

APPENDIX 3

Results of bulk geochemistry in representative samples

Lab #	23/17/1 L-01	23/17/2 L-02	23/17/3 S-03	23/17/4 L-04	23/17/5 S-04	23/17/6 M-01	23/17/7 M-05	23/17/8 L-08	23/17/9 S-09	23/17/10 M-12
Fe2O3 [%]	7.58	8.75	8.39	7.15	7.34	7.95	8.4	6.35	8.32	7.84
MnO	36.491	36.385	36.312	37.74	36.688	37.238	35.815	39.493	36.773	37.628
SiO2	12.98	13.25	12.78	12.8	12.27	12.24	13.7	12.81	12.39	12.93
Al2O3	4.65	4.3	4.07	4.4	4.13	4.05	4.45	4.55	4.12	4.19
MgO	2.89	2.95	2.62	2.89	2.61	2.71	2.87	3.18	2.71	2.96
CaO	2.15	1.98	2.26	1.98	3.15	2.15	2.01	1.75	2.18	1.91
Na2O	2.86	2.61	2.81	2.89	2.98	2.86	2.66	2.65	2.86	2.6
K2O	0.85	0.91	0.7	0.84	0.71	0.73	0.94	0.93	0.67	0.89
TiO2	0.409	0.39	0.306	0.347	0.321	0.336	0.34	0.338	0.373	0.334
P2O5	0.297	0.287	0.305	0.273	0.29	0.306	0.285	0.247	0.309	0.273
SO3	0.33	0.33	0.88	0.6	0.36	0.5	0.4	0.39	0.33	0.29
Cl	0.076	0.083	0.087	0.086	0.085	0.064	0.071	0.072	0.071	0.07
F	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LOI	24.2	23.6	23.7	23.7	24.8	24.4	23.7	23.1	24.7	24
SUM	95.73	95.67	95.02	95.54	95.57	95.28	95.4	95.73	95.49	95.61
Ag [ppm]	0.84	1.32	1.16	0.88	1.17	0.27	1.23	0.56	1.3	1.17
As	58	62	62	51	65	58	58	43	64	56
Au [ppb]	2	1	2	2	3	<1	1	<1	2	<1
Ba [ppm]	1686	3733	1612	1653	2294	2181	1603	2838	1472	3965
Be	1.51	1.74	1.58	1.51	1.77	1.44	1.73	1.26	1.78	1.56
Cd	20.83	15.7	23.26	23.78	24.00	20.51	19.67	18.71	20.6	22.38
Co	1536	1578	1516	1571	1297	1391	1711	1507	1487	1623
Cr	10	8	8	8	9	7	9	8	7	9
Cs	1.94	1.52	1.48	1.65	1.46	1.33	1.61	1.72	1.33	1.65
Cu	11260	11208	12261	11248	13599	11394	11379	11196	11501	11241
Li	188.5	132.9	162.4	203.3	165.9	149.9	129.0	164.2	155.7	118.0
Mo	579.4	541.8	626.6	578.3	672.4	599.6	569.9	517.8	620.6	600.1
Ni	11850	11555	11576	10892	12210	11451	11437	10745	11946	11359
Pb	246.9	251.3	205.8	194.4	210.7	224.2	211.9	192.7	230.0	222.2
Pd [ppb]	<5	10	18	12	<5	8	18	12	14	14
Pt [ppb]	60	96	68	34	32	<10	42	46	16	32
Rb [ppm]	24.55	22.57	21.25	23.19	21.3	19.64	23.12	24.33	20.13	23.87
Sb	50.58	47.45	53.02	53.64	60.69	45.94	48.93	51.46	52.43	53.27
Sc	10.1	10.4	8.3	10.8	9.3	8.5	10.0	10.6	8.3	9.15
Se	2	4	2	3	4	4	5	<2	2	4
Sn	1.1	1.1	0.9	0.8	1.1	0.5	1.0	0.7	1.0	1.1
Sr	622.3	614.4	680.8	591.4	591.0	618.3	606.9	549.0	625.5	596.9
Tl	136.69	61.61	118.39	111.66	165.82	141.23	158.58	65.74	155.86	181.14
Th	14.095	12.68	9.23	11.81	10.26	10.96	10.55	10.48	11.46	10.355
U	3.42	3.63	3.26	3.13	3.63	3.31	3.15	3.17	3.55	3.42
V	403	428	411	381	414	405	413	396	430	447
Y	70.0	75.2	63.4	68.2	69.8	70.1	69.1	65.3	68.9	68.35
Zn	1522	1263	1549	1482	1683	1422	1324	1338	1510	1297
La	87.6	94.0	78.2	83.3	83.9	87.05	85.5	86.0	88.3	90.3
Ce	216.9	215.3	175.6	193.0	170.1	192.95	192.0	180.7	198.4	189.05
Pr	27.4	29.9	23.8	26.5	25.5	27.0	26.8	26.6	27.6	27.45
Nd	117.6	128.8	104.0	112.4	108.5	114.9	114.3	111.5	115.0	115.65
Eu	7.365	8.32	6.39	7.18	6.86	7.24	7.08	7.02	7.1	7.495
Sm	29.315	31.48	25.58	27.99	26.71	28.24	28.09	26.97	28.17	28.04
Gd	27.67	29.58	24.63	26.63	25.72	26.835	26.47	25.77	27.23	27.285
Tb	4.235	4.62	3.7	4.11	3.98	4.15	4.11	4.05	4.26	4.295
Dy	23.915	26.35	20.99	23.07	22.66	23.525	23.38	22.87	24.14	24.415
Ho	4.365	4.82	3.93	4.28	4.21	4.365	4.3	4.15	4.42	4.43
Er	12.015	13.21	10.73	11.69	11.64	11.835	11.93	11.08	12.00	12.25
Tm	1.725	1.86	1.49	1.61	1.61	1.685	1.62	1.58	1.73	1.72
Yb	11.03	12.17	9.7	10.56	10.62	10.91	10.67	10.25	11.28	11.24
Lu	1.655	1.81	1.45	1.58	1.57	1.64	1.59	1.49	1.65	1.645
ΣREE [%]	572.79	602.22	490.19	533.9	503.58	542.33	537.84	520.03	551.28	545.3
ΣREY	642.79	677.42	553.59	602.1	573.38	612.43	606.94	585.33	620.18	613.62
ΣHREY	163.98	177.94	146.41	158.91	158.67	162.29	160.25	153.56	162.71	163.13
Element ratios										
Mn / Fe	5.33	4.60	4.79	5.85	5.55	5.19	4.72	6.89	4.89	5.32
Co + Cu + Ni [%]	2.46	2.43	2.54	2.37	2.71	2.42	2.45	2.35	2.49	2.42
Th / U	4.12	3.49	2.83	3.77	2.83	3.31	3.35	3.31	3.23	3.03