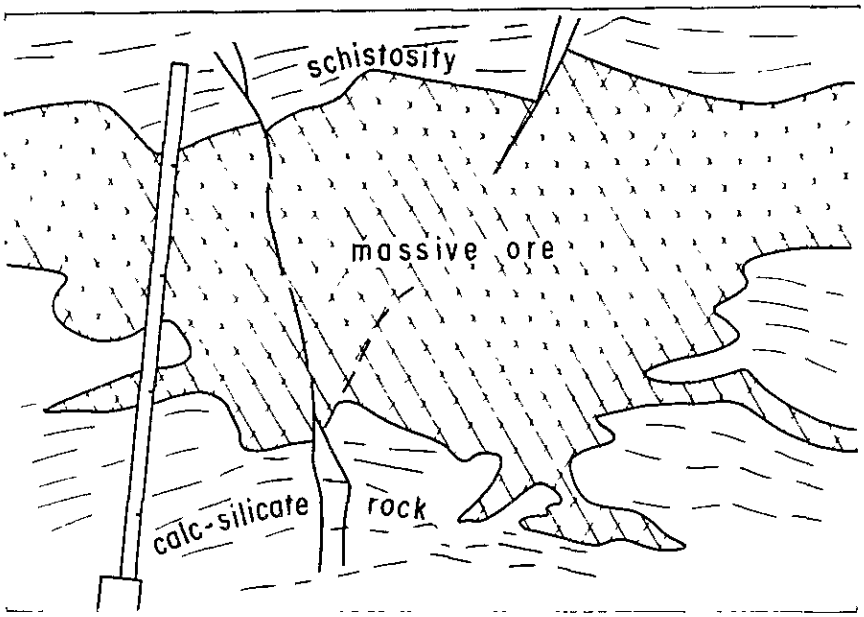
Location Perau Area
Soil sampling for geochemistry

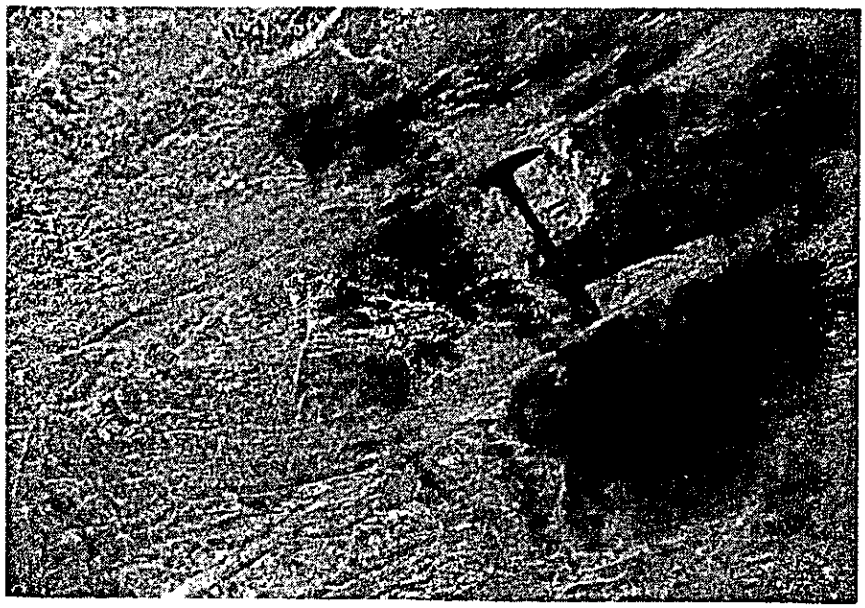
Location Perau Mine G1L
Massive Ore forming "Hanekomi-spur" shape
Coarse galena injected in the host rock



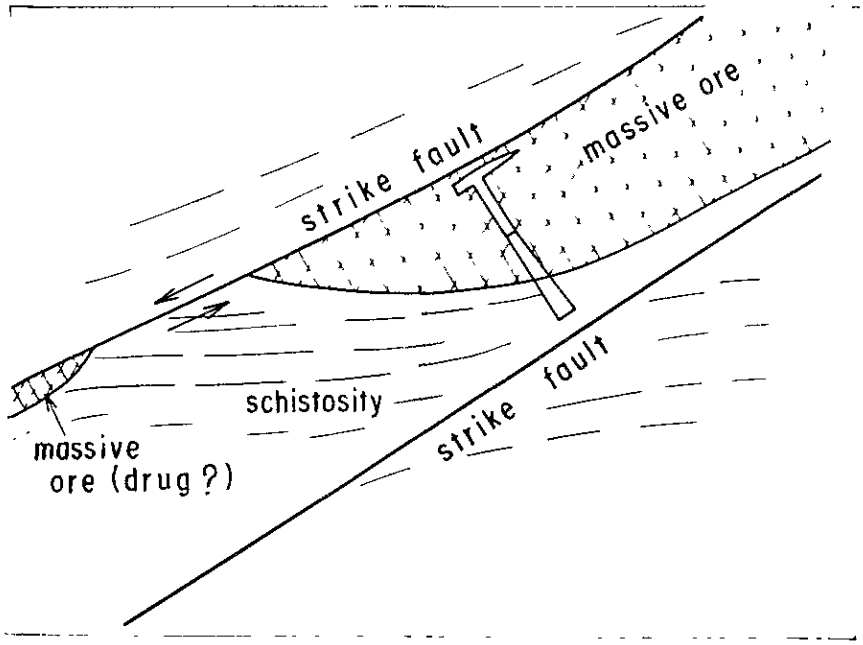
Explanation Sketch of above pht

Location . Perau Mine G1L
Massive ore bearing fine fragments of host rock

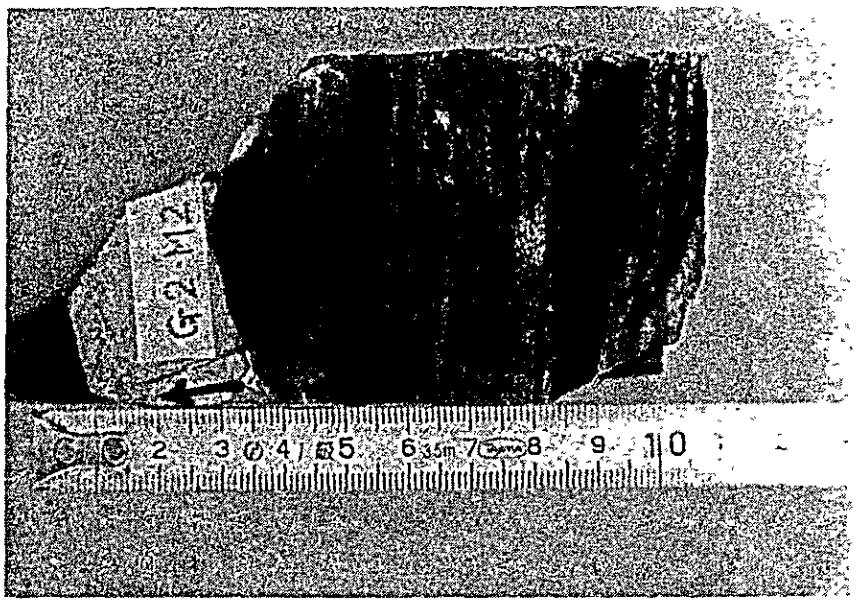
Location Perau Mine G3L
Folded massive ore with many cleavages



Location Perau Mine G3L
Strike faults are observed in both side of massive ore

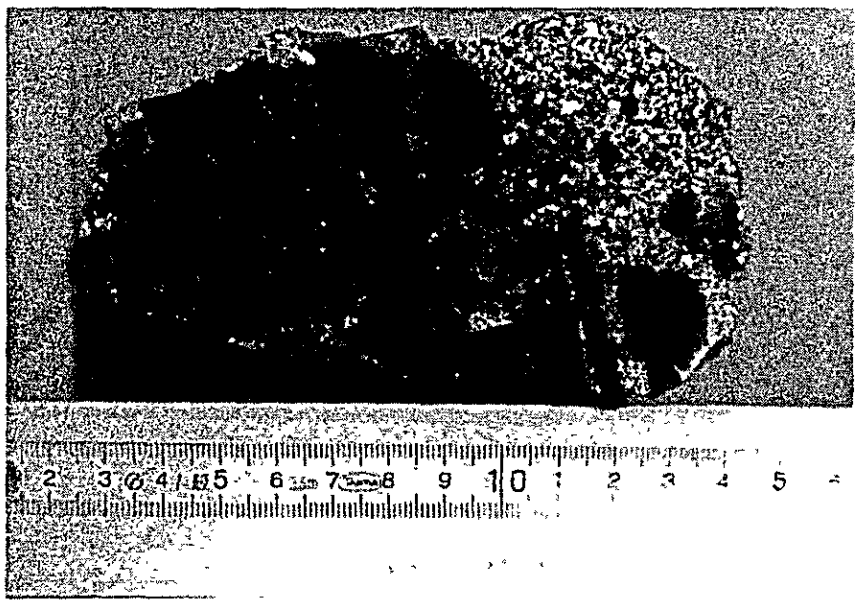


Explanation sketch of above photo

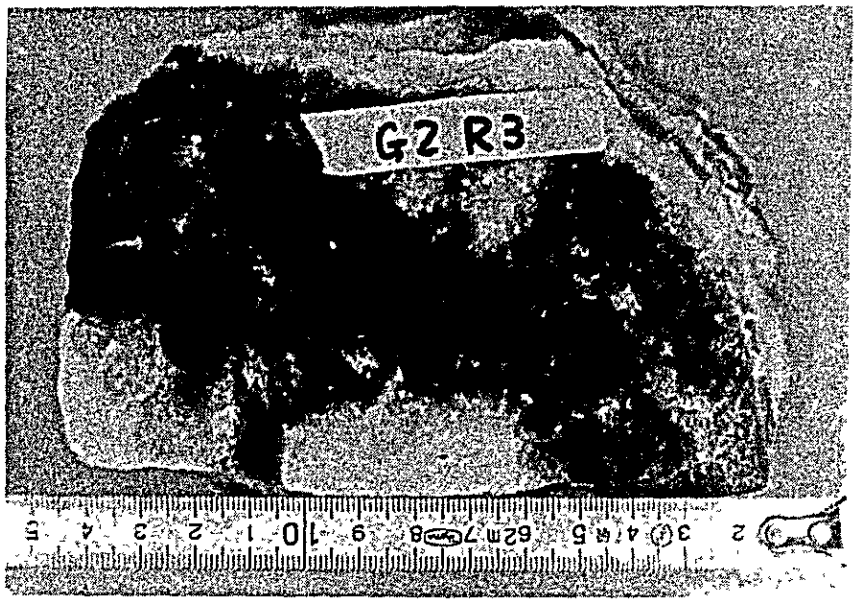


Location Perau Mine G2L
Banded pyrite

Location Perau Mine G3L
Massive ore bearing many fragments of host rock



Location Perau Mine G3 + 20 mL
Massive galena and banded pyrite



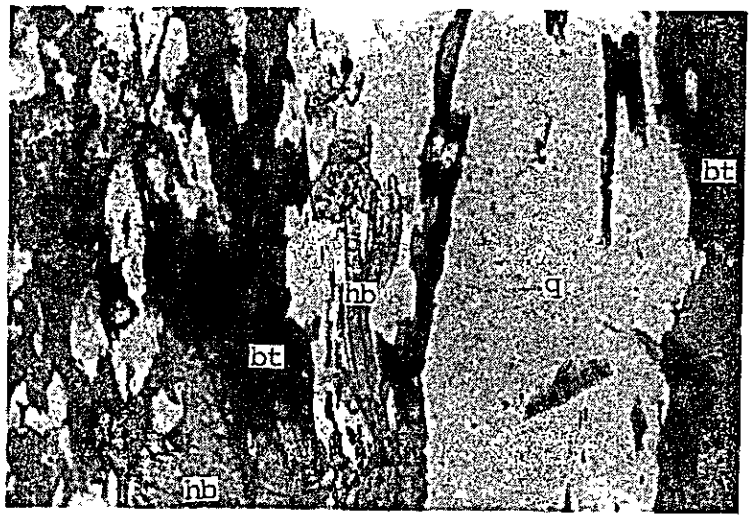
Location Perau Mine G2L
Massive barite with
galena impregnation

Photo A-2 Microphotograph of Thin Section

Abbreviations

q	quartz
pl	plagioclase
bt	biotite
mus	muscovite
hb	hornblende
tr	tremolite
gar	garnet
chl	chlorite
cal	calcite
cpx	clinopyroxene
act	actinolite
mcl	microcline
ol	olivine
sta	staurolite
hem	hematite

Sample No A- 091
Rock name Hornblende-biotite-schist (Setuva F)
Location Perau



It shows lepidoblastic texture

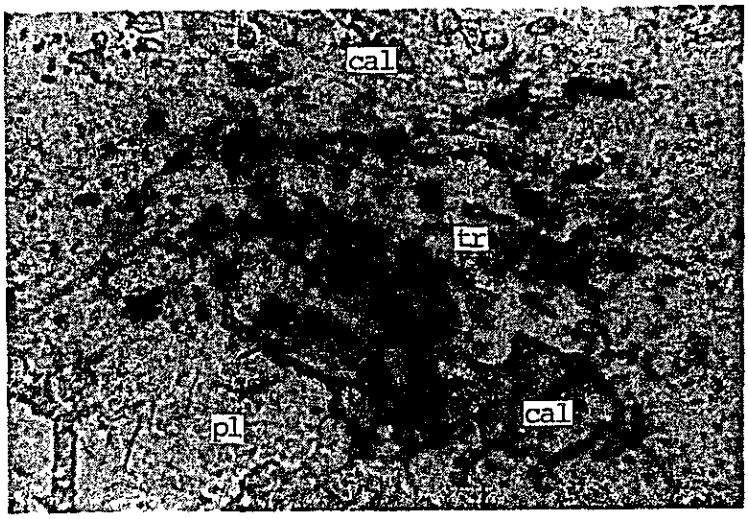
(only lower polar)

0 0 5mm

(corssed polars)

0 0.5mm

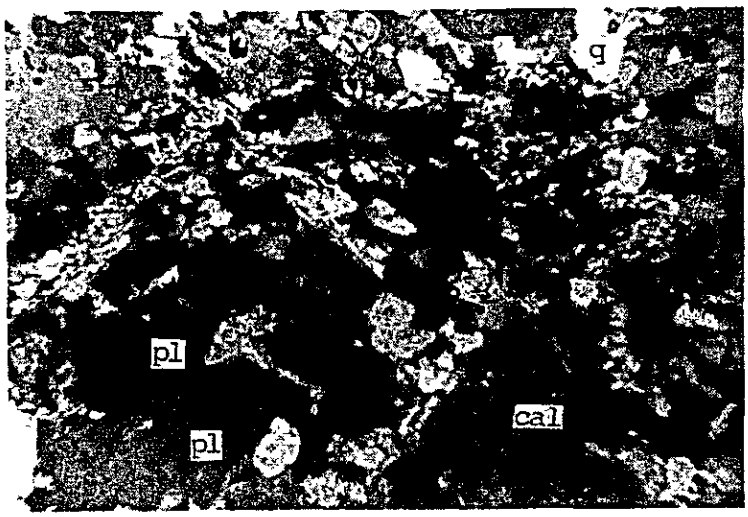
Sample No A-063
Rock name Calc-schist (Açungui I F)
Location Quil Ometro Quarenta



(only lower polar)

0 0.5mm

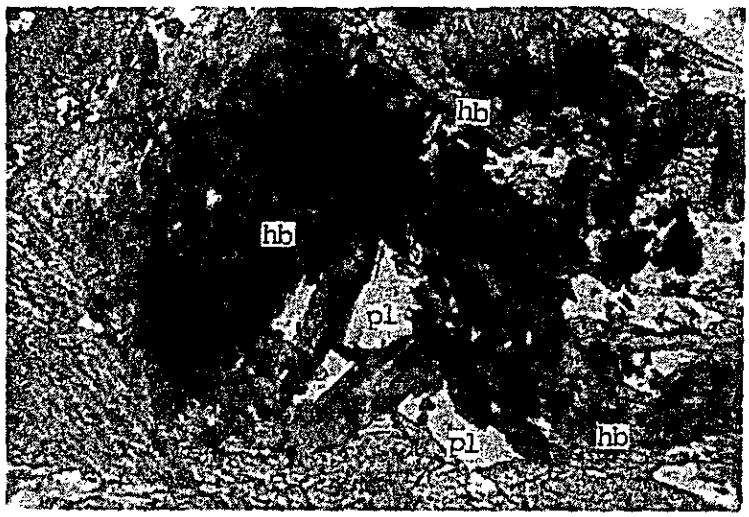
It shows equigranular texture, with partially lepidoblastic texture
Tremolite is found as needle-shaped crystal



(crossed polars)

0 0.5mm

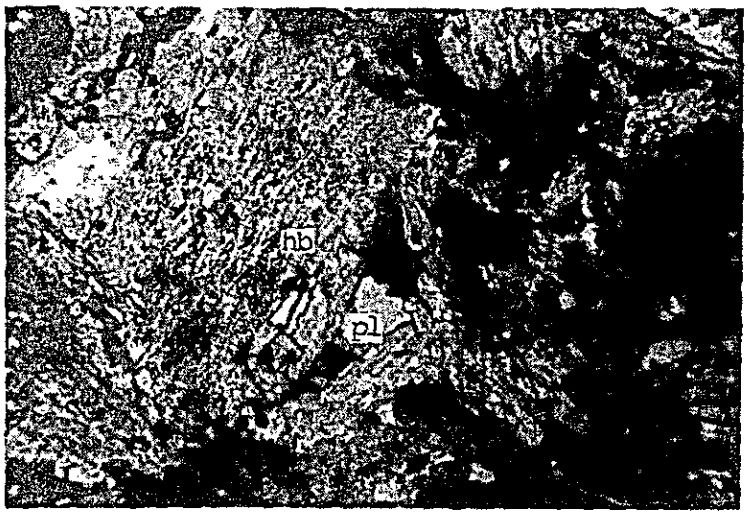
Sample No A-077
Rock name . Amphibolite (Açungui I F.)
Location Perau



It shows nematoblastic texture

(only lower polar)

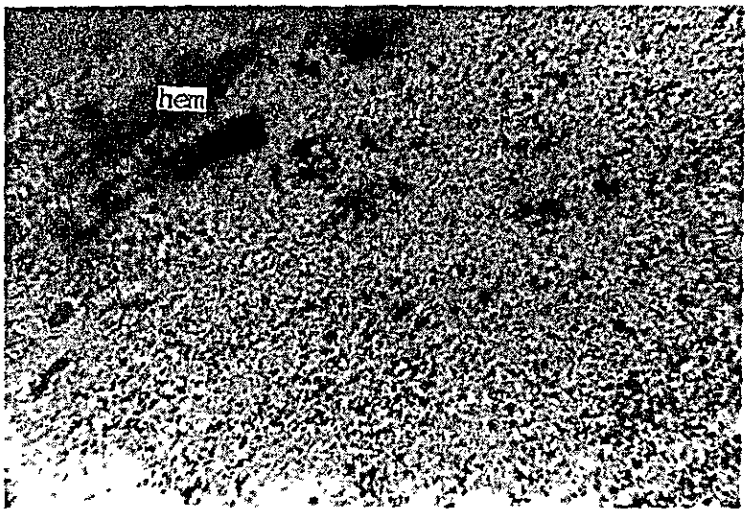
0 0.5mm



(crossed polars)

0 0.5mm

Sample No D-075
Rock name Sericite-phyllite (Açungui F.)
Location Tunas



(only lower polar)

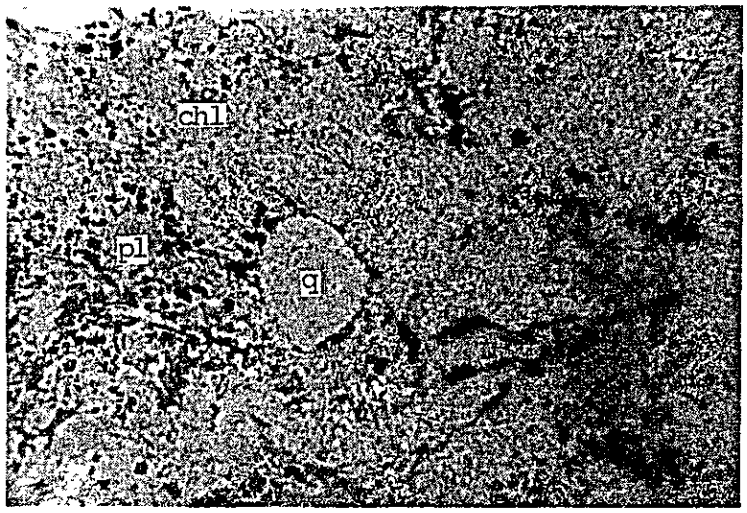
0 0.5mm

It shows lapidoblastic texture
Hematite is intercalated as lens in a matrix

(crossed polars)

0 0.5mm

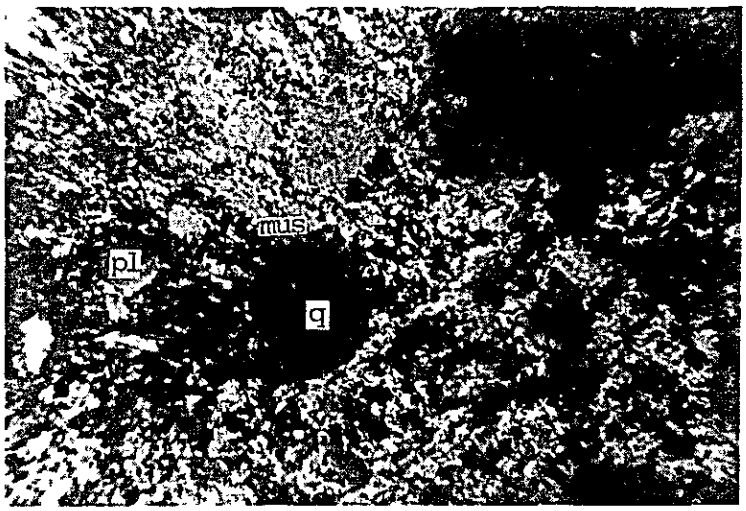
Sample No C-068
Rock name Chlorite-muscovite-schist (Açungui II.F.)
Location Quil Ometro Quarenta



(only lower polar)

0 0.5mm

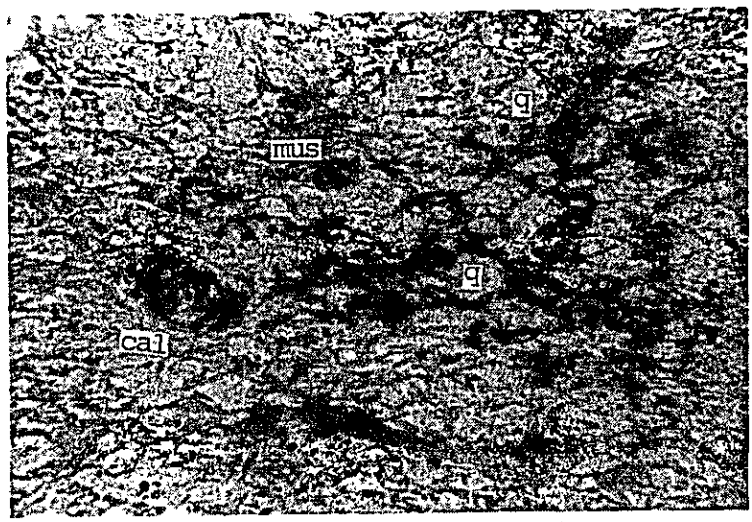
It shows porphyroblastic and partly lepidoblastic texture.
Porphyroblasts are composed of quartz and plagioclase.



(crossed polars)

0 0.5mm

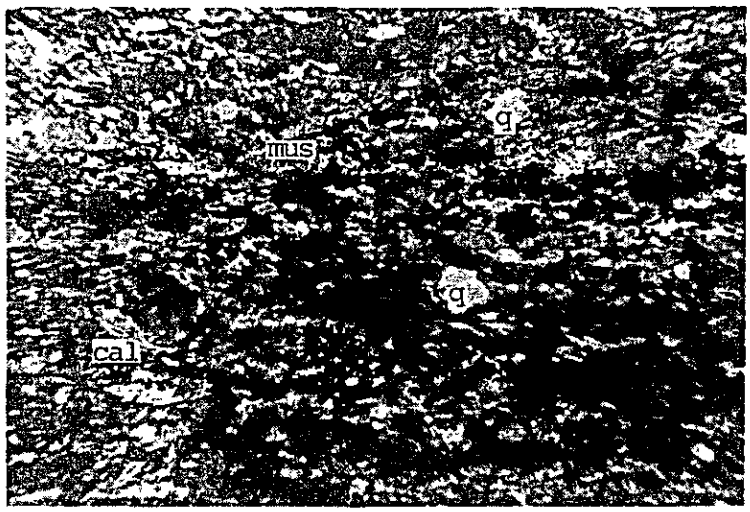
Sample No A 016
Rock name Muscovite schist (Açungui III F.)
Location Rio Ribeira



(only lower polar)

0 0 5mm

It shows lepidoblastic texture
A half amounts of muscovite is composed of phengitic muscovite



(crossed polars)

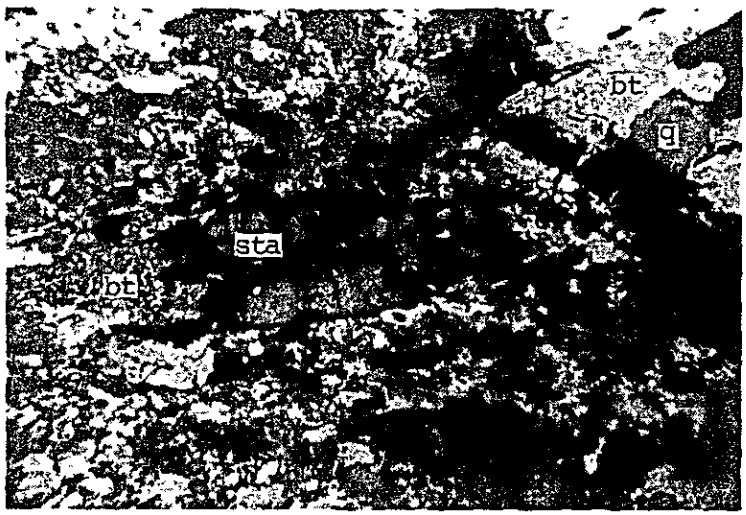
0 0 5mm

Sample No A-021
Rock name Staurolite-muscovite-biotite-schist (Açungui III F)
Location Rio Ribeira

It shows lepidoblastic texture
Staurolite is a slender prism in shape

(only lower polar)

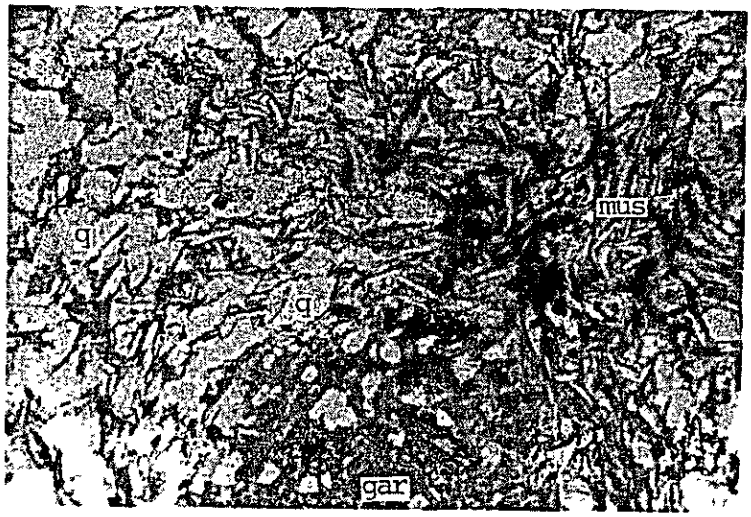
0 0 5mm



(crossed polars)

0 0 5mm

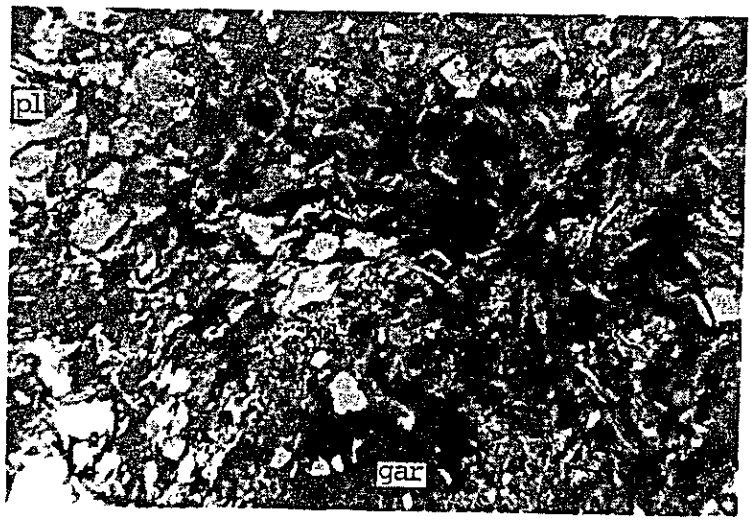
Sample No : C 004
Rock name : Garnet bearing chlorite-biotite-muscovite schist (Açungui III F)
Location : Paneras



(only lower polar)

0 0.5mm

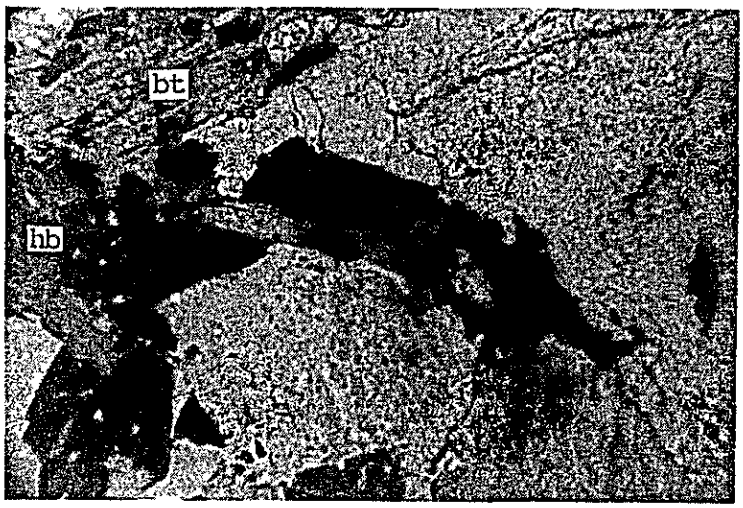
It shows lepidoblastic texture
Needles of muscovite crystals are aggregated and micro-folded
Garnet crystal is fringed with minute crystals of biotite



(crossed polars)

0 0.5mm

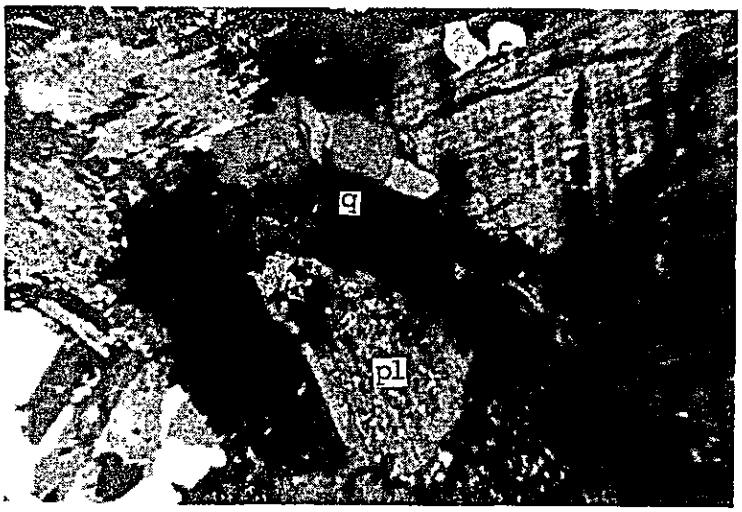
Sample No A-001
Rock name Biotite-hornblende-granodiorite (Intrusive rock)
Location Panelas



It shows porphyritic texture

(only lower polar)

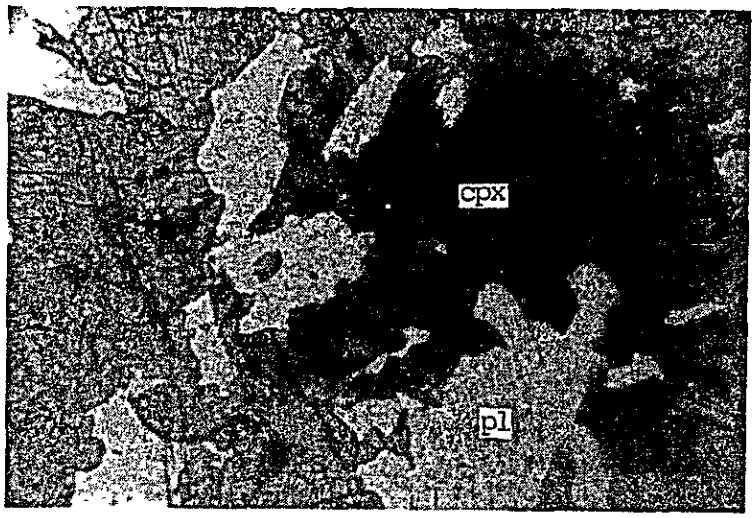
0 0.5mm



(crossed polars)

0 0.5mm

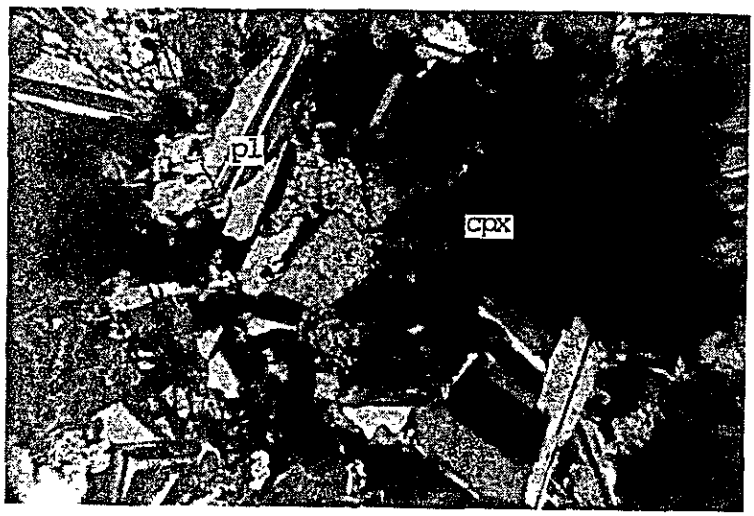
Sample No A 018
Rock name Hornblende-Gabbro (Intrusive Rock)
Location Rio Ribeira



It shows ophitic texture

(only lower polar)

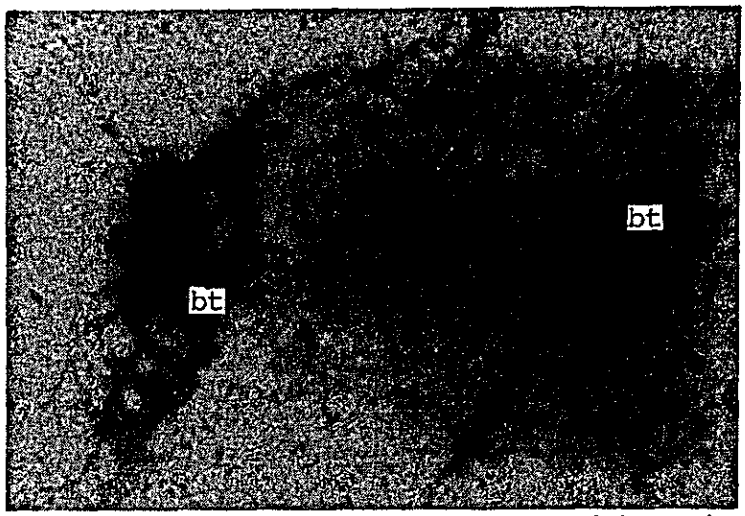
0 0.5mm



(crossed polars)

0 0.5mm

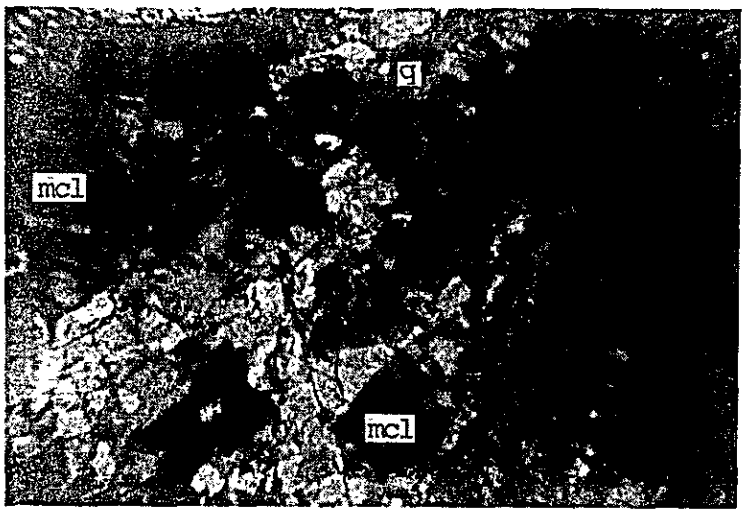
Sample No B-032
Rock name Mylonitized biotite-granite (Intrusive rocks)
Location Mato Preto



(only lower polar)

0 0.5mm

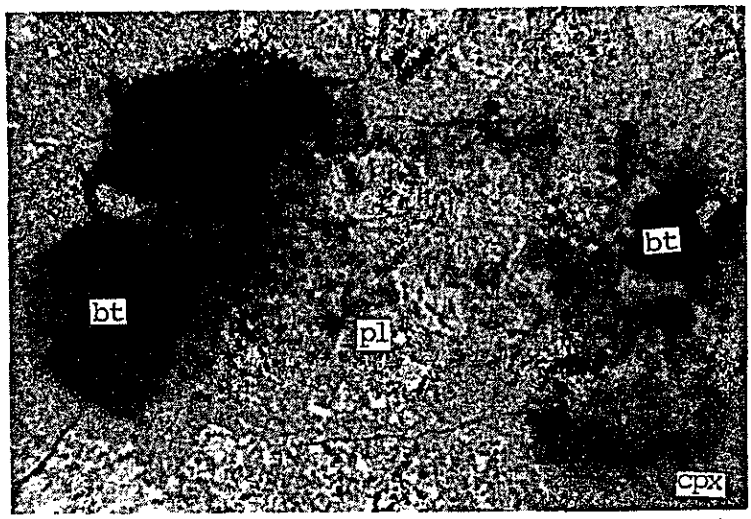
It shows porphyroblastic texture.
Microcline forming porphyroblasts frequently shows parthite texture and poikilitically encloses minute crystals of quartz and plagioclase.



(crossed polar)

0 0.5mm

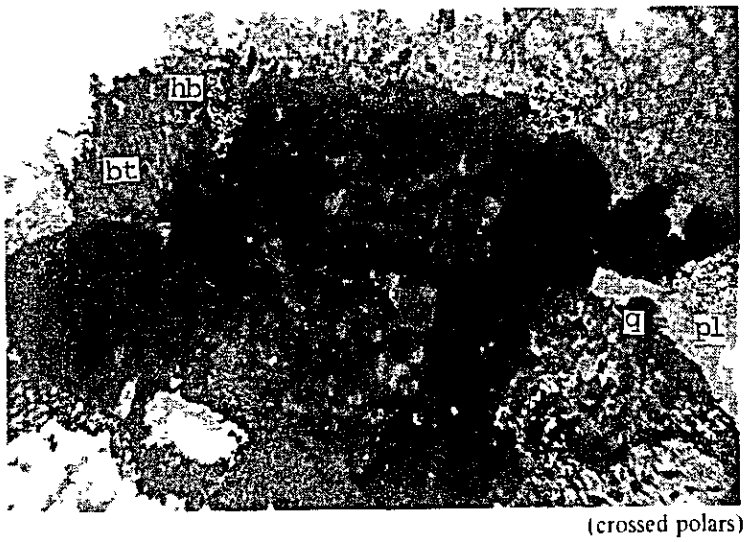
Sample No C-073
Rock name Hornblende-augite-biotite-syenite (Intrusive Rock)
Location Tunas



It shows equigranular texture

(only lower polar)

0 0.5mm



(crossed polars)

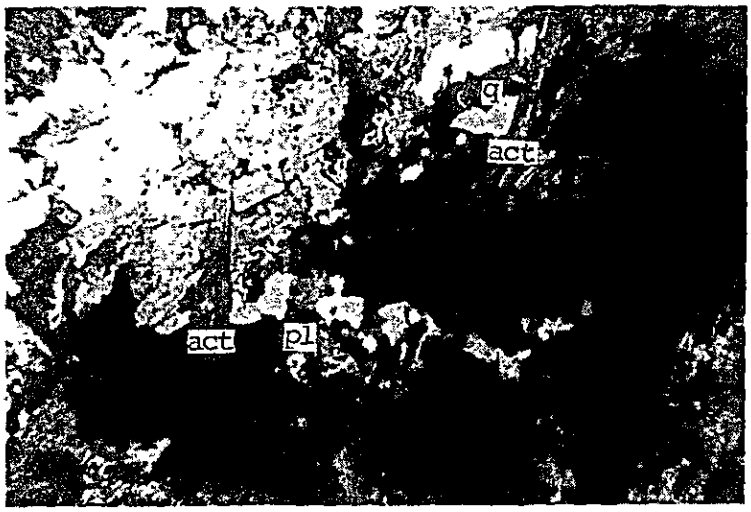
0 0.5mm

Sample No D-015
Rock name Meta gabbro (Intrusive Rock)
Location . Rio Ribeira

(only lower polar)

0 0.5mm

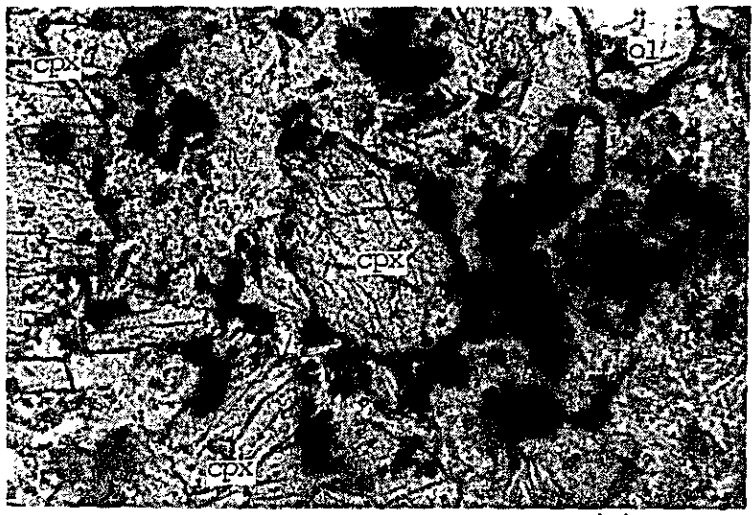
It shows poikiloblastic texture
Hornblende actinolite and plagioclase are the main constituents in this rock
Crystals of hornblende and actinolite poikilitically enclose scattered minute crystals of biotite quartz and plagioclase



(crossed polars)

0 0.5mm

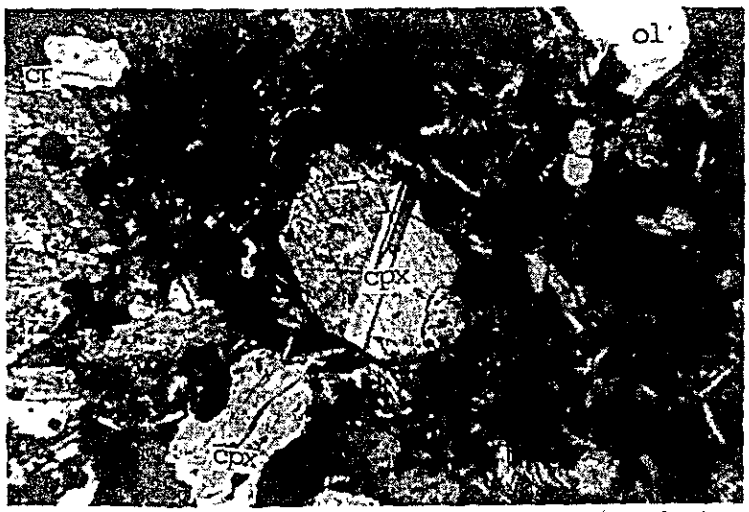
Sample No D-113
Rock name Olivine-basalt (Intrusive Rock)
Location Cretum



(only lower polar)

0 0.5mm

It shows porphyritic and intergranular texture.
Clinopyroxine showing zoned texture is the main components



(zoned polars)

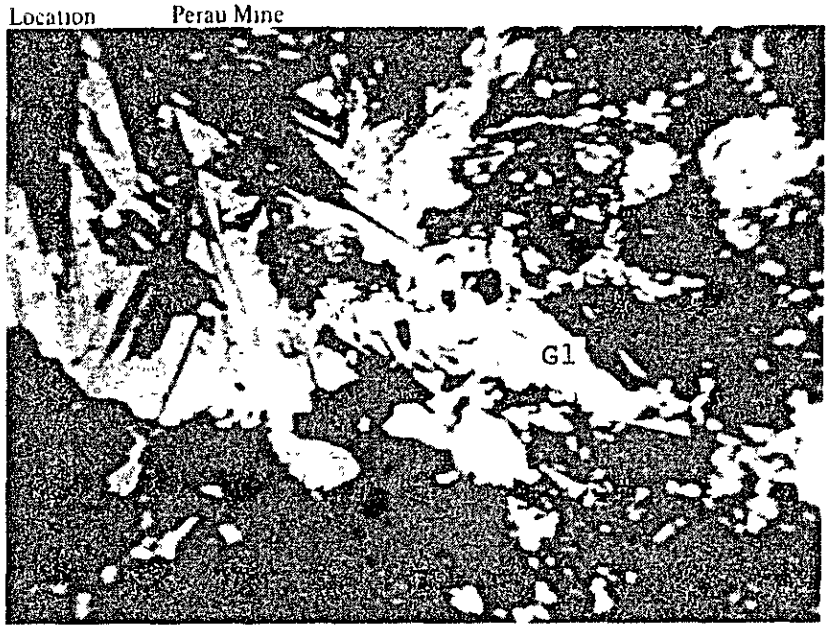
0 0.5mm

Photo A-3 Microphotograph of Polished Section

Abbreviation

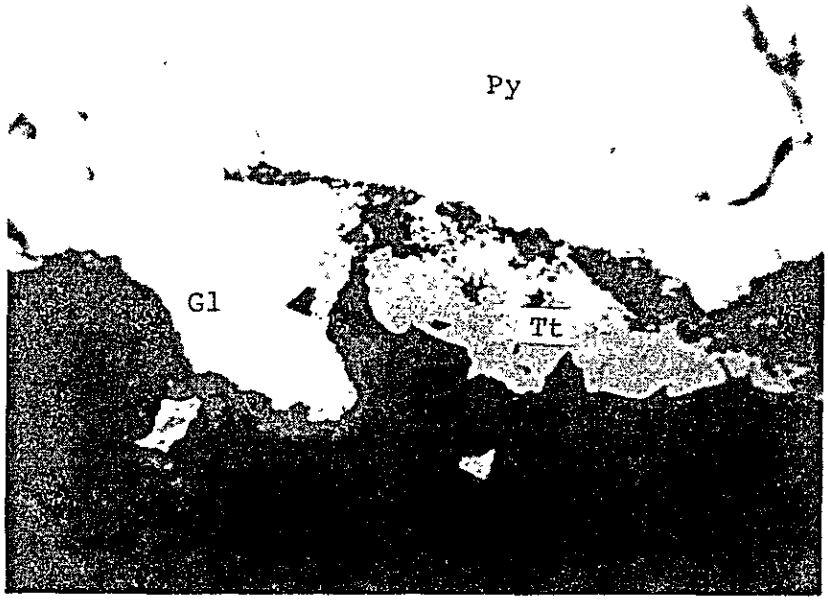
Gl	galena
Py	pyrite
Tt	tetrahedrite
Sp	sphalerite
Cp	chalcopyrite
Po	pyrrhotite
Mc	malachite

Sample No G1 M-05
Location Perau Mine



(only lower polar) 0.2mm

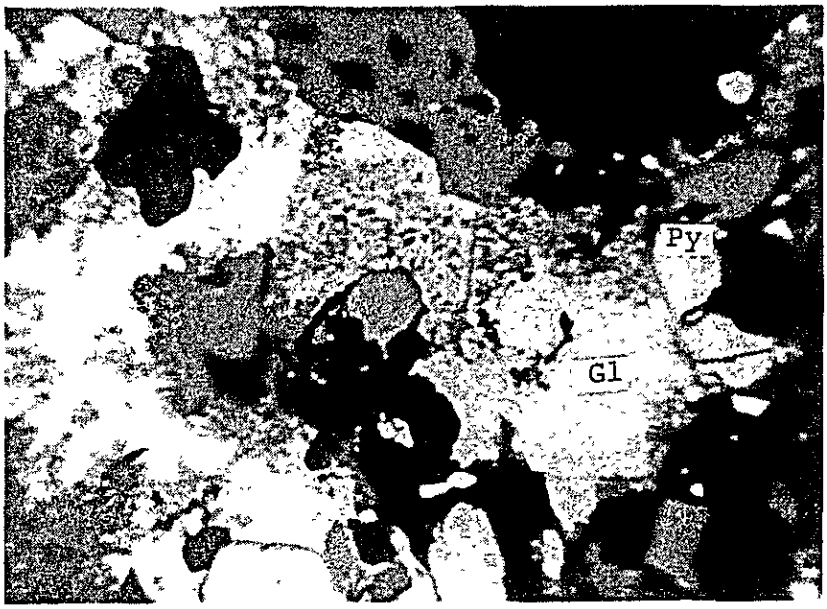
Galena fills the interstices of foliated gangue minerals



(only lower polar) 0.05mm

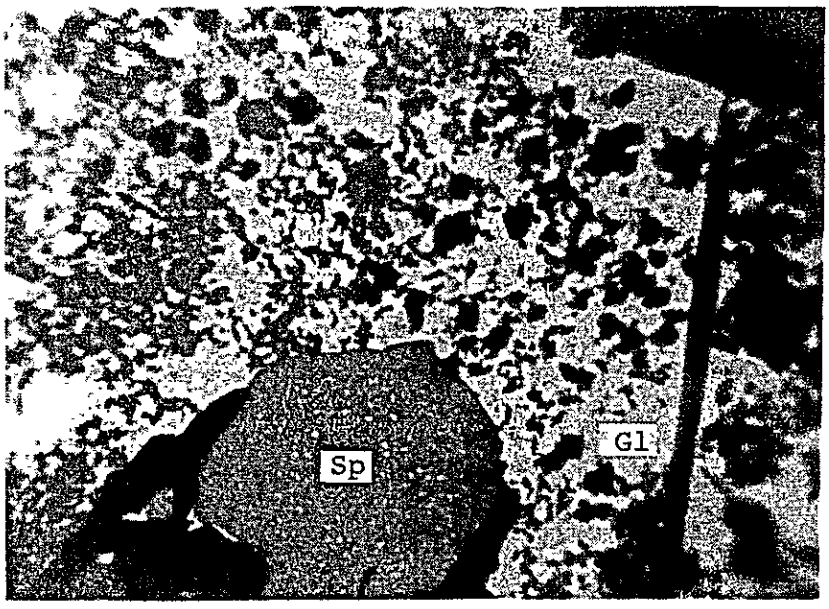
Tetrahedrite occurs intimately associated with galena

Sample No G1 M-08
Location Perau Mine



(only lower polar) 0 2mm

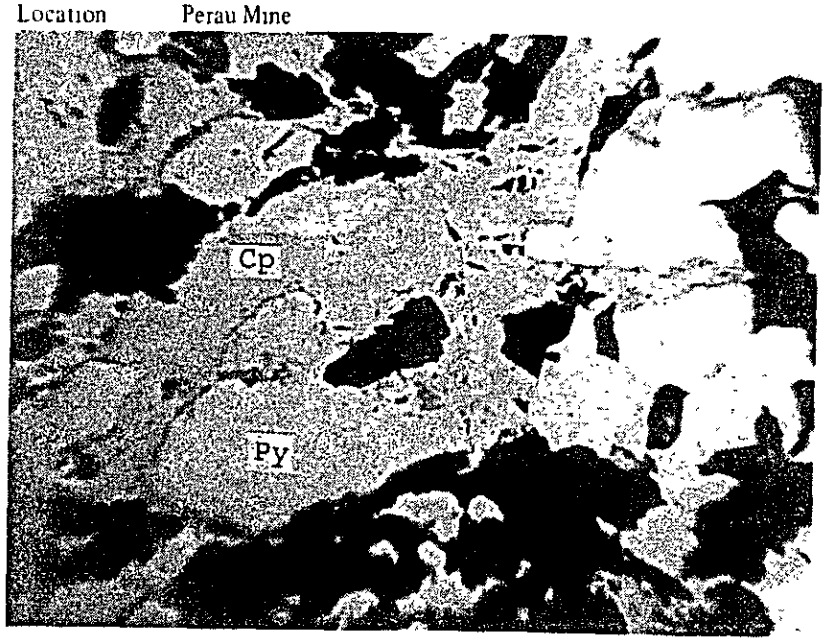
Galena is partly replaced by fine grains of gangue minerals



(only lower polar) 0 05mm

Sphalerite having minute chalcopyrite blebs and a gangue mineral which disseminates finely i in galena and fills cleavages

Sample No G1 M-04
Location Perau Mine



(only lower polar) 0.2mm

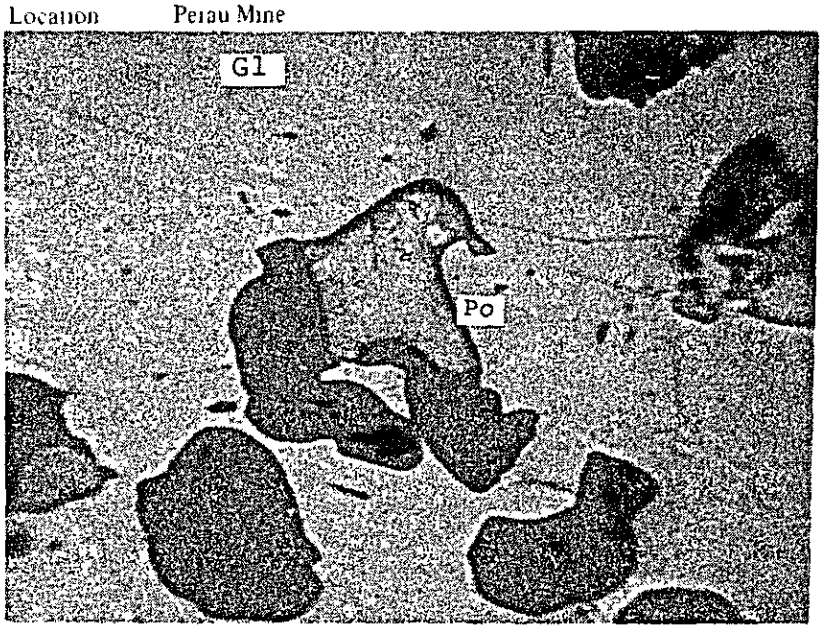
Pyrite is corroded by chalcopyrite
Some parts of pyrite are changed to fine-grained pyrite in chalcopyrite

Sample No G2 M-05
Location Perau Mine

(only lower polar) 0.2mm

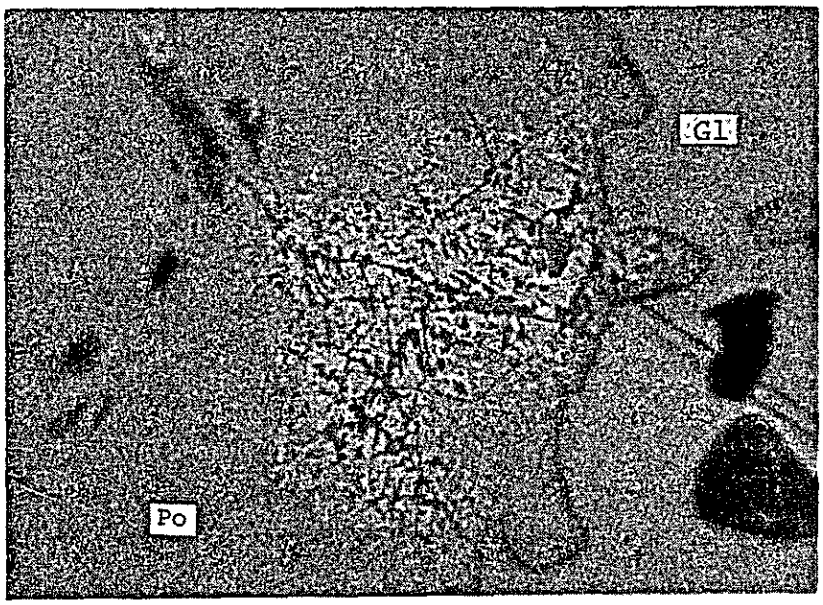
Dissemination of galena is controlled by the original structure of rock

Sample No G2 M-03
Location Perau Mine



Pyrrhotite grain corroded by galena and replaced partly by pyrite

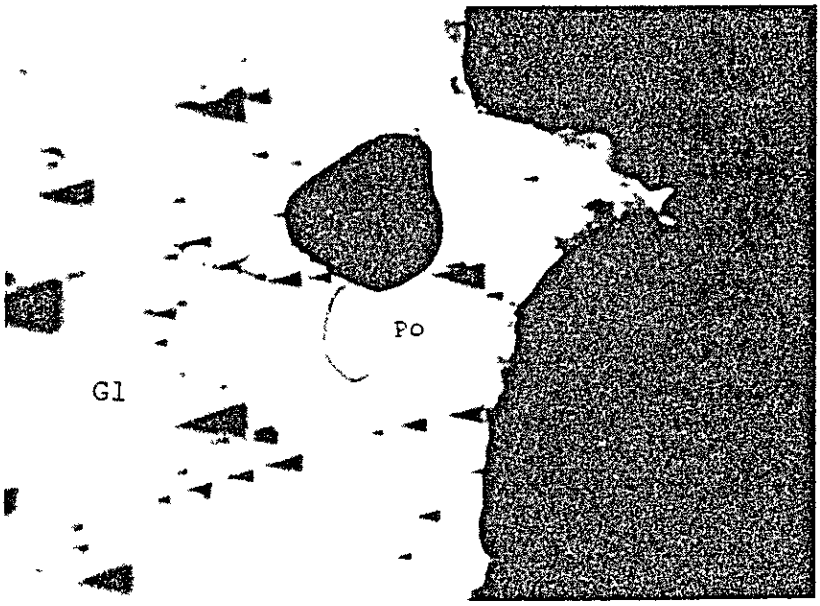
(only lower polar) 0 2mm



Fine-grained pyrite and gangue replace pyrrhotite along thin cracks

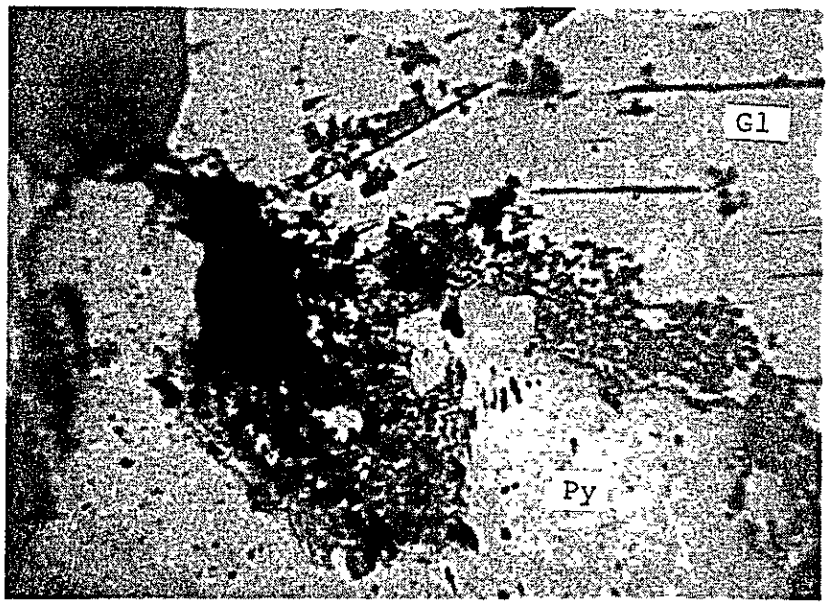
(only lower polar) 0 05mm

Sample No G2 M-04
Location Perau Mine



Pyrrhotite grain in galena

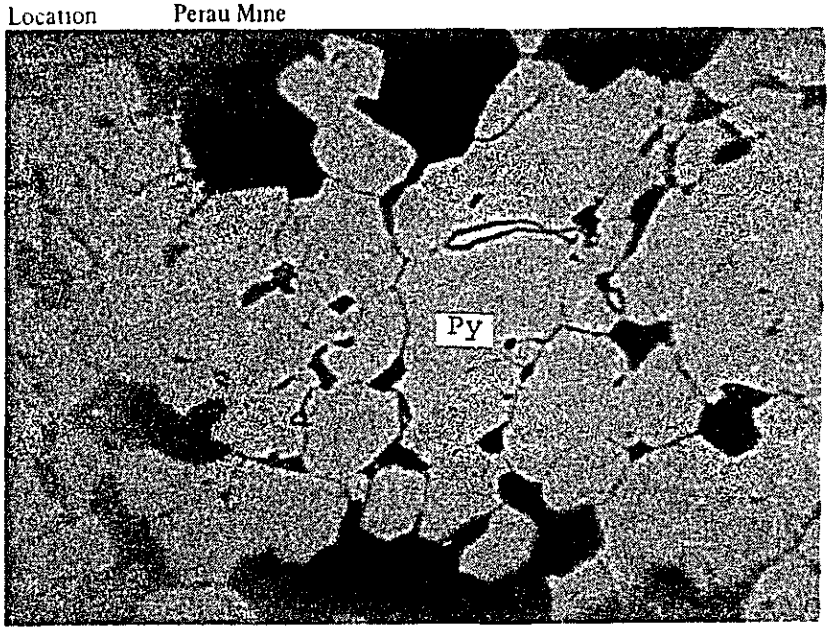
(only lower polar) 0.2mm



Fine-grained gangue mineral replaces a part of galena along boundaries and cleavages

(only lower polar) 0.2mm

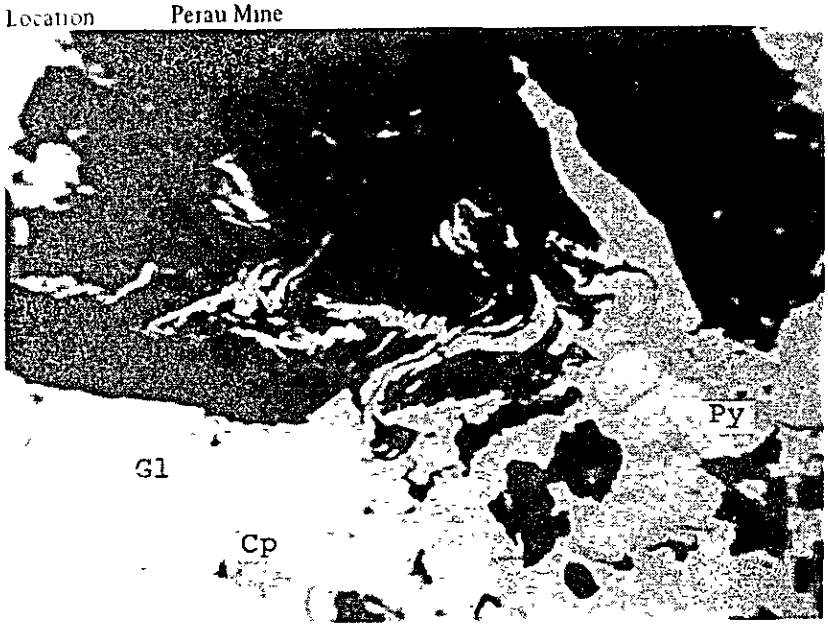
Sample No G3 M-03
Location Perau Mine



(only lower polar) 0.2mm

Pyrite occurs in a mozaic texture

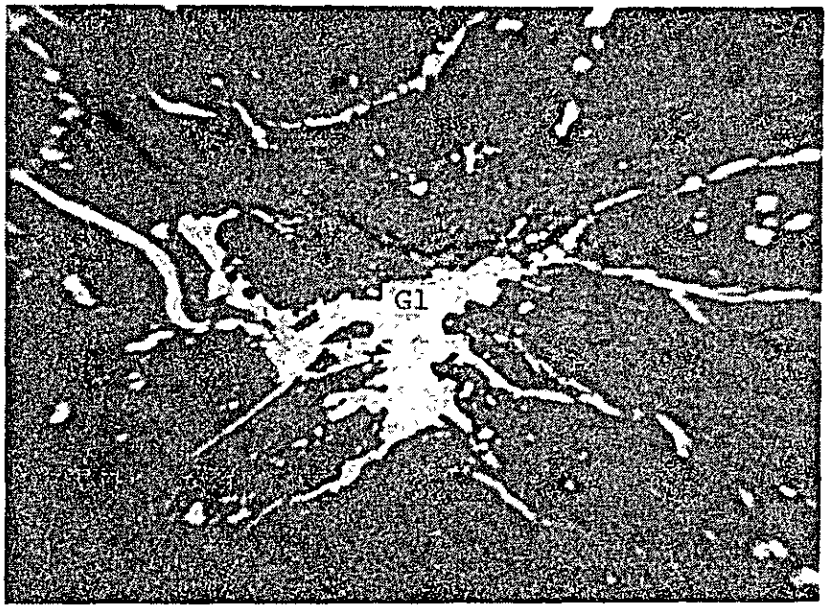
Sample No G3 M-04
Location Perau Mine



(only lower polar) 0.2mm

Galena fills the interstices of the original structure of rock

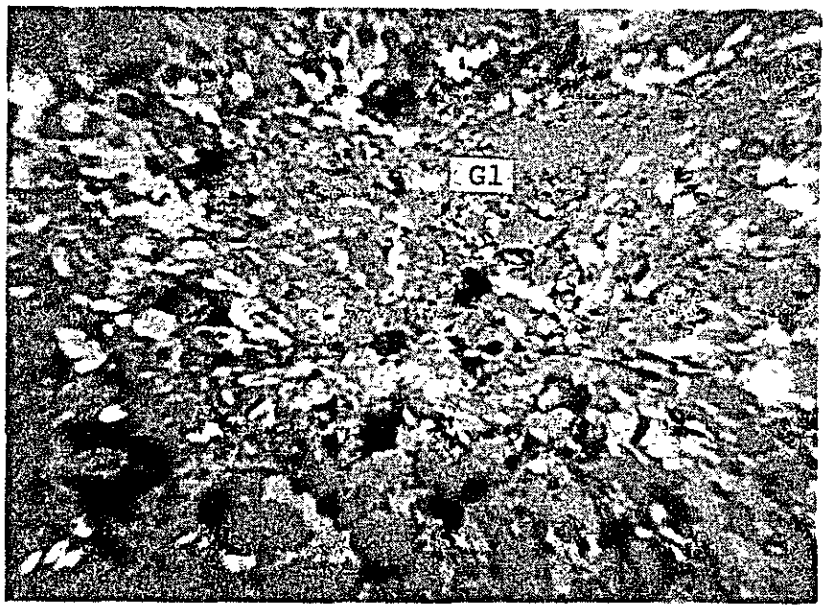
Sample No G3 + 20 M-01
Location Perau Mine



(only lower polar) 0.2mm

Irregular veinlets filled by galena

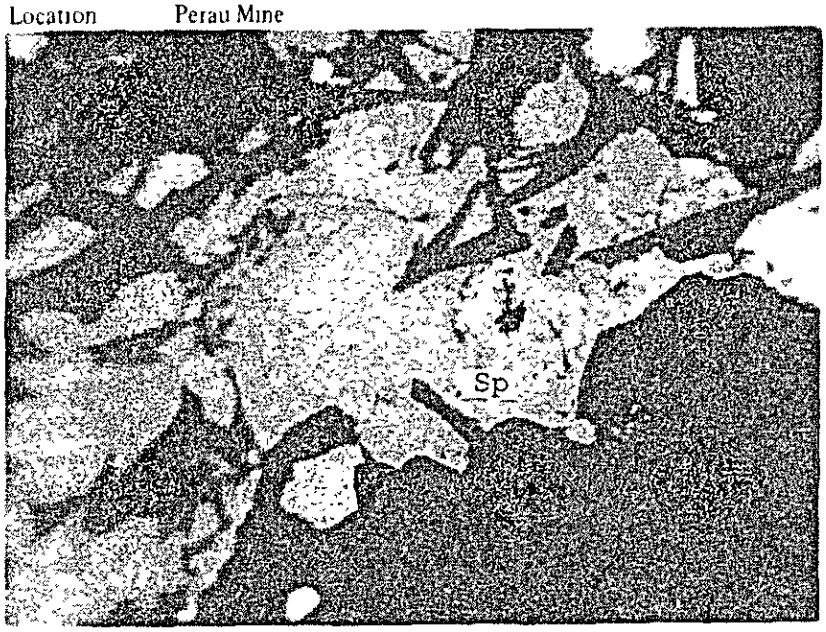
Sample No G4 M-02
Location Perau Mine



(only lower polar) 0.2mm

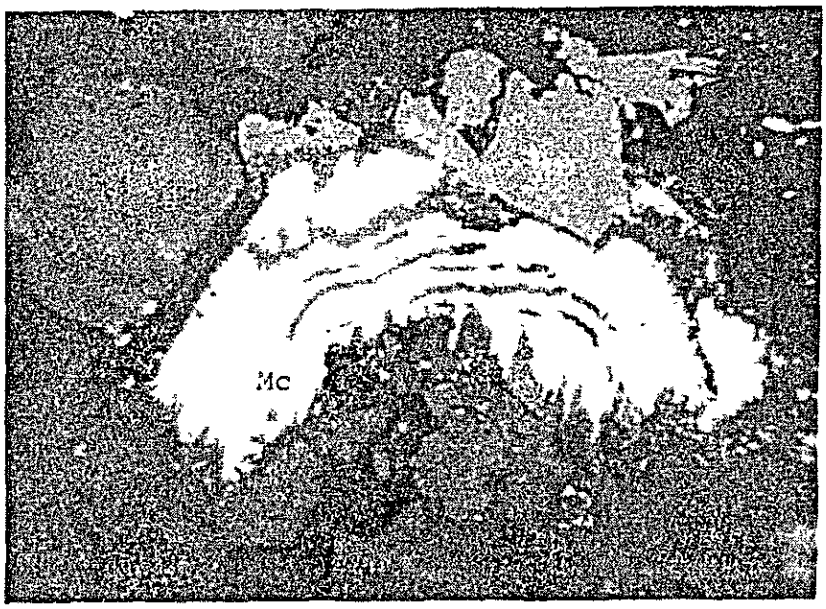
Galena fills the interstices of gangue forming fine and flaky grains

Sample No G4 M-02
Location Perau Mine



(only lower polar) 0 05mm

Concentric texture of a sphalerite grain. The texture is shown by the arrangement of fine grains of gangue minerals



(only lower polar) 0 05mm

Concentric texture found in a marcasite grain

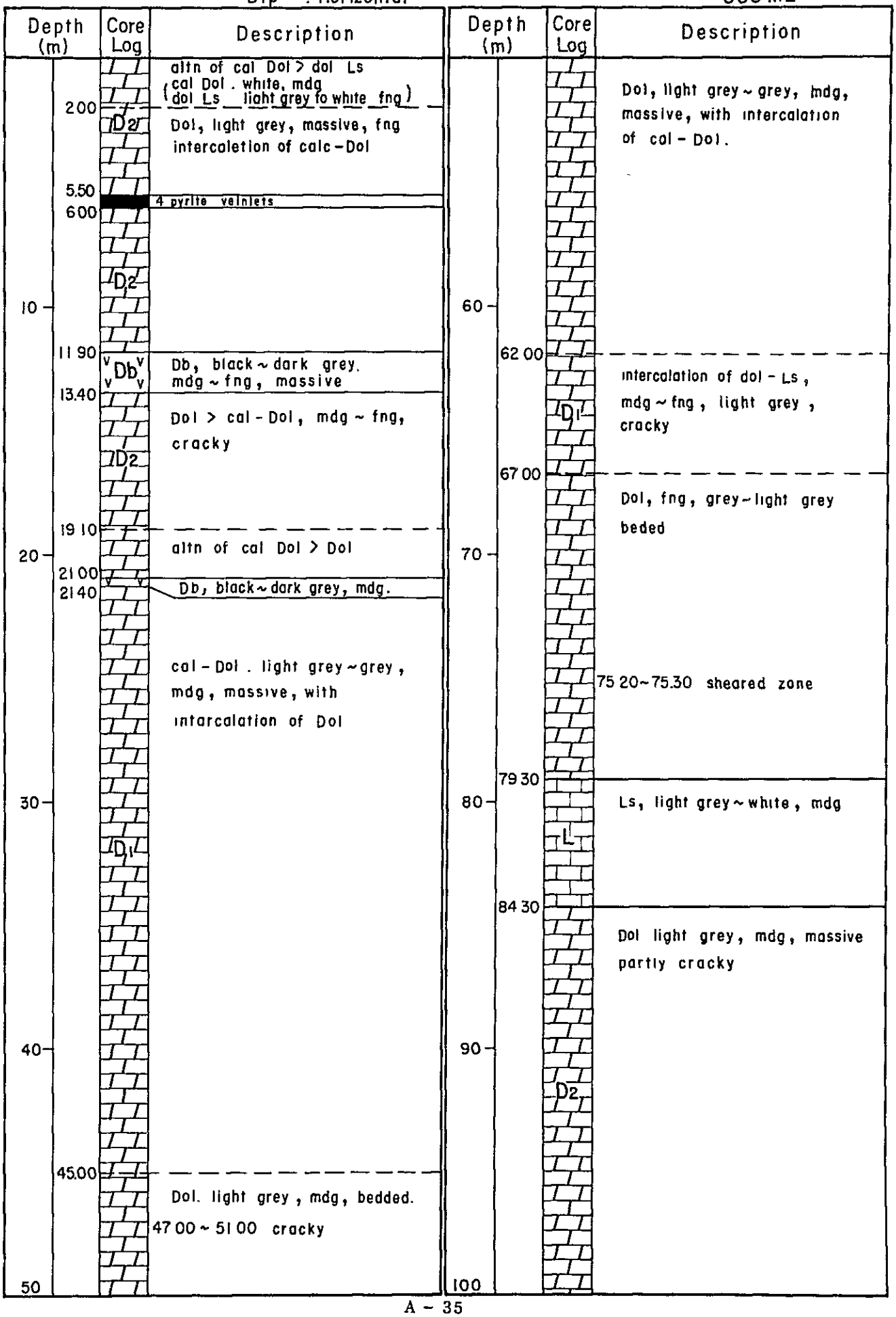
No	Name of Drilling	Location of Drilling set	Strike of Drilling	Dip of Drilling	Length of Drilling
1	I - 112	308 mL	S 68°W	0°	126 10 m
2	I - 122	308 mL	N 76°E	0°	103.70 m
3	I - 124	308 mL	S 68°W	0°	141 00 m
4	I - 139	308 mL	S 78°W	0°	83 00 m
5	I - 141	308 mL	N 40°W	0°	70.80 m
6	I - 142	308 mL	N 74°E	0°	120 00 m
7	I - 95	403 mL	N 40°W	0°	104.00 m
8	I - 113	403 mL	S 76°E	0°	82.30 m
9	I - 125	403 mL	N 50°W	0°	103.50 m
10	I - 129	403 mL	N 68°E	0°	90.00 m
11	I - 130	480 mL	N 90°W	0°	117 50 m

Fig. A-1 Columnar Section of Core Logs in Rocha Mine

No. 1
I-112(1)

Strike . S68°W
Dip : Horizontal

Rocha Mine
308 mL



No. 1
I-112 (2)

Strike : S 68°W
Dip : Horizontal

Rocha Mine
308mL

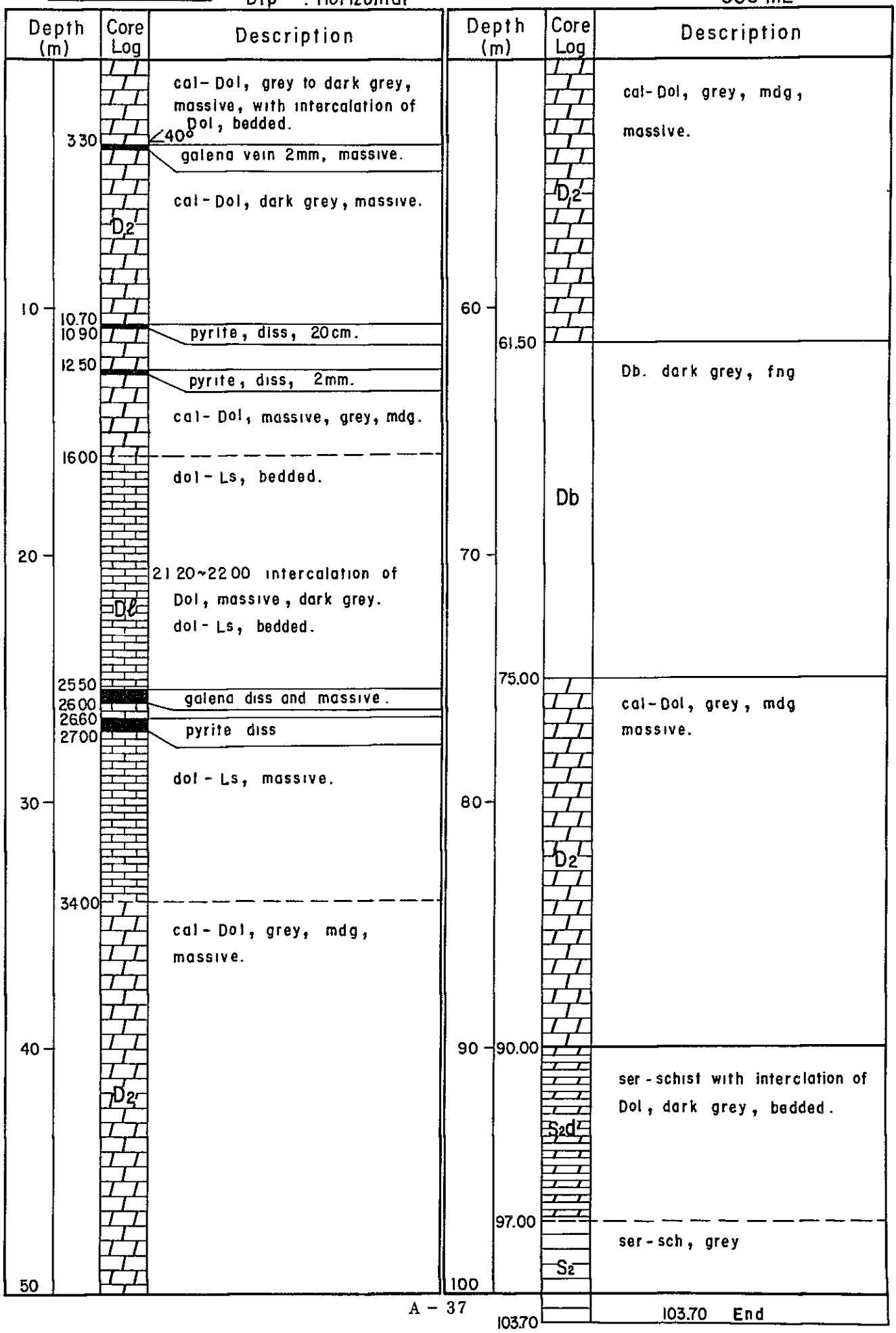
Depth (m)	Core Log	Description
	Dl	Dol, light grey, mdg, massive partly cracky
110		
120		
121 00	Al	alin of Ls > dol - Ls (Ls : grey mdg dol-Ls : grey ~ dark grey)
126 10		126 10 End

Depth (m)	Core Log	Description

No. 2
I – 122

Strike N76°E
Dip : Horizontal

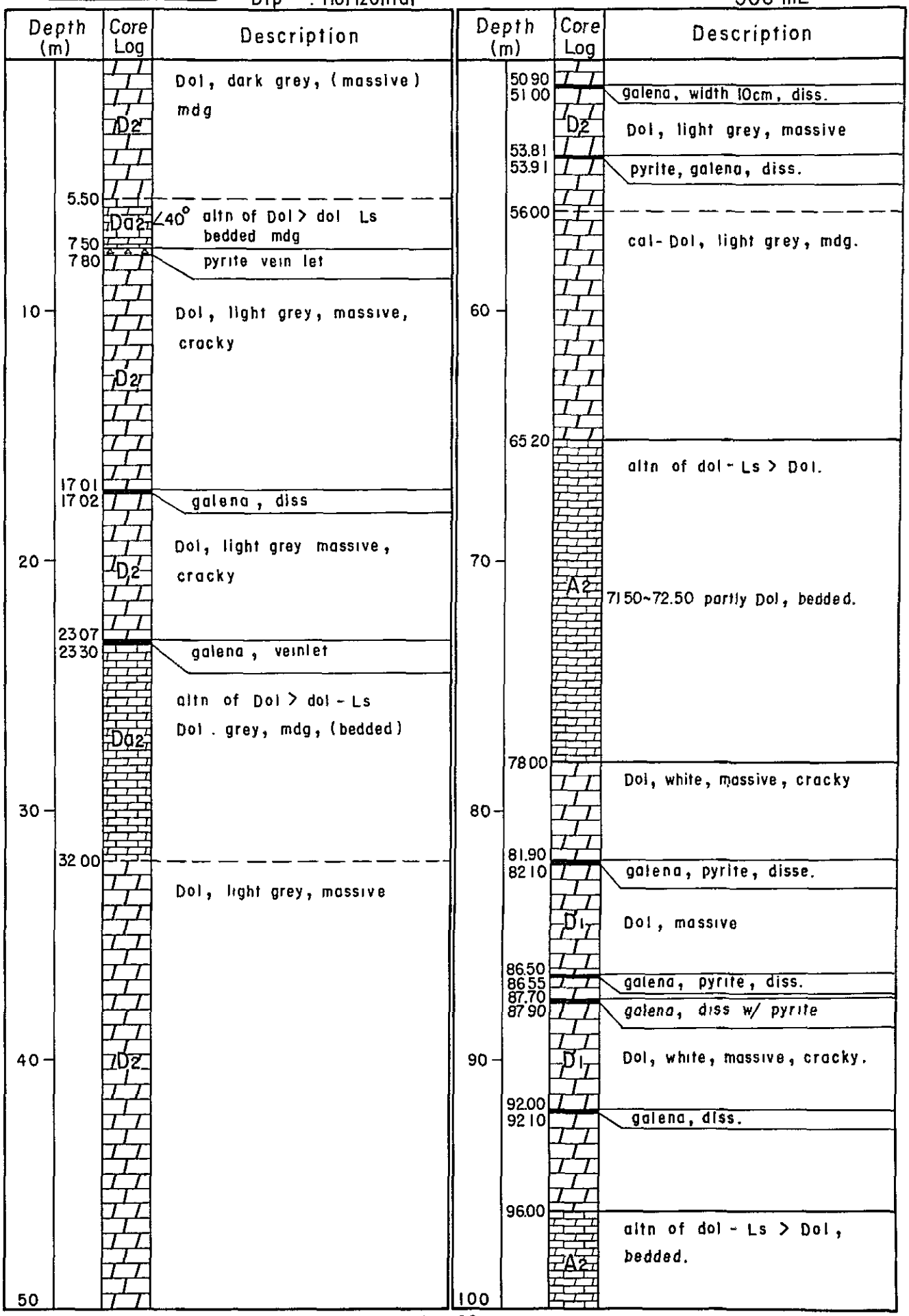
Rocha Mine
308 mL



No. 3
I - 124 (1)

Strike : S 68°W
Dip : Horizontal

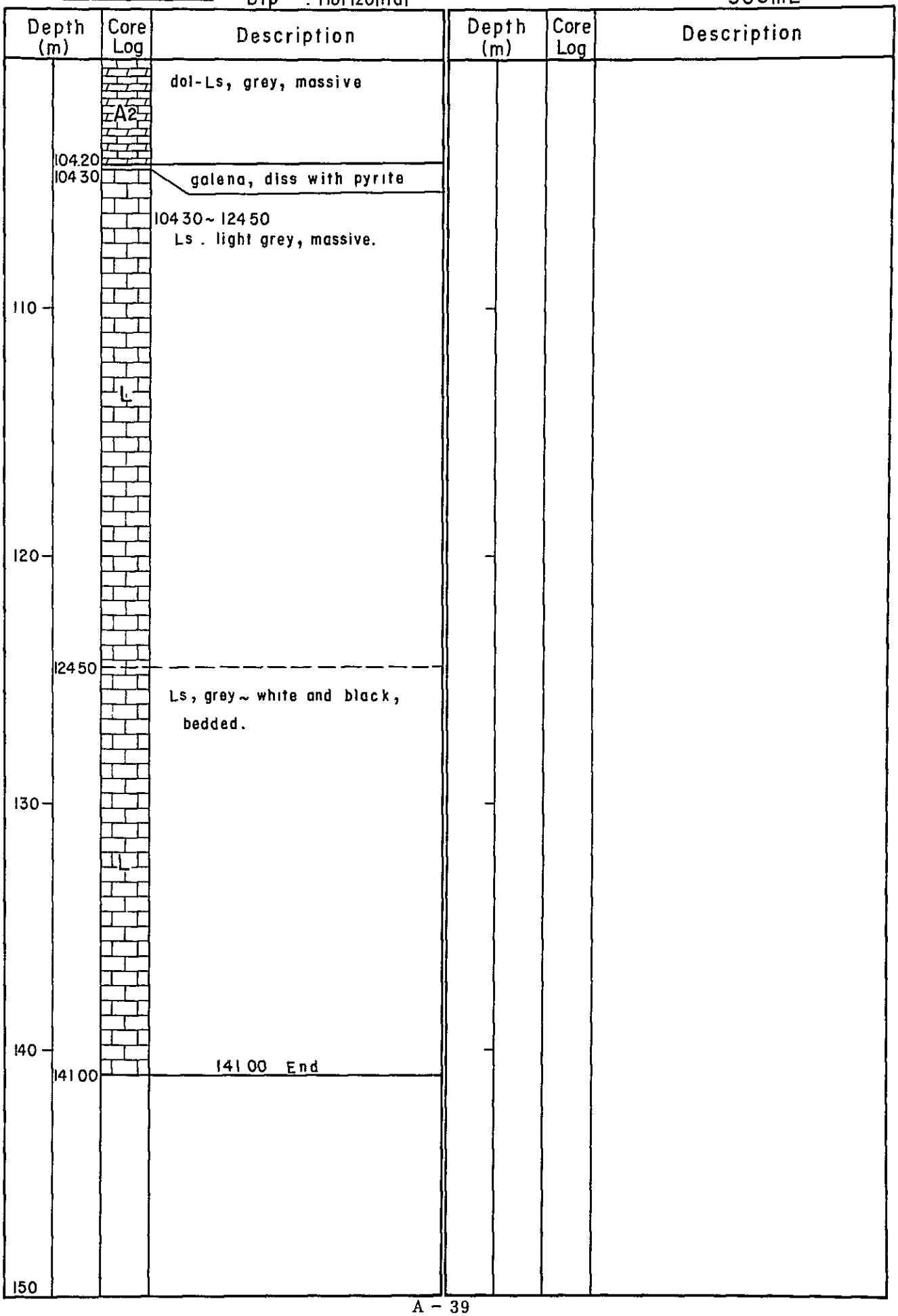
Rocha Mine
308 mL



No. 3
I - 124 (2)

Strike : S 68°W
Dip : Horizontal

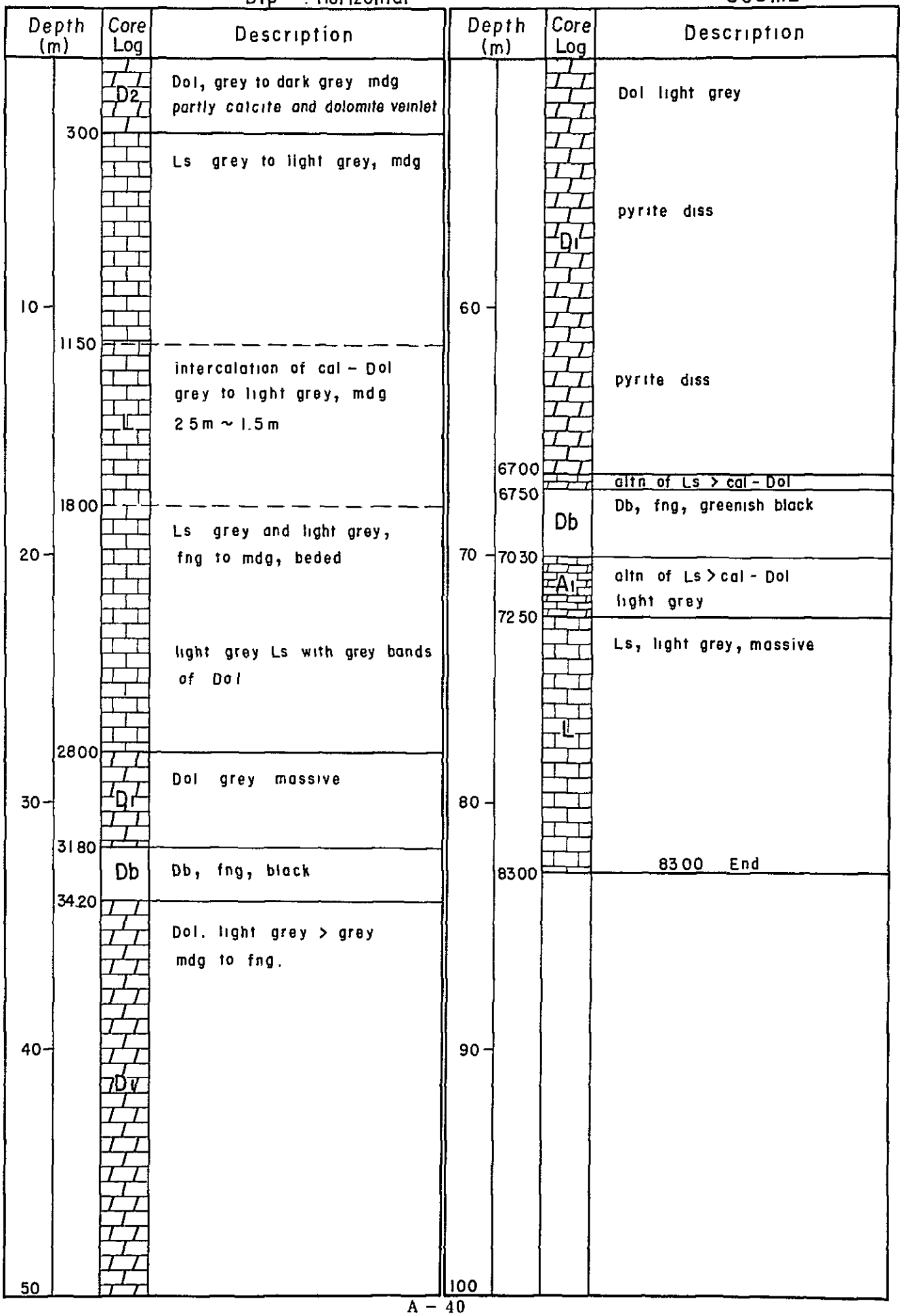
Rocha Mine
308mL



No. 4
I – 139

Strike : S 78°W
Dip : Horizontal

Rocha Mine
308 mL



No. 5
I - 141

Strike . N40°W
Dip : Horizontal

Rocha Mine
308 mL