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Title of article Geology and petrogenesis of lavas from San Cristobal
Island, Galapagos Archipelago

Author(s) Dennis J. Geist, Alexander R. McBirney, and Robert A. Duncan

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Appendix

APPENDIX

MAJOR AND TRACE ELEMENT ANALYSES

	2	5	8	9	13	17	20	21	23
SiO2	47.89	48.12	47.79	47.14	47.61	48.37	47.70	47.89	46.99
TiO2	2.29	2.33	2.10	2.06	1.34	1.94	2.48	1.68	1.46
Al2O3	16.99	17.06	17.14	16.11	15.45	16.50	16.71	16.69	15.73
Fe2O3	3.79	4.28	2.34	2.39	3.11	5.59	3.31	1.61	2.16
FeO	6.87	7.65	7.61	7.14	6.55	5.85	7.20	7.73	7.19
MnO	0.21	0.22	0.19	0.18	0.18	0.21	0.22	0.18	0.19
MgO	6.69	5.95	7.53	11.38	11.67	6.01	5.96	9.62	11.53
CaO	10.17	9.58	11.18	9.93	10.99	10.12	9.36	11.91	10.79
Na2O	3.35	4.09	3.09	3.04	2.74	4.12	4.07	2.33	2.65
K2O	0.81	1.01	0.61	0.74	0.71	0.90	1.07	0.43	0.53
H2O+	0.49	0.09	0.12	0.13	0.16	0.14	0.29	0.21	0.12
H2O-	0.76	0.21	0.31	0.24	0.11	0.16	0.40	0.29	0.32
P2O5	0.40	0.46	0.35	0.28	0.24	0.44	0.56	0.21	0.23
TOTAL	100.71	101.05	100.36	100.76	100.86	100.35	99.33	100.78	99.89
BA	225	261	156	158	207	347	225	96.00	122
CO	70.00	53.00	54.00	66.00	67.00	54.00	48.00	59.00	61.00
CR	144	55.00	182	543	539	69.00	117	325	432
CU	110	55.00	63.00	67.00	53.00	49.00	57.00	76.00	65.00
LI	10.00	7.90	6.70	5.60	5.80	8.50	11.00	5.50	5.70
NI	91.00	54.00	93.00	265	282	56.00	77.00	159	247
RB	14.00	19.00	10.00	8.80	11.00	15.00	18.00	6.40	8.80
SR	455	454	474	447	412	419	362	387	399
ZN	121	103.00	79.00	73.00	73.00	99.00	117	70.00	78.00
SC	0.00	0.00	34.22	30.66	0.00	0.00	27.47	36.18	30.57
HF	0.00	0.00	3.66	3.44	0.00	0.00	0.00	2.48	2.42
TA	0.00	0.00	1.47	1.36	0.00	0.00	1.72	1.07	1.21
TH	0.00	0.00	0.96	0.94	0.00	0.00	2.08	0.60	0.93
LA	0.00	0.00	12.14	12.45	0.00	0.00	20.20	7.89	11.36
SM	0.00	0.00	4.66	4.11	0.00	0.00	7.25	3.37	3.49
EU	0.00	0.00	4.66	1.57	0.00	0.00	2.35	1.28	1.26
TB	0.00	0.00	1.75	0.87	0.00	0.00	1.56	0.72	0.71
YB	0.00	0.00	3.59	2.68	0.00	0.00	5.34	2.68	2.08
LU	0.00	0.00	0.48	0.39	0.00	0.00	0.76	0.40	0.34
MG#	53.76	48.04	58.07	68.64	69.05	49.67	51.13	65.19	69.28
AGE	2.00	3.00	2.00	3.00	2.00	2.00	2.00	3.00	1.00

	24	25	28	31	44	47	50	53	55
SI02	47.53	46.86	46.95	47.79	48.26	47.79	48.70	47.98	47.19
TI02	2.00	1.59	1.62	1.59	1.86	1.53	1.60	1.55	1.15
AL203	16.34	15.69	17.28	15.84	16.61	16.35	17.48	17.31	17.97
FE203	3.52	2.83	1.90	2.75	1.72	1.79	3.20	1.22	2.60
FEO	7.21	6.89	7.55	7.05	7.61	7.26	6.01	7.51	6.46
MNO	0.21	0.18	0.19	0.18	0.18	0.17	0.17	0.17	0.17
MGO	6.52	11.65	8.35	11.61	9.54	11.13	7.32	8.74	8.73
CAO	10.52	10.53	11.21	10.55	10.55	10.63	11.25	12.19	12.60
NA2O	4.01	2.54	3.06	2.43	2.93	2.68	3.02	2.44	2.67
K2O	0.86	0.55	0.58	0.45	0.55	0.61	0.60	0.43	0.36
H2O+	0.22	0.15	0.11	0.16	0.26	0.24	0.31	0.17	0.22
H2O-	0.11	0.23	0.23	0.26	0.34	0.28	0.18	0.32	0.23
P2O5	0.52	0.24	0.31	0.21	0.33	0.24	0.30	0.22	0.13
TOTAL	99.57	99.93	99.34	100.87	100.74	100.70	100.14	100.25	100.48
BA	191	104.00	129	104.00	139	122	39.00	96.00	78.00
CO	51.00	59.00	59.00	63.00	58.00	61.00	53.00	54.00	59.00
CR	132	572	292	550	346	438	168	294	232
CU	61.00	73.00	72.00	72.00	67.00	74.00	72.00	82.00	84.00
LI	7.40	5.70	6.40	5.50	5.90	5.40	5.60	5.40	5.10
NI	82.00	278	126	286	80.00	246	95.00	113	129
RB	16.00	7.70	8.80	7.70	6.10	8.80	8.30	6.40	5.60
SR	371	362	378	385	444	405	375	340	246
ZN	90.00	71.00	77.00	78.00	69.00	81.00	67.00	85.00	62.00
SC	0.00	0.00	0.00	32.11	0.00	30.45	0.00	37.89	0.00
HF	0.00	0.00	0.00	2.74	0.00	2.57	0.00	2.48	0.00
TA	0.00	0.00	0.00	1.16	0.00	1.18	0.00	1.10	0.00
TH	0.00	0.00	0.00	0.89	0.00	0.82	0.00	0.45	0.00
LA	0.00	0.00	0.00	10.88	0.00	9.48	0.00	8.14	0.00
SM	0.00	0.00	0.00	3.42	0.00	3.56	0.00	3.43	0.00
EU	0.00	0.00	0.00	1.26	0.00	1.29	0.00	1.30	0.00
TB	0.00	0.00	0.00	0.65	0.00	0.74	0.00	0.78	0.00
YB	0.00	0.00	0.00	2.30	0.00	2.17	0.00	2.96	0.00
LU	0.00	0.00	0.00	0.35	0.00	0.35	0.00	0.39	0.00
MG#	52.89	68.81	61.70	68.53	65.05	69.15	59.54	64.47	63.93
AGE	2.00	3.00	3.00	3.00	3.00	5.00	3.00	5.00	4.00

	56	58	59	61	68	69	70	75	76
SIO2	47.51	46.69	48.03	48.20	46.69	47.23	47.64	47.42	47.61
TIO2	1.08	1.04	1.02	1.42	1.02	1.12	1.24	1.08	1.08
AL2O3	16.43	17.29	17.48	16.91	17.24	17.31	16.38	16.86	16.87
FE2O3	2.87	2.90	4.50	2.10	2.22	1.15	3.98	1.38	1.27
FeO	6.23	6.19	4.34	6.68	6.55	7.49	4.96	7.38	7.55
MNO	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
MGO	12.25	10.84	9.33	9.83	9.38	9.82	11.42	11.62	12.22
CAO	10.75	12.03	12.66	12.24	12.88	11.92	11.75	11.84	10.94
NA2O	2.28	2.44	2.27	2.56	2.24	2.16	2.22	2.06	2.20
K2O	0.30	0.29	0.15	0.49	0.18	0.18	0.30	0.18	0.21
H2O+	0.32	0.11	0.31	0.22	0.11	0.21	0.22	0.17	0.13
H2O-	0.35	0.09	0.24	0.24	0.16	0.36	0.23	0.23	0.21
P2O5	0.13	0.10	0.10	0.19	0.09	0.12	0.14	0.10	0.10
TOTAL	100.67	100.18	100.60	101.25	98.93	99.24	100.65	100.49	100.56
BA	62.00	49.00	39.00	103.00	33.00	37.00	46.00	37.00	46.00
CO	70.00	66.00	61.00	62.00	64.00	65.00	69.00	69.00	68.00
CR	538	428	260	326	267	395	489	523	501
CU	94.00	104.00	80.00	72.00	86.00	91.00	91.00	89.00	94.00
LI	4.50	4.80	4.50	5.10	4.40	4.40	4.90	4.50	4.50
NI	293	231	142	167	138	165	237	235	298
RB	3.30	3.00	1.90	5.90	2.10	2.60	5.00	2.60	2.50
SR	211	211	178	320	185	201	225	195	199
ZN	67.00	62.00	57.00	64.00	58.00	80.00	66.00	65.00	94.00
SC	0.00	0.00	37.31	35.96	0.00	0.00	0.00	35.97	34.12
HF	0.00	0.00	1.40	2.54	0.00	0.00	0.00	1.65	1.52
TA	0.00	0.00	0.64	1.09	0.00	0.00	0.00	0.83	0.64
TH	0.00	0.00	0.25	0.51	0.00	0.00	0.00	0.50	0.35
LA	0.00	0.00	2.85	7.52	0.00	0.00	0.00	3.11	3.45
SM	0.00	0.00	1.94	3.30	0.00	0.00	0.00	2.30	1.94
EU	0.00	0.00	0.80	1.57	0.00	0.00	0.00	0.91	0.80
TB	0.00	0.00	0.67	0.69	0.00	0.00	0.00	0.53	0.54
YB	0.00	0.00	2.34	2.25	0.00	0.00	0.00	2.61	2.32
LU	0.00	0.00	0.44	0.42	0.00	0.00	0.00	0.38	0.43
MG#	71.30	68.76	66.52	67.21	66.23	67.30	70.49	70.66	71.52
AGE	6.00	6.00	3.00	6.00	6.00	6.00	6.00	6.00	6.00

	77	82	87	90	97	98	102	108	114
SiO2	47.36	48.45	48.20	47.95	47.02	46.52	47.11	47.10	47.86
TiO2	1.67	1.23	1.11	0.99	1.34	1.45	1.33	1.48	2.01
Al2O3	17.00	17.43	17.64	17.16	15.25	16.32	15.24	15.39	17.11
Fe2O3	2.44	2.93	3.41	2.02	4.30	2.23	3.19	4.07	1.32
FeO	6.92	6.40	6.41	6.80	5.86	7.31	6.67	5.86	7.62
MnO	0.18	0.17	0.19	0.15	0.18	0.17	0.18	0.18	0.17
MgO	7.19	8.59	8.22	11.72	12.56	10.69	11.84	10.90	9.52
CaO	13.01	12.40	11.69	11.21	10.48	11.17	10.44	10.54	10.00
Na2O	2.60	2.53	2.94	2.34	2.67	2.41	2.77	2.87	3.00
K2O	0.46	0.26	0.38	0.33	0.52	0.47	0.61	0.60	0.83
H2O+	0.26	0.19	0.13	0.18	0.09	0.24	0.11	0.10	0.38
H2O-	0.50	0.21	0.20	0.17	0.19	0.25	0.16	0.23	0.28
P2O5	0.25	0.17	0.17	0.14	0.22	0.19	0.26	0.27	0.33
TOTAL	99.84	100.96	100.69	101.16	100.68	99.42	99.91	99.59	100.43
BA	120	59.00	103.00	64.00	120	241	190	138	179
CO	52.00	61.00	57.00	68.00	73.00	67.00	65.00	65.00	62.00
CR	226	272	234	452	454	487	66.00	502	299
CU	94.00	74.00	92.00	92.00	65.00	68.00	73.00	55.00	63.00
LI	6.10	5.10	5.30	4.50	5.80	5.40	6.10	6.50	6.00
NI	72.00	125	110	285	311	224	286	259	175
RB	5.90	3.70	6.50	3.70	7.40	6.50	9.30	9.30	12.00
SR	378	240	271	222	335	402	377	388	464
ZN	72.00	64.00	67.00	57.00	69.00	76.00	79.00	71.00	71.00
SC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
HF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TH	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
YB	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LU	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MG#	58.50	62.94	60.78	70.85	69.76	67.22	68.92	67.16	65.89
AGE	4.00	3.00	3.00	4.00	3.00	4.00	3.00	3.00	6.00

	115	122	123	134	135	136	140	141	142
SiO2	47.61	47.79	47.70	47.27	47.60	47.19	51.48	48.50	47.89
TiO2	1.66	1.26	0.87	1.70	1.54	1.72	1.36	1.65	1.29
Al2O3	17.64	17.73	18.15	14.67	17.40	17.81	16.22	16.40	17.57
Fe2O3	2.28	1.53	3.24	5.88	5.72	4.29	6.01	3.07	3.49
FeO	6.63	7.56	5.88	4.45	4.03	5.33	3.20	7.34	5.56
MnO	0.17	0.18	0.18	0.18	0.17	0.17	0.18	0.20	0.17
MgO	8.27	8.63	9.11	11.22	6.76	7.20	6.18	7.70	8.82
CaO	11.29	12.01	12.15	10.00	11.61	11.85	9.73	9.22	12.71
Na2O	3.24	2.46	2.32	2.67	3.18	3.08	3.49	3.72	2.35
K2O	0.79	0.28	0.20	0.66	0.60	0.56	0.60	1.04	0.36
H2O+	0.29	0.17	0.30	0.43	0.42	0.27	0.27	0.12	0.21
H2O-	0.15	0.28	0.27	0.56	0.49	0.31	0.21	0.28	0.33
P2O5	0.35	0.14	0.08	0.32	0.30	0.29	0.35	0.41	0.17
TOTAL	100.37	100.02	100.45	100.01	99.82	100.07	99.28	99.65	100.92
BA	150	67.00	44.00	214	133	133	245	173	96.00
CO	55.00	57.00	59.00	70.00	61.00	56.00	55.00	47.00	57.00
CR	250	239	224	625	179	239	193	308	280
CU	68.00	92.00	90.00	57.00	61.00	67.00	60.00	59.00	93.00
LI	6.10	4.90	5.10	6.20	6.70	6.70	8.30	8.70	5.90
NI	128	121	148	326	102.00	111	119	129	139
RB	11.00	2.60	2.00	9.80	7.90	8.90	15.00	15.00	5.50
SR	463	248	206	371	386	381	336	412	392
ZN	66.00	72.00	62.00	73.00	76.00	82.00	74.00	71.00	64.00
SC	0.00	0.00	27.39	0.00	0.00	0.00	27.39	0.00	0.00
HF	0.00	0.00	1.69	0.00	0.00	0.00	4.02	0.00	0.00
TA	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00
TH	0.00	0.00	0.66	0.00	0.00	0.00	1.96	0.00	0.00
LA	0.00	0.00	4.57	0.00	0.00	0.00	16.06	0.00	0.00
SM	0.00	0.00	2.27	0.00	0.00	0.00	5.11	0.00	0.00
EU	0.00	0.00	0.83	0.00	0.00	0.00	1.74	0.00	0.00
TB	0.00	0.00	0.66	0.00	0.00	0.00	1.08	0.00	0.00
YB	0.00	0.00	2.55	0.00	0.00	0.00	4.62	0.00	0.00
LU	0.00	0.00	0.36	0.00	0.00	0.00	0.54	0.00	0.00
MG#	62.99	63.31	64.92	67.30	56.83	58.33	56.19	57.66	64.43
AGE	6.00	4.00	5.00	2.00	2.00	2.00	2.00	3.00	2.00

[illegible]

	156	157	158	159	160	165
SIO2	48.77	47.36	49.29	47.73	48.17	48.08
TIO2	1.62	1.34	1.59	2.00	1.97	1.59
AL2O3	16.66	16.84	16.83	16.75	16.90	17.57
FE2O3	4.98	5.84	2.91	4.70	3.29	2.00
FEU	4.79	3.92	6.67	5.52	6.75	6.79
MNO	0.19	0.18	0.19	0.18	0.19	0.17
MGO	8.02	8.54	8.51	8.78	8.87	8.24
CAO	9.48	11.80	9.58	9.70	9.84	10.98
NA2O	3.51	2.64	3.45	3.37	3.24	2.69
K2O	0.86	0.26	0.84	0.71	0.68	0.66
H2O+	0.16	0.17	0.15	0.14	0.23	0.45
H2O-	0.32	0.32	0.24	0.21	0.22	0.67
P2O5	0.37	0.14	0.36	0.32	0.31	0.24
TOTAL	99.73	99.35	100.61	100.11	100.66	100.13
BA	172	49.00	175	138	154	148
CO	73.00	60.00	53.00	57.00	57.00	54.00
CR	290	223	299	315	313	193
CU	48.00	72.00	37.00	41.00	52.00	84.00
LI	8.10	5.30	8.30	6.60	6.50	5.60
NI	161	137	156	151	152	113
RB	13.00	3.90	13.00	9.90	9.60	6.60
SR	405	306	452	471	467	414
ZN	71.00	64.00	72.00	73.00	77.00	80.00
SC	0.00	0.00	0.00	0.00	0.00	0.00
HF	0.00	0.00	0.00	0.00	0.00	0.00
TA	0.00	0.00	0.00	0.00	0.00	0.00
TH	0.00	0.00	0.00	0.00	0.00	0.00
LA	0.00	0.00	0.00	0.00	0.00	0.00
SM	0.00	0.00	0.00	0.00	0.00	0.00
EU	0.00	0.00	0.00	0.00	0.00	0.00
TB	0.00	0.00	0.00	0.00	0.00	0.00
YB	0.00	0.00	0.00	0.00	0.00	0.00
LU	0.00	0.00	0.00	0.00	0.00	0.00
MG#	60.72	62.45	62.08	61.67	62.01	63.16
AGE	3.00	3.00	3.00	2.00	3.00	3.00