
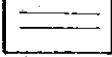

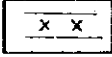


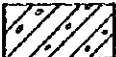
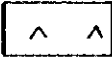
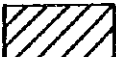
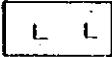
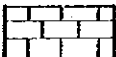

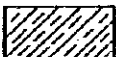
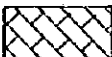

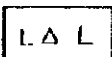
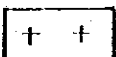

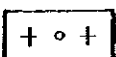
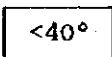


Apex-1 CORE LOG S = 1 / 200

Legend

	quartzite		quartz vein
	quartz schist		aplite pegmatite granite
	black schist muscovite schist biotite schist		basalt
	biotite schist (porphyroblastic)		dolerite
	graphite schist		altered basic rock
	limestone		serpentinite
	amphibole schist		talc-carbonate rock
	green schist		aplitized basic rock with skarn
	gneiss		chromite
	gneiss (porphyroblastic)		dip of schistosity and gneissosity

Abbreviation

q:	quartz	tour:	tourmaline
fs:	feldspar	ta:	talc
mus:	muscovite	carb:	carbonate
bi:	biotite	amp:	amphibole
hb:	hornblende	apl:	aplite
act:	actinolite	kaol:	kaolinite
cpx:	clinopyroxene	cr:	chromite
ep:	epidote	Cp:	chalcopyrite
chl:	chlorite	Py:	pyrite
gt:	garnet	Hm:	hematite



GSI-19

0-50 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
		3.00								overburden	brown soil q small gravel
10										amp schist	pale yellow ~ pale green weathered  dark green, schistosity: clear
20											
30											
								ep			27.30 m Hm vein
											30.10 m q vein with Cp spots 30.50 m Hm vein
											35.00 ~ 45.00 m Cu minor spots scattered
			1	1.70	0.093	0.002	0.004				37.70 ~ 38.00 m calcareous rock
			2	2.30	0.077	0.002	0.004				
40								carb			47.70 m minor Cp veinlet
50											

GSI-19

50-100 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
											53.50m q veinlet with Cp spots 55.00 m Hm vein Cp spot
60											59.20 m Hm vein Py, Cp spots
70										amp schist	65.30 m Hm veinlet 66.20 m Py 67.90 ~ 69.10 m Cp minor spot
											73.80 m magnetite spots
											pale brown
80											80.00 ~ 95.00 m Py > Cp spots scattered
			3	2.00	0.157	0.002	0.004				
			4	1.50	0.018	0.003	0.004				
			5	1.50	0.049	0.002	0.004				
90										amp schist	88.30 m Cp spot
										Py	90.80 ~ 95.70 m q vein with Py, Cp sporadically
100										Py Cp	98.30 m, 98.80 m, 99.20 m, 99.40 m q vein with Py, Cp spots

Depth (m)	Core log	Bound- ary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alter- ation	Mineral ization	Remarks
					Cu	Pb	Zn				
110	[Hatched]	< 30°								medium ~ fine grained schistosity: clear	
										105.30 m Cp minor spots 107.80 ~ 109.90 m q vein with Cp spots	
120	[Hatched]	< 20°								Cp 113.70 m Cp minor spots	
										Py 119.10, 119.70 m Py scattered	
130	[Hatched]	129.00								amp schist	
		132.10								bi - q schist chl pale grey schistosity waving	
140	[Hatched]	< 20°								Py 136.00 ~ 138.00 m Py ≧ Cp impregnated	
		136.00	6	2.00	0.040	0.001	0.005				
150	[Hatched]	< 20°								140.60 ~ 145.00 m He vein, q vein with Py, Cp sporadically	
		< 40°									

GSJ-20

0-50 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
		3.00					overburden			grey soil q gravel	
10										dark green, medium ~ coarse grained	
20		< 20°					amp schist	ep		13 ~ 20 m epidotization sporadically	
30											
		< 10° 34.60					Limestone			crystalline, Cp spots	
		34.70									
40								carb		38.15, 39.30 m barren q vein	
		40.00								39.90 m Cp small spot	
		41.00	7	1.00	0.108	0.001	0.003			40.00 ~ 42.50 m Py, Cp minor spots scattered	
		42.00	8	1.00	0.138	0.003	0.003	amp schist			
		< 60° 43.50	9	1.50	0.174	0.004	0.004		Py Cp		
										48.40 m q vein	
50		< 50°									

GSJ-20

50-100 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
		50.50									
		51.00	10	0.5	0.122	0.004	0.004				
		53.00	11	2.00	0.139	0.004	0.004				50.50 ~ 63.00 m Py, Cu minor spots scattered
		55.00	12	2.00	0.021	0.004	0.004		Py		
		57.00	13	2.00	0.026	0.004	0.004		Cp		
			14	2.50	0.026	0.004	0.004				
		59.50									
		60.40	15	0.90	0.033	0.004	0.003				
60		< 20° 63.00	16	2.60	0.041	0.005	0.003	amp schist			
70											73.40 ~ 73.80 m Cp, Py impregnation
		73.40									
		73.90								Cp Py	
		74.10	17	0.90	0.442	0.005	0.006	Limestone			crystalline
		74.30									
											74.10 ~ 74.20 m Cp, Py impregnation 75.50 ~ 76.00 m minor spots of Cu 76.60 m Cu spots
80											80.50 ~ 87.00 m q veinlet with Py, Cp or small spots of Py, Cp impregnated sporadically
90											92.50 m Hm vein
											95.50 m Cp spots
100											

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
110	[Hatched Core Log]	110.00								102.90 ~ 103.10 m Py impregnated 103.30 ~ 105.00 m minor Cp spots	
		111.80	18	1.80	0.092	0.006	0.003	carb	Py Hm	110.10 ~ 111.80 m carbonate rock with Py, Hm ≧ Cp	
								carb	Py	113.20 ~ 113.30 m carbonate rock Py impregnated	
120										116.10 m Hm vein	
										119.50 m Hm with Py	
130							amp schist				
										131.20 131.70 m q vein with Cp spots	
										134.10 134.90 m q vein with Cp spots	
140											
										143.60 m calcite vein with Cp spots	
150		150.50									

← 30°



GSI-22

0-50 m

GSI-22

50-100.20 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
		3.80								overburden brown soil calcrete	
10										upper part pale green-brown, weathered	
20										amp schist	
30										dark green, coarse grained massive Amphibolite schistosity: unclear	
40										39.00 m magnetite scattered barren q veinlets scattered 45.80 m green copper	
50								ep			

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
		53.00									amp schist
		< 20°									white ~ pale brown schistosity: clear, waving
		< 57.50									dark green massive
60											amp schist
70										Py Cp	70.10 ~ 70.25 m Py, Cp spots
		< 72.30									
		< 40° 74.50							chl		light brown ~ grey schistosity: clear
80										Cp Py	78.40 m, 79.60 m q veinlet with Py, Cp spots
										Py	83.50 m, 83.40 m 89.30 m q. veinlet with Py
										Py Cp Cp	89.10 m small spots of Cp
		94.10									
		94.50									bi - q schist
		96.50								He	pale brown reddish purple schistosity: waving
											bi - q schist
									chl		pale brown
100		99.40 100.20								Py	Py magnetite spots



GSI-23

0-50 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
		3.00								overburden brown soil	
10										upper part brownish grey, weathered	
										schistosity: clear	
20										amp schist	
30											
40											
47.40											
		30°	31	1.60	0.043	0.004	0.012			Hm Cp	47.40 ~ 49.0 Hm vein Cp spots scattered Au 0.1g/t, Ag 1g/t
50		49.00									

GSI-23

50-100 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks		
					Cu	Pb	Zn						
											Cp Hm Cp	50.20 m q. veinlet with Cp 51.50 m, 51.80 m Hm veinlet 51.90 m Cp spots scattered	
												Py	56.40 m Py spots
60												chl	61.00 ~ 62.00 m q veinlet, Py impregnated
			32	1.00	0.013	0.001	0.003						
70													
80													
			33	2.00	0.068	0.001	0.004						
			34	3.00	0.048	0.004	0.004						
			35	3.00	0.039	0.001	0.004						
90													
			36	3.00	0.035	0.001	0.003						
			37	3.00	0.041	0.002	0.004						
			38	3.00	0.034	0.003	0.004						
100													

Apex.-7

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
110		110.00									
		112.00	39	2.00	0.099	0.001	0.004		Cp ep ep	110.60 m, 11.40 m, 112.20 m q veinlet with Cp	
120		35°						amp schist			
130									Cp Py	128.70 m q veinlet with Cp spots 130.30 m Py spots	
140		143.40							Py Cp	143.40 ~ 144.50 m Py > Cp impregnated	
		144.50	40	1.10	0.052	0.001	0.004				
150		150.50									

GSI-24

0-50 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
		3.00								overburden red soil calcrete	
10										dark green partly weathered: pale green medium ~ coarse grained	
								ep		11.20 m Hm q veinlet 13.50 m ep veinlet	
20										amp schist	
30		30°								28.70 m Hm vein 31.40, 31.90 Hm veinlet	
		35°								36.50 ~ 37.50 m q veinlets scattered, barren	
40		50°						ep	Cp	39.50 q veinlet with Cp 39.90 ~ 40.00 m Cp spots scattered 40.30 Ep. with Cp	
									Cp Py	43.50 ~ 43.60 Py, Cp minor spots	
									Cp Py	47.20 ~ 47.30 Py, Cp minor spots	
50		35°									

GSI-24

50-100 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
60											dark green, medium ~ coarse grain schistosity: unclear
								ep	Py Cp		52 ~ 54 m small spots of Cp, Py scattered
								ep sil	Cp		56.40 ~ 57.50 m 58.30 m qu veinlet with Cp spots
								ep			59 ~ 63 m epidotization
		65.40									
		45° 67.10									pale brown q >= bi
70		70.00									67.50 m Cu spots
		20° 71.00									pale grey
		74.00						ep			72.50 m q vein with Cp
		75.00	41	1.00	0.081	0.001	0.007		Cp		74.30 m 74.50 Cp spots
									Py		76.60 m q vein with Cp, Py
80											83.40 m Hm veinlet
									Cp		85.70 m q veinlet with Cp spots
90		91.00									91.60 m Hm vein with Cp spots
		92.50	42	1.50	0.102	0.001	0.004		Hm Cp Py Cp		S-42: Au 0.1g/t Ag 1g/t 93.50 m q veinlet with Cp spots
100											

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
110	[Hatched pattern]									106.40 m q. veinlet with Cp spots	
										107.90 m Py > Cp spots	
										112.90 m Cp spot impregnated	
										amp schist	
120										Cp 118.20 m, 118.80 m q veinlet with Cp spots	
										Cp 120.30 m q veinlet with Cp	
										Cp 122.00 m q veinlet Cp	
130										ep Cp 127.30 m Cp spots	
140											
150										150.50	



GSI-26

0-50 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
		1.70								overburden red soil	
		7.50								amp schist pale green ~ yellowish grey weathered	
10										grey mus - q schist q ≧ mus generally sericitisation	
20		23.50								pale green ~ yellowish grey, calcite veinlet network schistosity: clear	
30		60°								amp schist	
		35°									
40		40°								lower part: dark green	
		40°								45.00 ~ 63.00 m epidotization spots (2~3 mm) scattered	
50									ep		

GSI-26

50-100.40 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
60											dark green fine grained, lower part coarse grained schistosity: unclear, partly clear 56.00 m green Cp
		45°									
70											
		45°									
		45°									
80											amp schist
		35°									
		50°									
		85.80									
		86.00									
		40°									
90											Limestone Chalcopyrite (2 cm X 2 cm)
		40°									
		100.40									
100											amp schist
											90.15 ~ 95.60 m small spots of Cp, Py scattered
											98.50 m q vein Py ≧ Cp impregnated 98.90 m Hm thin layer with Cp spots

GSI-27

0-50 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
	dots	3.00					overburden			brown soil	
10	diagonal lines	40°					bi schist			grey, schistosity: clear, generally weathered  many calcite veinlets appear to be parallel to bedding	
20	diagonal lines	40°									
	diagonal lines	21.50									
30	triangles	31.90					dolerite	chl		brownish grey	
	diagonal lines	40°					bi schist			brownish grey	
	triangles	34.50					dolerite			grey	
40	triangles	39.50									
	diagonal lines	40°					bi schist			dark grey pelitic	
	diagonal lines	43.90									
50	triangles						dolerite			grey	

GSI-27

50-100.05 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
	triangles	54.00					dolerite	chl			
	diagonal lines	40°					bi schist			dark grey pelitic	
60	diagonal lines	59.00									
	triangles								Py	dark grey, medium grained 60~65 m: hair cracks with minor spots of Py	
70	triangles						dolerite	chl			
	triangles	76.40									
80	diagonal lines	30°								dark grey 78.10 m barren q vein (w = 7 cm) schistosity: clear	
	diagonal lines	40°									
	diagonal lines						bi schist				
90	diagonal lines	40°							Py	88.40~90.00 m minor spots of Py scattered	
	diagonal lines	40°									
100	diagonal lines	100.05									

GSI-28

0-50 m

GSI-28

50-100.05 m

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Pb	Zn				
										overburden	brown soil q. float
10										mus - bi - q schist	upper part: dark grey bi schist light grey, massive q ≫ bi ≫ mus
20		15.00								bi schist	dark grey schistosity: clear
		24.70								bi - q schist	light grey schistosity: unclear
30		27.50								bi schist	dark grey ~ grey pelitic, slaty
40										bi schist	
50											

Depth (m)	Core log	Boundary (m) Dip	Samp. No.	Width (m)	Assay % (Au, Ag g/t)			Rock name	Alteration	Mineralization	Remarks
					Cu	Zn	Pb				
60										bi schist	dark grey, slaty schistosity clear  partially intercalated with thin bands of q schist
70										bi schist	
80										bi schist	
90										Limestone	crystalline, barren
										bi schist	Py weak pyritization
										Limestone	Cp crystalline, Cp spots
100										bi schist	



Apex. 2 Analytical Data (Drilling Core)

Sample No.	Drill hole No.	Interval (m)	Length (m)	Assay					Remarks
				Cu %	Pb %	Zn %	Au g/t	Ag g/t	
1	GSJ-19	35.00~ 36.70	1.70	0.093	0.002	0.004			
2	GSJ-19	36.70~ 39.00	2.30	0.077	0.002	0.002			
3	GSJ-19	80.00~ 82.00	2.00	0.157	0.002	0.004			
4	GSJ-19	82.00~ 83.50	1.50	0.018	0.003	0.004			
5	GSJ-19	83.50~ 85.00	1.50	0.049	0.002	0.004			
6	GSJ-19	136.00~138.00	2.00	0.040	0.001	0.005			
7	GSJ-20	40.00~ 41.00	1.00	0.108	0.001	0.003			
8	GSJ-20	41.00~ 42.00	1.00	0.138	0.003	0.003			
9	GSJ-20	42.00~ 43.50	1.50	0.174	0.004	0.004			
10	GSJ-20	50.50~ 51.00	0.50	0.122	0.004	0.004	0.2	2	
11	GSJ-20	51.00~ 53.00	2.00	0.139	0.004	0.004			
12	GSJ-20	53.00~ 55.00	2.00	0.021	0.004	0.004			
13	GSJ-20	55.00~ 57.00	2.00	0.026	0.004	0.004			
14	GSJ-20	57.00~ 59.50	2.50	0.026	0.004	0.004			
15	GSJ-20	59.50~ 60.40	0.90	0.033	0.004	0.003			
16	GSJ-20	60.40~ 63.00	2.60	0.041	0.005	0.003			
17	GSJ-20	73.40~ 74.30	0.90	0.442	0.005	0.006			
18	GSJ-20	110.00~111.80	1.80	0.092	0.006	0.003			
19	GSJ-21	40.00~ 43.00	3.00	0.061	0.004	0.004			
20	GSJ-21	43.00~ 46.00	3.00	0.053	0.004	0.003			
21	GSJ-21	46.00~ 49.00	3.00	0.053	0.002	0.004			
22	GSJ-21	49.00~ 52.00	3.00	0.050	0.001	0.003			
23	GSJ-21	52.00~ 55.00	3.00	0.051	0.004	0.004			

Sample No.	Drill hole No.	Interval (m)	Length (m)	Assay					Remarks
				Cu %	Pb %	Zn %	Au g/t	Ag g/t	
24	GSJ-21	55.00~ 58.00	3.00	0.079	0.004	0.004			
25	GSJ-21	58.00~ 61.00	3.00	0.045	0.004	0.004			
26	GSJ-21	61.00~ 64.00	3.00	0.063	0.002	0.004			
27	GSJ-21	64.00~ 67.00	3.00	0.037	0.001	0.002			
28	GSJ-21	67.00~ 68.00	1.00	0.122	0.001	0.003			
29	GSJ-21	68.00~ 68.90	0.90	0.309	0.001	0.003	0.0	2	
30	GSJ-21	68.90~ 71.00	2.10	0.034	0.004	0.004			
31	GSJ-23	47.40~ 49.00	1.60	0.043	0.004	0.012	0.1	1	
32	GSJ-23	61.00~ 62.00	1.00	0.013	0.001	0.003			
33	GSJ-23	80.00~ 82.00	2.00	0.068	0.001	0.004			
34	GSJ-23	82.00~ 85.00	3.00	0.048	0.004	0.004			
35	GSJ-23	85.00~ 88.00	3.00	0.039	0.001	0.004			
36	GSJ-23	88.00~ 91.00	3.00	0.035	0.001	0.003			
37	GSJ-23	91.00~ 94.00	3.00	0.041	0.002	0.004			
38	GSJ-23	94.00~ 97.00	3.00	0.034	0.003	0.004			
39	GSJ-23	110.00~112.00	2.00	0.099	0.001	0.004			
40	GSJ-23	143.40~144.50	1.10	0.052	0.001	0.004			
41	GSJ-24	74.00~ 75.00	1.00	0.081	0.001	0.007			
42	GSJ-24	91.00~ 92.50	1.50	0.102	0.001	0.004	0.1	1	
43	GSJ-25	55.50~ 56.30	0.80	0.385	0.001	0.004	0.2	2	
44	GSJ-25	56.30~ 59.00	2.70	0.019	0.001	0.004			
45	GSJ-25	66.50~ 68.00	1.50	0.021	0.004	0.006			
46	GSJ-25	68.00~ 69.50	1.50	0.018	0.001	0.004			

Sample No.	Drill hole No.	Interval (m)	Length (m)	Assay					Remarks
				Cu %	Pb %	Zn %	Au g/t	Ag g/t	
47	GSI-25	92.00~ 94.00	2.00	0.049	0.001	0.004			
48	GSI-25	94.00~ 96.00	2.00	0.071	0.001	0.004			
49	GSI-25	96.00~ 98.00	2.00	0.142	0.001	0.004			
50	GSI-25	98.00~ 99.30	1.30	0.032	0.003	0.003			

**Apex. 3 Analytical Data (Soil)**

Sample No.	Location	Assay ppm		Sample No.	Location	Assay ppm	
		Cu	Zn			Cu	Zn
1	X0, Y0	40	27	25	X0, Y12.0	67	28
2	X0, Y0.5	63	30	26	X0, Y12.5	95	31
3	X0, Y1.0	126	52	27	X0, Y13.0	66	22
4	X0, Y1.5	169	44	28	X0.5, Y0	142	50
5	X0, Y2.0	172	46	29	Y0.5 Y0.5	168	45
6	X0, Y2.5	91	23	30	X0.5, Y1.0	143	71
7	X0, Y3.0	54	33	31	X0.5, Y1.5	122	52
8	X0, Y3.5	52	35	32	X0.5, Y2.0	144	49
9	X0, Y4.0	75	38	33	X0.5, Y2.5	147	46
10	X0, Y4.5	55	34	34	X0.5, Y3.0	172	38
11	X0, Y5.0	89	38	35	X0.5, Y3.5	98	29
12	X0, Y5.5	80	39	36	X0.5, Y4.0	51	37
13	X0, Y6.0	48	35	37	X0.5, Y4.5	44	34
14	X0, Y6.5	66	30	38	X0.5, Y5.0	33	29
15	X0, Y7.0	65	26	39	X0.5, Y5.5	29	28
16	X0, Y7.5	62	29	40	X0.5, Y6.0	43	25
17	X0, Y8.0	79	32	41	X0.5, Y6.5	52	29
18	X0, Y8.5	105	31	42	X0.5, Y7.0	67	26
19	X0, Y9.0	114	29	43	X0.5, Y7.5	86	29
20	X0, Y9.5	110	30	44	X0.5, Y8.0	110	32
21	X0, Y10.0	120	39	45	X0.5, Y8.5	140	40
22	X0, Y10.5	137	36	46	X0.5, Y9.0	126	39
23	X0, Y11.0	134	42	47	X0.5, Y9.5	157	44
24	X0, Y11.5	88	32	48	X0.5, Y10.0	150	48

Sample No.	Location	Assay ppm		Sample No.	Location	Assay ppm	
		Cu	Zn			Cu	Zn
49	X0.5, Y10.5	120	38	74	X1.0, Y9.5	135	41
50	X0.5, Y11.0	102	34	75	X1.0, Y10.0	122	44
51	X0.5, Y11.5	129	33	76	X1.0, Y10.5	118	33
52	X0.5, Y12.0	131	47	77	X1.0, Y11.0	147	37
53	X0.5, Y12.5	100	29	78	X1.0, Y11.4	144	35
54	X0.5, Y13.0	106	28	79	X1.0, Y12.0	142	33
55	X1.0, Y0	154	61	80	X1.0, Y12.5	120	31
56	X1.0, Y0.5	134	60	81	X1.0, Y13.0	138	36
57	X1.0, Y1.0	125	63	82	X1.5, Y0	132	64
58	X1.0, Y1.5	163	64	83	X1.5, Y0.5	106	62
59	X1.0, Y2.0	184	56	84	X1.5, Y1.0	116	63
60	X1.0, Y2.5	158	57	85	X1.5, Y1.5	125	49
61	X1.0, Y3.0	157	59	86	X1.5, Y2.0	145	51
62	X1.0, Y3.5	186	59	87	X1.5, Y2.5	172	59
63	X1.0, Y4.0	280	39	88	X1.5, Y3.0	164	65
64	X1.0, Y4.5	120	31	89	X1.5, Y3.5	137	53
65	X1.0, Y5.0	126	32	90	X1.5, Y4.0	145	58
66	X1.0, Y5.5	50	24	91	X1.5, Y4.5	123	62
67	X1.0, Y6.0	74	30	92	X1.5, Y5.0	169	44
68	X1.0, Y6.5	87	27	93	X1.5, Y5.5	144	35
69	X1.0, Y7.0	102	29	94	X1.5, Y6.0	127	28
70	X1.0, Y7.5	104	31	95	X1.5, Y6.5	136	36
71	X1.0, Y8.0	115	38	96	X1.5, Y7.0	147	45
72	X1.0, Y8.5	158	47	97	X1.5, Y7.5	215	52
73	X1.0, Y9.0	158	47	98	X1.5, Y8.0	210	50

Sample No.	Location	Assay ppm		Sample No.	Location	Assay ppm	
		Cu	Zn			Cu	Zn
99	X1.5, Y8.5	228	55	124	X2.0, Y7.5	200	50
100	X1.5, Y9.0	195	51	125	X2.0, Y8.0	176	45
101	X1.5, Y9.5	181	51	126	X2.0, Y8.5	184	52
102	X1.5, Y10.0	244	56	127	X2.0, Y9.0	147	53
103	X1.5, Y10.5	187	49	128	X2.0, Y9.5	148	47
104	X1.5, Y11.0	200	48	129	X2.0, Y10.0	171	45
105	X1.5, Y11.5	201	50	130	X2.0, Y10.5	202	46
106	X1.5, Y12.0	175	45	131	X2.0, Y11.0	224	46
107	X1.5, Y12.5	200	51	132	X2.0, Y11.5	233	53
108	X1.5, Y13.0	208	52	133	X2.0, Y12.0	234	54
109	X2.0, Y0	221	60	134	X2.0, Y12.5	235	58
110	X2.0, Y0.5	118	53	135	X2.0, Y13.0	212	52
111	X2.0, Y1.0	104	52	136	X2.5, Y0	64	47
112	X2.0, Y1.5	128	46	137	X2.5, Y0.5	132	60
113	X2.0, Y2.0	120	57	138	X2.5, Y1.0	120	47
114	X2.0, Y2.5	122	52	139	X2.5, Y1.5	104	56
115	X2.0, Y3.0	139	56	140	X2.5, Y2.0	108	48
116	X2.0, Y3.5	140	53	141	X2.5, Y2.5	124	47
117	X2.0, Y4.0	121	56	142	X2.5, Y3.0	119	46
118	X2.0, Y4.5	153	54	143	X2.5, Y3.5	123	47
119	X2.0, Y5.0	179	46	144	X2.5, Y4.0	119	53
120	X2.0, Y5.5	163	45	145	X2.5, Y4.5	138	47
121	X2.0, Y6.0	119	46	146	X2.5, Y5.0	176	48
122	X2.0, Y6.5	182	52	147	X2.5, Y5.5	167	54
123	X2.0, Y7.0	192	49	148	X2.5, Y6.0	153	53

Sample No.	Location	Assay ppm		Sample No.	Location	Assay ppm	
		Cu	Zn			Cu	Zn
149	X2.5, Y6.5	152	44	174	X3.0, Y5.5	177	44
150	X2.5, Y7.0	179	47	175	X3.0, Y6.0	162	41
151	X2.5, Y7.5	156	45	176	X3.0, Y6.5	165	44
152	X2.5, Y8.0	136	53	177	X3.0, Y7.0	153	46
153	X2.5, Y8.5	134	51	178	X3.0, Y7.5	129	46
154	X2.5, Y9.0	168	51	179	X3.0, Y8.0	100	58
155	X2.5, Y9.5	142	46	180	X3.0, Y8.5	166	45
156	X2.5, Y10.0	130	40	181	X3.0, Y9.0	168	51
157	X2.5, Y10.5	194	44	182	X3.0, Y9.5	89	36
158	X2.5, Y11.0	200	43	183	X3.0, Y10.0	95	53
159	X2.5, Y11.5	179	41	184	X3.0, Y10.5	104	40
160	X2.5, Y12.0	194	45	185	X3.0, Y11.0	117	37
161	X2.5, Y12.5	184	42	186	X3.0, Y11.5	120	41
162	X2.5, Y13.0	196	46	187	X3.0, Y12.0	112	41
163	X3.0, Y0	72	48	188	X3.0, Y12.5	111	43
164	X3.0, Y0.5	78	53	189	X3.0, Y13.0	141	44
165	X3.0, Y1.0	103	48	190	X3.5, Y0	96	57
166	X3.0, Y1.5	76	36	191	X3.5, Y0.5	83	45
167	X3.0, Y2.0	96	39	192	X3.5, Y1.0	76	38
168	X3.0, Y2.5	100	38	193	X3.5, Y1.5	57	34
169	X3.0, Y3.0	126	40	194	X3.5, Y2.0	55	35
170	X3.0, Y3.5	112	40	195	X3.5, Y2.5	73	33
171	X3.0, Y4.0	142	41	196	X3.5, Y3.0	116	41
172	X3.0, Y4.5	127	38	197	X3.5, Y3.5	89	36
173	X3.0, Y5.0	168	42	198	X3.5, Y4.0	85	36

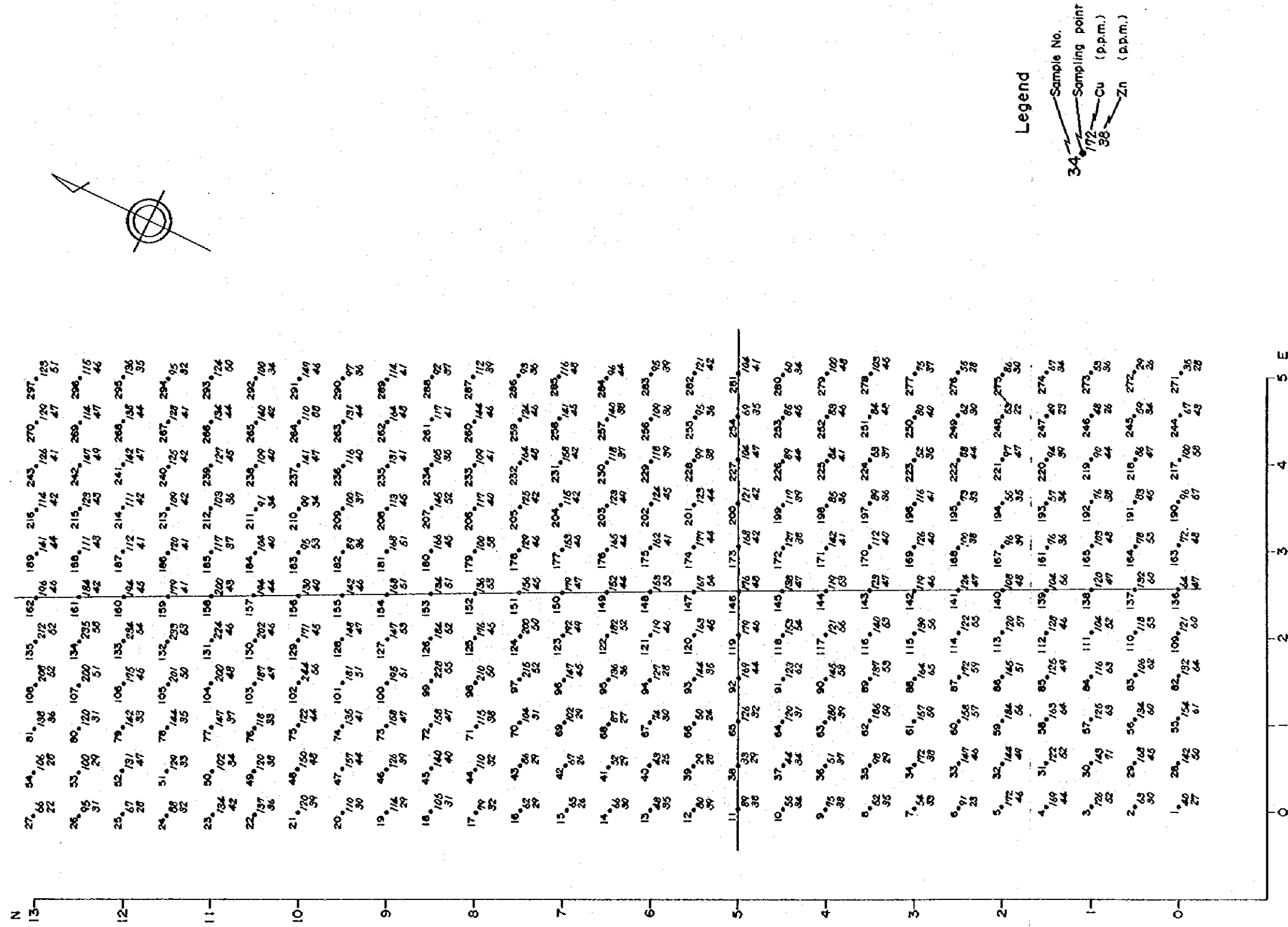
Sample No.	Location	Assay ppm		Sample No.	Location	Assay ppm	
		Cu	Zn			Cu	Zn
199	X3.5, Y4.5	117	39	224	X4.0, Y3.5	57	37
200	X3.5, Y5.0	121	42	225	X4.0, Y4.0	84	41
201	X3.5, Y5.5	123	44	226	X4.0, Y4.5	89	44
202	X3.5, Y6.0	124	45	227	X4.0, Y5.0	104	47
203	X3.5, Y6.5	123	49	228	X4.0, Y5.5	99	38
204	X3.5, Y7.0	115	42	229	X4.0, Y6.0	118	39
205	X3.5, Y7.5	125	42	230	X4.0, Y6.5	118	37
206	X3.5, Y8.0	117	40	231	X4.0, Y7.0	158	42
207	X3.5, Y8.5	145	51	232	X4.0, Y7.5	164	48
208	X3.5, Y9.0	113	45	233	X4.0, Y8.0	109	41
209	X3.5, Y9.5	100	37	234	X4.0, Y8.5	105	35
210	X3.5, Y10.0	99	34	235	X4.0, Y9.0	131	41
211	X3.5, Y10.5	91	34	236	X4.0, Y9.5	116	40
212	X3.5, Y11.0	103	36	237	X4.0, Y10.0	141	47
213	X3.5, Y11.5	109	42	238	X4.0, Y10.5	109	40
214	X3.5, Y12.0	111	42	239	X4.0, Y11.0	127	45
215	X3.5, Y12.5	123	43	240	X4.0, Y11.5	125	42
216	X3.5, Y13.0	114	42	241	X4.0, Y12.0	142	47
217	X4.0, Y0	100	58	242	X4.0, Y12.5	147	49
218	X4.0, Y0.5	86	47	243	X4.0, Y13.0	126	41
219	X4.0, Y1.0	90	44	244	X4.5, Y0	67	43
220	X4.0, Y1.5	94	39	245	X4.5, Y0.5	59	34
221	X4.0, Y2.0	97	47	246	X4.5, Y1.0	48	26
222	X4.0, Y2.5	88	44	247	X4.5, Y1.4	49	23
223	X4.0, Y3.0	52	35	248	X4.5, Y2.0	53	22



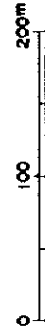
Sample No.	Location	Assay ppm		Sample No.	Location	Assay ppm	
		Cu	Zn			Cu	Zn
249	X4.5, Y2.5	62	30	274	X5.0, Y1.5	67	34
250	X4.5, Y3.0	80	40	275	X5.0, Y2.0	86	30
251	X4.5, Y3.5	84	48	276	X5.0, Y2.5	55	28
252	X4.5, Y4.0	83	46	277	X5.0, Y3.0	75	37
253	X4.5, Y4.5	85	45	278	X5.0, Y3.5	103	45
254	X4.5, Y5.0	69	35	279	X5.0, Y4.0	100	48
255	X4.5, Y5.5	95	36	280	X5.0, Y4.5	60	34
256	X4.5, Y6.0	109	36	281	X5.0, Y5.0	104	41
257	X4.5, Y6.5	140	38	282	X5.0, Y5.5	121	42
258	X4.5, Y7.0	141	45	283	X5.0, Y6.0	95	39
259	X4.5, Y7.5	124	46	284	X5.0, Y6.5	96	44
260	X4.5, Y8.0	144	46	285	X5.0, Y7.0	116	48
261	X4.5, Y8.5	117	41	286	X5.0, Y7.5	93	36
262	X4.5, Y9.0	164	48	287	X5.0, Y8.0	112	39
263	X4.5, Y9.5	131	44	288	X5.0, Y8.5	92	37
264	X4.5, Y10.0	110	28	289	X5.0, Y9.0	114	41
265	X4.5, Y10.5	140	42	290	X5.0, Y9.5	97	36
266	X4.5, Y11.0	134	44	291	X5.0, Y10.0	149	46
267	X4.5, Y11.5	128	41	292	X5.0, Y10.5	100	34
268	X4.5, Y12.0	138	44	293	X5.0, Y11.0	124	50
269	X4.5, Y12.5	114	47	294	X5.0, Y11.5	95	32
270	X4.5, Y13.0	129	47	295	X5.0, Y12.0	136	35
271	X5.0, Y0	35	28	296	X5.0, Y12.5	115	46
272	X5.0, Y0.5	29	26	297	X5.0, Y13.0	123	51
273	X5.0, Y1.0	53	36				



# Apex.4 Location map of geochemical samples and analytical values



S = 1:5,000



Apex.-5 LIST OF MICROSCOPIC OBSERVATION (THIN SECTION OF DRILLING CORE SAMPLE)

Sample			Rock	Mineral																										Texture	Note												
No.	Drill hole	Sampling depth (m)		q	kf	pl	mus	bi	hb	act	hyp	cpx	mt	op	chr	ap	zr	sph	ca	do	si	ep	chl	tour	ser	serp	gt	lm	rt			hm	ta	py	leu	cha	mal	ol	gr				
S- 1	GSI- 19	46.90	Amphibolite			△		•				△									△	X																					
S- 2	GSI- 19	130.20	Chlorite schist	•		•		△															△						○											sch	bi → chl		
S- 3	GSI- 20	52.90	Amphibolite			○		•				△										X	X																				
S- 4	GSI- 21	92.70	Chlorite schist	•		•	△																X						○											sch	bi → chl		
S- 5	GSI- 22	73.50	Chlorite schist	○		•		△															X						△											sch	bi → chl		
S- 6	GSI- 22	98.60	Biotite schist	•		•		○															△						△												sch	bi → chl	
S- 7	GSI- 23	52.90	Amphibolite					•														△	X						△														
S- 8	GSI- 23	111.30	Chlorite schist	•		•		X															•						△												sch	bi → chl	
S- 9	GSI- 24	44.80	Amphibolite	○		○		•														△	X						△														
S- 10	GSI- 24	131.00	Amphibolite	△		△		•														△	X						△												sch		
S- 11	GSI- 25	62.80	Amphibolite	△		△		•														△	X						△														
S- 12	GSI- 26	10.50	Quartzite	•		○	○																X			X			△												sch		
S- 13	GSI- 26	48.80	Amphibolite			○		○				△										△	X						△													sch	
S- 14	GSI- 26	79.80	Amphibolite			△		•														△	X						△														
S- 15	GSI- 27	13.50	Mica schist	•		○		•																				○														sch	
S- 16	GSI- 27	69.10	Delelite			•		△			•	○	△										X																			oph	
S- 17	GSI- 27	93.80	Biotite schist	○		△		•				△											X																			sch	
S- 18	GSI- 28	9.60	Quartzite	•		○	△	○																																			
S- 19	GSI- 28	48.00	Biotite schist	•		○		•	△														X						△													sch	
S- 20	GSI- 28	79.50	Biotite schist	•		○		•															X						△	X												sch	

Abbreviation:

Mineral:

q	quartz	si	siderite
kf	potash feldspar	ep	epidote
pl	plagioclase	chl	chlorite
mus	muscovite	tour	tourmaline
bi	biotite	ser	sericite
hb	hornblende	serp	serpentine
act	actinolite	gt	garnet
hyp	hyperthene	lm	limonite
cpx	clinopyroxene	rt	rutile
op	opaque mineral	hm	hematite
mt	magnetite	ta	talc
chr	chromite	py	pyrite
ap	apatite	leu	leucoxene
zr	zircon	cha	chalcedony
sph	sphene	mal	malachite
ca	calcite	ol	olivine
do	dolomite	gr	graphite

Texture:

holo	holocrystalline	sac	saccharoidal
gran	granular	crypto	cryptocrystalline
sch	schistose	porb	porphyroblastic
gne	gneissose	oph	ophitic
mos	mosaic		

Symbol:

•	abundant	△	rare
○	common	X	very rare

Apex.-6 List of Microscopic Observation (Polished section of drilling core sample)

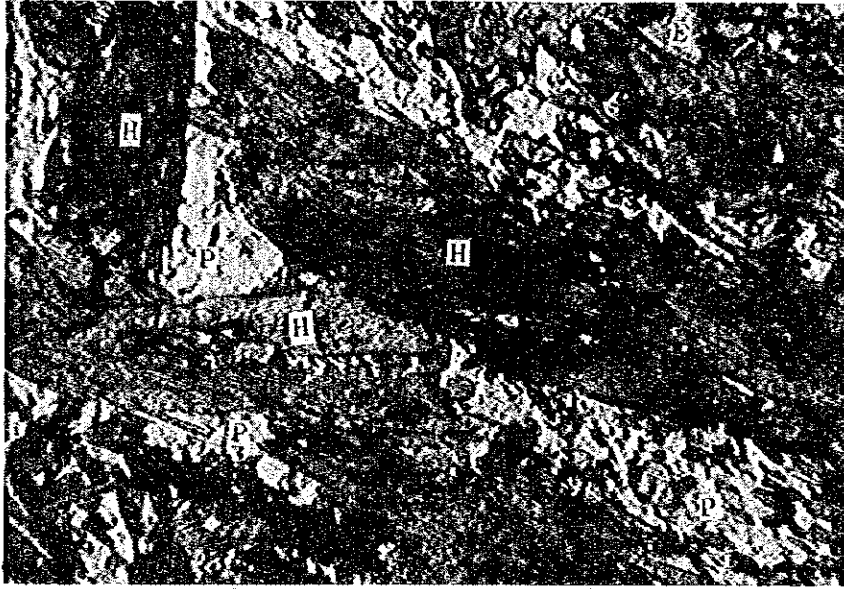
Sample No.	Hole No.	Depth (m)	Ore mineral					Remarks
			Cp	Py	Hm	Mt	Go	
P- 1	GSJ-19	53.30	⊙	○	X	X		Cp: massive, Py: 40μm-0.4mm spots in Cp
P- 2	GSJ-19	84.70	○	X		Δ	X	Cp: massive, Hm: massive, needle-like, Mt: 0.2-0.8mm spots
P- 3	GSJ-19	93.05	○	○	Δ	Δ	X	Cp: 0.1-1mm spots oriented, Mt: 10-0.6mm spots, Py: 20μm-0.4mm spots in Cp, Mt
P- 4	GSJ-20	50.70	○	Δ		Δ	X	Cp: massive, Mt: 0.1-0.3mm spots scattered, Py: 60μm-0.6mm in Cp
P- 5	GSJ-20	59.60		○		○	X	Mt: 40μm-0.6mm spots scattered, Py: max. 3mm, 0.1-0.4mm spots
P- 6	GSJ-20	73.70	○	○	X		X	Cp, Py: 20μm-0.2mm spots scattered, Hm: max. 2mm needle-like
P- 7	GSJ-20	84.70	○		X		○	Cp: 0.1mm spots, Go: 20μm-0.3mm spots
P- 8	GSJ-20	111.50		○	○	Δ	X	Py: massive, Hm: needle-like, Mt: 20μm-0.2mm spots
P-9	GSJ-20	134.10	○	○	X			Py: 0.1mm spots, Cp: massive, Hm: 40-60μm, needle-like
P-10	GSJ-21	57.60	⊙	○				Cp: massive, Py: 20μm-0.1mm spots, vein
P-11	GSJ-22	70.20	○	○	X	Δ	X	Cp: massive, Py: max. 0.8mm, Mt: 0.1-0.2mm spots, Covellite: in Cp
P-12	GSJ-22	78.40	○	Δ	X	Δ	X	Cp: massive, Mt: 0.1mm spots scattered
P-13	GSJ-23	119.40	○	X		○	X	Cp: massive, Mt: 0.1mm spots scattered, Hm: needle-like, Py: eu hedral
P-14	GSJ-24	47.20	⊙	○	Δ	X		Cp: massive, Py: 50-80μm spots, vein in Cp, Hm: needle-like
P-15	GSJ-24	83.50	○	X	Δ		Δ	Cp: max. 2mm, Go: 0.1mm spots, oriented, Hm: needle-like
P-16	GSJ-24	92.70	X	Δ		○	X	Mt: 20μm-0.3mm, Py: max. 0.4mm, Cp: max. 0.3 max.
P-17	GSJ-25	50.90	○	X	⊙			Hm: needle-like ag., Cp: max. 0.4mm, Py: max. 0.1mm in Cp
P-18	GSJ-25	56.20	○	Δ		○	X	Mt: max. 0.2mm, 0.1-0.2mm spots, Cp: massive, Py: max. 0.6mm in Cp
P-19	GSJ-26	85.90	⊙	X				Cp: massive, Py: 0.1mm in Cp
P-20	GSJ-28	95.70	○	Δ		Δ	X	Cp: massive, Py: max. 0.3mm in Cp

Abbreviation: Cp: chalcoprite Py: pyrite Hm: hematite Mt: magnetite Go: goethite  
 ⊙ : abundant, ○ : common Δ : rare X : very rare

## Apex. 7 Microphotographs

### Abbreviation:

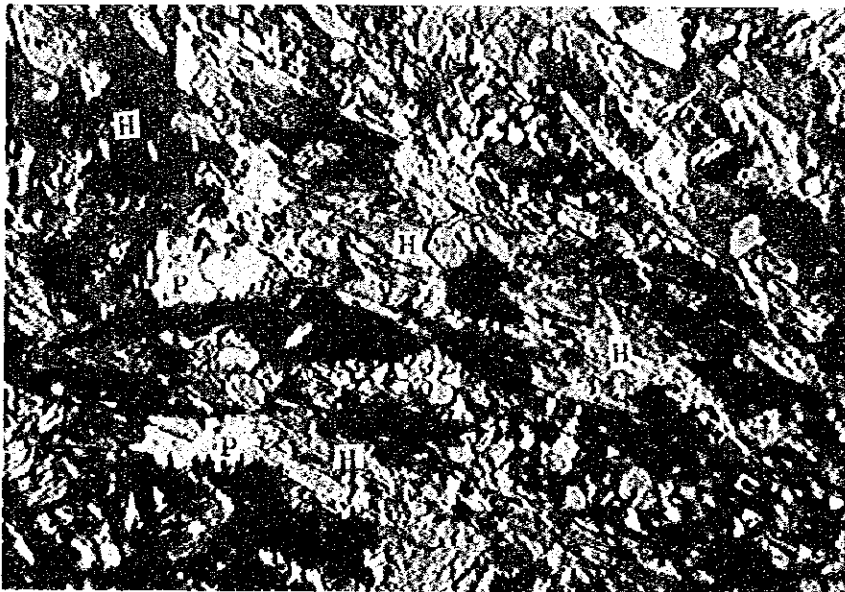
Thin section	Polished section
Q : Quartz	M : Magnetite
P : Plagioclase	H : Hematite
B : Biotite	C : Chalcopyrite
M : Muscovite	CV : Covellite
H : Hornblende	P : Pyrite
C : Chlorite	
E : Epidote	
CA : Calcite	
MT : Montmorillonite	
T : Tourmaline	
A : Augite	



0 0.2 mm

Open nicol

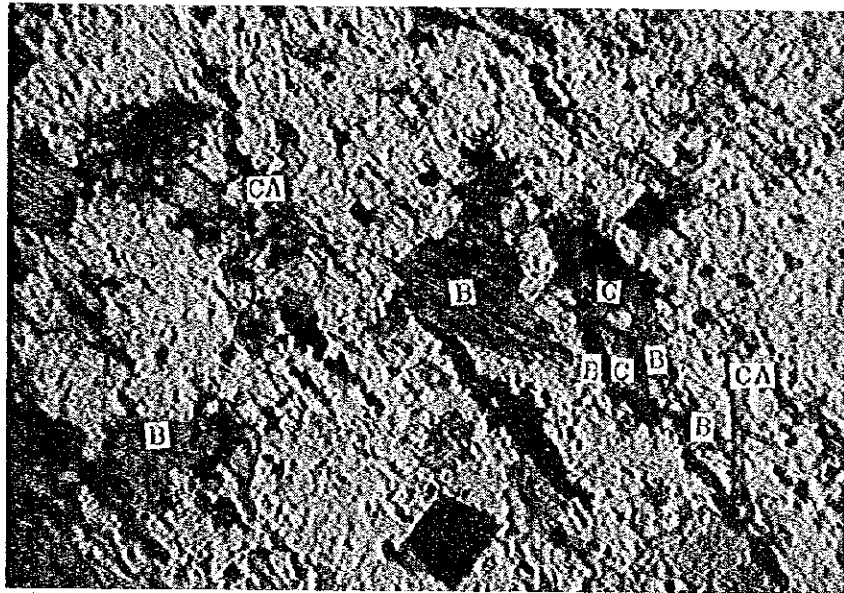
S-1 (GSJ-19, 46.90 m)  
Amphibolite



0 0.2 mm

Crossed nicol

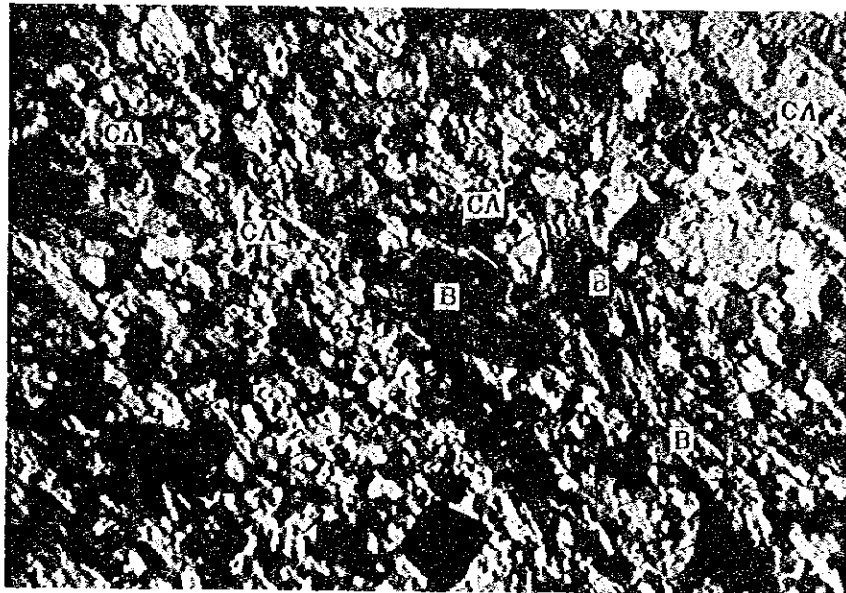
Same as the above



0 0.2 mm

Open nicol

S-5 (GSI-22, 73.50 m)  
Chlorite schist



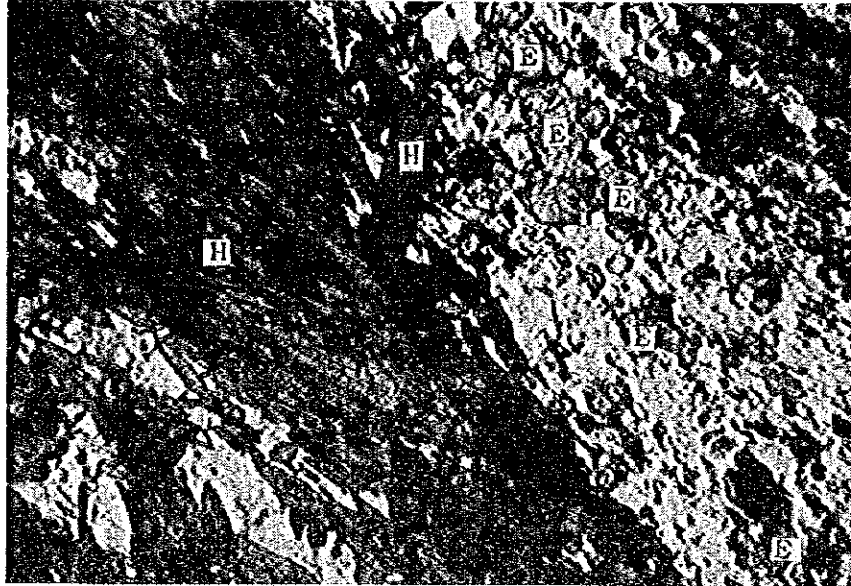
0 0.2 mm

Crossed nicol

Same as the above

Apex.-29

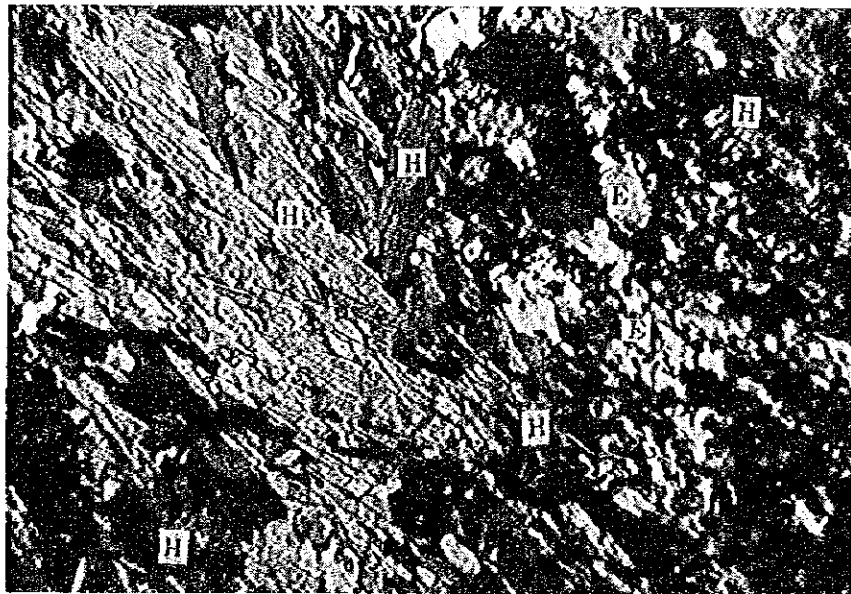




0 0.2 mm

Open nicol

S-7 (GSJ-23, 52.90 m)  
Amphibolite

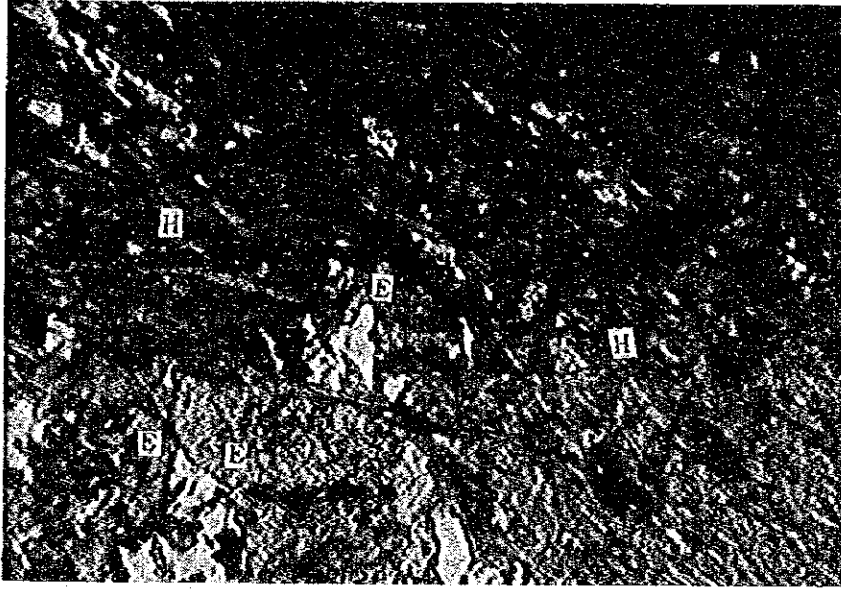


0 0.2 mm

Crossed nicol

Same as the above

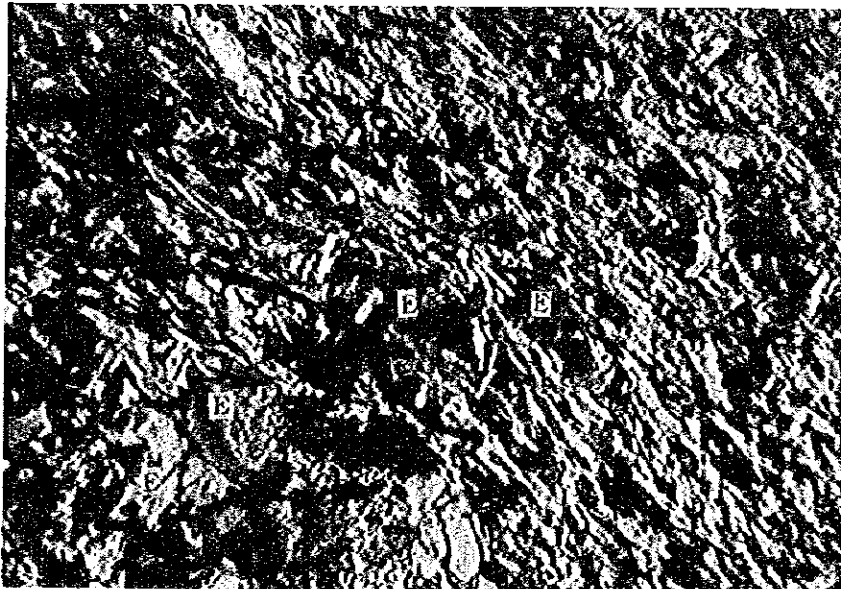
Apex.-30



0 0.2 mm

Open nicol

S-10 (GSI-24, 131.00 m)  
Amphibolite

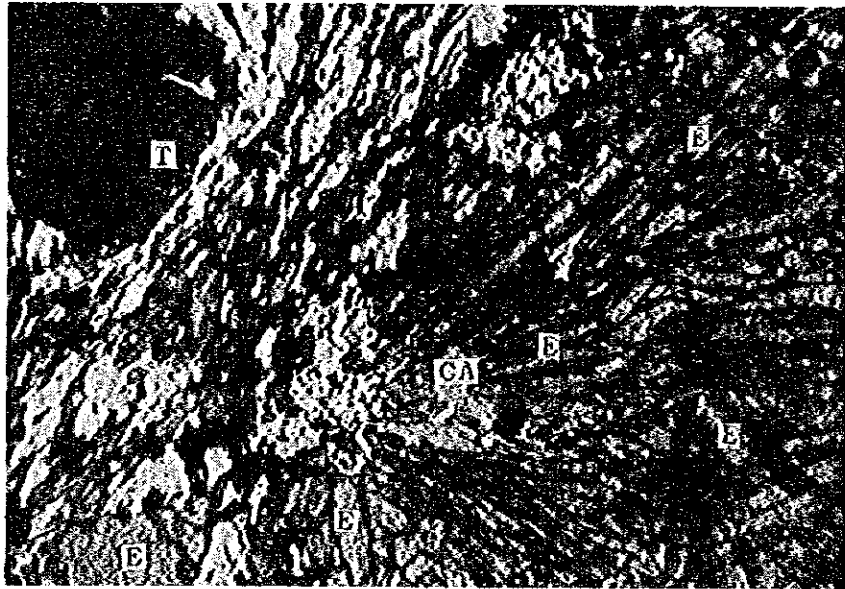


0 0.2 mm

Crossed nicol

Same as the above

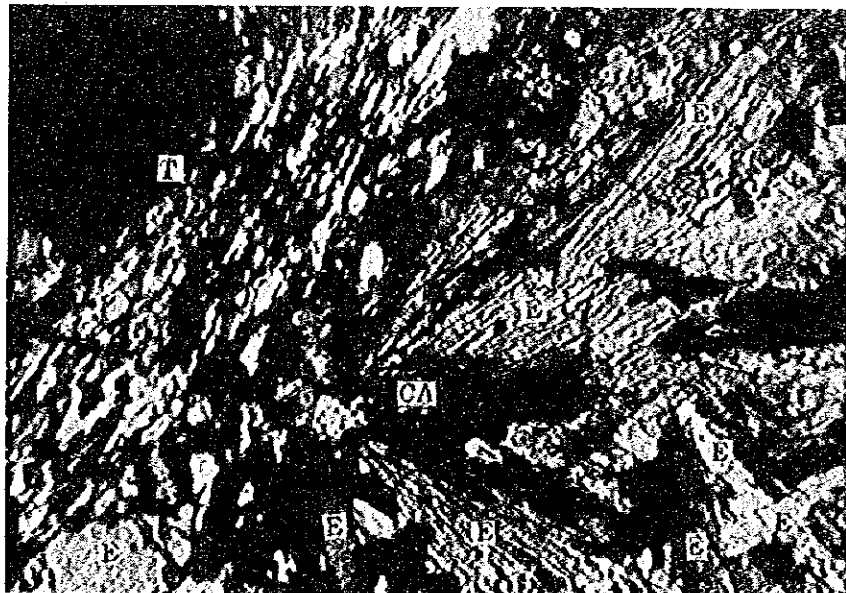
Apex.-31



0 0.2 mm

Open nicol

S-13 (GSJ-26, 48.80 m)  
Amphibolite



0 0.2 mm

Crossed nicol

Same as the above

Apex.-32



0 0.2 mm

Open nicol

S-16 (GSJ-27, 69.10 m)  
Dolerite

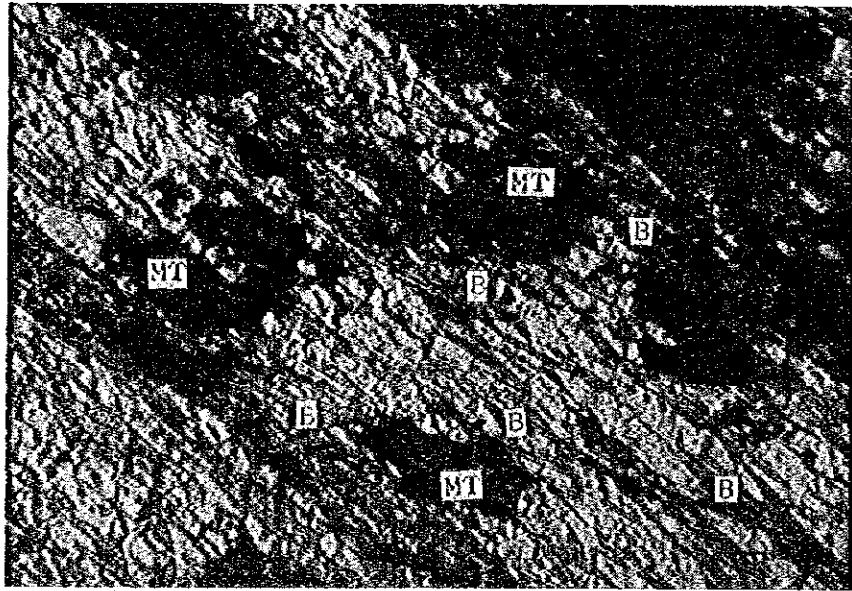


0 0.2 mm

Crossed nicol

Same as the above

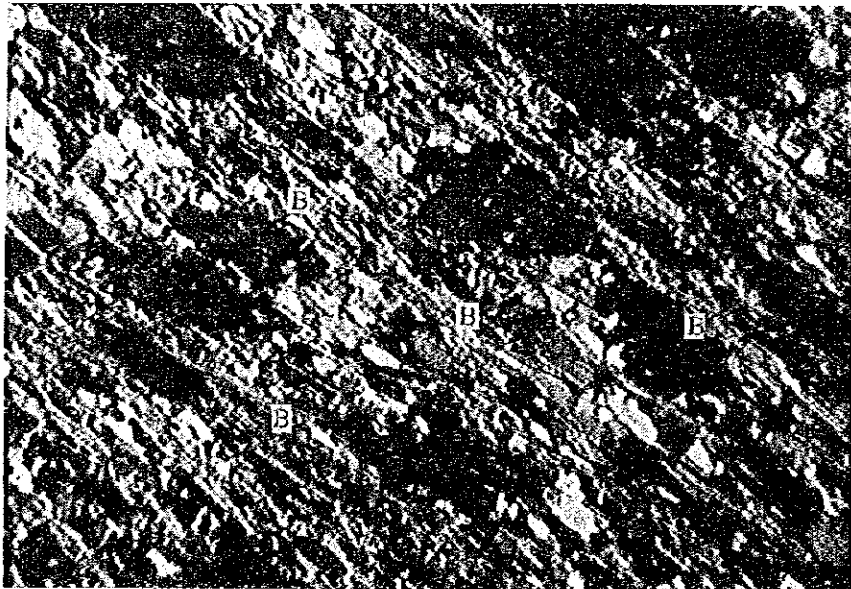
Apex-33



0 0.2 mm

Open nicol

S-17 (GSJ-27, 93.80 m)  
Biotite schist

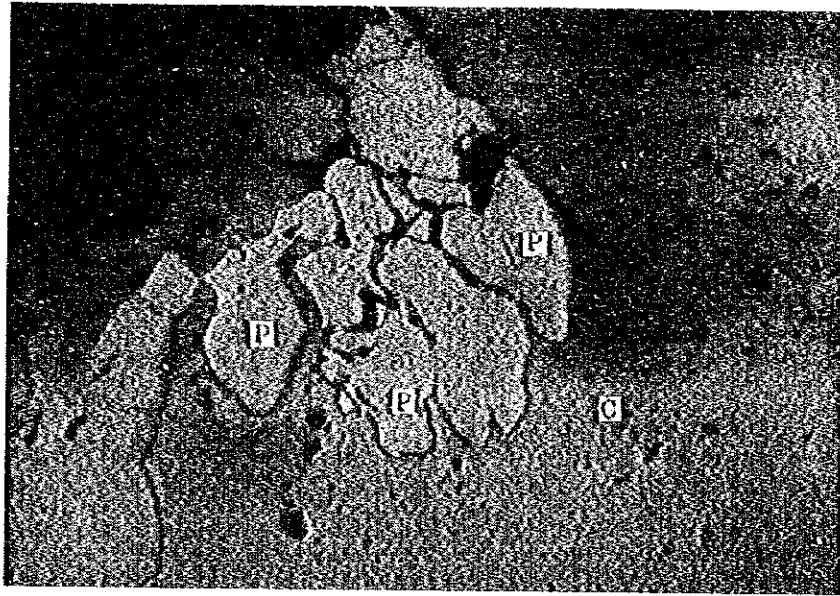


0 0.2 mm

Crossed nicol

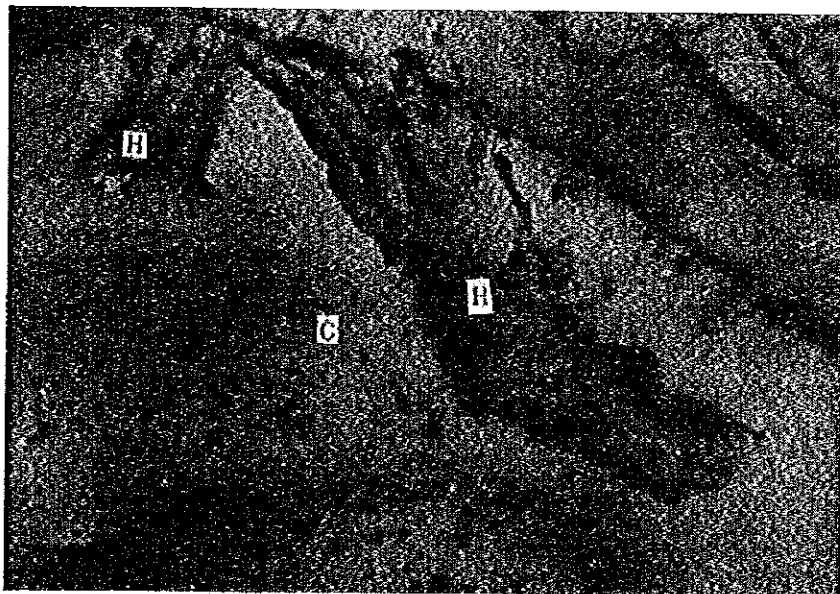
Same as the above

Apex.-34



0 0.1 mm

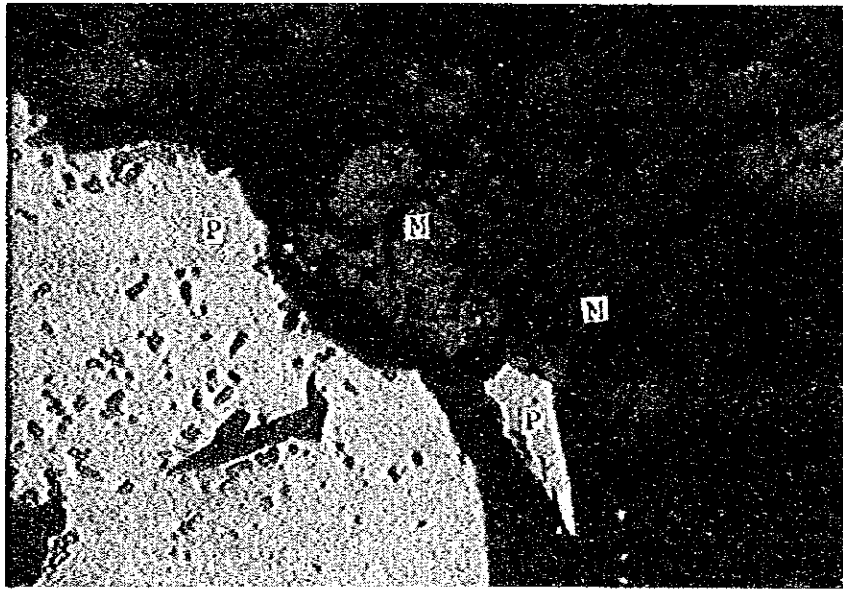
**P-1 (GSJ-19, 53.30 m)**  
**Chalcopyrite in Amphibole schist**



0 0.1 mm

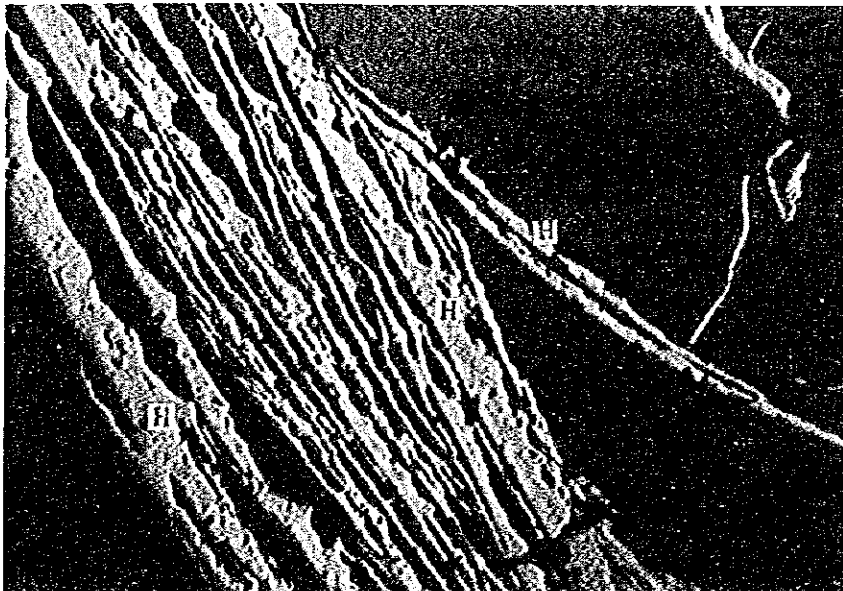
**P-2 (GSJ-19, 84.70 m)**  
**Hematite, chalcopyrite in Amphibolite**

**Apex.-35**



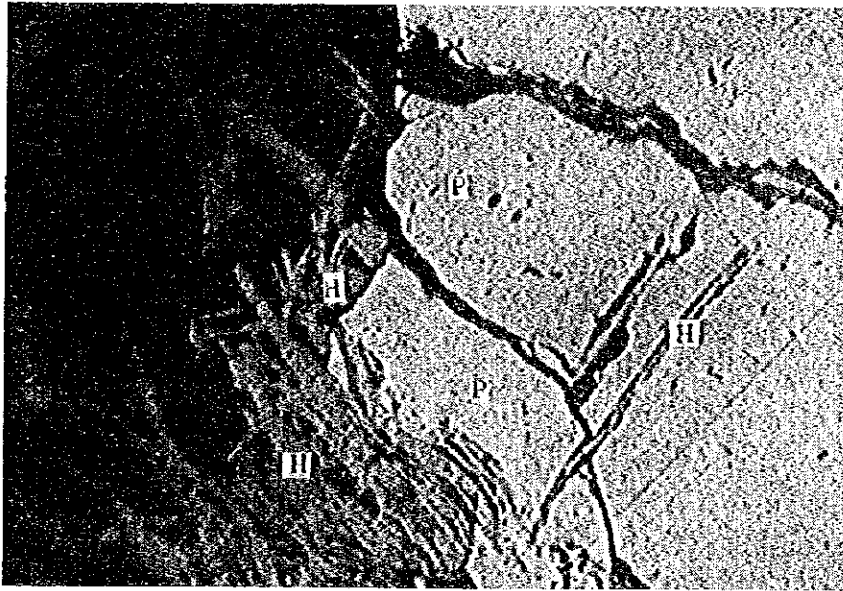
0 0.1 mm

P-5 (GSJ-20, 59.60 m)  
Pyrite in Amphibolite



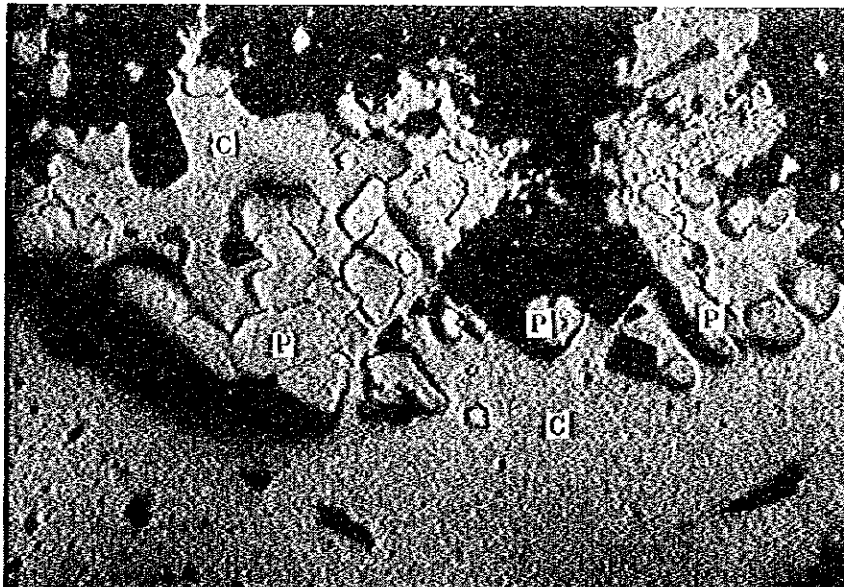
0 0.1 mm

P-6 (GSJ-20, 73.70)  
Hematite in Calcreous Rock



0 0.1 mm

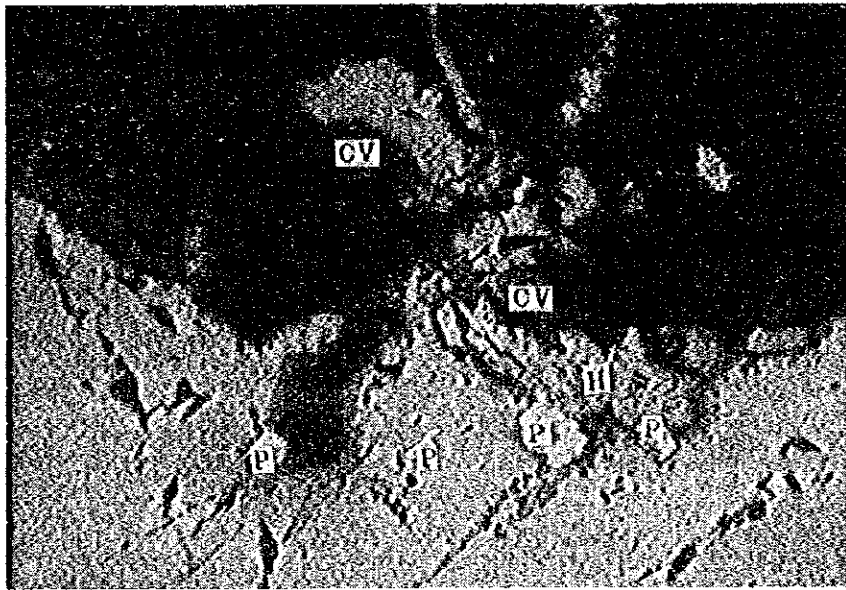
P-8 (GSJ-20, 111.50 m)  
Pyrite, Hematite in Calcareous rock



0 0.1 mm

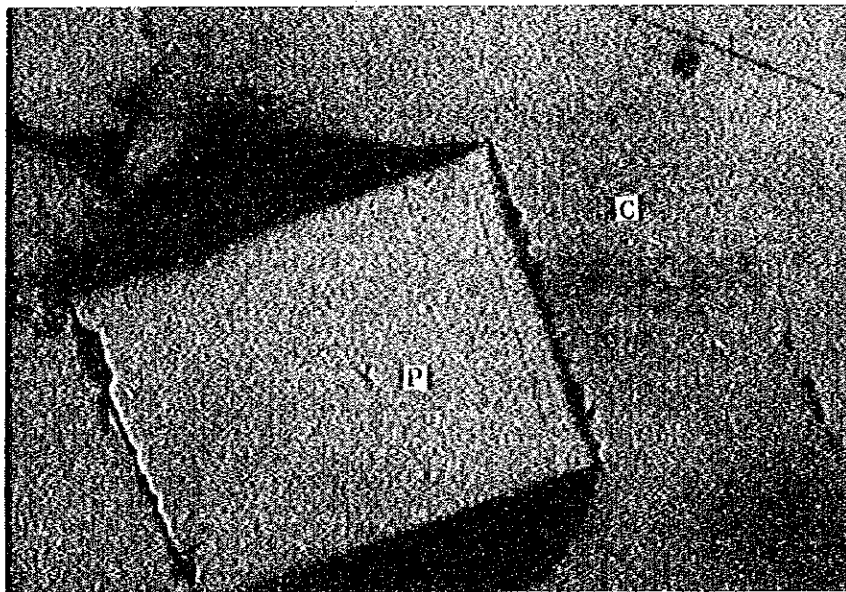
P-10 (GSJ-21, 57.60 m)  
Chalcopyrite in Amphibolite





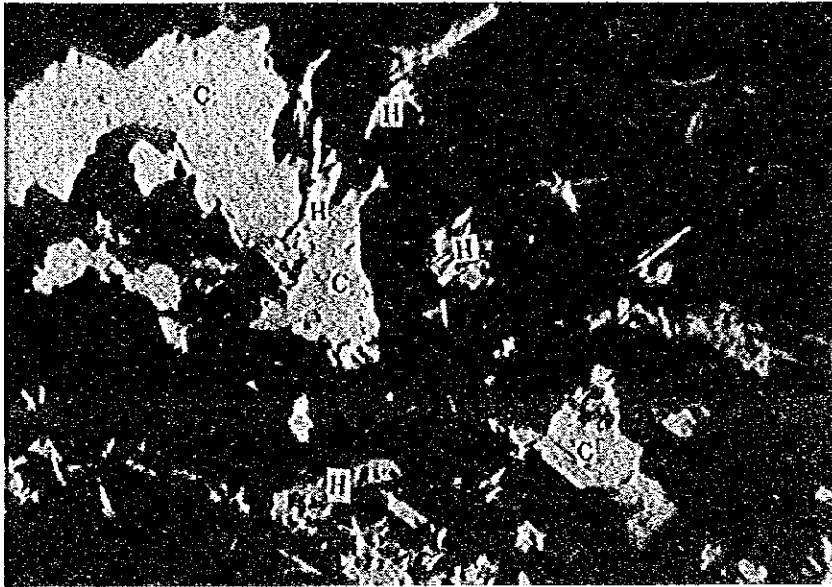
0 0.1 mm

**P-11 (GSJ-22, 70.20 m)**  
**Copper minerals in Amphibolite**



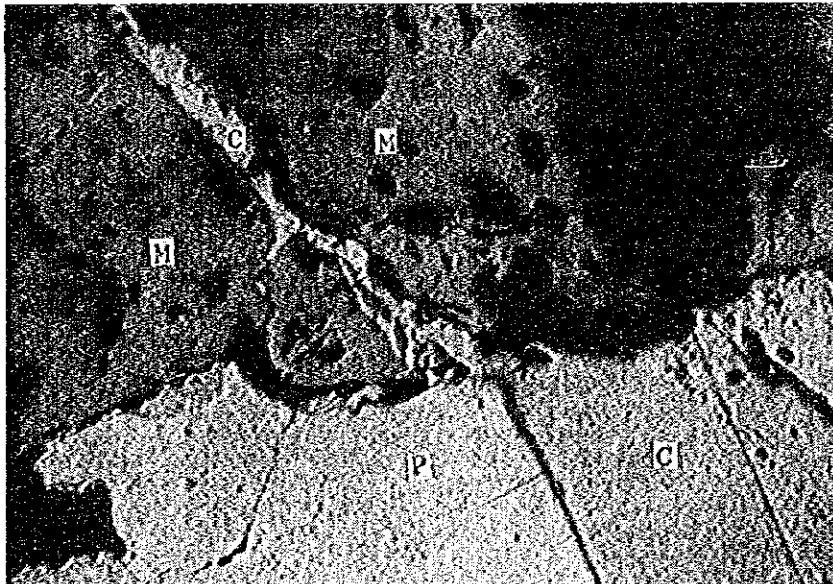
0 0.1 mm

**P-13 (GSJ-23, 119.40 m)**  
**Pyrite, Chalcopyrite in Amphibolite**



0 0.1 mm

**P-15 (GSJ-24, 83.50 m)**  
**Hematite, chalcopyrite in Amphibolite**



0 0.1 mm

**P-18 (GSJ-25, 56.20 m)**  
**Pyrite, Chalcopyrite in Amphibolite**





