

## Appendix



A-1 Result of Whole Rock Analysis

(1)

Number		1	2	3	4	5	6	7	8	9	10	11	
Sample		G-15	C-16	G-17	A-50	C-45	D-64	D-65	G-121	C-14	A-51	C-18	
Rock Type		Hb-Ad	Ad	As/Ocoals	As/Ocoals	Granite	Granite	Granite	Granite	As/Ocoals	As/Ocoals	As/Ocoals	
Formation		intrusive	intrusive	intrusive?	intrusive?	intrusive	intrusive	intrusive	intrusive	intrusive?	intrusive?	intrusive?	
1	SiO2	%	50.80	50.50	48.10	44.60	61.10	60.10	58.30	59.30	52.60	50.50	51.10
2	TiO2	%	0.80	0.53	0.77	0.72	0.48	0.74	0.63	0.79	0.72	0.67	0.70
3	Al2O3	%	15.40	17.30	17.20	17.20	15.90	15.80	15.90	14.80	17.10	16.60	14.50
4	FeO	%	4.75	4.62	4.38	5.59	3.25	3.53	3.41	5.15	2.31	4.44	4.07
5	Fe2O3	%	11.40	8.91	10.40	10.80	7.05	6.90	4.38	7.42	9.55	9.86	12.20
6	MnO	%	0.18	0.15	0.31	0.28	0.09	0.10	0.14	0.12	0.23	0.25	0.26
7	MgO	%	4.60	4.76	4.95	7.98	2.63	2.08	2.41	2.63	2.53	5.11	5.72
8	CaO	%	4.96	3.53	3.70	1.70	5.01	3.66	4.49	5.50	4.52	1.17	1.85
9	Na2O	%	3.68	4.63	4.32	4.60	3.55	4.22	4.10	3.26	4.44	5.02	4.42
10	K2O	%	2.90	3.00	3.12	1.91	1.91	2.88	2.39	1.51	4.46	2.90	2.28
11	P2O5	%	0.28	0.10	0.36	0.39	0.13	0.25	0.21	0.17	0.37	0.50	0.32
12	LOI	%	2.46	4.14	3.21	5.89	0.75	0.61	0.68	0.41	2.81	4.09	4.26
13	Ba	ppm	320	380	296	218	266	306	264	268	366	302	392
14	Rb	ppm	28	74	48	28	38	28	54	16	64	58	74
15	Sr	ppm	364	452	340	246	346	282	336	191	230	166	280
16	Zr	ppm	96	36	104	91	19	29	31	24	101	100	92
17	Nb	ppm	7	1	4	4	4	8	6	5	6	3	3
18	Y	ppm	21	6	18	14	17	25	20	21	16	17	16
	Total	%	103.05	103.12	101.64	102.26	102.54	101.75	97.75	101.59	102.42	101.76	102.54
	Quartz	%	2.86	0.26	-	-	19.33	14.27	12.48	19.36	-	1.49	5.08
	Corundum	%	-	-	0.85	5.41	-	-	-	-	-	4.27	2.16
	Orthoclase	%	17.14	17.73	18.44	11.29	11.29	17.02	14.12	8.92	26.36	17.14	13.47
	Albite	%	31.14	39.18	36.55	38.92	30.04	35.71	34.69	27.59	37.30	42.48	37.40
	Anorthoclase	%	16.94	16.86	16.00	5.89	21.81	15.66	17.92	21.29	13.56	2.54	7.09
	Feldspar	%	65.21	73.76	71.00	56.10	63.13	68.39	66.74	57.80	77.21	62.15	57.96
	Nepheline	%	-	-	-	-	-	-	-	-	0.15	-	-
	Wollastonite	%	2.44	-	-	-	0.92	0.77	1.24	2.04	2.69	-	-
	Enstatite	%	2.11	3.68	-	-	0.79	0.67	0.87	1.40	2.33	-	-
	Ferrosilite	%	-	0.16	-	-	-	-	0.27	0.48	-	-	-
	Diopside	%	4.55	-	-	-	1.71	1.44	2.38	3.92	5.02	-	-
	Enstatite	%	9.35	3.68	1.41	6.16	5.76	4.51	5.13	5.15	-	12.73	14.25
	Ferrosilite	%	-	0.16	-	0.21	-	-	1.59	1.77	-	-	-
	Hypersthene	%	9.35	3.84	1.41	6.37	5.76	4.51	6.73	6.92	-	12.73	14.25
	Forsterite	%	-	5.73	7.67	9.61	-	-	-	-	2.79	-	-
	Fayalite	%	-	0.28	-	0.36	-	-	-	-	-	-	-
	Olivine	%	-	6.01	7.67	9.97	-	-	-	-	2.79	-	-
	Magnetite	%	13.58	12.92	12.90	15.66	9.38	9.56	6.35	10.76	6.11	13.18	11.94
	Hematite	%	2.04	-	1.51	-	0.58	0.31	-	-	5.34	0.77	3.97
	Ilmenite	%	1.52	1.01	1.46	1.37	0.91	1.41	1.20	1.50	1.37	1.27	1.33
	Apatite	%	0.65	0.23	0.83	0.90	0.30	0.53	0.49	0.39	0.86	1.16	0.74
	Total	%	99.75	98.03	97.62	95.77	101.10	100.46	96.36	100.65	98.83	97.02	97.42

A-1 Result of Whole Rock Analysis

(2)

Number		12	13	14	15	16	17	18	19	20	21	22	
Sample		A-52	A-53	C-3	C-20	C-26	B-52	C-23	B-53	B-54	B-55	B-56	
Rock Type		Af-Occta'	Af-Occta'	Q-Porphyr	Por-Ad	Porphyrite	Hb-Ad	Red-Ad	Red-Ad	Red-Ad	Red-Ad	Red-Ad	
Formation		intrusive	intrusive	intrusive	intrusive	intrusive	intrusive	Horqueta	Horqueta	Horqueta	Horqueta	Horqueta	
1	SiO <sub>2</sub>	%	51.90	52.80	71.10	55.30	50.10	58.60	57.00	55.40	56.90	60.60	57.50
2	TiO <sub>2</sub>	%	0.94	0.70	0.19	0.43	0.74	0.62	0.52	0.41	0.41	0.32	0.46
3	Al <sub>2</sub> O <sub>3</sub>	%	15.60	15.50	18.08	17.00	15.80	15.70	14.10	14.80	14.10	14.50	14.70
4	FeO	%	4.77	2.79	0.38	2.33	4.73	3.97	0.44	0.87	0.61	0.32	0.33
5	Fe <sub>2</sub> O <sub>3</sub>	%	9.76	9.80	3.34	10.30	11.20	5.64	8.81	9.40	6.57	5.37	9.18
6	MnO	%	0.16	0.20	0.09	0.17	0.25	0.09	0.12	0.15	0.18	0.10	0.10
7	MgO	%	3.80	4.26	0.32	4.68	4.01	4.02	3.42	2.18	2.51	2.55	1.96
8	CaO	%	6.20	1.41	0.25	1.03	4.78	5.08	1.80	1.67	1.34	1.00	0.58
9	Na <sub>2</sub> O	%	3.24	5.33	4.07	6.82	4.87	4.06	4.52	5.48	2.75	7.28	6.81
10	K <sub>2</sub> O	%	2.57	2.60	3.68	0.38	2.47	2.63	4.04	3.51	7.88	0.37	2.03
11	P <sub>2</sub> O <sub>5</sub>	%	0.36	0.43	0.08	0.18	0.33	0.18	0.17	0.18	0.14	0.15	0.22
12	LOI	%	2.03	3.59	1.25	3.22	4.31	2.76	3.17	2.92	3.93	2.27	1.78
13	Ba	ppm	354	340	526	37	282	192	676	370	636	27	304
14	Rb	ppm	46	41	28	22	34	30	24	56	Tr	5	30
15	Sr	ppm	504	204	96	151	212	470	99	143	100	73	130
16	Zr	ppm	146	79	53	19	70	84	68	31	36	56	52
17	Nb	ppm	15	4	7	3	5	5	4	2	2	3	1
18	Y	ppm	20	14	9	6	14	14	16	10	9	6	15
	Total	%	102.42	100.10	103.55	102.08	104.21	104.15	99.00	97.78	98.10	95.00	96.18
	Quartz	%	7.01	3.69	32.56	5.50	-	9.29	7.11	3.92	5.15	11.32	6.58
	Corundum	%	-	2.38	7.14	3.93	-	-	-	-	-	0.66	0.77
	Orthoclase	%	15.19	15.36	21.75	2.25	14.60	15.54	23.87	20.74	46.57	2.19	12.00
	Albite	%	27.42	45.10	34.44	57.71	41.21	34.35	38.25	46.37	23.27	61.60	57.62
	Anorthoclase	%	20.43	4.19	0.72	3.93	13.96	16.85	6.25	5.42	2.86	3.98	1.44
	Feldspar	%	63.04	64.65	56.90	63.89	69.76	66.74	68.37	72.53	72.69	67.77	71.06
	Wollastonite	%	3.33	-	-	-	3.17	3.00	0.65	1.12	1.20	-	-
	Ferrosilite	%	-	-	-	-	-	-	-	-	-	-	-
	Enstatite	%	2.88	-	-	-	2.74	2.28	0.57	0.97	1.04	-	-
	Diopside	%	6.21	-	-	-	5.92	5.68	1.22	2.09	2.24	-	-
	Enstatite	%	6.59	10.61	0.80	11.66	2.81	7.73	7.95	4.46	5.21	6.35	4.88
	Ferrosilite	%	-	-	-	-	-	1.37	-	-	-	-	-
	Hypersthene	%	6.59	10.61	0.80	11.66	-	9.10	7.95	4.46	5.21	6.35	4.88
	Forsterite	%	-	-	-	-	3.11	-	-	-	-	-	-
	Fayalite	%	-	-	-	-	-	-	-	-	-	-	-
	Olivine	%	-	-	-	-	3.11	-	-	-	-	-	-
	Magnetite	%	13.17	7.62	-	6.82	13.91	8.18	0.30	2.11	1.37	0.43	0.06
	Hematite	%	0.68	4.55	2.67	5.60	1.60	-	8.60	7.95	5.63	5.07	9.14
	Ilmenite	%	1.79	1.33	0.36	0.82	1.41	1.18	0.99	0.78	0.78	0.61	0.87
	Apatite	%	0.83	1.00	0.19	0.42	0.76	0.42	0.39	0.42	0.32	0.35	0.51
	Total	%	99.30	95.82	101.53	98.62	99.28	100.59	94.94	94.25	93.39	92.56	93.87

A-2 Result of Chemical Analysis of rock samples

No.	Samp. No.	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Te (ppm)	Cd (ppm)	Co (ppm)	Cu (ppm)	Fe (ppm)	Pb (ppm)	Mn (ppm)	Mo (ppm)	Ni (ppm)	V (ppm)	Zn (ppm)
R- 1	A - 1	Tr	Tr	23	Tr	Tr	Tr	22	46	6.14	9	1187	4	Tr	129	116
R- 2	A - 2	Tr	Tr	24	Tr	Tr	Tr	17	170	4.5	7	761	Tr	Tr	139	Tr
R- 3	A - 5	Tr	Tr	27	Tr	Tr	Tr	23	72	4.51	17	645	Tr	7	131	16
R- 4	A - 6	0.017	Tr	17	Tr	0.1	Tr	29	4	6.4	14	1011	Tr	1	218	54
R- 5	A - 7	0.017	Tr	22	Tr	Tr	Tr	13	42	2.74	Tr	475	3	Tr	94	Tr
R- 6	A - 8	Tr	Tr	32	Tr	Tr	Tr	19	33	3.61	13	411	Tr	11	124	Tr
R- 7	A - 9	Tr	Tr	27	Tr	Tr	Tr	22	4	5.63	17	836	Tr	9	161	18
R- 8	A - 10	Tr	Tr	43	Tr	Tr	Tr	28	23	4.91	14	1085	Tr	6	151	31
R- 9	A - 12	Tr	Tr	Tr	Tr	0.1	Tr	14	4	4.81	4	627	Tr	Tr	254	Tr
R- 10	A - 13	Tr	Tr	82	Tr	Tr	Tr	26	19	4.61	39	817	Tr	9	118	48
R- 11	A - 14	Tr	Tr	37	Tr	0.1	Tr	13	2	4.75	13	509	Tr	6	276	Tr
R- 12	A - 15	0.058	Tr	26	Tr	0.1	Tr	36	2	6.13	25	993	Tr	13	175	34
R- 13	A - 16	Tr	Tr	25	Tr	Tr	Tr	19	2	5.87	27	1405	Tr	12	226	Tr
R- 14	B - 1	Tr	Tr	Tr	Tr	Tr	Tr	6	83	0.89	13	301	Tr	Tr	56	Tr
R- 15	D - 16	Tr	Tr	12	Tr	Tr	Tr	2	1	1.75	4	245	Tr	6	42	28
R- 16	B - 3	0.017	Tr	40	Tr	Tr	Tr	14	11	4.22	25	581	Tr	Tr	83	50
R- 17	B - 5	Tr	Tr	36	Tr	Tr	Tr	28	39	6.72	12	1023	Tr	2	274	21
R- 18	B - 6	Tr	Tr	22	Tr	0.2	Tr	20	53	5.27	246	2136	Tr	Tr	200	1284
R- 19	B - 8	Tr	Tr	53	Tr	Tr	Tr	33	5	6.73	31	1969	Tr	36	226	362
R- 20	C - 12	0.067	17.6	29	Tr	0.4	Tr	31	9220	2.24	11	1696	Tr	4	189	30
R- 21	B - 11	Tr	Tr	31	Tr	Tr	Tr	26	105	5.8	17	1159	Tr	6	126	74
R- 22	B - 13	Tr	Tr	41	Tr	Tr	Tr	22	290	5.93	16	1107	Tr	Tr	206	22
R- 23	B - 14	Tr	1.1	20	Tr	0.1	Tr	23	2910	5.58	6	1081	Tr	6	191	113
R- 24	B - 16	Tr	Tr	52	Tr	Tr	Tr	33	198	6.74	14	2315	Tr	Tr	189	286
R- 25	B - 17	Tr	Tr	30	Tr	Tr	Tr	26	160	5.63	67	1321	Tr	Tr	139	226
R- 26	B - 18	Tr	Tr	26	Tr	Tr	Tr	19	150	4.3	15	1511	Tr	23	112	157
R- 27	B - 19	Tr	Tr	45	22	Tr	Tr	39	89	7.15	54	1873	Tr	23	224	179
R- 28	B - 21	Tr	Tr	47	Tr	0.1	Tr	5	33	4.92	24	97	Tr	Tr	106	Tr
R- 29	B - 22	Tr	Tr	36	Tr	Tr	Tr	29	Tr	5.29	18	1237	Tr	13	188	99
R- 30	D - 1	Tr	3.8	21	Tr	0.4	Tr	25	4340	4.87	9	911	Tr	4	187	73
R- 31	D - 2	Tr	Tr	46	Tr	Tr	Tr	28	46	5.34	30	1347	Tr	14	169	131
R- 32	D - 4	Tr	Tr	39	Tr	0.1	Tr	20	1362	3.98	20	908	Tr	5	110	159
R- 33	D - 6	Tr	2.4	62	Tr	0.2	Tr	8	1162	4.76	61	343	30	17	216	15
R- 34	D - 8	Tr	Tr	19	Tr	Tr	Tr	15	39	3.11	24	1167	Tr	18	70	78
R- 35	D - 10	Tr	Tr	17	Tr	Tr	Tr	5	33	0.84	15	152	Tr	Tr	12	Tr
R- 36	D - 11	Tr	Tr	24	Tr	Tr	Tr	10	Tr	4.03	2	733	Tr	Tr	30	121
R- 37	D - 12	Tr	Tr	15	Tr	Tr	Tr	Tr	8	0.42	17	541	Tr	6	Tr	9
R- 38	D - 13	Tr	Tr	23	Tr	Tr	Tr	8	17	3.95	Tr	1149	16	30	16	159
R- 39	D - 14	Tr	Tr	23	Tr	Tr	Tr	4	Tr	3.47	13	559	Tr	25	14	65
R- 40	D - 17	Tr	Tr	21	Tr	Tr	Tr	Tr	5	0.44	16	152	Tr	Tr	26	Tr
R- 41	D - 18	Tr	Tr	47	Tr	0.1	Tr	19	39	5.74	86	1617	Tr	Tr	121	482
R- 42	D - 21	Tr	Tr	33	Tr	0.1	Tr	15	Tr	4.68	22	1617	Tr	Tr	98	36
R- 43	D - 22	Tr	Tr	27	Tr	Tr	Tr	16	25	5.53	31	867	Tr	16	58	312
R- 44	D - 25	Tr	Tr	53	Tr	0.1	Tr	14	71	4.34	36	393	5	4	157	87
R- 45	D - 27	Tr	Tr	Tr	Tr	Tr	Tr	5	5	0.27	3	255	Tr	Tr	13	Tr
R- 46	D - 29	Tr	Tr	27	Tr	0.1	Tr	8	Tr	2.56	21	903	Tr	6	44	222
R- 47	D - 31	Tr	Tr	9	Tr	Tr	Tr	9	3	2.33	13	505	Tr	9	38	38
R- 48	D - 32	Tr	Tr	14	Tr	Tr	Tr	9	Tr	3.81	16	951	Tr	Tr	59	32
R- 49	D - 36	Tr	0.9	45	Tr	0.5	Tr	5	45	1.28	129	1058	Tr	4	20	234
R- 50	D - 39	Tr	0.7	42	34	Tr	Tr	9	46	4.28	22	1178	Tr	Tr	82	48
R- 51	D - 40	Tr	Tr	50	Tr	0.1	Tr	16	36	4.27	20	698	Tr	6	117	73
R- 52	D - 43	Tr	Tr	46	Tr	0.1	Tr	Tr	6	3.78	12	312	Tr	Tr	86	8
R- 53	D - 45	Tr	Tr	34	Tr	Tr	Tr	16	5	5.93	20	592	Tr	Tr	147	63
R- 54	D - 46	Tr	Tr	34	Tr	0.1	Tr	18	55	6.57	15	1782	Tr	4	171	169
R- 55	D - 47	Tr	Tr	14	Tr	0.1	Tr	4	6	4.22	18	268	Tr	Tr	114	16
R- 56	D - 49	Tr	5.3	36	Tr	0.9	Tr	20	2074	5.45	13	940	Tr	7	179	63
R- 57	D - 51	Tr	Tr	39	Tr	0.1	Tr	16	52	5	9	1104	Tr	14	118	139
R- 58	D - 52	Tr	Tr	44	Tr	Tr	Tr	13	18	4.98	20	720	Tr	4	130	82
R- 59	D - 53	Tr	Tr	27	Tr	Tr	Tr	16	1478	2.61	10	1004	Tr	Tr	181	86
R- 60	D - 54	Tr	4.8	39	Tr	0.3	Tr	21	>10000	3.03	10	970	Tr	2	135	158
R- 61	C - 11	Tr	Tr	20	Tr	0.3	Tr	9	244	4.53	10	626	Tr	Tr	60	60
R- 62	D - 57 a	Tr	Tr	50	Tr	Tr	Tr	14	133	5.74	26	964	Tr	Tr	131	89
R- 63	D - 57	Tr	Tr	45	Tr	Tr	Tr	19	39	5.65	19	906	Tr	12	119	63
R- 64	D - 59	Tr	Tr	27	Tr	Tr	Tr	Tr	54	1.83	11	125	Tr	18	242	87
R- 65	D - 61	Tr	Tr	28	Tr	0.2	Tr	5	54	2.31	9	146	Tr	14	104	59
R- 66	D - 15	Tr	Tr	24	Tr	Tr	Tr	2	12	2.79	11	384	Tr	Tr	13	105
R- 67	D - 7	Tr	Tr	28	Tr	Tr	Tr	5	13	3.92	16	1098	Tr	Tr	46	77
R- 68	D - 12 c	Tr	1.7	88	Tr	0.5	Tr	4	38	3.91	466	894	Tr	2	57	1190
R- 69	D - 19	Tr	Tr	43	Tr	Tr	Tr	12	13	6.97	19	586	Tr	Tr	79	119
R- 70	D - 23	Tr	Tr	44	Tr	Tr	Tr	18	19	8.78	21	2180	Tr	6	190	212
R- 71	D - 26	Tr	Tr	53	Tr	Tr	Tr	7	7	4.35	17	958	Tr	Tr	36	44
R- 72	D - 26 b	0.033	Tr	25	Tr	Tr	Tr	6	10	0.43	11	123	Tr	Tr	6	7
R- 73	D - 30	Tr	Tr	28	6	Tr	Tr	2	43	1.16	16	166	12	Tr	9	25
R- 74	D - 37	Tr	Tr	48	Tr	Tr	Tr	10	8	4.69	23	582	8	Tr	71	200

No.	Samp. No.	As(ppm)	Ag(ppm)	Al(ppm)	Sb(ppm)	Ba(ppm)	Cd(ppm)	Co(ppm)	Cu(ppm)	Fe(O)	Pb(ppm)	Mn(ppm)	Mo(ppm)	Ni(ppm)	V(ppm)	Zn(ppm)
R- 75	D - 38	Tr	Tr	27	Tr	Tr	Tr	7	16	1.13	17	278	7	Tr	11	14
R- 76	D - 56	Tr	Tr	25	6	Tr	Tr	14	19	5.41	12	834	5	5	103	26
R- 77	D - 62	Tr	Tr	26	Tr	Tr	Tr	8	11	2.82	14	542	Tr	Tr	36	45
R- 78	D - 63	Tr	Tr	23	Tr	Tr	Tr	3	12	2.32	16	450	Tr	Tr	26	38
R- 79	D - 64	Tr	Tr	41	Tr	Tr	Tr	15	78	4.88	29	710	11	1	84	134
R- 80	D - 65	Tr	Tr	21	Tr	Tr	Tr	16	101	4.86	28	788	7	5	92	75
R- 81	D - 66	Tr	Tr	30	Tr	Tr	Tr	5	85	2.91	13	452	5	6	45	43
R- 82	D - 66 b	Tr	Tr	57	Tr	Tr	Tr	21	116	5.44	22	696	9	8	121	67
R- 83	D - 67	Tr	Tr	32	Tr	Tr	Tr	8	14	2.76	17	614	Tr	Tr	38	41
R- 84	D - 68	Tr	Tr	53	Tr	Tr	Tr	28	63	8.18	24	1040	15	1	176	87
R- 85	D - 69	Tr	Tr	22	Tr	Tr	Tr	7	21	3.32	9	400	Tr	3	41	43
R- 86	D - 70	Tr	Tr	34	Tr	Tr	Tr	4	17	2.61	13	318	Tr	1	34	29
R- 87	D - 72	Tr	Tr	25	Tr	Tr	Tr	6	15	2.95	18	534	Tr	3	37	47
R- 88	D - 73	Tr	Tr	27	Tr	Tr	Tr	10	6	3.92	16	696	Tr	5	48	55
R- 89	D - 74	Tr	Tr	24	Tr	Tr	Tr	6	7	3.49	9	878	9	Tr	17	44
R- 90	D - 75	Tr	Tr	5	Tr	Tr	Tr	Tr	13	1.62	6	388	Tr	Tr	Tr	48
R- 91	D - 75 b	0.025	Tr	15	Tr	Tr	Tr	2	14	0.56	9	264	3	Tr	10	9
R- 92	C - 59	0.017	Tr	34	Tr	Tr	Tr	19	20	4.79	18	788	8	9	118	66
R- 93	D - 78	Tr	Tr	Tr	Tr	Tr	Tr	3	24	1.92	18	400	5	3	30	33
R- 94	C - 9	0.017	Tr	44	Tr	Tr	Tr	13	86	4.47	26	944	5	Tr	106	91
R- 95	D - 80	Tr	Tr	44	Tr	Tr	Tr	19	73	5.71	18	750	4	4	130	53
R- 96	D - 81	Tr	Tr	44	Tr	Tr	Tr	Tr	13	1.73	17	378	Tr	Tr	21	17
R- 97	D - 82	Tr	Tr	34	Tr	Tr	Tr	16	34	5.32	30	778	Tr	6	92	86
R- 98	D - 83	Tr	Tr	30	Tr	Tr	Tr	14	25	4.8	26	822	Tr	6	79	82
R- 99	D - 84	Tr	Tr	45	Tr	Tr	Tr	16	33	5.33	28	906	Tr	6	98	103
R- 100	D - 86	Tr	Tr	47	Tr	Tr	Tr	17	39	6.7	38	984	Tr	5	106	100
R- 101	D - 87	Tr	Tr	33	Tr	Tr	Tr	2	34	1.77	113	1590	Tr	Tr	21	282
R- 102	D - 89	Tr	Tr	27	Tr	Tr	Tr	9	106	4.54	31	1056	Tr	Tr	32	198
R- 103	D - 92	Tr	Tr	63	Tr	Tr	Tr	25	334	8.48	382	2180	Tr	7	266	1118
R- 104	D - 93	Tr	0.6	62	Tr	Tr	Tr	16	390	6.64	486	1282	Tr	8	226	1274
R- 105	D - 94	Tr	Tr	31	Tr	Tr	Tr	1	36	3.46	33	708	Tr	Tr	18	80
R- 106	D - 95	Tr	1.4	57	Tr	Tr	Tr	18	462	7.62	610	1420	Tr	3	268	1445
R- 107	B - 53	Tr	Tr	41	Tr	Tr	Tr	16	9	6.68	31	1046	Tr	Tr	132	106
R- 108	D - 97	Tr	Tr	33	Tr	Tr	Tr	21	57	8.11	39	1948	Tr	Tr	85	204
R- 109	D - 98	Tr	1.9	30	14	0.1	Tr	6	1218	4.82	29	7660	Tr	Tr	344	242
R- 110	D - 98 b	Tr	72	53	12	0.1	Tr	16	>10630	6.19	31	7920	Tr	Tr	165	116
R- 111	D - 99	Tr	0.8	37	Tr	Tr	Tr	12	502	4.85	27	1092	Tr	Tr	77	64
R- 112	D - 100	Tr	0.6	79	Tr	Tr	Tr	20	226	6.62	160	3480	Tr	22	228	276
R- 113	C - 8	0.017	Tr	31	20	Tr	Tr	16	39	6.64	23	1298	Tr	Tr	124	120
R- 114	D - 102	Tr	Tr	60	11	Tr	Tr	5	96	3.94	25	698	Tr	Tr	34	69
R- 115	C - 10	Tr	Tr	51	Tr	Tr	Tr	20	11	7.01	33	908	Tr	2	228	87
R- 116	D - 105	Tr	Tr	24	Tr	Tr	Tr	7	196	4.32	66	1088	Tr	Tr	25	306
R- 117	D - 107	Tr	Tr	58	Tr	Tr	Tr	26	47	7.54	33	1330	Tr	3	180	191
R- 118	D - 108	Tr	Tr	43	Tr	Tr	Tr	20	49	7.22	38	1734	Tr	Tr	144	286
R- 119	D - 110	Tr	Tr	74	Tr	Tr	Tr	13	24	6.5	33	1552	Tr	Tr	88	152
R- 120	D - 111	Tr	Tr	19	12	Tr	Tr	Tr	16	3.77	20	430	Tr	Tr	3	49
R- 121	D - 113	Tr	Tr	43	Tr	Tr	Tr	1	17	2.71	22	180	Tr	5	1	29
R- 122	D - 114	Tr	Tr	46	Tr	Tr	Tr	Tr	29	2.05	26	138	Tr	Tr	Tr	6
R- 123	D - 92 b	Tr	Tr	41	Tr	Tr	Tr	7	242	3.01	51	570	Tr	Tr	29	165
R- 124	A - 51	Tr	Tr	52	Tr	Tr	Tr	23	42	6.96	23	1822	Tr	2	148	189
R- 125	A - 52	Tr	Tr	60	Tr	Tr	Tr	28	129	6.77	27	1128	Tr	15	171	104
R- 126	A - 53	Tr	Tr	54	Tr	Tr	Tr	25	23	6.93	18	1432	Tr	2	130	167
R- 127	C - 1	Tr	Tr	20	Tr	Tr	Tr	8	41	3.6	21	1512	Tr	Tr	56	56
R- 128	C - 2	Tr	Tr	32	Tr	Tr	Tr	11	13	3.98	21	1588	Tr	Tr	64	111
R- 129	C - 3	Tr	Tr	49	Tr	Tr	Tr	2	148	2.23	18	752	Tr	6	27	69
R- 130	C - 4	Tr	3.1	50	Tr	0.1	Tr	27	3801	6.08	32	1840	Tr	26	160	264
R- 131	C - 5	Tr	Tr	60	Tr	Tr	Tr	15	22	6.81	33	880	Tr	Tr	123	62
R- 132	C - 6	Tr	Tr	56	Tr	Tr	Tr	20	20	6.62	34	1766	Tr	5	167	120
R- 133	C - 13	Tr	Tr	63	Tr	Tr	Tr	11	19	5.16	18	1422	Tr	Tr	98	94
R- 134	C - 14	Tr	Tr	38	Tr	Tr	Tr	19	153	6.73	35	1876	Tr	2	198	312
R- 135	C - 15	0.017	Tr	46	Tr	Tr	Tr	33	516	8.06	37	1500	5	25	193	110
R- 136	C - 16	Tr	1.9	54	Tr	Tr	Tr	29	2651	6.32	31	1086	Tr	18	154	85
R- 137	C - 17	0.025	Tr	48	Tr	Tr	Tr	29	760	7.38	31	2480	Tr	29	183	224
R- 138	C - 18	Tr	Tr	51	Tr	Tr	Tr	31	114	8.67	22	2040	Tr	9	194	264
R- 139	C - 20	Tr	Tr	53	Tr	Tr	Tr	17	9	7.08	29	1216	Tr	15	105	105
R- 140	C - 23	Tr	Tr	79	Tr	Tr	Tr	20	12	6.24	40	878	Tr	21	129	103
R- 141	C - 25	Tr	Tr	66	Tr	Tr	Tr	27	6	7.23	26	2480	Tr	9	400	150
R- 142	C - 26	Tr	Tr	59	Tr	Tr	Tr	28	30	7.91	34	1928	Tr	15	196	127
R- 143	C - 27	Tr	Tr	60	Tr	Tr	Tr	26	14	8.16	34	1884	Tr	24	189	110
R- 144	C - 29	Tr	Tr	62	Tr	0.1	Tr	15	7	7.09	39	790	Tr	40	196	60
R- 145	C - 30	Tr	Tr	27	Tr	Tr	Tr	19	64	7.47	19	1418	8	6	179	121
R- 146	C - 31	Tr	Tr	21	Tr	0.1	Tr	2	6	4.23	19	292	4	Tr	59	20
R- 147	C - 32	Tr	Tr	22	Tr	Tr	Tr	11	25	5.35	15	1250	Tr	Tr	107	110
R- 148	C - 33	Tr	Tr	33	Tr	Tr	Tr	11	38	5.76	17	964	Tr	Tr	92	108

A-2 Result of Chemical Analysis of rock samples

No.	Samp. No.	Au(ppm)	Ag(ppm)	As(ppm)	Sb(ppm)	Pb(ppm)	Cd(ppm)	Co(ppm)	Cu(ppm)	Fe(%)	Mn(ppm)	Ni(ppm)	Mo(ppm)	Ni(ppm)	V(ppm)	Zn(ppm)	
R- 149	C - 34	Tr	Tr	29	Tr	Tr	Tr	14	16	4.91	15	560	Tr	1	56	54	
R- 150	C - 35	Tr	Tr	33	Tr	Tr	Tr	2	15	3.65	24	620	Tr	Tr	1	61	11
R- 151	C - 36	Tr	Tr	48	Tr	0.1	Tr	13	3	4.79	31	560	Tr	2	155	46	
R- 152	C - 37	Tr	Tr	13	Tr	Tr	Tr	10	8	4.68	20	506	Tr	Tr	90	57	
R- 153	C - 38	Tr	Tr	27	Tr	Tr	Tr	14	20	5.49	21	668	2	5	138	74	
R- 154	C - 39	Tr	Tr	24	Tr	Tr	Tr	9	22	7.07	33	758	Tr	7	72	30	
R- 155	C - 40	Tr	Tr	32	Tr	Tr	Tr	11	8	5.96	24	374	Tr	4	102	36	
R- 156	C - 41	Tr	Tr	47	Tr	Tr	Tr	22	72	7.14	22	1004	Tr	14	164	85	
R- 157	C - 42	Tr	Tr	25	Tr	Tr	Tr	7	6	4.56	16	706	Tr	11	47	34	
R- 158	C - 43	Tr	Tr	25	Tr	Tr	Tr	13	135	4.32	19	1020	Tr	8	91	90	
R- 159	C - 44	Tr	Tr	37	Tr	Tr	Tr	13	54	6.05	13	6.48	Tr	10	141	60	
R- 160	C - 45	0.017	Tr	20	Tr	Tr	Tr	13	51	4.96	26	638	Tr	22	98	50	
R- 161	C - 46	Tr	Tr	19	Tr	Tr	Tr	4	7	3.6	9	141	Tr	13	42	16	
R- 162	C - 48	Tr	Tr	16	Tr	Tr	Tr	6	10	3.58	10	238	4	37	65	24	
R- 163	C - 49	Tr	Tr	53	Tr	Tr	Tr	18	5	6.14	24	844	Tr	17	140	74	
R- 164	C - 50	Tr	Tr	47	Tr	Tr	Tr	29	164	6.79	28	984	Tr	10	139	81	
R- 165	C - 51	0.017	Tr	36	Tr	Tr	Tr	16	19	6.92	30	760	3	22	138	69	
R- 166	C - 7	Tr	Tr	20	5	Tr	Tr	15	125	6.59	23	676	Tr	7	115	63	
R- 167	B - 56	Tr	Tr	40	Tr	Tr	Tr	12	5	6.48	22	784	Tr	Tr	74	72	
R- 168	C - 54	Tr	Tr	44	Tr	Tr	Tr	16	3	5.73	25	1316	Tr	5	173	131	
R- 169	C - 55	0.017	Tr	22	Tr	Tr	Tr	11	28	5.35	21	502	Tr	Tr	94	59	
R- 170	C - 56	Tr	Tr	29	Tr	Tr	Tr	18	109	5.82	21	6.14	Tr	7	115	61	
R- 171	C - 57	Tr	0.5	7	Tr	0.1	Tr	4	15	2.69	10	113	Tr	2	37	16	
R- 172	C - 60	Tr	Tr	13	Tr	Tr	Tr	17	10	7.51	26	1350	Tr	4	151	156	
R- 173	C - 61	Tr	Tr	40	Tr	Tr	Tr	17	1	8.05	23	760	Tr	2	141	92	
R- 174	C - 62	Tr	Tr	37	Tr	Tr	Tr	14	11	7.04	26	914	Tr	Tr	111	72	
R- 175	C - 63	Tr	Tr	27	Tr	Tr	Tr	19	650	4.84	19	842	Tr	4	104	133	
R- 176	C - 64	Tr	Tr	22	Tr	Tr	Tr	9	13	4.91	20	886	Tr	Tr	92	52	
R- 177	C - 67	Tr	Tr	34	Tr	Tr	Tr	29	94	9.14	22	976	Tr	Tr	226	84	
R- 178	C - 68	Tr	Tr	34	Tr	Tr	Tr	17	2	7.48	30	730	Tr	Tr	131	74	
R- 179	C - 69	Tr	Tr	17	Tr	Tr	Tr	2	11	1.97	24	354	Tr	Tr	32	58	
R- 180	C - 71	Tr	Tr	40	Tr	Tr	Tr	13	13	5.58	20	810	Tr	Tr	109	107	
R- 181	C - 72	Tr	Tr	23	Tr	Tr	Tr	31	123	7.79	28	1236	Tr	10	216	146	
R- 182	C - 73	Tr	1.4	49	Tr	0.7	Tr	3	26	2.92	402	51	Tr	Tr	64	50	
R- 183	C - 74	Tr	Tr	23	Tr	Tr	Tr	4	8	3.18	22	364	Tr	Tr	17	68	
R- 184	C - 75	0.017	Tr	39	Tr	Tr	Tr	21	144	6.53	29	936	Tr	3	192	91	
R- 185	C - 76	Tr	Tr	31	Tr	Tr	Tr	21	36	6.41	26	696	Tr	9	159	60	
R- 186	C - 77	0.025	Tr	17	Tr	Tr	Tr	18	158	6.43	29	1004	Tr	Tr	122	91	
R- 187	C - 78	0.017	Tr	41	Tr	Tr	Tr	22	43	7.78	29	1761	Tr	Tr	197	142	
R- 188	C - 79	0.017	Tr	18	Tr	Tr	Tr	9	26	5.71	27	120	Tr	Tr	176	15	
R- 189	C - 80	0.025	Tr	25	Tr	Tr	Tr	3	24	1.05	17	80	Tr	Tr	33	10	
R- 190	C - 81	0.017	Tr	Tr	Tr	0.3	Tr	5	69	2.36	16	75	Tr	Tr	55	16	
R- 191	C - 82	Tr	Tr	28	Tr	Tr	Tr	11	18	4.98	23	468	Tr	Tr	78	57	
R- 192	C - 83	0.017	Tr	28	Tr	Tr	Tr	16	37	5.45	28	1180	Tr	Tr	116	94	
R- 193	C - 85	Tr	Tr	81	Tr	Tr	Tr	8	4	4.22	11	558	10	Tr	63	70	
R- 194	C - 86	Tr	Tr	28	Tr	Tr	Tr	5	4	3.61	Tr	594	Tr	2	70	45	
R- 195	C - 89	Tr	Tr	16	Tr	Tr	Tr	6	23	2.74	7	634	6	Tr	37	49	
R- 196	C - 91	1.93	50	276	25	12	Tr	1	960	7.71	4320	144	19	Tr	104	137	
R- 197	C - 92	0.042	Tr	33	Tr	0.2	Tr	21	24	0.18	56	920	Tr	6	175	86	
R- 198	C - 93	0.033	Tr	16	Tr	0.1	Tr	3	20	2.86	42	600	Tr	Tr	41	51	
R- 199	C - 94	0.092	2.5	91	7	Tr	Tr	1	22	1.46	122	99	4	Tr	39	38	
R- 200	C - 95	0.017	Tr	26	Tr	Tr	Tr	3	9	2.68	3	348	7	Tr	33	39	
R- 201	C - 96	0.017	Tr	28	Tr	Tr	Tr	5	10	3.2	3	6.78	Tr	Tr	41	54	
R- 202	C - 97	Tr	Tr	68	Tr	Tr	Tr	7	7	3.61	13	1732	Tr	Tr	26	99	
R- 203	C - 98	Tr	0.7	89	Tr	Tr	Tr	31	88	9.47	20	1626	13	5	222	221	
R- 204	C - 99	Tr	Tr	23	Tr	Tr	5.4	Tr	17	2.68	115	4200	4	Tr	29	443	
R- 205	C - 100	Tr	Tr	10	Tr	Tr	Tr	3	32	2.4	Tr	3720	39	36	189	40	
R- 206	C - 101	0.017	Tr	86	Tr	Tr	Tr	26	37	8.8	20	2460	16	Tr	224	179	
R- 207	C - 102	Tr	Tr	26	Tr	Tr	Tr	6	9	4.08	110	1781	17	82	226	39	
R- 208	C - 103	Tr	Tr	74	Tr	Tr	Tr	29	29	6.56	216	2880	12	5	250	293	
R- 209	C - 104	Tr	Tr	52	Tr	Tr	Tr	26	836	5.1	10	1634	10	Tr	210	59	
R- 210	C - 105	Tr	Tr	Tr	Tr	Tr	Tr	Tr	33	1.4	6	938	Tr	Tr	20	74	
R- 211	C - 107	Tr	Tr	35	Tr	Tr	Tr	12	21	6.07	61	2100	Tr	Tr	107	335	
R- 212	C - 109	Tr	Tr	40	Tr	Tr	Tr	31	38	7.91	Tr	1062	Tr	1	232	132	
R- 213	C - 110	0.025	1.5	15	Tr	0.2	1	7	672	3.1	79	490	Tr	Tr	93	1971	
R- 214	C - 111	Tr	Tr	28	Tr	Tr	Tr	13	50	4.14	8	628	4	Tr	123	221	
R- 215	C - 112	Tr	Tr	31	Tr	Tr	Tr	3	21	2.77	Tr	488	6	Tr	28	89	
R- 216	C - 113	Tr	Tr	29	Tr	Tr	Tr	5	9	3.99	Tr	2780	Tr	17	70	71	
R- 217	C - 114	Tr	Tr	30	Tr	Tr	Tr	3	30	1.34	140	380	Tr	3	19	184	
R- 218	C - 115	Tr	Tr	31	Tr	Tr	Tr	5	16	0.99	4	296	Tr	Tr	15	23	
R- 219	C - 116	Tr	0.5	40	Tr	Tr	Tr	10	70	1.91	64	1164	Tr	Tr	39	508	
R- 220	C - 117	Tr	Tr	16	Tr	Tr	Tr	5	11	1.86	14	246	Tr	Tr	11	16	
R- 221	C - 118	Tr	Tr	26	Tr	Tr	Tr	4	18	1.66	17	224	Tr	Tr	16	Tr	
R- 222	C - 119	Tr	Tr	66	Tr	Tr	Tr	31	41	6.63	26	1152	Tr	Tr	163	64	

No.	Samp. No.	Au(ppm)	Ag(ppm)	As(ppm)	Sb(ppm)	Pb(ppm)	Cd(ppm)	Co(ppm)	Cu(ppm)	Fe(%)	Pb(ppm)	Mn(ppm)	K <sub>2</sub> O(ppm)	Si(ppm)	V(ppm)	Zn(ppm)
R-223	B-52	Tr	Tr	38	Tr	Tr	Tr	24	88	3.88	23	662	Tr	23	128	51
R-224	B-54	Tr	Tr	76	Tr	Tr	Tr	22	3	4.78	34	1350	Tr	6	102	75
R-225	B-55	Tr	Tr	33	Tr	Tr	Tr	17	13	3.79	20	658	Tr	2	110	68
R-226	C-84	Tr	Tr	48	Tr	Tr	Tr	17	27	4.8	25	510	Tr	12	105	59
R-227	C-121	Tr	Tr	29	Tr	Tr	Tr	22	87	5.15	26	866	Tr	Tr	190	56
R-228	A-55	0.025	Tr	21	Tr	0.1	Tr	3	58	1.09	17	77	Tr	5	15	10
R-229	A-56	0.042	47	46	Tr	0.1	Tr	46	6891	6.08	35	1714	6	63	220	182
R-230	A-57	0.017	0.8	18	Tr	0.1	Tr	10	191	4.34	15	646	Tr	5	32	58
R-231	A-58	0.033	0.7	33	Tr	0.1	Tr	29	197	4.84	22	932	4	35	128	87
R-232	A-59	Tr	Tr	43	Tr	0.2	Tr	17	71	4.2	58	394	6	6	167	59
R-233	A-60	0.017	Tr	26	Tr	0.1	Tr	24	128	5.38	26	672	12	32	127	64
R-234	A-61	Tr	Tr	36	Tr	0.1	Tr	26	75	5.59	29	1128	4	16	158	195
R-235	A-62	0.017	Tr	16	Tr	0.1	Tr	14	59	4.81	49	492	4	10	73	95
R-236	A-63	Tr	Tr	24	Tr	0.1	Tr	20	13	4.37	19	976	Tr	3	135	82
R-237	A-64	Tr	8.3	41	Tr	0.1	Tr	20	4611	5.82	19	1054	Tr	5	133	111
R-238	A-65	Tr	Tr	32	Tr	0.1	Tr	3	100	1.12	21	250	Tr	8	15	31
R-239	A-66	Tr	Tr	37	Tr	0.1	Tr	7	24	6.97	47	908	Tr	2	140	11
R-240	A-67	Tr	Tr	28	Tr	0.1	Tr	12	13	4.31	28	650	10	29	58	84
R-241	A-68	Tr	Tr	39	Tr	0.1	Tr	23	185	7.22	35	1230	8	3	236	109
R-242	A-69	0.017	Tr	38	Tr	0.1	Tr	23	98	5.71	21	1332	Tr	10	154	105
R-243	A-70	Tr	Tr	24	Tr	0.1	Tr	4	9	3.13	25	324	3	3	32	40
R-244	A-71	Tr	Tr	25	Tr	0.1	Tr	20	40	6.32	22	2200	4	5	157	143
R-245	A-72	Tr	Tr	42	Tr	0.1	Tr	19	8	6.07	29	1938	6	5	131	175
R-246	A-73	Tr	Tr	38	Tr	0.1	Tr	19	11	6.2	24	2100	Tr	6	128	180
R-247	A-74	0.017	Tr	43	Tr	0.1	Tr	18	100	4.18	30	1050	2	5	99	95
R-248	A-75	Tr	Tr	16	Tr	0.1	Tr	11	31	3.03	28	564	Tr	10	46	62
R-249	A-76	Tr	Tr	32	Tr	0.1	Tr	12	14	4.07	24	864	4	3	34	90
R-250	A-77	Tr	Tr	86	Tr	0.1	Tr	17	17	1.25	32	676	Tr	20	125	70
R-251	A-78	Tr	Tr	41	Tr	0.1	Tr	6	50	1.27	29	474	2	8	27	47
R-252	A-79	Tr	Tr	21	Tr	0.1	Tr	9	23	4.06	31	287	Tr	Tr	40	43
R-253	A-80	Tr	Tr	26	Tr	0.1	Tr	10	16	3.17	4	417	4	Tr	48	35
R-254	A-81	Tr	Tr	23	Tr	0.1	Tr	14	30	3.83	Tr	5.27	4	Tr	83	45
R-255	B-100	0.017	Tr	57	Tr	0.1	Tr	23	62	5.34	11	1896	Tr	4	138	128
R-256	B-101	Tr	Tr	31	Tr	0.1	Tr	12	10	3.23	10	209	Tr	Tr	27	22
R-257	B-102	Tr	Tr	35	Tr	0.1	Tr	28	14	5.46	10	697	Tr	Tr	63	57
R-258	B-103	Tr	Tr	31	Tr	0.1	Tr	18	45	3.13	8	253	6	Tr	39	23
R-259	B-104	Tr	Tr	28	Tr	0.1	Tr	15	126	4.18	3	541	Tr	Tr	59	81
R-260	B-106	Tr	Tr	33	Tr	0.1	Tr	20	108	5.58	17	1249	Tr	Tr	151	122
R-261	B-107	Tr	Tr	30	Tr	0.1	Tr	9	41	3.05	Tr	306	21	79	23	44
R-262	B-108	Tr	Tr	24	Tr	0.1	Tr	9	39	2.93	Tr	273	Tr	Tr	28	55
R-263	B-109	Tr	Tr	29	Tr	0.1	Tr	18	4	5.89	22	917	3	Tr	113	75
R-264	B-110	Tr	Tr	41	Tr	0.1	Tr	21	90	5.94	18	1025	5	Tr	154	89
R-265	B-112	Tr	Tr	37	Tr	0.1	Tr	25	188	7.29	13	1049	Tr	Tr	192	132
R-266	B-113	Tr	Tr	16	Tr	0.1	Tr	20	29	4.42	10	831	8	10	155	41
R-267	B-114	Tr	Tr	24	Tr	0.1	Tr	13	15	4.17	Tr	1051	4	2	68	33
R-268	B-115	Tr	Tr	38	Tr	0.1	Tr	27	79	8.53	37	959	Tr	7	166	78
R-269	B-116	Tr	Tr	37	Tr	0.1	Tr	26	235	6.07	31	1715	Tr	6	179	235
R-270	B-117	Tr	Tr	41	Tr	0.1	Tr	21	109	6.28	22	841	Tr	7	149	68
R-271	B-118	0.017	Tr	26	Tr	0.1	Tr	12	66	5.85	7	711	Tr	Tr	17	97
R-272	B-119	0.017	Tr	32	Tr	0.1	Tr	22	21	5.14	9	885	Tr	Tr	151	58
R-273	B-120	0.15	Tr	40	Tr	0.1	Tr	22	22	7.09	5	1321	2	10	136	90
R-274	B-121	0.025	Tr	38	Tr	0.1	Tr	19	47	4.95	4	1406	Tr	1	126	83
R-275	B-122	0.017	Tr	44	Tr	0.1	Tr	18	32	4.59	17	901	9	15	110	70
R-276	B-123	0.017	Tr	30	Tr	0.1	Tr	18	7	3.81	24	969	Tr	2	55	71
R-277	B-124	0.017	Tr	36	Tr	0.1	Tr	10	16	4.25	12	527	Tr	Tr	37	47
R-278	B-125	Tr	Tr	31	Tr	0.1	Tr	12	21	3.82	20	1327	Tr	Tr	107	81
R-279	B-126	Tr	Tr	31	Tr	0.1	Tr	19	9	4.66	16	1401	Tr	5	133	113
R-280	B-127	0.017	Tr	19	Tr	0.1	Tr	17	65	4.39	Tr	987	3	2	84	54
R-281	B-128	0.017	0.7	28	Tr	0.1	Tr	18	13	3.81	5	787	Tr	Tr	88	108
R-282	B-129	0.16	2.8	121	8	0.1	Tr	27	5549	9.54	148	1687	Tr	2	119	189
R-283	B-130	0.017	Tr	23	Tr	0.1	Tr	13	85	3.98	17	843	Tr	Tr	77	58
R-284	B-131	Tr	Tr	26	Tr	0.1	Tr	12	72	2.46	8	521	2	Tr	33	77
R-285	B-132	Tr	Tr	33	Tr	0.1	Tr	14	8	4.8	29	1370	Tr	3	119	81
R-286	B-133	0.017	Tr	35	Tr	0.1	Tr	18	8	4.97	32	1395	Tr	4	127	84
R-287	B-134	Tr	Tr	22	Tr	0.1	Tr	18	114	5.06	Tr	1347	Tr	9	142	84
R-288	B-135	Tr	Tr	36	Tr	0.1	Tr	24	53	5.78	Tr	1239	Tr	10	147	91
R-289	B-136	Tr	Tr	32	Tr	0.1	Tr	23	110	5.82	11	1609	8	10	145	95
R-290	B-137	Tr	Tr	20	Tr	0.1	Tr	27	75	8.09	7	1227	3	16	146	80
R-291	B-138	Tr	Tr	23	Tr	0.1	Tr	19	97	6	Tr	1885	Tr	8	132	107
R-292	B-139	Tr	Tr	44	Tr	0.1	Tr	20	46	5.94	22	1523	Tr	7	134	143
R-293	B-140	Tr	Tr	28	Tr	0.1	Tr	13	38	5.19	Tr	1273	Tr	Tr	70	139
R-294	B-141	0.017	Tr	20	Tr	0.1	Tr	12	8	4.87	13	953	4	Tr	79	73
R-295	B-142	Tr	Tr	18	Tr	0.1	Tr	8	17	5.57	10	681	8	Tr	77	15
R-296	B-143	Tr	Tr	18	Tr	0.1	Tr	10	6	4.35	Tr	723	4	Tr	88	43



No.	Samp. No.	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)	Cd (ppm)	Co (ppm)	Ni (ppm)	Fe (t)	Pb (ppm)	Mn (ppm)	Mo (ppm)	Ni (ppm)	V (ppm)	Zn (ppm)
R- 297	B - 144	Tr	Tr	23	Tr	0.1	Tr	17	98	4.87	Tr	859	4	8	109	81
R- 298	B - 145	Tr	Tr	26	Tr	0.1	Tr	19	60	5.19	Tr	1363	8	15	132	70
R- 299	B - 146	Tr	Tr	24	Tr	0.1	Tr	18	76	4.64	22	1.89	8	5	122	58
R- 300	B - 147	Tr	Tr	20	Tr	1.2	4.3	15	26	5.12	61	826	Tr	Tr	55	58
R- 301	C - 122	Tr	Tr	17	Tr	0.2	Tr	6	4	2.19	28	566	Tr	Tr	25	84
R- 302	C - 123	Tr	Tr	18	Tr	0.1	Tr	8	14	2.37	32	410	3	2	28	48
R- 303	C - 124	Tr	Tr	12	Tr	0.1	Tr	8	19	2.88	17	892	4	4	41	31
R- 304	C - 125	Tr	Tr	14	Tr	0.1	Tr	7	11	3.01	48	1486	4	2	23	167
R- 305	C - 126	Tr	Tr	21	Tr	0.1	Tr	2	4	0.83	32	390	7	Tr	9	44
R- 306	C - 127	Tr	Tr	27	Tr	0.1	Tr	4	3	1.22	25	358	5	3	13	30
R- 307	C - 128	Tr	Tr	14	Tr	0.1	Tr	15	Tr	9.49	38	88	13	7	171	26
R- 308	C - 129	Tr	Tr	14	Tr	0.1	Tr	2	4	0.91	20	744	Tr	Tr	9	13
R- 309	C - 130	Tr	Tr	19	Tr	0.1	Tr	5	25	1.69	17	327	Tr	4	31	30
R- 310	C - 131	Tr	Tr	30	Tr	0.1	Tr	12	10	3.27	29	504	Tr	Tr	25	76
R- 311	C - 132	0.025	Tr	65	Tr	0.1	1.6	11	39	2.56	38	1588	10	6	62	1154
R- 312	C - 133	Tr	Tr	41	Tr	0.1	Tr	8	1	3.85	22	562	Tr	Tr	75	97
R- 313	C - 134	Tr	Tr	29	Tr	0.1	Tr	9	9	4.28	14	928	9	Tr	104	70
R- 314	C - 135	Tr	Tr	21	Tr	0.1	Tr	9	41	1.88	13	498	Tr	Tr	53	33
R- 315	C - 136	Tr	Tr	11	Tr	0.1	Tr	3	Tr	1.35	12	89	Tr	Tr	27	17
R- 316	C - 137	Tr	Tr	32	Tr	0.1	Tr	17	18	6.32	16	894	9	5	173	71
R- 317	C - 138	Tr	Tr	26	Tr	0.1	Tr	15	211	4.86	21	848	6	7	127	62
R- 318	C - 139	Tr	Tr	14	Tr	0.1	Tr	7	25	2.57	13	1138	Tr	Tr	46	40
R- 319	C - 140	Tr	0.8	52	Tr	0.1	Tr	6	78	3.1	49	1570	3	4	34	169
R- 320	C - 141	Tr	Tr	13	Tr	0.1	Tr	8	Tr	3.28	13	686	3	Tr	30	107
R- 321	C - 142	Tr	Tr	9	Tr	0.1	Tr	3	11	3.06	9	148	3	2	17	19
R- 322	C - 143	0.1	Tr	17	Tr	0.1	0.3	7	147	1.24	26	36	8	3	36	17
R- 323	C - 144	0.017	Tr	11	Tr	0.1	Tr	12	178	3.63	23	274	6	2	34	29
R- 324	C - 145	Tr	Tr	37	Tr	0.1	Tr	11	25	7.42	29	1450	9	5	100	56
R- 325	C - 146	Tr	1.2	108	21	0.1	Tr	8	83	5.77	752	4378	21	11	146	723
R- 326	C - 152	Tr	Tr	35	Tr	0.1	Tr	17	32	6.14	52	1088	2	2	111	129
R- 327	C - 153	Tr	Tr	18	Tr	0.1	Tr	7	35	3.07	29	482	3	1	50	43
R- 328	C - 154	Tr	Tr	13	Tr	0.1	Tr	4	28	1.86	33	410	Tr	3	16	43
R- 329	C - 155	Tr	Tr	39	Tr	0.1	Tr	9	22	7.31	31	2018	5	2	49	123
R- 330	C - 156	Tr	Tr	14	Tr	0.1	Tr	8	151	1.79	26	478	Tr	4	55	55
R- 331	C - 157	Tr	Tr	21	Tr	0.1	Tr	11	61	2.32	42	428	5	3	28	66
R- 332	C - 158	Tr	Tr	15	Tr	0.1	Tr	6	22	0.88	55	258	Tr	7	25	61
R- 333	C - 159	0.033	5.3	538	60	1.5	Tr	7	2790	0.84	17	77	8	3	24	13
R- 334	C - 160	Tr	Tr	22	Tr	0.2	Tr	3	45	1.6	20	178	3	Tr	23	9
R- 335	C - 161	Tr	Tr	11	Tr	0.1	Tr	3	19	2.47	18	113	Tr	Tr	13	8
R- 336	C - 162	Tr	Tr	6	Tr	0.1	Tr	2	21	1.12	14	242	Tr	Tr	19	14
R- 337	C - 163	Tr	Tr	24	Tr	0.1	Tr	4	9	2.27	18	168	Tr	5	12	41
R- 338	C - 164	Tr	1.4	30	Tr	0.2	Tr	15	512	7.78	90	3668	Tr	3	84	223
R- 339	C - 165	Tr	Tr	34	Tr	0.1	Tr	9	15	1.96	50	1236	Tr	3	109	160
R- 340	C - 166	Tr	Tr	1.1	Tr	0.1	Tr	9	175	2.56	23	780	2	7	35	46
R- 341	C - 167	Tr	Tr	16	Tr	0.1	Tr	9	43	2.58	25	314	Tr	2	41	17
R- 342	C - 168	Tr	Tr	27	Tr	0.1	Tr	17	30	4.5	24	790	4	4	83	49
R- 343	C - 169	0.017	Tr	19	Tr	0.1	Tr	6	17	0.99	24	782	Tr	2	90	26
R- 344	C - 170	Tr	Tr	26	Tr	0.1	Tr	16	34	3.03	27	1092	7	14	105	51
R- 345	C - 171	Tr	Tr	22	Tr	0.1	Tr	16	24	3.68	24	532	3	11	91	36
R- 346	C - 172	Tr	Tr	50	Tr	0.1	Tr	17	19	4.88	26	1608	5	8	186	93
R- 347	C - 173	Tr	Tr	26	Tr	0.1	Tr	18	36	4.98	24	1542	4	8	163	67
R- 348	C - 174	Tr	Tr	28	Tr	0.1	Tr	19	104	4.93	28	1140	3	2	152	70
R- 349	C - 175	Tr	Tr	33	Tr	0.1	Tr	22	22	3.16	25	1034	Tr	5	118	72
R- 350	C - 176	Tr	Tr	27	Tr	0.1	Tr	14	25	3.77	33	778	4	8	85	71
R- 351	C - 177	0.017	Tr	25	Tr	0.1	Tr	16	28	3.55	30	1518	4	18	127	79
R- 352	C - 178	Tr	Tr	30	Tr	0.1	Tr	13	5	3.86	27	1801	4	6	100	75
R- 353	D - 116	0.017	Tr	30	Tr	0.1	Tr	11	168	3.74	102	8278	3	Tr	67	234
R- 354	D - 117	Tr	Tr	30	Tr	0.1	Tr	17	30	6.54	30	918	2	3	124	67
R- 355	D - 117 b	Tr	Tr	17	Tr	0.1	Tr	10	35	3.61	23	500	3	Tr	24	48
R- 356	D - 118	0.017	Tr	23	Tr	0.1	Tr	9	40	3.17	33	562	10	7	23	47
R- 357	D - 119	Tr	Tr	37	Tr	0.1	Tr	18	3	4.08	32	1080	6	Tr	86	78
R- 358	D - 120	0.025	Tr	25	Tr	0.1	Tr	7	32	2.87	36	1084	Tr	1	27	59
R- 359	D - 121	0.017	Tr	24	Tr	0.1	Tr	18	60	4.37	27	706	Tr	9	101	43
R- 360	D - 122	Tr	Tr	27	Tr	0.1	Tr	6	58	2.43	34	424	Tr	Tr	29	28
R- 361	D - 124	0.025	Tr	25	Tr	0.1	Tr	7	16	2.18	51	320	4	Tr	30	25
R- 362	D - 125	0.025	Tr	10	Tr	0.1	Tr	6	11	1.7	37	550	Tr	Tr	27	57
R- 363	D - 127	0.017	Tr	22	Tr	0.1	Tr	7	13	1.69	19	436	3	2	25	36
R- 364	D - 128	0.017	Tr	49	Tr	0.1	Tr	21	105	7.02	36	1290	4	3	163	181
R- 365	D - 129	Nd	1.2	84	59	0.1	Tr	9	1	5.46	38	5138	5	19	71	586
R- 366	D - 129 b	0.017	1.3	50	Tr	0.1	Tr	28	389	7.56	91	2292	16	4	190	230
R- 367	D - 130	0.017	0.9	49	Tr	0.1	Tr	23	211	7.12	46	1558	Tr	3	180	172
R- 368	D - 133	0.017	Tr	19	Tr	0.1	Tr	23	4	7.27	31	1231	Tr	Tr	147	92
R- 369	D - 134	0.075	Tr	12	Tr	0.1	Tr	7	56	2.06	19	536	Tr	Tr	29	34
R- 370	D - 134 b	0.017	Tr	45	Tr	0.1	Tr	5	10	1.88	27	568	4	Tr	28	25

A-2 Result of Chemical Analysis of rock samples

6

No.	Samp. No.	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)	Cd (ppm)	Co (ppm)	Cu (ppm)	Fe (d)	Pb (ppm)	Mn (ppm)	Mo (ppm)	Ni (ppm)	V (ppm)	Zn (ppm)
R- 371	D - 135	Tr	Tr	17	Tr	0.1	Tr	6	10	1.88	11	448	Tr	1	31	35
R- 372	D - 136	Tr	Tr	48	Tr	0.1	Tr	Tr	5	2.17	27	276	Tr	Tr	23	24
R- 373	D - 137	0.017	Tr	34	Tr	0.1	Tr	8	6	4.75	36	438	4	Tr	40	77
R- 374	D - 138 b	Tr	Tr	41	Tr	0.1	Tr	2	2	5.3	35	344	9	Tr	27	43
R- 375	D - 138	Tr	Tr	20	Tr	0.1	Tr	Tr	39	2.42	44	700	7	Tr	9	34
R- 376	D - 139	Tr	Tr	27	Tr	0.1	Tr	6	5	5.72	22	636	9	Tr	33	55
R- 377	D - 140	Tr	Tr	27	Tr	0.1	Tr	15	2	8.44	35	1032	16	Tr	84	89
R- 378	D - 140 b	0.025	Tr	33	Tr	0.1	Tr	8	23	6.14	35	682	5	Tr	130	74
R- 379	D - 141	0.042	Tr	19	Tr	0.1	Tr	12	8	7.02	29	1050	2	1	121	77
R- 380	D - 142	Tr	Tr	27	Tr	0.1	Tr	5	4	3.5	24	474	5	Tr	51	40
R- 381	D - 143	Tr	Tr	38	Tr	0.1	Tr	4	13	4.22	25	666	3	Tr	44	76
R- 382	D - 144	Tr	Tr	8	Tr	0.1	Tr	Tr	11	1.36	6	212	6	Tr	1	21
R- 383	D - 145	Tr	Tr	31	Tr	0.1	Tr	10	36	5.42	28	738	9	3	107	58
R- 384	D - 146	0.11	5.8	199	Tr	0.1	Tr	25	857	9.69	107	1542	12	10	36	118
R- 385	D - 147	Tr	Tr	42	Tr	0.1	Tr	19	23	7.81	25	924	Tr	Tr	192	119
R- 386	D - 148	0.017	Tr	26	17	0.1	Tr	4	132	>10.0	39	382	50	Tr	42	105
R- 387	D - 149	Tr	Tr	17	Tr	0.1	Tr	8	112	7.72	36	800	4	Tr	77	64
R- 388	D - 150	Tr	Tr	31	Tr	0.1	Tr	9	49	4.99	69	500	6	2	91	212
R- 389	D - 151	0.025	Tr	53	Tr	0.1	Tr	4	31	3.81	137	246	5	2	75	234
R- 390	D - 152	Tr	Tr	30	Tr	0.1	Tr	12	20	5.45	30	820	5	5	107	117
R- 391	D - 153	Tr	Tr	11	Tr	0.1	Tr	?	4	4.97	17	624	10	4	45	162
R- 392	D - 154	0.058	Tr	8	Tr	0.1	Tr	Tr	74	1.33	25	1240	3	1	18	45
R- 393	D - 155	Tr	Tr	11	Tr	0.1	Tr	Tr	16	6.15	12	222	8	Tr	33	21
R- 394	D - 156	Tr	Tr	38	Tr	0.1	Tr	5	14	6.42	30	538	5	Tr	39	90
R- 395	D - 157	Tr	Tr	29	Tr	0.1	Tr	4	40	4.55	27	800	3	Tr	37	187
R- 396	D - 159	Tr	26	31	Tr	0.1	Tr	10	>10000	2.08	24	540	8	7	16	112
R- 397	D - 160	Tr	2.2	21	Tr	0.1	Tr	8	>10000	2.34	19	544	4	4	16	56
R- 398	D - 161	Tr	0.7	25	Tr	0.1	Tr	8	511	1.18	9	892	5	3	21	26
R- 399	D - 162	Tr	Tr	31	Tr	0.1	Tr	17	271	5.78	18	758	Tr	Tr	166	103
R- 400	D - 163	Tr	Tr	22	Tr	0.1	Tr	25	138	7.49	21	814	5	6	168	94
R- 401	D - 164	Tr	Tr	18	Tr	0.1	Tr	13	99	3.54	11	520	Tr	7	121	31
R- 402	D - 165	Tr	Tr	22	Tr	0.1	Tr	10	27	3.59	14	900	2	5	68	30
R- 403	D - 166	0.017	Tr	57	Tr	0.1	Tr	18	71	5.04	55	704	Tr	9	160	49
R- 404	D - 167	Tr	0.6	33	Tr	0.1	Tr	20	169	5.92	24	1520	Tr	10	180	223
R- 405	D - 168	Tr	Tr	39	Tr	0.1	Tr	16	49	4.61	20	796	Tr	9	137	64
R- 406	D - 169	Tr	Tr	14	Tr	0.1	Tr	Tr	12	0.53	12	31	Tr	1	14	4
R- 407	D - 170	Tr	Tr	19	Tr	0.1	Tr	5	21	1.95	23	262	3	4	19	33
R- 408	D - 171	Tr	Tr	17	Tr	0.1	Tr	14	72	4.16	21	586	4	4	110	34
R- 409	D - 172	Tr	Tr	15	Tr	0.1	Tr	9	20	2.73	9	324	4	6	63	30
R- 410	D - 173	Tr	Tr	29	Tr	0.1	Tr	18	24	4.53	32	2296	5	12	143	221

A-3 Result of Chemical Analysis of Soil samples

1

No.	Samp. No.	Au(ppm)	Ag(ppm)	As(ppm)	Sb(ppm)	Hg(ppm)	Cd(ppm)	Co(ppm)	Cu(ppm)	Fe(%)	Pb(ppm)	Mn(ppm)	Mo(ppm)	Ni(ppm)	V(ppm)	Zn(ppm)
S- 1	SA - 1	Tr	Tr	36	Tr	Tr	Tr	30	117	6.97	33	2040	6	3	186	114
S- 2	SA - 2	Tr	1.1	47	Tr	0.1	Tr	27	1383	6.38	36	1680	Tr	8	228	160
S- 3	B - 1	Tr	Tr	28	Tr	Tr	Tr	16	128	4.42	80	1128	Tr	7	109	139
S- 4	B - 4	Tr	Tr	24	Tr	Tr	Tr	26	223	5.3	204	1670	3	4	158	296
S- 5	B - 7	Tr	Tr	52	Tr	Tr	Tr	27	349	5.33	49	1718	Tr	6	152	326
S- 6	B - 9	Tr	Tr	41	Tr	Tr	Tr	21	128	4.64	38	1020	Tr	4	160	77
S- 7	B - 12	Tr	Tr	29	Tr	Tr	Tr	22	501	5.19	26	1222	Tr	Tr	151	80
S- 8	B - 15	Tr	Tr	33	Tr	Tr	Tr	29	401	6.13	32	2050	Tr	14	168	280
S- 9	B - 20	Tr	Tr	34	Tr	Tr	Tr	25	43	5.43	29	1216	Tr	1	182	126
S- 10	B - 22	Tr	Tr	46	Tr	Tr	Tr	14	34	3.45	22	691	Tr	6	100	48
S- 11	B - 23	Tr	Tr	28	Tr	Tr	Tr	19	58	4.93	18	842	Tr	Tr	178	54
S- 12	B - 24	Tr	Tr	29	Tr	Tr	Tr	23	61	5.75	36	1036	Tr	1	165	74
S- 13	SC - 1	Tr	Tr	7	Tr	Tr	Tr	27	32	6.58	40	1388	5	3	202	109
S- 14	SC - 2	Tr	Tr	46	Tr	Tr	Tr	22	48	5.56	31	1266	3	Tr	166	116
S- 15	SC - 3	Tr	Tr	55	Tr	Tr	Tr	20	19	6.03	41	1274	Tr	Tr	143	127
S- 16	SC - 4	Tr	Tr	66	Tr	Tr	Tr	26	35	6.32	35	1000	Tr	4	144	93
S- 17	SC - 5	Tr	Tr	17	Tr	Tr	Tr	19	16	4.83	29	672	Tr	Tr	152	71
S- 18	SC - 6	Tr	Tr	39	Tr	Tr	Tr	20	29	4.85	34	1196	Tr	Tr	122	101
S- 19	SC - 7	Tr	Tr	39	Tr	Tr	Tr	22	16	7.27	33	678	Tr	Tr	210	46
S- 20	SC - 8	Tr	Tr	37	Tr	Tr	Tr	12	17	4.78	22	610	Tr	Tr	103	60
S- 21	SC - 9	Tr	Tr	63	Tr	Tr	Tr	27	68	5.13	28	1056	Tr	3	168	95
S- 22	SC - 10	Tr	Tr	52	Tr	Tr	Tr	13	7	3.82	32	468	Tr	Tr	86	25
S- 23	SC - 11	Tr	Tr	28	Tr	Tr	Tr	14	13	4.72	31	434	4	Tr	107	30
S- 24	SC - 12	Tr	Tr	51	Tr	Tr	Tr	28	8	6.63	31	1462	Tr	Tr	220	96
S- 25	SC - 13	Tr	Tr	33	Tr	Tr	Tr	24	50	5.24	23	1910	4	4	186	183
S- 26	SC - 14	Tr	Tr	59	Tr	Tr	Tr	29	17	7.54	44	1908	Tr	11	342	139
S- 27	SC - 15	Tr	Tr	42	Tr	Tr	Tr	26	84	5.36	38	1926	Tr	8	194	146
S- 28	SC - 16	Tr	Tr	23	Tr	Tr	Tr	14	62	4.88	31	962	Tr	Tr	148	82
S- 29	SC - 17	Tr	Tr	30	Tr	Tr	Tr	23	49	4.88	36	766	2	Tr	170	57
S- 30	SC - 18	Tr	Tr	36	Tr	Tr	Tr	22	22	5.43	26	1272	Tr	3	147	126
S- 31	SC - 19	Tr	Tr	17	Tr	Tr	Tr	25	26	7.39	34	1252	3	5	236	131
S- 32	SC - 20	Tr	Tr	52	Tr	Tr	Tr	22	65	6.21	41	772	3	3	180	59
S- 33	SC - 21	Tr	Tr	33	Tr	0.1	Tr	20	46	5.1	29	1280	Tr	11	156	93
S- 34	SC - 22	Tr	Tr	40	Tr	Tr	Tr	31	72	7.96	49	1851	Tr	6	238	116
S- 35	SC - 23	Tr	Tr	38	Tr	Tr	Tr	26	154	5.36	31	1800	3	12	181	121
S- 36	SC - 24	Tr	Tr	20	Tr	Tr	Tr	26	73	5.04	23	1112	Tr	Tr	149	66
S- 37	SC - 25	Tr	Tr	1r	Tr	Tr	Tr	19	7	4.46	13	1144	Tr	Tr	148	99
S- 38	SC - 26	Tr	Tr	24	Tr	Tr	Tr	20	56	4.06	34	1042	Tr	7	123	107
S- 39	SC - 27	Tr	Tr	22	Tr	Tr	Tr	16	50	3.74	13	768	Tr	1	120	76
S- 40	SC - 28	Tr	Tr	Tr	Tr	Tr	Tr	16	37	4.17	11	462	Tr	1	156	59
S- 41	SC - 29	Tr	Tr	35	Tr	Tr	Tr	27	49	5.94	27	1498	Tr	10	200	110
S- 42	SC - 30	Tr	Tr	31	Tr	Tr	Tr	25	69	6.61	17	1252	4	Tr	163	82
S- 43	SC - 31	0.017	Tr	17	Tr	Tr	Tr	28	120	4.79	11	776	Tr	14	174	59
S- 44	SC - 32	Tr	Tr	20	Tr	Tr	Tr	12	44	3	18	428	Tr	Tr	61	31
S- 45	SC - 33	Tr	Tr	16	Tr	Tr	Tr	22	28	6.18	24	942	Tr	4	171	107
S- 46	SC - 34	Tr	Tr	32	Tr	Tr	Tr	18	27	4.15	25	1838	Tr	11	137	157
S- 47	SC - 35	Tr	Tr	32	Tr	Tr	Tr	24	147	5.48	32	1496	2	3	158	143
S- 48	SC - 36	Tr	Tr	64	Tr	Tr	Tr	30	55	7.32	37	1006	Tr	Tr	173	110
S- 49	SC - 37	Tr	Tr	56	Tr	Tr	Tr	29	35	9.35	43	1852	Tr	5	196	138
S- 50	D - 3	Tr	Tr	44	Tr	Tr	Tr	33	281	7.26	26	1170	6	11	228	63
S- 51	D - 6	Tr	1	52	Tr	Tr	Tr	24	164	4.87	95	1240	Tr	17	139	268
S- 52	D - 9	Tr	Tr	35	Tr	Tr	Tr	18	86	3.88	76	1736	2	4	95	282
S- 53	D - 12	Tr	Tr	20	Tr	Tr	Tr	17	60	3.33	294	2420	4	2	76	332
S- 54	D - 15	Tr	Tr	27	Tr	Tr	Tr	21	61	5.06	46	1936	Tr	4	104	276
S- 55	D - 17	Tr	Tr	32	Tr	Tr	Tr	25	92	3.18	38	1406	Tr	Tr	121	76
S- 56	D - 20	Tr	Tr	31	Tr	Tr	Tr	16	33	4.22	34	1538	Tr	2	81	162
S- 57	D - 24	Tr	Tr	36	Tr	Tr	Tr	28	195	4.75	62	902	Tr	5	158	107
S- 58	D - 28	Tr	Tr	17	Tr	Tr	Tr	27	79	4.5	31	1400	Tr	5	131	70
S- 59	D - 33	Tr	Tr	53	Tr	Tr	Tr	19	62	3.41	65	1376	Tr	9	95	220
S- 60	D - 35	Tr	Tr	45	Tr	Tr	Tr	17	31	3.64	74	1456	Tr	Tr	94	154
S- 61	D - 41	Tr	Tr	41	Tr	Tr	Tr	23	56	4.06	69	936	Tr	3	111	185
S- 62	D - 42	Tr	Tr	32	Tr	Tr	Tr	26	152	5.61	38	984	Tr	7	177	64
S- 63	D - 44	Tr	Tr	36	Tr	Tr	Tr	27	25	0.33	21	1060	Tr	Tr	187	108
S- 64	D - 34	Tr	Tr	25	Tr	Tr	Tr	14	30	3	46	1152	Tr	2	70	96
S- 65	D - 48	Tr	Tr	46	Tr	Tr	Tr	21	24	5.36	35	1068	Tr	Tr	170	118
S- 66	D - 50	Tr	Tr	34	Tr	Tr	Tr	26	221	5.89	35	1370	Tr	2	191	149
S- 67	D - 53	Tr	Tr	18	Tr	Tr	Tr	29	113	4.5	19	1422	Tr	8	141	120
S- 68	D - 55	Tr	Tr	61	Tr	Tr	Tr	30	239	5.93	37	1032	Tr	3	206	56
S- 69	D - 56	0.025	Tr	27	Tr	Tr	Tr	22	89	4.95	37	1334	Tr	4	145	115
S- 70	D - 58	Tr	Tr	56	Tr	Tr	Tr	29	223	5.18	60	1344	Tr	8	174	76
S- 71	D - 60	Tr	Tr	27	Tr	Tr	Tr	25	73	3.77	29	824	7	4	147	65
S- 72	SA - 3	Tr	Tr	41	Tr	Tr	Tr	21	135	8.37	48	1292	20	8	186	115
S- 73	SA - 4	Tr	Tr	37	Tr	Tr	Tr	22	168	7.88	54	1992	15	7	186	153
S- 74	SA - 5	Tr	Tr	78	Tr	Tr	Tr	22	13	6.66	47	414	1	7	177	72

No.	Samp. No.	Au(ppm)	Ag(ppm)	As(ppm)	Sb(ppm)	Hg(ppm)	Cd(ppm)	Co(ppm)	Cu(ppm)	Fe(%)	Pb(ppm)	Mn(ppm)	Mo(ppm)	Ni(ppm)	V(ppm)	Zn(ppm)
S- 75	SA - 6	Tr	Tr	44	Tr	Tr	Tr	15	111	5.67	130	784	14	8	109	185
S- 76	SA - 7	Tr	Tr	52	Tr	Tr	Tr	18	104	6.77	107	1210	6	7	152	163
S- 77	SA - 8	Tr	Tr	74	7	Tr	Tr	18	76	5.23	131	598	14	7	105	191
S- 78	SA - 9	Tr	Tr	69	Tr	Tr	Tr	10	98	4.64	168	628	16	5	79	212
S- 79	SC - 38	0.017	Tr	34	Tr	Tr	Tr	6	30	3.98	48	722	11	Tr	53	70
S- 80	SC - 39	Tr	Tr	13	Tr	Tr	Tr	9	28	3.97	38	514	12	Tr	59	43
S- 81	SC - 40	Tr	Tr	25	Tr	Tr	Tr	3	30	3.07	39	768	10	Tr	36	59
S- 82	SC - 41	Tr	Tr	32	Tr	Tr	Tr	6	27	3.82	38	760	14	Tr	49	57
S- 83	SC - 42	Tr	Tr	29	6	Tr	Tr	13	45	5.1	51	1304	5	Tr	96	136
S- 84	SC - 43	Tr	Tr	46	Tr	Tr	Tr	5	58	4.23	72	1752	8	Tr	45	184
S- 85	SC - 44	Tr	Tr	88	Tr	Tr	Tr	26	136	6.6	88	2120	8	Tr	129	308
S- 86	SC - 45	Tr	Tr	177	7	Tr	Tr	19	193	7.14	168	2820	17	10	137	692
S- 87	SC - 46	Tr	Tr	115	Tr	Tr	Tr	18	126	0.9	118	2940	23	32	181	654
S- 88	SC - 47	Tr	Tr	46	9	Tr	Tr	11	126	6.72	74	1666	4	Tr	109	77
S- 89	SC - 48	Tr	Tr	68	Tr	Tr	Tr	21	50	7.12	200	1332	8	2	141	660
S- 90	SC - 49	Tr	Tr	47	Tr	Tr	Tr	19	91	6.88	166	3060	9	26	139	550
S- 91	SC - 50	Tr	Tr	19	Tr	Tr	Tr	20	112	7.26	61	1112	11	2	168	286
S- 92	SC - 51	Tr	Tr	51	Tr	Tr	Tr	21	127	5.85	268	3140	6	16	168	220
S- 93	SC - 52	Tr	Tr	89	Tr	Tr	Tr	20	77	6.33	192	2400	9	16	145	726
S- 94	SC - 53	Tr	Tr	34	Tr	Tr	Tr	20	93	5.1	100	2020	8	3	99	330
S- 95	SC - 54	Tr	Tr	42	6	Tr	Tr	19	55	6.34	55	1668	7	Tr	100	91
S- 96	DS - 62	Tr	Tr	36	Tr	Tr	Tr	8	15	4.53	27	606	7	2	67	41
S- 97	DS - 65	23.2	8.5	3060	24	3.7	5	23	222	8.19	3380	1854	9	3	212	1250
S- 98	DS - 69	0.025	Tr	43	Tr	Tr	Tr	5	Tr	2.55	30	626	Tr	3	29	38
S- 99	DS - 71	0.067	Tr	31	Tr	0.1	Tr	7	10	3.33	44	388	4	Tr	48	40
S- 100	DS - 76	0.017	Tr	178	Tr	Tr	Tr	15	24	6.76	33	1654	Tr	4	51	336
S- 101	DS - 80	Tr	Tr	42	Tr	Tr	Tr	11	29	5.05	24	668	2	6	92	69
S- 102	DS - 83	Tr	Tr	24	Tr	Tr	Tr	15	37	4.78	34	732	4	12	74	78
S- 103	DS - 85	Tr	Tr	33	Tr	Tr	Tr	14	38	4.92	33	582	Tr	4	76	65
S- 104	DS - 88	Tr	Tr	47	Tr	Tr	Tr	15	24	5.14	40	592	Tr	4	84	92
S- 105	DS - 90	Tr	Tr	38	Tr	Tr	Tr	18	236	7.06	260	2430	9	10	122	306
S- 106	DS - 91	Tr	Tr	21	5	Tr	Tr	12	41	4.96	103	1420	3	6	92	196
S- 107	DS - 98	0.033	3.3	50	Tr	Tr	Tr	17	3020	6.3	97	7360	7	3	169	310
S- 108	DS - 100	Tr	Tr	39	Tr	Tr	Tr	14	58	5.58	83	1834	10	15	122	202
S- 109	DS - 103	Tr	Tr	72	Tr	Tr	Tr	16	78	6.84	98	2620	20	55	222	414
S- 110	DS - 106	Tr	Tr	26	Tr	Tr	Tr	20	97	6.56	79	1374	5	10	128	336
S- 111	DS - 109	Tr	Tr	31	Tr	Tr	Tr	18	50	7.29	57	1260	6	11	139	190
S- 112	DS - 112	Tr	Tr	52	Tr	Tr	Tr	15	67	7.89	29	1608	2	4	88	76
S- 113	DS - 115	Tr	Tr	41	Tr	Tr	Tr	15	31	5.87	34	9.14	Tr	7	87	83
S- 114	D - 46	Tr	Tr	37	Tr	Tr	Tr	31	50	5.82	39	2020	Tr	4	197	197
S- 115	DS - 118	0.32	Tr	37	Tr	0.1	Tr	11	50	4.31	430	1233	2	Tr	46	150
S- 116	DS - 123	0.017	Tr	39	Tr	0.1	Tr	11	38	3.96	37	1213	16	11	63	75
S- 117	DS - 126	0.13	Tr	34	Tr	0.1	Tr	5	34	2.09	66	1187	4	2	32	70
S- 118	DS - 129	0.092	0.7	56	6	0.1	Tr	16	722	5.97	76	3417	6	6	122	221
S- 119	DS - 131	0.033	Tr	47	Tr	0.1	Tr	13	66	4.94	64	1497	6	7	93	239
S- 120	DS - 134	0.06	0.5	46	Tr	0.1	Tr	12	47	4.49	51	1207	5	5	78	102
S- 121	DS - 135	0.017	Tr	15	Tr	0.1	Tr	7	22	2.4	23	673	Tr	2	39	49
S- 122	DS - 137	Tr	Tr	56	6	0.1	Tr	17	70	5.59	37	1071	7	6	106	97
S- 123	DS - 142	Tr	Tr	126	Tr	0.1	Tr	17	91	5.29	79	2697	4	10	76	637
S- 124	DS - 150	0.017	Tr	28	Tr	0.1	Tr	5	34	1.88	68	681	Tr	Tr	41	100
S- 125	DS - 152	0.017	Tr	34	Tr	0.1	Tr	15	24	5.65	34	505	3	2	114	81
S- 126	DS - 155	0.017	Tr	35	Tr	0.1	Tr	16	26	7.03	34	1027	4	5	108	132
S- 127	DS - 158	Tr	Tr	23	Tr	0.1	Tr	13	41	4.46	44	1291	6	7	73	211
S- 128	DS - 159	Tr	Tr	24	Tr	0.1	Tr	14	224	5.47	51	1409	3	3	101	177
S- 129	SC - 55	Tr	Tr	35	Tr	0.1	Tr	6	19	2.56	27	495	Tr	4	46	34
S- 130	SC - 56	Tr	Tr	43	Tr	0.1	Tr	10	37	3.78	58	1247	21	26	55	115
S- 131	SC - 57	Tr	Tr	34	Tr	0.1	Tr	8	26	3.28	53	1013	4	2	47	77
S- 132	SC - 58	0.017	Tr	29	Tr	0.1	Tr	7	41	2.74	63	2277	Tr	2	40	201
S- 133	SC - 59	Tr	Tr	42	Tr	0.1	Tr	6	21	2.05	43	1020	Tr	2	40	68
S- 134	SC - 60	Tr	Tr	23	Tr	0.1	Tr	5	22	2.15	45	1041	Tr	3	41	72
S- 135	SC - 61	0.017	0.6	103	Tr	0.1	Tr	17	88	4.89	464	1289	9	4	99	681
S- 136	SC - 62	0.025	Tr	26	Tr	1.8	Tr	14	49	4.52	57	1267	Tr	11	105	139
S- 137	SC - 63	Tr	Tr	19	Tr	0.2	Tr	11	25	4.56	21	437	Tr	3	105	44
S- 138	SC - 64	Tr	Tr	35	Tr	0.2	Tr	14	59	4.21	49	953	Tr	7	102	183
S- 139	SC - 65	0.017	Tr	42	Tr	0.2	Tr	12	34	5.36	2	1084	4	6	89	72
S- 140	SC - 66	0.017	Tr	52	Tr	0.1	Tr	16	47	5.78	39	822	3	20	100	97
S- 141	SC - 67	0.017	Tr	137	Tr	0.1	Tr	13	116	6.32	127	3998	8	12	106	1336
S- 142	SC - 68	Tr	0.9	51	Tr	0.1	Tr	15	143	6.85	179	2198	5	10	83	416
S- 143	SC - 69	0.017	Tr	41	Tr	0.1	Tr	8	23	3.63	51	840	Tr	9	50	137
S- 144	SC - 70	0.017	Tr	144	9	0.1	Tr	18	90	8.05	129	4278	6	10	106	914
S- 145	SA - 10	0.017	Tr	35	Tr	0.1	Tr	21	29	4.94	21	1162	Tr	22	156	107
S- 146	SA - 11	Tr	Tr	19	Tr	0.1	Tr	18	41	5.17	38	744	Tr	7	139	92
S- 147	SA - 12	Tr	Tr	20	Tr	0.1	Tr	21	50	5.99	27	1472	6	35	153	174
S- 148	SA - 13	Tr	Tr	33	Tr	0.1	Tr	13	10	5.9	29	1196	Tr	2	75	176

A-3 Result of Chemical Analysis of Soil samples

No.	Samp. No.	Au (ppm)	Hg (ppm)	As (ppm)	Sb (ppm)	Pb (ppm)	Cd (ppm)	Co (ppm)	Cu (ppm)	Fe (g)	Pb (ppm)	Mn (ppm)	Mo (ppm)	Ni (ppm)	V (ppm)	Zn (ppm)
S- 149	SA - 14	Tr	Tr	38	Tr	0.1	Tr	12	5	5.89	33	312	Tr	4	86	50
S- 150	SA - 15	Tr	Tr	34	Tr	0.1	Tr	20	40	5.62	32	1016	Tr	8	141	106
S- 151	SA - 16	Tr	Tr	29	Tr	0.2	Tr	16	13	6.05	23	906	Tr	3	122	59
S- 152	SA - 17	0.017	Tr	35	Tr	0.1	Tr	15	45	4.33	28	958	Tr	3	99	80
S- 153	SA - 18	Tr	Tr	27	Tr	0.1	Tr	15	57	4.81	30	814	3	7	97	126
S- 154	B - 105	Tr	Tr	21	Tr	0.1	Tr	14	75	3.89	22	790	Tr	4	104	95

### A-4 Result of chemical Analysis of ore samples

No.	Sample No.	location	Au (g/t)	Ag (g/t)	Cu (%)	Mo (g/t)	Pb (g/t)	Zn (g/t)	S (%)	Remarks
1	C-120	Angelita	0.380	1.0	0.29	5	15	40	0.200	Q-vein in tunnel
2	C-106	Cajon de Panama	Tr.	7.5	2.97	15	25	45	3.400	Cp-Q net
3	C-108	Cajon de Panama	Tr.	2.5	1.90	5	20	85	1.990	Cp-Q net
4	D-100	Cajon de Panama	Tr.	1.5	0.81	5	140	150	0.087	
5	C-84	Campanano	0.033	163.0	4.14	5	40	155	0.190	Malachite diss Andesite
6	C-87	Campanano	0.017	42.0	2.91	5	75	250	0.058	Malachite net Andesite
7	C-88	Campanano	Tr.	54.0	2.52	10	40	210	0.058	Malachite net Andesite
8	C-70	La Rica	0.017	51.0	2.19	5	5	65	0.018	Malachite net Andesite
9	A-3	Las Guías	Tr.	17.0	1.92	Tr.	10	90	0.044	Waste
10	B-82	Las Guías	Tr.	9.0	1.53	5	20	405	0.540	Waste
11	B-83	Las Guías	0.017	53.0	11.10	15	20	240	4.440	Waste
12	B-84	Las Guías	0.025	61.0	14.90	15	15	230	6.050	
13	C-19	Las Guías	0.560	45.0	14.00	5	35	130	14.900	Cp-Q net
14	C-21	Mona Blanca	0.017	10.0	1.59	5	10	35	0.072	Waste. Mal-Cp net
15	C-22	Mona Blanca	0.017	31.0	3.88	5	10	40	0.330	Waste. Mal net
16	C-28	Mona Blanca	0.017	34.0	3.80	5	10	70	0.068	Waste. Mal diss~net
17	C-62	Mona Blanca	0.033	114.0	5.68	5	15	40	0.610	Waste. Q-vein, Andesite
18	C-63A	Mona Blanca	0.017	35.0	2.26	5	15	120	0.050	Waste. Mal diss
19	C-63B	Mona Blanca	0.017	36.0	4.38	5	20	150	1.020	Waste. Mal diss
20	D-78B	Port. Hondo	Tr.	49.0	3.55	5	20	55	0.180	Cp-Py diss Andesite



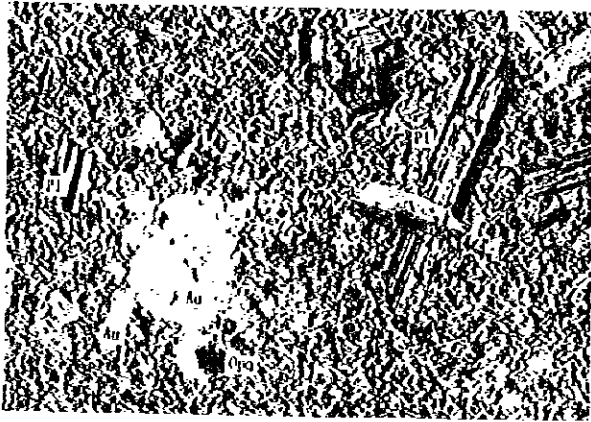








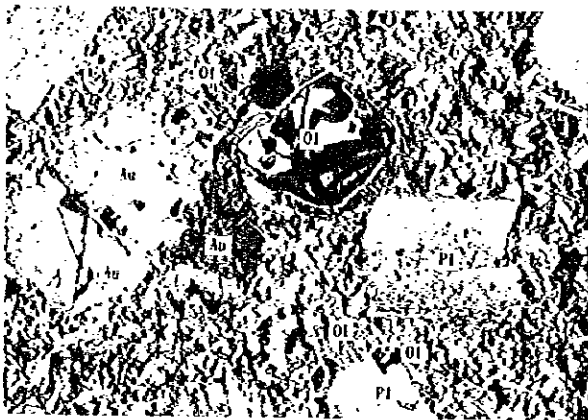
A-5(3) Microphotographs of thin and polish section



C-15 : Divin augite andesite (dyke rock)  
cross



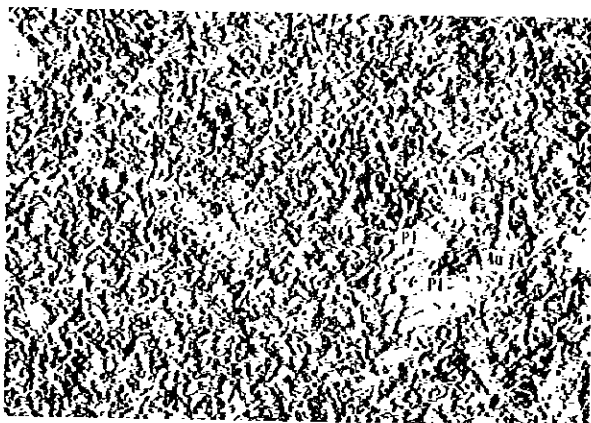
C-45 : Granodiorite (Aulne Granite)  
cross



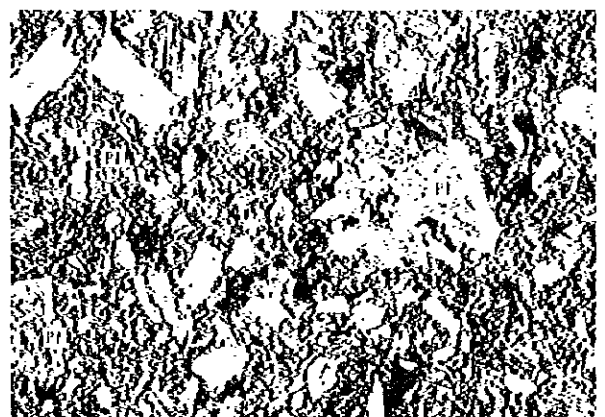
C-14 : Olivine andesite (Ocoita-Horqueta upper For.)  
cross



C-18 : Olivine basalt (Ocoita-Horqueta upper For.)  
cross



C-26 : Augite andesite or Porphyrite (dyke rock)  
cross

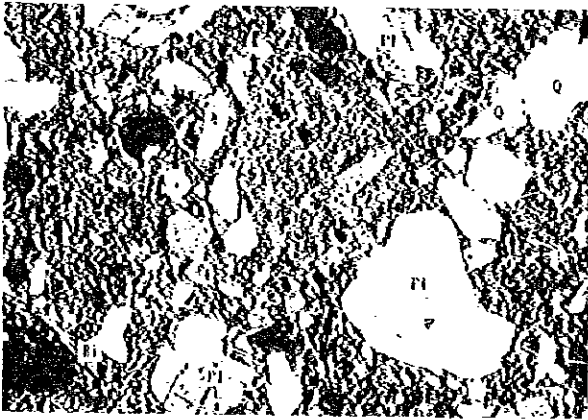


B-53 : Pyroxene bearing hornblende andesite  
(Horqueta upper For.) cross

Legend

Au : Augite	Kf : K-feldspar	Opq: Opaque mineral
Bi : Biotite	Ol : Olivine	Sps: Sphene
Cz : Cumingtonit	Pl : Plagioclase	And: Andesite
Hb : Hornblende	Py : Pyroxene	Dc : Dacite
Hr : Hyalothoe	Q : Quartz	

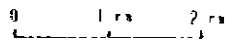
A-5(4) Microphotographs of thin and polish section



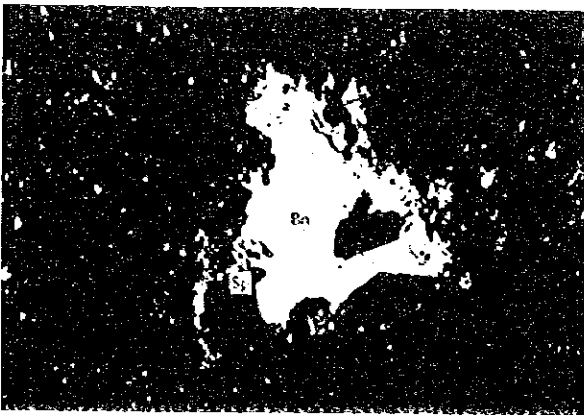
D-135: Dacitic lapilli tuff (Lo Plado For.)  
cross



D-143: Andesitic lapilli tuff (Lo Plado For.)  
cross



Photographs of Reflecting microscope



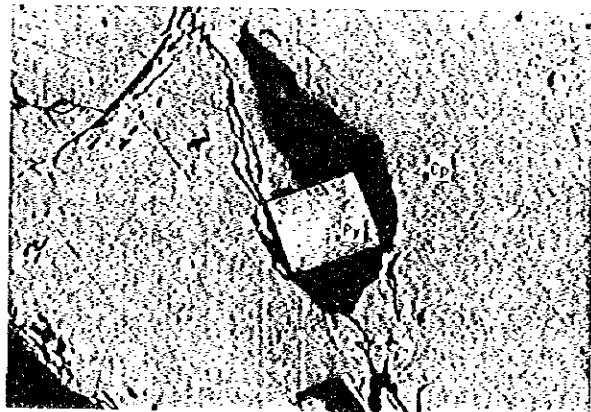
C 53



C 53



C 53

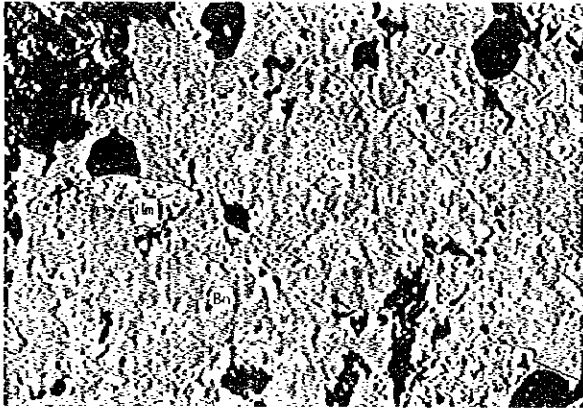


B 77 (Las Guías)

Legend

Bn : Bornite      Cy : Chalcocyanite      Hm : Hematite  
Cc : Chalcocite      Dg : Digenite

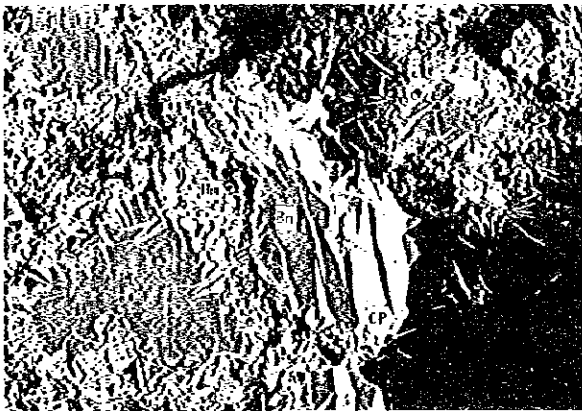
A-5(5) Microphotographs of thin and polish section



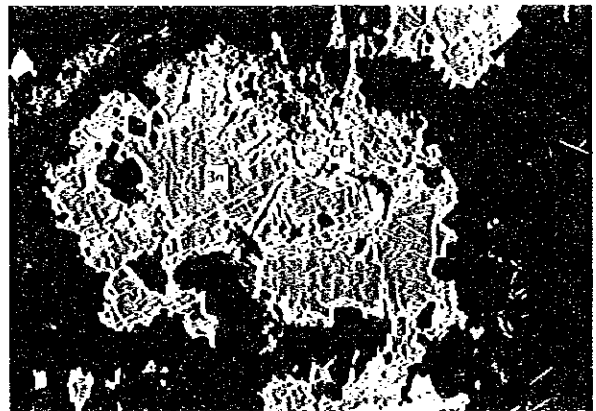
B-77 (Las Guías)



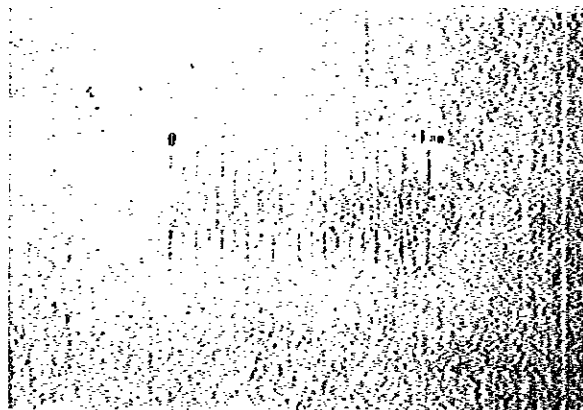
B-81 (Las Guías)



B-81 (Las Guías)



B-72 (Las Guías)



A-6 Result of microscopic observation of polish section and their photographs

No.	No. of Sample	Location (No.: Mine/Block Indicated)	Ore Mineral									Texture, Structure, etc.
			Bornite	Chalcosite	Chalcocopyrite	Pyrite	Sphalerite	Hematite	Digenite	Covellite	Magnetite	
1	B-81	19(Las Guías)	⊗	-					Δ			Bornite: $\phi$ 0.05-0.15mm, fills gap in other minerals.
2	D-4	13			Δ	+	-					Chalcocopyrite: metasomatic to other minerals
3	C-53	17	⊗	⊗		-				○		Bornite: $\phi$ 0.1-0.2mm, in digenite. Chalcocopyrite: exsolution in digenite.
4	B-70	19(Las Guías)	○	○		-		+				Bornite: $\phi$ 0.01-0.2mm, in digenite, intertwined with chalcocopyrite.
5	B-76	19(Las Guías)	+	+				+				Bornite: $\phi$ 0.01-0.03mm, fills gap in other minerals, with chalcocopyrite.
6	B-80	19(Las Guías)	○	Δ				-				Bornite: $\phi$ 0.01-1mm, fills gap in other minerals, partly with chalcocopyrite.
7	C-108	22(Cajón de Parí)			⊗		+	+				Bornite fills gap in host rock pyrite granular pyrite and partly with chalcocopyrite.
8	B-74	19(Las Guías)	○	Δ						+		Bornite: $\phi$ 0.02-0.2mm, with digenite. Chalcocopyrite: micrographic tex.
9	C-19	19(Las Guías)			⊗	Δ						Chalcocopyrite: $\phi$ 0.5-2mm, fills gap in other minerals.
10	B-79	19(Las Guías)	⊗	○						○		Bornite: $\phi$ 0.1-2mm, exsolution to gangue mineral. Micrographic texture.
11	C-65	14								○		Hematite: $\phi$ 0.02-0.2mm, granular, exsolution to magnetite.
12	B-75	19(Las Guías)	⊗							○	+	Bornite: $\phi$ 0.1-0.5mm, fill in gangue mineral, exsolution to hematite.
13	D-74	19(Las Guías)				-	+				○	Chalcocopyrite: $\phi$ 0.01-0.03mm. Hematite: margin of Magnetite.
14	B-78	19(Las Guías)	⊗	⊗					+			Bornite: $\phi$ 0.1-2mm, fill in gangue mineral, with chalcocopyrite partly micrographic.
15	C-12	10(Angelita)		○						⊗		Chalcocopyrite: $\phi$ 0.01-0.1mm, fill in hematite.
16	C-106	22(Cajón de Parí)	Δ		⊗	+	Δ	-				Chalcocopyrite: $\phi$ 0.01-1mm, fills gap in other minerals, partly with sphalerite.
17	C-120	10(Angelita)			⊗							Chalcocopyrite: $\phi$ 0.05-1mm, fills in host rock, partly including sphalerite.
18	B-73	19(Las Guías)	⊗	⊗					+			Bornite: $\phi$ 0.01-0.5mm, fills in host rock, with Chalcocite.
19	B-77	19(Las Guías)	⊗	○	⊗					○		Bornite: $\phi$ 0.02-0.6mm, delted in host rock, partly with Chalcocite.
20	B-71	19(Las Guías)	○	○					+			Bornite: $\phi$ 0.1-2mm, fill in gangue mineral, partly micrographic with chalcocopyrite.
21	B-72	19(Las Guías)	⊗	⊗						○	+	Bornite: $\phi$ 0.01-0.5mm, in host rock, partly with chalcocopyrite, granular or micrographic.

Legend

⊗: Very Abundant ○: Abundant Δ: Medium +: Minor -: Existent

A-7 Result of EPMA analysis of ore minerals

No.	Sample No.	Mineral	Weight %				Atomic %		
			Cu	Fe	S	Total	Cu	Fe	S
1	B- 70	Chalcocite	80.51	0.16	20.07	100.74	66.83	0.15	33.02
		Chalcocite	79.35	0.27	20.80	100.42	65.64	0.26	34.10
		Bornite	63.75	11.21	25.81	100.77	49.94	9.99	40.07
		Bornite	63.21	11.17	25.59	99.97	49.91	10.04	40.05
2	B- 73	Chalcocite	80.51	0.12	20.35	100.98	66.54	0.12	33.34
		Chalcocite	79.14	0.05	21.03	100.22	65.47	0.04	34.48
		Chalcocite	81.07	0.18	20.36	101.61	66.66	0.17	33.18
		Bornite	64.57	10.89	25.96	101.42	50.28	9.65	40.07
3	B- 74	Chalcocite	79.31	0.06	21.20	100.57	65.34	0.05	34.61
		Chalcocite	79.63	0.02	21.00	100.65	65.66	0.01	34.33
		Digenite	78.07	0.69	22.65	101.41	63.08	0.63	36.28
		Digenite	78.31	1.17	22.34	101.82	63.19	1.07	35.74
		Bornite	62.93	10.86	25.75	99.54	49.81	9.78	40.41
		Bornite	63.48	10.94	25.56	99.98	50.14	9.83	40.02
4	B- 78	Chalcocite	81.41	0.01	20.47	101.89	66.74	0.01	33.26
		Bornite	63.85	11.34	25.56	100.75	50.11	10.13	39.76
		Bornite	62.50	11.25	25.03	98.78	50.04	10.24	39.72
5	B- 79	Chalcocite	80.14	0.42	21.05	101.61	65.51	0.39	34.10
		Chalcocite	80.53	0.57	20.72	101.82	65.87	0.53	33.60
		Digenite	78.68	1.07	21.29	101.04	64.43	1.00	35.57
		Bornite	61.97	10.85	25.58	98.40	49.57	9.88	40.56
6	B- 80	Chalcocite	81.25	0.03	20.29	101.57	66.87	0.03	33.11
		Chalcocite	80.31	0.10	20.22	100.63	66.65	0.09	33.26
		Djurleite	78.47	0.09	20.67	99.23	65.64	0.08	34.28
		Bornite	64.39	10.81	25.29	100.49	50.77	9.70	39.53
7	B- 73b	Bornite	63.70	11.08	26.10	100.88	49.75	9.85	40.40
		Bornite	63.39	10.74	25.71	99.81	50.08	9.66	40.26
		Chalcocite	79.76	0.53	19.40	99.69	67.13	0.51	32.36
8	C- 53	Bornite	62.55	11.02	26.21	99.78	49.23	9.87	40.40
		Chalcocite	78.99	0.06	22.82	101.87	63.55	0.05	36.40
		Chalcocite	80.25	0.02	21.42	101.69	65.39	0.02	34.59
		Chalcocite	79.57	0.02	21.89	101.48	64.70	0.01	35.28
9	B- 81	Digenite	78.04	1.24	21.05	100.33	64.40	1.16	34.43
		Bornite	63.03	11.67	26.86	101.56	48.65	10.25	41.09
10	B- 75	Bornite	63.79	11.40	26.48	101.67	49.35	10.03	40.61
		Digenite	75.97	1.70	23.22	100.89	61.30	1.55	37.14
		Digenite	76.42	1.48	23.25	101.15	61.53	1.36	37.10







A-9 Result of agedetermination (K-Ar method) of igneous rock

No. Sample	Rock Type	Formation	K (wt%)	Weight (g)	$^{36}\text{Ar}$ [ $^{36}\text{Ar}$ ] 10 cm SPG/g	$^{40}\text{Ar}/^{39}\text{Ar}$	$^{40}\text{Ar}$ [ $^{40}\text{Ar}$ ]rad 10 cm SPG/g	K-Ar age (Ma)	Air fract (%)
1	C-15 Hb-Andesite	intrusive	2.83 (2.0%)	0.0521 0.0486	35.51±.66 23.09±.63	1761.3±22.0 2565.4±55.0	520.64±5.27 524.72±5.30	46.80±1.04 47.17±1.04	16.8 11.5
2	C-16 Andesite	intrusive	2.28 (2.0%)	0.0507 0.0549 0.0557	37.35±.68 20.09±.56 20.66±.56	1955.4±24.4 3439.1±77.2 3460.9±72.4	621.14±6.29 633.06±6.40 635.10±6.41	68.83±1.51 70.12±1.54 70.34±1.55	15.1 8.6 8.8
3	C-17 Andesite(Ocoita)	intrusive?	1.67 (2.0%)	0.0503 0.0534 0.0462	25.35±.63 18.61±.57 17.83±.64	2827.9±54.2 3797.7±95.1 4131.3±124.0	643.55±6.52 653.43±6.62 687.47±6.94	96.74±2.11 98.18±2.14 103.2±2.2	10.4 7.8 7.1
4	A-50 Andesite(Ocoita)	intrusive?	3.22 (2.0%)	0.0670 0.0645	22.79±.50 22.32±.50	5615.1±96.8 5774.0±105.1	1219.3±12.3 1228.8±12.4	95.03±2.07 95.75±2.09	5.2 5.1
5	C-45 Granite	intrusive	1.42 (2.0%)	0.0605 0.0561 0.0618	19.86±.52 14.51±.53 12.68±.48	4279.3±90.4 5936.4±184.4 6280.3±202.9	797.04±8.04 826.25±8.34 768.11±7.75	139.2±3.0 144.1±3.1 134.3±2.9	6.9 4.9 4.7
6	D-64 Granite	intrusive	2.06 (2.0%)	0.0503 0.0597 0.0580	23.73±.62 24.05±.54 24.55±.55	3089.2±63.8 3133.8±54.3 3086.8±54.3	665.74±6.73 684.27±6.92 680.64±6.87	83.48±1.83 93.84±1.30 93.36±1.29	9.5 9.4 9.6

A-10 Result of measurement of filling temperature and salinity of fluid inclusion

1/3

Sample	Locality	No.	Mineral	Size (μg)	Volume ratio(%)	Form	Filling Temp(°C)	Melting Temp(°C)	Salinity (as %wt)	Occurrence
C-47	Las Guías	1	Quartz	20.0	7	polygonal	203	-1.0	1.74	Sp-Qtz vein in andesite
		2	Quartz	10.0	10	polygonal	209	-0.9	1.57	
		3	Quartz	10.0	10	triangular	217	-1.0	1.74	
		4	Quartz	12.5	10	polygonal	214	-1.0	1.74	
		5	Quartz	7.5	7	polygonal	195	-1.2	2.02	
		6	Quartz	<2.5	5	egg-shaped	198	—	—	
		7	Quartz	7.5	7	square	225	-1.0	1.74	
		8	Quartz	25.0	10	irregular	206	-1.6	2.74	
		9	Quartz	12.5	7	polygonal	203	-1.7	2.90	
		10	Quartz	17.5	10	polygonal	224	-1.3	2.24	
		11	Quartz	5.0	10	polygonal	219	—	—	
		12	Quartz	2.5	7	egg-shaped	221	—	—	
		13	Quartz	25.0	7	polygonal	185	-5.7	8.81	
		14	Quartz	12.5	10	polygonal	221	-1.0	1.74	
		15	Quartz	5.0	12	egg-shaped	232	—	—	
		16	Quartz	20.0	10	polygonal	228	-5.6	8.68	
		17	Quartz	15.0	5	polygonal	192	-6.6	9.98	
		18	Quartz	7.5	10	egg-shaped	204	-5.6	8.68	
		19	Quartz	5.0	10	polygonal	226	—	—	
		20	Quartz	2.5	5	egg-shaped	203	—	—	
A-17	Angelita	1	Quartz	32.5	7	irregular	237	-1.9	3.23	Sp-Qtz vein in andesite
		2	Quartz	20.0	7	columnar	218	-2.0	3.39	
		3	Quartz	17.5	5	polygonal	229	-2.0	3.39	
		4	Quartz	2.5	3	egg-shaped	192	—	—	
		5	Quartz	15.0	10	polygonal	219	-1.9	3.23	
		6	Quartz	10.0	7	columnar	201	—	—	
		7	Quartz	12.5	7	polygonal	213	-1.6	2.74	
		8	Quartz	7.5	10	polygonal	218	—	—	
		9	Quartz	7.5	7	egg-shaped	188	—	—	
		10	Quartz	<2.5	3	egg-shaped	172	—	—	
		11	Quartz	2.5	5	egg-shaped	178	—	—	
		12	Quartz	12.5	7	polygonal	211	-1.8	3.06	
		13	Quartz	5.0	10	egg-shaped	193	—	—	
		14	Quartz	12.5	3	columnar	177	-1.9	3.23	
		15	Quartz	20.0	7	irregular	191	—	—	
		16	Quartz	5.0	7	polygonal	189	—	—	
		17	Quartz	45.0	10	irregular	193	-11.1	15.07	
		18	Quartz	2.5	7	egg-shaped	228	—	—	
		19	Quartz	7.5	5	egg-shaped	186	—	—	
		20	Quartz	7.5	10	square	191	—	—	
A-54	Co-Rico	1	Quartz	20.0	5	polygonal	197	-6.6	9.98	Barren Quartz vein in andesite
		2	Quartz	27.5	10	polygonal	175	-7.0	10.49	
		3	Quartz	5.0	7	polygonal	192	—	—	
		4	Quartz	5.0	5	egg-shaped	174	—	—	
		5	Quartz	2.5	5	polygonal	191	—	—	
		6	Quartz	10.0	10	polygonal	219	-6.4	9.73	
		7	Quartz	10.0	10	irregular	211	-7.0	10.49	
		8	Quartz	10.0	7	irregular	205	-6.6	9.98	
		9	Quartz	7.5	3	columnar	174	—	—	
		10	Quartz	7.5	7	polygonal	208	—	—	
		11	Quartz	5.0	10	polygonal	223	—	—	
		12	Quartz	12.5	10	irregular	222	-6.5	9.86	
		13	Quartz	12.5	12	irregular	224	-6.6	9.98	
		14	Quartz	5.0	7	polygonal	196	-7.0	10.49	
		15	Quartz	5.0	5	polygonal	182	—	—	
		16	Quartz	5.0	5	polygonal	191	-6.5	9.86	
		17	Quartz	2.5	5	egg-shaped	190	—	—	
		18	Quartz	32.5	10	irregular	211	-6.4	9.73	
		19	Quartz	12.5	10	polygonal	224	-7.0	10.49	
		20	Quartz	10.0	7	polygonal	201	-6.2	9.47	
B-61	Las Guías	1	Quartz	17.5	10	polygonal	174	-6.2	9.47	Barren Qtz-vein cutting bar. ore
		2	Quartz	15.0	7	polygonal	178	-6.2	9.47	
		3	Quartz	10.0	7	square	162	-5.9	9.08	
		4	Quartz	25.0	3	columnar	141	-6.0	9.21	
		5	Quartz	<2.5	5	egg-shaped	154	—	—	
		6	Quartz	<2.5	5	egg-shaped	151	—	—	
		7	Quartz	5.0	5	egg-shaped	183	—	—	
		8	Quartz	<2.5	5	egg-shaped	199	—	—	
		9	Quartz	5.0	7	polygonal	185	—	—	
		10	Quartz	12.5	10	irregular	205	-6.0	9.21	
		11	Quartz	12.5	5	polygonal	144	-5.8	8.95	
		12	Quartz	10.0	7	polygonal	145	-6.1	9.34	
		13	Quartz	32.5	12	irregular	197	-6.0	9.21	
		14	Quartz	5.0	5	polygonal	158	—	—	
		15	Quartz	7.5	5	polygonal	177	-6.2	9.47	
		16	Quartz	12.5	7	polygonal	174	-6.2	9.47	
		17	Quartz	12.5	7	triangular	189	-6.0	9.21	
		18	Quartz	5.0	3	polygonal	152	—	—	
		19	Quartz	15.0	10	polygonal	212	-6.7	10.11	
		20	Quartz	5.0	5	egg-shaped	205	-5.9	9.08	

A-10 Result of measurement of filling temperature and salinity of fluid inclusion

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Sample	Locality	No	Mineral	Size (μg)	Volume ratio(%)	Form	Filling Temp.(°C)	Melting Temp.(°C)	Salinity (as NaCl)	Occurrence
B-62	Angelita	1	Quartz	30.0	7	polygonal	188	-0.1	0.18	Barren Qtz vein cutting calcite ore
		2	Quartz	12.5	10	polygonal	192	-0.1	0.18	
		3	Quartz	10.0	7	square	189	-0.1	0.18	
		4	Quartz	10.0	10	square	193	-0.2	0.35	
		5	Quartz	17.5	10	polygonal	180	-	-	
		6	Quartz	22.5	3	irregular	153	-0.2	0.35	
		7	Quartz	2.5	3	egg-shaped	174	-	-	
		8	Quartz	12.5	3	columnar	171	-1.0	0.18	
		9	Quartz	25.0	5	irregular	163	0.0	0.00	
		10	Quartz	5.0	10	polygonal	204	-	-	
		11	Quartz	5.0	10	polygonal	201	-	-	
		12	Quartz	<2.5	3	egg-shaped	177	-	-	
		13	Quartz	<2.5	5	egg-shaped	174	-	-	
		14	Quartz	12.5	10	square	203	0.0	0.18	
		15	Quartz	12.5	7	square	187	-	-	
		16	Quartz	5.0	5	polygonal	174	-	-	
		17	Quartz	10.0	2	columnar	164	-	-	
		18	Quartz	25.0	7	irregular	182	-	-	
		19	Quartz	5.0	10	polygonal	169	-	-	
		20	Quartz	32.5	7	polygonal	192	0.0	0.00	
B-63	Angelita	1	Calcite	10.0	5	egg-shaped	126	-16.6	19.92	Calcite vein cutting oxide ore
		2	Calcite	22.5	10	polygonal	142	-6.7	10.11	
		3	Calcite	10.0	10	egg-shaped	157	-16.9	20.15	
		4	Calcite	5.0	5	polygonal	127	-16.7	19.99	
		5	Calcite	7.5	3	polygonal	116	-6.4	9.73	
		6	Calcite	5.0	3	triangular	118	-	-	
		7	Calcite	10.0	5	polygonal	126	-15.9	19.37	
		8	Calcite	22.5	5	irregular	137	-6.4	9.73	
		9	Calcite	2.5	2	egg-shaped	123	-	-	
		10	Calcite	2.5	3	egg-shaped	143	-	-	
		11	Calcite	<2.5	3	egg-shaped	122	-	-	
		12	Calcite	5.0	5	polygonal	158	-	-	
		13	Calcite	2.5	5	polygonal	146	-	-	
		14	Calcite	<2.5	2	egg-shaped	113	-	-	
		15	Calcite	<2.5	2	egg-shaped	121	-	-	
		16	Calcite	20.0	5	irregular	161	-6.4	9.73	
		17	Calcite	17.5	7	polygonal	138	-6.2	9.47	
		18	Calcite	<2.5	3	egg-shaped	133	-	-	
		19	Calcite	10.0	7	polygonal	155	-7.0	10.49	
		20	Calcite	32.5	10	polygonal	147	-10.2	14.15	
B-63	Angelita	1	Calcite	10.0	5	egg-shaped	126	-16.6	19.92	Calcite vein cutting oxide ore
		2	Calcite	22.5	10	polygonal	142	-6.7	10.11	
		3	Calcite	10.0	10	egg-shaped	157	-16.9	20.15	
		4	Calcite	5.0	5	polygonal	127	-16.7	19.99	
		5	Calcite	7.5	3	polygonal	116	-6.4	9.73	
		6	Calcite	5.0	3	triangular	118	-	-	
		7	Calcite	10.0	5	polygonal	126	-15.9	19.37	
		8	Calcite	22.5	5	irregular	137	-6.4	9.73	
		9	Calcite	2.5	2	egg-shaped	123	-	-	
		10	Calcite	2.5	3	egg-shaped	143	-	-	
		11	Calcite	<2.5	3	egg-shaped	122	-	-	
		12	Calcite	5.0	5	polygonal	158	-	-	
		13	Calcite	2.5	5	polygonal	146	-	-	
		14	Calcite	<2.5	2	egg-shaped	113	-	-	
		15	Calcite	<2.5	2	egg-shaped	121	-	-	
		16	Calcite	20.0	5	irregular	161	-6.4	9.73	
		17	Calcite	17.5	7	polygonal	138	-6.2	9.47	
		18	Calcite	<2.5	3	egg-shaped	133	-	-	
		19	Calcite	10.0	7	polygonal	155	-7.0	10.49	
		20	Calcite	32.5	10	polygonal	147	-10.2	14.15	
C-62	Angelita	1	Quartz	37.5	5	irregular	104	-4.4	7.02	Barren Qtz vein in andesite
		2	Quartz	12.5	10	wedge-shaped	127	-4.3	6.88	
		3	Quartz	5.0	5	polygonal	112	-4.4	7.02	
		4	Quartz	12.5	7	polygonal	121	-2.1	3.55	
		5	Quartz	<2.5	5	egg-shaped	126	-	-	
		6	Quartz	2.5	5	egg-shaped	121	-	-	
		7	Quartz	<2.5	7	egg-shaped	123	-	-	
		8	Quartz	22.5	10	irregular	109	-2.0	3.39	
		9	Quartz	17.5	5	irregular	109	-4.3	6.88	
		10	Quartz	15.0	5	polygonal	122	-4.4	7.02	
		11	Quartz	15.0	5	polygonal	114	-4.0	6.45	
		12	Quartz	2.5	3	egg-shaped	121	-	-	
		13	Quartz	<2.5	2	egg-shaped	117	-	-	
		14	Quartz	7.5	10	polygonal	131	-4.4	7.02	
		15	Quartz	2.5	3	egg-shaped	123	-	-	

A-10 Result of measurement of filling temperature and salinity of fluid inclusion

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Sample	Locality	No	Mineral	Size (μm)	Volume ratio(%)	Form	Filling Temp(°C)	Melting Temp(°C)	Salinity (eq NaCl)	Occurrence
B-59	Las Guías	1	Calcite	12.5	5	polygonal	124	-8.6	12.39	Calcite vein in andesite
		2	Calcite	15.0	7	polygonal	149	-4.5	7.17	
		3	Calcite	5.0	5	triangular	142	—	—	
		4	Calcite	10.0	7	polygonal	143	-8.3	12.05	
		5	Calcite	<2.5	2	egg-shaped	121	—	—	
		6	Calcite	<2.5	2	egg-shaped	130	—	—	
		7	Calcite	2.5	3	egg-shaped	131	—	—	
		8	Calcite	5.0	10	triangular	153	-8.5	12.26	
		9	Calcite	5.0	7	polygonal	155	-4.2	6.74	
		10	Calcite	12.5	5	polygonal	130	-4.2	6.74	
		11	Calcite	5.0	5	polygonal	141	-4.5	7.17	
		12	Calcite	2.5	3	egg-shaped	131	—	—	
		13	Calcite	<2.5	2	egg-shaped	122	—	—	
		14	Calcite	<2.5	2	egg-shaped	129	—	—	
C-120	Angelita	1	Quartz	10.0	10	egg-shaped	154	-1.3	2.24	Barren Qz vein in andesite
		2	Quartz	5.0	3	egg-shaped	142	-1.3	2.24	
		3	Quartz	<2.5	2	egg-shaped	141	—	—	
		4	Quartz	<2.5	2	egg-shaped	145	—	—	
		5	Quartz	5.0	5	polygonal	176	-1.3	2.24	
		6	Quartz	2.5	5	egg-shaped	178	—	—	
		7	Quartz	2.5	5	egg-shaped	164	—	—	
		8	Quartz	5.0	10	polygonal	177	-1.2	2.07	
		9	Quartz	<2.5	3	egg-shaped	144	—	—	
		10	Quartz	22.5	2	columnar	137	-0.9	1.57	
		11	Quartz	12.5	3	columnar	143	-1.0	1.74	
		12	Quartz	10.0	5	irregular	165	-1.3	2.24	
		13	Quartz	5.0	3	polygonal	153	-1.2	2.07	
		14	Quartz	<2.5	3	egg-shaped	152	—	—	
		15	Quartz	<2.5	3	egg-shaped	141	—	—	
C-110	El Estero Cuervo	1	Quartz	12.5	10	polygonal	231	-3.2	5.26	Qz-Fp network in andesite
		2	Quartz	25.0	12	polygonal	262	-12.9	16.80	
		3	Quartz	7.5	5	polygonal	253	—	—	
		4	Quartz	12.5	10	irregular	241	-4.1	6.59	
		5	Quartz	2.5	5	egg-shaped	271	—	—	
		6	Quartz	10.0	10	polygonal	281	-12.3	16.24	
		7	Quartz	10.0	7	polygonal	263	-13.2	17.68	
		8	Quartz	10.0	10	polygonal	284	-12.3	16.24	
		9	Quartz	2.5	5	egg-shaped	269	—	—	
		10	Quartz	<2.5	5	egg-shaped	258	—	—	
		11	Quartz	15.0	7	irregular	244	-3.3	5.41	
		12	Quartz	12.5	7	polygonal	247	-3.2	5.26	
		13	Quartz	17.5	13	triangular	286	-3.2	5.26	
		14	Quartz	2.5	10	egg-shaped	298	—	—	
15	Quartz	5.0	12	square	292	—	—			
16	Quartz	5.0	5	polygonal	232	—	—			
17	Quartz	12.5	10	polygonal	231	-12.9	16.80			
18	Quartz	5.0	10	polygonal	278	—	—			
19	Quartz	5.0	12	triangular	283	—	—			
20	Quartz	5.0	10	polygonal	272	—	—			
C-19	Las Guías	1	Quartz	12.5	12	polygonal	273	-2.4	4.03	Qz vein in andesite
		2	Quartz	17.5	10	columnar	223	-1.5	2.57	
		3	Quartz	12.5	10	irregular	243	-1.6	2.74	
		4	Quartz	5.0	10	triangular	256	—	—	
		5	Quartz	2.5	5	egg-shaped	262	—	—	
		6	Quartz	2.5	3	egg-shaped	256	—	—	
		7	Quartz	12.5	3	columnar	249	-2.1	3.55	
		8	Quartz	22.5	7	irregular	221	-1.5	2.57	
		9	Quartz	5.0	10	polygonal	259	—	—	
		10	Quartz	5.0	7	polygonal	239	—	—	
		11	Quartz	5.0	12	polygonal	261	—	—	
		12	Quartz	17.5	10	polygonal	247	-2.0	3.39	
		13	Quartz	12.5	10	triangular	242	-1.2	2.07	
		14	Quartz	15.0	7	polygonal	218	-1.4	2.41	
		15	Quartz	5.0	5	square	238	-1.2	2.07	
		16	Quartz	17.5	5	columnar	233	-2.2	3.71	
		17	Quartz	27.5	10	irregular	262	-2.4	4.03	
		18	Quartz	2.5	5	egg-shaped	244	—	—	
		19	Quartz	<2.5	3	egg-shaped	232	—	—	
		20	Quartz	<2.5	5	egg-shaped	249	—	—	

A-11 Result of Measurement of Geoelectrical Properties of Rock Samples

No.	Rock name	Resistivity ( $\Omega$ m)		Chargeability (mv/v)	
			average		average
G- 1	Red autobrecciated andesite	1640		1	
G- 2	"	1970		1	
G- 3	"	1210	1660	1	1
G- 4	"	1940		0	
G- 5	"	1680		1	
G- 6	Pale gray compact andesite	3120		0	
G- 7	"	3650	3840	0	0
G- 8	"	4980		0	
G- 9	Andesitic tuff breccia	2980		0	
G-10	"	5300		0	
G-11	"	3120		0	
G-12	"	3900	4410	0	0
G-13	"	8850		0	
G-14	"	7700		0	
G-15	"	2480		0	
G-16	"	4390		0	
G-17	Ocoita without mineralization	2990		0	
G-18	"	6270		0	
G-19	"	2800		0	
G-20	"	3070	3060	0	0
G-21	"	5130		0	
G-22	"	2000		0	
G-23	"	3480		0	
G-24	"	1320		0	
G-25	Ocoita with much bornite(ore)	21		47	
G-26	"	52		57	
G-27	"	32		58	
G-28	"	41	54	54	45
G-29	"	1930		0	
G-30	"	45		56	
G-31	"	30		51	
G-32	"	19		34	
G-33	Ocoita with much malachite(ore)	3790		0	
G-34	"	1990		0	
G-35	"	6060		0	
G-36	"	8250	5430	0	0
G-37	"	5490		0	
G-38	"	13000		0	
G-39	"	8700		0	
G-40	"	3250		0	

