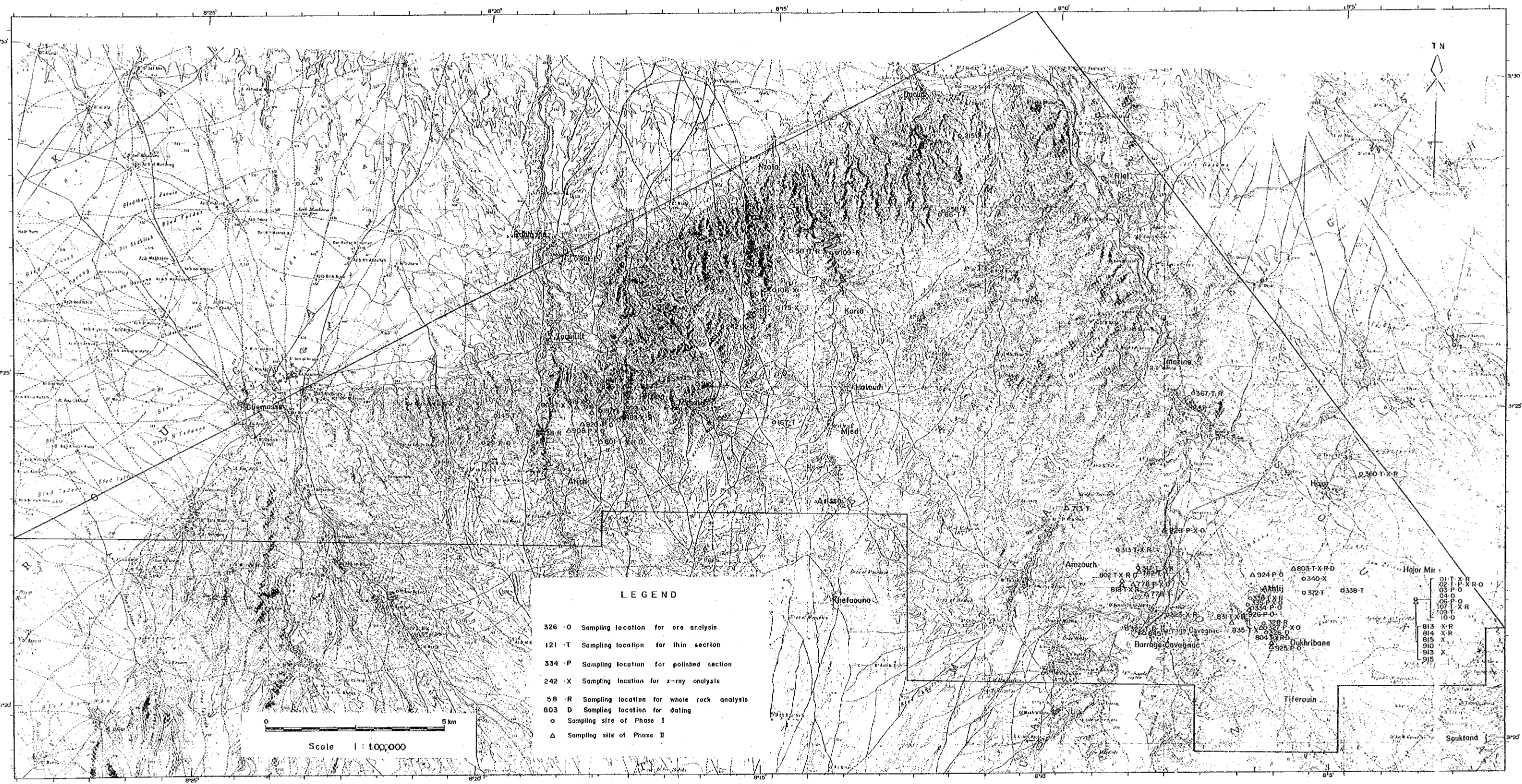


AP. I-1-2 Location Map of Rock and Ore Samples



LEGEND

- 326 - O Sampling location for ore analysis
- 121 - T Sampling location for thin section
- 334 - P Sampling location for polished section
- 242 - X Sampling location for x-ray analysis
- 58 - R Sampling location for whole rock analysis
- 803 - D Sampling location for dating
- o Sampling site of Phase I
- Δ Sampling site of Phase II

0 5 km
Scale 1 : 100,000

AP. I-1-2 Location Map of Rock and Ore Samples

Ap. I-2 Assay Results of Ore Samples

No.	Samp. No.	Type of Sample	Grade			
			Cu(%)	Pb(%)	Zn(%)	Ag(g/t)
1	778	Gossan	0.31	1.04	1.37	20
2	908	Oxide Vein	0.21	1.12	0.28	1
3	919	Quartz Vein	0.20	0.12	0.21	3
4	920	Oxide Vein	6.06	0.17	0.44	3
5	921	Gossan	0.29	0.67	0.57	2
6	923	Dissemination	5.48	0.03	0.82	5
7	924	Oxide Vein	0.02	0.15	0.02	2
8	925	Oxide Vein	0.16	0.01	0.01	4
9	926	Oxide Vein	0.04	<0.01	<0.01	7
10	928	Oxide Vein	0.50	0.30	0.77	4

(Sampling location and geological unit are shown in AP. I-1-1)

Ap. I-3 Whole Rock Analysis and Molal Ratio

sample No. rock type (weight %)	801 rhyo	802 rhyo	803 rhyo	804 pyro	813 green	814 green	818 silt	825 dole	826 marl	831 green
SiO2	76.34	62.24	80.28	60.55	54.53	58.63	70.28	52.87	57.80	50.42
Al2O3	12.60	15.53	11.98	16.49	16.99	15.80	13.53	13.40	6.45	15.34
Fe2O3	0.89	0.85	0.22	2.36	1.88	1.68	0.81	3.72	0.92	3.86
FeO	2.21	5.32	0.73	7.14	12.10	4.54	3.60	7.46	1.01	10.70
MgO	2.01	0.86	0.34	2.18	4.01	7.71	1.28	3.03	0.85	3.17
CaO	0.34	3.28	0.89	0.24	0.20	0.89	1.94	5.31	16.68	3.98
Na2O	0.16	4.57	4.50	0.22	0.16	0.59	1.73	3.50	0.98	0.20
K2O	3.50	2.96	0.92	3.19	2.81	4.51	3.49	0.01	0.91	1.93
TiO2	0.19	0.69	0.08	0.96	0.79	0.77	0.72	2.61	0.49	0.85
P2O5	0.27	0.41	0.16	0.13	0.16	0.12	0.14	0.47	0.06	0.15
MnO	0.07	0.23	0.01	0.17	0.22	0.33	0.10	0.22	0.07	0.16
BaO	0.03	0.08	0.01	0.09	0.11	0.04	0.07	0.01	0.01	0.08
LOI	2.77	2.67	1.34	3.56	4.36	4.40	2.55	6.13	14.23	6.86
TOTAL	101.38	99.69	101.46	97.28	98.32	100.01	100.24	98.74	100.46	97.70
+H2O	2.64	1.20	0.83	4.20	5.05	3.51	1.44	3.63	1.18	5.14
(molal ratio)										
SiO2	1.2706	1.0360	1.3362	1.0078	0.9076	0.9759	1.1698	0.8800	0.9621	0.8392
Al2O3	0.1236	0.1523	0.1175	0.1617	0.1666	0.1550	0.1327	0.1314	0.0633	0.1505
Fe2O3	0.0056	0.0053	0.0014	0.0148	0.0118	0.0106	0.0051	0.0233	0.0057	0.0242
FeO	0.0308	0.0740	0.0102	0.0994	0.1684	0.0632	0.0501	0.1038	0.0141	0.1489
MgO	0.0499	0.0213	0.0084	0.0541	0.0995	0.1913	0.0318	0.0752	0.0211	0.0787
CaO	0.0061	0.0585	0.0159	0.0043	0.0036	0.0159	0.0346	0.0947	0.2974	0.0710
Na2O	0.0026	0.0737	0.0726	0.0035	0.0026	0.0095	0.0279	0.0565	0.0158	0.0032
K2O	0.0372	0.0314	0.0098	0.0339	0.0298	0.0479	0.0370	0.0001	0.0097	0.0205
TiO2	0.0024	0.0086	0.0010	0.0120	0.0099	0.0096	0.0090	0.0327	0.0061	0.0106
P2O5	0.0019	0.0029	0.0011	0.0009	0.0011	0.0008	0.0010	0.0033	0.0004	0.0011
MnO	0.0010	0.0032	0.0001	0.0024	0.0031	0.0047	0.0014	0.0031	0.0010	0.0023
BaO	0.0002	0.0005	0.0001	0.0006	0.0007	0.0003	0.0005	0.0001	0.0001	0.0005
A1	0.0894	0.0525	0.0365	0.1391	0.1460	0.1081	0.0728	0.0981	0.0435	0.1509
C	0.0061	0.0585	0.0159	0.0043	0.0036	0.0159	0.0346	0.0947	0.2974	0.0710
F1	0.0816	0.0986	0.0187	0.1559	0.2710	0.2592	0.0833	0.1821	0.0361	0.2298
A2	0.0834	-0.0060	0.0206	0.1348	0.1425	0.0922	0.0382	0.0035	-0.2539	0.0799
K	0.0372	0.0314	0.0098	0.0339	0.0298	0.0479	0.0370	0.0001	0.0097	0.0205
F1	0.0816	0.0986	0.0187	0.1559	0.2710	0.2592	0.0833	0.1821	0.0361	0.2298
A3	0.0121	0.0580	0.0882	0.0601	0.0771	0.0113	0.0216	0.1311	0.0343	0.0890
F2	0.0308	0.0740	0.0102	0.0994	0.1684	0.0632	0.0501	0.1038	0.0141	0.1489
M	0.0499	0.0213	0.0084	0.0541	0.0995	0.1913	0.0318	0.0752	0.0211	0.0787

rhyo: rhyolite, pyro: pyroclastic rock, green: green rock, silt: siltstone, dole: dolerite
 A1=Al2O3+Fe2O3-(Na2O+K2O), C=CaO, F1=FeO+MgO+MnO, A2=Al2O3+Fe2O3-(Na2O+K2O+CaO),
 A3=Al2O3-3K2O, F2=FeO, M=MgO

Sample No. : 713
Rock Name : Biotite-chlorite schist

This rock shows schistose texture. Schistosity is constructed by chlorite and biotite arranged in definite orientation. The other components of the rock are quartz, albite, muscovite and carbonate minerals.

Quartz occurs as anhedral grain up to 0.2 mm across. Muscovite is up to 0.05 mm in size and closely coexists with carbonate mineral in subhedral to anhedral crystal.

Sample No. : 776
Rock Name : Meta sandstone

The rock forming minerals are fine-grained and the rock shows weak schistose texture. It consists mainly of quartz and chlorite. Quartz is smaller than 0.15 mm in size and shows distinct wavy extinction.

The other components are muscovite and opaque minerals.

Muscovite occurs in foliated crystal, up to 0.1 mm in size. Zircon and rutile are present sporadically.

Sample No. : 782
Rock Name : Meta sandstone

This rock is similar to sample No.776 in mode of mineral occurrence.

It is composed mainly of quartz, with subordinate amounts of chlorite, sericite, biotite and muscovite.

Schistose texture is not so clear comparing with the sample No.776.

Sample No. : 801
Rock Name : Rhyolitic rock

This rock is strongly altered, but porphyritic texture is slightly observed.

Phenocrysts are plagioclase and quartz.

Plagioclase phenocrysts occur as coarse and tabular crystals, up to 1.5 mm long, and are completely replaced by sericite.

The groundmass is holocrystalline and consists of quartz with wavy extinction.

Secondary minerals are chlorite, biotite, sericite and quartz.

(3)

Sample No. : 802
Rock Name : Meta dacite

This rock shows porphyritic texture with weak foliation.

Plagioclase phenocrysts are smaller than 1.5 mm in size and are partly decomposed to calcite, biotite and quartz.

The groundmass is made up from plagioclase laths, smaller than 0.1 mm across, accompanied with accessory minerals of biotite and sericite.

A small amount of xenolith like porphirite in round form is seen.

Sample No. : 803
Rock Name : Meta rhyolite

This rock has porphyritic texture with quartz and plagioclase phenocrysts. Quartz phenocrysts are up to 1.1 mm in size and are characterized by the distinct wavy extinction. Plagioclase phenocrysts, smaller than 0.3 mm in size, are tabular with albite twin.

The groundmass consists mainly of quartz, with subordinate amount of plagioclase. It is recrystallized and shows mosaic texture.

Secondary chlorite and sericite are commonly present in the groundmass.

Sample No. : 804
Rock Name : Meta siltstone

The rock forming minerals are fine-grained and the rock has weak schistose texture. Clastic grains are quartz and opaque minerals.

Quartz is smaller than 0.05 mm in size and is weakly recrystallized with mosaic texture.

Secondary minerals are chlorite, sericite, biotite and Fe-oxide mineral. Chlorite is abundant in anhedral form.

Sample No. : 813
Rock Name : Meta sandstone

This rock shows weak banding texture. It is composed mainly of quartz and chlorite, with subordinate amounts of sericite and biotite.

Quartz and biotite occur as euhedral crystal, smaller than 0.2 mm in size, respectively.

Chlorite and sericite fill interstices between quartz and chlorite.

Sample No. : 814
Rock Name : Meta sandstone

This rock has weak schistose texture. Clastic grains are quartz, muscovite and opaque minerals.

Quartz occurs as euhedral crystal, smaller than 0.1 mm and shows wavy extinction.

The matrix consists mainly of sericite and chlorite, with accessory zircon.

Biotite is tabular crystal, smaller than 0.05 mm in size and is ubiquitous as alteration product.

Sample No. : 815
Rock Name : Meta sandstone

This rock is very similar to that of sample No.814 in the mode of mineral occurrence, in spite of lacking biotite.

Main constituents are quartz, sericite, muscovite and opaque minerals.

A trace amount of zircon, tourmaline and rutile are seen sporadically as accessory minerals.

Sample No. : 818
Rock Name : Meta sandstone

This rock is characterized by including a lot of rock fragments and a little of micro fossils.

It shows weak schistose texture.

Clastic materials are quartz, plagioclase, rock fragments, fossils and opaque minerals.

Quartz occurs subrounded to subangular form, smaller than 0.1 mm in size. Rock fragments are subangular form, up to 6 mm long and are composed mainly of shale or pelitic rock.

Sample No. : 825
Rock Name : Altered porphirite

This rock is strongly chloritized and carbonitized, but it remains porphiritic texture slightly. The rock forming minerals are medium-grained.

Most of phenocrysts are altered to secondary minerals such as chlorite, carbonate and quartz.

The groundmass is made up of plagioclase laths, smaller than 0.6 mm in size.

Sample No. : 826
Rock Name : Meta sandstone

This rock has weak banding texture with carbonaceous matter in shoestring form. It is fine grained and is composed mainly of quartz and carbonate mineral.

Quartz occurs as anhedral crystals, up to 0.1 mm in size and weakly recrystallized with mosaic texture.

Carbonate mineral is arranged traverse the banding texture. A small amount of sericite in flaky form fills interstices of quartz and carbonate mineral.

Sample No. : 827
Rock Name : Meta sandstone

The rock forming minerals are fine-grained and the rock shows mosaic texture consisting of abundant quartz.

The other components of the rock are plagioclase, opaque mineral, carbonate, sericite and accessory tourmaline.

Carbonate mineral and sericite fill interstices of quartz.

Sample No. : 831
Rock Name : Chlorite-muscovite schist

This rock has well-developed schistose texture. Schistosity is constructed by muscovite and chlorite in definite orientation.

The other components of rock are quartz and calcite. Quartz is fine-grained and smaller than 0.05 mm in size.

A carbonate veinlet traverse the schistosity.

Sample No. : 835
Rock Name : Chlorite-muscovite schist

This rock shows conspicuous schistose texture in the same way as sample No.831.

Main constituent minerals are quartz, muscovite and chlorite. They are fine-grained and smaller than 0.05 mm in size.

A little of biotite in tabular form is also seen as secondary mineral.

Sample No. : 845
Rock Name : Meta porphyrite

This rock is strongly altered, but porphyritic texture is occasionally observed.

Phenocrysts, turbid in the interior owing to alteration, are plagioclase. It is up to 1.5 mm in size and shows albite twin.

The groundmass is composed mainly of plagioclase. Quartz in anhedral form fills interstices of plagioclase.

Secondary flaky biotite, smaller than 0.05 mm in size, are ubiquitous.

Sample No. : 909
Rock Name : Chlorite-muscovite schist

This rock has conspicuous schistose and banding texture. Schistosity is formed by quartz, muscovite and chlorite.

Quartz shows distinct wavy extinction and partly occurs in veinlet.

A little carbonaceous matter is seen in a parallel direction to the schistose texture.

Sample No. : 918
Rock Name : Meta siltstone

The rock forming minerals are very fine-grained and the rock shows weak schistose texture.

The main constituent is quartz, next in abundance is muscovite, then Fe-oxide mineral.

Fe-oxide mineral forms aggregation and is arranged in narrow bands. Muscovite traverses these bands and constructs the schistosity.

Sample No. : 922
Rock Name : Calcareous schist

This rock shows distinct banding texture and well-developed schistose texture. It is composed mainly of calcite, quartz, with subordinate amounts of plagioclase, biotite, chlorite and muscovite.

Quartz is smaller than 0.08 mm in mosaic texture and shows wavy extinction.

Rare zircon is present sporadically.

Ap. I-4-2 Microphotograph of Thin Sections

(1)

No.	Sample No.	Rock Name
(1) (2)	713	Bi-Chl schist
(3) (4)	776	Meta sandstone
(5) (6)	801	Rhyolitic rock
(7) (8)	802	Meta dacite
(9) (10)	803	Meta rhyolite
(11) (12)	804	Meta siltstone
(13) (14)	813	Meta sandstone
(15) (16)	909	Chl-Ms schist

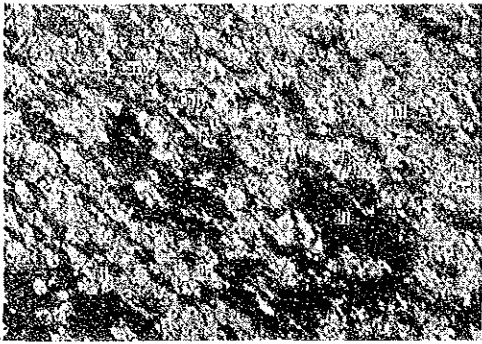
(Abbreviation)

Bi	:	biotite
Cal	:	calcite
Carb	:	carbonate minerals
Chl	:	chlorite
Fe	:	Fe oxide minerals
Ms	:	muscovite
Opq	:	opaque minerals
Pl	:	plagioclase
Qz	:	quartz
Rf	:	rock fragments
Rt	:	rutile
Ser	:	sericite
Tl	:	tourmaline

(2)

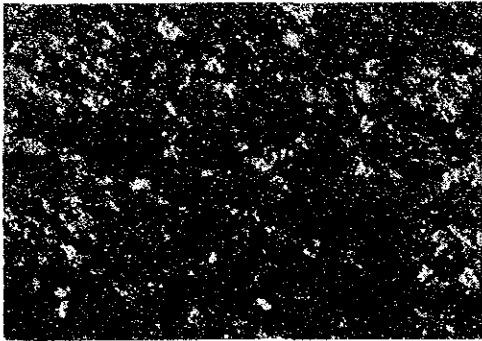
(1) 713

The rock has schistose texture with a compositional banding. Muscovite coexists with carbonate mineral and chlorite.



Plain polarized light 0 0.5mm

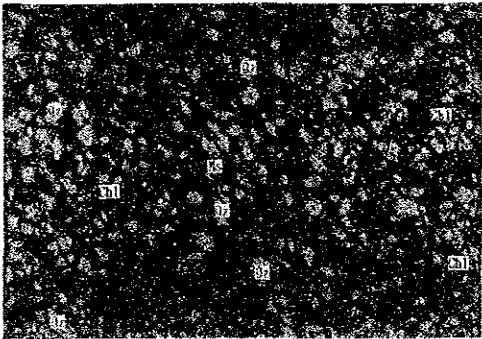
(2) 713



Crossed polarized light 0 0.5mm

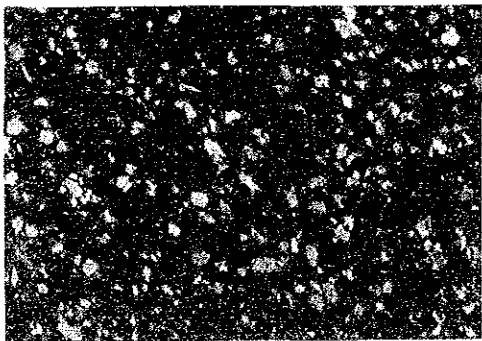
(3) 776

The rock is fine-grained and has weak schistose texture, consisting of abundant quartz grains.



Plain polarized light 0 0.5mm

(4) 776

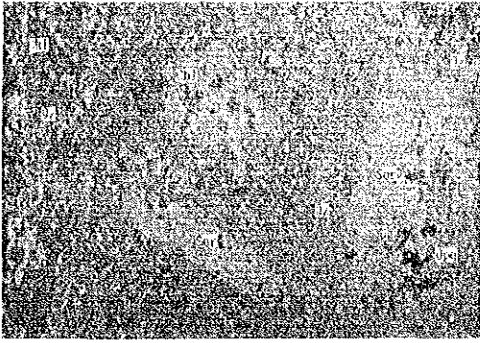


Crossed polarized light 0 0.5mm

(3)

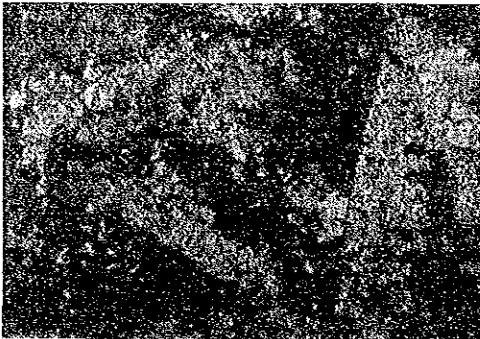
(5) 801

The rock shows faint porphyritic texture. Plagioclase phenocrysts are totally replaced by sericite.



Plain polarized light 0 0.5mm

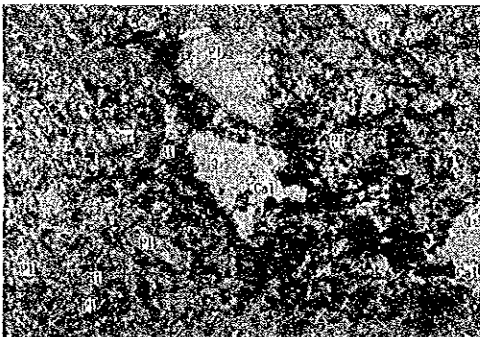
(6) 801



Crossed polarized light 0 0.5mm

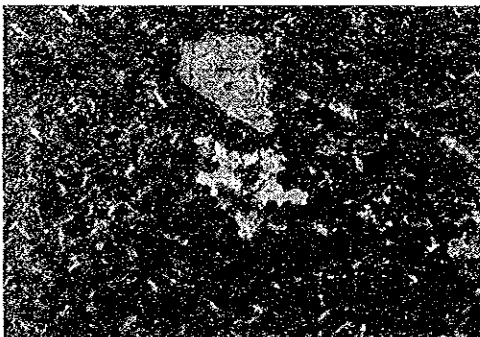
(7) 802

The rock shows porphyritic texture with weak foliation. a lot of minute biotite are shown.



Plain polarized light 0 0.5mm

(8) 802

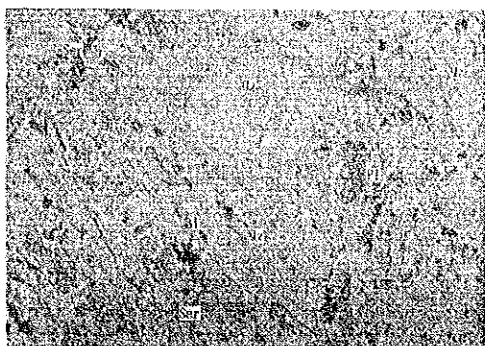


Crossed polarized light 0 0.5mm

(4)

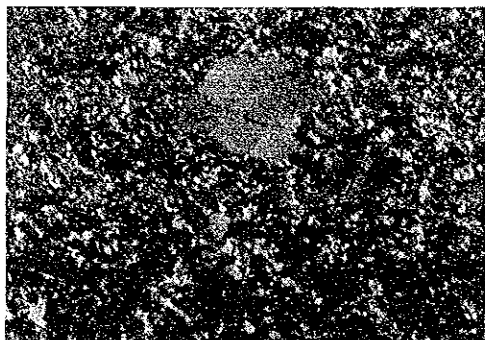
(9) 803

The rock, having porphyritic texture, is weakly recrystallized. Quartz phenocryst shows wavy extinction.



Plain polarized light 0 0.5mm

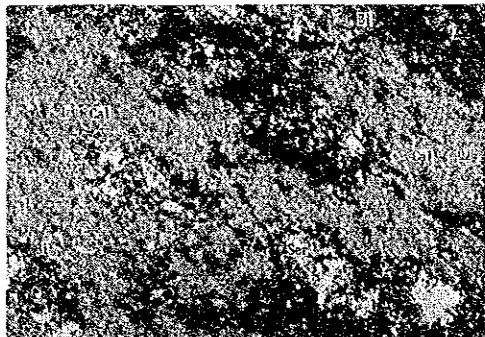
(10) 803



Crossed polarized light 0 0.5mm

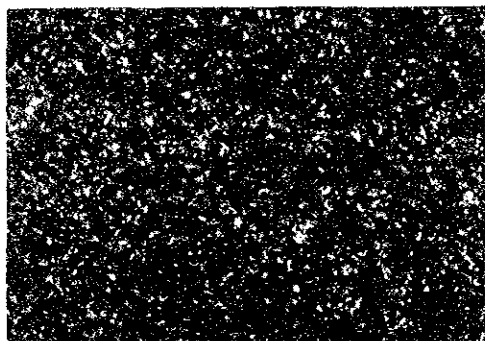
(11) 804

Biotite and sericite show shistose texture with quartz and calcite.



Plain polarized light 0 0.5mm

(12) 804

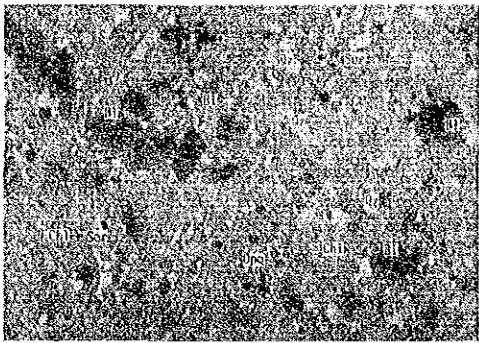


Crossed polarized light 0 0.5mm

(5)

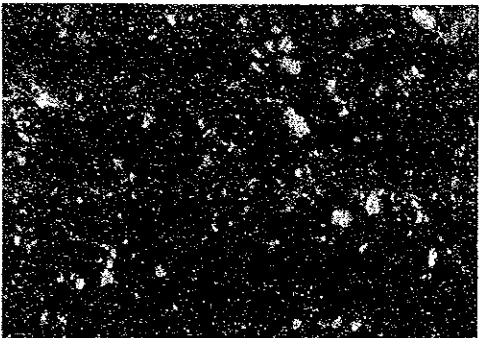
(13) 813

Biotite occurs in
euhedral crystal, less
than 0.2mm in diameter.
Matrix is composed
mainly of chlorite and
sericite.



Plain polarized light 0 0.2mm

(14) 813



Crossed polarized light 0 0.2mm

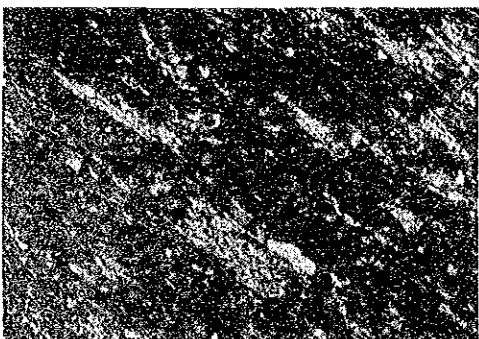
(15) 909

The rock has conspicuous
schistose texture,
consisting of quartz,
muscovite and chlorite.



Plain polarized light 0 0.5mm

(16) 909



Crossed polarized light 0 0.5mm

Ap. I-5-1 Microscopic Observation of Polished Sections

(1)

No. Samp. No.	Rock Type	Location	Sphalerite	Galena	Chalcopyrite	Pyrite	Marcasite	Pyrrhotite	Arsenopyrite	Hematite	Goethite	Manganese Oxide
1	778 Oxidized Fe Vein	Amzourh			1					4	4	
2	908 Oxidized Fe Vein	Frizem				1				4	4	
3	910 Massive Ore	Hajar Mine	4	4	2	1		4				
4	913 Banded Ore	Hajar Mine	4	2	2	4	4					
5	915 Banded Ore	Hajar Mine	4	3	2	1	1	4	1			
6	920 Oxidized Fe Vein	Frizem								4	2	
7	924 Oxidized Fe Vein	Akhlij								4	3	
8	925 Oxidized Fe Vein	Oukhribane								4	4	
9	926 Oxidized Fe Vein	Oukhribane								4	4	
10	928 Oxidized Fe Vein	Amzourh			1					3	3	2

4:abundant, 3:common, 2:poor, 1:rare

Sample No. : 778
Rock Name : Porous oxidized Fe ore

This specimen is strongly oxidized with many cavities and cracks. It consists mainly of hematite and goethite.

Hematite and goethite, showing the botryoidal aggregate, are closely associated with each other and sometimes form concentric zonal texture.

Only one grain of chalcopyrite, considered to be primary mineral, is found in this specimen, less than 0.01 mm in diameter.

Sample No. : 908
Rock Name : Oxidized Fe ore

The mode of occurrence of hematite and goethite are the same as those of sample No. 778.

Hematite closely coexists with goethite in the botryoidal aggregate.

Pyrite occurs as minute, euhedral grain less than 0.02 mm in diameter.

Sample No. : 910
Rock Name : Cu-Pb-Zn ore

This specimen is massive sulfide ore composed mainly of sphalerite, pyrrhotite, galena and chalcopyrite with a minute pyrite.

Sphalerite and pyrrhotite occur as euhedral grains and show simple intergrowth texture, respectively.

Galena occurs as subhedral to anhedral grain and fills interstices between sphalerite and pyrrhotite.

Chalcopyrite is often observed in the coarse grain of sphalerite as minute euhedral to subhedral grains.

Sample No. : 913
Rock Name : Cu-Pb-Zn ore

This specimen is massive sulfide ore with distinct banding structure. It consists mainly of pyrite, marcasite and sphalerite, with subordinate amounts of chalcopyrite and galena.

Pyrite occurs as euhedral to subhedral grain filling interstices among sphalerite, and often shows "bird's eye" structure.

Marcasite occurs in the margin of pyrite and looks like decomposed crystal from pyrite.

Partly, crushed structure, composed of small pyrite and sphalerite crystal fragment, is also observed.

Sample No. : 915
Rock Name : Cu-Pb-Zn ore

This specimen is similar to that of sample No.910 in mineralogy and the mode of occurrence of ore minerals. It shows banding structure.

Sphalerite and pyrrhotite widely and abundantly occurs as coarse euhedral grains, associated with small amount of inclusions.

Galena and chalcopyrite show subhedral to anhedral crystals and occupy interstices between sphalerite and pyrrhotite.

Minute arsenopyrite grains are rarely observed as inclusions in coarse pyrrhotite.

Sample No. : 920
Rock Name : Oxidized Fe ore

The ore mineral assemblage is very simple in this specimen. It is composed mainly of hematite, with subordinate amount of goethite.

It shows dendritic and partly botryoidal texture with many cavities. Lattice-shape replacement texture is occasionally observed in the porous mass.

Hematite fills cracks and cavities of gangue minerals as anhedral grain and coexist with goethite in the aggregate mass.

Sample No. : 924
Rock Name : Oxidized Fe ore

The ore minerals shows fine-grained and this specimen has dendritic texture with small gangue minerals.

Ore minerals replace compact original rock and partly penetrate gangue minerals in forming the botryoidal texture. This specimen consists mainly of hematite, closely coexisting with goethite-like minerals.

In this specimen, there is a mineral that forms finely crystalline aggregate and has the optical properties as follows, color:bluish white~ light gray, bireflectance:distinct, anisotropy:distinct~strong. So, there is a possibility that it may be Mn-oxide mineral.

(4)

Sample No. : 925
Rock Name : Oxidized Fe ore

This specimen shows dendritic texture and partly botryoidal one. It consists mainly of hematite and goethite.

Hematite, showing a lattice-shaped replacement texture, closely coexists with goethite.

Occasionally goethite occurs as anhedral crystal in cubic form grain. It suggests that goethite is the product of pyrite.

There is no sulfide mineral observed in this specimen.

Sample No. : 926
Rock Name : Oxidized Fe ore

This specimen shows banding and replacement structure in reddish, massive matrix.

The main ore mineral is hematite, next in abundance is goethite. A lot of hematite are concordantly arranged and fill the cracks in gangue minerals.

Mn-oxide mineral, in sheaf-like aggregates, coexists with hematite and goethite. It is also conformably arranged to the above mentioned structure.

Sample No. : 928
Rock Name : Oxidized Fe ore

This specimen is similar to the sample No.926 in mineral assemblage. It consists mainly of hematite and goethite.

Hematite coexists with goethite in showing concentric zonal texture and fills interstices and cracks in the country rock.

Goethite is observed as anhedral crystals and pseudomorphs after pyrite.

Chalcopyrite rarely occurs as euhedral crystal dispersed in gangue mineral.

Ap. I-5-2 Microphotograph of Polished Sections

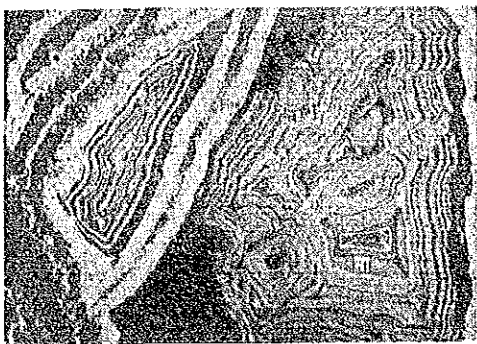
(1)

No.	Sample No.	Rock Name
(1)	778	Oxidized Fe vein
(2)	910	Massive ore
(3)	913	Banded ore
(4)	925	Oxidized Fe vein

(Abbreviation)

Cp	:	chalcopyrite
G	:	gangue minerals
Gn	:	galena
Goe	:	goethite
Hm	:	hematite
Lim	:	limonite
Ms	:	marcasite
Po	:	pyrrhotite
Py	:	pyrite
Sp	:	sphalerite

(2)



Plain polarized light 0 0.1mm

(1) 778

Oxidation-ore with rhythmic colloform textures, which consist of alternating goethite and hematite.



Plain polarized light 0 0.02mm

(2) 910

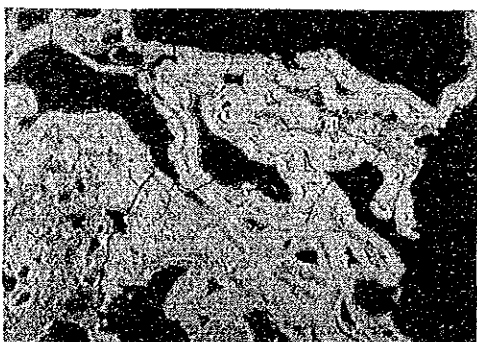
Galena occurs filling interstices among euhedral sphalerite. Chalcopyrite and pyrrhotite also closely associate with sphalerites.



Plain polarized light 0 0.1mm

(3) 913

Marcasite and pyrite displaying "bird's eye" texture. Marcasite shows a strong anisotropy.



Plain polarized light 0 0.2mm

(4) 925

Hematite filling cracks or cavities in compact mass, forms colloform texture.

Ap. I -6 Results and Charts of X-Ray Diffractive Analysis

(1)

No. Samp No.	Rock Type	Location	Quartz	Plagioclase	Calcite	Sericite	Biotite	Chlorite	Sphalerite	Galena	Chalcopyrite	Pyrite	Marcasite	Hematite	Goethite	Pyrolusite	Todorokite	Alunite
1	778 Gossan	Amzourh																
2	801 Rhyolite	Frizem	4			3		3				1		3	4			
3	802 Rhyolite	Amzourh	4	4	3	3	4	1				1						
4	803 Rhyolite	Akhlij	4	4	1	2	1	2										
5	804 Green Rock	Akhlij	4	4		4	2	4										
6	813 Green Rock	Hajar	4			3	3	4				2						
7	814 Green Rock	Hajar	4	2		3	4	4										
8	815 Sil Rock	Hajar	4			4	4	2										
9	818 Silty Sl	Amzourh	4	4		3	4											
10	825 Dolerite	Frizem	4	4	2	1	4	4							2			
11	826 Marl	Frizem	4		4	3		2										
12	831 Green Rock	Oukhrribane	4		4	2		4										
13	835 Slaty Rock	Akhlij	4			3		4										
14	908 Gossan	Frizem	4		4									3				2
15	909 Green Sch	Frizem	4			3		4										
16	913 Banded Ore	Hajar			2				4	2	2	3	2					
17	919 Gossan	Frizem												4	2	4		1
18	921 Gossan	Frizem	4		4									2	2	2		2
19	922 Calcarenite	Frizem	4	2	4	1		3							1			
20	928 Gossan	Amzourh	3					1						4	4			

Sil Rock: Silicified Rock, Sl: Slate, Sch: Schist,
 4: abundant, 3: common, 2: poor, 1: rare

