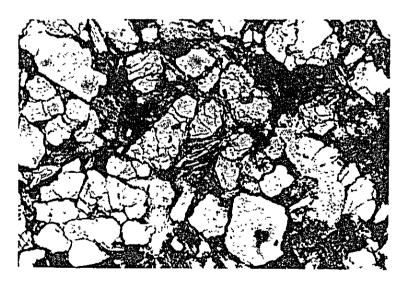


Rock Name : Carbonaceous

sandstone
(or siltstone)

Crossed Nicols

0.5 mm



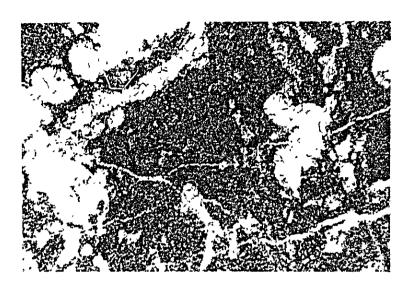
Sample No.: 72902

Rock Name : Conglomerate

(Quartz conglomerate)

Open Nicol

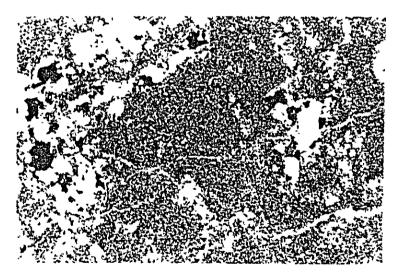




Rock Name : Limestone

Open Nicol

0.5 mm



Sample No.: 72903

Rock Name : Limestone

Crossed Nicols



Rock Name : Quartz conglomerate

Crossed Nicols

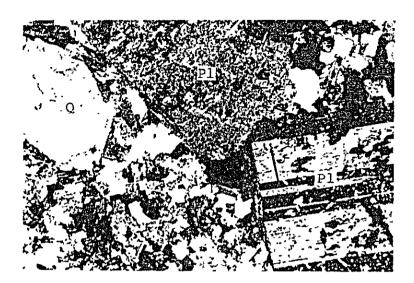
0.5 mm



Sample No.: 73001

Rock Name : Granodiorite

Crossed Nicols

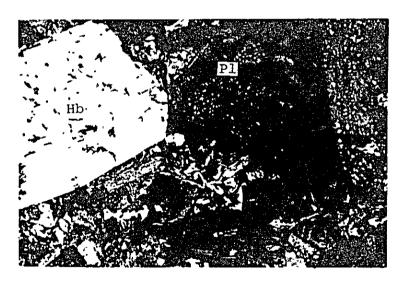


Rock Name : Quartz feldspar

porphyry

Crossed Nicols

0.5 mm



Sample No.: 73003

Rock Name : Granodiorite porphyry

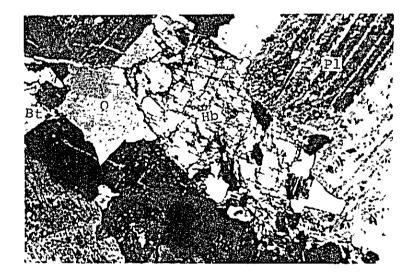
Crossed Nicols



Rock Name : Muscovite schist

Crossed Nicols

0.5 mm



Sample No.: 73104

Rock Name : Quartz diorite

Crossed Nicols



Rock Name : Polymictic conglomerate

Open Nicol

0.5 mm



Sample No.: 80101

Rock Name : Polymictic conglomerate

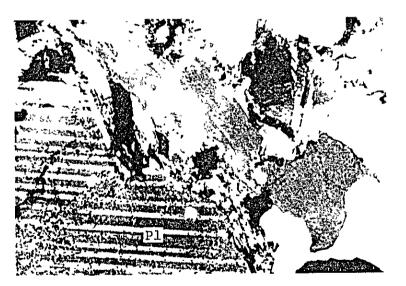
Crossed Nicols



Rock Name : Altered quartz porphyry

Crossed Nicols

0.5 mm

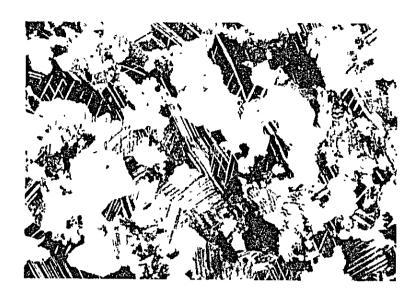


Sample No.: 80104A

Rock Name : Granodiorite

Crossed Nicols





Sample No.: 80104B

Rock Name : Meta limestone (Marble)

Crossed Nicols

0.5 mm

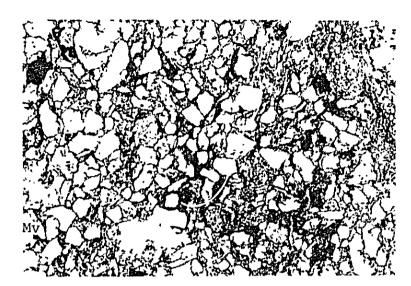


Sample No.: 80106

Rock Name : Meta-andesite

Crossed Nicols

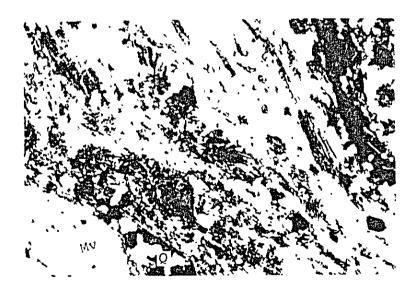




Rock Name : Silty sandstone

Open Nicol

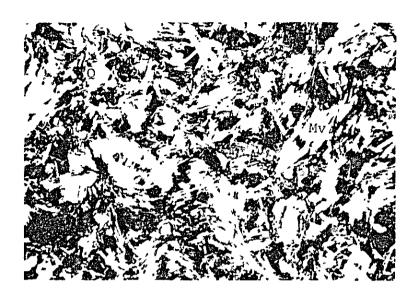
0.5 mm



Sample No.: 80204

Rock Name : Pelitic schist

Crossed Nicols

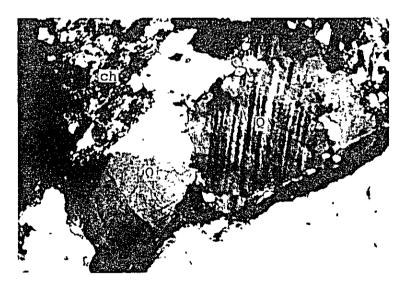


Rock Name : Muscovite biotite

Schist

Crossed Nicols

0.5 mm



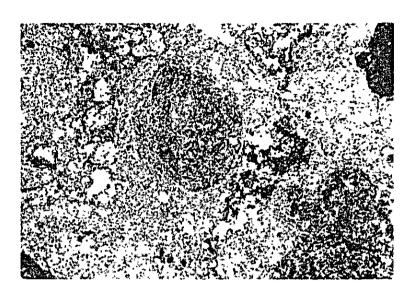
Sample No.: 80401

Rock Name : Quartz conglomerate

Crossed Nicols

 $0.5 \, \mathrm{mm}$

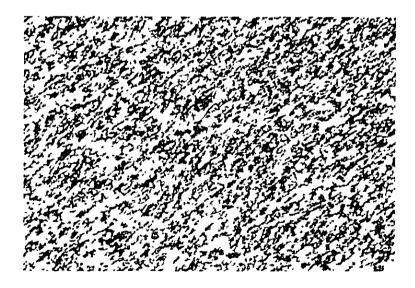




Rock Name : Pelleted limestone

Open Nicol

0.5 mm

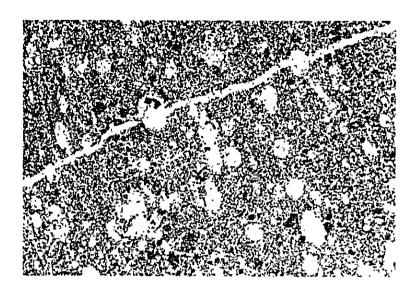


Sample No.: 80604

Rock Name : Quartz muscovite schist

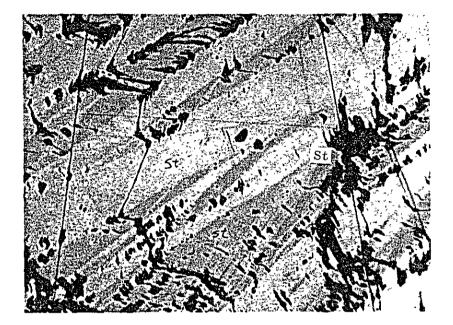
Cross Nicols





Rock Name : Dolomitic limestone

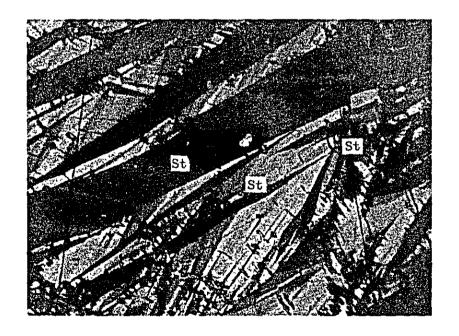
Polished Sections



Sample No.: H006 o stibnite vein

Open Nicol

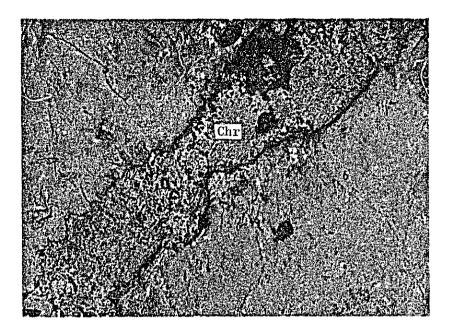
0.2 mm



Sample No.: H006

Crossed Nicols



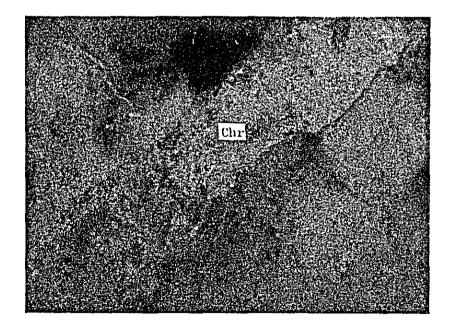


Sample No.: HO15

o chrysocolla in granodiorite

Open Nicol

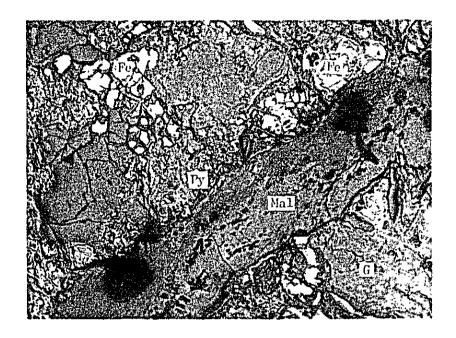
0.2 mm



Sample No.: HO15

Crossed Nicols



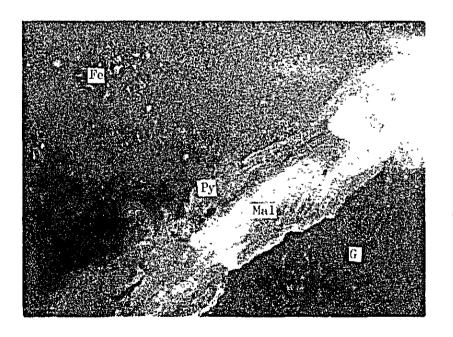


Sample No.: HO23

o malachite in altered rock

Open Nicol

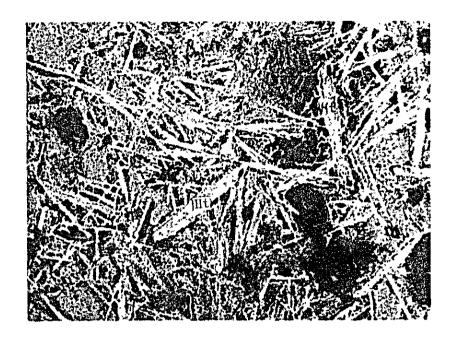
0.2 mm



Sample No.: H023

Crossed Nicols

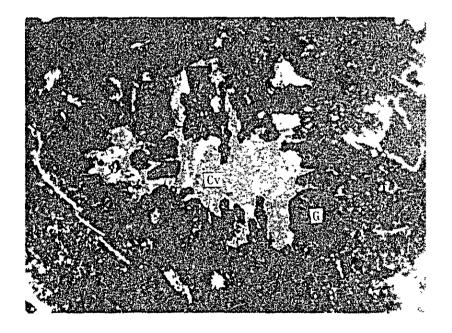
0.2 mm



Sample No.: H043 o high grade Cu-ore

Open Nicol

0.2 mm

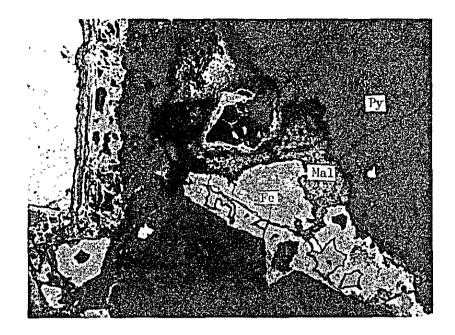


Sample No.: H043

Open Nicol

0.05 mm



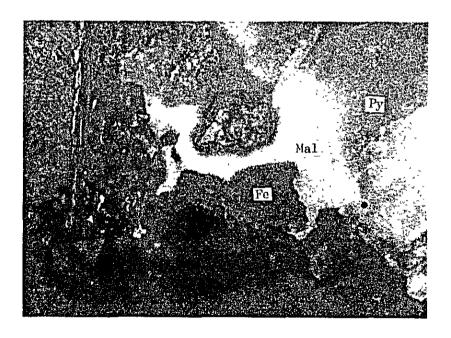


Sample No.: S100

o malachite and pyrite ores

Open Nicol

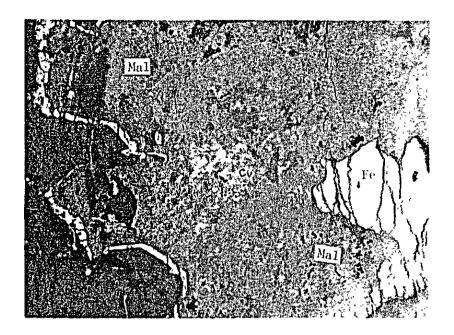
0.2 mm



Sample No.: S100

Crossed Nicols



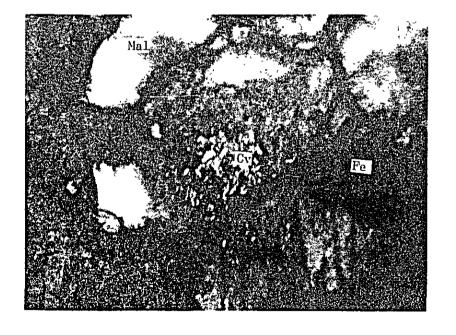


Sample No.: S101

o malachite and other Cu-oxides

Open Nicol

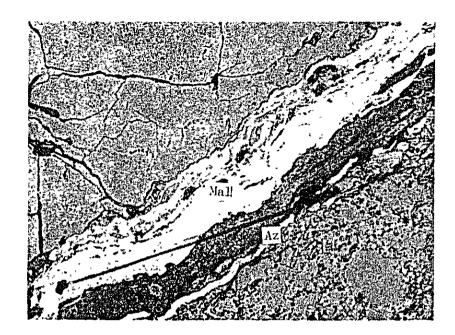
0.2 mm



Sample No.: S101

Crossed Nicols

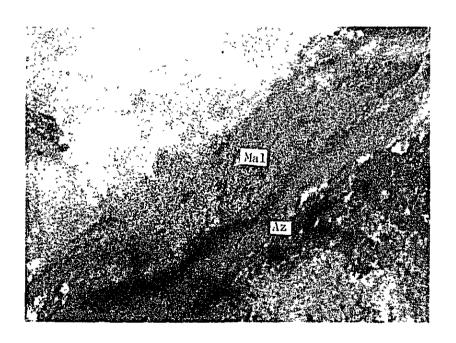




o azurite and malachite ores

Open Nicol

0.2 mm



Sample No.: S102

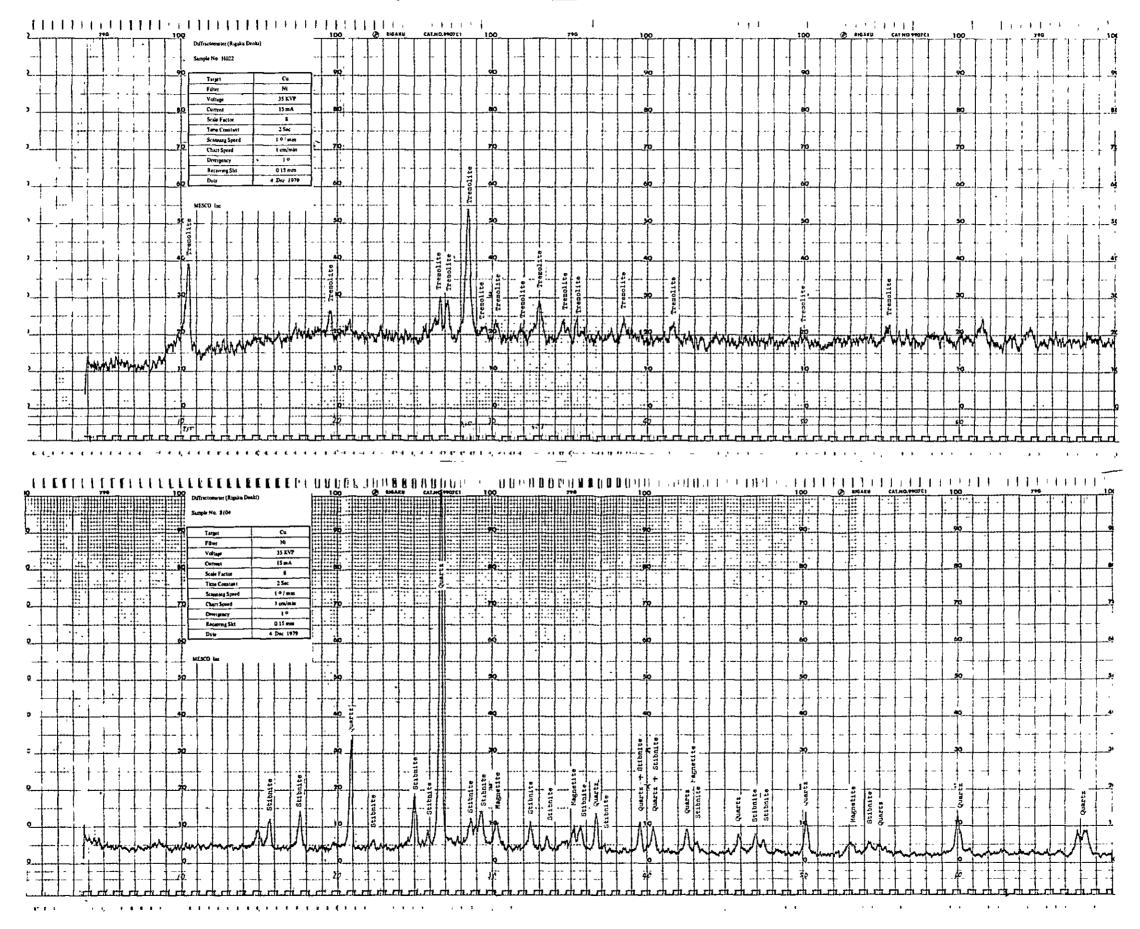
Crossed Nicols



A. III-4 Chemical Analysis for Igneous Rocks

		НО12	н036	Н037	73001	73104	80102
	sio ₂	64.26%	80.29%	60.62%	68.93%	55.60%	73.96%
	TiO ₂	0.45	0.31	0.50	0.55	2.06	0.18
_	A1203	15.25	10.44	16.39	15.17	14.92	12.73
tio	Fe ₂ 0 ₃	1.48	0.36	1.04	1.37	3.67	3.04
osi	Fe0	4.81	0.86	2.95	2.29	6.40	0.57
Composition	Mn0	0.11	0.01	0.03	0.09	0.14	0.02
	MgO	2.09	0.40	4.52	1.06	2.61	0.08
ica	Ca0	2.71	0.31	7.21	3.12	5.96	0.21
Chemical	Na ₂ O	5.68	4.72	4.54	3.19	3.68	1.99
٥	к ₂ 0	0.25	0.29	0.33	2.20	1.15	5.66
	P ₂ O ₅	0.12	0.06	0.11	0.16	0.93	0.03
	H ₂ 0+	2.15	1.22	1.33	0.45	0.99	0.35
	Н20-	0.20	0.28	0.08	0.45	0.64	0.23
	Total	99.56	99.55	99.65	99.03	98.75	99.05
	Q	18.99%	51.28%	12.09%	33.71%	14.21%	40.87%
	С	1.02	1.98	-	2.29	_	3.07
	Or	1.52	1.75	1.98	13.25	7.00	33.97
	Ab	49.44	40.73	39.10	27.51	32.06	17.10
als	An	13.02	1.17	23.79	14.71	21.41	0.86
Minerals	Salic Total	84.00	96.91	76.96	91.47	74.68	95.86
	Wo	-	-	4.96	-	1.16	-
Normative	Di < En	-	_	3.42	-	0.61	-
mat	Fs	-	-	1.15	-	0.52	
Nor	En	5.35	1.02	8.04	2.69	6.09	0.20
	Hy { Fs	7.27	0.80	2.71	2.38	5.22	-
CIPW	Mt	2.21	0.53	1.53	2.02	5.48	1.40
	Hm		-	-	-	_	2.12
	11	0.88	0.60	0.97	1.06	4.03	0.35
	Ар	0.29	0.14	0.26	0.38	2.22	0.07
	Femic Total	16.00	3.09	23.04	8.53	25.32	4.14

A. III-5 Charts of X-ray Diffraction Test ___





A. III-6 Chemical Analysis of Ore Samples

	Name of	Occurrence and Name	Au	Ag	n C	Pb	Zn	
Mineralized Zone		of Ore	g/t	g/t	20	80	20	%
Tata Angel Stib	Stib	Stibnite vein	1	0.0	00.00	ı	,	23.9 0.01
Lupe Chann	Chann	Channel sample of quartz vein	0.0	0.0	ı	ı	•	
Concordia in gr	Malac in gr	Malachite and other Cu-oxides in granodiorite	1	ı	1.30	I	ı	i
Chica Leona Malacl	Malacl in sil	Malachite and other Cu-oxides in silicified andesite	ı	ı	1.20	ı	•	1
La Lola Quartz vein	Quartz	vein	0.1	0.0	ı	ı	1	<u> </u>
California Quartz vein	(Juart 2	vein	0.0	0.0	ı	1	•	1
Lupe Quartz vein	Quart 2	vein	0.0	0.0	ı		,	1
22.5 30.9 Orica-Guayape La Conce Malach	Malach in alt	Malachite and other Cu-oxides in altered rock	ı	ı	3.83	ı	ı	1
22.4 30.9 Orica-Guayape La Conce	Actino	Actinolite skarn	1	1	0.55	i	•	
22.6 30.7 Orica-Guayape La Conce Limoni	Limoni quartz	Limonitized, Silicified in quartz porphyry	0.00	<1	0.00	0.00	0.03	1
22.5 29.8 Orica-Guayape La Conce Conglo	Conglo	Conglomeratic siliceous rock	00.00	<u> </u>	0.04	<1	0.03	1
22.5 29.9 Orica-Guayape La Conce Limoni	Limoni	Limonitized quartzite	00.00	<1	00.00	<1	0.04	1
16.0 36.2 Orica-Guayape Suyapita in skarn	Malach: in ska	ite and other Cu-oxides	1	1	3.43	ı	•	
16.0 36.2 Orica-Guayape Suyapita in skarn	Malach in ska	Malachite and other Cu-oxides in skarn	ı	1	14.20	ı	ı	1
Perico Limoni	Limoni	Limonitized granodiorite	1	_	0.01	1	,	ı

66.1 MPN