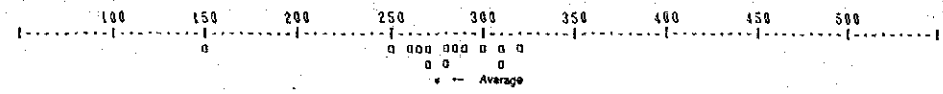
Appendix 2-12 Histograms of Homogenization Temperatures of the Fluid Inclusions (1)～(17)

Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (1)

No. 3

No. 0A63002

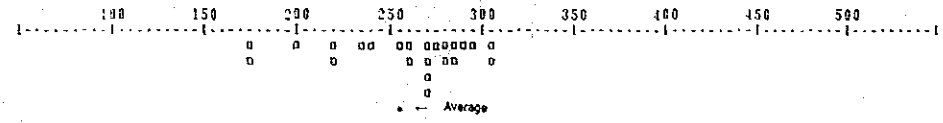
Homogenization Temp.	152 251 261 267 268 270 280 281 287 288 302 308 310 318
Number of measuring	14
Minimum Temperature	152
Maximum Temperature	318
Average Temperature	275
Standard Deviation	39



No. 4

No. 0A70101

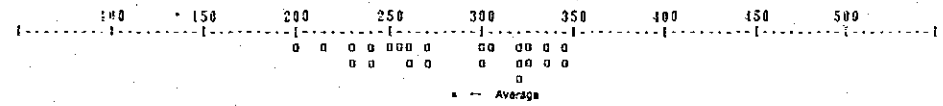
Homogenization Temp.	173 175 201 220 221 234 239 254 261 261 269 271 272 272 273 278 280 283 284
Number of measuring	23
Minimum Temperature	173
Maximum Temperature	307
Average Temperature	257
Standard Deviation	37



No. 5

No. 0A70204

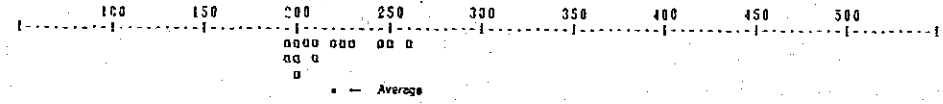
Homogenization Temp.	202 217 228 232 240 240 252 255 260 260 270 271 289 300 305 318 321 322 329 346
Number of measuring	24
Minimum Temperature	202
Maximum Temperature	346
Average Temperature	284
Standard Deviation	44



No. 8

No. 0S62603

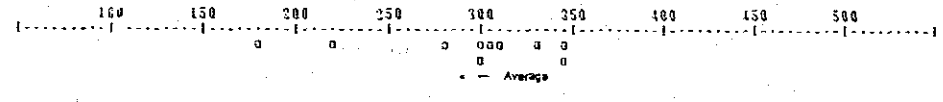
Homogenization Temp.	195 197 199 201 202 204 210 211 218 226 232 245 252 262
Number of measuring	14
Minimum Temperature	195
Maximum Temperature	262
Average Temperature	218
Standard Deviation	21



No. 9

No. 0S62402

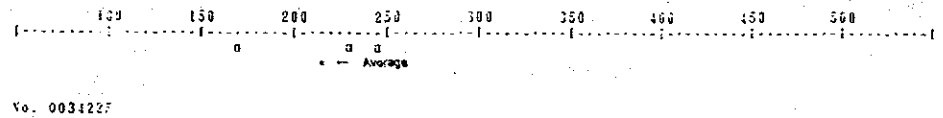
Homogenization Temp.	178 218 279 298 302 304 310 328 343 347
Number of measuring	10
Minimum Temperature	178
Maximum Temperature	347
Average Temperature	291
Standard Deviation	51



No. 11

No. 0S70401

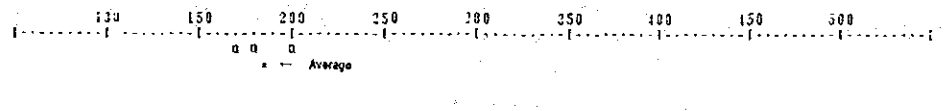
Homogenization Temp.	172 230 245
Number of measuring	3
Minimum Temperature	172
Maximum Temperature	245
Average Temperature	216
Standard Deviation	38



No. 12

No. 0031227

Homogenization Temp.	172 181 199
Number of measuring	3
Minimum Temperature	172
Maximum Temperature	199
Average Temperature	184
Standard Deviation	14

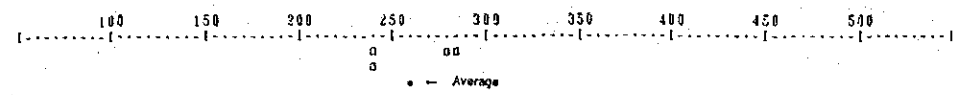


Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (2)

No. 13

No. 0084030

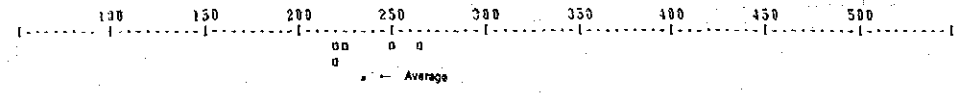
Homogenization Temp.	238 241 281 284
Number of measuring	4
Minimum Temperature	238
Maximum Temperature	284
Average Temperature	261
Standard Deviation	22



No. 14

No. 0143750

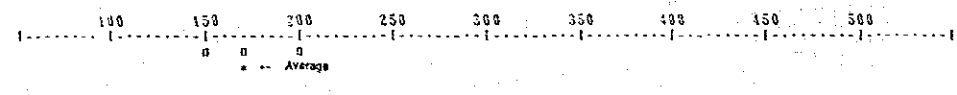
Homogenization Temp.	218 222 223 248 266
Number of measuring	5
Minimum Temperature	218
Maximum Temperature	266
Average Temperature	235
Standard Deviation	19



No. 15

No. 0292960

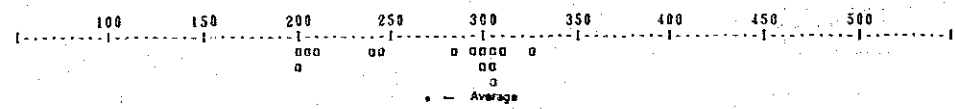
Homogenization Temp.	148 169 199
Number of measuring	3
Minimum Temperature	148
Maximum Temperature	199
Average Temperature	172
Standard Deviation	21



No. 16

No. 0300775

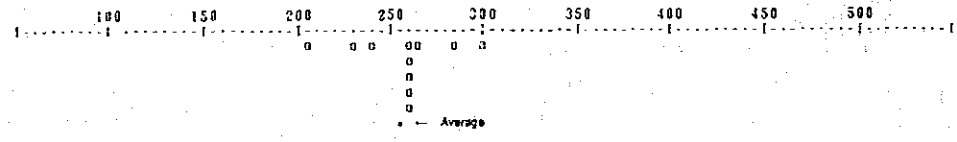
Homogenization Temp.	200 201 205 210 242 245 286 296 301 302 305 306 307 312 326
Number of measuring	15
Minimum Temperature	200
Maximum Temperature	326
Average Temperature	270
Standard Deviation	15



No. 17

No. 0301950

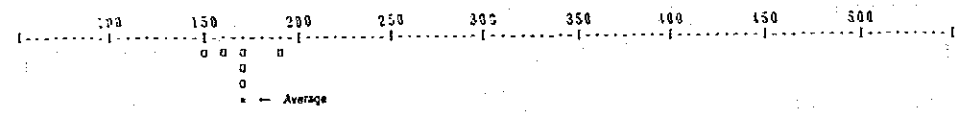
Homogenization Temp.	203 230 238 258 259 260 261 262 265 286 288
Number of measuring	11
Minimum Temperature	203
Maximum Temperature	288
Average Temperature	256
Standard Deviation	25



No. 19

No. 0341930

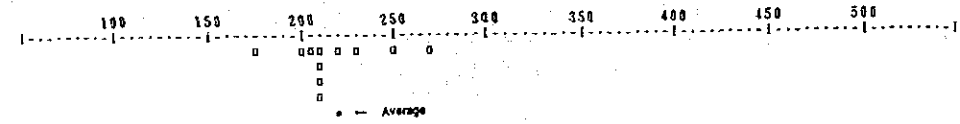
Homogenization Temp.	150 162 169 171 172 189
Number of measuring	6
Minimum Temperature	150
Maximum Temperature	189
Average Temperature	169
Standard Deviation	12



No. 20

No. 0381175

Homogenization Temp.	174 201 204 211 211 212 212 220 232 248 271
Number of measuring	11
Minimum Temperature	174
Maximum Temperature	271
Average Temperature	218
Standard Deviation	24

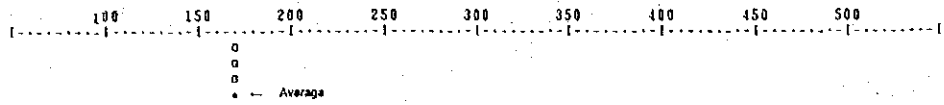


Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (3)

No. 0472400

Homogenization Temp. 168 171 172
Number of measuring 3
Minimum Temperature 168
Maximum Temperature 172
Average Temperature 170
Standard Deviation 2

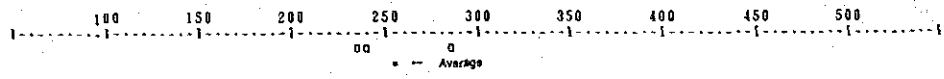
No. 22



No. 0674670

Homogenization Temp. 234 240 285
Number of measuring 3
Minimum Temperature 234
Maximum Temperature 285
Average Temperature 253
Standard Deviation 23

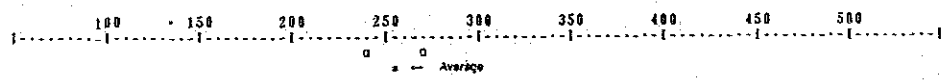
No. 25



No. 0832190

Homogenization Temp. 240 269
Number of measuring 2
Minimum Temperature 240
Maximum Temperature 269
Average Temperature 255
Standard Deviation 15

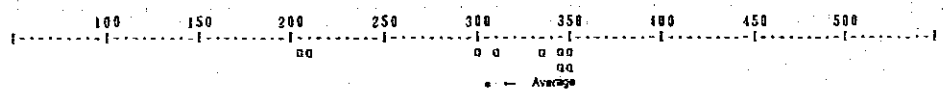
No. 26



No. 0924300

Homogenization Temp. 205 212 300 311 333 345 347 351 352
Number of measuring 9
Minimum Temperature 205
Maximum Temperature 352
Average Temperature 306
Standard Deviation 55

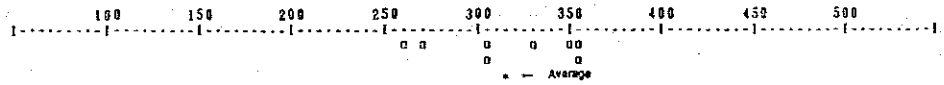
No. 28



No. 0943230

Homogenization Temp. 260 268 303 304 329 350 354 356
Number of measuring 8
Minimum Temperature 260
Maximum Temperature 356
Average Temperature 316
Standard Deviation 36

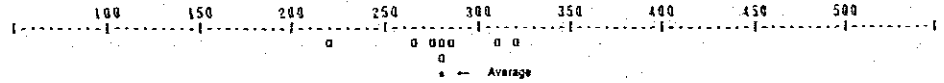
No. 29



No. 0954375

Homogenization Temp. 222 265 277 278 282 284 310 320
Number of measuring 8
Minimum Temperature 222
Maximum Temperature 320
Average Temperature 280
Standard Deviation 28

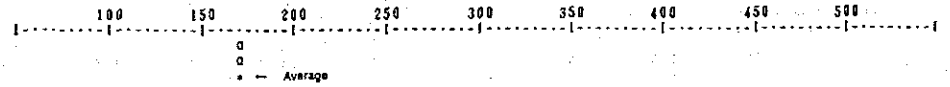
No. 30



No. 0984500

Homogenization Temp. 169 172
Number of measuring 2
Minimum Temperature 169
Maximum Temperature 172
Average Temperature 171
Standard Deviation 2

No. 31

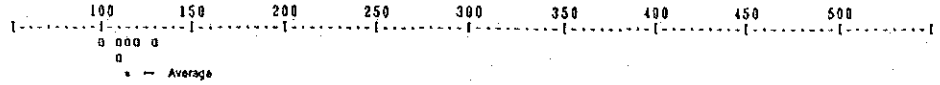


Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (4)

No. 34

No. 0S70510

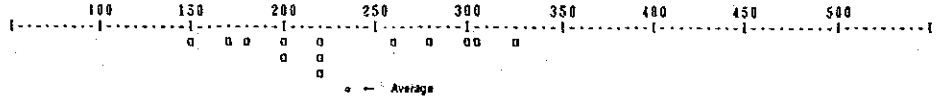
Homogenization Temp.	102 111 112 117 121 128
Number of measuring	6
Minimum Temperature	102
Maximum Temperature	128
Average Temperature	115
Standard Deviation	8



No. 36

No. 0S80501

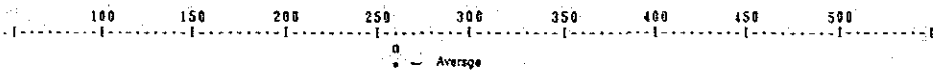
Homogenization Temp.	151 172 179 199 201 218 219 221 258 280 298 305 323
Number of measuring	13
Minimum Temperature	151
Maximum Temperature	323
Average Temperature	233
Standard Deviation	53



No. 37

No. 0S80504

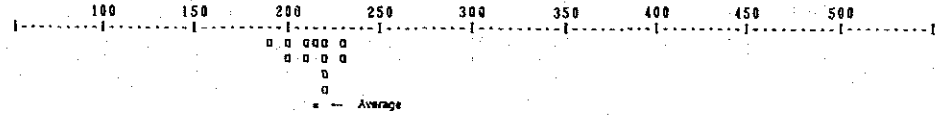
Homogenization Temp.	262
Number of measuring	1
Minimum Temperature	262
Maximum Temperature	262
Average Temperature	262
Standard Deviation	0



No. 38

No. XS80501

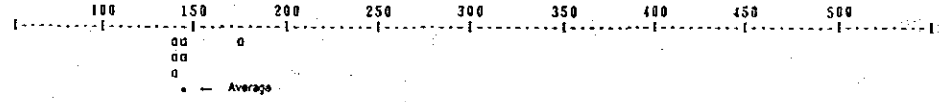
Homogenization Temp.	189 199 201 209 212 217 220 220 221 222 231 232
Number of measuring	12
Minimum Temperature	189
Maximum Temperature	232
Average Temperature	214
Standard Deviation	12



No. 39

No. XS80504

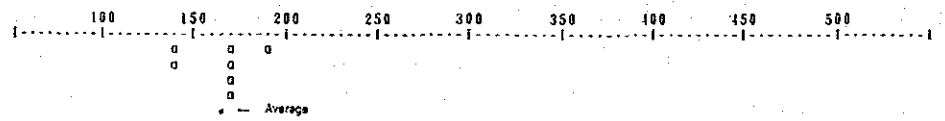
Homogenization Temp.	138 139 142 143 145 175
Number of measuring	6
Minimum Temperature	138
Maximum Temperature	175
Average Temperature	147
Standard Deviation	13



No. 40

No. XS80505

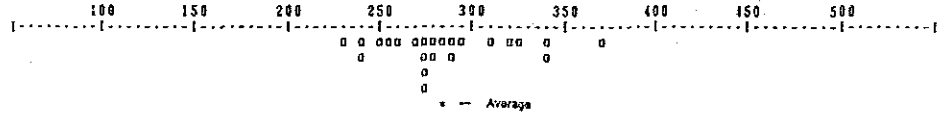
Homogenization Temp.	139 141 169 170 170 171 189
Number of measuring	7
Minimum Temperature	139
Maximum Temperature	189
Average Temperature	164
Standard Deviation	17



No. 41

No. US81105

Homogenization Temp.	228 238 240 250 254 260 272 273 274 276 277 280 282 284 289 290 296 310 320
Number of measuring	23
Minimum Temperature	228
Maximum Temperature	368
Average Temperature	285
Standard Deviation	35

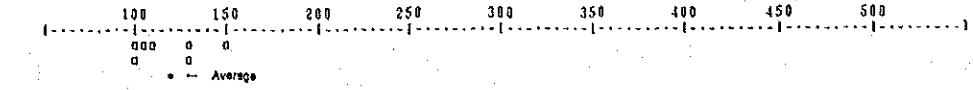


Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (5)

No. H81502

Homogenization Temp.	98 99 106 110 129 131 150
Number of measuring	7
Minimum Temperature	98
Maximum Temperature	150
Average Temperature	118
Standard Deviation	18

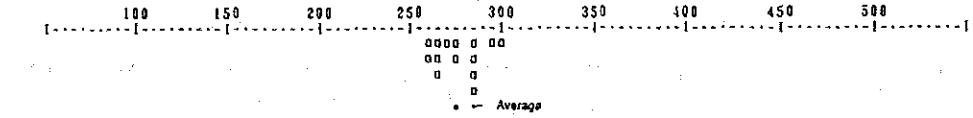
No. 43



No. H81504

Homogenization Temp.	259 262 264 265 267 268 274 277 283 284 285 287 295 298
Number of measuring	14
Minimum Temperature	259
Maximum Temperature	298
Average Temperature	276
Standard Deviation	12

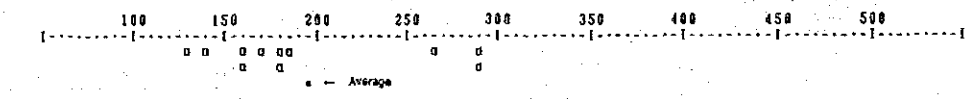
No. 44



No. OH80601

Homogenization Temp.	130 141 159 160 170 179 182 183 267 290 292
Number of measuring	11
Minimum Temperature	130
Maximum Temperature	292
Average Temperature	196
Standard Deviation	56

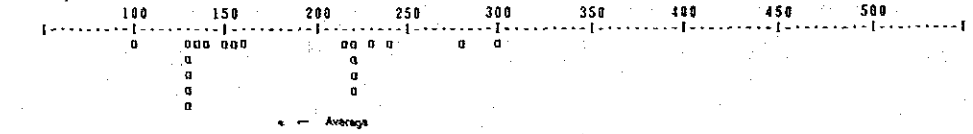
No. 45



No. OH80603

Homogenization Temp.	101 128 130 131 131 132 133 142 151 154 158 216 220 220 222 222 228 241 282
Number of measuring	20
Minimum Temperature	101
Maximum Temperature	301
Average Temperature	182
Standard Deviation	56

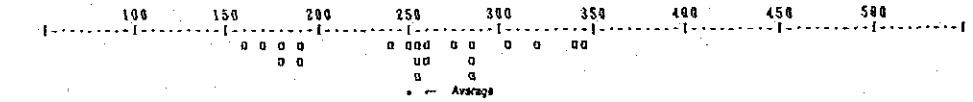
No. 46



No. OH80604

Homogenization Temp.	162 172 179 181 189 198 242 251 255 256 257 260 261 276 283 283 287 304 321
Number of measuring	21
Minimum Temperature	162
Maximum Temperature	343
Average Temperature	252
Standard Deviation	54

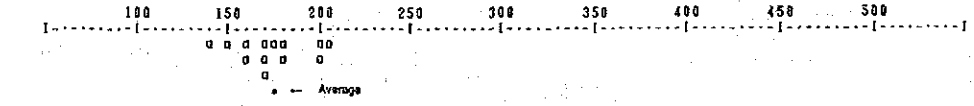
No. 47



No. OH80605

Homogenization Temp.	142 151 160 162 169 172 172 174 179 180 199 202 204
Number of measuring	13
Minimum Temperature	142
Maximum Temperature	204
Average Temperature	174
Standard Deviation	18

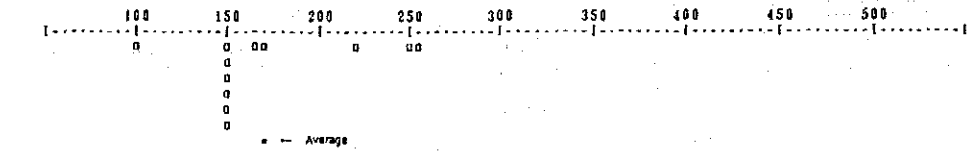
No. 48



No. OH80703

Homogenization Temp.	102 148 148 149 151 152 152 167 172 220 248 255
Number of measuring	12
Minimum Temperature	102
Maximum Temperature	255
Average Temperature	172
Standard Deviation	44

No. 49

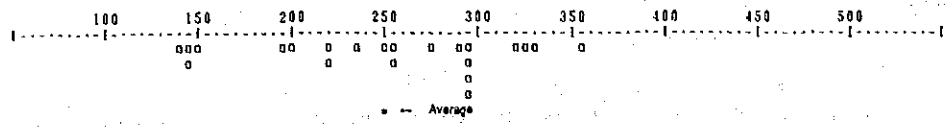


Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (6)

No. 50

No. 0H80705

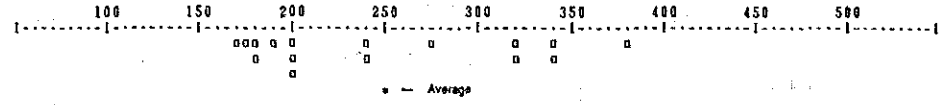
Homogenization Temp.	139	145	147	151	196	199	220	222	236	250	254	254	274	290	294	295	296	296	320
Number of measuring	22																		
Minimum Temperature	139																		
Maximum Temperature	354																		
Average Temperature	249																		
Standard Deviation	64																		



No. 51

No. 0S80710

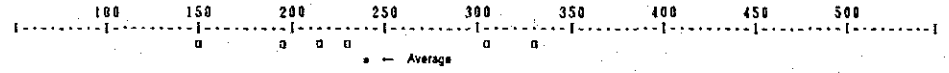
Homogenization Temp.	172	175	180	181	189	199	201	202	241	242	275	320	322	340	342	380
Number of measuring	16															
Minimum Temperature	172															
Maximum Temperature	386															
Average Temperature	248															
Standard Deviation	69															



No. 52

No. T8N0701

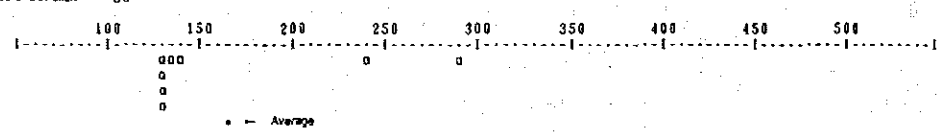
Homogenization Temp.	151	197	214	232	303	329
Number of measuring	6					
Minimum Temperature	151					
Maximum Temperature	329					
Average Temperature	238					
Standard Deviation	61					



No. 54

No. S8N0701

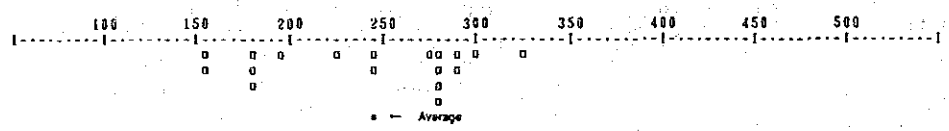
Homogenization Temp.	129	130	130	131	135	139	238	289
Number of measuring	8							
Minimum Temperature	129							
Maximum Temperature	289							
Average Temperature	165							
Standard Deviation	58							



No. 55

No. 8S80702

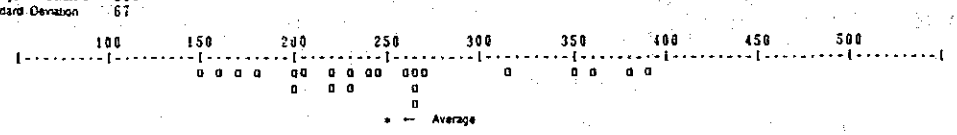
Homogenization Temp.	154	157	179	180	182	197	227	243	245	273	279	280	281	282	288	292	301	325
Number of measuring	18																	
Minimum Temperature	154																	
Maximum Temperature	325																	
Average Temperature	243																	
Standard Deviation	53																	



No. 56

No. 8S80703

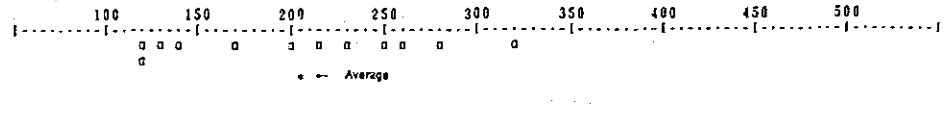
Homogenization Temp.	149	160	172	179	200	201	205	222	222	230	230	242	245	262	264	266	267	270	315
Number of measuring	23																		
Minimum Temperature	149																		
Maximum Temperature	392																		
Average Temperature	251																		
Standard Deviation	67																		



No. 57

No. 8S80802

Homogenization Temp.	129	121	131	140	169	202	216	232	248	260	282	320
Number of measuring	12											
Minimum Temperature	129											
Maximum Temperature	329											
Average Temperature	203											
Standard Deviation	65											

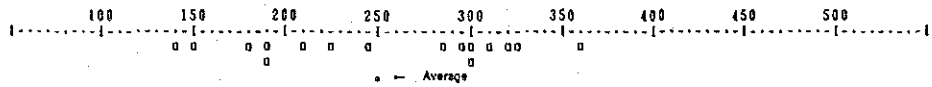


Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (7)

No. 58

No. 8R80805

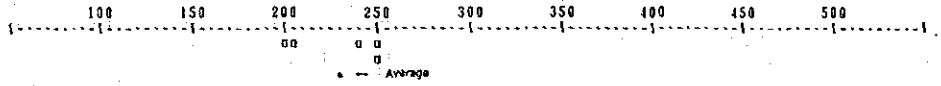
Homogenization Temp. 139 150 182 189 190 210 223 244 284 297 299 301 310 319 325 362
Number of measuring 16
Minimum Temperature 139
Maximum Temperature 362
Average Temperature 252
Standard Deviation 67



No. 59

No. BS80809

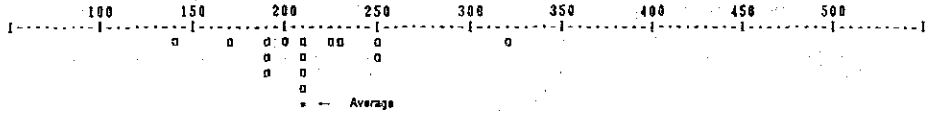
Homogenization Temp. 202 205 242 250 252
Number of measuring 5
Minimum Temperature 202
Maximum Temperature 252
Average Temperature 230
Standard Deviation 22



No. 60

No. 880903

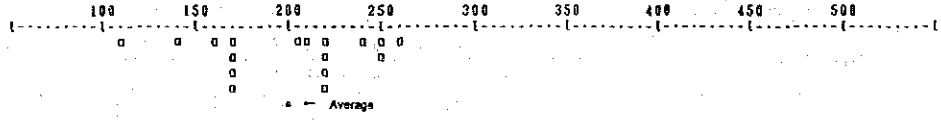
Homogenization Temp. 139 168 188 190 191 198 209 210 210 210 224 230 248 250 319
Number of measuring 15
Minimum Temperature 139
Maximum Temperature 319
Average Temperature 212
Standard Deviation 40



No. 61

No. 8R80801

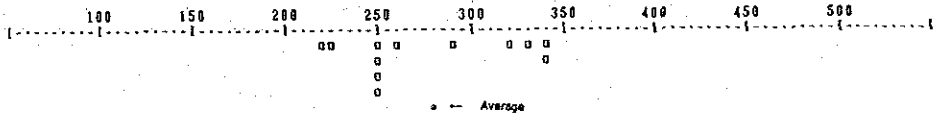
Homogenization Temp. 110 139 160 170 170 171 172 205 209 219 220 220 222 239 250 252 262
Number of measuring 17
Minimum Temperature 110
Maximum Temperature 262
Average Temperature 199
Standard Deviation 41



No. 63

No. 881003

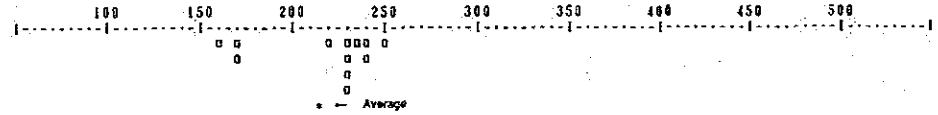
Homogenization Temp. 221 225 248 251 252 252 262 292 321 330 338 340
Number of measuring 12
Minimum Temperature 221
Maximum Temperature 340
Average Temperature 273
Standard Deviation 42



No. 64

No. 881006

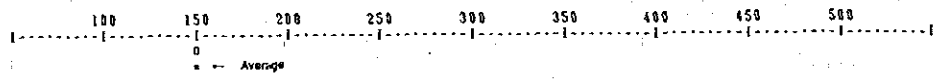
Homogenization Temp. 162 169 170 222 228 232 232 232 234 238 239 250
Number of measuring 12
Minimum Temperature 162
Maximum Temperature 250
Average Temperature 217
Standard Deviation 30



No. 65

No. 881007

Homogenization Temp. 148
Number of measuring 1
Minimum Temperature 148
Maximum Temperature 148
Average Temperature 148
Standard Deviation 0

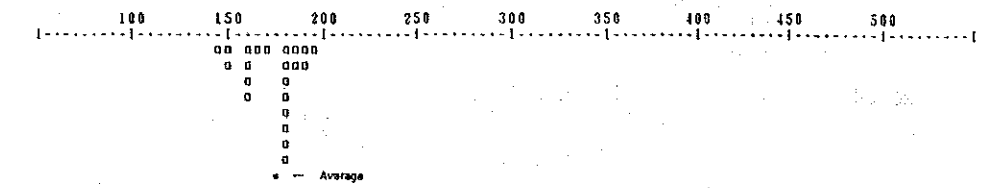


Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (8)

No. H81008

Homogenization Temp.	145	149	150	161	162	162	162	166	170	178	179	179	180	180	180	181	182	184	185
Number of measuring	22																		
Minimum Temperature	145																		
Maximum Temperature	195																		
Average Temperature	173																		
Standard Deviation	14																		

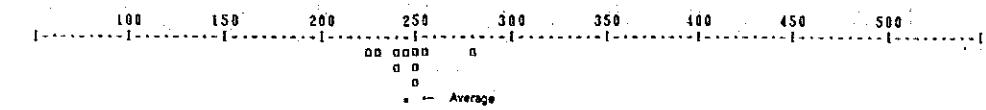
No. 66



No. H81010

Homogenization Temp.	226	232	238	242	244	248	250	251	256	282
Number of measuring	10									
Minimum Temperature	226									
Maximum Temperature	282									
Average Temperature	247									
Standard Deviation	15									

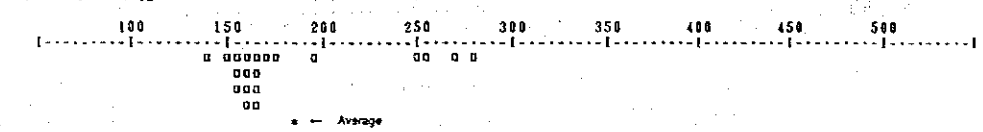
No. 67



No. 0581014

Homogenization Temp.	142	152	155	156	157	160	162	162	162	163	165	165	166	172	174	196	252	256	270
Number of measuring	20																		
Minimum Temperature	142																		
Maximum Temperature	280																		
Average Temperature	183																		
Standard Deviation	42																		

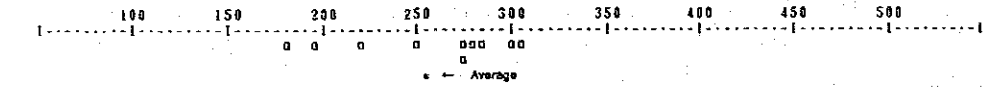
No. 68



No. H81012

Homogenization Temp.	182	195	220	248	274	276	282	287	302	305
Number of measuring	10									
Minimum Temperature	182									
Maximum Temperature	305									
Average Temperature	257									
Standard Deviation	42									

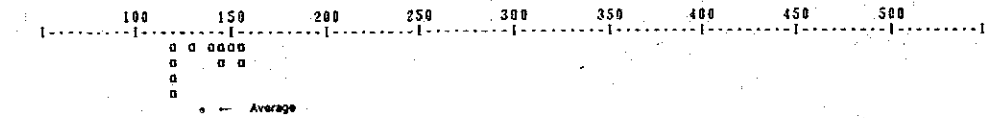
No. 69



No. H81707

Homogenization Temp.	119	120	120	121	128	140	144	146	151	154	155
Number of measuring	11										
Minimum Temperature	119										
Maximum Temperature	155										
Average Temperature	136										
Standard Deviation	14										

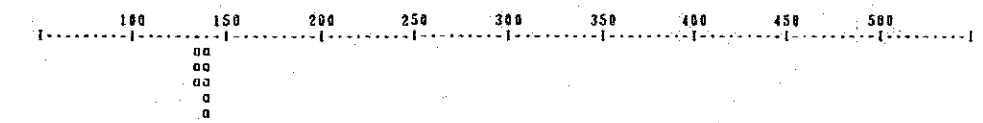
No. 72



No. H81708

Homogenization Temp.	135	136	137	138	140	140	141	142
Number of measuring	8							
Minimum Temperature	135							
Maximum Temperature	142							
Average Temperature	139							
Standard Deviation	2							

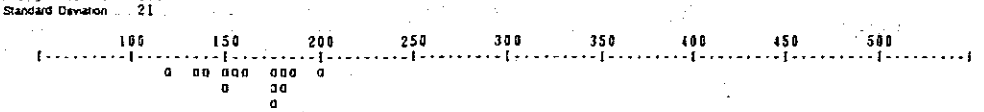
No. 73



No. H81710

Homogenization Temp.	122	135	140	149	150	156	160	174	174	175	179	182	184	202	
Number of measuring	14														
Minimum Temperature	122														
Maximum Temperature	202														
Average Temperature	163														
Standard Deviation	21														

No. 74



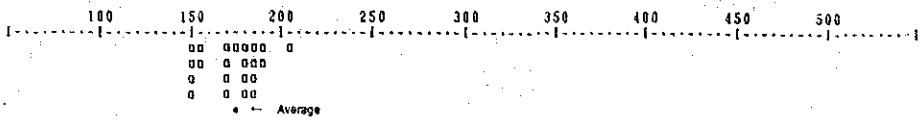
Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (9)

No. H81711

Homogenization Temp.	149	150	151	152	153	154	169	170	172	172	175	179	180	181	182	184	184	186	187

Number of measuring 22
Minimum Temperature 149
Maximum Temperature 205
Average Temperature 173
Standard Deviation 15

No. 75

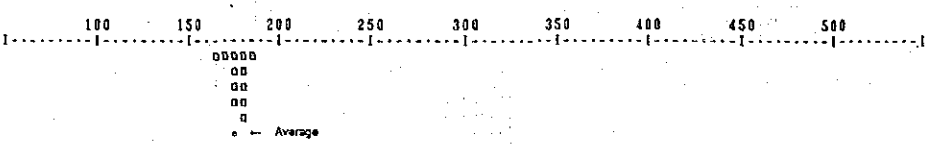


No. H81712

Homogenization Temp.	167	170	174	174	175	176	178	179	179	180	181	186

Number of measuring 12
Minimum Temperature 167
Maximum Temperature 186
Average Temperature 177
Standard Deviation 5

No. 76

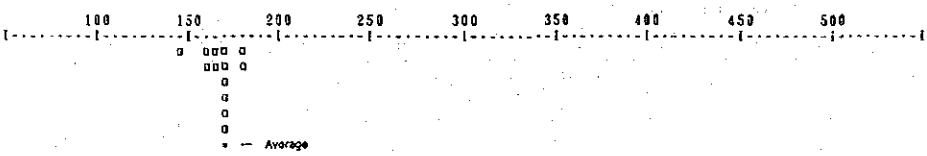


No. H81714

Homogenization Temp.	146	162	162	163	164	168	170	170	171	172	172	176	180

Number of measuring 13
Minimum Temperature 146
Maximum Temperature 180
Average Temperature 168
Standard Deviation 8

No. 77

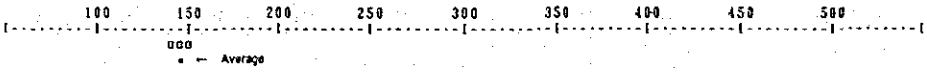


No. H81715

Homogenization Temp.	142	146	152

Number of measuring 3
Minimum Temperature 142
Maximum Temperature 152
Average Temperature 147
Standard Deviation 4

No. 78

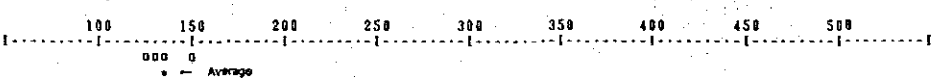


No. H81802

Homogenization Temp.	124	130	136	148

Number of measuring 4
Minimum Temperature 124
Maximum Temperature 148
Average Temperature 135
Standard Deviation 9

No. 79

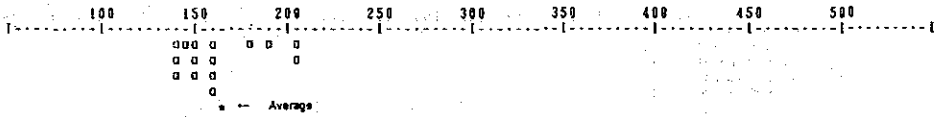


No. H81803

Homogenization Temp.	138	142	142	146	150	151	152	158	160	160	161	180	189	204	205

Number of measuring 15
Minimum Temperature 138
Maximum Temperature 205
Average Temperature 163
Standard Deviation 21

No. 80

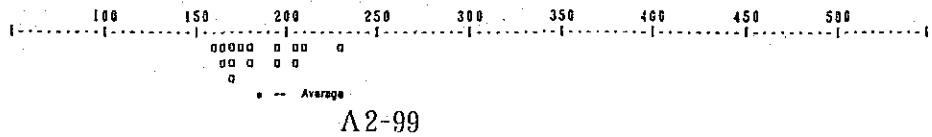


No. H82702

Homogenization Temp.	162	164	165	168	170	170	175	179	180	195	196	203	205	209	229

Number of measuring 15
Minimum Temperature 162
Maximum Temperature 229
Average Temperature 185
Standard Deviation 20

No. 82

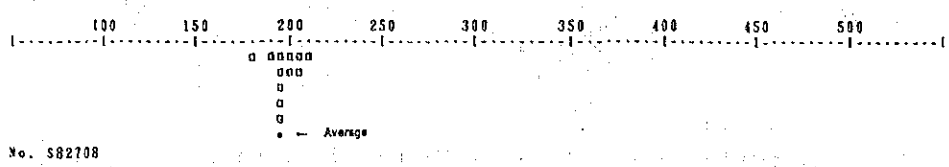


Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (10)

No. H82703

Homogenization Temp. 182 191 193 194 194 195 195 200 202 203 205 209
Number of measuring 12
Minimum Temperature 182
Maximum Temperature 209
Average Temperature 197
Standard Deviation 7

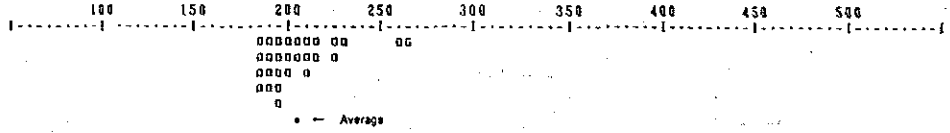
No. 83



No. S82708

Homogenization Temp. 185 186 187 187 188 192 192 192 193 194 195 195 196 199 200 201 203 205 211
223 227 229 262 263
Number of measuring 23
Minimum Temperature 185
Maximum Temperature 263
Average Temperature 206
Standard Deviation 20

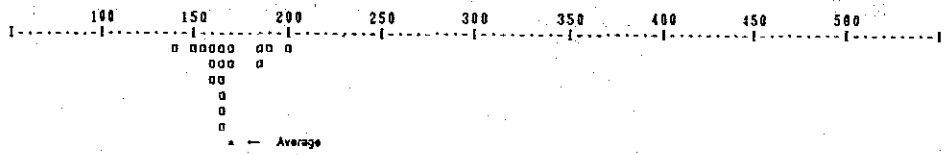
No. 84



No. H83110

Homogenization Temp. 140 149 157 158 160 161 163 164 165 166 167 167 170 171 184 186 189 208
Number of measuring 18
Minimum Temperature 140
Maximum Temperature 208
Average Temperature 168
Standard Deviation 14

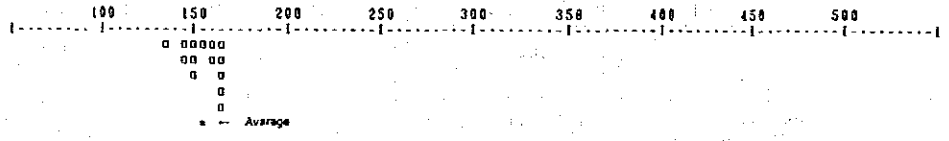
No. 86



No. H83111

Homogenization Temp. 134 145 147 149 149 152 154 161 162 163 163 164 165 166
Number of measuring 14
Minimum Temperature 134
Maximum Temperature 166
Average Temperature 155
Standard Deviation 9

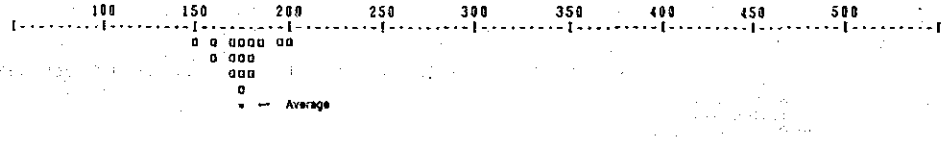
No. 87



No. H83112

Homogenization Temp. 152 159 160 168 169 170 173 174 176 177 178 179 180 184 196 199
Number of measuring 16
Minimum Temperature 152
Maximum Temperature 199
Average Temperature 175
Standard Deviation 12

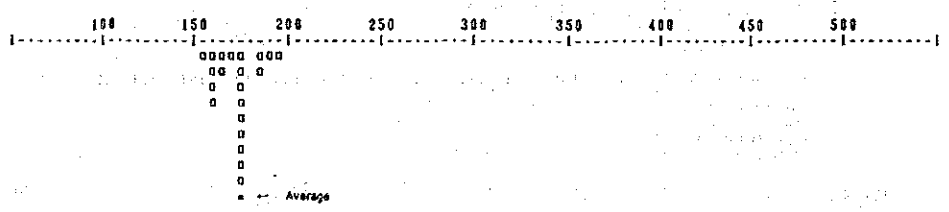
No. 88



No. H83113

Homogenization Temp. 156 158 159 159 160 166 167 170 173 175 175 175 175 176 176 177 177 185 186
Number of measuring 21
Minimum Temperature 156
Maximum Temperature 196
Average Temperature 173
Standard Deviation 10

No. 89

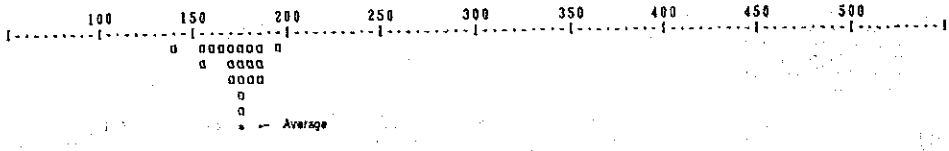


Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions(11)

No. 90

No. H83115

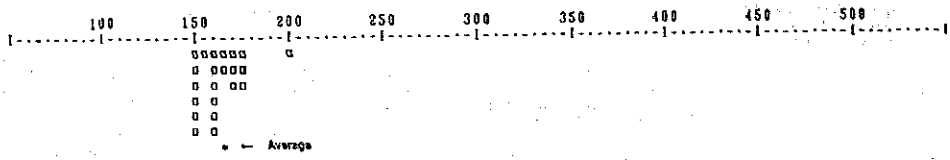
Homogenization Temp. 142 156 156 162 165 169 170 172 174 174 175 176 176 179 180 182 183 186 187
Number of measuring 20
Minimum Temperature 142
Maximum Temperature 195
Average Temperature 173
Standard Deviation 12



No. 91

No. H83116

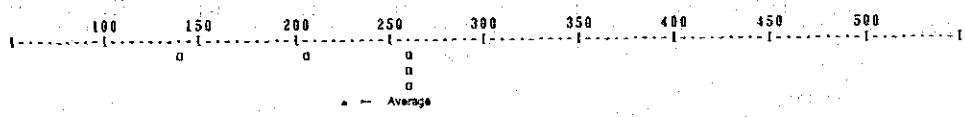
Homogenization Temp. 148 148 149 150 152 152 153 159 160 161 161 162 162 163 165 169 170 171 175
Number of measuring 22
Minimum Temperature 148
Maximum Temperature 198
Average Temperature 163
Standard Deviation 12



No. 92

No. H83102

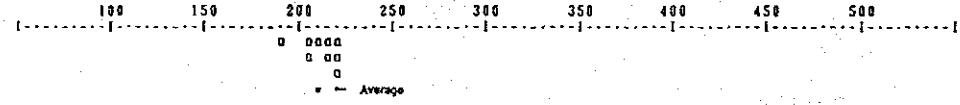
Homogenization Temp. 138 206 260 262 262
Number of measuring 5
Minimum Temperature 138
Maximum Temperature 262
Average Temperature 226
Standard Deviation 49



No. 93

No. H83101

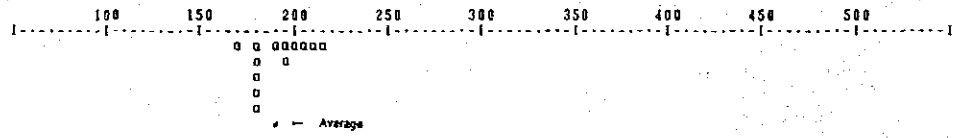
Homogenization Temp. 190 205 205 210 215 217 219 220 221
Number of measuring 9
Minimum Temperature 190
Maximum Temperature 221
Average Temperature 211
Standard Deviation 9



No. 94

No. H83019

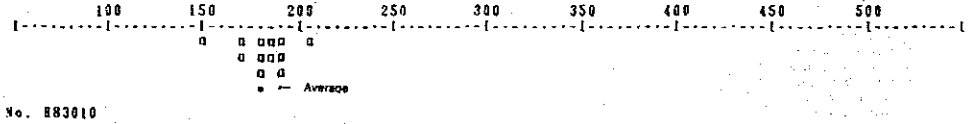
Homogenization Temp. 171 178 178 178 179 179 191 194 197 292 203 212 213
Number of measuring 13
Minimum Temperature 171
Maximum Temperature 213
Average Temperature 190
Standard Deviation 14



No. 95

No. H83014

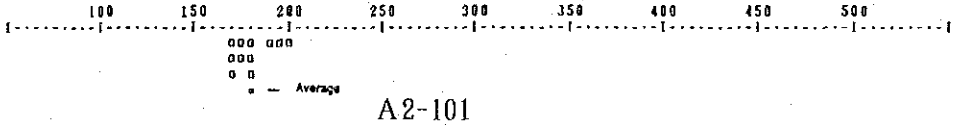
Homogenization Temp. 149 170 172 180 180 182 184 185 188 189 190 204
Number of measuring 12
Minimum Temperature 149
Maximum Temperature 204
Average Temperature 181
Standard Deviation 13



No. 96

No. H83010

Homogenization Temp. 170 172 172 175 177 180 180 182 192 193 202
Number of measuring 11
Minimum Temperature 170
Maximum Temperature 202
Average Temperature 181
Standard Deviation 10

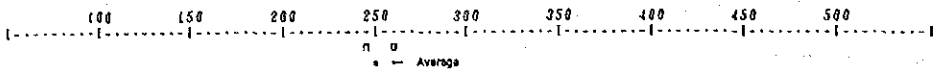


Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (1 2)

No. H83087

Homogenization Temp. 244 258
Number of measuring 2
Minimum Temperature 244
Maximum Temperature 258
Average Temperature 251
Standard Deviation 7

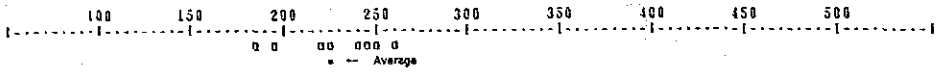
No. 97



No. H83089

Homogenization Temp. 184 196 218 225 242 243 248 258
Number of measuring 8
Minimum Temperature 184
Maximum Temperature 258
Average Temperature 227
Standard Deviation 24

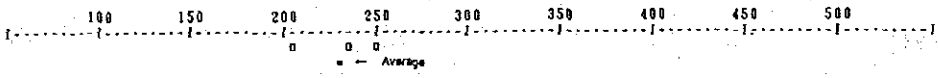
No. 98



No. H83082

Homogenization Temp. 207 235 250
Number of measuring 3
Minimum Temperature 207
Maximum Temperature 250
Average Temperature 231
Standard Deviation 18

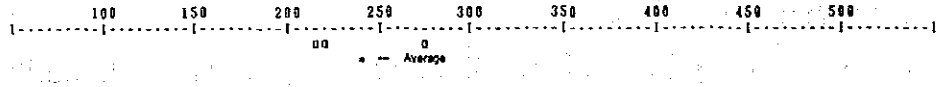
No. 100



No. H82916

Homogenization Temp. 217 222 275
Number of measuring 3
Minimum Temperature 217
Maximum Temperature 275
Average Temperature 238
Standard Deviation 26

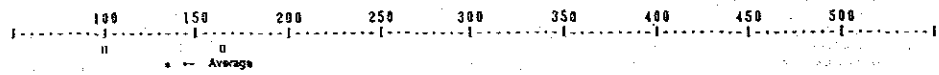
No. 101



No. H82903

Homogenization Temp. 101 166
Number of measuring 2
Minimum Temperature 101
Maximum Temperature 166
Average Temperature 134
Standard Deviation 33

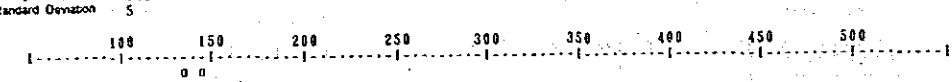
No. 105



No. H82002

Homogenization Temp. 136 146
Number of measuring 2
Minimum Temperature 136
Maximum Temperature 146
Average Temperature 141
Standard Deviation 5

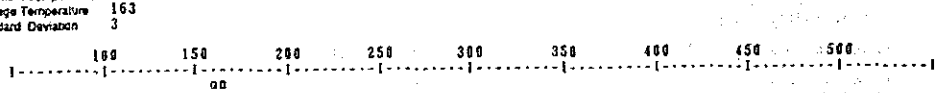
No. 107



No. H82004

Homogenization Temp. 161 162 167
Number of measuring 3
Minimum Temperature 161
Maximum Temperature 167
Average Temperature 163
Standard Deviation 3

No. 109

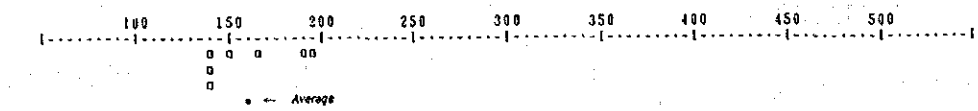


Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (13)

No. H82007

Homogenization Temp. 138 139 141 148 167 191 195
Number of measuring 7
Minimum Temperature 138
Maximum Temperature 195
Average Temperature 160
Standard Deviation 23

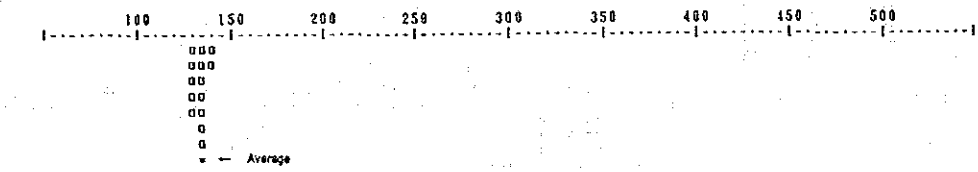
No. 111



No. H82101

Homogenization Temp. 129 129 130 132 132 133 134 135 135 135 135 136 138 140
Number of measuring 14
Minimum Temperature 129
Maximum Temperature 140
Average Temperature 134
Standard Deviation 3

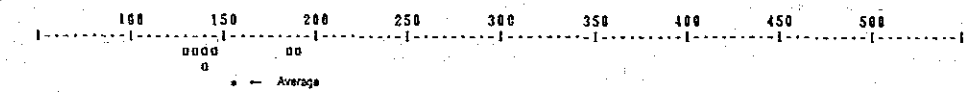
No. 113



No. H82104

Homogenization Temp. 132 136 139 140 143 187 192
Number of measuring 7
Minimum Temperature 132
Maximum Temperature 192
Average Temperature 153
Standard Deviation 24

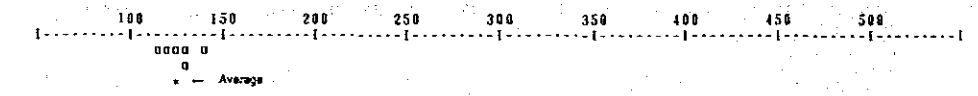
No. 115



No. H82107

Homogenization Temp. 115 119 125 130 132 139
Number of measuring 6
Minimum Temperature 115
Maximum Temperature 139
Average Temperature 127
Standard Deviation 8

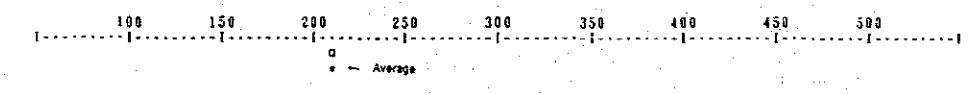
No. 116



No. H82108

Homogenization Temp. 209
Number of measuring 1
Minimum Temperature 209
Maximum Temperature 209
Average Temperature 209
Standard Deviation 0

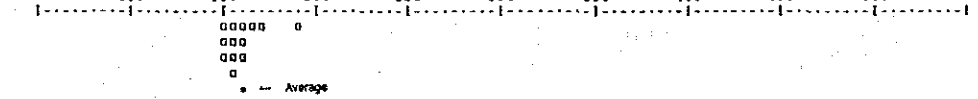
No. 117



No. H82110

Homogenization Temp. 150 152 152 154 156 157 157 160 160 162 165 170 192
Number of measuring 13
Minimum Temperature 150
Maximum Temperature 192
Average Temperature 161
Standard Deviation 11

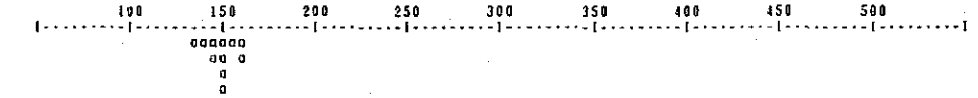
No. 118



No. H82111

Homogenization Temp. 135 139 146 147 148 149 149 150 153 159 161
Number of measuring 11
Minimum Temperature 135
Maximum Temperature 161
Average Temperature 149
Standard Deviation 7

No. 119

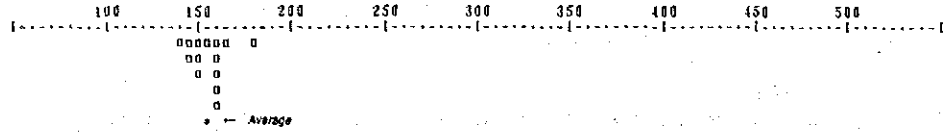


Appendix 2-12 Histogram of Homogenization Temperature of Fluid Inclusions (14)

No. H82406

Homogenization Temp.	142	144	145	149	150	152	155	159	160	150	161	162	167	179
Number of measuring	14													
Minimum Temperature	142													
Maximum Temperature	179													
Average Temperature	156													
Standard Deviation	10													

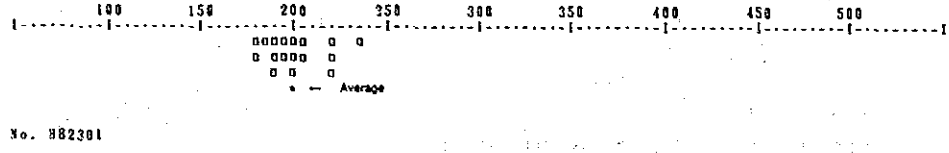
No. 121



No. H82411

Homogenization Temp.	180	182	185	190	191	192	195	197	199	200	201	205	206	219	220	222	237
Number of measuring	17																
Minimum Temperature	180																
Maximum Temperature	237																
Average Temperature	201																
Standard Deviation	15																

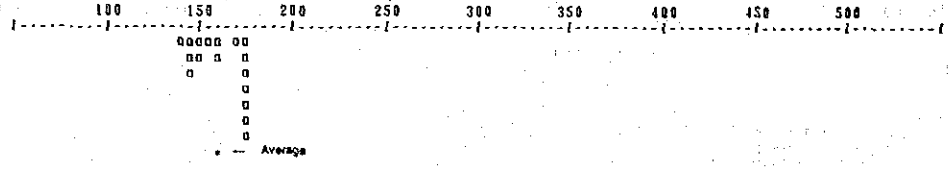
No. 123



No. H82301

Homogenization Temp.	140	144	144	147	149	151	157	159	160	172	174	174	175	175	175	176	177
Number of measuring	17																
Minimum Temperature	140																
Maximum Temperature	177																
Average Temperature	162																
Standard Deviation	13																

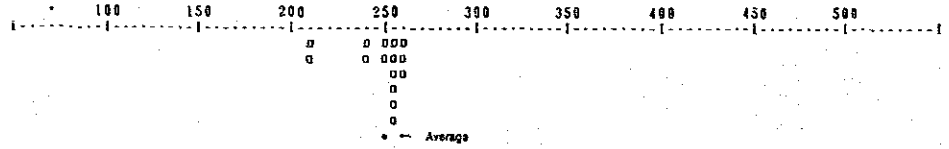
No. 124



No. H82304

Homogenization Temp.	210	212	239	241	250	252	254	254	255	256	256	257	258	260	260
Number of measuring	15														
Minimum Temperature	210														
Maximum Temperature	260														
Average Temperature	248														
Standard Deviation	16														

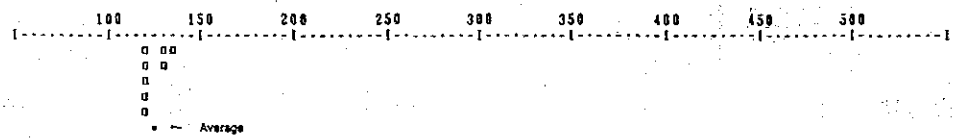
No. 126



No. H82205

Homogenization Temp.	119	119	120	120	121	130	132	133
Number of measuring	8							
Minimum Temperature	119							
Maximum Temperature	133							
Average Temperature	124							
Standard Deviation	6							

No. 128



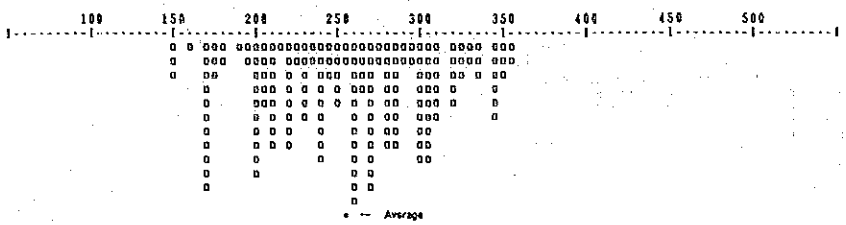
Appendix 2-12 Histogram of Homogenization Temperature or Fluid Inclusions(15)

Olon Ovoot deposit total

Homogenization Temp.

148	150	152	162	168	169	169	169	171	171	172	172	172	172	172	173	174	175	178	181	189	195	197		
199	199	199	200	201	201	201	202	202	203	204	204	205	205	210	210	211	211	211	212	212	212	217	218	218	218
220	220	221	222	222	223	226	228	230	230	232	232	232	234	234	238	238	239	240	240	240	240	241	242	245	245	245
248	248	251	252	252	254	255	258	259	260	260	260	260	261	261	261	261	262	262	265	265	266	267	268	268	269	269
270	270	271	271	271	272	272	273	277	278	278	279	280	280	281	281	282	283	284	284	284	285	286	286	287	288	289
293	296	298	298	299	300	300	301	302	302	302	303	303	304	304	305	305	306	307	307	308	310	310	310	311	312	318
318	320	321	322	325	326	327	328	329	333	335	337	343	345	345	346	347	347	350	351	352	354	356				

Number of measuring 181
Minimum Temperature 148
Maximum Temperature 356
Average Temperature 256
Standard Deviation 52

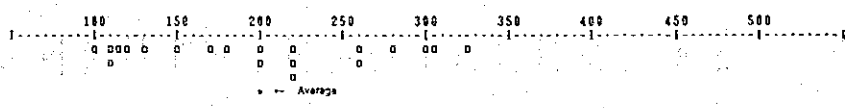


North Olon Ovoot total

Homogenization Temp.

102	111	112	117	121	128	151	172	179	199	201	218	219	221	258	262	280	298	305	323

Number of measuring 28
Minimum Temperature 102
Maximum Temperature 323
Average Temperature 199
Standard Deviation 70

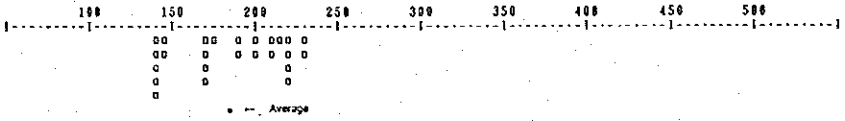


Horimt Hodag total

Homogenization Temp.

138	139	139	141	142	143	145	169	170	170	171	175	189	189	199	201	209	212	217	220	220	221	222	
231	232																						

Number of measuring 25
Minimum Temperature 138
Maximum Temperature 232
Average Temperature 184
Standard Deviation 33

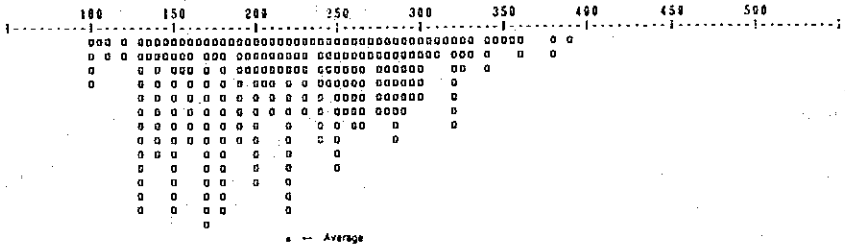


Tsagaan Uula arae total

Homogenization Temp.

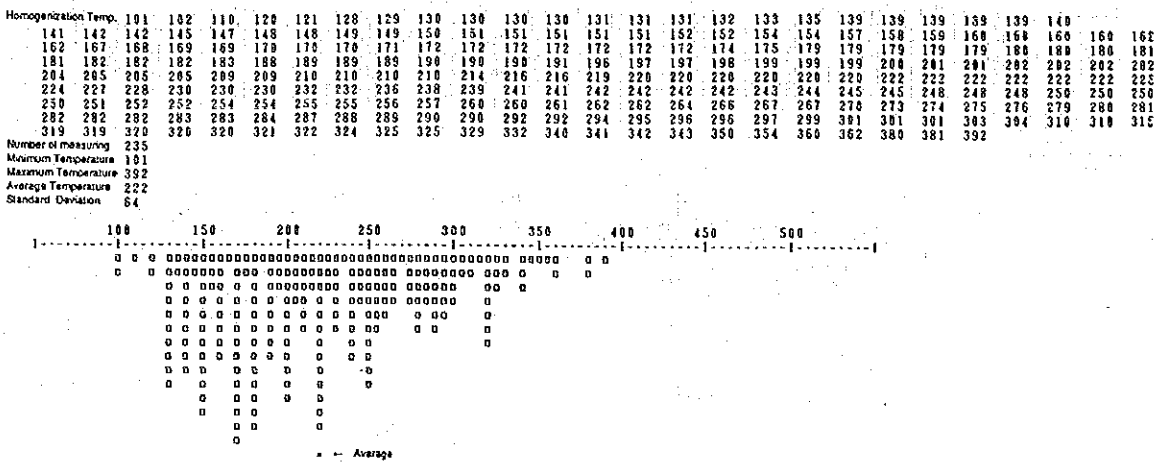
98	99	101	102	106	110	110	120	121	128	129	129	130	130	130	130	131	131	131	131	131	132	133	135		
139	139	139	139	139	140	141	142	142	145	147	148	148	149	149	150	150	151	151	151	151	151	152	152	154	154	157
158	159	160	160	160	160	162	162	167	168	169	169	170	170	170	171	172	172	172	172	172	172	172	174	175	179	179
179	179	179	180	180	180	181	181	182	182	182	183	188	189	189	189	190	190	190	191	196	197	197	198	199	199	199
200	201	201	202	202	202	202	204	205	205	205	209	209	210	210	210	210	214	216	216	219	220	220	220	220	220	220
222	222	222	222	222	222	223	224	227	228	230	230	230	232	232	236	238	239	241	241	242	242	242	242	243	244	245
245	248	248	248	250	250	250	256	251	252	252	254	254	255	255	256	257	259	260	260	261	262	262	262	264	264	265
266	267	267	267	268	270	273	274	274	275	276	277	279	280	281	282	282	282	283	283	283	284	284	285	287	287	288
289	298	298	292	292	294	295	295	296	297	298	299	301	301	301	303	304	310	310	315	319	319	320	320	320	321	322
324	325	325	329	332	340	341	342	343	350	354	360	362	380	381	392											

Number of measuring 256
Minimum Temperature 98
Maximum Temperature 392
Average Temperature 221
Standard Deviation 65

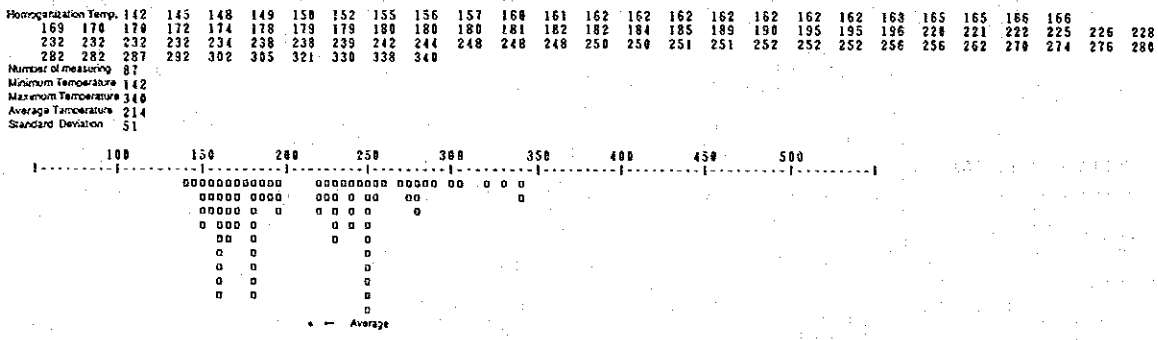


Appendix 2-12 Histogram of Homogenization Temperature or Fluid Inclusions(16)

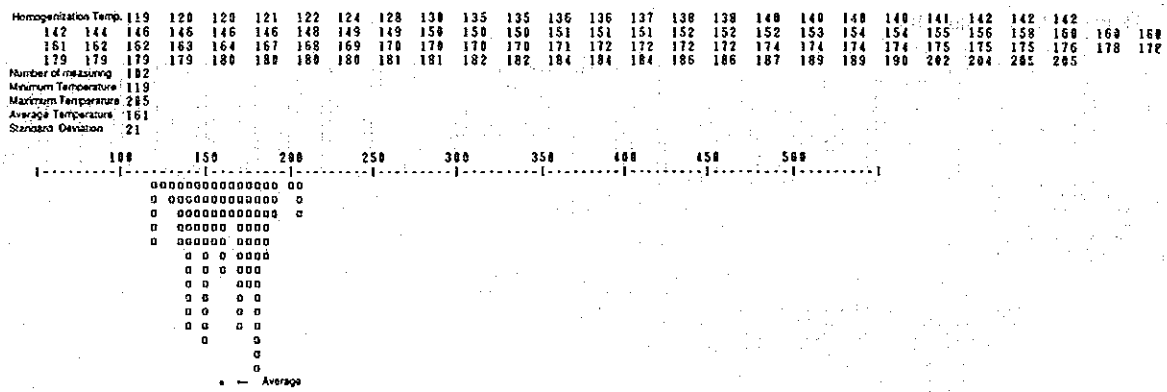
Dugshih area total



Onh area total



Soirig area total

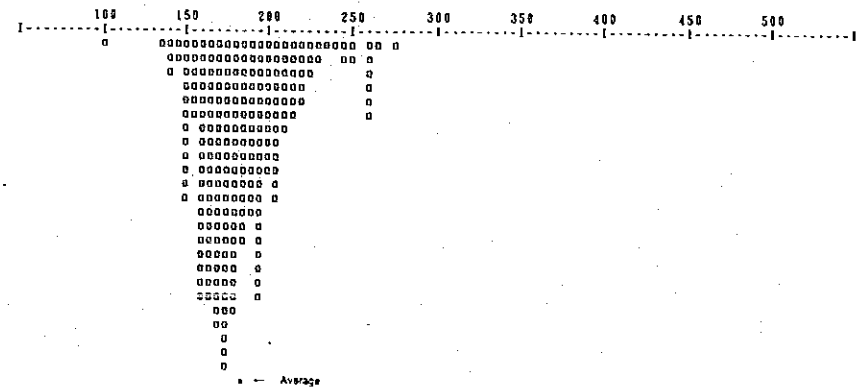


Appendix 2-12 Histogram of Homogenization Temperature or Fluid Inclusions(17)

North Harmagtai area total

Homogenization Temp.	101	134	138	140	142	145	147	148	148	149	149	149	149	149	150	152	152	152	152	153	154	156	156	
156	157	158	158	159	159	159	159	160	160	160	160	161	161	161	161	162	162	162	162	162	163	163	163	163	164	164
164	165	165	165	165	165	166	166	166	166	167	167	167	168	168	169	169	169	170	170	170	170	170	170	170	170	170
171	171	171	172	172	172	172	173	173	174	174	174	175	175	175	175	175	175	175	175	175	176	176	176	176	176	177
177	177	177	177	178	178	178	178	179	179	179	179	179	180	180	180	180	180	180	180	182	182	182	182	183	184	184
184	184	185	185	185	186	186	186	186	187	187	187	188	188	188	189	189	190	190	191	191	192	192	192	192	193	193
193	194	194	194	194	195	195	195	195	195	195	196	196	196	196	196	197	198	199	199	200	200	200	201	202	202	202
203	203	203	203	204	205	205	205	205	205	206	207	209	209	210	211	211	212	212	213	215	215	216	217	217	218	219
220	221	222	223	225	227	229	229	235	242	243	244	248	250	258	258	260	262	262	262	263	275					

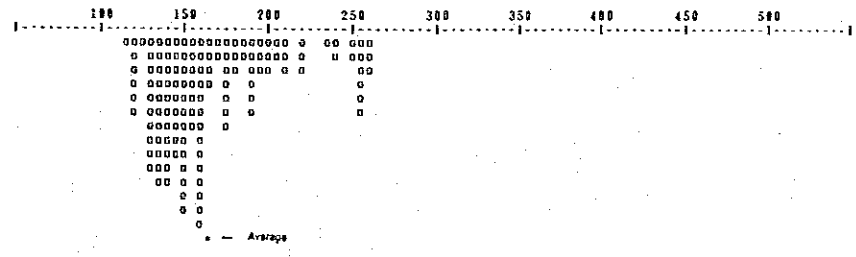
Number of measuring 234
Minimum Temperature 101
Maximum Temperature 275
Average Temperature 185
Standard Deviation 27



Sologoi area total

Homogenization Temp.	115	119	119	119	120	120	121	125	129	129	130	130	130	132	132	132	132	132	133	133	134	135	135	
135	135	135	136	136	136	138	138	139	139	139	139	140	140	140	141	142	143	144	144	144	145	146	146	147	147	148
148	149	149	149	149	158	150	150	151	152	152	152	153	154	155	156	157	157	157	159	159	159	160	160	160	160	160
161	161	161	162	162	162	165	167	167	167	170	172	174	174	175	175	175	176	177	179	180	182	185	187	190	191	191
192	192	192	195	195	197	199	200	201	205	206	209	210	212	219	220	222	237	239	241	250	252	254	254	255	256	256
257	258	260	260																							

Number of measuring 135
Minimum Temperature 115
Maximum Temperature 260
Average Temperature 167
Standard Deviation 38



3. Microscopic Observations and Photomicrographs (Thin Section)

ABBREVIATION

Act : Actinolite
Apt : Apatite
Au : Augite
Bt : Biotite
(Bt) : Pseudomorph after biotite
Cal : Calcite
Cb : Carbonate
Chl : Chlorite
Cly : Clay mineral
Cv : Cavity
Ep : Epidote
Frg : Fragment
Gls : Glass
Go : Goethite
Hb : Hornblende
(Hb) : Pseudomorph after hornblende
Kae : Kaersutite
Kf : K-feldspar
Mf : Mafic mineral
Ms : Muscovite
Ne : Nepheline
(Ol) : Pseudomorph after olivine
Opq : Opaque mineral
Ph : Phlogopite
Pl : Plagioclase
Qz : Quartz
Sph : Sphene
Tor : Tourmaline
Zeo : Zeolite

(1)
Sample No. : A80901
Locality : Dugshih
Rock name : Rhyolite welded(?) tuff
Observation note :
This specimen is pinkish gray, altered rhyolite welded(?) tuff, with phenocrysts of plagioclase(andesine), quartz and biotite and with altered rock fragments(mainly mudstone). Matrix shows an indistinct micro-eutaxitic foliation, and is made up of flattened glass shards which are perfectly devitrified into minute crystals of quartz and plagioclase. Plagioclase phenocryst is mostly altered to sericite.

(2)
Sample No. : DH80704
Locality : Dugshih
Rock name : Meta-gabbro
observation note :
This specimen is dark greenish grey, medium-grained meta-gabbro, showing an ophitic texture. It consists principally of plagioclase(labradorite-andesine), hornblende and opaque mineral. Plagioclase occurs as euhedral prismatic crystals 0.5-1mm in length. Hornblende occurs as anhedral intersertal crystals, about 0.5mm in length, and is partly changed into fibrous actinolite and scaly biotite. Epidote, carbonate minerals and sphene are observed as secondary minerals.

(3)
Sample No. : TH80703
Locality : Dugshih
Rock name : Rhyolite
Observation note :
This specimen is light grey , aphyric rhyolite with sandstone fragments(0.5-0.8mm diameter) and a small amount of phenocryst. Phenocryst minerals mostly smaller than 0.3mm, are mainly of biotite and altered other mafic minerals. Biotite is commonly altered to sericite or is replaced by carbonate minerals. Groundmass consists of fine-grained quartz, and of sericite as secondary minerals.

(4)
Sample No. : A82801
Locality : North Harmagtai
Rock name : Meta-gabbro
Observation note :
This specimen is greenish grey, fine-grained meta-gabbro. It consists principally of plagioclase, hornblende(pseodomorph) and epidote and subordinately of actinolite, sphene and quartz. Plagioclase occurs as subhedral to anhedral crystals, up to 0.1mm across. Hornblende occurs as euhedral to subhedral crystals, about 0.1mm across, and is wholly changed to actinolite. Large amount of epidote, 0.1-0.2mm across, and sphene occur as secondary minerals. Quartz and carbonate mineral veinlet are recognized.

(5)
Sample No. : A82901
Locality : North Harmagtai
Rock name : Mafic schist
Observation notes :
This specimen is greenish grey, mafic schist which has probably been derived from basic tuff. It consists principally of, actinolite plagioclase(oligoclase-albite) and quartz. Actinolite is subhedral,

probably changed from hornmblende(?). Plagioclase is subhedral to anhedral, interstitial between actinolite crystals. Quartz is anhedral interstitial between actinolite and plagioclase crystals, and often broken into subgrains. A small amount of opaque mineral(ilmenite?) occurs, and is partly altered to leucoxene. Quartz and goethite veinlet are recognized.

(6)
Sample No. : A81101
Locality : Olon Ovoot
Rock name : Altered basalt
Observation note :

This specimen is dark grey altered basalt with phenocrysts of plagioclase(andesine), olivine(pseudomorph) and apatite, showing an intersertal texture. Plagioclase phenocryst is prismatic, up to 0,2mm in length, and has glass inclusions. Olivine phenocryst is euhedral, up to 0.1mm in length, and is wholly altered to iddingsite and clay minerals. Apatite phenocryst is euhedral, up to 0.1mm in length. Groundmass consists principally of lath-sharped plagioclase, glass and crystallite, and subordinately of opaque minerals.

(7)
Sample No. : H81011
Locality : Onh
Rock name : Granite
Observation note :

This specimen is pale yellowish grey, medium-grained granite. It consists of quartz, K-feldspar(perthite), plagioclase(oligoclase), biotite and a small amount of opaque minerals, zircon and apatite. Quartz occurs as anhedral crystals, 0.1-1mm across. K-feldspar occurs as anhedral crystals, 0.1-2mm across, partly with indistinct microcline texture. Quartz and K-feldspar partly show micrographic texture. Plagioclase occurs as subhedral to anhedral crystals, up to 0.1mm across, associated with quartz and K-feldspar. Both K-feldspar and plagioclase are partly replaced by sericite crystals.

(8)
Sample No. : A81802
Locality : Soirig
Rock name : Granite porphyry
Observation note :

This specimen is greyish white, medium-grained, granite porphyry with phenocrysts of quartz, plagioclase, K-feldspar, biotite and hornblende. Quartz phenocryst is up to 2mm across, and is often embayed by groundmass. Plagioclase phenocryst is up to 2mm across. K-feldspar phenocryst is anhedral, up to 2mm across, often showing a microcline texture. Both plagioclase and K-feldspar are partly altered to sericite. Hornblende phenocryst is up to 0.5mm in length, showing a distinct cleavage, and partly replaced by sericite. Biotite phenocryst is up to 0.3mm across, commonly destroyed, and partly changed into chlorite. Groundmass consists principally of quartz and K-feldspar and subordinately of plagioclase and biotite.

(9)
Sample No. : A81701
Locality : Soirig
Rock name : Granite
Observation note :

This specimen is brownish grey, medium-grained granite. It consists of

quartz, plagioclase(oligoclase), K-feldspar(orthoclase-perthite), biotite, hornblende and a small amount of opaque minerals, sphene, zircon, apatite and epidote. Quartz occurs as anhedral, up to 2mm across, and is changed into subgrains which show sutured texture. Plagioclase occurs as euhedral to subhedral short prismatic crystals, up to 1.5mm in length. K-feldspar occurs as anhedral interstitial crystals with up to 2mm across between plagioclase and quartz crystals. Both plagioclase and K-feldspar are commonly replaced by anhedral sericite crystals. Biotite occurs as subhedral, up to 0.5mm in length, and is commonly altered to chlorite. Hornblende occurs as euhedral, up to 0.3mm in length.

(10)
Sample No. : A81804
Locality : Soirig
Rock name : Rhyolite
Observation note :
This specimen is purplish dark grey rhyolite with phenocrysts of plagioclase (oligoclase) and quartz. Plagioclase phenocryst is clouded by dusty materials, up to 1mm in length. Quartz phenocryst is up to 0.5mm in length and embayed by groundmass. Groundmass, showing microcrystalline to cryptocrystalline texture, consists of plagioclase, quartz, biotite and a small amount of opaque mineral, sphene, zircon and apatite. Biotite mostly is replaced by sericite.

(11)
Sample No. : A81901
Locality : Sologoi
Rock name : Granophyre
Observation note :
This specimen is light grey granophyre with a small amount of K-feldspar (orthoclase-perthite) and plagioclase phenocrysts. K-feldspar phenocryst is euhedral to subhedral short prismatic crystals, up to 0.8mm in length, sometimes showing a Carlsbad twinning. Groundmass, mostly smaller than 0.1mm, consists principally of K-feldspar and quartz, conspicuously a micrographic intergrowth, and subordinately of biotite and plagioclase. Biotite is partly altered to chlorite.

(12)
Sample No. : A82301
Locality : Sologoi
Rock name : Nepheline dolerite
Observation note :
This specimen is dark grey nepheline dolerite, with plagioclase phenocrysts. Plagioclase(labradorite) phenocryst is euhedral prismatic crystal, 0.5-1mm in length. Groundmass shows an intersertal texture and consists principally of nepheline, glass and opaque minerals and subordinately of biotite and amphibole. Nepheline is anhedral crystal up to 0.5mm across, and commonly replaced by carbonate minerals. Biotite is subhedral crystal up to 0.3mm across, and considerably is altered to chlorite. Amphibole is euhedral to subhedral crystal up to 0.3mm across, and wholly changed into opacite.

(13)
Sample No. : A82302
Locality : Sologoi
Rock name : Granite
Observation note :
This specimen is greyish white, medium-grained granite with a

cataclastic deformation. It consists of K-feldspar(orthoclase-microperthite), quartz, plagioclase(oligoclase), muscovite, tourmaline and a small amount of opaque mineral and apatite. Quartz occurs as anhedral crystals, up to 0.5mm across, and is changed into subgrains which show sutured texture. K-feldspar occurs as anhedral crystals, up to 0.5mm across. Plagioclase occurs as subhedral to anhedral crystals, up to 0.3mm across, and is commonly altered to sericite. Muscovite occurs as euhedral to subhedral crystals, up to 0.5mm in length. Tourmaline occurs as short prismatic euhedral crystals, 0.3-0.8mm in length.

(14)
Sample No. : A90101
Locality : Tahilga Uula
Rock name : Dacite
Observation note :

This specimen is grey dacite with phenocrysts of corroded quartz, plagioclase, biotite and apatite. Quartz phenocryst is up to 5mm in length. Plagioclase phenocryst is up to 0.8mm in length. Biotite phenocryst is up to 0.3mm in length. Apatite phenocryst is up to 0.5mm in length. Groundmass, showing cryptocrystalline texture, consists of quartz, plagioclase, apatite and a small amount of opaque mineral and zircon. Sericite is observed as secondary minerals.

(15)
Sample No. : A90103
Locality : Tahilga Uula
Rock name : Diorite
Observation note :

This specimen is grey, medium-grained diorite, showing a holocrystalline texture. It consists principally of plagioclase and hornblende(or kaersutite) and subordinately quartz, biotite(pseudomorph), sphene, epidote, chlorite and actinolite. Plagioclase occurs as euhedral prismatic clouded crystals, o.2-0.5mm in length. Hornblende occurs as anhedral crystals , interstitial between plagioclase crystals, 0.3-0.5mm across and partly changed into actinolite or epidote. Biotite occurs as subhedral crystals, up to 0.2mm, and is wholly replaced by chlorite.

(16)
Sample No. : A90104
Locality : Tahilga Uula
Rock name : Granite
Observation note :

This specimen is pinkish white, coarse-grained granite with a cataclastic deformation. It consists of quartz, plagioclase(oligoclase), K-feldspar(orthoclase-perthite), biotite and a small amount of muscovite(?), opaque mineral, zircon and apatite. Quartz occurs as anhedral, up to 8mm across, and is changed into subgrains which show sutured texture. Plagioclase occurs as euhedral to subhedral short prismatic crystals, up to 2mm in length. K-feldspar occurs as anhedral interstitial crystals with up to 5mm across between quartz and plagioclase crystals. Both plagioclase and K-feldspar are commonly replaced by sericite crystals. Biotite occurs as subhedral, up to 0.5mm in length, and is partly altered to chlorite.

(17)
Sample No. : A81501
Locality : Tsagaan Uula
Rock name : Andesite
Observation note :

This specimen is brownish grey andesite with phenocrysts of plagioclase, augite, olivine(pseudomorph) and apatite. Plagioclase phenocryst is prismatic, up to 3mm in length. Augite phenocryst is short prismatic, up to 1mm in length, and embayed by groundmass. Olivine phenocryst is euhedral, up to 0.5mm in length, and is wholly altered to iddingsite. Apatite phenocryst is euhedral up to 0.5mm in length. Groundmass, showing a hyalopilitic texture, consists principally of lath-shaped plagioclase, glass and crystallite and subordinately of apatite, augite and opaque mineral. Carbonate mineral, goethite and quartz veinlets are recognized.

(18)
Sample No. : A81502
Locality : Tsagaan Uula
Rock name : Meta-gabbro
Observation note :
This specimen is dark greenish grey, medium-grained meta-gabbro, showing an ophitic texture. It consists principally of plagioclase(labradorite) and hornblende and subordinately augite. Plagioclase occurs as euhedral prismatic crystals, 0.5-1mm in length. Hornblende occurs as anhedral crystals, up to 0.5mm across, and is partly changed into actinolite and scaly biotite. Sphene is observed as secondary mineral.

(19)
Sample No. : A82503
Locality : Undur Uda
Rock name : Tonalite
Observation note :
This specimen is greenish white, medium-grained gneissose tonalite. It consists of quartz, plagioclase and muscovite with accessory biotite, zircon, apatite and opaque mineral. Quartz is anhedral crystal, up to 1.5mm across. Plagioclase is primary subhedral crystal, up to 2.5mm in length, but it is considerably distorted and deformed. Muscovite is euhedral to subhedral crystal, up to 0.8mm in length. Biotite is subhedral crystal, up to 0.5mm in length and commonly altered to chlorite.

(20)
Sample No. : A82504
Locality : Undur Uda
Rock name : Porphyrite
Observation note :
This specimen is light grey porphyrite. It consists principally of plagioclase and subordinately of quartz and apatite. Plagioclase occurs as euhedral to subhedral, up to 1mm in length, and partly shows porphyritic and spheluritic texture. Quartz occurs as subhedral to anhedral, 0.1-0.2mm across. Apatite occurs as euhedral to subhedral, up to 0.1mm in length.

(21)
Sample No. : OH70503
Locality : Olon Ovoot
Rock name : Nepheline basalt
Observation note :
This specimen is greenish grey nepheline basalt with olivine(pseudomorph), augite(Ti-augite) and nephline phenocrysts. Olivine phenocryst is up to 0.5mm in length, and is wholly changed into iddingsite and clay mineral. Augite phenocryst is up to 0.2mm in length. Nepheline phenocryst is up to 0.2mm in length. Groundmass consists principally of

augite and subordinately of phlogopite. Large amount of zeolite are recognized as secondary mineral(?).

(22)
Sample No. : OS62403
Locality : Olon Ovoot
Rock name : Meta-gabbro
Observation note :
This specimen is dark greenish grey, medium-grained meta-gabbro, showing hollocrystalline texture. It consists principally of plagioclase(labradorite-andesine), hornblende and opaque mineral. Plagioclase occurs as subhedral to anhedral crystals, up to 1mm across. Hornblende occurs as anhedral crystals, up to 1mm across, and is partly replaced by actinolite. A small amount of opaque mineral(ilmenite?) occurs, and is partly altered to leucoxene. Large amount of epidote ,0.1-0.3mm across, occurs as secondary minerals.

(23)
Sample No. : OA62904
Locality : Olon Ovoot
Rock name : Fine-sandstone
Observation note :
This specimen is greenish grey fine-sandstone. It consists principally of quartz and a small amount of muscovite and opaque mineral. These grains are poorly sorted and subrounded. Fine-sandstone is undergone chlorite and sericite alteration.

(24)
Sample No. : 0124750
Locality : Olon Ovoot
Rock name : Quartz gabbro
Observation note :
This specimen is greenish grey quartz gabbro, showing a hollocrystalline texture. It consists principally of plagioclase and hornblende and subordinately of quartz and opaque mineral. Plagioclase occurs as subhedral crystals, up to 0.8mm in length. Hornblende occurs as anhedral crystals, up to 1mm across, and is partly changed into fibrous actinolite. Quartz occurs anhedral crystals, up to 0.5mm across. Opaque mineral occurs as euhedral to subhedral, up to 0.3mm in length. Large amount of epidote, up to 0.3mm across, occurs as secondary mineral.

(25)
Sample No. : OH70504
Locality : Olon Ovoot
Rock name : Nepheline basalt
Observation note :
This specimen is grey nepheline basalt with augite, apatite, opaque mineral, biotite and phlogopite phenocrysts. Augite phenocryst is up to 2mm in length, and is embayed by groundmass. Apatite phenocryst is up to 0.8mm in length. Biotite phenocryst is up to 0.2mm in length, and is commonly surrounded by phlogopite. Phlogopite phenocryst is up to 0.2mm across. Groundmass consists of nepheline, K-feldspar and augite, mostly smaller than 0.05mm. Large amount of epidote, up to 0.06mm across, occurs as secondary mineral.

(26)
Sample No. : OS70403
Locality : Olon Ovoot

Rock name : Meta-quartz diolite
Observation note :

This specimen is greenish grey, fine-grained meta-quartz diolite. It consists of quartz, plagioclase, opaque mineral and K-feldspar. Quartz occurs as anhedral, up to 0.3mm across. Plagioclase occurs as subhedral, up to 0.5mm in length. K-feldspar occurs as anhedral, up to 0.3mm across. Quartz occurs as anhedral, up to 0.3mm across. Large amount of chlorite and epidote occurs as secondary mineral interstitially among plagioclase, K-feldspar and quartz crystals.

(27)
Sample No. : 0044300
Locality : Olon Ovoot
Rock name : Tourmaline rock
Observation note :

This specimen is greenish brown tourmaline rock. It consists principally of tourmaline and subordinately of quartz, plagioclase and K-feldspar. Tourmaline occurs as euhedral acicular crystal aggregate. Plagioclase occurs as subhedral to anhedral crystals, up to 0.4mm across. K-feldspar occurs as anhedral crystals, up to 0.5 across. Quartz occurs as anhedral crystals, up to 0.3mm across. This rock is injected by goethite, quartz and carbonate veinlets.

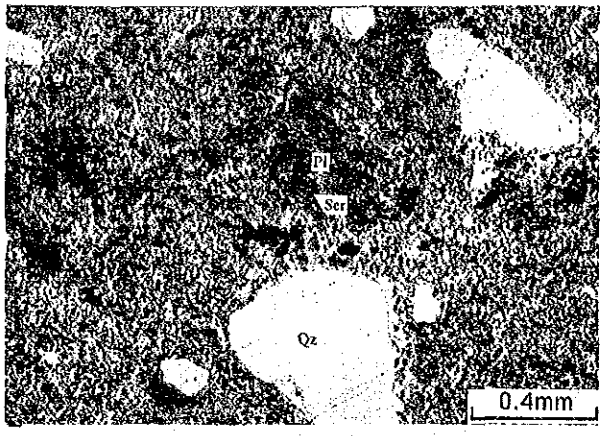
(28)
Sample No. : 0290675
Locality : Olon Ovoot
Rock name : Meta-tonalite
Observation note :

This specimen is greyish brown, medium-grained meta-tonalite. It consists principally of plagioclase, quartz and opaque mineral. Plagioclase occurs as euhedral to subhedral crystals, up to 0.8mm in length. Quartz occurs as anhedral crystals, up to 0.5mm across, interstitially between plagioclase crystals or embays plagioclase crystals. This rock is injected many goethite veinlets.

Plane polarized light

Crossed polarized light

(1)



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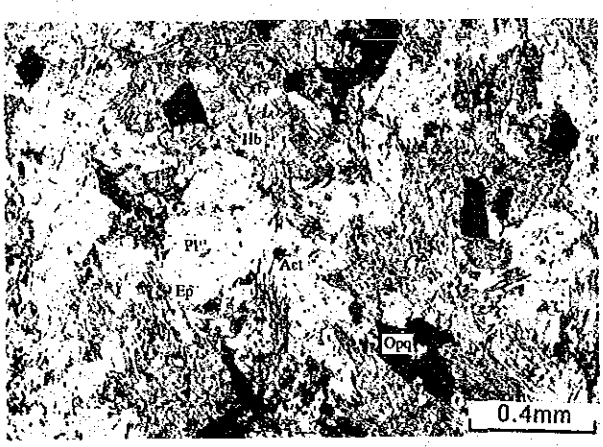

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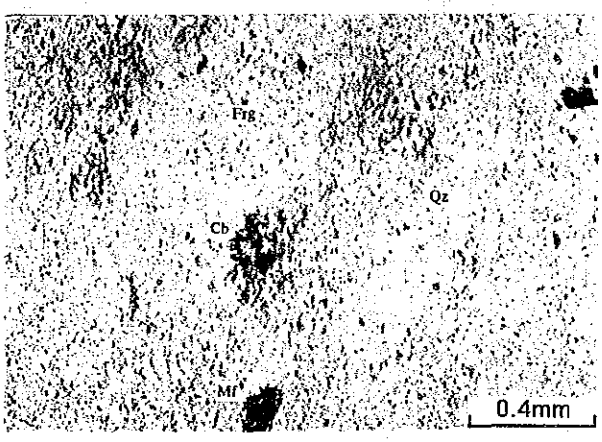

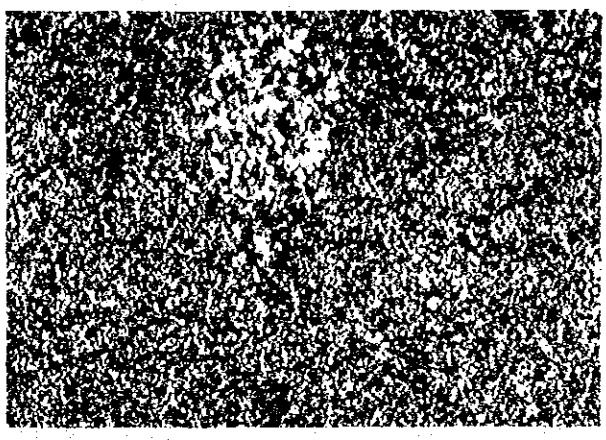

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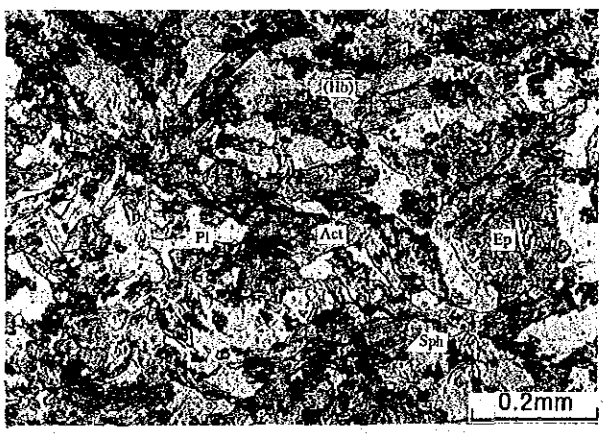
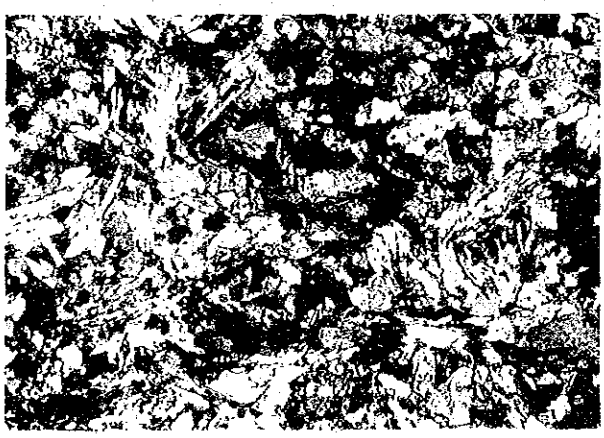
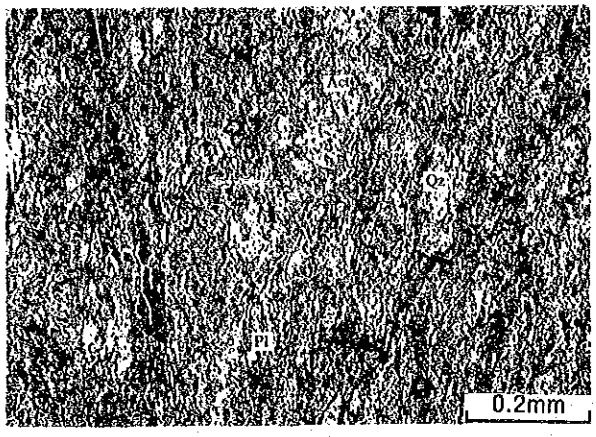


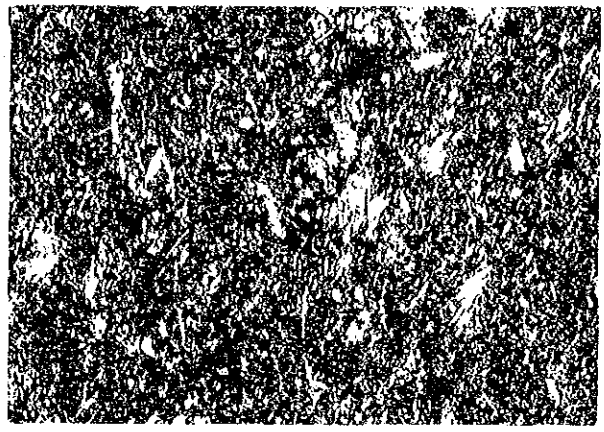


Plane polarized light

Crossed polarized light

(5)





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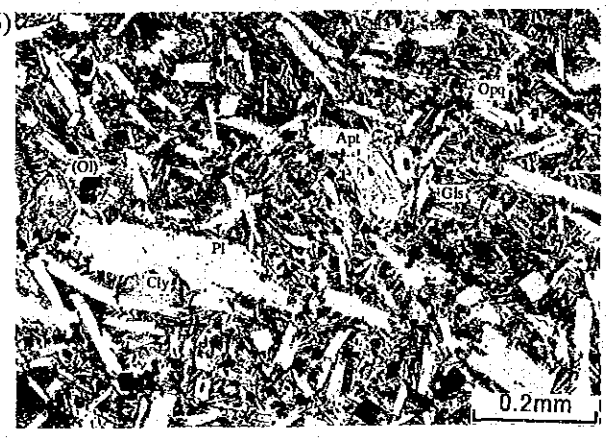

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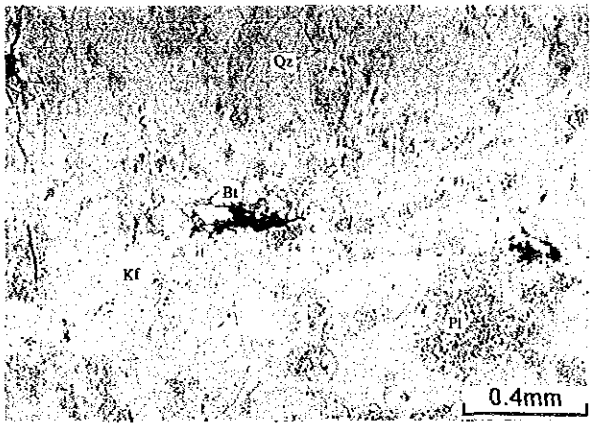

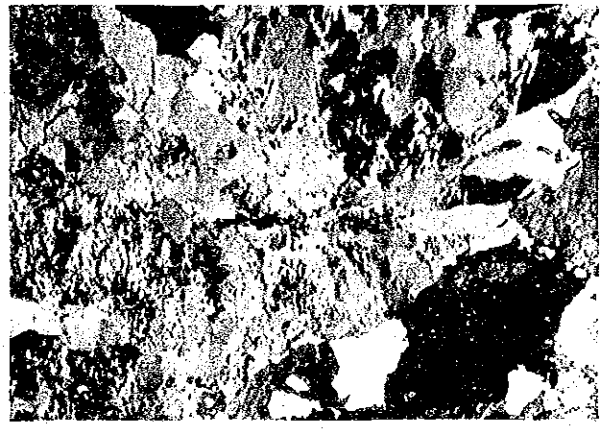

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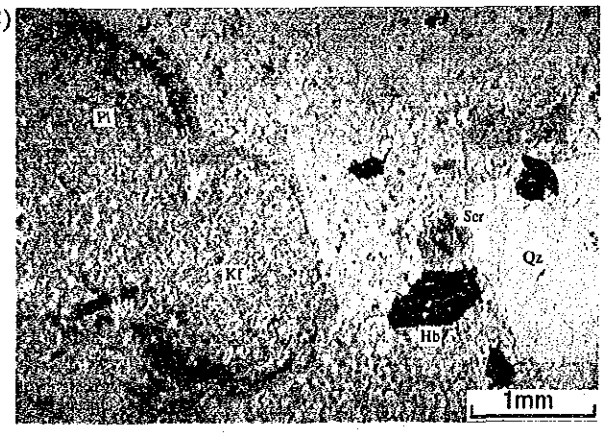
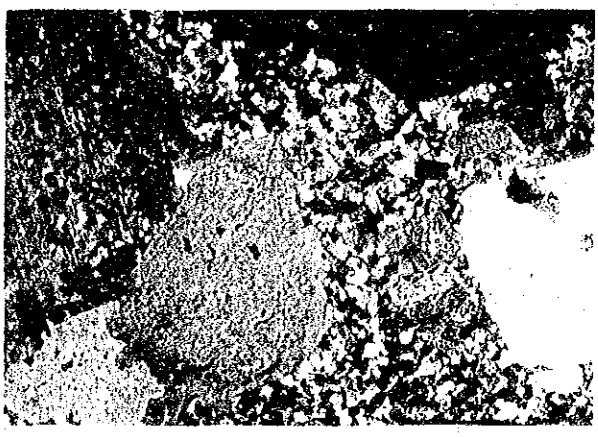
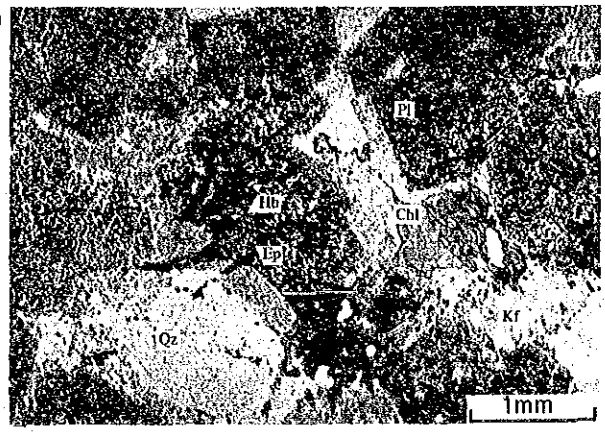




Plane polarized light

Crossed polarized light

(9)



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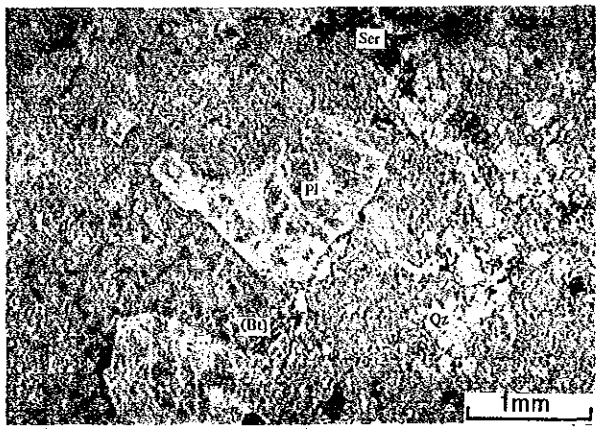

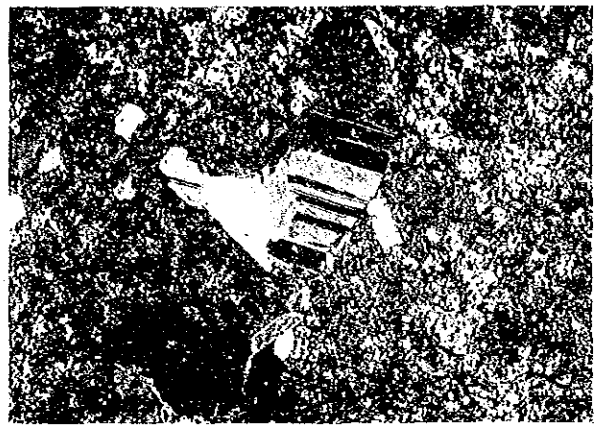

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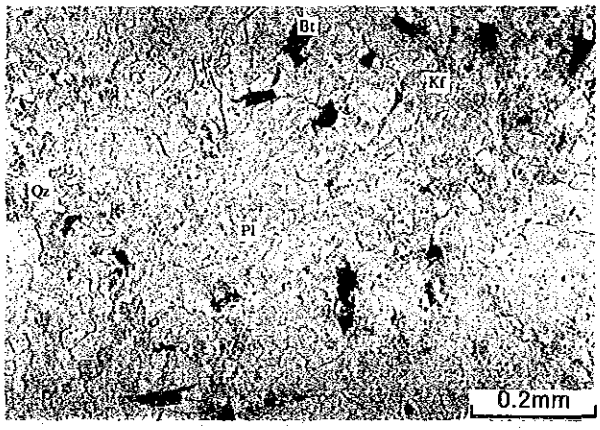

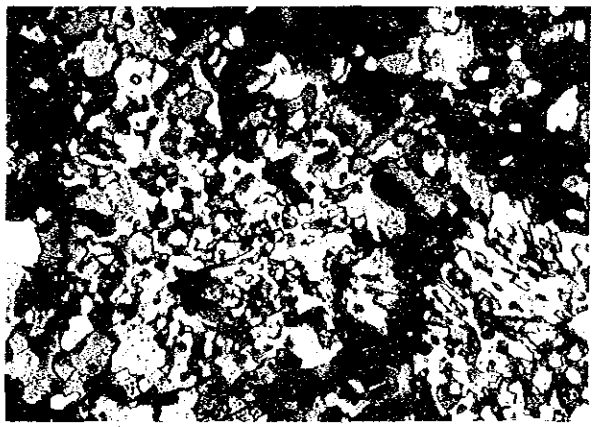

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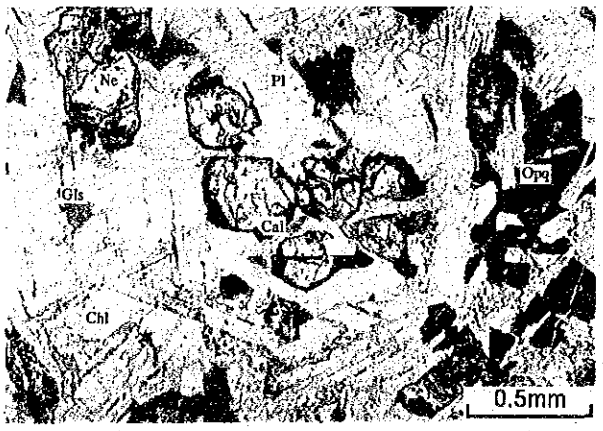

Plane polarized light

Crossed polarized light

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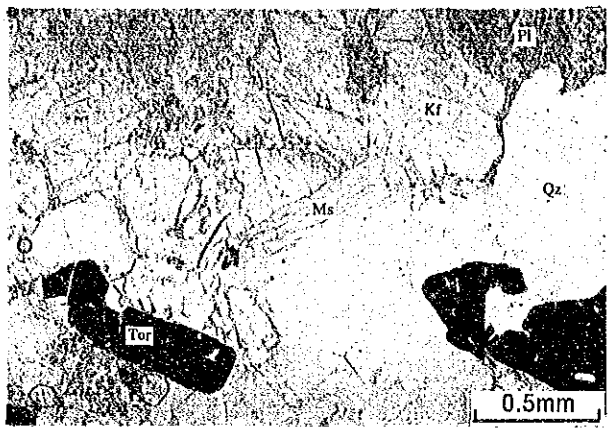

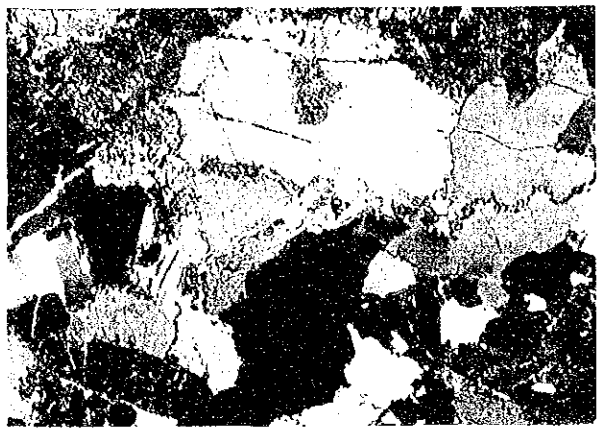

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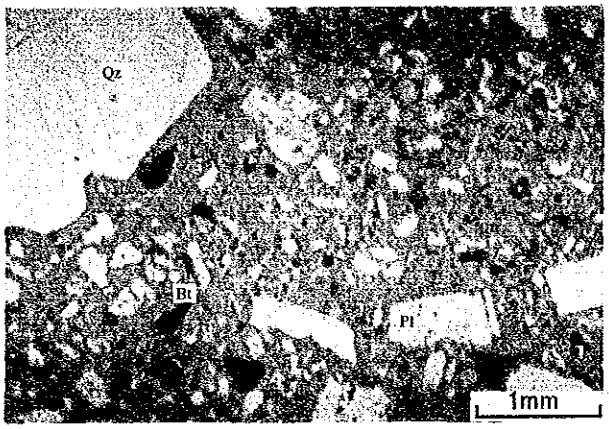

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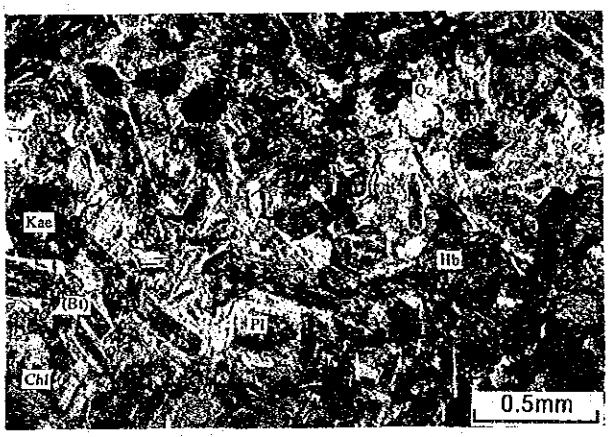

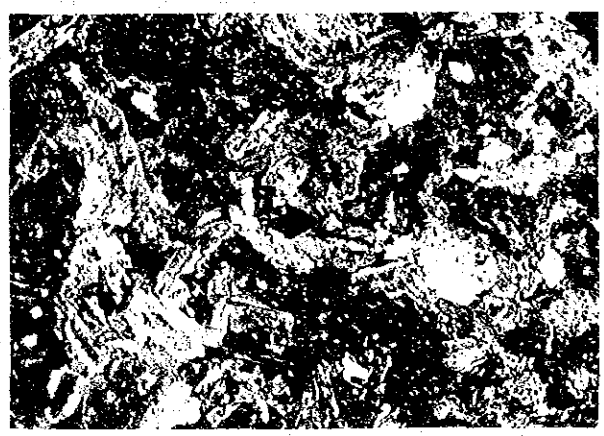

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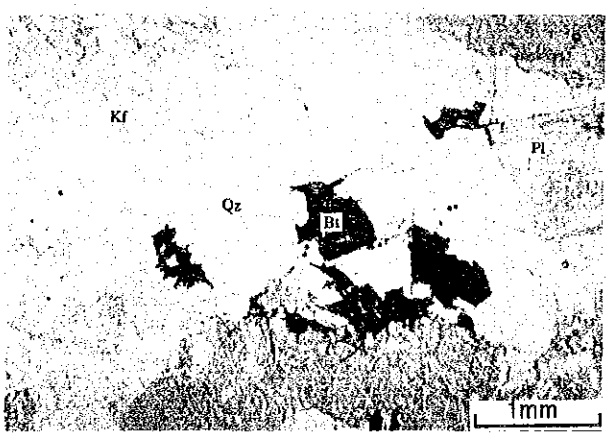
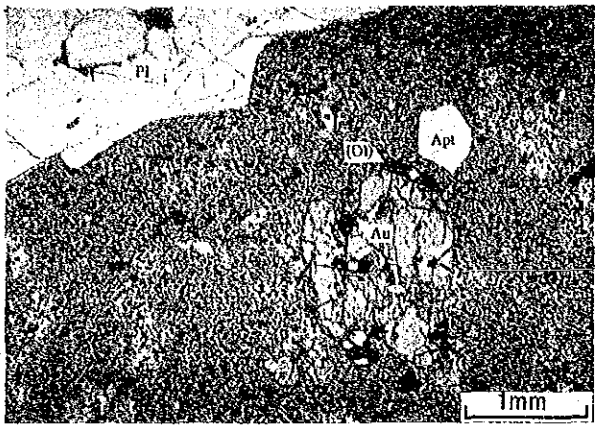


Plane polarized light

Crossed polarized light

(17)



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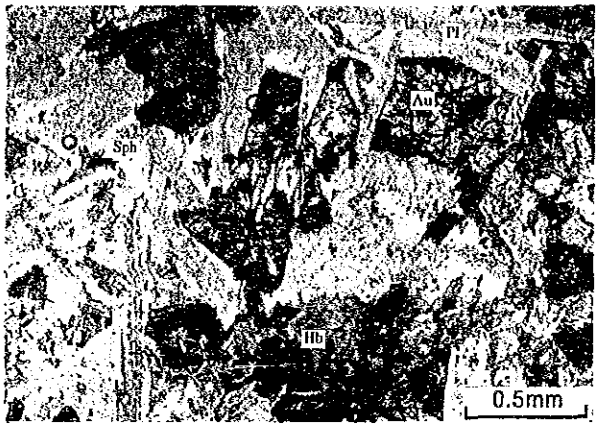

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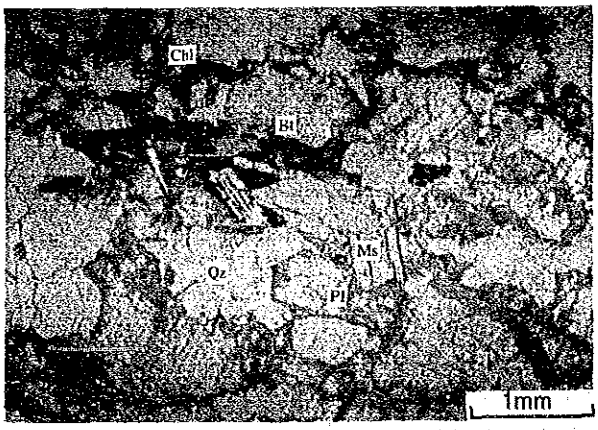

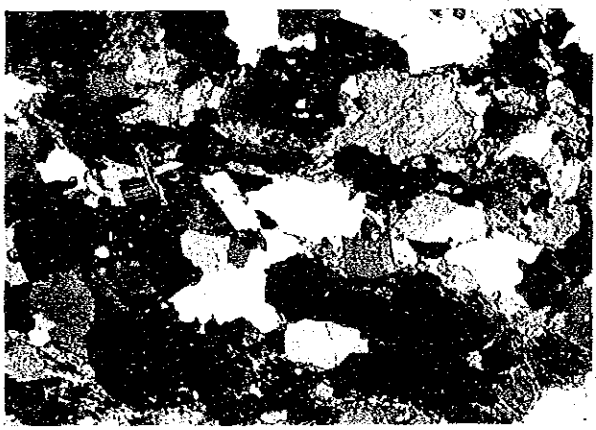

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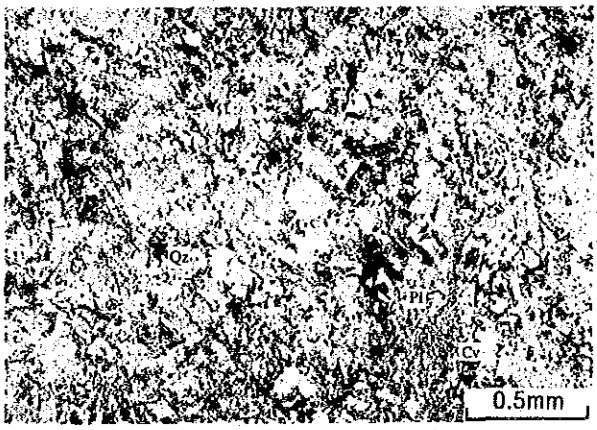
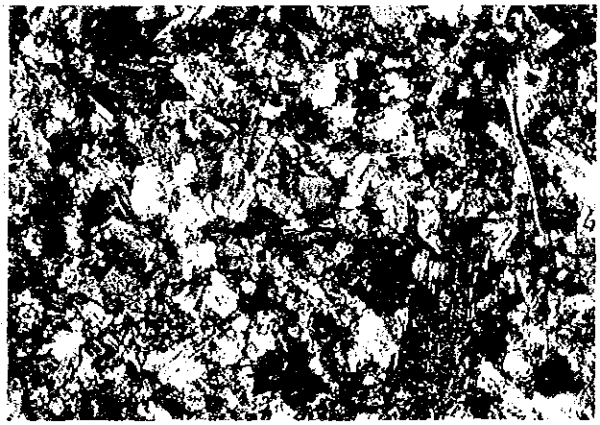
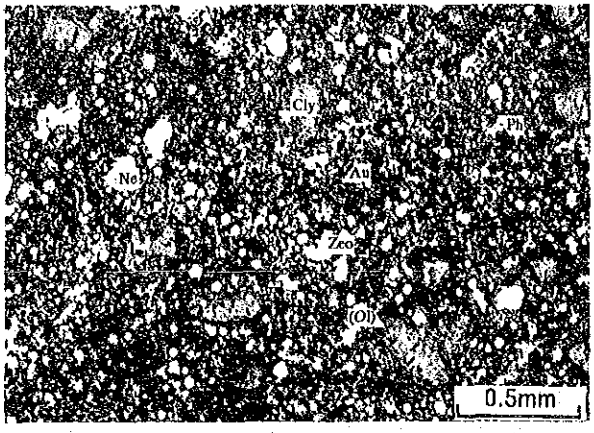


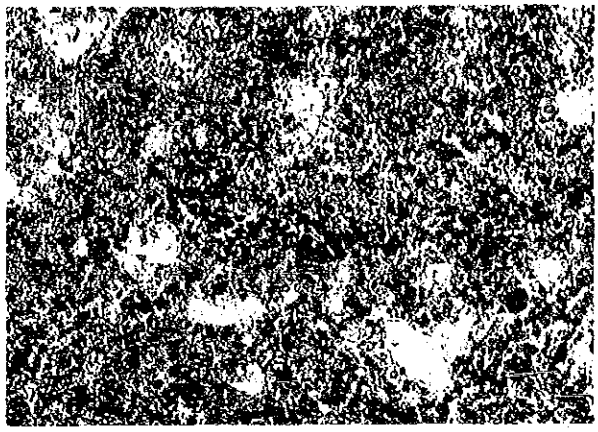


Plane polarized light

Crossed polarized light

(21)





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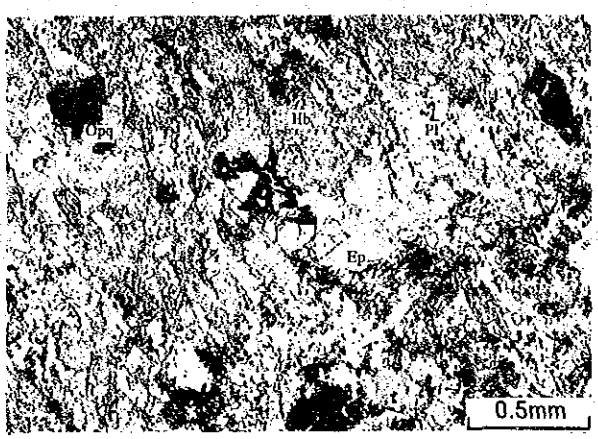

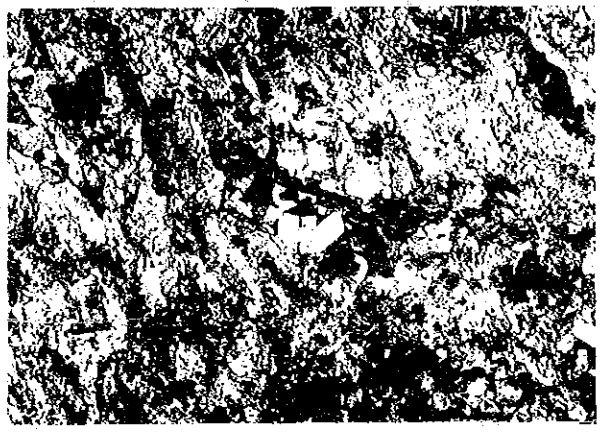

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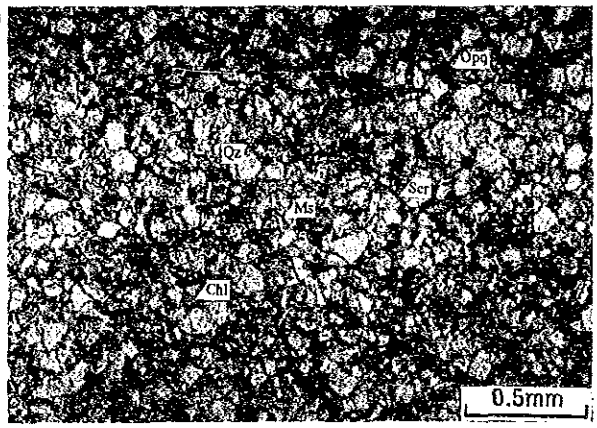

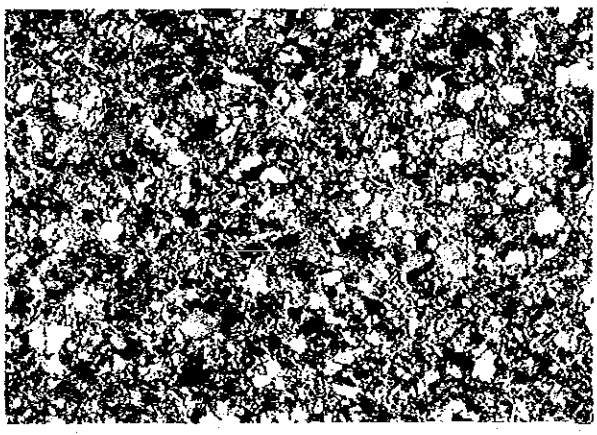

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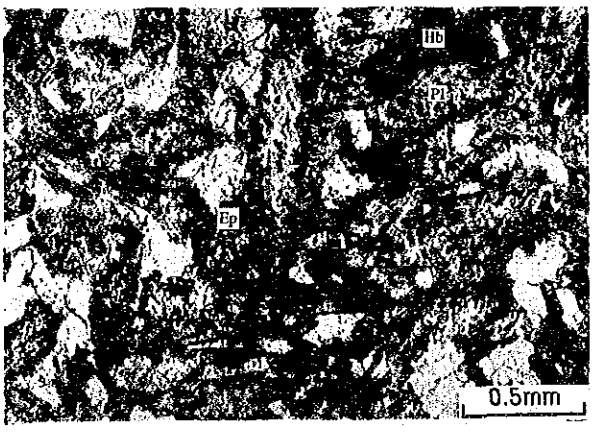
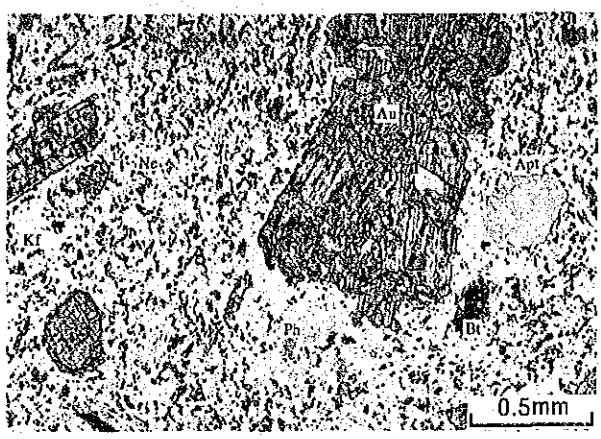


Plane polarized light

Crossed polarized light

(25)



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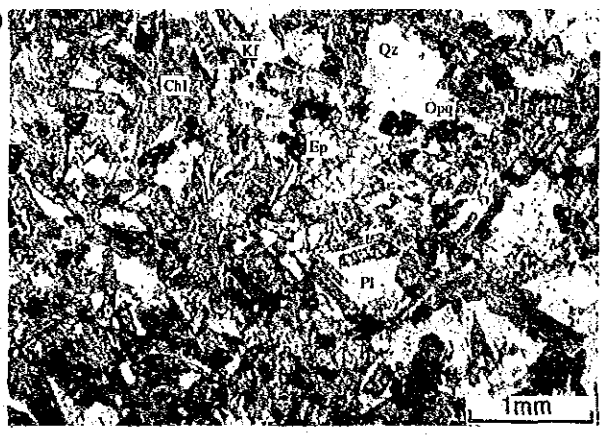

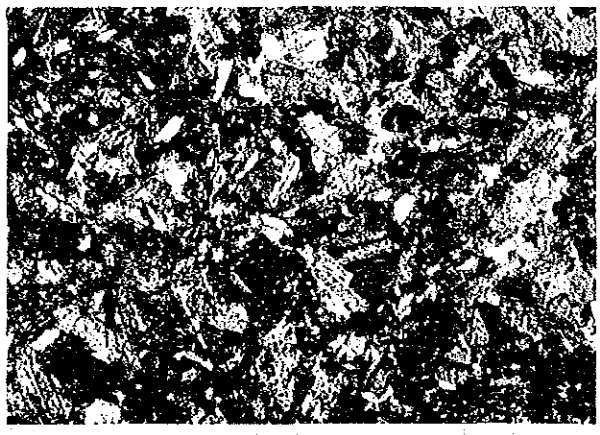

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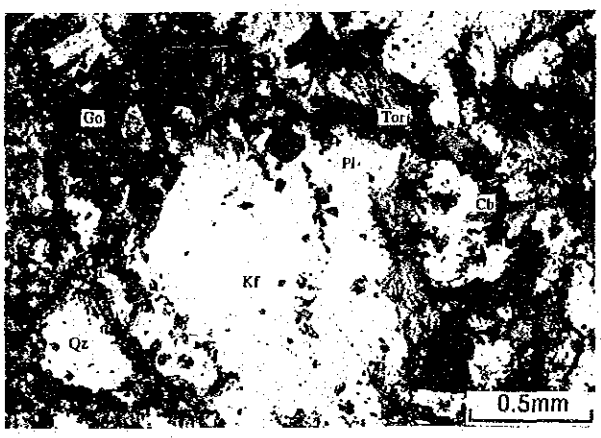

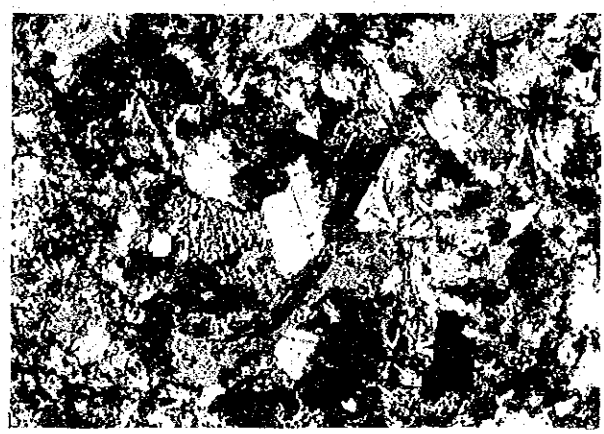

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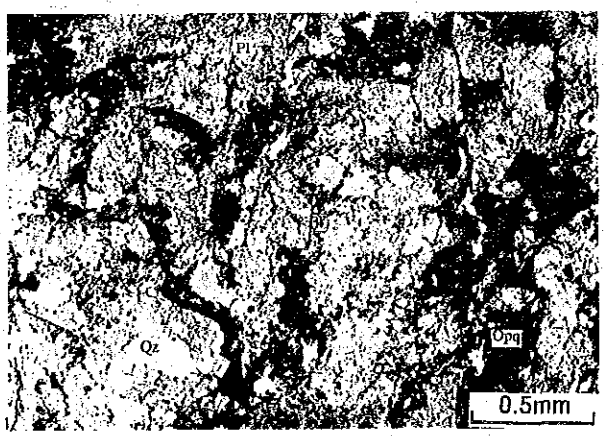


4. Microscopic Observations and Photomicrographs (Polished Section)

ABBREVIATION

Cct	: Chalcocite	Mgh	: Maghemite
Ccp	: Chalcopyrite	Mgt	: Magnetite
Cv	: Covellite	Au	: Native Gold
El	: Electrum	Ag(?)	: Native Silver(?)
Gn	: Galena	OM	: Oxidic-Manganese
Go	: Goethite	Py	: Pyrite
Hm	: Hematite	Po	: Pyrrhotite
Ilm	: Ilmenite	Ti	: TiO_2-Mineral
Lep	: Lepidocrocite		

(1)
Sample No. : OH70505
Locality : Olon Ovoot
Observation note :
This sample was taken from the oxidic manganese-quartz vein. No primary ore minerals can be observed with naked eye. Under the microscopic observation, no primary ore minerals is recognized. As secondary ore minerals, goethite and oxidic manganese mineral are observed.

(2)
Sample No. : OS70302
Locality : Olon Ovoot
Observation note :
This sample is composed of milky-white quartz vein, with one black band of which width is about 1mm. As primary ore minerals, native silver(?) and pyrite can be seen. Native silver(?), smaller than 0.005mm in diameter, has high reflectivity but it has no anisotropism. Pyrite forms euhedral crystal, smaller than 0.005mm in length. As secondary ore mineral, only goethite can be observed, it is anhedral crystal, up to 0.02mm in diameter.

(3)
Sample No. : OS70401
Locality : Olon Ovoot
Observation note :
Rock type of this sample is silicified sandstone. As primary ore mineral, only pyrite can be observed. It is euhedral form, smaller than 0.02mm in length. As secondary ore minerals, goethite and small amount of hematite and TiO_2-mineral can be seen, mostly up to 0.02mm in diameter. Hematite and goethite sometimes occurs as cubic or short prismatic crystal pseudomorph, up to 0.8mm in length, after pyrite.

(4)
Sample No. : OS70402
Locality : Olon Ovoot
Observation note :
This sample was taken from hematite skarn ore. It consists principally of hematite and maghemite and subordinate ilmenite, goethite and lepidocrocite. Probably, maghemite originate from magnetite. Hematite occurs surrounding maghemite. Ilmenite shows exsolution-like texture in hematite. Goethite occurs as veinlets along the crucks in hematite and maghemite , and sometimes shows colloform texture. Lepidocrocite occurs interstitially within maghemite crystals or separately in gangue minerals.

(5)
Sample No. : OS70524
Locality : Olon Ovoot
Observation note :
This specimen is silicified dolomitic shale in rock type. As primary ore minerals, a small amount of pyrite can be observed. It is euhedral crystal, up to 0.01mm in length. As secondary ore minerals, goethite and a small amount of TiO_2-mineral can be seen. Goethite forms veinlet along the cruck of gangue mineral crucks. TiO_2-mineral, up to 0.02mm in diameter, exist separately in quartz or between gangue mineral crystals.

(6)

Sample No. : 0292060
Locality : Olon Ovoot
Observation note :
This sample was taken from quartz vein with gold mineralization. Except for electrum and goethite, no ore minerals can be observed. Electrum occurs, up to 0.1mm in diameter, interstitially among gangue minerals, and frequently associates with goethite. Goethite occurs as a veinlet.

(7)
Sample No. : 0302100
Locality : Olon Ovoot
Observation note :
This sample was taken from quartz vein with gold mineralization. Ore mineral consist of native gold, abundant goethite and a small amount of pyrite. Native gold is bright or "golden" yellow in color, up to 0.2mm in diameter, and occurs as veinlets or disseminated grains in goethite. Crystal zoning can be observed by the different shades of color. Inclusion of pyrite is rarely seen.

(8)
Sample No. : 0034225
Locality : Olon Ovoot
Observation note :
This sample is composed of milky quartz vein. As primary ore minerals, chalcopyrite and pyrite are observed. Chalcopyrite partly has euhedral pyrite inclusion(0.08mm in length), and is commonly replaced by chalcocite and goethite. Coveline closely associate with chalcocite.

(9)
Sample No. : OS70510
Locality : Olon Ovoot
Observation note :
This sample is composed of milky white quartz vein. No primary ore minerals can be observed. As secondary ore minerals, cubic goethite, up to 0.1mm in length, pseudomorph after pyrite, and TiO_2-mineral, up to 0.02mm in diameter, occur separately.

(10)
Sample No. : SS80702
Locality : Dugshih
Observation note :
This sample was taken from quartz vein. As primary ore mineral only pyrite, smaller 0.03mm in length, can be observed. As secondary minerals, goethite and a small amount of TiO_2-mineral, mostly up to 0.05mm in diameter, occurs interstitially within gangue minerals.

(11)
Sample No. : BS80814
Locality : Dugshih
Observation note :
This sample was taken from quartz vein. As primary ore minerals, pyrite and chalcopyrite are recognized. Pyrite forms euhedral crystals, up to 0.1mm in length, and is commonly replaced by goethite and pyrrhotite(?). Chalcopyrite forms anhedral crystals, up to 0.05mm in diameter, in gangue minerals.

(12)

Sample No. : A81002
Locality : Onh
Observation note :
This sample was taken from magnetite-quartz vein. Primary ore mineral is only magnetite. Magnetite forms euhedral crystals, up to 0.2mm in length, and is commonly replaced by hematite. Magnetite and hematite are often penetrated by goethite veinlets.

(13)
Sample No. : H81715
Locality : Soirig
Observation note :
This sample was taken from silicified rock. As primary ore mineral, pyrite can be observed. Pyrite, up to 0.03mm in length, forms euhedral crystals. As secondary ore mineral, TiO_2-mineral and goethite are observed, mostly smaller than 0.03mm in diameter.

(14)
Sample No. : H82914
Locality : North Harmagtai
Observation note :
This sample was taken from quartz vein. No primary ore minerals can be observed. As secondary ore minerals, goethite and hematite are observed. Goethite occurs interstitially between gangue minerals. Hematite shows colloform texture.

(15)
Sample No. : H82914
Locality : Sologoi
Observation note :
This sample was taken from quartz vein . A small amount of primary ore mineral (pyrite, chalcopyrite and pyrrhotite) can be observed, mostly smaller than 0.02mm. Pyrite shows euhedral form. Chalcopyrite shows anhedral form, and closely associate with pyrrhotite. As secondary ore minerals, hematite and goethite are observed. Hematite occurs interstitially between gangue minerals. Goethite occurs as veinlets.

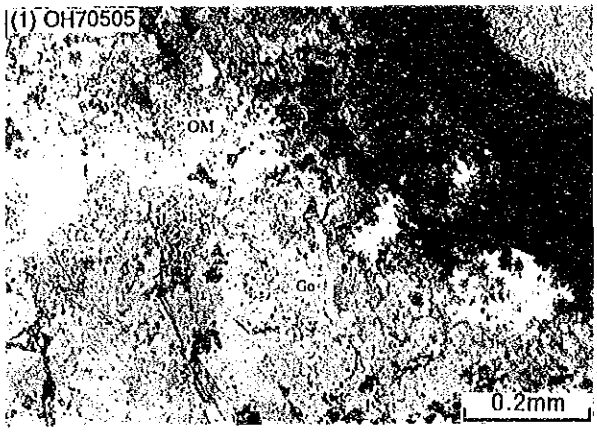
(16)
Sample No. : H82207
Locality : Sologoi
Observation note :
This sample was taken from silicified rock. No primary ore minerals can be observed. As secondary ore minerals, goethite and TiO_2-mineral occur separately in gangue minerals.

(17)
Sample No. : S82305
Locality : Sologoi
Observation note :
This sample was taken from quartz vein. As primary ore minerals, galena, pyrite, and chalcopyrite can be observed. Galena occurs as subhedral, up to 1mm across in diameter, and is commonly replaced by goethite. Pyrite occurs as euhedral, up to 0.03mm in length, is partly replaced by goethite. Chalcopyrite occurs separately in gangue minerals. Coveline is commonly associated with galena.

(18)
Sample No. : H82504

Locality : Undur Uda
Observation note :

This sample was taken from quartz vein. As primary ore minerals, pyrite and chalcopyrite can be observed. Pyrite occurs as euhedral crystals, up to 0.1mm in length, and is partly replaced by goethite. Chalcopyrite occurs interstitially between gangue minerals, and is partly replaced by chalcocite, goethite and coveline.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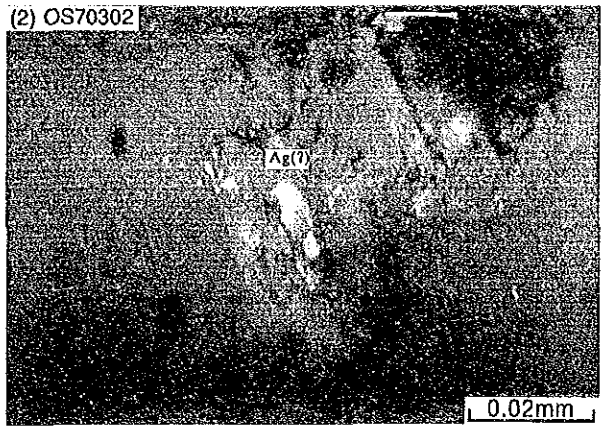
OM
Go
0.2mm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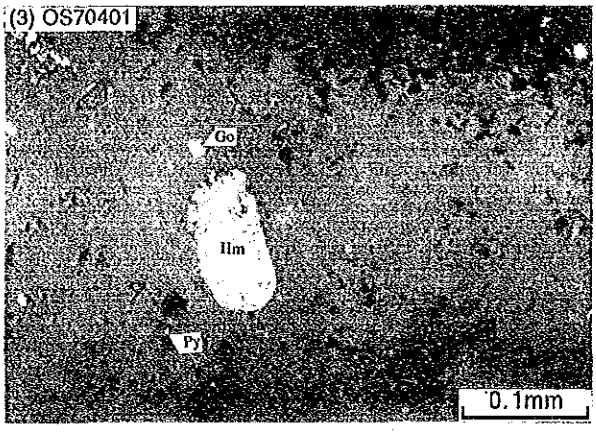
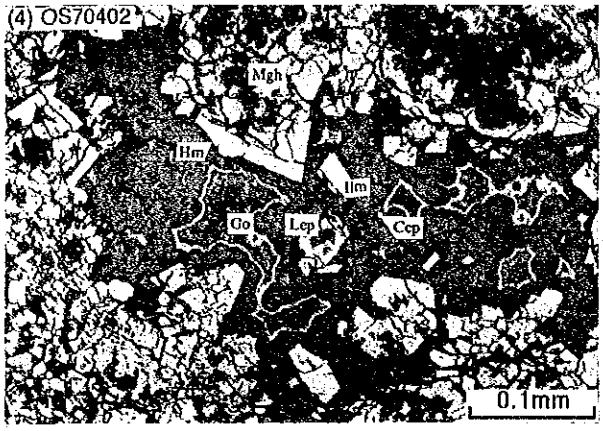
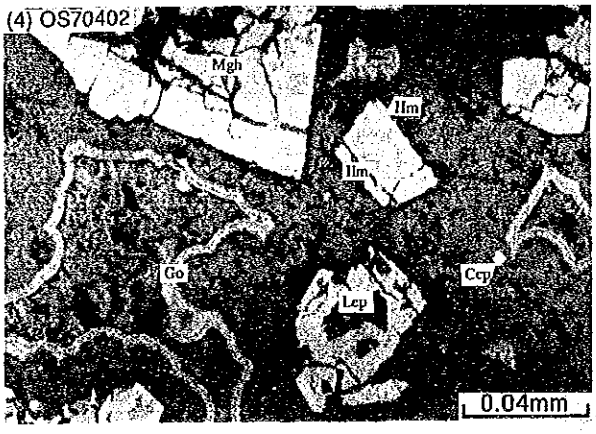
Ag(?)
0.02mm


(3) OS70401
Go
Ilm
Py
0.1mm


(4) OS70402
Mgh
Hm
Ilm
Go
Lep
Ccp
0.1mm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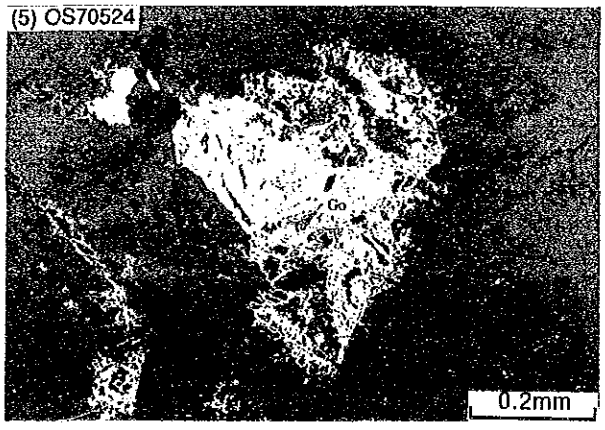
Mgh
Ilm
Ilm
Go
Ccp
Lep
0.04mm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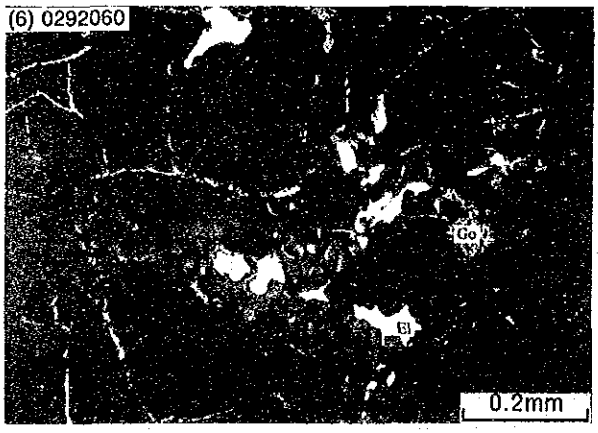
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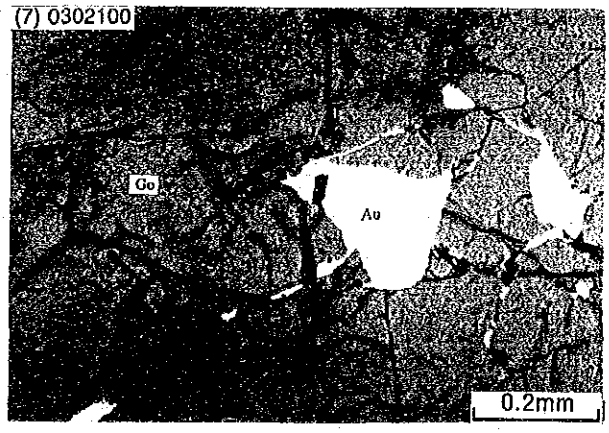
Bi
0.2mm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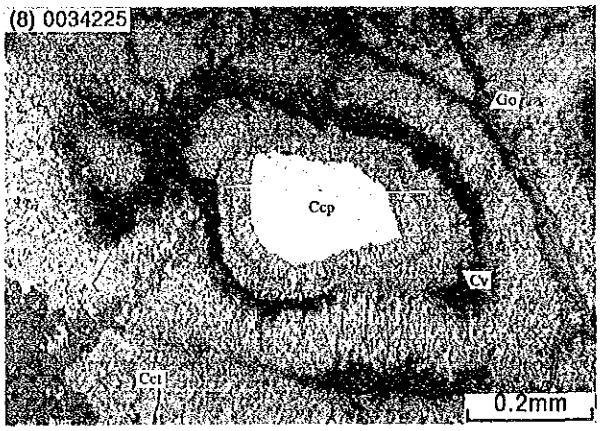
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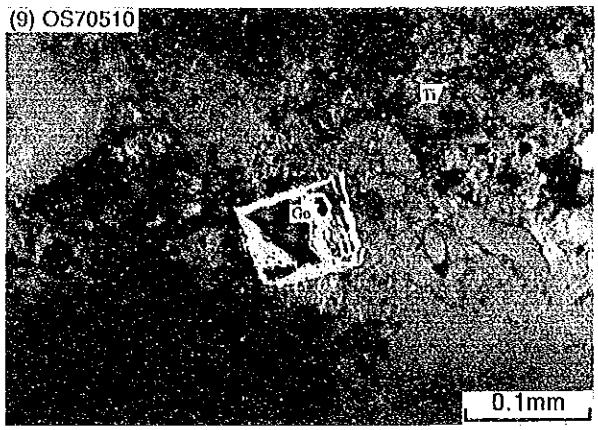
Go
Ccp
Cv
Cct
0.2mm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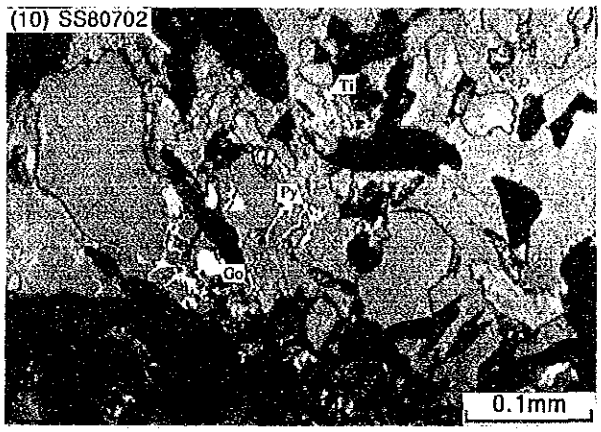
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Py
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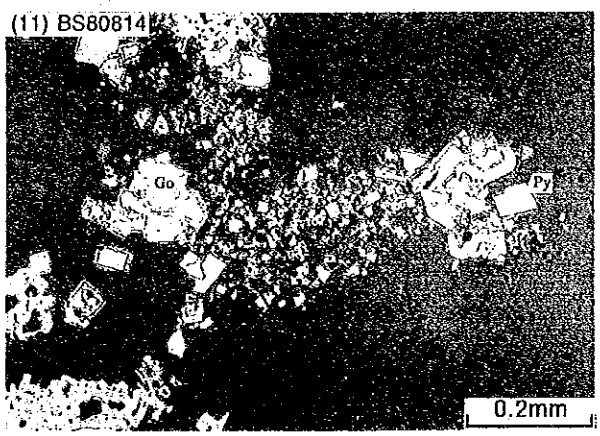
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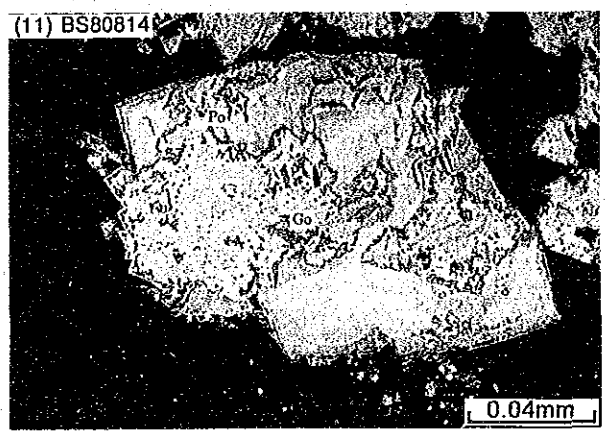
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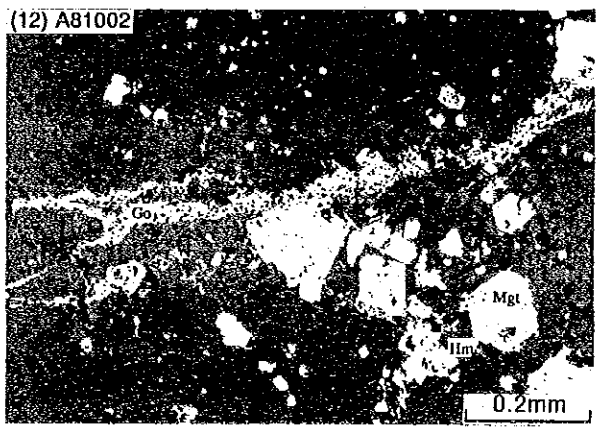
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Hm
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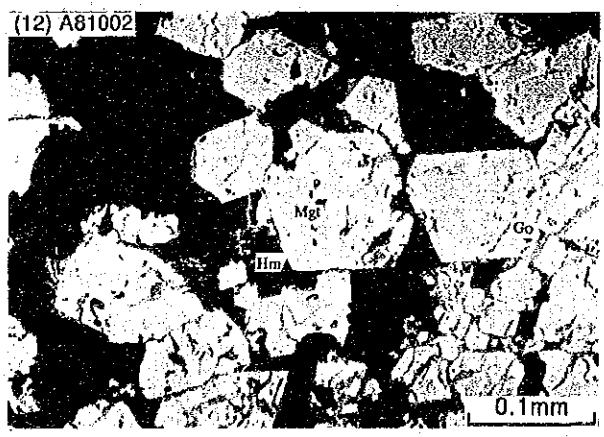
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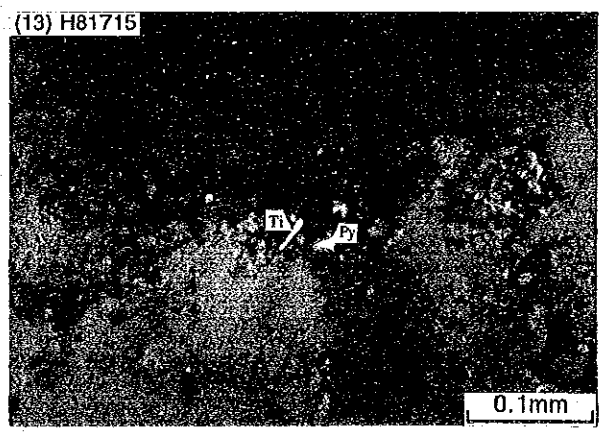
(13) H81715
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Py
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