UNION OF BURMA

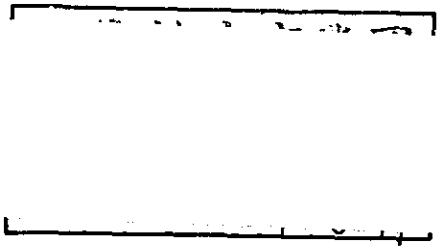
REPORT ON GEOLOGICAL SURVEY OF THE MONYWA AREA

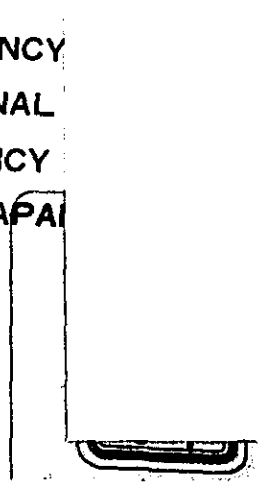
PHASE II

(VOL. II)

GEOLOGICAL MAPS

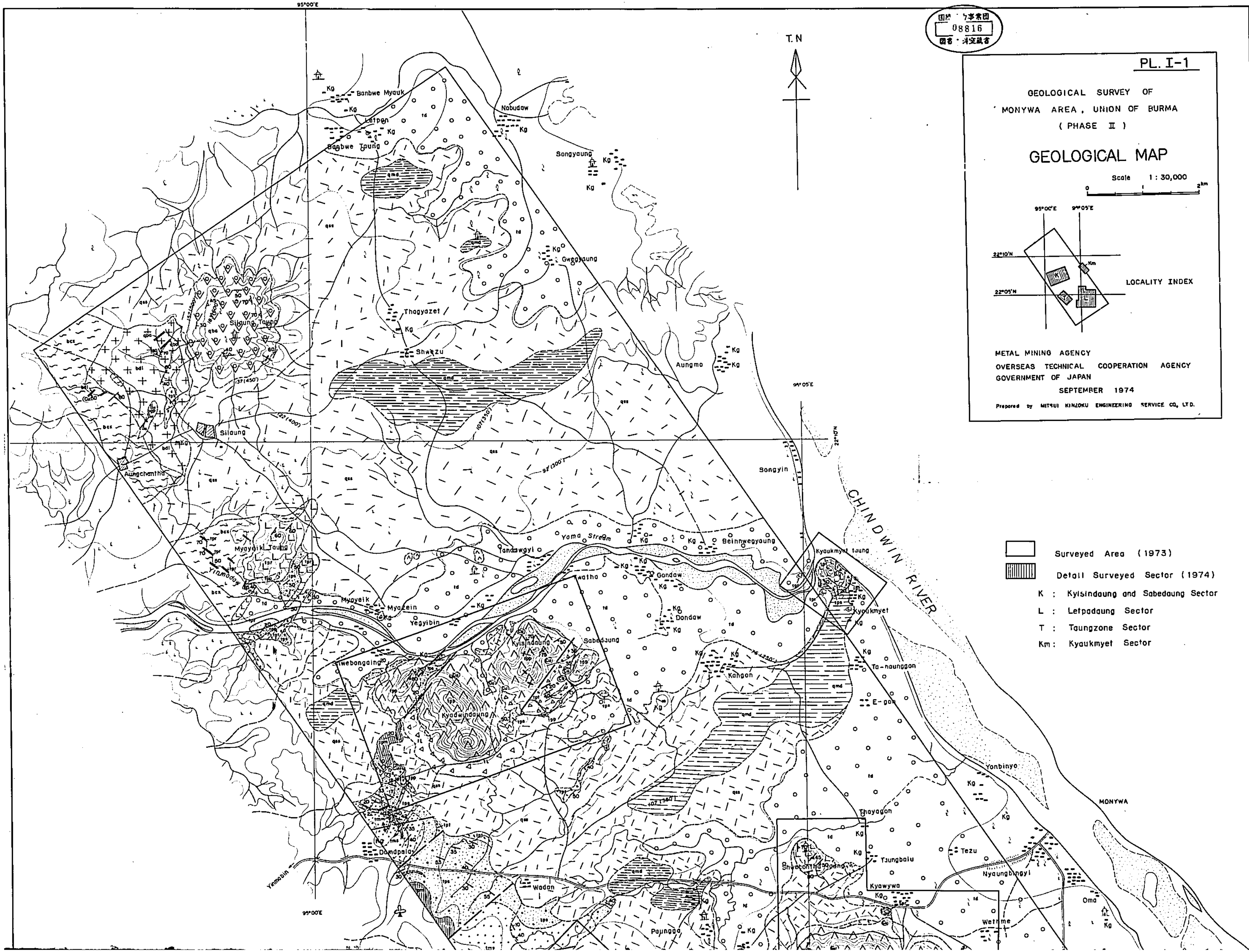
METAL MINING AGENCY
JAPAN INTERNATIONAL
COOPERATION AGENCY
GOVERNMENT OF JAPAN

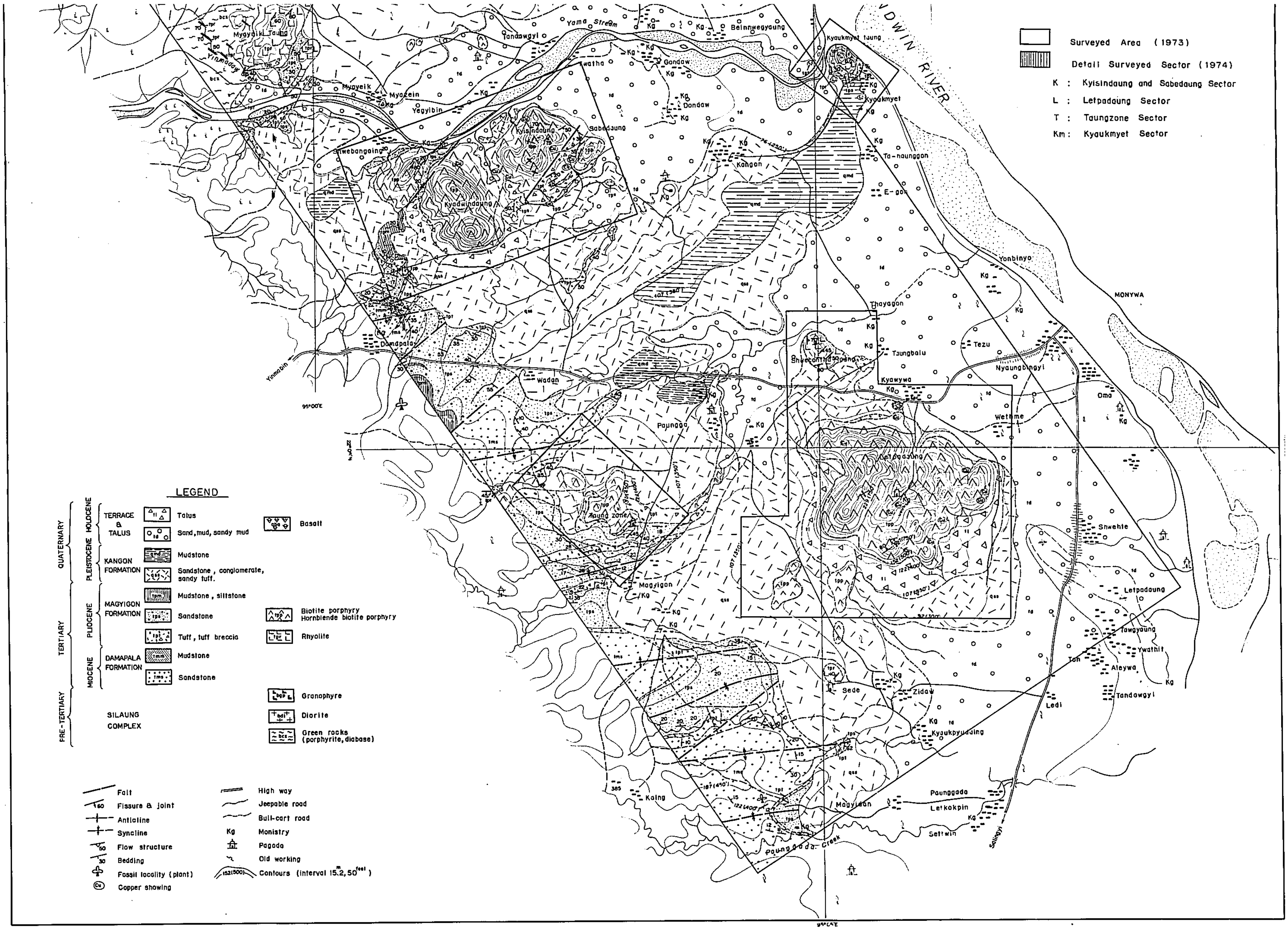




List of Plates

PL I-1	Geological Map	1:30,000
I-2-1	Geological Map of Kyisindaung and Sabedaung Sector	1:10,000
I-2-2	Geological Profile of Kyisindaung and Sabedaung Sector	1:10,000
I-2-3	Rock Alteration Map in Kyisindaung and Sabedaung Sector	1:5,000
I-2-4	Locality Map of Rock Samples in Kyisindaung and Sabedaung Sector	1:5,000
I-3-1	Geological Map of Letpadaung Sector	1:10,000
I-3-2	Geological Profile of Letpadaung Sector	1:10,000
I-3-3	Rock Alteration Map in Letpadaung Sector	1:10,000
I-3-4	Locality Map of Rock Samples in Letpadaung Sector	
I-4-1	Geological Map of Taungzone Sector	1:5,000
I-4-2	Geological Profile of Taungzone Sector	1:5,000
I-4-3	Locality Map of Rock Samples in Taungzone Sector	1:5,000
I-5-1	Geological Map of Kyaukmyet Sector	1:5,000
I-5-2	Geological Prifile of Kyaukmyet Sector	1:5,000
I-5-3	Locality Map of Rock Samples in Kyaukmyet Sector	1:5,000
I-6	Geological Mapping of Tunnels and Trenches in Kyisindaung and Sabedaung Sector	1:300
I-7	Geological Mapping of Tunnels in Letpadaung Sector	1:300
I-8-1~18	Core Log and Assay (18 Sheets)	1:300
I-9-1~41	Core Log and Assay (41 Sheets)	1:300
I-10-	Locality Map of Drill Holles in Kyisindaung and Sabedaung Sector	1:5,000
I-11	Locality Map of Drill Holles in Letpadaung Sector	1:5,000
I-12	Plan and Section for Ore Reserve Estimation of Sabedaung Ore Deposit	1:2,000
I-13	Plan and Section for Ore Reserve Estimation of Kyisindaung Ore Deposit	1:5,000


PL. I-1
GEOLOGICAL SURVEY OF
MONYWA AREA, UNION OF BURMA
(PHASE II)
GEOLOGICAL MAP
Scale 1 : 30,000
95°00'E
95°05'E
22°10'N
22°05'N
LOCALITY INDEX
METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974
Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.
T.N
Surveyed Area (1973)
Detail Surveyed Sector (1974)
K : Kyisindaung and Sabedaung Sector
L : Letpadaung Sector
T : Taungzone Sector
Km : Kyaukmyet Sector
CHINDWIN RIVER
Banbwe Myauk
Letpen
Banbwe Taung
Nabudaw
Songyaung
Gweyaung
Thagyazet
Shwezu
Aungmo
Silaung Taung
Silaung
Aungchantha
Songyin
Myayaik Taung
Yinmaday
Myayeik
Myazein
Yegyibin
Tandawgyi
Yoma Stream
Beinnwegyaung
Kyaukmyet taung
Kyaukmyet
Gondaw
Dondaw
Kyisindaung
Sabedaung
Sibewbangaing
Kyadwindaung
Kangon
Ta-naunggon
E-gon
Yonbinyo
MONYWA
Thayagon
Tezu
Taungbalu
Nyaungbingyi
Kyawywa
Oma
Wetmme
Damapala
Yinmabin
Wadan
Pauggo


Surveyed Area (1973)
Detail Surveyed Sector (1974)
K : Kyisindaung and Sabedaung Sector
L : Letpadaung Sector
T : Taungzone Sector
Km : Kyaukmyet Sector
LEGEND
QUATERNARY
HOLOCENE
TERRACE & TALUS
Talus
Sand, mud, sandy mud
PLEISTOCENE
KANGON FORMATION
Mudstone
Sandstone, conglomerate, sandy tuff.
TERTIARY
PLIOCENE
MAGYIGON FORMATION
Mudstone, siltstone
Sandstone
Tuff, tuff breccia
MIOCENE
DAMAPALA FORMATION
Mudstone
Sandstone
PRE-TERTIARY
SILAUNG COMPLEX
Basalt
Biotite porphyry
Hornblende biotite porphyry
Rhyolite
Granophyre
Diorite
Green rocks (porphyrite, diabase)
Falt
Fissure & joint
Anticline
Syncline
Flow structure
Bedding
Fossil locality (plant)
Copper showing
High way
Jeepable road
Bull-cart road
Kg Monistry
Pagoda
Old working
Contours (interval 15.2, 50)
CHINDWIN RIVER
MONYWA
Yama Stream
Beinnwegyaung
Kyaukmyet taung
Kyaukmyet
Tandawgyi
Myagyiki Taung
Yinmaday
Myayeik
Myazein
Yegyibin
watha
Gandaw
Dondaw
Kyisindaung
Sabedaung
Shwebangaing
Kyadwindaung
Kangon
Ta-naunggan
E-gon
Yonbinyo
Thayagon
Tezu
Taungbalu
Shwetanhtangdaung
Nyaungbingyi
Kyawywa
Oma
Wetheme
Damapala
Yinmabin
Wadan
Paunggo
Letpadaung
Taung Zone
Magyigon
Shwehte
Tawgyaung
Ywathit
Aleywa
Toh
Tandawgyi
Ledi
Sede
Zidaw
Kyaukpyudaing
Kaing
Magyidan
Paunggada
Letkokpin
Settwin
Salingyi
Paunggada Creek
95°00'E

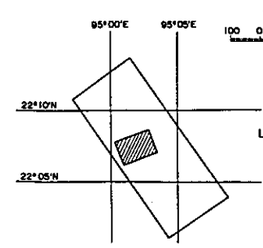
PL.I-2-1

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

GEOLOGICAL MAP OF KYISINDAUNG AND SABEDAUNG SECTOR

Scale 1:10,000

100 0 100 200 300 400 500m

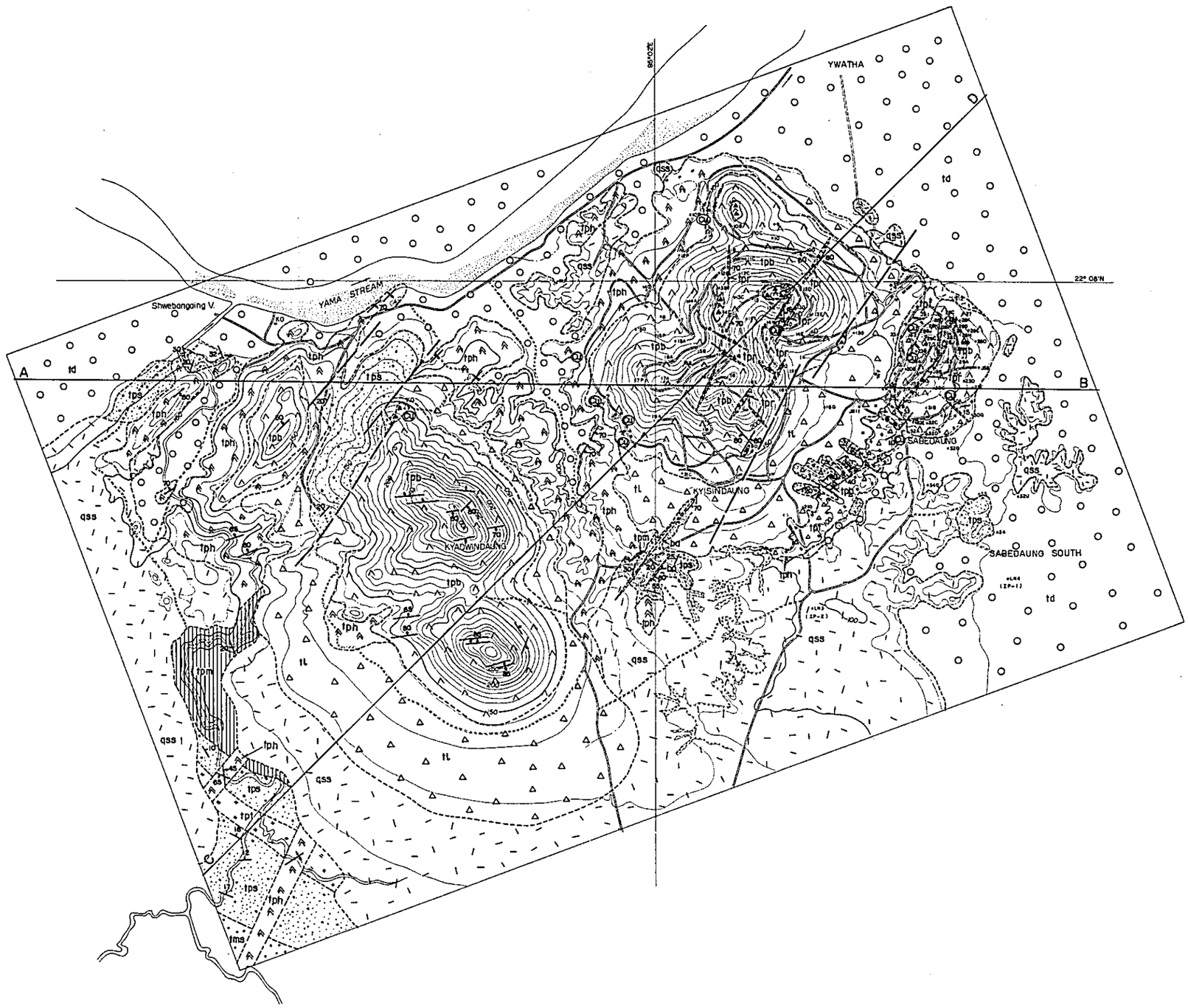


LOCALITY INDEX

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



LEGEND

QUATERNARY	HOLOCENE	TERRACE & TALUS	tl	Talus
			td	Sand mud, sandy mud
TERTIARY	PLEISTOCENE	KANGON FORMATION	qmd	Mudstone
			qss	Sandstone, conglomerate, sandy tuff
	PLIOCENE	MAGYIGON FORMATION	tpm	Mudstone, siltstone
			tps	Sandstone
			tpl	Tuff, Lapilli tuff Tuff breccia
	MIOCENE	DAMAPALA FORMATION	tms	Mudstone
				Sandstone

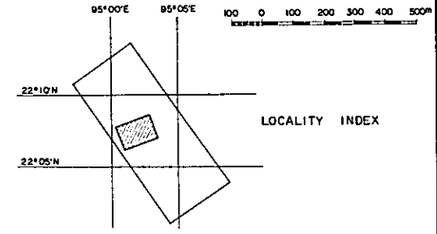
bd	Basalt		
tpr L	Rhyolite		
tpb	Biotite porphyry		
tph	Hornblende-biotite porphyry		
	Brecciation		
	Fault		
	Fissure & joint		Jeepable road
80	Bedding		Bull cart road
80	Flow structure	kg	Monistry
Cu	Copper showing		Pagoda
	Old working	150	Contours (Interval 10m)
	Tunnel and wast dump		
	Shaft and testpit		
31A	Drilling hole		

PL. I-2-2

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

GEOLOGICAL PROFILE OF KYISINDAUNG AND SABEDAUNG SECTOR

Scale 1:10,000

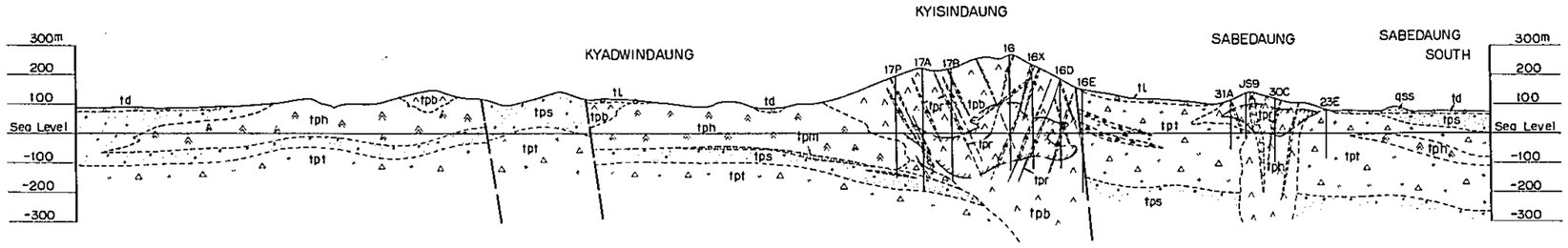


METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

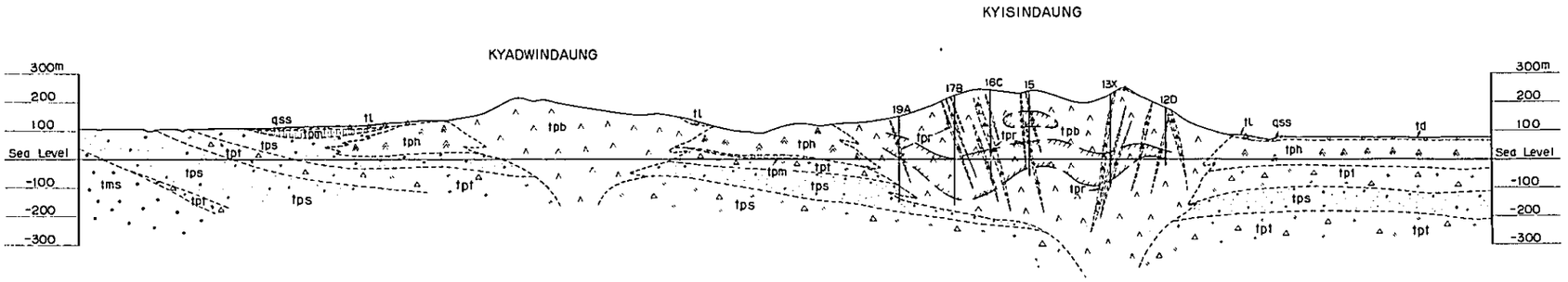
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

A - B SECTION



C - D SECTION



LEGEND

QUATERNARY
- HOLOCENE
  - TERRACE & TALUS: tL — Talus
  - TALUS: td — Sand, mud, sandy mud
  - KANGON FORMATION: qmd — Mudstone,
  - KANGON FORMATION: qss — Sandstone, conglomerate, sandy tuff
- PLEISTOCENE

TERTIARY
- PLIOCENE
  - MAGYIGON FORMATION: tpm — Mudstone, siltstone
  - MAGYIGON FORMATION: tps — Sandstone
  - MAGYIGON FORMATION: tpt — Tuff, Lapilli tuff, Tuff, breccia
- MIOCENE
  - DAMAPALA FORMATION: tmm — Mudstone
  - DAMAPALA FORMATION: tms — Sandstone

tpr — Rhyolite
tpb — Biotite porphyry
tph — Hornblende-biotite porphyry

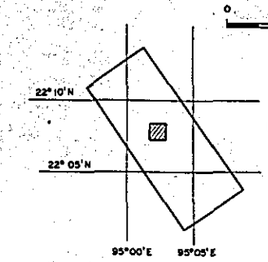
Ore body
Brecciation
Fault
Cu — Copper showing

PL. I-2-3

GEOLOGICAL SURVEY OF
MONYWA AREA, UNION OF BURMA
(PHASE II)

ROCK ALTERATION MAP IN KYISINDAUNG AND SABEDAUNG SECTOR

Scale 1: 5,000
0 100 200 300m

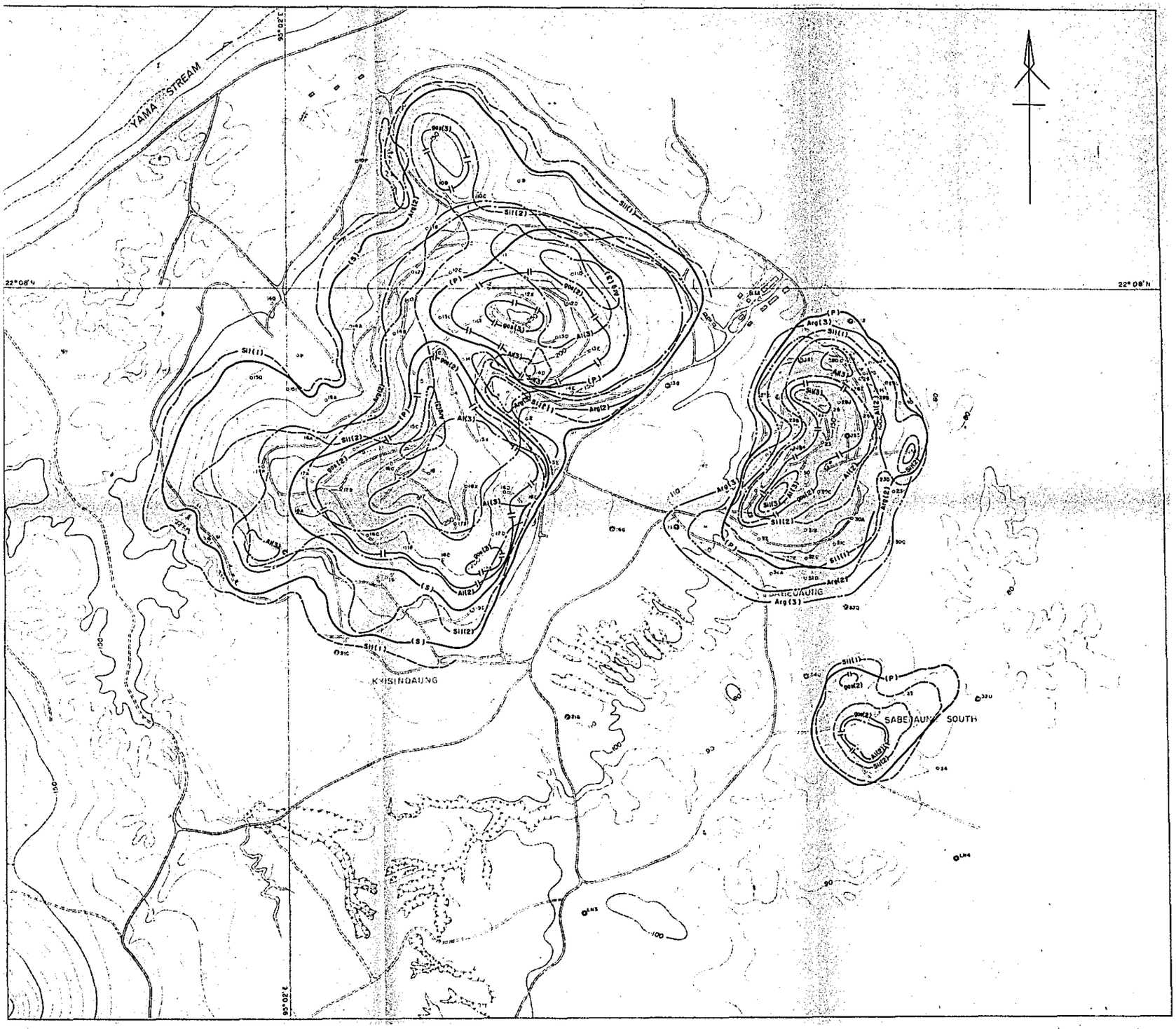


LOCALITY INDEX

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



LEGEND

- Argillization
- Silicification
- Alunitization
- Gossan
- Primary area for exploration
- Secondary area for exploration

DEGREE OF ROCK ALTERATION

	Argillization	Silicification	Alunitization	Gossan
Degree \ A*	kaolinite sericite	SiO_2	alunite	hematite limonite
(1)	weak	55–65%	weak	weak
(2)	medium	65–80%	medium	medium
(3)	strong	> 80%	strong	strong

(by field observation)

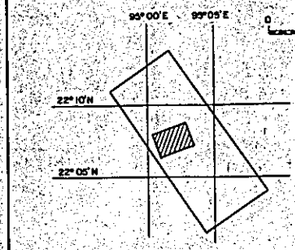
* A : mineral or ingredient

PL.I-2-4

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

LOCALITY MAP OF ROCK SAMPLES IN KYISINDAUNG AND SABEDAUNG SECTOR

Scale 1:10,000

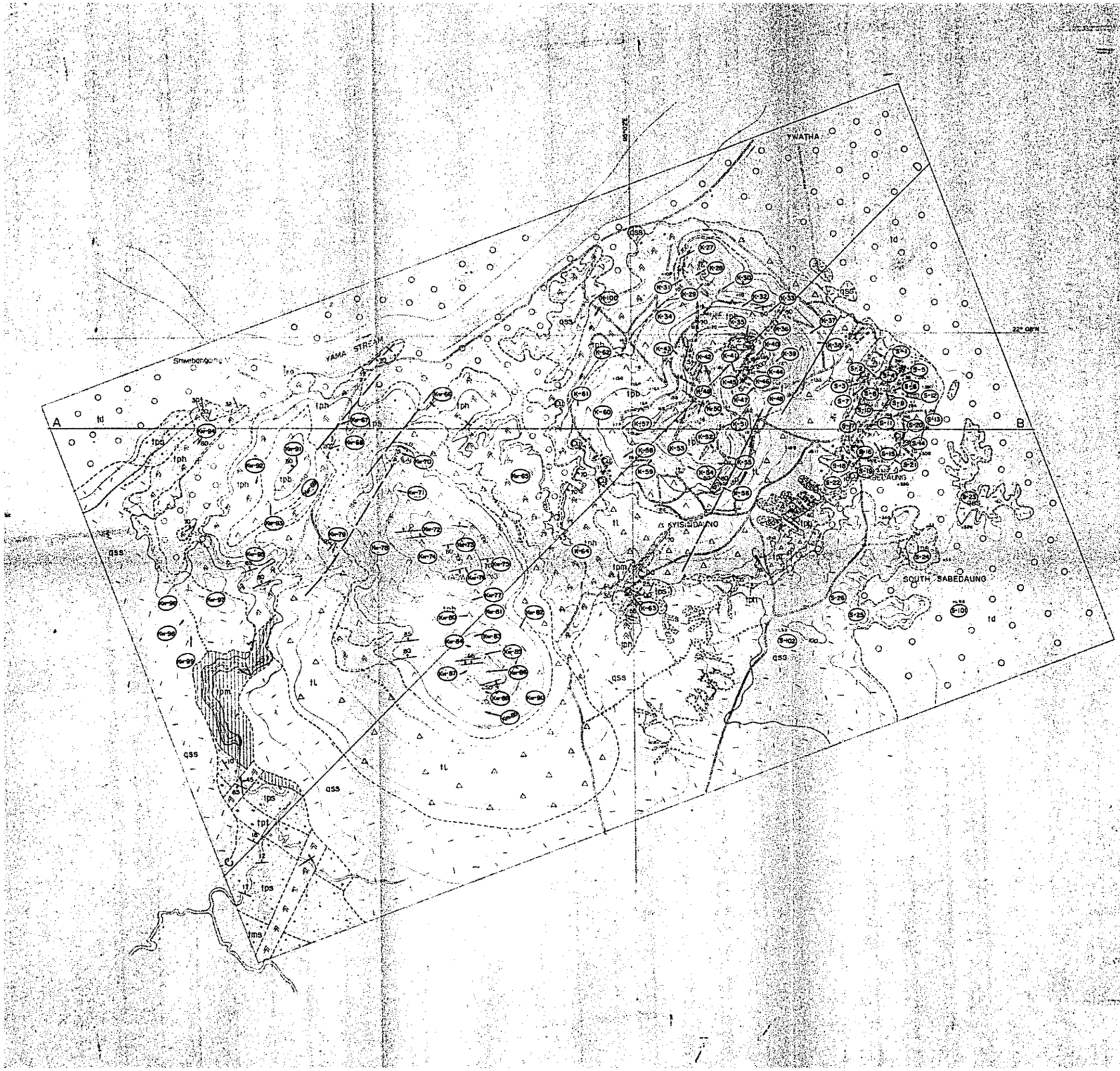


LOCALITY INDEX

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



LEGEND

QUATERNARY / TERTIARY

- HOLOCENE — TERRACE & TALUS: tl Talus; td Sand mud, sandy mud
- PLEISTOCENE — KANGON FORMATION: qmd Mudstone; qss Sandstone, conglomerate, sandy tuff
- PLIOCENE — MAGYIGON FORMATION: tpm Mudstone, siltstone; tps Sandstone; tpl Tuff, Lapilli tuff, Tuff, breccia
- MIOCENE — DAMAPALA FORMATION: tms Mudstone; tms Sandstone

tpr Rhyolite
tpb Biotite porphyry
tph Hornblende–biotite porphyry

Brecciation
Fault
Fissure & joint
Bedding
Flow structure
Copper showing
Old working
Tunnel and wast dump
Shaft and testpit
Drilling hole

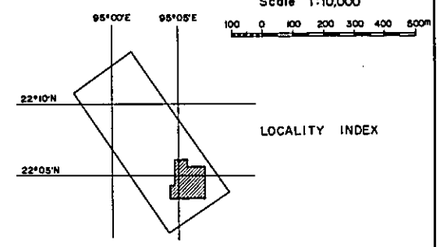
Jeepable road
Bull cart road
Monistry
Pagoda
Contours (Interval 10m)
Sample No.

PL.I-3-1

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

GEOLOGICAL MAP OF LETPADAUNG SECTOR

Scale 1:10,000

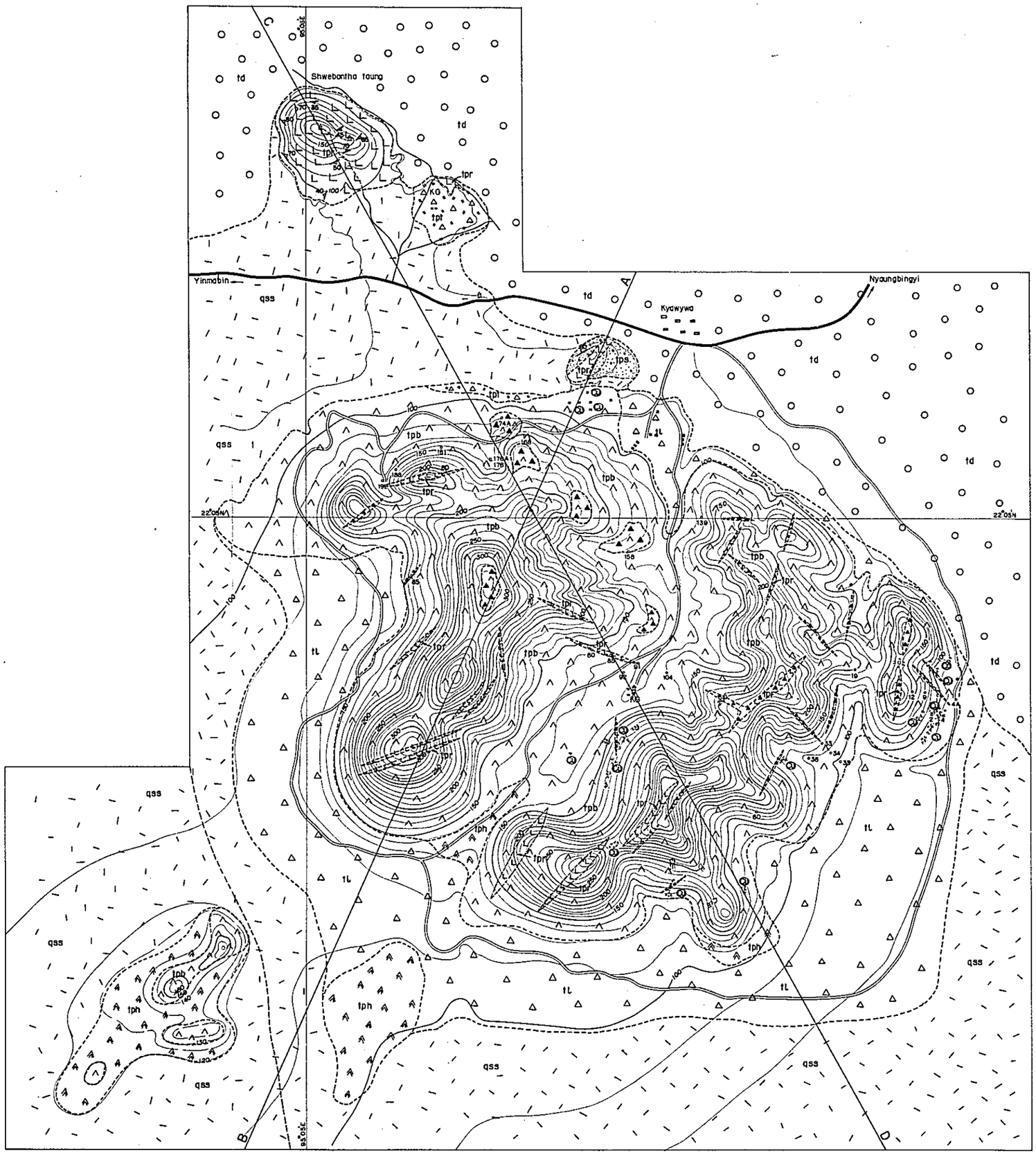


LOCALITY INDEX

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



LEGEND

QUATERNARY	HOLOCENE	TERRACE & TALUS	tL	Talus
			td	Sand, mud, sandy mud
	PLEISTOCENE	KANGON FORMATION	qmd	Mudstone,
			qss	Sandstone, conglomerate, sandy tuff
TERTIARY	PLIOCENE	MAGYIGON FORMATION	tpm	Mudstone, siltstone
			tps	Sandstone
			tpt	Tuff, Lapilli tuff Tuff breccia
	MIOCENE	DAMAPALA FORMATION	tms	Mudstone
			tms	Sandstone

- tpr — Rhyolite
- tpb — Biotite porphyry
- tph — Hornblende-biotite porphyry

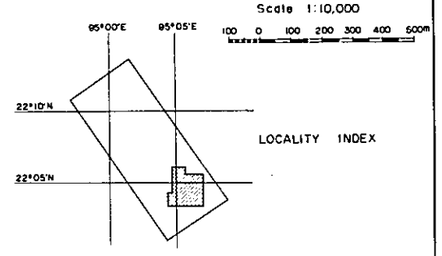
- Brecciation
- Fault
- Fissure & joint
- Bedding
- Flow structure
- Copper showing
- Old working
- Tunnel and wast dump
- Shaft and testpit
- High way
- Jeepable road
- Bull cart road
- kg — Monistry
- Pagoda
- 150 — Contours (Interval 10m)

PL.I-3-2

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

GEOLOGICAL PROFILE OF LETPADAUNG SECTOR

Scale 1:10,000

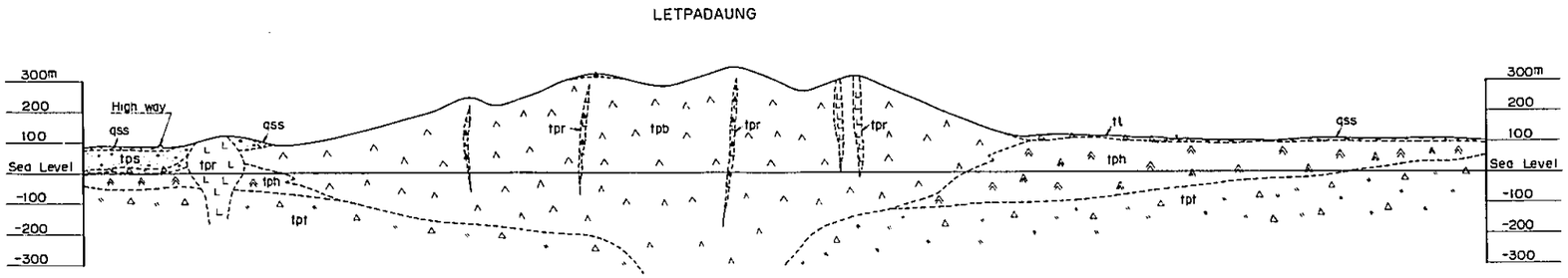


METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

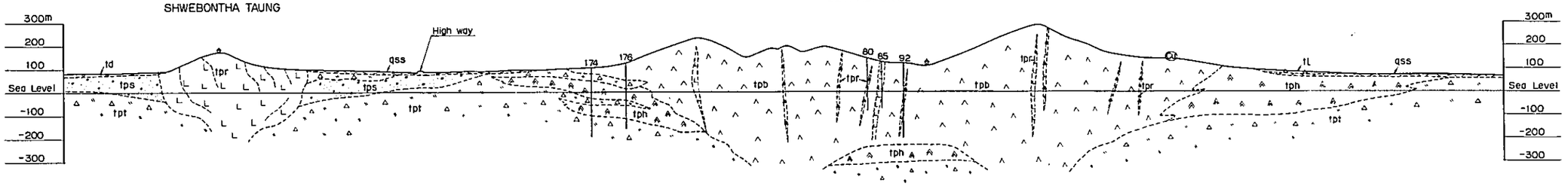
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

A - B SECTION



C - D SECTION



LEGEND

QUATERNARY / TERTIARY

HOLOCENE
- TERRACE & TALUS: tl — Talus; td — Sand, mud, sandy mud

PLEISTOCENE
- KANGON FORMATION: qmd — Mudstone; qss — Sandstone, conglomerate, sandy tuff

PLIOCENE
- MAGYIGON FORMATION: tpm — Mudstone, siltstone; tps — Sandstone; tpt — Tuff, Lapilli tuff, Tuff, breccia

MIOCENE
- DAMAPALA FORMATION: tmm — Mudstone; tms — Sandstone

- tpr — Rhyolite
- tpb — Biotite porphyry
- tph — Hornblende-biotite porphyry

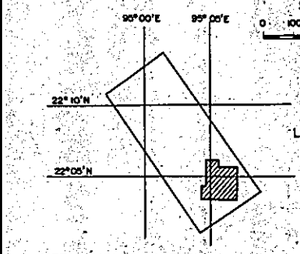
Ore body
Brecciation
Fault
Cu Copper showing

PL.I-3-3

GEOLOGICAL SURVEY OF,
MONYWA AREA, UNION OF BURMA
(PHASE II)

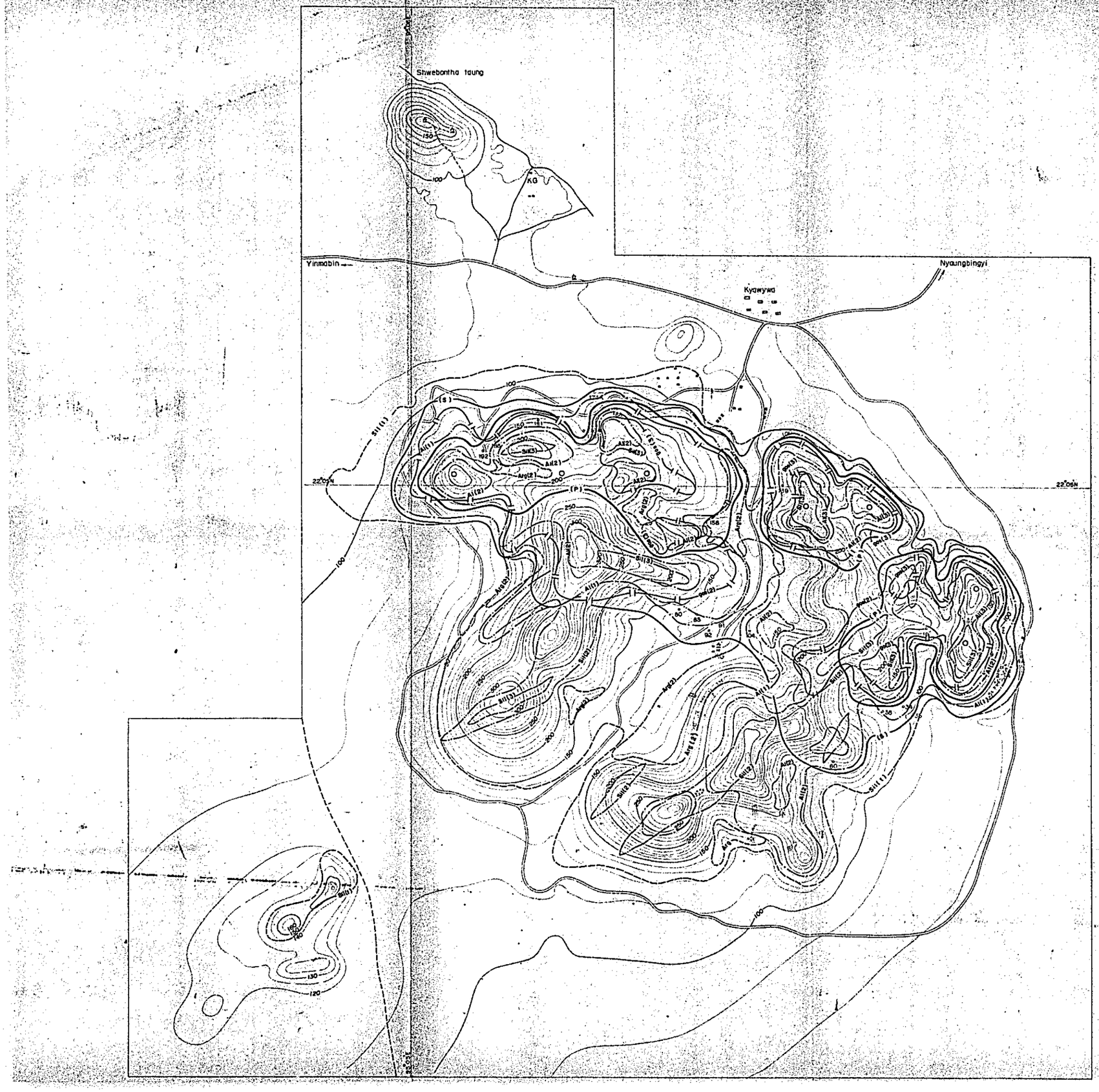
ROCK ALTERATION MAP IN LETPADAUNG SECTOR

Scale 1: 10,000
0 100 200 300 400 500m



METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



LEGEND

- Ag(2) — Argillization
- Si(1) — Silicification
- Al(3) — Alunitization
- Go(2) — Gossan
- (P) — Primary area for exploration
- (S) — Secondary area for exploration

DEGREE OF ROCK ALTERATION

A* / Degree	argillization	silicification	alunitization	gossan
	kaolinite sericite	SiO_2	alunite	hematite limonite
(1)	weak	55～65 %	weak	weak
(2)	medium	65～80%	medium	medium
(3)	strong	> 80 %	strong	strong

(by field observation)

* A : mineral or ingredient

○ Location of the proposed drill hole.

PL.I-3-4

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

LOCALITY MAP OF ROCK SAMPLES IN LE TPADAUNG SECTOR

Scale 1:10,000

95°00'E 95°05'E 0 200 400 600m

22°10'N

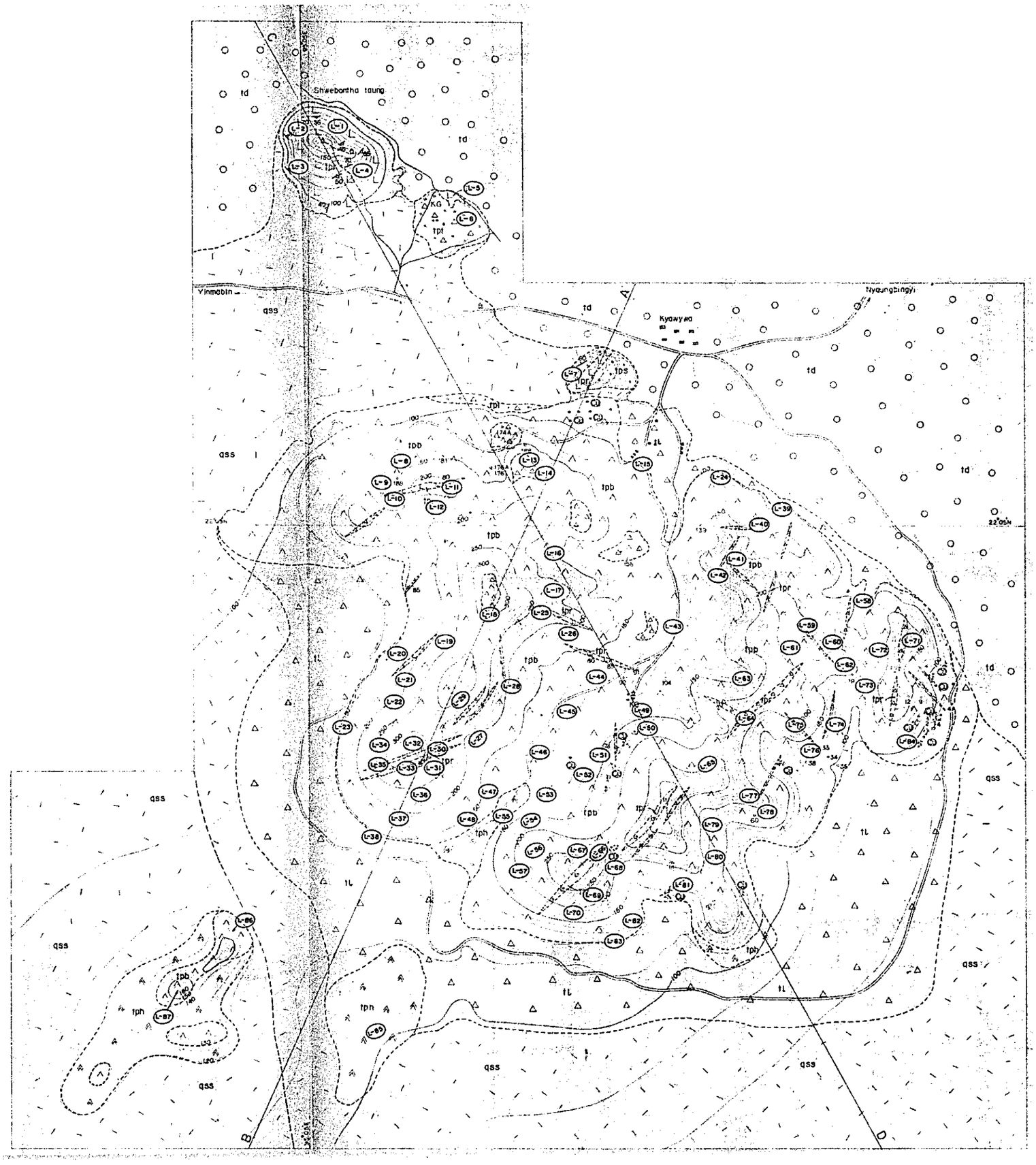
22°05'N

LOCALITY INDEX

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



LEGEND

QUATERNARY
- HOLOCENE
  - TERRACE & TALUS
    - tL — Talus
    - td — Sand mud, sandy mud
  - PLEISTOCENE
    - KANGON FORMATION
      - qmd — Mudstone
      - qss — Sandstone, conglomerate, sandy tuff

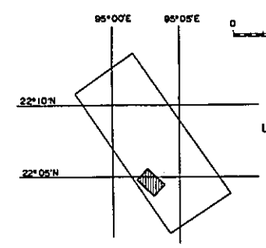
TERTIARY
- PLIOCENE
  - MAGYIGON FORMATION
    - tpm — Mudstone, siltstone
    - tps — Sandstone
    - tpt — Tuff, Lapilli tuff Tuff, breccia
    - tpr — Rhyolite
    - tpb — Biotite porphyry
    - tph — Hornblende-biotite porphyry
- MIOCENE
  - DAMAPALA FORMATION
    - tm — Mudstone
    - tms — Sandstone

- Brecciation
- Fault
- Fissure & joint
- 60 / 30 Bedding
- 60 / 30 Flow structure
- Cu Copper showing
- Old working
- Tunnel and wast dump
- Shaft and testpit
- 31A Drilling hole
- Jeepable road
- Bull cart road
- Kg Monistry
- Pagoda
- 150 Contours (Interval 10m)
- L-1 Sample No.

PL.I-4-1

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

GEOLOGICAL MAP OF TAUNGZONE SECTOR



Scale 1:5,000
0 100 200 300m

LOCALITY INDEX

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

LEGEND

QUATERNARY
- TERRACE & TALUS: Talus; Sand mud, sandy mud
- PLEISTOCENE HOLOCENE — KANGON FORMATION: Mudstone; Sandstone, conglomerate, sandy tuff

TERTIARY
- PLIOCENE — MAGYIGON FORMATION: Mudstone, siltstone; Sandstone; Tuff, Lapilli tuff, Tuff breccia
- MIOCENE — DAMAPALA FORMATION: Mudstone; Sandstone

Rhyolite; Biotite porphyry; Hornblende-biotite porphyry

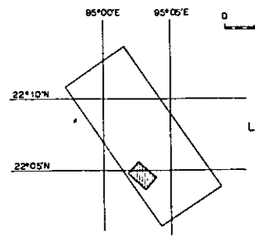
Brecciation
Fault
Fissure & joint
Bedding
Flow structure
Copper showing
Old working
Tunnel and wast dump
Shaft and testpit
Drilling hole 31A

Jeepable road
Bull cart road
kg Monistry
Pagoda
Contours (Interval 10m)
Syncline

PL.I-4-2

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

GEOLOGICAL PROFILE OF TAUNGZONE SECTOR



Scale 1:5,000
0 100 200 300m

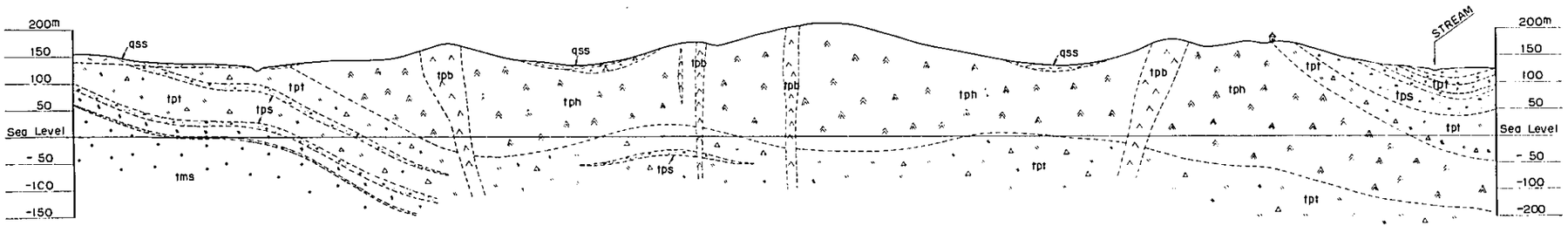
LOCALITY INDEX

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

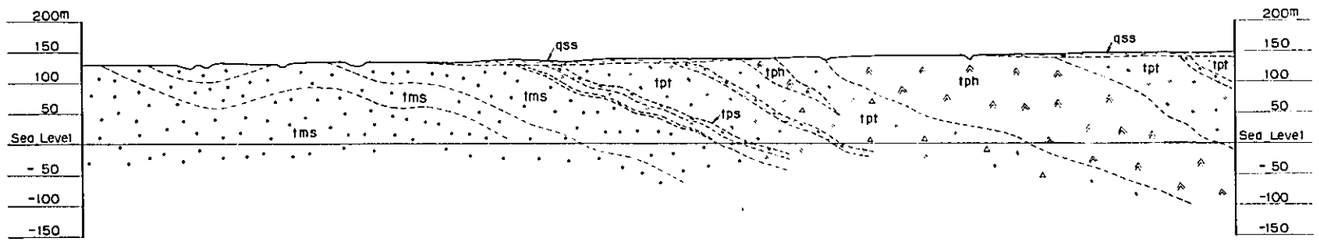
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

A - B SECTION



C - D SECTION

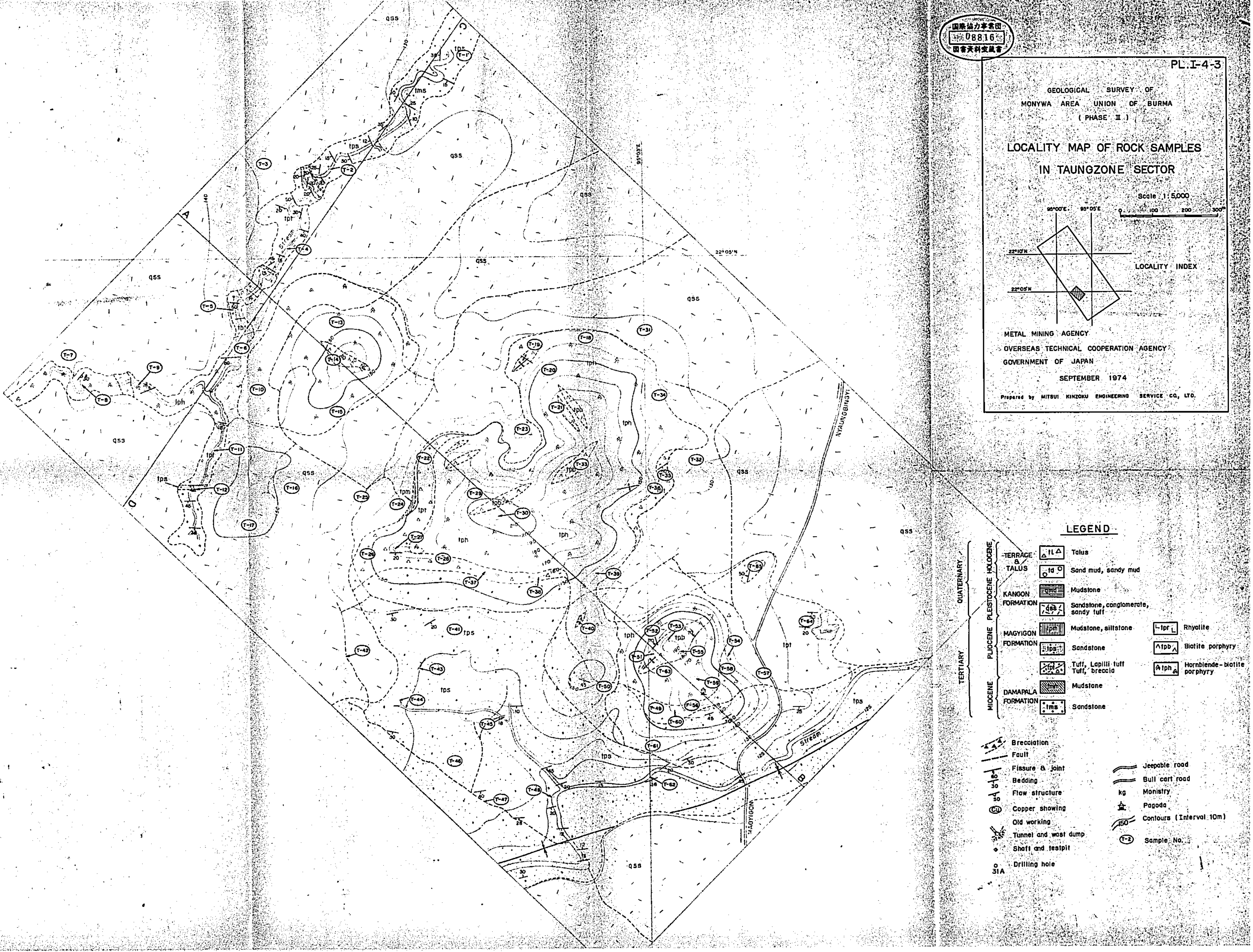


LEGEND

QUATERNARY
- HOLOCENE
  - TERRACE & TALUS: tL Talus; td Sand, mud, sandy mud
  - KANGON FORMATION: qmd Mudstone; qss Sandstone, conglomerate, sandy tuff
- PLEISTOCENE

TERTIARY
- PLIOCENE
  - MAGYIGON FORMATION: tpm Mudstone, siltstone; tps Sandstone; tpl Tuff, Lapilli tuff, Tuff, breccia
  - tpr Rhyolite; tpb Biotite porphyry; tph Hornblende-biotite porphyry
- MIOCENE
  - DAMAPALA FORMATION: tms Mudstone; tms Sandstone

Ore body
Brecciation
Fault
Cu Copper showing

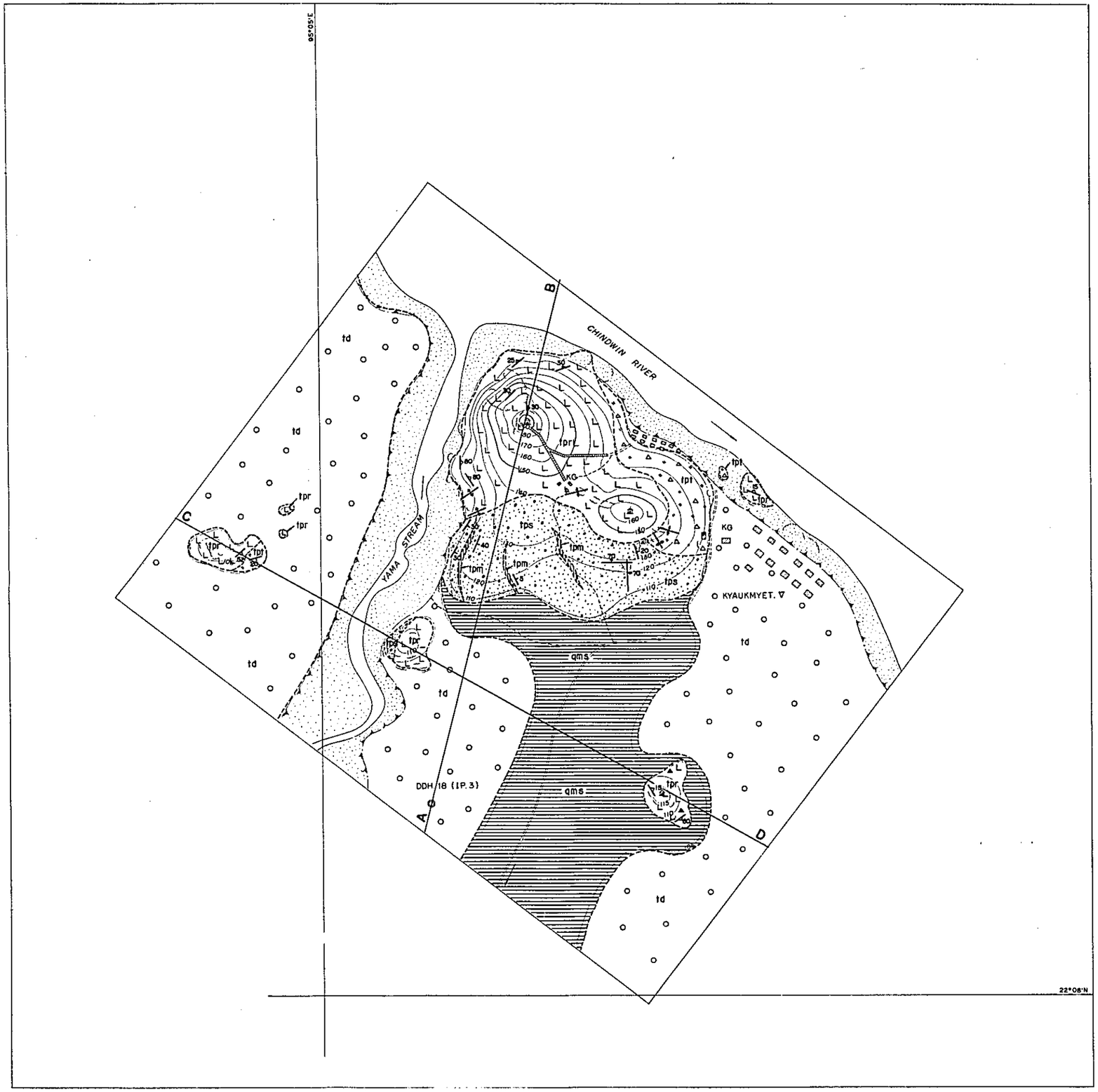


PL.I-4-3
GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)
LOCALITY MAP OF ROCK SAMPLES
IN TAUNGZONE SECTOR
Scale 1:5,000
LOCALITY INDEX
METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974
Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.
LEGEND
QUATERNARY
TERTIARY
HOLOCENE
PLEISTOCENE
PLIOCENE
MIOCENE
TERRACE & TALUS
Talus
Sand mud, sandy mud
KANGON FORMATION
Mudstone
Sandstone, conglomerate, sandy tuff
MAGYIGON FORMATION
Mudstone, siltstone
Sandstone
Tuff, Lapilli tuff Tuff, breccia
DAMAPALA FORMATION
Mudstone
Sandstone
Rhyolite
Biotite porphyry
Hornblende-biotite porphyry
Brecciation
Fault
Fissure & joint
Bedding
Flow structure
Copper showing
Old working
Tunnel and wast dump
Shaft and testpit
Drilling hole
Jeepable road
Bull cart road
Monistry
Pagoda
Contours (Interval 10m)
Sample No.
NYAUNGBINGYI
MAGYIGON
Stream
Lake

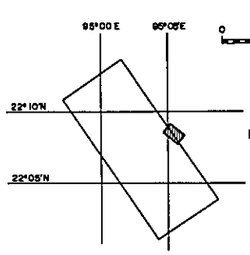
PL.I-5-1

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

GEOLOGICAL MAP OF KYAUKMYET SECTOR



Scale 1:5,000
0 100 200 300m



LOCALITY INDEX

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

LEGEND

QUATERNARY / HOLOCENE
- TERRACE & TALUS: tl — Talus
- TERRACE & TALUS: td — Sand mud, sandy mud

PLEISTOCENE
- KANGON FORMATION: qmd — Mudstone
- KANGON FORMATION: qss — Sandstone, conglomerate, sandy tuff

TERTIARY / PLIOCENE
- MAGYIGON FORMATION: tpm — Mudstone, siltstone
- MAGYIGON FORMATION: tps — Sandstone
- MAGYIGON FORMATION: tpt — Tuff, Lapilli tuff, Tuff breccia
- tpr — Rhyolite
- tpb — Biotite porphyry
- tph — Hornblende-biotite porphyry

MIOCENE
- DAMAPALA FORMATION: tms — Mudstone
- DAMAPALA FORMATION: tms — Sandstone

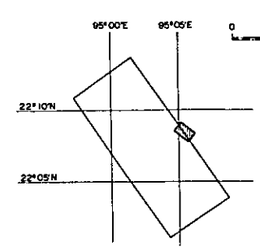
- Brecciation
- Fait
- Fissure & joint
- Bedding
- Flow structure
- Copper showing
- Old working
- Tunnel and wast dump
- Shaft and testpit
- 31A Drilling hole
- Jeepable road
- Bull cart road
- kg Monistry
- Pagoda
- 150 Contours (Interval 10m)

PL.I-5-2

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

GEOLOGICAL PROFILE OF KYAUKMYET SECTOR

Scale 1:5,000
0 100 200 300m



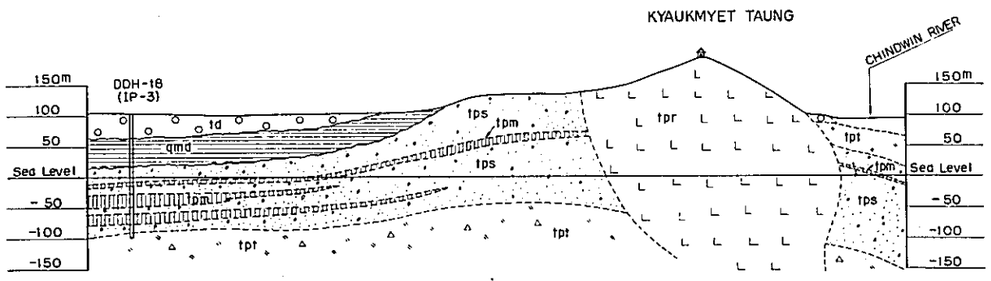
LOCALITY INDEX

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

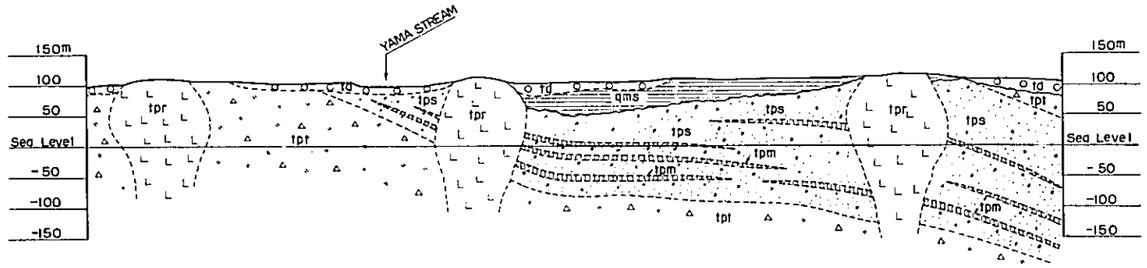
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

A - B SECTION



C - D SECTION



LEGEND

QUATERNARY	HOLOCENE	TERRACE & TALUS	tl	Talus
			td	Sand, mud, sandy mud
	PLEISTOCENE	KANGON FORMATION	qmd	Mudstone,
			qss	Sandstone, conglomerate, sandy tuff
TERTIARY	PLIOCENE	MAGYIGON FORMATION	tpm	Mudstone, siltstone
			tps	Sandstone
			tpt	Tuff, Lapilli tuff, Tuff breccia
	MIOCENE	DAMAPALA FORMATION	tmm	Mudstone
			tms	Sandstone

tpr Rhyolite
tpb Biotite porphyry
tph Hornblende-biotite porphyry

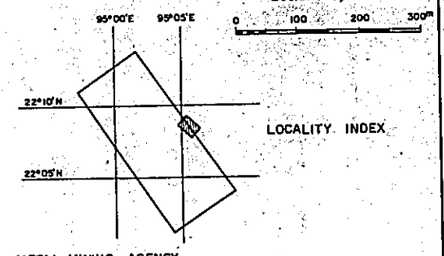
Ore body
Brecciation
Fault
Cu Copper showing

PL. I-5-3

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

LOCALITY MAP OF ROCK SAMPLES IN KYAUKMYET SECTOR

Scale 1:5,000



METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

LEGEND

QUATERNARY	HOLOCENE	TERRACE & TALUS	Talus
			Sand mud, sandy mud
	PLEISTOCENE	KANGON FORMATION	Mudstone
			Sandstone, conglomerate, sandy tuff
TERTIARY	PLIOCENE	MAGYIGON FORMATION	Mudstone, siltstone
			Sandstone
			Tuff, Lapilli tuff Tuff, breccia
	MIOCENE	DAMAPALA FORMATION	Mudstone
			Sandstone

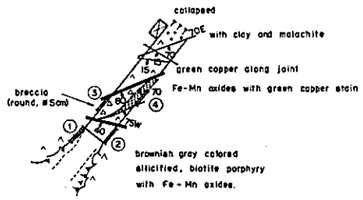
Rhyolite
Biotite porphyry
Hornblende-biotite porphyry

Brecciation
Fault
Fissure & Joint
Bedding
Flow structure
Copper showing
Old working
Tunnel and wast dump
Shaft and testpit
Drilling hole

Jeepable road
Bull cart road
Monistry
Pagoda
Contours (Interval 10m)
Sample No.

Kyisindaung.

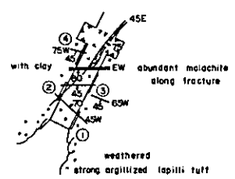
INCLINE NO.1



Sample NO.	Sampling line m	Assay of total cu %
1	2.0m	0.10
2	2.0	0.23
3	2.0	0.18
4	2.0	0.13

Sabedaung.

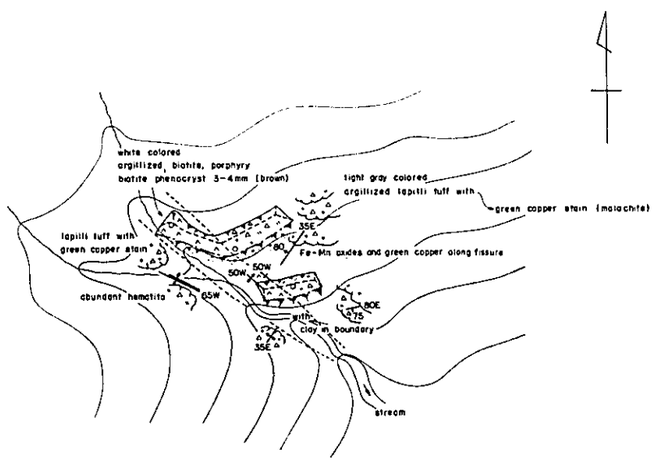
ADIT. NO.1



Sample NO	Sampling line m	Assay of total cu %
1	2.0m	0.08
2	2.0	0.10
3	2.0	0.28
4	2.0	0.10

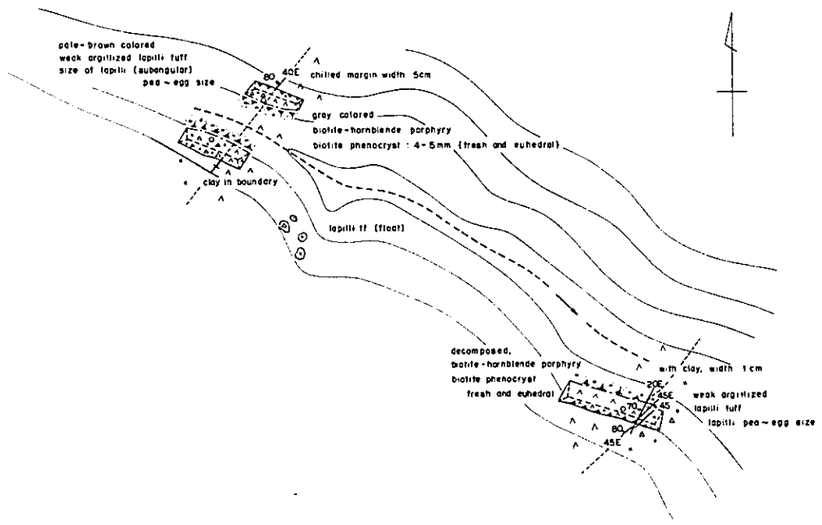
Sabedaung.

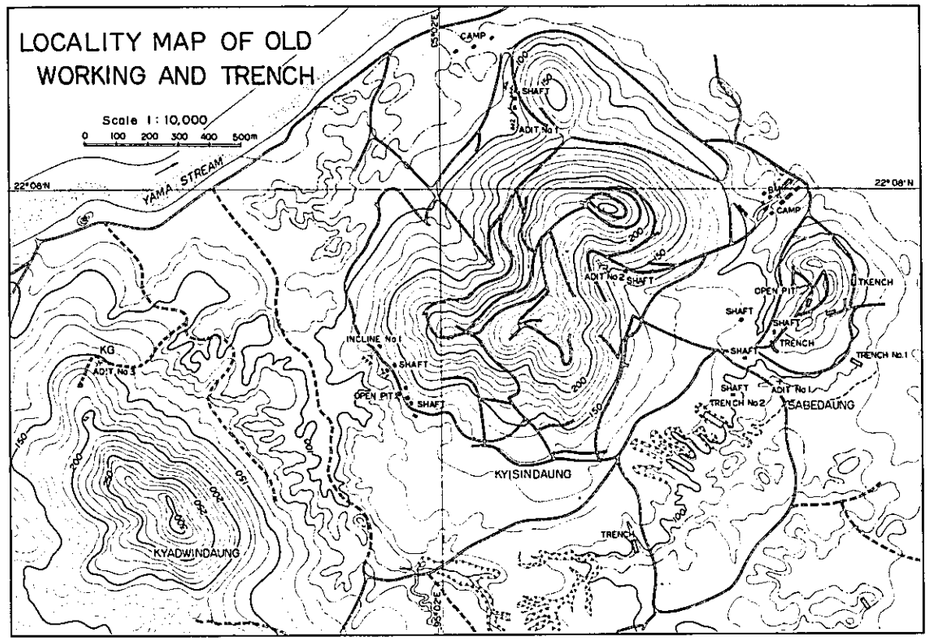
TRENCH. 1



Sabedaung.

TRENCH. 2





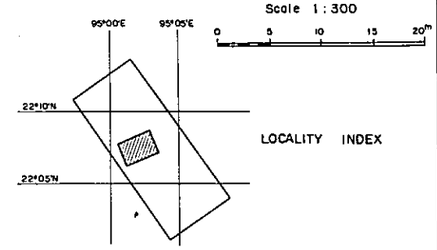
LEGEND

- Rhyolite
- Biotite porphyry
- Biornblende biotite porphyry
  Lapilli tuff , Tuff breccia
- Breccia
- 60 Fissure and joint
- 30 Bedding
- ② Sample No. and sample locality

PL. I-6

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

GEOLOGICAL MAPPING OF TUNNELS AND TRENCHES IN LETPADAUNG SECTOR



METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974
Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD.

PL. I-7

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

GEOLOGICAL MAPPING OF TUNNELS IN LETPADAUNG SECTOR

(SHEET 1)

95°00'E 95°05'E
22°10'N
22°05'N

Scale 1 : 300
0 5 10 15 20m

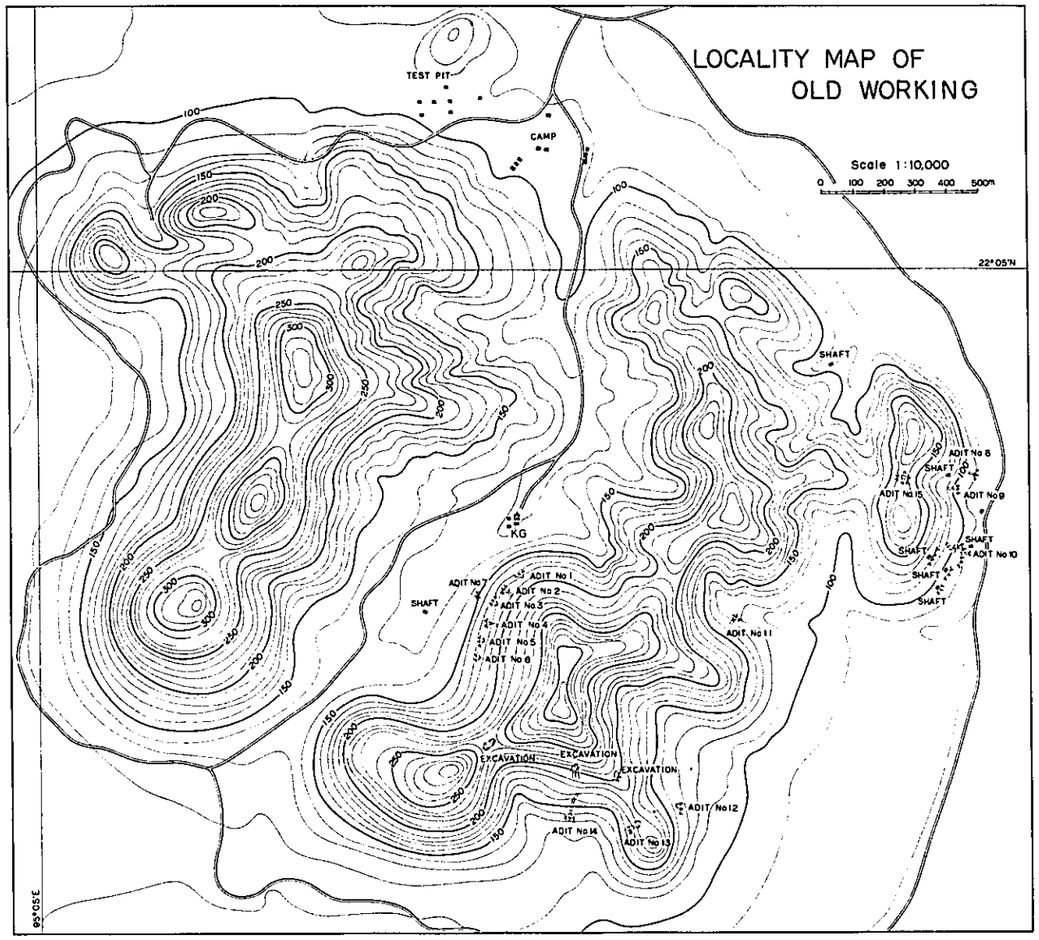
LOCALITY INDEX

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

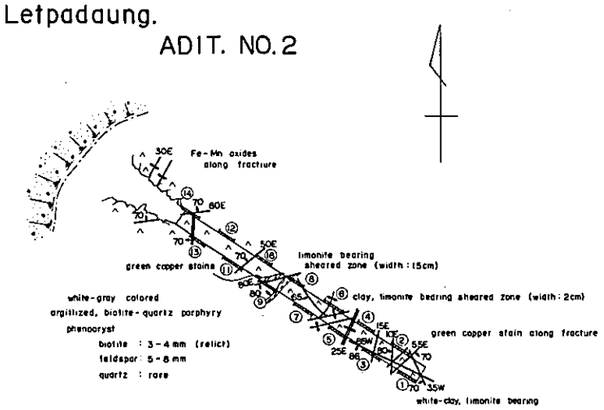
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO, LTD.

LOCALITY MAP OF OLD WORKING

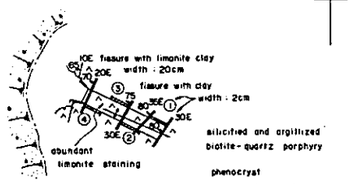


Letpadaung.
ADIT. NO. 2



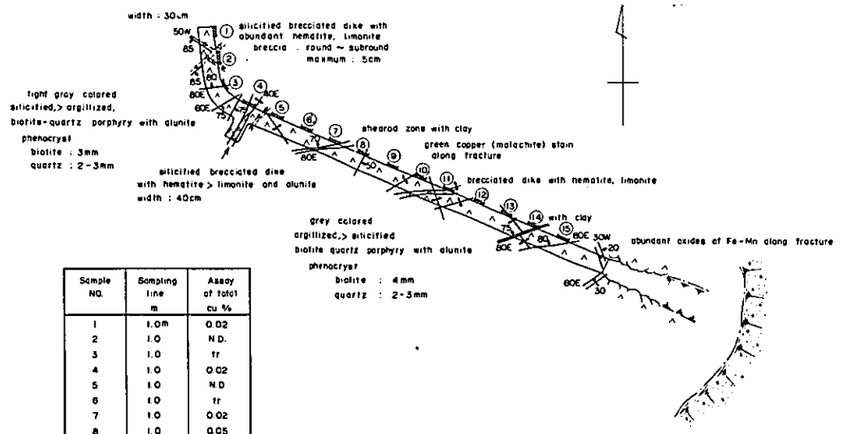
Sample NO.	Sampling line m	Assay of total cu %
1	2.0m	0.03
2	2.0	0.06
3	2.0	0.03
4	2.0	0.03
5	2.0	tr
6	2.0	0.15
7	2.0	0.18
8	2.0	0.18
9	2.0	0.15
10	2.0	0.15
11	2.0	0.33
12	2.0	0.18
13	2.0	0.25
14	2.0	0.20

Letpadaung.
ADIT. NO. 4



Sample NO.	Sampling line m	Assay of total cu %
1	2.0m	0.30
2	2.0	0.28
3	2.0	0.03
4	2.0	0.05

Letpadaung.
ADIT. NO. 8

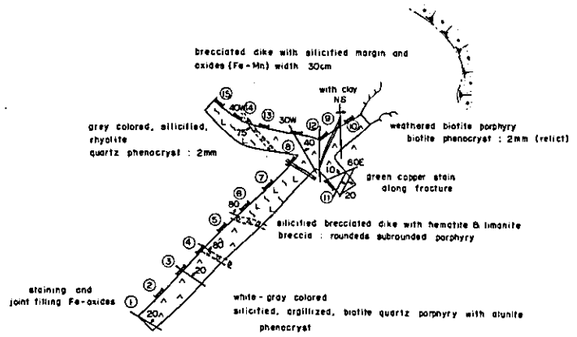


Sample NO.	Sampling line m	Assay of total cu %
1	1.0m	0.02
2	1.0	N.D.
3	1.0	tr
4	1.0	0.02
5	1.0	N.D
6	1.0	tr
7	1.0	0.02
8	1.0	0.05
9	1.0	0.02
10	1.0	0.12
11	1.0	0.02
12	1.0	0.05
13	1.0	0.02
14	1.0	0.02
15	1.0	0.05

LEGEND

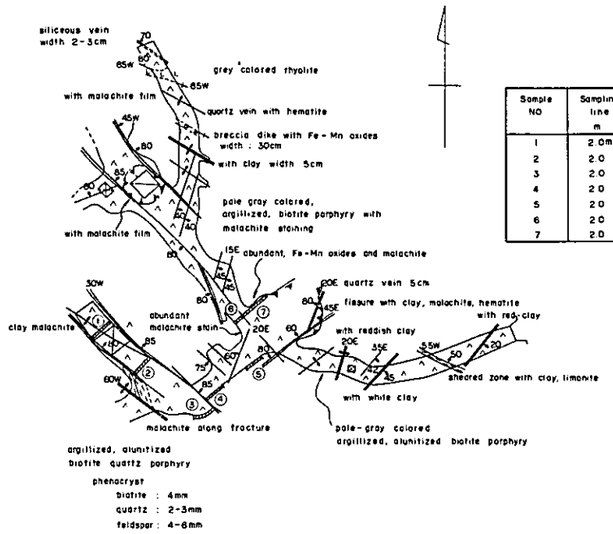
- Rhyolite
- Biotite porphyry
- Lapilli tuff
- Breccia
- Fissure and joint (60)
- Bedding (30)
- Sample No. and sample locality (②)

Letpadaung.
ADIT. NO. 9



Sample NO	Sampling line m	Assay of total cu %
1	1.0	tr
2	1.0	tr
3	1.0	tr
4	1.0	0.02
5	1.0	tr
6	1.0	tr
7	1.0	0.02
8	1.0	0.22
9	1.0	ND
10	1.0	0.07
11	1.0	0.10
12	1.0	0.66
13	1.0	0.12
14	1.0	0.07
15	1.0	tr

Letpadaung.
ADIT. NO. 10



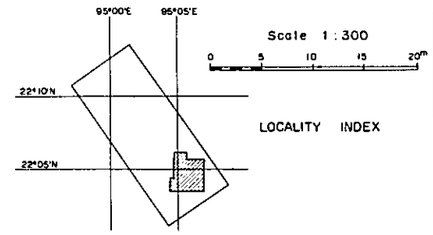
Sample NO	Sampling line m	Assay of total cu %
1	2.0m	0.18
2	2.0	0.30
3	2.0	0.13
4	2.0	0.20
5	2.0	1.90
6	2.0	0.45
7	2.0	1.38

PL. I-7

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

GEOLOGICAL MAPPING OF TUNNELS IN LETPADAUNG SECTOR

(SHEET 2)

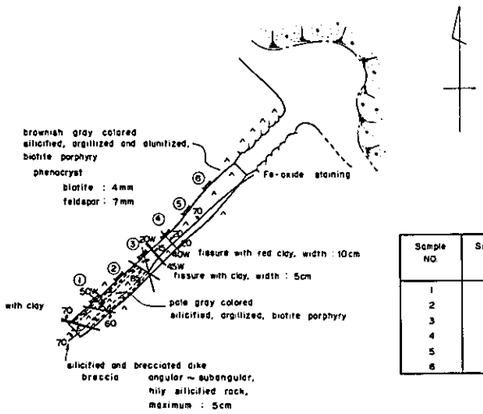


METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO, LTD.

Letpadaung.
ADIT. NO. 11



Sample NO	Sampling line m	Assay of total cu %
1	1.0m	0.04
2	1.0	0.02
3	1.0	tr
4	1.0	0.02
5	1.0	N.D
6	1.0	tr

Letpadaung.
ADIT. NO. 14

Sample NO	Sampling line m	Assay of total cu %
1	2.0m	2.48
2	2.0	0.98
3	2.0	0.08
4	2.0	0.03
5	2.0	0.05
6	2.0	0.03
7	2.0	0.03
8	2.0	0.03

LEGEND

- Rhyolite
- Biotite porphyry
- Lapilli tuff
- Breccia
- Fissure and joint
- Bedding
- Sample No. and sample locality

PL I-8-1

GEOLOGICAL SURVEY OF MONYWA AREA, UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

DDH No.1 (JS1)   Sheet 1

Total Length 150.4 m   Core Recovery 94.7 %

Location Sabedaung   Elevation 100.7 m

Direction 0   Inclination -90°

Date of Logging from 30·11·73 to 4·12·73

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD

Core log (Depth (m) / Particulars)

Depth (m)	Particulars	Alteration
0–3.0	non core	
3.0–11.7	brownish gray colored massive tuff with rock fragments 2 cm	
11.7–20.0	tuff breccia with essential rock fragments; leached zone with Fe-oxide staining (limonite); breccia size	kao
20.0–30.0	common : 2-5 cm, maximum: 10 cm; (27.0) lapilli tuff with essential rock fragments	Cu: C.c
30.4–40.0	brecciated biotite porphyry, feldspar : 4 mm; essential tuff breccia with pyrite ore fragments, breccia size common : 5 cm, maximum: 40 cm	kao
40.0–55.0	∠10° chalcocite bearing pyrite veinlet, width : 5 cm (43.2); pyrite-quartz druse with chalcocite; lapilli tuff	Cu: C.c
55.0–60.0	alunitized brecciated biotite porphyry with pyrite ore fragments, biotite phenocryst : 3 mm	
60.0–72.0	∠55° chalcocite coating pyrite-quartz veinlet, width 4 mm; pyrite-quartz veinlet with chalcocite ∠55° width : 2.0 cm; ∠10° width : 1.0 cm; ∠35° (72.0) width : 2 mm	ser
72.0–81.2	lapilli tuff with porphyritic rock fragments; brecciated biotite porphyry, biotite phenocryst : 3 mm	
81.2–90.0	∠50° lapilli tuff with pyrite ore fragments abundant; ∠70° chalcocite veinlt, width : 2 mm; pyrite ore fragments bearing brecciation	kao alu; Cu: C.c, en
90.0–100.0	with chalcocite and enargite abundant; lapilli tuff with pyrite ore fragments; pale gray colored biotite porphyry, biotite : 3 mm (relict), feldspar : 6 mm	
100.0–111.7	∠80° chalcocite coated pyrite vein; disseminations and stringers of chalcocite, pyrite	
111.7–120.0	brecciation with pyrite ore fragments; ∠50° (117.1) sheared; ∠60° pyrite-quartz veinlet with chalcocite	kao ser
120.0–130.0	biotite porphyry; (123.6) sheared lapilli tuff (129.1)	alu
130.0–140.0	alunitized biotite porphyry, feldspar : 5 mm; ∠80° pyrite veinlet, width 3 mm; ∠70° hematite along fracture	alu; hem
140.0–150.4	∠80° pyrite veinlet; fine grained tuff; biotite porphyry, biotite : 3-4 mm, feldspar : 7 mm	alu; hem
150.4	Bottom	

Alteration, Mineralization: arg / sil / py / cu

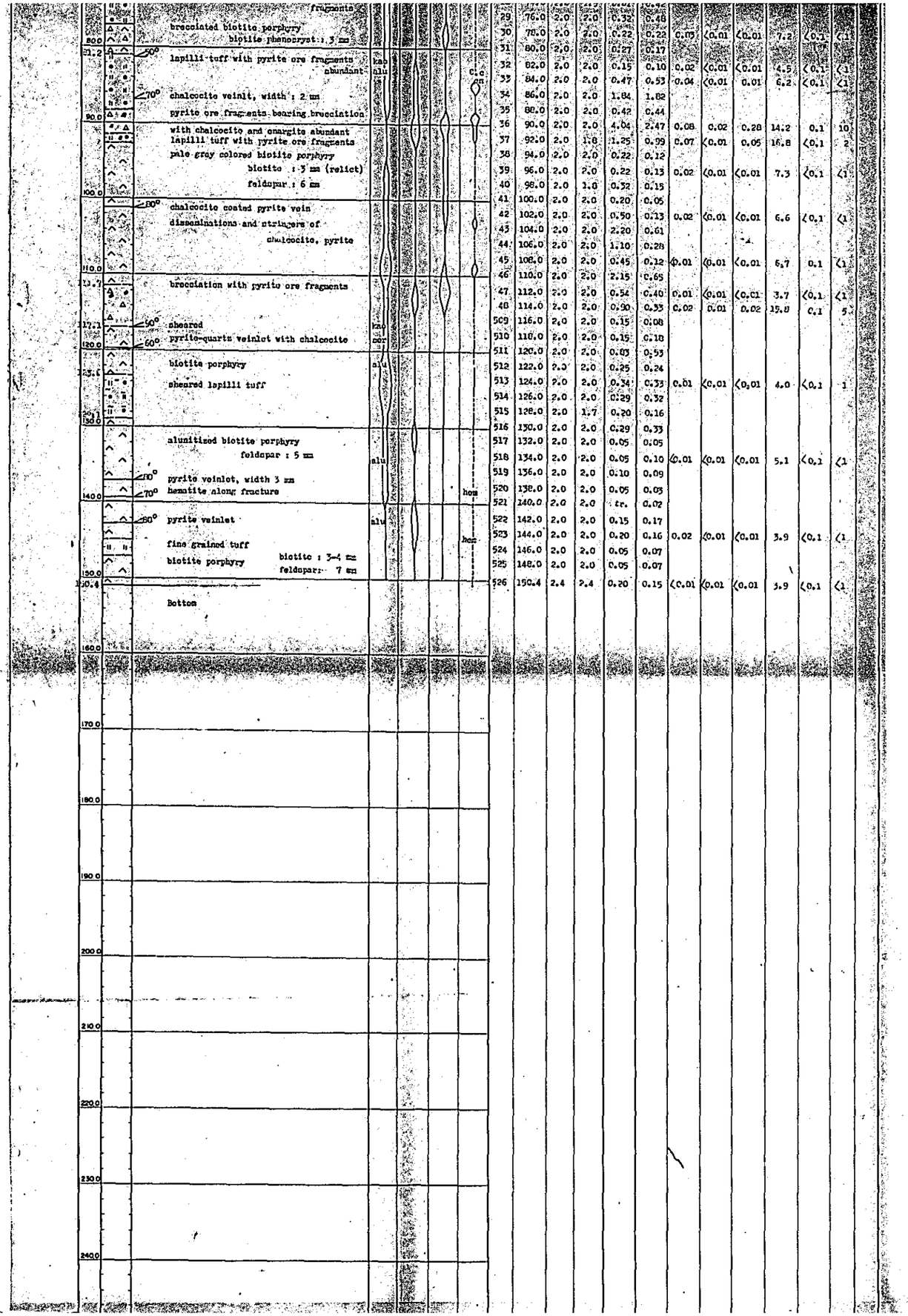
Result of Chemical Analysis

Sample No.	Depth m	Core Length	Sample Length	BURMA T-Cu %	JAPAN T-Cu	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t
	18.0										
C-1	20.0	2.0	2.0	0.95	0.94						
2	22.0	2.0	2.0	0.17	0.15	0.06	<0.01	<0.01	2.5	<0.1	<1
3	24.0	2.0	2.0	0.30	0.21	0.09	<0.01	<0.01	3.5	<0.1	<1
4	26.0	2.0	2.0	0.36	0.25						
5	28.0	2.0	2.0	0.15	0.08						
6	30.0	2.0	2.0	0.20	0.24	0.06	<0.01	<0.01	5.7	<0.1	<1
7	32.0	2.0	1.6	0.12	0.07	0.02	<0.01	<0.01	4.0	<0.1	<1
8	34.0	2.0	2.0	0.12	0.05						
9	36.0	2.0	1.5	0.09	0.06	0.02	<0.01	<0.01	3.9	<0.1	<1
10	38.0	2.0	1.8	0.06	0.05						
11	40.0	2.0	2.0	0.11	0.09						
12	42.0	2.0	2.0	0.09	0.13	0.05	<0.01	<0.01	3.8	<0.1	<1
13	44.0	2.0	2.0	0.55	0.60						
14	46.0	2.0	1.8	0.74	0.91						
15	48.0	2.0	2.0	0.21	0.21	0.05	<0.01	<0.01	4.2	<0.1	<1
16	50.0	2.0	1.9	0.35	0.48						
17	52.0	2.0	1.8	0.16	0.14	0.04	<0.01	<0.01	7.1	<0.1	<1
18	54.0	2.0	1.4	0.38	0.36	0.10	<0.01	<0.01	13.6	<0.1	<1
19	56.0	2.0	2.0	0.46	0.53						
20	58.0	2.0	2.0	1.08	0.87						
21	60.0	2.0	1.8	2.23	1.50	0.16	<0.01	0.05	13.1	<0.1	<1
22	62.0	2.0	1.6	2.47	1.77	0.19	<0.01	0.01	13.1	<0.1	<1
23	64.0	2.0	2.0	1.94	1.43						
24	66.0	2.0	2.0	1.00	0.85	0.16	<0.01	<0.01	14.9	<0.1	<1
25	68.0	2.0	2.0	1.10	1.11						
26	70.0	2.0	2.0	0.47	0.39						
27	72.0	2.0	2.0	0.12	0.31	0.06	<0.01	<0.01	10.1	<0.1	<1
20	74.0	2.0	1.5	0.61	0.42						
29	76.0	2.0	2.0	0.32	0.48						
30	78.0	2.0	2.0	0.22	0.22	0.03	<0.01	<0.01	7.2	<0.1	<1
31	80.0	2.0	2.0	0.27	0.17						
32	82.0	2.0	2.0	0.15	0.10	0.02	<0.01	<0.01	4.5	<0.1	<1
33	84.0	2.0	2.0	0.47	0.53	0.04	<0.01	0.01	6.2	<0.1	<1
34	86.0	2.0	2.0	1.84	1.82						
35	88.0	2.0	2.0	0.42	0.44						
36	90.0	2.0	2.0	4.04	2.47	0.08	0.02	0.28	14.2	0.1	10
37	92.0	2.0	1.8	1.25	0.99	0.07	<0.01	0.05	16.8	<0.1	2
38	94.0	2.0	2.0	0.22	0.12						
39	96.0	2.0	2.0	0.22	0.13	0.02	<0.01	<0.01	7.3	<0.1	<1
40	98.0	2.0	1.0	0.32	0.15						
41	100.0	2.0	2.0	0.20	0.05						
42	102.0	2.0	2.0	0.50	0.13	0.02	<0.01	<0.01	6.6	<0.1	<1
43	104.0	2.0	2.0	2.20	0.61						
44	106.0	2.0	2.0	1.10	0.28						
45	108.0	2.0	2.0	0.45	0.12	<0.01	<0.01	<0.01	6.7	0.1	<1
46	110.0	2.0	2.0	2.15	0.65						
47	112.0	2.0	2.0	0.54	0.40	0.01	<0.01	<0.01	3.7	<0.1	<1
48	114.0	2.0	2.0	0.90	0.33	0.02	0.01	0.02	15.8	0.1	5
509	116.0	2.0	2.0	0.15	0.08						
510	118.0	2.0	2.0	0.15	0.18						
511	120.0	2.0	2.0	0.83	0.53						
512	122.0	2.0	2.0	0.25	0.24						
513	124.0	2.0	2.0	0.34	0.33	0.01	<0.01	<0.01	4.0	<0.1	1
514	126.0	2.0	2.0	0.29	0.32						
515	128.0	2.0	1.7	0.20	0.16						
516	130.0	2.0	2.0	0.29	0.33						
517	132.0	2.0	2.0	0.05	0.05						
518	134.0	2.0	2.0	0.05	0.10	<0.01	<0.01	<0.01	5.1	<0.1	<1
519	136.0	2.0	2.0	0.10	0.09						
520	138.0	2.0	2.0	0.05	0.03						
521	140.0	2.0	2.0	tr.	0.02						
522	142.0	2.0	2.0	0.15	0.17						
523	144.0	2.0	2.0	0.20	0.16	0.02	<0.01	<0.01	3.9	<0.1	<1
524	146.0	2.0	2.0	0.05	0.07						
525	148.0	2.0	2.0	0.05	0.07						
526	150.4	2.4	2.4	0.20	0.15	<0.01	<0.01	<0.01	3.9	<0.1	<1

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia
- Rhyolite
- Porphyry: hornblende-biotite porphyry, biotite porphyry, quartz-biotite porphyry
- Brecciation
- ∠30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION



29	76.0	2.0	2.0	0.32	0.48								
30	78.0	2.0	2.0	0.22	0.22	0.03	<0.01	<0.01	7.2	<0.1	<1		
31	80.0	2.0	2.0	0.27	0.17								
32	82.0	2.0	2.0	0.15	0.10	0.02	<0.01	<0.01	4.5	<0.1	<1		
33	84.0	2.0	2.0	0.47	0.53	0.04	<0.01	0.01	6.2	<0.1	<1		
34	86.0	2.0	2.0	1.84	1.82								
35	88.0	2.0	2.0	0.42	0.44								
36	90.0	2.0	2.0	4.04	2.47	0.08	0.02	0.28	14.2	0.1	10		
37	92.0	2.0	1.8	1.25	0.99	0.07	<0.01	0.05	16.8	<0.1	2		
38	94.0	2.0	2.0	0.22	0.12								
39	96.0	2.0	2.0	0.22	0.13	0.02	<0.01	<0.01	7.3	<0.1	<1		
40	98.0	2.0	1.8	0.32	0.15								
41	100.0	2.0	2.0	0.20	0.05								
42	102.0	2.0	2.0	0.50	0.13	0.02	<0.01	<0.01	6.6	<0.1	<1		
43	104.0	2.0	2.0	2.20	0.61								
44	106.0	2.0	2.0	1.10	0.28								
45	108.0	2.0	2.0	0.45	0.12	<0.01	<0.01	<0.01	6.7	0.1	<1		
46	110.0	2.0	2.0	2.15	0.65								
47	112.0	2.0	2.0	0.54	0.40	0.01	<0.01	<0.01	3.7	<0.1	<1		
48	114.0	2.0	2.0	0.90	0.33	0.02	0.01	0.02	15.8	0.1	5		
509	116.0	2.0	2.0	0.15	0.08								
510	118.0	2.0	2.0	0.15	0.18								
511	120.0	2.0	2.0	0.03	0.53								
512	122.0	2.0	2.0	0.25	0.24								
513	124.0	2.0	2.0	0.34	0.33	0.01	<0.01	<0.01	4.0	<0.1	1		
514	126.0	2.0	2.0	0.29	0.32								
515	128.0	2.0	1.7	0.20	0.16								
516	130.0	2.0	2.0	0.29	0.33								
517	132.0	2.0	2.0	0.05	0.05								
518	134.0	2.0	2.0	0.05	0.10	<0.01	<0.01	<0.01	5.1	<0.1	<1		
519	136.0	2.0	2.0	0.10	0.09								
520	138.0	2.0	2.0	0.05	0.03								
521	140.0	2.0	2.0	tr.	0.02								
522	142.0	2.0	2.0	0.15	0.17								
523	144.0	2.0	2.0	0.20	0.16	0.02	<0.01	<0.01	3.9	<0.1	<1		
524	146.0	2.0	2.0	0.05	0.07								
525	148.0	2.0	2.0	0.05	0.07								
526	150.4	2.4	2.4	0.20	0.15	<0.01	<0.01	<0.01	3.9	<0.1	<1		

LEGEND

- Mudstone
- *Sandstone*
- Tuff, Lapilli tuff, Tuff breccia,
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; *quartz – biotite porphyry*
- Brecciation
- 30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

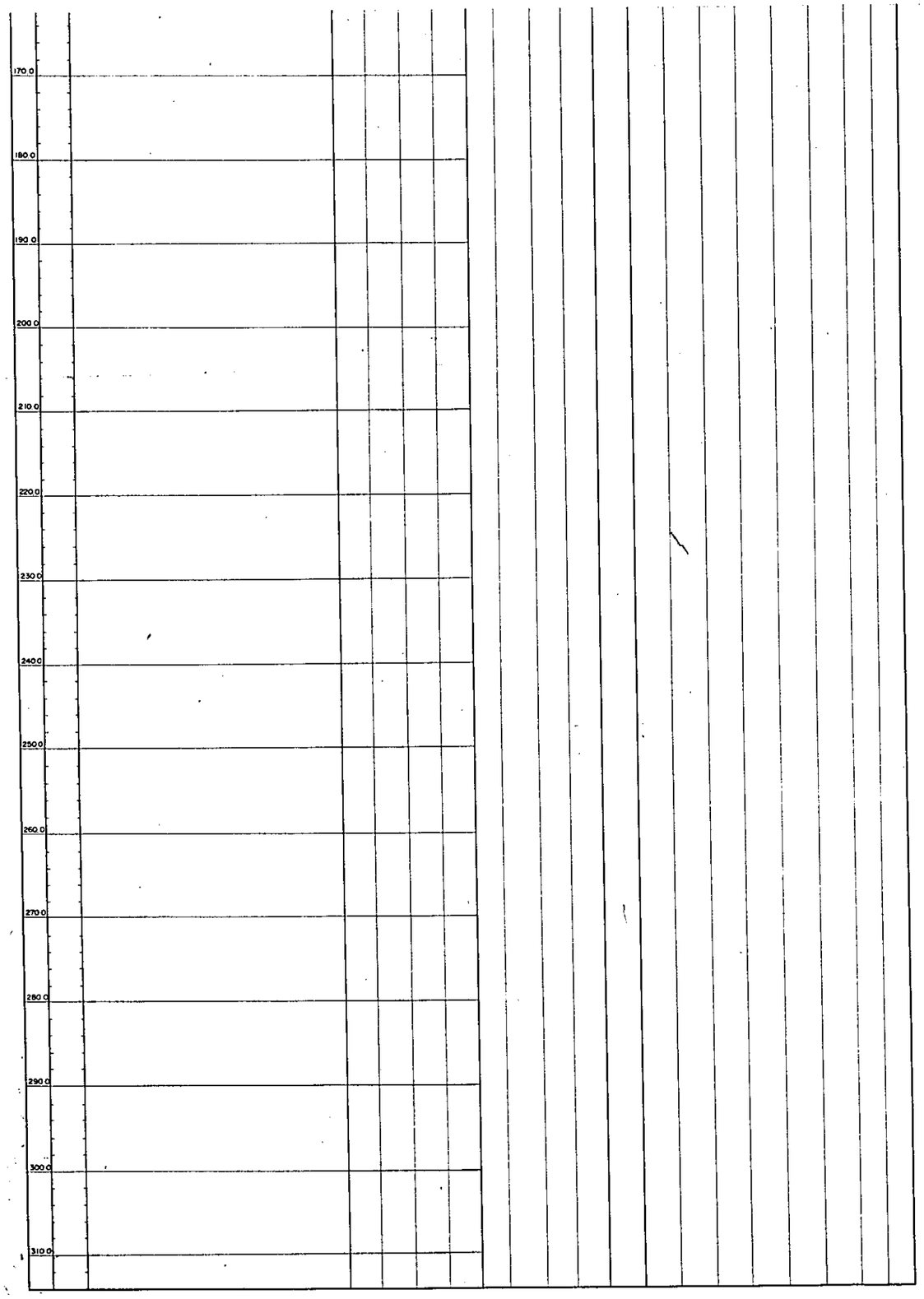
	argillization *	silicification	pyritization	mineralization
fresh		SiO_2 < 55 %	Fe_2 < 1 %	Cu < 0.2 %
weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 05 %	
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 09 %	
strong	> 80 %	> 10 %	> 1 %	

* fresh : unaltered
weak : part of feldspar phenocrysts changed into clay minerals
medium : *almost all the feldspar phenocrysts* changed into clay minerals
strong : not only feldspar phenocrysts but groundmass changed into clay minerals

(by field observation)

ABBREVIATIONS

arg.	Argillization
sil.	*Silicification*
py.	Pyritization
kao.	Kaolinitization
ser.	Sericitization
ch.	Chloritization
alu.	Alunitization
c.c.p.	Chalcopyrite
c.c	Chalcocite
en.	Enargite
dis.	Dissemination
v.	Veinlet
w.	Width



weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

X fresh : unaltered
weak : part of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but groundmass changed into clay minerals

(by field observation)

ABBREVIATIONS

arg. : Argillization
sil : Silicification
py. : Pyritization

kao : Kaolinitization
ser : Sericitization
ch : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c : Chalcocite
en : Enargite
dis : Dissemination
v. : Veinlet
w : Width

PL I-8-2

GEOLOGICAL SURVEY OF
MONYWA AREA. UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

DDH No. 2 (JS 2) Sheet 1

Total Length 151.1 m Core Recovery 97.2%

Location Sabedaung Elevation 120.2 m

Direction O Inclination −90°

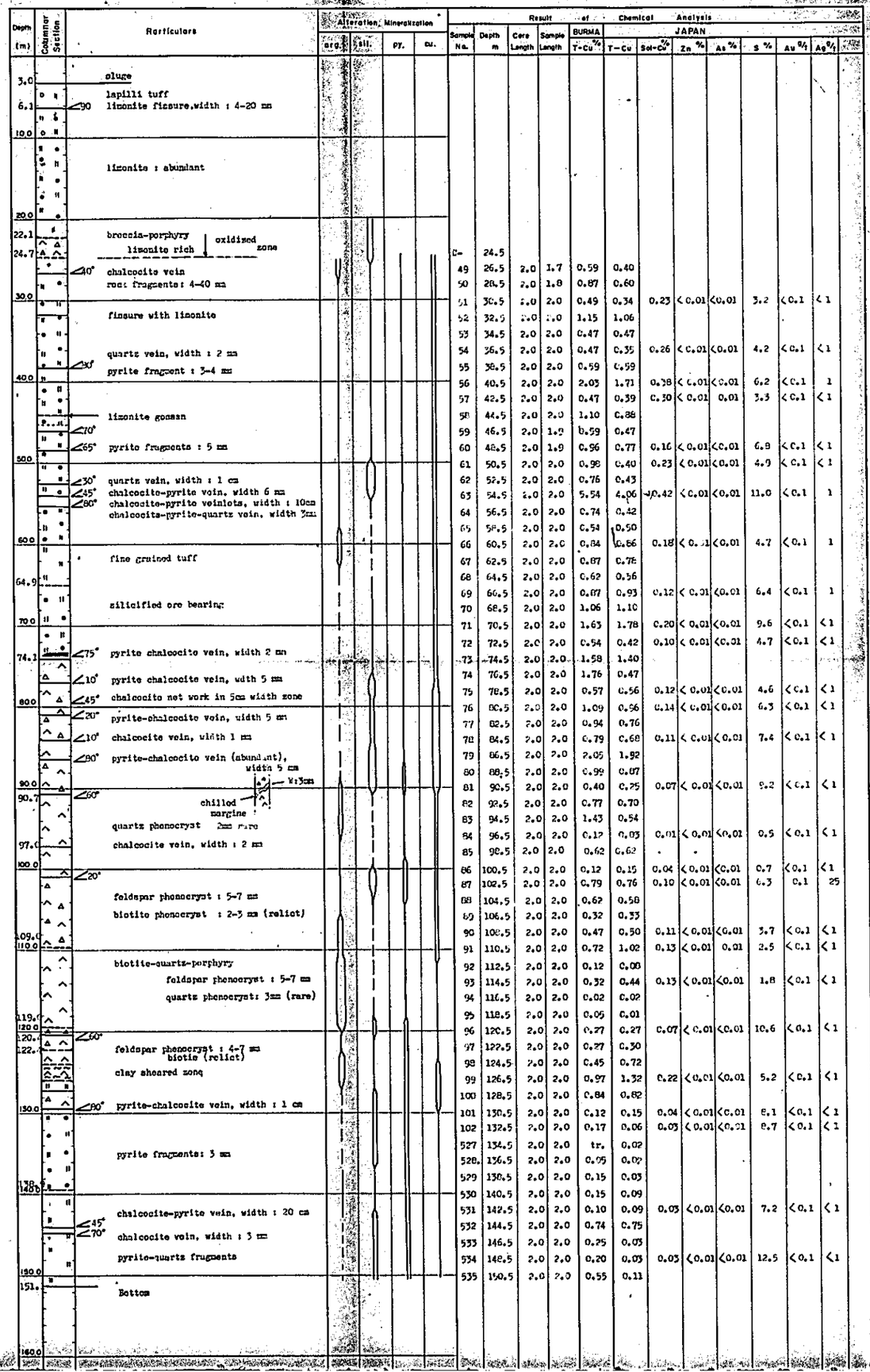
Date of Logging from 3·12·73' to 9·12·73'

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD



Result of Chemical Analysis

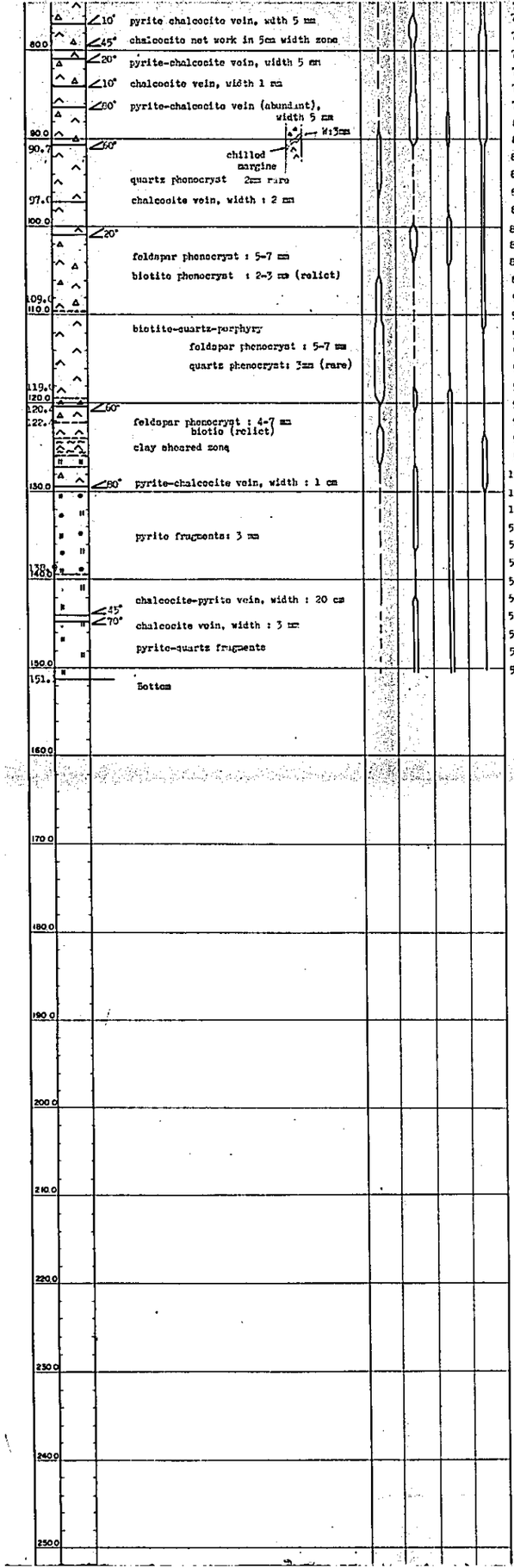
Sample No.	Depth m	Core Length	Sample Length	BURMA T-Cu %	JAPAN T-Cu	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t
C-	24.5										
49	26.5	2.0	1.7	0.59	0.40						
50	28.5	2.0	1.8	0.87	0.60						
51	30.5	2.0	2.0	0.49	0.34	0.23	< 0.01	< 0.01	3.2	< 0.1	< 1
52	32.5	2.0	2.0	1.15	1.06						
53	34.5	2.0	2.0	0.47	0.47						
54	36.5	2.0	2.0	0.47	0.35	0.26	< 0.01	< 0.01	4.2	< 0.1	< 1
55	38.5	2.0	2.0	0.59	0.59						
56	40.5	2.0	2.0	2.03	1.71	0.38	< 0.01	< 0.01	6.2	< 0.1	1
57	42.5	2.0	2.0	0.47	0.39	0.30	< 0.01	0.01	3.3	< 0.1	< 1
58	44.5	2.0	2.0	1.10	0.88						
59	46.5	2.0	1.9	0.59	0.47						
60	48.5	2.0	1.9	0.96	0.77	0.16	< 0.01	< 0.01	6.8	< 0.1	< 1
61	50.5	2.0	2.0	0.98	0.40	0.23	< 0.01	< 0.01	4.9	< 0.1	< 1
62	52.5	2.0	2.0	0.76	0.43						
63	54.5	2.0	2.0	5.54	4.06	0.42	< 0.01	< 0.01	11.0	< 0.1	1
64	56.5	2.0	2.0	0.74	0.42						
65	58.5	2.0	2.0	0.54	0.50						
66	60.5	2.0	2.0	0.84	0.66	0.18	< 0.01	< 0.01	4.7	< 0.1	1
67	62.5	2.0	2.0	0.87	0.78						
68	64.5	2.0	2.0	0.62	0.56						
69	66.5	2.0	2.0	0.87	0.93	0.12	< 0.01	< 0.01	6.4	< 0.1	1
70	68.5	2.0	2.0	1.06	1.10						
71	70.5	2.0	2.0	1.63	1.78	0.20	< 0.01	< 0.01	9.6	< 0.1	< 1
72	72.5	2.0	2.0	0.54	0.42	0.10	< 0.01	< 0.01	4.7	< 0.1	< 1
73	74.5	2.0	2.0	1.58	1.40						
74	76.5	2.0	2.0	1.76	0.47						
75	78.5	2.0	2.0	0.57	0.56	0.12	< 0.01	< 0.01	4.6	< 0.1	< 1
76	80.5	2.0	2.0	1.09	0.96	0.14	< 0.01	< 0.01	6.3	< 0.1	< 1
77	82.5	2.0	2.0	0.94	0.76						
78	84.5	2.0	2.0	0.79	0.68	0.11	< 0.01	< 0.01	7.4	< 0.1	< 1
79	86.5	2.0	2.0	2.05	1.92						
80	88.5	2.0	2.0	0.99	0.87						
81	90.5	2.0	2.0	0.40	0.25	0.07	< 0.01	< 0.01	9.2	< 0.1	< 1
82	92.5	2.0	2.0	0.77	0.70						
83	94.5	2.0	2.0	1.43	0.54						
84	96.5	2.0	2.0	0.17	0.03	0.01	< 0.01	< 0.01	0.5	< 0.1	< 1
85	98.5	2.0	2.0	0.62	0.62						
86	100.5	2.0	2.0	0.12	0.15	0.04	< 0.01	< 0.01	0.7	< 0.1	< 1
87	102.5	2.0	2.0	0.79	0.76	0.10	< 0.01	< 0.01	6.3	0.1	25
88	104.5	2.0	2.0	0.62	0.58						
89	106.5	2.0	2.0	0.32	0.33						
90	108.5	2.0	2.0	0.47	0.50	0.11	< 0.01	< 0.01	3.7	< 0.1	< 1
91	110.5	2.0	2.0	0.72	1.02	0.13	< 0.01	0.01	2.5	< 0.1	< 1
92	112.5	2.0	2.0	0.12	0.00						
93	114.5	2.0	2.0	0.32	0.44	0.13	< 0.01	< 0.01	1.8	< 0.1	< 1
94	116.5	2.0	2.0	0.02	0.02						
95	118.5	2.0	2.0	0.05	0.01						
96	120.5	2.0	2.0	0.27	0.27	0.07	< 0.01	< 0.01	10.6	< 0.1	< 1
97	122.5	2.0	2.0	0.27	0.30						
98	124.5	2.0	2.0	0.45	0.72						
99	126.5	2.0	2.0	0.97	1.32	0.22	< 0.01	< 0.01	5.2	< 0.1	< 1
100	128.5	2.0	2.0	0.84	0.82						
101	130.5	2.0	2.0	0.12	0.15	0.04	< 0.01	< 0.01	0.1	< 0.1	< 1
102	132.5	2.0	2.0	0.17	0.06	0.03	< 0.01	< 0.01	0.7	< 0.1	< 1
527	134.5	2.0	2.0	tr.	0.02						
528	136.5	2.0	2.0	0.05	0.02						
529	138.5	2.0	2.0	0.15	0.03						
530	140.5	2.0	2.0	0.15	0.09						
531	142.5	2.0	2.0	0.10	0.09	0.03	< 0.01	< 0.01	7.2	< 0.1	< 1
532	144.5	2.0	2.0	0.74	0.75						
533	146.5	2.0	2.0	0.25	0.03						
534	148.5	2.0	2.0	0.20	0.03	0.03	< 0.01	< 0.01	12.5	< 0.1	< 1
535	150.5	2.0	2.0	0.55	0.11						

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane, intrusive boundory etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	cu
	fresh	< 55 %	< 1 %	< 0.2 %



74	76.5	2.0	2.0	1.76	0.47								
75	78.5	2.0	2.0	0.57	0.56	0.12	< 0.01	< 0.01	4.6	< 0.1	< 1		
76	80.5	2.0	2.0	1.09	0.96	0.14	< 0.01	< 0.01	6.3	< 0.1	< 1		
77	82.5	2.0	2.0	0.94	0.76								
78	84.5	2.0	2.0	0.79	0.66	0.11	< 0.01	< 0.01	7.4	< 0.1	< 1		
79	86.5	2.0	2.0	2.05	1.92								
80	88.5	2.0	2.0	0.99	0.87								
81	90.5	2.0	2.0	0.40	0.25	0.07	< 0.01	< 0.01	9.2	< 0.1	< 1		
82	92.5	2.0	2.0	0.77	0.70								
83	94.5	2.0	2.0	1.43	0.54								
84	96.5	2.0	2.0	0.12	0.03	0.01	< 0.01	< 0.01	0.5	< 0.1	< 1		
85	98.5	2.0	2.0	0.62	0.62	.	.						
86	100.5	2.0	2.0	0.12	0.15	0.04	< 0.01	< 0.01	0.7	< 0.1	< 1		
87	102.5	2.0	2.0	0.79	0.76	0.10	< 0.01	< 0.01	6.3	0.1	25		
88	104.5	2.0	2.0	0.62	0.58								
89	106.5	2.0	2.0	0.32	0.33								
90	108.5	2.0	2.0	0.47	0.50	0.11	< 0.01	< 0.01	3.7	< 0.1	< 1		
91	110.5	2.0	2.0	0.72	1.02	0.13	< 0.01	0.01	2.5	< 0.1	< 1		
92	112.5	2.0	2.0	0.12	0.08								
93	114.5	2.0	2.0	0.32	0.44	0.13	< 0.01	< 0.01	1.8	< 0.1	< 1		
94	116.5	2.0	2.0	0.02	0.02								
95	118.5	2.0	2.0	0.05	0.01								
96	120.5	2.0	2.0	0.27	0.27	0.07	< 0.01	< 0.01	10.6	< 0.1	< 1		
97	122.5	2.0	2.0	0.27	0.30								
98	124.5	2.0	2.0	0.45	0.72								
99	126.5	2.0	2.0	0.97	1.32	0.22	< 0.01	< 0.01	5.2	< 0.1	< 1		
100	128.5	2.0	2.0	0.84	0.82								
101	130.5	2.0	2.0	0.12	0.15	0.04	< 0.01	< 0.01	8.1	< 0.1	< 1		
102	132.5	2.0	2.0	0.17	0.06	0.03	< 0.01	< 0.01	8.7	< 0.1	< 1		
527	134.5	2.0	2.0	tr.	0.02								
528	136.5	2.0	2.0	0.05	0.02								
529	138.5	2.0	2.0	0.15	0.03								
530	140.5	2.0	2.0	0.15	0.09								
531	142.5	2.0	2.0	0.10	0.09	0.03	< 0.01	< 0.01	7.2	< 0.1	< 1		
532	144.5	2.0	2.0	0.74	0.75								
533	146.5	2.0	2.0	0.25	0.03								
534	148.5	2.0	2.0	0.20	0.03	0.03	< 0.01	< 0.01	12.5	< 0.1	< 1		
535	150.5	2.0	2.0	0.55	0.11								

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia,
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures, (bedding plane, intrusive boundary, etc)

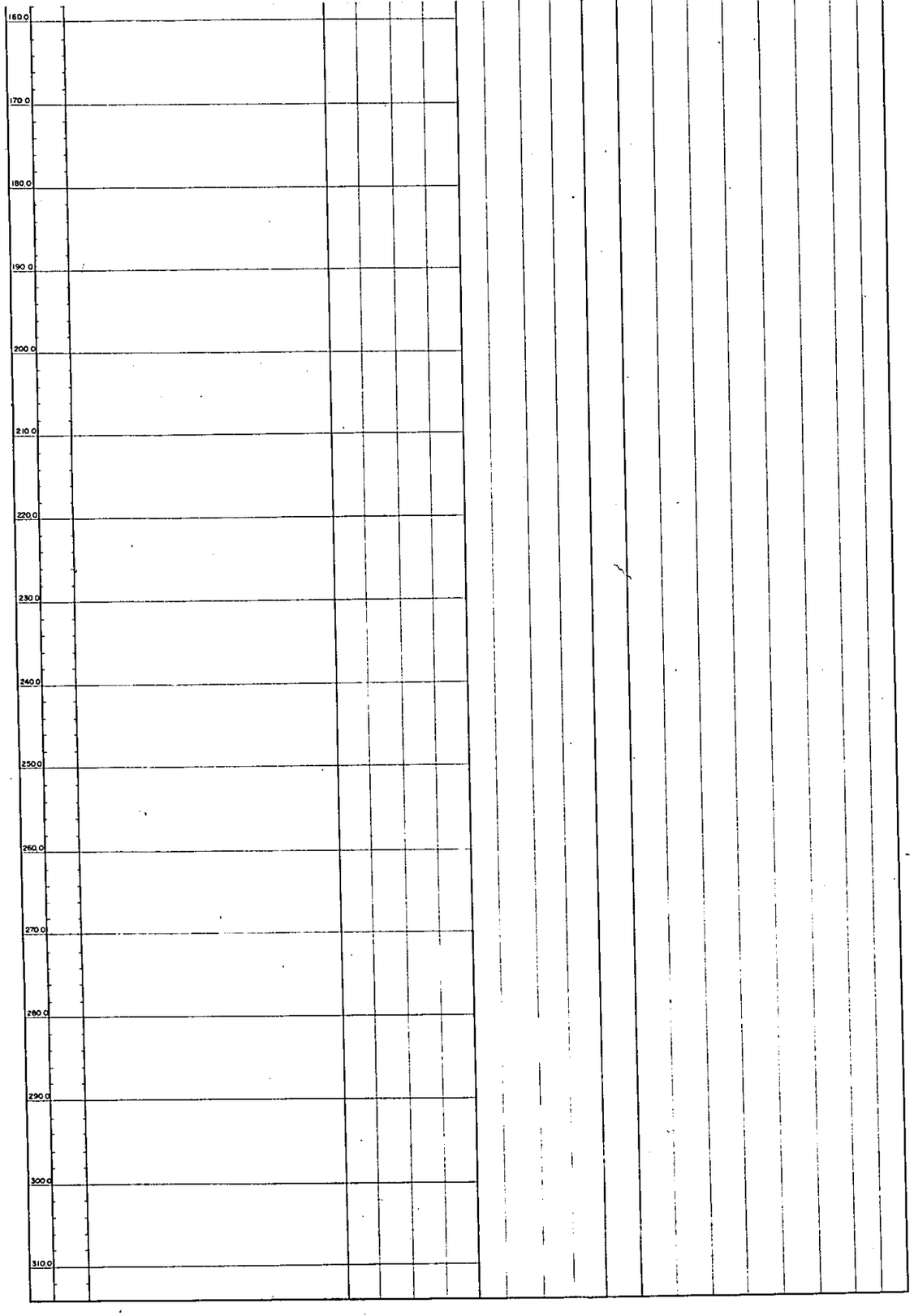
DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals "
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil : Silicification
- py : Pyritization
- kao. : Kaolinitization
- ser : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en : Engarite
- dis. : Dissemination
- v. : Veinlet
- w. : Width



		SiO_2	FeS_2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.
(by field observation)

ABBREVIATIONS

arg.	Argillization
sil	Silicification
py	Pyritization
kao	Kaolinitization
ser	Sericitization
ch.	Chloritization
alu.	Alunitization
c.c.p.	Chalcopyrite
c.c	Chalcocite
en	Engargite
dis	Dissemination
v	Veinlet
w.	Width

PL I-8-3

GEOLOGICAL SURVEY OF
MONYWA AREA, UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

DDH No 3 (JS 3) Sheet 1

Total Length 150.7 m Core Recovery 98.9%

Location Sabedaung Elevation 120.4 m

Direction O Inclination −90°

Date of Logging from 7·12·73' to 9·12·73'

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD

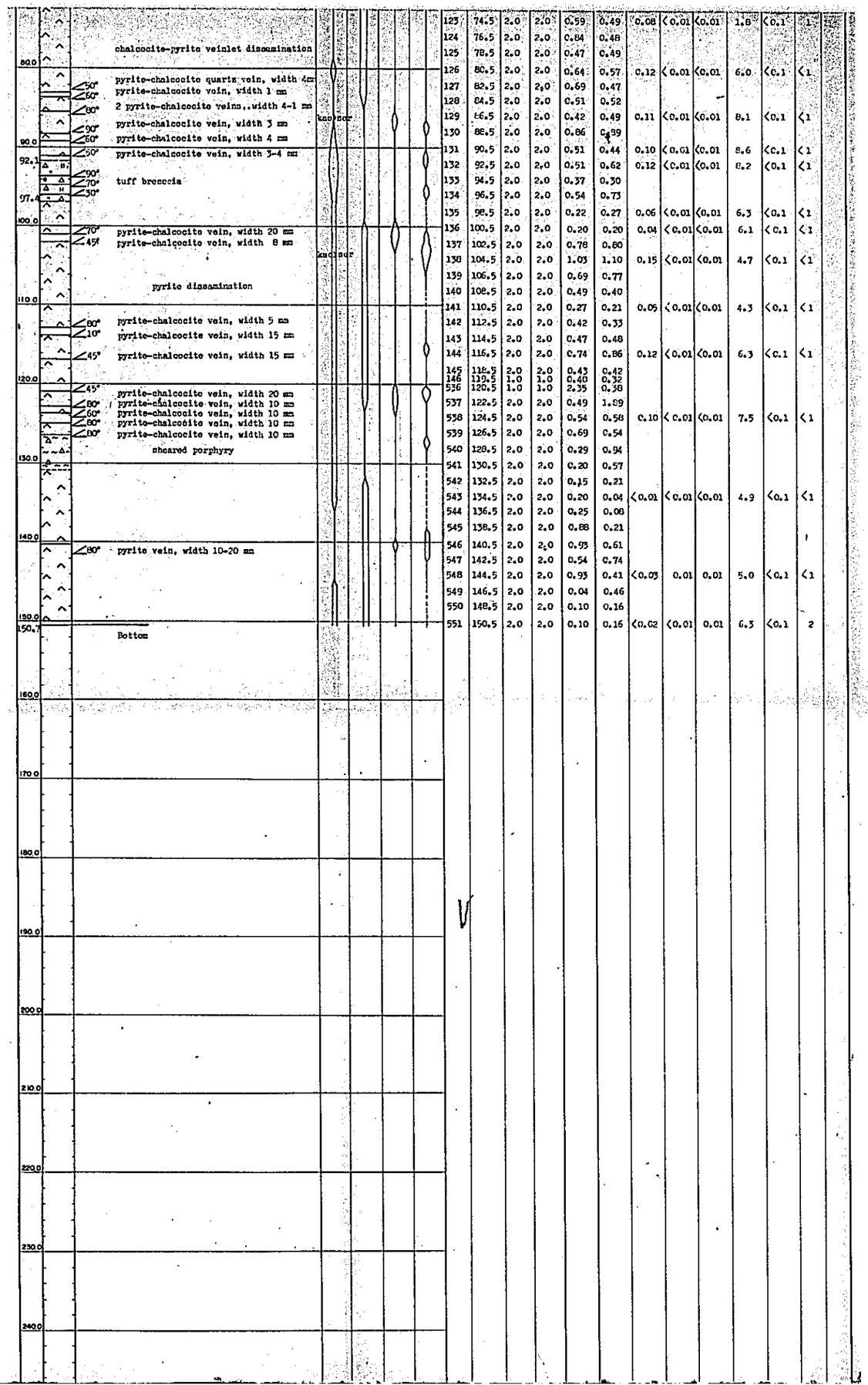
Depth (m)	Columnar Section	Particulars	Alteration Mineralization arg	sil	py	cu	Sample No.	Depth m	Core Length	Sample Length	Result of Chemical Analysis BURMA T-Cu %	JAPAN T-Cu	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t
1.6		non core																
		biotite-feldspar-porphyry quartz is not observed																
10.0																		
		a little quartz feldspar phenocryst 5-4 mm																
20.0																		
		oxidized zone																
30.0																		
32.5		light gray biotite-feldspar-porphyry biotite phenocryst : 1-4 mm feldspar phenocryst: 3-5 mm quartz phenocryst 1mm (rare)					C-	32.5										
							103	34.5	2.0	2.0	0.62	0.54						
	50°						104	36.5	2.0	2.0	1.21	1.12						
							105	38.5	2.0	2.0	0.89	0.60	0.12	<0.01	<0.01	2.6	<0.1	1
40.0							106	40.5	2.0	2.0	0.66	0.70	0.10	<0.01	<0.01	1.6	<0.1	1
	70°	pyrite-chalcocite vein, width 1 cm					107	42.5	2.0	2.0	0.47	0.41						
	60°						108	44.5	2.0	2.0	0.20	0.22	0.06	<0.01	<0.01	0.8	<0.1	<1
	10°	pyrite-chalcocite vein, width 3 cm					109	46.5	2.0	2.0	2.25	2.89						
50.0							110	48.5	2.0	2.0	0.59	0.32						
	70°	pyrite-chalcocite vein, width 1 cm					111	50.5	2.0	2.0	1.75	1.36	0.15	<0.01	<0.01	2.8	<0.1	<1
							112	52.5	2.0	2.0	0.32	0.22						
							113	54.5	2.0	2.0	0.47	0.35						
	30°	pyrite-quartz vein, width 3 mm					114	56.5	2.0	2.0	0.32	0.29	0.07	<0.01	<0.01	0.8	<0.1	<1
	40°	pyrite-chalcocite vein					115	58.5	2.0	2.0	1.43	1.16						
60.0							116	60.5	2.0	2.0	1.51	1.57	0.15	<0.01	<0.01	5.8	<0.1	<1
		biotite-feldspar-porphyry feldspar phenocryst : 3-4 mm biotite phenocryst : 3-4 mm quartz phenocryst : 1 mm					117	62.5	2.0	2.0	0.47	0.39	0.07	<0.01	<0.21	2.2	<0.1	<1
							118	64.5	2.0	2.0	0.42	0.61						
							119	66.5	2.0	2.0	1.09	1.07						
70.0							120	68.5	2.0	2.0	1.29	1.26	0.15	<0.01	<0.01	4.0	<0.1	<1
							121	70.5	2.0	2.0	0.79	0.54	0.09	<0.01	<0.01	0.9	<0.1	<1
							122	72.5	2.0	2.0	0.62	0.37						
		chalcocite-pyrite veinlet dissamination					123	74.5	2.0	2.0	0.59	0.49	0.08	<0.01	<0.01	1.8	<0.1	1
							124	76.5	2.0	2.0	0.84	0.48						
80.0							125	78.5	2.0	2.0	0.47	0.49						
	50°	pyrite-chalcocite quartz vein, width 4 mm					126	80.5	2.0	2.0	0.64	0.57	0.12	<0.01	<0.01	6.0	<0.1	<1
	60°	pyrite-chalcocite vein, width 1 mm					127	82.5	2.0	2.0	0.69	0.47						
							128	84.5	2.0	2.0	0.51	0.52						
	80°	2 pyrite-chalcocite veins, width 4-1 mm					129	86.5	2.0	2.0	0.42	0.49	0.11	<0.01	<0.01	8.1	<0.1	<1
		pyrite-chalcocite vein, width 3 mm					130	88.5	2.0	2.0	0.86	0.89						
	90°						131	90.5	2.0	2.0	0.51	0.44	0.10	<0.01	<0.01	5.6	<0.1	<1
90.0	60°	pyrite-chalcocite vein, width 4 cm					132	92.5	2.0	2.0	0.51	0.62	0.12	<0.01	<0.01	6.2	<0.1	<1
92.1	50°	pyrite-chalcocite vein, width 3-4 mm					133	94.5	2.0	2.0	0.37	0.30						
	90°						134	96.5	2.0	2.0	0.54	0.73						
	70°	tuff breccia					135	98.5	2.0	2.0	0.22	0.27	0.06	<0.01	<0.01	6.3	<0.1	<1
97.4	30°						136	100.5	2.0	2.0	0.20	0.20	0.04	<0.01	<0.01	6.1	<0.1	<1
100.0							137	102.5	2.0	2.0	0.78	0.80						
	70°	pyrite-chalcocite vein, width 20 mm					138	104.5	2.0	2.0	1.03	1.10	0.15	<0.01	<0.01	4.7	<0.1	<1
	45°	pyrite-chalcocite vein, width 8 mm					139	106.5	2.0	2.0	0.69	0.77						
							140	108.5	2.0	2.0	0.49	0.40						
		pyrite dissamination					141	110.5	2.0	2.0	0.27	0.21	0.05	<0.01	<0.01	4.3	<0.1	<1
110.0							142	112.5	2.0	2.0	0.42	0.33						
	80°	pyrite-chalcocite vein, width 5 mm					143	114.5	2.0	2.0	0.47	0.48						
	10°	pyrite-chalcocite vein, width 15 mm					144	116.5	2.0	2.0	0.74	0.86	0.12	<0.01	<0.01	6.3	<0.1	<1
	45°	pyrite-chalcocite vein, width 15 cm					145	118.5	2.0	2.0	0.43	0.42						
							146	119.5	1.0	1.0	0.40	0.32						
120.0							536	120.5	1.0	1.0	2.35	0.38						
	65°	pyrite-chalcocite vein, width 20 mm					537	122.5	2.0	2.0	0.49	1.59						
	80°	pyrite-chalcocite vein, width 10 mm					538	124.5	2.0	2.0	0.54	0.58	0.10	<0.01	<0.01	7.5	<0.1	<1
	60°	pyrite-chalcocite vein, width 10 mm					539	126.5	2.0	2.0	0.69	0.54						
	80°	pyrite-chalcocite vein, width 10 mm					540	128.5	2.0	2.0	0.29	0.94						
		sheared porphyry					541	130.5	2.0	2.0	0.20	0.57						
130.0							542	132.5	2.0	2.0	0.15	0.21						
							543	134.5	2.0	2.0	0.20	0.04	<0.01	<0.01	<0.01	4.9	<0.1	<1
							544	136.5	2.0	2.0	0.25	0.08						
							545	138.5	2.0	2.0	0.88	0.21						
140.0							546	140.5	2.0	2.0	0.93	0.61						
	80°	pyrite vein, width 10-20 mm					547	142.5	2.0	2.0	0.54	0.74						
							548	144.5	2.0	2.0	0.93	0.41	<0.03	0.01	0.01	5.0	<0.1	<1
							549	146.5	2.0	2.0	0.04	0.46						
150.0							550	148.5	2.0	2.0	0.10	0.16						
150.7		Bottom					551	150.5	2.0	2.0	0.10	0.16	<0.02	<0.01	0.01	6.3	<0.1	2

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia.
- Rhyolite
- Porphyry — hornblende − biotite porphyry; biotite porphyry; quartz − biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
strong				
moderate				
weak				



123	74.5	2.0	2.0	0.59	0.49	0.08	<0.01	<0.01	1.8	<0.1	<1	
124	76.5	2.0	2.0	0.84	0.48							
125	78.5	2.0	2.0	0.47	0.49							
126	80.5	2.0	2.0	0.64	0.57	0.12	<0.01	<0.01	6.0	<0.1	<1	
127	82.5	2.0	2.0	0.69	0.47							
128	84.5	2.0	2.0	0.51	0.52							
129	86.5	2.0	2.0	0.42	0.49	0.11	<0.01	<0.01	8.1	<0.1	<1	
130	88.5	2.0	2.0	0.86	0.89							
131	90.5	2.0	2.0	0.51	0.44	0.10	<0.01	<0.01	8.6	<0.1	<1	
132	92.5	2.0	2.0	0.51	0.62	0.12	<0.01	<0.01	8.2	<0.1	<1	
133	94.5	2.0	2.0	0.37	0.30							
134	96.5	2.0	2.0	0.54	0.73							
135	98.5	2.0	2.0	0.22	0.27	0.06	<0.01	<0.01	6.3	<0.1	<1	
136	100.5	2.0	2.0	0.20	0.20	0.04	<0.01	<0.01	6.1	<0.1	<1	
137	102.5	2.0	2.0	0.78	0.80							
138	104.5	2.0	2.0	1.03	1.10	0.15	<0.01	<0.01	4.7	<0.1	<1	
139	106.5	2.0	2.0	0.69	0.77							
140	108.5	2.0	2.0	0.49	0.40							
141	110.5	2.0	2.0	0.27	0.21	0.05	<0.01	<0.01	4.3	<0.1	<1	
142	112.5	2.0	2.0	0.42	0.33							
143	114.5	2.0	2.0	0.47	0.48							
144	116.5	2.0	2.0	0.74	0.86	0.12	<0.01	<0.01	6.3	<0.1	<1	
145	118.5	2.0	2.0	0.43	0.42							
146	119.5	1.0	1.0	0.40	0.32							
526	120.5	1.0	1.0	2.35	0.38							
537	122.5	2.0	2.0	0.49	1.89							
538	124.5	2.0	2.0	0.54	0.58	0.10	<0.01	<0.01	7.5	<0.1	<1	
539	126.5	2.0	2.0	0.69	0.54							
540	128.5	2.0	2.0	0.29	0.94							
541	130.5	2.0	2.0	0.20	0.57							
542	132.5	2.0	2.0	0.15	0.21							
543	134.5	2.0	2.0	0.20	0.04	<0.01	<0.01	<0.01	4.9	<0.1	<1	
544	136.5	2.0	2.0	0.25	0.08							
545	138.5	2.0	2.0	0.88	0.21							
546	140.5	2.0	2.0	0.93	0.61							
547	142.5	2.0	2.0	0.54	0.74							
548	144.5	2.0	2.0	0.93	0.41	<0.03	0.01	0.01	5.0	<0.1	<1	
549	146.5	2.0	2.0	0.04	0.46							
550	148.5	2.0	2.0	0.10	0.16							
551	150.5	2.0	2.0	0.10	0.16	<0.02	<0.01	0.01	6.3	<0.1	2	

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia,
- Rhyolite
- Porphyry — hornblende–biotite porphyry; biotite porphyry; quartz–biotite porphyry
- Brecciation
- 30 — Inclination of plane structures, (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

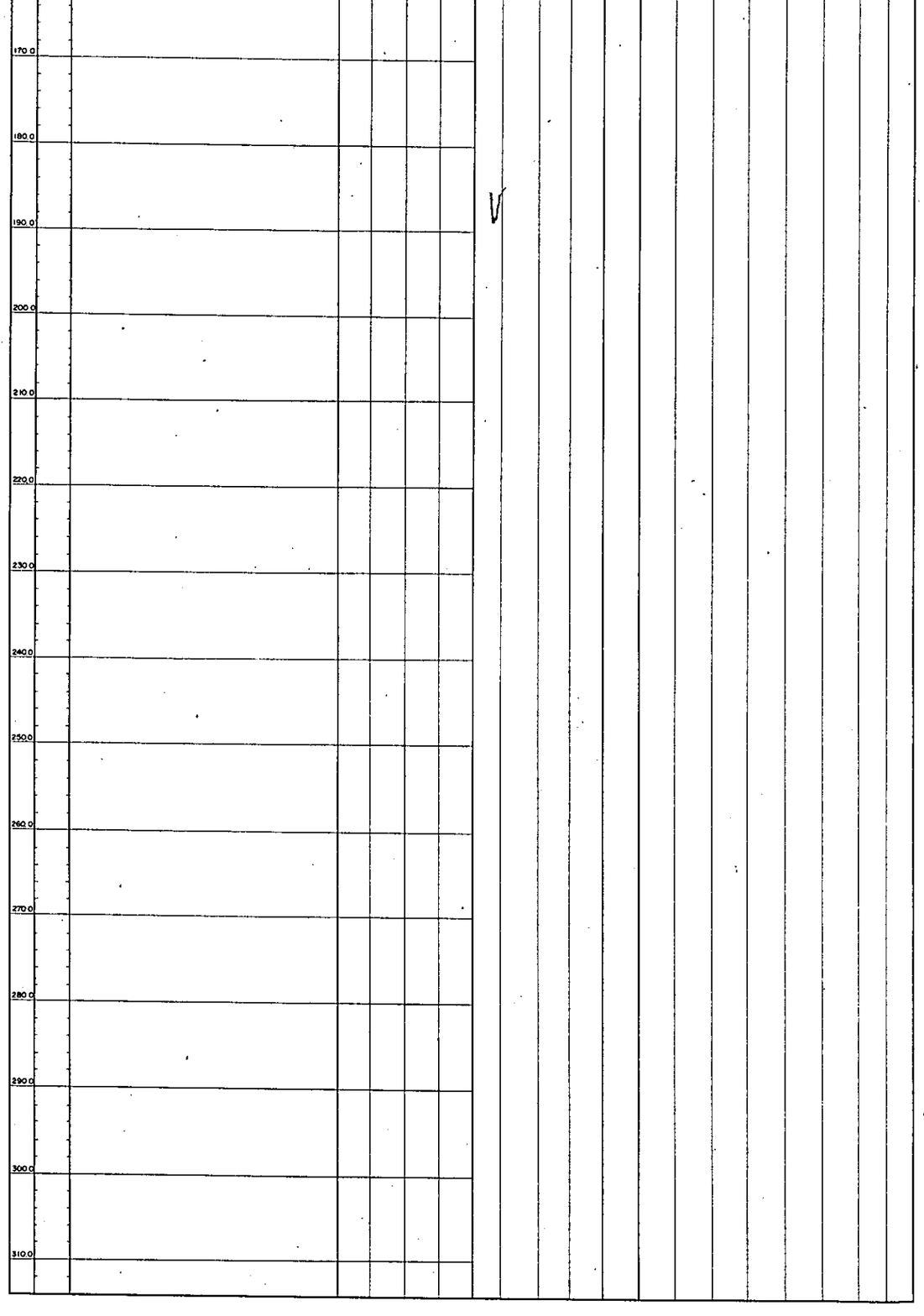
	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width



weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

X fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en : Enargite
dis : Dissemination
v. : Veinlet
w : Width

PL I-8-4

GEOLOGICAL SURVEY OF

MONYWA AREA. UNION OF BURMA

(PHASE II)

CORE LOG and ASSAY

DDH No 4 (JS 4) Sheet 1

Total Length 151.6 m Core Recovery 98.0%

Location Sabedaung Elevation 125.5 m

Direction O Inclination −90°

Date of Logging from 13·12·73' to 16·12·73'

Logged by S. MONONOBE

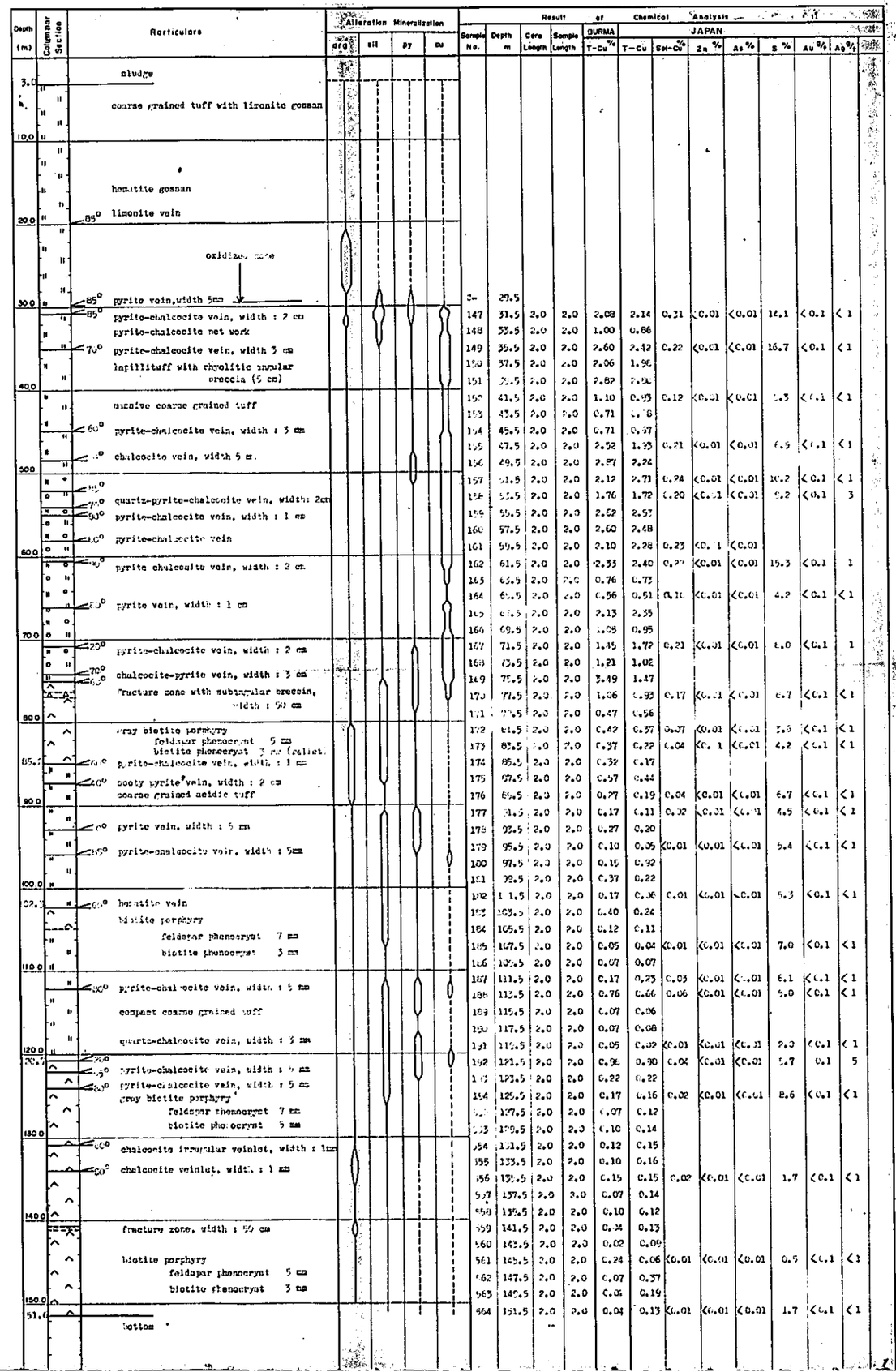
METAL MINING AGENCY

OVERSEAS TECHNICAL COOPERATION AGENCY

GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD



Result of Chemical Analysis

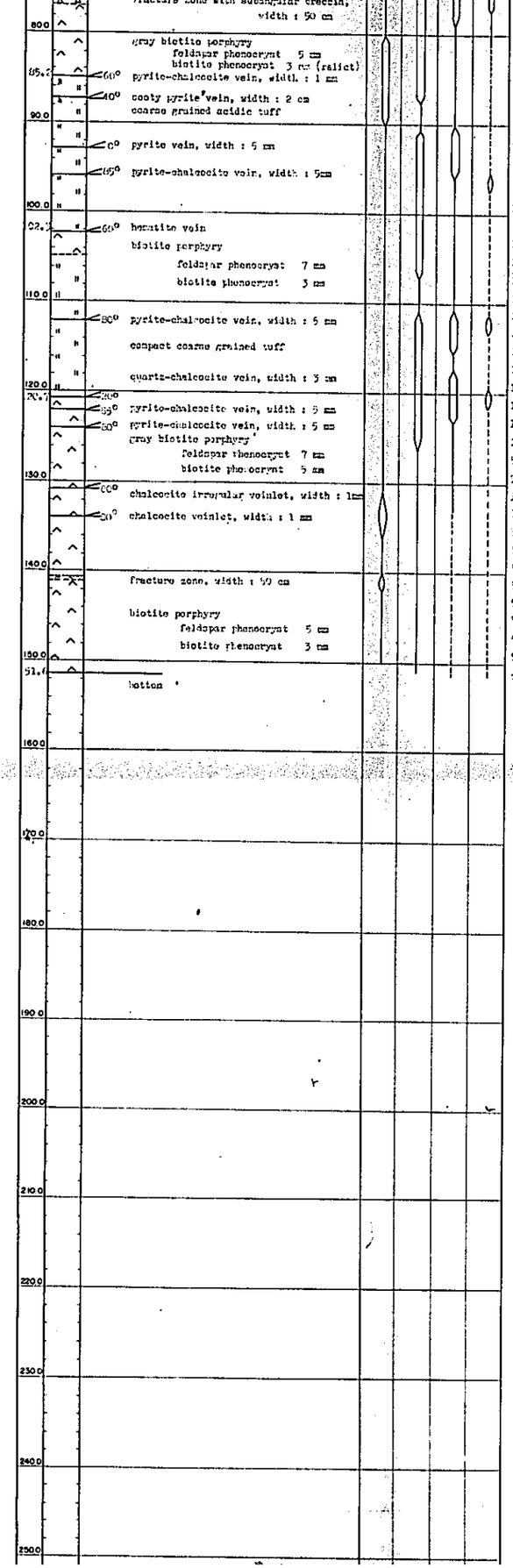
Sample No.	Depth m	Core Length	Sample Length	BURMA T-Cu %	JAPAN T-Cu	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t
2-	29.5										
147	31.5	2.0	2.0	2.08	2.14	0.31	<0.01	<0.01	16.1	<0.1	<1
148	33.5	2.0	2.0	1.00	0.86						
149	35.5	2.0	2.0	2.60	2.42	0.22	<0.01	<0.01	16.7	<0.1	<1
150	37.5	2.0	2.0	2.06	1.96						
151	39.5	2.0	2.0	2.87	2.80						
152	41.5	2.0	2.0	1.10	0.93	0.12	<0.01	<0.01	5.3	<0.1	<1
153	43.5	2.0	2.0	0.71	0.68						
154	45.5	2.0	2.0	0.71	0.67						
155	47.5	2.0	2.0	2.52	1.93	0.21	<0.01	<0.01	6.5	<0.1	<1
156	49.5	2.0	2.0	2.87	2.24						
157	51.5	2.0	2.0	2.12	2.71	0.24	<0.01	<0.01	10.2	<0.1	<1
158	53.5	2.0	2.0	1.76	1.72	0.20	<0.01	<0.01	9.2	<0.1	3
159	55.5	2.0	2.0	2.62	2.57						
160	57.5	2.0	2.0	2.60	2.48						
161	59.5	2.0	2.0	2.10	2.28	0.23	<0.1	<0.01			
162	61.5	2.0	2.0	2.33	2.40	0.22	<0.01	<0.01	15.3	<0.1	1
163	63.5	2.0	2.0	0.76	0.73						
164	65.5	2.0	2.0	0.56	0.51	0.10	<0.01	<0.01	4.2	<0.1	<1
165	67.5	2.0	2.0	2.13	2.35						
166	69.5	2.0	2.0	1.05	0.95						
167	71.5	2.0	2.0	1.45	1.72	0.21	<0.01	<0.01	8.0	<0.1	1
168	73.5	2.0	2.0	1.21	1.02						
169	75.5	2.0	2.0	3.49	1.47						
170	77.5	2.0	2.0	1.06	0.93	0.17	<0.1	<0.01	6.7	<0.1	<1
171	79.5	2.0	2.0	0.47	0.56						
172	81.5	2.0	2.0	0.42	0.37	0.07	<0.01	<0.01	3.5	<0.1	<1
173	83.5	2.0	2.0	0.37	0.22	0.04	<0.1	<0.01	4.2	<0.1	<1
174	85.5	2.0	2.0	0.32	0.17						
175	87.5	2.0	2.0	0.57	0.44						
176	89.5	2.0	2.0	0.27	0.19	0.04	<0.01	<0.01	6.7	<0.1	<1
177	91.5	2.0	2.0	0.17	0.11	0.02	<0.01	<0.01	4.5	<0.1	<1
178	93.5	2.0	2.0	0.27	0.20						
179	95.5	2.0	2.0	0.10	0.05	<0.01	<0.01	<0.01	5.4	<0.1	<1
180	97.5	2.0	2.0	0.15	0.32						
181	99.5	2.0	2.0	0.37	0.22						
182	101.5	2.0	2.0	0.17	0.06	0.01	<0.01	<0.01	5.3	<0.1	<1
183	103.5	2.0	2.0	0.40	0.24						
184	105.5	2.0	2.0	0.12	0.11						
185	107.5	2.0	2.0	0.05	0.04	<0.01	<0.01	<0.01	7.0	<0.1	<1
186	109.5	2.0	2.0	0.07	0.07						
187	111.5	2.0	2.0	0.17	0.23	0.03	<0.01	<0.01	6.1	<0.1	<1
188	113.5	2.0	2.0	0.76	0.66	0.06	<0.01	<0.01	5.0	<0.1	<1
189	115.5	2.0	2.0	0.07	0.06						
190	117.5	2.0	2.0	0.07	0.08						
191	119.5	2.0	2.0	0.05	0.02	<0.01	<0.01	<0.01	2.3	<0.1	<1
192	121.5	2.0	2.0	0.98	0.90	0.04	<0.01	<0.01	5.7	0.1	5
193	123.5	2.0	2.0	0.22	0.22						
194	125.5	2.0	2.0	0.17	0.16	0.02	<0.01	<0.01	8.6	<0.1	<1
195	127.5	2.0	2.0	0.07	0.12						
196	129.5	2.0	2.0	0.10	0.14						
197	131.5	2.0	2.0	0.12	0.15						
198	133.5	2.0	2.0	0.10	0.16						
199	135.5	2.0	2.0	0.15	0.15	0.02	<0.01	<0.01	1.7	<0.1	<1
200	137.5	2.0	2.0	0.07	0.14						
201	139.5	2.0	2.0	0.10	0.12						
202	141.5	2.0	2.0	0.14	0.13						
203	143.5	2.0	2.0	0.02	0.09						
204	145.5	2.0	2.0	0.24	0.06	<0.01	<0.01	<0.01	0.5	<0.1	<1
205	147.5	2.0	2.0	0.07	0.37						
206	149.5	2.0	2.0	0.04	0.19						
207	151.5	2.0	2.0	0.04	0.13	<0.01	<0.01	<0.01	1.7	<0.1	<1

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia,
- Rhyolite
- Porphyry — hornblende — biotite porphyry; biotite porphyry; quartz — biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane, intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
※				



170	77.5	2.0	2.0	1.06	0.93	0.17	<0.01	<0.01	6.7	<0.1	<1	
171	79.5	2.0	2.0	0.47	0.56							
172	81.5	2.0	2.0	0.42	0.37	0.07	<0.01	<0.01	3.6	<0.1	<1	
173	83.5	2.0	2.0	0.37	0.22	0.04	<0.01	<0.01	4.2	<0.1	<1	
174	85.5	2.0	2.0	0.32	0.17							
175	87.5	2.0	2.0	0.57	0.44							
176	89.5	2.0	2.0	0.27	0.19	0.04	<0.01	<0.01	6.7	<0.1	<1	
177	91.5	2.0	2.0	0.17	0.11	0.02	<0.01	<0.01	4.5	<0.1	<1	
178	93.5	2.0	2.0	0.27	0.20							
179	95.5	2.0	2.0	0.10	0.05	<0.01	<0.01	<0.01	5.4	<0.1	<1	
180	97.5	2.0	2.0	0.15	0.92							
181	99.5	2.0	2.0	0.37	0.22							
182	101.5	2.0	2.0	0.17	0.08	0.01	<0.01	<0.01	5.3	<0.1	<1	
183	103.5	2.0	2.0	0.40	0.24							
184	105.5	2.0	2.0	0.12	0.11							
185	107.5	2.0	2.0	0.05	0.04	<0.01	<0.01	<0.01	7.0	<0.1	<1	
186	109.5	2.0	2.0	0.07	0.07							
187	111.5	2.0	2.0	0.17	0.23	0.03	<0.01	<0.01	6.1	<0.1	<1	
188	113.5	2.0	2.0	0.76	0.66	0.06	<0.01	<0.01	5.0	<0.1	<1	
189	115.5	2.0	2.0	0.07	0.06							
190	117.5	2.0	2.0	0.07	0.08							
191	119.5	2.0	2.0	0.05	0.02	<0.01	<0.01	<0.01	9.0	<0.1	<1	
192	121.5	2.0	2.0	0.96	0.90	0.04	<0.01	<0.01	5.7	0.1	5	
193	123.5	2.0	2.0	0.22	0.22							
194	125.5	2.0	2.0	0.17	0.16	0.02	<0.01	<0.01	8.6	<0.1	<1	
195	127.5	2.0	2.0	0.07	0.12							
196	129.5	2.0	2.0	0.10	0.14							
197	131.5	2.0	2.0	0.12	0.15							
198	133.5	2.0	2.0	0.10	0.16							
199	135.5	2.0	2.0	0.15	0.15	0.02	<0.01	<0.01	1.7	<0.1	<1	
200	137.5	2.0	2.0	0.07	0.14							
201	139.5	2.0	2.0	0.10	0.12							
202	141.5	2.0	2.0	0.04	0.13							
203	143.5	2.0	2.0	0.02	0.09							
204	145.5	2.0	2.0	0.24	0.06	<0.01	<0.01	<0.01	0.5	<0.1	<1	
205	147.5	2.0	2.0	0.07	0.37							
206	149.5	2.0	2.0	0.02	0.19							
207	151.5	2.0	2.0	0.04	0.13	<0.01	<0.01	<0.01	1.7	<0.1	<1	

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia
- Rhyolite
- Porphyry — hornblende–biotite porphyry; biotite porphyry; quartz–biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

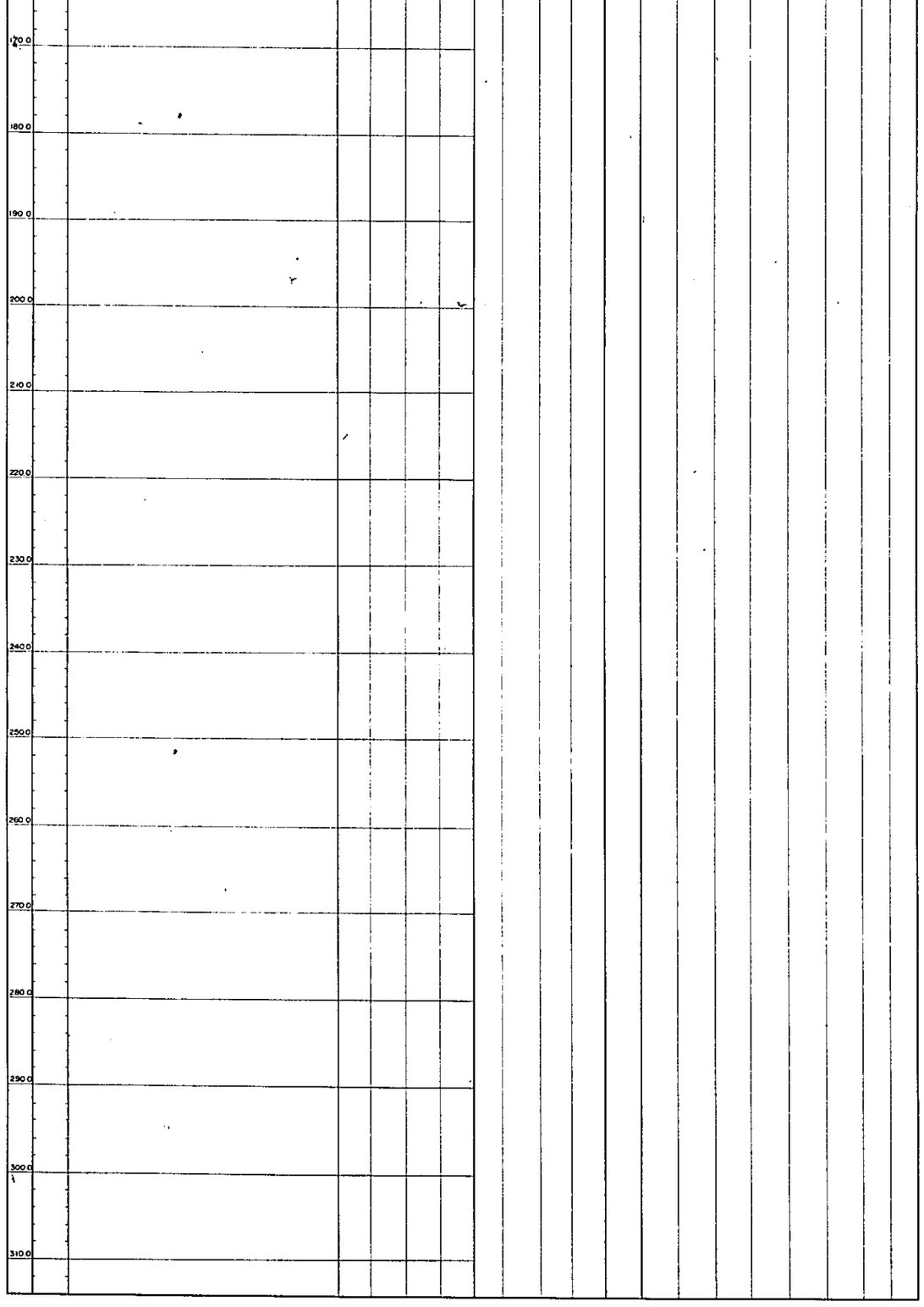
DEGREE OF ALTERATION AND MINERALIZATION

	argillization*	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals.
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil : Silicification
- py. : Pyritization
- kao. : Kaolinitization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c : Chalcocite
- en : Enargite
- dis : Dissemination
- v. : Veinlet
- w. : Width



	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg.	Argillization
sil.	Silicification
py	Pyritization
kao.	Kaolinitization
ser	Sericitization
ch	Chloritization
alu	Alunitization
c.c.p.	Chalcopyrite
c c	Chalcocite
en	Enargite
dis	Dissemination
v.	Veinlet
w	Width

PL I-8-5

GEOLOGICAL SURVEY OF
MONYWA AREA, UNION OF BURMA
(PHASE Ⅱ)

CORE LOG and ASSAY

DDH No 5 (JS 5) Sheet 1

Total Length 151.0 m Core Recovery 98.9 %

Location Sabedaung Elevation 125.8 m

Direction O Inclination −90°

Date of Logging from 12:12:73 to 15:12:73

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD

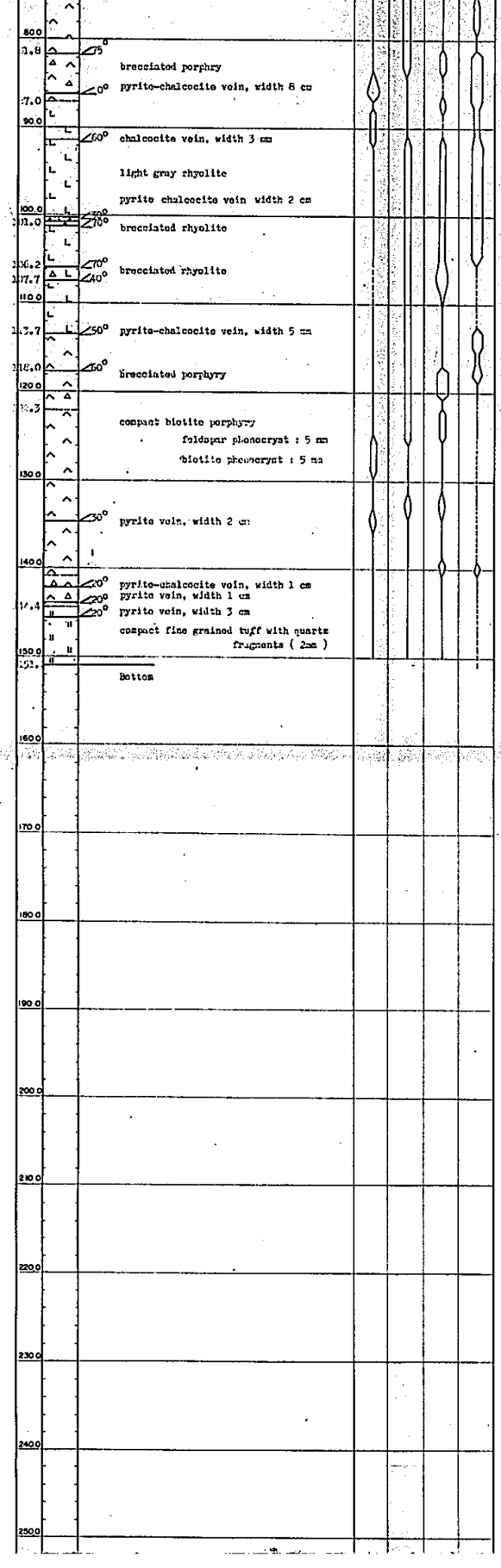
Depth (m)	Columnar Section	Particulars	Alteration Mineralization arg	sil	py	cu	Sample No.	Depth m	Core Length	Sample Length	Result of Chemical Analysis BURMA T-Cu %	JAPAN T-Cu	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t
1.6		non core																
		porous biotite porphyry with limonite gossan biotite phenocryst 5 mm feldspar phenocryst 7 mm																
10.0		rhyolitic breccia, ¢ 2 cm oxidized zone																
19.0							C-	19										
20.0							195	21	2.0	2.0	0.42	0.34	0.08	<0.01	<0.01	3.9	<0.1	<1
							196	23	2.0	2.0	0.27	0.22						
		∠20° pyrite vein, width 5 mm					197	25	2.0	2.0	0.47	0.46	0.08	<0.01	<0.01	2.5	<0.1	<1
		∠70° chalcocite vein, width 1 mm					198	27	2.0	2.0	0.25	0.20						
30.0		∠0° pyrite- chalcocite vein, width 4 cm					199	29	2.0	2.0	1.18	1.17						
							200	31	2.0	2.0	0.78	0.77	0.15	<0.01	<0.01	5.1	<0.1	<1
		∠75° pyrite-chalcocite vein, width 2 cm					201	33	2.0	2.0	2.45	3.12						
							202	35	2.0	2.0	1.96	2.10						
		∠70° pyrite-chalcocite vein, width 2 cm pyrite fragments					203	37	2.0	2.0	2.54	2.89	0.33	<0.01	<0.01	16.9	<0.1	<1
40.0							204	39	2.0	2.0	0.49	0.38						
		∠0° pyrite vein with sooty chalcocite, width 4 cm					205	41	2.0	2.0	1.70	1.98	0.23	<0.01	<0.01	9.0	<0.1	<1
45.0							206	43	2.0	2.0	1.24	1.19	0.20	<0.01	<0.01	9.0	<0.1	<1
							207	45	2.0	2.0	0.67	0.71						
50.0		∠60° pyrite-chalcocitevein, width 3 mm					208	47	2.0	2.0	1.71	1.74						
							209	49	2.0	2.0	0.65	0.58	0.09	<0.01	<0.01	2.8	<0.1	<1
							210	51	2.0	2.0	0.67	0.67	0.10	<0.01	<0.01	2.9	<0.1	<1
							211	53	2.0	2.0	0.48	0.41						
							212	55	2.0	2.0	0.26	0.21	0.04	<0.01	<0.01	1.6	<0.1	<1
		∠60° quarts-pyrite-chalcocite vein, width 4cm					213	57	2.0	2.0	1.51	1.47						
60.0							214	59	2.0	2.0	0.26	0.13	-	-	-	-	-	-
							215	61	2.0	2.0	0.26	0.13	0.04	<0.01	<0.01	3.5	<0.1	<1
		biotite (6mm) : abundant					216	63	2.0	2.0	0.70	0.69						
							217	65	2.0	2.0	2.78	2.76						
		∠10° pyrite-chalcocite vein, width 6 cm					218	67	2.0	2.0	1.46	1.48	0.12	<0.01	<0.01	5.8	<0.1	<1
70.0							219	69	2.0	2.0	0.80	0.75						
							220	71	2.0	2.0	3.42	1.54	0.14	<0.01	<0.01	4.9	<0.1	<1
		∠70° pyrite vein, width 5 mm					221	73	2.0	2.0	1.92	1.56	0.21	<0.01	<0.01	6.2	<0.1	<1
							222	75	2.0	2.0	0.80	0.50						
							223	77	2.0	2.0	1.02	0.60						
80.0							224	79	2.0	2.0	0.67	0.60	0.12	<0.01	<0.01	3.9	<0.1	<1
83.8		∠75°					225	81	2.0	2.0	0.45	0.31	0.07	<0.01	<0.01	1.9	<0.1	<1
		breccíated porphyry					226	83	2.0	2.0	1.40	1.83						
		∠0° pyrite-chalcocite vein, width 8 cm					227	85	2.0	2.0	1.47	1.67	0.15	<0.01	<0.01	3.6	<0.1	<1
87.0							228	87	2.0	2.0	1.15	1.20						
90.0							229	89	2.0	1.9	0.66	0.64						
		∠60° chalcocite vein, width 3 mm					230	91	2.0	2.0	1.05	0.93	0.15	<0.01	<0.01	4.7	<0.1	<1
							231	93	2.0	2.0	1.51	1.76						
		light gray rhyolite					232	95	2.0	2.0	3.01	2.56						
		pyrite chalcocite vein width 2 cm					233	97	2.0	2.0	1.67	1.64	0.17	<0.01	<0.01	6.2	<0.1	<1
100.0		∠60°					234	99	2.0	2.0	1.30	1.21						
101.0		∠70° brecciated rhyolite					235	101	2.0	2.0	1.20	1.21	0.14	<0.01	<0.01	6.2	<0.1	<1
							236	103	2.0	2.0	1.10	1.08	0.14	<0.01	<0.01	6.3	<0.1	<1
106.2		∠70°					237	105	2.0	2.0	1.25	1.29						
107.7		∠40° brecciated rhyolite					238	107	2.0	2.0	0.37	0.31	.	.	.	..	.	
110.0							239	109	2.0	2.0	0.37	0.29	0.08	<0.01	<0.01	10.3	<0.1	<1
							240	111	2.0	2.0	0.22	0.13	0.05	<0.01	<0.01	10.0	<0.1	<1
117.7		∠50° pyrite-chalcocite vein, width 5 mm					241	113	2.0	2.0	0.20	0.20						
							242	115	2.0	2.0	1.49	1.47	0.14	<0.01	<0.01	10.2	<0.1	<1
118.0		∠50° brecciated porphyry					243	117	2.0	2.0	0.85	0.75						
120.0							244	119	2.0	2.0	1.30	1.06						
121.3		compact biotite porphyry feldspar phenocryst : 5 mm biotite phenocryst : 5 mm					245	121	2.0	2.0	0.54	0.39	0.07	<0.01	<0.01	13.5	<0.1	<1
							246	123	2.0	2.0	0.16	0.17						
							247	125	2.0	2.0	0.34	0.31						
							248	127	2.0	2.0	0.15	0.07	0.05	<0.01	<0.01	6.5	<0.1	<1
130.0							249	129	2.0	2.0	0.11	0.05						
							250	131	2.0	2.0	0.16	0.09	0.03	<0.01	<0.01	8.1	<0.1	<1
		∠30° pyrite vein, width 2 cm					251	133	2.0	2.0	0.46	0.43	0.08	<0.01	<0.01	10.0	<0.1	<1
							252	135	2.0	2.0	0.21	0.12						
							253	137	2.0	2.0	0.31	0.24						
140.0							254	139	2.0	2.0	0.14	0.07	0.03	<0.01	<0.01	4.6	<0.1	<1
144.4		∠0° pyrite-chalcocite vein, width 1 cm ∠20° pyrite vein, width 1 cm ∠20° pyrite vein, width 3 cm					255	141	2.0	2.0	0.04	0.96	0.12	<0.01	<0.01	11.0	<0.1	<1
							256	143	2.0	2.0	0.33	0.25						
							257	145	2.0	2.0	0.11	0.16	0.05	<0.01	<0.01	6.3	<0.1	<1
		compact fine grained tuff with quartz fragments (2mm)					565	147	2.0	2.0	0.07	0.16	0.03					
150.0							566	149	2.0	2.0	0.12	0.24						
151.0		Bottom					567	151	2.0	2.0	0.04	0.25	0.06					
160.0																		

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia.
- Rhyolite
- Porphyry — hornblende — biotite porphyry; biotite porphyry; quartz — biotite porphyry
- Brecciation
- ∠30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %



223	77	2.0	2.0	1.02	0.60							
224	79	2.0	2.0	0.67	0.60	0.12	<0.01	<0.01	3.9	<0.1	<1	
225	81	2.0	2.0	0.45	0.31	0.07	<0.01	<0.01	1.9	<0.1	<1	
226	83	2.0	2.0	1.40	1.83							
227	85	2.0	2.0	1.47	1.67	0.15	<0.01	<0.01	3.6	<0.1	<1	
228	87	2.0	2.0	1.15	1.20							
229	89	2.0	1.9	0.66	0.64				—			
230	91	2.0	2.0	1.05	0.93	0.15	<0.01	<0.01	4.7	<0.1	<1	
231	93	2.0	2.0	1.51	1.76							
232	95	2.0	2.0	3.01	2.66							
233	97	2.0	2.0	1.67	1.64	0.17	<0.01	<0.01	6.2	<0.1	<1	
234	99	2.0	2.0	1.30	1.21							
235	101	2.0	2.0	1.20	1.21	0.14	<0.01	<0.01	6.2	<0.1	<1	
236	103	2.0	2.0	1.10	1.08	0.14	<0.01	<0.01	6.3	<0.1	<1	
237	105	2.0	2.0	1.25	1.29							
238	107	2.0	2.0	0.37	0.31	.	.	.	..	.		
239	109	2.0	2.0	0.37	0.29	0.00	<0.01	<0.01	10.3	<0.1	<1	
240	111	2.0	2.0	0.22	0.13	0.05	<0.01	<0.01	10.0	<0.1	<1	
241	113	2.0	2.0	0.20	0.20							
242	115	2.0	2.0	1.49	1.47	0.14	<0.01	<0.01	10.2	<0.1	<1	
243	117	2.0	2.0	0.85	0.75							
244	119	2.0	2.0	1.30	1.06							
245	121	2.0	2.0	0.54	0.39	0.07	<0.01	<0.01	13.5	<0.1	<1	
246	123	2.0	2.0	0.16	0.17							
247	125	2.0	2.0	0.34	0.31							
248	127	2.0	2.0	0.15	0.07	0.03	<0.01	<0.01	6.5	<0.1	<1	
249	129	2.0	2.0	0.11	0.05							
250	131	2.0	2.0	0.16	0.09	0.03	<0.01	<0.01	9.1	<0.1	<1	
251	133	2.0	2.0	0.46	0.43	0.08	<0.01	<0.01	10.0	<0.1	<1	
252	135	2.0	2.0	0.21	0.12							
253	137	2.0	2.0	0.31	0.24							
254	139	2.0	2.0	0.14	0.07	0.03	<0.01	<0.01	4.6	<0.1	<1	
255	141	2.0	2.0	0.04	0.96	0.12	<0.01	<0.01	11.0	<0.1	<1	
256	143	2.0	2.0	0.33	0.25							
257	145	2.0	2.0	0.11	0.16	0.05	<0.01	<0.01	6.3	<0.1	<1	
565	147	2.0	2.0	0.07	0.16	0.05						
566	149	2.0	2.0	0.12	0.24							
567	151	2.0	2.0	0.04	0.25	0.06						

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende — biotite porphyry; biotite porphyry; quartz — biotite porphyry
- Brecciaton
- 30 — Inclination of plane structures. (bedding plane. intrusive boundary. etc)

DEGREE OF ALTERATION AND MINERALIZATION

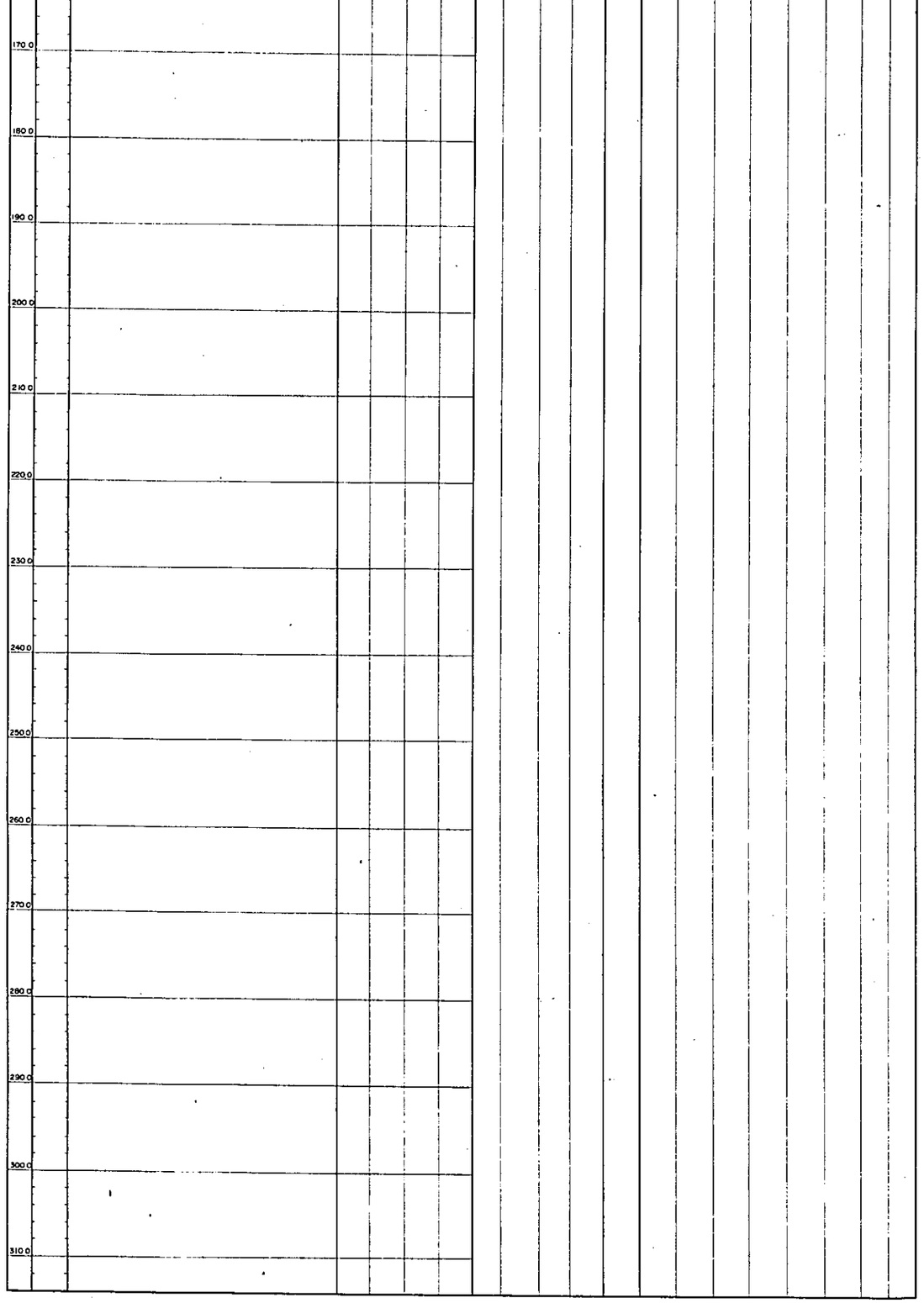
	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

X
- fresh : unaltered
- weak : parts of feldspar phenocrysts changed into clay minerals
- medium : almost all the feldspar phenocrysts changed into clay minerals
- strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

- arg. Argillization
- sil Silicification
- py Pyritization
- kao Kaolinitization
- ser. Sericitization
- ch. Chloritization
- alu. Alunitization
- c.c.p. : Chalcopyrite
- c.c Chalcocite
- en Enargite
- dis. Dissemination
- v. Veinlet
- w. Width



weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 05 %
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

X
- fresh : unaltered
- weak : parts of feldspar phenocrysts changed into clay minerals
- medium : almost all the feldspar phenocrysts changed into clay minerals
- strong : not only feldspar phenocrysts but also groundmass changed into clay minerals

(by field observation)

ABBREVIATIONS

arg.	Argillization
sil	Silicrfication
py	Pyritization
kao	Kaolinitization
ser.	Sericitization
ch.	Chloritization
alu.	Alunitization
c.c.p.	Chalcopyrite
c.c	Chalcocite
en	Enargite
dis	Dissemination
v.	Veinlet
w	Width

PL: I-8-6

GEOLOGICAL SURVEY OF MONYWA AREA, UNION OF BURMA

(PHASE II)

CORE LOG and ASSAY

DDH No. 6 (JS 6) Sheet 1

Total Length 150.4 m Core Recovery 94.3 %

Location Sabedaung Elevation 124.7 m

Direction 0 Inclination −90°

Date of Logging from 20·12·73 to 24·12·73

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO LTD

Particulars

Depth (m)	Particulars
	no core
10.0	biotite-feldspar porphyry with limonite gossan; biotite phenocryst 3-4mm (relict); quartz phenocryst 1-3mm; feldspar phenocryst 5mm
18.5	∠80° pyrite gossan vein with limonite, width 10 mm; ∠80° limonite gossan, width 5 mm; oxidized zone
20.0 / 30.0	white gray colored biotite-feldspar porphyry; biotite phenocryst 5 mm; ∠10° pyrite vein with chalcocite and limonite gossan, width 20 mm; quartz phenocryst 1-2 mm
33.5 / 40.0	∠70° pyrite-chalcocite vein, width 3 mm, unclear boundary; pale gray silicified rhyolite; ∠70° pyrite chalcocite veinlet abundant, width 3-5 mm; ∠75°, ∠90°, ∠60° silicified rock vein, width 10 cm
50.0	∠10°, ∠10° pyrite vein with chalcocite, width 20 mm; ∠60° pyrite vein net work, width 10 mm; chalcocite dissemination veinlet; ∠30° pyrite veinlet with chalcocite, width 1-2 mm
60.0	∠15° pyrite vein; ∠90° quartz vein with chalcocite, width 4 mm; ∠50° quartz vein with pyrite, chalcocite and enargite; ∠90° pyrite-chalcocite vein; quartz phenocryst : rare (ser kao)
70.0	quartzphenocryst : 2 mm; ∠70° chalcocite vein, width 1 mm; chalcocite ore dissemination and veinlet; ∠60° chalcocite-coating pyrite vein, width : 2 mm
80.0	∠65° pyrite chalcocite vein, width 3 mm; quartz phenocryst : rare; ∠80°, ∠20°, ∠10°, ∠60° pyrite-chalcocite vein net work, width : 2 mm
90.0	∠10° pyrite-chalcocite vein, width 3 mm; feldspar phenocryst : 3-4 mm; biotite phenocryst (relict) 3mm
100.0	pale gray colored silicified rhyolite; quartz phenocryst : 3-2 mm; chalcocite ore dissemination
110.0	∠90° pyrite vein with chalcocite coarting 1-2 mm; biotite-feldspar porphyry; feldspar (argillaceous) : 5 mm
120.0	biotite (relict) : 4 mm; ∠10°, ∠90° chalcocite-pyrite vein, width 10 mm; white gray colored; ∠10° chalcocite vein, width : 2 mm (kao)
120.5 / 130.0	∠80° pyrite vein with chalcocite, width : 7mm; silicified rhyolite; quartz phenocryst : rare; ∠80°, ∠60°, ∠20° chalcocite
140.0	biotite feldspar porphyry; biotite phenocryst (relict) : 5-7 mm; feldspar (plagioclase) phenocryst:10mm; pyrite-chalcocite vein, width 10 mm
150.0	∠80°, 10° chalcocite vein, width 1 mm; ∠85° pyrite vein with chalcocite, width 2 mm; ∠85° pyrite-chalcocite veinlet; quartz phenocryst : 1-2 mm; ∠70° pyrite vein, width : 2 mm
150.4	Bottom

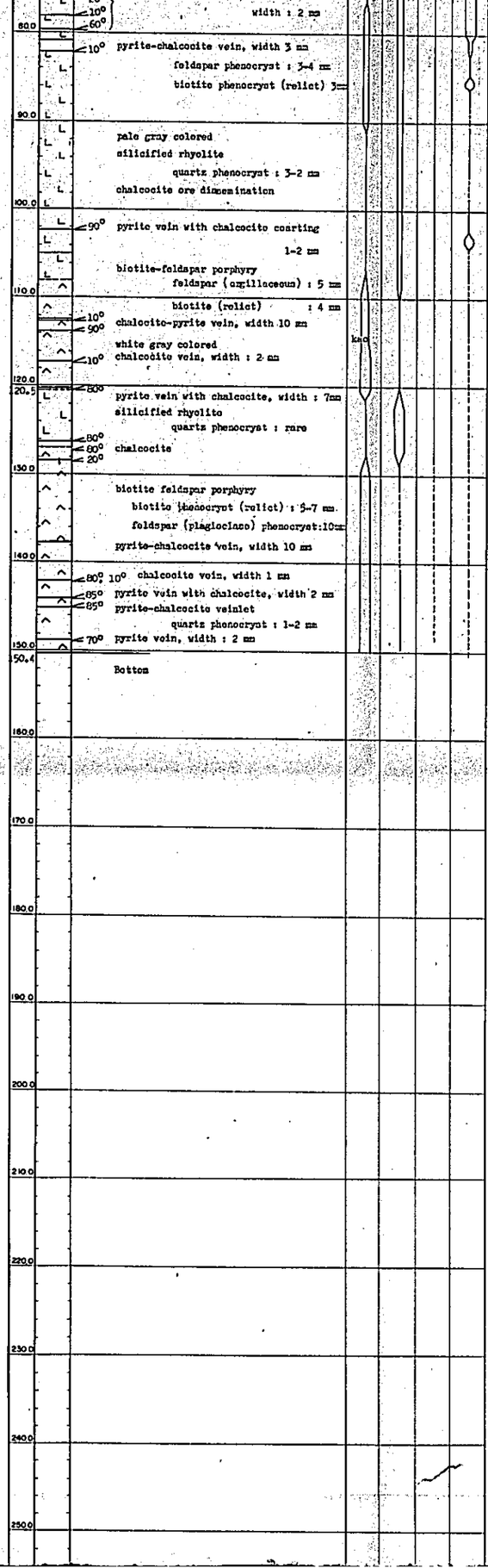
Result of Chemical Analysis

Sample No.	Depth m	Core Length	Sample Length	BURMA T-Cu %	JAPAN T-Cu	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t
C-	18.5										
258	20.5	2.0	2.0	0.27	0.01	<0.01	<0.01	<0.01	1.5		
259	22.5	2.0	2.0	0.12	0.02						
260	24.5	2.0	2.0	0.12	0.03	0.01	<0.01	<0.01	1.1		
261	26.5	2.0	1.0	0.07	0.02						
262	28.5	2.0	0.3	0.01	0.05						
263	30.5	2.0	0.3	0.12	0.01	<0.01	<0.01	<0.01	0.4		
264	32.5	2.0	2.0	0.05	0.01						
265	34.5	2.0	2.0	0.49	0.34						
266	36.5	2.0	2.0	0.56	1.05	0.15	<0.01	<0.01	6.6		
267	38.5	2.0	2.0	1.25	1.38						
268	40.5	2.0	2.0	1.30	2.04	0.20	<0.01	<0.01	6.7		
269	42.5	2.0	2.0	1.84	1.09	0.10	<0.01	<0.01	6.4		
270	44.5	2.0	2.0	1.15	0.68						
271	46.5	2.0	2.0	0.71	0.57						
272	48.5	2.0	0.7	0.61	0.72	0.10	<0.01	<0.01	5.2		
273	50.5	2.0	0.6	0.81	0.42	0.07	<0.01	<0.01	3.0		
274	52.5	2.0	2.0	0.56	1.10						
275	54.5	2.0	1.9	1.35	2.18	0.20	<0.01	<0.01	11.0		
276	56.5	2.0	2.0	2.28	1.92						
277	58.5	2.0	2.0	1.89	2.39						
278	60.5	2.0	2.0	2.33	2.06	0.22	<0.01	<0.01	6.7		
279	62.5	2.0	2.0	2.03	1.45						
280	64.5	2.0	2.0	1.79	2.28						
281	66.5	2.0	2.0	2.77	2.19	0.20	<0.01	<0.01	3.8		
282	68.5	2.0	2.0	2.62	1.14						
283	70.5	2.0	2.0	1.59	1.40	0.15	<0.01	<0.01	2.8		
284	72.5	2.0	2.0	1.98	1.88	0.17	<0.01	<0.01	4.3		
285	74.5	2.0	2.0	2.00	3.02						
286	76.5	2.0	2.0	2.87	1.67						
287	78.5	2.0	2.0	1.84	2.14	0.14	<0.01	<0.01	5.4		
288	80.5	2.0	2.0	2.18	1.70	0.16	<0.01	<0.01	5.2		
289	82.5	2.0	2.0	1.98	0.78						
290	84.5	2.0	2.0	1.00	0.55	0.08	<0.01	<0.01	2.6		
291	86.5	2.0	2.0	0.81	1.02						
292	88.5	2.0	2.0	1.00	0.43						
293	90.5	2.0	2.0	0.51	0.29	0.07	<0.01	<0.01	3.2		
294	92.5	2.0	2.0	0.42	0.37						
295	94.5	2.0	2.0	0.37	0.38						
296	96.5	2.0	2.0	0.46	0.51	0.08	<0.01	<0.01	3.8		
297	98.5	2.0	2.0	0.61	0.17						
298	100.5	2.0	2.0	0.27	0.55	0.08	<0.01	<0.01	3.5		
299	102.5	2.0	2.0	0.71	0.47	0.07	<0.01	<0.01	2.7		
300	104.5	2.0	2.0	0.61	2.35						
301	106.5	2.0	2.0	1.74	0.20						
302	108.5	2.0	2.0	0.42	0.33	0.06	<0.01	<0.01	3.6		
303	110.5	2.0	2.0	0.27	0.20	0.04	<0.01	<0.01	3.0		
304	112.5	2.0	2.0	0.47	0.44						
305	114.5	2.0	2.0	0.56	0.37	0.02	<0.01	<0.01	2.2		
306	116.5	2.0	2.0	0.27	0.15						
307	118.5	2.0	2.0	0.12	0.06						
308	120.5	2.0	2.0	0.17	0.12	0.02	<0.01	<0.01	0.9		
309	122.5	2.0	2.0	0.37	0.29						
310	124.5	2.0	2.0	0.37	0.24						
311	126.5	2.0	2.0	0.27	0.17	0.03	<0.01	<0.01	4.2		
312	128.5	2.0	2.0	0.42	0.27						
313	129.5	1.0	1.0	0.07	0.04	<0.01					
568	130.5	1.0	1.0	0.02	0.12						
569	132.5	2.0	2.0	tr.	0.06						
570	134.5	2.0	2.0	1.03	0.17						
571	136.5	2.0	2.0	0.25	0.14						
572	138.5	2.0	2.0	tr.	0.02	<0.01	<0.01	0.01	1.1	<0.1	<1
573	140.5	2.0	2.0	0.05	0.03						
574	142.5	2.0	2.0	tr.	0.05						
575	144.5	2.0	2.0	0.29	0.20						
576	146.5	2.0	2.0	0.25	0.13						
577	148.5	2.0	2.0	0.83	0.03	<0.01					
578	150.5	2.0	2.0	0.05	0.07						

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia.
- Rhyolite
- Porphyry: hornblende − biotite porphyry; biotite porphyry; quartz − biotite porphyry
- Brecciation
- ∠30 Inclination of plane structures. (bedding plane, Intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION



286	76.5	2.0	2.0	2.87	1.67						
287	78.5	2.0	2.0	1.84	2.14	0.14	< 0.01	< 0.01	5.4		
288	80.5	2.0	2.0	2.18	1.70	0.16	< 0.01	< 0.01	5.2		
289	82.5	2.0	2.0	1.98	0.78						
290	84.5	2.0	2.0	1.00	0.55	0.08	< 0.01	< 0.01	2.6		
291	86.5	2.0	2.0	0.81	1.02						
292	88.5	2.0	2.0	1.00	0.43						
293	90.5	2.0	2.0	0.51	0.29	0.07	< 0.01	< 0.01	3.2		
294	92.5	2.0	2.0	0.42	0.37						
295	94.5	2.0	2.0	0.37	0.38						
296	96.5	2.0	2.0	0.46	0.51	0.08	< 0.01	< 0.01	3.8		
297	98.5	2.0	2.0	0.61	0.17						
298	100.5	2.0	2.0	0.27	0.55	0.08	< 0.01	< 0.01	3.5		
299	102.5	2.0	2.0	0.71	0.47	0.07	< 0.01	< 0.01	2.7		
300	104.5	2.0	2.0	0.61	2.35						
301	106.5	2.0	2.0	1.74	0.20						
302	108.5	2.0	2.0	0.42	0.33	0.06	< 0.01	< 0.01	3.8		
303	110.5	2.0	2.0	0.27	0.20	0.04	< 0.01	< 0.01	3.0		
304	112.5	2.0	2.0	0.47	0.44						
305	114.5	2.0	2.0	0.56	0.37	0.02	< 0.01	< 0.01	2.2		
306	116.5	2.0	2.0	0.27	0.15						
307	118.5	2.0	2.0	0.12	0.06						
308	120.5	2.0	2.0	0.17	0.12	0.02	< 0.01	< 0.01	0.9		
309	122.5	2.0	2.0	0.37	0.29						
310	124.5	2.0	2.0	0.37	0.24						
311	126.5	2.0	2.0	0.27	0.17	0.03	< 0.01	< 0.01	4.2		
312	128.5	2.0	2.0	0.42	0.27						
313	129.5	1.0	1.0	0.07	0.04	< 0.01					
568	130.5	1.0	1.0	0.02	0.12						
569	132.5	2.0	2.0	tr.	0.06						
570	134.5	2.0	2.0	1.03	0.17						
571	136.5	2.0	2.0	0.25	0.14						
572	138.5	2.0	2.0	tr.	0.02	< 0.01	< 0.01	0.01	1.1	< 0.1	< 1
573	140.5	2.0	2.0	0.05	0.03						
574	142.5	2.0	2.0	tr.	0.05						
575	144.5	2.0	2.0	0.29	0.20						
576	146.5	2.0	2.0	0.25	0.13						
577	148.5	2.0	2.0	0.83	0.03	< 0.01					
578	150.5	2.0	2.0	0.05	0.07						

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende – biotite porphyry, biotite porphyry, quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

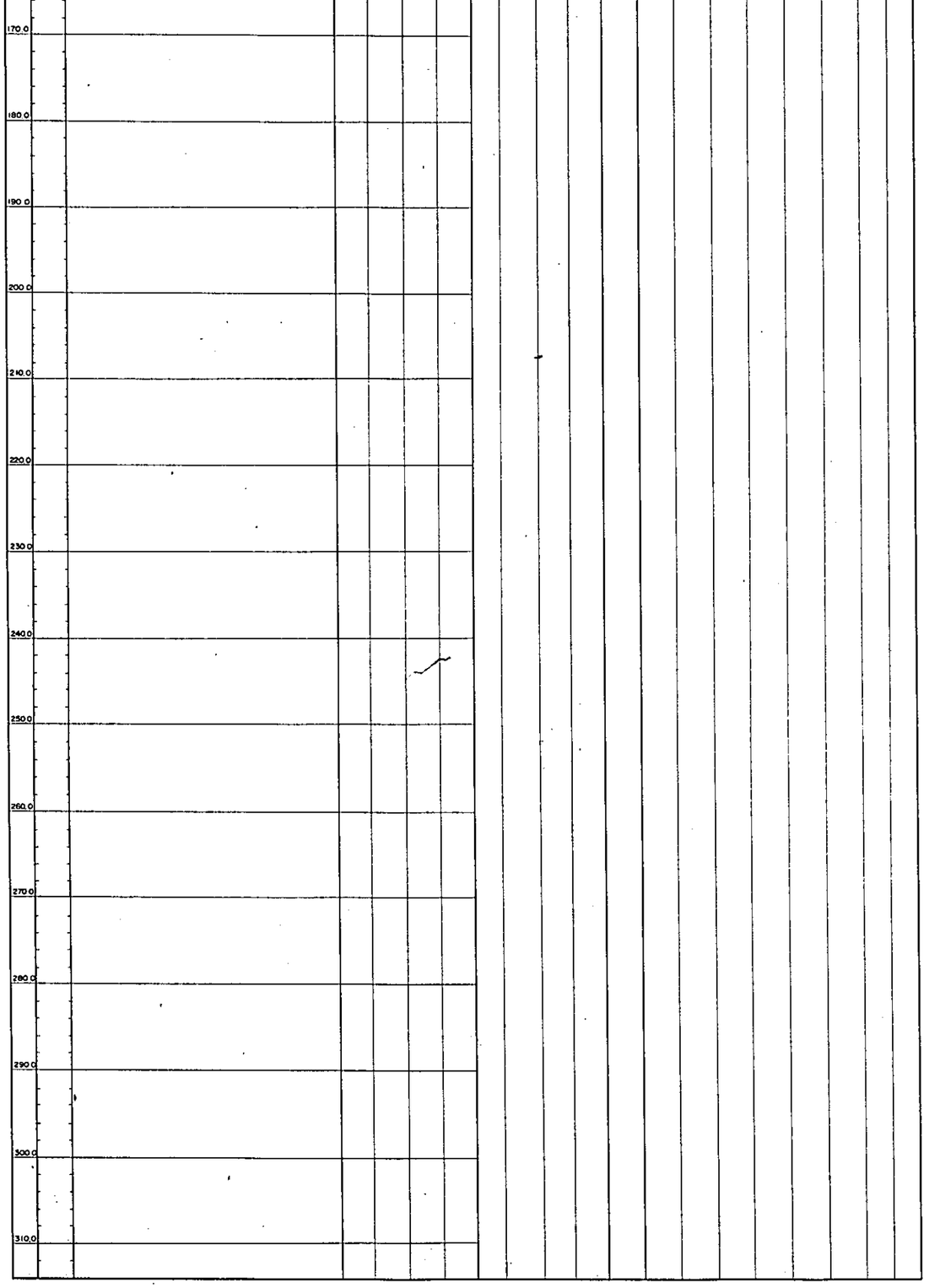
	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals.
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg.	Argillization
sil.	Silicification
py	Pyritization
kao.	Kaolinitization
ser.	Sericitization
ch.	Chloritization
alu.	Alunitization
c.c.p.	Chalcopyrite
c.c	Chalcocite
en	Enargite
dis	Dissemination
v.	Veinlet
w	Width



medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals.
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg.	:	Argillization
sil.	:	Silicification
py.	:	Pyritization
kao.	:	Kaolinitization
ser.	:	Sericitization
ch.	:	Chloritization
alu	:	Alunitization
c.c.p.	:	Chalcopyrite
c.c.	:	Chalcocite
en	:	Enargite
dis	:	Dissemination
v.		Veinlet
w		Width

PL I-8-7

GEOLOGICAL SURVEY OF
MONYWA AREA, UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

DDH No 7 (JS 7) Sheet 1

Total Length 151.0 m Core Recovery 98.0%

Location Sabedaung Elevation 148.9 m

Direction O Inclination - 90°

Date of Logging from 20·12·73' to 26·12·73'

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD

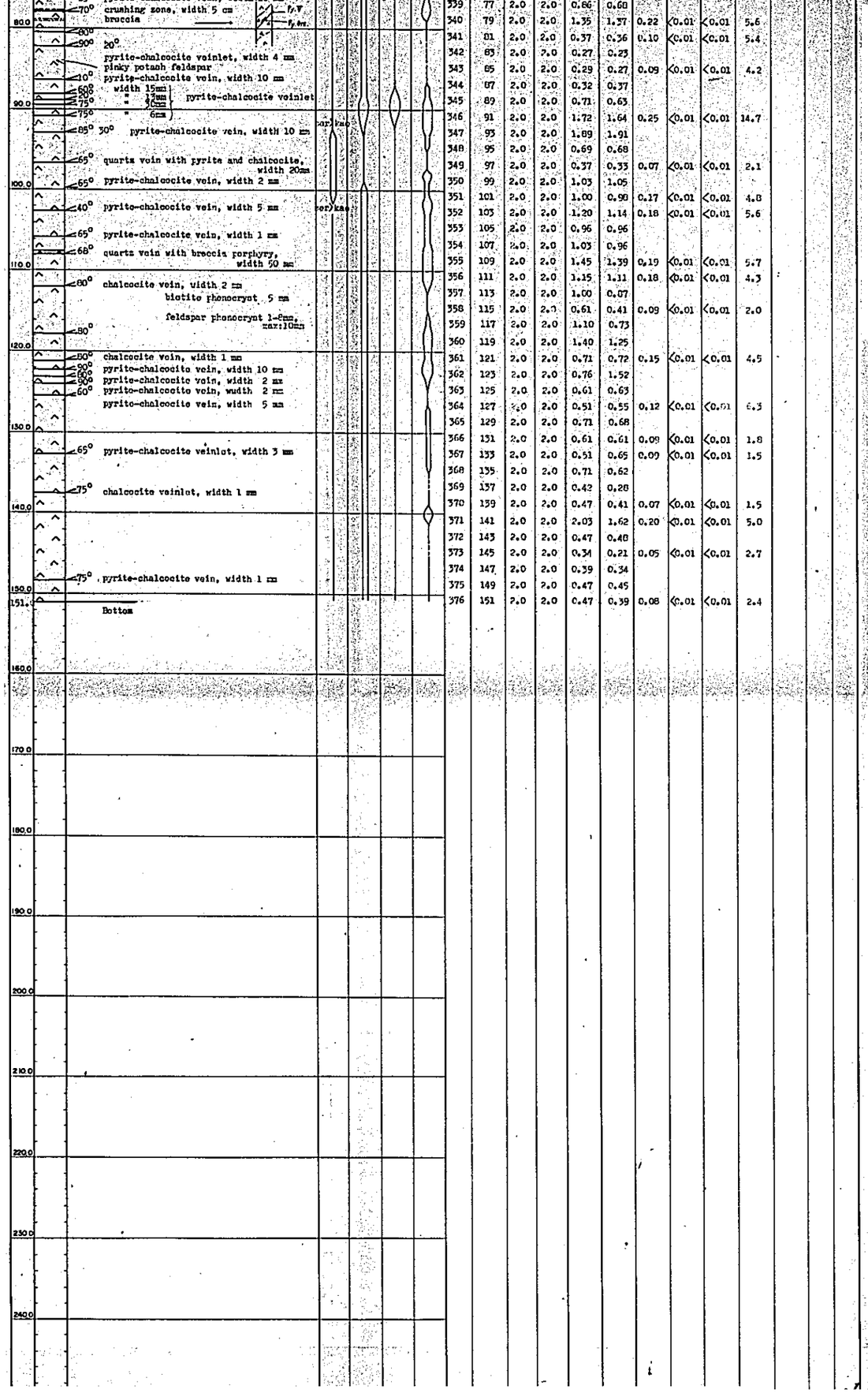
Depth (m)	Rerticulars	Alteration, Mineralization Grs.	Sil.	-Py.	Cu.	Sample No.	Depth m	Core Length	Sample Length	Result of Chemical Analysis BURMA T-Cu %	JAPAN T-Cu	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t
10.0	sluge biotite-feldspar porphyry with limonite gossan biotite phenocryst : 3 mm feldspar phenocryst: 8 mm																
20.0	biotite relict 5 mm 75° quartz veinlet, width : 1 cm																
30.0	oxidized zone 80° hematite veinlet, width 1cm 90° pyrite chalcocite veinlet width 14 cm 90° chalcocite-pyrite impregnation					C-	25										
	80° pyrite-chalcocite vein, width 1 mm 80° pyrite-chalcocite vein, width 2 mm 90° pyrite-chalcocite vein with limonite stain chalcocite-pyrite dissemination and veinlet					314	27	2.0	2.0	1.40	1.11						
						315	29	2.0	2.0	0.66	0.52						
						316	31	2.0	2.0	0.66	0.48	0.13	<0.01	<0.01	6.0		
						317	33	2.0	2.0	0.83	0.71						
						318	35	2.0	2.0	1.30	0.85						
40.0	30° pyrite-chalcocite vein, width 1 cm					319	37	2.0	2.0	0.27	0.15	0.08	<0.01	<0.01	1.9		
						320	39	2.0	2.0	0.57	0.39						
	85° pyrite-chalcocite vein, width 3 mm					321	41	2.0	2.0	0.54	0.57	0.13	<0.01	<0.01	9.1		
	85° silicified rock vein, width 15 cm biotite phenocryst 5 mm feldspar phenocryst 10 mm					322	43	2.0	2.0	0.93	1.03	0.14	<0.01	<0.01	5.8		
						323	45	2.0	2.0	1.84	1.90						
50.0	90° pyrite-chalcocite veinlet, width 5 mm					324	47	2.0	2.0	0.76	0.69						
						325	49	2.0	2.0	1.57	1.53	0.52	<0.01	<0.01	9.9		
	75° pyrite-chalcocite vein, width 4 mm pyrite-chalcocite impregnation					326	51	2.0	2.0	2.53	2.38	0.36	<0.01	<0.01	8.7		
						327	53	2.0	2.0	1.10	1.04						
						328	55	2.0	2.0	1.67	1.58	0.23	<0.01	<0.01	5.9		
60.0	80° pyrite-chalcocite vein, width 6 mm					329	57	2.0	2.0	1.20	0.83						
						330	59	2.0	2.0	1.54	1.23						
	90° pyrite-chalcocite vein, width 4 mm					331	61	2.0	2.0	0.86	0.77	0.15	<0.01	<0.01	6.4		
						332	63	2.0	2.0	1.20	1.07						
						333	65	2.0	2.0	0.96	0.90						
						334	67	2.0	2.0	0.51	0.44	0.08	<0.01	<0.01	7.4		
70.0						335	69	2.0	2.0	0.61	0.58						
	65° pyrite-chalcocite veinlet, width 4 mm					336	71	2.0	2.0	0.61	0.52	0.11	<0.01	<0.01	1.5		
						337	73	2.0	2.0	0.44	0.36	0.07	<0.01	<0.01	1.3		
	90° 10° pyrite-chalcocite veinlet, width 1-2mm 85° pyrite-chalcocite vein, width 10 mm					338	75	2.0	2.0	0.42	0.36						
						339	77	2.0	2.0	0.66	0.68						
80.0	70° crushing zone, width 5 cm breccia					340	79	2.0	2.0	1.35	1.37	0.22	<0.01	<0.01	5.6		
	90° 20° pyrite-chalcocite veinlet, width 4 mm pinky potash feldspar					341	81	2.0	2.0	0.37	0.36	0.10	<0.01	<0.01	5.4		
						342	83	2.0	2.0	0.27	0.23						
	10° pyrite-chalcocite vein, width 10 cm width 15cm " 15cm " 20cm " 6cm					343	85	2.0	2.0	0.29	0.27	0.09	<0.01	<0.01	4.2		
						344	87	2.0	2.0	0.32	0.37						
90.0	60° 20° 75° pyrite-chalcocite veinlet 75°					345	89	2.0	2.0	0.71	0.63						
						346	91	2.0	2.0	1.72	1.64	0.25	<0.01	<0.01	14.7		
	85° 30° pyrite-chalcocite vein, width 10 cm	qtz vein				347	93	2.0	2.0	1.89	1.91						
						348	95	2.0	2.0	0.69	0.68						
	65° quartz vein with pyrite and chalcocite, width 20cm					349	97	2.0	2.0	0.37	0.33	0.07	<0.01	<0.01	2.1		
100.0	65° pyrite-chalcocite vein, width 2 mm					350	99	2.0	2.0	1.03	1.05						
	40° pyrite-chalcocite vein, width 5 mm	qtz vein				351	101	2.0	2.0	1.00	0.98	0.17	<0.01	<0.01	4.8		
						352	103	2.0	2.0	1.20	1.14	0.18	<0.01	<0.01	5.6		
	65° pyrite-chalcocite vein, width 1 mm					353	105	2.0	2.0	0.96	0.96						
	68° quartz vein with breccia porphyry, width 50 mm					354	107	2.0	2.0	1.03	0.96						
110.0						355	109	2.0	2.0	1.45	1.39	0.19	<0.01	<0.01	5.7		
	80° chalcocite vein, width 2 mm biotite phenocryst 5 mm					356	111	2.0	2.0	1.15	1.11	0.18	<0.01	<0.01	4.3		
						357	113	2.0	2.0	1.00	0.87						
	90° feldspar phenocryst 1-6mm, max 10mm					358	115	2.0	2.0	0.61	0.41	0.09	<0.01	<0.01	2.0		
						359	117	2.0	2.0	1.10	0.73						
120.0						360	119	2.0	2.0	1.40	1.25						
	80° chalcocite vein, width 1 mm 60° pyrite-chalcocite vein, width 10 mm 60° pyrite-chalcocite vein, width 2 mm 60° pyrite-chalcocite vein, width 2 mm 60° pyrite-chalcocite vein, width 5 mm					361	121	2.0	2.0	0.71	0.72	0.15	<0.01	<0.01	4.5		
						362	123	2.0	2.0	0.76	1.52						
						363	125	2.0	2.0	0.61	0.63						
						364	127	2.0	2.0	0.51	0.55	0.12	<0.01	<0.01	4.5		
130.0						365	129	2.0	2.0	0.71	0.68						
	65° pyrite-chalcocite veinlet, width 3 mm					366	131	2.0	2.0	0.61	0.61	0.09	<0.01	<0.01	1.8		
						367	133	2.0	2.0	0.51	0.65	0.09	<0.01	<0.01	1.5		
	75° chalcocite veinlet, width 1 mm					368	135	2.0	2.0	0.71	0.62						
						369	137	2.0	2.0	0.42	0.28						
140.0						370	139	2.0	2.0	0.47	0.41	0.07	<0.01	<0.01	1.5		
						371	141	2.0	2.0	2.03	1.62	0.20	<0.01	<0.01	5.0		
						372	143	2.0	2.0	0.47	0.48						
						373	145	2.0	2.0	0.34	0.21	0.05	<0.01	<0.01	2.7		
	75° pyrite-chalcocite vein, width 1 mm					374	147	2.0	2.0	0.39	0.34						
150.0						375	149	2.0	2.0	0.47	0.45						
151.0	Bottom					376	151	2.0	2.0	0.47	0.39	0.08	<0.01	<0.01	2.4		
160.0																	

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia,
- Rhyolite
- Porphyry — hornblende – biotite porphyry, biotite porphyry, quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	cu
fresh		< 55 %	< 1 %	< 0.2 %



339	77	2.0	2.0	0.66	0.68						
340	79	2.0	2.0	1.35	1.37	0.22	<0.01	<0.01	5.6
341	81	2.0	2.0	0.37	0.36	0.10	<0.01	<0.01	5.4
342	83	2.0	2.0	0.27	0.23				
343	85	2.0	2.0	0.29	0.27	0.09	<0.01	<0.01	4.2
344	87	2.0	2.0	0.32	0.37				
345	89	2.0	2.0	0.71	0.63				
346	91	2.0	2.0	1.72	1.64	0.25	<0.01	<0.01	14.7
347	93	2.0	2.0	1.89	1.91				
348	95	2.0	2.0	0.69	0.68				
349	97	2.0	2.0	0.37	0.33	0.07	<0.01	<0.01	2.1
350	99	2.0	2.0	1.03	1.05				
351	101	2.0	2.0	1.00	0.98	0.17	<0.01	<0.01	4.8
352	103	2.0	2.0	1.20	1.14	0.18	<0.01	<0.01	5.6
353	105	2.0	2.0	0.96	0.96				
354	107	2.0	2.0	1.03	0.96				
355	109	2.0	2.0	1.45	1.39	0.19	<0.01	<0.01	5.7
356	111	2.0	2.0	1.15	1.11	0.18	<0.01	<0.01	4.3
357	113	2.0	2.0	1.00	0.07				
358	115	2.0	2.0	0.61	0.41	0.09	<0.01	<0.01	2.0
359	117	2.0	2.0	1.10	0.73				
360	119	2.0	2.0	1.40	1.25				
361	121	2.0	2.0	0.71	0.72	0.15	<0.01	<0.01	4.5
362	123	2.0	2.0	0.76	1.52				
363	125	2.0	2.0	0.61	0.63				
364	127	2.0	2.0	0.51	0.55	0.12	<0.01	<0.01	6.3
365	129	2.0	2.0	0.71	0.68				
366	131	2.0	2.0	0.61	0.61	0.09	<0.01	<0.01	1.8
367	133	2.0	2.0	0.51	0.65	0.09	<0.01	<0.01	1.5
368	135	2.0	2.0	0.71	0.62				
369	137	2.0	2.0	0.42	0.28				
370	139	2.0	2.0	0.47	0.41	0.07	<0.01	<0.01	1.5
371	141	2.0	2.0	2.03	1.62	0.20	<0.01	<0.01	5.0
372	143	2.0	2.0	0.47	0.48				
373	145	2.0	2.0	0.34	0.21	0.05	<0.01	<0.01	2.7
374	147	2.0	2.0	0.39	0.34				
375	149	2.0	2.0	0.47	0.45				
376	151	2.0	2.0	0.47	0.39	0.08	<0.01	<0.01	2.4

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia,
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
fresh		SiO_2 < 55 %	FeS_2 < 1 %	Cu < 0.2 %
weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %	
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %	
strong	> 80 %	> 10 %	> 1 %	

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals.
(by field observation)

ABBREVIATIONS

arg.	:	Argillization
sil.	:	Silicification
py.	:	Pyritization
kao.	:	Kaolinitization
ser.	:	Sericitization
ch.	:	Chloritization
alu.	:	Alunitization
c c p.	:	Chalcopyrite
c. c.	:	Chalcocite
en.	:	Enargite
dis.	:	Dissemination
v.	:	Veinlet
w	:	Width

weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered

weak : parts of feldspar phenocrysts changed into clay minerals.

medium : almost all the feldspar phenocrysts changed into clay minerals

strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg.	:	Argillization
sil.	:	Silicification
py.	:	Pyritization
kao.	:	Kaolinitization
ser.	:	Sericitization
ch.	:	Chloritization
alu.	:	Alunitization
c.c.p.	:	Chalcopyrite
c.c.	:	Chalcocite
en	:	Enargite
dis.	:	Dissemination
v.	:	Veinlet
w	:	Width

PL I-8-8

GEOLOGICAL SURVEY OF
MONYWA AREA, UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H No.8 (JS 8) Sheet 1

Total Length 151.0 m Core Recovery 83.8 %

Location Sabedaung Elevation 85.3 m

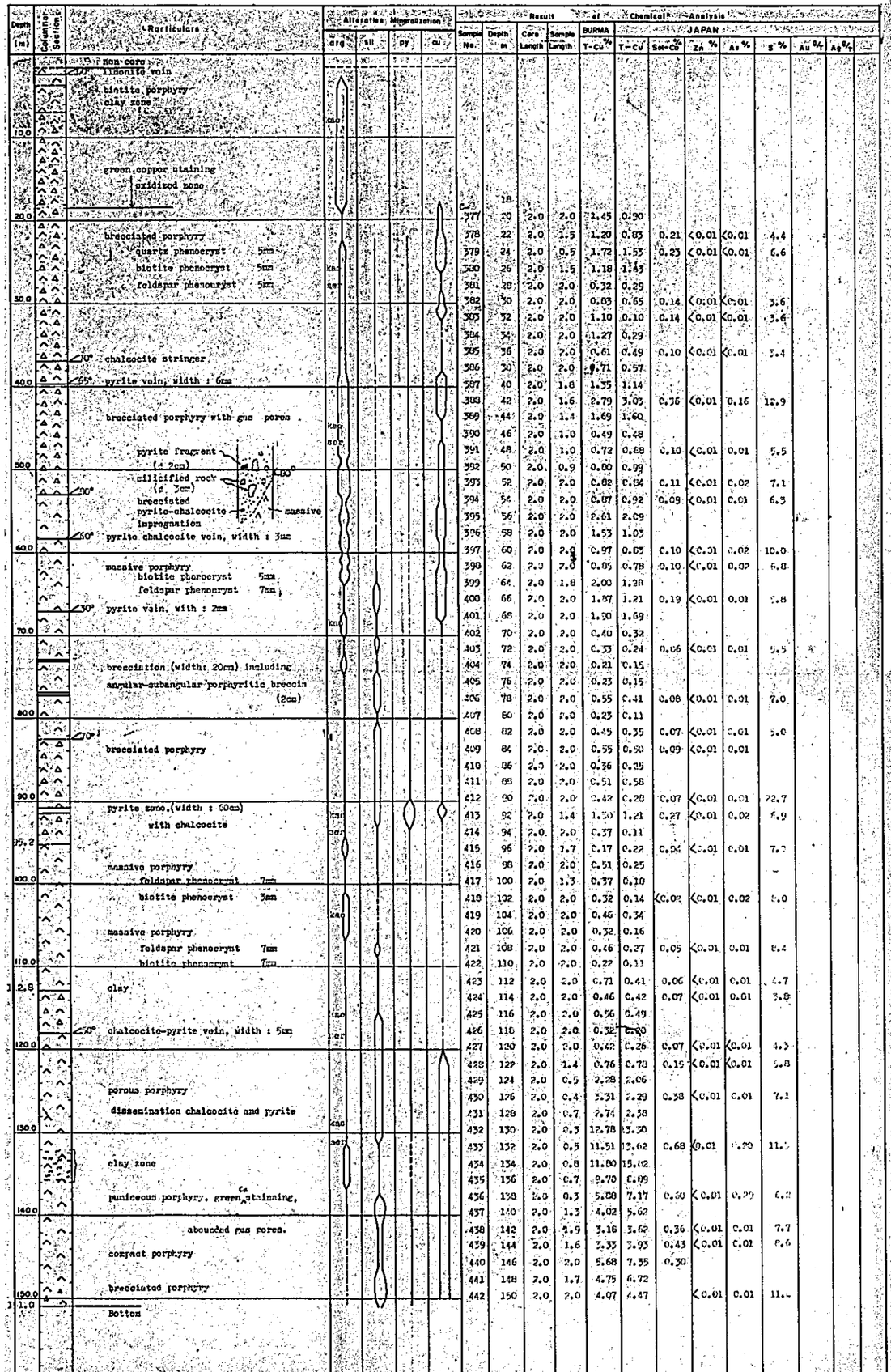
Direction O Inclination -90°

Date of Logging from 3-1-'74 to 13-1-'74

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD



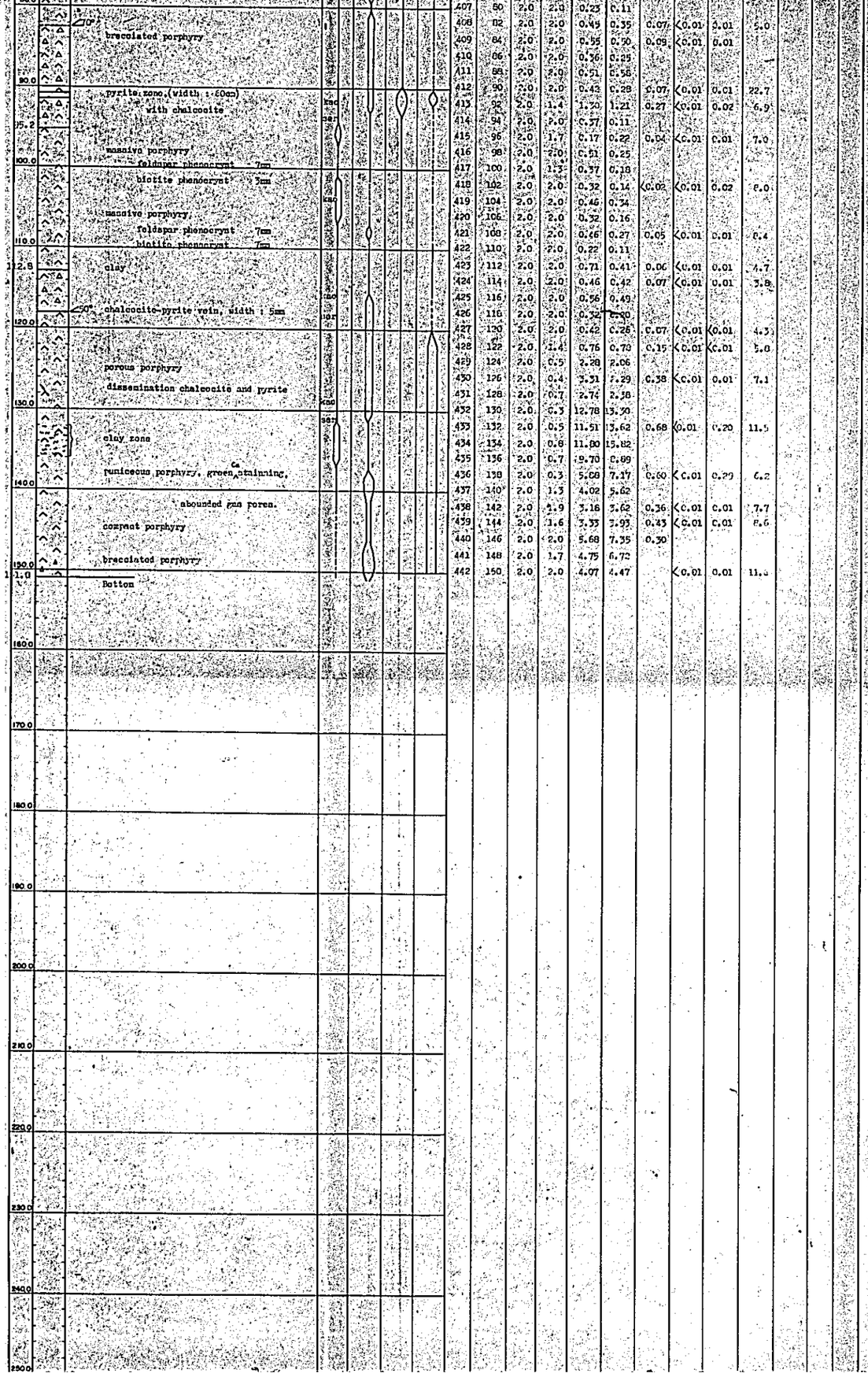
Sample No.	Depth m	Core Length	Sample Length	BURMA T-Cu %	JAPAN T-Cu %	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t
377	20	2.0	2.0	1.45	0.90						
378	22	2.0	1.5	1.20	0.83	0.21	<0.01	<0.01	4.4		
379	24	2.0	0.5	1.72	1.55	0.23	<0.01	<0.01	6.6		
380	26	2.0	1.5	1.18	1.43						
381	28	2.0	2.0	0.32	0.29						
382	30	2.0	2.0	0.83	0.65	0.14	<0.01	<0.01	3.6		
383	32	2.0	2.0	1.10	0.10	0.14	<0.01	<0.01	3.6		
384	34	2.0	2.0	1.27	0.29						
385	36	2.0	2.0	0.61	0.49	0.10	<0.01	<0.01	3.4		
386	38	2.0	2.0	0.71	0.57						
387	40	2.0	1.8	1.35	1.14						
388	42	2.0	1.6	2.79	3.05	0.36	<0.01	0.16	12.9		
389	44	2.0	1.4	1.69	1.60						
390	46	2.0	1.0	0.49	0.48						
391	48	2.0	1.0	0.72	0.88	0.10	<0.01	0.01	5.5		
392	50	2.0	0.9	0.80	0.99						
393	52	2.0	2.0	0.82	0.84	0.11	<0.01	0.02	7.1		
394	54	2.0	2.0	0.87	0.92	0.09	<0.01	0.01	6.3		
395	56	2.0	2.0	2.61	2.09						
396	58	2.0	2.0	1.53	1.03						
397	60	2.0	2.0	0.97	0.83	0.10	<0.01	0.02	10.0		
398	62	2.0	2.0	0.85	0.78	0.10	<0.01	0.02	6.8		
399	64	2.0	1.8	2.00	1.28						
400	66	2.0	2.0	1.87	1.21	0.19	<0.01	0.01	7.8		
401	68	2.0	2.0	1.30	1.69						
402	70	2.0	2.0	0.40	0.32						
403	72	2.0	2.0	0.33	0.24	0.06	<0.01	0.01	9.5		
404	74	2.0	2.0	0.21	0.15						
405	76	2.0	2.0	0.23	0.16						
406	78	2.0	2.0	0.55	0.41	0.08	<0.01	0.01	7.0		
407	80	2.0	2.0	0.23	0.11						
408	82	2.0	2.0	0.45	0.35	0.07	<0.01	0.01	5.0		
409	84	2.0	2.0	0.55	0.50	0.09	<0.01	0.01			
410	86	2.0	2.0	0.36	0.35						
411	88	2.0	2.0	0.51	0.58						
412	90	2.0	2.0	0.42	0.28	0.07	<0.01	0.01	22.7		
413	92	2.0	1.4	1.30	1.21	0.27	<0.01	0.02	6.9		
414	94	2.0	2.0	0.37	0.11						
415	96	2.0	1.7	0.17	0.22	0.04	<0.01	0.01	7.0		
416	98	2.0	2.0	0.51	0.25						
417	100	2.0	1.3	0.37	0.18						
418	102	2.0	2.0	0.32	0.14	<0.01	<0.01	0.02	5.0		
419	104	2.0	2.0	0.46	0.34						
420	106	2.0	2.0	0.32	0.16						
421	108	2.0	2.0	0.46	0.27	0.05	<0.01	0.01	8.4		
422	110	2.0	2.0	0.22	0.11						
423	112	2.0	2.0	0.71	0.41	0.06	<0.01	0.01	4.7		
424	114	2.0	2.0	0.46	0.42	0.07	<0.01	0.01	3.8		
425	116	2.0	2.0	0.56	0.49						
426	118	2.0	2.0	0.32	tr<0.20						
427	120	2.0	2.0	0.42	0.26	0.07	<0.01	<0.01	4.3		
428	122	2.0	1.4	0.76	0.78	0.15	<0.01	<0.01	5.8		
429	124	2.0	0.5	2.28	2.06						
430	126	2.0	0.4	3.31	2.29	0.38	<0.01	0.01	7.1		
431	128	2.0	0.7	9.74	2.38						
432	130	2.0	0.3	12.78	13.30						
433	132	2.0	0.5	11.51	13.62	0.68	<0.01	0.20	11.2		
434	134	2.0	0.8	11.00	15.82						
435	136	2.0	0.7	9.70	8.99						
436	138	2.0	0.3	5.88	7.17	0.50	<0.01	0.29	6.2		
437	140	2.0	1.3	4.02	5.62						
438	142	2.0	1.9	3.16	3.62	0.36	<0.01	0.01	7.7		
439	144	2.0	1.6	3.33	3.93	0.43	<0.01	0.01	8.6		
440	146	2.0	2.0	5.68	7.35	0.30					
441	148	2.0	1.7	4.75	6.72						
442	150	2.0	2.0	4.07	4.47		<0.01	0.01	11.-		

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciaton
- 30 Inclination of plane structures. (bedding plane, intrusive boundory, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %



407	80	2.0	2.0	0.23	0.11						
408	82	2.0	2.0	0.49	0.35	0.07	<0.01	0.01	5.0
409	84	2.0	2.0	0.55	0.50	0.09	<0.01	0.01	
410	86	2.0	2.0	0.56	0.25				
411	88	2.0	2.0	0.51	0.55				
412	90	2.0	2.0	0.42	0.28	0.07	<0.01	0.01	22.7
413	92	2.0	1.4	1.20	1.21	0.27	<0.01	0.02	6.9
414	94	2.0	2.0	0.57	0.11				
415	96	2.0	1.7	0.17	0.22	0.04	<0.01	0.01	7.0
416	98	2.0	2.0	0.61	0.25				
417	100	2.0	1.3	0.27	0.18				
418	102	2.0	2.0	0.32	0.14	<0.02	<0.01	0.02	8.0
419	104	2.0	2.0	0.46	0.34				
420	106	2.0	2.0	0.32	0.16				
421	108	2.0	2.0	0.66	0.27	0.05	<0.01	0.01	6.4
422	110	2.0	2.0	0.22	0.11				
423	112	2.0	2.0	0.71	0.41	0.06	<0.01	0.01	4.7
424	114	2.0	2.0	0.46	0.42	0.07	<0.01	0.01	3.8
425	116	2.0	2.0	0.66	0.49				
426	118	2.0	2.0	0.32	2.40				
427	120	2.0	2.0	0.42	0.26	0.07	<0.01	<0.01	4.3
428	122	2.0	1.4	0.76	0.70	0.15	<0.01	<0.01	5.8
429	124	2.0	0.5	2.28	2.06				
430	126	2.0	0.4	3.31	7.29	0.38	<0.01	0.01	7.1
431	128	2.0	0.7	2.74	2.38				
432	130	2.0	0.3	12.78	13.30				
433	132	2.0	0.5	11.51	13.62	0.68	<0.01	0.20	11.5
434	134	2.0	0.8	11.80	15.82				
435	136	2.0	0.7	9.70	8.99				
436	138	2.0	0.3	5.08	7.17	0.60	<0.01	0.29	6.2
437	140	2.0	1.3	4.02	5.62				
438	142	2.0	1.9	3.16	3.62	0.26	<0.01	0.01	7.7
439	144	2.0	1.6	3.33	3.93	0.43	<0.01	0.01	8.6
440	146	2.0	<2.0	5.68	7.35	0.30			
441	148	2.0	1.7	4.75	6.72				
442	150	2.0	2.0	4.07	4.47		<0.01	0.01	11.3

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciaton
- 30 Inclination of plane structures. (bedding plane, intrusive boundory, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
fresh		SiO_2 < 55 %	FeS_2 < 1 %	Cu < 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

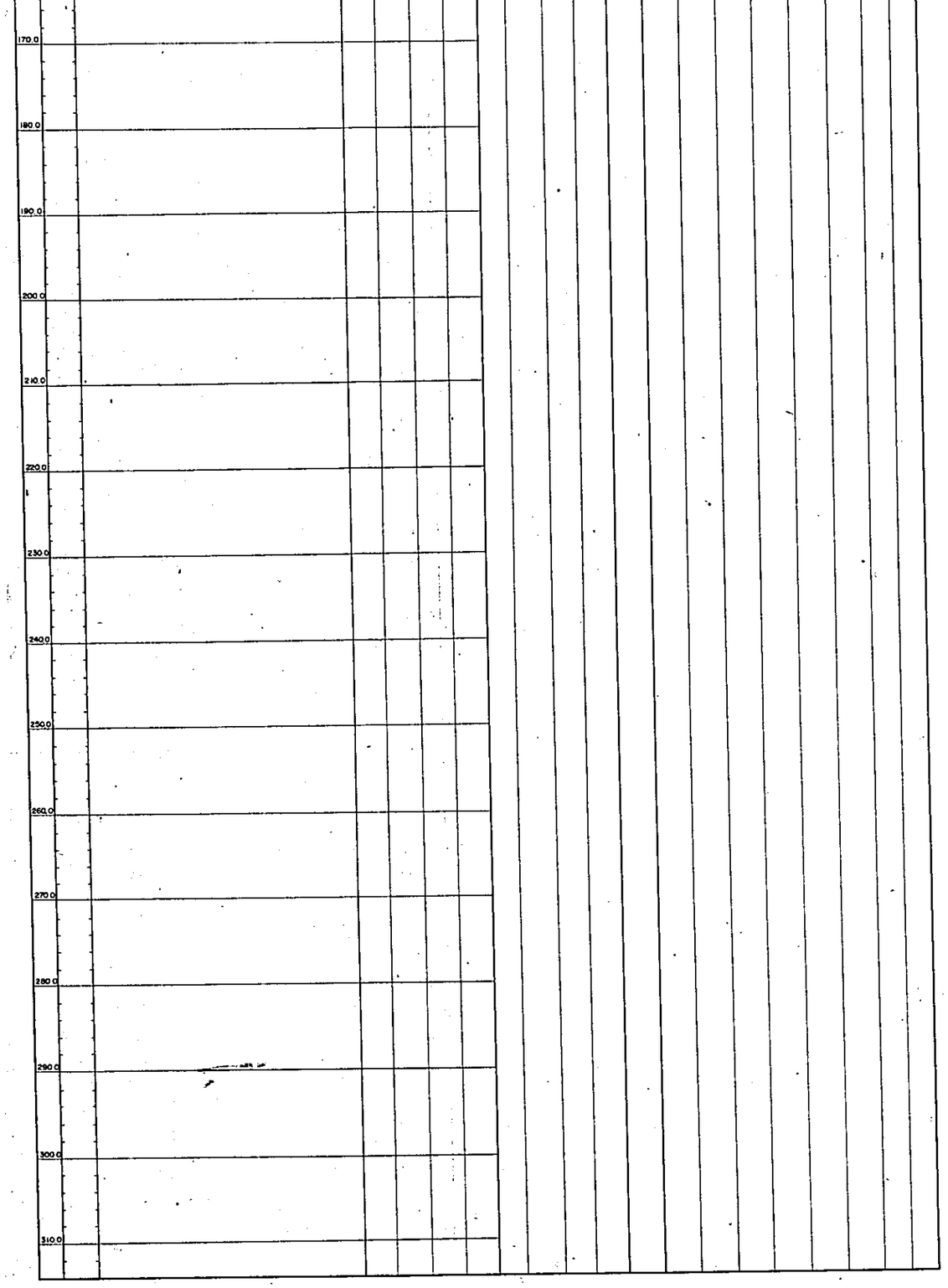
* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals.
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width



medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 09 %
strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals.
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w : Width

PL I-8-9

GEOLOGICAL SURVEY OF
MONYWA AREA, UNION OF BURMA
(PHASE Ⅱ)

CORE LOG and ASSAY

DDH No 9 (JS 9) Sheet 1

Total Length 151.5 m Core Recovery 97.9%

Location Sabedaung Elevation 132.7 m

Direction O Inclination −90°

Date of Logging from 7·1·74 to 13·1·74

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD

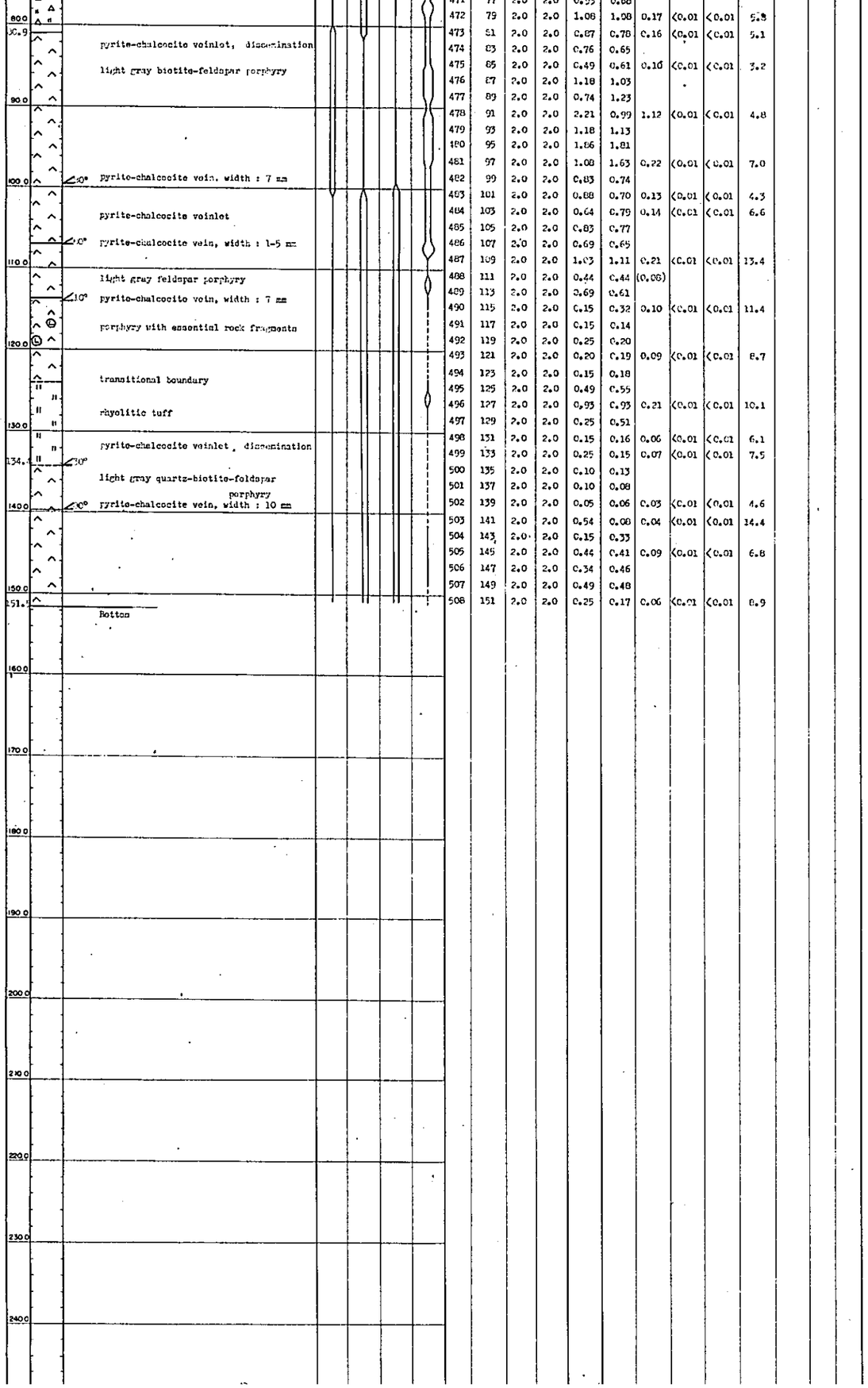
Depth (m)	Particulars	Alteration, Mineralization arg.	sil.	py.	cu.	Sample No.	Depth m	Core Length	Sample Length	BURMA T-Cu %	JAPAN T-Cu	JAPAN Sol-Cu %	JAPAN Zn %	JAPAN As %	JAPAN S %	Au g/t	Ag g/t
3.1	non core																
10.0	biotite-feldspar porphyry																
	oxidized zone 19.1					C-	19										
20.0	breccia dyke including angular rock fragments of porphyry and tuff; chalcocite-pyrite dissemination and joint filling; light gray biotite-feldspar porphyry; feldspar phenocryst : 1-10 mm; biotite phenocryst : 1-2 mm					443	21	2.0	2.0	1.22	0.98	0.24	<0.01	<0.01	5.8		
						444	23	2.0	2.0	2.15	1.44						
						445	25	2.0	2.0	1.18	2.93	0.16	<0.01	<0.01	4.3		
						446	27	2.0	2.0	0.83	1.70						
30.0						447	29	2.0	2.0	0.73	1.58						
	20° pyrite-chalcocite-quartz vein, width:15mm; chalcocite-pyrite dissemination and veinlet filling					448	31	2.0	2.0	0.49	1.20	0.15	<0.01	<0.01	5.8		
						449	33	2.0	2.0	1.32	1.40						
	80° pyrite-chalcocite-quartz vein, width:10mm					450	35	2.0	2.0	6.86	2.88						
						451	37	2.0	2.0	1.62	1.85	0.22	<0.01	<0.01	10.6		
40.0	80° pyrite-chalcocite-quartz vein, width:10mm; transitional boundary					452	39	2.0	2.0	0.85	1.07						
	rhyolite with biotite-feldspar porphyritic rock fragments			hem isp		453	41	2.0	2.0	1.32	1.55	0.20	<0.01	<0.01	6.5		
						454	43	2.0	2.0	1.23	1.51	0.22	<0.01	<0.01	4.2		
						455	45	2.0	2.0	0.94	1.14						
	lapilli tuff (5 thin beds)					456	47	2.0	2.0	0.74	0.76						
50.0						457	49	2.0	2.0	1.42	1.99	0.22	<0.01	<0.01	7.3		
	chalcocite-pyrite veinlet, dissemination	ser				458	51	2.0	2.0	0.64	0.58	0.17	<0.01	<0.01	5.9		
						459	53	2.0	2.0	0.74	0.80	.	.	.	.		
	50° pyrite-chalcocite vein, width : 15 cm					460	55	2.0	2.0	0.54	0.51	0.11	<0.01	<0.01	3.1		
	lapillituff					461	57	2.0	2.0	0.88	0.92						
60.0						462	59	2.0	2.0	0.88	0.70	.	.	.	.		
	15° pyrite-chalcocite veins, width: 10cm, 20cm; 40° chalcocite-pyrite dissemination and veinlet; 30° pyrite-chalcocite vein, width:15cm					463	61	2.0	2.0	0.34	0.29	0.08	<0.01	<0.01	6.6		
						464	63	2.0	2.0	0.39	0.37						
						465	65	2.0	2.0	0.54	0.45						
						466	67	2.0	2.0	0.54	0.59	0.11	<0.01	<0.01	8.5		
	30° pyrite-chalcocite vein, width : 20 cm					467	69	2.0	2.0	0.29	2.30						
70.0						468	71	2.0	2.0	0.49	0.53	0.12	<0.01	<0.01	8.3		
	pisolite					469	73	2.0	2.0	0.54	0.53	0.12	<0.01	<0.01	6.7		
	50° pyrite-chalcocite, width : 9 cm					470	75	2.0	2.0	0.98	0.65						
						471	77	2.0	2.0	0.93	0.68						
80.0						472	79	2.0	2.0	1.08	1.00	0.17	<0.01	<0.01	5.8		
						473	81	2.0	2.0	0.87	0.78	0.16	<0.01	<0.01	5.1		
90.9	pyrite-chalcocite veinlet, dissemination; light gray biotite-feldspar porphyry					474	83	2.0	2.0	0.76	0.65						
						475	85	2.0	2.0	0.49	0.61	0.10	<0.01	<0.01	3.2		
						476	87	2.0	2.0	1.18	1.03						
90.0						477	89	2.0	2.0	0.74	1.23						
						478	91	2.0	2.0	2.21	0.99	1.12	<0.01	<0.01	4.8		
						479	93	2.0	2.0	1.18	1.13						
						480	95	2.0	2.0	1.86	1.81						
						481	97	2.0	2.0	1.08	1.63	0.22	<0.01	<0.01	7.0		
100.0	30° pyrite-chalcocite vein, width : 7 cm					482	99	2.0	2.0	0.83	0.74						
						483	101	2.0	2.0	0.88	0.70	0.13	<0.01	<0.01	4.3		
	pyrite-chalcocite veinlet					484	103	2.0	2.0	0.64	0.79	0.14	<0.01	<0.01	6.6		
						485	105	2.0	2.0	0.83	0.77						
	60° pyrite-chalcocite vein, width : 1-5 mm					486	107	2.0	2.0	0.69	0.65						
110.0						487	109	2.0	2.0	1.03	1.11	0.21	<0.01	<0.01	13.4		
	light gray feldspar porphyry					488	111	2.0	2.0	0.44	0.44	(0.06)					
	10° pyrite-chalcocite vein, width : 7 mm					489	113	2.0	2.0	0.69	0.61						
						490	115	2.0	2.0	0.15	0.32	0.10	<0.01	<0.01	11.4		
	porphyry with essential rock fragments					491	117	2.0	2.0	0.15	0.14						
						492	119	2.0	2.0	0.25	0.20						
120.0						493	121	2.0	2.0	0.20	0.19	0.09	<0.01	<0.01	8.7		
						494	123	2.0	2.0	0.15	0.18						
	transitional boundary					495	125	2.0	2.0	0.49	0.55						
						496	127	2.0	2.0	0.93	0.93	0.21	<0.01	<0.01	10.1		
	rhyolitic tuff					497	129	2.0	2.0	0.25	0.51						
130.0						498	131	2.0	2.0	0.15	0.16	0.06	<0.01	<0.01	6.1		
	pyrite-chalcocite veinlet, dissemination					499	133	2.0	2.0	0.25	0.15	0.07	<0.01	<0.01	7.5		
134.4	50°					500	135	2.0	2.0	0.10	0.13						
	light gray quartz-biotite-feldspar porphyry					501	137	2.0	2.0	0.10	0.08						
	80° pyrite-chalcocite vein, width : 10 mm					502	139	2.0	2.0	0.05	0.06	0.03	<0.01	<0.01	4.6		
140.0						503	141	2.0	2.0	0.54	0.08	0.04	<0.01	<0.01	14.4		
						504	143	2.0	2.0	0.15	0.33						
						505	145	2.0	2.0	0.44	0.41	0.09	<0.01	<0.01	6.8		
						506	147	2.0	2.0	0.34	0.46						
150.0						507	149	2.0	2.0	0.49	0.48						
151.5	Bottom					508	151	2.0	2.0	0.25	0.17	0.06	<0.01	<0.01	8.9		
160.0																	

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia.
- Rhyolite
- Porphyry — hornblende − biotite porphyry; biotite porphyry; quartz − biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO 2	FeS 2	cu
fresh		< 55 %/	< 1 %	< 0.2 %



472	79	2.0	2.0	1.08	1.08	0.17	<0.01	<0.01	5.8
473	81	2.0	2.0	0.87	0.78	0.16	<0.01	<0.01	5.1
474	83	2.0	2.0	0.76	0.65				
475	85	2.0	2.0	0.49	0.61	0.10	<0.01	<0.01	3.2
476	87	2.0	2.0	1.18	1.03				
477	89	2.0	2.0	0.74	1.23				
478	91	2.0	2.0	2.21	0.99	1.12	<0.01	<0.01	4.8
479	93	2.0	2.0	1.18	1.13				
480	95	2.0	2.0	1.86	1.81				
481	97	2.0	2.0	1.08	1.63	0.22	<0.01	<0.01	7.0
482	99	2.0	2.0	0.83	0.74				
483	101	2.0	2.0	0.88	0.70	0.13	<0.01	<0.01	4.3
484	103	2.0	2.0	0.64	0.79	0.14	<0.01	<0.01	6.6
485	105	2.0	2.0	0.83	0.77				
486	107	2.0	2.0	0.69	0.65				
487	109	2.0	2.0	1.03	1.11	0.21	<0.01	<0.01	13.4
488	111	2.0	2.0	0.44	0.44	(0.06)			
489	113	2.0	2.0	0.69	0.61				
490	115	2.0	2.0	0.15	0.32	0.10	<0.01	<0.01	11.4
491	117	2.0	2.0	0.15	0.14				
492	119	2.0	2.0	0.25	0.20				
493	121	2.0	2.0	0.20	0.19	0.09	<0.01	<0.01	8.7
494	123	2.0	2.0	0.15	0.18				
495	125	2.0	2.0	0.49	0.55				
496	127	2.0	2.0	0.93	0.93	0.21	<0.01	<0.01	10.1
497	129	2.0	2.0	0.25	0.51				
498	131	2.0	2.0	0.15	0.16	0.06	<0.01	<0.01	6.1
499	133	2.0	2.0	0.25	0.15	0.07	<0.01	<0.01	7.5
500	135	2.0	2.0	0.10	0.13				
501	137	2.0	2.0	0.10	0.08				
502	139	2.0	2.0	0.05	0.06	0.03	<0.01	<0.01	4.6
503	141	2.0	2.0	0.54	0.08	0.04	<0.01	<0.01	14.4
504	143	2.0	2.0	0.15	0.33				
505	145	2.0	2.0	0.44	0.41	0.09	<0.01	<0.01	6.8
506	147	2.0	2.0	0.34	0.46				
507	149	2.0	2.0	0.49	0.48				
508	151	2.0	2.0	0.25	0.17	0.06	<0.01	<0.01	8.9

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia,
- Rhyolite
- Porphyry — hornblende-biotite porphyry; biotite porphyry; quartz-biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

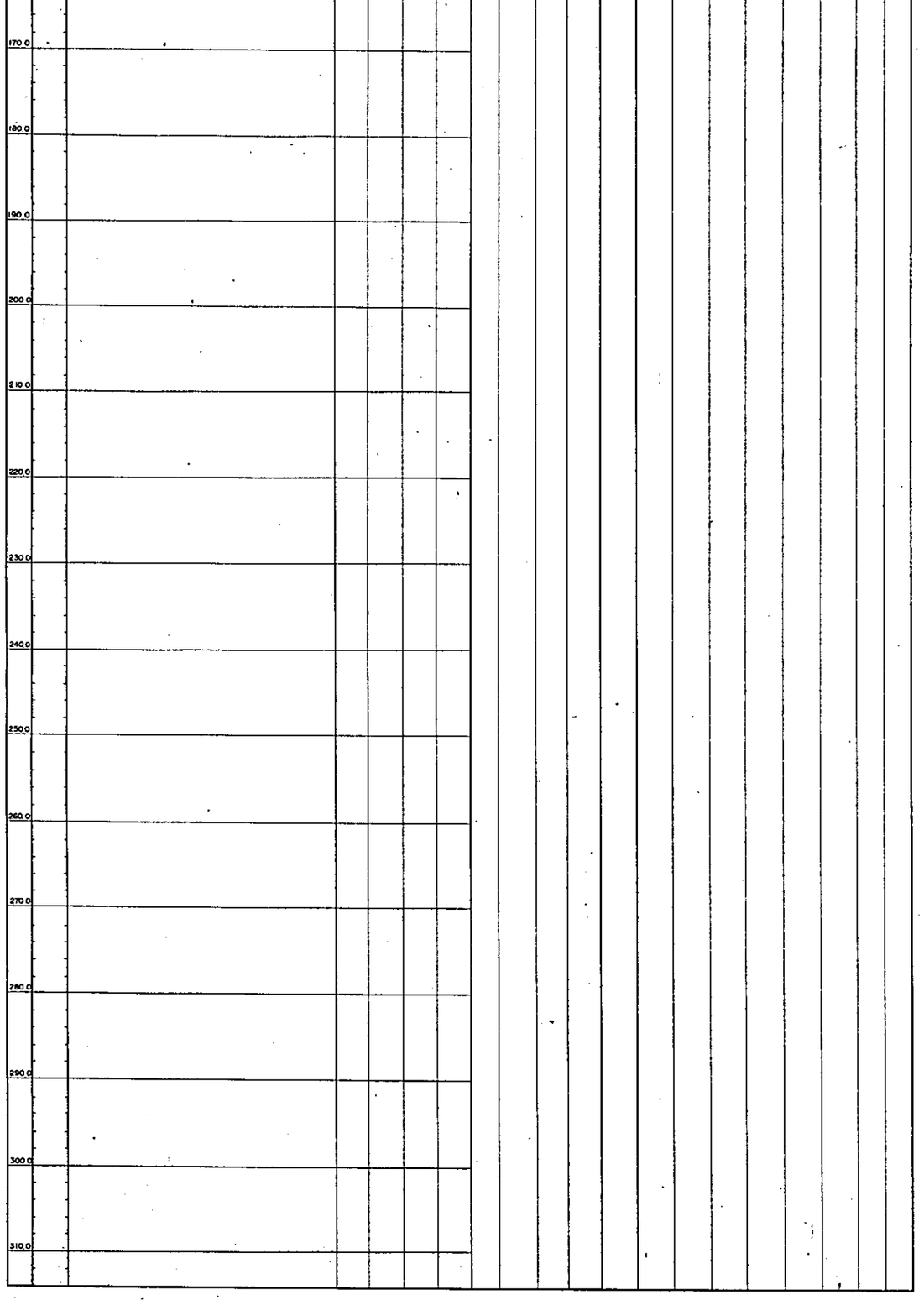
	argillization x	silicification	pyritization	mineralization
fresh		SiO_2 < 55 %	FeS_2 < 1 %	Cu < 0.2 %
weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %	
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %	
strong	> 80 %	> 10 %	> 1 %	

x fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals

(by field observation)

ABBREVIATIONS

arg.	Argillization
sil.	Silicification
py	Pyritization
kao	Kaolinitization
ser	Sericitization
ch.	Chloritization
alu	Alunitization
c c p	Chalcopyrite
c.c	Chalcocite
en	Enargite
dis	Dissemination
v.	Veinlet
w	Width



weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en : Enargite
dis Dissemination
v. Veinlet
w Width

PL I-8-10

GEOLOGICAL SURVEY OF
MONYWA AREA. UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

DDH No.10 (JS 10) Sheet 1

Total Length 151.0 m Core Recovery 98.9 %

Location Sabedaung Elevation 108.6 m

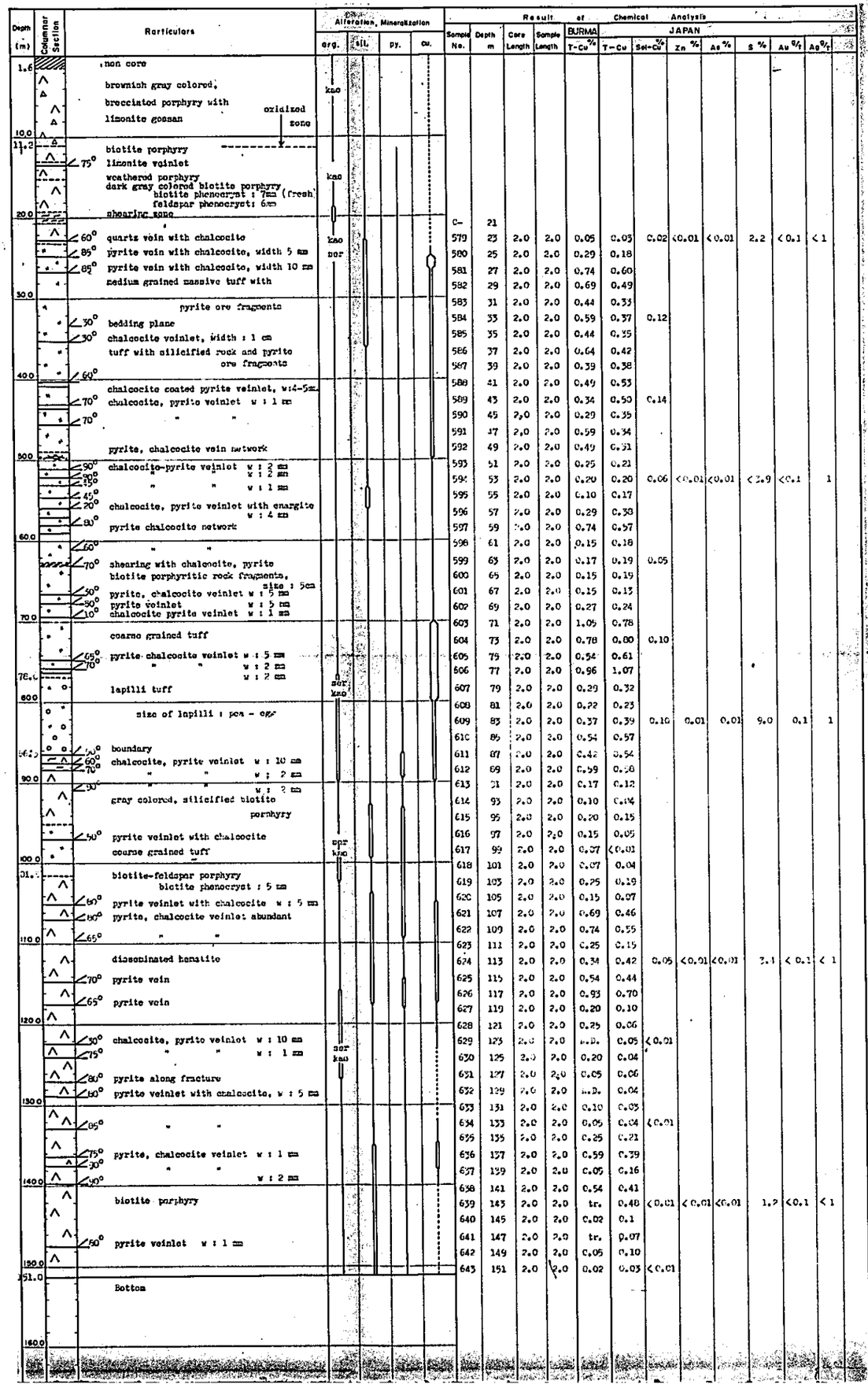
Direction O Inclination -90°

Date of Logging from 22·1·74' to 29·1·74'

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD



Result of Chemical Analysis

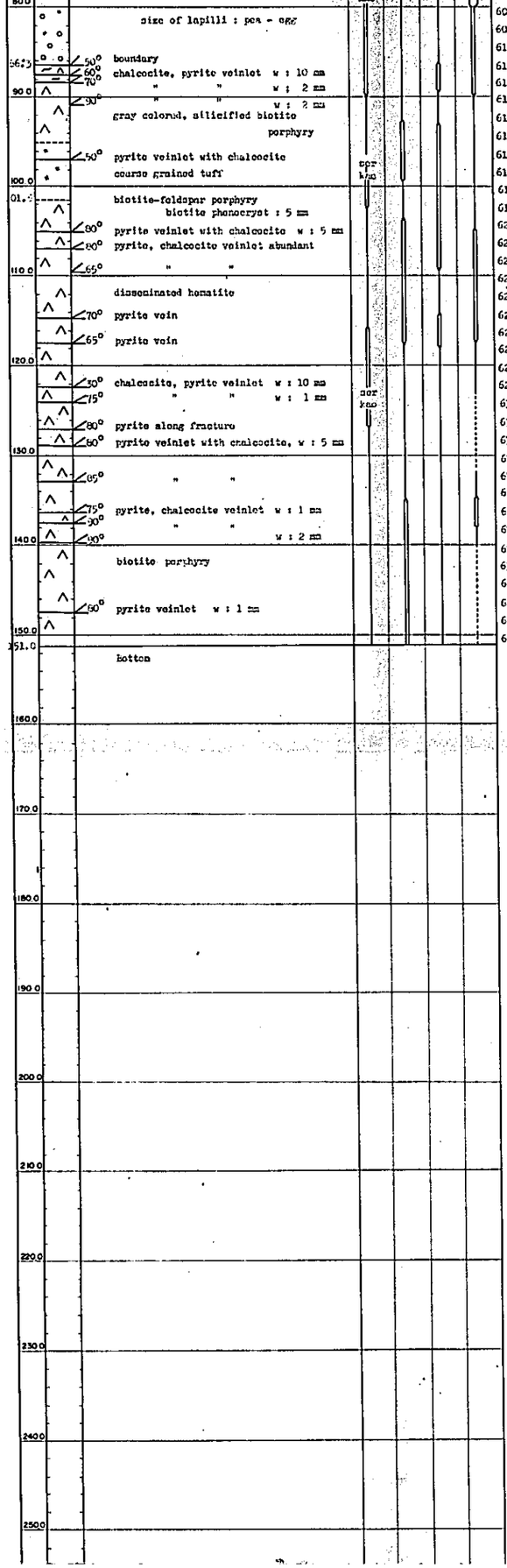
Sample No.	Depth m	Core Length	Sample Length	BURMA T-Cu %	JAPAN T-Cu	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t
C-	21										
579	23	2.0	2.0	0.05	0.03	0.02	<0.01	<0.01	2.2	<0.1	<1
580	25	2.0	2.0	0.29	0.18						
581	27	2.0	2.0	0.74	0.60						
582	29	2.0	2.0	0.69	0.49						
583	31	2.0	2.0	0.44	0.33						
584	33	2.0	2.0	0.59	0.37	0.12					
585	35	2.0	2.0	0.44	0.35						
586	37	2.0	2.0	0.64	0.42						
587	39	2.0	2.0	0.39	0.38						
588	41	2.0	2.0	0.49	0.53						
589	43	2.0	2.0	0.34	0.50	0.14					
590	45	2.0	2.0	0.29	0.35						
591	47	2.0	2.0	0.59	0.34						
592	49	2.0	2.0	0.49	0.51						
593	51	2.0	2.0	0.25	0.21						
594	53	2.0	2.0	0.20	0.20	0.06	<0.01	<0.01	<2.9	<0.1	1
595	55	2.0	2.0	0.10	0.17						
596	57	2.0	2.0	0.29	0.30						
597	59	2.0	2.0	0.74	0.57						
598	61	2.0	2.0	0.15	0.18						
599	63	2.0	2.0	0.17	0.19	0.05					
600	65	2.0	2.0	0.15	0.19						
601	67	2.0	2.0	0.15	0.13						
602	69	2.0	2.0	0.27	0.24						
603	71	2.0	2.0	1.05	0.78						
604	73	2.0	2.0	0.78	0.80	0.10					
605	75	2.0	2.0	0.54	0.61						
606	77	2.0	2.0	0.96	1.07						
607	79	2.0	2.0	0.29	0.32						
608	81	2.0	2.0	0.22	0.23						
609	83	2.0	2.0	0.37	0.39	0.10	0.01	0.01	9.0	0.1	1
610	85	2.0	2.0	0.54	0.57						
611	87	2.0	2.0	0.42	0.54						
612	89	2.0	2.0	0.59	0.58						
613	91	2.0	2.0	0.17	0.12						
614	93	2.0	2.0	0.10	0.14						
615	95	2.0	2.0	0.20	0.15						
616	97	2.0	2.0	0.15	0.05						
617	99	2.0	2.0	0.07	<0.01						
618	101	2.0	2.0	0.07	0.04						
619	103	2.0	2.0	0.25	0.19						
620	105	2.0	2.0	0.15	0.07						
621	107	2.0	2.0	0.69	0.46						
622	109	2.0	2.0	0.74	0.55						
623	111	2.0	2.0	0.25	0.15						
624	113	2.0	2.0	0.34	0.42	0.05	<0.01	<0.01	3.1	<0.1	<1
625	115	2.0	2.0	0.54	0.44						
626	117	2.0	2.0	0.93	0.70						
627	119	2.0	2.0	0.20	0.10						
628	121	2.0	2.0	0.25	0.06						
629	123	2.0	2.0	n.d.	0.05	<0.01					
630	125	2.0	2.0	0.20	0.04						
631	127	2.0	2.0	0.05	0.06						
632	129	2.0	2.0	n.d.	0.04						
633	131	2.0	2.0	0.10	0.03						
634	133	2.0	2.0	0.05	0.04	<0.01					
635	135	2.0	2.0	0.25	0.21						
636	137	2.0	2.0	0.59	0.39						
637	139	2.0	2.0	0.05	0.16						
638	141	2.0	2.0	0.54	0.41						
639	143	2.0	2.0	tr.	0.48	<0.01	<0.01	<0.01	1.9	<0.1	<1
640	145	2.0	2.0	0.02	0.1						
641	147	2.0	2.0	tr.	0.07						
642	149	2.0	2.0	0.05	0.10						
643	151	2.0	2.0	0.02	0.03	<0.01					

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	cu
fresh		< 55 %	< 1 %	< 0.2 %



608	81	2.0	2.0	0.22	0.23								
609	83	2.0	2.0	0.37	0.39	0.10	0.01	0.01	9.0	0.1	1		
610	85	2.0	2.0	0.54	0.57								
611	87	2.0	2.0	0.42	0.54								
612	89	2.0	2.0	0.59	0.58								
613	91	2.0	2.0	0.17	0.12								
614	93	2.0	2.0	0.10	0.04								
615	95	2.0	2.0	0.20	0.15								
616	97	2.0	2.0	0.15	0.05								
617	99	2.0	2.0	0.07	<0.01								
618	101	2.0	2.0	0.07	0.04								
619	103	2.0	2.0	0.25	0.19								
620	105	2.0	2.0	0.15	0.07								
621	107	2.0	2.0	0.69	0.46								
622	109	2.0	2.0	0.74	0.55								
623	111	2.0	2.0	0.25	0.15								
624	113	2.0	2.0	0.34	0.42	0.05	<0.01	<0.01	7.4	< 0.1	< 1		
625	115	2.0	2.0	0.54	0.44								
626	117	2.0	2.0	0.93	0.70								
627	119	2.0	2.0	0.20	0.10								
628	121	2.0	2.0	0.25	0.06								
629	123	2.0	2.0	N.D.	0.05	<0.01							
630	125	2.0	2.0	0.20	0.04								
631	127	2.0	2.0	0.05	0.06								
632	129	2.0	2.0	N.D.	0.04								
633	131	2.0	2.0	0.10	0.03								
634	133	2.0	2.0	0.05	0.04	<0.01							
635	135	2.0	2.0	0.25	0.21								
636	137	2.0	2.0	0.59	0.39								
637	139	2.0	2.0	0.05	0.16								
638	141	2.0	2.0	0.54	0.41								
639	143	2.0	2.0	tr.	0.48	<0.01	<0.01	<0.01	1.2	<0.1	< 1		
640	145	2.0	2.0	0.02	0.1								
641	147	2.0	2.0	tr.	0.07								
642	149	2.0	2.0	0.05	0.10								
643	151	2.0	2.0	0.02	0.03	<0.01							

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende — biotite porphyry; biotite porphyry; quartz — biotite porphyry
- Brecciation
- 30 — Inclination of plane structures. (bedding plane, intrusive boundary, etc)

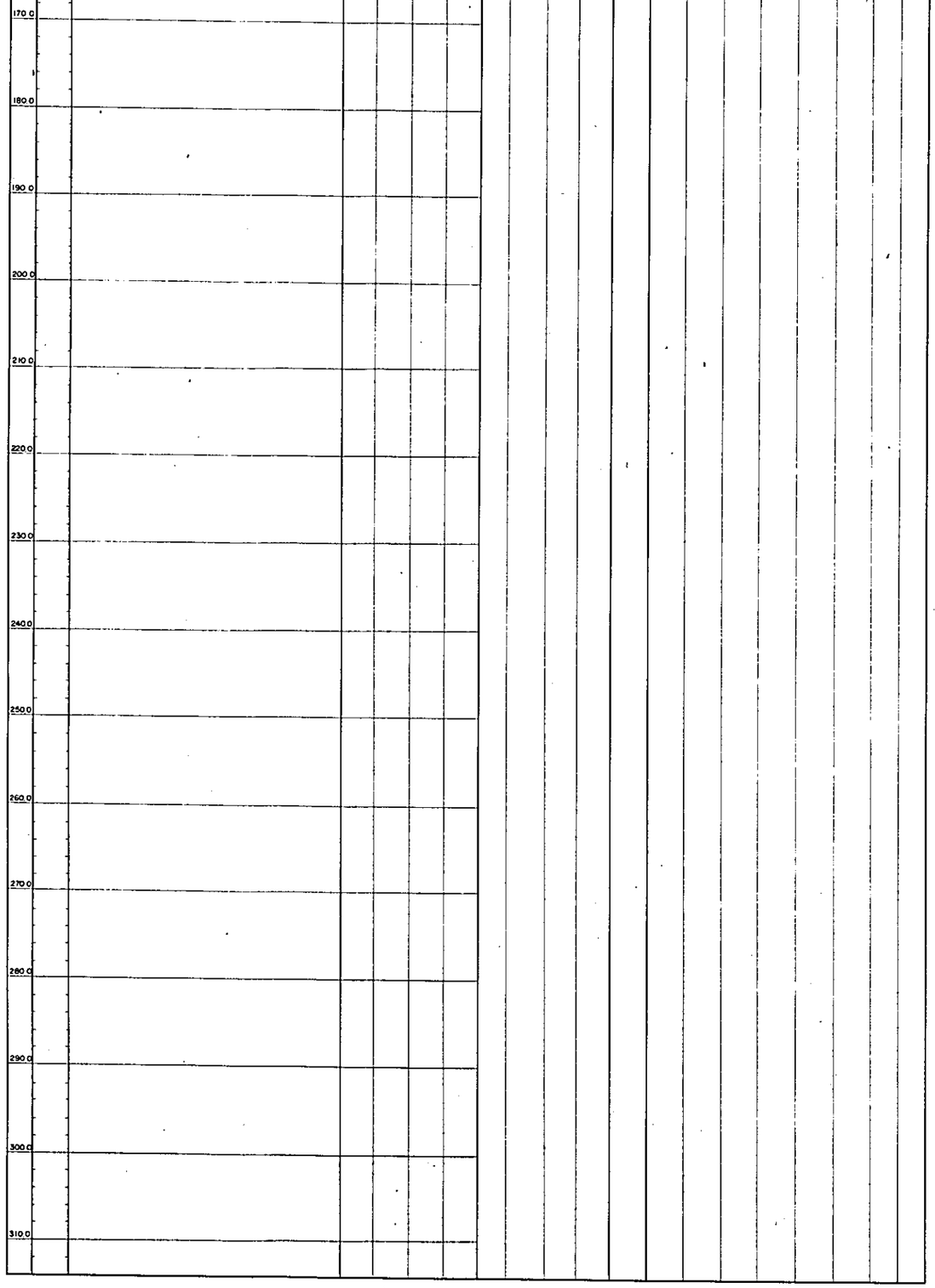
DEGREE OF ALTERATION AND MINERALIZATION

	argillization ※	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg.	Argillization
sil.	Silicification
py.	Pyritization
kao.	Kaolinitization
ser.	Sericitization
ch.	Chloritization
alu.	Alunitization
c.c.p.	Chalcopyrite
c.c.	Chalcocite
en.	Enargite
dis.	Dissemination
v	Veinlet
w	Width



medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg.	Argillization
sil	Silicification
py.	Pyritization
kao	Kaolinitization
ser.	Sericitization
ch.	Chloritization
alu	Alunitization
c.c.p	Chalcopyrite
c.c	Chalcocite
en	Enargite
dis	Dissemination
v	Veinlet
w	Width

PL I-8-11

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

DDH No II (JS (I)) Sheet 1

Total Length 151.6 m Core Recovery 98.0 %

Location Sabedaung Elevation 104.8 m

Direction 0 Inclination −90°

Date of Logging from 21·1·74 to 28·1·74

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD

Depth (m)	Columnar Section	Particulars	Alteration arg	Alteration sil	Mineralization py	Mineralization cu
10.0		non core oxidised lapilli tuff with silicified rock fragments (5-2mm)				
20.0		rhyolitic lapilli tuff				
30.0						
40.0		deudrite veinlets (strong) pyrite dissemination silicified rock fragments angular-subangular < 5mm oxidised zone pyrite impregnation. rhyolite breccia tuff 25° sandstone layer	kao			
50.0		20° sandstone layer, width 5cm white clay rock fragments (angular-subangular) : 5-10cm pyrite ore fragments rock fragments : pea size sandy parts in fine grained tuff	kao			
60.0		rock fragments (angular-subangular) : 1-5cm pyrite ore fragments and silicified rock fragments	kao		dis	
70.0		green copper stain fragments : pea size (biotite (relict) porphyry fragments : 5cm) lapilli tuff biotite porphyry fragments : 5x3 cm pyrite ore fragments : 1x2 cm				
80.0		sandy tuff rock fragments : pea size pyrite ore fragments : 1cm biotite porphyry fragments : 4x3 cm sandy fine grained			dis	
90.0		rock fragments : pea size (biote porphyry fragments) egg size biotite porphyry fragments : coarse grained 7x4 25° chilled margin, width : 2cm			dis	
100.0		dark gray biotite-feldspar-quartz porphyry chilled margin, width : 1cm greenish gray lapilli tuff rock fragments : pea size chloritization 10° fragments of biotite porphyry (angular-subangular) silicified rock pyrite ore			dis	
110.0					dis	
120.0		pyrite ore fragments : 1cm 30° sandy parts in tuff				
130.0		fine grained sandy tuff.. 30° pyrite vein : 3cm pyrite ore fragments				
140.0		pisolite rock fragments : pea size				
150.0		pyrite ore fragments egg size pisolite in coarse grained sandy tuff pea size (egg size is rare				
151.6		Bottom				
160.0						

Result of Chemical Analysis

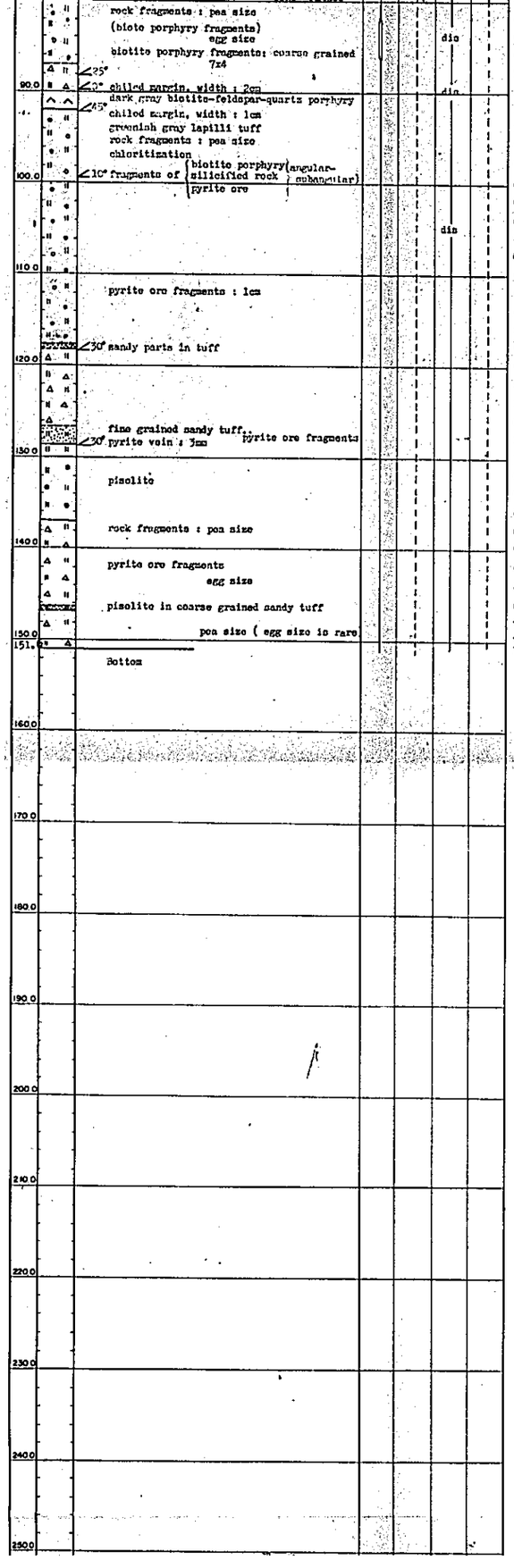
Sample No.	Depth m	Core Length	Sample Length	BURMA T-Cu %	JAPAN T-Cu	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t	
C-	34											
644	36	2.0	2.0	0.10	0.04	0.02	0.01	<0.01	0.7	<0.1	1	
645	38	2.0	2.0	0.07	0.03							
646	40	2.0	2.0	0.14	0.03							
647	42	2.0	2.0	0.12	0.03							
648	44	2.0	2.0	0.05	0.02							
649	46	2.0	2.0	0.05	0.02	<0.01						
650	48	2.0	2.0	0.07	0.03							
651	50	2.0	2.0	0.07	0.04							
652	52	2.0	2.0	0.06	0.04							
653	54	2.0	2.0	0.05	0.03							
654	56	2.0	2.0	0.04	0.02	<0.01						
655	58	2.0	2.0	0.06	0.03							
656	60	2.0	2.0	0.02	0.03							
657	62	2.0	2.0	0.09	0.06							
658	64	2.0	2.0	0.06	0.06							
659	66	2.0	2.0	0.05	0.04	<0.01	0.01	<0.01	3.1	<0.1	<1	
660	68	2.0	2.0	0.06	0.04							
661	70	2.0	2.0	0.01	0.04							
662	72	2.0	2.0	0.05	0.03							
663	74	2.0	2.0	0.10	0.04							
664	76	2.0	2.0	0.06	0.03							
665	78	2.0	2.0	0.17	0.02							
666	80	2.0	2.0	0.10	0.03	<0.01						
667	82	2.0	2.0	0.06	0.03							
668	84	2.0	2.0	0.04	0.02							
669	86	2.0	2.0	tr.	0.01	<0.01						
670	88	2.0	2.0	0.04	0.03							
671	90	2.0	2.0	0.07	0.02							
672	92	2.0	2.0	0.04	0.01							
673	94	2.0	2.0	0.04	0.03							
674	96	2.0	2.0	0.06	0.03	<0.01	0.02	<0.01	1.7	<0.1	<1	
675	98	2.0	2.0	0.06	0.03							
676	100	2.0	2.0	0.09	0.06							
677	102	2.0	2.0	0.06	0.03							
678	104	2.0	2.0	0.06	0.03							
679	106	2.0	2.0	0.06	0.03	<0.01						
680	108	2.0	2.0	0.07	0.03							
681	110	2.0	2.0	0.07	0.03							
682	112	2.0	2.0	0.09	0.03							
683	114	2.0	2.0	0.04	0.03							
684	116	2.0	2.0	0.11	0.05	<0.01						
685	118	2.0	2.0	0.12	0.03							
686	120	2.0	2.0	0.11	0.02							
687	122	2.0	2.0	0.10	0.04							
688	124	2.0	2.0	0.12	0.03							
689	126	2.0	2.0	0.21	0.07	<0.01	<0.01	<0.01	2.2	<0.1	<1	
690	128	2.0	2.0	0.10	0.04							
691	130	2.0	2.0	0.11	0.04							
692	132	2.0	2.0	0.10	0.04							
693	134	2.0	2.0	0.08	0.03							
694	136	2.0	2.0	0.15	0.03							
695	138	2.0	2.0	0.12	0.02							
696	140	2.0	2.0	0.05	0.02							
697	142	2.0	2.0	0.06	0.03							
698	144	2.0	2.0	0.06	0.02							
699	146	2.0	2.0	0.08	0.03	<0.01						
700	148	2.0	2.0	0.06	0.03							
701	150	2.0	2.0	0.07	0.03							
702	151	2.0	2.0	0.11	0.03	<0.01	0.02	<0.01	1.8	<0.1	<1	

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende−biotite porphyry; biotite porphyry; quartz−biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane. intrusive boundary. etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	cu
	fresh	< 55 %	< 1 %	< 0.2 %



666	80	2.0	2.0	0.10	0.03	<0.01							
667	82	2.0	2.0	0.06	0.03								
668	84	2.0	2.0	0.04	0.02								
669	86	2.0	2.0	tr.	0.01	<0.01							
670	88	2.0	2.0	0.04	0.03								
671	90	2.0	2.0	0.07	0.02								
672	92	2.0	2.0	0.04	0.01								
673	94	2.0	2.0	0.04	0.03								
674	96	2.0	2.0	0.06	0.03	<0.01	0.02	<0.01	1.7	<0.1	<1		
675	98	2.0	2.0	0.06	0.03								
676	100	2.0	2.0	0.09	0.06								
677	102	2.0	2.0	0.06	0.03								
678	104	2.0	2.0	0.06	0.03								
679	106	2.0	2.0	0.06	0.03	<0.01							
680	108	2.0	2.0	0.07	0.03								
681	110	2.0	2.0	0.07	0.03								
682	112	2.0	2.0	0.09	0.03								
683	114	2.0	2.0	0.04	0.03								
684	116	2.0	2.0	0.11	0.05	<0.01							
685	118	2.0	2.0	0.11	0.03								
686	120	2.0	2.0	0.11	0.02								
687	122	2.0	2.0	0.10	0.04								
688	124	2.0	2.0	0.12	0.03								
689	126	2.0	2.0	0.21	0.07	<0.01	<0.01	<0.01	2.2	<0.1	<1		
690	128	2.0	2.0	0.10	0.04								
691	130	2.0	2.0	0.11	0.04								
692	132	2.0	2.0	0.10	0.04								
693	134	2.0	2.0	0.08	0.03								
694	136	2.0	2.0	0.15	0.03								
695	138	2.0	2.0	0.12	0.02								
696	140	2.0	2.0	0.05	0.02								
697	142	2.0	2.0	0.06	0.03								
698	144	2.0	2.0	0.06	0.02								
699	146	2.0	2.0	0.08	0.03	<0.01							
700	148	2.0	2.0	0.06	0.03								
701	150	2.0	2.0	0.07	0.03								
702	151	2.0	2.0	0.11	0.03	<0.01	0.02	<0.01	1.8	<0.1	<1		

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane. intrusive boundary. etc)

DEGREE OF ALTERATION AND MINERALIZATION

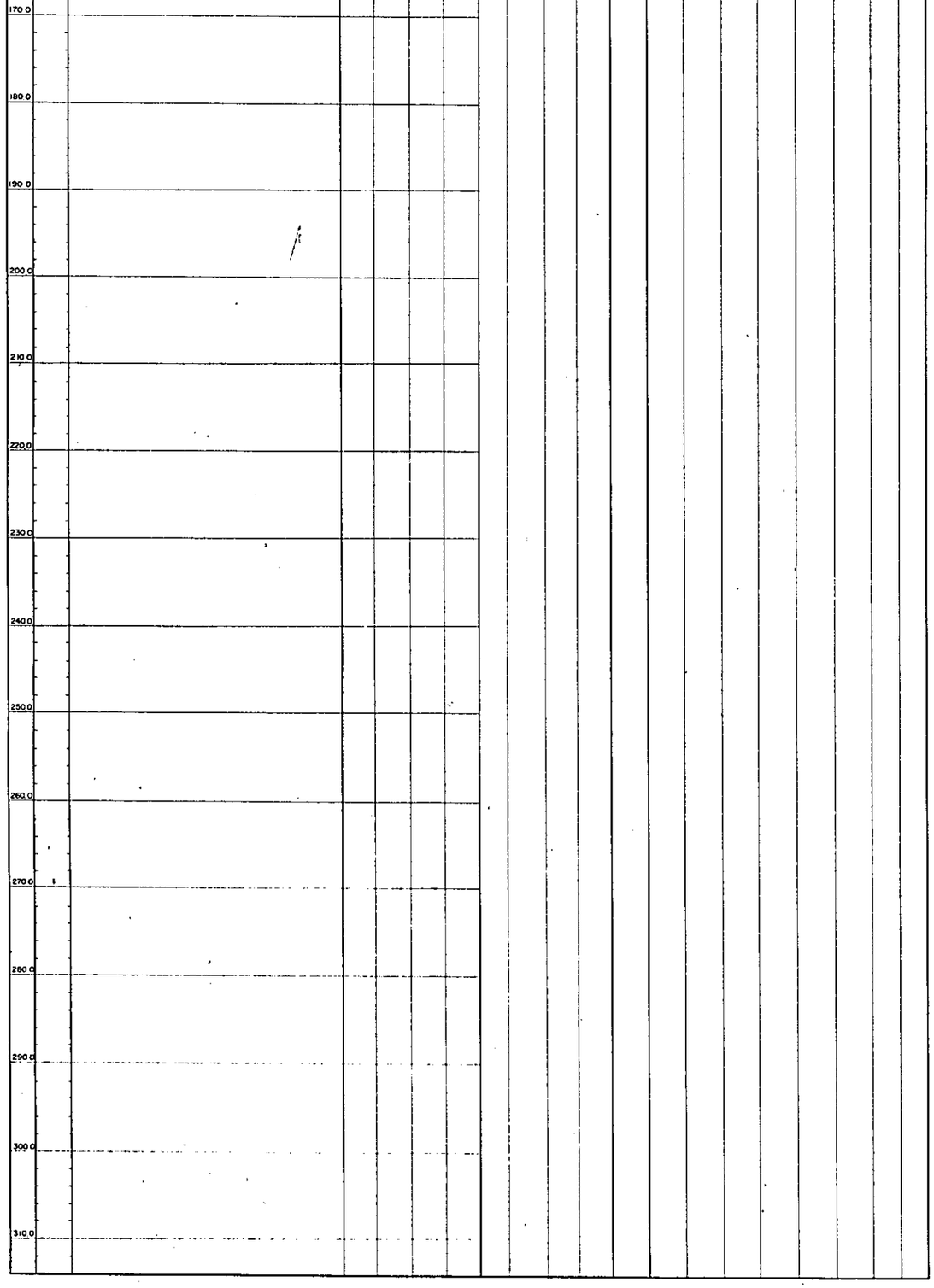
	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c : Chalcocite
en : Enargite
dis : Dissemination
v. : Veinlet
w. : Width



medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg.	:	Argillization
sil.	:	Silicification
py.	:	Pyritization
kao	:	Kaolinitization
ser.	:	Sericitization
ch.	:	Chloritization
alu.	:	Alunitization
c.c.p.	:	Chalcopyrite
c.c	:	Chalcocite
en		Enargite
dis		Dissemination
v.		Veinlet
w		Width

PL I-8-12

GEOLOGICAL SURVEY OF
MONYWA AREA. UNION OF BURMA
(PHASE Ⅱ)

CORE LOG and ASSAY

DDH No.12 (JS 12) Sheet 1

Total Length 151.0 m Core Recovery 92.5 %

Location Sabedaung Elevation 78.1 m

Direction O Inclination -90°

Date of Logging from 5·2·74 to 11·2·74

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD

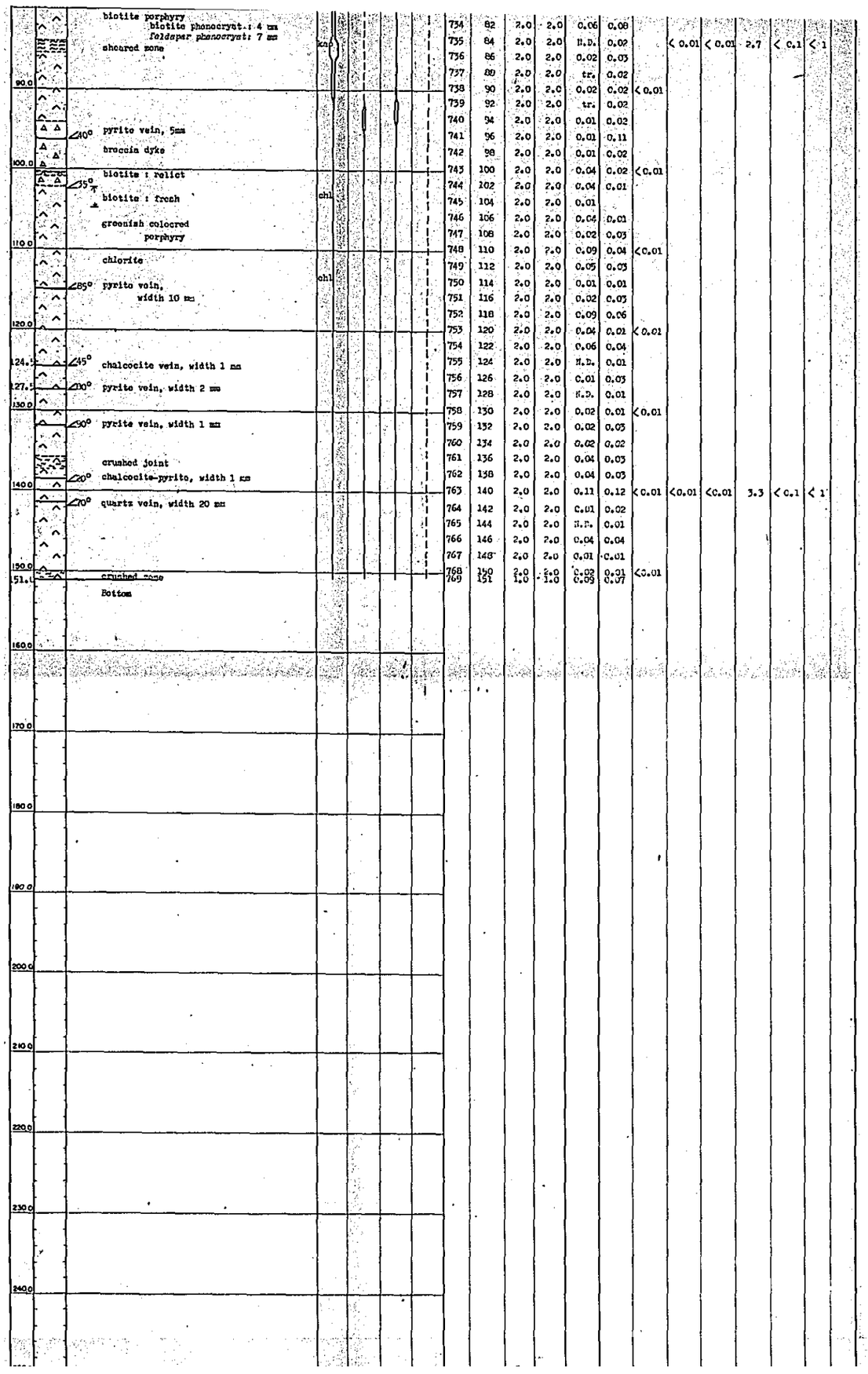
Depth (m)	Column Section	Particulars	Alteration Mineralization				Sample No.	Depth m	Core Length	Sample Length	BURMA T-Cu %	JAPAN T-Cu	JAPAN Sol-Cu %	JAPAN Zn %	JAPAN As %	JAPAN S %	JAPAN Au g/t	JAPAN Ag g/t
			arg	sil	py	cu												
7.3																		
10.0		red colored coarse grained sand ∠45°																
		biotite porphyry biotite (sericite):5mm feldspar (kaoline):7mm oxidized zone	kao															
18.6							C-	18										
20.0							703	20	2.0	1.8	1.15	1.19	0.17	< 0.01	0.01	3.9	< 0.1	< 1
		chalcocite impregnation	kao				704	22	2.0	2.0	2.01	1.84						
22.4		∠75° chalcocite vein, width 7 mm	ser				705	24	2.0	2.0	1.25	1.47						
		chalcocite vein, width 7 mm					706	26	2.0	1.7	1.95	1.26						
27.6		∠0°					707	28	2.0	1.9	1.79	1.42						
30.0		∠75° chalcocite vein bearing pyrite, width 5mm	ser				708	30	2.0	2.0	3.58	3.71	0.26					
		chalcocite impregnation					709	32	2.0	2.0	1.08	0.84						
31.5		∠30°	ser				710	34	2.0	2.0	0.69	0.76						
		∠70° chalcocite vein bearing pyrite, width 5cm					711	36	2.0	2.0	1.06	1.01						
34.2		∠60° chalcocite vein, width : 20 mm					712	38	2.0	2.0	0.12	0.10						
		pyrite vein;					713	40	2.0	2.0	0.05	0.06	0.03					
37.0		∠70° pyrite vein, width : 1 mm	kao				714	42	2.0	2.0	0.25	0.26						
39.4							715	44	2.0	2.0	0.07	0.06						
40.0							716	46	2.0	2.0	0.07	0.03						
		sheared zone					717	48	2.0	2.0	tr.	0.03						
42.0		∠85° chalcocite vein, width 5 mm					718	50	2.0	2.0	0.07	0.10	0.02	< 0.01	< 0.01	2.2	< 0.1	< 1
		biotite porphyry	kao				719	52	2.0	2.0	0.27	0.20						
		biotite phenocryst : 5 mm					720	54	2.0	2.0	0.07	0.08						
		feldspar phenocryst: 7 mm					721	56	2.0	2.0	0.22	0.24						
50.0							722	58	2.0	2.0	0.10	0.05						
51.1		∠90° chalcocite vein, width 1 mm					723	60	2.0	2.0	0.02	0.02	< 0.01					
		sheared zone					724	62	2.0	2.0	0.06	0.07						
		∠70° pyrite vein, width 7 mm					725	64	2.0	2.0	0.17	0.16						
							726	66	2.0	2.0	0.04	0.01						
60.0		∠60° pyrite chalcocite vein, width 10 mm					727	68	2.0	2.0	0.05	0.03						
		alunite					728	70	2.0	2.0	0.25	0.35	0.02					
							729	72	2.0	2.0	0.04	0.01						
							730	74	2.0	2.0	0.04	0.03						
69.1		∠35° chalcocite vein, width 10 mm	kao				731	76	2.0	2.0	0.01	0.01						
70.0							732	78	2.0	2.0	0.09	0.05						
		∠10° pyrite vein, width 4 cm					733	80	2.0	2.0	0.04	0.02	< 0.01	< 0.01	< 0.01	3.0	< 0.1	< 1
		biotite porphyry					734	82	2.0	2.0	0.06	0.08						
		biotite phenocryst : 4 mm					735	84	2.0	2.0	N.D.	0.02		< 0.01	< 0.01	2.7	< 0.1	< 1
		feldspar phenocryst: 7 mm	kao				736	86	2.0	2.0	0.02	0.03						
		sheared zone					737	88	2.0	2.0	tr.	0.02						
90.0							738	90	2.0	2.0	0.02	0.02	< 0.01					
							739	92	2.0	2.0	tr.	0.02						
		∠10° pyrite vein, 5cm					740	94	2.0	2.0	0.01	0.02						
		breccia dyke					741	96	2.0	2.0	0.01	0.11						
100.0							742	98	2.0	2.0	0.01	0.02						
		biotite : relict					743	100	2.0	2.0	0.04	0.02	< 0.01					
		∠35° biotite : fresh	chl				744	102	2.0	2.0	0.04	0.01						
							745	104	2.0	2.0	0.01							
		greenish colocred porphyry					746	106	2.0	2.0	0.04	0.01						
110.0							747	108	2.0	2.0	0.02	0.03						
		chlorite					748	110	2.0	2.0	0.09	0.04	< 0.01					
		∠85° pyrite vein,	chl				749	112	2.0	2.0	0.05	0.03						
		width 10 mm					750	114	2.0	2.0	0.01	0.01						
							751	116	2.0	2.0	0.02	0.03						
120.0							752	118	2.0	2.0	0.09	0.06						
							753	120	2.0	2.0	0.04	0.01	< 0.01					
							754	122	2.0	2.0	0.06	0.04						
124.5		∠45° chalcocite vein, width 1 mm					755	124	2.0	2.0	N.D.	0.01						
127.5		∠30° pyrite vein, width 2 mm					756	126	2.0	2.0	0.01	0.03						
130.0							757	128	2.0	2.0	N.D.	0.01						
		∠90° pyrite vein, width 1 mm					758	130	2.0	2.0	0.02	0.01	< 0.01					
							759	132	2.0	2.0	0.02	0.03						
							760	134	2.0	2.0	0.02	0.02						
		crushed joint					761	136	2.0	2.0	0.04	0.03						
		∠20° chalcocite-pyrite, width 1 cm					762	138	2.0	2.0	0.04	0.03						
140.0							763	140	2.0	2.0	0.11	0.12	< 0.01	< 0.01	< 0.01	3.3	< 0.1	< 1
		∠70° quartz vein, width 20 mm					764	142	2.0	2.0	0.01	0.02						
							765	144	2.0	2.0	N.D.	0.01						
							766	146	2.0	2.0	0.04	0.04						
150.0							767	148	2.0	2.0	0.01	0.01						
151.0		crushed zone					768	150	2.0	2.0	0.02	0.01	< 0.01					
		Bottom					769	151	1.0	1.0	0.06	0.07						
160.0																		

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciaton
- ∠30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	cu
fresh		< 55 %	< 1 %	< 0.2 %



734	82	2.0	2.0	0.06	0.08							
735	84	2.0	2.0	N.D.	0.02		< 0.01	< 0.01	2.7	< 0.1	< 1	
736	86	2.0	2.0	0.02	0.03							
737	88	2.0	2.0	tr.	0.02							
738	90	2.0	2.0	0.02	0.02	< 0.01						
739	92	2.0	2.0	tr.	0.02							
740	94	2.0	2.0	0.01	0.02							
741	96	2.0	2.0	0.01	0.11							
742	98	2.0	2.0	0.01	0.02							
743	100	2.0	2.0	0.04	0.02	< 0.01						
744	102	2.0	2.0	0.04	0.01							
745	104	2.0	2.0	0.01								
746	106	2.0	2.0	0.04	0.01							
747	108	2.0	2.0	0.02	0.03							
748	110	2.0	2.0	0.09	0.04	< 0.01						
749	112	2.0	2.0	0.05	0.03							
750	114	2.0	2.0	0.01	0.01							
751	116	2.0	2.0	0.02	0.03							
752	118	2.0	2.0	0.09	0.06							
753	120	2.0	2.0	0.04	0.01	< 0.01						
754	122	2.0	2.0	0.06	0.04							
755	124	2.0	2.0	N.D.	0.01							
756	126	2.0	2.0	0.01	0.03							
757	128	2.0	2.0	N.D.	0.01							
758	130	2.0	2.0	0.02	0.01	< 0.01						
759	132	2.0	2.0	0.02	0.03							
760	134	2.0	2.0	0.02	0.02							
761	136	2.0	2.0	0.04	0.03							
762	138	2.0	2.0	0.04	0.03							
763	140	2.0	2.0	0.11	0.12	< 0.01	< 0.01	< 0.01	3.3	< 0.1	< 1	
764	142	2.0	2.0	0.01	0.02							
765	144	2.0	2.0	N.D.	0.01							
766	146	2.0	2.0	0.04	0.04							
767	148	2.0	2.0	0.01	< 0.01							
768	150	2.0	2.0	0.02	0.01	< 0.01						
769	151	1.0	1.0	0.03	0.07							

LEGEND

- Mudstone
- *Sandstone*
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- *Porphyry* — hornblende – biotite porphyry, biotite porphyry, quartz – biotite porphyry
- Brecciaton
- 30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg.	:	Argillization
sil.	:	Silicification
py.	:	*Pyritization*
kao.	:	Kaolinitization
ser.	:	Sericitization
ch.	:	Chloritization
alu.	:	Alunitization
c.c.p	:	Chalcopyrite
c.c	:	Chalcocite
en.	:	Enargite
dis.	:	Dissemination
v.		Veinlet
w.		Width

	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

X fresh : unaltered

weak : parts of feldspar phenocrysts changed into clay minerals.

medium : almost all the feldspar phenocrysts changed into clay minerals

strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg.	:	Argillization
sil.	:	Silicification
py	:	Pyritization
kao	:	Kaolinitization
ser.	:	Sericitization
ch.	:	Chloritization
alu.	:	Alunitization
c.c.p	:	Chalcopyrite
c.c	:	Chalcocite
en.	:	Enargite
dis.	:	Dissemination
v		Veinlet
w		Width

PL I-8-13

GEOLOGICAL SURVEY OF
MONYWA AREA. UNION OF BURMA.
(PHASE II)

CORE LOG and ASSAY

DDH No IP-I (LN4) Sheet 1

Total Length 201.2 m Core Recovery 97.3 %

Location Sabedaung South Elevation 77.8 m

Direction O Inclination −90°

Date of Logging from 18·2·74 to 24·2·74

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD

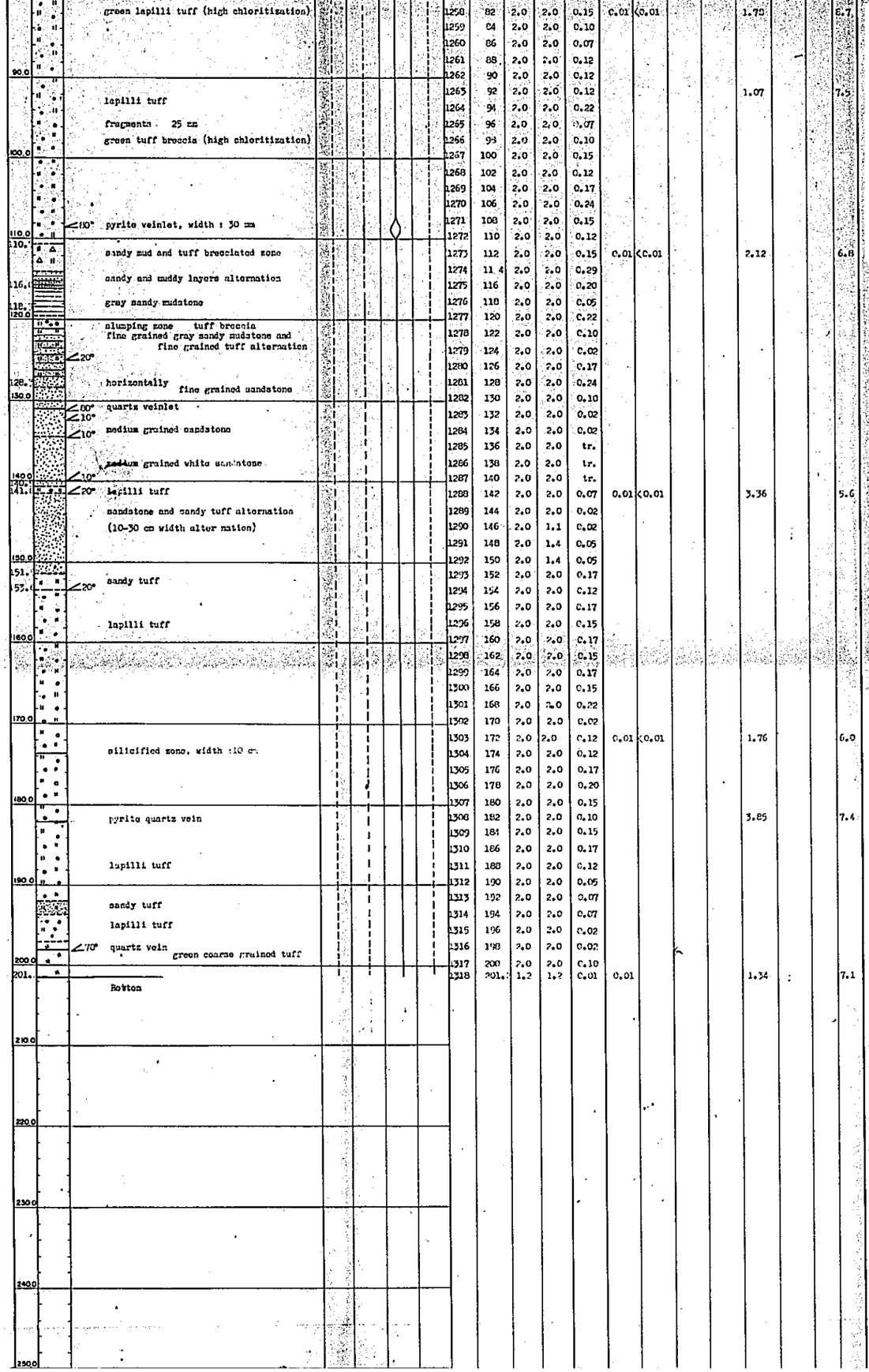
Depth (m)	Columnar Section	Particulars	Alteration Mineralization: org	sil	py	cu	Sample No.	Depth m	Core Length	Sample Length	Result of Chemical Analysis: BURMA T-Cu %	JAPAN T-Cu	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t	Fe %
10.0		non core (kangon formation) clay and sandstone argillied zone : 20 cm (naggigon formation) weathered sandstone																	
20.0		weathered sandstone medium grained, whitish gray colored, fresh sandstone. ∠10°					C-	20											
30.0		∠15° ∠70° quartz-pyrite veinlet, width : 20cm ∠20°					1228	22	2.0	2.0	0.02	0.02	0.01			3.00			7.1
							1229	24	2.0	2.0	0.02								
							1230	26	2.0	2.0	0.05								
							1231	28	2.0	2.0	tr.								
							1232	30	2.0	2.0	0.01								
							1233	32	2.0	2.0	0.02								
							1234	34	2.0	2.0	0.07								
							1235	36	2.0	2.0	0.02								
							1236	38	2.0	2.0	tr.								
40.0		∠10° ∠20° biotite porphyry (chloritization) ∠70° sheared zone ∠60°					1237	40	2.0	2.0	0.02								
		slumping zone sandstone with muddy patches					1238	42	2.0	2.0	0.02								
		∠30°					1239	44	2.0	2.0	0.02								
							1240	46	2.0	2.0	0.02								
		high slumping zone					1241	48	2.0	2.0	0.05								
50.0							1242	50	2.0	2.0	0.02								
		∠15° ∠20° low slumping zone high slumping zone medium grained sandstone					1243	52	2.0	2.0	0.05	0.01	0.01			2.32			5.1
							1244	54	2.0	2.0	0.05								
							1245	56	2.0	2.0	tr.								
							1246	58	2.0	2.0	0.05								
60.0							1247	60	2.0	2.0	0.02								
62.5							1248	62	2.0	2.0	0.05								
65.0		biotite porphyry sheared zone					1249	64	2.0	2.0	0.02								
67.6							1250	66	2.0	2.0	tr.								
70.0		biotite porphyry					1251	68	2.0	2.0	tr.								
							1252	70	2.0	2.0	tr.								
70.6		∠50° green lapilli tuff (chloritization) lapilli 10 mm					1253	72	2.0	2.0	0.02								
74.6							1254	74	2.0	2.0	0.07								
77.7		biotite porphyry ∠50°					1255	76	2.0	2.0	0.02								
80.0							1256	78	2.0	2.0	0.02								
							1257	80	2.0	2.0	0.02								
		green lapilli tuff (high chloritization)					1258	82	2.0	2.0	0.15	0.1	<0.01			1.78			8.7
							1259	84	2.0	2.0	0.10								
							1260	86	2.0	2.0	0.07								
90.0							1261	88	2.0	2.0	0.12								
							1262	90	2.0	2.0	0.12								
		lapilli tuff fragments 25 mm green tuff breccia (high chloritization)					1263	92	2.0	2.0	0.12					1.07			7.5
							1264	94	2.0	2.0	0.22								
							1265	96	2.0	2.0	0.11								
100.0							1266	98	2.0	2.0	0.10								
							1267	100	2.0	2.0	0.15								
							1268	102	2.0	2.0	0.12								
							1269	104	2.0	2.0	0.17								
							1270	106	2.0	2.0	0.24								
		∠30° pyrite veinlet, width : 30 mm					1271	108	2.0	2.0	0.15								
110.0							1272	110	2.0	2.0	0.12								
110.7		sandy mud and tuff brecciated zone					1273	112	2.0	2.0	0.15	0.01	<0.01			2.12			6.8
							1274	114	2.0	2.0	0.29								
116.4		sandy and muddy layers alternation					1275	116	2.0	2.0	0.20								
118.2		gray sandy mudstone					1276	118	2.0	2.0	0.05								
120.0							1277	120	2.0	2.0	0.22								
		slumping zone tuff breccia fine grained gray sandy mudstone and fine grained tuff alternation					1278	122	2.0	2.0	0.10								
		∠20°					1279	124	2.0	2.0	0.02								
							1280	126	2.0	2.0	0.17								
126.2		horizontally fine grained sandstone					1281	128	2.0	2.0	0.24								
130.0							1282	130	2.0	2.0	0.10								
		∠60° quartz veinlet ∠10°					1283	132	2.0	2.0	0.02								
		∠10° medium grained sandstone					1284	134	2.0	2.0	0.02								
							1285	136	2.0	2.0	tr.								
		medium grained white sandstone					1286	138	2.0	2.0	tr.								
140.0		∠10°					1287	140	2.0	2.0	tr.								
141.1		∠20° lapilli tuff sandstone and sandy tuff alternation (10-30 cm width alternation)					1288	142	2.0	2.0	0.07	0.01	<0.01			3.36			5.6
							1289	144	2.0	2.0	0.02								
							1290	146	2.0	1.1	0.02								
							1291	148	2.0	1.4	0.05								
150.0							1292	150	2.0	1.4	0.05								
151.5							1293	152	2.0	2.0	0.17								
153.4		sandy tuff ∠20°					1294	154	2.0	2.0	0.12								
							1295	156	2.0	2.0	0.17								
		lapilli tuff					1296	158	2.0	2.0	0.15								
160.0																			

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia
- Rhyolite
- Porphyry — hornblende − biotite porphyry; biotite porphyry; quartz − biotite porphyry
- Brecciaton
- ∠30 Inclination of plane structures. (bedding plane, intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
strong				
medium				
weak				



1258	82	2.0	2.0	0.15	0.01	<0.01		1.75		6.7
1259	84	2.0	2.0	0.10						
1260	86	2.0	2.0	0.07						
1261	88	2.0	2.0	0.12						
1262	90	2.0	2.0	0.12						
1263	92	2.0	2.0	0.12				1.07		7.5
1264	94	2.0	2.0	0.22						
1265	96	2.0	2.0	0.07						
1266	98	2.0	2.0	0.10						
1267	100	2.0	2.0	0.15						
1268	102	2.0	2.0	0.12						
1269	104	2.0	2.0	0.17						
1270	106	2.0	2.0	0.24						
1271	108	2.0	2.0	0.15						
1272	110	2.0	2.0	0.12						
1273	112	2.0	2.0	0.15	0.01	<0.01		2.12		6.8
1274	11 4	2.0	2.0	0.29						
1275	116	2.0	2.0	0.20						
1276	118	2.0	2.0	0.05						
1277	120	2.0	2.0	0.22						
1278	122	2.0	2.0	0.10						
1279	124	2.0	2.0	0.02						
1280	126	2.0	2.0	0.17						
1281	128	2.0	2.0	0.24						
1282	130	2.0	2.0	0.10						
1283	132	2.0	2.0	0.02						
1284	134	2.0	2.0	0.02						
1285	136	2.0	2.0	tr.						
1286	138	2.0	2.0	tr.						
1287	140	2.0	2.0	tr.						
1288	142	2.0	2.0	0.07	0.01	<0.01		3.36		5.6
1289	144	2.0	2.0	0.02						
1290	146	2.0	1.1	0.02						
1291	148	2.0	1.4	0.05						
1292	150	2.0	1.4	0.05						
1293	152	2.0	2.0	0.17						
1294	154	2.0	2.0	0.12						
1295	156	2.0	2.0	0.17						
1296	158	2.0	2.0	0.15						
1297	160	2.0	2.0	0.17						
1298	162	2.0	2.0	0.15						
1299	164	2.0	2.0	0.17						
1300	166	2.0	2.0	0.15						
1301	168	2.0	2.0	0.22						
1302	170	2.0	2.0	0.02						
1303	172	2.0	2.0	0.12	0.01	<0.01		1.76		6.0
1304	174	2.0	2.0	0.12						
1305	176	2.0	2.0	0.17						
1306	178	2.0	2.0	0.20						
1307	180	2.0	2.0	0.15						
1308	182	2.0	2.0	0.10				3.85		7.4
1309	184	2.0	2.0	0.15						
1310	186	2.0	2.0	0.17						
1311	188	2.0	2.0	0.12						
1312	190	2.0	2.0	0.05						
1313	192	2.0	2.0	0.07						
1314	194	2.0	2.0	0.07						
1315	196	2.0	2.0	0.02						
1316	198	2.0	2.0	0.02						
1317	200	2.0	2.0	0.10						
1318	201.2	1.2	1.2	0.01	0.01			1.34		7.1

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciaton
- 30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization*	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground mass changed into clay minerals.
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py : Pyritization
kao : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c : Chalcocite
en : Enargite
dis : Dissemination
v. : Veinlet
w. : Width

180.0		silicified zone, width 110 cm	1302	170	2.0	2.0	0.02			
			1303	172	2.0	2.0	0.12	0.01	<0.01	1.76	6.0
			1304	174	2.0	2.0	0.12			
			1305	176	2.0	2.0	0.17			
			1306	178	2.0	2.0	0.20			
			1307	180	2.0	2.0	0.15			
190.0		pyrite quartz vein	1308	182	2.0	2.0	0.10			3.85	7.4
		lapilli tuff	1309	184	2.0	2.0	0.15			
			1310	186	2.0	2.0	0.17			
			1311	188	2.0	2.0	0.12			
			1312	190	2.0	2.0	0.05			
		sandy tuff	1313	192	2.0	2.0	0.07			
		lapilli tuff	1314	194	2.0	2.0	0.07			
			1315	196	2.0	2.0	0.02			
200.0	∠70°	quartz vein green coarse grained tuff.	1316	198	2.0	2.0	0.02			
			1317	200	2.0	2.0	0.10			
201.2		Boring	1318	201.2	1.2	1.2	0.01	0.01		1.34	7.1
210.0										
220.0										
230.0										
240.0										
250.0										
260.0										
270.0										
280.0										
290.0										
300.0										
310.0										

fresh	unaltered		
weak	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals.
strong : not only feldspar phenocrysts but also ground mass changed into clay minerals.
(by field observation)

ABBREVIATIONS

arg. : Argillizations
sil. : Silicification
py. : Pyritization
kao. : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-8-14

GEOLOGICAL SURVEY OF
MONYWA AREA, UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

DDH No JK-1(21C) Sheet 1

Total Length 301.6 m Core Recovery 96.8 %

Location Kyisindaung Elevation 128.4 m

Direction O Inclination −90°

Date of Logging from 5·2·74 to 20·2·74

Logged by S. MONONOBE.

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO LTD

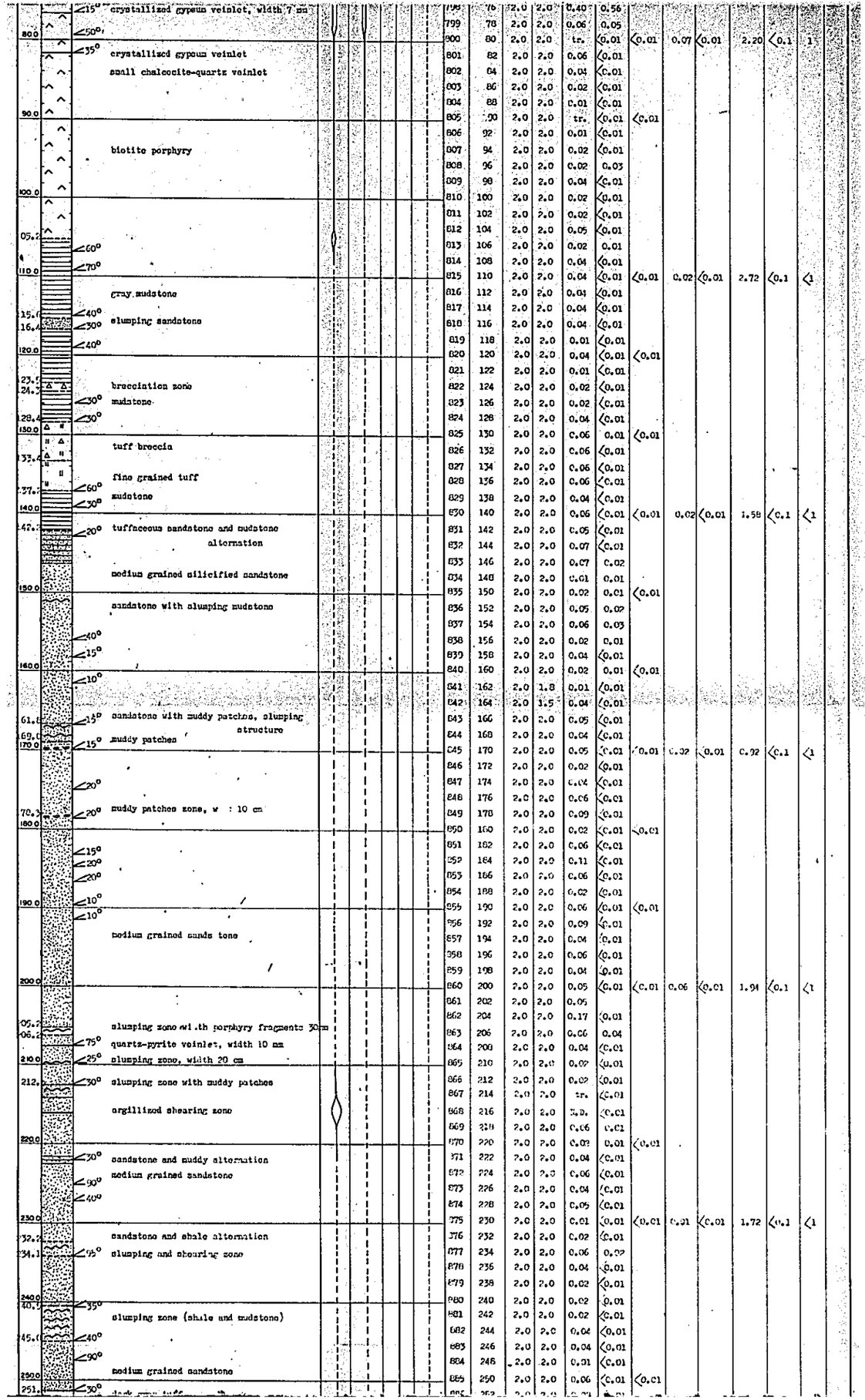
Depth (m)	Particulars	Alteration, Mineralization: arg.	sil.	py.	cu.	Sample No.	Depth m	Core Length	Sample Length	BURMA T-Cu %	JAPAN T-Cu %	JAPAN Sol-Cu %	JAPAN Zn %	JAPAN As %	JAPAN S %	JAPAN Au g/t	JAPAN Ag g/t
	non core																
10.0	weathered biotite porphyry, limonite veinlet ∠60°																
19.0	weathered biotite porphyry																
20.0	limonite veinlet with green copper ∠30°					C-	18										
22.3	kaolinization zone					770	20	2.0	2.0	0.68	0.52	0.46	0.15	<0.01	0.11	0.1	2
25.0						771	22	2.0	2.0	0.33	0.32						
26.0	argillization zone					772	24	2.0	2.0	0.20	0.33						
30.0						773	26	2.0	2.0	0.17	0.15						
						774	28	2.0	2.0	0.09	0.08						
						775	30	2.0	2.0	0.06	0.05	0.03					
	weathered biotite porphyry					776	32	2.0	2.0	0.07	0.06						
34.5	∠40°					777	34	2.0	2.0	0.11	0.05						
	argillized porphyry					778	36	2.0	2.0	0.06	0.04						
37.9	∠60° ∠30° ∠25°					779	38	2.0	2.0	0.11	0.08						
40.0	medium grained sandstone					780	40	2.0	2.0	0.09	0.01	<0.01					
						781	42	2.0	2.0	0.16	0.14						
	breccia rock					782	44	2.0	2.0	0.28	0.23						
45.4						783	46	2.0	2.0	0.49	0.73						
	argillized biotite porphyry					784	48	2.0	2.0	0.07	0.09						
50.0						785	50	2.0	2.0	0.04	0.02	0.01	<0.01	<0.01	4.96	<0.1	<1
						786	52	2.0	2.0	0.02	<0.01						
						787	54	2.0	2.0	0.01	<0.01						
	biotite relict : 5 mm					788	56	2.0	2.0	0.01	<0.01						
	feldspar : 7 mm					789	58	2.0	2.0	0.02	<0.01						
60.0						790	60	2.0	2.0	0.04	<0.01						
						791	62	2.0	2.0	0.02	<0.01						
						792	64	2.0	2.0	0.01	<0.01						
						793	66	2.0	2.0	tr.	<0.01						
	fine grained silicified porphyritic rock ∠60°					794	68	2.0	2.0	tr.	<0.01						
70.0						795	70	2.0	2.0	0.01	<0.01	0.01					
						796	72	2.0	2.0	0.02	<0.01						
	argillized porphyry					797	74	2.0	2.0	tr.	<0.01						
	∠15° crystallized gypsum veinlet, width 7 mm					798	76	2.0	2.0	0.40	0.56						
80.0	∠50°					799	78	2.0	2.0	0.06	0.05						
	∠35° crystallized gypsum veinlet					800	80	2.0	2.0	tr.	<0.01	<0.01	0.07	<0.01	2.20	<0.1	1
	small chalcocite-quartz veinlet					801	82	2.0	2.0	0.06	<0.01						
						802	84	2.0	2.0	0.04	<0.01						
						803	86	2.0	2.0	0.02	<0.01						
90.0						804	88	2.0	2.0	0.01	<0.01						
						805	90	2.0	2.0	tr.	<0.01	<0.01					
	biotite porphyry					806	92	2.0	2.0	0.01	<0.01						
						807	94	2.0	2.0	0.02	<0.01						
						808	96	2.0	2.0	0.02	0.05						
100.0						809	98	2.0	2.0	0.04	<0.01						
						810	100	2.0	2.0	0.02	<0.01						
						811	102	2.0	2.0	0.02	<0.01						
105.5						812	104	2.0	2.0	0.05	<0.01						
	∠60°					813	106	2.0	2.0	0.02	0.01						
110.0	∠70°					814	108	2.0	2.0	0.04	<0.01						
	gray mudstone					815	110	2.0	2.0	0.04	<0.01	<0.01	0.02	<0.01	7.72	<0.1	<1
						816	112	2.0	2.0	0.01	<0.01						
115.1	∠40°					817	114	2.0	2.0	0.04	<0.01						
116.4	slumping sandstone ∠30°					818	116	2.0	2.0	0.04	<0.01						
120.0	∠40°					819	118	2.0	2.0	0.01	<0.01						
						820	120	2.0	2.0	0.04	<0.01	<0.01					
123.1						821	122	2.0	2.0	0.01	<0.01						
124.5	brecciation zone					822	124	2.0	2.0	0.02	<0.01						
	∠30° mudstone					823	126	2.0	2.0	0.02	<0.01						
128.4	∠30°					824	128	2.0	2.0	0.04	<0.01						
130.0						825	130	2.0	2.0	0.06	0.01	<0.01					
133.6	tuff breccia					826	132	2.0	2.0	0.06	<0.01						
						827	134	2.0	2.0	0.06	<0.01						
	fine grained tuff					828	136	2.0	2.0	0.06	<0.01						
137.6	∠60° mudstone					829	138	2.0	2.0	0.04	<0.01						
140.0	∠30°					830	140	2.0	2.0	0.06	<0.01	<0.01	0.02	<0.01	1.58	<0.1	<1
142.1	∠20° tuffaceous sandstone and mudstone alternation					831	142	2.0	2.0	0.05	<0.01						
						832	144	2.0	2.0	0.07	<0.01						
	medium grained silicified sandstone					833	146	2.0	2.0	0.07	0.02						
150.0						834	148	2.0	2.0	0.01	0.01						
	sandstone with slumping mudstone					835	150	2.0	2.0	0.02	0.01	<0.01					
						836	152	2.0	2.0	0.05	0.02						
	∠60°					837	154	2.0	2.0	0.06	0.03						
	∠15°					838	156	2.0	2.0	0.02	0.01						
160.0						839	158	2.0	2.0	0.04	<0.01						
	∠10°					840	160	2.0	2.0	0.02	0.01	<0.01					
						841	162	2.0	1.5	0.01	<0.01						

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia.
- Rhyolite
- Porphyry (hornblende − biotite porphyry; biotite porphyry; quartz − biotite porphyry)
- Brecciation
- ∠30 Inclination of plane structures.
- (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
fresh		SiO_2 < 55 %	FeS_2 < 1 %	cu < 0.2 %



799	78	2.0	2.0	0.06	0.05							
800	80	2.0	2.0	tr.	<0.01	<0.01	0.07	<0.01	2.20	<0.1	1	
801	82	2.0	2.0	0.06	<0.01							
802	84	2.0	2.0	0.04	<0.01							
803	86	2.0	2.0	0.02	<0.01							
804	88	2.0	2.0	0.01	<0.01							
805	90	2.0	2.0	tr.	<0.01	<0.01						
806	92	2.0	2.0	0.01	<0.01							
807	94	2.0	2.0	0.02	<0.01							
808	96	2.0	2.0	0.02	0.03							
809	98	2.0	2.0	0.04	<0.01							
810	100	2.0	2.0	0.02	<0.01							
811	102	2.0	2.0	0.02	<0.01							
812	104	2.0	2.0	0.05	<0.01							
813	106	2.0	2.0	0.02	0.01							
814	108	2.0	2.0	0.04	<0.01							
815	110	2.0	2.0	0.04	<0.01	<0.01	0.02	<0.01	2.72	<0.1	<1	
816	112	2.0	2.0	0.01	<0.01							
817	114	2.0	2.0	0.04	<0.01							
818	116	2.0	2.0	0.04	<0.01							
819	118	2.0	2.0	0.01	<0.01							
820	120	2.0	2.0	0.04	<0.01	<0.01						
821	122	2.0	2.0	0.01	<0.01							
822	124	2.0	2.0	0.02	<0.01							
823	126	2.0	2.0	0.02	<0.01							
824	128	2.0	2.0	0.04	<0.01							
825	130	2.0	2.0	0.06	0.01	<0.01						
826	132	2.0	2.0	0.06	<0.01							
827	134	2.0	2.0	0.06	<0.01							
828	136	2.0	2.0	0.06	<0.01							
829	138	2.0	2.0	0.04	<0.01							
830	140	2.0	2.0	0.06	<0.01	<0.01	0.02	<0.01	1.58	<0.1	<1	
831	142	2.0	2.0	0.05	<0.01							
832	144	2.0	2.0	0.07	<0.01							
833	146	2.0	2.0	0.07	0.02							
834	148	2.0	2.0	0.01	0.01							
835	150	2.0	2.0	0.02	0.01	<0.01						
836	152	2.0	2.0	0.05	0.02							
837	154	2.0	2.0	0.06	0.03							
838	156	2.0	2.0	0.02	0.01							
839	158	2.0	2.0	0.04	<0.01							
840	160	2.0	2.0	0.02	0.01	<0.01						
841	162	2.0	1.8	0.01	<0.01							
842	164	2.0	1.5	0.04	<0.01							
843	166	2.0	2.0	0.05	<0.01							
844	168	2.0	2.0	0.04	<0.01							
845	170	2.0	2.0	0.05	<0.01	<0.01	0.02	<0.01	0.92	<0.1	<1	
846	172	2.0	2.0	0.02	<0.01							
847	174	2.0	2.0	0.04	<0.01							
848	176	2.0	2.0	0.06	<0.01							
849	178	2.0	2.0	0.09	<0.01							
850	180	2.0	2.0	0.02	<0.01	<0.01						
851	182	2.0	2.0	0.06	<0.01							
852	184	2.0	2.0	0.11	<0.01							
853	186	2.0	2.0	0.06	<0.01							
854	188	2.0	2.0	0.02	<0.01							
855	190	2.0	2.0	0.06	<0.01	<0.01						
856	192	2.0	2.0	0.09	<0.01							
857	194	2.0	2.0	0.04	<0.01							
858	196	2.0	2.0	0.06	<0.01							
859	198	2.0	2.0	0.04	<0.01							
860	200	2.0	2.0	0.05	<0.01	<0.01	0.06	<0.01	1.94	<0.1	<1	
861	202	2.0	2.0	0.05								
862	204	2.0	2.0	0.17	<0.01							
863	206	2.0	2.0	0.06	0.04							
864	208	2.0	2.0	0.04	<0.01							
865	210	2.0	2.0	0.02	<0.01							
866	212	2.0	2.0	0.02	<0.01							
867	214	2.0	2.0	tr.	<0.01							
868	216	2.0	2.0	N.D.	<0.01							
869	218	2.0	2.0	0.06	0.01							
870	220	2.0	2.0	0.02	0.01	<0.01						
871	222	2.0	2.0	0.04	<0.01							
872	224	2.0	2.0	0.06	<0.01							
873	226	2.0	2.0	0.04	<0.01							
874	228	2.0	2.0	0.05	<0.01							
875	230	2.0	2.0	0.01	<0.01	<0.01	0.01	<0.01	1.72	<0.1	<1	
876	232	2.0	2.0	0.02	<0.01							
877	234	2.0	2.0	0.06	0.02							
878	236	2.0	2.0	0.04	<0.01							
879	238	2.0	2.0	0.02	<0.01							
880	240	2.0	2.0	0.02	<0.01							
881	242	2.0	2.0	0.02	<0.01							
882	244	2.0	2.0	0.04	<0.01							
883	246	2.0	2.0	0.04	<0.01							
884	248	2.0	2.0	0.01	<0.01							
885	250	2.0	2.0	0.06	<0.01	<0.01						

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia,
- Rhyolite
- Porphyry — hornblende–biotite porphyry; biotite porphyry; quartz–biotite porphyry
- Brecciation
- 30 — Inclination of plane structures.
- (bedding plane, intrusive boundary, etc)

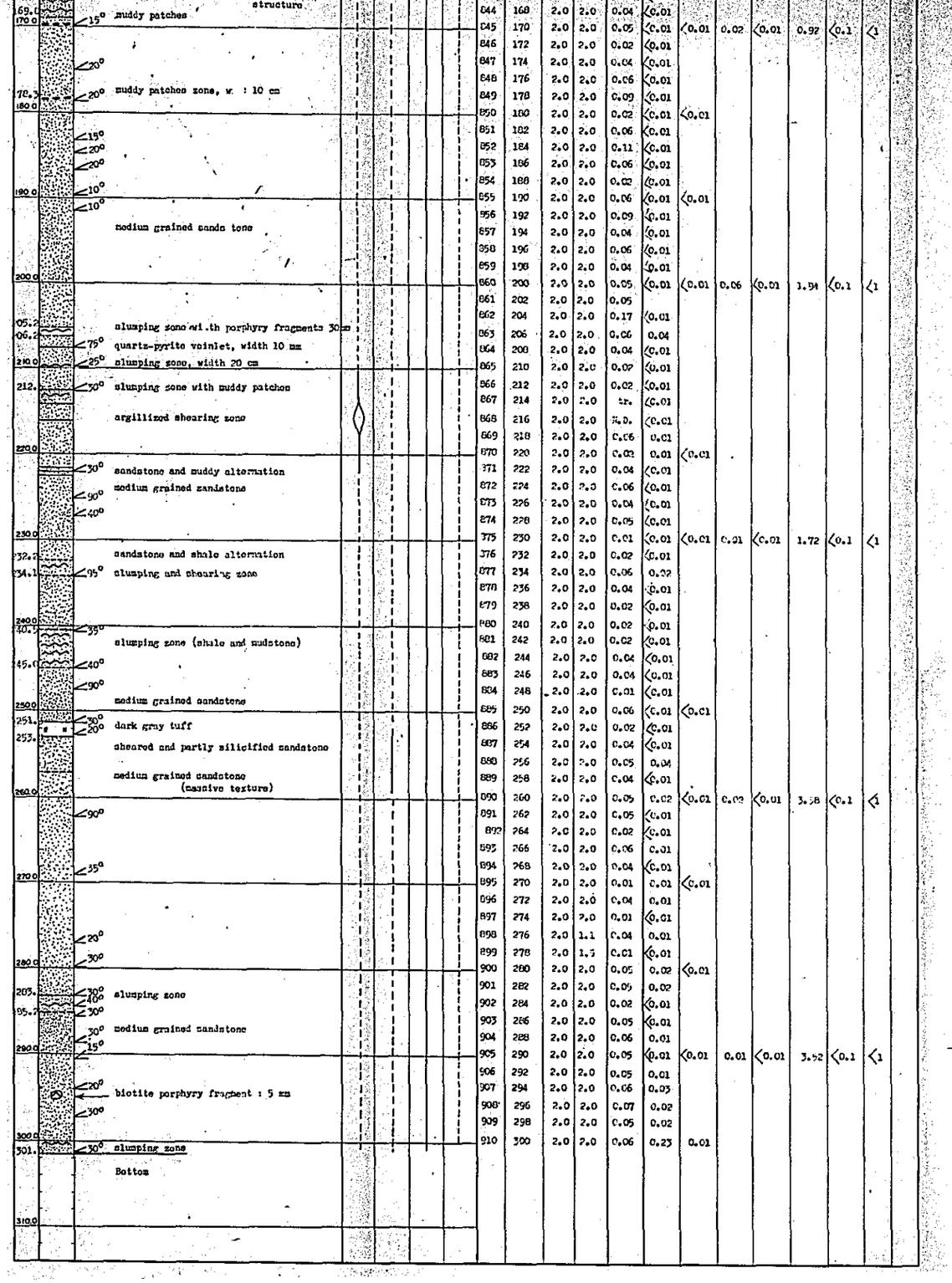
DEGREE OF ALTERATION AND MINERALIZATION

	argillization x	silicification	pyritization	mineralization
fresh		SiO_2 < 55 %	FeS_2 < 1 %	Cu < 0.2 %
weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %	
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %	
strong	> 80 %	> 10 %	> 1 %	

x fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg.	Argillization
sil.	Silicification
py	Pyritization
kao	Kaolinitization
ser	Sericitization
ch	Chloritization
alu	Alunitization
c.c.p.	Chalcopyrite
c.c	Chalcocite
en	Enargite
dis.	Dissemination
v.	Veinlet
w	Width



844	168	2.0	2.0	0.04	<0.01								
845	170	2.0	2.0	0.05	<0.01	<0.01	0.02	<0.01	0.92	<0.1	<1		
846	172	2.0	2.0	0.02	<0.01								
847	174	2.0	2.0	0.04	<0.01								
848	176	2.0	2.0	0.06	<0.01								
849	178	2.0	2.0	0.09	<0.01								
850	180	2.0	2.0	0.02	<0.01	<0.01							
851	182	2.0	2.0	0.06	<0.01								
852	184	2.0	2.0	0.11	<0.01								
853	186	2.0	2.0	0.06	<0.01								
854	188	2.0	2.0	0.02	<0.01								
855	190	2.0	2.0	0.06	<0.01	<0.01							
856	192	2.0	2.0	0.09	<0.01								
857	194	2.0	2.0	0.04	<0.01								
858	196	2.0	2.0	0.06	<0.01								
859	198	2.0	2.0	0.04	<0.01								
860	200	2.0	2.0	0.05	<0.01	<0.01	0.06	<0.01	1.94	<0.1	<1		
861	202	2.0	2.0	0.05									
862	204	2.0	2.0	0.17	<0.01								
863	206	2.0	2.0	0.06	0.04								
864	208	2.0	2.0	0.04	<0.01								
865	210	2.0	2.0	0.07	<0.01								
866	212	2.0	2.0	0.02	<0.01								
867	214	2.0	2.0	tr.	<0.01								
868	216	2.0	2.0	N.D.	<0.01								
869	218	2.0	2.0	0.06	0.01								
870	220	2.0	2.0	0.02	0.01	<0.01							
871	222	2.0	2.0	0.04	<0.01								
872	224	2.0	2.0	0.06	<0.01								
873	226	2.0	2.0	0.04	<0.01								
874	228	2.0	2.0	0.05	<0.01								
875	230	2.0	2.0	0.01	<0.01	<0.01	0.01	<0.01	1.72	<0.1	<1		
876	232	2.0	2.0	0.02	<0.01								
877	234	2.0	2.0	0.06	0.02								
878	236	2.0	2.0	0.04	<0.01								
879	238	2.0	2.0	0.02	<0.01								
880	240	2.0	2.0	0.02	<0.01								
881	242	2.0	2.0	0.02	<0.01								
882	244	2.0	2.0	0.04	<0.01								
883	246	2.0	2.0	0.04	<0.01								
884	248	2.0	2.0	0.01	<0.01								
885	250	2.0	2.0	0.06	<0.01	<0.01							
886	252	2.0	2.0	0.02	<0.01								
887	254	2.0	2.0	0.04	<0.01								
888	256	2.0	2.0	0.05	0.04								
889	258	2.0	2.0	0.04	<0.01								
890	260	2.0	2.0	0.05	0.02	<0.01	0.02	<0.01	3.58	<0.1	<1		
891	262	2.0	2.0	0.05	<0.01								
892	264	2.0	2.0	0.02	<0.01								
893	266	2.0	2.0	0.06	0.01								
894	268	2.0	2.0	0.04	<0.01								
895	270	2.0	2.0	0.01	<0.01	<0.01							
896	272	2.0	2.0	0.04	0.01								
897	274	2.0	2.0	0.01	<0.01								
898	276	2.0	1.1	0.04	0.01								
899	278	2.0	1.5	0.01	<0.01								
900	280	2.0	2.0	0.05	0.02	<0.01							
901	282	2.0	2.0	0.05	0.02								
902	284	2.0	2.0	0.02	<0.01								
903	286	2.0	2.0	0.05	<0.01								
904	288	2.0	2.0	0.06	0.01								
905	290	2.0	2.0	0.05	<0.01	<0.01	0.01	<0.01	3.52	<0.1	<1		
906	292	2.0	2.0	0.05	0.01								
907	294	2.0	2.0	0.06	0.03								
908	296	2.0	2.0	0.07	0.02								
909	298	2.0	2.0	0.05	0.02								
910	300	2.0	2.0	0.06	0.23	0.01							

medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 09 %
strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals.
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c : Chalcocite
en : Enargite
dis. : Dissemination
v. : Veinlet
w : Width

PL I-8-15

GEOLOGICAL SURVEY OF
MONYWA AREA, UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

DDH No. IP-2(LN3) Sheet 1

Total Length 201.0 Core Recovery 97.1 %

Location Sabedaung South Elevation 98.0 m

Direction 0 Inclination − 90°

Date of Logging from 28·2·74 to 7·3·74

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974
Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD

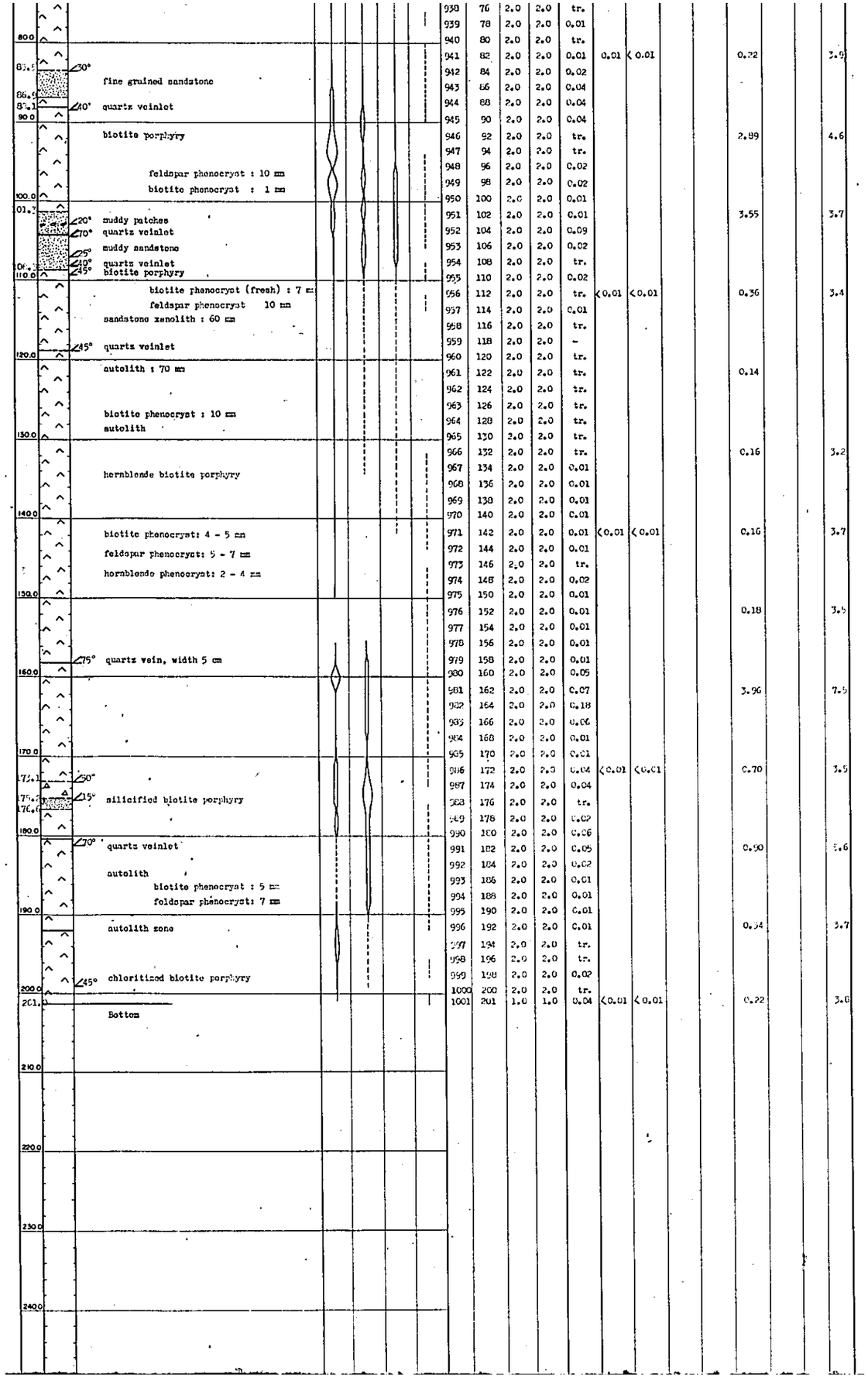
Depth (m)	Inclination	Particulars	Sample No.	Depth m	Core Length	Sample Length	BURMA T-Cu %	JAPAN T-Cu	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t	Fe %
		non core													
		(kangon formation) sandstone													
9.4 / 10.0	∠55°														
		magyigon formation fine grained tuffaceous sandstone with limonite network													
20.0			C-	20											
20.5		oxidized sandstone	911	22	2.0	2.0	0.06	0.02	<0.1			0.19			5.4
23.5		argillized mudstone	912	24	2.0	2.0	0.09								
25.1	∠20°	pale gray fine grained sandstone	913	26	2.0	2.0	0.07								
27.4	∠40°, ∠60°	biotite-quartz porphyry (small dyke)	914	28	2.0	2.0	0.05								
[illegible] / 30.0	∠15°		915	30	2.0	2.0	0.04								
		pale gray fine grained sandstone with quartz vein net work	916	32	2.0	1.5	0.01					3.46			4.3
	∠30°		917	34	2.0	1.9	0.04								
			918	36	2.0	2.0	0.04								
	∠20°		919	38	2.0	2.0	0.09								
40.0			920	40	2.0	2.0	0.04								
40.?	∠45°	biotite porphyry; feldspar phenocryst : 10 mm	921	42	2.0	2.0	0.04					7.6?			5.1
		biotite phenocryst : 5 mm	922	44	2.0	1.4	0.04								
45.3 / 46.5	∠25°	muddy layers	923	46	2.0	2.0	0.18								
	∠35°	muddy patches	924	48	2.0	2.0	0.04								
50.0	∠20°	muddy patches	925	50	2.0	2.0	0.09								
50.7 / 51.? / 52.?	∠45°, 20°	muddy layers	926	52	2.0	2.0	0.05	0.02	<0.01			?.71			7.7
54.1 / 54.6			927	54	2.0	2.0	0.02								
	∠20°	muddy patches	928	56	2.0	2.0	0.13								
	∠20°	muddy patches	929	58	2.0	2.0	0.40								
60.0			930	60	2.0	2.0	0.06								
			931	62	2.0	2.0	0.04					4.07			4.2
65.0	∠40°		932	64	2.0	2.0	0.02								
66.7		chilled margin zone	933	66	2.0	2.0	0.05								
		feldspar change to clay minerals	934	68	2.0	2.0	0.01								
70.0			935	70	2.0	2.0	tr.								
		biotite porphyry (biotite is fresh)	936	72	2.0	2.0	0.01					0.22			5.6
			937	74	2.0	2.0	0.01								
			938	76	2.0	2.0	tr.								
			939	78	2.0	2.0	0.01								
80.0			940	80	2.0	2.0	tr.								
			941	82	2.0	2.0	0.01	0.01	<0.01			0.?2			?.9
83.?	∠30°		942	84	2.0	2.0	0.02								
86.9		fine grained sandstone	943	86	2.0	2.0	0.04								
8?.1	∠40°	quartz veinlet	944	88	2.0	2.0	0.04								
90.0			945	90	2.0	2.0	0.04								
		biotite porphyry	946	92	2.0	2.0	tr.					?.89			4.6
			947	94	2.0	2.0	tr.								
		feldspar phenocryst : 10 mm	948	96	2.0	2.0	0.02								
		biotite phenocryst : 1 mm	949	98	2.0	2.0	0.02								
100.0			950	100	2.0	2.0	0.01								
101.7	∠20°	muddy patches	951	102	2.0	2.0	0.01					3.55			3.7
	∠70°	quartz veinlet	952	104	2.0	2.0	0.09								
	∠5°	muddy sandstone	953	106	2.0	2.0	0.02								
10?.?	∠40°, ∠45°	quartz veinlet; biotite porphyry	954	108	2.0	2.0	tr.								
110.0			955	110	2.0	2.0	0.02								
		biotite phenocryst (fresh) : 7 mm	956	112	2.0	2.0	tr.	<0.01	<0.01			0.36			3.4
		feldspar phenocryst 10 mm; sandstone xenolith : 60 mm	957	114	2.0	2.0	0.01								
			958	116	2.0	2.0	tr.								
	∠45°	quartz veinlet	959	118	2.0	2.0	-								
120.0			960	120	2.0	2.0	tr.								
		autolith : 70 mm	961	122	2.0	2.0	tr.					0.14			
			962	124	2.0	2.0	tr.								
		biotite phenocryst : 10 mm	963	126	2.0	2.0	tr.								
		autolith	964	128	2.0	2.0	tr.								
130.0			965	130	2.0	2.0	tr.								
			966	132	2.0	2.0	tr.					0.16			3.2
		hornblende biotite porphyry	967	134	2.0	2.0	0.01								
			968	136	2.0	2.0	0.01								
			969	138	2.0	2.0	0.01								
140.0			970	140	2.0	2.0	0.01								
		biotite phenocryst: 4 − 5 mm	971	142	2.0	2.0	0.01	<0.01	<0.01			0.16			3.7
		feldspar phenocryst: 5 − 7 mm	972	144	2.0	2.0	0.01								
		hornblende phenocryst: 2 − 4 mm	973	146	2.0	2.0	tr.								
			974	148	2.0	2.0	0.02								
150.0			975	150	2.0	2.0	0.01								
			976	152	2.0	2.0	0.01					0.18			3.5
			977	154	2.0	2.0	0.01								
			978	156	2.0	2.0	0.01								
	∠75°	quartz vein, width 5 cm	979	158	2.0	2.0	0.01								
160.0			980	160	2.0	2.0	0.05								
			981	162	2.0	2.0	0.07					3.96			7.?

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia
- Rhyolite
- Porphyry: hornblende − biotite porphyry, biotite porphyry, quartz − biotite porphyry
- Brecciation
- ∠30 Inclination of plane structures. (bedding plane, intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization ※	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %



938	76	2.0	2.0	tr.						
939	78	2.0	2.0	0.01						
940	80	2.0	2.0	tr.						
941	82	2.0	2.0	0.01	0.01	< 0.01		0.72		3.9
942	84	2.0	2.0	0.02						
943	86	2.0	2.0	0.04						
944	88	2.0	2.0	0.04						
945	90	2.0	2.0	0.04						
946	92	2.0	2.0	tr.				2.99		4.6
947	94	2.0	2.0	tr.						
948	96	2.0	2.0	0.02						
949	98	2.0	2.0	0.02						
950	100	2.0	2.0	0.01						
951	102	2.0	2.0	0.01				3.55		3.7
952	104	2.0	2.0	0.09						
953	106	2.0	2.0	0.02						
954	108	2.0	2.0	tr.						
955	110	2.0	2.0	0.02						
956	112	2.0	2.0	tr.	< 0.01	< 0.01		0.36		3.4
957	114	2.0	2.0	0.01						
958	116	2.0	2.0	tr.						
959	118	2.0	2.0	-						
960	120	2.0	2.0	tr.						
961	122	2.0	2.0	tr.				0.14		
962	124	2.0	2.0	tr.						
963	126	2.0	2.0	tr.						
964	128	2.0	2.0	tr.						
965	130	2.0	2.0	tr.						
966	132	2.0	2.0	tr.				0.16		3.2
967	134	2.0	2.0	0.01						
968	136	2.0	2.0	0.01						
969	138	2.0	2.0	0.01						
970	140	2.0	2.0	0.01						
971	142	2.0	2.0	0.01	< 0.01	< 0.01		0.16		3.7
972	144	2.0	2.0	0.01						
973	146	2.0	2.0	tr.						
974	148	2.0	2.0	0.02						
975	150	2.0	2.0	0.01						
976	152	2.0	2.0	0.01				0.18		3.6
977	154	2.0	2.0	0.01						
978	156	2.0	2.0	0.01						
979	158	2.0	2.0	0.01						
980	160	2.0	2.0	0.05						
981	162	2.0	2.0	0.07				3.96		7.5
982	164	2.0	2.0	0.18						
983	166	2.0	2.0	0.06						
984	168	2.0	2.0	0.01						
985	170	2.0	2.0	0.01						
986	172	2.0	2.0	0.04	< 0.01	< 0.01		0.70		3.9
987	174	2.0	2.0	0.04						
988	176	2.0	2.0	tr.						
989	178	2.0	2.0	0.02						
990	180	2.0	2.0	0.06						
991	182	2.0	2.0	0.05				0.90		5.6
992	184	2.0	2.0	0.02						
993	186	2.0	2.0	0.01						
994	188	2.0	2.0	0.01						
995	190	2.0	2.0	0.01						
996	192	2.0	2.0	0.01				0.34		3.7
997	194	2.0	2.0	tr.						
998	196	2.0	2.0	tr.						
999	198	2.0	2.0	0.02						
1000	200	2.0	2.0	tr.						
1001	201	1.0	1.0	0.04	< 0.01	< 0.01		0.22		3.6

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia
- Rhyolite
- Porphyry — hornblende – biotite porphyry, biotite porphyry, quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane, intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization*	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.
(by field observation)

ABBREVIATIONS

arg.	Argillization
sil.	Silicification
py	Pyritization
kao	Kaolinitization
ser	Sericitization
ch	Chloritization
alu	Alunitization
c.c.p.	Chalcopyrite
c.c	Chalcocite
en	Enargite
dis	Dissemination
v.	Veinlet
w	Width

982	164	2.0	2.0	0.18						
983	166	2.0	2.0	0.06						
984	168	2.0	2.0	0.01						
985	170	2.0	2.0	0.01						
986	172	2.0	2.0	0.04	<0.01	<0.01		0.70		3.5
987	174	2.0	2.0	0.04						
988	176	2.0	2.0	tr.						
989	178	2.0	2.0	0.02						
990	180	2.0	2.0	0.06						
991	182	2.0	2.0	0.05				0.90		5.6
992	184	2.0	2.0	0.02						
993	186	2.0	2.0	0.01						
994	188	2.0	2.0	0.01						
995	190	2.0	2.0	0.01						
996	192	2.0	2.0	0.01				0.34		3.7
997	194	2.0	2.0	tr.						
998	196	2.0	2.0	tr.						
999	198	2.0	2.0	0.02						
1000	200	2.0	2.0	tr.						
1001	201	1.0	1.0	0.04	<0.01	<0.01		0.22		3.8

170.0
172.1 50° silicified biotite porphyry
176.7 15°
176.0
180.0
70° quartz veinlet
autolith
biotite phenocryst : 5 mm
feldspar phenocryst: 7 mm
190.0
autolith zone
200.0
45° chloritized biotite porphyry
201.0
Bottom
210.0
220.0
230.0
240.0
250.0
260.0
270.0
280.0
290.0
300.0
310.0

weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

※
- fresh : unaltered
- weak : parts of feldspar phenocrysts changed into clay minerals.
- medium : almost all the feldspar phenocrysts changed into clay minerals.
- strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg.	:	Argillization
sil.	:	Silicification
py.	:	Pyritization
kao.	:	Kaolinitization
ser.	:	Sericitization
ch.	:	Chloritization
alu.	:	Alunitization
c.c.p.	:	Chalcopyrite
c.c	:	Chalcocite
en	:	Enargite
dis.	:	Dissemination
v.	:	Veinlet
w.	:	Width

PL I-8-16

GEOLOGICAL SURVEY OF MONYWA AREA, UNION OF BURMA (PHASE II)

CORE LOG and ASSAY

DDH No. JK-2 (19A) Sheet 1

Total Length 301.1 m Core Recovery 98.6 %

Location Kyisindaung Elevation 161.2 m

Direction 0 Inclination −90°

Date of Logging from 25·2·74' to 7·3·74'

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD

Depth (m)	Inclination	Particulars
		non core
		weathered silicified porphyry with hematite stringer
		clear porphyritic texture; feldspar phenocryst : 3 mm; biotite phenocryst : 1 mm
	60°	fine grained rhyolitic rock
10.0		hematite vein
	20°	hematitization stringer
		hematite veinlet
		biotite porphyry
		biotite change to other minerals
17.0	30°	hematite vein
	75°	fine grained rhyolitic rock
20.0		
22.6		argillized porphyry with hematite stringer
	60°	quartz veinlet
		autolith; biotite relict 20 mm; feldspar phenocryst 10 mm
30.0	60°	
		sheared zone
		autolith
	65°	hematite vein
	65°	hematite vein
	80°	joint filling hematite veinlet
40.0		
	65°	hematite veinlet
	60°	hematite veinlet
50.0		
	65°	hematite-quartz vein, width : 5 cm
	70°	sericitic kaolin veinlet
	60°	flow structure : 10 mm
60.0		
	28°	
	70°	joint filling green copper
70.0		
	70°	chalcocite-quartz vein
	75°	chalcocite quartz vein
80.0		
81.0	65°	fine grained silicified rhyolitic rock
	75°	chalcocite veinlet
88.0	20°	
90.0		
90.2	45°	
	60°	
		rhyolitic rock with chalcocite impregnation
100.0		
	65°	chalcocite veinlet
	88°	chalcocite veinlet
110.0		
	75°	chalcocite veinlet, width 10 mm
		rhyolitic rock with stringer of mineralization
	70°	quartz vein, width 30 mm
	70°	brecciation zone
		high silicified biotite porphyry
120.0		
	80°	chalcocite vein, width : 20 mm
	65°	pyrite-quartz vein
	75°	chalcocite vein
		sandstone zenolith : 20 mm
130.0		
	75°	chalcocite rich vein
	60°, 70°	pyrite-quartz rich part
140.0		
		feldspar phenocryst : 5 mm; biotite phenocryst : 5 mm
	75°, 65°	pyrite vein
	70°	chalcopite veinlet
150.0		
		sheared zone, width 20 cm
	75°	kaolin veinlet
	70°	pyrite veinlet

Alteration, Mineralization: arg, sil, py, cu

Result of Chemical Analysis

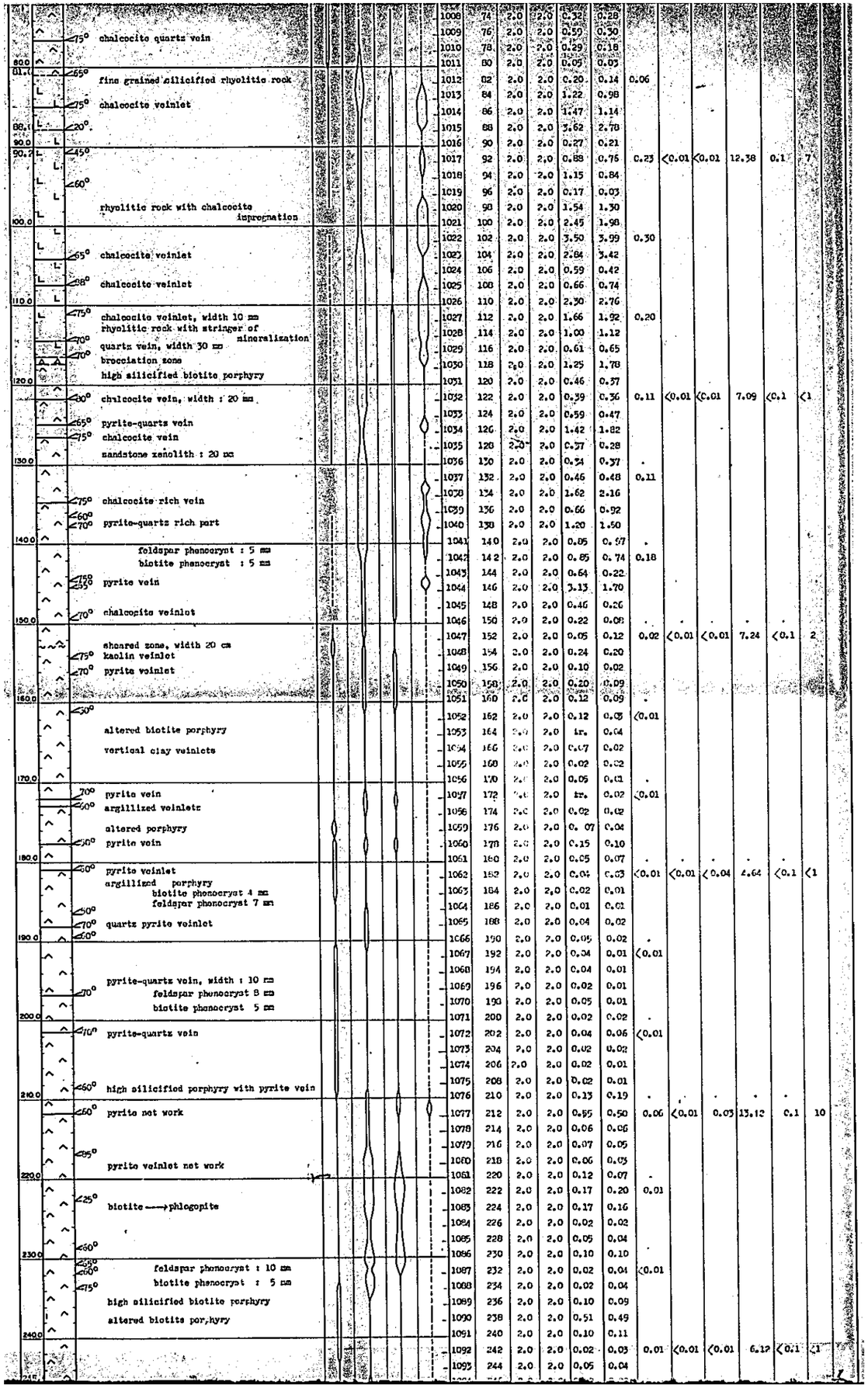
Sample No.	Depth m	Core Length	Sample Length	BURMA T-Cu %	JAPAN T-Cu	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t
C-	60										
1002	62	2.0	2.0	0.08	0.06	0.04	<0.01	<0.01	0.99	<0.1	<1
1003	64	2.0	2.0	1.13	0.84						
1004	66	2.0	2.0	0.59	0.45						
1005	68	2.0	2.0	1.00	0.98						
1006	70	2.0	2.0	0.95	0.89						
1007	72	2.0	2.0	0.92	1.06	0.13					
1008	74	2.0	2.0	0.32	0.28						
1009	76	2.0	2.0	0.59	0.30						
1010	78	2.0	2.0	0.29	0.18						
1011	80	2.0	2.0	0.05	0.03						
1012	82	2.0	2.0	0.20	0.14	0.06					
1013	84	2.0	2.0	1.22	0.98						
1014	86	2.0	2.0	1.47	1.14						
1015	88	2.0	2.0	3.62	2.78						
1016	90	2.0	2.0	0.27	0.21						
1017	92	2.0	2.0	0.89	0.76	0.23	<0.01	<0.01	12.38	0.1	7
1018	94	2.0	2.0	1.15	0.84						
1019	96	2.0	2.0	0.17	0.03						
1020	98	2.0	2.0	1.54	1.30						
1021	100	2.0	2.0	2.45	1.98						
1022	102	2.0	2.0	3.50	3.99	0.30					
1023	104	2.0	2.0	2.84	3.42						
1024	106	2.0	2.0	0.59	0.42						
1025	108	2.0	2.0	0.66	0.74						
1026	110	2.0	2.0	2.30	2.76						
1027	112	2.0	2.0	1.66	1.92	0.20					
1028	114	2.0	2.0	1.00	1.12						
1029	116	2.0	2.0	0.61	0.65						
1030	118	2.0	2.0	1.25	1.78						
1031	120	2.0	2.0	0.46	0.37						
1032	122	2.0	2.0	0.39	0.36	0.11	<0.01	<0.01	7.09	<0.1	<1
1033	124	2.0	2.0	0.59	0.47						
1034	126	2.0	2.0	1.42	1.82						
1035	128	2.0	2.0	0.37	0.28						
1036	130	2.0	2.0	0.34	0.37						
1037	132	2.0	2.0	0.46	0.48	0.11					
1038	134	2.0	2.0	1.62	2.16						
1039	136	2.0	2.0	0.66	0.92						
1040	138	2.0	2.0	1.20	1.60						
1041	140	2.0	2.0	0.85	0.97						
1042	142	2.0	2.0	0.85	0.74	0.18					
1043	144	2.0	2.0	0.64	0.22						
1044	146	2.0	2.0	3.13	1.70						
1045	148	2.0	2.0	0.46	0.26						
1046	150	2.0	2.0	0.22	0.08						
1047	152	2.0	2.0	0.05	0.12	0.02	<0.01	<0.01	7.24	<0.1	2
1048	154	2.0	2.0	0.24	0.20						
1049	156	2.0	2.0	0.10	0.02						
1050	158	2.0	2.0	0.20	0.09						

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia
- Rhyolite
- Porphyry: hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- ∠30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu



1008	74	2.0	2.0	0.32	0.28										
1009	76	2.0	2.0	0.59	0.30										
1010	78	2.0	2.0	0.29	0.18										
1011	80	2.0	2.0	0.05	0.03										
1012	82	2.0	2.0	0.20	0.14	0.06									
1013	84	2.0	2.0	1.22	0.98										
1014	86	2.0	2.0	1.47	1.14										
1015	88	2.0	2.0	3.62	2.78										
1016	90	2.0	2.0	0.27	0.21										
1017	92	2.0	2.0	0.88	0.76	0.23	<0.01	<0.01	12.38	0.1	7				
1018	94	2.0	2.0	1.15	0.84										
1019	96	2.0	2.0	0.17	0.03										
1020	98	2.0	2.0	1.54	1.30										
1021	100	2.0	2.0	2.45	1.98										
1022	102	2.0	2.0	3.50	3.99	0.30									
1023	104	2.0	2.0	2.84	3.42										
1024	106	2.0	2.0	0.59	0.42										
1025	108	2.0	2.0	0.66	0.74										
1026	110	2.0	2.0	2.30	2.76										
1027	112	2.0	2.0	1.66	1.92	0.20									
1028	114	2.0	2.0	1.00	1.12										
1029	116	2.0	2.0	0.61	0.65										
1030	118	2.0	2.0	1.25	1.78										
1031	120	2.0	2.0	0.46	0.57										
1032	122	2.0	2.0	0.39	0.36	0.11	<0.01	<0.01	7.09	<0.1	<1				
1033	124	2.0	2.0	0.59	0.47										
1034	126	2.0	2.0	1.42	1.82										
1035	128	2.0	2.0	0.37	0.28										
1036	130	2.0	2.0	0.34	0.37										
1037	132	2.0	2.0	0.46	0.48	0.11									
1038	134	2.0	2.0	1.62	2.16										
1039	136	2.0	2.0	0.66	0.92										
1040	138	2.0	2.0	1.20	1.50										
1041	140	2.0	2.0	0.85	0.57										
1042	142	2.0	2.0	0.85	0.74	0.18									
1043	144	2.0	2.0	0.64	0.22										
1044	146	2.0	2.0	3.13	1.70										
1045	148	2.0	2.0	0.46	0.26										
1046	150	2.0	2.0	0.22	0.08										
1047	152	2.0	2.0	0.05	0.12	0.02	<0.01	<0.01	7.24	<0.1	2				
1048	154	2.0	2.0	0.24	0.20										
1049	156	2.0	2.0	0.10	0.02										
1050	158	2.0	2.0	0.20	0.09										
1051	160	2.0	2.0	0.12	0.09										
1052	162	2.0	2.0	0.12	0.08	<0.01									
1053	164	2.0	2.0	tr.	0.04										
1054	166	2.0	2.0	0.07	0.02										
1055	168	2.0	2.0	0.02	0.02										
1056	170	2.0	2.0	0.05	0.01										
1057	172	2.0	2.0	tr.	0.02	<0.01									
1058	174	2.0	2.0	0.02	0.02										
1059	176	2.0	2.0	0.07	0.04										
1060	178	2.0	2.0	0.15	0.10										
1061	180	2.0	2.0	0.05	0.07										
1062	182	2.0	2.0	0.04	0.03	<0.01	<0.01	<0.01	4.64	<0.1	<1				
1063	184	2.0	2.0	0.02	0.01										
1064	186	2.0	2.0	0.01	0.01										
1065	188	2.0	2.0	0.04	0.02										
1066	190	2.0	2.0	0.05	0.02										
1067	192	2.0	2.0	0.04	0.01	<0.01									
1068	194	2.0	2.0	0.04	0.01										
1069	196	2.0	2.0	0.02	0.01										
1070	198	2.0	2.0	0.05	0.01										
1071	200	2.0	2.0	0.02	0.02										
1072	202	2.0	2.0	0.04	0.06	<0.01									
1073	204	2.0	2.0	0.02	0.02										
1074	206	2.0	2.0	0.02	0.01										
1075	208	2.0	2.0	0.02	0.01										
1076	210	2.0	2.0	0.13	0.19										
1077	212	2.0	2.0	0.55	0.50	0.06	<0.01	0.03	13.12	0.1	10				
1078	214	2.0	2.0	0.06	0.06										
1079	216	2.0	2.0	0.07	0.05										
1080	218	2.0	2.0	0.06	0.03										
1081	220	2.0	2.0	0.12	0.07										
1082	222	2.0	2.0	0.17	0.20	0.01									
1083	224	2.0	2.0	0.17	0.16										
1084	226	2.0	2.0	0.02	0.02										
1085	228	2.0	2.0	0.05	0.04										
1086	230	2.0	2.0	0.10	0.10										
1087	232	2.0	2.0	0.02	0.04	<0.01									
1088	234	2.0	2.0	0.02	0.04										
1089	236	2.0	2.0	0.10	0.09										
1090	238	2.0	2.0	0.51	0.49										
1091	240	2.0	2.0	0.10	0.11										
1092	242	2.0	2.0	0.02	0.03	0.01	<0.01	<0.01	6.12	<0.1	<1				
1093	244	2.0	2.0	0.05	0.04										

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende–biotite porphyry; biotite porphyry; quartz–biotite porphyry
- Brecciation
- 30 — inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

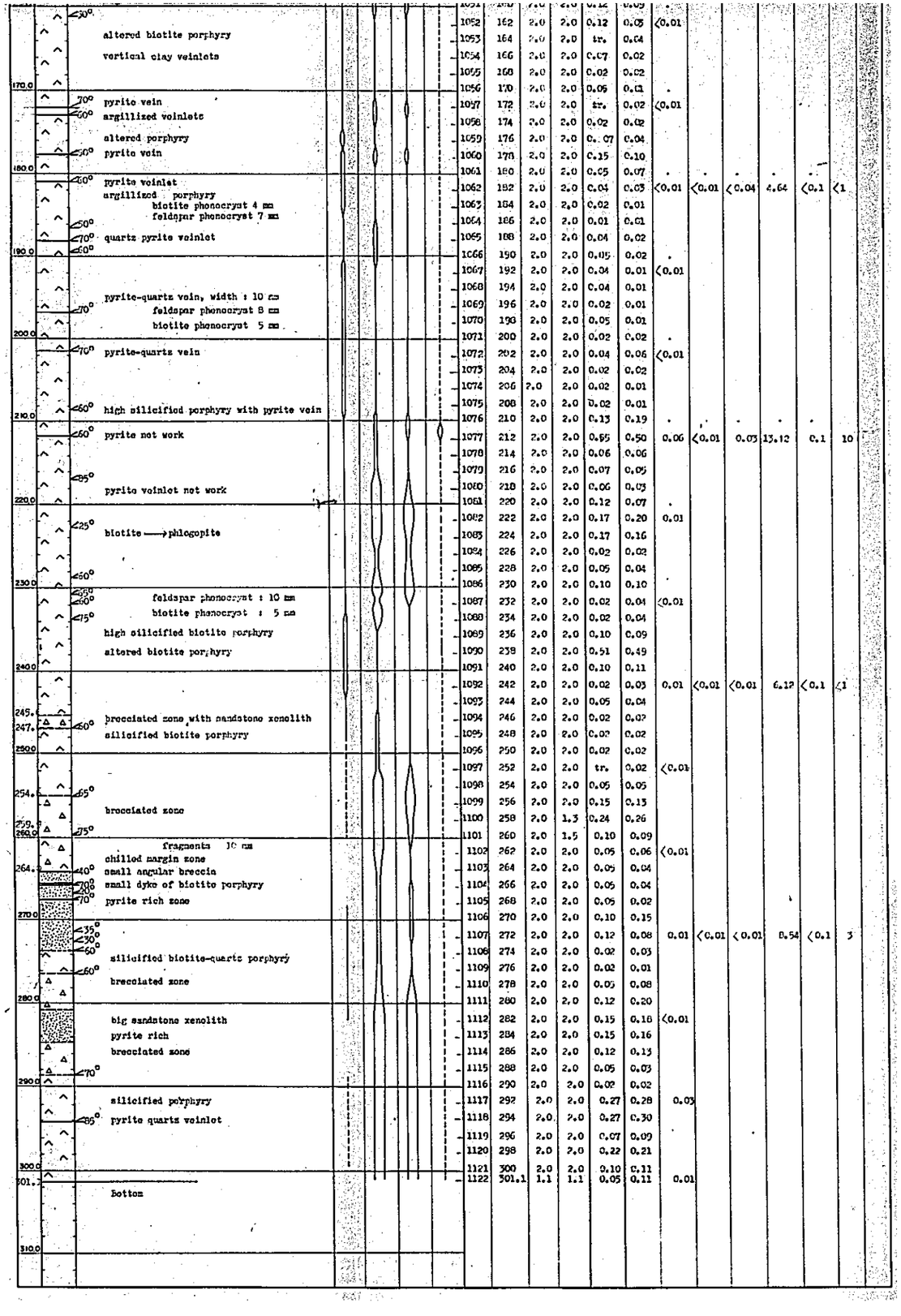
	argillization	silicification	pyritization	mineralization
		↑ SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c : Chalcocite
en : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width



1052	162	2.0	2.0	0.12	0.05	<0.01							
1053	164	2.0	2.0	tr.	0.04								
1054	166	2.0	2.0	0.07	0.02								
1055	168	2.0	2.0	0.02	0.02								
1056	170	2.0	2.0	0.06	0.11								
1057	172	2.0	2.0	tr.	0.02	<0.01							
1058	174	2.0	2.0	0.02	0.02								
1059	176	2.0	2.0	0.07	0.04								
1060	178	2.0	2.0	0.15	0.10								
1061	180	2.0	2.0	0.05	0.07								
1062	182	2.0	2.0	0.04	0.03	<0.01	<0.01	<0.04	4.64	<0.1	<1		
1063	184	2.0	2.0	0.02	0.01								
1064	186	2.0	2.0	0.01	0.01								
1065	188	2.0	2.0	0.04	0.02								
1066	190	2.0	2.0	0.05	0.02								
1067	192	2.0	2.0	0.04	0.01	<0.01							
1068	194	2.0	2.0	0.04	0.01								
1069	196	2.0	2.0	0.02	0.01								
1070	198	2.0	2.0	0.05	0.01								
1071	200	2.0	2.0	0.02	0.02								
1072	202	2.0	2.0	0.04	0.06	<0.01							
1073	204	2.0	2.0	0.02	0.02								
1074	206	2.0	2.0	0.02	0.01								
1075	208	2.0	2.0	0.02	0.01								
1076	210	2.0	2.0	0.13	0.19								
1077	212	2.0	2.0	0.65	0.50	0.06	<0.01	0.03	13.12	0.1	10		
1078	214	2.0	2.0	0.06	0.06								
1079	216	2.0	2.0	0.07	0.05								
1080	218	2.0	2.0	0.06	0.03								
1081	220	2.0	2.0	0.12	0.07								
1082	222	2.0	2.0	0.17	0.20	0.01							
1083	224	2.0	2.0	0.17	0.16								
1084	226	2.0	2.0	0.02	0.02								
1085	228	2.0	2.0	0.05	0.04								
1086	230	2.0	2.0	0.10	0.10								
1087	232	2.0	2.0	0.02	0.04	<0.01							
1088	234	2.0	2.0	0.02	0.04								
1089	236	2.0	2.0	0.10	0.09								
1090	238	2.0	2.0	0.51	0.49								
1091	240	2.0	2.0	0.10	0.11								
1092	242	2.0	2.0	0.02	0.03	0.01	<0.01	<0.01	6.12	<0.1	<1		
1093	244	2.0	2.0	0.05	0.04								
1094	246	2.0	2.0	0.02	0.02								
1095	248	2.0	2.0	0.02	0.02								
1096	250	2.0	2.0	0.02	0.02								
1097	252	2.0	2.0	tr.	0.02	<0.01							
1098	254	2.0	2.0	0.05	0.05								
1099	256	2.0	2.0	0.15	0.13								
1100	258	2.0	1.3	0.24	0.26								
1101	260	2.0	1.5	0.10	0.09								
1102	262	2.0	2.0	0.05	0.06	<0.01							
1103	264	2.0	2.0	0.05	0.04								
1104	266	2.0	2.0	0.05	0.04								
1105	268	2.0	2.0	0.05	0.02								
1106	270	2.0	2.0	0.10	0.15								
1107	272	2.0	2.0	0.12	0.08	0.01	<0.01	<0.01	8.54	<0.1	3		
1108	274	2.0	2.0	0.02	0.03								
1109	276	2.0	2.0	0.02	0.01								
1110	278	2.0	2.0	0.05	0.08								
1111	280	2.0	2.0	0.12	0.20								
1112	282	2.0	2.0	0.15	0.18	<0.01							
1113	284	2.0	2.0	0.15	0.16								
1114	286	2.0	2.0	0.12	0.13								
1115	288	2.0	2.0	0.05	0.03								
1116	290	2.0	2.0	0.02	0.02								
1117	292	2.0	2.0	0.27	0.28	0.03							
1118	294	2.0	2.0	0.27	0.30								
1119	296	2.0	2.0	0.07	0.09								
1120	298	2.0	2.0	0.22	0.21								
1121	300	2.0	2.0	0.10	0.11								
1122	301.1	1.1	1.1	0.05	0.11	0.01							

	SiO_2	Fe_2	Cu
fresh	< 55 %	< 1 %	< 0.2 %
weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals.
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization
kao. : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c : Chalcocite
en : Enargite
dis. : Dissemination
v. Veinlet
w. Width

PL I-8-17

GEOLOGICAL SURVEY OF

MONYWA AREA. UNION OF BURMA

(PHASE Ⅱ)

CORE LOG and ASSAY

D.D.H No. J.K-3(19D) Sheet 1

Total Length 301.6 m Core Recovery 95.5%

Location Kyisindaung. Elevation 163.6 m

Direction O Inclination -90°

Date of Logging from 13·3·74' to 23·3·74'

Logged by S. MONONOBE

METAL MINING AGENCY

OVERSEAS TECHNICAL COOPERATION AGENCY

GOVERNMENT OF JAPAN

SEPTEMBER 1974

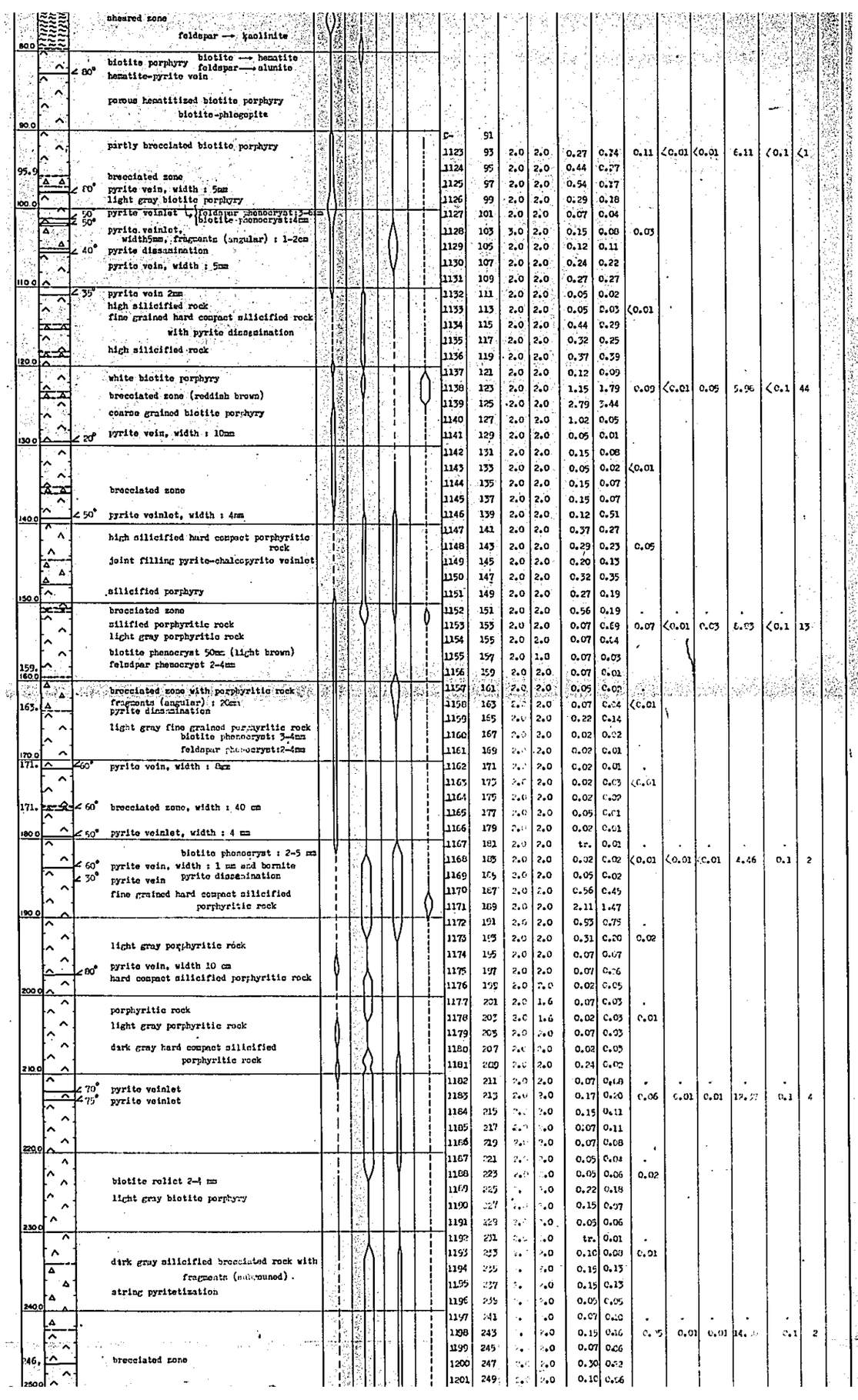
Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD

Depth (m)	Columnar Section	Particulars	Alteration Mineralization arg	sil	py	cu	Sample No.	Depth m	Core Length	Sample Length	Result of Chemical Analysis BURMA T-Cu %	JAPAN T-Cu %	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t
		non core																
		whitish gray biotite porphyry with limonitization net work																
		alunite																
10.0		whitish gray biotite porphyry																
		feldspar ⟶ alunite hematitization zone feldspar phenocryst : 7mm biotite phenocryst : 5mm altered phlogopite																
20.0		purple biotite porphyry																
		∠ 75° hematite veinlet																
		∠ 70° hematite veinlet																
		high hematitization biotite porphyry																
30.0																		
		breccia dyke																
		biotite porphyry feldspar phenocryst:6mm biotite phenocryst :5mm																
		pyrite ⟶ hematite silicified porous zone																
40.0		pyrite ⟶ hematite																
		∠ 50° hematite veinlet																
		∠ 30° breccia dyke																
		breccia: biotite porphyry, angular-subangular size 50 cm																
50.0		∠ 75° strong altered biotite porphyry																
		∠ 87°																
		sandstone xenolith																
		∠ 65° angular breccia																
60.0		high altered biotite porphyry																
		sheared zone																
		biotite porphyry (partly porous) biotite ⟶ sericite																
		alunitization																
70.0		hematite small veinlet																
		sheared zone																
		sheared zone																
		sheared zone foldspar ⟶ kaolinite																
80.0																		
		∠ 80° biotite porphyry biotite ⟶ hematite foldspar ⟶ alunite																
		hematite-pyrite vein																
		porous hematitized biotite porphyry biotite-phlogopite																
90.0																		
		partly brecciated biotite porphyry					C-91											
							1123	93	2.0	2.0	0.27	0.34	0.11	<0.01	<0.01	6.11	<0.1	<1
							1124	95	2.0	2.0	0.44	0.37						
95.9		brecciated zone					1125	97	2.0	2.0	0.54	0.37						
		∠ 60° pyrite vein, width : 5mm					1126	99	2.0	2.0	0.29	0.18						
100.0		light gray biotite porphyry					1127	101	2.0	2.0	0.07	0.04						
		∠ 10° pyrite veinlet ∠ 50° pyrite veinlet, width5mm, fragments (angular) : 1-2cm					1128	103	2.0	2.0	0.15	0.08	0.03					
		∠ 40° pyrite dissemination					1129	105	2.0	2.0	0.12	0.11						
		pyrite vein, width : 5mm					1130	107	2.0	2.0	0.24	0.22						
110.0							1131	109	2.0	2.0	0.27	0.27						
		∠ 35° pyrite vein 2mm					1132	111	2.0	2.0	0.05	0.02						
		high silicified rock					1133	113	2.0	2.0	0.05	0.03	<0.01					
		fine grained hard compact silicified rock with pyrite dissemination					1134	115	2.0	2.0	0.44	0.29						
		high silicified rock					1135	117	2.0	2.0	0.32	0.25						
120.0							1136	119	2.0	2.0	0.37	0.39						
		white biotite porphyry					1137	121	2.0	2.0	0.12	0.09						
		brecciated zone (reddish brown)					1138	123	2.0	2.0	1.15	1.79	0.09	<0.01	0.05	5.96	<0.1	44
		coarse grained biotite porphyry					1139	125	2.0	2.0	2.79	3.44						
		∠ 20° pyrite vein, width : 10mm					1140	127	2.0	2.0	1.02	0.05						
130.0							1141	129	2.0	2.0	0.05	0.01						
							1142	131	2.0	2.0	0.15	0.08						
		brecciated zone					1143	133	2.0	2.0	0.05	0.02	<0.01					
							1144	135	2.0	2.0	0.15	0.07						
							1145	137	2.0	2.0	0.15	0.07						
140.0		∠ 50° pyrite veinlet, width : 4mm					1146	139	2.0	2.0	0.12	0.51						
		high silicified hard compact porphyritic rock					1147	141	2.0	2.0	0.37	0.27						
		joint filling pyrite-chalcopyrite veinlet					1148	143	2.0	2.0	0.29	0.23	0.05					
							1149	145	2.0	2.0	0.20	0.13						
		silicified porphyry					1150	147	2.0	2.0	0.32	0.35						
150.0							1151	149	2.0	2.0	0.27	0.19						
		brecciated zone					1152	151	2.0	2.0	0.56	0.19						
		silified porphyritic rock					1153	153	2.0	2.0	0.07	0.69	0.07	<0.01	0.03	6.03	<0.1	13
		light gray porphyritic rock					1154	155	2.0	2.0	0.07	0.04						
		biotite phenocryst 50vol (light brown)																

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende — biotite porphyry; biotite porphyry; quartz — biotite porphyry
- Brecciation
- ∠30 Inclination of plane structures. (bedding plane, intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION



c-	91											
1123	93	2.0	2.0	0.27	0.24	0.11	<0.01	<0.01	6.11	<0.1	<1	
1124	95	2.0	2.0	0.44	0.27							
1125	97	2.0	2.0	0.54	0.27							
1126	99	2.0	2.0	0.29	0.18							
1127	101	2.0	2.0	0.07	0.04							
1128	103	3.0	2.0	0.15	0.08	0.03						
1129	105	2.0	2.0	0.12	0.11							
1130	107	2.0	2.0	0.24	0.22							
1131	109	2.0	2.0	0.27	0.27							
1132	111	2.0	2.0	0.05	0.02							
1133	113	2.0	2.0	0.05	0.03	<0.01						
1134	115	2.0	2.0	0.44	0.29							
1135	117	2.0	2.0	0.32	0.25							
1136	119	2.0	2.0	0.37	0.39							
1137	121	2.0	2.0	0.12	0.09							
1138	123	2.0	2.0	1.15	1.79	0.09	<0.01	0.05	5.96	<0.1	44	
1139	125	2.0	2.0	2.79	3.44							
1140	127	2.0	2.0	1.02	0.05							
1141	129	2.0	2.0	0.05	0.01							
1142	131	2.0	2.0	0.15	0.08							
1143	133	2.0	2.0	0.05	0.02	<0.01						
1144	135	2.0	2.0	0.15	0.07							
1145	137	2.0	2.0	0.15	0.07							
1146	139	2.0	2.0	0.12	0.51							
1147	141	2.0	2.0	0.37	0.27							
1148	143	2.0	2.0	0.29	0.23	0.05						
1149	145	2.0	2.0	0.20	0.13							
1150	147	2.0	2.0	0.32	0.35							
1151	149	2.0	2.0	0.27	0.19							
1152	151	2.0	2.0	0.56	0.19							
1153	153	2.0	2.0	0.07	0.69	0.07	<0.01	0.03	8.03	<0.1	13	
1154	155	2.0	2.0	0.07	0.64							
1155	157	2.0	1.0	0.07	0.03							
1156	159	2.0	2.0	0.07	0.01							
1157	161	2.0	2.0	0.05	0.02							
1158	163	2.0	2.0	0.07	0.04	<0.01						
1159	165	2.0	2.0	0.22	0.14							
1160	167	2.0	2.0	0.02	0.02							
1161	169	2.0	2.0	0.02	0.01							
1162	171	2.0	2.0	0.02	0.01							
1163	173	2.0	2.0	0.02	0.03	<0.01						
1164	175	2.0	2.0	0.02	0.02							
1165	177	2.0	2.0	0.05	0.01							
1166	179	2.0	2.0	0.02	0.01							
1167	181	2.0	2.0	tr.	0.01							
1168	183	2.0	2.0	0.02	0.02	<0.01	<0.01	<0.01	4.46	0.1	2	
1169	185	2.0	2.0	0.05	0.02							
1170	187	2.0	2.0	0.56	0.45							
1171	189	2.0	2.0	2.11	1.47							
1172	191	2.0	2.0	0.53	0.75							
1173	193	2.0	2.0	0.31	0.20	0.02						
1174	195	2.0	2.0	0.07	0.07							
1175	197	2.0	2.0	0.07	0.06							
1176	199	2.0	2.0	0.02	0.05							
1177	201	2.0	1.6	0.07	0.03							
1178	203	3.0	1.6	0.02	0.03	0.01						
1179	205	2.0	2.0	0.07	0.03							
1180	207	2.0	2.0	0.02	0.03							
1181	209	2.0	2.0	0.24	0.02							
1182	211	2.0	2.0	0.07	0.08							
1183	213	2.0	2.0	0.17	0.20	0.06	0.01	0.01	12.27	0.1	4	
1184	215	2.0	2.0	0.15	0.11							
1185	217	2.0	2.0	0.07	0.11							
1186	219	2.0	2.0	0.07	0.08							
1187	221	2.0	2.0	0.05	0.04							
1188	223	2.0	2.0	0.05	0.06	0.02						
1189	225	2.0	2.0	0.22	0.18							
1190	227	2.0	2.0	0.15	0.07							
1191	229	2.0	2.0	0.05	0.06							
1192	231	2.0	2.0	tr.	0.01							
1193	233	2.0	2.0	0.10	0.09	0.01						
1194	235	2.0	2.0	0.15	0.13							
1195	237	2.0	2.0	0.15	0.13							
1196	239	2.0	2.0	0.05	0.05							
1197	241	2.0	2.0	0.07	0.10							
1198	243	2.0	2.0	0.15	0.16	0.05	0.01	0.01	14.10	0.1	2	
1199	245	2.0	2.0	0.07	0.06							
1200	247	2.0	2.0	0.30	0.32							
1201	249	2.0	2.0	0.10	0.06							

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende–biotite porphyry; biotite porphyry; quartz–biotite porphyry
- Brecciation
- 30 — Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals

(by field observation)

ABBREVIATIONS

arg. Argillization
sil. Silicification
py. Pyritization

kao Kaolinitization
ser. Sericitization
ch. Chloritization
alu. Alunitization
c c p. Chalcopyrite
c c Chalcocite
en Enargite
dis. Dissemination
v. Veinlet
w Width

163. fragments (angular) : [illegible]
pyrite dissemination

light gray fine grained porphyritic rock
biotite phenocryst: 3–4mm
feldspar phenocryst:2–4mm

170.0

171. ∠60° pyrite vein, width : 8mm

171. ∠60° brecciated zone, width : 40 cm

180.0 ∠50° pyrite veinlet, width : 4 mm

biotite phenocryst : 2–5 mm
∠60° pyrite vein, width : 1 mm and bornite
∠30° pyrite vein pyrite dissemination
fine grained hard compact silicified porphyritic rock

190.0

light gray porphyritic rock
∠80° pyrite vein, width 10 cm
hard compact silicified porphyritic rock

200.0

porphyritic rock
light gray porphyritic rock
dark gray hard compact silicified porphyritic rock

210.0

∠70° pyrite veinlet
∠75° pyrite veinlet

220.0

biotite relict 2–4 mm
light gray biotite porphyry

230.0

dark gray silicified brecciated rock with fragments (subrounded).
string pyritetization

240.0

246. brecciated zone

250.0

dark gray hard compact silicified porphyritic rock with pyrite dissemination
∠50° pyrite veinlet

260.0

267.

fine grained silicified sandstone with muddy layers

270.0

∠60° pyrite veinlet
∠25° pyrite veinlet, width, 3 mm
∠70° fragments : 10–40 mm
∠60° brecciated porphyry
slumping zone
∠70° sheared zone

280.0

280. ∠75° sheared zone
281.
283. ∠80° fine grained silicified sandstone
fragment : 40 mm
brecciated porphyry
287. sheared zone
∠85° pyrite veinlet

290.0

dark grey hard compact silicified rock
∠70°

300.0

301. Bottom

310.0

1158	163	2.0	2.0	0.07	0.04	<0.01					
1159	165	2.0	2.0	0.22	0.14						
1160	167	2.0	2.0	0.02	0.02						
1161	169	2.0	2.0	0.02	0.01						
1162	171	2.0	2.0	0.02	0.01						
1163	173	2.0	2.0	0.02	0.03	<0.01					
1164	175	2.0	2.0	0.02	0.02						
1165	177	2.0	2.0	0.05	0.01						
1166	179	2.0	2.0	0.02	0.01						
1167	181	2.0	2.0	tr.	0.01						
1168	183	2.0	2.0	0.02	0.02	<0.01	<0.01	<0.01	4.46	0.1	2
1169	185	2.0	2.0	0.05	0.02						
1170	187	2.0	2.0	0.56	0.45						
1171	189	2.0	2.0	2.11	1.47						
1172	191	2.0	2.0	0.93	0.75						
1173	193	2.0	2.0	0.31	0.20	0.02					
1174	195	2.0	2.0	0.07	0.07						
1175	197	2.0	2.0	0.07	0.06						
1176	199	2.0	2.0	0.02	0.05						
1177	201	2.0	1.6	0.07	0.03						
1178	203	2.0	1.6	0.02	0.03	0.01					
1179	205	2.0	2.0	0.07	0.03						
1180	207	2.0	2.0	0.02	0.05						
1181	209	2.0	2.0	0.24	0.02						
1182	211	2.0	2.0	0.07	0.08						
1183	213	2.0	2.0	0.17	0.20	0.06	0.01	0.01	12.37	0.1	4
1184	215	[illegible]	2.0	0.15	0.11						
1185	217	2.0	2.0	0.07	0.11						
1186	219	[illegible]	2.0	0.07	0.08						
1187	221	[illegible]	2.0	0.05	0.04						
1188	223	[illegible]	2.0	0.05	0.06	0.02					
1189	225	[illegible]	2.0	0.22	0.18						
1190	227	[illegible]	2.0	0.15	0.07						
1191	229	[illegible]	2.0	0.05	0.06						
1192	231	[illegible]	2.0	tr.	0.01						
1193	233	[illegible]	2.0	0.10	0.08	0.01					
1194	235	[illegible]	2.0	0.15	0.15						
1195	237	[illegible]	2.0	0.15	0.13						
1196	239	[illegible]	2.0	0.05	0.05						
1197	241	[illegible]	2.0	0.07	0.10						
1198	243	[illegible]	2.0	0.15	0.16	0.05	0.01	0.01	14.[illegible]	0.1	2
1199	245	[illegible]	2.0	0.07	0.06						
1200	247	[illegible]	2.0	0.30	0.22						
1201	249	[illegible]	2.0	0.10	0.06						
1202	251	[illegible]	2.0	0.05	0.05						
1203	253	[illegible]	2.0	0.02	0.03	0.01					
1204	255	[illegible]	2.0	0.07	0.09						
1205	257	[illegible]	2.0	0.10	0.08						
1206	259	[illegible]	2.0	0.10	0.08						
1207	261	[illegible]	2.0	0.02	0.01						
1208	263	[illegible]	2.0	0.10	0.11	0.03					
1209	265	[illegible]	2.0	0.07	0.07						
1210	267	[illegible]	2.0	0.07	0.05						
1211	269	[illegible]	2.0	0.07	0.05						
1212	271	[illegible]	2.0	0.10	0.08						
1213	273	[illegible]	2.0	tr.	0.01	<0.01	<0.01	<0.01	6.[illegible]	<0.1	1
1214	275	[illegible]	2.0	0.07	0.06						
1215	277	[illegible]	2.0	0.07	0.05						
1216	279	[illegible]	2.0	0.02	0.03						
1217	281	[illegible]	2.0	0.12	0.07						
1218	283	[illegible]	1.8	0.10	0.08	<0.01					
1219	285	2.0	2.0	0.05	0.08						
1220	287	2.0	2.0	0.05	0.04						
1221	289	2.0	2.0	0.07	0.05						
1222	291	2.0	2.0	0.02	0.03						
1223	293	2.0	2.0	0.02	0.02	<0.01					
1224	295	2.0	2.0	0.02	0.02						
1225	297	2.0	2.0	0.02	0.02						
1226	299	2.0	2.0	tr.	0.01						
1127	301.5	2.5	2.5	tr.	0.01						

weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu : Alunitization
ccp. : Chalcopyrite
c.c : Chalcocite
en : Enargite
dis. : Dissemination
v. : Veinlet
w : Width

PL I-8-18

GEOLOGICAL SURVEY OF
MONYWA AREA. UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. I P-3 Sheet 1

Total Length 200.6 m Core Recovery 76.5%

Location Kyaukmyet Elevation 102.0 m

Direction 0 Inclination −90°

Date of Logging from 13·3·74 to 20·3·74

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO. LTD

Depth (m)	Columnar Section	Particulars	Alteration Mineralization: arg	sil	py	cu	Sample No.	Depth m	Core Length	Sample Length	Result of Chemical Analysis: BURMA T-Cu %	JAPAN T-Cu %	Sol-Cu %	Zn %	As %	S %	Au g/t	Ag g/t	Pb %
		non core																	
10.0		yellowish brown coarse grained sandstone																	
		gravels (yellowish brown) reddish brown conglomerate fragments (subrounded) : 8-20mm reddish brown conglomerate																	
		sandstone with gravels																	
20.0																			
30.0																			
		compact sandstone																	
40.0		reddish brown mudstone																	
		core lost																	
	∠15°	mudstone with gravels																	
		muddy sandstone with quartz grain .																	
50.0		reddish sandy mudstone						50											
51.5		reddish brown fine grained sandstone					1319	52	2.0	2.0	0.02	<0.01	<0.01		0.18				2.4
53.5	∠35°	sandy mudstone with sand layers					1320	54	2.0	1.0	tr.								
55.5		light gray mudstone					1321	56	2.0	1.0	tr.								
		light gray sandy mudstone					1322	58	2.0	2.0	0.02								
59.6 60.0	∠59°	pyrite dissemination					1323	60	2.0	2.0	0.02								
		light gray, laminated mudstone					1324	62	2.0	2.0	0.02				2.76				3.8
		pyrite impregnation					1325	64	2.0	0.5	0.02								
							1326	66	2.0	1.3	0.02								
							1327	68	2.0	2.0	0.02								
70.0							1328	70	2.0	1.7	0.02								
							1329	72	2.0	1.8	tr.				2.62				3.3
							1330	74	2.0	1.8	tr.								
							1331	76	2.0	1.9	0.02								
		light gray sandy mudstone					1332	78	2.0	2.0	0.02								
80.0		light gray fine grained sandstone					1333	80	2.0	2.0	0.02								
		light gray sandy mudstone with sand					1334	82	2.0	2.0	0.02	<0.01	<0.01		2.76				3.9
	∠5°	layers and pyrite dissemination					1335	84	2.0	1.75	tr.								
		light gray laminated mudstone with disseminated pyrite grains					1336	86	2.0	2.0	0.05								
89.0 90.0		silicified sandstone, width: 50cm, with pyrite dissemination					1337	88	2.0	2.0	0.02								
							1338	90	2.0	2.0	0.05								
	∠65°	pyrite vein, width : 20cm					1339	92	2.0	2.0	0.05				3.06				3.7
		light gray laminated mudstone and sandy					1340	94	2.0	2.0									
		mudstone alternation with pyrite grains					1341	96	2.0	2.0	0.02								
		pyrite dissemination					1342	98	2.0	2.0	0.02								
100.0							1343	100	2.0	2.0	tr.								
							1344	102	2.0	2.0	tr				2.96				3.9
		laminated mudstone and sandy					1345	104	2.0	2.0	0.02								
		mudstone alternation					1346	106	2.0	2.0	0.02								
							1347	108	2.0	2.0	tr.								
110.0							1348	110	2.0	1.6	tr.								
							1349	112	2.0	2.0	tr.	<0.01	<0.01		3.92				3.9
							1350	114	2.0	1.3	0.05								
		sandstone, width : 20cm					1351	116	2.0	1.45	tr.								
		gray sandy mudstone					1352	118	2.0	2.0	tr.								
120.0							1353	120	2.0	2.0	0.02								
123.4							1354	122	2.0	2.0	tr.				4.26				4.3
125.0		light gray sandstone					1355	124	2.0	2.0	0.02								
		light gray mudstone					1356	126	2.0	1.4	tr.								
							1357	128	2.0	1.2	tr.								
130.0		light gray sandstone					1358	130	2.0	2.0	tr.								
		light gray mudstone					1359	132	2.0	1.6	0.02				2.48				4.1
							1360	134	2.0	1.5	tr.								
							1361	136	2.0	2.0	tr.								
							1362	138	2.0	2.0	tr.								
140.0		brecciated rock with sandstone fragments					1363	140	2.0	2.0	0.02								
141.7		light gray mudstone					1364	142	2.0	2.0	0.02	<0.01	<0.01		2.94				3.4
		biotite (1-2mm) porphyry fragments: 3-4mm					1365	144	2.0	2.0	0.05								
							1366	146	2.0	2.0	0.02	0.02							
		light gray mudstone with small fragments					1367	148	2.0	2.0	tr.								
150.0							1368	150	2.0	1.7	tr.								
		dark gray mudstone with silicified rock fragments : 20-40mm					1369	152	2.0	1.6	0.05				3.16				3.6
		pyrite fragments : 30x40mm					1370	154	2.0	2.0	tr.								
							1371	156	2.0	2.0	0.02								
	∠20°	silicified gray sandstone					1372	158	2.0	2.0	0.02								
160.0							1373	160	2.0	2.0	tr.								

LEGEND

- Gravel
- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff. breccia.
- Rhyolite
- Porphyry — hornblende — biotite porphyry; biotite porphyry; quartz — biotite porphyry
- Brecciaton
- ∠30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	cu

80.0	light gray sandy mudstone light gray fine grained sandstone	1332	78	2.0	2.0	0.02								
		1333	80	2.0	2.0	0.02								
	light gray sandy mudstone with sand layers and pyrite dissemination	1334	82	2.0	2.0	0.02	<0.01	<0.01		2.76			2.9	
	∠5° light gray laminated mudstone with disseminated pyrite grains	1335	84	2.0	1.75	tr.								
		1336	86	2.0	2.0	0.05								
89.0	silicified sandstone, width: 50cm, with pyrite dissemination	1337	88	2.0	2.0	0.02								
90.0		1338	90	2.0	2.0	0.05								
	∠65° pyrite vein, width : 20cm	1339	92	2.0	2.0	0.05				3.06			3.7	
	light gray laminated mudstone and sandy mudstone alternation with pyrite grains	1340	94	2.0	2.0									
		1341	96	2.0	2.0	0.02								
	pyrite dissemination	1342	98	2.0	2.0	0.02								
100.0		1343	100	2.0	2.0	tr.								
	laminated mudstone and sandy mudstone alternation	1344	102	2.0	2.0	tr				2.96			3.9	
		1345	104	2.0	2.0	0.02								
		1346	106	2.0	2.0	0.02								
		1347	108	2.0	2.0	tr.								
110.0		1348	110	2.0	1.6	tr.								
		1349	112	2.0	2.0	tr.	<0.01	<0.01		3.92			3.9	
		1350	114	2.0	1.3	0.05								
	sandstone, width : 20cm	1351	116	2.0	1.45	tr.								
	gray sandy mudstone	1352	118	2.0	2.0	tr.								
120.0		1353	120	2.0	2.0	0.02								
23.4		1354	122	2.0	2.0	tr.				4.26			4.3	
25.0	light gray sandstone	1355	124	2.0	2.0	0.02								
	light gray mudstone	1356	126	2.0	1.4	tr.								
		1357	128	2.0	1.2	tr.								
130.0	light gray sandstone	1358	130	2.0	2.0	tr.								
	light gray mudstone	1359	132	2.0	1.6	0.02				2.48			4.1	
		1360	134	2.0	1.5	tr.								
		1361	136	2.0	2.0	tr.								
39.7		1362	138	2.0	2.0	tr.								
40.0	brecciated rock with sandstone fragments	1363	140	2.0	2.0	0.02								
	light gray mudstone	1364	142	2.0	2.0	0.02	<0.01	<0.01		2.94			3.4	
	biotite (1-2mm) porphyry fragments; 3-4mm	1365	144	2.0	2.0	0.05								
	light gray mudstone with small fragments	1366	146	2.0	2.0	0.02	0.02							
		1367	148	2.0	2.0	tr.								
150.0		1368	150	2.0	1.7	tr.								
	dark gray mudstone with silicified rock fragments : 20-40cm	1369	152	2.0	1.6	0.05				3.16			3.6	
	pyrite fragments : 30x40cm	1370	154	2.0	2.0	tr.								
	∠20° silicified gray sandstone	1371	156	2.0	2.0	0.02								
160.0		1372	158	2.0	2.0	0.02								
	silicified sandstone with mudstone	1373	160	2.0	2.0	tr.								
	dark gray mudstone bearing pyrite with rock fragments	1374	162	2.0	2.0	0.02								
		1375	164	2.0	2.0	tr.								
		1376	166	2.0	1.4	tr.								
68.1	black gray medium grained sandstone with mud layers	1377	168	2.0	1.0	tr.								
170.0	∠30°	1378	170	2.0	2.0	tr.								
70.5	black gray mudstone with pyrite	1379	172	2.0	2.0	0.02	<0.01	<0.01		3.36			5.4	
		1380	174	2.0	1.7	0.02								
		1381	176	2.0	1.4	tr.								
72.5		1382	178	2.0	2.0	tr.								
180.0	medium grained silicified sandstone	1383	180	2.0	2.0	tr.								
	∠45° silicified sandstone	1384	182	2.0	2.0	tr.				1.78			3.0	
	black mudstone with pyrite impregnation	1385	184	2.0	2.0	tr.								
85.5		1386	186	2.0	1.7	tr.								
	dark gray medium grained sandstone with mud layers	1387	188	2.0	2.0	tr.								
190.0	∠50°	1388	190	2.0	2.0	tr.								
91.5	brecciated rhyolite (white) with pyrite ore fragments	1389	192	2.0	2.0					2.90			2.8	
94.8	white rhyolite tuff	1390	194	2.0	2.0	0.02								
97.1		1391	196	2.0	2.0	tr.								
99.1	gray mudstone with tuff	1392	198	2.0	2.0	tr.								
200.0	high silicified breccia figure-filling barite, lead, zinc etc.	1393	200.6	2.6	2.6	tr.								
00.6	Bottom													
210.0														
220.0														
230.0														
240.0														

LEGEND

- Gravel
- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff-breccia.
- Rhyolite
- Porphyry — hornblende-biotite porphyry; biotite porphyry; quartz-biotite porphyry
- Brecciaton
- ∠30 Inclination of plane structures. (bedding plane, intrusive boundary, etc)

DEGREE OF ALTERATION AND MINERALIZATION

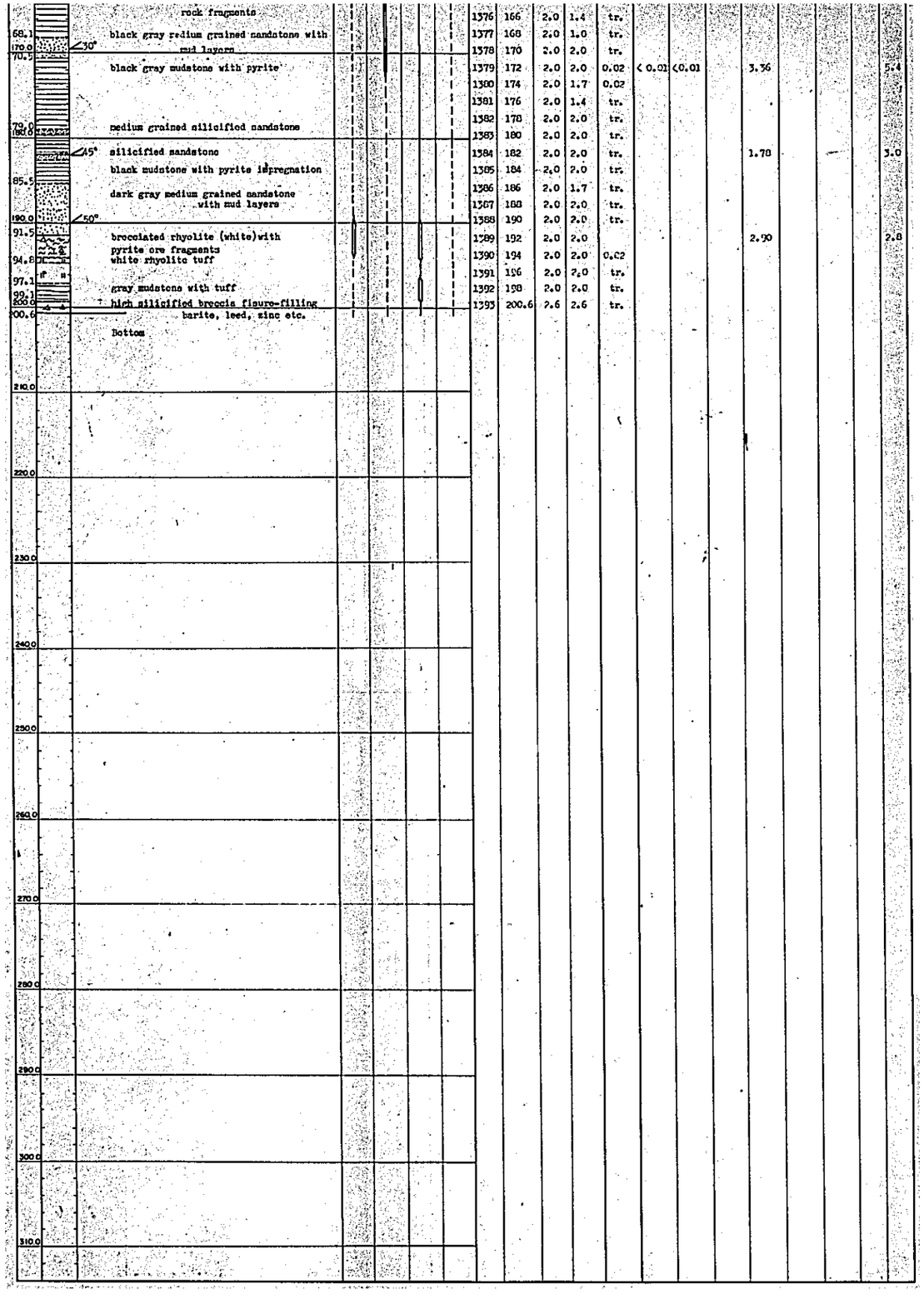
	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

※ fresh : unaltered.
weak : parts of feldspar phenocrysts changed into clay minerals.
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : *not only feldspar phenocrysts but also ground-mass* changed into clay minerals.

(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : *Pyritization*
- kao. : Kaolinitization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c : Chalcocite
- en : Enargite
- dis. : Dissemination
- v. : *Veinlet*
- w : Width



1376	166	2.0	1.4	tr.						
1377	168	2.0	1.0	tr.						
1378	170	2.0	2.0	tr.						
1379	172	2.0	2.0	0.02	< 0.01	<0.01		3.36		5.4
1380	174	2.0	1.7	0.02						
1381	176	2.0	1.4	tr.						
1382	178	2.0	2.0	tr.						
1383	180	2.0	2.0	tr.						
1384	182	2.0	2.0	tr.				1.78		3.0
1385	184	2.0	2.0	tr.						
1386	186	2.0	1.7	tr.						
1387	188	2.0	2.0	tr.						
1388	190	2.0	2.0	tr.						
1389	192	2.0	2.0					2.90		2.8
1390	194	2.0	2.0	0.02						
1391	196	2.0	2.0	tr.						
1392	198	2.0	2.0	tr.						
1393	200.6	2.6	2.6	tr.						

weak	55 ~ 65 %	~ 5 %	0.3 ~ 0.5 %
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered

weak : parts of feldspar phenocrysts changed into clay minerals.

medium: almost all the feldspar phenocrysts changed into clay minerals.

strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals.

(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinitization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c. c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. Veinlet
w Width

PL I-9-1

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 23 Sheet 1

Total Length 834.0 feet Core Recovery

Location Sabedaung Elevation 145.5 m

Direction 0 Inclination -90°

Date of Logging from 12·5·58 to 22·7·58

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
									5			
									12.5	7.5		0.09
									22.5	10.0		0.05
10.0			partly brecciated quartz-biotite porphyry due to leaching biotite changed into ferruginous clay mineral						32.5	10.0		0.04
									41.5	9.0		0.02
	50.0								53.5	12.0		0.05
16.5			brecciated biotite porphyry						61.5	8.0		0.04
20.0									66.5	5.0		0.04
									74.0	9.5		0.05
24.5			malachite stain						79.5	5.5		Trace
									80.31	1.81		0.82
									80.4	4.5	4.50	
			quartz biotite porphyry						90.5	5.5	5.50	1.05
30.0	100.0								100.5	10.0	10.00	2.00
									110.0	9.5	9.50	1.62
			white gray biotite porphyry						120.0	10.0	10.00	1.18
40.0									130.0	10.0	10.00	0.80
			30° chalcocite vein						140.0	11.0	10.00	0.10
									145.0	5.0	5.00	0.40
	150.0								150.0	5.0	5.00	0.20
									161.0	10.0	6.80	0.55
50.0			30° chalcocite vein						171.0	10.0	9.71	0.76
									181.0	10.0	11.00	0.98
									186.0	5.0	5.00	1.93
			70° chalcocite-pyrite vein						192.5	7.5	7.50	1.20
60.0									202.5	11.0	9.50	0.46
	200.0											
			solid chalcocite vein						212.5	10.0	10.00	2.00
									217.5	5.0	5.00	1.03
			chalcocite vein						222.5	5.0	5.00	1.33
									227.5	5.0	5.00	0.90
70.0			quartz biotite porphyry biotite phenocryst : 3-7 mm						234.0	7.5	6.50	0.79
									244.0	10.0	10.00	0.85
	250.0								250.0	10.0	10.00	0.65
									252.5	2.5	2.50	0.65
80.0									252.5	10.0	10.00	0.30
									272.5	10.0	10.00	1.22
			45° chalcocite pyrite vein						282.5	10.0	9.00	2.70
			fine grained biotite porphyry						287.5	5.0	4.50	0.34
90.0									292.5	5.0	4.67	0.34
	300.0								297.5	5.0	5.00	0.39
									300.0	2.5	2.50	0.13
			pyrite vein						308.0	7.0	7.00	1.05
									318.0	10.0	10.00	0.58
									323.0	5.0	5.00	0.85
100.0			biotite porphyry						328.0	5.0	5.00	0.59
									333.0	5.0	5.00	0.98
			pyrite dissemination						338.0	5.0	3.67	0.73
									341.0	3.0	3.40	0.95
	350.0								342.0	7.0	7.00	0.52
									353.0	5.0	5.00	
110.0									358.0	5.0	5.00	0.58
									363.0	5.0	5.00	
									368.0	5.0	5.00	0.13
			biotite porphyry						373.0	5.0	5.00	
									378.0	5.0	5.00	0.49
			chalcocite vein						384.5	6.5	6.50	0.53
120.0									392.5	10.0	10.00	0.36
	400.0								397.5	5.0	5.00	
			pyrite vein						402.5	5.0	5.00	0.73
									407.5	5.0	5.00	
			biotite porphyry						412.5	5.0	5.00	0.63
									417.5	5.0	4.50	
130.0			biotite phenocryst : 2-5 mm						422.5	5.0	5.00	0.17
									427.5	5.0	5.00	0.18
									432.5	5.0	5.00	0.12
									436.5	4.0	4.00	0.11
	450.0								447.0	12.5	12.50	0.02
									453.0	6.0	5.50	0.04
140.0									459.0	6.0	6.00	0.34
			biotite porphyry						464.0	5.0	4.00	0.02
									474.0	10.0	10.00	0.1
									480.0	6.0	6.00	0.02
									485.0	5.0	4.83	0.02
150.0									490.0	5.0	5.00	0.03
									493.5	3.5	3.50	0.04
	500.0								503.5	10.0	6.00	0.02
									510.0	6.5	6.50	0.04
									515.0	5.0	5.00	0.06
									520.0	5.0	5.00	0.14
160.0			biotite porphyry biotite phenocryst : 1-3 mm no quartz						525.0	5.0	4.00	0.15
									530.0	5.0	5.00	0.12
									535.0	5.0	5.00	
									540.0	5.0	5.00	0.08
									545.0	5.0	5.00	
	550.0								552.0	5.0	4.00	0.13
170.0									562.0	10.0	10.00	0.15
									572.0	10.0	10.00	0.15
			biotite porphyry						582.0	10.0	8.83	0.01
180.0			biotite euhedral						592.0	10.0	5.00	0.13
	600.0								602.0	10.0	7.50	0.15
									612.0	10.0	4.20	0.18
			whitish gray colored biotite porphyry						622.0	10.0	2.50	0.20
190.0									627.0	5.0	4.00	0.11
									637.0	9.0	6.50	0.05
									641.0	7.0	3.00	0.08
									646.0	5.0	1.00	0.25
	650.0								662.0	14.0	2.00	0.15
200.0									667.0	5.0	5.00	0.33
			small grained biotite porphyry biotite..2-3 mm feldspar..2-3 mm						674.0	7.0	1.00	0.25
									681.0	7.0	C-L	
210.0									688.5	7.5		
									691.5	3.0		
	700.0								696.5	5.0	5.00	0.10
									704.5	8.0	2.50	0.15

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry — hornblende – biotite porphyry, biotite porphyry, quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive bounddry etc) :

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-1

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 23 Sheet 2

Total Length 834.0 feet Core Recovery

Location Sabedaung Elevation 145.5 m

Direction 0 Inclination -90°

Date of Logging from 12·5·58 to 22·7·58

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	700		hematite						7045	9.0	3.50	0.15
									7120	7.5	3.50	0.23
									7160	4.0	3.17	
2200									7210	5.0	C-L	0.45
			silicified biotite porphyry						7330	12.0	5.25	0.20
			biotite..3-5 mm									
			feldspar..3-5 mm						7436	10.0	4.00	0.20
	750.0								7456	2.0	1.50	0.23
2300									7550	10.0	2.00	0.10
									7565	1.5	1.50	0.20
									7615	5.0	1.25	0.20
									7670	5.5	1.50	0.20
									7720	5.0	C-L	0.27
									7765	4.5	2.00	0.25
									7810	5.5	4.00	0.25
									7860	5.0	0.50	0.25
2400			silicified biotite porphyry						7870	1.0	4.00	0.25
			biotite..3-5 mm						7920	5.0	3.83	0.25
			feldspar..3-5 mm						7950	3.0	3.00	0.20
	800.0								7985	3.5	2.50	0.25
									8040	5.5	5.50	0.50
									8125	9.5	5.00	0.20
2500									8180	5.0	5.00	0.62
									8220	3.5		0.25
									8330	8.0		0.20
									8360	4.0		0.15
	850.0		Bottom									
2600												
2700												
	900.0											
2800												
2900	950.0											
3000												
	1000.0											
3100												
3200	1050.0											
3300												
	1100.0											
3400												
3500	1150.0											
3600												
	1200.0											
3700												
3800	1250.0											
3900												
	1300.0											
4000												
4100	1350.0											
4200												
	1400.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry: hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification SiO2	pyritization FeS2	mineralization Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-2

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 23 A Sheet 1

Total Length 535.0 feet Core Recovery

Location Sabedaung Elevation 100.6 m

Direction 0 Inclination −90°

Date of Logging from 1·12·65 to 27·12·65

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
			non core						405			
10.0			light brown tuff breccia with oxidized iron stain						440	35	330	0.05
			tuff breccia						455	15	135	0.18
			pyroclastic flow						705	35	350	0.13
			rock fragments (angular-subangular) pea-egg size						740	35	350	0.17
	50.0								815	55	400	0.42
20.0									850	45	350	0.61
			pyrite-chalcocite dissemination and chalcocite vein						890	30	300	0.57
									920	30	300	0.60
			acidic tuff containing porphyritic						955	35	350	0.32
			rock fragments with chalcocite-pyrite dissemination						995	40	400	0.24
									1025	30	300	0.32
30.0	100.0		chalcocite-pyrite dissemination						1055	30	300	0.32
			chalcocite-pyrite dissemination						1095	40	400	0.45
			chalcocite-pyrite vein						1140	45	450	0.21
			light gray acidic tuff						1180	40	400	0.19
40.0			chalcocite-pyrite dissemination fragments (angular-subangular) pea size						1250	70	700	0.30
			chalcocite vein						1300	50	500	0.34
									1400	100	1000	0.30
	150.0								1500	100	1000	0.36
			chalcocite-pyrite dissemination fragments with chalcocite-pyrite						1600	100	1000	0.30
50.0			chalcocite pyrite dissemination chalcocite dissemination and pyrite fragment						1700	100	1000	0.25
			chalcocite-pyrite veinlet						1800	100	1000	0.15
			chalcocite veinlet						1890	90	900	0.15
									1925	35		
		80°	pyrite-chalcocite dissemination						1980	90	900	0.15
60.0	200.0		biotite porphyry									
			biotite phenocryst (brown): 2-3mm						2080	100	1000	0.19
			pyrite chalcocite dissemination						2180	100	1000	0.27
			pyrite in getting bigger amount than chalcocite									
		40°	pyrite-chalcocite dissemination pyrite veinlet.						2260	100	925	0.20
70.0									2345	85	850	0.13
			medium grained tuff									
			pyrite dissemination a little chalcocite						2445	100	1000	0.19
	250.0								2500	55	550	0.20
			massive lapilli tuff									
80.0			pyrite silicified rock fragment (angular-subangular) : pea-egg size						2600	100	800	0.26
									2660	60	650	0.14
			pyrite dissemination						2710	50	500	0.13
									2760	50	500	0.08
									2810	50	400	0.05
									2860	50	400	0.10
			tuff with reddish brown iron stain						2925	65	650	0.34
90.0			chalcocite-hematite dissemination						2985	60	600	0.23
	300.0								3035	100	1000	0.17
			pyrite dissemination						3135	100	1000	0.14
			hematite dissemination						3235	100	1000	0.18
100.0			pyrite dissemination						3335	100	1000	0.23
			breccia : egg size gray mudstone sandy tuff						3435	100	1000	0.24
	350.0								3535	100	1000	0.20
110.0			dark gray lapilli tuff lapilli : pea-egg size a little chalcocite						3120	85	850	0.16
			light gray tuff fragments (subangular)						3720	100	1000	0.21
									3820	100	1000	0.23
120.0			pyrite-chalcocite dissemination						3920	100	1000	0.21
	400.0								3935	15	150	2.70
									4035	100	1000	0.26
									4135	100	1000	0.26
			pyrite chalcocite veinlet						4235	100	1000	0.32
130.0									4310	75	750	0.32
			tuff fragments : pea size									
			hematite dissemination						4410	100	1000	0.35
			hematite dissemination									
	450.0								4510	100	1000	0.36
140.0			lapilli tuff lapilli (angular) : pea size						4610	100	1000	0.29
			pyrite ore and porphyritic rock fragments						4710	100	1000	0.23
									4810	100	1000	0.17
150.0			pyrite chalcocite vein						4910	100	1000	0.23
									4950	40	400	0.17
	500.0								4975	25	250	0.38
			biotite porphyry, biotite phenocryst : 4 cm						5020	45	450	0.25
									5120	100	1000	0.19
			pyrite chalcocite vein						5220	100	1000	0.27
160.0			pyrite chalcocite dissemination						5245	25	250	0.20
									5280	35	350	0.16
									5320	50	500	0.29
	535.0								5350	90	900	0.50
			Bottom									
	550.0											
170.0												
180.0												
	600.0											
190.0												
	650.0											
200.0												
210.0												
	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry (hornblende−biotite porphyry; biotite porphyry; quartz−biotite porphyry)
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-3

GEOLOGICAL SURVEY OF MONYWA AREA UNION OF BURMA

(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 23 B   Sheet 1

Total Length 511.5 feet   Core Recovery

Location Sabedaung   Elevation 117.4 m

Direction 0   Inclination -90°

Date of Logging from 27·1·66 to 24·2·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974
Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars (Depth: 0 – 511.5 feet)

- non core
- biotite-quartz porphyry; biotite phenocryst : fresh
- reddish brown brecciation; breccia : angular-subangular
- biotite porphyry with fragment : 40cm
- light gray porphyry {green feldspar, fresh biotite}
- irregular boundary
- tuff breccia
- iron dissemination
- light gray brown colored biotite porphyry
- feldspar phenocryst : 11 mm
- pyrite dissemination
- tuff breccia
- chalcocite > pyrite dissemination
- tuff breccia
- light gray biotite porphyry
- brecciated zone
- light gray porphyry; feldspar phenocryst : 10-30 mm; biotite phenocryst : 1-3 mm
- pyrite chalcocite dissemination
- feldspar phenocryst : 1-10 mm
- 75° pyrite chalcocite vein, width 2 mm
- 50° quartz-pyrite-chalcocite vein, W : 1mm; W : 7mm
- pyrite-chalcocite dissemination
- 75° chalcocite-pyrite vein, width < 1 mm
- 90° chalcocite-pyrite vein, width < 1 mm
- pyrite-chalcocite dissemination
- brecciated biotite porphyry
- sheared zone
- brecciated biotite porphyry
- quartz-biotite porphyry (light gray); feldspar phenocryst : 10mm
- 65° quartz-pyrite-chalcocite vein, W : 2mm
- pyrite dissemination
- biotite porphyry; phenocryst : 1-3 mm
- pyrite dissemination
- Bottom

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	10.0	10.0		
	[illegible]	[illegible]	[illegible]	
	14.5	0.5		
	55.0	35.5		
	[illegible]	[illegible]	1.50	
	[illegible]	[illegible]	1.50	
	[illegible]	[illegible]	1.50	
	56.0	4.5	4.50	
	57.0	3.0	3.00	
	58.0	1.0	1.00	
	67.0	5.0	2.00	
	[illegible]	2.5	2.50	
	[illegible]	8.0	[illegible]	
	70.0	2.5	2.50	
	77.0	3.0	1.50	0.26
	[illegible]	[illegible]	[illegible]	[illegible]
	81.5	3.5	2.50	0.18
	86.5	5.0	5.00	0.22
	89.0	2.5	2.50	0.26
	94.5	5.5	5.00	0.26
	97.5	3.0	3.00	0.19
	100.0	2.5	2.50	0.18
	104.5	4.5	4.00	0.18
	[illegible]	5.0	5.00	0.15
	[illegible]	3.0	0.50	0.10
	112.0	3.5	2.00	0.12
	115.0	3.0	2.50	0.13
	118.5	3.5	3.00	0.18
	121.5	3.0	3.00	0.27
	127.5	[illegible]	[illegible]	[illegible]
	126.5	3.0	4.00	0.24
	[illegible]	[illegible]	[illegible]	[illegible]
	131.5	3.0	3.00	0.37
	135.5	4.0	4.00	0.39
	[illegible]	[illegible]	[illegible]	[illegible]
	149.0	5.0	2.00	0.20
	153.0	4.0	4.00	0.20
	156.0	3.0	3.00	0.25
	159.0	3.0	2.00	0.30
	166.0	4.0	0.50	0.22
	167.5	1.5	1.50	0.14
	170.5	3.0	3.00	0.13
	172.5	2.0	2.00	0.15
	175.5	3.0	3.00	0.09
	179.5	4.0	4.00	0.09
	184.5	5.6	5.00	0.07
	191.5	7.0	3.00	0.09
	201.0	9.5	9.08	0.15
	206.5	5.5	5.00	0.14
	209.5	3.0	3.00	0.11
	212.0	2.5	2.50	0.04
	217.5	5.5	5.50	0.09
	220.0	2.5	2.50	0.09
	226.5	6.5	6.50	0.27
	229.0	2.5	2.50	0.07
	231.0	2.0	2.00	0.07
	237.5	6.5	6.50	0.09
	247.5	10.0	10.00	0.04
	251.5	4.0	4.00	0.07
	253.5	2.0	2.00	0.07
	257.0	3.5	3.50	0.07
	260.0	3.0	3.00	
	262.5	2.5	2.50	0.09
	265.0	2.5	2.50	0.09
	275.0	10.0	10.00	0.08
	284.5	9.5	9.50	0.03
	291.5	7.0	6.83	0.12
	293.5	2.0	2.00	0.09
	300.0	6.5	6.50	0.07
	302.0	2.0	0.75	0.07
	306.0	4.0	3.00	0.10
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	312.0	3.0	3.00	0.07
	315.0	3.0	3.00	0.07
	319.5	4.5	4.50	0.07
	322.0	2.5	2.50	0.30
	324.0	2.0	2.00	0.46
	328.0	4.0	4.00	0.38
	[illegible]	[illegible]	[illegible]	[illegible]
	334.0	3.0	2.00	0.41
	[illegible]	[illegible]	[illegible]	[illegible]
	359.0	3.0	3.00	0.46
	362.0	3.0	3.00	0.19
	369.5	7.5	7.50	0.12
	379.5	10.0	10.00	0.40
	389.5	10.0	10.00	0.16
	394.5	5.0	5.00	0.18
	400.0	5.5	5.50	0.15
	408.5	8.5	8.50	0.16
	414.5	6.0	6.00	0.27
	418.0	3.5	3.50	0.37
	422.0	4.0	4.00	0.19
	[illegible]	1.5	1.50	0.14
	429.0	3.5	3.50	0.13
	430.5	1.5	1.50	0.13
	433.5	3.0	3.00	0.13
	436.5	3.0	3.00	0.13
	440.0	3.5	3.50	0.13
	445.0	5.0	5.00	0.09
	449.0	4.0	4.00	0.09
	452.0	3.0	3.00	0.18
	454.5	2.5	2.50	0.22
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	467.5	10.0	10.00	0.18
	477.5	10.0	10.00	0.20
	481.5	4.0	4.00	0.09
	484.5	3.0	2.50	0.08
	487.5	3.0	3.00	0.14
	490.0	2.5	2.50	0.15
	498.5	8.5	8.42	0.27
	503.5	5.0	5.00	0.26
	511.5	8.0	8.00	0.15

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry: hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

argillization*	silicification SiO_2	pyritization FeS_2	mineralization Cu
fresh	< 55 %	< 1 %	< 0.2 %
weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w : Width

PL I-9-4

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

DDH No 23 C — Sheet 1

Total Length 510.5 feet — Core Recovery

Location Sabedoung — Elevation 104.0 m

Direction 0 — Inclination -90°

Date of Logging from 28·3·66 to 26·4·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
			non core						230			
10.0			light gray fine grained silicified tuff						300	8.0	2.5	
									350	5.0	1.5	
									410	6.0	6.0	
									455	4.5	4.5	
	50.0		tuff breccia						497.0	4.5	3.5	
									530	3.0	2.5	
			volcanic breccia									
			rock fragments (angular) : pea size						600	10.0	10.0	0.20
20.0			pyrite veinlet, width 3-1 cm						650	5.0	5.0	4.83
									693.5	3.5	3.5	4.21
			fine grained high silicified rhyolitic tuff						773.5	6.0	3.0	1.97
									778.5	5.0	5.0	0.81
									788.5	3.0	6.5	1.74
			rock fragments (angular) : pea size						885	10.0	9.5	1.57
									948.5	6.0	6.0	1.07
30.0	100.0		pyrite-chalcocite vein									
			pyrite-chalcocite vein						1045	10.0	10.0	2.25
			85° pyrite-chalcocite vein, width 3 cm						1145	10.0	9.0	2.52
			a little pyrite dissemination						1195	5.0	5.0	0.39
			joint filling chalcocite-pyrite						1295	10.0	10.0	0.94
40.0									1345	5.0	4.0	0.66
			chalcocite vein						1430	8.5	8.5	1.39
			fragments									
			joint filling chalcocite						1505	7.5	6.5	1.60
	150.0											
			malachite stain						1525	7.0	5.0	1.79
50.0			biotite porphyry						1635	6.0	6.0	1.31
			biotite phenocryst (brown) : 4mm						1700	6.5	6.5	0.82
			argillized feldspar (brownish)									
			irregular pyrite vein coated by chalcocite						1810	10.0	9.0	0.90
									1880	8.0	7.5	0.48
			pyrite veinlet coated by chalcocite						1940	6.0	6.0	0.56
			light gray biotite-quartz porphyry									
60.0	200.0		chalcocite-pyrite veinlet						2010	7.0	7.0	1.53
			50° pyrite chalcocite vein, width 4 cm						2075	6.5	6.5	2.48
			chalcocite-pyrite vein, width 4 cm						2160	8.5	8.0	3.98
			fine grained tuff						2200	4.0	3.5	2.42
			joint filling pyrite						2280	8.0	8.0	1.11
70.0			pyrite dissemination						2345	6.5	6.5	1.96
									2385	2.0	7.0	0.33
									2475	9.0	8.5	0.46
	250.0											
			chalcocite-pyrite vein						2550	7.5	7.5	2.31
80.0			chalcocite-pyrite vein, width 1 cm						2650	10.0	10.0	0.45
			biotite → sericite									
			yellowish brown biotite-quartz-porphyry						2735	8.5	8.0	0.85
									2771.5	3.0	3.0	1.09
									2850	8.5	8.5	0.61
									2950	10.0	10.0	0.05
90.0	300.0								3005	5.5	5.5	3.04
			chalcocite-pyrite veinlet, width 3 cm						3105	10.0	10.0	0.76
			light gray fine grained silicified rock						3205	10.0	10.0	0.49
100.0			joint filling chalcocite						3300	9.5	9.5	0.30
			pyrite dissemination									
			pyrite dissemination						3400	10.0	10.0	0.44
			joint filling chalcocite						3480	8.0	8.0	0.26
	350.0											
			pyrite dissemination						3540	8.0	8.0	0.53
110.0			70° pyrite-quartz-chalcocite vein, w : 1 cm						3620	6.0	6.0	0.93
			pyrite-chalcocite vein, width -2 cm						3670	5.0	5.0	0.58
			chalcocite-pyrite vein, width 1-2 cm						3770	10.0	10.0	0.50
									3850	8.0	8.0	0.09
									3910	6.0	6.0	0.12
120.0			joint filling chalcocite-pyrite						4010	10.0	10.0	0.17
	400.0											
			dissemination						4110	10.0	10.0	0.38
									4155	4.5	4.5	0.64
			joint filling pyrite									
			60° pyrite dissemination						4260	10.5	10.5	0.35
130.0			pyrite chalcocite vein, width 2 cm						4320	6.0	6.0	0.71
			irregular pyrite vein, width : 3 cm						4420	10.0	10.0	0.81
			pyrite dissemination						4520	10.0	10.0	0.68
	450.0											
140.0			pyrite-chalcocite veinlet						4620	10.0	10.0	0.88
			light gray small grained biotite porphyry						4670	5.0	5.0	0.28
									4740	9.0	9.0	0.22
			pyrite vein coated by chalcocite						4835	7.5	7.5	0.25
									4885	5.0	5.0	0.28
150.0									4935	5.0	5.0	0.75
	500.0								5035	10.0	10.0	0.10
			joint filling pyrite > chalcocite						5145	7.0	11.0	0.33
	510.5		Bottom									
160.0												
	550.0											
170.0												
180.0												
	600.0											
190.0												
	650.0											
200.0												
210.0												
	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

※
- fresh : unaltered
- weak : parts of feldspar phenocrysts changed into clay minerals
- medium : almost all the feldspar phenocrysts changed into clay minerals
- strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-5

GEOLOGICAL SURVEY OF MONYWA AREA UNION OF BURMA

(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 23 D   Sheet 1

Total Length 514.67 feet   Core Recovery

Location Sabedaung   Elevation 89.0 m

Direction 0   Inclination -90°

Date of Logging from 14·3·66 to 21·4·66

Logged by S. MONONOBE

METAL MINING AGENCY

OVERSEAS TECHNICAL COOPERATION AGENCY

GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars

Depth scale: (m) 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0, 100.0, 110.0, 120.0, 130.0, 140.0, 150.0, 160.0, 170.0, 180.0, 190.0, 200.0, 210.0; (feet) 50.0, 100.0, 150.0, 200.0, 250.0, 300.0, 350.0, 400.0, 450.0, 500.0, 514.67, 550.0, 600.0, 650.0, 700.0

Alteration & Mineralization: arg. / sil. / py. / cu.

- non core
- oxidized brecciation
- light gray fine grained rhyolitic tuff
- iron stain
- light gray rhyolitic tuff breccia
- breccia (angular-subrounded) : 20–40mm
- pyrite-chalcocite dissemination
- light gray fine grained rhyolitic tuff
- pyrite chalcocite dissemination
- light gray
- pyrite dissemination
- no fragment
- light gray rhyolitic tuff
- pyrite chalcocite vein, width 4 mm
- pyrite-chalcocite dissemination
- pyrite-chalcocite dissemination
- light gray rhyolitic tuff
- chalcocite dissemination
- 90° / 90° pyrite vein, width 1 mm
- light gray tuff with fragments 50 mm
- pyrite hematite vein, width 5 mm
- malachite stain
- light gray rhyolitic tuff
- pyrite dissemination
- medium grained and silicified
- pyrite dissemination weakly
- 50° pyrite-chalcocite vein, width 3 mm
- gray tuff with fragments (angular-subangular) : 50–20 mm
- 70° pyrite-chalcocite vein, width 1 mm
- brecciation
- light gray tuff
- no fragment
- fragment (angular-subrounded) : 50–30mm
- fragments : 30–10 mm
- 70° quartz-pyrite chalcocite vein, w: 15mm
- light gray tuff with fragments and malachite stain
- 50° quartz-pyrite-chalcocite vein, w : 2mm
- 55° quartz-pyrite-chalcocite vein, w : 15mm
- light gray quartz - biotite porphyry
- light gray rhyolitic tuff
- pyrite dissemination
- brecciation
- Bottom

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	10.00			
	18.00	8.00	8.00	
	22.00	8.00	5.00	-
	[illegible]	[illegible]	[illegible]	
	26.00	2.00	2.25	
	32.00	6.00	6.00	
	36.00	4.00	4.00	
	38.50	2.50	2.00	
	44.00	5.50	5.00	
	50.50	6.50	6.25	
	53.50	3.00	2.00	
	61.50	8.00	7.25	
	67.50	6.00	5.00	
	72.00	4.50	2.00	
	74.50	2.50	1.00	
	76.00	1.50	1.30	0.33
	79.00	3.00	2.00	0.43
	81.50	2.50	1.75	0.88
	84.50	3.00	1.83	0.38
	87.50	3.00	1.25	0.93
	91.00	3.50	2.00	0.29
	95.00	4.00	3.25	0.29
	98.00	3.00	3.00	0.29
	100.00	2.00	1.83	0.24
	102.00	2.00	1.83	0.49
	105.33	3.33	3.00	0.36
	109.33	4.00	4.00	0.26
	113.33	4.00	3.00	0.26
	118.83	5.50	4.50	0.26
	127.50	8.67	6.50	0.25
	131.00	3.50	2.25	0.35
	133.83	2.83	2.50	0.45
	137.17	3.34	2.58	0.18
	141.00	3.83	2.50	0.19
	149.00	8.00	1.50	0.25
	151.75	2.75	1.50	0.25
	153.58	1.83	1.50	0.41
	157.67	4.09	3.50	0.35
	159.50	1.83	1.75	0.49
	161.50	2.00	1.50	0.16
	164.50	3.00	3.00	0.12
	168.50	4.00	3.25	0.12
	171.50	3.00	3.00	0.29
	176.25	4.75	4.75	0.72
	179.25	3.00	3.00	0.20
	186.42	7.17	7.00	0.14
	191.45	5.00	4.25	0.13
	198.42	6.97	6.00	0.90
	203.00	4.58	3.50	0.69
	206.00	3.00	2.75	0.08
	209.00	3.00	2.75	0.08
	213.33	4.33	2.16	0.80
	220.50	7.17	1.50	0.12
	228.50	8.00	3.50	0.65
	232.0	3.50	3.50	0.11
	235.5	3.50	3.50	0.10
	241.00	5.50	4.50	0.12
	245.50	4.50	2.25	0.08
	251.50	6.00	5.00	0.21
	257.50	6.00	6.00	0.41
	261.50	4.00	3.50	0.27
	265.50	4.00	3.50	0.06
	271.50	6.00	5.50	0.13
	280.00	8.50	7.25	0.19
	287.50	7.50	5.75	0.15
	295.50	8.00	8.00	0.63
	302.50	7.00	2.50	0.60
	305.50	3.00	2.50	0.06
	310.17	4.67	4.30	0.06
	314.00	3.83	2.75	0.12
	319.00	5.00	4.58	0.12
	322.00	3.00	[illegible]	0.09
	327.50	6.50	4.75	0.06
	334.00	6.50	4.00	0.07
	337.50	3.50	3.40	0.07
	341.50	4.00	4.00	0.06
	344.50	3.00	3.00	0.12
	348.00	3.50	3.30	0.19
	351.17	3.17	3.10	0.13
	353.00	1.83	1.83	[illegible]
	355.50	2.50	2.50	0.18
	359.75	4.25	4.25	0.18
	363.75	4.00	4.00	0.06
	367.25	3.50	2.50	0.04
	370.25	3.00	3.00	0.06
	375.25	5.00	5.00	0.12
	383.25	8.00	3.50	0.18
	385.75	2.50	2.50	0.06
	389.25	3.50	3.50	0.06
	399.25	10.00	10.00	0.15
	409.25	10.00	10.00	0.18
	415.75	6.50	6.50	0.06
	419.65	3.90	3.30	0.12
	429.67	10.02	10.00	0.06
	439.69	10.02	10.00	0.12
	446.78	7.09	7.00	0.12
	460.58	13.80	8.41	0.11
	468.00	7.42	7.25	0.08
	476.00	8.00	7.50	0.14
	486.00	10.00	10.00	0.06
	492.00	6.00	5.30	0.20
	502.00	10.00	10.00	0.06
	504.67	2.67	2.00	0.18
	514.67	10.00	8.00	0.18

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry: hornblende-biotite porphyry, biotite porphyry, quartz-biotite porphyry
- Brecciation
- 30 Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization*	silicification SiO_2	pyritization FeS_2	mineralization Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization
kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-6

GEOLOGICAL SURVEY OF MONYWA AREA UNION OF BURMA

(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 23 E   Sheet 1

Total Length 514.0 feet   Core Recovery

Location Sabedaung   Elevation 79.8 m

Direction 0   Inclination −90°

Date of Logging from 16·5·66 to 9·6·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars

Depth scale: (m) 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0, 100.0, 110.0, 120.0, 130.0, 140.0, 150.0, 160.0, 170.0, 180.0, 190.0, 200.0, 210.0; (feet) 50.0, 100.0, 150.0, 200.0, 250.0, 300.0, 350.0, 400.0, 450.0, 500.0, 514.0, 550.0, 600.0, 650.0, 700.0

- non core
- leached zone
- tuff
- limonite-hematite dissemination and joint filling
- lapilli tuff
- pyrite dissemination
  - fragments : 4-10 mm
  - irregular shape subrounded
- chloritization
- pale green tuff
- massive.
- fragments (subrounded) : 3-10 mm
- chlorite-hematite dissemination
- pyrite chalcocite dissemination
  - pyrite → hematite (abundant)
- reddish brown colored fine grained tuff
  - silicified rock fragments : rare
- fine grained tuff
- fine grained tuff
- fine grained tuff
- fine grained tuff
- silicified rock fragments : 10-20 mm
- rock fragments (subrounded) : 3-4 mm
- fine grained tuff
- fine grained tuff
- bottom

Alteration & Mineralization columns: arg., sil., py., cu.

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	15.0	5.0	1.50	0.03
	20.0	5.0	1.50	0.03
	26.0	6.0	2.50	0.03
	36.0	10.0	3.00	N.D.
	45.0	9.0	6.00	—
	50.0	5.0	1.00	0.05
	55.0	5.0	0.50	0.05
	60.0	5.0	0.50	0.18
	65.0	5.0	3.00	0.05
	68.0	8.6	4.00	0.08
	75.0	7.0	4.00	1.05
	81.0	6.0	6.00	0.10
	84.5	3.5	3.50	0.03
	89.0	4.5	4.50	0.03
	[illegible]	[illegible]	[illegible]	[illegible]
	95.0	4.0	3.50	0.08
	98.5	3.5	1.50	0.05
	106.0	7.5	4.50	0.05
	115.5	9.5	6.00	0.10
	121.5	6.0	6.00	0.10
	124.5	3.0	1.50	0.10
	127.0	2.5	2.50	0.05
	131.5	4.5	4.50	0.08
	136.0	4.5	4.50	0.13
	143.5	7.5	4.50	0.15
	151.0	7.5	5.70	0.10
	157.0	6.0	4.50	0.20
	164.0	7.0	6.60	0.08
	169.0	5.0	4.10	0.13
	176.5	7.0	7.00	0.10
	184.0	8.0	8.10	0.13
	194.0	10.0	10.00	0.10
	201.0	7.0	7.00	0.05
	211.0	10.0	10.00	0.08
	216.0	5.0	5.00	0.08
	221.0	5.0	5.00	0.05
	226.0	5.0	5.00	0.05
	231.0	5.0	5.00	0.13
	240.5	9.5	9.50	0.10
	247.0	6.5	6.50	0.18
	256.0	9.0	5.00	0.08
	262.0	6.0	6.00	0.13
	270.0	8.00	8.00	0.05
	276.0	6.0	6.00	0.08
	284.5	8.5	5.00	0.03
	292.0	7.5	7.50	0.10
	298.5	3.5	3.50	0.08
	305.5	7.0	7.00	0.08
	314.0	8.5	8.00	0.10
	322.5	8.5	5.50	0.08
	326.0	3.5	2.25	0.10
	335.0	9.5	7.50	0.08
	339.0	4.0	4.00	0.08
	344.5	5.0	5.00	0.08
	[illegible]	[illegible]	[illegible]	[illegible]
	356.5	9.0	9.00	0.05
	365.5	9.0	9.00	0.08
	369.5	4.0	4.00	0.05
	305.0	5.5	5.00	0.05
	382.0	7.0	7.00	0.13
	392.0	10.0	10.00	0.10
	400.0	8.0	8.00	0.15
	406.0	6.0	6.00	0.13
	414.5	8.5	8.50	
	416.5	[illegible]	[illegible]	
	420.5	4.0	3.75	
	428.5	8.0	7.50	
	431.5	3.0	3.00	
	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	
	438.0	3.0	3.00	
	443.5	5.5	5.00	
	453.0	9.5	4.00	
	460.0	7.0	7.00	
	467.5	7.5	7.50	
	477.5	10.0	10.00	
	481.0	3.5	3.50	
	490.0	9.0	9.00	
	496.5	6.5	6.50	
	505.0	8.5	8.00	
	514.0	9.0	6.50	

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry: hornblende−biotite porphyry; biotite porphyry; quartz−biotite porphyry
- Brecciation
- Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification SiO_2	pyritization FeS_2	mineralization Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-7

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 27 — Sheet 1

Total Length 896.5 feet — Core Recovery

Location Sabedaung — Elevation 81.5 m

Direction 0 — Inclination −90°

Date of Logging from 24·4·59 to 6·7·59

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars (Depth / Columnar Section / Particulars / Alteration & Mineralization: arg., sil., py., cu.)

Depth scale: (m) 10.0 – 210.0; (feet) 50.0 – 700.0

- non core (rotary drilled) — to 100.0 ft
- pale green porphyry
- non core
- quartz-biotite porphyry {feldspar quartz; quartz-phenocryst: 21mm; feldspar-phenocryst: 26mm}
- malachite stain
- chalcocite > pyrite dissemination
- blue biotite-feldspar porphyry — from 150.0 ft
- feldspar ⟶ clay mineral
- bluish green biotite porphyry
- 45° chalcocite vein, width : 0.5mm — from 200.0 ft
- 25° chalcocite vein
- biotite-feldspar porphyry
- fissure filling hematite
- hematite vein, width 0.5 mm — from 250.0 ft
- greenish chlorite-quartz-biotite porphyry
- biotite-quartz porphyry
- hematite
- pyrite vein
- {biotite phenocryst : 4 mm; quartz phenocryst : 2 mm; feldspar phenocryst : 4–6 mm} — from 300.0 ft
- pyrite dissemination
- {biotite phenocryst : 2 mm; feldspar phenocryst: 4 mm}
- greenish porphyry
- pyrite dissemination
- white biotite porphyry — from 350.0 ft
- {biotite phenocryst : 2 mm; feldspar phenocryst: 2–4 mm}
- white biotite porphyry — from 400.0 ft
- biotite porphyry
- hematite
- biotite porphyry
- white biotite porphyry
- feldspar ⟶ clay mineral
- pyrite dissemination — from 450.0 ft
- pyrite dissemination
- silicified porphyry
- greenish silicified porphyry
- pyrite dissemination — to 500.0 ft
- pyrite dissemination
- greenish porphyritic rock
- chlorite — at 550.0 ft
- biotite porphyry
- pyrite dissemination
- pyrite dissemination
- pyrite dissemination — to 600.0 ft
- greenish biotite porphyry
- pyrite dissemination
- — to 700.0 ft

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T−Cu %
	5.0	5.0		
	10.0	5.0		
	20.0	10.0		
	30.0	10.0		
	37.0	7.0		
	40.0	3.0		
	47.0	7.0		
	57.0	10.0		
	67.0	10.0		
	77.0	10.0		
	84.5	7.5		
	94.5	10.0		
	104.5	10.0	0.5	0.30
	114.5	10.0		—
	120.5	6.0	0.5	0.26
	131.0	10.5	2.3	0.46
	141.0	10.0	2.0	0.41
	131.0	10.0	1.0	0.50
	161.0	10.0	2.5	0.66
	1620	6.0	2.3	0.84
	177.0	10.0	1.0	0.30
	187.0	10.0	3.66	0.56
	191.0	4.0	2.50	1.20
	201.5	10.5	4.00	0.36
	206.5	5.0	3.50	0.39
	214.5	8.0	5.50	0.56
	224.5	10.0	5.00	0.36
	234.5	10.0	4.25	0.33
	244.5	10.0	3.50	0.23
	253.0	8.5		—
	263.0	10.0	10.00	0.23
	267.0	4.0		—
	270.0	3.0	2.50	0.07
	280.0	10.0	1.75	0.30
	284.0	4.0	1.50	0.40
	294.0	10.0	7.50	0.25
	300.0	6.0	2.50	0.20
	312.5	12.50	9.00	0.26
	322.5	10.0		—
	326.5	4.0	3.00	0.30
	336.5	10.0	5.00	0.30
	346.5	10.0	5.00	0.30
	349.0	2.5	0.25	0.48
	359.0	10.0	1.00	0.41
	363.5	4.5		—
	371.0	7.5	0.25	0.31
	381.0	10.0	0.71	0.21
	390.0	9.0	1.50	0.31
	396.0	6.0		—
	400.0	4.0	3.00	0.13
	410.0	10.0	5.50	0.20
	413.5	3.5		—
	423.5	10.0	1.50	0.18
	437.0	13.5	2.00	0.15
	438.0	1.0		—
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	448.0	4.6	2.75	0.16
	456.2	7.4	0.50	0.18
	462.8	6.6	2.73	0.41
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	474.8	8.0	3.33	0.15
	486.2	10.0	3.75	0.20
	486.7	2.5	2.50	0.20
	491.5	4.8	3.83	0.10
	495.2	3.7	3.20	0.13
	502.0	7.8	6.60	0.23
	509.5	6.5	5.50	0.21
	516.0	6.5	6.00	0.12
	526.0	10.0	5.00	0.16
	536.0	10.0	2.50	0.10
	542.0	6.0	4.00	0.20
	543.0	1.0		—
	547.0	4.0	2.75	0.20
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	556.5	5.0	1.60	0.09
	562.5	6.0	3.66	—
	572.5	10.0	1.00	
	575.0	2.5	0.85	
	582.0	7.0	2.75	
	586.5	4.5	1.50	
	591.5	5.0	2.80	
	[illegible]	[illegible]	[illegible]	
	[illegible]	[illegible]	[illegible]	
	601.5	6.0	1.00	
	606.5	5.0	5.00	
	613.5	7.0	6.50	
	619.5	6.0	5.00	
	622.7	3.2	3.50	
	627.0	3.3	1.50	
	637.0	10.0	2.50	
	645.0	8.0	5.00	
	652.0	7.0	2.00	
	660.0	8.0	2.83	
	663.0	3.0	2.00	
	667.0	4.0	2.00	
	671.0	4.0	4.00	
	674.0	3.0	1.87	
	678.5	4.5	3.00	
	685.0	6.5	0.83	
	695.0	10.0	4.50	
	700.5	5.5	1.83	

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry — hornblende-biotite porphyry; biotite porphyry; quartz-biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-7

GEOLOGICAL SURVEY OF

MONYWA AREA UNION OF BURMA

(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 27 Sheet 2

Total Length 896.5 feet Core Recovery

Location Sabedaung Elevation 81.5 m

Direction 0 Inclination -90°

Date of Logging from 24·4·59 to 6·7·59

Logged by S. MONONOBE

METAL MINING AGENCY

OVERSEAS TECHNICAL COOPERATION AGENCY

GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil	py.	cu	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
									712.0	2.5	2.64	
									713.0	10.0	1.66	
2200			light gray colored biotite porphyry						720.0	7.0	0.75	
									725.0	5.0	3.75	
									733.0	8.0	C.L.	
									743.0	10.0	1.50	
	7500								747.0	4.0	3.08	
2300									753.5	6.5	1.00	
									761.0	7.5	2.50	
			silicified biotite porphyry						769.0	8.0	4.25	
									774.5	5.5	3.17	
2400									784.5	10.0	2.00	
									790.5	6.0	1.50	
	8000								800.5	10.0	1.42	
									810.5	10.0	3.50	
2500									820.5	10.0	1.00	
									826.5	6.0	2.00	
			light gray colored, silicified biotite porphyry						829.0	8.5	0.58	
									837.5	8.5	3.50	
	8500								846.0	8.5	2.33	
2600									848.8	8.5	2.60	
									853.4	5.1	3.00	
									856.0	2.6	1.42	
									864.5	8.5	4.25	
									871.5	7.0	5.17	
2700									881.0	9.5	3.25	
									885.0	4.0	2.17	
									891.0	6.0	6.00	
	895.5		bottom						896.5	5.5	3.5	
	9000											
2800												
2900	9500											
3000												
	10000											
3100												
3200	10500											
3300												
	11000											
3400												
3500	11500											
3600												
	12000											
3700												
3800	12500											
3900												
	13000											
4000												
4100	13500											
4200												
	14000											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry: hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu : Alunitization
c.c.p. : Chalcopyrite
c. c. : Chalcocite
en : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-8

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 Sheet 1

Total Length 1235.0 feet Core Recovery

Location Sabedaung Elevation 104.6 m

Direction 0 Inclination −90°

Date of Logging from 14-2-59 to 4-4-59

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars

- 0 – 20.0 ft: non core
- red.ish brown silicified biotite porphyry with strong hematitization
- 55°: hematite veinlet, width 10 mm
- silicified biotite porphyry
- 65°: pyrite-chalcocite veinlet
- 50°: pyrite-chalcocite veinlet
- 70°: pyrite-chalcocite veinlet
- 0°: pyrite-chalcocite veinlet, width 10mm
- 124.0 – 153.0 ft: non core box
- 75°: chalcocite-pyrite veinlet
- irregular pyrite-chalcocite veinlet
- chalcocite net work
- silicified biotite porphyry
  - biotite phenocryst; 2-3 mm
  - feldspar phenocryst; 2-5 mm
- 80°, 50°: pyrite-chalcocite veinlet
- light gray biotite porphyry
  - biotite phenocryst : 2-3 mm
  - feldspar phenocryst : 2-3 mm
- 35°: pyrite-chalcocite veinlet
- 35°: pyrite-chalcocite veinlet
- 70°: pyrite-chalcocite veinlet
- 80°: pyrite-chalcocite veinlet
- silicified biotite porphyry with pyrite dissemination and irregular small chalcocite veinlet
- 50°: pyrite chalcocite veinlet
- chalcocite-pyrite dissemination
- silicified biotite porphyry
  - biotite phenocryst : 2-3 mm
  - feldspar phenocryst : 2-5 mm
- pyrite-chalcocite dissemination
- pyrite-chalcocite dissemination
- pyrite>chalcocite dissemination
- light gray silicified biotite porphyry with pyrite (grain) dissemination
- 50°: pyrite-chalcocite veinlet
- pyrite>chalcocite dissemination
- 90°: pyrite-chalcocite-quartz veinlet
- pyrite vein
- brecciated zone with strong silicification and pyritization
- fragment (angular) : 10 mm
- light dark gray silicified porphyritic rock with strong pyritization
- pyrite>chalcocite dissemination
- biotite phenocryst : 1-2 mm

Depth scale: 10.0–210.0 m (20.0–700.0 ft)

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	5.00	5.00		
	10.00	5.00		
	20.00	10.00		
	28.5	8.5		
	36.5	8.0		
	46.5	10.0		
	50.0	4.5		
	54.0			
	56.0	2.0		
	59.44	5.44		
	[illegible]	[illegible]		
	67.5	5.97		
	72.5	5.0		
	79.0	9.0		
	85.5	6.0	5.0	0.70
	90.0	4.5	3.5	0.90
	94.5	4.5	3.2	0.40
	98.0	3.5	3.2	0.60
	101.417	3.67	3.2	0.90
	104.42	3.00	3.0	0.50
	114.42	10.0	5.2	0.70
	120.5	6.08	4.0	0.40
	129.0	8.5	6.7	0.70
	133.5	4.5	2.5	0.90
	143.5	10.0	4.70	0.60
	153.5	10.0	6.50	1.70
	157.0	3.5	2.50	3.30
	160.5	3.5	1.30	2.00
	163.0	2.5	0.70	2.40
	170.5	7.5	5.6	1.40
	174.0	3.5	3.00	0.90
	180.0	6.0	3.40	0.80
	187.0	7.0	5.30	1.00
	192.0	5.0	4.50	0.70
	195.5	3.6	3.50	0.50
	200.0	4.5	4.00	0.60
	207.0	7.0	3.50	0.70
	215.0	8.0	4.80	0.70
	222.0	7.0	2.70	0.70
	224.5	2.5	2.40	0.80
	228.0	3.5	3.50	1.00
	230.83	2.83	2.70	0.60
	235.5	4.67	2.80	0.70
	[illegible]	[illegible]	[illegible]	[illegible]
	241.0	2.5	1.17	2.50
	247.0	6.0	5.00	1.80
	250.0	3.00	2.17	0.80
	257.0	7.00	2.17	0.10
	261.33	4.33	2.58	1.10
	267.0	5.67	2.09	0.80
	270.5	3.5	1.50	0.60
	277.0	6.5	1.50	0.60
	287.0	10.0	0.50	0.30
	295.5	8.5	0.83	0.10
	297.0	1.5	1.50	—
	302.0	5.0	1.92	1.30
	306.0	4.0	2.00	1.10
	310.5	4.5	1.83	0.70
	315.5	5.0	4.50	1.50
	323.5	8.0	2.50	0.40
	327.0	3.6	2.50	1.10
	330.0	3.0	1.00	0.90
	334.5	4.5	2.50	1.80
	336.66	2.16	2.16	0.70
	341.5	4.84	4.00	1.00
	345.5	4.00	2.67	0.40
	351.0	6.5	3.50	0.90
	361.0	10.00	9.00	1.00
	371.0	10.00	10.00	0.70
	381.0	10.00	5.50	0.70
	385.5	4.50	4.50	0.60
	395.5	10.00	10.00	0.80
	405.5	10.00	7.00	0.70
	415.5	10.00	8.50	1.60
	425.5	10.00	9.00	1.10
	435.5	10.00	8.00	1.30
	445.6	10.00	5.00	1.10
	455.50	10.00	4.67	1.50
	465.66	10.16	6.83	0.10
	475.83	10.17	5.83	0.50
	486.0	10.17	3.00	0.05
	496.5	10.5	4.00	0.60
	505.5	9.00	3.00	0.20
	515.5	10.00	9.50	0.60
	525.5	10.00	10.00	0.10
	535.5	10.00	10.00	0.30
	545.5	10.00	10.00	0.80
	555.5	10.00	3.50	0.70
	560.6	5.00	3.00	0.20
	570.0	9.50	3.50	0.30
	577.5	7.50	3.00	0.10
	587.0	9.50	8.75	0.10
	596.0	9.00	4.17	0.30
	600.25	4.25	1.50	0.10
	610.25	10.00	6.25	0.10
	620.25	10.00	6.45	0.10
	624.0	3.750	0.98	0.05
	627.5	3.50	3.30	0.05
	630.0	2.50	1.25	0.50
	638.0	8.00	2.50	0.30
	644.0	6.00	1.00	0.30
	650.5	6.50	1.00	0.10
	652.83	2.33	1.50	0.30
	656.5	3.67	2.47	0.10
	664.5	8.00	3.00	0.38
	672.0	6.5	2.00	0.05
	673.0	7.00	1.00	0.90
	676.5	3.50	3.50	0.10
	683.5	7.00	1.60	0.10
	688.5	5.00	5.00	0.30
	698.5	10.0	5.0	0.30

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry: hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- ∠30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

argillization *	silicification SiO_2	pyritization FeS_2	mineralization Cu
fresh	< 55 %	< 1 %	< 0.2 %
weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-8

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 Sheet 2

Total Length 1235.0 feet Core Recovery

Location Sabedaung Elevation 104.6 m

Direction 0 Inclination −90°

Date of Logging from 14·2·59 to 4·4·59

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD

Depth (m) (feet): 2200, 7500, 2300, 2400, 8000, 2500, 8500, 2600, 2700, 9000, 2800, 2900, 9500, 3000, 10000, 3100, 3200, 10500, 3300, 11000, 3400, 3500, 11500, 3600, 1178, 12000, 3700, 3800, 12500, 3900, 13000, 4000, 4100, 13500, 4200, 14000

Particulars
biotite porphyry
biotite phenocryst ; 2–3 mm
feldspar phenocryst ; 2–5 mm
brecciated zone, fragment : 10 mm
light gray biotite porphyry
40° pyrite veinlet
30° pyrite veinlet
70° pyrite veinlet
30° pyrite veinlet
pyrite vein net work
65° pyrite vein
90° pyrite veinlet
biotite porphyry
biotite phenocryst 2–4 mm
feldspar phenocryst 2–5 mm
pyrite veinlet, 80 mm
pyrite net work and quartz vein
light gray biotite porphyry
dark gray silicified biotite porphyry
65° pyrite veinlet
biotite porphyry
pyrite dissemination
30° pyrite veinlet, width 1 mm
25° pyrite veinlet, width 6 mm
35° pyrite veinlet
biotite porphyry
pyrite dissemination
35° pyrite veinlet, width 10 mm
50° pyrite veinlet
chalcocite dissemination
dark gray silicified porphyritic rock
40° pyrite veinlet net work
no core

Alteration & Mineralization: arg. | sil. | py. | cu

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	701.25	[illegible]	[illegible]	[illegible]
	703.5	[illegible]	[illegible]	[illegible]
	711.5	8.00	4.00	0.10
	713.5	2.00	2.00	0.03
	716.5	3.00	2.50	0.05
	724.0	7.50	3.50	0.30
	731.0	7.00	2.50	0.20
	741.0	10.00	10.00	0.10
	751.0	10.00	10.00	0.20
	759.5	8.50	7.00	0.60
	769.5	10.00	10.00	0.50
	779.5	10.00	8.50	0.20
	786.0	6.50	5.50	0.20
	796.0	10.0	9.17	0.10
	806.0	10.0	3.83	0.10
	816.0	10.00	10.00	0.10
	826.0	10.00	4.50	0.05
	832.5	6.50	4.67	1.00
	842.5	10.00	10.00	0.30
	852.5	10.00	4.33	0.20
	857.5	5.00	5.00	0.20
	860.0	2.50		—
	866.5	6.50	6.50	0.40
	876.5	10.00	10.00	0.70
	886.5	10.00	4.66	0.20
	895.0	9.50	7.00	0.10
	904.83	9.83	9.66	0.20
	914.83	10.00	9.03	0.10
	925.83	11.00	7.23	0.20
	935.83	10.0	4.75	0.10
	945.83	10.00	8.00	0.10
	955.83	10.00	8.00	0.10
	962.83	7.00	6.00	0.10
	972.83	10.00	10.00	0.20
	982.83	10.00	4.00	0.40
	992.00	9.17	9.17	0.60
	1001.50	9.50	4.50	0.40
	1011.00	9.50	9.50	0.10
	1021.00	10.00	8.00	0.40
	1031.00	10.00	10.00	0.10
	1041.00	10.00	10.00	0.20
	1051.00	—	—	0.20

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry: hornblende−biotite porphyry; biotite porphyry; quartz − biotite porphyry
- Brecciation
- 30 Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification SiO_2	pyritization FeS_2	mineralization Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao : Kaolinization
- ser. : Sericitization
- ch : Chloritization
- alu : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en : Enargite
- dis. : Dissemination
- v. : Veinlet
- w : Width

PL I-9-9

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 A Sheet 1
Total Length 904.05 feet Core Recovery
Location Sabedaung Elevation 99.0 m
Direction 0 Inclination −90°
Date of Logging from 9·5·59 to 20·7·59
Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974
Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars

Columns: Depth (m) (feet) | Columnar Section | Particulars | Alteration & Mineralization (arg. | sil. | py. | cu.) | Result of Chemical Analysis

- weathered biotite porphyry with Fe-oxide staining; biotite relict: brown colored
- weathered biotite porphyry; leached zone
- green copper stain
- 70° pyrite vein, width 15 mm
- chalcocite dissemination
- 40° pyrite-chalcocite vein, width 30 mm
- light gray – pale green biotite porphyry; biotite phenocryst : 4 mm; feldspar phenocryst : 2–4 mm
- porphyry; feldspar phenocryst 10 mm, average 6 mm
- pyrite chalcocite dissemination; pyrite > chalcocite
- porphyry; biotite phenocryst : 5 mm, brown colored
- pyrite dissemination
- porphyritic texture is clear; feldspar phenocryst : 3–4 mm; biotite phenocryst : 2–4 mm
- pale green – light gray biotite porphyry; quartz : rare
- biotite porphyry; feldspar phenocryst: 1–4 mm; biotite phenocryst : 1–3 mm
- pyrite ore
- porphyry; feldspar : abundant
- pyrite dissemination
- biotite porphyry
- pyrite dissemination
- pale green – gray biotite porphyry; biotite phenocryst: 3–4 mm; feldspar phenocryst: 5 mm; quartz : rare
- pyrite dissemination
- weakly silicified porphyry
- pyrite veinlet
- pyrite impregnation
- porphyry
- pyrite impregnation
- porphyry; feldspar phenocryst : 5–10 mm; biotite : rare

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	5	5.0	–	0.15
	15.0	10.0		0.15
	20.0	5.0		0.15
	[illegible]	[illegible]		[illegible]
	27.0	[illegible]	3.37	0.15
	29.0	2.0		—
	33.0	4.0	2.50	0.30
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	42.0	3.0	2.83	
	48.0	6.0	5.66	
	54.5	6.5	5.50	
	60.5	6.0	4.75	0.10
	67.5	7.0	2.00	0.05
	70.0	2.5	2.50	0.30
	75.0	5.0	3.50	
	80.0	5.0	2.00	0.05
	85.0	5.0	5.00	0.05
	90.0	5.0	5.00	0.05
	95.0	5.0	3.00	0.20
	100.0	5.0	1.66	0.50
	105.0	5.0	2.91	0.15
	110.0	5.0	5.00	1.65
	115.0	5.0	5.00	7.58
	120.0	5.0	5.00	8.48
	125.0	5.0	5.00	0.60
	130.0	5.0	4.83	7.98
	135.0	5.0	4.75	7.39
	140.0	5.0	2.50	7.19
	145.0	5.0	4.17	0.25
	150.0	5.0	5.00	0.10
	156.7	6.7	4.50	0.25
	160.5	3.8	2.25	4.69
	163.0	2.5	2.17	0.20
	166.6	3.6	3.33	0.13
	168.5	1.9	1.33	0.05
	[illegible]	[illegible]	[illegible]	[illegible]
	173.0	2.5		0.05
	177.5	4.5		0.20
	183.5	6.0		0.10
	186.0	2.5		0.10
	[illegible]	[illegible]		[illegible]
	197.0	9.0		0.10
	198.7	1.7		0.15
	200.7	2.0		0.20
	[illegible]	[illegible]		[illegible]
	208.2	6.0		0.10
	213.2	5.0		0.20
	217.7	4.5		0.05
	221.7	4.0		0.05
	223.0	1.3		0.05
	233.0	10.0		0.10
	241.5	[illegible]		0.10
	245.5	4.0		
	251.5	6.0		0.15
	261.5	10.0		0.20
	265.0	3.5		0.05
	267.5	2.5		0.10
	270.2	2.7		0.30
	277.5	7.3		0.15
	284.5	7.0		0.16
	294.5	10.0		0.05
	300.0	5.5		
	307.5	7.5		
	316.5	9.0		
	326.5	10.0		0.10
	336.5	10.0		0.50
	346.5	10.0		0.10
	357.5	11.0		0.20
	360.5	3.0		0.10
	365.5	5.0		0.10
	370.5	5.0		0.05
	380.5	10.0		0.10
	383.5	3.0		0.50
	393.5	10.0		
	396.0	2.5		0.05
	398.0	2.0		0.05
	403.5	5.5		0.05
	407.5	4.0		0.10
	417.5	10.0		0.15
	[illegible]	[illegible]		
	429.0	10.0		0.10
	430.0	1.0		0.15
	440.5	10.0		0.10
	446.5	6.5		0.20
	452.5	6.0		0.15
	462.5	10.0		0.30
	472.5	10.0		0.15
	482.0	9.5		0.10
	492.0	10.0		0.10
	502.0	10.0		0.15
	512.0	10.0		0.05
	521.0	9.0		0.10
	525.5	4.5		0.10
	534.5	9.0		0.05
	544.5	10.0		0.05
	549.0	3.5		0.10
	559.0	10.0		0.05
	569.0	10.0		0.10
	579.0	10.0		0.05
	581.0	2.0		0.15
	591.0	10.0		0.05
	[illegible]	[illegible]		0.20
	[illegible]	[illegible]		0.05
	599.5	3.5		0.05
	606.0	4.5		0.05
	609.5	5.5		0.05
	616.5	7.0		0.05
	623.5	7.0		0.05
	631.5	7.0		0.05
	641.5	10.0		0.10
	649.0	7.5		0.05
	655.5	6.5		0.10
	665.5	10.0		0.05
	668.5	3.0		0.10
	675.5	7.0		0.05
	685.5	10.0		0.10
	695.5	10.0		0.10

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry: hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization*	silicification SiO_2	pyritization FeS_2	mineralization Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization
kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-9

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 A Sheet 2

Total Length 904.05 feet Core Recovery

Location Sabedaung Elevation 99.0 m

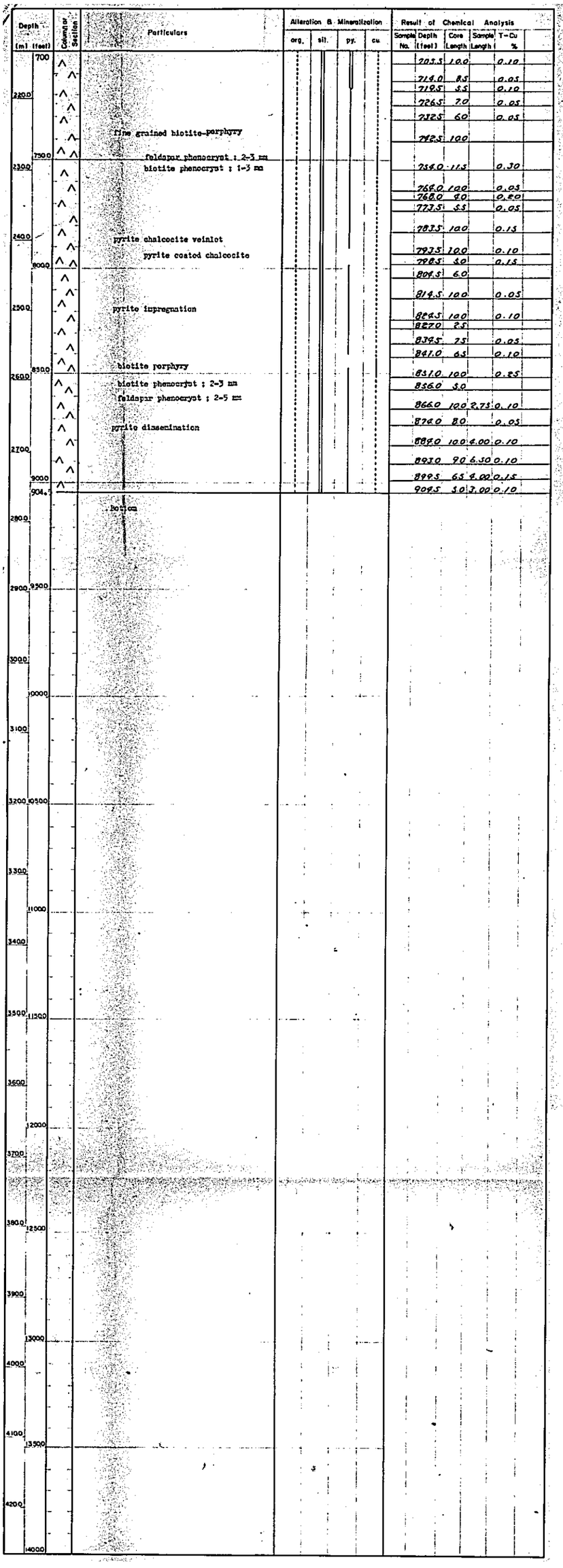
Direction O Inclination - 90°

Date of Logging from 9·5·59 to 20·7·59

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



LEGEND

- Mudstone
- Sandstone
- Tuff Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry: hornblende-biotite porphyry; biotite porphyry; quartz-biotite porphyry
- Brecciation
- 30 Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- org. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c c : Chalcocite
- en : Enargite
- dis. : Dissemination
- v. : Veinlet
- w : Width

PL I-9-10

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H No. 28 B Sheet I

Total Length 542.8 feet Core Recovery

Location Sabedaung Elevation 101.9 m

Direction O Inclination - 90°

Date of Logging from 1·11·59 to 11·1·60

Logged by S.MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
		(rotary) non core						0.0	4.0		
								11.0	5.0		
								20.0	9.0	4.77	0.15
								26.0	6.0	3.33	0.10
10.0								30.0	4.0	3.17	0.15
		leached zone						34.0	4.0	2.83	0.25
								38.5	4.5	3.00	0.10
	50.0							43.0	4.5	3.00	0.10
								52.0	7.0	5.92	0.05
								58.2	6.2	4.92	0.05
20.0		silicified biotite porphyry						62.3	6.2	5.92	0.07
								71.8	9.5	7.50	0.10
		60° brecciated rock						81.0	9.2	8.83	0.20
		chalcocite pyrite vein						87.0	6.0	3.67	0.10
		20° chalcocite pyrite vein						94.5	7.5	2.58	0.50
30.0	100.0	biotite-quartz porphyry						100.8	6.3	5.59	0.50
								105.8	5.0	2.67	0.20
		chalcocite pyrite veinlet, dissemination						115.0	9.2	5.83	0.30
								120.0	5.0	3.67	0.10
								125.0	5.0	1.67	0.85
40.0								130.0	5.0	3.08	0.65
		10° chalcocite pyrite veinlet						135.0	5.0	9.83	0.10
		70° chalcocite pyrite veinlet						140.0	5.0	3.33	0.35
	150.0							145.0	5.0	0.92	0.25
								150.0	5.0	3.00	2.60
								155.0	5.0	1.42	0.30
50.0								160.0	5.0	1.17	2.70
								165.0	5.0	C-L	—
								170.0	5.0	1.83	4.60
		joint filling chalcocite-pyrite						175.0	5.0	—	—
								180.0	5.0	1.83	0.25
								186.0	6.0	0.33	0.20
60.0	200.0							191.0	5.0	2.00	0.35
								196.5	5.5	4.00	3.00
								201.0	4.5	1.50	1.10
		silicified biotite porphyry						206.0	5.0	3.00	1.75
								211.0	5.0	2.58	0.15
		biotite phenocryst 3-4 mm						218.5	7.5	6.30	0.25
								224.0	5.5	2.90	0.45
70.0		chalcocite veinlet network and						229.0	5.0	3.80	17.00
		dissemination						234.0	5.0	1.00	9.80
								238.0	4.0	1.17	18.25
	250.0							244.0	6.0	3.30	12.15
								252.0	8.0	5.60	12.15
								258.6	6.6	5.60	0.20
80.0								268.6	10.0	8.77	1.30
		70° pyrite-quartz vein, width 10 mm						278.6	10.0	10.00	0.20
								288.9	10.3	7.67	0.10
90.0	300.0	porphyritic rocks						298.0	10.0	4.00	0.05
								308.0	10.0	7.50	0.25
								318.0	10.0	3.50	0.05
100.0		silicified porphyry						328.0	10.0	3.00	0.10
		feldspar changed into kaolin						338.0	10.0	3.50	0.05
	350.0							348.0	10.0	6.50	0.15
								358.0	10.0	8.50	0.25
110.0								368.0	10.0	5.30	0.25
		light gray colored silicified porphyry						374.0	6.0	1.30	0.10
		pyrite dissemination						378.5	4.5	3.00	0.19
		biotite porphyry						384.5	6.0	5.50	0.15
120.0								393.5	9.0	8.83	0.15
	400.0							403.5	10.0	5.17	0.15
								414.0	8.5	9.00	—
								419.0	5.0	0.83	0.12
								422.2	3.2	3.20	0.20
130.0		silicified porphyry						425.2	0.2	C-L	—
								430.0	7.8	1.00	0.15
		hematite impregnation						435.5	5.5	0.50	0.15
								440.3	4.8	1.50	0.25
								445.5	5.2	4.00	0.10
	450.0							455.0	9.5	2.50	0.10
140.0								464.0	9.0	1.00	0.05
		pyrite impregnation 5-6%						474.0	10.0	2.25	0.10
								484.0	10.0	1.33	0.05
150.0								494.0	10.0	9.67	0.05
	500.0							504.0	10.0	1.58	0.05
		silicified biotite porphyry						514.0	10.0	0.50	0.05
								521.0	7.0	3.17	0.20
160.0								528.0	7.0	0.33	0.20
								537.0	9.0	0.50	0.10
	542.8							541.0	4.0	0.67	0.15
	550.0	Bottom						546.8	5.8	9.17	0.15
170.0											
180.0											
	600.0										
190.0											
	650.0										
200.0											
210.0	700.0										

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende — biotite porphyry; biotite porphyry; quartz — biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
	fresh	SiO2 < 55 %	FeS2 < 1 %	Cu < 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-11

GEOLOGICAL SURVEY OF MONYWA AREA UNION OF BURMA

(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 C   Sheet 1

Total Length 1,003.0 feet   Core Recovery

Location Sabedaung   Elevation 91.4 m

Direction 0   Inclination −90°

Date of Logging from 17-6-60 to 9-11-60

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars

- (rotary) no core
- biotite-quartz porphyry, Fe staining (hematite), -riched biotite- (light gray color)
- feldspar ≫ quartz, biotite : rare; pyrite-chalcocite dissemination and joint filling; biotite-quartz porphyry; pyrite dissemination, biotite 2–4mm, feldspar 2–5mm, quartz rare; joint filling and dissemination
- pyrite joint filling and dissemination; chalcocite-pyrite vein, pyrite > chalcocite; pyrite ≫ chalcocite
- pyrite dissemination; 60° pyrite-chalcocite vein dissemination; white colored biotite porphyry {biotite 2 mm, feldspar 5–7 mm}
- 60° pyrite-chalcocite vein, 2 mm; pyrite dissemination {biotite 2–3 mm, feldspar 4–6 mm}; pyrite dissemination; 60° pyrite-chalcocite vein; silicified biotite porphyry (light gray color)
- light gray colored silicified biotite porphyry; biotite phenocryst: 3 mm; pyrite dissemination; light gray colored, silicified biotite porphyry
- biotite phenocryst: 3 – 4 mm, feldspar phenocryst: 4 – 5 mm; pyrite dissemination; light gray colored, silicified biotite porphyry
- pyrite ≫ chalcocite; pyrite dissemination
- light gray colored, silicified biotite porphyry; 70° pyrite vein {biotite : rare, feldspar 3–4 mm}
- biotite porphyry; 60° pyrite vein and dissemination; pyrite dissemination; 40° chalcocite-pyrite vein, 2 mm
- 90° chalcocite-pyrite vein and dissemination; chalcocite vein, pyrite 4–5 % dissemination
- pyrite dissemination; silicified, biotite porphyry; pyrite dissemination {biotite 4 mm, feldspar 2–7 mm}
- pyrite joint filling and dissemination; 50° chalcocite-pyrite vein and dissemination; silicified, biotite porphyry; malachite staining {biotite 2–3 mm, feldspar 2–6 mm}; malachite staining; pyrite dissemination
- silicified, biotite porphyry; malachite staining; argillized, silicified biotite porphyry
- pyrite dissemination; hematite > malachite; feldspar changed into clay minerals; biotite porphyry; joint filling (pyrite) {biotite 2 mm, feldspar 4 mm}

Depth marks (m): 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0, 100.0, 110.0, 120.0, 130.0, 140.0, 150.0, 160.0, 170.0, 180.0, 190.0, 200.0, 210.0; (feet): 50.0, 100.0, 150.0, 200.0, 214.0, 250.0, 300.0, 350.0, 400.0, 450.0, 500.0, 504.0, 550.0, 558.0, 587, 600.0, 650.0, 700.0

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	15.0	15.0	—	—
	25.0	10.0	2.5	0.05
	32.0	7.0	3.0	0.05
	37.0	5.0	2.5	0.05
	46.0	9.0	9.0	0.05
	51.0	5.0	4.5	0.05
	57.5	6.5	1.0	0.02
	67.5	10.0	3.8	0.10
	72.0	4.5	2.3	0.55
	77.5	5.5	4.5	0.25
	87.0	9.5	4.0	0.68
	97.0	10.0	8.5	0.48
	102.5	5.5	2.0	0.05
	109.0	6.5	4.0	0.15
	118.0	9.0	5.5	0.05
	125.5	7.5	5.3	0.05
	131.0	5.5	3.8	0.05
	133.5	2.5	2.0	4.82
	136.0	2.5	0.5	0.02
	146.0	10.0	4.0	0.05
	156.0	10.0	6.0	0.05
	166.0	10.0	5.3	0.05
	176.0	10.0	9.5	0.60
	187.0	11.0	9.5	1.00
	197.0	10.0	5.0	Trace
	205.0	8.0	7.0	0.20
	215.0	10.0	9.5	0.10
	225.0	10.0	10.0	0.05
	227.5	2.5	2.0	0.15
	233.0	5.5	2.8	0.10
	237.5	4.5	3.5	0.15
	242.5	5.0	3.8	0.60
	245.5	3.0	2.3	0.25
	251.5	6.0	5.8	0.15
	257.5	6.0	5.8	0.05
	267.5	10.0	8.8	0.10
	276.0	8.5	8.5	0.10
	285.5	9.5	7.0	0.10
	295.0	9.5	8.7	0.85
	306.0	11.0	1.8	Trace
	316.0	10.0	10.0	0.08
	325.0	9.0	7.5	0.05
	334.5	9.5	4.0	0.05
	344.5	10.0	8.5	0.05
	355.5	11.0	10.3	0.05
	365.5	10.0	10.0	0.05
	375.5	10.0	6.0	0.30
	391.5	16.0	8.5	0.10
	401.5	10.0	5.0	0.10
	414.0	12.5	8.5	0.17
	420.5	6.5	6.0	0.10
	426.0	5.5	5.5	0.05
	432.5	6.5	6.0	0.05
	436.0	3.5	1.5	0.10
	440.5	4.5	1.0	Trace
	446.0	5.5	4.8	0.30
	449.0	3.0	2.5	4.05
	456.0	7.0	6.5	0.10
	465.0	9.0	9.0	Trace
	476.0	11.0	7.3	Trace
	483.0	7.0	6.5	Trace
	499.0	16.0	9.8	Trace
	508.5	9.5	9.5	0.41
	516.0	7.5	7.0	0.11
	526.0	10.0	9.2	0.07
	535.0	9.0	6.5	0.02
	545.0	10.0	10.0	Trace
	555.0	10.0	8.8	0.02
	565.0	10.0	9.5	0.05
	575.0	10.0	8.0	0.23
	585.0	10.0	9.8	0.08
	595.0	10.0	7.4	0.05
	605.0	10.0	2.0	0.05
	615.0	10.0	8.0	0.05
	625.0	10.0	9.5	0.06
	635.0	10.0	10.0	0.05
	645.0	10.0	10.0	0.15
	655.0	10.0	8.5	0.05
	665.0	10.0	10.0	Trace
	675.0	10.0	8.0	0.08
	685.0	10.0	6.0	0.15
	695.0	10.0	9.7	0.14

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry: hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

argillization *	silicification	pyritization	mineralization
	SiO_2	FeS_2	Cu
fresh	< 55 %	< 1 %	< 0.2 %
weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-11

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 C Sheet 2

Total Length 1003.0 feet Core Recovery

Location Sabedaung Elevation 91.4 m

Direction 0 Inclination -90°

Date of Logging from 17·6·60 to 9·11·60

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	702.0								709.0	10.2	8.9	0.14
			hematite vein						717.0	12.0	3.5	tr.
2200	720.		biotite changed into hematite malachite staining						725.0	8.0	8.0	0.07
			biotite 2 mm feldspar 4 mm						735.0	8.0	7.5	0.05
			silicified biotite-porphyry						745.0	10.0	7.3	0.05
	790.0								755.0	10.0	8.6	0.17
2300			biotite changed into hematite malachite staining pyrite dissemination						765.0	10.0	7.6	0.14
			malachite staining pyrite 3-4 %						775.0	10.0	8.0	0.05
2400			biotite changed into pyrite silicified biotite porphyry						785.0	10.0	7.8	0.05
	860.0		chalcocite dissemination						795.0	10.0	3.6	0.03
			biotite change into hematite						805.0	10.0	7.7	0.09
2500			argillized and silicified white colored						816.0	11.0	6.3	0.35
			biotite porphyry with quartz vein						825.0	9.0	1.0	0.05
	850.0		chlorite (greenish color) pyrite rare						835.0	10.0	7.3	0.10
2600			white colored biotite porphyry						845.0	10.0	6.2	0.10
			greenish colored biotite porphyry						855.0	10.0	6.4	0.30
			biotite changed into chlorite whitish gray porphyry						865.0	10.0	8.3	0.05
			pyrite-chalcocite vein 4 mm						875.0	10.0	5.6	0.10
2700			malachite staining chlorite » biotite						885.0	10.0	3.0	0.03
	900.0		pyrite dissemination						895.0	10.0	6.0	0.05
			whitish gray porphyry						905.0	10.0	8.0	0.05
2800	915.		malachite staining						915.0	10.0	6.5	0.60
			malachite staining						925.0	10.0	6.0	0.10
			chalcocite-pyrite vein						935.0	10.0	5.0	0.10
									945.0	10.0	3.0	0.15
2900	930.0											
			chlorite						955.0	10.0	6.1	0.10
			pyrite dissemination						965.0	10.0	6.5	0.05
			biotite porphyry						975.0	10.0	4.6	0.10
3000			biotite phenocryst ; 2-3 mm feldspar phenocryst ; 2-5 mm						985.0	10.0	4.4	0.09
	1000.0								995.0	10.0	1.7	tr.
	1003.								1003.0	1.0	6.5	0.05
3100			Bottom									
3200	1050											
3300												
	1100.0											
3400												
3500	1150.0											
3600												
	1200.0											
3700												
3800	1250.0											
3900												
	1300.0											
4000												
4100	1350.0											
4200												
	1400.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry: hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-12

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H No. 28 D Sheet 1

Total Length 330.0 feet Core Recovery

Location Sabedaung Elevation 101.7 m

Direction O Inclination - 90°

Date of Logging from 2·9·60 to

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
			non core						15.0	15.0		
			leached zone						25.0	10.0	3.50	0.02
									35.0	10.0	5.50	0.05
10.0									45.0	10.0	0.66	tr.
	50.0		brecciated biotite porphyry						55.0	10.0	0.66	tr.
									65.0	10.0	10.00	tr.
20.0			pyrite dissemination									
			chalcocite-pyrite vein 10 mm					69	75.0	10.0	0.50	0.42
			chalcocite > pyrite malachite staining									
		60°	chalcocite azurite						85.0	10.0	8.53	1.09
			biotite porphyry									
30.0	100.0	60°	biotite 3 - 5 mm						96.0	10.0	8.92	1.04
			chalcocite pyrite vein 5 mm						105.0	10.0	9.66	0.26
			pyrite disseminated						115.0	10.0	6.18	1.17
			biotite porphyry									
		60°	chalcocite-pyrite vein 10 mm						125.0	10.0	9.66	2.26
40.0									135.0	10.0	4.42	0.98
									140.0	5.0	2.82	0.39
	150.0		coarse grained biotite porphyry						150.0	10.0	7.75	0.43
			feldspar 3 - 5 mm						160.0	10.0		0.24
50.0			biotite 3 - 4 mm						170.0	10.0		1.5
			biotite porphyry									
			biotite is euhedral						180.0	10.0		0.64
									190.0	10.0		0.27
60.0			pyrite dissemination									
	200.0								200.0	10.0		0.12
									210.0	10.0		0.12
									220.0	10.0		0.34
			coarse grained biotite porphyry									
70.0			dissemination pyrite grains						230.0	10.0		0.10
									240.0	10.0		tr.
	250.0								250.0	10.0		0.05
80.0									260.0	10.0		0.05
			biotite porphyry						270.0	10.0		0.17
			biotite 2 - 5 mm						280.0	10.0		0.20
			feldspar 2 - 3 mm									
			biotite porphyry					290	290.0	10.0		0.07
90.0	300.0								300.0	10.0		tr.
			biotite porphyry						310.0	10.0		tr.
			biotite and feldspar is anhedral						320.0	10.0		tr.
100.0									330.0	10.0		tr.
			Intrusion									
	350.0											
110.0												
120.0	400.0											
130.0												
	450.0											
140.0												
150.0												
	500.0											
160.0												
	550.0											
170.0												
180.0	600.0											
190.0												
	650.0											
200.0												
210.0	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 — Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-13

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 E Sheet 1

Total Length 292.5 feet Core Recovery

Location Sobedaung Elevation 99.3 m

Direction 0 Inclination -90°

Date of Logging from 11·10·60' to 1·11·60'

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
									15.0	15.0		
									25.0	10.0		
10.0									35.0	10.0		
									45.0	10.0		
	50.0								55.0	10.0		
			non core						65.0	10.0		
20.0									75.0	10.0		
									85.0	10.0		
			biotite porphyry						90.0	5.0	5.00	1.80
30.0	100.0		chalcocite joint filling dissemination						96.5	6.5	5.00	0.80
			biotite-quartz porphyry						100.0	3.5	2.50	0.30
			coating pyrite { feldspar 7 mm, biotite 1-3 mm						110.0	10.0	2.80	0.60
			chalcocite pyrite						120.0	10.0	5.40	0.35
			biotite changed into muscovite									
40.0			(highly silicified, whitish gay color)						129.0	9.0	6.60	0.20
			coarse grained porphyry						140.0	11.0	7.20	0.28
	150.0		solid (pyrite and chalcocite)						150.0	10.0	4.25	0.45
			pyrite chalcocite vein						160.0	10.0	3.95	2.84
50.0			biotite porphyry									
			feldspar 7 mm, biotite 2-3 mm						170.0	10.0	6.63	0.08
			feldspar changed into kaolin, silicified porphyry						180.0	10.0	4.90	0.10
			joint whitish blue color									
			coarse grained porphyry						190.0	10.0	6.08	0.80
60.0	200.0		chalcocite = pyrite						200.0	10.0	2.00	1.09
			coarse grained biotite porphyry						210.0	10.0	7.15	0.42
			{ feldspar 4-6 mm, biotite 2-4 mm						220.0	10.0	6.33	0.78
70.0			pyrite > chalcocite					229	230.0	10.0	10.00	0.15
			whitish gray color feldspar porphyry						240.0	10.0	1.10	0.15
	250.0		silicified porphyry						250.0	10.0	9.90	0.20
			pyrite-chalcocite-malachite filled joint						260.0	10.0	8.80	0.78
80.0			coarse grained porphyry						270.0	10.0	10.00	
			biotite altered						280.0	10.0	9.50	
			feldspar 5-7 mm, biotite 3-5 mm						291.0	11.0	9.00	
89.2	292.5											
90.0	300.0		no core									
100.0												
	350.0											
110.0												
120.0	400.0											
130.0												
	450.0											
140.0												
150.0	500.0											
160.0												
	550.0											
170.0												
180.0	600.0											
190.0												
	650.0											
200.0												
210.0	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry: hornblende-biotite porphyry; biotite porphyry; quartz-biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization*	silicification	pyritization	mineralization
fresh		SiO_2 < 55 %	FeS_2 < 1 %	Cu < 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals

(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-14

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

DDH No. 28 F Sheet I

Total Length 326.0 feet Core Recovery

Location Sabedaung Elevation 102.5 m

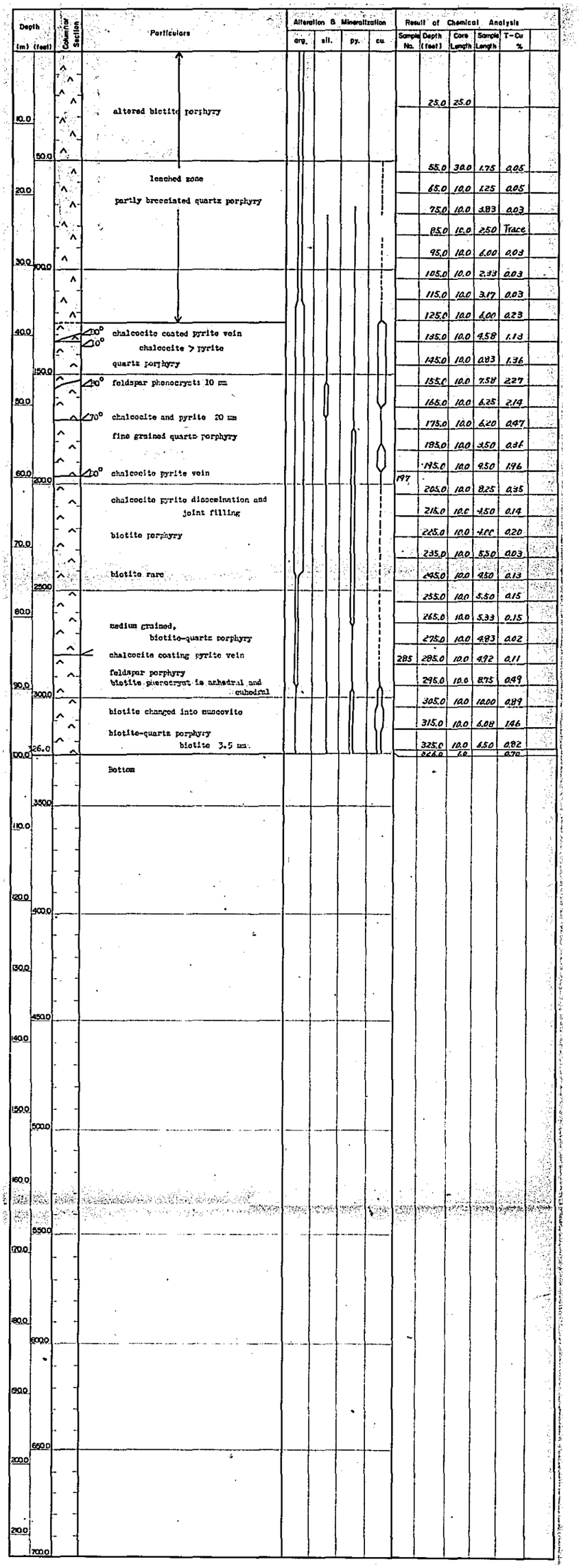
Direction O Inclination -90°

Date of Logging from 17·9·60 to 17·10·60

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane Intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
	fresh	SiO_2 < 55 %	FeS_2 < 1 %	Cu < 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

* (by field observation)

- fresh : unaltered
- weak : parts of feldspar phenocrysts changed into clay minerals
- medium : almost all the feldspar phenocrysts changed into clay minerals
- strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-15

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 G — Sheet 1

Total Length 488.0 feet — Core Recovery

Location Sabedaung — Elevation 98.1 m

Direction O — Inclination − 90°

Date of Logging from 23·9·60 to 9·11·60

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO.,-LTD.

Depth (m)	(feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	slt.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
									16	16		
									26	10	—	trace
10.0			altered biotite porphyry						36	10	3.70	trace
	50.0								46	10	1.40	trace
			leached zone						56	10	1.00	trace
20.0									66	10	3.33	trace
			silicified porphyry						76	10	2.00	trace
									86	10	1.00	trace
30.0									96	10	2.30	0.71
	100.0								106	10	3.30	0.05
									116	10	4.35	0.25
40.0			silicified biotite porphyry						126	20	11.10	0.59
									146	10	5.00	0.50
	150.0								156	10	5.00	0.13
50.0			10° pyrite-chalcocite vein, width : 5 mm						166	10	9.00	0.67
			70° chalcocite-pyrite vein, width : 50 mm									
			biotite porphyry						186	20	14.28	0.79
60.0									196	10	7.50	2.38
	200.0		chalcocite pyrite dissemination									
			chalcocite-pyrite vein						216	20	17.20	3.51
			chalcocite > pyrite						226	10	10.00	3.73
70.0			chalcocite-pyrite vein, thickness 20cm									
			pyrite dissemination						246	20	17.75	2.16
	250.0		biotite porphyry						256	10	10.00	1.84
80.0			biotic : 2 mm						266.5	10.5	3.00	0.93
			foldspar ..: 3 mm						276	9.5	1.00	0.24
									286	10	5.50	0.34
									296	10	5.00	0.14
90.0			70° chalcocite-pyrite vein, thickness 3 mm									
	300.0		pyrite dissemination						306	10	5.25	0.06
			light biotite porphyry						314	8	3.33	0.36
			pyrite > chalcocite						326	12	1.16	trace
100.0			pyrite 7-8 %									
			50° chalcocite vein, thickness 3 mm						336	10	8.66	0.12
			pyrite dissemination									
	350.0											
110.0			light gray biotite porphyry						346	30	21.06	0.21
			biotite ; 2-3 mm						376	10	8.00	0.19
			foldspar ; 2-4 mm						386	10	7.00	0.38
120.0									396	10	8.00	0.16
	400.0								406	10	8.83	0.08
			hematite abundant quartz vein, thickness 2 mm						416	10	5.75	0.07
			light gray biotite porphyry						426	10	7.83	0.33
130.0			biotite : 2 mm						436	10	9.33	0.23
			foldspar : 2 mm						446	10	4.00	0.07
			quartz : 1 mm									
	450.0								456	10	5.25	0.90
140.0									466	10	2.50	0.05
			light gray biotite porphyry						476	10	—	0.09
			foldspar : 2mm						486	10	—	0.12
			biotite : 2 mm						488	2	—	0.09
150.0			Bottom									
	500.0											
160.0												
	550.0											
170.0												
180.0												
	600.0											
190.0												
	650.0											
200.0												
210.0												
	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia
- Rhyolite
- Porphyry — hornblende − biotite porphyry; biotite porphyry; quartz − biotite porphyry
- Brecciation
- 30 — Inclination of plane structures. (bedding plane, intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
	fresh	SiO2 < 55 %	FeS2 < 1 %	Cu < 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

※
- fresh : unaltered
- weak : parts of feldspar phenocrysts changed into clay minerals
- medium : almost all the feldspar phenocrysts changed into clay minerals
- strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

- arg. : Argillization
- slt. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-16

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 H — Sheet 1
Total Length 505.0 feet — Core Recovery
Location Sabedaung — Elevation 102.7 m
Direction 0 — Inclination - 90°
Date of Logging from 21·11·60 to 22·12·60
Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
			non core						35.0			
10.0	55.0		pale brown, biotite-quartz porphyry quartz phenocryst: 2-4mm feldspar phenocryst: 2-6mm						45.0	10.0	1.33	
	50.0								55.0	10.0	3.70	
			leached zone						65.0	10.0	3.50	
20.0									75.0	10.0	5.45	0.05
									85.0	10.0	5.25	0.05
			70° pyrite vein : width 20 mm						95.0	10.0	4.80	5.0
30.0	100.0		pale gray biotite-quartz porphyry						105.0	10.0	—	0.60
			biotite(relict) : 4 mm quartz : 2-4 mm									
40.0				kao					135.0	30.0	—	0.64
	150.0		biotite-quartz porphyry						145.0	10.0	—	0.93
			biotite : 3-5 mm feldspar : 2-5 mm						155.0	10.0	—	0.33
50.0			quartz : 2-4 mm						165.0	10.0	—	0.25
									175.0	10.0	5.53	0.28
			chalcocite rich dissemination						185.0	10.0	7.95	0.27
60.0									194.5	9.5	7.70	0.29
	200.0								204.5	10.0	5.20	0.35
			chalcocite-pyrite dissemination						215.0	10.5	8.25	0.62
			pyrite > chalcocite						225.0	10.0	3.00	2.30
70.0			biotite porphyry						235.0	10.0	5.80	0.75
			biotite phenocryst : 5 mm chalcocite abundant						245.0	10.0	6.05	0.33
	250.0								255.0	10.0	5.35	0.20
			chalcocite pyrite dissemination									
80.0			chalcocite > pyrite						265.0	10.0	8.58	0.18
			biotite porphyry						275.0	10.0	7.15	0.25
									282.5	7.5	7.00	0.35
									295.0	12.5	9.08	0.35
90.0			70° pyrite chalcocite vein : 10 mm									
	300.0								305.0	10.0	5.08	1.03
			hematite dissemination						315.0	10.0	9.03	0.25
			(hematite replace biotite)						325.0	10.0	9.08	0.05
100.0			pyrite chalcocite vein : 2 mm						335.0	10.0	9.80	0.25
			pyrite vein						345.0	10.0	4.95	0.30
	350.0											
			10° pyrite vein : 20 mm 30° chalcocite vein						355.0	10.0	9.45	1.08
110.0												
			joint filling hematite dissemination						375.0	20.0	12.90	0.22
			pyrite vein						385.0	10.0	7.75	0.45
120.0									395.0	10.0	7.73	0.17
	400.0								405.0	10.0	0.50	0.18
			pale gray biotite-quartz-porphyry						415.0	10.0	8.00	0.12
			biotite (relict) : 4-5 mm quartz phenocryst : 3-4 mm feldspar phenocryst : 4-7mm						425.0	10.0	7.75	0.13
130.0									435.0	10.0	4.00	0.02
			hematite abundant						445.0	10.0	3.75	0.12
	450.0								455.0	10.0	5.50	0.02
140.0									465.0	10.0	3.75	0.07
			biotite-quartz-porphyry						475.0	10.0	3.25	0.10
									485.0	10.0	8.00	0.21
150.0									495.0	10.0	7.50	0.20
	500.0								505.0	10.0	7.50	0.21
			Bottom									
160.0												
	550.0											
170.0												
180.0	600.0											
190.0												
	650.0											
200.0												
210.0	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures.
  (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization
kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-17

GEOLOGICAL SURVEY OF
MONYWA AREA, UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 I Sheet I

Total Length 644.6 feet Core Recovery

Location Sabedaung Elevation 114.6 m

Direction 0 Inclination -90°

Date of Logging from to

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
			non core						35	3.5		
10.0									45.0	10.0	6.50	
	50.0								55.0	10.0	5.75	0.45
20.0			biotite porphyr. with limonite veinlet						65.0	10.0	7.00	
			leached zone						75.0	10.0	3.00	
									78.5	3.5	3.50	0.05
									79.5	1.0	1.00	0.05
30.0									80.0	0.5	0.50	0.05
	100.0		limonite, pyrite chalcocite mixed						101.0	8.8	8.67	0.05
			light gray biotite porphyritic rock						109.0	8.0	7.00	0.07
									117.0	8.0	8.00	0.05
40.0									127.0	10.0	7.00	0.30
			chalcocite-pyrite vein						137.0	10.0	9.83	0.45
			40° chalcocite-pyrite vein						137.5	0.5	0.67	0.05
			biotite-quartz porphyry						144.0	5.5	5.25	0.85
	150.0		biotite phenocryst : 2 mm						150.0	6.0	5.20	0.95
			20° quartz phenocryst : 2-3 mm									
			pyrite-chalcocite vein						160.0	10.0	5.83	0.65
50.0			55° pyrite chalcocite W : 10cm									
			70° pyrite-chalcocite vein						170.0	10.0	8.50	0.80
			pyrite chalcocite									
			chalcocite vein						178.0	8.0	7.25	0.75
			biotite porphyry						185.5	7.5	5.50	0.30
			chalcocite abundant dissemination									
60.0									196.0	10.5	7.50	0.93
	200.0		70° quartz-chalcocite-pyrite vein									
			chalcocite vein						206.0	10.0	10.00	1.33
			chalcocite veinlet network						216.0	10.0	6.33	0.76
			40° chalcocite vein						226.0	10.0	8.00	1.63
70.0									237.5	11.5	8.50	0.13
									246.0	8.5	5.25	
	250.0											
			pyrite-chalcocite-hematite dissemination						256.0	10.0	6.70	
80.0									266.0	10.0	6.36	6.04
									276.0	10.0	6.75	0.63
			30° pyrite-chalcocite veinlet, width 10 mm						287.0	11.0	6.30	0.08
			biotite porphyry						295.0	8.0	3.25	0.11
90.0	300.0		porphyry texture is clear						305.0	10.0	1.00	0.05
			feldspar : euhedral						315.0	10.0	1.00	0.05
									310.5	5.5	5.50	0.10
100.0									331.0	5.5	3.25	0.05
			core size down hematite chalcocite dissemination						341.0	10.0	3.83	0.08
	350.0											
									351.0	10.0	1.00	0.10
110.0			biotite porphyry						361.0	10.0	1.50	0.10
									368.0	7.0	1.67	0.10
									375.0	7.0	3.00	
									385.0	10.0	8.50	0.05
			hematite impregnation along joint						390.0	5.0	1.67	
120.0	400.0								397.0	7.0	6.83	
									407.0	10.0	2.00	
									417.0	10.0	5.00	0.10
			80° chalcocite vein width 5 mm						424.0	7.0	3.33	0.20
130.0									429.0	5.0	2.50	0.68
									437.0	8.0	7.25	0.20
									444.0	7.0	3.50	0.08
	450.0											
									453.0	9.0	5.00	0.14
140.0									463.0	10.0	5.50	0.08
			biotite porphyry						473.0	10.0	5.00	0.05
									483.0	10.0	5.00	0.02
									493.0	10.0	2.00	0.02
150.0									498.0	5.0	1.00	0.03
	500.0											
									505.0	7.0	1.50	0.05
									510.0	5.0	2.75	
			chalcocite vein hematite abundant dissemination						520.0	10.0	8.50	0.13
160.0									530.0	10.0	9.00	0.04
			light gray biotite porphyry						540.0	10.0	3.00	0.03
	550.0											
									550.0	10.0	7.00	0.03
170.0			70° pyrite vein						560.0	10.0	3.00	0.03
			80° chalcocite vein, joint filling						567.0	7.0	6.75	0.08
			pyrite veinlet						577.0	10.0	9.00	
			pyrite 1-2 %						585.0	8.0	4.00	
180.0			chalcocite veinlet						595.0	10.0	8.25	0.05
	600.0											
			biotite porphyry						605.0	10.0	9.25	0.05
			pyrite vein, joint filling						615.0	10.0	8.50	
190.0									625.0	10.0	5.00	0.03
			hematite dissemination						633.5	8.5	3.00	
	644.6								643.5	10.0	10.00	0.80
	650.0								653.5	10.0	7.75	0.13
200.0			Bottom									
210.0	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia
- Rhyolite
- Porphyry (hornblende-biotite porphyry, biotite porphyry, quartz-biotite porphyry)
- Brecciation
- 30 Inclination of plane structures (bedding plane, intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-18

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 J Sheet 1

Total Length 700.0 feet Core Recovery

Location Sabedaung Elevation 137.1 m

Direction O Inclination -90°

Date of Logging from 14·11·66 to 23·11·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	(feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
			oxidation zone						25	25		
			iron staining						35	10	4.6	0.02
10.0									45	10	2.0	tr.
	50.0								55	10	2.6	tr.
			biotite-quartz porphyry						65	10	4.6	0.25
			biotite : brown colored						75	10	5.4	tr.
20.0			quartz phenocryst : 2-6 mm						85	10	8.7	tr.
			pyrite dissemination						95	10	8.0	0.10
30.0	100.0		pale gray biotite-quartz-porphyry						105	10	7.0	0.20
			biotite phenocryst : brown colored, euhedral 4 mm						115	10	6.1	0.30
									125	10	7.5	0.55
40.0			brecciated zone	kao					135	10	7.0	0.40
			biotite porphyry						145	10	4.3	1.15
	150.0								155	10	5.5	0.33
50.0									165	10	4.5	0.18
			60° quartz vein, width : 10 mm						175	10	6.5	0.30
			quartz - biotite porphyry						185	10	6.3	0.25
60.0									195	10	8.7	0.20
	200.0								205	10	8.0	0.32
			biotite porphyry						215	10	10.0	0.35
			60° pyrite vein						225	10	9.1	2.15
			76° pyrite vein, width 5 mm						235	10	8.0	0.05
70.0									245	10	2.7	0.43
			brecciated zone						255	10	9.8	0.45
	250.0		30° pyrite vein, width 2 mm						265	10	8.5	0.05
			20° pyrite-chalcocite vein						275	10	6.7	0.62
80.0			rhyolite, (white gray colored)						285	10	3.8	3.50
			pyrite dissemination						295	10	3.8	3.05
			white gray rhyolite						305	10	8.0	1.03
			30° chalcocite-quartz vein, width 5 mm						315	10	7.5	0.02
90.0									325	10	5.2	0.34
	300.0		60° pyrite-chalcocite vein						335	10	7.5	0.82
			coarse grained porphyry						345	10	10.0	0.94
			chalcocite-pyrite vein biotite phenocryst brown, 3-4 mm						355	10	5.0	0.50
			brecciated zone chalcocite > pyrite						365	10	6.8	0.26
100.0			50° chalcocite-pyrite vein						375	10	7.0	0.04
			90° chalcocite-pyrite vein, width : 10 mm						385	10	5.0	0.73
			100° " : 5 mm						395	10	7.5	0.00
			80° " : 10 mm						405	10	6.5	0.08
	350.0		85° pyrite-chalcocite vein, width : 20 mm						415	10	5.3	0.53
			60° chalcocite-pyrite vein, width: 30-40cm						425	10	7.4	0.31
110.0			70° chalcocite-pyrite, width : 1 mm						435	10	6.0	0.08
			core lost						445	10	7.5	0.05
			chalcocite-pyrite veinlet chalcocite > pyrite						455	10	6.4	0.25
120.0			60° chalcocite-pyrite vein, width : 3 cm						465	10	8.5	0.20
	400.0		joint filling limonite chalcocite pyrite						475	10	6.2	0.63
			80° chalcocite-pyrite vein, width : 2 mm						485	10	9.9	0.36
			90° joint						495	10	10.0	0.14
130.0									505	10	7.8	0.58
	450.0		70° pyrite-chalcocite vein, width : 4 mm						515	10	7.0	0.10
140.0			chalcocite-pyrite vein, fracture filling						525	10	6.7	0.31
			70° pyrite vein : 3 cm						535	10	4.5	0.08
			50° pyrite vein : 5 cm						545	10	6.7	0.07
			quartz porphyry						555	10	10.0	0.05
			80° pyrite vein, width : 2 mm						565	10	6.8	0.04
150.0									575	10	7.0	0.05
			70° chalcocite-pyrite vein.						583	8.0	5.5	0.05
	500.0								593	10.0	4.0	0.08
			biotite porphyry						600	7.0	3.0	0.05
			copper dessominated						605.5	5.5	3.0	0.05
160.0			90° pyrite vein						615.5	10.0	3.5	0.15
			70° pyrite vein						623.5	8.0	2.3	0.15
			white gray biotite-quartz porphyry						633.5	10.0	2.5	0.17
			biotite phenocryst : brown colored 3-4 mm						641.5	7.0	4.0	0.13
	550.0								648.5	7.0	6.0	0.10
170.0									658.5	10.0	4.4	0.18
			biotite-quartz porphyry						668.5	10.0	2.5	0.05
			biotite phenocryst: 3 - 4 mm						677.0	8.5	4.0	0.10
									687.0	10.0	3.5	1.40
180.0									692.0	5.0	3.8	0.05
	600.0								700.0	8.0	5.5	0.10
			biotite porphyry									
			biotite phenocryst: 4 mm									
190.0												
	650.0											
200.0			pyrite-chalcocite vein									
			biotite porphyry									
			chalcocite vein									
210.0												
	700.0		bottom									

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry — hornblende-biotite porphyry; biotite porphyry; quartz-biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-19

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28K Sheet 1

Total Length 295.0 feet Core Recovery

Location Sabedaung Elevation 84.2 m

Direction 0 Inclination -90°

Date of Logging from 29-11-60 to 16-12-60

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
									35			
10.0									45	10	—	—
	50.0								55	10	—	—
									60	5	—	—
20.0									70	10	—	—
			CORE LOSS						80	10	3.0	0.13
									90	10	4.2	0.18
30.0	100.0								100	10	2.2	0.15
									110	10		
									120	10	4.3	0.13
40.0									130	10	2.3	0.13
									140	10	1.2	0.35
	150.0								150	10	2.6	0.15
									160	10	3.3	0.18
50.0									170	10	1.6	0.13
									180	10	0.8	0.05
									190	10	1.8	0.03
60.0	200.0								200	10	1.5	0.03
									210	10		—
									220	10	1.5	0.03
70.0									230	10	2.0	0.08
									240	10	3.0	0.05
	250.0								250	10	2.3	0.05
									260	10	2.0	0.01
80.0									270	10	0.2	0.10
									275	5	2.9	0.10
									285	10	4.3	0.10
90.0	300.0								295	10	0.3	0.08
100.0												
	350.0											
110.0												
120.0	400.0											
130.0												
	450.0											
140.0												
150.0	500.0											
160.0												
	550.0											
170.0												
180.0	600.0											
190.0												
	650.0											
200.0												
210.0	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 — Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

※
- fresh : unaltered
- weak : parts of feldspar phenocrysts changed into clay minerals
- medium : almost all the feldspar phenocrysts changed into clay minerals
- strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c. c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-20

GEOLOGICAL - SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H No. 28 L Sheet I

Total Length 551.0 feet Core Recovery

Location Sabedaung Elevation 86.0 m

Direction 0 Inclination -90°

Date of Logging from to

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
10.0	50.0											
20.0			non core						70.0			
			light gray color biotite-quartz porphyry. pyrite dissemination {biotite 2-3mm, feldspar 3-6 mm, quartz 2-3 mm} chalcocite filled fracture						80.0	10.0	0.2	0.35
									85.0	5.0	0.5	0.25
30.0	100.0								95.0	10.0	3.0	0.25
			feldspar 2-3 mm, quartz 1-2 mm biotite porphyry						105.0	10.0	3.0	0.35
									107.5	2.5	2.0	—
									112.0	4.5	3.0	0.31
40.0			light gray color						121.0	9.0	2.5	0.25
									127.0	6.0	2.3	0.35
									136.0	9.0	4.0	0.35
			60° chalcocite vein 7 mm						145.0	9.0	2.3	0.35
	150.0								155.0	10.0	0.5	0.60
50.0			80° pyrite vein 1-2 mm pyrite dissemination						163.5	8.5	6.5	0.50
			dark gray colored biotite porphyry						173.5	10.0	6.3	0.20
			85° pyrite vein 1mm {biotite-feldspar is euhedral, no quartz}						179.5	6.0	6.0	0.10
			70° chalcocite-pyrite vein feldspar 1-7mm, biotite 1-4mm						186.0	6.5	4.5	0.10
60.0	200.0		feldspar changed into clay minerals						196.0	10.0	9.0	0.40
									202.5	6.5	5.0	0.30
			biotite-quartz porphyry pyrite dissemination and joint filling						208.5	6.0	4.5	0.10
									218.5	10.0	6.5	0.20
70.0			feldspar phenocryst : 3-5 mm biotite phenocryst :4-7 mm						228.5	10.0	2.2	0.15
									230.0	1.5	1.2	0.20
			246.0						236.0	4.0	3.0	0.20
	250.0								246.0	10.0	8.2	0.05
			quartz-feldspar-biotite porphyry						256.0	10.0	8.3	0.10
80.0			feldspar 6 mm						266.0	10.0	7.2	0.15
									276.0	10.0	5.3	0.15
			70° pyrite chalcocite vein 21 mm coarse grained, greenish colored, biotite porphyry						286.0	10.0	9.0	0.10
90.0	300.0								296.0	10.0	7.0	0.10
									306.0	10.0	5.0	0.35
									311.0	5.0	1.0	0.30
			30° chalcocite-pyrite vein 4 mm						316.0	5.0	4.5	0.10
			50° biotite-quartz porphyry						332.0	6.0	3.7	0.15
100.0			pyrite dissemination						328.0	6.0	2.0	0.20
									338.0	10.0	9.0	0.15
	350.0								348.0	10.0	4.5	0.15
110.0			biotite porphyry 45° pyrite vein < 1 mm						358.0	10.0	5.0	0.15
									318.0	10.0	3.5	0.35
			hematite dissemination and joint filling						378.0	10.0	2.3	0.15
									388.0	10.0	6.8	0.15
120.0	400.0								398.0	10.0	4.8	0.10
									408.0	10.0	4.5	0.20
									418.0	10.0	3.7	0.25
130.0			chalcocite vein						428.0	10.0	3.0	0.20
			coarse grained biotite porphyry pyrite > chalcocite pyrite dissemination						438.0	10.0	2.7	0.40
									448.0	10.0	2.7	0.25
	450.0								458.0	10.0	3.0	0.45
140.0			459.0						468.0	10.0	5.5	0.25
			biotite porphyry						475.0	7.0	4.0	0.10
			malachite stain						485.0	10.0	5.0	0.05
									491.0	6.0	2.0	0.05
150.0									498.0	7.0	5.0	0.15
	500.0								506.0	8.0	2.5	0.10
			coarse grained biotite-quartz porphyry						516.0	10.0	6.0	0.05
160.0									526.0	10.0	4.5	0.15
			pyrite-chalcocite vein						536.0	10.0	4.5	0.10
									541.0	5.0	3.0	0.15
	550.0		548.0						551.0	10.0	4.0	0.15
170.0			551.0 bottom									
180.0	600.0											
190.0												
	650.0											
200.0												
210.0	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry (hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry)
- Brecciation
- 30 Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-21

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 M Sheet 1

Total Length 601.0 feet Core Recovery

Location Sabedaung Elevation 113.9 m

Direction 0 Inclination -90°

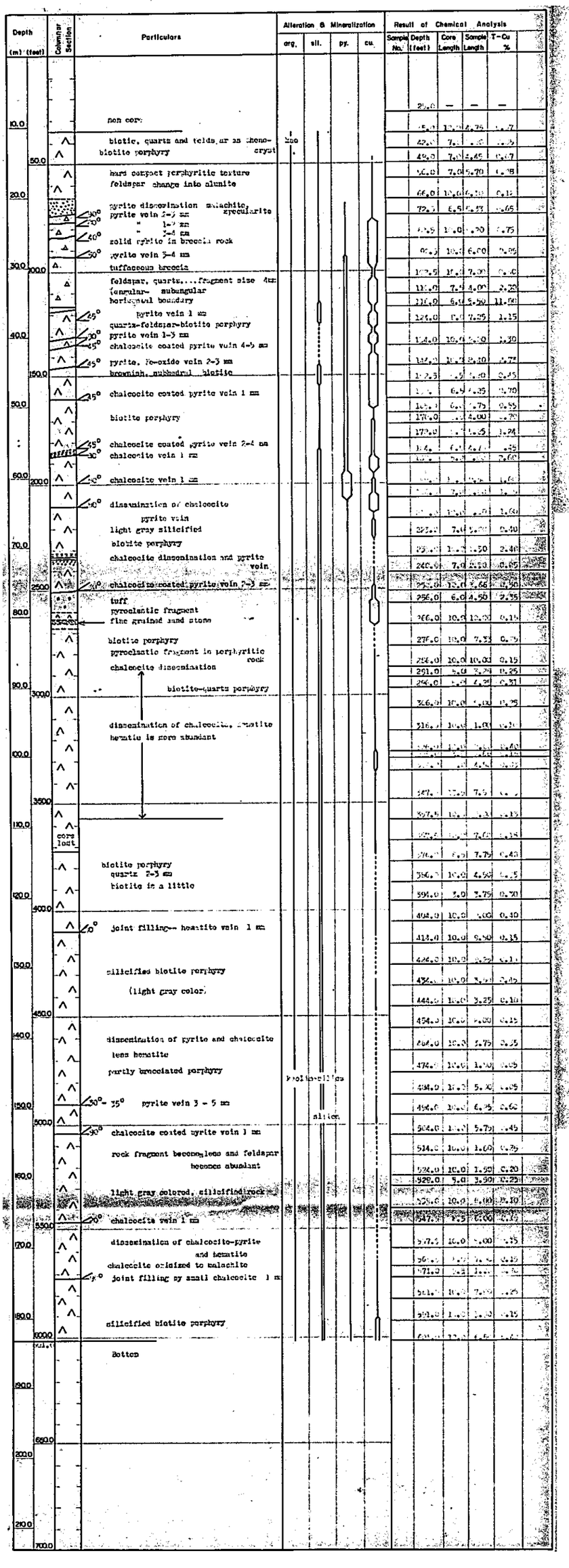
Date of Logging from to

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry — hornblende-biotite porphyry, biotite porphyry, quartz-biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization
kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-22

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 N Sheet 1

Total Length 650.0 feet Core Recovery

Location Sabedaung Elevation 119.6 m

Direction 0 Inclination −90°

Date of Logging from to

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
		non core						25.0			
10.0		iron stain						32.0	7.0	4.25	
		silicified rhyolite						42.0	10.0	3.50	
	50.0							52.0	10.0	4.25	
								62.0	10.0	7.00	
20.0		iron stain						67.0	5.0	4.25	
								72.0	5.0	3.00	0.05
								82.0	10.0	7.50	0.02
								87.0	5.0	4.25	0.07
30.0		leached zone						94.0	7.0	6.33	0.10
	100.0							97.5	3.5	2.25	0.35
	105	pyrite dissemination						107.0	9.5	9.50	0.45
		30° chalcocite, pyrite vein : 5 cm						115.0	8.0	8.00	0.65
		chalcocite dissemination						125.0	10.0	9.67	3.10
40.0		30° chalcocite, pyrite vein : 3-1 cm						134.5	9.5	6.25	1.70
		porphyry						140.5	6.0	5.00	1.50
		brecciated zone rock fragment ¢ 6cm						150.5	10.0	6.17	1.50
	150.0							156.0	5.5	2.75	0.35
50.0		biotite porphyry						166.0	10.0	5.25	2.40
		biotite < 2 mm, feldspar < 3 mm, quartz ~ rare						176.0	10.0	1.50	0.50
								182.0	6.0	2.50	0.60
								192.0	10.0	6.00	3.05
60.0		lapilli tuff ~ tuff breccia						197.0	5.0	3.00	3.20
	200.0							204.5	7.5	7.00	2.70
		chalcocite dissemination						210.5	6.0	5.00	4.15
								217.5	6.5	2.75	0.65
70.0		tuff breccia						225.0	8.0	5.50	0.20
								233.0	8.0	3.50	0.10
		chalcocite net work						241.0	8.0	7.50	0.80
	250.0							246.0	5.0	4.50	0.60
		brecciated biotite porphyry						256.0	10.0	3.00	0.75
80.0		breccia: angular ~ subangular						264.5	8.5	7.00	0.30
								271.0	6.5	3.00	0.40
								276.0	5.0	3.33	0.10
								286.0	10.0	5.25	0.49
								292.5	6.5	3.25	0.95
90.0		biotite porphyry						302.5	10.0	6.50	0.25
	300.0	biotite : 3-5 mm, feldspar : 3-5 mm						312.0	10.0	4.00	0.85
		brecciated biotite porphyry						319.0	7.0	5.00	0.50
								325.5	6.5	6.25	0.25
100.0								335.5	10.0	3.00	0.15
		brecciated biotite porphyry						345.5	10.0	1.50	0.15
	350.0							352.0	6.5	2.00	0.15
		biotite : 5 mm						359.5	7.5	5.25	0.05
110.0		porphyritic texture						369.5	10.0	9.00	0.10
		silicified breccia : ¢ 10 mm						378.5	9.0	7.00	0.15
		boundary is not clear						384.0	5.5	1.75	0.15
		coarse grained tuff						394.0	10.0	2.50	0.05
120.0	400.0							404.0	10.0	3.33	0.05
		biotite porphyry						414.0	10.0	0.50	0.10
		feldspar argillized (kaolin, sericite)						424.0	10.0	3.75	0.10
130.0								434.0	10.0	3.25	0.15
								444.0	10.0	4.80	0.10
	450.0							454.0	10.0	4.50	0.05
140.0								464.0	10.0	3.50	0.07
		biotite porphyry						474.0	10.0	4.25	0.15
		biotite : 5 mm						484.0	10.0	1.25	0.05
		feldspar : 4-6 mm						490.0	6.0	1.00	0.15
150.0		massive biotite porphyry						500.0	10.0	1.00	0.05
	500.0	biotite : 5 mm (relict)						510.0	10.0	2.50	0.40
								517.0	7.0	2.50	0.40
160.0								526.0	9.0	4.50	0.30
								536.0	10.0	2.75	0.10
								542.0	6.0	3.00	0.05
	550.0							548.0	6.0	4.50	0.05
170.0		lapilli tuff						556.0	8.0	5.32	0.05
		lapilli size: 1-3 cm						565.0	9.0	2.00	0.15
								570.0	5.0	4.00	0.10
								576.0	6.0	5.00	0.20
180.0								586.0	10.0	7.00	0.40
								593.5	7.5	6.00	0.25
	600.0							601.0	7.5	5.50	0.05
								610.0	9.0	7.70	0.20
								620.0	10.0	9.00	0.15
190.0	625	boundary is not clear						627.0	7.0	5.00	0.20
		biotite porphyry						637.0	10.0	5.00	0.05
		biotite : 4 mm, feldspar : 3-5 mm						644.0	7.0	3.00	0.10
	660.0	650.0 feet						650.0	6.0	2.50	0.45
200.0		Bottom									
210.0											
	700.0										

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff . Tuff breccia.
- Rhyolite
- Porphyry (hornblende − biotite porphyry; biotite porphyry; quartz − biotite porphyry)
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive bourdary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification SiO2	pyritization FeS2	mineralization Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-23

GEOLOGICAL SURVEY OF MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 28 0 — Sheet 1

Total Length 500.0 feet — Core Recovery

Location Sabedaung — Elevation 89.2 m

Direction 0 — Inclination −90°

Date of Logging from 21·6·66 to 23·7·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m) (feet) | Columnar Section | Particulars | Alteration & Mineralization (arg., sil., py., cu.) | Result of Chemical Analysis

Depth scale (m): 10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0, 100.0, 110.0, 120.0, 130.0, 140.0, 150.0, 152.5, 160.0, 170.0, 180.0, 190.0, 200.0, 210.0
Depth scale (feet): 50.0, 100.0, 150.0, 200.0, 250.0, 300.0, 350.0, 400.0, 450.0, 500.0, 501.0, 550.0, 600.0, 650.0, 700.0

Particulars

- non core
- biotite-quartz porphyry
- 90° chalcocite vein 3-10 mm
- 90° chalcocite vein 1-3 mm
- leached zone
- biotite changed into muscovite
- core lost
- chalcocite veinlet
- brecciated porphyry (fragment 10-30mm)
- pyrite chalcocite
- dissemination and joint filling
- breccia
- hematite dissemination
- dissemination of hematite and
- biotite porphyry (mainly hematite)
- biotite phenocryst 0.5 - 4 mm
- hematite dissemination
- hematite dissemination
- hematite dissemination
- 70° pyrite-hematite-chalcocite vein 3 mm
- 80° pyrite-chalcocite vein (0-5 mm)
- chalcocite veinlets (> 0-5 mm)
- 70° pyrite vein breccia rock (10-20 mm)
- biotite-quartz porphyry
- hematite
- joint filling
- sooty chalcocite
- quartz-pyrite veinlets — feldspar phenocryst 0.5-4mm
- hematite dissemination
- joint filling sooty chalcocite
- dissemination of pyrite-hematite-chalcocite
- joint filling of pyrite-chalcocite-hematite
- sooty chalcocite dissemination
- hematite dissemination mainly pyrite
- light gray colored biotite-quartz porphyry
- 90° pyrite vein 1 mm
- dissemination and joint filling of sooty chalcocite
- 90° pyrite dissemination
- quartz vein, sooty chalcocite
- quartz-biotite porphyry feldspar phenocryst 1-7 mm
- 90° pyrite-chalcocite vein 1 mm
- joint filling of sooty chalcocite
- 60° pyrite chalcocite vein 3 mm
- 10° pyrite-chalcocite vein 2 mm
- 70° pyrite-chalcocite vein 2 mm
- 70° pyrite-chalcocite vein 2 mm
- 0° pyrite-chalcocite vein 0-5 mm kaolin > silica
- pyrite-chalcocite dissemination
- chalcocite dissemination
- pyrite-chalcocite dissemination
- pyrite-chalcocite dissemination
- pyrite-chalcocite dissemination
- pyrite dissemination
- chalcocite dissemination
- joint filling of sooty chalcocite mainly pyrite
- pyrite dissemination
- Bottom

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	50.0	–	–	–
	60.0	10.0	8.0	1.32
	[illegible]	2.0	2.0	1.54
	71.0	8.0	1.0	0.72
	81.0	10.0	4.3	0.52
	85.5	4.5	0.5	1.27
	92.0	6.5	1.0	0.39
	102.0	10.0	1.5	0.57
	107.0	5.0	2.5	1.16
	114.0	7.0	7.0	0.87
	118.5	4.5	3.0	0.49
	[illegible]	[illegible]	[illegible]	[illegible]
	125.0	5.0	3.0	0.24
	129.0	4.0	1.5	0.10
	136.0	7.0	2.0	0.20
	142.0	6.0	2.5	0.08
	145.5	3.5	1.5	0.05
	150.0	4.5	1.3	0.07
	155.0	5.0	1.5	0.12
	162.0	7.0	1.8	0.09
	166.0	4.0	2.0	0.08
	176.0	10.0	3.0	0.08
	[illegible]	[illegible]	[illegible]	[illegible]
	182.5	4.5	2.0	0.08
	186.5	4.0	1.0	0.11
	190.0	3.5	1.5	0.12
	194.5	4.5	2.0	0.07
	197.5	3.0	2.5	0.35
	202.5	5.0	3.0	0.27
	212.0	9.5	5.0	0.11
	219.5	7.5	2.5	0.20
	223.0	3.5	3.5	0.11
	231.0	8.0	5.0	0.07
	236.0	5.0	5.0	0.23
	242.0	6.0	3.0	0.05
	250.5	8.5	4.0	0.08
	253.0	2.5	1.0	0.02
	260.5	7.5	2.0	0.07
	264.5	4.5	1.0	0.02
	271.0	5.5	1.5	0.18
	274.0	3.0	2.0	0.29
	277.0	3.0	2.0	0.13
	285.5	8.5	3.0	0.96
	[illegible]	[illegible]	[illegible]	[illegible]
	292.5	5.0	3.0	0.07
	297.5	5.0	3.5	0.10
	303.0	5.5	5.5	0.16
	307.0	4.0	2.0	0.14
	311.5	4.5	1.5	0.10
	319.5	8.0	3.0	0.05
	[illegible]	[illegible]	[illegible]	[illegible]
	324.0	4.5	4.5	0.19
	335.0	9.0	9.0	0.18
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	344.0	4.0	4.0	0.07
	347.5	3.5	2.2	0.05
	351.5	4.0	2.5	0.08
	355.5	4.0	2.5	0.15
	[illegible]	[illegible]	[illegible]	[illegible]
	366.5	8.0	4.5	0.35
	370.5	5.0	3.0	0.17
	[illegible]	[illegible]	[illegible]	[illegible]
	383.0	10.0	3.0	1.08
	387.0	4.0	2.0	2.15
	391.0	4.0	3.5	0.98
	394.0	3.0	1.5	0.73
	399.5	5.5	2.5	0.45
	405.5	6.0	5.0	0.29
	414.5	9.0	5.0	0.19
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	427.5	5.0	1.0	[illegible]
	430.5	3.0	[illegible]	0.29
	435.0	4.5	2.5	0.15
	[illegible]	[illegible]	[illegible]	[illegible]
	441.5	4.5	3.5	0.28
	[illegible]	[illegible]	[illegible]	[illegible]
	449.5	5.0	4.0	0.07
	454.0	4.5	5.0	0.07
	460.0	6.0	4.3	0.09
	464.0	4.0	1.0	0.10
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	2.0	[illegible]
	472.0	4.0	2.5	0.07
	475.5	3.5	3.3	[illegible]
	[illegible]	[illegible]	[illegible]	TRACE
	481.5	4.0	4.0	[illegible]
	485.5	4.0	2.5	0.05
	490.5	5.0	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	497.5	3.0	[illegible]	0.05
	501.0	3.5	2.0	[illegible]

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry — hornblende–biotite porphyry; biotite porphyry; quartz–biotite porphyry
- Brecciation
- Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization*	silicification (SiO_2)	pyritization (FeS_2)	mineralization (Cu)
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-24

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 29 Sheet 1

Total Length 689.6 feet Core Recovery

Location Sabedaung Elevation 150.7 m

Direction O Inclination -90°

Date of Logging from 30·4·58 to 3·7·58

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	4.0	no core						8.0	-	-	-
		gossan-stain bearing of limonite and hematite									
		lapilli tuff (rhyolite)	kao ser								
10.0		fragment 20-50 mm, subangular									
		silicified rock									
	50.0	fragment 30-50 mm, subangular									
16.0		biotite-quartz porphyry	alu kao					57.0	-	-	-
19.5		biotite relict 4-2 mm									
20.0		quartz 2 mm rare									
22.0	72.2	feldspar 4-5 mm, argillization									
24.2	79.1	breccia, strong silicified hematite-pyrite-limonite gossan									
		biotite quartz porphyry leached zone									
29.0	94.3	biotite relict 3-4 mm									
30.0	100.0	rhyolitic lapilli tuff									
		rock fragment 20-40 mm biotite porphyry						120.0	-	-	-
35.8	117.4	20° pyrite dissemination						125.0	5.0	3.2	1.58
		70° pyrite-chalcocite veinlet network with chalcocite-pyrite						130.0	5.0	4.7	1.22
40.0		biotite relict 3-4 mm						135.0	5.0	3.0	2.76
		quartz 1-2 mm						140.0	5.0	3.8	0.45
	150.0							145.0	5.0	2.2	0.78
								150.0	5.0	5.0	0.42
		dissemination and chalcocite veinlet	kao ser					155.0	5.0	2.0	1.20
50.0								160.0	5.0	2.6	0.68
51.2	167.8							165.0	5.0	2.0	0.61
		breccia, strong silicified						170.0	5.0	3.0	2.28
52.4	171.8	biotite porphyry						175.0	5.0	3.0	1.70
								180.0	5.0	2.0	2.39
56.5	185.3	biotite relict ; 2-3 mm						185.0	5.0	4.5	2.85
		rhyolite						190.0	5.0	3.0	2.73
60.0		quartz 1-2 mm feldspar 3-4 mm						195.0	5.0	2.5	1.60
	200.0							200.0	5.0	4.4	2.29
		60° pyrite-chalcocite vein 10 mm						205.0	5.0	3.0	0.07
								210.0	5.0	5.0	1.93
		70° pyrite-chalcocite vein 5-10 mm	alu kao					215.0	5.0	3.5	0.87
70.0								220.0	5.0	4.5	0.80
								225.0	5.0	3.5	5.10
74.1	243.1	60° pyrite vein with chalcocite						230.0	5.0	4.5	1.07
	250.0		alu kao					235.0	5.0	4.0	2.47
								240.0	5.0	3.0	0.15
								245.0	5.0	5.0	1.40
								250.0	5.0	2.0	0.33
		biotite porphyry						255.0	5.0	3.0	0.87
80.0		biotite relict 3-4 mm						260.0	5.0	5.0	0.72
								265.0	5.0	1.7	0.27
		feldspar 5 mm						270.0	5.0	5.0	0.85
								275.0	5.0	-	-
87.4	287.0	rhyolite						280.0	5.0	1.0	1.07
								285.0	5.0	3.0	0.91
90.0	295.0	10° pyrite vein 15 mm						290.0	5.0	1.5	1.27
	300.0							295.0	5.0	4.0	1.00
								300.0	5.0	4.0	1.47
								305.0	5.0	0.5	0.73
		50° pyrite vein with chalcocite 10 mm						310.0	5.0	5.0	0.69
								315.0	5.0	2.0	0.51
		alunite bearing						320.0	5.0	5.5	0.16
100.0		quartz phenocryst 3 mm	alu kao					325.0	5.0	4.7	0.28
								330.0	5.0	2.0	0.39
								335.0	5.0	2.0	5.07
		0° pyrite veinlet 10 mm						340.0	5.0	5.0	1.47
		10° pyrite veinlet 5 mm						345.0	5.0	3.0	1.00
	350.0							350.0	5.0	4.5	2.73
								355.0	5.0	3.0	0.92
								360.0	5.0	4.0	0.35
110.0		rock fragment 10-20 mm angular						365.0	5.0	5.0	0.40
110.8	363.5	biotite-quartz- porphyry						370.0	5.0	4.0	0.51
		30° pyrite vein 10 mm	kao					375.0	5.0	4.0	1.95
								380.0	5.0	3.3	0.29
		biotite 3 mm						385.0	5.0	5.0	0.64
120.0		quartz 1-2 mm						390.0	5.0	-	-
	400.0							395.0	5.0	3.5	0.40
								400.0	5.0	-	-
								405.0	5.0	1.5	0.20
		biotite-quartz porphyry						410.0	5.0	5.0	2.27
		pyrite≫chalcocite						415.0	5.0	5.0	0.40
		veinlet and dissemination						420.0	5.0	2.7	0.67
130.0								425.0	5.0	3.8	0.33
								430.0	5.0	4.3	0.69
		biotite porphyry						435.0	5.0	-	-
								440.0	5.0	2.5	0.07
	450.0							445.0	5.0	2.0	0.33
								450.0	5.0	3.0	1.03
		biotite relict 3-4 mm						455.0	5.0	1.7	0.40
140.0		feldspar 5 mm						460.0	5.0	2.8	0.16
								465.0	5.0	-	-
								470.0	5.0	5.0	0.72
		40° pyrite vein	kao					475.0	5.0	-	-
								480.0	5.0	2.0	0.35
								485.0	5.0	3.5	0.06
150.0								490.0	5.0	3.3	0.07
	500.0										
								510.0	20.0	-	-
156.4	512.9							515.0	5.0	2.3	0.08
								520.0	5.0	1.0	0.00
160.0		rhyolite lapilli tuff (essential)						525.0	5.0	-	-
								530.0	5.0	-	-
								535.0	5.0	3.0	0.08
		rock fragment 1-30 mm (common) angular						540.0	5.0	2.0	0.00
								545.0	5.0	-	-
	550.0							550.0	5.0	3.5	0.09
								555.0	5.0	5.0	0.40
170.0								560.0	5.0	5.0	0.15
								565.0	5.0	4.5	tr.
								570.0	5.0	-	-
		rock fragment 3 mm						575.0	5.0	4.0	0.30
								580.0	5.0	4.3	0.15
		silicified rock (fragment 2-4 mm)						585.0	5.0	-	-
180.0		angular						590.0	5.0	2.0	tr.
								595.0	5.0	-	-
	600.0							600.0	5.0	3.0	0.07
								605.0	5.0	5.0	tr.
								610.0	5.0	-	-
								615.0	5.0	5.0	-
								620.0	5.0	1.5	0.04
190.0								625.0	5.0	5.0	0.03
								630.0	5.0	-	-
		pyrite dissemination						635.0	5.0	2.5	0.01
		(abundant)						640.0	5.0	5.0	0.24
								645.0	5.0	-	-
	650.0							650.0	5.0	5.0	tr.
								655.0	5.0	2.0	0.03
200.0		silicified rock (fragment 2-3 mm)						660.0	5.0	4.5	tr.
		angular-subangular						665.0	5.0	5.0	tr.
		15° pyrite vein 3 mm						670.0	5.0	5.0	tr.
								675.0	5.0	-	-
								680.0	5.0	2.8	tr.
210.0	689.6	10° pyrite vein 1 mm						685.0	5.0	5.0	0.15
								689.5	4.5	4.5	0.17
	700.0										

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia
- Rhyolite
- Porphyry (hornblende-biotite porphyry, biotite porphyry, quartz-biotite porphyry)
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	≧ 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w : Width

PL.I-9-25

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 29 A Sheet 1 ~

Total Length 520.0 feet Core Recovery

Location Sabedaung Elevation 118.5 m

Direction O Inclination -90°

Date of Logging from 28·7·66 to 7·9·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
			non core						10.0	10.0	—	—
10.0									34.0	24.0	—	—
			feldspar is euhedral						42.0	8.0	8.0	—
	50.0		leached zone						47.0	5.0	5.0	Trace
									57.0	10.0	10.0	0.03
20.0			biotite porphyry						60.5	3.5	3.0	0.07
								47 Sample	67.0	6.5	6.0	0.21
									76.5	9.5	9.5	0.11
			biotite changed into white mica (muscovite)						84.0	7.5	7.0	0.16
									90.0	6.0	6.0	0.18
30.0	100.0		biotite porphyry						98.0	8.0	8.0	0.29
									106.5	8.5	3.5	0.50
			feldspar altered to brown color						112.0	5.5	0.5	0.35
									117.0	5.0	6.6	0.96
			biotite 4~7 mm						123.5	6.5	2.5	0.31
40.0			chalcocite-pyrite veinlet					128 Sample	131.5	7.5	7.0	0.38
									141.0	9.5	8.5	0.77
	150.0								151.0	10.0	9.5	2.64
									160.0	9.0	8.5	0.21
50.0			dissemination and joint filling of chalcocite						165.0	5.0	4.0	0.52
			chalcocite > pyrite						173.0	8.0	2.5	0.24
									179.0	6.0	1.5	1.28
									183.0	4.0	1.5	1.25
									187.0	4.0	4.0	0.66
60.0			biotite porphyry						193.0	6.0	3.0	1.14
	200.0								199.5	6.5	2.5	0.44
									203.0	3.5	3.0	0.77
			weak alteration						213.0	10.0	7.0	0.57
									223.0	10.0	10.0	0.55
70.0									231.0	8.0	8.0	0.17
									239.5	8.5	6.5	0.14
			biotite porphyry						243.5	4.0	3.5	0.11
	250.0								251.0	7.5	5.0	0.34
			chalcocite-pyrite veinlet						258.0	7.0	7.0	0.46
80.0									266.0	8.0	8.0	2.18
									276.0	10.0	10.0	1.78
			biotite porphyry						277.0	6.0	6.0	1.00
			feldspar 3~6 mm						283.5	6.5	5.0	0.28
			biotite 2~5 mm						288.0	4.5	1.0	1.27
90.0									290.0	4.0	2.5	0.79
	300.0								300.0	10.0	2.5	1.03
			fine grained biotite porphyry						306.0	6.0	4.0	0.14
									310.5	4.5	2.5	0.39
									320.0	9.5	3.0	0.33
100.0									323.5	7.5	2.5	0.85
									328.5	6.0	5.0	0.47
			biotite porphyry						336.0	7.5	6.0	0.67
	350.0								344.0	8.0	5.5	0.29
110.0									351.5	7.5	7.5	0.18
			biotite changed to muscovite						360.0	8.5	8.5	0.27
			biotite 4~6 mm						364.0	4.0	4.0	0.11
								368 Sample	368.0	4.0	2.0	0.06
120.0									372.5	4.5	3.0	0.08
	400.0								376.5	4.0	2.5	0.07
									381.5	5.0	5.0	0.06
			biotite porphyry						387.0	5.5	5.5	0.06
									392.5	5.5	3.5	0.04
									397.0	5.5	5.0	0.05
130.0									398.8	1.8	1.8	0.08
									407.0	9.0	5.5	0.09
			biotite porphyry						417.0	10.0	4.5	0.14
									424.0	7.0	4.0	0.21
140.0									434.0	6.0	3.0	0.05
									437.0	7.0	6.0	0.96
			biotite porphyry						448.0	5.0	5.0	0.08
	450.0								447.0	7.0	6.0	0.14
									452.0	5.0	5.0	0.09
150.0			biotite : 3~5 mm					461 Sample	461.0	9.0	9.0	0.14
			feldspar : 3~7 mm						471.0	10.0	10.0	0.09
									476.0	5.0	4.0	0.58
									480.0	4.0	3.0	0.31
			biotite porphyry						486.0	6.0	5.5	0.34
160.0									491.0	5.0	5.0	0.24
	500.0								497.5	6.5	6.0	0.09
			biotite porphyry						503.5	6.0	5.0	0.09
									513.5	10.0	7.5	0.31
	520.0								520.0	6.5	6.5	0.09
170.0			Bottom									
	550.0											
180.0												
	600.0											
190.0												
	650.0											
200.0												
210.0	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende-biotite porphyry; biotite porphyry; quartz-biotite porphyry
- Brecciation
- 30 — inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-26

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H No. 29 B — Sheet 1

Total Length 502.0 feet — Core Recovery

Location Sabedaung — Elevation 127.8 m

Direction 0 — Inclination -90°

Date of Logging from 3·11·66 to 25·11·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
			non core						25.0			
7.6	25.0		iron stain						29.0	4.0	3.5	0.04
									32.0	3.0	2.0	0.01
10.0			breccia (irregular shaped rock fragment)						41.0	9.0	4.0	0.02
									46.0	5.0	2.5	0.01
15.2	50.0								48.5	4.5	2.0	0.02
			lapilli tuff (rock fragment : pea size) leached zone						60.5	10.0	4.0	0.02
20.0									66.5	6.0	5.5	0.02
									72.0	5.5	5.0	0.02
			brecciated porphyry						80.5	8.5	5.5	0.02
25.7	84.4								84.0	3.5	2.5	0.02
									87.5	3.5	2.5	0.03
									93.0	5.5	2.0	0.05
30.0	100.0		30° pyrite vein 1 cm						102.0	9.0	6.5	0.04
									106.0	4.0	2.5	0.05
			35° chalcocite coated pyrite vein 2 cm						112.5	6.5	3.5	0.10
			(various size : 1-30mm)						121.5	9.0	4.0	0.24
			brecciated porphyry						127.5	5.5	5.0	0.13
40.0									132.0	5.0	2.0	0.25
			70° chalcocite vein 1-2 cm						137.0	5.0	5.0	0.29
			brecciated texture						142.0	5.0	4.0	1.01
	150.0								147.0	5.0	4.5	1.52
			(biotite porphyry, biotite 3-4 mm)						157.0	10.0	8.0	0.28
50.0									167.0	10.0	9.5	1.29
			chalcocite dissemination						174.0	7.0	6.0	0.98
55.7	182.6								182.0	8.0	4.5	2.91
			lapilli tuff						187.0	5.0	5.0	0.12
			silicified rock (fragment: 5mm, rounded or subrounded)	kao ser					197.0	10.0	3.0	0.08
60.0	200.0								203.0	6.0	6.0	0.07
									207.0	4.0	3.0	0.10
			10° pyrite vein 3-4 cm						217.0	10.0	9.5	0.10
			40° pyrite vein 2-3 cm									
			pyrite chalcocite vein 7 cm						226.0	9.0	8.0	0.16
70.0			hematite is abundant						233.0	7.0	6.0	0.05
			silicified rock (fragment 1-2 cm)						235.0	2.0	2.0	0.02
			fine grained tuff						243.0	8.0	7.5	0.02
			70° quartz vein with pyrite									
	250.0								253.0	10.0	9.0	0.03
			70° chalcocite vein 1 cm									
80.0			sandy tuff						263.0	10.0	10.0	0.05
			pyrite ore (fragment: 4-5 cm, subangular)						273.0	10.0	8.0	0.06
									283.0	10.0	5.5	0.07
			45° pyrite veinlets 1-2 cm						293.0	10.0	8.0	0.05
90.0			lapilli tuff									
	300.0								303.0	10.0	7.0	0.04
			(rock fragment 4 cm)						313.0	10.0	8.0	0.06
			lapilli tuff						323.0	10.0	7.5	0.05
100.0									330.0	7.0	6.5	0.08
			70° pyrite vein 1-2 cm						340.0	10.0	6.5	0.07
			55° chalcocite coated pyrite vein 3-4 cm						350.0	10.0	8.0	0.18
	350.0											
									360.0	10.0	6.5	0.09
110.0			chalcocite veinlets						370.0	10.0	7.0	0.16
									380.0	10.0	8.0	0.04
			50° pyrite vein with chalcocite 2-3 cm									
			65° pyrite vein 3-4 cm						390.0	10.0	9.5	0.07
120.0			pyrite veinlet						400.0	10.0	8.5	0.06
	400.0											
			70° pyrite vein 2-3 cm						410.0	10.0	8.0	0.08
									418.0	8.0	core lost	
			lapilli tuff						424.0	10.0	5.0	0.09
130.0									434.0	10.0	7.5	0.10
									444.0	10.0	7.0	0.18
135.0	443		brecciated part biotite porphyry (biotite 3-4 mm) boundary is unclear									
	450.0								454.0	10.0	3.0	0.15
			brecciated biotite porphyry									
140.0									464.0	10.0	2.0	0.07
			30° pyrite veinlet with barite, chalcopyrite 3 cm						474.0	10.0	8.0	0.08
			biotite rolict (phenocryst 3 cm) (quartz 1-2 cm)						482.0	8.0	6.5	0.11
150.0	491.		50° pyrite-chalcocite vein with barite 2cm						492.0	10.0	9.0	0.94
	500.0								502.0	10.0	9.5	0.18
	502.0		Bottom									
160.0												
	550.0											
170.0												
180.0	600.0											
190.0												
	650.0											
200.0												
210.0	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende-biotite porphyry, biotite porphyry, quartz-biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc).

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
	fresh	SiO2 < 55 %	FeS2 < 1 %	Cu < 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-27

GEOLOGICAL SURVEY OF MONYWA AREA UNION OF BURMA

(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 29 C   Sheet 1

Total Length 445.5 feet   Core Recovery

Location Sabedaung   Elevation 141.7 m

Direction 0   Inclination -90°

Date of Logging from 4·11·66 to 28·11·66

Logged by S. MONONOBE

METAL MINING AGENCY

OVERSEAS TECHNICAL COOPERATION AGENCY

GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars

- non core
- biotite-quartz porphyry (biotite 2-3 mm, quartz 2 mm, feldspar 4-5 mm)
- yellowish stain along fracture
- decomposed rhyolite
- porphyry changed gradually into silicified and argillized rhyolite
- leached zone
- rhyolite
- brecciated rock quartz > feldspar
- yellowish colored (rhyolite)
- quartz-feldspar fragments
- pyrite is in quartz fragment
- feldspar changed into clay minerals
- pyrite dissemination
- 30° quartz vein 3 mm — leached zone, reddish color
- white colored rhyolite
- breccia part
- 10° pyrite vein
- pyrite dissemination
- rhyolitic tuff
- 90° pyrite vein 21 mm (fragment is angular)
- quartz > feldspar, quartz 10-20 mm
- biotite porphyry
- silicified
- rhyolitic tuff
- 90° chalcocite vein 1 mm reddish color
- 10° quartz vein 2 mm
- pyrite dissemination
- rhyolitic tuff
- pyrite dissemination
- brownish colored biotite porphyry
- rhyolitic tuff
- fine grained rock
- 50° chalcocite coated pyrite vein
- chalcocite dissemination in pyrite
- quartz fragment (size 1x1 - 10x10 cm)
- pyrite dissemination
- 50° chalcocite coated pyrite vein
- pyrite and chalcocite dissemination
- chalcocite > pyrite > chalcopyrite
- chalcocite > pyrite
- rhyolitic tuff
- breccia angular fragment of silicified rock
- breccia (size 1x1 - 10x20 cm)
- with quartz fragment
- rhyolitic tuff
- 50° chalcocite coated pyrite vein 1 mm
- chalcocite > chalcopyrite > pyrite
- rhyolite
- pyrite dissemination
- chalcocite and pyrite vein
- rhyolite
- rhyolitic tuff
- quartz feldspar fragment (size 1x1 - 50x50 mm)
- pyrite > chalcocite
- rhyolitic tuff
- rhyolitic tuff
- dissemination
- pyrite > chalcocite
- Bottom

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	6.0	6.0	0.10	—
	8.5	2.5	2.50	—
	11.0	2.5	2.50	
	15.0	4.0	4.00	·
	17.5	2.5	2.50	·
	20.0	2.5	2.50	·
	24.5	4.5	3.50	·
	29.5	5.0	5.00	·
	35.5	6.0	6.00	0.02
	40.0	4.5	2.00	0.02
	42.0	2.0	2.00	
	46.0	4.0	4.00	
	56.0	10.0	10.00	0.01
	61.0	5.0	5.00	0.04
	65.5	4.5	4.50	0.02
	70.5	4.5	4.50	0.01
	75.5	5.0	4.50	0.02
	83.5	8.0	8.00	0.02
	93.5	10.0	6.66	0.61
	103.0	9.50	6.66	0.06
	113.0	10.0	4.50	0.16
	123.0	10.0	8.00	0.12
	129.5	6.5	6.00	0.35
	138.0	8.5	8.50	0.88
	146.0	8.0	5.50	0.25
	153.0	7.0	5.50	0.37
	158.5	5.5	5.50	0.48
	168.5	10.0	10.00	2.62
	178.5	10.0	10.00	0.15
	184.5	6.0	5.00	0.01
	188.0	3.5	3.50	0.05
	188.5	0.5	0.50	0.06
	195.0	6.5	6.50	0.10
	199.0	4.0	2.50	0.40
	209.0	10.0	8.50	0.68
	219.0	10.0	7.00	0.24
	229.0	10.0	7.00	0.27
	239.0	10.0	8.00	0.88
	247.0	8.0	8.00	1.64
	253.0	10.0	7.00	0.92
	263.0	10.0	8.00	1.16
	273.0	10.0	9.50	0.79
	280.5	7.5	5.00	0.97
	285.0	4.5	4.00	0.23
	295.0	10.0	9.00	0.10
	305.0	10.0	7.00	0.39
	312.0	7.0	6.00	3.52
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	325.0	5.0	5.00	1.06
	330.0	5.0	0.25	1.01
	336.0	6.0	3.00	0.21
	338.5	2.5	1.00	0.12
	344.5	6.0	6.00	0.05
	354.0	9.5	6.00	2.08
	364.0	10.0	8.50	0.97
	374.0	10.0	6.00	0.31
	384.0	10.0	8.00	0.10
	394.0	10.0	6.50	0.29
	402.5	8.5	8.50	0.45
	412.5	10.0	10.00	1.06
	419.5	7.0	7.00	0.23
	427.5	8.0	2.08	0.21
	428.5	0.5	0.50	0.28
	435.5	7.5	7.50	0.19
	445.5	10.0	10.00	0.46

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia
- Rhyolite
- Porphyry: hornblende-biotite porphyry, biotite porphyry, quartz-biotite porphyry
- Brecciation
- Inclination of plane structures (bedding plane, intrusive boundary etc.)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization*	silicification SiO_2	pyritization FeS_2	mineralization Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-28

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 30 Sheet I

Total Length 1618.5 feet Core Recovery

Location Sabedaung Elevation 139.2 m

Direction 0 Inclination − 90°

Date of Logging from 10·7·58 to 27·9·58

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
			non core						5.0	5.0		
									10.0	5.0		
									15.0	5.0		
									20.0	5.0		
7.5									25.0	5.0		
10.0		L	quartz phenocryst : ϕ2mm leached zone						31.0	6.0		
		L	small gas pores						39.0	8.0		
12.0												
	50.0	L	pale bluish gray colored	kao					49.5	9.5		
		L							50.0	0.5		
		L	rhyolite						55.0	5.0		
		L							60.0	5.0		
20.0		L							65.0	5.0		
		L							70.0	5.0		
		L	bluish gray colored silicified						75.0	5.0		
		L	rhyolitic rock with strong hematization						80.0	5.0		
		L							85.0	5.0		
		L							90.0	5.0		
30.0	100.0	L	80° pyrite-chalcocite veinlet						98.0	8.0		
		L							100.2	2.0	2.0	0.33
	105.	L	reddish brown colored weathered rhyolite						105.0	3.0		
		L	with strong hematization						103.0	3.0		
		L	(oxidized zone)						120.0	12.0	12.0	
	123.0								123.0	3.0		
40.0		L	hard and compact silicified rhyolite						131.3	10.0	8.0	
		L	with strong pyritization	kao					137.0	5.5	5.5	
		L		ser					145.0	8.0	8.0	
	150.0								150.0	5.0	5.0	
		L							155.0	5.0	5.0	
		L							160.0	5.0	5.0	
50.0									165.0	5.0	5.0	
		L							170.0	5.0	5.0	
		L	roddish brown colored rhyolitic rock						174.0	4.0	4.0	
		L	with strong hematization									
		L							192.4	18.4		
60.0		L	oxidized zone						195.0	2.6		
	200.0	L							200.0	5.0		
	204.		30° hematite pyrite veinlet	kao					205.0	5.0		
		L							210.0	5.0		
		L	quartz phenocryst 1 mm (rare)						215.0	5.0		
		L							220.0	5.0		
70.0		L							225.0	5.0		
		L	silicified rhyolitic rock with strong						230.0	5.0		
		L	pyritization and small mineralization						235.0	5.0		
	240.0	L							240.0	5.0		
									245.0	5.0		
		L							250.0	5.0	5.0	
80.0		L	fine compact						255.0	5.0	5.0	
	265.0								260.0	5.0	5.0	
		L							265.0	5.0	5.0	
		L							270.0	5.0	5.0	
		L							275.0	5.0	5.0	0.61
			60° pyrite-chalcocite-quartz veinlet 18 mm						280.0	5.0	5.0	0.33
87.5	287.		boundary not clear						285.0	5.0	5.0	0.10
90.0		^	light gray colored silicified biotite						290.0	5.0	3.0	0.32
	300.0	^	porphyry						295.0	5.0	3.0	0.10
		^							300.0	5.0	5.0	0.33
		^	vertical, pyrite-quartz veinlet						305.0	5.0	5.0	0.1
		^	biotite 2-4 mm	ser					310.0	5.0	5.0	0.45
	321.								315.0	5.0	5.0	1.08
100.0		^	biotite ... ϕ 7 mm						320.0	5.0	5.0	0.18
101.5	335	^	feldspar < ϕ 4 mm						325.0	5.0	5.0	0.38
		^	crushed						330.0	5.0	5.0	0.15
		^	from 336 feet to 341 feet						335.0	5.0	5.0	0.03
		^	40° pyrite chalcocite vein 10 mm						340.0	5.0	5.0	0.53
	350.0	^	silicified biotite porphyry						345.0	5.0	5.0	0.03
		^	90° chalcocite veinlet 8 mm	kao					350.0	5.0	5.0	0.95
110.0		^		ser					355.0	5.0	5.0	0.20
		^	silicified biotite porphyry						360.0	5.0	5.0	0.70
		^	biotite : 3-5 mm						365.0	5.0	5.0	0.03
		^	feldspar : 4-7 mm						370.0	5.0	5.0	
		^							375.0	5.0	5.0	
		^							380.0	5.0	5.0	
120.0		^							385.0	5.0	5.0	
	400.0	^							390.0	5.0	5.0	
		^							395.0	5.0	5.0	
		^							400.0	5.0	5.0	
		^							405.0	5.0	5.0	
130.0		^	70° pyrite-chalcocite vein 1 mm	kao					410.0	5.0	5.0	
		^		ser					415.0	5.0	5.0	
		^							420.0	5.0	5.0	
136.4	441.								425.0	5.0	5.0	
	450.0	^	fine						430.0	5.0	5.0	
140.0		^	biotite ϕ 3 mm						435.0	5.0	5.0	
		^	feldspar ϕ 2 mm						440.0	5.0	5.0	
		^	quartz ϕ 1 mm ... rare						445.0	5.0	0.5	
		^	biotite porphyry						447.0	5.0	4.0	
		^							452.0	5.0	5.0	
150.0		^	biotite 2-3 mm						456.0	5.0	4.0	
		^							461.0	5.0	4.3	
	500.0	^							464.0	5.0	3.0	
		^	feldspar ϕ 5 mm						469.0	5.0	5.0	
		^	biotite ϕ 5mm rather						500.0	5.0	5.0	
		^	quartz rare porous						505.0	5.0	5.0	
		^							510.0	5.0	4.5	
160.0		^							515.0	5.0	3.5	
		^	biotite porphyry						520.0	5.0	5.0	
		^							525.0	5.0	5.0	
		^							530.0	5.0	4.5	
		^							535.0	5.0	4.3	
		^		kao					540.0	5.0	4.0	
	550.0	^		ser					545.0	5.0	4.0	
170.0		^							550.0	5.0	5.0	
		^							555.0	5.0	1.5	
		^							565.0	10.0	4.5	
174.1	571.								570.0	5.0	4.0	
		^	gas pores						575.0	5.0	2.0	
		^	silicified hard compact						580.0	5.0	3.0	
180.0		^							585.0	5.0	3.0	
		^	porphyry						590.0	5.0	2.0	
		^							595.0	5.0	1.5	TR
	600.0	^							600.0	5.0	5.0	TR
		^		kao					605.0	5.0	2.0	0.08
		^	compact	ser					610.0	5.0	5.0	0.05
		^	quartz phenocryst : rare						615.0	5.0	3.5	TR
190.0		^							620.0	5.0	3.0	0.05
		^							625.0	5.0	5.0	0.05
		^							630.0	5.0	5.0	
194.3	637		brecciated zone						635.0	5.0	5.0	
		^							640.0	5.0	5.0	
	650.0	^							645.0	5.0	5.0	
		^							650.0	5.0	5.0	
200.0		^							655.0	5.0	5.0	
		^	biotite.... ϕ 5 mm	kao								
		^	feldspar ϕ 3 mm	ser								
		^	quartz ϕ 2 mm ... rare									
210.0		^		kao								
		^	biotite < ϕ 3 mm	ser								
	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry — hornblende-biotite porphyry; biotite porphyry; quartz-biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-28

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H No. 30 Sheet 2

Total Length 1618.5 feet Core Recovery

Location Sabedaung Elevation 139.2 m

Direction O Inclination −90°

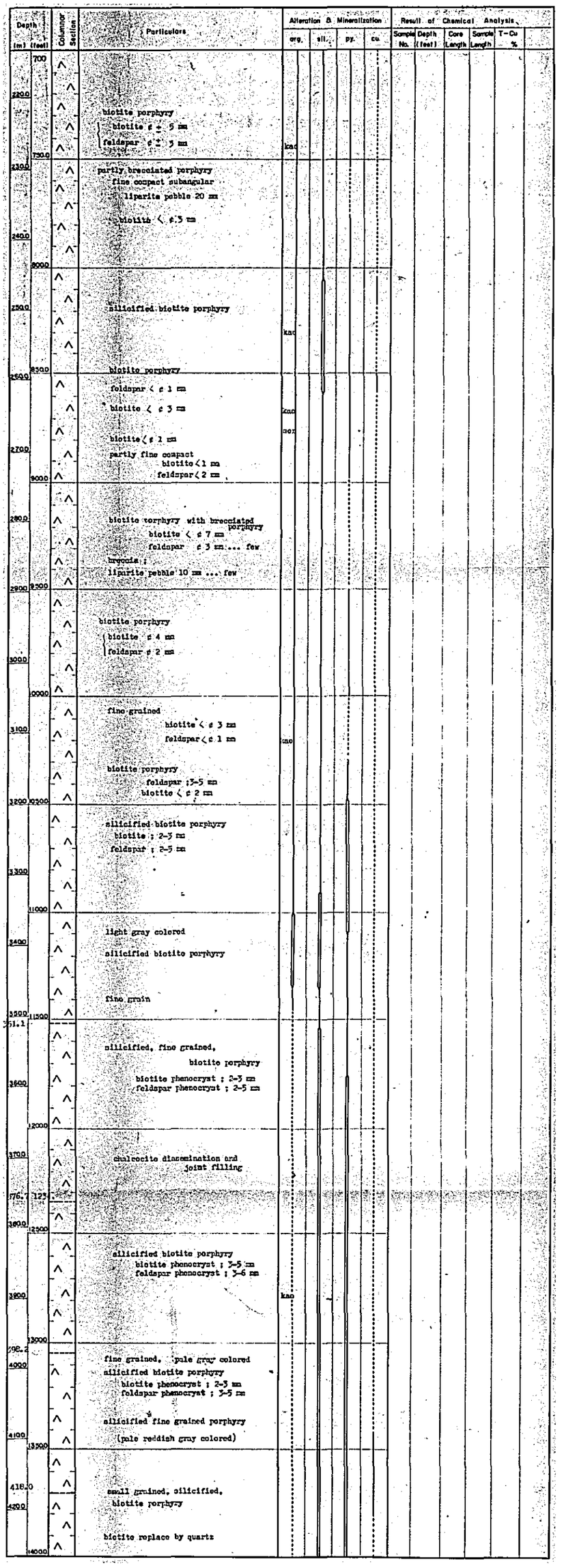
Date of Logging from 10-7-'58 to 27-9-'58

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia
- Rhyolite
- Porphyry (hornblende − biotite porphyry; biotite porphyry; quartz − biotite porphyry)
- Brecciation
- 30 Inclination of plane structures (bedding plane, intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification SiO2	pyritization FeS2	mineralization Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w : Width

PL I-9-28

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 30 Sheet 3

Total Length 1618.5 feet Core Recovery

Location Sabedaung Elevation 139.2 m

Direction 0 Inclination -90°

Date of Logging from 10·7·58 to 27·9·58

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: org.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
430			silicified biotite porphyry (biotite relict)									
440			silicified biotite porphyry									
	1450											
450			ditto									
	1500											
460			silicified biotite porphyry									
470			light gray colored biotite porphyry									
	1550		biotite 1-2 mm									
480			ditto									
	1600											
490			biotite < 3 mm diameter									
1618.5			bottom									

LEGEND

- Mudstone
- Sandstone
- Tuff, Lapilli tuff, Tuff breccia
- Rhyolite
- Porphyry: hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures (bedding plane, intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also groundmass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil : Silicification
py. : Pyritization

kao : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu : Alunitization
c.c.p. : Chalcopyrite
c c : Chalcocite
en : Enargite
dis. : Dissemination
v. : Vainlet
w : Width

PL 1-9-29

GEOLOGICAL SURVEY OF

MONYWA AREA UNION OF BURMA

(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 30 A Sheet 1

Total Length 944.0 feet Core Recovery

Location Sabedaung Elevation 99.1

Direction 220°00' Inclination −45°

Date of Logging from 10·10·58 to 15·12·58

Logged by S. MONONOBE

METAL MINING AGENCY

OVERSEAS TECHNICAL COOPERATION AGENCY

GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Particulars	arg.	sil.	py.	cu.	Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
		weathered biotite porphyry						10.0	10.0		
10.0	50.0							40.0	30.0		
		Biotite-porphyry									
20.0		biotite 5 mm leached zone						70.5	30.5		
		plagioclase 7 mm						79.75	9.25		
								82.75	3.0		
								85.0	2.25	2.25	0.15
								90.0	5.0	5.0	0.78
		90° chalcocite pyrite vein 4 mm						93.0	3.0	3.0	2.80
30.0	100.0							103.5	10.5	-	-
		45° chalcocite pyrite veinlet 10 mm						112.0	8.5	4.5	1.18
		biotite plagioclase porphyry						115.0	3.0	4.5	2.10
								120.0	5.0	4.73	3.60
								125.0	5.0	4.5	3.52
40.0								130.0	5.0	5.0	2.28
		60° chalcocite pyrite veinlet 10 mm biotite 5 mm feldspar 2-3 mm						135.0	5.0	5.0	1.84
								140.0	5.0	5.0	1.63
		60° pyrite chalcocite vein 10 mm						145.0	5.0	5.0	1.92
	150.0							150.0	5.0	5.0	2.56
		85° chalcocite pyrite vein 5 mm						155.0	5.0	4.33	6.40
50.0								159.5	4.5	1.0	1.26
		biotite porphyry						165.0	5.5	4.5	8.00
		light gray color						170.5	5.5	5.5	2.65
								175.0	4.5	4.5	2.44
								180.0	5.0	4.5	1.31
		65° chalcopyrite veinlet net work						185.0	5.0	4.0	4.92
60.0								190.0	5.0	4.5	4.60
	200.0							195.0	5.0	5.0	0.92
								200.0	5.0	4.5	3.30
								205.0	5.0	5.0	3.12
		biotite porphyry						210.0	5.0	5.0	0.84
								215.0	5.0	3.0	0.42
		chalcocite dissemination						220.0	5.0	4.5	1.66
70.0								226.5	6.5	3.5	1.02
								232.5	6.0	4.0	8.20
								237.0	4.5	4.5	8.27
								240.0	3.0	3.0	8.04
								243.0	3.0	2.0	0.98
	250.0							250.0	7.0	8.0	1.71
								255.0	5.0	3.0	1.26
80.0								258.0	3.0	2.5	0.37
		45° chalcocite veinlet 1 mm									
		biotite 5 mm						268.0	11.0	9.7	3.60
								273.0	7.0	5.0	1.00
		fine grained silicified porphyritic rock						283.0	10.0	5.0	1.84
								293.0	9.0	3.0	5.50
90.0								298.0	8.0	5.8	3.20
	300.0										
		35° pyrite veinlet 1 mm						303.5	8.5	6.9	3.90
		phenocryst : biotite and feldspar biotite (yellow, 2-5 mm)						310.0	9.5	3.0	1.70
		70° chalcopyrite veinlet : 1 mm						317.0	7.0	7.0	3.70
100.0		75° chalcocite veinlet 10 mm						327.0	10.0	4.0	5.04
								336.0	9.0	4.7	1.62
								337.0	1.0	4.0	4.60
								338.5	1.5	7.5	4.70
		10° pyrite chalcocite veinlet 2 mm						345.0	6.5	7.3	4.22
	350.0							350.0	5.0	5.0	2.92
								355.0	5.0	4.5	2.31
110.0		light gray colored silicified Biotite porphyry						359.5	4.5	4.5	1.11
								367.7	8.2	3.8	5.45
		feldspar 2 mm									
		quartz 1-2 mm						378.8	10.3	9.8	1.47
								379.3	0.5	0.5	8.00
120.0								387.7	10.0	10.0	8.00
								390.3	10.0	10.0	1.86
	400.0							397.5	7.2	7.2	1.64
								401.5	4.0	4.0	1.43
								404.5	3.0	3.0	1.43
								406.0	1.5	1.0	0.09
		altered biotite observed						412.5	6.5	6.5	5.86
								415.5	3.0	3.0	4.16
130.0								422.5	7.0	7.0	1.06
								427.5	5.0	5.0	1.78
		15° pyrite veinlet 10 mm						435.0	7.5	7.5	1.60
		10°						442.0	7.0	7.0	1.88
		10° breccia quartz vein 50 mm						449.0	7.0	7.0	1.84
	450.0										
								455.5	6.5	6.5	3.60
140.0		some quartz grains 5 mm						462.5	7.0	7.0	1.76
								469.0	6.5	6.5	2.00
		silicified quartz porphyry						476.5	7.5	7.5	0.99
								484.5	8.0	8.0	0.66
150.0								494.5	10.0	10.0	0.94
	500.0							499.0	4.5	4.5	2.44
		pyrite chalcocite veinlet						508.5	9.5	9.0	2.66
		50° chalcocite pyrite vein 3 mm									
		50° chalcocite pyrite vein 3 mm						516.5	8.0	8.0	2.88
		biotite porphyry						520.5	4.0	7.5	3.68
160.0								526.0	5.5	3.5	0.46
		joint filling of chalcocite-pyrite vein						533.0	8.0	7.0	0.73
		70° chalcocite vein 2 mm						538.3	6.3	6.3	3.90
		altered biotite-pyrite dissemination biotite changed into hematite size of biotite 2 mm						544.5	6.2	6.2	0.46
	550.0	60°						548.0	3.5	3.5	0.70
		chalcocite pyrite vein						554.0	6.0	3.2	0.98
170.0		whitish quartz-biotite-porphyry						560.3	6.3	6.3	0.30
		malachite stain									
								570.7	10.0	8.0	0.30
		10° chalcocite-pyrite vein 5 mm						574.8	4.5	2.8	0.32
								580.8	6.0	4.0	0.40
								584.5	3.7	3.3	0.86
180.0		70° pyrite veinlet 20 mm						588.0	3.5	0.8	0.27
								593.8	7.8	4.0	0.32
	600.0										
								601.5	7.7	4.0	0.12
		pale dark gray colored silicified biotite porphyry						604.5	3.0	3.0	0.83
								607.5	3.0	2.0	0.27
								612.0	4.5	3.5	0.12
190.0								618.0	6.0	2.3	0.08
								623.0	5.0	4.0	TR
								628.0	5.0	3.0	TR
		pyrite dissemination						633.0	5.0	2.0	TR
								638.0	5.0	2.0	TR
								643.0	5.0	1.0	TR
	650.0										
200.0								654.0	10.0	6.8	TR
								660.0	6.0	3.8	TR
								663.0	3.0	2.0	TR
		quartz : coarse grain nearly 5 mm						673.0	10.0	5.0	TR
								676.8	3.8	3.7	TR
								677.5	0.7	C.L	—
								681.0	3.5	2.3	TR
210.0								686.0	5.0	4.0	TR
								687.0	1.0	1.3	0.08
								689.0	2.0	2.5	0.30
								692.0	3.0	0.8	0.03
	700.0							700	8.0	C.L	—

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry — hornblende − biotite porphyry; biotite porphyry; quartz − biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization ※	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
	strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL 1-9-29

GEOLOGICAL SURVEY OF

MONYWA AREA UNION OF BURMA

(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 30A Sheet 2

Total Length 944.0 feet Core Recovery

Location Sabedaung Elevation 99.1 m

Direction 220°00' Inclination -45°00'

Date of Logging from 10-10-58 to 15-12-58

Logged by S. MONONOBE

METAL MINING AGENCY

OVERSEAS TECHNICAL COOPERATION AGENCY

GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
			biotite relict 3cm						7050	5.0	4.2	0.10
									7080	5.0	4.3	0.71
									7150	5.0	5.0	0.96
2200									7200	5.0	5.0	TR
			biotite-quartz porphyry						7250	5.0	5.0	0.12
									7300	5.0	0.7	0.80
									7342	4.2	5.5	0.29
									7370	2.8	C.L	—
									7400	3.0	2.8	0.34
									7450	5.0	4.5	0.21
	7500								7500	5.0	2.8	0.21
2300									7575	9.5	3.0	TR
									7600	2.5	C.L	—
			light gray colored biotite porphyry						7690	9.0	2.3	0.16
									7735	4.5	3.7	0.10
									7790	5.5	3.0	TR
2400			pyrite dissemination						7850	6.0	1.5	TR
									7900	5.0	1.0	0.10
									7950	5.0	3.0	TR
	8000								8000	5.0	5.0	TR
									8025	2.5	C.L	—
									8064	4.2	2.5	TR
									8120	6.0	3.8	0.10
2500			biotite porphyry						8150	3.0	2.5	TR
			biotite : 2-4 mm						8200	5.0	4.0	TR
									8250	5.0	3.8	TR
			feldspar : 3-5 mm						8300	5.0	2.0	TR
									8345	4.5	C.L	—
									8390	4.5	4.0	TR
	8500								8450	6.0	4.0	TR
2600									8500	5.0	2.5	TR
									8550	5.0	2.3	TR
			biotite porphyry						8630	8.0	6.0	TR
			biotite : 2-4 mm						8650	2.0	2.0	TR
									8740	9.0	4.5	TR
			feldspar : 3-5 mm						8820	8.0	7.3	0.21
2700									8900	7.0	7.0	0.10
									8917	1.7	3.8	TR
			light gray colored biotite porphyry						9010	10.0	3.5	TR
	9000											
			biotite 2-3 mm feldspar 4-5 mm						9140	13.0	4.8	TR
									9162	2.2	1.8	TR
2800									9220	7.0	C.L	—
			chalcocite-pyrite vein 2mm thickness						9260	4.0	3.0	TR
									9370	8.0	1.5	0.10
									9410	4.0	2.0	0.10
	914.0		bottom						9440	3.0	—	—
2900	9500											
3000												
	10000											
3100												
3200	10500											
3300												
	11000											
3400												
3500	11500											
3600												
	12000											
3700												
3800	12500											
3900												
	13000											
4000												
4100	13500											
4200												
	14000											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 *Inclination of* plane structures.

(bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
strong		> 80 %	> 10 %	> 1 %

※ *fresh* : *unaltered*

weak : parts of feldspar phenocrysts changed into clay minerals

medium : almost all the feldspar phenocrysts changed into clay minerals

strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

arg.	:	Argillization
sil.	:	Silicification
py.	:	Pyritization
kao.	:	Kaolinization
ser.	:	Sericitization
ch.	:	Chloritization
alu.	:	Alunitization
c.c.p.	:	Chalcopyrite
c.c.	:	Chalcocite
en.	:	Enargite
dis.	:	Dissemination
v.	:	Veinlet
w.	:	Width

PL I-9-30

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 30 B Sheet 1

Total Length 520.0 m Core Recovery

Location Sabedaung Elevation 111.8 m

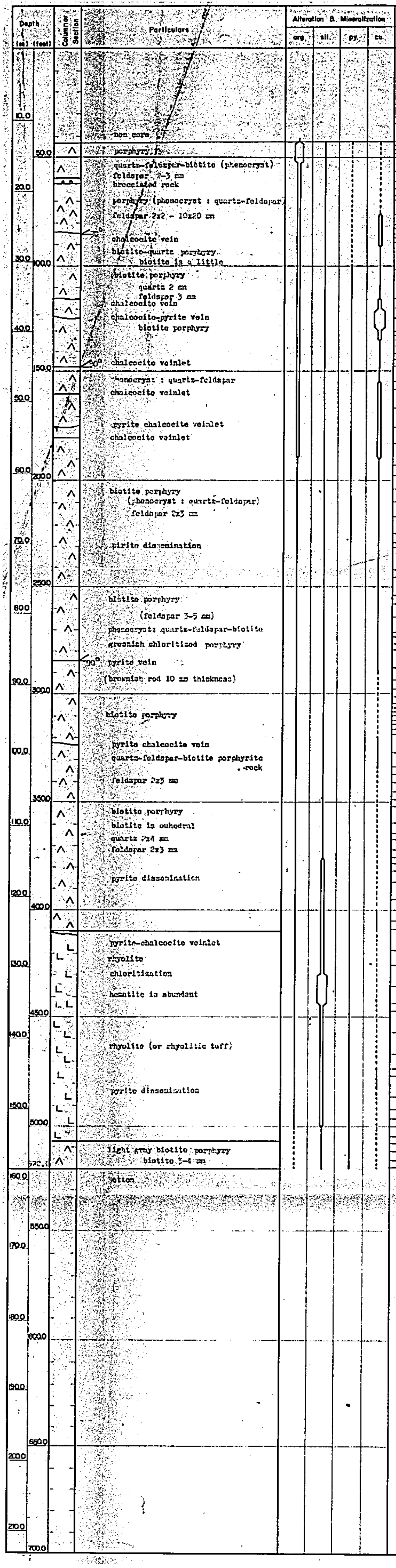
Direction 0 Inclination −90°

Date of Logging from 10·2·66 to 18·3·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



Depth (m) (feet)
Columnar Section
Particulars
Alteration & Mineralization
arg. sil. py. cu.
non core
porphyry
quartz-feldspar-biotite (phenocryst)
feldspar 2-3 mm
brecciated rock
porphyry (phenocryst : quartz-feldspar)
feldspar 2x2 - 10x20 mm
chalcocite vein
biotite-quartz porphyry
biotite is a little
biotite porphyry
quartz 2 mm
feldspar 3 mm
chalcocite vein
chalcocite-pyrite vein
biotite porphyry
chalcocite veinlet
phenocryst : quartz-feldspar
chalcocite veinlet
pyrite chalcocite veinlet
chalcocite veinlet
biotite porphyry
(phenocryst : quartz-feldspar)
feldspar 2x3 mm
pyrite dissemination
biotite porphyry
(feldspar 3-5 mm)
phenocryst: quartz-feldspar-biotite
greenish chloritized porphyry
pyrite vein
(brownish red 10 mm thickness)
biotite porphyry
pyrite chalcocite vein
quartz-feldspar-biotite porphyrite rock
feldspar 2x3 mm
biotite porphyry
biotite is euhedral
quartz 2x4 mm
feldspar 2x3 mm
pyrite dissemination
pyrite-chalcocite veinlet
rhyolite
chloritization
hematite is abundant
rhyolite (or rhyolitic tuff)
pyrite dissemination
light gray biotite porphyry
biotite 3-4 mm
bottom

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	16.0	14.0	—	—
	27.0	11.0	—	—
	35.0	8.0	—	—
	41.0	6.0	—	—
	[illegible]	[illegible]	[illegible]	—
	[illegible]	[illegible]	[illegible]	—
	[illegible]	[illegible]	[illegible]	—
	[illegible]	[illegible]	[illegible]	—
	52.0	3.5	1.50	—
	55.5	3.5	2.30	—
	60.5	3.0	1.00	—
	63.5	3.0	1.00	—
	67.0	3.5	3.50	—
	[illegible]	[illegible]	[illegible]	—
	75.0	7.0	4.00	—
	79.5	4.5	3.00	0.40
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	92.0	4.5	4.00	0.94
	102.0	10.0	10.00	1.75
	105.5	3.5	2.83	1.57
	115.5	10.0	8.00	0.61
	120.0	4.5	3.00	2.75
	125.0	5.0	3.00	1.80
	132.0	7.0	2.00	1.35
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	138.0	2.5	2.50	1.00
	142.0	4.0	4.00	0.92
	144.5	2.5	2.50	0.85
	148.0	3.5	2.00	1.06
	155.5	7.5	5.00	1.40
	158.5	3.0	3.00	0.40
	167.5	9.0	9.00	0.42
	176.5	9.0	4.00	0.25
	184.0	7.5	7.50	0.36
	194.0	10.0	10.00	0.15
	198.0	4.0	4.00	0.15
	204.0	6.0	6.00	0.13
	210.0	6.0	6.00	0.11
	216.5	6.5	6.50	0.31
	224.5	8.0	3.00	0.19
	228.5	4.0	1.50	0.28
	[illegible]	[illegible]	[illegible]	[illegible]
	241.5	10.0	1.50	0.16
	245.0	3.5	3.33	0.19
	254.0	9.0	8.66	0.14
	257.5	3.5	3.50	0.24
	264.0	6.5	5.00	0.22
	271.0	7.0	5.00	0.28
	[illegible]	[illegible]	[illegible]	[illegible]
	275.0	3.0	3.00	0.14
	277.0	2.0	2.00	0.14
	286.0	9.0	9.00	0.18
	292.0	6.0	6.00	0.36
	297.0	5.0	5.00	0.62
	301.0	4.0	4.00	0.34
	304.0	3.0	3.00	0.38
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	316.5	2.0	2.00	0.31
	325.0	8.5	8.50	0.23
	331.5	6.5	6.50	0.15
	334.5	3.0	3.00	0.28
	339.0	4.5	4.50	0.28
	344.0	5.0	5.00	0.24
	348.5	4.5	4.50	0.12
	351.5	3.0	3.00	0.16
	359.5	8.0	8.00	0.16
	364.5	5.0	5.00	0.14
	367.0	2.5	2.50	0.14
	372.0	5.0	5.00	0.12
	375.5	3.5	3.50	0.04
	376.5	1.0	1.00	0.14
	379.5	3.0	3.00	0.14
	385.0	5.5	5.50	0.19
	395.0	10.0	10.00	0.24
	400.0	5.0	4.50	0.19
	405.0	5.0	4.50	0.14
	409.5	4.5	4.00	0.19
	419.5	10.0	7.50	0.17
	427.0	7.5	2.50	0.17
	437.0	10.0	8.00	0.23
	444.0	7.0	3.50	0.21
	447.0	3.0	1.50	0.20
	457.0	10.0	1.50	0.24
	467.0	10.0	9.00	0.20
	474.0	7.0	6.00	0.16
	477.0	3.0	2.50	0.20
	487.0	10.0	4.50	0.18
	493.0	6.0	5.00	0.17
	497.0	4.0	3.00	0.28
	500.0	3.0	3.00	0.42
	505.0	5.0	3.50	0.23
	508.0	3.0	3.00	0.17
	511.5	3.5	3.50	0.36
	517.0	5.5	2.00	0.69
	520.0	3.0	1.75	0.46

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry: hornblende−biotite porphyry, biotite porphyry, quartz−biotite porphyry
- Brecciation
- Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION. AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-31

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H No. 30 C. Sheet 1

Total Length 721.5 feet Core Recovery

Location Sabedaung Elevation 118.1 m

Direction 0 Inclination -90°

Date of Logging from 5·3·66 to 5·7·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
		altered biotite porphyry with Fe. oxide						15.0	15.0	—	—
		leached zone						20.0	5.0	—	—
								25.0	5.0	5.0	—
								26.0	4.0	4.0	—
10.0								32.5	6.5	6.5	
10.8	35.4							37.0	4.5	4.0	—
		small grained and compact part						43.5	6.5	6.5	—
	50.0							53.0	9.5	9.5	—
		silicified biotite porphyry						63.0	10.0	10.0	0.76
20.0								69.0	6.0	6.0	0.73
		chalcocite-pyrite vein						77.0	8.0	8.0	1.12
		quartz vein, near horizon									
								87.0	10.0	10.0	0.52
								97.0	10.0	10.0	0.96
30.0	100.0	silicified rock									
		feldspar 3-4 mm						107.0	10.0	10.0	1.86
		light gray colored green copper						117.0	10.0	10.0	1.09
37.4	123.	silicified porphyry		ser				125.0	8.0	8.0	1.09
40.0		pyrite (fragment 5 mm)						135.0	10.0	10.0	1.30
								143.0	8.0	8.0	1.58
								153.5	10.5	10.5	2.65
	150.0							163.5	10.0	10.0	2.65
		75° chalcocite vein 1-2 mm						168.5	5.0	5.0	3.08
		60° chalcocite vein 2 mm						173.5	5.0	5.0	3.70
50.0		quartz 7 mm						175.5	2.0	2.0	4.39
								179.5	4.0	4.0	1.84
		biotite porphyry		kao				183.5	4.0	3.5	2.10
				ser				188.5	5.0	5.0	1.71
		biotite 3 mm (altered)						192.5	4.0	3.5	1.21
60.0	200.0							194.0	1.5	1.5	2.10
								199.0	5.0	5.0	2.16
								206.0	7.0	7.0	2.09
		70° chalcocite-pyrite vein 10 mm thickness						216.0	10.0	10.0	1.61
								226.0	10.0	10.0	1.61
70.0		70° chalcocite-pyrite vein						236.0	10.0	10.0	0.87
		60° chalcocite-pyrite vein									
		chalcocite-pyrite vein 3cm thickness						249.0	13.0	13.0	3.30
	250.0							256.0	7.0	7.0	1.10
80.0								266.0	10.0	10.0	2.31
				ser				276.0	10.0	10.0	2.51
		biotite porphyry						286.0	10.0	10.0	1.18
		porphyritic texture									
90.0		biotite 7 mm relict is few						296.0	10.0	10.0	1.29
	300.0							306.0	10.0	10.0	2.21
		biotite 3 mm		ser				316.0	10.0	10.0	1.61
								326.0	10.0	10.0	0.99
100.0		brecciated part						331.0	5.0	5.0	1.60
		light gray colored									
		silicified porphyritic rock						341.0	10.0	10.0	1.57
		quartz phenocryst 3 mm									
	350.0							351.0	10.0	10.0	1.50
		biotite phenocryst 5 mm						361.0	10.0	10.0	1.29
110.0		porphyritic texture (biotite) is clear						369.0	8.0	7.0	1.18
112.7	370.0	chalcocite disseminate						377.0	8.0	8.0	0.98
		silicified porphyry						387.0	10.0	10.0	1.27
120.0								397.0	10.0	10.0	1.62
	400.0							402.0	5.0	5.0	1.25
		biotite porphyry						407.0	5.0	5.0	1.01
		biotite : 3-5 mm						417.0	10.0	10.0	0.76
		feldspar : 3-5 mm									
130.0								427.0	10.0	10.0	0.83
								437.0	10.0	10.0	0.81
		silicified biotite porphyry									
								447.0	10.0	10.0	0.99
	450.0							457.0	10.0	10.0	1.05
140.0		light gray colored						462.0	5.0	5.0	0.34
		silicified biotite porphyry						470.0	8.0	8.0	0.37
		biotite 1-2 mm									
		quartz 2-3 mm						480.5	10.5	10.0	0.18
								489.0	8.5	8.5	0.6
150.0											
152.4	500.0							499.0	10.0	10.0	0.23
								502.0	3.0	3.0	0.39
		0° pyrite vein						512.0	10.0	10.0	1.07
		quartz vein						514.0	2.0	1.6	0.38
160.0		biotite porphyry						523.0	9.0	9.0	0.15
								527.0	4.0	4.0	0.23
		biotite 2-3 mm						537.0	10.0	9.0	0.49
								543.0	6.0	6.0	0.57
	550.0							547.0	4.0	4.0	0.19
								552.0	5.0	4.5	0.21
170.0								559.0	7.0	4.5	0.72
		70° pyrite-chalcocite vein						561.0	2.0	1.6	0.83
								569.0	8.0	7.5	0.49
		pyrite dissemination						579.0	10.0	7.0	0.21
		porphyritic texture									
180.0								589.0	10.0	9.0	0.34
		35° pyrite vein 2 mm thickness						599.0	10.0	5.0	0.31
	600.0	60° pyrite vein 4 mm thickness									
		0° chalcocite-pyrite vein						609.0	10.0	5.0	0.36
		15° pyrite-chalcocite vein						619.0	10.0	4.0	0.16
190.0								629.0	10.0	9.0	0.13
		30° pyrite-chalcocite vein 3 mm thickness						635.0	6.0	4.0	0.20
		with a little quartz phenocryst									
								645.0	10.0	6.5	0.20
	660.0	pyrite dissemination						655.0	10.0	7.0	0.13
200.0								665.0	10.0	8.5	0.19
								670.0	5.0	4.0	0.72
								674.5	4.5	1.5	0.19
		silicified porphyry									
								684.5	10.0	6.5	0.07
210.0								689.5	5.0	2.0	0.11
								698.5	9.0	2.0	0.09
								703.5	5.0	1.5	0.09
	700.0							701.0	6.0	6.0	0.05
								710.0	9.0	9.0	0.11
								717.0	7.0	7.0	0.55
								715.5	9.5	4.5	0.04
	721.5							721.5	6.0	6.0	0.07
		Bottom									

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry (hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry)
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-32

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 3 I　　Sheet I

Total Length 770.5 feet　　Core Recovery

Location Sabedaung　　Elevation 123.1 m

Direction 0　　Inclination -90°

Date of Logging from 26-7-58 to 29-9-58

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry: hornblende-biotite porphyry; biotite porphyry; quartz-biotite porphyry
- Brecciation
- ∠30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

Core log

Columns: Depth (m) (feet) | Columnar Section | Particulars | Alteration & Mineralization (arg., sil., py., cu.) | Result of Chemical Analysis

Particulars:

- 0 – 100.0 ft (32.0 m): non core
- chalcocite-pyrite veinlet
- chalcocite-pyrite veinlet
- biotite-quartz porphyry　biotite 4 mm, feldspar 4mm
- pyrite veinlet with chalcocite
- lapilli tuff (lapilli 15 mm)
- 44.2 m / 145.0 ft: ∠90° chalcocite-pyrite vein 10 mm
- 150.0 ft: ∠90° quartz vein with pyrite and chalcocite
- biotite porphyry
- ∠60° biotite 6 mm, feldspar 5 mm
- ∠90° quartz vein with chalcocite-pyrite
- 52.8 m: brecciated tuff
- brecciated biotite porphyoy
- ∠90° chalcocite-pyrite vein
- 55.8 m: biotite porphyry　biotite 5 mm, feldspar 2 mm
- 60.0 m / 200.0 ft: ∠90° chalcocite-pyrite vein 2 mm　(kao, ser)
- lapilli tuff
- 64.9 m: lapilli 10 mm, silicified rock fragment
- ∠90° pyrite-chalcocite veinlet
- 68.9 m: chalcocite-pyrite vein 15 mm
- 70.0 m: coarse grained tuff
- 73.4 m: pyrite dissemination
- chalcocite veinlet
- 250.0 ft / 77.4 m: pale green colored, biotite porphyry
- 80.0 m: chalcocite pyrite veinlet
- coarse grained tuff) 2 mm
- chalcocite-pyrite bearing quartz vein
- 90.0 m: quartz vein with chalcocite-pyrite　(kao, ser)
- 300.0 ft: coarse grained tuff
- quartz vein with pyrite　(kao, ser)
- ∠90° pyrite vein 3 mm
- 100.0 m: ∠60° pyrite vein with chalcocite coated
- quartz vein with pyrite
- 103.4 m: biotite porphyry　biotite 4 mm, feldspar 6 mm
- 350.0 ft / 106.7 m: coarse grained tuff
- 110.0 m: weak argillized　(kao, ser)
- 120.0 m: ∠40° fine grained band (bedding)　(kao, ser)
- 400.0 ft: ∠70°, ∠70° pyrite veinlet with chalcocite
- coarse grained tuff with silicified rock fragment, fragment is subangular
- 130.0 m: pyrite ore fragment 7 x 10 mm
- 135.0 m: biotite porphyry
- 450.0 ft / 137.2 m: biotite .... brown colored 4 mm　(kao, ser)
- 140.0 m: (tuff breccia)
- 144.9 m: ∠70° bedding
- 146.6 m: silicified rock fragment: 10x10 subround
- 147.8 m: biotite porphyry (biotite 4 mm)
- 150.0 m: lapilli tuff
- 500.0 ft: lapilli tuff
- rock fragment is pea size and subround
- pyrite ore fragment is abundant
- 160.0 m: silicified rock fragment　(kao, ser)
- 160.9 m: ∠90° pyrite veinlet 10 mm
- brecciated biotite-quartz porphyry
- 550.0 ft: biotite porphyry
- 170.0 m: { biotite ... 6 mm, brown colored; feldspar...argillaceous, 2-5 mm }
- biotite porphyry
- 180.0 m / 600.0 ft: fine grained　feldspar 2 mm, biotite 3 mm
- 190.0 m: light gray colored　(kao, ser)
- 650.0 ft / 200.0 m: biotite porphyry (biotite phenocryst 4 mm, feldspar phenocryst 6 mm)
- 210.0 m / 700.0 ft

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	5.0	5.0		
	10.0	"		
	15.0	"		
	20.0	"		
	25.0	"		
	30.0	"		
	35.0	"		
	40.0	"		
	45.0	"		
	50.0	"		
	55.0	"		
	60.0	"		
	65.0	"		
	70.0	"		
	75.0	"		
	80.0	"		
	85.0	"		
	90.0	"		
	95.0	"		
	102.0	7.0		
	107.0	5.0	3.0	0.05
	109.5	2.5	2.5	0.05
	115.0	5.5	4.0	0.15
	120.0	5.0	4.0	0.05
	125.5	5.5	1.5	0.15
	131.0	5.5	4.5	0.10
	134.5	3.5	1.0	—
	139.5	5.0	5.0	0.15
	144.5	5.0	1.5	1.04
	151.5	7.0	6.5	1.04
	156.5	5.0	5.0	0.15
	161.0	4.5	4.5	0.10
	168.0	7.0	6.0	0.52
	173.0	5.0	5.0	0.83
	178.5	5.5	5.5	2.30
	183.0	4.5	4.5	1.46
	193.0	10.0	10.0	0.89
	198.0	5.0	5.0	1.12
	203.0	5.0	5.0	0.26
	208.0	5.0	5.0	0.05
	213.0	5.0	5.0	0.15
	218.0	5.0	5.0	0.94
	228.0	10.0	10.0	0.89
	233.0	5.0	4.5	Nil
	238.5	5.5	5.0	0.87
	240.5	2.0	1.2	0.73
	247.0	6.5	6.5	0.73
	252.0	5.0	4.5	2.20
	258.0	6.0	6.0	0.20
	263.0	5.0	5.0	0.10
	268.0	5.0	5.0	0.20
	273.0	5.0	3.0	0.20
	278.0	5.0	3.0	0.37
	283.5	5.5	CL	—
	288.5	5.0	4.0	0.25
	293.5	5.0	4.5	0.15
	303.5	10.0	7.0	0.10
	309.0	5.5	5.0	0.15
	316.0	7.0	7.0	0.15
	328.0	12.0	1.0	0.10
	332.0	4.0	2.0	0.05
	339.5	7.5	6.5	TR
	343.0	3.5	3.5	0.10
	348.0	5.0	1.5	0.10
	358.0	10.0	2.0	0.05
	363.0	5.0	3.0	0.10
	368.0	5.0	2.0	0.10
	372.0	4.0	1.0	Nil
	376.0	4.0	CL	—
	382.0	6.0	1.5	Nil
	388.0	6.0	5.0	0.05
	398.0	10.0	9.5	0.55
	402.0	4.0	3.5	TR
	406.0	4.0	4.0	"
	408.0	2.0	2.0	0.15
	415.0	7.0	7.0	0.35
	423.0	8.0	4.0	0.30
	428.0	5.0	5.0	1.97
	432.5	4.5	4.0	0.15
	437.5	5.0	2.5	0.42
	442.0	4.5	CL	—
	449.0	7.0	7.0	0.10
	458.5	9.5	9.5	0.30
	463.5	5.0	5.0	0.20
	468.0	4.5	2.5	0.90
	473.0	5.0	5.0	1.56
	477.0	4.0	3.5	0.62
	482.0	5.0	5.0	0.30
	487.0	5.0	5.0	0.62
	492.0	5.0	4.0	0.15
	498.0	6.0	5.5	0.40
	504.0	6.0	3.5	0.20
	512.0	8.0	7.5	TR
	513.3	1.3	1.3	—
	517.0	3.7	3.5	0.20
	526.0	9.0	8.0	0.08
	536.0	10.0	10.0	0.20
	539.5	3.5	3.5	0.80
	544.0	4.5	5.0	0.08
	547.5	1.5	1.5	TR
	552.5	5.0	0.5	0.12
	557.0	4.5	CL	—
	562.0	5.0	1.5	0.07
	570.0	8.0	1.0	0.18
	574.5	4.5	4.0	0.14
	581.5	7.0	2.0	0.18
	587.0	5.5	4.0	TR
	588.0	1.0	0.4	0.05
	594.0	6.0	2.5	TR
	600.0	4.0	4.0	0.07
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	1.5	[illegible]
	607.0	4.0	3.5	1.00
	615.0	8.0	8.0	0.08
	625.0	10.0	8.5	TR
	635.0	10.0	6.8	0.07
	645.0	10.0	9.0	TR
	655.0	10.0	7.0	TR
	665.0	10.0	9.5	TR
	670.0	5.0	3.0	TR
	672.0	2.0	1.5	TR
	675.0	3.0	2.5	0.07
	684.0	9.0	6.0	0.06
	690.0	6.0	3.0	TR
	700.0	10.0	10.0	TR

PL I-9-32

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 31 Sheet 2

Total Length 770.5 feet Core Recovery

Location Sabedaung Elevation 123.1 m

Direction 0 Inclination −90°

Date of Logging from 26·7·58 to 29·9·58

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	7000		biotite 2 mm	kao					710.5	10.5	9.5	TR
			feldspar > 2 mm	ser					712.5	2.0	1.0	"
2200									722.5	10.0	10.0	"
			pyrite veinlet						727.5	5.0	4.0	"
									732.0	5.5	5.5	0.05
									737.0	6.0	4.0	0.09
	7500								746.5	7.5	5.0	0.10
2300			pyrite chalcocite veinlet						751.0	4.5	4.5	0.14
			pyrite chalcocite lapilli tuff						758.0	7.0	4.0	0.20
	7705		silicified rock fragment (50 mm×20mm)						766.5	8.5	7.5	0.36
			bottom						770.5	4.0	1.8	0.13
2400												
	8000											
2500												
2600	8500											
2700												
	9000											
2800												
2900	9500											
3000												
	10000											
3100												
3200	10500											
3300												
	11000											
3400												
3500	11500											
3600												
	12000											
3700												
3800	12500											
3900												
	13000											
4000												
4100	13500											
4200												
	14000											

LEGEND

- Mudstone
- Sandstone
- Tuff Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry — hornblende−biotite porphyry; biotite porphyry; quartz−biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization
kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-33

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 31 A Sheet 1

Total Length 511.0 feet Core Recovery

Location Sabedaung Elevation 110.9 m

Direction O Inclination −90°

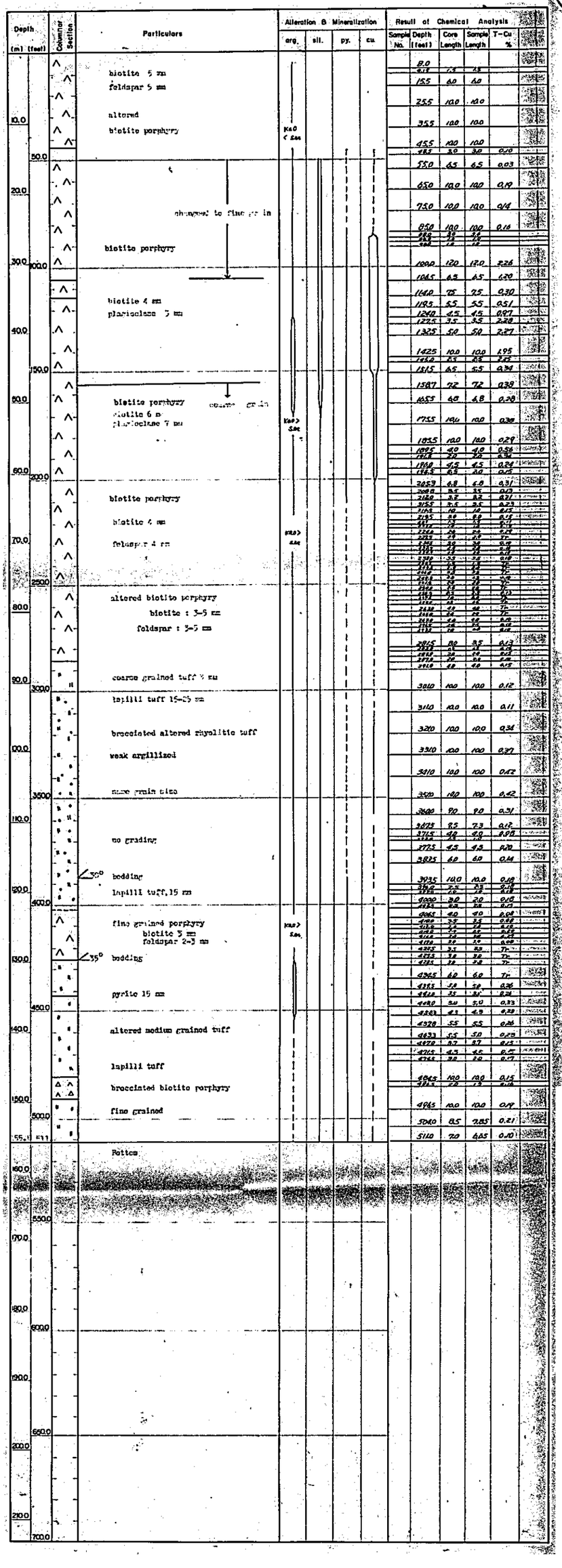
Date of Logging from 10·12·65 to 19·1·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc.)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground mass changed into clay minerals
(by a field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-34

GEOLOGICAL SURVEY OF MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 3 I B   Sheet 1

Total Length 537.0 feet   Core Recovery

Location Sabedaung   Elevation 110.9 m

Direction 0   Inclination -90°

Date of Logging from 10-12-65 to 19-1-66

Logged by S. MONONOB

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars

- non core
- biotite porphyry
- weathered zone; biotite 4-7 mm; feldspar 5-6 mm; leached zone
- biotite changed into sericite
- brecciated lapilli tuff
- pyrite dissemination
- brown colored fragments
- fine grained tuff
- sandstone
- fine grained tuff
- sandstone band
- silicified tuff
- sandy tuff
- pyrite dissemination
- biotite changed into phlogopite
- brown colored biotite 1-. mm
- feldspar 7 mm
- biotite porphyry
- whitish gray color
- pale gray color
- very fine grained tuff
- biotite porphyry
- grain under 2 mm
- medium grain tuff
- granular texture
- silicified tuff
- 17° dykes: biotite 5 mm, feldspar phenocryst 4mm
- biotite brown color
- massive fine tuff
- whitish gray color
- silicified rhyolite tuff
- quartz fragment 3-4 mm
- granular texture
- breccia 20 mm
- silicified biotite-quartz porphyry: quartz 3-4 mm, feldspar 7 mm, biotite 2-4 mm
- pale whitish gray color
- fine grained rhyolite tuff
- whitish gray color
- silicified tuff
- biotite porphyry fragments ; ø2 cm
- whitish gray color
- fine grained tuff
- silicified tuff
- Bottom

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	40.0	40.0	—	—
	53.0	8.0	8.0	—
	56.0	3.0	3.0	—
	60.0	4.0	2.0	—
	68.0	8.0	8.0	—
	78.0	10.0	10.0	0.33
	[illegible]	2.5	[illegible]	[illegible]
	84.0	3.5	3.5	0.20
	89.0	2.5	2.5	0.34
	92.0	3.0	3.0	1.49
	104.5	2.5	2.0	0.59
	110.0	3.5	3.0	0.53
	114.5	4.5	4.5	0.63
	117.5	[illegible]	[illegible]	[illegible]
	123.5	4.5	4.5	0.65
	136.5	5.0	2.8	0.56
	138.5	4.5	4.5	0.99
	146.5	8.0	8.0	0.69
	162.0	10.0	10.0	0.74
	168.0	6.0	6.0	1.35
	174.0	6.0	6.0	2.52
	178.5	4.5	4.5	1.73
	182.5	4.0	4.0	0.61
	190.0	4.0	4.0	0.43
	196.0	6.0	6.0	0.26
	204.0	8.0	8.0	0.45
	214.0	10.0	10.0	0.30
	223.5	9.5	9.5	0.35
	230.5	7.0	7.0	2.03
	235.5	5.0	5.0	3.02
	243.5	8.0	8.0	0.31
	232.5	10.0	10.0	0.42
	257.5	4.0	4.0	0.34
	260.0	2.5	2.0	0.33
	270.0	10.0	10.0	0.47
	280.0	10.0	10.0	0.39
	290.0	10.0	10.0	0.27
	300.0	10.0	10.0	0.30
	310.0	10.0	10.0	0.28
	319.0	9.0	9.0	0.20
	322.0	3.5	3.5	0.14
	330.5	8.0	7.0	0.16
	340.5	10.0	10.0	0.06
	348.5	8.0	8.0	0.29
	354.5	6.0	6.0	0.28
	364.5	10.0	10.0	0.18
	374.5	10.0	10.0	0.10
	384.5	10.0	10.0	0.13
	390.0	5.5	5.5	0.28
	400.0	10.0	10.0	0.08
	410.0	10.0	10.0	0.15
	417.5	7.5	7.5	0.13
	425.5	8.0	8.0	0.55
	429.5	4.0	4.0	0.10
	436.5	7.0	7.0	0.14
	446.0	9.5	9.5	0.15
	455.0	9.0	9.0	0.21
	463.0	8.0	8.0	0.22
	473.0	10.0	10.0	0.33
	482.5	9.5	9.0	0.45
	492.5	10.0	10.0	0.33
	501.0	8.5	8.5	0.30
	510.5	5.5	1.5	0.45
	516.0	5.5	5.5	0.49
	519.5	3.5	3.5	0.45
	526.0	6.5	6.5	0.15
	530.0	4.0	4.0	0.20
	537.0	7.0	7.0	2.31

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff. Tuff breccia.
- Rhyolite
- Porphyry: hornblende-biotite porphyry; biotite porphyry; quartz-biotite porphyry
- Brecciation
- Inclination of plane structures (bedding plane, intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

argillization *	silicification SiO_2	pyritization FeS_2	mineralization Cu
fresh	< 55 %	< 1 %	< 0.2 %
weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization
kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-35

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H No. 3 I C Sheet I

Total Length 500.0 feet Core Recovery

Location Sabedaung Elevation 93.4 m

Direction O Inclination −90°

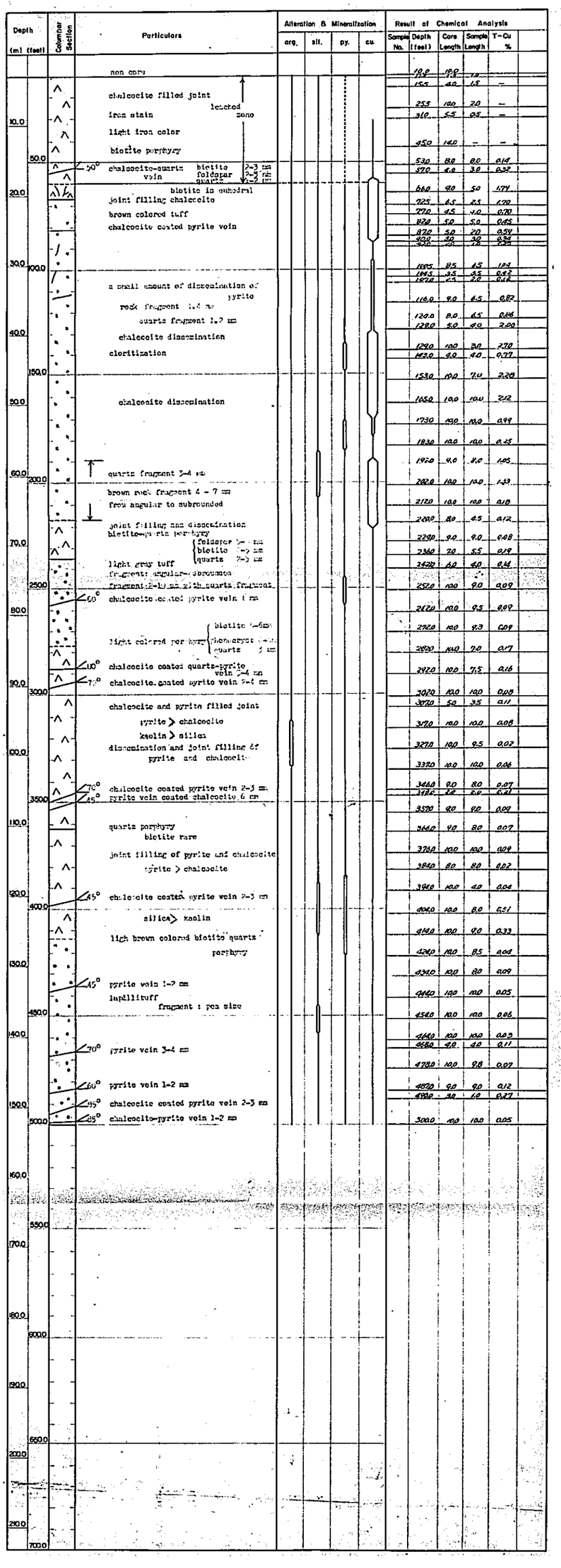
Date of Logging from 23:9:66 to 26:10:66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.



LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry — hornblende−biotite porphyry; biotite porphyry; quartz−biotite porphyry
- Brecciation
- Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

※
- fresh : unaltered
- weak : parts of feldspar phenocrysts changed into clay minerals
- medium : almost all the feldspar phenocrysts changed into clay minerals
- strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-36

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 32 Sheet 1

Total Length 478.0 feet Core Recovery

Location Sabedaung Elevation 103.1 m

Direction 0 Inclination -90°

Date of Logging from 24·9·66 to 31·10·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars

Depth (feet)	Inclination	Particulars
0–46.0		non core
46.0–50.0		Fe stains bearing breccia
50.0–56.0		hematite gossan leached zone
56.0–77.0		biotite-quartz porphyry
		biote relict, phenocryst 2-3 mm
		quartz phenocryst 2 mm
77.0	70°	chalcocite vein 2-3 mm
	70°	chalcocite coated pyrite vein 2 mm
		breccia matrix is tuffaceous
	90°	chalcocite vein 1-2 mm
	90°	chalcocite > pyrite vein 100 mm essential
100.0	90°	chalcocite > pyrite vein 5 mm
		biotite-quartz porphyry
		biotite relict phenocryst 5 mm
		quartz phenocryst 3 mm
	50°	chalcocite vein 5-10 mm
	50°	" " "
		light brown colored, biotite porphyry
150.0		feldspar change into clay mineral
		feldspar 6 mm
		biotic phenocryst 4 mm
	30°	chalcocite coated pyrite vein w : 10 mm
	85°	pyrite vein 7 mm
	80°	pyrite vein 2 mm
200.0	75°	pyrite vein with chalcocite [illegible] mm
	70°	pyrite vein with chalcocite 2 mm
		biotite phenocryst 4-5 mm
		Fe stains (hematite)
	75°	pyrite vein 2-3 mm
250.0	70°	pyrite vein 3-4 mm
256.0		quartz vein with pyrite 2-3 mm
	45°	biotite porphyry with hematite
		hematite is abundant
		biotite 2 mm
		feldspar 4 mm
		hematite veinlet and impregnated
		breccia (angular)
300.0	70°	chalcocite-pyrite vein 100 mm
		hily silicified
316.0		pale gray colored
		massive lapilli tuff
		rock fragment : pea size silicified, rhyolitic rock
	75°	pyrite vein 2-3 mm
350.0	85°	pyrite vein with chalcocite 2-3 mm
		pyrite ore fragment (ø : 20 mm)
		silicified rock fragment (ø : 10 mm)
400.0		lapilli tuff
		rock fragment common size : 20x10mm with silicified rock fragment
478.		Bottom

Alteration & Mineralization: arg. (kao), sil., py., cu.

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	45.0			
	48.0	3.0	1.3	0.09
	56.0	8.0	5.5	0.03
	61.0	5.0	3.0	0.04
	66.0	5.0	2.5	0.02
	76.0	10.0	5.0	0.02
	82.0	6.0	3.0	0.20
	86.0	4.0	3.0	0.73
	92.0	6.0	5.0	0.43
	99.5	7.5	4.0	0.36
	106.5	7.0	4.5	0.67
	112.0	5.5	3.5	1.13
	115.0	3.0	2.0	0.28
	121.5	6.5	3.5	0.25
	127.5	6.5	2.0	0.56
	133.5	6.0	3.0	0.33
	137.5	4.0	2.0	0.33
	147.5	10.0	10.0	0.56
	154.5	7.0	7.0	0.38
	161.5	7.0	6.5	0.15
	171.5	10.0	9.0	0.09
	177.0	5.5	5.5	0.07
	184.5	7.5	7.5	0.03
	194.5	10.0	9.5	0.04
	200.5	6.0	6.0	0.04
	206.5	6.0	5.5	0.07
	216.0	9.5	9.5	0.04
	224.5	8.5	8.5	0.04
	231.5	7.0	7.0	0.04
	241.5	10.0	9.5	0.08
	246.0	4.5	4.5	0.09
	251.0	5.0	4.5	0.04
	261.0	10.0	9.5	0.04
	269.0	8.0	7.5	0.04
	279.0	10.0	5.5	0.05
	283.0	4.0	2.0	0.04
	286.0	3.0	3.0	0.04
	291.0	5.0	5.0	0.04
	296.0	5.0	4.5	0.18
	301.0	5.0	4.0	0.33
	311.0	10.0	9.0	1.42
	316.0	5.0	2.5	0.66
	319.5	3.5	2.0	0.21
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	326.0	3.5	3.0	0.41
	336.0	10.0	5.0	0.11
	346.0	10.0	10.0	0.09
	356.0	10.0	10.0	0.09
	366.0	10.0	8.0	0.77
	374.0	8.0	6.5	0.20
	384.0	10.0	9.5	0.24
	394.0	10.0	10.0	0.06
	404.0	10.0	8.7	0.14
	414.0	10.0	9.5	0.06
	424.0	10.0	10.0	0.06
	434.0	10.0	8.7	0.07
	440.0	6.0	5.5	0.05
	450.0	10.0	8.0	0.03
	460.0	10.0	7.0	0.03
	468.0	8.0	6.0	0.02
	478.0	10.0	9.0	0.02

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry: hornblende-biotite porphyry, biotite porphyry, quartz-biotite porphyry
- Brecciation
- Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

argillization*	silicification SiO_2	pyritization FeS_2	mineralization Cu
fresh	< 55 %	< 1 %	< 0.2 %
weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

arg. : Argillization
sil. : Silicification
py. : Pyritization

kao. : Kaolinization
ser. : Sericitization
ch. : Chloritization
alu. : Alunitization
c.c.p. : Chalcopyrite
c.c. : Chalcocite
en. : Enargite
dis. : Dissemination
v. : Veinlet
w. : Width

PL I-9-37

GEOLOGICAL SURVEY OF MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 32 A — Sheet 1
Total Length 570.5 feet — Core Recovery
Location Sabedaung — Elevation 85.9 m
Direction 0° — Inclination -90°
Date of Logging from 25-9-58 to 4-11-58
Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars

- core box lost
- light gray tuffaceous rock; fragment : 1-5 mm; from angular to subrounded; quartz and solid pyrite bearing biotite porphyry; dissemination and joint filling of chalcocite and pyrite
- 45° chalcocite coated pyrite vein 6 mm
- 35° pyrite and quartz vein 2-3 mm
- rhyolitic tuff
- brecciated rock; dissemination of pyrite is abundant than joint filling of pyrite
- 65° pyrite vein 1 mm
- biotite porphyry; hematite stains; feldspar and quartz 1-2mm
- 50° pyrite vein
- pyrite and chalcocite vein
- dissemination of pyrite and chalcocite; joint filling of pyrite > abundant; light colored biotite porphyry; biotite 3-5 mm; quartz 1-3 mm; feldspar 3-5 mm
- 85° pyrite vein 3-4 mm; biotite replaced by hematite
- dissemination of pyrite; rhyolitic tuff
- 60° pyrite vein 10 mm; biotite porphyry; biotite 3-5 mm; feldspar 4-6mm; dissemination Py.
- biotite porphyry; feldspar 3-5 mm; biotite 6-7 mm; quartz 1-3 mm
- 40° pyrite vein 3-4 mm
- joint filling and dissemination of pyrite
- 45° pyrite vein 2-3 mm
- light colored biotite porphyry
- light colored porphyry (fine grain of phenocryst); iron stain
- 570.5 feet bottom

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	10.0	10.0		
	15.0	5.0		
	20.0	5.0		
	25.0	5.0		
	30.0	5.0		
	50.0	20.0		
	60.0	10.0	3.0	0.75
	[illegible]	[illegible]	[illegible]	[illegible]
	71.0	10.0	CL	—
	81.0	10.0	2.0	0.93
	85.0	4.0	1.5	0.15
	92.0	7.0	CL	—
	102.0	10.0	2.0	0.95
	112.0	10.0	3.0	0.25
	122.0	10.0	4.5	0.20
	130.0	8.0	1.5	0.15
	140.0	10.0	2.5	0.10
	147.0	7.0	4.0	0.40
	156.0	9.0	7.5	0.15
	161.0	5.0	3.5	0.25
	170.0	9.0	7.3	0.50
	180.0	10.0	2.0	0.30
	186.0	6.0	2.0	0.10
	190.0	4.0	2.0	0.30
	196.0	6.0	2.5	0.44
	200.0	4.0	3.0	0.52
	203.0	3.0	3.0	0.29
	210.0	7.0	6.0	TR
	220.0	10.0	9.0	0.42
	229.0	9.0	5.5	0.08
	234.0	3.0	3.0	0.39
	237.0	5.0	3.0	0.55
	241.5	4.5	2.5	0.05
	[illegible]	[illegible]	[illegible]	[illegible]
	251.5	10.0	4.7	0.10
	[illegible]	[illegible]	[illegible]	[illegible]
	262.0	8.5	1.5	0.10
	272.0	10.0	10.0	0.10
	276.0	4.0	4.0	0.10
	284.5	8.5	8.5	0.30
	289.5	5.5	5.0	0.10
	299.5	10.0	10.0	0.25
	306.0	6.5	5.0	0.15
	316.0	10.0	10.0	0.20
	323.0	7.0	7.0	3.80
	328.0	5.0	3.0	1.45
	338.0	10.0	2.5	0.20
	347.0	9.0	8.0	0.25
	357.0	10.0	7.5	0.10
	366.5	9.5	2.5	0.10
	375.0	8.5	5.5	0.10
	385.0	10.0	2.7	0.10
	390.0	5.0	1.5	0.15
	395.0	5.0	CL	—
	403.0	8.0	1.0	0.15
	410.0	7.0	7.0	0.40
	414.0	4.0	CL	—
	423.0	9.0	2.0	0.10
	423.0	9.0	3.0	0.30
	436.0	4.0	CL	—
	446.0	10.0	1.3	0.20
	449.0	3.0	2.5	0.25
	456.0	7.0	3.0	0.15
	466.0	10.0	7.5	0.10
	472.0	6.0	1.5	0.15
	478.0	6.0	5.0	0.20
	482.0	4.0	1.8	0.15
	490.0	8.0	1.5	0.20
	496.0	6.0	1.0	0.10
	501.0	5.0	1.0	0.15
	505.0	4.0	2.0	0.10
	510.0	5.0	4.0	0.45
	520.0	10.0	2.0	0.35
	529.0	9.0	2.0	0.35
	533.0	4.0	1.2	0.10
	537.5	4.5	1.0	0.20
	[illegible]	[illegible]	[illegible]	[illegible]
	546.5	9.0	3.0	0.10
	550.0	3.5	2.5	0.15
	558.5	8.5	2.5	0.20
	565.0	6.5	4.0	0.10
	570.5	5.5	5.5	0.40

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry: hornblende-biotite porphyry; biotite porphyry; quartz-biotite porphyry
- Brecciation
- 30 Inclination of plane structures. (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization*	silicification (SiO_2)	pyritization (FeS_2)	mineralization (Cu)
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
	strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-38

GEOLOGICAL SURVEY OF MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 32 B   Sheet 1

Total Length 520.0 feet   Core Recovery

Location Sabedaung   Elevation 103.4 m

Direction 0   Inclination −90°

Date of Logging from 6·12·65 to 17·11·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974
Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars

Depth (m)	Depth (feet)	Particulars
		non core
		rhyolitic tuff
10.0		partly brecciated (essential rhyolitic rock)
		fragment (50cm, average 10cm granule)
	50.0	
		leached zone
20.0		tuffaceous rock
	75.0	60° 80° 50° chalcocite-pyrite vein 1-2 mm; chalcocite-pyrite veinlet 1-4 mm
		90° 75° chalcocite-pyrite vein 1 mm; chalcocite-pyrite vein 5-10 mm
30.0	100.0	50° 30° chalcocite vein 5mm, fine grained sandy rock; chalcocite vein 1-5mm
		30° 65° chalcocite vein 1-2 mm; chalcocite vein 1-5 mm
		sandy fine grained tuff
40.0	134.5	dark gray colored
		biotite porphyry
		75° chalcocite vein 1 mm
	150.0	45° (chalcocite pyrite vein 2 mm)
50.0		75° biotite-quartz-feldspar porphyry; biotite phenocryst < 5mm; feldspar < 7mm; quartz < 5mm ... rare
		chalcocite-pyrite dissemination and joint filling
		30° chalcocite-pyrite veinlet 10 mm
60.0	200.0	
		green copper bearing clay zone
		75° chalcocite-pyrite veinlet
		hematite veinlet
		45° chalcocite vein 1 mm
70.0		75° pyrite chalcocite vein 10 mm
		compact
	250.0	biotite porphyry
80.0		biotite relict phenocryst 3 mm
		feldspar phenocryst 4-5 mm
		chalcocite-pyrite dissemination
		medium argillied
90.0	300.0	
		biotite porphyry; biotite ¢ 5 mm; feldspar ¢ 7 mm
		60° pyrite vein 10 mm, dissemination
100.0		biotite porphyry
		weathered porous porphyry (biotite clear)
	350.0	
110.0		30° quartz vein 2 mm
		30° chalcocite-pyrite vein 8 mm
		40° chalcocite vein 5 mm
		porphyry fragment ¢ 2 cm
120.0	400.0	50° pyrite vein with chalcocite 4 mm
		pyrite chalcocite dissemination and joint filling
130.0		
	450.0	
140.0		70° pyrite vein 1 mm
	473. / 478. / 485. / 490.	20° chilled margin
150.0		60° tuff breccia
	500.0	biotite porphyry
	516. / 520.	
160.0		Bottom

Alteration & Mineralization: arg. — kao (≈50 ft), kao ser (≈165 ft), kao (≈240 ft), kao (≈330 ft), ser (≈405 ft)

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	13.0	—	—	—
	25.0	10.0	—	—
	26.5	1.5	—	—
	30.0	3.5	2.00	—
	34.0	4.0	4.00	—
	40.0	6.0	6.00	—
	50.0	10.0	10.00	—
	60.0	10.0	7.00	—
	67.0	7.0	7.00	—
	75.5	8.0	3.00	0.13
	85.0	9.5	9.50	1.34
	92.0	7.0	7.00	1.97
	102.5	10.5	10.00	1.80
	108.5	6.0	6.00	1.69
	110.0	1.5	1.00	1.24
	114.5	4.5	4.50	5.95
	124.5	10.0	10.00	1.18
	134.5	10.0	10.00	0.76
	136.5	2.0	2.00	0.77
	144.5	8.0	8.00	0.44
	152.5	8.0	8.00	1.12
	161.5	9.0	9.00	0.83
	165.5	4.0	4.00	0.77
	168.5	3.0	3.00	1.49
	169.5	1.0	0.97	1.29
	172.0	2.5	2.50	0.42
	175.5	3.5	3.00	0.16
	181.5	6.0	6.00	0.20
	187.5	6.0	5.50	0.39
	192.5	5.0	5.00	3.66
	201.0	8.5	8.50	4.09
	208.0	7.0	7.00	0.82
	212.5	4.5	4.50	1.64
	214.5	2.0	2.00	1.04
	220.0	5.5	5.50	0.93
	226.0	6.0	6.00	0.23
	236.0	10.0	10.00	0.38
	240.0	4.0	4.00	0.44
	248.0	8.0	8.00	0.42
	250.0	2.0	2.00	0.79
	255.0	5.0	5.00	0.15
	261.5	6.5	6.50	0.18
	265.5	4.0	4.00	0.20
	270.5	5.0	5.00	0.15
	276.0	5.5	5.50	0.17
	283.0	7.0	7.00	0.28
	293.0	10.0	10.00	0.46
	296.5	3.5	3.50	0.90
	301.0	4.5	4.50	0.78
	304.0	3.0	3.00	0.36
	306.5	2.5	2.50	0.27
	308.0	1.5	1.50	0.81
	314.0	6.0	6.00	0.53
	315.5	1.5	1.50	0.71
	319.0	3.5	3.50	0.74
	322.0	3.0	1.00	0.47
	325.5	3.5	3.50	0.38
	331.0	5.5	5.50	0.59
	337.5	6.5	6.50	0.39
	343.5	6.0	6.00	0.54
	346.5	3.0	3.00	0.50
	356.5	10.0	10.00	0.42
	366.5	10.0	10.00	0.26
	376.5	10.0	10.00	1.51
	386.5	10.0	10.00	0.37
	396.5	10.0	10.00	0.30
	402.5	6.0	6.00	0.37
	410.5	8.0	8.00	0.54
	414.5	4.0	3.75	0.39
	424.5	10.0	10.00	0.67
	434.5	10.0	10.00	0.24
	438.5	4.0	4.00	0.34
	439.5	1.0	1.00	0.36
	449.0	9.5	9.50	0.12
	454.0	5.0	5.00	0.73
	460.0	6.0	6.00	0.38
	462.0	2.0	1.50	0.10
	469.5	7.5	7.50	0.10
	479.5	10.0	10.00	0.20
	482.0	2.5	2.50	0.10
	488.0	6.0	6.00	0.08
	490.5	2.5	2.50	0.06
	495.5	5.0	5.00	0.29
	498.5	3.0	3.00	0.29
	502.0	3.5	3.50	0.98
	506.0	4.0	4.00	0.81
	510.0	4.0	3.75	1.36
	512.5	2.5	2.50	1.40
	514.0	1.5	1.50	1.40
	[illegible]	[illegible]	2.30	[illegible]
	[illegible]	1.0	1.00	[illegible]
	520.0	2.5	1.00	1.11

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry: hornblende−biotite porphyry; biotite porphyry; quartz−biotite porphyry
- Brecciation
- 30 Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization *	silicification	pyritization	mineralization
		SiO_2	FeS_2	Cu
	fresh	< 55 %	< 1 %	< 0.2 %
	weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
	medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
	strong	> 80 %	> 10 %	> 1 %

※ fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width

PL I-9-39

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 32 C Sheet I

Total Length 519.0 feet Core Recovery

Location Sabedaung Elevation 95.2 m

Direction O Inclination -90°

Date of Logging from 4·3·66 to 21·5·66

Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD

Depth (m)	Depth (feet)	Columnar Section	Particulars	Alteration & Mineralization: arg.	sil.	py.	cu.	Result of Chemical Analysis: Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
									10.0	10.0	—	
			non core						25.0	15.0	3.0	
									29.0	4.0	1.5	
									31.5	2.5	1.0	
10.0			pale gray colored, fine grained, argillized tuff						34.0	5.0	3.0	
									34.5	3.5	2.0	
	50.0								45.5	6.0	4.0	
			pyrite veinlet						53.0	7.5	4.5	
									54.0	9.0	1.0	
20.0									59.0	3.0	0.42	
			pyrite veinlet						63.0	4.0	3.0	
									63.0	2.0	0.2	
			lapilli tuff						70.0	5.0	2.0	
									71.5	1.5	1.0	
									76.0	4.5	2.0	
			chalcocite, coated pyrite veinlet						78.5	2.5	4.0	
									83.0	4.5	2.0	0.27
			" "						86.0	3.0	2.5	0.32
30.0	100.0								90.0	4.0	3.0	0.43
									93.5	3.5	2.0	0.11
			gray colored, argillized biotite porphyry						96.0	3.0	2.0	0.09
									98.5	2.5	2.5	0.23
									100.5	2.0	2.0	0.32
									103.0	3.0	3.0	0.32
			biotite phenocryst: 3–4 cm						109.5	6.5	3.5	0.52
									114.0	5.5	3.5	0.76
									118.5	4.5	3.5	0.61
40.0									125.5	7.5	5.0	0.22
			chalcocite veinlet						134.0	8.5	7.0	0.18
			pyrite-chalcocite veinlet						144.0	10.00	6.5	1.11
	150.0		" " "						149.0	5.0	4.0	1.20
									154.0	5.0	1.5	0.45
50.0									158.0	4.0	4.5	0.85
			chalcocite-pyrite veinlet						160.0	2.0	2.0	1.06
			65° " "						166.0	6.0	3.5	0.73
									172.0	6.0	5.0	0.54
			" "						178.0	6.0	5.0	0.37
									182.0	4.0	2.0	0.75
									185.0	3.0	2.0	1.06
									190.0	5.0	4.5	0.35
60.0									196.0	6.0	5.0	0.11
	200.0		pyrite veinlet						200.0	4.0	4.2	0.08
			70° " "						204.0	4.0	4.0	0.24
									208.0	4.0	4.0	0.14
									213.5	5.5	5.42	0.41
			rock fragment: porphyritic texture size 2–2.5 cm						219.5	6.0	6.02	0.32
									225.0	5.5	5.2	0.32
70.0									228.0	3.0	6.50	0.19
			argillized, coarse grained tuff						235.0	10.0	10.0	0.15
									241.0	6.0	5.0	0.10
	250.0								248.0	7.0	2.0	0.07
									253.5	7.0	5.5	0.09
80.0									258.5	5.0	2.0	0.17
									264.0	6.5	8.5	0.14
									271.0	7.0	2.0	0.09
									277.0	6.0	2.0	0.09
			pyrite quartz vein						279.5	2.5	6.42	0.11
									284.0	3.5	3.5	0.19
90.0									289.5	6.5	5.0	0.21
	300.0								295.0	6.5	4.0	0.09
									301.0	6.0	5.5	0.11
									304.5	3.5	3.0	0.07
			brecciated zone						313.5	9.5	9.5	0.03
									324.0	5.0	4.5	0.11
100.0									334.0	10.0	9.5	0.08
			argillized, silicified tuff						344.0	10.0	10.0	0.06
	350.0								354.0	10.0	10.0	0.06
			pyrite veinlet, network						364.0	10.0	9.5	0.09
110.0									374.0	10.0	10.0	0.66
									382.0	8.0	8.0	0.09
									389.5	7.5	6.5	0.12
			pyrite veinlet						398.0	8.5	8.5	0.06
120.0									402.0	4.0	6.0	0.14
	400.0								408.5	5.5	9.5	0.10
									415.5	10.0	10.0	0.14
			fracture filled pyrite						421.5	6.0	6.0	0.27
									426.0	4.5	3.67	0.17
130.0									426.5	0.5	2.33	0.28
			brecciated zone pyrite veinlet						436.5	10.0	10.0	0.14
									442.5	6.5	4.83	0.12
									446.5	4.0	4.0	0.19
	450.0								448.5	2.0	—	0.19
									458.5	10.0	9.0	0.08
140.0			pyrite veinlet, width 2–5 cm						460.5	4.0	6.0	0.08
			greenish gray colored, coarse grained tuff						463.0	3.0	2.5	0.10
									472.0	9.0	9.0	0.12
									476.0	4.0	3.5	0.15
			pyrite veinlet with chalcocite						486.0	10.0	9.5	0.14
150.0									492.0	6.0	4.5	0.44
	500.0								502.0	10.0	10.0	0.04
			pyrite veinlet						510.0	8.0	7.0	0.04
	519.0		bottom						516.0	6.0	6.0	0.17
160.0									519.5	3.5	3.5	0.10
	550.0											
170.0												
180.0												
	600.0											
190.0												
	650.0											
200.0												
210.0	700.0											

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia
- Rhyolite
- Porphyry — hornblende – biotite porphyry; biotite porphyry; quartz – biotite porphyry
- Brecciation
- 30 Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

	argillization	silicification	pyritization	mineralization
		SiO2	FeS2	Cu
fresh		< 55 %	< 1 %	< 0.2 %
weak		55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5 %
medium		65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9 %
strong		> 80 %	> 10 %	> 1 %

※
- fresh : unaltered
- weak : parts of feldspar phenocrysts changed into clay minerals
- medium : almost all the feldspar phenocrysts changed into clay minerals
- strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals

(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w : Width

PL 1-9-40

GEOLOGICAL SURVEY OF
MONYWA AREA UNION OF BURMA
(PHASE II)

CORE LOG and ASSAY

D.D.H. No. 32 D — Sheet 1
Total Length 365.0 feet — Core Recovery
Location Sabedaung — Elevation 86.4 m
Direction 0 — Inclination -90°
Date of Logging from 30·5·66 to 20·7·66
Logged by S. MONONOBE

METAL MINING AGENCY
OVERSEAS TECHNICAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
SEPTEMBER 1974

Prepared by MITSUI KINZOKU ENGINEERING SERVICE CO., LTD.

Particulars (Depth 0 – 365.0 feet)

- non core
- hematite and limonite; leached zone
- Fe stain
- rhyolitic lapilli tuff (pea size)
- 5° chalcocite pyrite vein 15 mm
- 87° chalcocite pyrite vein 2-7 mm
- fragment of rock in irregular shape 4 - 8 mm
- boundary
- 70° chalcocite vein 8 mm
- quartz-biotite porphyry
- dissemination and joint filling of pyrite
- quartz 3-5mm, feldspar 2-4mm, biotite 3-5mm
- 50° pyrite-quartz vein 5 mm
- 50° chalcocite vein 1-2 mm
- 45° pyrite-quartz vein 3 mm
- 30° chalcocite coated pyrite vein 10 mm
- joint filling > dissemination
- Fe stain
- hematite
- joint filling of pyrite
- biotite replaced by hematite; pyrite
- pyrite dissemination
- 75° pyrite vein 4-5 mm
- joint filling of pyrite
- biotite phenocryst 4-6 mm
- 75° joint filling of pyrite; hematite stain
- 30° pyrite vein 1 mm
- purplish brown colored porphyry
- biotite phenocryst 1-3mm
- 65° pyrite vein 5-7 mm
- light gray porphyry
- quartz phenocryst 1 - 2 mm
- purplish brown porphyry
- green colored fine grained chloritized
- biotite porphyry: quartz 1-2 mm, biotite 2-3 mm
- very fine ground mass
- 60° pyrite vein 1 mm
- dissemination of hematite
- Fe stain
- dissemination of pyrite
- chlorite
- Bottom

Alteration & Mineralization: arg. (kao), sil., py., cu.

Result of Chemical Analysis

Sample No.	Depth (feet)	Core Length	Sample Length	T-Cu %
	11.0	—	—	—
	15.0	4.0	3.0	0.13
	18.0	3.0	3.0	0.10
	21.0	3.0	3.5	0.08
	31.0	10.0	4.0	0.05
	38.0	7.0	0.5	0.08
	46.0	8.0	5.0	4.05
	50.0	4.0	3.0	10.43
	60.0	10.0	1.5	0.58
	64.0	4.0	3.0	0.20
	67.0	3.0	0.5	0.13
	77.0	10.0	10.0	4.25
	80.0	3.0	1.0	0.75
	84.0	4.0	4.0	0.10
	89.0	5.0	5.0	1.28
	[illegible]	1.5	1.5	1.40
	[illegible]	[illegible]	[illegible]	[illegible]
	96.0	4.5	4.5	0.45
	102.0	6.0	6.0	0.43
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	112.0	5.0	5.0	0.53
	114.5	[illegible]	[illegible]	[illegible]
	119.0	4.5	4.0	0.05
	123.0	4.0	4.0	0.33
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	3.0	3.0	[illegible]
	140.0	7.5	7.5	0.08
	143.0	3.0	3.0	0.10
	152.0	9.0	3.0	0.08
	155.0	3.0	3.0	0.20
	158.0	3.0	Cl	—
	163.0	5.0	5.0	0.08
	169.0	4.0	4.5	0.05
	173.0	4.0	3.0	0.10
	176.5	3.5	3.5	0.15
	186.5	10.0	10.0	0.08
	194.5	5.0	4.0	0.20
	197.0	5.5	5.0	0.08
	207.0	10.0	10.0	0.03
	213.5	6.5	6.5	0.08
	220.5	7.0	7.0	0.05
	224.0	3.5	3.5	0.13
	227.5	3.5	3.5	0.23
	233.0	5.5	2.0	0.70
	240.0	7.0	7.0	0.23
	242.0	2.0	2.0	N.D.
	247.0	5.0	5.0	0.13
	252.0	5.0	4.5	N.D.
	[illegible]	2.0	2.0	N.D.
	263.0	9.0	7.5	0.20
	271.0	8.0	4.0	0.10
	281.0	10.0	9.0	0.03
	284.5	3.5	3.5	0.05
	294.5	10.0	7.5	0.03
	297.5	3.0	3.0	N.D.
	306.5	9.0	9.0	0.03
	311.5	5.0	5.0	0.05
	318.5	7.0	6.5	0.10
	328.5	10.0	5.0	N.D.
	329.5	1.0	0.5	0.03
	334.5	5.0	2.0	0.03
	340.5	6.0	2.0	0.05
	346.5	6.0	4.5	0.15
	356.5	10.0	10.0	0.05
	365.5	8.5	8.5	0.03

LEGEND

- Mudstone
- Sandstone
- Tuff. Lapilli tuff Tuff breccia.
- Rhyolite
- Porphyry: hornblende-biotite porphyry; biotite porphyry; quartz-biotite porphyry
- Brecciation
- Inclination of plane structures (bedding plane intrusive boundary etc)

DEGREE OF ALTERATION AND MINERALIZATION

argillization*	silicification SiO2	pyritization FeS2	mineralization Cu
fresh	< 55 %	< 1 %	< 0.2 %
weak	55 ~ 65 %	1 ~ 5 %	0.3 ~ 0.5%
medium	65 ~ 80 %	5 ~ 10 %	0.6 ~ 0.9%
strong	> 80 %	> 10 %	> 1 %

* fresh : unaltered
weak : parts of feldspar phenocrysts changed into clay minerals
medium : almost all the feldspar phenocrysts changed into clay minerals
strong : not only feldspar phenocrysts but also ground-mass changed into clay minerals
(by field observation)

ABBREVIATIONS

- arg. : Argillization
- sil. : Silicification
- py. : Pyritization
- kao. : Kaolinization
- ser. : Sericitization
- ch. : Chloritization
- alu. : Alunitization
- c.c.p. : Chalcopyrite
- c.c. : Chalcocite
- en. : Enargite
- dis. : Dissemination
- v. : Veinlet
- w. : Width