LARA PROJECT

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ORE MINERALOGY OF THE CORONATION AND CORONATION EXTENSION ZONES

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LARA PROJECT

ORE MINERALOGY OF THE CORONATION AND CORONATION EXTENSION ZONES

INTRODUCTION: Polished thin-sections of 141 drill core samples were received from Dave Carson for examination, description and classification. Plans and sections showing locations of holes samples were also provided as well as a complete listing of drill core assays. of the 141 sections received, 108 were from the main Coronation Zone and 33 from the Coronation Extension.

The mineralogy of the main Coronation Zone and of the Coronation Extension are very similar and the general description of minerals and ore types, below, applies to both. However, distributions of ore types within the two zones are shown on separate plots.

A report prepared by CANMET in 1987 summarised the mineralogy of the deposit and also contained a series of probe analyses of tetrahedrite/tennantite grains. Some information concerning the silver content of galena and of electrum grains was also recorded.

ASSAYS: A complete listings of assays from which samples for study were collected, was provided by Noranda. For convenient reference during this study a shorter assay file was prepared by extracting from the drill hole listing assay results related to sections for which thin-sections were prepared (Table 1). Using data from this table, correlation matrices were prepared showing the relationships between the elements of economic interest in the deposit as a whole, and separately in the Main and Extension Zones (Table 2).

ORE MINERALOGY: The principal ore minerals throughout the deposit are sphalerite, pyrite, chalcopyrite, galena and tetrahedrite. Bornite, rutile and arsenopyrite occur in very small amounts and, as will be discussed in detail below, fine gold, or electrum, grains were observed in many of the samples. The presence of trace amounts of pearceite was mentioned in the CANMET report, but definite identification of this mineral was not made during the present study. Gangue minerals most commonly associated with the sulfides are coarsely crystalline carbonate, and fine to medium grained quartz and feldspar; sericite is locally abundant in heavily sheared samples.

The estimated maxiumum widths of sphalerite, pyrite, chalcopyrite, galena and tetrahedrite grains were noted during the examination of individual thin-sections and are recorded in Table 4. The results are summarised for all of these minerals, except sphalerite, in Figs 2,3,4 and 5. It was considered that, because sphalerite commonly occurs in massive or semi-massive bands, a plot of this type would not be useful.

Sphalerite is generally the most abundant ore mineral present. It occurs most commonly as semi-massive to massive bands from a few mm. to several cms. in width, within which are found abundant inclusions of the other sulfides species (Plates 1 and 2). In zones affected by shearing, sub-parallel, arcuate fractures are commonly developed within the sphalerite and lenticular fragments are broken off along the margins of massive bands.

Sphalerite also occurs in lesser amounts as irregular inclusions within the semi-massive chalcopyrite bands to be described later (Plate 7), and as interstitial grains within bands of granular pyrite.

Pyrite is generally the next most abundant sulfide. It is commonly found as subhedral to sub-rounded inclusions in massive sphalerite bands (Plates 1 & 2) These pyrite inclusions range from 0.5 to 1.5 mm. in width and are are frequently traversed by irregular fractures which are frequently filled by fine stringers of chalcopyrite, galena, tetrahedrite and, rarely, gold (Plate 18). Fine irregular inclusions of these minerals and of sphalerite are also found within unfractured portions of the pyrite grains. In portions of the deposit where shearing is particularly intense, pyrite grains within sphalerite bands are frequently pulled out into a discontinuous bands of irregular fragments.

In addition to its common mode of occurrence as an inclusion within sphalerite bands, pyrite also occurs, in some parts of the deposit, as generally fine grained,subhedral, granular aggregations or stringers. Varying subordinate amounts of the other sulfide minerals occur as anhedral grains within the interstices of the pyrite aggregations (Plates 9 & 10).

Chalcopyrite occurs frequently, as anhedral, very irregulary outlined, inclusions within massive or semi-massive sphalerite bands. They often show some tendency to be elongated parallel to the banding of the sphalerite and range from 0.1 to 0.5 mm. in width (Plate 1). Within the sphalerite there are also some very fine stringers of chalcopyrite (and of galena) which appear to define original boundaries in aggregations of granular sphalerite, now annealed into semi-massive or massive hands.

In some portions of the deposit chalcopyrite becomes the dominant sulfide present. In these cases it forms completely anhedral, semi-massive to massive stringers and bands, from 2 or 3 mm. to several cms. in width, which contain subhedral pyrite inclusions to 0.75mm in width and anhedral, generally finer inclusions of sphalerite, tetrahedrite and galena (Plates 5,6 & 7).

Tarnishing of the chalcopyrite is not common; when present it appears to be related to the presence of fine gold inclusions.

Galena: Galena most often occurs as irregular inclusions, ranging from 0.1 to 0.5mm in width within massive sphalerite bands. The galena inclusions are frequently intergrown with grains of tetrahedrite and chalcopyrite, also occuring as inclusions within the sphalerite. Very occasionally galena is the dominant sulfide species - in such cases it forms semi-massive aggregations of anhedral grains, in the 0.25 to 0.75mm. size range, which contain irregular inclusions of pyrite, chalcopyrite and sphalerite.

In the CANMET report the silver contents of several galena grains, as determined by microprobe analyses, are discussed. The limit of detection for silver in galena was calculated to be 210ppm; this value was exceeded in eight of analyses on grains from the Extension Zone but in only one grain, out of ten analysed, from the Main Coronation Zone. The eight spots above detection in the Extension Zone contained an average of 300ppm Ag, while the single detectable value recorded from the Main Zone, was 310ppm. The relationships between shown in Table 2 of this report shows that, in both zones, silver correlates more strongly with lead than with any other of the metals, suggesting that galena is likely to be host to a significant proportion of the silver present in the deposit.

Tetrahedrite is of widespread occurrence as inclusions in massive and semi-massive sphalerite bands. It forms anhedral to bulbous grains, ranging from 0.1 to 0.5mm in diameter which are often associated or intergrow with, galena and chalcopyrite (Plate 2). Tetrahedrite is also found as small inclusions in the chalcopyrite rich bands described above, and, in one sample, it is the dominant sulfide present and forms sub-rounded grains to 2 OR 3mm in width, with which are intergrown subordinate amounts of sphalerite and pyrite. Subordinate amounts of tetrahedrite also occur as interstitial grains in the granular pyrite aggregations referred to above (Plate 9) and as occasional disseminations of free grains in gangue.

Nine complete probe analyses of tetrahedrite grains were included in the 1987 CANMET Report, a copy of which is attached. These analyses show the grains to have compositions which vary widely within the tetrahedrite/tennantite compositional range and to have silver contents ranging from 0.3 to 14.8 percent.

However, although it can thus be demonstrated that the tetrahedrite carries important amounts of silver, the correlation between silver and copper shown in Table 2 is not a strong one. This may explained by the fact that, as shown in the CANMET results, the copper and silver contents of tetrahedrite are almost exactly inversely proportional to each other.

Gold: Gold grains were observed in 39 of the 141 thin-sections examined. They occur in 33 of the 108 sections from the Coronation Zone and in 6 of the 33 sections from the Extension Zone. The total numbers of grains observed in the two zones were 201 and 25 respectively. In the Coronation Zone the dimensions of the gold grains mostly lie in the 2 to 40 micron range but there are several grain over 100 micrens in length. In the Extension Zone the gold is generally somewhat finer grained with most particles lying in the 2 to 20 micron range. Fig.1 is a histogram of the areas of all of the gold grains from both zones; it shows that the grain sizes have an approximately lognormal distribution. In Table 5 the total areas occupied by the gold in each thin-section are listed; a more extensive listing of individual grains and their dimensions is given in Table 6.

As is shown in Plates 11 through 18, the gold occurs as isolated inclusions in other sulfide minerals, or as strings of fine grains along grain boundaries in sulfide aggregations. Some of the larger grains are encrusted by heavy bluish tarnish (Plates 17 & 18). Table 5 includes a list of the minerals which act as hosts for the gold particles and it can be seen that tetrahedrite is the most common and pyrite the least common, host mineral. The lack of gold particles in pyrite does not necessarily mean that there is no gold present in that mineral but does indicate that, if present, the gold must be contained within the sulfide lattice or in solid solution. The presence of gold in a variety of hosts, rather in one or two preferred minerals, is reflected in Table 2 by the lack of any strong correlations between gold concentrations and those of copper, lead or zinc.

In Table 5 the amount of free gold observed in thin-sections can be compared with reported assay values from the samples they represent. The general lack of correlation between the amounts of gold observed and the reported values indicate that gold is very variable in distribution and that significant amounts may be contained, as solid solutions, within sulfide grains.

Electron microprobe examination of several particles of gold from the deposit were discussed in the CANMET report; the authers reported that the silver content of several of the largest grains they observed, ranged from 36.4 to 42.3 per cent. Strictly speaking, therefore, the gold in this deposit appears to be a high-silver variety of electrum and the tarnishing often associated with the larger gold grains is likely related to their high silver content.

CLASSIFICATION OF THE ORE: The mineralogical composition and texture of the ore in this deposit show continous variation and there appear to be no well defined boundaries separating different varieties. The degree of variability is demonstrated by the frequent lack of agreement between the observed mineralogy of a polished section and reported metal content of the interval from which it was selected.

However, for practical purposes, the ore has been divided into the types described below and listed in Table 1. General distribution of these ore types within the Coronation and Coronation Extension Zones is shown in Figures 6 through 11.

Type A: This is the commonest type of ore in the Lara Deposit. It consists of massive and semi-massive bands of sphalerite from a few mm. to several cms. in width in which are embedded abundant inclusions of all of the other sulfides present in the deposit (Plates 1,2 &3) .The sphalerite is generally rather homogeous in nature but in the more heavily sheared zones it contains many, sub-parallel arcuate fractures and, at the margins of massive bands, is broken up into lenticular fragments up to about 0.25mm. in width.

Pyrite, generally, forms the most abundant inclusions in the sphalerite bands. It forms equant, sometimes subhedral, grains which lie mostly in the 0.25 to 0.75mm. size range. The pyrite grains are much more heavily fractured than those of the other sulfides and, in the more heavily sheared zones, are broken up into trains of irregular fragments. The frastures within pyrite grains are frequently filled with fine stringers of the other sulfide species present and, on rare occasions, by fine veinlets of gold (Plate 18).

Chalcopyrite and galena make up the next most abundant set of inclusions in the sphalerite bands. Their relative proportions vary greatly and in some cases one or other of the two may be absent entirely. They both form very irregularly outlined, anhedral grains, often with wispy terminations, which are generally extended parallel to the banding of the sphalerite and vary in width from a few microns up to 0.5mm. The chalcopyrite and galena are often intergrown with each other and with the pyrite inclusions discussed above.

Tetrahedrite is also of widespread occurrence as an inclusion in sphalerite. It forms anhedral to occasionally sub-rounded grains up to 0.3mm in width which are intergrown with chalcopyrite, pyrite and, most commonly, with galena.

Minor amounts of arsenopyrite can be observed in Type A ores and very fine rounded inclusiens of bornite occur occasionally within pyrite grains; small amounts of pearceite were noted in the CANMET study but have net been observed in the present set of samples.

As listed in Table 5 and discussed above, fine inclusions of gold occur sporadically within the Type A samples. The gold may be found within any of the sulfide minerals and is often located at, or close to, intergranular boundaries.

<u>Type B:</u> In some zones chalcopyrite replaces sphalerite as the dominant constituent; ores in these zones have been classified as Type B. In these zones chalcopyrite forms very irregularly outlined semi-massive to massive bands within which are included

subordinate amounts of pyrite, galena, sphalerite and tetrahedrite (Plates 5,6 & 7).

Pyrite may occur as equant subhedral grains, similar to those found in Type A Ore, but often occurs as sparse, much finer grains. Sphalerite forms irregulary outlined inclusions to 0.5mm in width, while galena and tetrahedrite form generally finer inclusions in the 0.1 to 0.25m range. Fine gold inclusions occur in a few examples of Type B Ore (Table 5).

Type C: Ores composed mainly of sub-equal amounts of sphalerite and pyrite, accompanied by only minor amounts of chalcopyrite, galena and tetrahedrite (Plate 8), are classified as Type C. As in Type A, the sphalerite forms semi-massive to massive bands in which the pyrite occurs as equant, sometimes subhedral inclusions. The pyrite is however, generally finer than in Type A Ores, with most grains being less than 0.25mm in width. The minor amounts of other sulfides which do accompany the sphalerite in Type D Ores, occur as very fine (<0.5mm) anhedral inclusions.

Type D: Type D ores are composed essentially of aggregations of fine grained pyrite accompanied by minor amounts of other sulfides. The pyrite occurs as subhedral equant grains, mostly in the 0.15 to 0.25mm size range. Varying amounts of sphalerite, galena, tetrahedrite and, occasionally, of chalcopyrite occur as anhedral grain, interstitial with respect to the pyrite aggregations (Plate 10). Several cases in which Type D ores contain fine gold inclusions are listed in Table 5 .

Type E: In occasional zones, the sulfides, rather than occurring in the complex intergrowths described above, form discrete grains which may be up to 0.5mm in width but are generally finer and are disseminated in the felsic or carbonate matrix. Pyrite is the sulfide which most often occurs in this manner but bands of disseminated chalcopyrite or sphalerite have been observed.

Type F: Tetrahedrite is generally present as a subordinate, fine grained, constituent of the Lara Ores. However, in one zone, LA-184;365.4m, it forms sub-rounded grains up to several mm in width and is the dominant sulfide present. This band has been classified as Type F Ore. The tetrahedrite is accompanied by subordinate amounts of sphalerite and pyrite and minor intergrowths of chalcopyrite and galena. Scattered fine gold specks occur within tetrahedrite.

It is interesting to note that the zone containing this tetrahedrite-rich ore also has the highest silver content of all those from which samples were selected for this study - it contains 29.36 ozs/t Silver.

Type G: One band was observed in which galena is the dominant sulfide - this has been classified as Type G Ore. In this zone the galena occurs as semi-massive stringers up to several mm in width with which are intergrown variable subordinate amounts of chalcopyrite and pyrite.

APPENDIX: PROBE ANALYSES OF TETRAHEDRITE/TENNANTITE GRAINS LISTED IN CANMET REPORT.

TABLE 1

Quantitative EDXA analysis of tetrahedrite/tennantite

Coronation Zone

Element	No.1 wt.%	No.2 wt.%	No.3 wt.%	No.4 wt.%	No.5 wt.%
Cu	41.2	41.0	38.4	39.6	38.9
Ag	0.4	0.3	1.4	1.2	2.0
Fe	2.7	2.7	1.4	2.1	1.9
Zn	5.2	5.2	6.1	5.6	6.3
Sb	4.2	4.4	18.4	13.5	6.1
As	19.3	20.4	9.2	13.1	18.2
S	27.7	27.8	25.8	26.8	27.2
	100.7	101.8	100.7	101.9	100.6

Extension Zone

Element	No.6 wt.%	No.7 wt.%	No.8 wt.%	No.9 wt.%
Cu	27.9	27.2	28.0	37.8
Ag	14.1	14.8	13.8	2.4
Fe	3.2	3.1	3.3	3.6
Zn	3.8	3.8	3.7	5.3
Sb	22.8	23.6	23.3	14.9
As	4.4	3.5	4.2	14.9
S	24.2	23.8	23.9	27.0
	100.4	99.8	100.2	100.7

Tetrahedrite in sphalerite: Nos. 6, 7, and 8.
Tetrahedrite in gangue: No. 3.
Tennantite in gangue: Nos. 2 and 4.
Tennantite in chalcopyrite: No. 5.
Tennantite in galena: No. 1.
Tennantite in sphalerite: No. 9.

Fig.1

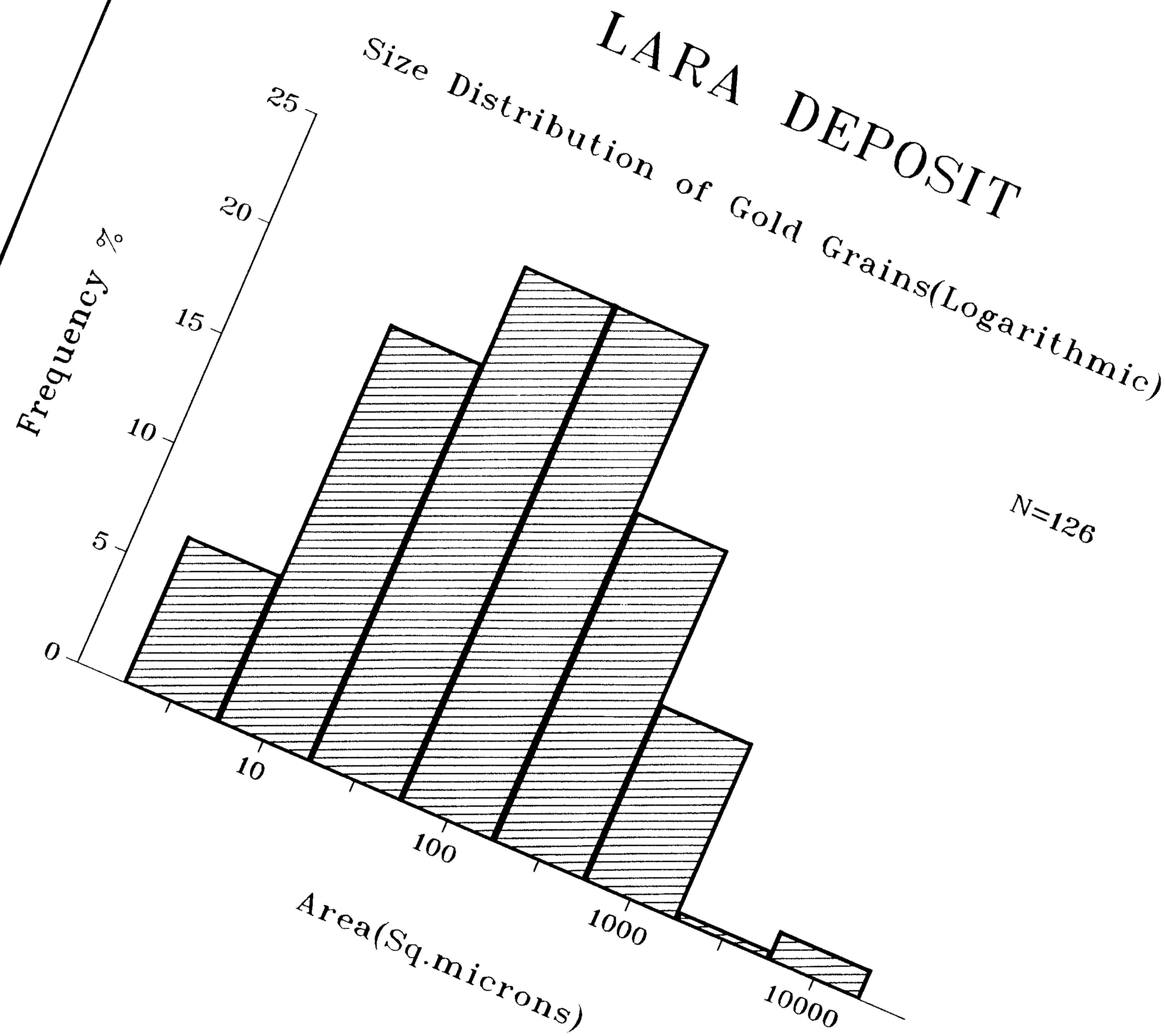

LARA DEPOSIT
Size Distribution of Gold Grains(Logarithmic)
Frequency %
25
20
15
10
5
0
10
100
1000
10000
Area(Sq.microns)
N=126

Fig.2

LARA DEPOSIT

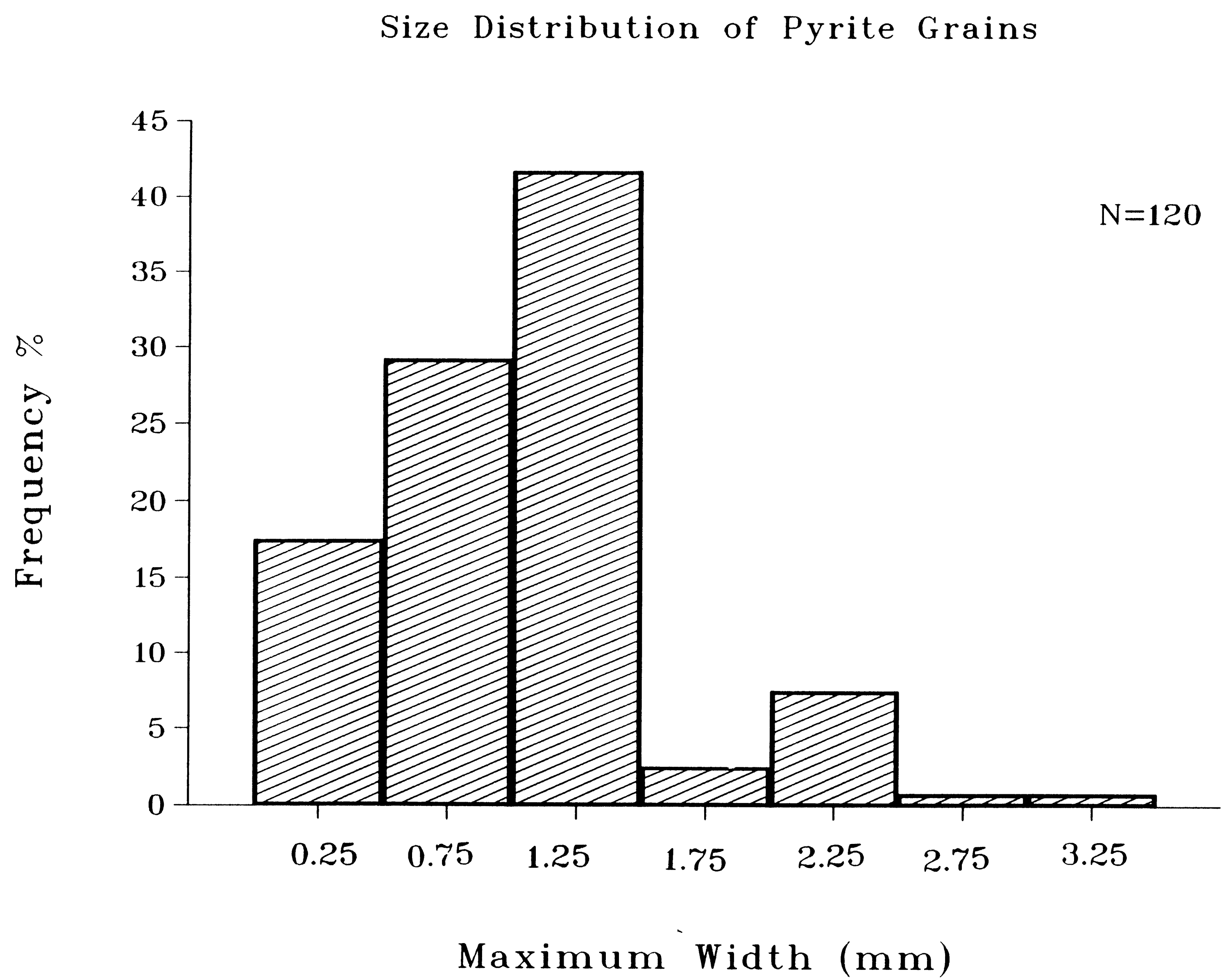


Fig.3

LARA DEPOSIT

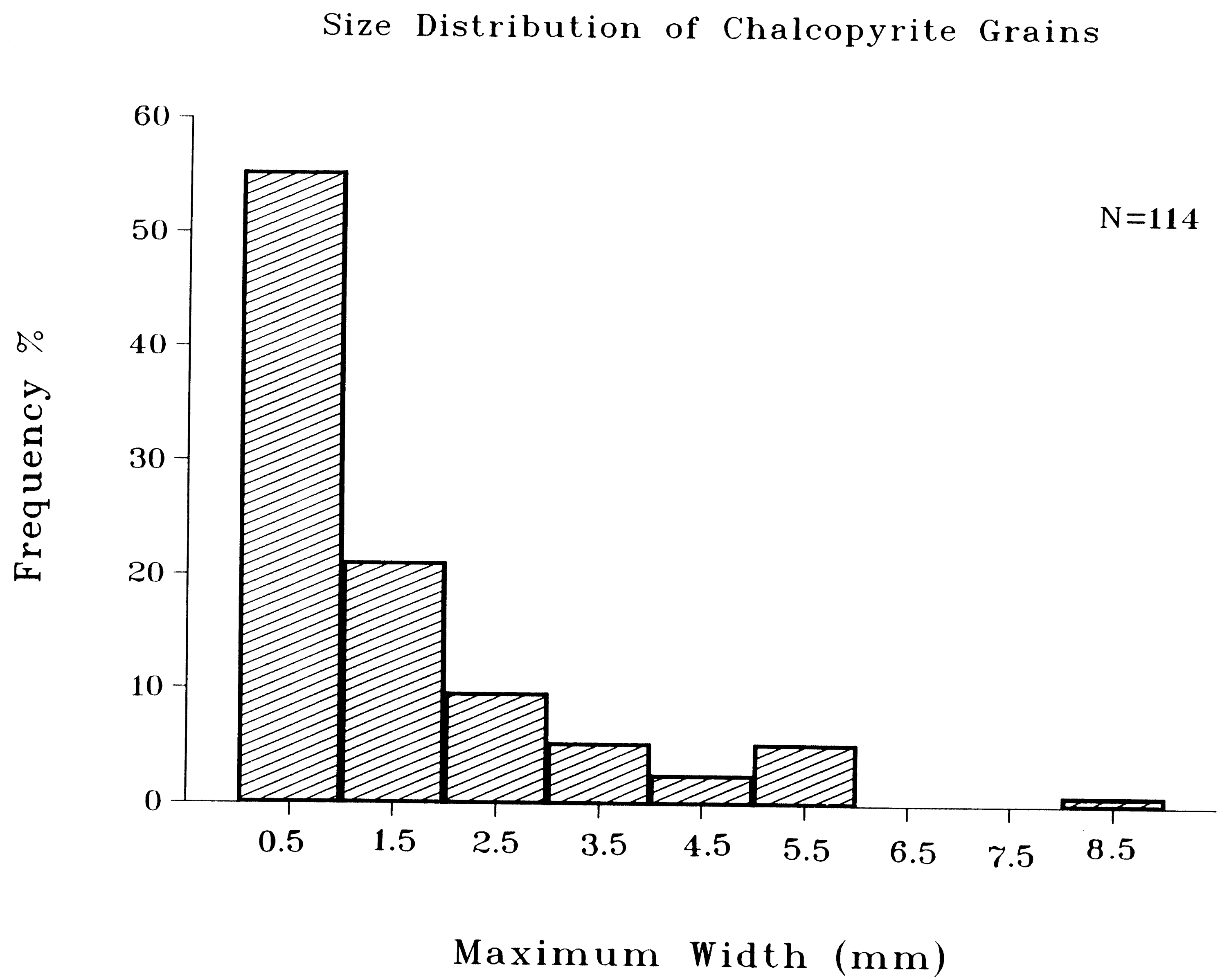


Fig.4

LARA DEPOSIT

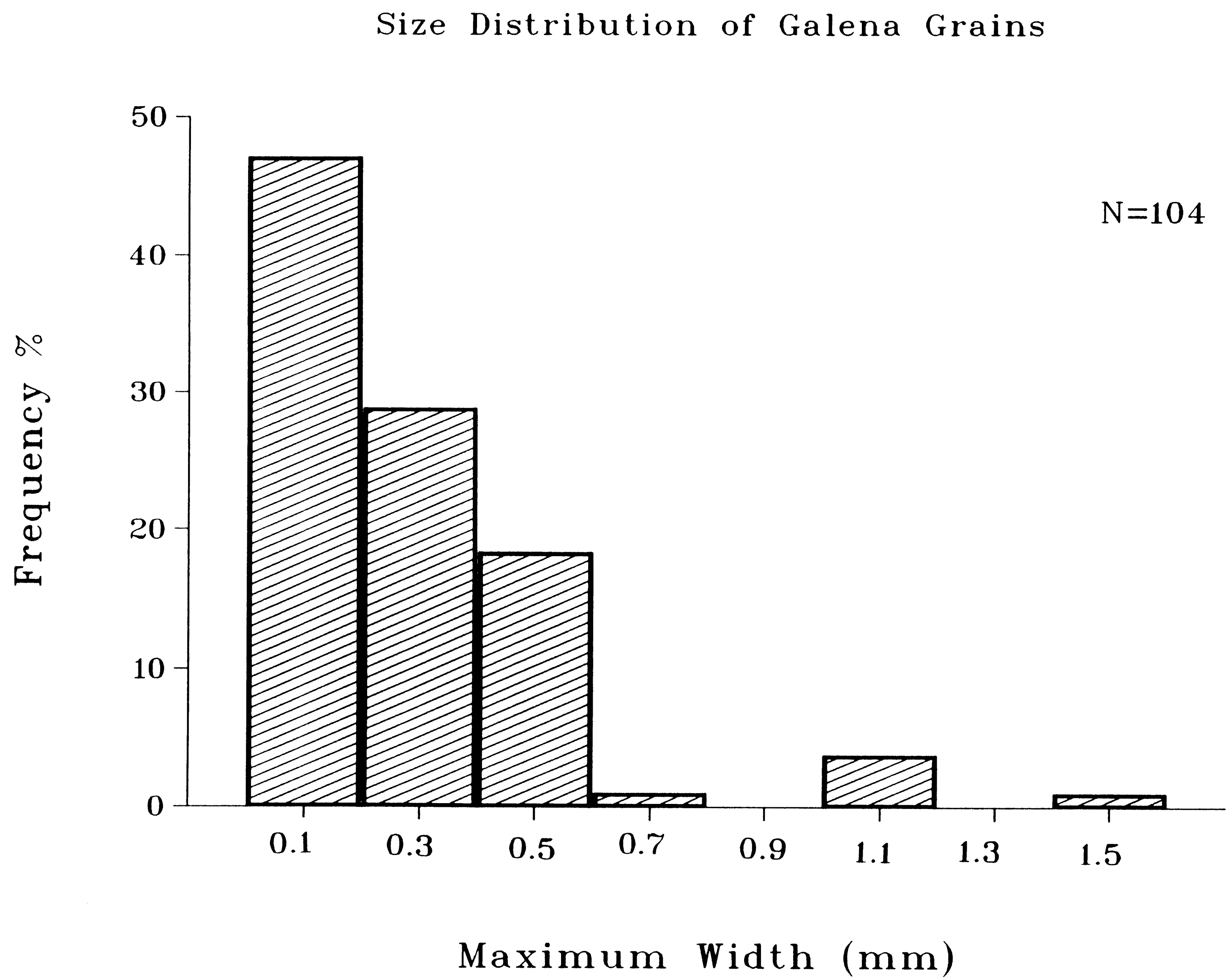


Fig.5

LARA DEPOSIT

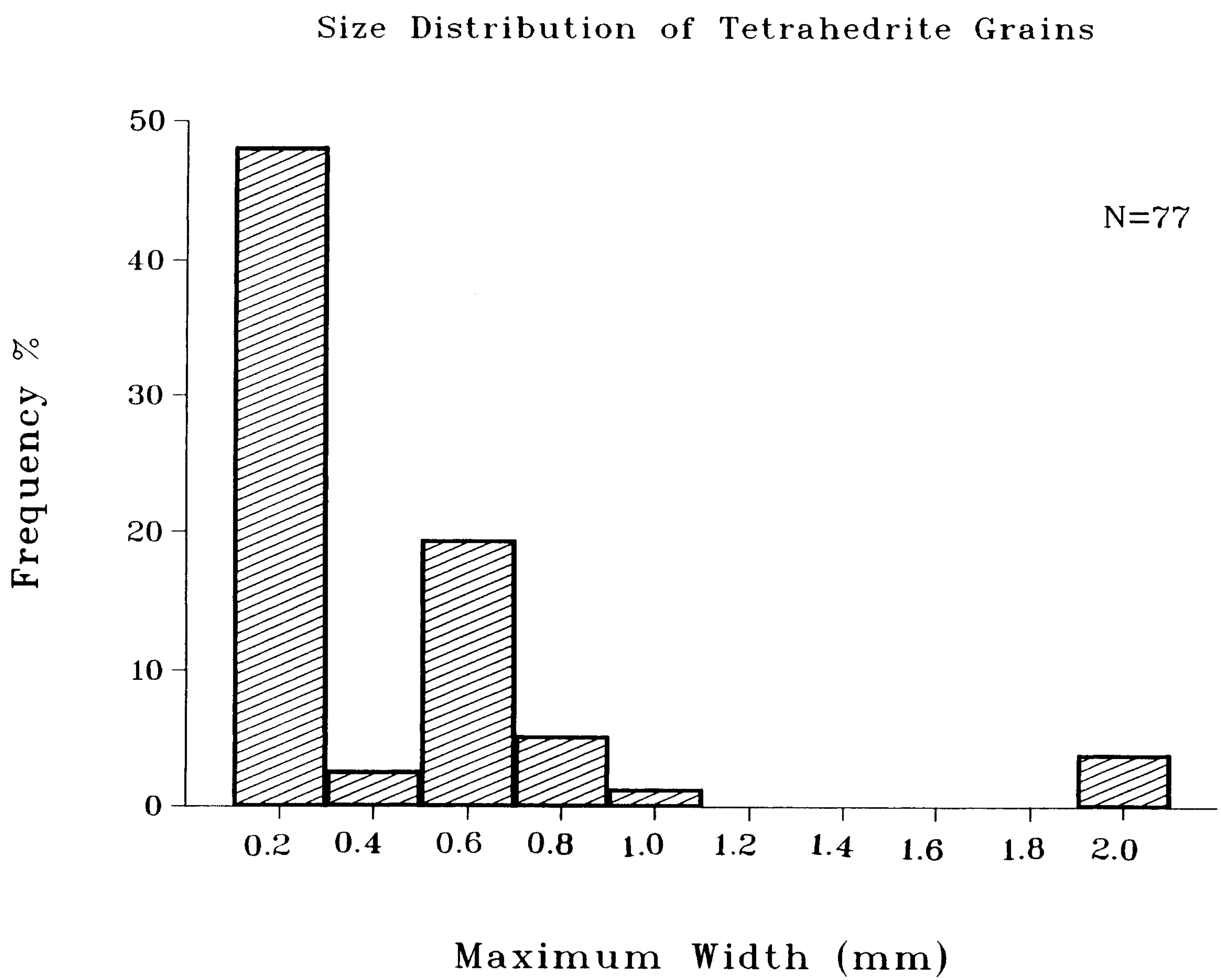
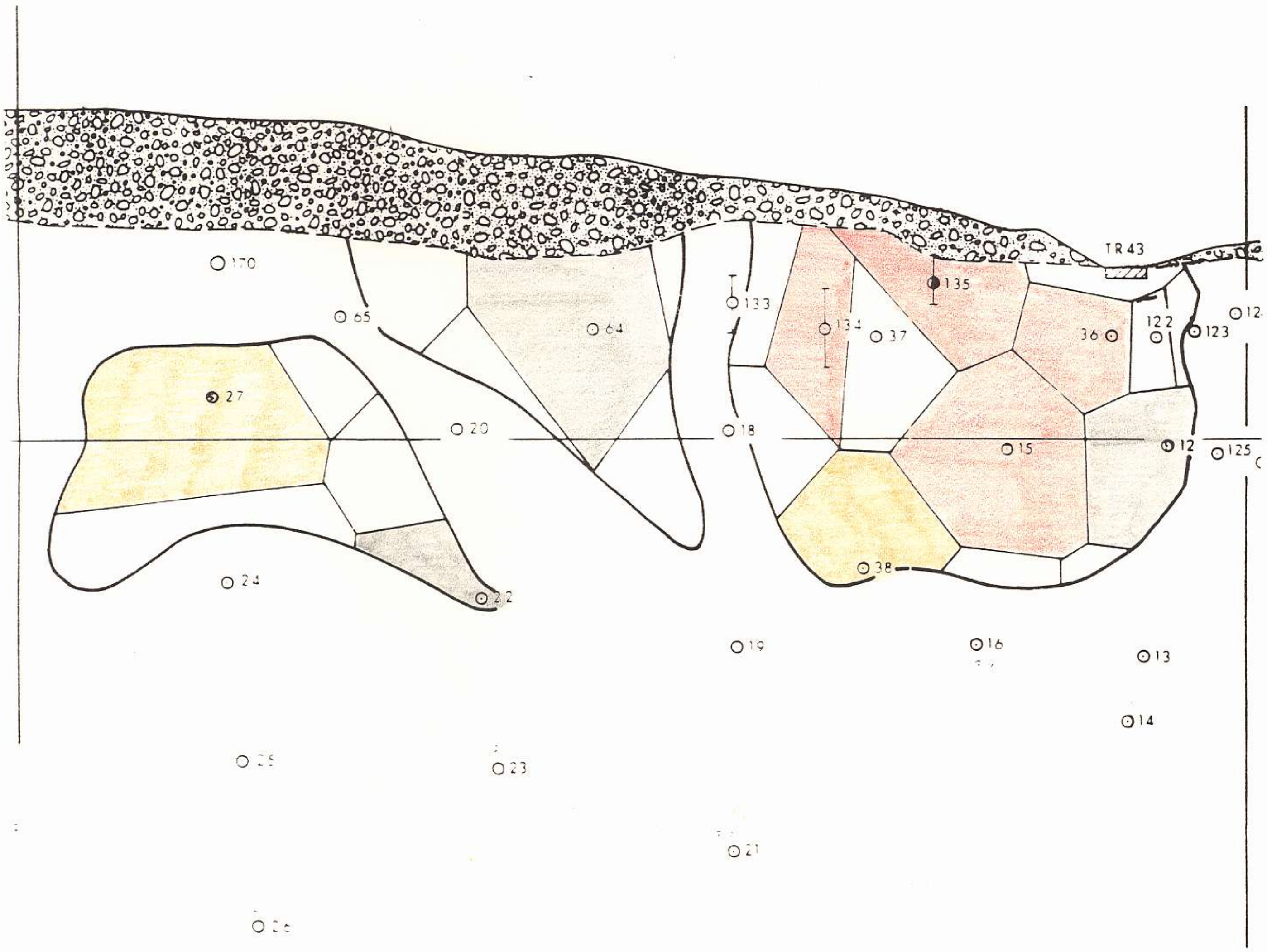


Fig. 6



LEGEND :
Type A
Type B
Type C
Type D
Type E
Type F
Type G

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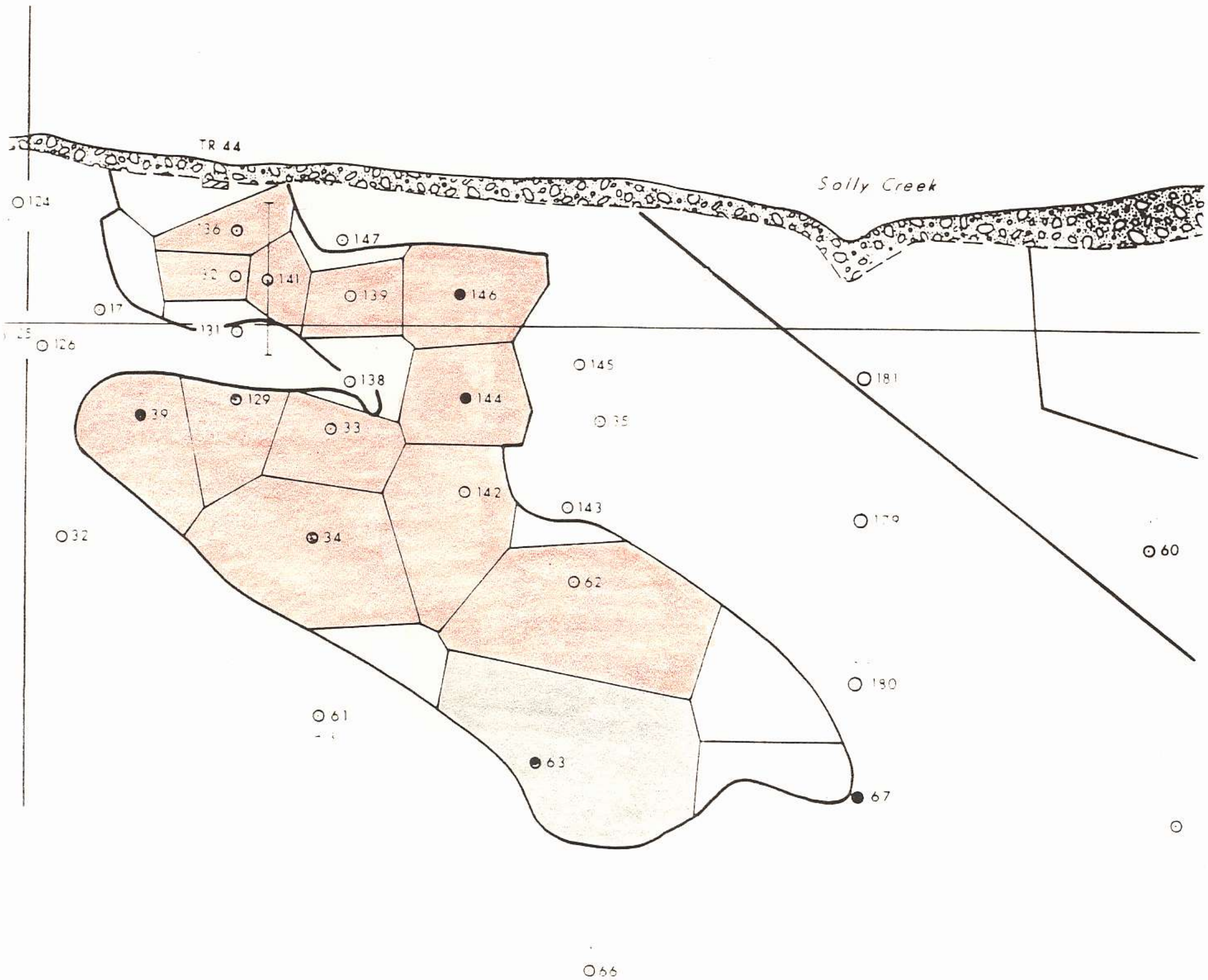
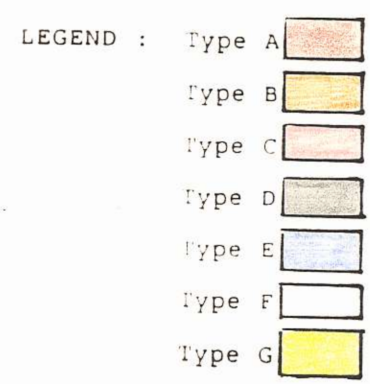
CORONATION ZONE

BLOCK 1-A

DISTRIBUTION OF ORE TYPES

Fig. 7





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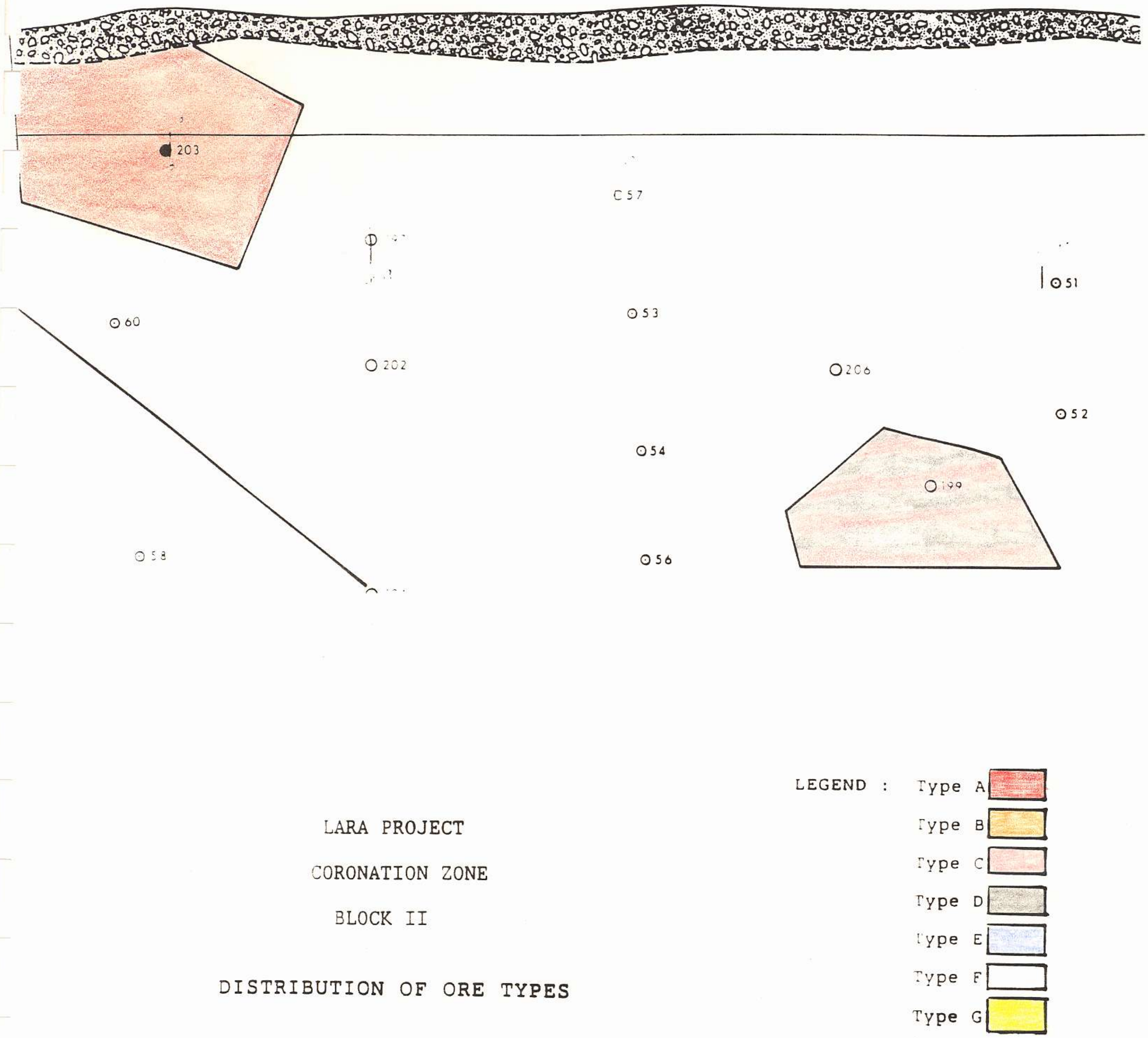
CORONATION ZONE

BLOCK I-B

DISTRIBUTION OF ORE TYPES

Fig. 8



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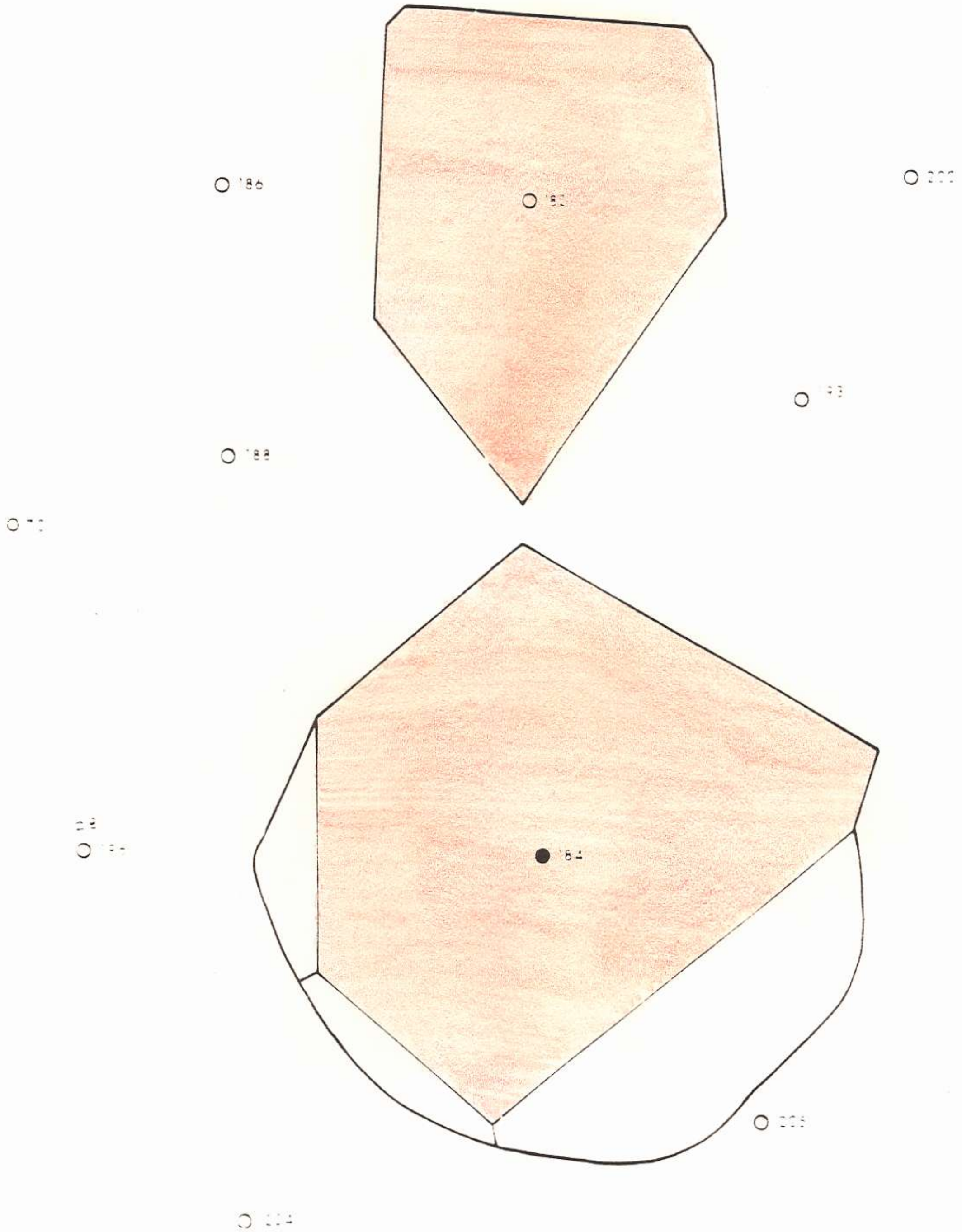
CORONATION ZONE

BLOCK II

DISTRIBUTION OF ORE TYPES

Fig. 9



LEGEND :

- Type A
- Type B
- Type C
- Type D
- Type E
- Type F
- Type G

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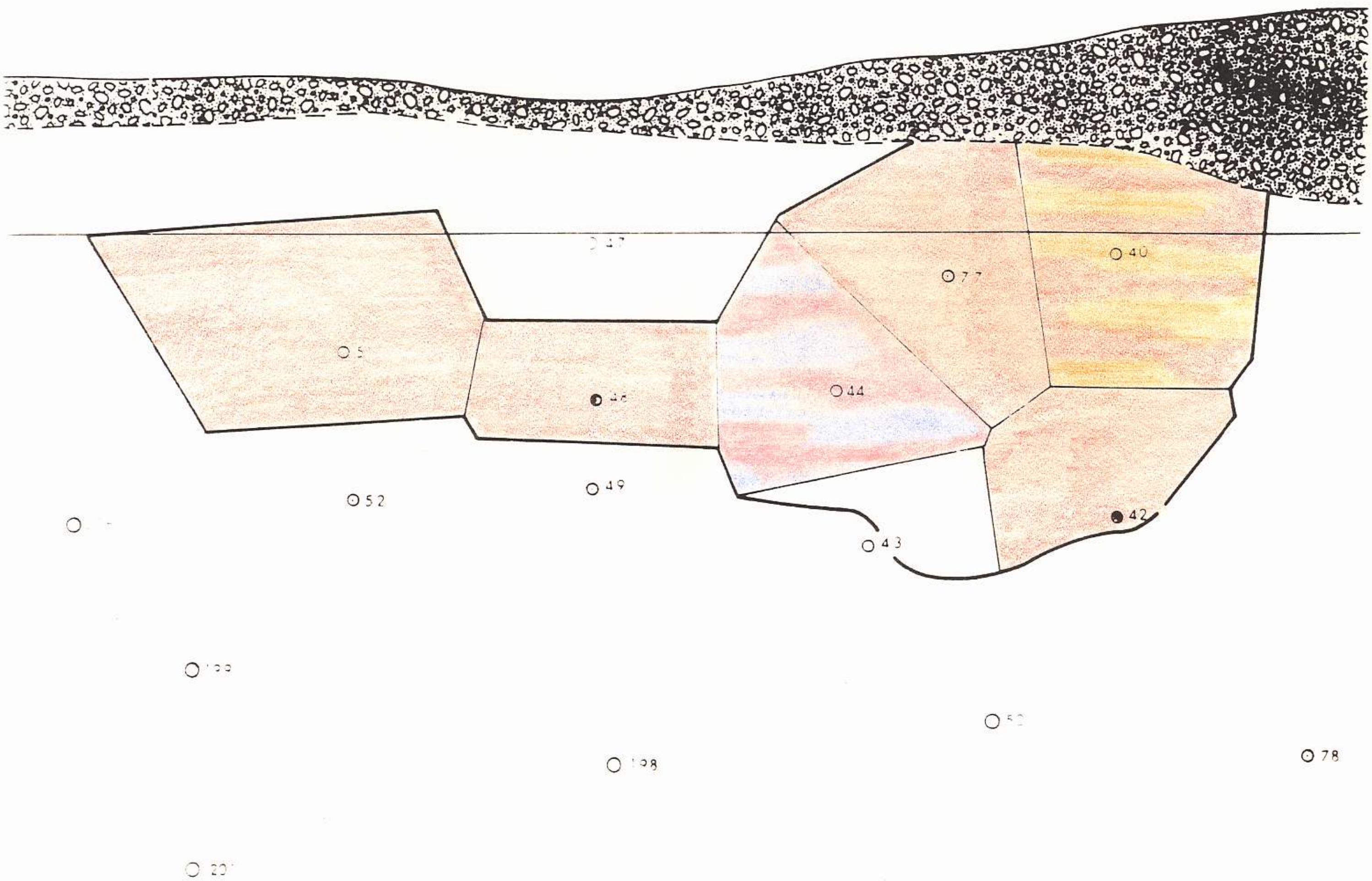
CORONATION ZONE

BLOCK III

DISTRIBUTION OF ORE TYPES

Fig. 10



LEGEND :

- Type A
- Type B
- Type C
- Type D
- Type E
- Type F
- Type G

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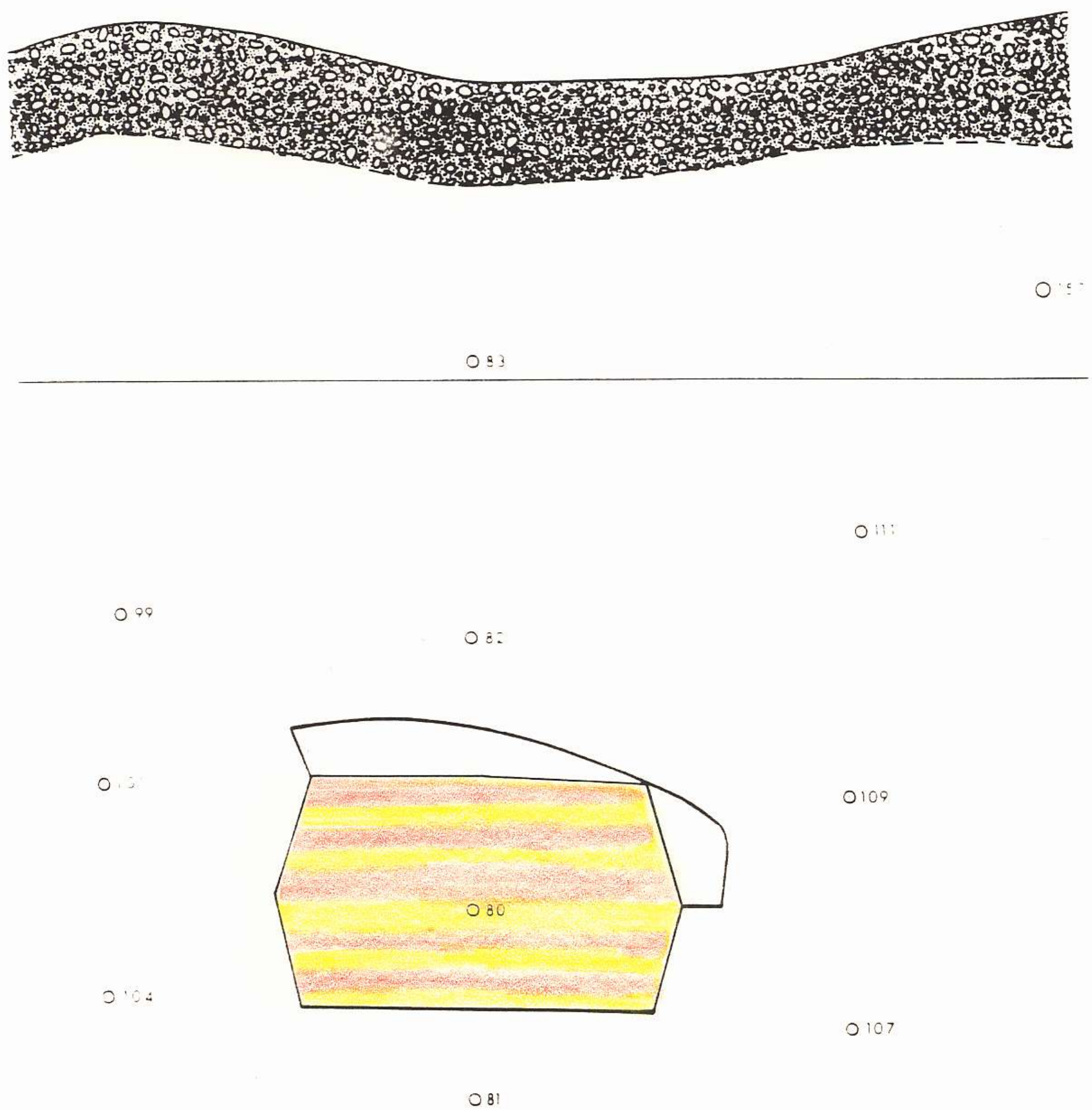
CORONATION EXTENSION ZONE

BLOCK I

DISTRIBUTION OF ORE TYPES

Fig. 11



LEGEND :

- Type A
- Type B
- Type C
- Type D
- Type E
- Type F
- Type G

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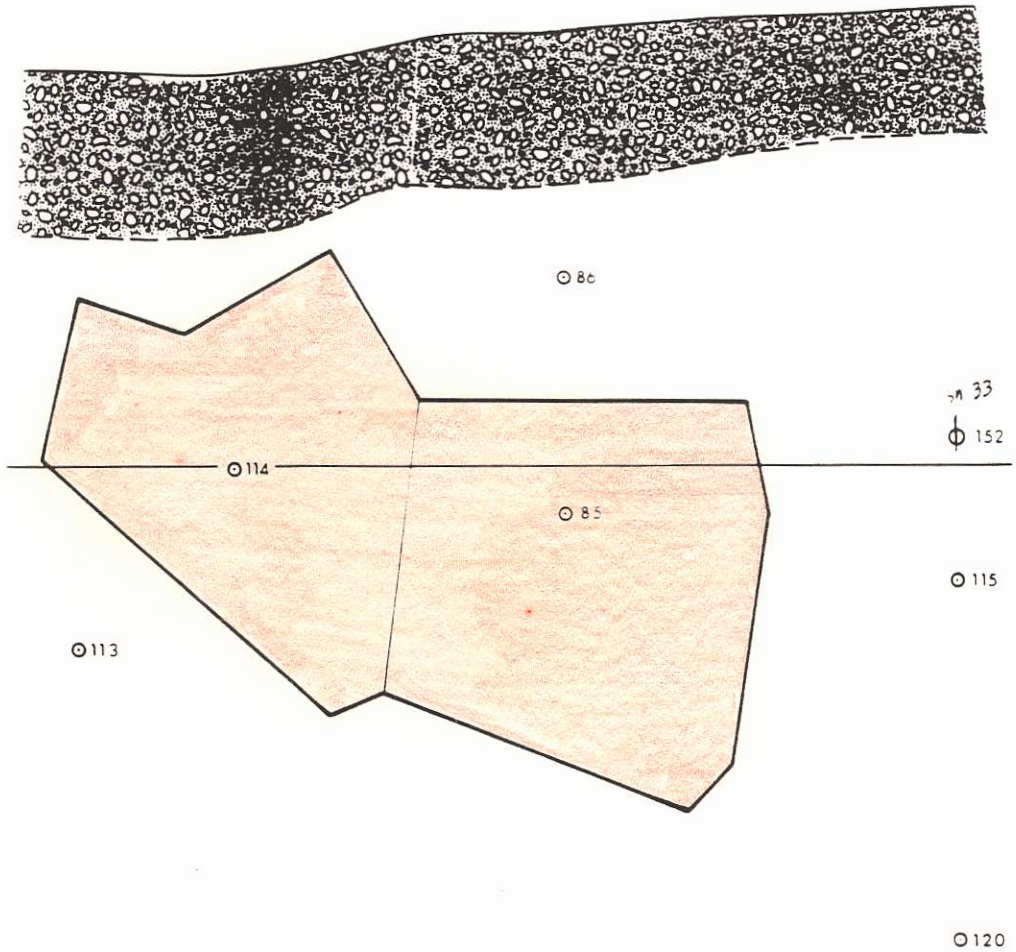
CORONATION EXTENSION ZONE

BLOCK II

DISTRIBUTION OF ORE TYPES

Fig. 12



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CORONATION EXTENSION ZONE

BLOCK III

DISTRIBUTION OF ORE TYPES

LEGEND : Type A, Type B, Type C, Type D, Type E, Type F, Type G

TABLE 1

ASSAYS OF SAMPLES REPRESENTED BY POLISHED SECTIONS

CORONATION ZONE

(N.B.Assays are repeated when more than one sample was taken from a single assayed interval)

DRILL HOLE	DEPTH (M.)	ORE TYPE	BA %	CU %	PB %	ZN %	AG OZ/T	AU OZ/T
12	52.6	E	0.62	3.95	0.16	1.60	4.82	0.203
	53.0	D	0.59	0.04	0.21	3.75	3.01	0.377
	53.5	B	0.26	4.43	0.63	5.53	3.44	0.076
	54.5	A	0.18	1.22	0.94	8.90	4.02	0.135
15	52.0	A	0.27	0.43	0.96	4.50	2.49	0.103
	53.0	A	0.45	0.14	0.43	2.95	2.56	0.058
	55.0	A	0.19	1.94	1.01	11.10	3.12	0.255
	55.7	A	0.25	1.20	0.69	7.10	12.05	0.224
22	107.0	D	0.30	0.12	1.34	2.70	2.64	0.062
	110.0	D	0.25	0.42	0.33	2.55	0.66	0.028
	111.6	E	0.51	0.27	0.07	0.18	1.79	0.635
	111.8	D	0.51	0.27	0.07	0.18	1.17	0.635
27	66.8	E	0.33	0.21	2.00	3.30	4.79	0.114
	68.2	B	0.40	1.92	0.55	4.52	2.37	0.050
	69.7	B	0.28	11.20	0.28	1.48	4.45	0.125
33	74.7	A	0.10	0.74	9.40	18.00	3.71	0.060
	76.0	A	0.50	1.12	1.60	4.80	2.55	0.047
	76.5	A	0.60	0.30	2.97	5.43	1.28	0.098
34	77.1	A	0.50	1.04	9.25	18.00	29.20	0.117
	78.5	D	0.92	0.14	1.07	1.96	1.71	0.016
	80.0	A	0.20	0.81	0.68	13.80	1.15	0.022
	81.0	A	0.30	1.16	0.39	5.30	1.73	0.057
36	23.9	A	0.34	1.42	1.45	9.20	7.50	1.345
	24.2	A	0.34	1.42	1.45	9.20	7.50	1.345
	25.4	D	0.39	0.09	0.15	0.92	1.44	0.113
	26.5	C	0.36	1.60	0.78	5.10	2.15	0.160
	27.0	A	0.36	1.60	0.78	5.10	2.15	0.160
38	75.0	B	0.25	1.20	0.72	4.80	1.84	0.085
	76.0	B	0.30	1.48	0.33	1.53	1.41	0.040
39	51.8	C	0.20	0.49	2.60	5.60	1.05	0.090
	52.4	A	0.05	0.40	0.66	1.50	6.26	0.300
	52.8	A	0.15	1.00	1.37	10.05	4.30	0.052
62	88.4	A	0.14	0.80	2.50	18.10	3.95	0.032
	88.8	A	0.62	0.30	0.46	3.60	4.85	0.214

	89.6	C	0.62	0.30	0.46	3.60	4.85	0.214
	90.0	A	0.40	1.21	0.70	8.50	6.22	0.318
	91.0	A	0.40	1.21	0.70	8.50	6.22	0.318
	92.0	A	0.40	1.21	0.70	8.50	6.22	0.318
63	113.0	D	0.30	0.28	0.18	4.25	1.07	0.062
	115.0	D	0.48	0.13	0.10	1.90	0.54	0.040
64	37.7	D	0.30	0.30	0.98	2.10	4.35	0.105
	38.7	D	0.30	0.30	0.98	2.10	4.35	0.105
67	171.0	A	0.13	1.98	1.85	8.20	6.00	0.066
	171.5	A	0.13	1.98	1.85	8.20	6.00	0.066
129	48.0	A	0.27	0.25	0.84	4.90	0.89	0.028
	49.0	E	0.68	0.05	0.02	0.10	0.13	0.144
	49.5	A	0.65	0.46	0.72	6.55	0.99	0.072
132	26.0	A	0.25	0.47	2.00	4.60	2.93	0.040
	26.7	A	0.17	4.45	3.30	21.50	8.36	0.403
	27.0	A	0.17	4.45	3.30	21.50	8.36	0.403
	27.5	A	0.29	2.13	1.92	17.14	5.62	0.050
	28.3	A	0.15	1.28	11.27	27.34	17.76	0.144
	28.7	A	0.15	1.28	11.27	27.34	17.76	0.144
	29.0	B	0.60	1.00	0.12	4.56	0.75	0.043
134	17.0	A	0.09	1.04	3.50	27.20	9.30	0.205
	17.3	A	0.22	1.28	1.40	8.80	14.21	2.594
	17.8	A	0.22	1.28	1.40	8.80	14.21	2.594
	18.5	A	0.24	1.24	0.98	10.00	10.27	0.270
	19.8	A	0.36	0.93	1.16	10.93	3.31	0.026
	23.0	D	0.38	1.80	0.16	1.59	1.71	0.046
	26.0	A	0.35	2.00	0.56	3.18	1.60	0.148
	28.0	B	0.58	1.33	0.04	0.38	1.28	0.149
135	10.5	A	0.00	3.00	5.00	25.00	10.00	0.432
	11.5	A	0.00	2.00	7.00	27.00	11.00	0.310
	12.6	A	0.00	3.00	5.00	22.00	11.00	0.370
	13.5	A	0.00	2.00	4.00	15.00	11.00	0.416
	14.2	A	1.00	2.00	4.00	23.00	8.00	0.087
136	14.2	A	0.12	0.68	2.00	9.52	1.81	0.028
	15.7	A	0.11	1.28	4.56	24.00	7.75	0.100
139	9.5	A	0.00	1.00	1.00	10.00	4.00	0.090
	29.7	A	0.15	0.58	1.92	10.90	1.52	0.044
	31.4	A	0.28	1.00	2.68	15.50	9.01	0.050
	33.1	A	0.18	0.92	1.60	11.90	5.86	0.496
	33.6	A	0.10	2.08	7.25	32.29	15.71	0.419
	34.0	A	0.08	1.74	8.60	26.74	10.09	0.220
	35.0	A	0.10	1.76	6.10	21.44	14.25	0.068
141	4.0	A	0.20	1.32	10.90	21.20	20.02	2.425
	4.5	A	0.20	1.32	10.90	21.20	20.02	2.425
	5.0	A	0.20	1.32	10.90	21.20	20.02	2.425
	5.4	A	0.20	1.32	10.90	21.20	20.02	2.425

	18.0	A	0.20	0.96	6.72	18.00	10.12	0.277
	19.0	A	0.20	0.96	6.72	18.00	10.12	0.277
	20.0	C	0.28	1.28	2.70	12.80	3.47	0.045
	21.7	C	0.26	0.70	0.80	7.46	1.76	0.039
	23.5	D	0.32	0.76	0.78	6.53	3.53	0.026
	25.5	A	0.54	0.37	0.08	2.75	1.42	0.228
142	64.5	D	0.53	0.00	0.02	0.04	0.22	0.378
	65.3	A	0.28	1.02	0.46	2.42	1.64	0.179
	66.0	A	0.30	0.34	0.53	4.75	1.41	0.020
144	62.1	D	0.24	1.11	1.00	3.58	5.34	0.231
	62.6	A	0.18	1.96	1.90	8.40	3.52	0.056
146	35.4	A	0.08	4.75	3.80	22.70	16.47	0.113
	36.5	A	0.08	4.75	3.80	22.70	16.47	0.113
182	225.2	A	0.08	3.20	7.00	27.75	6.65	0.171
	225.7	A	0.04	4.76	5.85	31.72	9.54	0.179
	226.2	A	0.20	1.08	8.80	34.50	7.60	0.156
184	356.0	A	0.60	0.40	1.23	3.20	1.86	0.190
	357.0	A	0.31	0.30	1.09	6.00	1.80	0.037
	358.2	A	0.31	0.42	0.36	2.32	0.88	0.018
	359.7	B	0.32	12.90	0.13	2.08	3.81	1.081
	359.9	B	0.32	12.90	0.13	2.08	3.81	1.081
	365.4	F	0.37	9.25	0.16	3.40	29.36	0.485
199	128.5	D	0.38	0.04	0.63	1.31	1.84	0.358
	130.8	D	0.13	0.49	0.35	4.25	6.46	0.360
	131.8	C	0.44	0.35	0.15	2.58	2.23	0.104
	132.7	C	0.26	0.49	0.27	11.20	1.50	0.070
203	35.7	A	0.16	1.51	1.27	12.60	3.38	0.158
	36.2	A	0.16	1.51	1.27	12.60	3.38	0.158

CORONATION EXTENSION ZONE

40	46.5	A	0.70	0.95	4.50	10.90	18.20	0.184
	48.0	A	0.51	1.44	3.10	13.30	8.12	0.198
	49.0	A	0.51	1.44	3.10	13.30	8.12	0.198
	50.1	B	0.92	0.80	0.04	0.27	0.97	0.218
	50.6	B	1.50	2.31	0.10	4.76	4.30	0.620
42	110.4	A	0.18	0.62	6.75	16.20	7.00	0.116
44	77.0	C	1.15	0.27	0.34	1.04	0.85	0.193
	77.0	C	1.15	0.27	0.34	1.04	0.85	0.193
	78.5	A	0.35	0.36	8.37	33.00	14.40	0.073
	80.7	B	3.70	1.36	0.28	0.95	2.39	1.126
	80.9	E	3.70	1.36	0.28	0.95	2.39	1.126
	82.0	E	0.35	0.63	2.46	22.10	2.72	0.150

48	93.4	A	0.37	0.86	2.38	19.93	5.09	0.066
51	102.6	A	0.22	2.86	4.50	16.02	16.35	0.261
	102.8	A	0.22	2.86	4.50	16.02	16.35	0.261
	103.0	B	1.49	0.38	0.39	0.87	0.25	0.067
77	62.3	B	0.25	1.16	6.45	21.60	13.28	0.560
	62.5	A	0.25	1.16	6.45	21.60	13.28	0.560
	62.6	A	0.25	1.16	6.45	21.60	13.28	0.560
	64.2	A	0.37	1.59	5.80	13.70	15.03	0.190
80	210.0	C	1.07	0.13	0.63	1.17	2.12	0.069
	210.6	A	0.40	0.73	5.00	11.70	6.46	0.121
	210.7	G	0.27	2.40	14.40	6.80	8.87	0.622
	210.9	G	0.27	2.40	14.40	6.80	8.87	0.622
	212.5	B	0.52	2.60	0.44	7.20	2.92	0.151
	213.5	A	0.52	0.41	0.84	6.00	2.47	0.096
85	88.5	A	0.40	0.69	0.32	15.40	4.71	0.057
	89.0	A	0.90	1.82	1.60	12.80	11.62	0.173
	89.8	A	0.36	3.16	0.36	4.40	2.58	0.372
	90.0	D	0.36	3.16	0.36	4.40	2.58	0.372
114	74.5	A	1.50	0.57	4.25	8.00	10.21	0.044
	75.5	A	0.21	0.06	1.35	7.75	1.95	0.116
	76.0	A	0.26	2.76	9.30	32.92	8.69	0.059

TABLE 2: COEFFICIENTS OF CORRELATION BETWEEN METALS IN ASSAYS LISTED IN TABLE 1

A) MAIN ZONE AND EXTENSION ZONE

	CU	PB	ZN	AG
PB	0.053			
ZN	0.129	0.764		
AG	0.312	0.625	0.578	
AU	0.144	0.079	-0.008	0.302

B) MAIN ZONE ONLY

	CU	PB	ZN	AG
PB	0.052			
ZN	0.149	0.836		
AG	0.342	0.634	0.580	
AU	0.131	0.115	0.054	0.372

C) EXTENSION ZONE ONLY

	CU	PB	ZN	AG
PB	0.140			
ZN	0.032	0.579		
AG	0.164	0.616	0.569	
AU	0.311	-0.070	-0.367	-0.133

TABLE 3

SUMMARY OF SULFIDE MINERALOGY

CORONATION ZONE

DRILL HOLE	DEPTH (M.)	PRINCIPAL SULFIDES	SUBORDINATE SULFIDES	TRACES
12	52.6	MINOR DISSEM PYR		
	53.0	PYR	SPH>GAL	CPY
	53.5	CPY>PYR	TETRA>SPH>GAL	GOLD
	54.5	SPH>CPY>PYR>GAL	TETRA	
15	52.0	PYR>SPH	CPY>GAL>TETRA	
	53.0	SPH>PYR>CPY	TETRA>GAL	
	55.0	CPY>SPH>PYR	GAL>TETRA	
	55.7	PYR>SPH>CPY	TETRA>GAL	GOLD
22	107.0	PYR	SPH>GAL>TETRA	CPY GOLD
	110.0	PYR	CPY>GAL>SPH>TETRA	GOLD
	111.6	SCATT.FINE CPY		
	111.8	PYR	CPY>TETRA>GAL>SPH	GOLD
27	66.8	TRACES SULFIDES ONLY		
	68.2	PY>CPY	SPH	GOLD
	69.7	CPY>PY	SPH>GAL	
33	74.7	SPH>PYR>GAL	TETRA	CPY
	76.0	SPH=CPY	GAL=PYR	
	76.5	SPH>PYR>GAL		CPY
34	77.1	SPH>PYR>GAL>TETRA		CPY GOLD
	78.5	PYR>SPH>GAL		CPY
	80.0	SPH>PYR	GAL>CPY>TETRA	
	81.0	SPH>PYR>CPY	TETRA>GAL	
36	23.9	PYR>SPH>CPY	GAL>TETRA	
	24.2	CPY>SPH	TETRA	GAL PYR AU
	25.4	PYR	CPY>TETRA>GALENA	GOLD
	26.5	MINOR DISSEM SULFIDES		GOLD
	27.0	SPH>CPY>PYR	GAL	GOLD
38	75.0	CPY>PYR>SPH	TETRA>GAL	GOLD
	76.0	CPY>SPH>PYR	TETRA=GAL	
39	51.8	PYR>SPH>GAL	CPY>TETRA	
	52.4	SPH=PYR>GAL	CPY>TETRA	GOLD
	52.8	SPH>PYR>CPY	GAL>YETRA	
62	88.4	PYR>SPH	CPY>GAL>TETRA	
	88.8	SPH>PYR	CPY>GAL>TETRA	
	89.6	PYR>SPH	CPY>GAL	
	90.0	SPH>PYR	GAL>TETRA>CPY	
	91.0	SPH>PYR>CPY	GAL>TETRA	
	92.0	SPH>PYR>CPY	GAL	
63	113.0	PYR	SPH>TETRA	CPY

	115.0	PYR	SPH	GAL>CPY
64	37.7	PYR	SPH>TETRA>GAL	
	38.7	PYR>SPH>GAL	TETRA	
67	171.0	SPH>PYR	GAL>CPY>TETRA	
	171.5	SPH>PYR	CPY>GAL>TETRA	
129	48.0	PYR>SPH	GAL>TETRA>CPY	
	49.0	TRACES SULFIDES		
	49.5	PYR>SPH>CPY	GAL	
132	26.0	SPH>PYR>CPY	GAL	GOLD
	26.7	SPH>PYR>CPY	GAL	TETRA
	27.0	SPH>PYR>CPY	GAL>TETRA	
	27.5	SPH>PYR>CPY	GAL>TETRA	
	28.3	SPH>PYR>GAL	CPY>TETRA	
	28.7	SPH>PYR	CPY>GAL	GOLD
	29.0	PYR>CPY	SPH	TETRA
134	17.0	SPH>PYR	GAL>TETRA>CPY	
	17.3	SPH>CPY>PYR>TETRA	GAL	GOLD
	17.8	SPH>PYR	GAL>TETRA>CPY	GOLD
	18.5	PYR>SPH	GAL>TETRA>CPY	
	19.8	SPH>PY>CPY	GAL>TETRA	
	23.0	CPY	PYR>SPH	
	26.0	SPH>SPH	CPY>GAL	TETRA GOLD
	28.0	CPY	PYR=SPH	
135	10.5	SPH>PYR	CPY>GAL>TETRA	
	11.5	SPH>GAL	CPY>PYR>TETRA	
	12.6	SPH>PYR>CPY	GAL=TETRA	GOLD
	13.5	SPH>CPY>PY	GAL	TETRA GOLD
	14.2	SPH>CPY>GAL	TETRA>PYR	GOLD
136	14.2	SPH>PYR	GAL>CPY	
	15.7	SPH>PYR	GAL>TETRA	CPY
139	9.5	SPH>PYR	GAL=CPY>TETRA	
	29.7	SPH>PYR>CPY	GAL	
	31.4	SPH>PYR>GAL	CPY>TETRA	
	33.1	SPH>PYR>CPY>GAL	TETRA	GOLD
	33.6	SPH	PYR>GAL>TETRA>CPY	GOLD
	34.0	SPH	GAL>CPY>PYR>TETRA	GOLD
	35.0	SPH>PYR>CPY	GAL>TETRA	
141	4.0	SPH>GAL	PYR>CPY>TETRA	GOLD
	4.5	SPH>GAL	PYR>CPY>TETRA	
	5.0	SPH>GAL>CPY>PYR	TETRA	
	5.4	SPH>CPY	PYR	5.0
	18.0	SPH>PYR>CPY	GAL	ASPY
	19.0	SPH>GAL>PYR	CPY	TETRA
	20.0	SPH>PYR	CPY>GAL	
	21.7	CPY>SPH>PYR	GAL>TETRA	RUTILE
	23.5	PYR	SPH>GAL>TETRA	CPY
	25.5	PYR=SPH	CPY	

142	64.5	PYR	SPH	
	65.3	PYR>CPY>SPH		
	66.0	PYR>SPH	GAL>TETRA>CPY	
144	62.1	PYR>SPH>CPY	GAL>TETRA	GOLD
	62.6	SPH>PYR	CPY>GAL>TETRA	
146	35.4	SPH>CPY>PYR>GAL	TETRA	
	36.5	SPH>CPY	PYR>GAL>TETRA	
182	225.2	SPH>CPY>PYR	TETRA>GAL	
	225.7	SPH>CPY>PYR>GAL>TETRA		
	226.2	SPH>GAL>PYR	CPY>TETRA	GOLD
184	356.0	CPY>GAL>SPH>PY		
	357.0	SPH>PYR>GAL	TETRA>CPY	GAL GOLD
	358.2	SPH>PYR>CPY	TETRA>GAL	
	359.7	CPY	SPH>PYR	GOLD
	359.9	CPY	SPH>PYR	GOLD
	365.4	TETRA>SPH>PYR	CPY	GAL GOLD
199	128.5	PYR		SPH>GAL
	130.8	PYR	TETRA	GAL>CPY
	131.8	SPH>PYR>CPY	GAL>TETRA	GOLD
	131.8	SPH=PYR	TETRA	GALENA
	132.7	PYR=SPH	CPY	GAL
203	35.7	SPH>PYR>CPY	GAL	
	36.2	PYR>SPH>CPY	GAL	

CORONATION EXTENSION ZONE

40	46.5	SPH>GAL>CPY	TETRA	
	48.0	SPH>PYR	GAL>CPY>TETRA	
	49.0	SPH>PYR>GAL	TETRA	CPY
	50.1	TRACES SULFIDES		
	50.6	PYR=CPY	SPH>TETRA>GAL	GOLD
42	110.4	SPH>GAL>CPY	PYR	ASPY
44	77.0	MINOR DISSEM SULFIDES		
	78.5	SPH>PYR>GAL		CPY
	80.7	CPY>PYR	SPH>GAL>TETRA	GOLD
	80.9	SCATTERED TRACES SULFIDES		
	82.0	MINOR DISS PYR		
48	93.4	SPH>PYR>GAL	CPY	
51	102.6	SPH>PYR>CPY>GAL		
	103.0	CPY>PYR	SPH	
77	62.3	CPY>SPH>PYR		
	62.5	SPH>GAL	PY>CPY	

	62.6	SPH>GAL>CPY	TETRA>PYR	GOLD
	64.2	SPH>GAL>PYR>CPY	TETRA	
80	210.0	PYR	SPH>GAL>CPY	
	210.6	SPH	CPY>PYR>GAL>TETRA	
	210.7	GAL>CPY	PYR>SPH>TETRA	
	210.9	GAL>PYR>SPH>CPY		
	213.5	CPY>PYR>SPH	GAL	
	213.5	PYR>SPH	CPY>GAL	
85	88.5	SPH>PYR	TETRA>GAL	CPY
	89.0	SPH>CPY>PYR>GAL	TETRA	
	89.8	SPH>CPY		GAL>PYR
	90.0	PYR>CPY	SPH	GOLD
114	74.5	SPH>PYR>GAL		CPY
	75.5	SPH>GAL>PYR	CPY	TETRA
	76.0	SPH>GAL>CPY	PYR	

TABLE 4

SUMMARY OF SULFIDE GRAIN SIZE
(Maximum Width of Grains in mm)

CORONATION ZONE

DRILL HOLE	DEPTH (M.)	SPH	PYR	CPY	GAL	TETRA
12	52.6					
	53.0	0.30	0.75	0.20	0.20	
	53.5	0.25	0.75	5.00	0.25	0.75
	54.5	6.00	1.00	1.00	0.25	0.15
15	52.0	5.00	0.75	1.00	0.05	0.05
	53.0	3.00	0.50	0.50	0.10	0.50
	55.0	2.00	1.00	2.50	0.05	0.05
	55.7	1.00	1.00	1.50	0.10	0.50
22	107.0	0.10	0.50	0.10	0.10	0.10
	110.0	0.50	1.00	1.00	0.50	0.50
	111.6					
	111.8		1.00	0.10	0.10	0.10
27	66.8					
	68.2	0.75	0.20	3.00		
	69.7	0.20	0.30	8.00	0.10	
33	74.7	6.00	0.75	0.50	0.25	0.50
	76.0	4.00	0.50	4.00	0.05	
	76.5	8.00	0.50	0.15	0.30	
34	77.1	10.00	0.50	0.02	0.10	0.50
	78.5	0.50	0.50		0.25	
	80.0	4.00	1.00	0.40	0.20	0.20
	81.0	7.00	2.00	1.00	0.25	0.25
36	23.9	1.00	1.00	0.20	0.20	0.20
	24.2	2.00	0.05	2.50	0.50	0.50
	25.4	0.50	0.75	0.10	0.10	0.10
	26.5	1.00	0.20	0.15	0.15	0.15
	27.0	8.00	1.00	2.50	0.10	
38	75.0	0.75	2.00	3.50	0.25	0.50
	76.0	2.00	1.00	2.50	0.10	0.10
39	51.8	4.00	0.25	0.15	0.50	0.05
	52.4	2.50	0.50	0.25	0.25	0.50
	52.8	6.00	0.50	1.50	0.05	0.05
62	88.4		0.20			
	88.8	10.00	1.00	0.50	0.30	0.02
	89.6	3.00	1.00	2.50	0.10	
	90.0	5.00	2.00	0.05	0.30	0.30

	91.0	5.00	1.00	1.00	0.05	0.05
	92.0					
63	113.0	0.50	0.40	0.05		0.20
	115.0	0.05	0.50	0.05	0.05	
64	37.7	0.50	0.25		0.10	0.10
	38.7	0.25	0.20		0.40	0.40
67	171.0	5.00	2.00	0.10	0.05	0.05
	171.5	6.00	0.75	0.05	0.02	0.02
129	48.0	2.00	2.00	0.25	0.25	0.25
	49.0					
	49.5	10.00	1.00	1.00	0.25	
132	26.0					
	26.7	8.00	1.00	0.75	0.30	0.10
	27.0	4.00		4.50	0.40	0.20
	27.5	10.00	2.00	3.00	0.75	0.50
	29.0	0.10	0.60	0.75		
134	17.0	8.00	1.00		0.50	0.50
	17.3	8.00	1.00	2.00	0.50	1.00
	17.8	10.00	1.50	0.20	0.10	0.20
	18.5	1.50	0.50	0.20	0.25	0.20
	19.8	6.00	1.00	1.00	0.10	0.10
	23.0	0.50	2.50	5.00	0.01	
	26.0	7.50	1.00	0.50	0.05	
	28.0	1.50	0.15	2.50		
135	12.6	8.00	1.00	0.50	0.20	0.20
	13.5	5.00	1.00	1.00	0.15	0.10
	14.2	8.00	1.25	0.50	0.20	0.25
136	14.2	5.00	1.00	0.50	0.10	
	15.7	15.00	1.50	0.10	1.00	0.50
139	9.5					
	29.7	25.00	1.00	2.00	0.50	
	31.4	25.00	1.00	0.25	0.10	0.10
	33.1	5.00	1.00	1.50	0.50	0.10
	33.6	10.00	0.75	0.05	0.50	0.25
	34.0	10.00	0.50	1.50	0.30	0.15
	35.0	5.00	0.75	1.00	0.10	0.10
141	4.0	10.00	1.00	0.50	0.50	0.75
	4.5	10.00	1.00	0.50	0.50	0.75
	5.0	10.00	2.00	0.50	1.00	0.50
	5.4		0.01	0.02		
	18.0	10.00	1.00	0.75	0.02	
	19.0	20.00	0.40	1.50	1.50	0.25
	20.0	5.00	1.00	0.25		
	21.7	1.00	1.00	1.00	0.20	0.20
	23.5	1.00	1.00	1.00	0.50	0.50
	25.5					
142	64.5	0.20	0.20			
	65.3	2.00	1.25	1.50		
	66.0	5.00	1.00	0.25	0.50	0.25

144	62.1	0.40		3.50		
	62.6	20.00	1.00	1.00	0.30	0.02
146	35.4	15.00	0.30	0.50	0.25	0.25
	36.5	10.00	1.00	2.50	0.25	0.10
182	225.2	25.00	1.00	1.00		2.00
	225.7	6.00	0.75	0.25	0.10	0.50
	226.2		0.50	2.00	0.10	2.00
184	356.0	0.25	0.10	4.00	1.00	
	357.0	7.50	1.00	0.05	0.20	0.75
	358.2	7.50	1.50	1.50	0.25	0.50
	359.7	1.00	0.50	25.00		
	359.9	1.00	0.50	25.00		
	365.4	7.50	3.00	0.50	0.10	7.00
199	128.5		0.20			
	130.8		0.20			
	131.8	10.00	0.75	3.00	0.30	0.15
	131.8	7.00	1.00		0.15	2.00
	132.7	10.00	1.00	0.75		
203	35.7	5.00	0.05	0.50	0.40	
	36.2	0.50	1.00	2.00	0.10	

CORONATION EXTENSION ZONE

40	46.5	6.00		0.20	0.25	0.05
	48.0	20.00	1.00	0.20	0.10	0.05
	49.0	15.00	1.00	0.05	0.50	0.25
	50.1					
	50.6	2.50	0.30	0.50	0.05	0.05
42	110.4	7.50	0.30	0.25	0.10	
44	77.0	1.00	0.50	0.01	0.20	
	77.0					
	78.5	10.00	1.00	0.05	0.10	
	80.7	0.50	1.00	3.50	0.05	0.02
	80.9					
	82.0					
48	93.4	6.00	0.50	0.75	0.10	
51	102.6	1.00	1.00	1.00	0.50	0.15
	103.0	0.05	2.00	5.00		
77	62.3	1.00	0.75	5.00		
	62.5	6.00	1.00	1.00	0.10	
	62.6	6.00	1.00	0.50	0.50	0.10
	64.2	10.00	0.50	0.20	0.50	0.20
80	210.0	0.50	0.50	0.25	0.10	
	210.6	25.00	1.00	1.00	1.00	
	210.7			5.00	10.00	0.02

	210.9	2.00	5.00	1.50		
	213.5	2.00	0.80	5.00	0.10	
	213.5	5.00	1.00	0.50	0.05	
85	88.5	10.00	0.50	0.10	0.10	0.10
	89.0	5.00	1.00	0.50	0.10	0.10
	89.8	5.00	0.05	0.25	0.05	
	90.0	0.10	0.50	0.40		
114	74.5	20.00	0.75	0.05	0.05	
	75.5	25.00	0.75	0.50	0.10	0.05
	76.0	10.00	2.00	0.05	0.30	

TABLE 5

LISTING OF SAMPLES CONTAINING FREE GOLD

(Including number of grains in each slide
and their combined areas in square microns)

CORONATION ZONE

DRILL HOLE	DEPTH (M.)	TOTAL GRAINS	TOTAL AREA	HOST MINERALS	AU ASSAY	ORE TYPE
12	53.5	10	2204	TETRA + CPY	0.076	B
15	52.0	1	42	SPH	0.103	A
	55.7	5	989	TETRA + SPH	0.224	A
22	107.0	5	25	TETRA	0.062	D
	110.0	2	310	TETRA + SPH	0.028	D
	111.6	43	10225	CPY + TETRA	0.635	E
	111.8	9	614	CPY	0.635	D
34	77.1	6	591	TETRA	0.771	A
36	24.2	1	16	TETRA + SPH	1.345	A
	25.4	1	60	SPH	0.113	D
	26.5	2	25	CPY + SPH	0.160	C
	27.0	2	42	CPY	0.160	A
38	75.0	4	198	TETRA + SPH	0.085	B
39	52.4	1	75	GAL + SPH	0.300	A
132	26.0	1	16	CPY + GAL	0.040	A
	26.7	2	61	TETRA + SPH	0.403	A
	28.7	1	12	GAL + SPH	0.144	A
134	17.3	10	2177	SPH + TETRA	2.594	A
	17.8	1	75	GAL + SPH	2.594	A
	26.0	1	16	TETRA + SPH	0.148	A
135	12.6	1	10	TETRA + GAL	0.370	A
	13.5	3	200	CPY + GAL	0.416	A
	14.2	1	21	CPY	0.087	A
139	33.1	11	2720	TETRA + CPY + GAL	0.496	A
	33.6	2	60	SPH + TETRA	0.419	A
	34.0	4	1065	CPY	0.220	A
141	4.0	10	1150	SPH + TETRA	2.425	A
144	62.1	2	68	TETRA	0.231	D
182	226.2	1	200	TETRA	0.156	A
184	359.7	27	28279	CPY	1.081	B
	359.9	18	13933	CPY+PYR	1.081	B
	365.4	12	426	TETRA	0.485	F

CORONATION EXTENSION ZONE

40	50.6	15	565	CPY	0.620	B
44	80.7	2	66	TETRA + GAL + CPY	1.126	B
51	102.8	1	200	CPY+TET+GAL	0.261	A
77	62.6	3	68	GAL + CPY	0.560	A
80	210.9	1	650	GAL + SPH	0.622	G
85	90.0	4	94	CPY	0.372	D

TABLE 6

LISTING OF OBSERVED GOLD GRAINS
(Dimensions in Microns)

CORONATION ZONE

DRILL HOLE	DEPTH (M.)	GRAIN	LENGTH	WIDTH	AREA
12	53.5	1	7	2	14
		2	30	12	360
		3	45	12	540
		4	50	15	750
		5	15	8	120
		6	20	5	100
		7	10	10	100
		8	10	5	50
		9	11	10	110
		10	20	3	60
					2,204
15	52.0	1	7	6	42
	55.7	1	12	5	60
		2	18	8	144
		3	30	7	210
		4	25	9	225
		5	35	10	350
					989
22	107.0	1	1	1	1
		2	1	1	1
		3	1	1	1
		4	8	2	16
		5	3	2	6
					25
	110.0	1	25	10	250
		2	10	6	60
					310
	111.6	1	10	2	20
		2	3	1	3
		3	20	10	200
		4	3	3	9
		5	1	1	1
		6	6	3	18

		7	10	3	30
		8	15	12	180
		9	4	2	8
		10	15	5	75
		11	15	6	90
		12	10	6	60
		13	3	2	6
		14	2	1	2
		15	2	1	2
		16	2	2	4
		17	1	1	1
		18	3	2	6
		19	10	5	50
		20	25	10	250
		21	40	15	600
		22	8	3	24
		23	12	4	48
		24	100	40	4000
		25	40	20	800
		26	10	10	100
		27	30	15	450
		28	10	5	50
		29	10	5	50
		30	3	3	9
		31	15	6	90
		32	12	5	60
		33	10	8	80
		34	10	6	60
		35	20	12	240
		36	6	6	36
		37	5	5	25
		38	20	12	240
		39	20	10	200
		40	6	8	48
		41	20	10	200
		42	50	20	1000
		43	40	20	800
					10,225
	111.8	1	4	2	8
		2	2	1	2
		3	20	10	200
		4	5	4	20
		5	3	3	9
		6	15	10	150
		7	1	1	1
		8	20	8	160
		9	8	8	64
					614
34	77.1	1	20	15	300
		2	8	8	64
		3	6	3	18
		4	10	8	80
		5	12	10	120
		6	3	3	9

					591
36	24.2	1	4	4	16
	25.4	1	15	4	60
	26.5	1	4	4	16
		2	3	3	9

					25
	27.0	1	3	3	10
		2	8	4	32

					42

38	75.0	1	20	7	140
		2	7	3	21
		3	2	1	2
		4	7	5	35

					198

39	52.4	1	15	5	75
132	26.0	1	4	4	16
	26.7	1	10	4	40
		2	7	3	21

					61
	28.7	1	4	3	12

134	17.3	1	20	7	140
		2	40	4	160
		3	10	10	100
		4	10	10	100
		5	10	8	80
		6	10	7	70
		7	5	3	15
		8	4	3	12
		9	50	15	750
		10	50	15	750

					2,177
	17.8	1	25	3	75
	26.0	1	15	8	120

135	12.6	1	5	2	10
	13.5	1	7	5	35
		2	5	3	15

		3	15	10	150

					200
	14.2	1	7	3	21

139	33.1	1	10	7	70
		2	7	1	7
		3	40	15	600
		4	65	10	650
		5	40	10	400
		6	2	1	2
		7	5	1	5
		8	17	8	136
		9	15	12	180
		10	17	10	170
		11	50	10	500

					2,720
	33.6	1	7	5	35
		2	5	5	25

					60
	34.0	1	15	10	150
		2	5	3	15
		3	30	10	300
		4	40	15	600

					1,065

141	4.0	1	30	5	150
		2	20	5	100
		3	7	2	14
		4	2	2	4
		5	10	5	50
		6	20	10	200
		7	25	15	375
		8	20	10	200
		9	3	3	9
		10	8	6	48

					1,150

144	62.1	1	5	4	20
		2	12	4	48

	62.1				68

182	226.2	1	20	10	200
184	359.7	1	180	75	13500
		2	80	80	6400
		3	25	5	125
		4	30	7	210

		5	15	3	45
		6	15	3	45
		7	12	2	24
		8	10	5	50
		9	25	10	250
		10	60	25	1500
		11	10	2	20
		12	7	14	14
		13	3	2	6
		14	30	10	300
		15	30	10	300
		16	65	20	1300
		17	5	2	10
		18	30	25	750
		19	5	2	10
		20	30	25	750
		21	45	20	900
		22	40	20	800
		23	10	10	100
		24	20	1	20
		25	40	15	600
		26	50	3	150
		27	25	4	100

					28,279
184	359.9	1	250	50	12500
		2	4	2	8
		3	2	2	4
		4	3	2	6
		5	30	8	240
		6	35	6	210
		7	15	8	120
		8	4	3	12
		9	6	3	18
		10	8	4	32
		11	20	10	200
		12	6	4	24
		13	6	3	18
		14	8	6	48
		15	2	1	2
		16	1	1	1
		17	25	10	250
		18	30	8	240

					13,933
	365.4	1	3	2	6
		2	6	6	36
		3	10	5	50
		4	10	3	30
		5	1	1	1
		6	8	2	16
		7	8	2	16
		8	3	2	6
		9	12	3	36
		10	15	3	45
		11	20	8	160
		12	6	4	24

CORONATION EXTENSION ZONE

DRILL HOLE	DEPTH (M.)	GRAIN	LENGTH	WIDTH	AREA
40	50.6	1	3	1	3
		2	1	1	1
		3	15	10	150
		4	7	4	28
		5	10	10	100
		6	3	1	3
		7	7	2	14
		8	2	2	4
		9	1	1	1
		10	4	2	8
		11	1	1	1
		12	2	1	2
		13	15	7	105
		14	10	2	20
		15	25	5	125
					565
44	80.7	1	7	6	42
		2	12	2	24
					66
51	102.8	1	20	10	200
77	62.6	1	10	5	50
		2	3	3	9
		3	3	3	9
					68
80	210.9	1	65	10	650
85	90.0	1	7	3	21
		2	4	3	12
		3	1	1	1
		4	12	5	60
					94

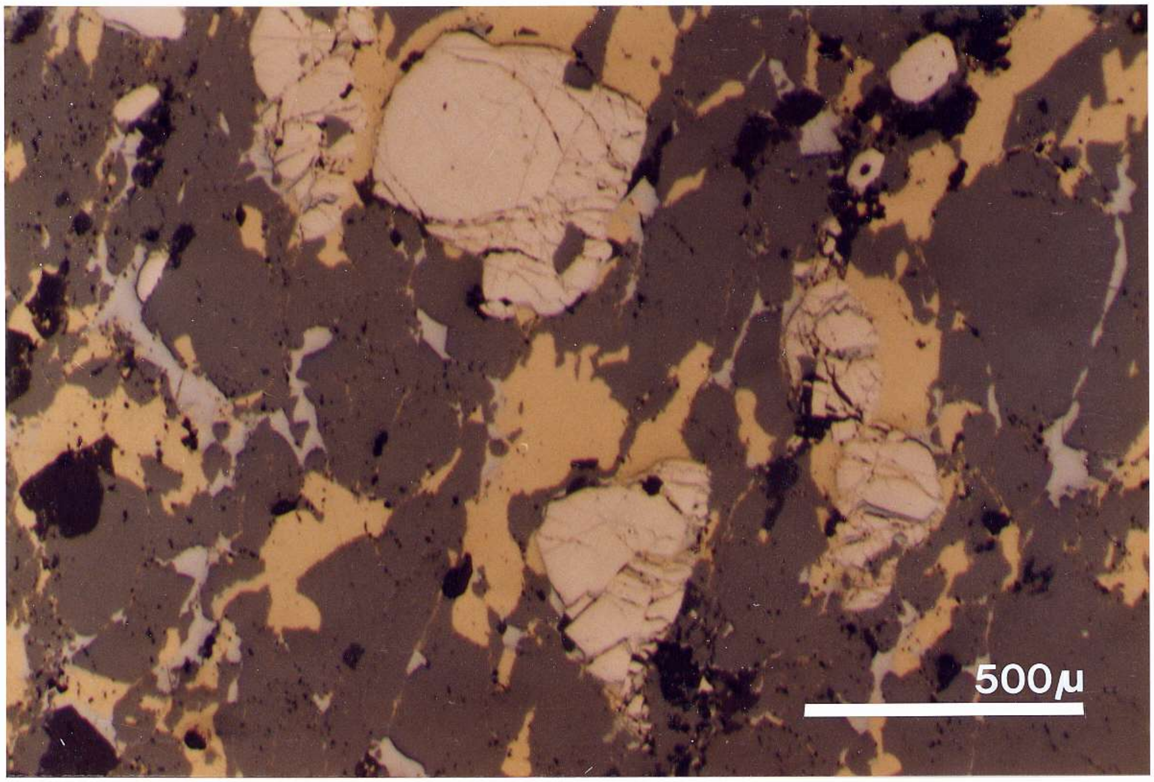

Plate 1: Typical Type A Ore composed of massive sphalerite which contains equant grains of heavily fractured pyrite and anhedral chalcopyrite and galena inclusions. LA-182; 225.7m.

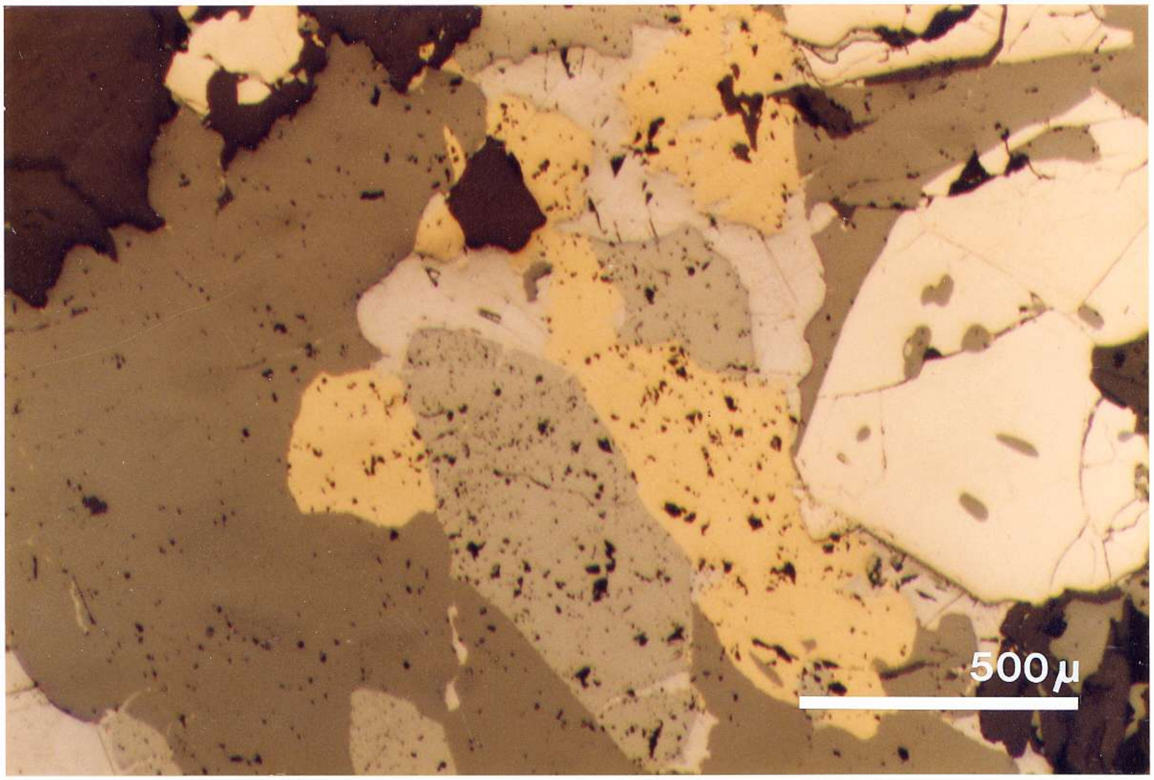

Plate 2: Coarser grained variety of Type A. The dark grey, massive sphalerite contains inclusions of pyrite (yellow), chalcopyrite (orange), galena (light grey) and tetrahedrite (medium grey). LA-132; 27.5m.

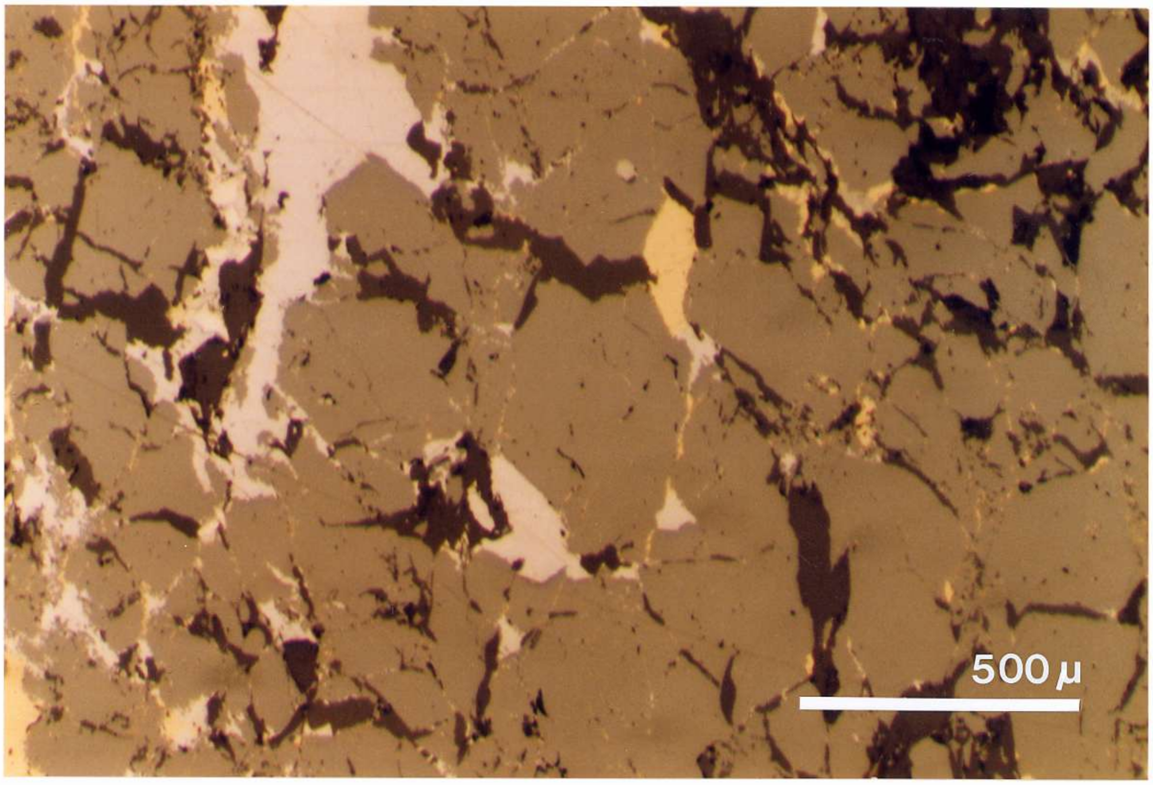

Plate 3: An example of Type A in which the massive sphalerite contains fewer inclusions than were shown in Plates 1 and 2. Internal fracturing of the sphalerite is common. LA-146; 35.4m.

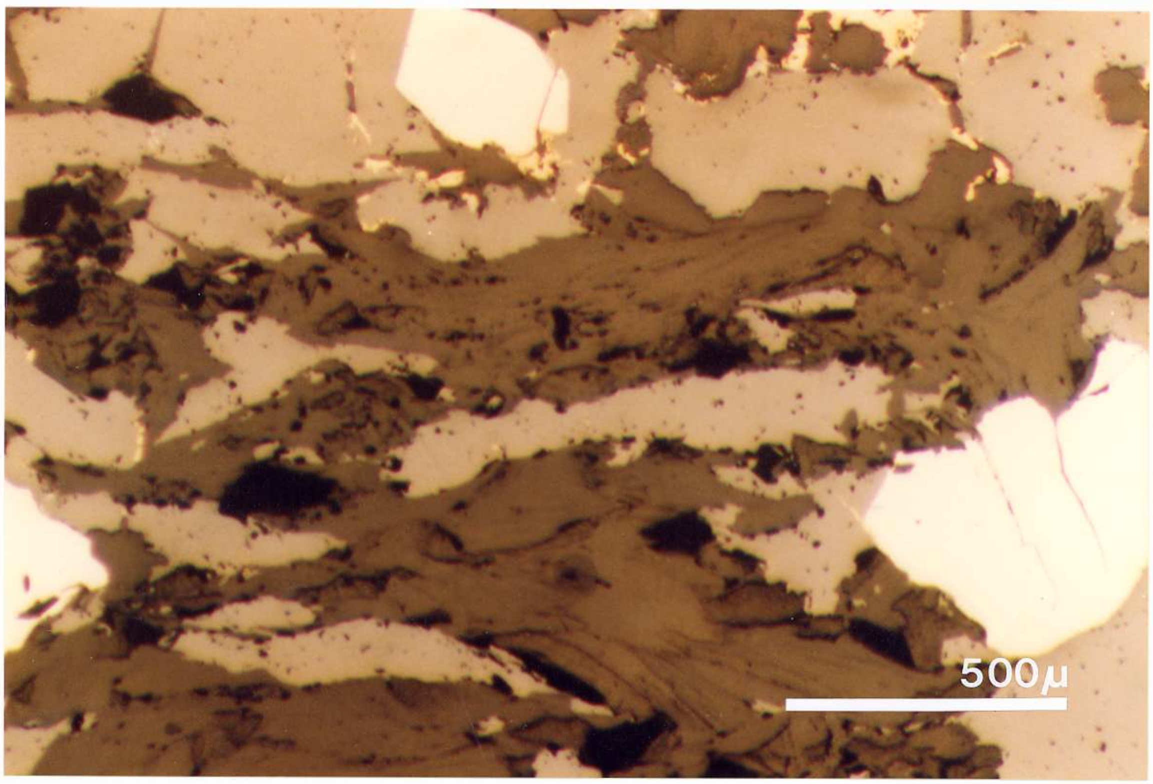

Plate 4: An example of heavily sheared Type A Ore. The massive sphalerite in this case has been broken up in elongated or lenticular fragments. LA-132; 27.5m.

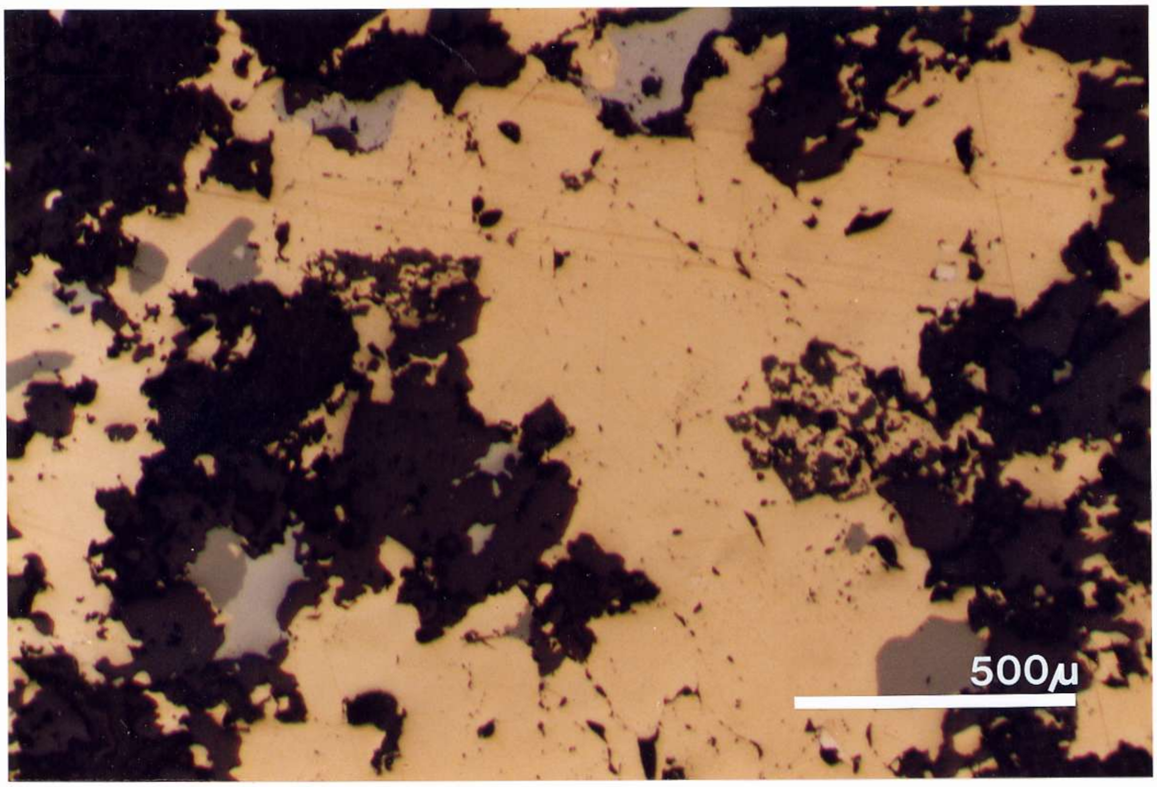

Plate 5: An example of Type B Ore in which massive chalcopyrite is the principal component. It contains minor anhedral inclusions of sphalerite and galena. LA-40; 50.0m.

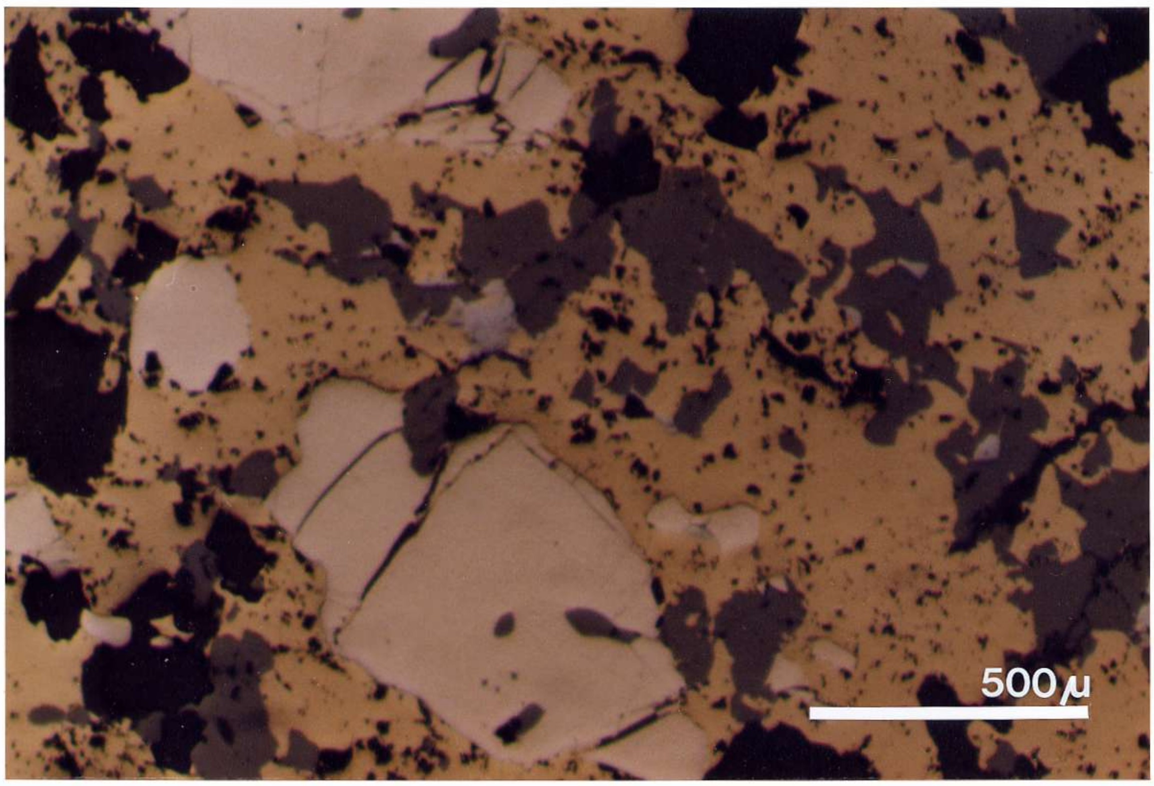

Plate 6: This example of Type B Ore contains subhedral grains of pyrite in addition to anhedral inclusions of sphalerite and galena. LA-27; 69.7m.

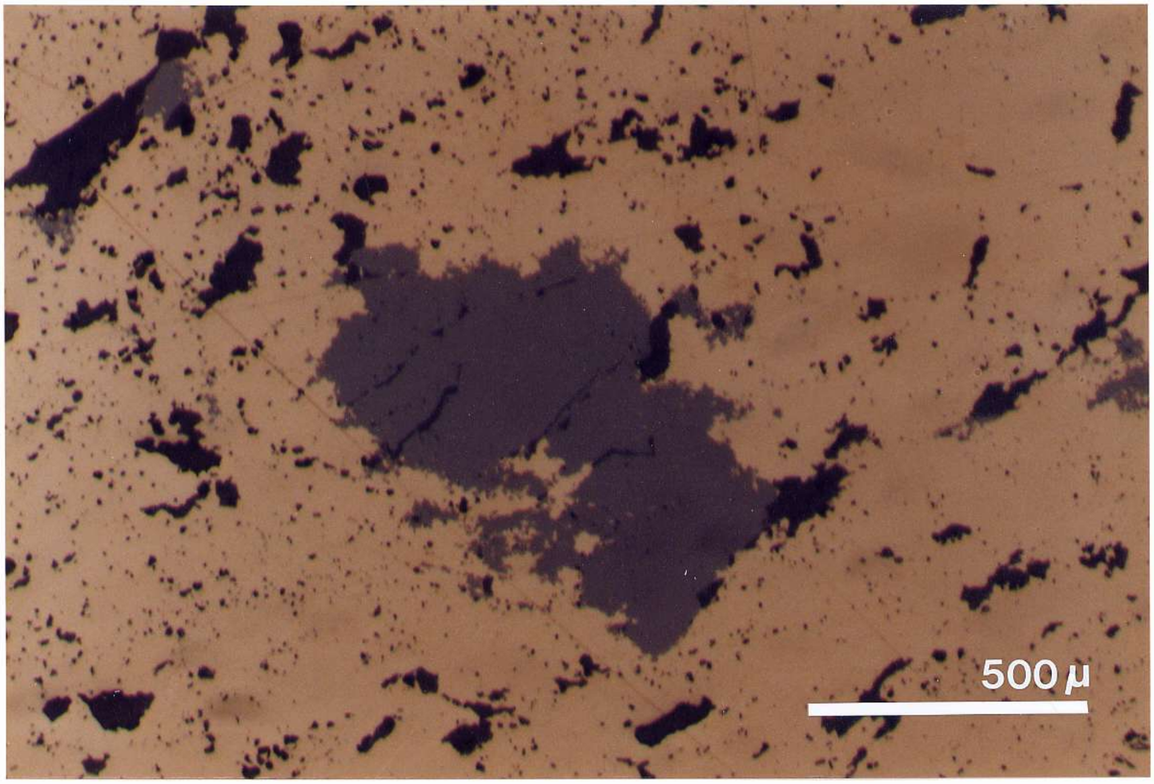

Plate 7: Massive chalcopyrite with an irregularly outlined inclusion of sphalerite. Type B Ore. LA-184; 359.7m.

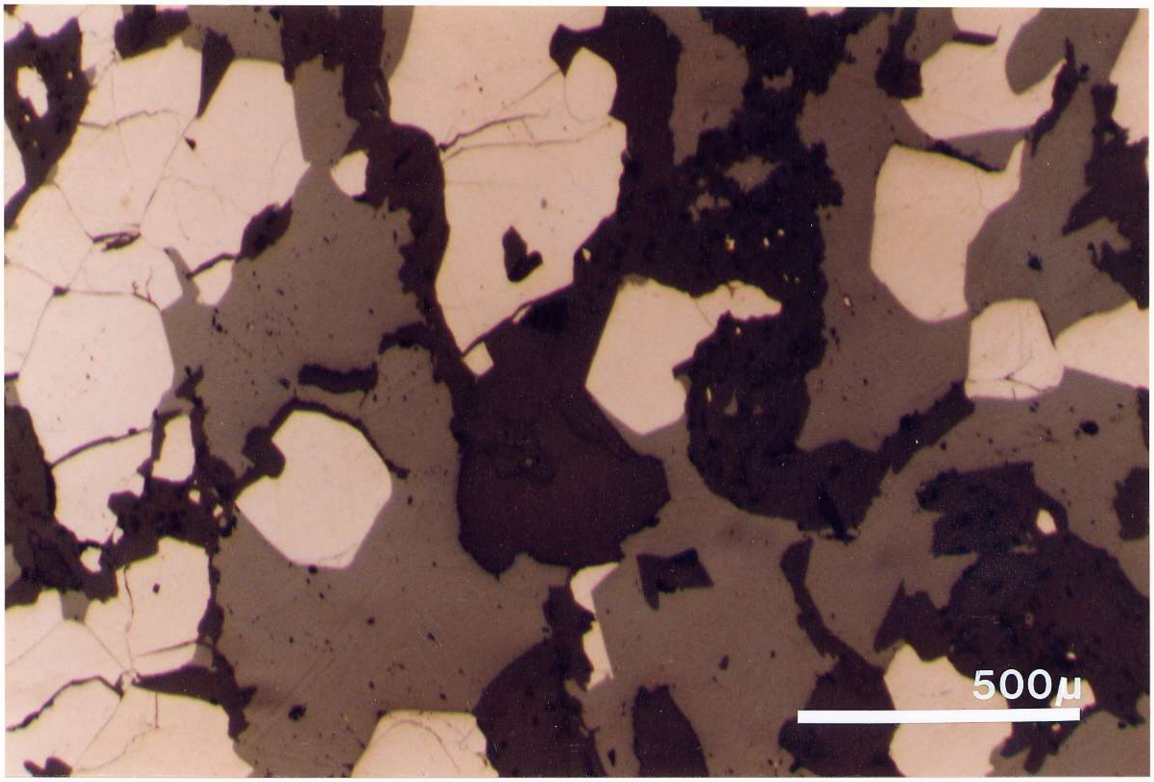

Plate 8: Type C Ore composed mainly of sub-equal amounts of subhedral pyrite and anhedral sphalerite. LA-141; 20.0m.

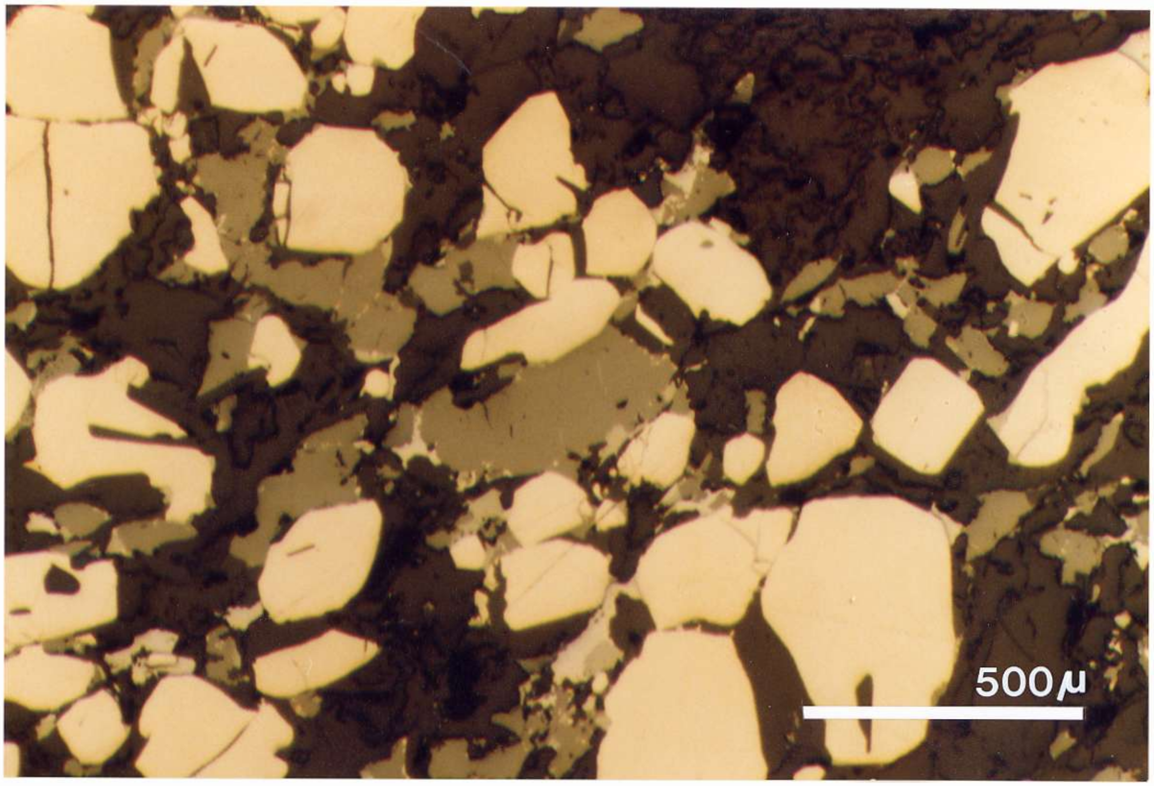

Plate 9: Type C Ore. As Type D ore becomes more pyrite-rich it grades into Type D Ore which is made up mainly of fine grained pyrite accompanied by varying, minor amounts of sphalerite, galena and tetrahedrite. LA-39; 51.8m.

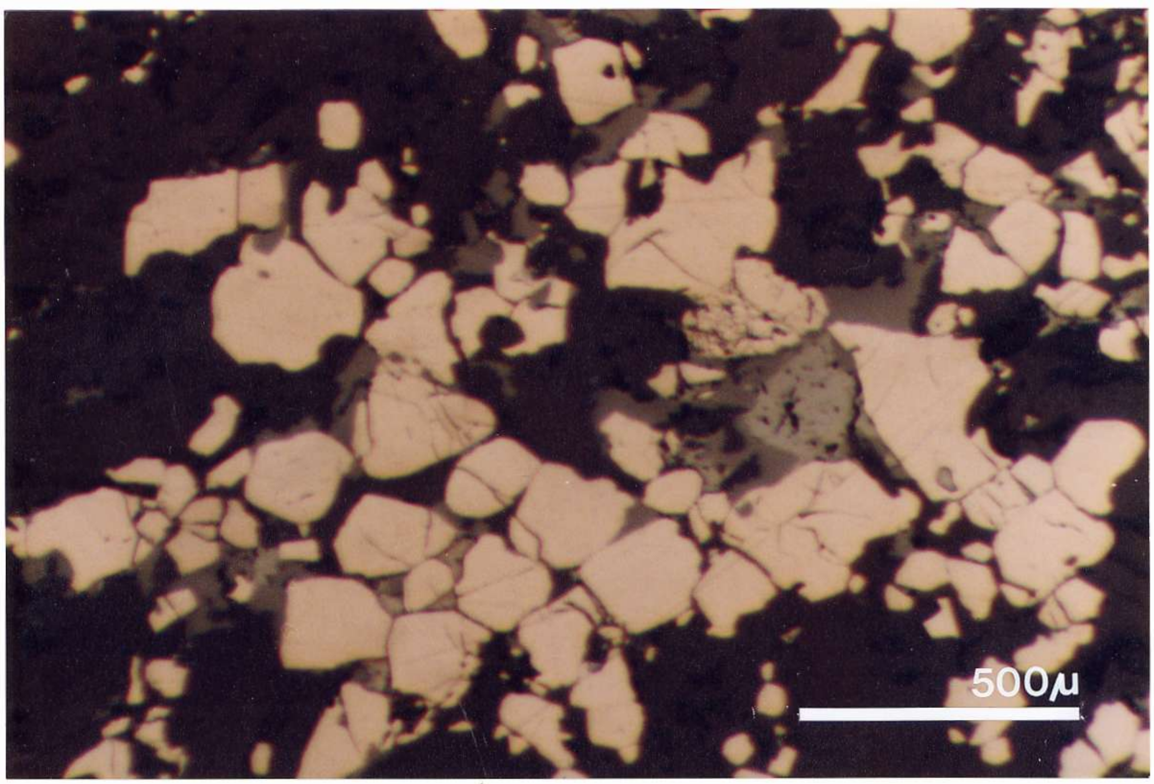

Plate 10: Type D Ore composed of finely granular pyrite with minor amounts of interstitial sphalerite (dark grey) and tetrahedrite (medium grey). LA-64; 38.7m.

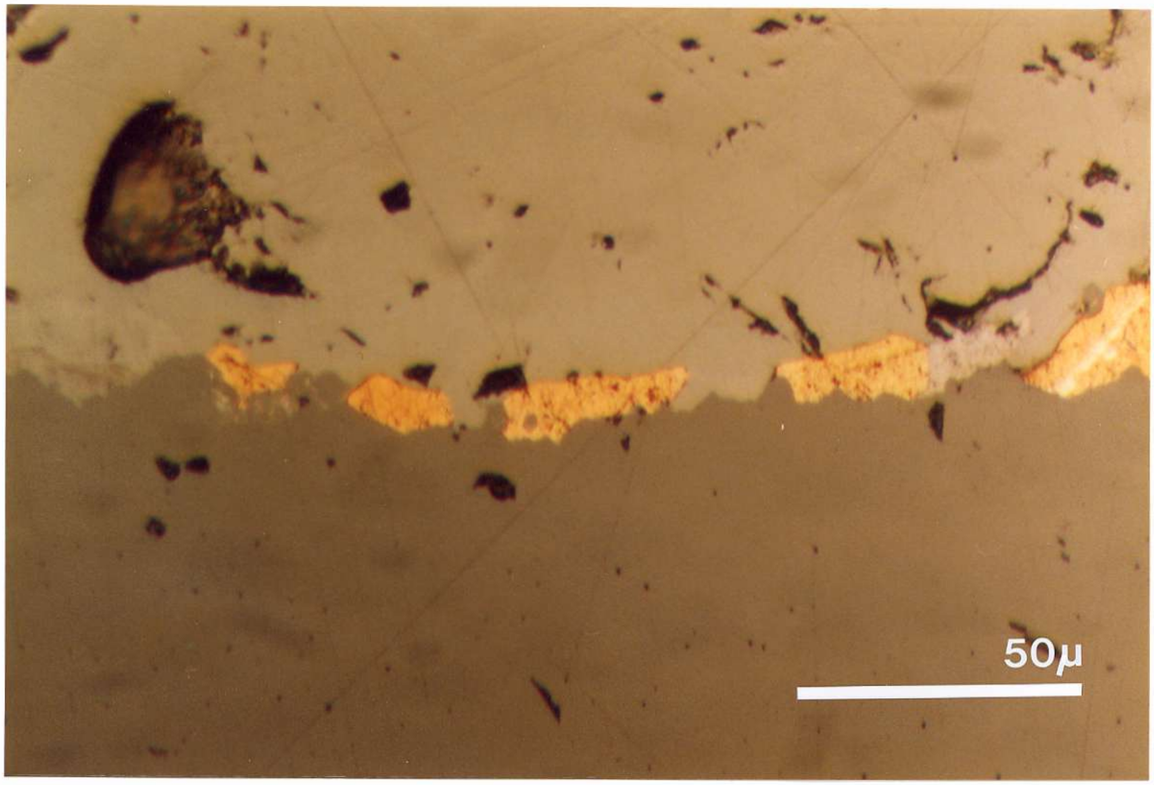

Plate 11: Grains of gold and minor galena located along a boundary betweeen sphalerite (dark grey) and tetrahedrite (medium grey). LA-15; 55.7m.

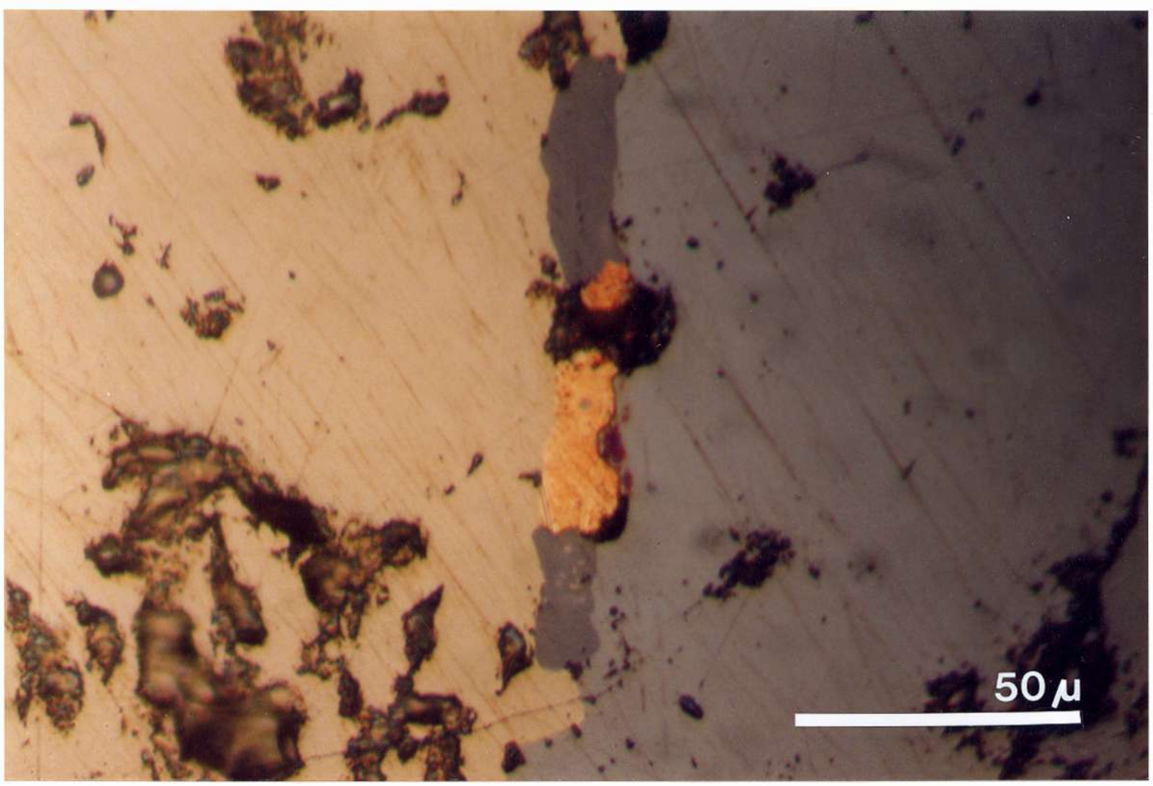

Plate 12: A fine layer of gold and sphalerite along an interface between tetrahedrite and chalcopyrite. LA-139; 33.1m.

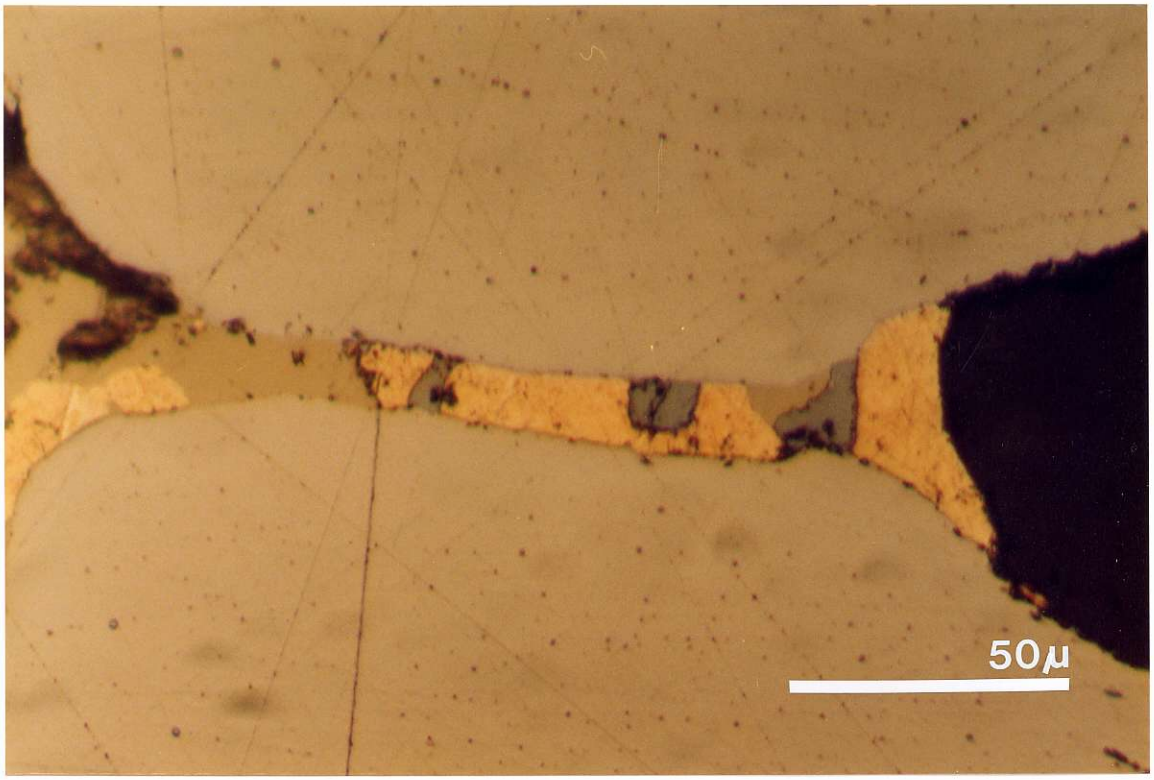

Plate 13: A film of gold, chalcopyrite and tetrahedrite between two pyrite grains. LA-139; 33.1m.

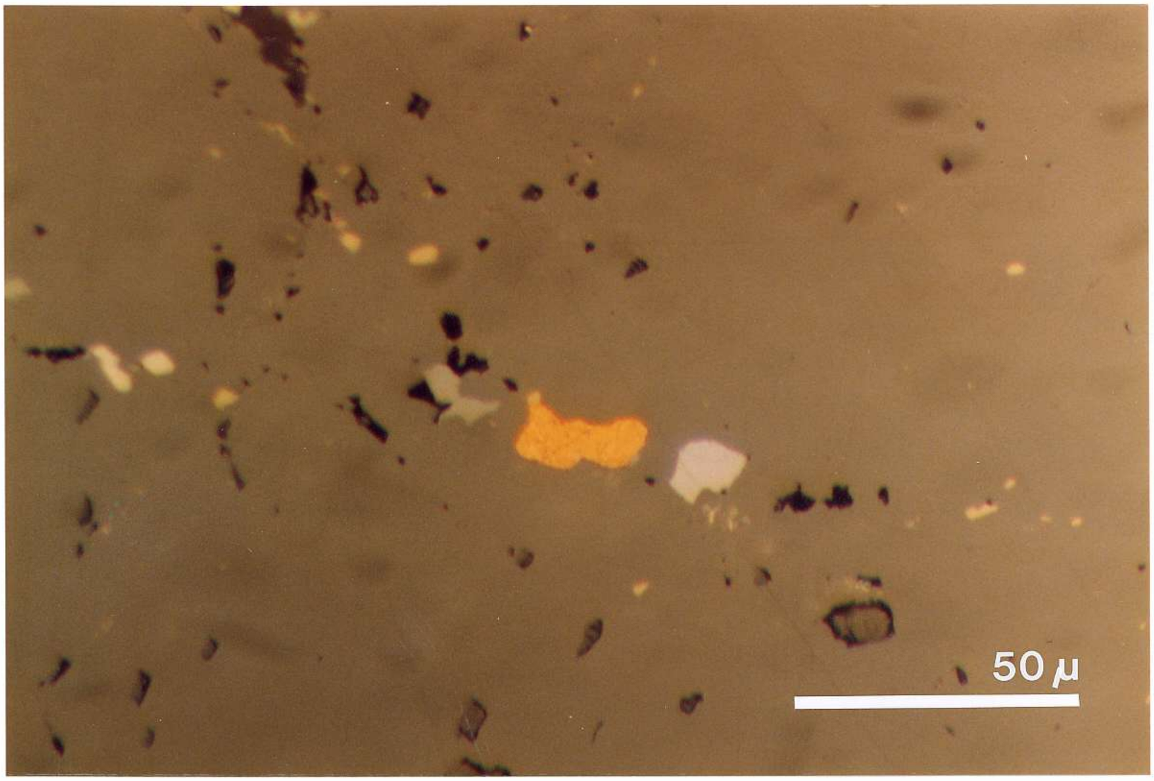

Plate 14: A stringer of fine gold and galena inclusions in massive sphalerite. LA-134; 17.3m.

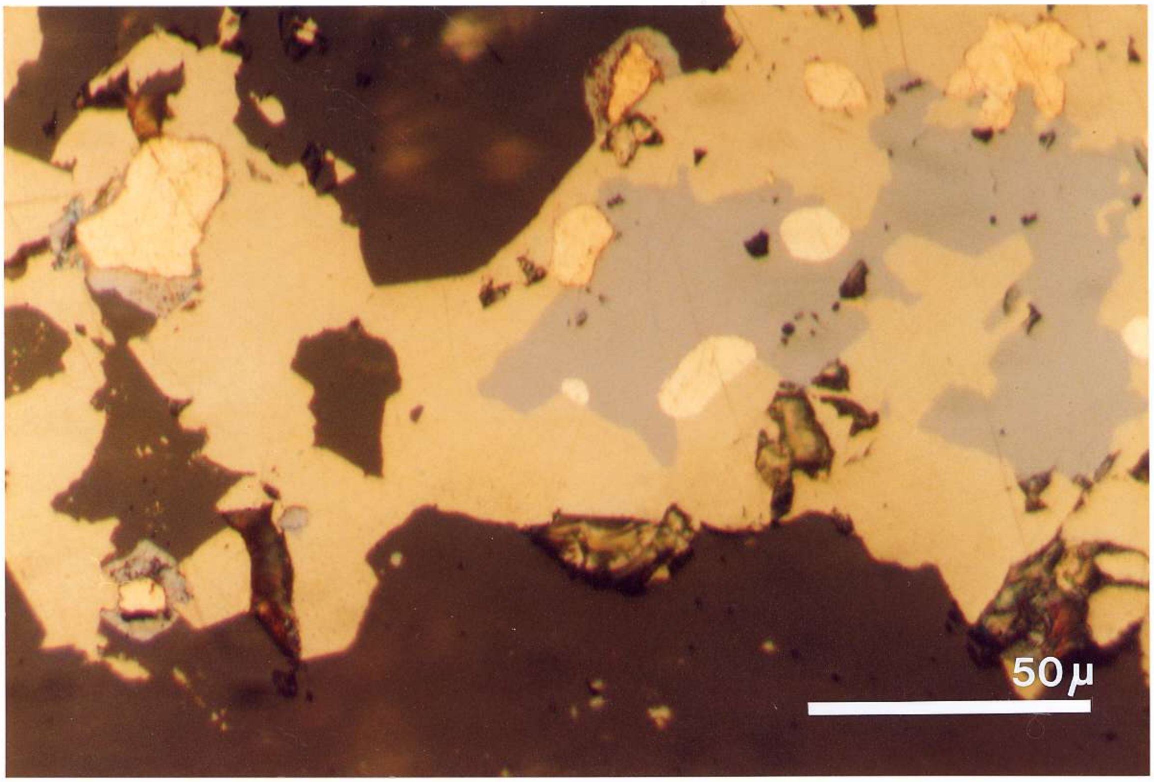

Plate 15: Gold grains included in a chalcopyrite/tetrahedrite intergrowth. LA-22; 111.6m.

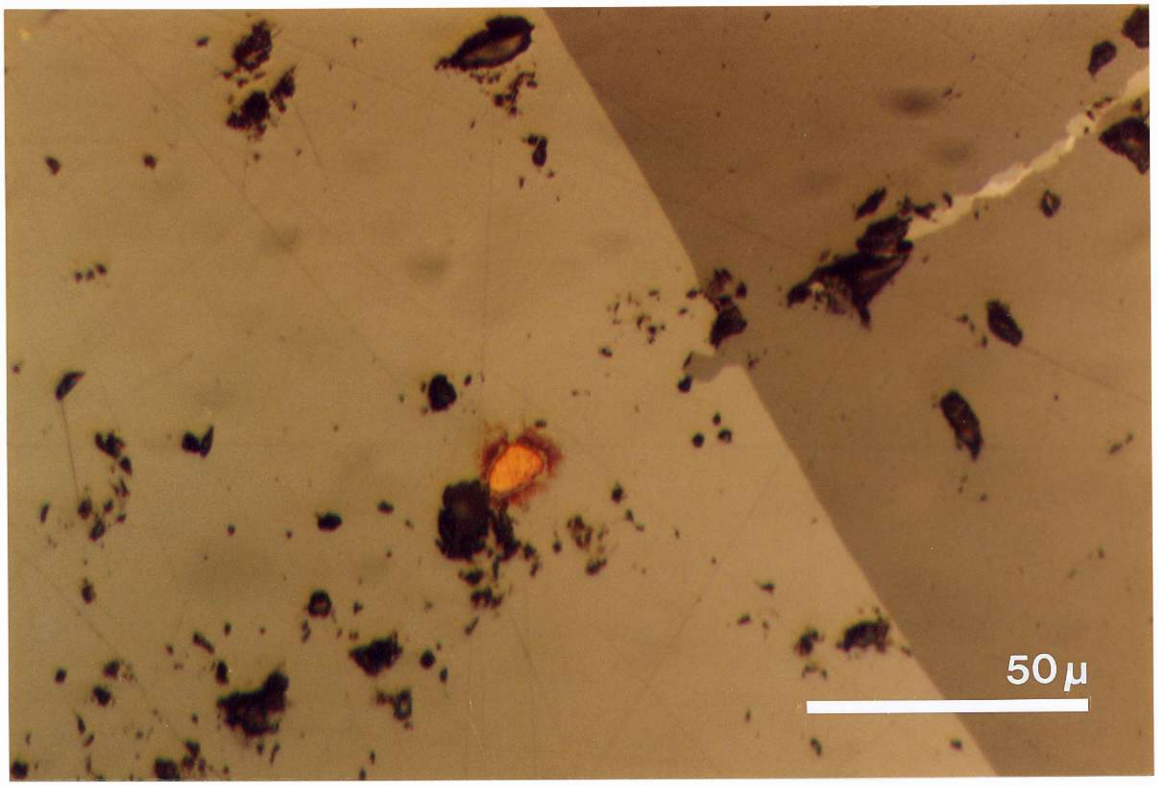

Plate 16: A small,isolated gold inclusion in tetrahedrite close to a boundary with sphalerite. LA-139; 33.1m.

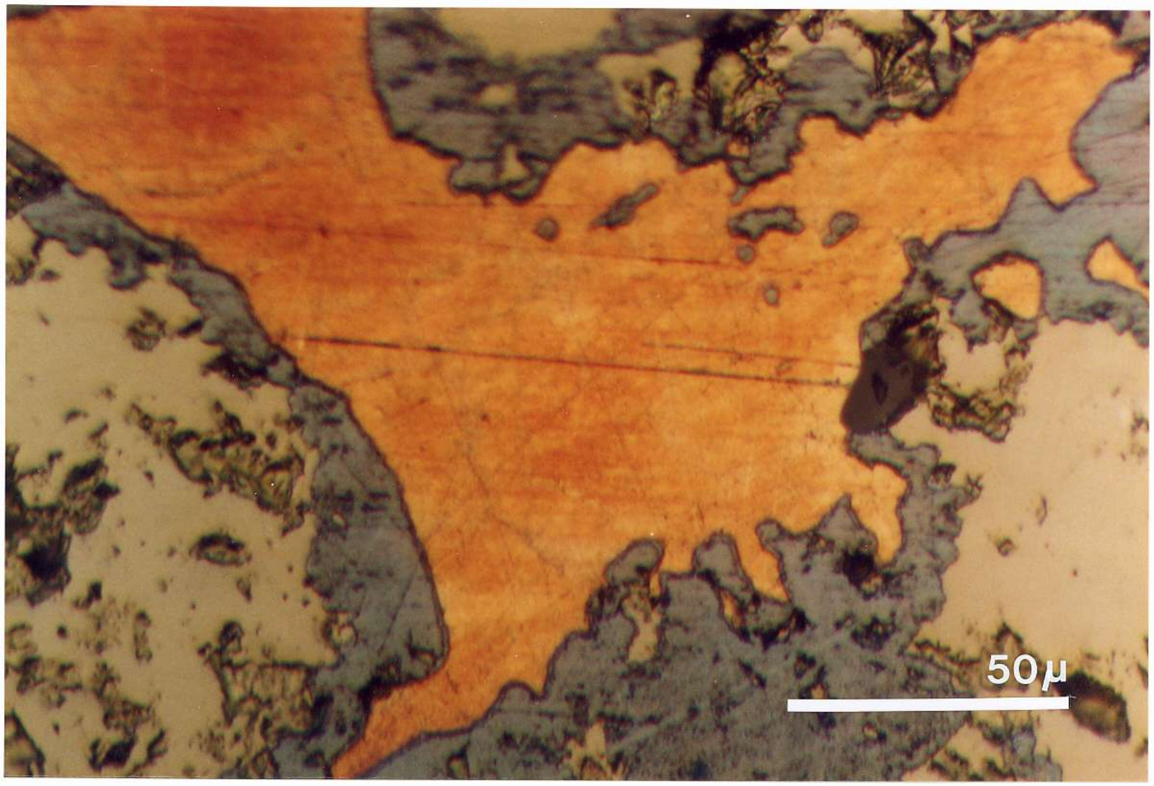

Plate 17: Large gold grain with heavy blue-grey tarnish indicating the presence of significant amounts of silver. LA-184; 359.7m

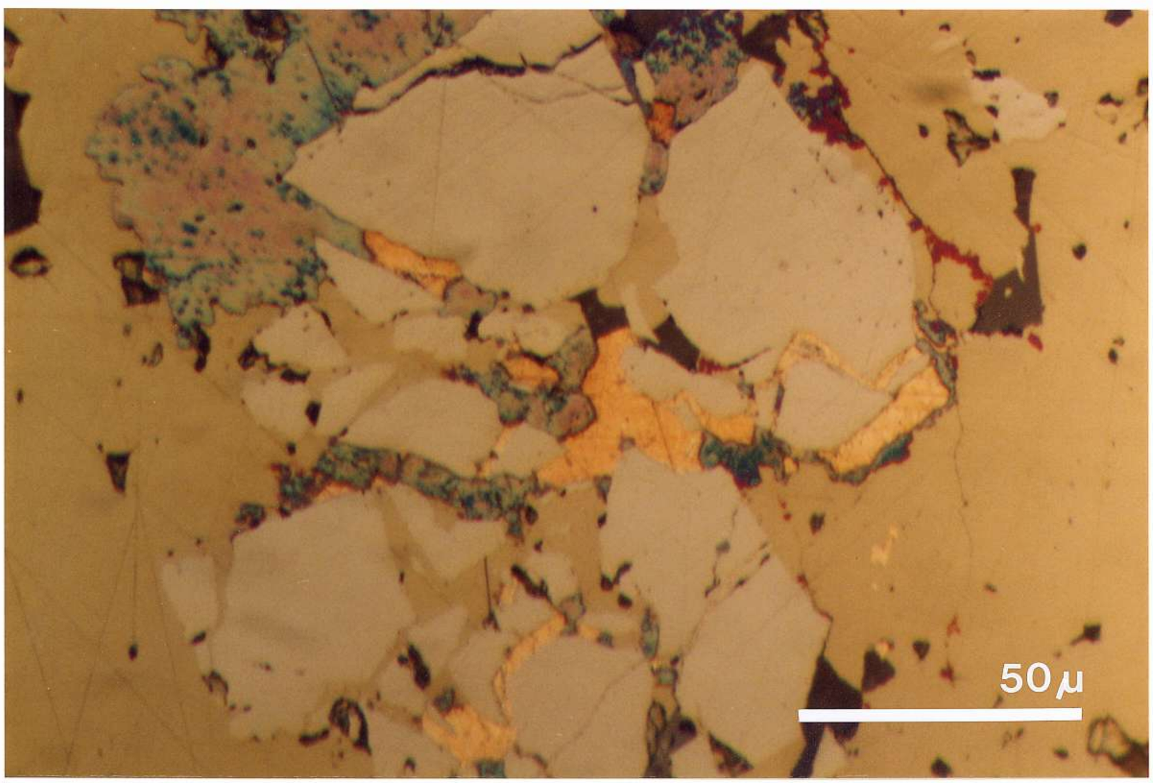

Plate 18: Gold veinlets in fractured pyrite. The heavy tarnish noted in Plate 17 is again present. LA-184; 359.7m.