511961	0.511952	-

Note: Major and trace elements Ni-Th by XRF. REE in normal type by ICP-MS, REE in *italic type* by INAA. Initial isotopic ratios calculated at 48.75 Ma. B.D. - below detection

TABLE DR3. ANALYSES OF OLIVINE PHENOCRYSTS IN SUNLIGHT BASALTIC LAVAS

Sample:	SV98-3																
Grain:	1c	2c	2r	3c	4c	5c	5r	6c	6r	7c	8c	9c	10c	11c	11r	12c	13c
SiO_2	39.57	39.27	38.42	39.18	38.65	39.05	38.37	39.22	38.81	39.30	39.04	39.53	39.04	40.76	39.54	38.40	39.39
TiO_2	0.02	0.01	0.05	0.01	0.01	0.00	0.04	0.02	0.02	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.03
Al_2O_3	0.03	0.03	0.03	0.04	0.03	0.03	0.04	0.03	0.02	0.03	0.04	0.04	0.05	0.04	0.02	0.03	0.02
FeO	16.74	16.66	16.77	17.49	17.25	17.41	16.64	17.33	16.74	17.20	16.73	16.62	16.43	9.79	16.12	17.03	16.96
MnO	0.31	0.30	0.32	0.31	0.39	0.33	0.29	0.29	0.30	0.26	0.33	0.29	0.26	0.14	0.33	0.29	0.30
MgO	44.03	44.35	44.04	43.38	43.90	43.77	44.49	43.88	44.30	43.48	44.29	44.20	44.47	50.02	44.43	43.84	43.79
CaO	0.20	0.27	0.25	0.18	0.26	0.14	0.27	0.18	0.26	0.23	0.18	0.25	0.18	0.06	0.20	0.20	0.21
NiO	0.27	0.19	0.22	0.28	0.19	0.25	0.23	0.25	0.22	0.28	0.28	0.26	0.30	0.37	0.23	0.27	0.25
Fo	82	83	82	82	82	82	83	82	83	82	83	83	83	90	83	82	82

Sample:	SV98-4														
Grain:	1c	2c	3c	4c	5c	6c	7c	8c	9c	10c	10r	11c	11r	12c	13c
SiO_2	38.86	39.32	39.54	39.12	38.49	39.06	38.58	38.74	38.53	39.46	38.45	38.79	38.84	38.33	39.24
TiO_2	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.03	0.00	0.03	0.03	0.02	0.02	0.00	0.00
Al_2O_3	0.02	0.04	0.03	0.02	0.03	0.03	0.04	0.05	0.03	0.02	0.03	0.05	0.05	0.05	0.03
FeO	16.48	16.95	14.08	16.78	16.73	16.54	16.85	17.45	17.13	14.17	21.06	17.56	18.24	16.61	16.72
MnO	0.34	0.34	0.18	0.33	0.30	0.32	0.35	0.31	0.30	0.26	0.39	0.31	0.41	0.29	0.34
MgO	44.21	43.61	46.68	44.04	44.14	44.28	44.10	43.46	43.84	46.32	40.77	43.44	42.87	44.15	44.31
CaO	0.28	0.19	0.09	0.22	0.19	0.17	0.26	0.20	0.19	0.08	0.25	0.17	0.27	0.22	0.23
NiO	0.23	0.19	0.37	0.21	0.20	0.25	0.25	0.25	0.24	0.26	0.14	0.29	0.19	0.21	0.23
Fo	83	82	86	82	83	83	82	82	82	85	78	82	81	83	83

Sample:	SV98-5													
Grain:	1c	1r	2c	2r	3c	4c	5c	6c	7c	8c	9c	10c	11c	11r
SiO_2	38.45	39.12	39.83	39.13	38.88	39.34	39.14	39.49	38.78	39.46	38.71	39.54	39.14	39.33
TiO_2	0.03	0.04	0.02	0.00	0.04	0.00	0.02	0.00	0.00	0.06	0.00	0.03	0.02	0.00
Al_2O_3	0.04	0.09	0.02	0.02	0.04	0.06	0.03	0.05	0.03	0.04	0.05	0.04	0.04	0.06
FeO	17.41	16.79	13.91	14.97	16.35	17.34	16.61	17.74	16.46	17.05	16.77	17.00	16.40	16.68
MnO	0.28	0.36	0.25	0.28	0.33	0.33	0.35	0.30	0.35	0.32	0.32	0.35	0.30	0.27
MgO	42.92	43.56	46.25	45.75	43.86	43.35	44.00	43.29	43.85	43.81	44.06	44.05	43.87	43.85
CaO	0.19	0.24	0.19	0.16	0.30	0.22	0.25	0.18	0.27	0.21	0.26	0.23	0.25	0.27
NiO	0.18	0.21	0.25	0.23	0.24	0.23	0.20	0.26	0.25	0.24	0.28	0.23	0.16	0.19
Fo	82	82	86	85	83	82	83	81	83	82	82	82	83	82

Note: c = core analyses; r = rim analyses

TABLE DR4. ANALYSES OF PLAGIOCLASE IN SUNLIGHT BASALTIC AND SHOSHONITIC LAVAS

Sample:	SV98-5																			
Grain:	1c	1r	2c	2r	3c	3r	4c	4r	5c	5r	6c	6r	7c	7r	8c	8r	9c	9r	10c	10r
SiO_2	50.48	52.00	50.93	51.46	50.73	51.88	51.04	51.12	50.36	51.08	51.32	51.13	51.62	51.82	51.84	51.54	51.09	51.69	51.79	51.89
Al_2O_3	28.84	28.40	29.61	29.29	29.30	28.92	29.44	29.05	29.06	29.15	28.96	28.64	28.65	28.39	28.38	28.42	29.09	28.41	28.35	28.28
Fe_2O_3	1.12	0.90	1.00	1.10	0.94	1.05	0.92	1.00	1.03	0.97	0.92	1.00	0.89	0.97	0.93	0.92	0.95	1.11	1.03	1.09
CaO	13.07	11.94	13.34	12.33	13.00	12.21	12.85	12.57	13.03	12.64	12.54	12.16	12.06	11.84	11.95	12.25	12.83	11.78	11.87	11.87
SrO	0.49	0.52	0.52	0.45	0.52	0.55	0.48	0.54	0.46	0.45	0.48	0.56	0.47	0.54	0.53	0.54	0.56	0.48	0.50	0.48
BaO	0.21	0.22	0.17	0.21	0.18	0.31	0.24	0.25	0.24	0.34	0.24	0.20	0.30	0.26	0.26	0.27	0.19	0.45	0.28	0.30
Na_2O	3.39	3.68	3.25	3.81	3.48	4.04	3.43	3.49	3.39	3.80	3.55	3.81	3.65	3.91	3.76	3.82	3.49	4.29	3.69	4.09
K_2O	0.86	1.09	0.86	0.36	0.90	0.37	0.98	1.03	0.87	0.55	1.00	0.96	1.11	0.88	1.17	0.88	0.99	0.45	1.18	0.83
An	64	59	65	62	63	60	62	61	63	62	61	59	59	58	58	59	62	57	58	58

Sample:	SV98-4													
Grain:	1c	1r	2c	2r	3c	3r	4c	4r	5c	5r	6c	6r	7c	7r
SiO_2	51.69	54.06	51.35	61.67	51.02	52.10	51.47	51.29	51.08	52.20	50.48	52.83	50.71	50.89
Al_2O_3	29.15	26.69	29.60	22.09	29.53	29.15	29.58	30.00	29.68	29.25	29.54	27.65	29.85	29.97
Fe_2O_3	0.93	0.73	0.83	0.67	0.90	0.87	0.88	0.98	0.92	0.79	0.82	1.00	0.86	0.91
CaO	11.79	10.00	12.61	3.81	12.57	11.83	12.99	13.14	12.62	12.32	12.69	10.63	12.87	12.69
SrO	0.39	0.41	0.51	0.11	0.46	0.48	0.46	0.48	0.54	0.44	0.50	0.45	0.51	0.51
BaO	0.25	0.71	0.33	0.67	0.25	0.27	0.25	0.23	0.24	0.30	0.24	0.43	0.24	0.24
Na_2O	4.24	4.87	3.71	6.41	3.80	4.33	3.60	3.77	3.85	4.25	4.03	5.04	3.68	3.94
K_2O	0.42	1.77	0.70	4.63	0.66	0.32	0.68	0.40	0.61	0.34	0.30	0.41	0.69	0.27
An	58	47	61	18	61	58	63	63	61	59	61	51	62	62

Sample:	SV98-3									
Grain:	1c	1r	2c	2r	3c	3r	4c	4r	5c	5r
SiO_2	51.10	52.10	51.35	51.31	51.17	55.02	52.19	52.15	51.19	55.17
Al_2O_3	29.29	29.04	29.18	29.86	29.60	27.22	28.92	29.07	29.43	27.43
Fe_2O_3	0.81	0.87	1.11	0.88	0.96	1.06	0.67	0.86	0.80	0.94
CaO	12.39	12.00	12.72	12.89	12.70	10.06	11.83	12.00	12.52	9.44
SrO	0.49	0.46	0.55	0.51	0.48	0.40	0.44	0.43	0.50	0.41
BaO	0.27	0.29	0.26	0.21	0.15	0.53	0.28	0.25	0.21	0.52
Na_2O	3.73	4.18	3.59	3.96	3.72	5.73	3.75	4.39	3.84	5.80
K_2O	0.80	0.78	0.96	0.30	0.69	0.41	1.12	0.28	0.65	0.46
An	61	58	61	62	62	47	58	58	61	45

Sample:	SV98-2									
Grain:	1c	1r	2c	2r	3c	3r	4c	4r	5c	5r
SiO_2	47.58	50.05	45.84	49.36	45.46	48.87	46.22	49.77	47.06	51.43
Al_2O_3	32.63	30.14	32.73	30.52	33.51	31.42	32.68	30.98	32.79	29.83
Fe_2O_3	0.80	1.14	0.98	0.88	0.86	0.93	0.89	0.89	0.76	0.73
CaO	16.02	13.17	16.44	13.69	17.15	14.96	16.83	14.26	16.67	12.87
SrO	0.39	0.32	0.39	0.45	0.39	0.39	0.43	0.37	0.40	0.41
BaO	0.15	0.29	0.22	0.15	0.15	0.12	0.13	0.17	0.07	0.24
Na_2O	2.12	3.45	1.73	3.24	1.39	2.65	1.39	3.00	1.72	3.71
K_2O	0.11	0.21	0.09	0.24	0.09	0.09	0.24	0.23	0.10	0.26
An	79	66	82	68	86	74	85	71	83	64

Sample:	SV97-7									
Grain:	1c	1r	2c	2r	3c	3r	4c	4r	5c	5r
SiO_2	50.29	52.43	49.93	52.00	48.12	51.84	48.55	51.51	52.8	47.55
Al_2O_3	30.86	29.11	30.89	29.53	31.86	29.25	31.52	29.02	28.51	31.24
Fe_2O_3	0.75	0.75	0.74	0.73	0.77	0.79	0.94	0.85	0.80	0.70
CaO	14.23	12.36	14.41	12.85	15.9	12.49	15.03	12.55	12.01	15.07
SrO	0.24	0.32	0.24	0.36	0.31	0.30	0.35	0.35	0.28	0.29
BaO	0.08	0.13	0.14	0.08	0.10	0.07	0.10	0.20	0.17	0.08
Na_2O	3.07	4.03	2.82	3.79	2.22	3.96	2.49	3.9	4.04	2.4
K_2O	0.41	0.71	0.42	0.62	0.29	0.65	0.20	0.65	0.74	0.29
An	70	60	71	62	78	61	75	61	59	76

TABLE DR4. CONTINUED

Sample:	SV97-13									
Grain:	1c	1r	2c	2r	3c	3r	4c	4r	5c	5r
SiO_2	49.46	53.94	48.79	53.45	51.34	53.81	52.74	55.13	52.17	55.15
Al_2O_3	31.14	27.78	31.22	27.60	28.98	27.97	28.59	27.17	28.61	27.22
Fe_2O_3	0.88	1.07	0.80	1.20	1.12	0.98	0.87	0.97	0.78	1.11
CaO	14.86	11.36	14.89	11.00	12.66	11.27	11.78	10.51	12.00	10.47
SrO	0.29	0.26	0.30	0.25	0.21	0.21	0.26	0.26	0.29	0.26
BaO	0.11	0.22	0.09	0.17	0.17	0.18	0.14	0.21	0.14	0.26
Na_2O	2.60	4.51	2.68	4.4	3.73	4.44	4.03	4.98	3.89	4.89
K_2O	0.41	0.78	0.41	0.97	0.57	0.76	0.88	0.90	0.80	0.85
An	73	55	73	54	62	55	58	51	59	51

Sample:	SV97-24									
Grain:	1c	1r	2c	2r	3c	3r	4c	4r	5c	5r
SiO_2	48.94	51.44	49.37	54.52	51.06	52.16	48.01	52.46	51.47	51.53
Al_2O_3	31.08	29.47	30.26	27.28	30.26	28.12	30.09	28.65	29.56	28.91
Fe_2O_3	0.96	1.02	1.04	1.03	0.73	1.46	2.08	0.98	1.06	1.10
CaO	14.72	13.27	13.83	10.51	13.99	12.23	14.82	12.24	13.35	12.69
SrO	0.16	0.10	0.18	0.11	0.15	0.14	0.13	0.11	0.15	0.14
BaO	0.15	0.16	0.03	0.19	0.06	0.13	0.10	0.06	0.10	0.13
Na_2O	2.70	3.82	3.14	5.21	3.45	3.94	2.22	4.15	3.64	3.81
K_2O	0.26	0.43	0.33	0.49	0.33	0.48	0.37	0.55	0.36	0.46
An	73	64	69	51	68	61	76	60	65	63

Sample:	SV97-22							
Grain:	1c	1r	2c	2r	3c	3r	4c	4r
SiO_2	51.82	52.49	50.47	53.65	51.71	53.49	53.37	52.68
Al_2O_3	29.1	29.04	30.07	27.13	28.95	28.48	28.43	28.87
Fe_2O_3	0.76	0.79	0.78	0.74	0.71	0.73	0.79	0.79
CaO	12.48	12.22	13.42	9.13	12.5	11.49	11.51	12.08
SrO	0.38	0.40	0.39	0.26	0.43	0.41	0.37	0.47
BaO	0.21	0.25	0.17	0.59	0.19	0.25	0.29	0.15
Na_2O	3.93	3.87	3.11	3.65	3.87	4.31	4.32	3.89
K_2O	0.60	0.55	0.49	2.81	0.49	0.70	0.74	0.59
An	61	61	67	47	61	56	56	60

Note: c = core analyses; r = rim analyses