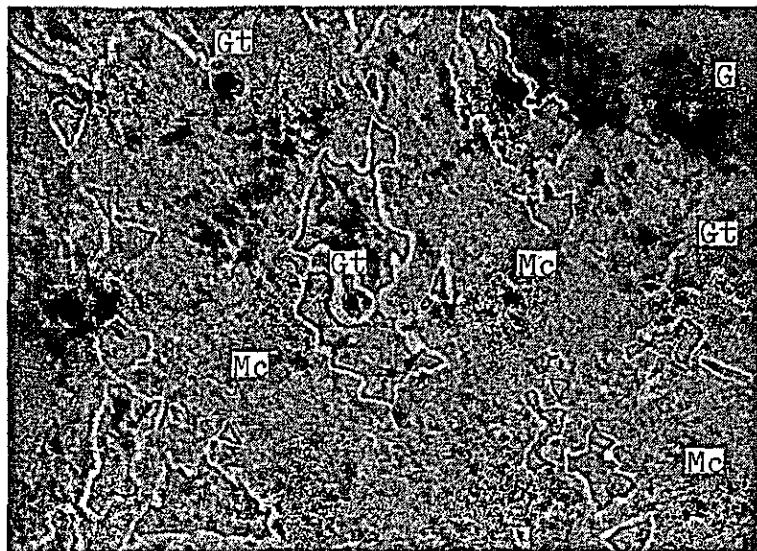


Polished Sections

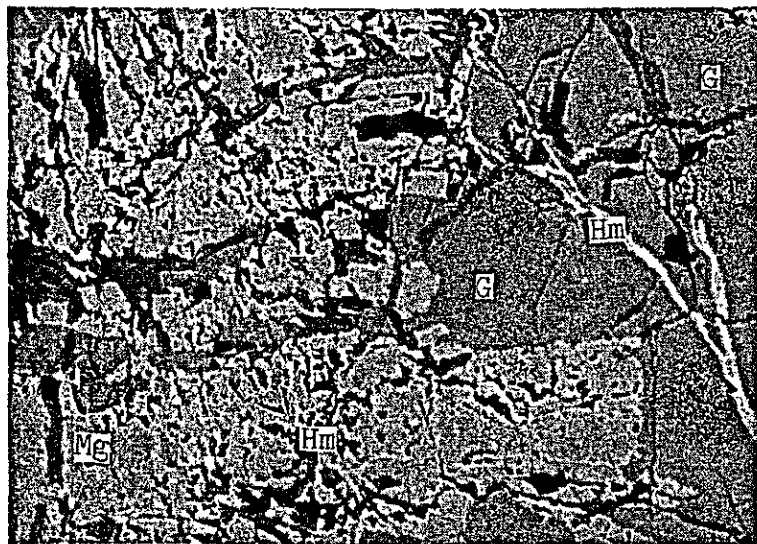


Sample No. 72807

Ore minerals:

Malachite, goethite

0.25 mm

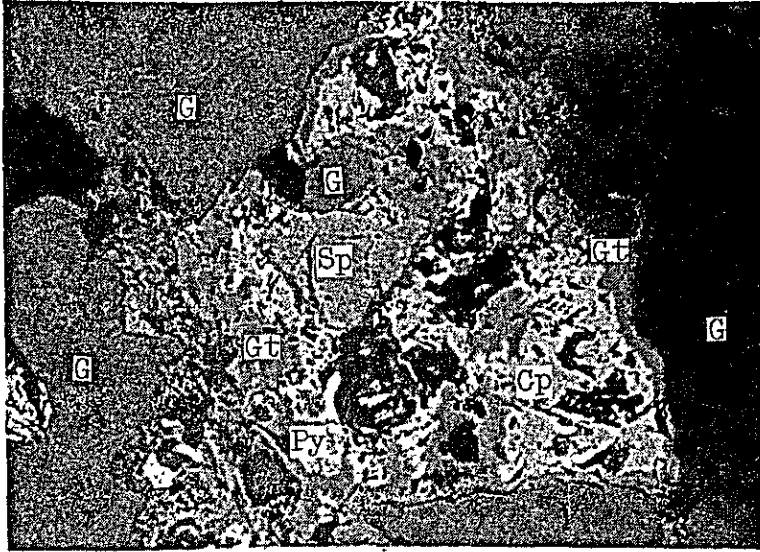


Sample No. 80205

Ore minerals:

Magnetite, hematite

0.25 mm

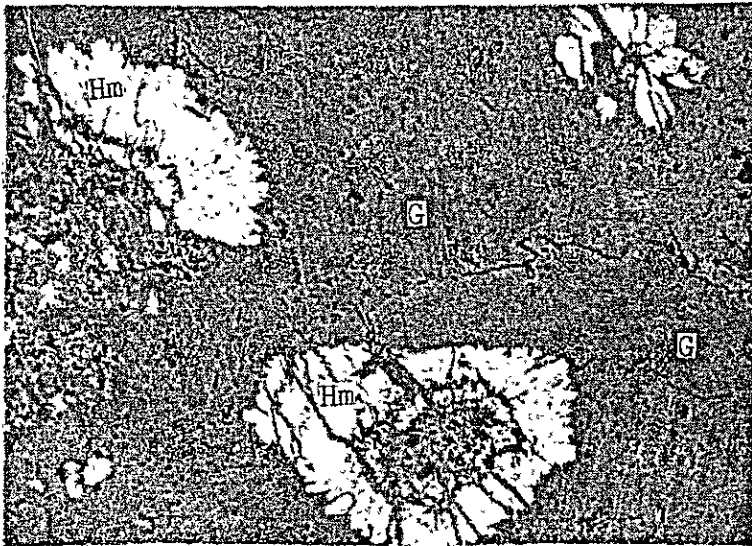


Sample No. 82409

Ore minerals:

Chalcopyrite, sphalerite,
goethite and pyrite

0.25 mm

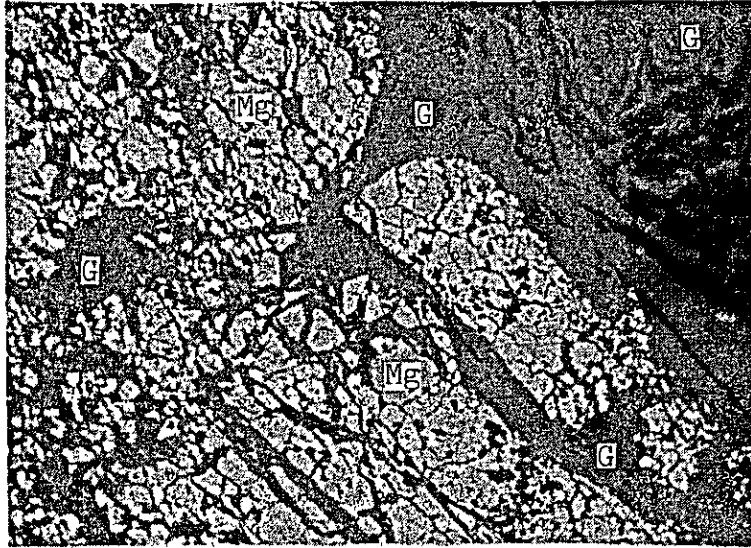


Sample No. 82409

Ore minerals:

Hematite

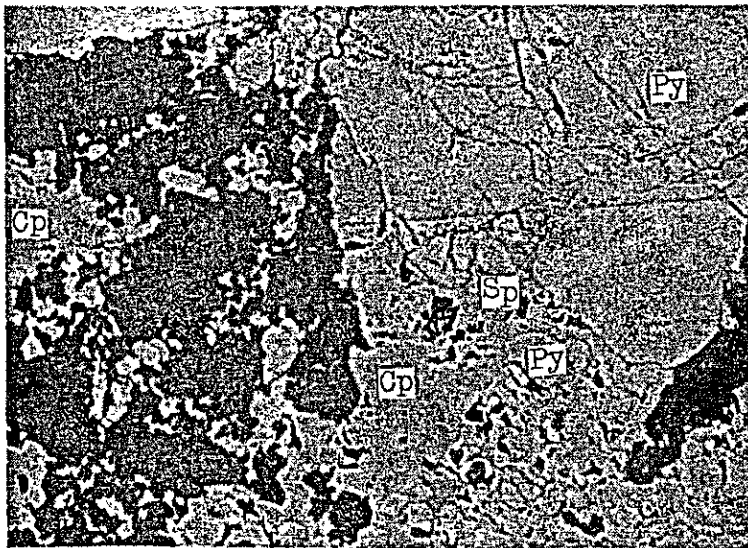
0.25 mm



Sample No. 80306

Ore mineral:
Magnetite

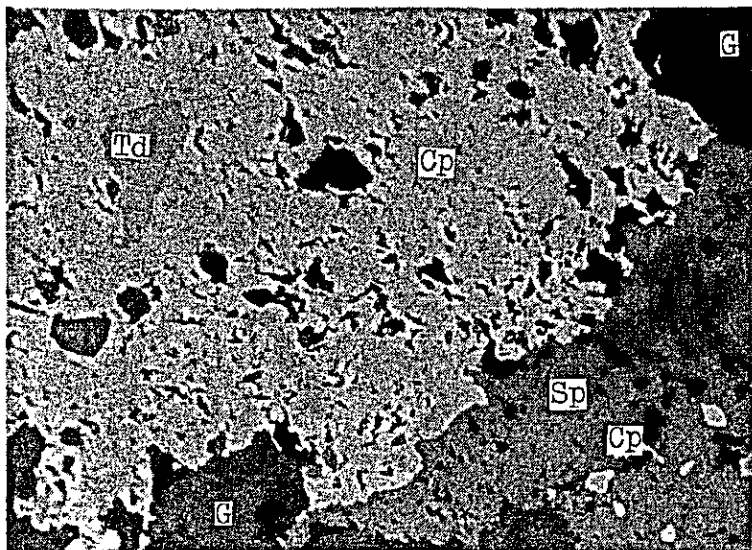
0.25 mm



Sample No. 1097

Ore minerals:
Chalcopyrite, pyrite
and sphalerite

0.25 mm



Sample No. 2173

Ore minerals:

Chalcopyrite, tetrahedrite
and sphalerite

0.25 mm

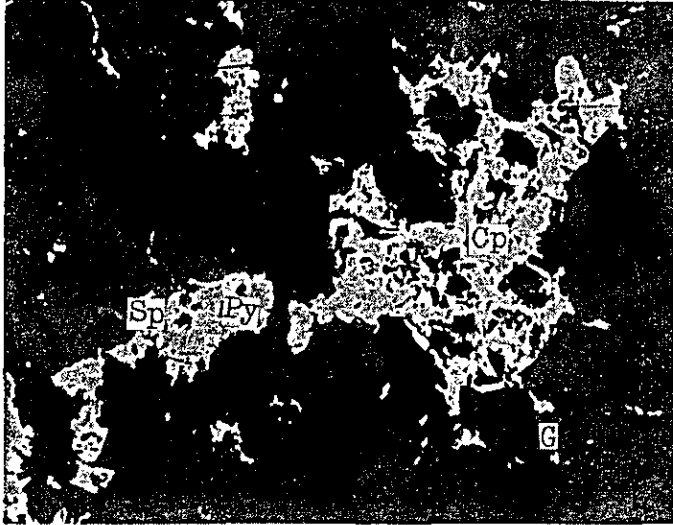


Sample No. 3115

Ore minerals:

Chalcopyrite, pyrite

0.25 mm



Sample No. 3106

Ore minerals:

Sphalerite, chalcopryrite

0.25 mm

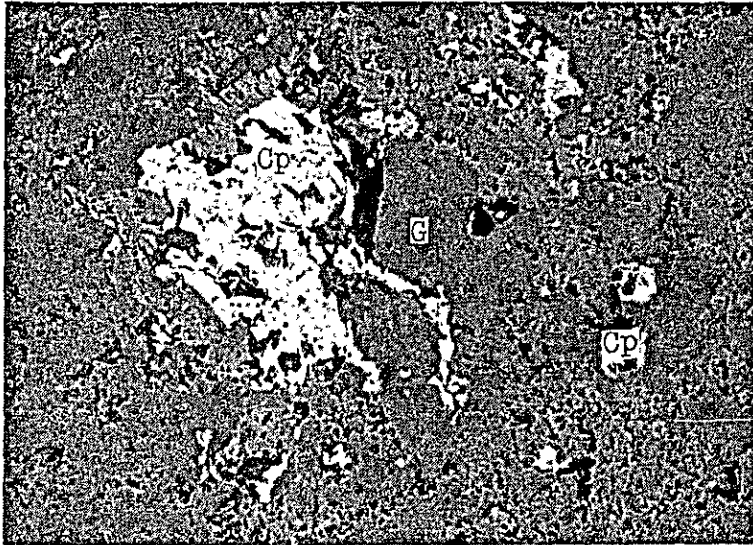


Sample No. 3124

Ore minerals:

Chalcopryrite, sphalerite

0.25 mm

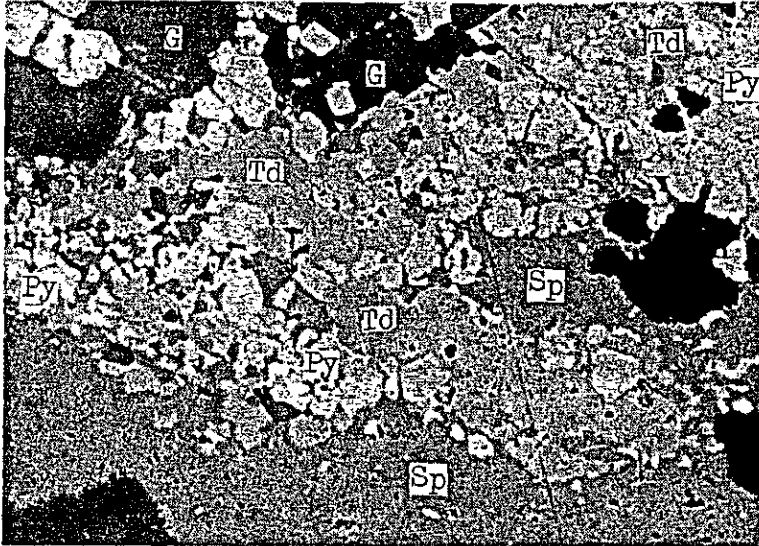


Sample No. 3124

Ore mineral:

Chalcopyrite

0.25 mm

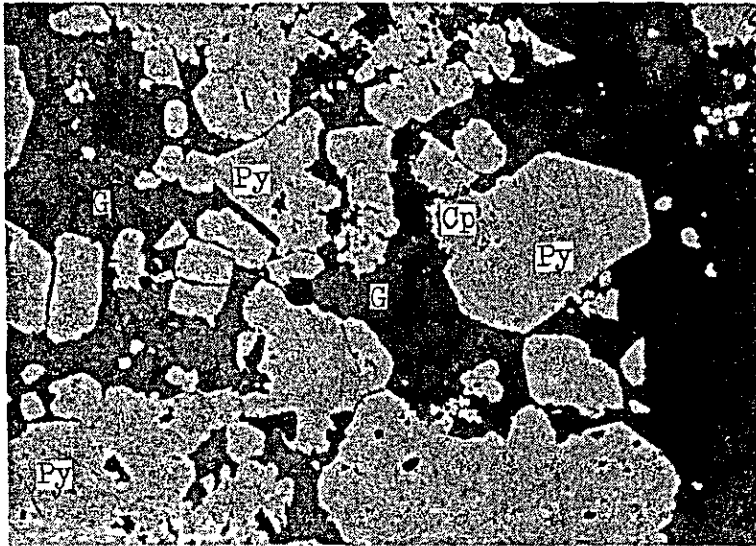


Sample No. 4090

Ore minerals:

Sphalerite, tetrahedrite
and pyrite

0.25 mm

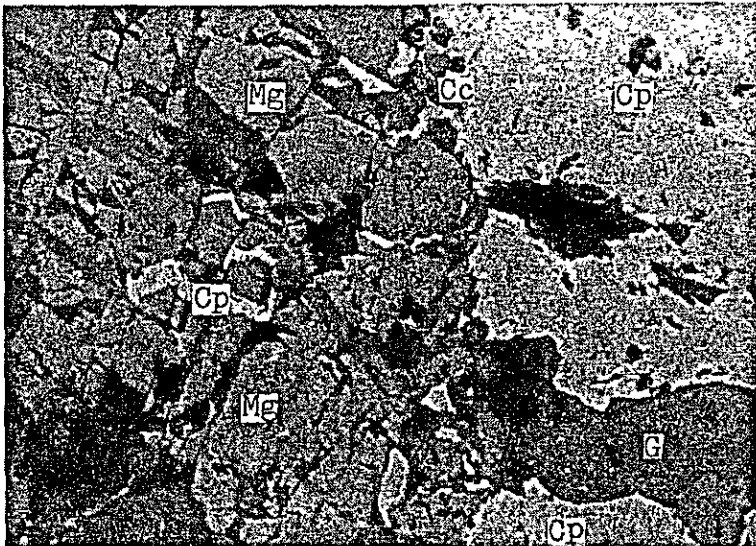


Sample No. 7087

Ore minerals:

- Chalcopyrite, pyrite

0.25 mm



Sample No. 7091

Ore minerals:

Chalcopyrite, chalcocite
and magnetite

0.25 mm

Table I-4 Results of X-ray diffraction test

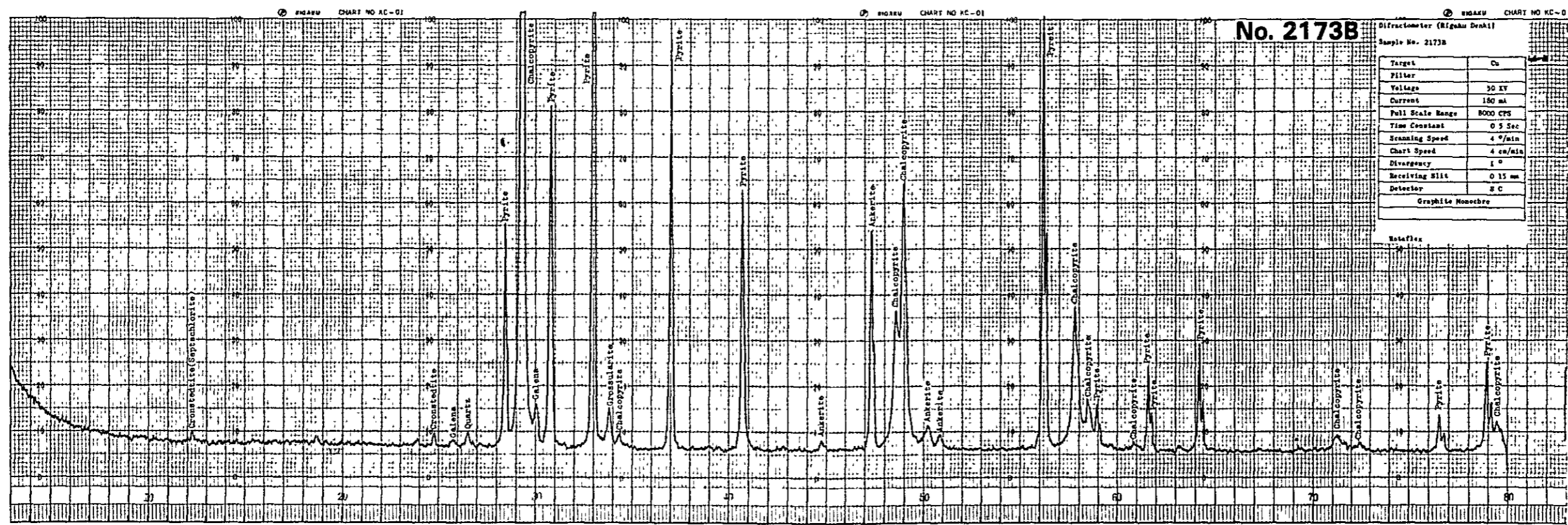
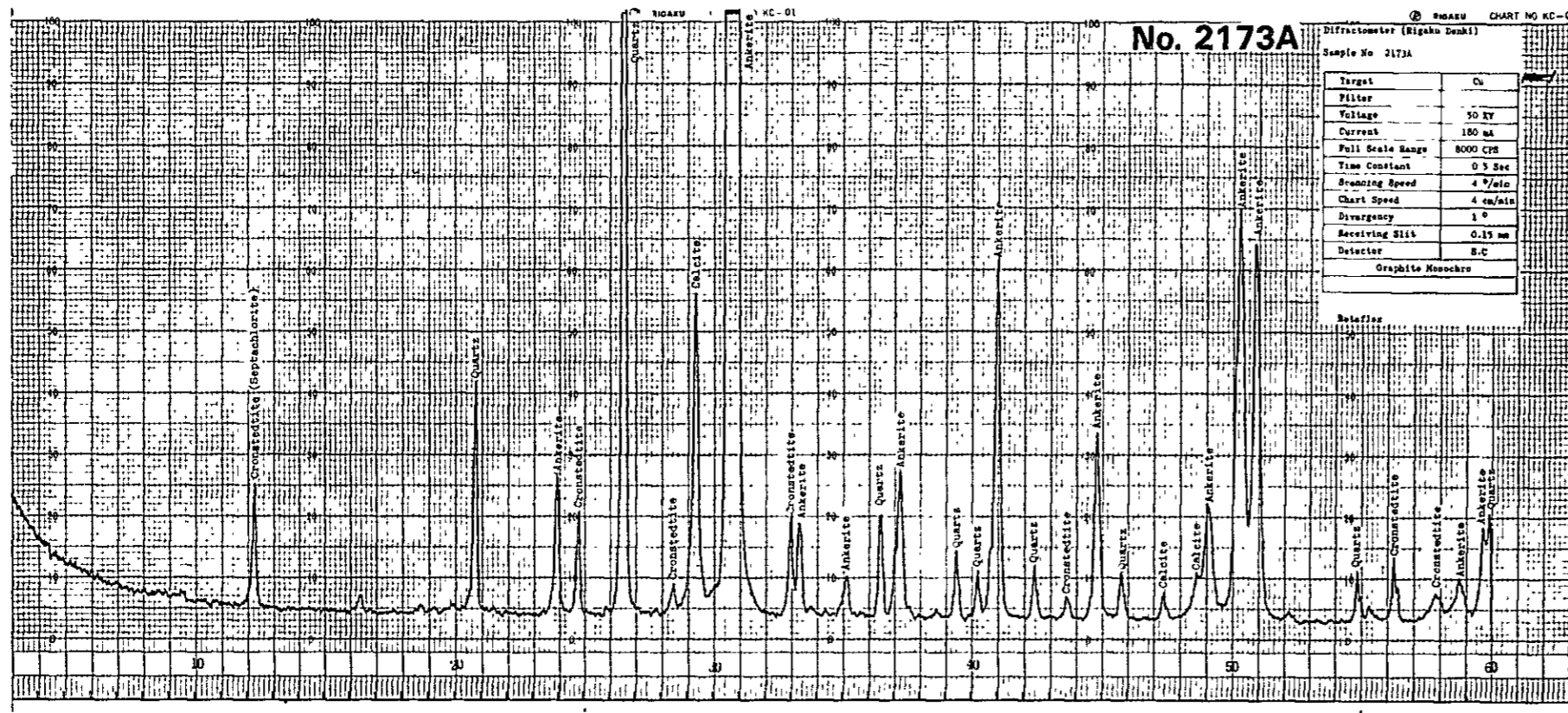
⊙ Most
 ⊙ Much
 ○ Common
 △ Rare
 × Very Rare

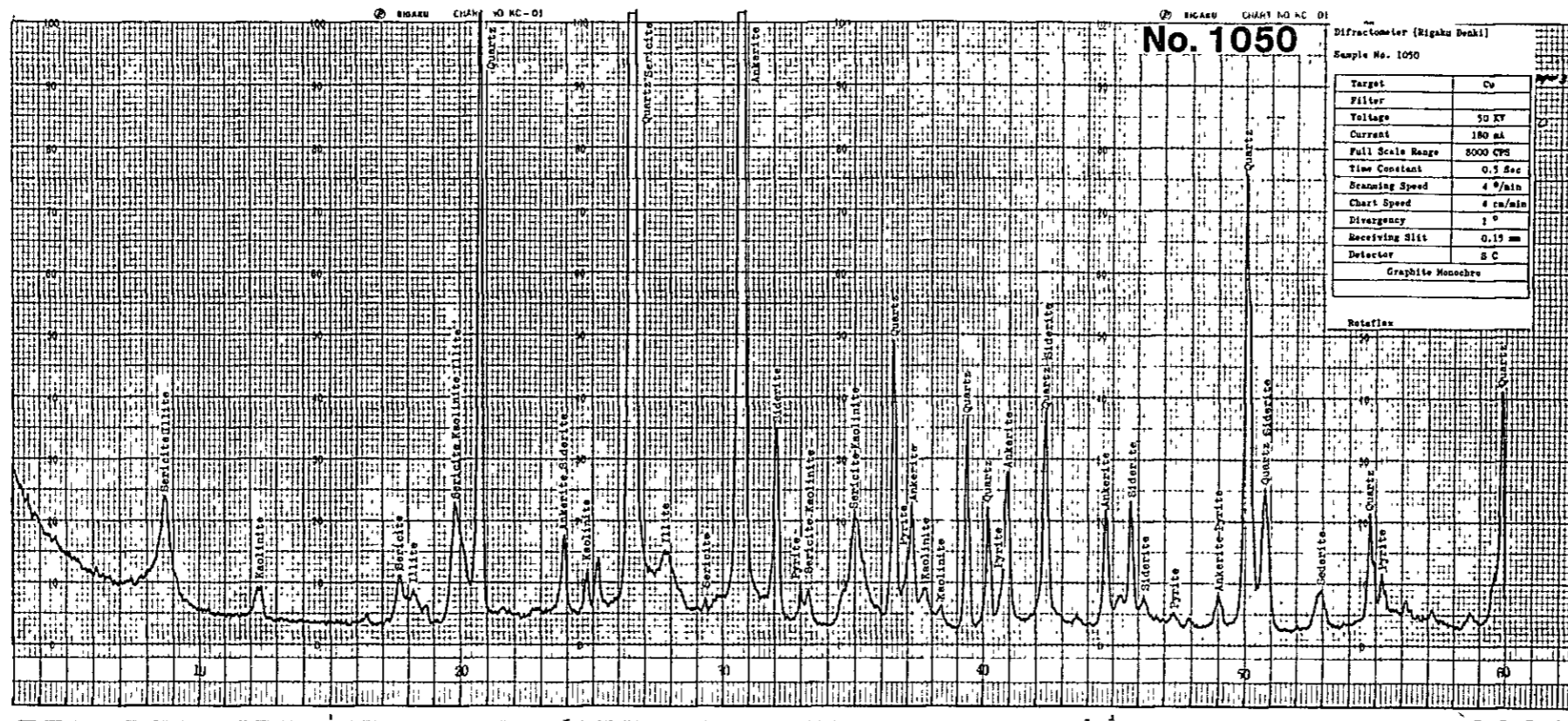
Location Minerals	Vuelatas del Rio Sector															Minitas Sector					Pueblo Nuevo Sector				
	Sample No.	1050	1097	2050	2173 A B	3020	3050	3057	4068	4083	4090	5007	5050	5056	5072	5098	7082	7091	7095	7113	71705	80205	80306	81901	82409
	DDH No.	53-1	53-1	53-2	53-2	53-3	53-3	53-3	53-4	53-4	53-4	53-5	53-5	53-5	53-5	53-5	53-7	53-7	53-7	53-7					
Depth (m)	26	97	50	173	20	50	57	68	83	90	7	50	56	72	98	82	91	95	113						
Quartz	⊙	⊙	⊙	⊙ △	⊙	⊙	⊙	⊙	⊙	○	⊙	⊙	⊙	⊙	○	△		△	△	△			⊙	⊙	
Calcite		⊙		○						△					△	○		○	△	△				△	
Dolomite																			△						
Chlorite																		○	⊙						
Kaolinite	○		○			⊙	△	△	○	△	△	△	○	△	×										
Sericite	○		△			△	△	△	○	○	○	○	△	○											
Ankerite	○			⊙ △																					
Cronstedtite				○																					
Illite	△																								
Talc																△									
Garnet (Andradite)																⊙	⊙	○	△	⊙		⊙		○	
Epidote		○	○													△	⊙	△	⊙	×					
Pyroxene (Diopside?)										△															
Galena					×																				
Sphalerite		○								⊙						△									
Tetrahedrite										△															
Chalcopyrite		⊙		⊙														○						△	
Malachite																							△		
Azurite																							△		
Pyrite	△	○		○	△			△	△	△	△		△	△	⊙				⊙						
Magnetite																		○				⊙	⊙		
Hematite																		△			○	△	△	○	
Siderite	○					△	○											△				△			
Grossularite				×																					

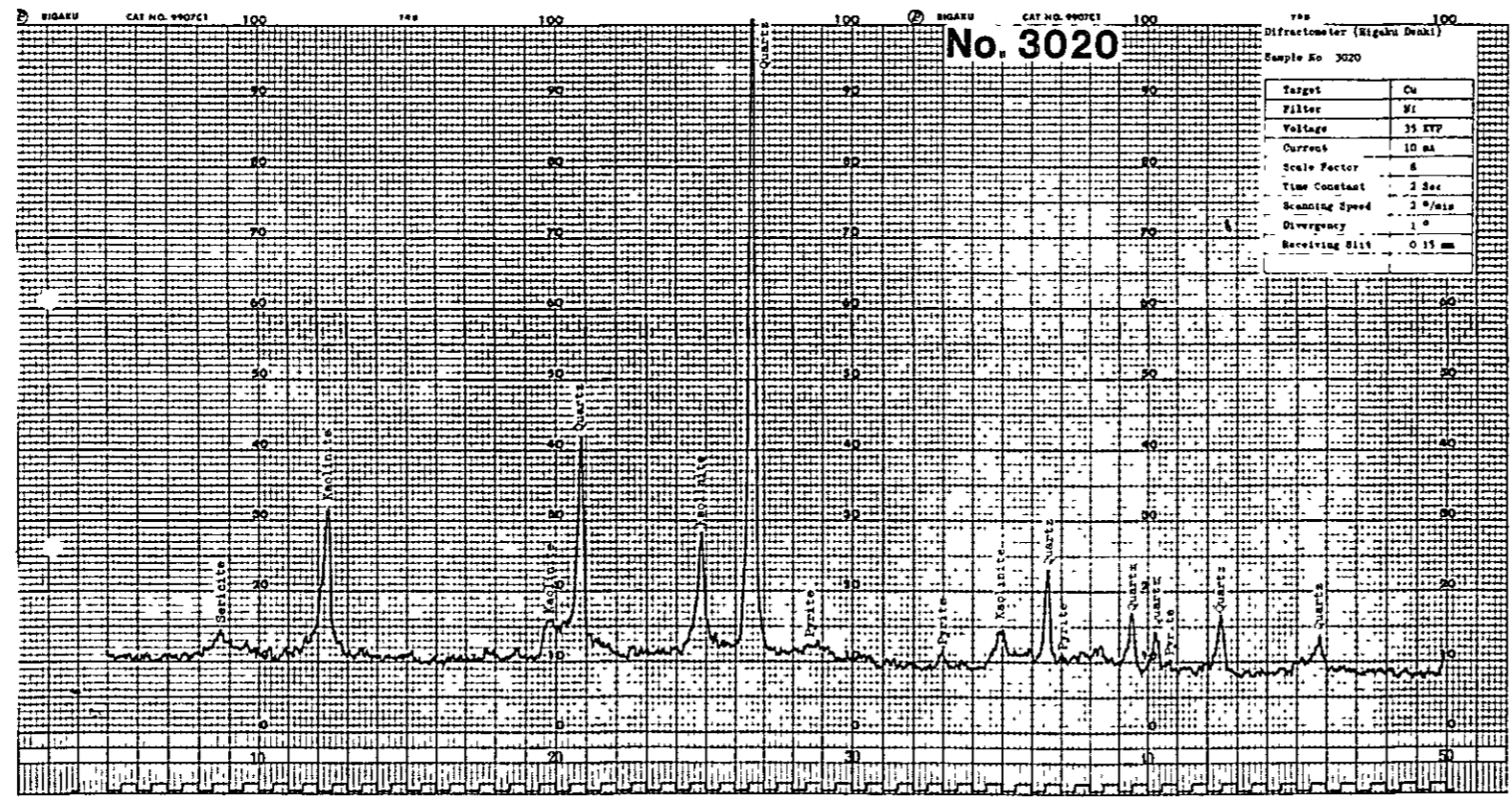
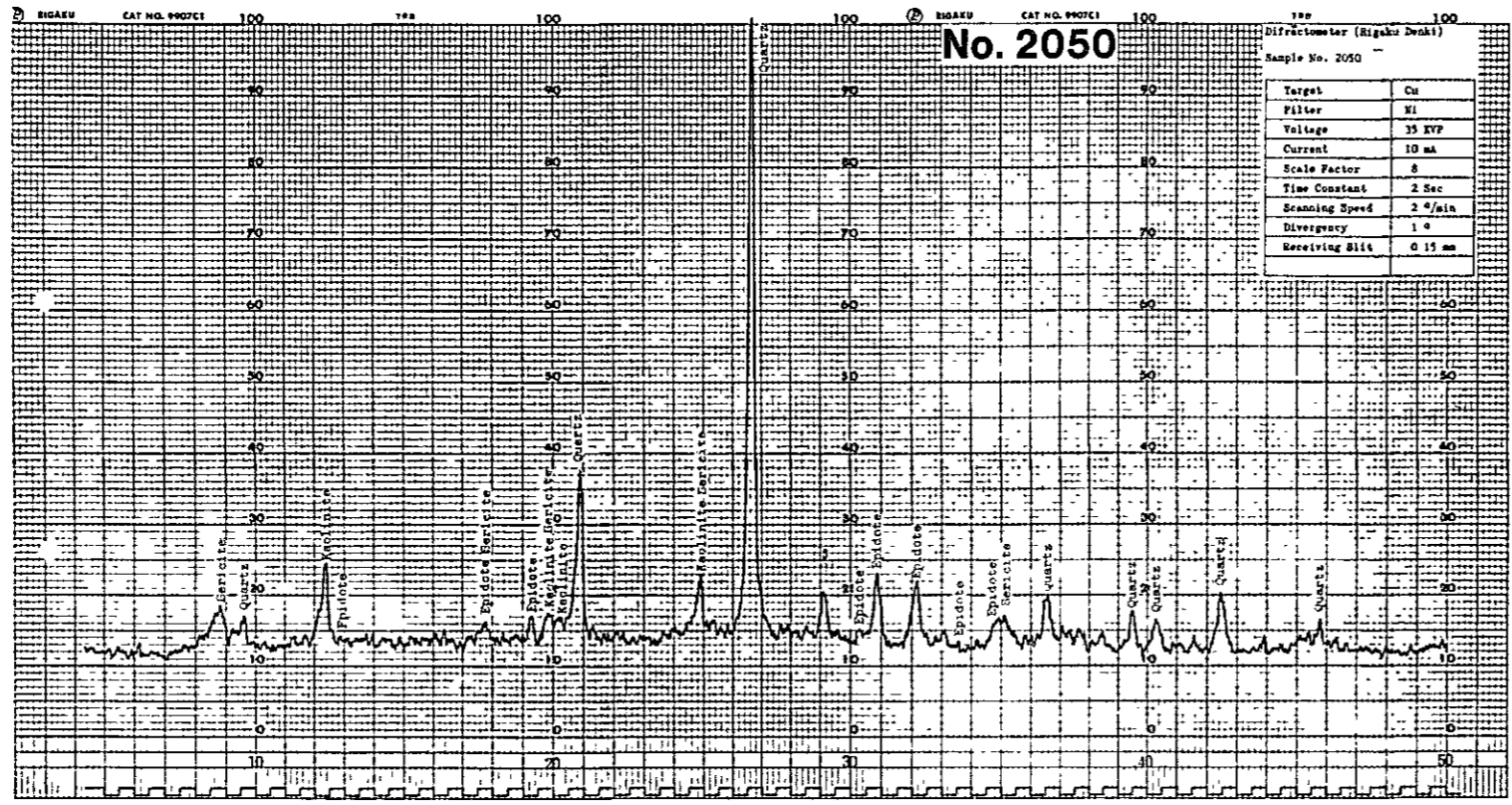
Table I—5 Chart of X-ray diffraction test

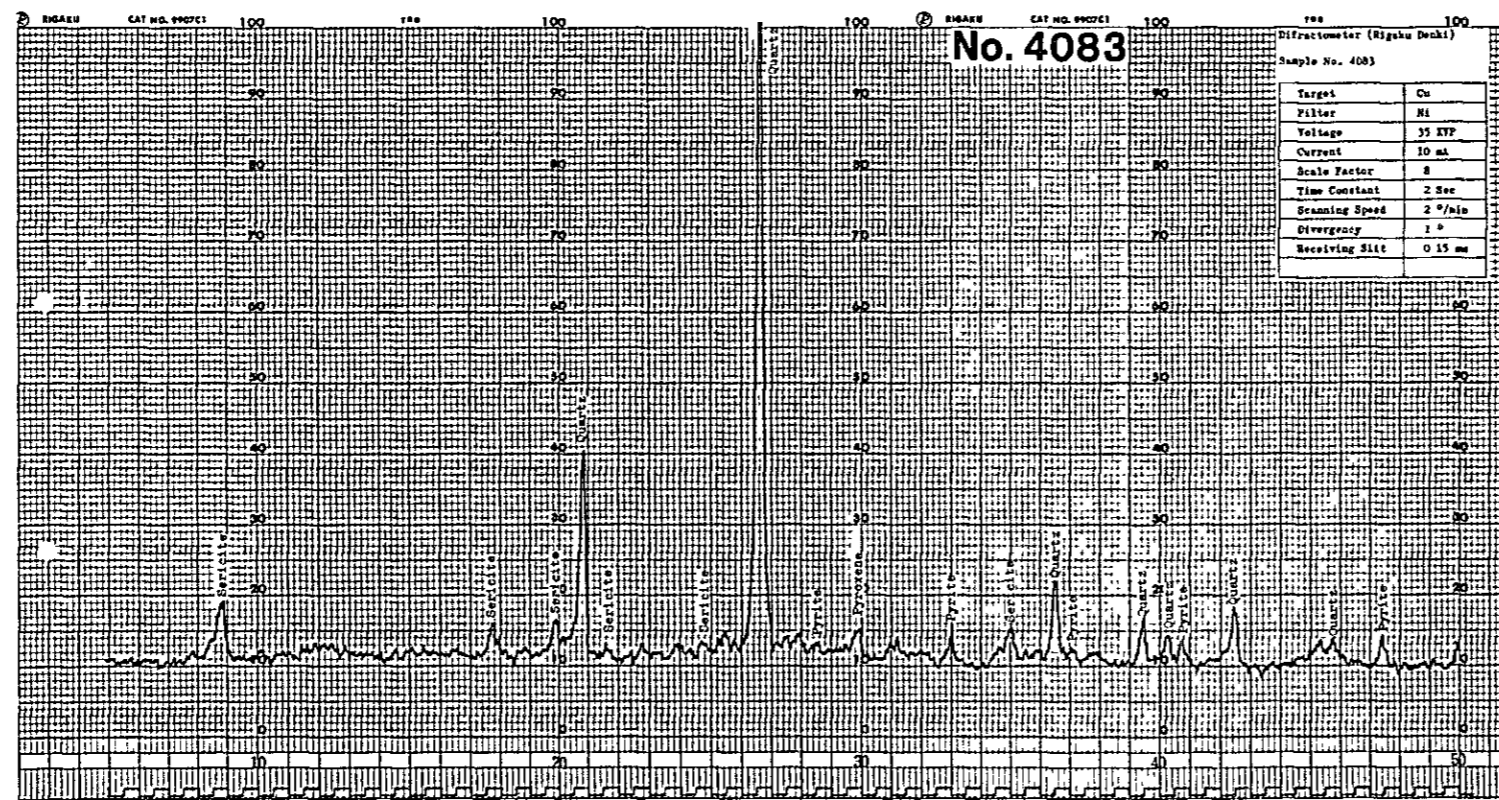
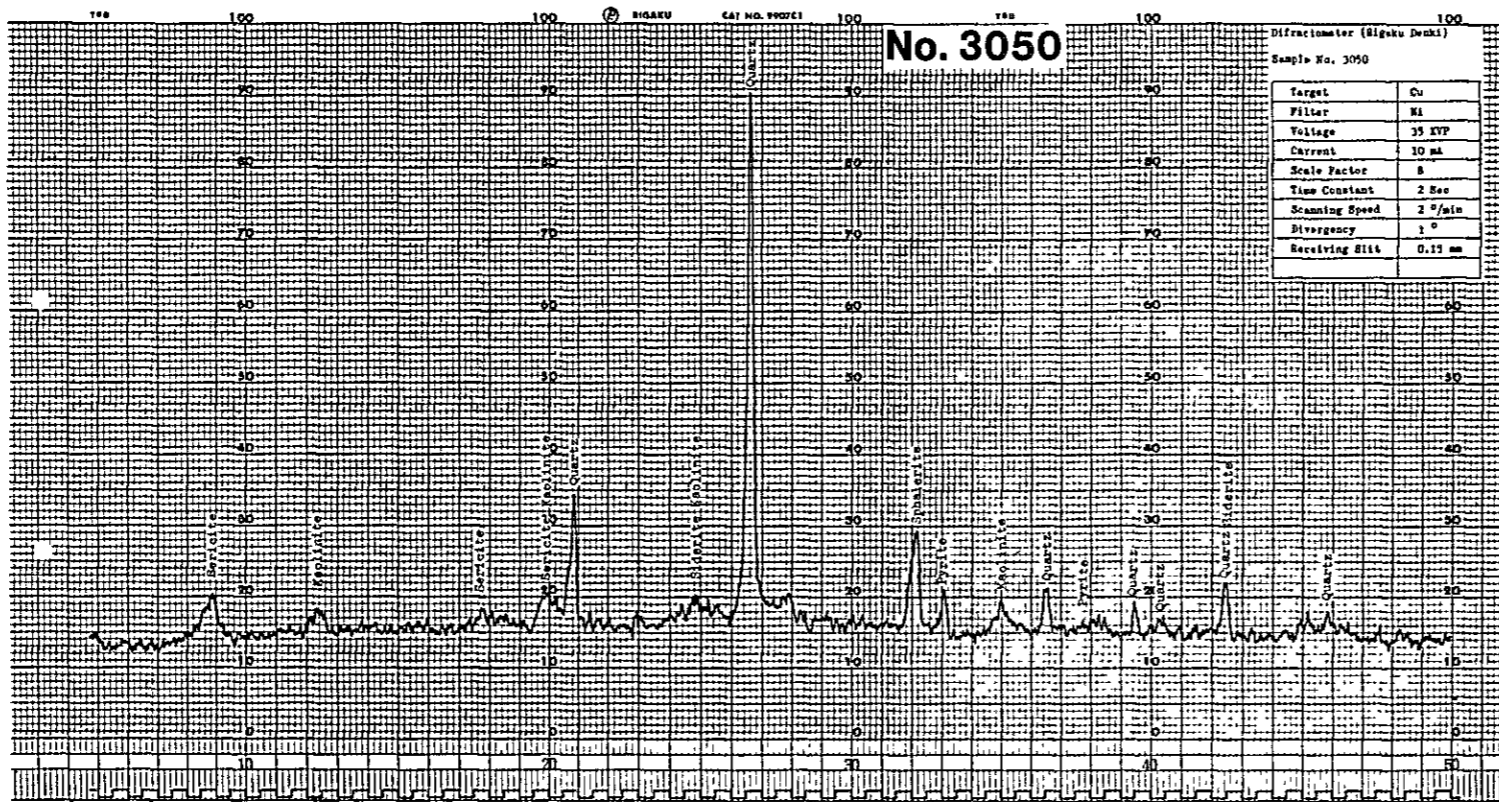
Sector	Sample No.	Rock name
Vueltas del Rio	No. 2173A	Tuff breccia
"	No. 2173B	Tuff breccia with Cu ore
"	No. 1050	Tuff
"	No. 2050	Tuff
"	No. 3020	Welded tuff
"	No. 3050	Welded tuff
"	No. 4083	Silicified tuff
"	No. 4090	Tuff
"	No. 5072	Dacite porphyry
Minitas	No. 7082	Garnet skarn
"	No. 7095	Epidote fluorite skarn
Pueblo Nuevo	No. 81901	Limestone with Cu ore
"	No. 82409	Liparite with Fe-Cu-Zn ore

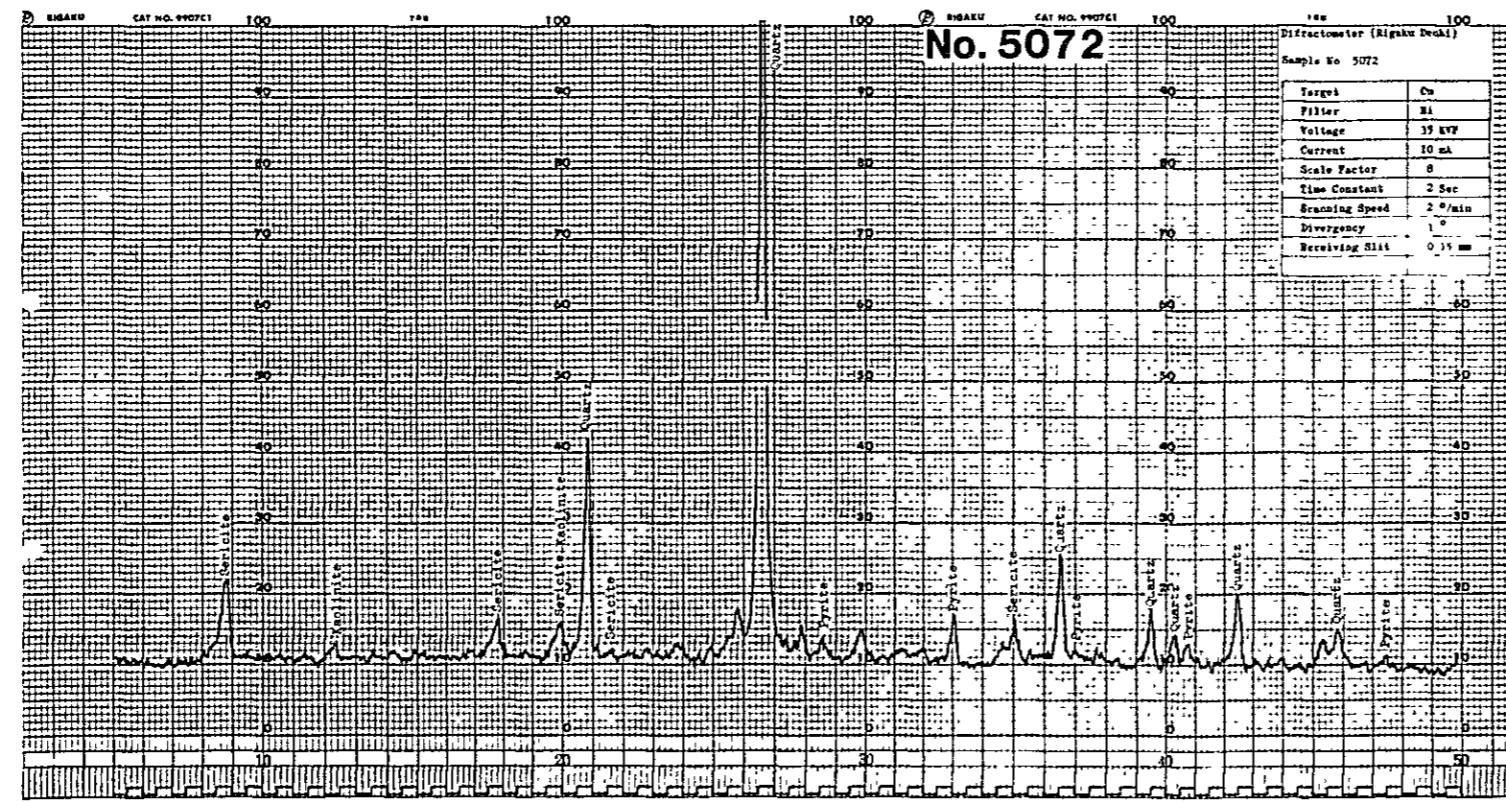
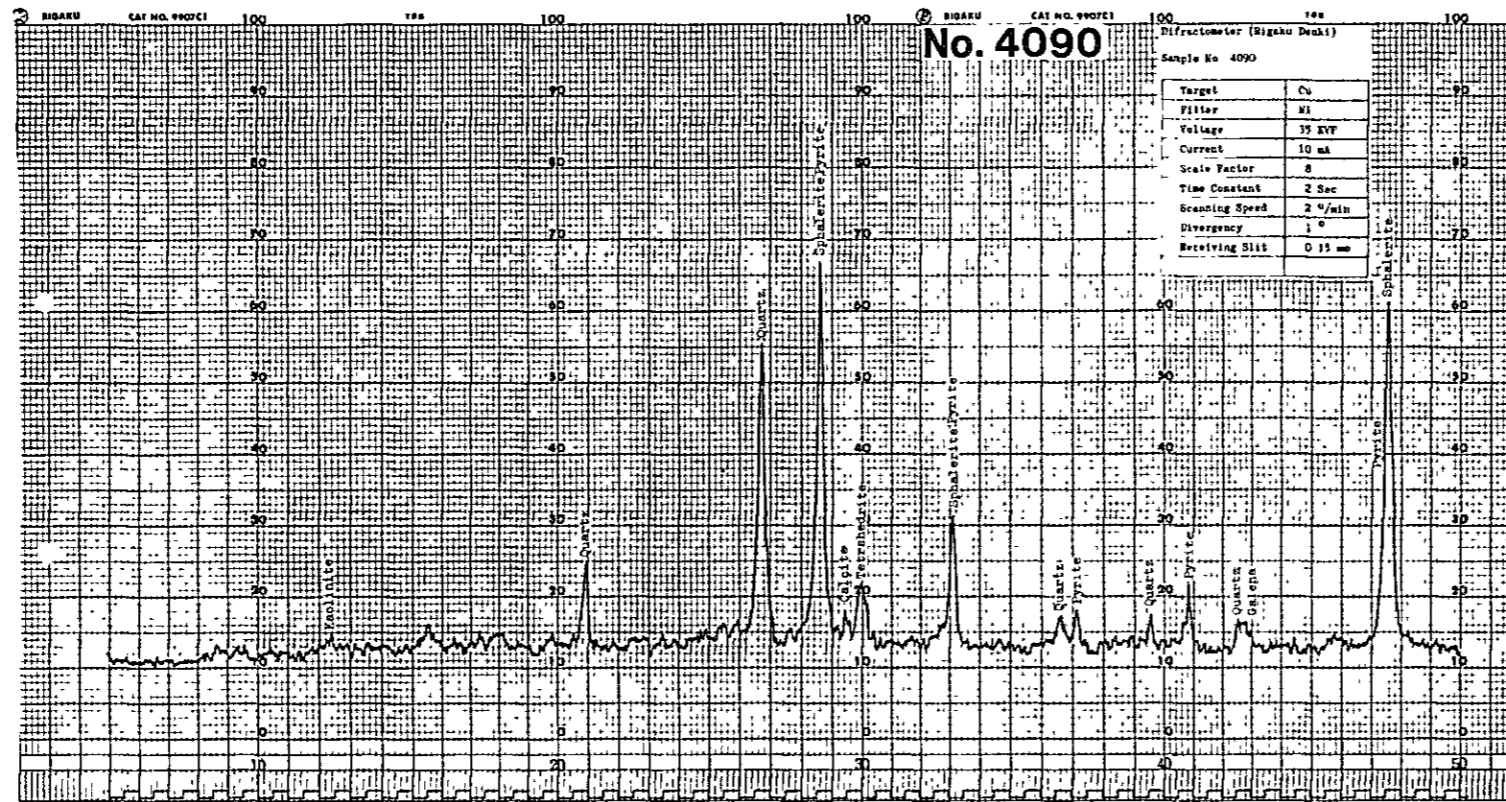
Table I-5 Chart of X-ray diffraction test

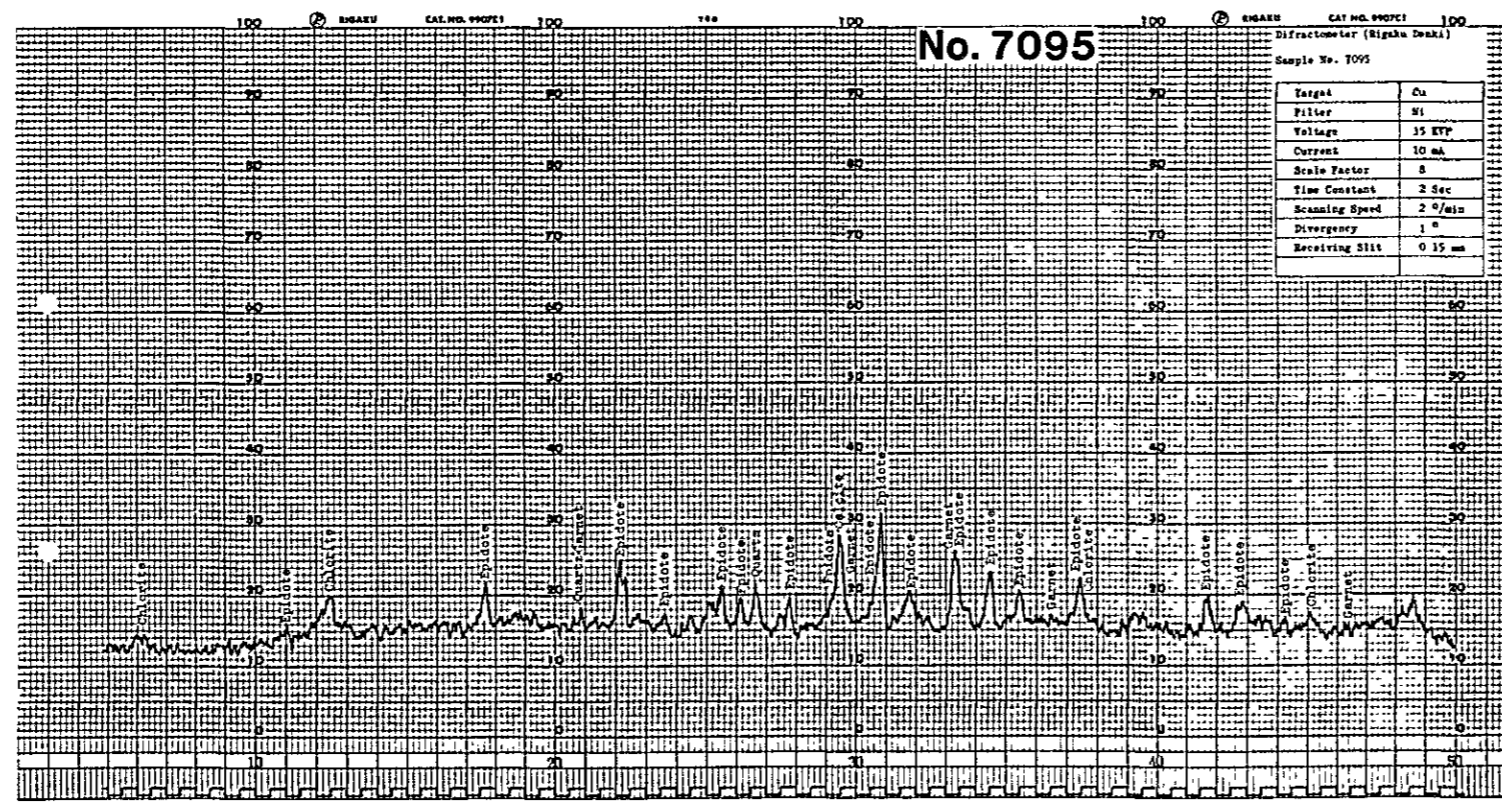
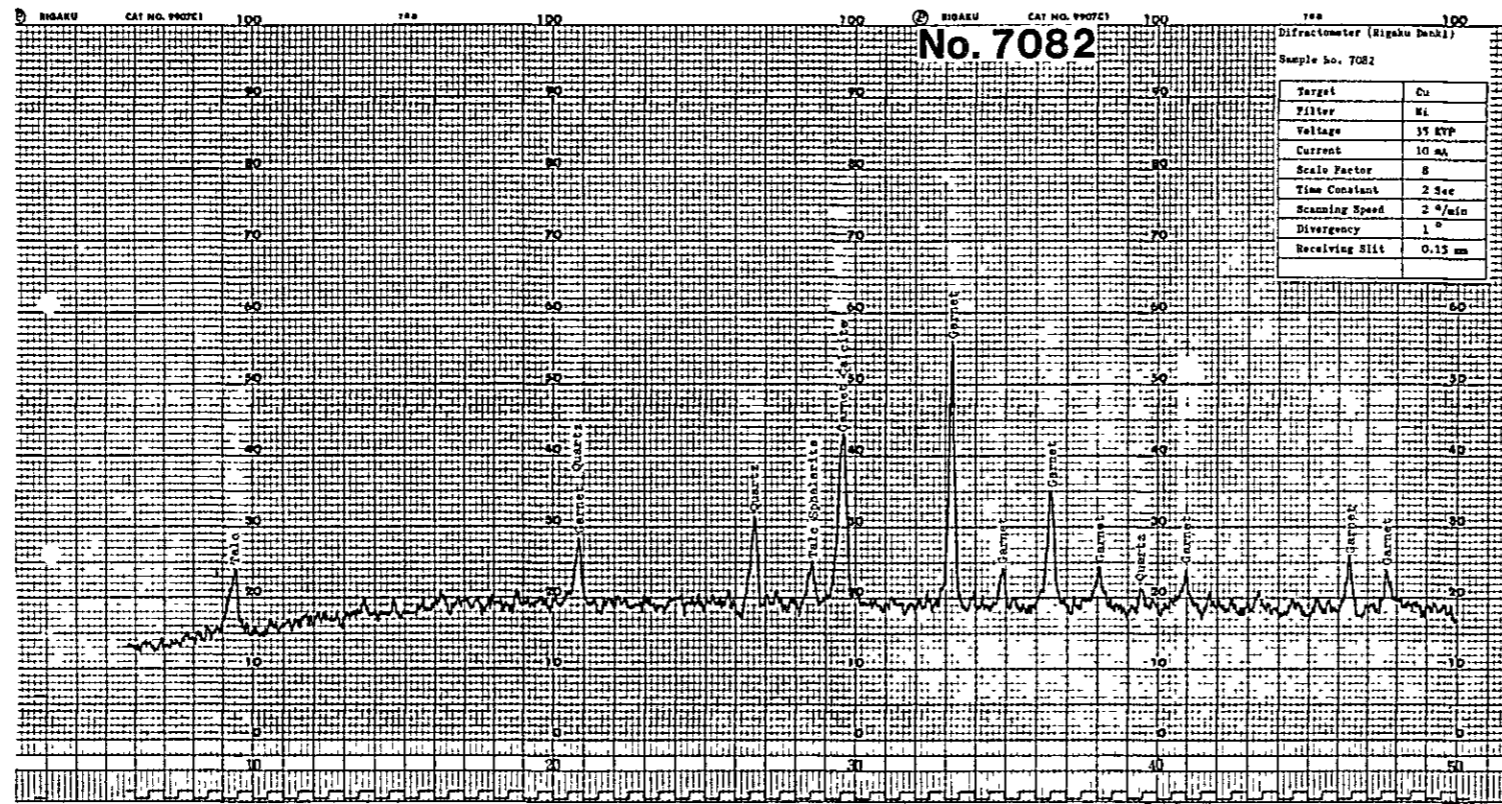












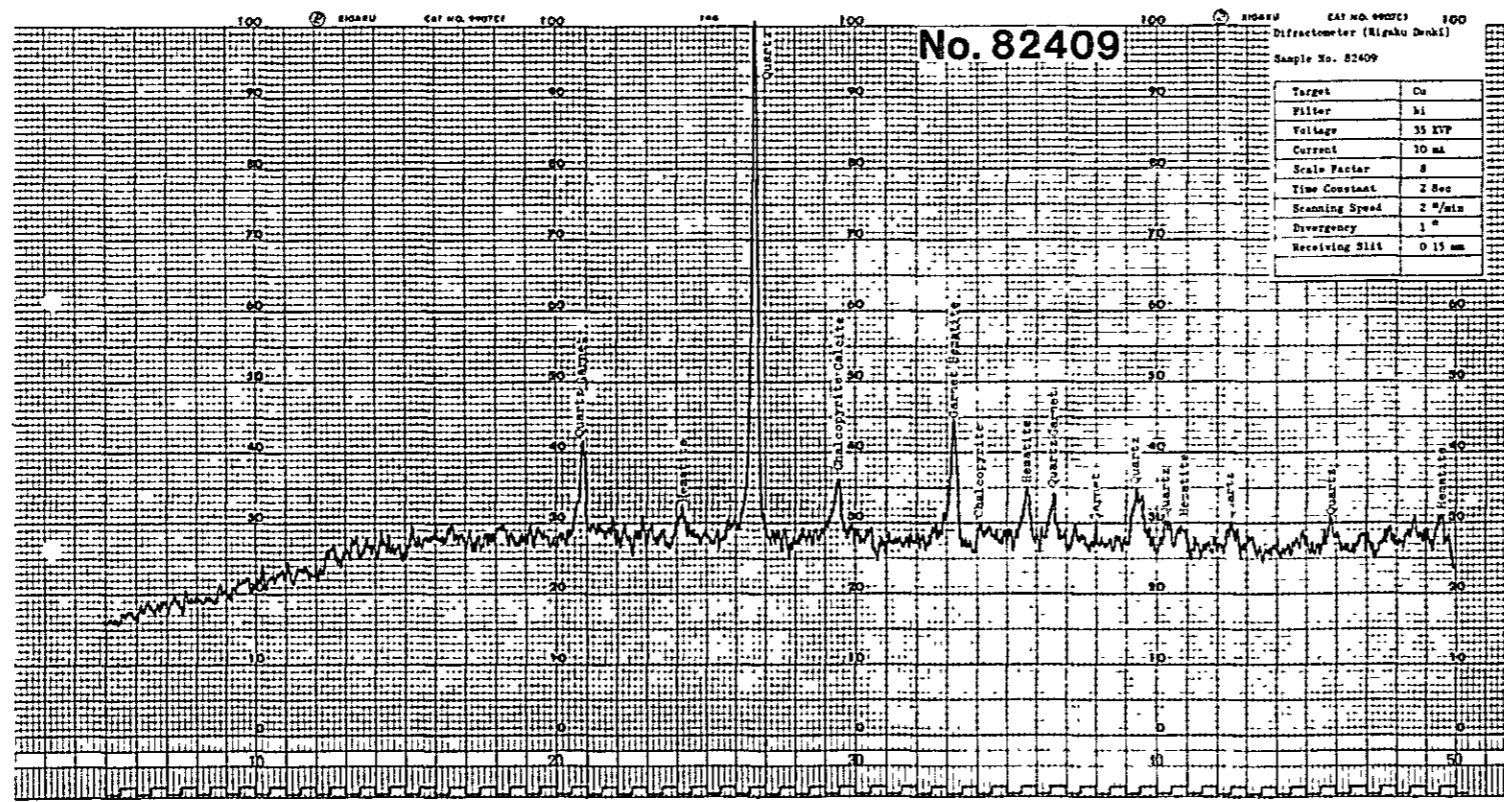
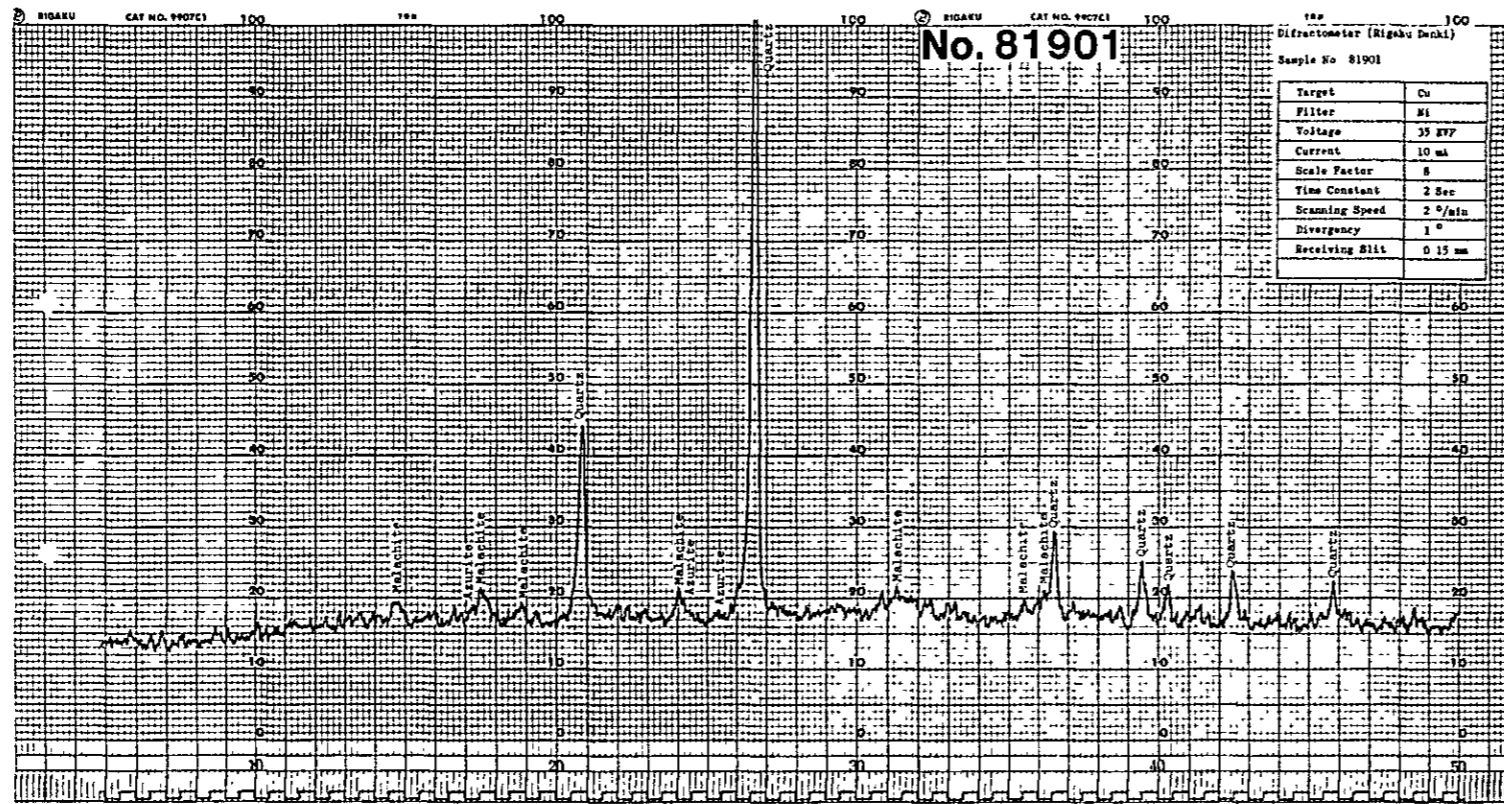


Table I—6 Chemical analysis of ore and rock samples in the surveyed area

△----- checked samples

Vueltas del Rio Sector

Sample No.	Width (m)	Elements analysed (ppm)				Sample No.	Width (m)	Elements analysed (ppm)			
		Au	Cu	Pb	Zn			Au	Cu	Pb	Zn
VR 1	1.0	0.04	78	9	8	VR 63	3.0	0.06	275	11	15
" 2	3.0	0.24	251	28	10	" 64	2.0	0.38	351	17	14
" 3	3.0	0.04	41	19	12	" 65	3.6	0.36	145	8	20
Δ " 3		0.04	42	19	12	" 66	1.2	2.24	297	12	10
" 4	3.0	0.02	165	10	11	" 67	2.3	0.16	164	10	20
" 5	3.0	0.02	48	16	15						
" 6	3.0	0.04	174	16	250						
" 7	3.0	0.01	109	14	120						
" 8	3.0	0.02	54	16	120						
" 9	3.0	< 0.01	48	13	123						
" 10	3.0	0.02	53	14	134						
" 11	3.0	0.04	31	14	159						
" 12	3.0	0.02	63	13	100						
" 13	3.0	< 0.01	39	10	89						
Δ " 13		< 0.01	40	11	89						
" 14	3.0	0.02	69	11	195						
" 15	3.0	< 0.01	24	12	101						
" 16	3.0	0.02	57	17	121						
" 17	3.0	0.01	68	17	117						
" 18	3.0	0.04	84	17	171						
" 19	3.0	0.20	57	12	130						
Δ " 19		0.20	57	12	126						
" 20	3.0	< 0.01	48	20	580						
" 21	3.0	< 0.01	54	8	129						
" 22	3.0	< 0.01	39	63	870						
" 23	3.0	< 0.01	8	7	99						
" 24	3.0	< 0.01	54	34	254						
" 25	3.0	0.20	204	767	420						
" 26	3.0	0.08	79	26	360						
" 27	3.0	0.04	170	20	80						
" 28	3.0	0.02	132	51	175						
" 29	3.0	< 0.01	59	81	730						
Δ " 29		< 0.01	59	81	740						
" 30	3.0	0.06	61	12	267						
" 31	2.0	0.06	38	21	102						
" 32	3.0	0.02	22	45	77						
" 33	3.0	< 0.01	55	49	480						
" 34	3.0	0.06	48	675	890						
" 35	3.0	< 0.01	74	9	750						
" 36	3.0	< 0.01	60	30	134						
" 37	3.0	< 0.01	34	12	64						
" 38	3.0	0.10	150	108	360						
" 39	3.0	0.08	40	43	161						
Δ " 39		0.08	38	43	173						
" 40	3.0	< 0.01	15	16	46						
" 41	3.0	0.06	10	90	146						
" 42	3.0	0.01	26	16	214						
" 43	5.0	0.82	19	15	36						
" 44	1.5	2	8	19	50						
" 45	1.5	0.06	255	645	910						
" 46	1.5	0.06	43	198	90						
Δ " 46		0.06	43	201	88						
" 47	2.0	0.04	491	230	400						
" 48	2.0	< 0.01	202	6	164						
" 50	1.5	0.52	51	73	35						
" 51	1.5	5.60	567	31	84						
" 52	1.5	0.90	28	20	65						
" 53	2.0	1.64	65	75	91						
" 54	1.5	0.66	26	18	44						
" 55	1.5	0.48	87	81	71						
" 56	1.3	1.82	92	28	66						
" 57	1.2	0.26	48	21	37						
" 58	3.0	< 0.01	166	5	15						
" 59	3.0	0.36	181	8	21						
" 60	3.0	0.58	143	8	17						
Δ " 60		0.58	148	8	15						
" 61	3.0	0.12	184	9	11						
" 62	3.0	0.10	278	6	17						

Laguna Seca Sector

Sample No.	Width (m)	Elements analysed (ppm)				Sample No.	Width (m)	Elements analysed (ppm)			
		Au	Cu	Pb	Zn			Au	Cu	Pb	Zn
LS 1	3.0	0.10	50	65	290						
" 3	3.0	0.08	142	178	96						
" 4	3.0	<0.01	62	32	81						
" 5	3.0	<0.01	95	242	830						
" 6	3.0	<0.01	290	53	129						
Δ " 6		<0.01	290	53	142						
" 7	3.0	0.10	297	94	500						
" 8	3.0	<0.01	160	23	250						
" 9		<0.01	35	44	122						
" 10	3.0	<0.01	34	35	173						
" 11	3.0	<0.01	52	31	230						
" 12	piece	0.01	50	108	197						
" 13	piece	0.08	67	103	180						
" 14	3.0	0.08	67	1,030	33						
" 15	5.0	0.04	56	62	280						
" 16	3.0	0.04	44	28	167						
Δ " 16		0.04	44	31	166						
" 18	3.0	0.18	267	51	1,490						
" 19	3.0	0.24	65	171	118						
" 20	3.0	0.14	83	22	106						
" 21	3.0	0.04	137	201	970						
" 22	3.0	0.01	31	57	360						
" 23	piece	0.12	123	91	170						
" 24	piece	0.10	220	57	100						

Minitas Sector

Sample No.	Width (m)	Elements analysed (ppm)				Sample No.	Width (m)	Elements analysis (ppm)			
		Au	Cu	Pb	Zn			Au	Cu	Pb	Zn
MS 1	3.0	<0.01	74	101	1,040						
" 2	3.0	0.02	274	37	252						
" 3	3.0	<0.01	674	31	1,020						
" 4	2.0	0.04	39	26	243						
" 5	3.0	<0.01	44	23	219						
" 6	3.0	0.14	41	26	172						
" 7	3.0	0.04	67	21	122						
" 8	3.0	<0.01	41	12	122						
Δ " 8		<0.01	40	12	120						
" 9	3.0	0.06	9	10	190						
" 10	3.0	0.02	39	38	630						
" 11	3.0	0.14	138	31	560						
" 12	3.0	0.04	390	46	380						
" 13	3.0	0.04	372	70	690						
" 14	3.0	0.10	549	78	730						
" 15	3.0	0.10	651	67	740						
" 16	3.0	0.06	202	39	264						
" 17	3.0	0.12	683	73	710						
" 18	3.0	0.20	534	86	730						
Δ " 18		0.20	539	86	730						
" 19	3.0	<0.01	17	21	90						
" 20	3.0	0.04	75	23	180						
" 21	piece	0.06	567	44	460						
" 22	2.0	<0.01	29,400	52	13,100						
" 23	1.5	0.14	60,700	125	1,910						
" 24	1.5	<0.01	65	12	147						
" 25	3.0	0.10	99	13	460						
" 26	piece	0.06	21	24	175						
" 27	2.0	0.06	4,380	117	710						
" 28	2.0	0.04	5,430	9	98						
" 29	3.0	<0.01	1,380	11	147						
Δ " 29		<0.01	1,360	12	138						
" 30	3.0	0.10	260	15	420						
" 31	3.0	0.10	26,200	32	290						
" 32	2.0	0.10	20,000	31	380						
" 33	3.0	0.10	5,620	12	117						

Pueblo Nuevo Sector

Sample No.	Width (m)	Elements analysed (ppm)				Sample No.	Width (m)	Elements and analysed (ppm)			
		Au	Cu	Pb	Zn			Au	Cu	Pb	Zn
PN 1	3.0	0.01	63	97	156						
" 2	3.0	< 0.01	73	39	340						
" 3	3.0	< 0.01	65	36	163						
" 4	3.0	< 0.01	267	490	240						
" 5	1.0	0.90	3,100	15,750	20,400						
Δ " 5		0.90	3,100	15,750	20,400						
" 6	piece	0.08	32	149	174						
" 7	2.0	0.40	22,300	67	780						
" 8	2.0	0.10	40,000	520	8,100						
" 9	2.0	0.04	7,800	144	6,200						
" 10	2.0	0.10	9,480	660	4,900						
" 11	1.5	0.04	56	58	94						
" 12	piece	0.04	267	43	1,060						
" 13	3.0	0.04	6,240	608	690						
" 14	piece	0.04	31	8	79						
" 15	piece	0.18	4,190	57	660						
" 16	piece	0.04	60	10	25						
Δ " 16		0.04	65	10	23						
" 17	piece	0.22	13,200	51	1,270						
" 18	piece	0.08	1,260	51	900						



Sample No.	Elements analysed (ppm)					Sample No.	Elements analysed (ppm)				
	Au	Ag	Cu	Pb	Zn		Au	Ag	Cu	Pb	Zn
1000	0.06	1	221	40	1,990	1170	0.04	1	29	140	58
1002	0.04	1	152	15	2,060	1180	0.06	1	132	21	123
1004	0.02	1	49	16	2,340	1182	0.14	5	440	14	920
1006	< 0.01	1	69	12	1,700	1184	0.04	1	157	17	138
1008	< 0.01	1	11	15	1,100	1186	< 0.01	1	61	11	116
Δ 1008	< 0.01	1	11	14	1,040	1190	< 0.01	1	36	10	51
1010	0.02	1	68	42	900	1200	< 0.01	1	23	19	81
1012	< 0.01	0.4	47	17	860	1205	0.16	1	24	9	72
1014	< 0.01	0.4	88	25	1,190	1210	< 0.01	2	15	21	69
1016	< 0.01	1	40	17	230	Δ 1210	< 0.01	2	15	21	66
1018	< 0.01	1	169	22	246	1215	< 0.01	2	34	9	78
1020	< 0.01	1	16	17	244	1220	< 0.01	1	52	8	111
1022	< 0.01	1	29	12	196	1225	< 0.01	1	40	27	72
1024	0.06	1	29	14	165	1230	< 0.01	0.5	39	3	56
1026	< 0.01	1	18	22	154	1235	< 0.01	1	46	3	92
1028	0.04	1	37	11	141	1240	< 0.01	0.4	35	9	69
Δ 1028	0.04	1	36	11	133	1245	< 0.01	1	21	3	53
1030	0.02	1	59	27	203	1250	< 0.01	0.4	18	7	69
1032	< 0.01	1	43	23	188	1255	< 0.01	0.4	15	10	68
1034	< 0.01	1	18	15	238	1260	< 0.01	2	23	7	62
1036	< 0.01	2	116	15	193	Δ 1260	< 0.01	2	24	6	71
1038	< 0.01	1	82	14	209	1265	< 0.01	0.4	20	10	70
Δ 1038	< 0.01	1	76	14	209	1270	0.24	1	26	13	74
1040	< 0.01	1	64	13	110	1275	< 0.01	1	11	10	76
1042	< 0.01	1	31	17	109	1280	< 0.01	1	6	11	48
1044	< 0.01	1	41	15	120	1285	< 0.01	1	6	14	58
1046	< 0.01	1	126	14	127	1290	< 0.01	0.5	17	25	64
1048	< 0.01	1	13	15	118	1295	< 0.01	1	14	11	102
1050	< 0.01	1	72	17	96	1300	< 0.01	1	12	11	97
1052	< 0.01	1	59	23	162	1305	< 0.01	1	12	21	74
1054	< 0.01	1	67	84	191	1310	< 0.01	1	14	8	102
1056	< 0.01	1	233	25	233	Δ 1310	< 0.01	1	12	8	104
1058	0.06	1	137	21	169	1315	< 0.01	0.5	14	9	77
Δ 1058	0.06	1	135	20	172	1320	< 0.01	8	29	12	153
1060	< 0.01	1	43	39	163	1325	< 0.01	1	22	15	120
1062	< 0.01	1	40	22	162	1330	< 0.01	2	91	11	140
1064	0.04	1	41	15	186	1335	< 0.01	1	42	14	131
1066	0.04	1	71	17	174	1340	< 0.01	0.4	19	8	53
1068	< 0.01	2	43	13	185	1345	< 0.01	1	19	10	118
1070	< 0.01	1	30	11	156	1350	< 0.01	1	59	16	81
1072	< 0.01	1	23	11	99	1355	< 0.01	2	65	21	96
1074	< 0.01	3	49	14	102	1360	< 0.01	1	90	17	67
1076	< 0.01	1	17	15	122	Δ 1360	< 0.01	1	89	17	63
1078	< 0.01	1	96	12	115	1365	< 0.01	1	72	19	95
Δ 1078	< 0.01	1	103	12	116	1370	< 0.01	1	60	18	125
1080	< 0.01	1	30	23	106	1375	< 0.01	1	45	15	80
1082	< 0.01	1	37	15	102	1380	< 0.01	1	57	16	92
1084	< 0.01	1	25	15	111	1385	< 0.01	1	32	14	106
1086	< 0.01	1	59	13	123	1390	< 0.01	2	31	16	112
1088	< 0.01	2	19	16	122	1395	0.04	1	22	12	120
1090	< 0.01	1	29	23	121	1400	< 0.01	1	70	15	95
1092	< 0.01	1	46	19	142						
1094	0.30	1	33	17	135						
1096	0.01	17	12,800	141	1,150						
1098	< 0.01	4	1,760	24	163						
Δ 1098	< 0.01	4	1,760	24	153						
1100	0.01	1	136	19	146						
1102	< 0.01	1	269	32	101						
1104	< 0.01	1	403	18	73						
1106	0.08	2	559	12	154						
1108	< 0.01	2	220	45	132						
1110	< 0.01	1	44	20	109						
1120	< 0.01	1	28	17	102						
1130	0.08	1	455	12	99						
1140	0.48	1	61	23	78						
1150	0.22	1	35	15	102						
Δ 1150	0.22	1	32	15	99						
1160	< 0.01	2	68	12	91						

Sample No.	Elements analysed (ppm)					Sample No.	Elements analysed (ppm)				
	Au	Ag	Cu	Pb	Zn		Au	Ag	Cu	Pb	Zn
2000	< 0.01	0.4	13	7	460	2190	< 0.01	1	79	25	217
2002	0.04	0.5	15	5	274	2200	< 0.01	1	40	14	108
2004	0.06	0.5	24	5	400	2205	< 0.01	1	34	16	123
2006	44	0.5	225	5	1,180	2210	< 0.01	1	151	13	227
2008	0.24	0.5	277	5	1,610	2215	< 0.01	1	28	12	109
2010	< 0.01	0.4	71	8	1,110	2220	< 0.01	1	44	18	170
Δ 2010	< 0.01	0.4	72	8	1,110	2225	< 0.01	3	81	36	156
2012	0.04	0.3	58	7	1,130	2230	< 0.01	1	54	26	53
2014	< 0.01	0.4	45	9	970	Δ 2230	< 0.01	1	55	25	50
2016	< 0.01	1	20	9	229	2235	< 0.01	1	26	12	81
2018	< 0.01	0.5	70	7	1,240	2240	< 0.01	1	74	16	46
2020	0.02	0.4	220	4	1,310	2245	< 0.01	1	71	33	750
2022	< 0.01	0.3	481	7	1,240	2250	< 0.01	1	75	18	87
2024	< 0.01	0.5	142	11	870	2255	< 0.01	1	89	12	87
2026	0.10	0.5	356	5	1,200	2260	< 0.01	1	75	16	169
2028	0.04	1	237	5	1,530	2265	< 0.01	1	69	12	63
2030	0.02	1	237	5	1,170	2270	< 0.01	1	56	12	85
Δ 2030	0.02	1	237	5	1,170	2275	< 0.01	1	38	16	94
2032	0.04	0.3	26	8	271	2280	0.10	1	86	17	69
2034	0.14	1	48	24	242	Δ 2280	0.10	1	81	17	72
2036	0.04	1	18	11	201	2285	< 0.01	1	80	13	86
2038	0.04	1	58	11	172	2290	< 0.01	1	77	12	120
2040	0.02	1	178	11	159	2295	0.02	1	75	14	103
2042	0.01	1	39	11	177	2300	0.01	1	95	15	133
2044	< 0.01	1	55	19	420						
2046	0.04	1	40	7	232						
2048	0.60	2	246	12	272						
2050	0.04	1	45	12	241						
2052	< 0.01	1	133	15	201						
2054	0.06	2	674	15	1,720						
2056	< 0.01	1	212	9	176						
2058	< 0.01	1	207	16	117						
Δ 2058	< 0.01	1	198	12	112						
2060	0.04	1	127	13	112						
2062	< 0.01	1	58	10	105						
2064	< 0.01	1	56	10	102						
2066	< 0.01	1	18	8	87						
2068	0.04	1	68	11	99						
2070	< 0.01	1	46	10	94						
2072	< 0.01	1	37	9	77						
2074	< 0.01	1	26	8	76						
2076	< 0.01	1	25	14	95						
2078	< 0.01	1	60	14	85						
Δ 2078	< 0.01	1	63	14	93						
2080	< 0.01	1	36	7	72						
2082	< 0.01	1	34	7	60						
2084	0.04	1	48	7	78						
2086	< 0.01	2	18	7	78						
2088	< 0.01	6	63	17	56						
2090	< 0.01	1	60	8	55						
2092	< 0.01	1	143	9	80						
2094	< 0.01	1	81	11	77						
2096	< 0.01	1	50	10	100						
2098	< 0.01	1	128	12	86						
Δ 2098	< 0.01	1	125	10	85						
2100	< 0.01	1	795	9	99						
2110	< 0.01	1	48	10	67						
2120	< 0.01	1	46	10	71						
2130	< 0.01	1	59	11	94						
2140	< 0.01	4	293	18	360						
2150	0.04	1	61	13	105						
2160	< 0.01	1	36	14	82						
2170	0.04	1	55	16	114						
2172	0.06	1	343	22	1,540						
2173	97	80	59,400	72	1,880						
Δ 2173	97	80	59,400	67	1,880						
2174	0.08	2	1,110	22	1,050						
2180	< 0.01	2	184	17	117						

Sample No.	Elements analysed (ppm)					Sample No.	Elements and analysed (ppm)				
	Au	Ag	Cu	Pb	Zn		Au	Ag	Cu	Pb	Zn
3000	0.74	0.4	23	155	27	3124	0.14	3	2,470	42	470
3002	0.34	0.3	18	57	13	3126	0.12	1	194	36	460
3004	0.22	0.3	53	37	11	3128	< 0.01	1	90	21	420
3006	0.46	0.3	50	31	17	Δ 3128	< 0.01	1	90	19	420
3008	1	1	91	126	18	3130	< 0.01	1	445	14	460
Δ 3008	1	1	89	122	24	3132	0.02	2	223	20	360
3010	0.22	0.3	60	195	16	3134	0.18	1	86	61	330
3012	0.74	0.2	55	129	16	3136	1	6	3,060	141	910
3014	0.46	1	17	38	11	3138	< 0.01	1	51	34	420
3016	0.22	0.3	147	15	19	3140	0.18	1	32	29	430
3018	0.12	3	736	66	350	3142	< 0.01	1	430	41	460
3020	0.16	1	467	13	74	3144	< 0.01	2	693	40	450
3022	< 0.01	0.4	366	21	71	3146	0.64	7	572	174	16,500
3024	< 0.01	0.1	112	12	117	3148	2	16	761	1,910	19,000
3026	0.12	0.3	11	18	290	Δ 3148	2	16	761	1,930	19,000
3028	0.02	0.5	184	12	380	3150	0.06	1	58	29	1,190
Δ 3028	0.02	0.5	181	11	380	3152	0.04	1	27	63	350
3030	< 0.01	1	134	11	161	3154	0.22	2	22	99	480
3032	0.46	0.4	220	18	150	3156	0.04	1	8	27	350
3034	< 0.01	1	380	21	350	3158	< 0.01	1	46	26	229
3036	< 0.01	1	270	25	550	3160	< 0.01	1	21	19	233
3038	0.12	1	68	17	720	3170	< 0.01	2	81	19	186
3040	0.34	1	437	32	1,100	Δ 3170	< 0.01	2	83	19	190
3042	< 0.01	1	81	157	1,430	3178	0.06	2	325	101	500
3044	0.22	1	34	400	1,280	3180	0.26	1	94	16	237
3046	3.34	8	570	3,750	18,500	3190	< 0.01	1	35	10	172
3048	0.14	1	89	71	765	3200	0.08	2	25	22	203
Δ 3048	0.14	1	94	75	765	3205	< 0.01	2	63	37	19
3050	0.16	1	141	22	520	3210	< 0.01	2	272	32	19
3052	0.34	1	28	39	560	3215	< 0.01	1	70	11	16
3054	0.16	1	20	92	600	3220	< 0.01	1	124	17	14
3056	0.18	1	93	375	1,260	3225	< 0.01	1	43	7	9
3058	0.24	2	34	100	1,140	Δ 3225	< 0.01	1	42	7	9
3060	0.06	1	19	642	2,300	3230	0.12	1	55	10	15
3062	0.28	1	31	625	4,900	3235	0.06	1	38	5	12
3064	0.46	1	231	483	1,750	3240	< 0.01	1	38	9	11
3066	0.38	1	228	550	1,380	3245	< 0.01	1	226	6	9
3068	3.72	3	253	1,479	4,750	3250	0.04	1	56	5	11
Δ 3068	3.72	3	253	1,479	4,750	3255	0.04	1	74	27	21
3070	< 0.01	1	72	171	580	3260	< 0.01	1	40	15	16
3072	< 0.01	2	148	117	370	3265	< 0.01	1	27	13	13
3074	0.16	1	39	209	770	3270	< 0.01	1	33	10	13
3076	< 0.01	1	55	32	390	3275	< 0.01	1	32	10	10
3078	< 0.01	1	91	74	540	Δ 3275	< 0.01	1	31	11	10
3080	0.06	1	37	40	2,900	3280	< 0.01	1	40	7	9
3082	< 0.01	1	283	21	1,050	3285	< 0.01	1	41	11	13
3084	0.12	1	27	62	520	3290	< 0.01	1	39	11	14
3086	< 0.01	1	28	22	156	3295	< 0.01	1	34	6	13
3088	< 0.01	1	161	17	159	3300	< 0.01	1	65	6	9
Δ 3088	< 0.01	1	172	17	160	3305	< 0.01	1	75	39	131
3090	< 0.01	1	641	16	165	3310	0.12	1	180	17	181
3092	< 0.01	1	128	72	350	3315	< 0.01	1	55	13	137
3094	0.68	1	169	71	450	3320	0.08	1	80	17	135
3096	0.06	1	287	40	178	3325	< 0.01	1	131	17	130
3098	< 0.01	1	36	14	165	Δ 3325	< 0.01	1	131	17	130
3100	0.14	2	379	14	286	3330	0.04	1	67	18	145
3102	0.12	1	11	11	217	3335	0.02	1	270	18	154
3104	0.18	2	1,190	36	380	3340	0.04	1	76	16	123
3106	0.20	14	2,220	49	480	3345	< 0.01	1	33	14	108
3108	0.10	1	896	15	390	3350	< 0.01	1	69	12	102
Δ 3108	0.10	1	896	15	410	3355	< 0.01	2	200	13	110
3110	< 0.01	1	830	8	410	3360	0.04	2	148	15	115
3112	0.34	1	1,070	9	256	3365	< 0.01	2	206	17	120
3114	0.14	1	1,060	7	207	3370	0.04	2	162	15	109
3116	0.08	1	210	9	253	3375	0.04	2	125	15	118
3118	0.08	2	814	30	550	Δ 3375	0.04	2	125	12	115
3120	0.06	3	940	28	650	3380	0.04	1	213	15	163
3122	0.08	1	1,760	45	440	3385	< 0.01	1	241	13	127

Sample No.	Elements analysed (ppm)					Sample No.	Elements and analysed (ppm)				
	Au	Ag	Cu	Pb	Zn		Au	Ag	Cu	Pb	Zn
3390	< 0.01	2	573	12	93						
3395	0.04	1	189	16	130						
3400	0.04	1	133	9	185						

Sample No.	Elements analysed (ppm)					Sample No.	Elements analysed (ppm)				
	Au	Ag	Cu	Pb	Zn		Au	Ag	Cu	Pb	Zn
4000	0.10	3	68	8	36	4202	< 0.01	1	134	12	94
4002	0.12	0.3	75	8	20	4204	< 0.01	1	187	12	43
4004	0.04	0.3	78	9	19	4206	0.10	2	241	21	60
4006	0.10	0.2	44	7	28	4208	0.01	1	150	11	35
4008	0.04	0.3	61	10	20	4210	0.04	1	261	11	94
Δ 4008	0.04	0.3	60	8	20	Δ 4210	0.04	1	273	14	96
4010	< 0.01	0.2	48	7	127	4212	0.08	2	161	24	100
4012	< 0.01	0.2	82	8	38	4214	0.10	1	63	10	29
4014	0.06	0.5	68	11	38	4216	< 0.01	1	83	10	28
4016	< 0.01	0.5	61	8	16	4218	0.04	1	54	9	46
4018	< 0.01	0.3	56	8	19	4220	< 0.01	1	150	10	55
4020	0.04	1	114	5	50	4222	< 0.01	1	73	11	34
4022	< 0.01	0.4	46	5	11	4224	< 0.01	1	91	12	47
4024	0.04	0.5	86	6	24	4226	0.01	3	45	226	480
4026	0.06	1	92	5	22	4228	< 0.01	2	31	47	118
4028	0.04	1	52	5	24	4230	0.06	1	257	54	155
Δ 4028	0.04	1	56	5	22	4232	0.08	1	203	28	156
4030	< 0.01	1	85	5	29	4234	< 0.01	1	59	27	138
4032	< 0.01	0.4	51	8	25	Δ 4234	< 0.01	1	60	28	143
4034	0.01	1	157	9	32	4236	< 0.01	1	51	32	135
4036	0.01	0.4	282	7	10	4238	0.06	1	39	26	109
4038	0.04	0.4	224	8	31	4240	< 0.01	1	69	20	93
4040	< 0.01	0.2	117	6	7	4242	0.01	1	198	29	65
4042	0.06	0.5	86	29	210	4244	< 0.01	1	72	20	57
4044	0.04	1	71	21	560	4246	0.18	1	43	27	91
4046	< 0.01	1	50	19	370	4248	0.08	1	48	23	92
4048	< 0.01	0.4	70	5	21	4250	< 0.01	1	84	52	86
4050	< 0.01	1	53	40	340	4252	< 0.01	1	44	21	102
Δ 4050	< 0.01	1	47	33	340	4254	< 0.01	1	53	24	122
4052	0.01	0.4	78	25	191	Δ 4254	< 0.01	1	51	24	115
4054	0.01	1	141	16	290	4256	0.38	1	32	24	93
4056	< 0.01	0.5	220	13	207	4258	< 0.01	1	68	39	103
4058	< 0.01	1	119	18	41	4260	< 0.01	1	225	16	92
4060	0.04	1	54	46	390	4262	< 0.01	1	34	15	70
4062	0.04	1	65	11	64	4264	0.08	1	56	16	86
4064	0.04	1	72	15	84	4266	0.08	2	80	21	140
4066	0.06	1	262	8	43	4268	< 0.01	1	38	17	75
4068	0.06	1	54	8	17	4270	< 0.01	1	63	14	39
4070	0.08	1	62	7	16	4272	< 0.01	1	47	23	61
Δ 4070	0.08	1	59	8	11	4274	< 0.01	1	40	18	72
4072	0.06	1	82	10	21	Δ 4274	< 0.01	1	41	20	78
4074	0.01	1	84	8	36	4276	0.01	1	37	17	67
4076	< 0.01	0.5	50	8	70	4278	< 0.01	1	35	12	44
4078	0.12	2	249	18	720	4280	< 0.01	2	58	309	131
4080	0.48	1	47	15	40	4282	< 0.01	1	25	17	62
4082	0.36	1	15	10	17	4284	< 0.01	1	27	64	122
4084	0.14	1	56	10	18	4286	0.01	1	34	17	96
4086	0.06	1	49	8	22	4288	< 0.01	1	24	21	115
4088	0.12	1	22	10	17	4290	0.02	1	23	23	370
4090	0.76	4	1,520	13	18,350	4292	< 0.01	1	113	17	84
Δ 4090	0.76	4	1,520	13	18,350	4294	0.02	2	52	325	174
4092	0.06	0.5	22	7	17	Δ 4294	0.02	2	53	317	169
4094	0.08	1	155	8	59	4296	< 0.01	1	29	26	86
4096	0.04	0.5	128	11	116	4298	0.01	1	35	22	76
4098	0.04	1	154	30	189	4300	< 0.01	1	198	17	88
4100	< 0.01	1	54	10	95	4302	< 0.01	1	102	15	90
4108	0.24	5	15,900	10	1,040	4304	0.10	1	164	17	59
4110	0.06	1	120	8	61	4306	< 0.01	1	261	11	54
4120	0.04	1	198	11	46	4308	< 0.01	1	287	10	70
4130	< 0.01	1	69	13	590	4310	< 0.01	0.4	38	13	68
4140	0.38	2	937	38	270	4312	< 0.01	1	213	16	149
4150	< 0.01	1	624	27	240	4314	< 0.01	1	31	12	86
Δ 4150	< 0.01	1	624	27	240	Δ 4314	< 0.01	1	29	12	93
4160	< 0.01	1	74	12	165	4316	< 0.01	1	318	13	78
4170	< 0.01	1	123	8	73	4318	0.01	1	231	19	68
4180	0.04	1	64	12	75	4320	0.01	1	63	16	43
4190	< 0.01	1	75	14	107	4322	< 0.01	1	351	15	47
4200	0.04	2	294	18	64	4324	< 0.01	1	369	21	56

Sample No.	Elements analysed (ppm)					Sample No.	Elements analysed (ppm)				
	Au	Ag	Cu	Pb	Zn		Au	Ag	Cu	Pb	Zn
4326	< 0.01	2	78	12	44	4450	0.06	1	667	10	138
4328	< 0.01	2	89	12	25	4452	< 0.01	1	202	16	1,890
4330	< 0.01	2	222	42	71	4454	0.06	1	257	16	4,000
4332	0.06	1	126	10	94	4456	0.06	1	293	15	4,000
4334	< 0.01	1	202	13	94	Δ 4456	0.06	1	277	15	4,000
Δ 4334	< 0.01	1	200	13	99	Δ 4458	0.06	1	513	18	3,600
4336	< 0.01	1	61	11	71	4460	< 0.01	1	58	14	320
4338	< 0.01	1	171	12	96	4462	0.04	1	76	20	330
4340	< 0.01	1	155	12	99	4464	0.04	1	159	19	1,070
4342	0.01	1	53	13	140	4466	0.04	1	82	20	860
4344	< 0.01	1	31	12	131	4468	0.06	1	267	24	340
4346	< 0.01	1	140	12	135	4470	< 0.01	1	182	22	430
4348	< 0.01	1	395	10	59	4472	1.06	1	169	11	300
4350	0.14	2	95	13	75	4474	0.08	1	364	12	4,200
4352	0.06	2	47	29	250	4476	0.08	1	129	26	290
4354	0.06	2	35	24	162	Δ 4476	0.08	1	124	26	290
4356	0.08	2	41	13	76	4478	0.01	1	54	15	20
Δ 4356	0.08	2	41	13	76	4480	0.04	1	144	19	560
4358	0.08	1	29	12	78	4482	0.04	1	245	49	970
4360	0.06	1	18	8	26	4484	0.04	1	324	24	740
4362	0.06	2	33	10	55	4486	0.01	1	140	15	350
4364	0.08	2	26	12	68	4488	< 0.01	1	456	10	103
4366	0.01	2	23	12	72	4490	< 0.01	1	205	13	260
4368	< 0.01	1	20	12	58	4492	0.06	1	72	13	145
4370	< 0.01	1	27	14	49	4494	0.04	1	52	14	105
4372	0.06	2	200	17	67	4496	< 0.01	1	47	12	74
4374	0.10	1	246	14	139	Δ 4496	< 0.01	1	46	12	74
4376	< 0.01	2	20	13	82	4498	0.01	1	35	15	49
Δ 4376	< 0.01	2	19	13	81	4500	< 0.01	1	43	13	32
4378	< 0.01	1	23	17	71						
4380	< 0.01	1	49	17	37						
4382	0.01	1	28	15	65						
4384	< 0.01	1	19	12	81						
4386	< 0.01	1	36	13	79						
4388	< 0.01	1	24	18	85						
4390	0.06	1	36	17	64						
4392	0.10	2	93	24	77						
4394	0.42	6	580	27	69						
4396	0.06	2	118	15	92						
Δ 4396	0.06	2	118	15	94						
4398	< 0.01	1	41	12	65						
4400	< 0.01	1	85	18	99						
4402	< 0.01	1	43	12	50						
4404	0.06	1	32	71	84						
4406	0.06	1	139	14	66						
4408	< 0.01	1	559	9	69						
4410	0.06	1	52	12	117						
4412	< 0.01	1	184	15	94						
4414	< 0.01	1	311	16	86						
4416	< 0.01	5	275	17	139						
Δ 4416	< 0.01	4	273	16	138						
4418	0.06	2	223	17	137						
4420	0.08	1	147	17	133						
4422	0.06	1	76	16	132						
4424	< 0.01	1	51	12	164						
4426	0.04	1	226	16	138						
4428	0.50	2	95	18	176						
4430	< 0.01	1	35	21	370						
4432	< 0.01	1	48	12	132						
4434	< 0.01	1	136	14	400						
4436	< 0.01	1	199	21	833						
Δ 4436	< 0.01	1	199	20	833						
4438	0.06	1	402	11	790						
4440	0.04	2	538	18	930						
4442	0.06	1	526	19	830						
4444	< 0.01	2	423	18	73						
4446	0.08	1	356	17	98						
4448	0.01	1	300	16	660						

Sample No.	Elements analysed (ppm)					Sample No.	Elements analysed (ppm)				
	Au	Ag	Cu	Pb	Zn		Au	Ag	Cu	Pb	Zn
5000*	0.06	1	33	9	51	5160	< 0.01	0.3	14	2	13
5002	0.12	1	52	11	177	5170	0.08	0.3	23	4	21
5004	0.04	1	42	6	57	5180	0.04	0.1	11	1	23
5006	0.06	1	43	6	61	5190	0.14	1	25	6	21
5008	0.20	1	36	6	41	5200	0.01	1	14	11	37
5010	0.08	1	63	6	17	Δ 5200	0.01	1	13	9	35
5012	0.14	1	45	8	15	5205	< 0.01	1	23	6	36
5014	0.16	1	48	12	21	5210	< 0.01	1	32	4	15
Δ 5014	0.16	1	49	11	19	5215	0.04	0.3	11	6	33
5016	0.30	1	32	10	64	5220	0.06	0.1	11	2	11
5018	0.18	0.5	28	10	20	5225	< 0.01	0.3	13	2	15
5020	0.10	1	21	15	112	5230	< 0.01	1	16	7	49
5022	0.16	1	28	12	31	5235	0.04	0.3	17	1	46
5024	0.06	0.5	19	11	47	5240	0.06	0.3	22	6	27
5026	0.04	1	46	38	87	5245	0.06	0.5	25	5	28
5028	0.12	0.5	20	17	77	5250	0.06	1	18	4	38
5030	0.06	1	16	15	39	Δ 5250	0.06	1	17	4	39
5032	0.18	1	29	31	24	5255	0.06	1	403	6	81
5034	0.08	1	21	12	15	5260	0.08	1	695	8	126
Δ 5034	0.08	1	21	13	18	5265	0.08	1	868	7	87
5036	0.04	1	25	14	69	5270	0.06	1	45	8	40
5038	0.34	3	22	14	65	5275	0.04	0.3	22	5	-29
5040	0.38	1	21	24	15	5280	< 0.01	0.5	21	7	65
5042	0.24	2	21	14	19	5285	0.10	0.5	174	12	156
5044	0.12	2	30	14	39	5290	0.10	0.5	743	19	135
5046	0.26	2	18	21	24	5295	0.04	1	24	11	280
5048	0.18	2	21	6	24	5300	0.08	1	365	19	151
5050	0.30	2	35	6	10	Δ 5300	0.08	1	355	19	155
5052	0.20	1	29	9	128	5305	0.06	1	85	24	243
5054	0.36	1	21	14	20	5310	0.08	1	279	18	139
5056	0.12	1	26	5	17	5315	< 0.01	1	402	17	163
5058	0.22	1	31	9	18	5320	0.08	1	329	10	115
5060	0.10	1	27	6	13	5325	0.02	1	54	16	149
Δ 5060	0.10	1	25	6	13	5330	0.04	1	167	11	86
5062	0.08	1	87	3	15	5335	< 0.01	1	67	10	64
5064	0.06	1	155	1	31	5340	< 0.01	0.2	16	4	24
5066	0.08	1	91	1	16	5345	< 0.01	0.1	16	3	18
5068	< 0.01	1	221	4	17	5350	0.04	0.1	13	2	25
5070	0.06	1	215	4	14	5355	< 0.01	0.2	14	2	15
5072	0.04	1	251	6	19	Δ 5355	< 0.01	0.2	14	2	16
5074	0.06	1	272	8	18	5360	< 0.01	0.2	16	1	17
5076	0.12	1	800	11	33	5365	< 0.01	0.4	15	4	24
5078	< 0.01	1	379	3	9	5370	0.04	0.4	50	1	92
5080	< 0.01	0.5	163	3	10	5375	< 0.01	0.1	20	2	22
Δ 5080	< 0.01	0.5	170	3	14	5380	0.01	0.5	92	2	131
5082	< 0.01	1	168	3	13	5385	< 0.01	0.05	14	4	163
5084	0.04	0.4	82	3	6	5390	< 0.01	0.05	15	1	116
5086	0.01	0.3	58	4	9	5395	< 0.01	0.5	25	4	71
5088	< 0.01	0.3	50	4	10	5400	< 0.01	0.2	22	4	110
5090	0.01	0.3	46	4	20						
5092	< 0.01	0.2	40	2	10						
5094	0.12	0.1	205	5	11						
5096	0.04	0.2	65	6	15						
5098	0.04	0.3	35	4	12						
5100	0.14	0.3	36	2	34						
Δ 5100	0.14	0.3	33	2	34						
5102	0.01	0.5	32	3	8						
Δ 5102	0.01	0.4	33	2	10						
5104	0.01	0.4	47	3	26						
5106	< 0.01	0.4	67	3	13						
5108	0.14	0.2	53	2	6						
5110	0.06	0.3	43	2	14						
5112	< 0.01	0.1	12	1	8						
5114	0.04	0.1	11	1	7						
5120	0.08	0.2	59	4	13						
5130	0.06	0.3	212	2	32						
5140	0.10	0.3	129	2	43						
5150	0.01	0.3	17	2	23						

Sample No.	Elements analysed (ppm)					Sample No.	Elements analysed (ppm)				
	Au	Ag	Cu	Pb	Zn		Au	Ag	Cu	Pb	Zn
6114	<0.01	4	10	34	88						
6116	<0.01	3	11	39	93						
6118	<0.01	3	26	49	520						
6120	<0.01	2	7	26	410						
6122	0.08	2	45	23	185						
△6122	0.08	2	47	22	179						
6124	<0.01	2	288	24	7,600						
6126	<0.01	4	31	19	225						
6128	<0.01	1	22	10	202						
6130	<0.01	2	53	13	268						
6132	0.04	2	44	41	470						
6134	<0.01	2	19	32	480						
6136	0.06	3	17	12	257						
6138	0.04	1	21	8	194						
6140	<0.01	1	23	10	201						
6145	0.04	1	21	17	330						
△6145	0.04	1	21	20	330						
6150	0.04	0.4	28	19	237						
6155	<0.01	1	26	23	470						
6160	<0.01	1	20	445	178						
6165	<0.01	1	24	39	107						
6170	<0.01	2	24	400	3,100						
6175	0.04	1	19	20	330						
△6175	0.04	1	20	21	330						
6180	0.04	1	19	32	250						
6185	0.01	1	20	25	197						
6190	0.12	1	28	29	120						
6195	<0.01	1	20	37	135						
6200	<0.01	1	23	113	330						
6205	<0.01	1	40	56	159						
6210	0.04	1	39	66	187						
6215	<0.01	2	29	48	151						
6220	<0.01	1	53	20	150						
6225	0.06	1	32	24	150						
6230	<0.01	1	58	22	116						
6235	<0.01	1	43	16	155						
6240	0.02	2	50	17	140						
6245	0.06	1	150	16	156						
6250	0.08	1	42	15	135						
6255	<0.01	1	46	16	131						
6260	0.01	0.1	25	14	136						
6265	0.01	1	21	15	130						
△6265	0.01	1	20	15	131						
6270	0.01	1	30	17	123						
6275	0.04	1	25	15	113						
6280	<0.01	1	23	20	122						
6285	0.04	1	24	17	131						
6290	0.04	1	30	15	113						
6295	0.04	1	27	20	115						
6300	0.04	1	23	14	149						

Sample No.	Elements analysed (ppm)					Sample No.	Elements analysed (ppm)				
	Au	Ag	Cu	Pb	Zn		Au	Ag	Cu	Pb	Zn
7000	<0.01	4	802	55	520	7122	0.01	2	57	19	153
7002	1.18	4	1,720	31	1,050	7124	0.06	2	78	34	148
7004	<0.01	2	116	48	270	7126	0.08	2	31	17	106
7006	<0.01	1	44	15	370	7128	0.04	1	45	9	75
7008	0.10	2	63	12	159	7130	0.02	1	58	33	130
Δ7008	0.10	2	62	12	152	7140	0.04	1	62	15	140
7010	<0.01	1	15	13	170	7150	0.02	1	54	15	138
7012	<0.01	1	6	10	203	7160	0.01	1	50	14	185
7014	0.01	0.5	10	9	135	7170	0.04	1	43	14	83
7016	0.01	1	19	15	320	7180	0.04	1	52	11	65
7018	0.08	0.5	22	8	93	7190	0.06	1	132	11	127
7020	<0.01	1	8	28	186	7200	0.04	1	68	12	94
7022	<0.01	1	6	11	73	7210	0.04	2	332	11	165
7024	0.02	1	6	9	310	7220	0.08	2	37	9	115
7026	0.04	1	28	13	330	Δ7220	0.08	2	36	9	102
7028	0.02	1	24	12	149	7250	0.02	1	87	8	290
Δ7028	0.02	1	24	12	145	7260	<0.01	1	37	30	340
7030	0.02	1	70	18	188	7270	<0.01	1	50	15	172
7032	<0.01	0.4	44	9	75	7280	0.04	1	56	12	260
7034	<0.01	1	13	58	310	7290	0.04	2	40	43	140
7036	0.02	1	10	25	123	7300	<0.01	1	69	14	330
7038	0.02	1	4	11	280						
7040	<0.01	2	10	44	470						
7042	<0.01	3	55	77	168						
7044	<0.01	4	519	161	660						
7046	0.08	8	1,930	570	950						
7048	0.02	4	309	79	1,090						
Δ7048	0.02	4	307	77	1,090						
7050	0.06	4	654	57	960						
7052	<0.01	4	817	72	340						
7054	0.02	3	295	73	340						
7056	<0.01	3	158	67	110						
7058	<0.01	3	675	49	196						
7060	0.04	3	477	40	730						
7062	0.04	3	568	62	430						
7064	<0.01	4	43	70	128						
7066	<0.01	4	29	67	56						
7068	0.02	4	3,525	105	570						
Δ7068	0.02	4	3,525	105	570						
7070	<0.01	3	67	40	330						
7072	0.02	2	76	33	186						
7074	0.06	1	10	17	182						
7076	<0.01	2	39	30	173						
7078	<0.01	4	1,440	36	1,250						
7080	0.08	3	928	39	6,800						
7082	<0.01	3	1,360	30	5,400						
7084	<0.01	3	2,550	35	560						
7086	<0.01	7	6,800	39	175						
7088	0.06	2	35	30	142						
Δ7088	0.06	3	35	32	140						
7090	0.06	9	12,100	32	115						
7092	0.06	2	16	27	176						
7094	0.04	1	11	27	159						
7096	0.08	2	29	19	176						
7098	0.06	1	53	10	106						
7100	0.02	2	41	16	99						
7102	0.08	2	45	57	139						
7104	0.04	3	19	74	169						
7106	<0.01	2	16	68	360						
7108	0.12	6	76	27	136						
Δ7108	0.12	7	74	27	136						
7110	0.12	5	34	44	430						
7112	0.08	20	252	181	1,060						
7114	0.10	5	190	80	1,220						
7116	<0.01	2	24	22	370						
7118	0.04	1	19	14	260						
7120	<0.01	1	51	17	310						
Δ7120	<0.01	1	53	17	310						

Sample No.	Elements analysed (ppm)					Sample No.	Elements and analysed (ppm)				
	Au	Ag	Cu	Pb	Zn		Au	Ag	Cu	Pb	Zn
8020	0.04	1	19	17	103						
8030	0.04	1	11	24	145						
8040	0.04	1	1,220	24	123						
Δ 8040	0.04	1	1,220	24	116						
8050	<0.01	1	244	115	4,400						
8060	0.06	1	81	19	390						
8070	0.01	1	41	14	173						
8080	<0.01	1	72	22	156						
8090	<0.01	0.2	81	17	154						
8100	0.01	1	46	12	131						
8110	<0.01	1	54	14	116						
8120	0.04	1	133	14	153						
8130	<0.01	1	61	12	133						
8140	<0.01	1	28	17	196						
8150	0.01	2	182	18	310						
Δ 8150	0.01	2	182	16	310						
8160	0.01	2	221	48	142						
8170	0.06	1	26	17	116						
8180	<0.01	1	35	14	74						
8190	<0.01	2	510	45	1,560						
8200	<0.01	1	205	106	420						
8210	<0.01	2	364	25	125						
8220	0.02	1	254	18	370						
8230	0.04	2	36	25	106						
8240	<0.01	2	269	44	380						
8250	<0.01	1	58	24	189						
Δ 8250	<0.01	1	56	25	171						
8260	0.02	1	181	14	149						
8270	<0.01	1	55	16	98						
8280	<0.01	1	27	9	61						
8290	0.08	0.3	31	10	72						
8300	<0.01	1	36	12	118						

Table I—8 Results and photomicrographs of X-ray Microanalysis

Sample No. : 3148
Location : Vueltas del Rio Sector
No. 53-3 Depth 148m
Formation : Vueltas del Rio
Ore minerals : electrum, chalcopyrite, galena and pyrite
Microscopic observation :

In megascopically, pyrite and galena occur as wide band on the polished specimen.

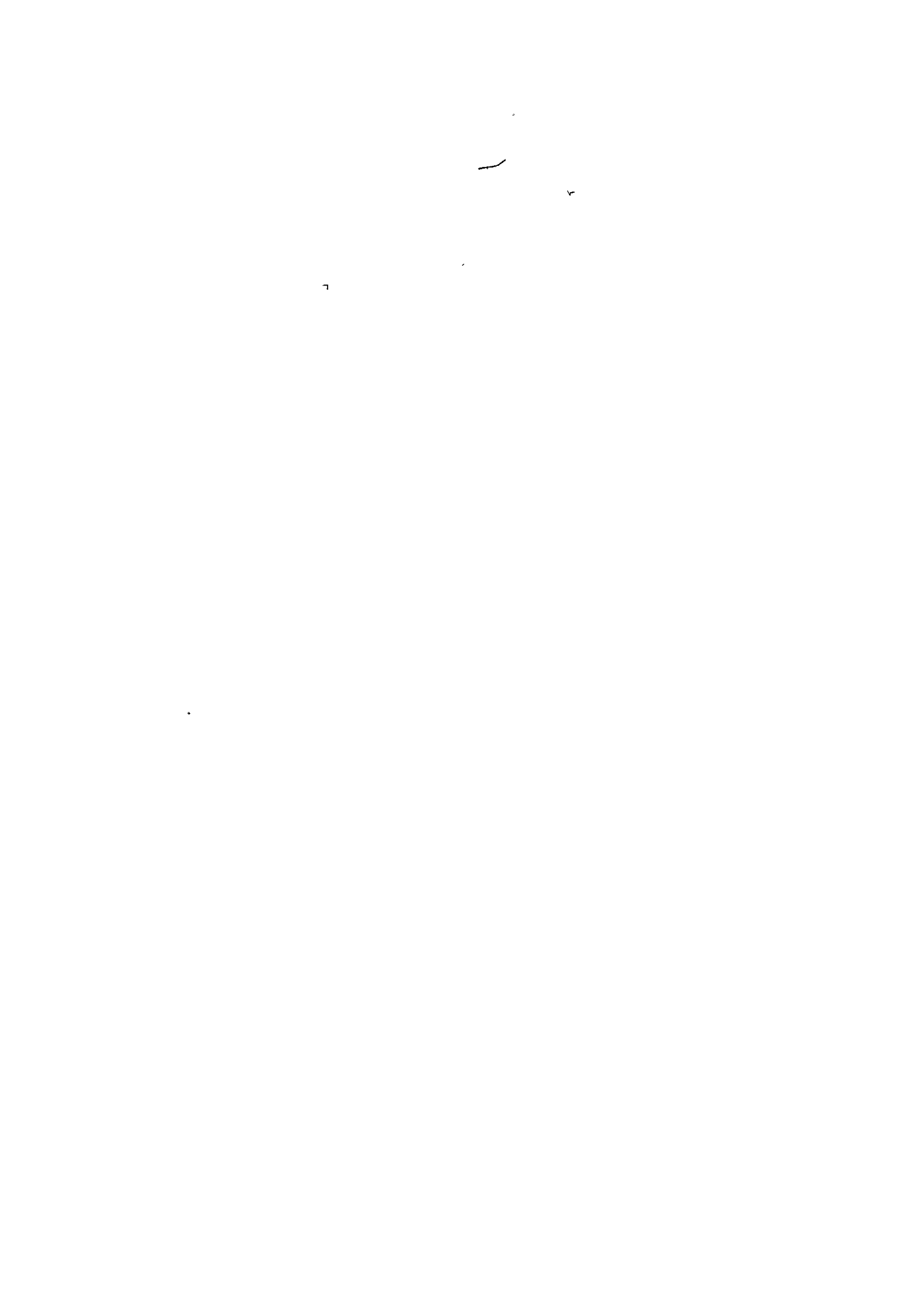
Under the microscope, it is mainly composed of pyrite, galena, sphalerite and chalcopyrite. Pyrite is most abundant on the polished surface and it is idiomorphic crystals, 400 to 100 microns in general size.

Galena is closely associated with aggregated masses of pyrite.

Sphalerite which mostly coexists with galena contains many small drops of chalcopyrite.

A small amount of bright yellow grains like native gold is observed, and it coexists with only galena in this specimen. It was determined by E.P.M.A. that these bright yellow grains were electrum, about Au 60%.

In reflecting color, electrum shows brighter yellowish tint than chalcopyrite and occurs as rounded and stretched shape crystals of 200 to 50 microns in size.

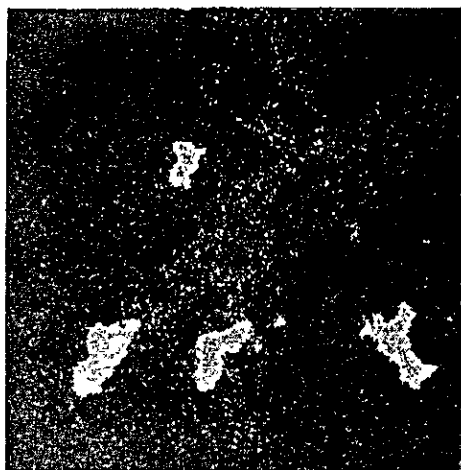




Absorbed electron image



Pb X-ray image



Au X-ray image



Ag X-ray image

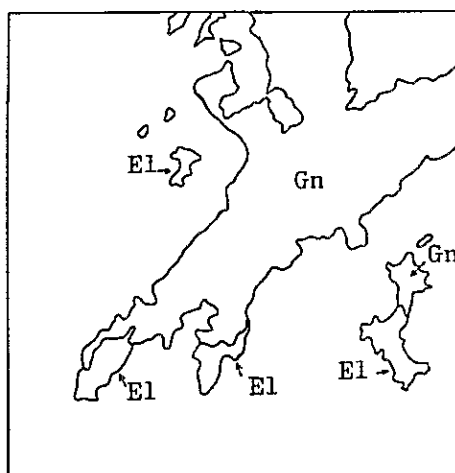
El: electrum
Gn: galena

Sample No. 3148

Accelerating voltage: 25KV

Absorbed electron current: 0.2 μA

Magnification: X300





Sample No. 3148

Intergrowth of galena
and electrum

El : electrum
Gn : galena

0.25 mm



Sample No. 3148

Cp : chalcopyrite
Gn : galena
Py : pyrite

0.25 mm

Table I-9 List of mineral indication in the surveyed area

No.	Surveyed sector	Name	Location		Kind of ore	Host rock	Related igneous rock	Mode of occurrence	Scale of mineralization	Amount of unit ore body	Unit ore body			Ore mineral	Grade of ore	Sample No.	Remarks	Abbreviation
			E	N							Length	Width	Direction					
1	Vueltas del Rio	Vueltas del Rio	333.5	1682.5	Au,Cu	Vol r.		diss & vlt	1200 ^m x300 ^m	5 ~ 10 ^m	50-400 ^m	2-100 ^m	E-W	Au,ccp,py	Au 1g/t ± by UNDP		Ore reserves by UNDP,1972 Probable Possible Au 7.5x10 ⁶ t (1.3 g/t) 10x10 ⁰ t (0.95 g/t)	<u>Host rock</u> ls..limestone pyro..pyro-clastics
2	Vueltas del Rio	DDH No. 53-1	334.80	1682.65	Cu	pyro		vein		1	(Core length) (2m)	10cm		ccp,py	Cu 1.28%	No. 1096	depth 96-98m	lip..liparite vol r..volcanic rock
3	Vueltas del Rio	DDH No. 53-2	334.07	1681.98	Au Au,Ag,Cu	pyro "		vlt "		1 1	(2m) (1m)	5-10cm 5cm		Au Au,ccp,py	Au 44 g/t Au 97g/t,Ag 80g/t Cu 5.94%	No.2006 No.2173	depth 6-8m depth 173-174m	<u>Related igneous rock</u>
4	Vueltas del Rio	DDH No. 53-3	333.20	1681.90	Au,Zn Cu Au,Zn	pyro " "		vlt diss & vlt vein		1 1 1	(2m) (22m) (4m)			Au,sp,py ccp,py Au,sp,gn	Au 3.34g/t, Zn 1.85% Cu 0.122% Au 1.3g/t, Zn 1.78%	No.3046 No.3104- No.3124 No.3146- No. 3148	depth 46-48m depth 104- 126m depth 146- 150m	gp..granite-porphry
5	Vueltas del Rio	DDH No. 53-4	333.20	1682.53	Au,Cu,Zn Cu	pyro pyro		diss vein		1 1	(2m) (2m)			Au,ccp,sp ccp	Au 0.76g/t, Cu 0.15%, Zn 1.84% Cu 1.59%	No. 4090 No. 4108	depth 90-92m depth 108- 110m	<u>Mode of occurrence</u> diss..dissemination
6	Minitas	Qda,Minitas	358.10	1687.10	Cu,Zn	ls	gp	vein	5m x 1.75m	1	5m	1.75m	N45W	az,mala,chry	Cu 4.28%,Zn 0.77%	MS22,MS23	Outcrop	vlt..veinlet
7	Minitas	DDH No. 53-7	357.40	1687.93	Cu,Zn " " "	ls " " "	gp " " "	contact " " "	500m x 90m ↓ ↓ ↓	1 ↓ ↓ ↓	(120m) ↓ ↓ ↓		N45W ↓ ↓ ↓	ccp,mala,py " " "	Cu 0.35% Cu 0.09%,Zn 0.68% Cu 0.68% Cu 1.21%	No. 7068 No. 7080 No. 7086 No. 7090	depth 68-70m depth 80-82m depth 86-88m depth 90-92m	<u>Ore mineral</u> Au...gold az...azurite ccp..chalco-pyrite chry..chry-socolla
8	Minitas	Macutalo	358.00	1686.53	Cu,Fe	ls	gp	contact	120m x 30m	1	10-30m		E-W	ccp,py,mala mg,Au	Cu 0.99%	MS28-MS33	old pit	gn..galena mg..magnetite
9	Minitas	Petoa I	358.95	1687.85	Fe	ls		vein	10m x 2m	2	5m	1m	N45W	mg,mala	Cu 0.44%	MS 27	old pit	mala..mala-chite sp..sphalerite
10	Pueblo Nuevo	Santa Ines	363.60	1688.82	Cu	ls		vein	150m x 2m	1	150m	2m	flat	ccp,mala,az	Cu 1.99%,Zn 0.5%	PN7-PN10	old pit	py..pyrite
11	Pueblo Nuevo	Santo Domingo	364.30	1688.75	Cu,Pb,Zn	lip		vein	50m x 6m	1	50m	6m	N40E	az,mala,ccp gn,sp,py	Cu 0.31%,Pb 1.57% Zn 2.04%	PN 5	old pit	
12	Pueblo Nuevo	Esperanza	362.60	1688.53	Cu	ls		vein	5m x 1m	1	5m	1m	flat	mala,az			old pit	



APPENDICES

PART II DIAMOND DRILLING

**Table II—1 Drilling machines used and materials consumed
drilling machines: TGM-5A**

Item	Model	Quantity	Capacity, Type, and Specification
Drilling Machine	TGM-5A	2	Capacity NQ510m BQ660m Inner Diameter of Spindle 93m/m Weight (excl. engine) 1,600kg
Engine for Drill	F3L-912	2	Diesel Engine 1,800rpm/40PS ~ 1,500rpm/33.5PS
Pump	NAS-3C NAS-3B	2 2	Piston ϕ 75m/m Capacity 130, 72, 39, 22 l/min Pressure 26 ~ 40 kg/cm ²
Engine for Pump	TS-155C	4	Diesel Engine 2,200rpm/12PS
Generator	YSG-3S	1	3KVA 100~110V
Engine for Generator	TS-60C	1	Diesel Engine 2,200rpm/5.5PS
Derrick	DCP9-9	2	Steel structural derrick (Vertical, inclination) Weight 12 ton lifting 6m height
Mud Mixer	MCE-200A	2	Volume 200l 800~1,000rpm/min
Rod Holder	CH-60A	2	Hydraulic type
Drill Rods	HQ NQ BQ	115 220 330	3.00 m/pc 3.00 m/pc 3.00 m/pc
Casing Pipes	HW NW BW	25 110 300	3.00 m/pc 3.00 m/pc 3.00 m/pc

Consumables used

Description	Specification	Unit	Quantity							
			53-1	53-2	53-3	53-4	53-5	53-6	53-7	53-8
Light oil		ℓ	900	800	900	1400	1100	800	900	800
Mobil oil		ℓ	72	72	48	72	48	48	48	48
Hydraulic oil		ℓ	90	90	5	10	15	40	30	40
Grease		kg	20	18	15	30	20	15	35	35
Bentonite		Bag	88	40	70	103	171	67	145	93
Libonite		kg	435	215	185	298	410	55	250	150
Tel-cellose		kg			15	16	20	10	13	10
Mud seal		kg	2	5	5	10	50	50	30	5
Tel-stop		kg	3	15	8	10	45	85	65	10
Emale 20C		ℓ	43	35	10	43	20	33	20	15
Metal crown	116mm	Pcs	2	2	1	1	2	2	1	2
Single core tube	114mm x 0.5m	Set	1	1						
Double core tube	114mm x 1.5m	"	1	1						
Wire line core barrel	HQ x 3.00m	"	1	1						
"	NQ x 3.00m	"	1	1						
"	BQ x 3.00m	"	1	1						
Inner tube assembly	HQ x 3.00m	"	1	1						
"	NQ x 3.00m	"	1	1						
"	BQ x 3.00m	"	1	1						
Outer tube	HQ x 3.00m	Pcs					1	1		
"	NQ x 3.00m	"					1	1		
"	BQ x 3.00m	"			1	1			1	1
Inner tube	HQ x 3.00m	"			1	1	1	1	1	1
"	NQ x 3.00m	"	1	1	1	1	1	1	1	1
"	BQ x 3.00m	"	1	1	2	2	2	2	2	2
Casing metal shoe	HW	"	1	1	1	1	1	1	1	1
"	NW	"	1	1	1	1	1	1	1	1
"	BW	"	1	1	1	1	1	1	1	1
Rag		kg	10	10	8	15	10	8	20	20
Core box		Pcs	67	52	68	84	62	50	47	47
Wire	10#	kg	8	8	10	12	8	7	10	10
"	12#	"	5	4	3	4	4	5	3	3
Nail		"	3	3	2	4	3	3	3	4
Wire rope	6mm x 550m	Roll	1	1			1	1		
"	12mm x 40m	"	1	1			1	1		
Manila rope	18mmxx 30m	Pcs	2	2			1	1		
Vinyl rope	8mm x 100m	"	1	1		1	1			
Pump packing		"	4	4		4	4		4	4
Valve steel ball	38.1φ	"				8	8		8	8

Consumables used

Description	Specification	Unit	Quantity							
			53-1	53-2	53-3	53-4	53-5	53-6	53-7	53-8
Piston rod		Pcs			2	2		2		2
Guide pipe	HQ	"			1	1			1	1
"	NQ	"			1	1			1	1
"	BQ	"			1	1	1	1	1	1
Guide coupling	HQ	"			1	1			1	1
"	NQ	"			1	1			1	1
"	BQ	"			1	1	1	1	1	1
Suction hose	50mm x 4.5m	"	1	1				1		1
Water swivel packing		"	3	3	3	3	3	3	3	3
Water swivel spindle		"			1	1	1	1	1	1
V-belt	TGM-5xF3L912	Sets			1	1			1	1
"		Pcs			1	1		1		1
Core lifter	HQ	"	1	1	2	2	2	2	2	2
"	NQ	"	3	2	3	4	3	2	3	2
"	BQ	"	4	3	4	6	4	3	5	3
Core lifter case	HQ	"	3	2	2	2	2	2	2	2
"	NQ	"	2	2	2	4	2	2	2	2
"	BQ	"	2	2	2	4	2	2	2	2

Table II - 2 Preparation and removal

Item	Hole No.		53-1		53-2		53-3		53-4		53-5		53-6		53-7		53-8		
	Days	Man-shifts	Days	Man-shifts	Days	Man-shifts	Days	Man-shifts	Days	Man-shifts	Days	Man-shifts	Days	Man-shifts	Days	Man-shifts	Days	Man-shifts	
Preparation and removal	In	21st May '78	21st May '78	25th May '78	30th May '78	23rd Jul. '78	17th Jul. '78	24th Aug. '78	22nd Aug. '78										
		14th Jun. '78	14th Jun. '78	7th Jul. '78	30th Jun. '78	26th Jul. '78	7th Aug. '78	31st Aug. '78	3rd Sep. '78										
	Out	4th Jul. '78	26th Jun. '78	22nd Jul. '78	28th Jul. '78	18th Aug. '78	24th Aug. '78	23rd Sep. '78	19th Sep. '78										
		5th Jul. '78	27th Jun. '78	24th Jul. '78	2nd Aug. '78	26th Aug. '78	26th Aug. '78	29th Sep. '78	26th Sep. '78										
		13	137	13	144	8	36	6	30.5	0.5	6.5	13	26	3	6	5	10		
Preparation	Access road	2	12	1.5	11.5	1.5	19	1	15	24	2	45	2.5	50					
	Haulage	5.5	118	5.5	108.5	1.5	46.5	1.5	54	2.5	69								
	Installation	0.5	4	0.5	3														
	Water pipe																		
	Test run, etc.																		
Removal	Total	21	271	21	267.5	11	88	10	106	3	75.5	17	125	7	104	11	142		
	Dismounting	0.8	12	1.2	16.5	1.5	26.5	4	97	4	100.5	2	30	1	37	1	23		
	Pipe removal	0.2	2	0.3	3			1	12			0.5	14			0.5	12		
	Haulage																		
	Road rein-statement																		
Others																			
		1	14	1.5	19.5	1.5	26.5	5	109	7.5	160.5	2.5	44	6	184.5	6.5	174		
	Total	22	28.5	22.5	287	12.5	114.5	15	215	10.5	236	19.5	169	13	288.5	17.5	316		
Grand Total																			

Table II—3 Operational results by drill hole, No. 53-1

Working Period	Period			Number of Days	Actual Working Days	Day Off	Total Number of Workers	
	Preparation	21st May '78 ~ 14th Jun. '78			25	21	21	250
	Drilling	15th Jun. '78 ~ 3rd Jul. '78			19	17	60	269
	Removing	4th Jul. '78 ~ 5th Jul. '78			2	1	3.5	14
	Total	21st May '78 ~ 5th Jul. '78			46	39	84.5	533
Drilling Length	Planned Length	m	Over-burden	m	Core Recovery for each 100 m section			
	Increase or Decrease in Length	m	Core Length	m	Depth of Hole	Section	Total	
	Length Drilled	m	Core Recovery	%	0~ 96.10m	95.4 %	95.4 %	
	401.00		95.8		96.10~204.20m	98.6 %	97.1 %	
Working Time	Drilling	160°00'	25.6 %	22.2 %	204.20~306.40m	94.2 %	96.1 %	
	Hoisting & Lowering Rod				306.40~401.00m	94.8 %	95.8 %	
	Hoisting & Lowering I.T.							
	Miscellaneous	187°00'	30.0 %	25.8 %	Efficiency of Drilling			
	Repairing	9°00'	1.4 %	1.2 %	401.00 m/Working Period		8.72 m/day	
	Others	268°00'	43.0 %	37.0 %	401.00 m/Working Days		10.28 m/day	
	Total	624°00'	100 %	86.2 %	401.00 m/Drilling Period		21.11 m/day	
	Removing	Preparation	80°00'		11.1 %	401.00 m/Net Drilling Days		23.59 m/day
		Moving	20°00'		2.7 %	Total workers/ 401.00 m		1.54 Man/m
	G. Total	724°00'		100 %	Total Drilling Workers/ 401.00 m		0.82 Man/m	
Casing Pipe Inserted	Pipe Size & Meterage	Inserted Length (%) Drilling Length	Recovery of Casing Pipe		Remarks			
	HW 6.5 m	1.6 %	100 %		G : Grand I.T.: Inner Tube			
	NW 60.0 m	15.0 %	100 %					
	BW 201.0 m	50.1 %	100 %					

Table II-4 Operational results by drill hole, No. 53-2

Working Period	Period			Number of Days	Actual Working Days	Day Off	Total Number of Workers	
	Preparation	21st May '78 ~ 14th Jun. '78			25	21	19.5	248
	Drilling	15th Jun. '78 ~ 26th Jun. '78			11.5	9.5	33	262
	Removing	26th Jun. '78 ~ 27th Jun. '78			1.5	-	5.5	14
	Total	21st May '78 ~ 27th Jun. '78			38	30.5	58	524
Drilling Length	Planned Length	m	Overburden	m	Core Recovery for each 100 m section			
	Increase or Decrease in Length	m	Core Length	m	Depth of Hole	Section	Total	
	Length Drilled	m	Core Recovery	%	0~107.20m	97.7 %	97.7 %	
Working Time					107.20~217.80m	97.6 %	97.7 %	
	Drilling	86°30'	20.2 %	17.0 %	217.80~301.00m	96.4 %	97.3 %	
	Hoisting & Lowering Rod							
	Hoisting & Lowering I.T.							
	Miscellaneous	101°30'	23.8 %	20.0 %	Efficiency of Drilling			
	Repairing		%	%	301.00 m/Working Period		7.92 m/day	
	Others	239°00'	56.0 %	47.0 %	301.00 m/Working Days		9.87 m/day	
	Total	427°00'	100 %	84.0 %	301.00 m/Drilling Period		26.17 m/day	
	Removing	Preparation	60°00'		12.0 %	301.00 m/Net Drilling Days		31.68 m/day
		Moving	21°00'		4.0 %	Total workers/ 301.00 m		1.93 Man/m
G. Total	508°00'		100 %	Total Drilling Workers/301.00 m			0.98 Man/m	
Casing Pipe Inserted	Pipe Size & Meterage	Inserted Length (%)	Recovery of Casing Pipe		Remarks			
		Drilling Length						
	HW 6.00 m	2.0 %	100 %		G : Grand			
	NW 51.00 m	16.9 %	100 %		I.T.: Inner Tube			
BW 138.00 m	45.8 %	100 %						



Table II-5 Operational results by drill hole, No. 53-3

Working Period	Period			Number of Days	Actual Working Days	Day Off	Total Number of Workers	
Preparation	25th May '78 ~ 7th Jul. '78			44	11	9	80	
Drilling	8th Jul. '78 ~ 22nd Jul. '78			14.5	12.5	43.5	213	
Removing	22nd Jul. '78 ~ 24th Jul. '78			2.5	1.5	4.5	22	
Total	25th May '78 ~ 24th Jul. '78			61	25	57	315	
Drilling Length	Planned Length	400.00 m	Over-burden	3.00 m	Core Recovery for each 100 m section			
	Increase or Decrease in Length	0.80 m	Core Length	385.90 m	Depth of Hole	Section	Total	
	Length Drilled	400.80 m	Core Recovery	96.3 %	0~125.20m	91.5 %	91.5 %	
					125.20~205.50m	96.4 %	93.4 %	
Working Time	Drilling	137°00'	30.7 %	27.9 %	205.50~313.90m	98.7 %	95.3 %	
	Hoisting & Lowering Rod				313.90~400.80m	100.0 %	96.3 %	
	Hoisting & Lowering I.T.							
	Miscellaneous	134°00'	30.0 %	27.3 %	Efficiency of Drilling			
	Repairing		%	%	400.80 m/Working Period		6.57 m/day	
	Others	175°00'	39.3 %	35.6 %	400.80 m/Working Days		16.03 m/day	
	Total	446°00'	100 %	90.8 %	400.80 m/Drilling Period		27.64 m/day	
	Removing	Preparation	22°00'		4.5 %	400.80 m/Net Drilling Days		32.06 m/day
		Moving	23°00'		4.7 %	Total workers/ 400.80 m		0.93 Man/m
	G. Total	491°00'			100 %	Total Drilling Workers/ 400.80 m		0.64 Man/m
Casing Pipe Inserted	Pipe Size & Meterage	Inserted Length (%)	Recovery of Casing Pipe					
		Drilling Length						
	HW 27.00 m	6.7 %	100 %		Remarks			
	NW 52.40 m	13.1 %	100 %		G : Grand			
BW 201.00 m	50.1 %	100 %		I.T.: Inner Tube				

Table II-6 Operational results by drill hole, No. 53-4

Working Period	Period			Number of Days	Actual Working Days	Day Off	Total Number of Workers	
	Preparation	30th May '78 ~ 30th Jun. '78			32	10	16	90
	Drilling	31st Jun. '78 ~ 27th Jul. '78			28	23	70.6	381
	Removing	28th Jul. '78 ~ 2nd Aug. '78			6	5	18	91
	Total	30th May '78 ~ 2nd Aug. '78			66	38	104.5	562
Drilling Length	Planned Length	500.00 m	Over-burden	- m	Core Recovery for each 100 m section			
	Increase or Decrease in Length	0.50 m	Core Length	472.90 m	Depth of Hole	Section	Total	
	Length Drilled	500.50 m	Core Recovery	94.5 %	0 ~ 90.60m	89.0 %	89.0 %	
					90.60 ~ 192.00m	91.8 %	90.5 %	
Working Time	Drilling	189°30'	23.3 %	22.0 %	192.00 ~ 302.30	98.9 %	93.4 %	
	Hoisting & Lowering Rod				302.30 ~ 393.70m	96.9 %	94.3 %	
	Hoisting & Lowering I.T.				393.70 ~ 500.50m	95.1 %	94.5 %	
	Miscellaneous	332°30'	41.0 %	38.6 %	Efficiency of Drilling			
	Repairing		%	%	500.50 m/Working Period		7.58 m/day	
	Others	290°00'	35.7 %	33.6 %	500.50 m/Working Days		13.17 m/day	
	Total	812°00'	100 %	94.2 %	500.50 m/Drilling Period		17.88 m/day	
	Removing	Preparation	31°00'		3.6 %	500.50 m/Net Drilling Days		21.76 m/day
		Moving	19°00'		2.2 %	Total workers/ 500.50 m		1.33 Man/m
	G. Total	862°00'		100 %				
Casing Pipe Inserted	Pipe Size & Meterage	Inserted Length (%)	Recovery of Casing Pipe		Total Drilling Workers/ 500.50 m		0.90 Man/m	
	HW 6.00 m	1.2 %	100 %					
	NW 103.50 m	20.7 %	100 %		Remarks			
	BW 245.95 m	49.1 %	100 %		G : Grand I.T.: Inner Tube			

Table II-7 Operational results by drill hole, No. 53-5

Working Period	Period			Number of Days	Actual Working Days	Day Off	Total Number of Workers	
Preparation	23rd Jul.'78 ~ 26th Jul.'78			3	3	9.5	66	
Drilling	27th Jul.'78 ~ 18th Aug.'78			22.5	19.5	66	351	
Removing	18th Aug.'78 ~ 26th Aug.'78			8.5	7.5	25.5	135	
Total	23rd Jul.'78 ~ 26th Aug.'78			34	30	101	552	
Drilling Length	Planned Length	m	Over-burden	m	Core Recovery for each 100 m section			
	Increase or Decrease in Length	m	Core Length	m	Depth of Hole	Section	Total	
	Length Drilled	m	Core Recovery	%	0~106.00m	81.0 %	81.0 %	
	400.80		85.3	106.00~201.00m	95.2 %	87.7 %		
Working Time	Drilling	117°00'	17.4 %	16.3 %	201.00~302.60m	81.2 %	85.5 %	
	Hoisting & Lowering Rod				302.60~400.80m	84.6 %	85.3 %	
	Hoisting & Lowering I.T.							
	Miscellaneous	308°00'	45.7 %	42.8 %	Efficiency of Drilling			
	Repairing	17°00'	2.5 %	2.4 %	400.80 m/Working Period		11.79 m/day	
	Others	232°00'	34.4 %	32.2 %	400.80 m/Working Days		13.36 m/day	
	Total	674°00'	100 %	93.7 %	400.80 m/Drilling Period		17.81 m/day	
	Removing	Preparation	24°00'		3.3 %	400.80 m/Net Drilling Days		20.55 m/day
		Moving	22°00'		3.0 %	Total workers/ 400.80 m		1.63 Man/m
	G. Total	720°00'		100 %				
Casing Pipe Inserted	Pipe Size & Meterage	Inserted Length (%)	Drilling Length	Recovery of Casing Pipe	Total Drilling Workers/ 400.80 m		1.04 Man/m	
	HW 42.00 m	10.5 %		100 %				
	NW 74.90 m	18.7 %		100 %				
	BW 201.00 m	50.1 %		100 %				
					Remarks			
					G : Grand			
					I.T.: Inner Tube			

Table II-8 Operational results by drill hole, No. 53-6

Working Period	Period			Number of Days	Actual Working Days	Day Off	Total Number of Workers	
	Preparation	17th Jul. '78 ~ 7th Aug. '78			22	17	15	110
	Drilling	8th Aug. '78 ~ 24th Aug. '78			16.5	14.5	50.5	320
	Removing	24th Aug. '78 ~ 26th Aug. '78			2.5	2.5	9	35
	Total	17th Jul. '78 ~ 26th Aug. '78			41	34	74.5	465
Drilling Length	Planned Length	300.00 m	Overburden	2.00 m	Core Recovery for each 100 m section			
	Increase or Decrease in Length	0.30 m	Core Length	284.30 m	Depth of Hole	Section	Total	
	Length Drilled	300.30 m	Core Recovery	94.7 %	0~114.20m	96.6 %	96.6 %	
					114.20~197.70m	89.3 %	93.5 %	
Working Time	Drilling	83°30'	13.7 %	12.6 %	197.70~300.30m	96.9 %	94.7 %	
	Hoisting & Lowering Rod							
	Hoisting & Lowering I.T.							
	Miscellaneous	212°30'	34.9 %	31.9 %	Efficiency of Drilling			
	Repairing		%	%	300.30 m/Working Period		7.32 m/day	
	Others	312°00'	51.4 %	46.9 %	300.30 m/Working Days		8.83 m/day	
	Total	608°00'	100 %	91.4 %	300.30 m/Drilling Period		18.20 m/day	
	Removing	Preparation	32°00'		4.8 %	300.30 m/Net Drilling Days		20.71 m/day
		Moving	25°00'		3.8 %			
	G. Total	665°00'		100 %	Total workers/ 300.30 m		1.80 Man/m	
Casing Pipe Inserted	Pipe Size & Meterage	Inserted Length (%)	Recovery of Casing Pipe	Total Drilling Workers/ 300.30 m			1.23 Man/m	
		Drilling Length						
	HW 9.00 m	3.0 %	100 %	Remarks G : Grand I.T.: Inner Tube				
	NW 45.50 m	15.2 %	100 %					
BW 119.80 m	39.9 %	100 %						



Table II-9 Operational results by drill hole, No. 53-7

Working Period	Period			Number of Days	Actual Working Days	Day Off	Total Number of Workers	
Preparation	24th Aug.'78 ~ 31st Aug.'78			8	7	14	90	
Drilling	1st Sep.'78 ~ 22nd Sep.'78			22	19	67	400	
Removing	23rd Sep.'78 ~ 29th Sep.'78			7	6	38.5	146	
Total	24th Aug.'78 ~ 29th Sep.'78			37	32	119.5	636	
Drilling Length	Planned Length	m	Over-burden	m	Core Recovery for each 100 m section			
	Increase or Decrease in Length	0.50	Core Length	241.90	Depth of Hole	Section	Total	
	Length Drilled	300.50	Core Recovery	80.5	0~112.60m	84.4 %	84.4 %	
					112.60~200.80m	80.6 %	82.7 %	
Working Time	Drilling	125°00'	19.0 %	17.0 %	200.80~300.50m	76.0 %	80.5 %	
	Hoisting & Lowering Rod							
	Hoisting & Lowering I.T.							
	Miscellaneous	292°00'	44.5 %	39.6 %	Efficiency of Drilling			
	Repairing		%	%	300.50 m/Working Period	8.12 m/day		
	Others	240°00'	36.5 %	32.6 %	300.50 m/Working Days	9.39 m/day		
	Total	657°00'	100 %	89.2 %	300.50 m/Drilling Period	13.66 m/day		
	Removing	Preparation	32°00'		4.3 %	300.50 m/Net Drilling Days	15.82 m/day	
		Moving	48°00'		6.5 %	Total workers/	300.50 m	2.51 Man/m
	G. Total	737°00'		100 %				
Casing Pipe Inserted	Pipe Size & Meterage	Inserted Length (%)	Recovery of Casing Pipe	Total Drilling Workers/ 300.50 m		1.55 Man/m		
		Drilling Length						
	HW 18.00 m	6.0 %	100 %					
	NW 74.00 m	24.6 %	100 %					
BW 152.00 m	50.6 %	100 %						
				Remarks				
				G : Grand				
				I.T.: Inner Tube				

Table II—10 Operational results by drill hole, No. 53-8

Working Period	Period			Number of Days	Actual Working Days	Day Off	Total Number of Workers	
Preparation	22nd Aug. '78 ~ 3rd Sep. '78			13	11	21	121	
Drilling	4th Sep. '78 ~ 19th Sep. '78			15.5	12.5	42.5	248	
Removing	19th Sep. '78 ~ 26th Sep. '78			7.5	6.5	24	150	
Total	22nd Aug. '78 ~ 26th Sep. '78			36	30	87.5	519	
Drilling Length	Planned Length	m	Over-burden	m	Core Recovery for each 100 m section			
	Increase or Decrease in Length	m	Core Length	m	Depth of Hole	Section	Total	
	Length Drilled	m	Core Recovery	%	0~114.60m	92.1 %	92.1 %	
	301.00		90.7		114.60~201.30m	87.8 %	90.1 %	
Working Time	Drilling	132°00'	25.1 %	22.1 %	201.30~301.00m	91.8 %	90.7 %	
	Hoisting & Lowering Rod							
	Hoisting & Lowering I.T.							
	Miscellaneous	160°00'	30.4 %	26.8 %	Efficiency of Drilling			
	Repairing		%	%	301.00 m/Working Period		8.36 m/day	
	Others	234°00'	44.5 %	39.2 %	301.00 m/Working Days		10.03 m/day	
	Total	526°00'	100 %	88.1 %	301.00 m/Drilling Period		19.42 m/day	
	Removing	Preparation	29°00'		4.9 %	301.00 m/Net Drilling Days		24.08 m/day
		Moving	42°00'		7.0 %	Total workers/ 301.00 m		2.01 Man/m
	G. Total	597°00'		100 %				
Casing Pipe Inserted	Pipe Size & Meterage	Inserted Length (%)	Recovery of Casing Pipe	Total Drilling Workers/ 301.00 m		0.97 Man/m		
		Drilling Length						
	HW 10.50 m	3.5 %	100 %	Remarks				
	NW 46.70 m	15.5 %	100 %	G : Grand				
BW 119.70 m	39.8 %	100 %	I.T.: Inner Tube					

Table II-11 Summary operational data by drill holes

Drill hole No.	Type of machine	Drilling period	Drilling length m	Core		No. of drilling shift		Drilling speed		Remarks
				Length m	Recovery %	Drilling	Casing etc.	* m/shift	** m/shift	
53-1	TGM-5A	15th Jun. '78 ~ 3rd Jul. '78	401.00	384.25	95.8	42	2	9.55	9.11	
53-2	"	15th Jun. '78 ~ 26th Jun. '78	301.00	292.90	97.3	22	2	13.68	12.54	
53-3	"	8th Jul. '78 ~ 22nd Jul. '78	400.80	385.90	96.3	33	5	12.15	10.55	
53-4	"	31st Jun. '78 ~ 27th Jul. '78	500.50	472.90	94.5	65	7	7.70	6.95	
53-5	"	27th Jul. '78 ~ 18th Aug. '78	400.80	341.90	85.3	48	20	8.35	5.89	
53-6	"	8th Aug. '78 ~ 24th Aug. '78	300.30	284.30	94.7	35	5	8.58	7.51	
53-7	"	1st Sep. '78 ~ 22nd Sep. '78	300.50	241.90	80.5	47	7	6.39	5.56	
53-8	"	4th Sep. '78 ~ 19th Sep. '78	301.00	273.10	90.7	36	2	8.36	7.92	
Total			2,905.90	2,677.15	92.1	328	50	8.86	7.69	

* Drilled per one shift covering net drilling operations.

** Drilled per one shift covering total works conducted.

Table II-12 Working time by drill hole

Drillhole No.	Drilling	Hoisting & lowering		Miscellaneous			Repairs	Others	Moving operation	Total
		Rod	rod & I.T.	Casing insertion	Hole reaming	Others				
53-1	160°00'			21°00'		166°00'	9°00'	268°00'	100°00'	724°00'
53-2	86°30'			16°00'		85°30'		239°00'	81°00'	508°00'
53-3	137°00'			39°00'		95°00'		175°00'	45°00'	491°00'
53-4	189°30'			45°00'		287°30'		290°00'	50°00'	862°00'
53-5	117°00'			62°00'	76°00'	170°00'	17°00'	232°00'	46°00'	720°00'
53-6	83°30'			30°00'		182°30'		312°00'	57°00'	665°00'
53-7	125°00'			24°00'	45°00'	223°00'		240°00'	80°00'	737°00'
53-8	132°00'			25°00'		135°00'		234°00'	71°00'	597°00'
Total	1,030°30'			262°00'	121°00'	1,344°30'	26°00'	1,990°00'	530°00'	5,304°00'
						1,727°30'				

Table II—13 Drilling meterage of diamond bits

Item	Size	Type	Bit No.	Drilling meterage by drill hole. Unite meter								Total		
				53-1	53-2	53-3	53-4	53-5	53-6	53-7	53-8			
Bit	HX	HQWL	502	38.40									38.40	
			E2516		21.05									21.05
			501		23.80									23.80
			E7465			32.15								32.15
			F1010			16.75								16.75
			F1011				31.50							31.50
			503				28.60							28.60
			E2515				36.00							36.00
			505					18.40						18.40
			F1020					23.70						23.70
	F1021					26.30						26.30		
	504						25.10					25.10		
	506						10.60					10.60		
	E8057								13.20			13.20		
	E8058								18.00			18.00		
	507									20.30		20.30		
	508									17.50		17.50		
				Total	38.40	44.85	48.90	96.10	68.40	35.70	31.20	37.80	401.35	
		NX	NQWL	05	41.30									41.30
				06	39.80									
	14			45.60										45.60
	E2519			29.20										29.20
	07				37.40									37.40
	F1017				43.60									43.60
	E2518					31.40								31.40
	E2520					40.10								40.10
	08					29.50								29.50
	10					47.60								47.60
	04						33.60							33.60
	F1016						42.70							42.70
	F1018						39.10							39.10
	11						28.45							28.45
	E2521								30.40					30.40
	E2522								40.20					40.20
	12								25.80					25.80
	13						29.70					29.70		
	F1015							31.40				31.40		
	F1019							43.70				43.70		
	03								28.50			28.50		
	02								30.00			30.00		
	01								21.90			21.90		
	F1020									29.60		29.60		
	E2523									43.40		43.40		
			Total	155.90	81.00	148.60	143.85	126.10	75.10	80.40	73.00	883.95		

Drilling meterage of diamond bits

Item	Size	Type	Bit No.	Drilling meterage by drill hole. Unite meter								Total	
				53-1	53-2	53-3	53-4	53-5	53-6	53-7	53-8		
Bit	BQWL	E2525	33.60										33.60
		F1030	45.10										45.10
		511	38.40										38.40
		512	27.30										27.30
		E2526	30.20										30.20
		E2527	25.40										25.40
		513	39.50										39.50
		514	42.80										42.80
		F1031	51.10										51.10
		F1032	35.50										35.50
		711	42.80										42.80
		712	37.40										37.40
		515	40.90										40.90
		516	41.20										41.20
		716	37.50										37.50
		714	31.60										31.60
		715	34.80										34.80
		E2530	39.20										39.20
		E2528	28.30										28.30
		E2531	25.70										25.70
	F1041	30.10										30.10	
	F1040	24.50										24.50	
	F1033	40.35										40.35	
	713	34.40										34.40	
	717	30.70										30.70	
	F1034	32.60										32.60	
	F1039	40.20										40.20	
	F1035	27.40										27.40	
	718	34.50										34.50	
	520	45.60										45.60	
	518	37.90										37.90	
	E2529	51.10										51.10	
	E2540	45.90										45.90	
	720	31.10										31.10	
	719	25.50										25.50	
	721	28.20										28.20	
	521	33.40										33.40	
	524	26.80										26.80	
	E2541	32.60										32.60	
	F1036	52.10										52.10	
F1037	43.60										43.60		
F1038	50.70										50.70		
E2532	34.90										34.90		
		Total	200.00	168.90	199.80	254.55	199.80	180.50	177.60	181.30	1,562.45		



Table II—14 Specifications of diamond bits

Size	Type	Carats per bit	Matrix	Stones per carat	Water way	Number	Remark
HX	HQ-WL	40	Y	1/35	6	E-2515	Reset
	"	"	"	"	"	E-2516	"
	"	"	"	"	"	E-7465	"
	"	"	"	"	"	E-8057	"
	"	"	"	"	"	E-8058	"
	"	"	Z	"	"	F-1010	"
	"	"	"	"	"	F-1011	"
	"	"	"	"	"	F-1020	"
	"	"	"	"	"	F-1021	"
	"	35	T1	"	"	501	"
	"	"	"	"	"	502	"
	"	"	"	"	"	503	"
	"	"	"	"	"	504	"
	"	"	"	"	"	505	"
	"	"	"	"	"	506	"
"	"	"	"	"	507	"	
"	"	"	"	"	508	"	
NX	NQ-WL	30	Y	1/40	6	E-2518	"
	"	"	"	"	"	E-2519	"
	"	"	"	"	"	E-2520	"
	"	"	"	"	"	E-2521	"
	"	"	"	"	"	E-2522	"
	"	"	"	"	"	E-2523	"
	"	"	Z	"	"	F-1015	"
	"	"	"	"	"	F-1016	"
	"	"	"	"	"	F-1017	"
	"	"	"	"	"	F-1018	"
	"	"	"	"	"	F-1019	"
	"	"	"	"	"	F-1020	"
	"	"	T1	1/35	"	01	"
	"	"	"	"	"	02	"
	"	"	"	"	"	03	"
	"	"	"	"	"	04	"
	"	"	"	"	"	05	"
	"	"	"	"	"	06	"
"	"	"	"	"	07	"	
"	"	"	"	"	08	"	
"	"	"	"	"	10	"	
"	"	"	"	"	11	"	
"	"	"	"	"	12	"	
"	"	"	"	"	13	"	
"	"	"	"	"	14	"	
BX	BQ-WL	20	Y	1/40	4	E-2525	"
	"	"	"	"	"	E-2526	"
	"	"	"	"	"	E-2527	"
	"	"	"	"	"	E-2528	"
	"	"	"	"	"	E-2529	"
	"	"	"	"	"	E-2530	"
	"	"	"	"	"	E-2531	"
	"	"	"	"	"	E-2532	"
	"	"	"	"	"	E-2540	"
"	"	"	"	"	E-2541	"	

Specifications of diamond bits

Size	Type	Carats per bit	Matrix	Stones per carat	Water way	Number	Remark
BX	BQ-WL	20	Z	1/35	4	F-1030	Reset
	"	"	"	"	"	F-1031	"
	"	"	"	"	"	F-1032	"
	"	"	"	"	"	F-1033	"
	"	"	"	"	"	F-1034	"
	"	"	"	"	"	F-1035	"
	"	"	"	"	"	F-1036	"
	"	"	"	"	"	F-1037	"
	"	"	"	"	"	F-1038	"
	"	"	"	"	"	F-1039	"
	"	"	"	"	"	F-1040	"
	"	"	"	"	"	F-1041	"
	"	"	"	T1	"	511	"
	"	"	"	"	"	512	"
	"	"	"	"	"	513	"
	"	"	"	"	"	514	"
	"	"	"	"	"	515	"
	"	"	"	"	"	516	"
	"	"	"	"	"	518	"
	"	"	"	"	"	520	"
	"	"	"	"	"	521	"
	"	"	"	"	"	524	"
	"	"	"	"	"	711	"
	"	"	"	"	"	712	"
	"	"	"	"	"	713	"
	"	"	"	"	"	714	"
	"	"	"	"	"	715	"
"	"	"	"	"	716	"	
"	"	"	"	"	717	"	
"	"	"	"	"	718	"	
"	"	"	"	"	719	"	
"	"	"	"	"	720	"	
"	"	"	"	"	721	"	



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