THE KINGDOM OF THAILAND

REPORT ON THE COOPERATIVE MINERAL EXPLORATION OF YANG KIANG AREA

PHASE II

OCTOBER 1989

JAPAN INTERNATIONAL COOPERATION AGENCY

METAL MINING AGENCY OF JAPAN

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THE KINGDOM OF THAILAND
REPORT ON THE COOPERATIVE MINERAL EXPLORATION OF YANG KIANG AREA
PHASE II
OCTOBER 1989

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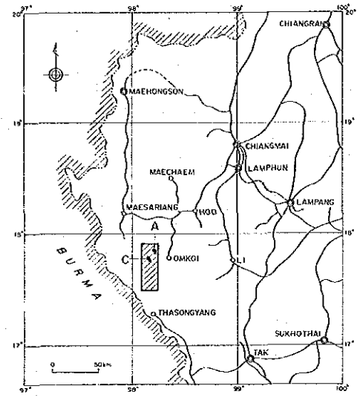
MINERAL EXPLORATION
OF
THE YANG KIANG AREA, THAILAND
PHASE Ⅲ

# SYNTHETIC MAP OF TRENCH SURVEY
## (NORTH SUBAREA IN AREA A)

Scale 1 : 2,000

0 50 100 150 200m

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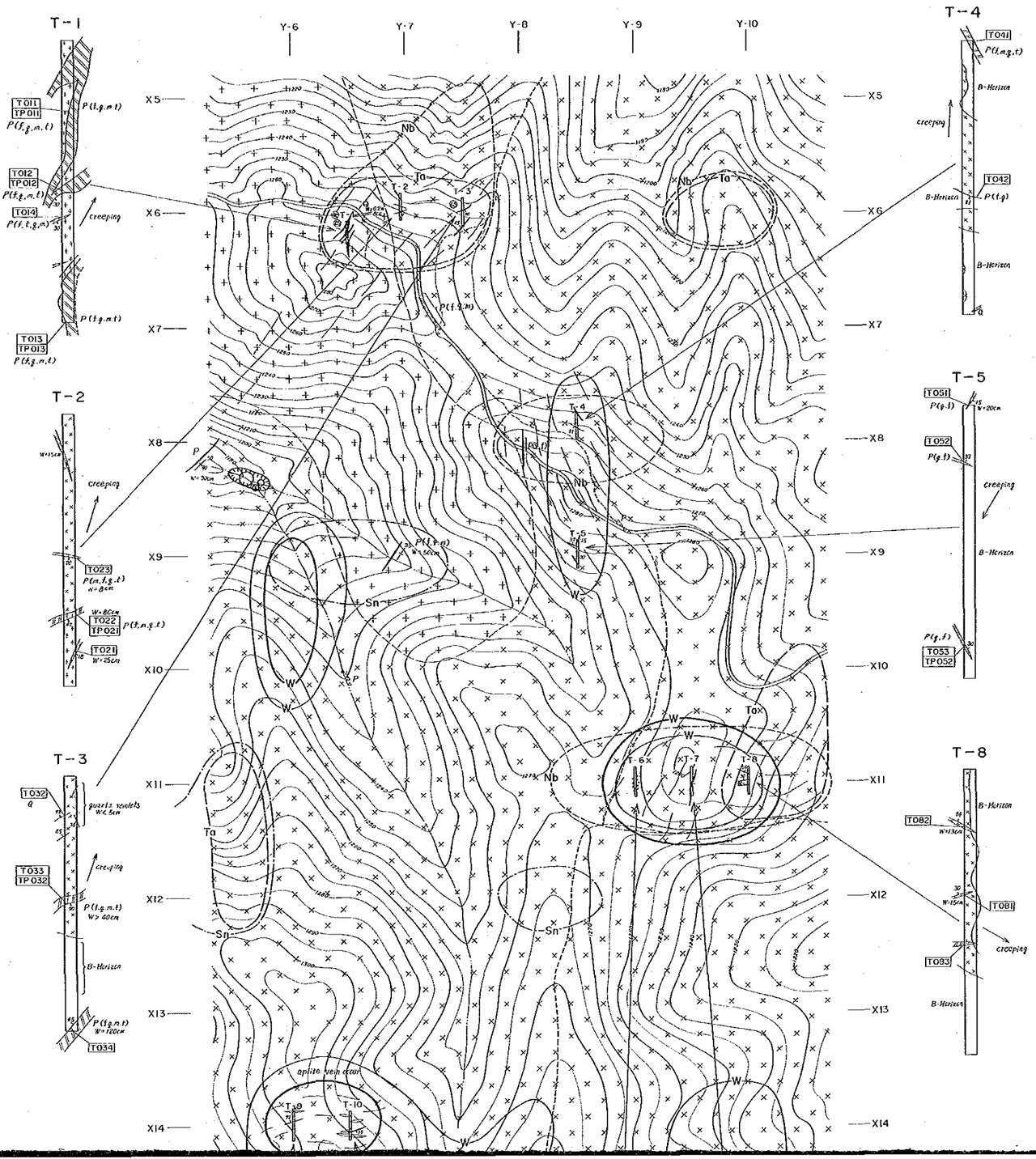



## LEGEND

- pegmatite vein
- quartz vein
- aplite vein
- biotite granite
- two mica granite
- T-1 trench and number
- mine works (inactive)

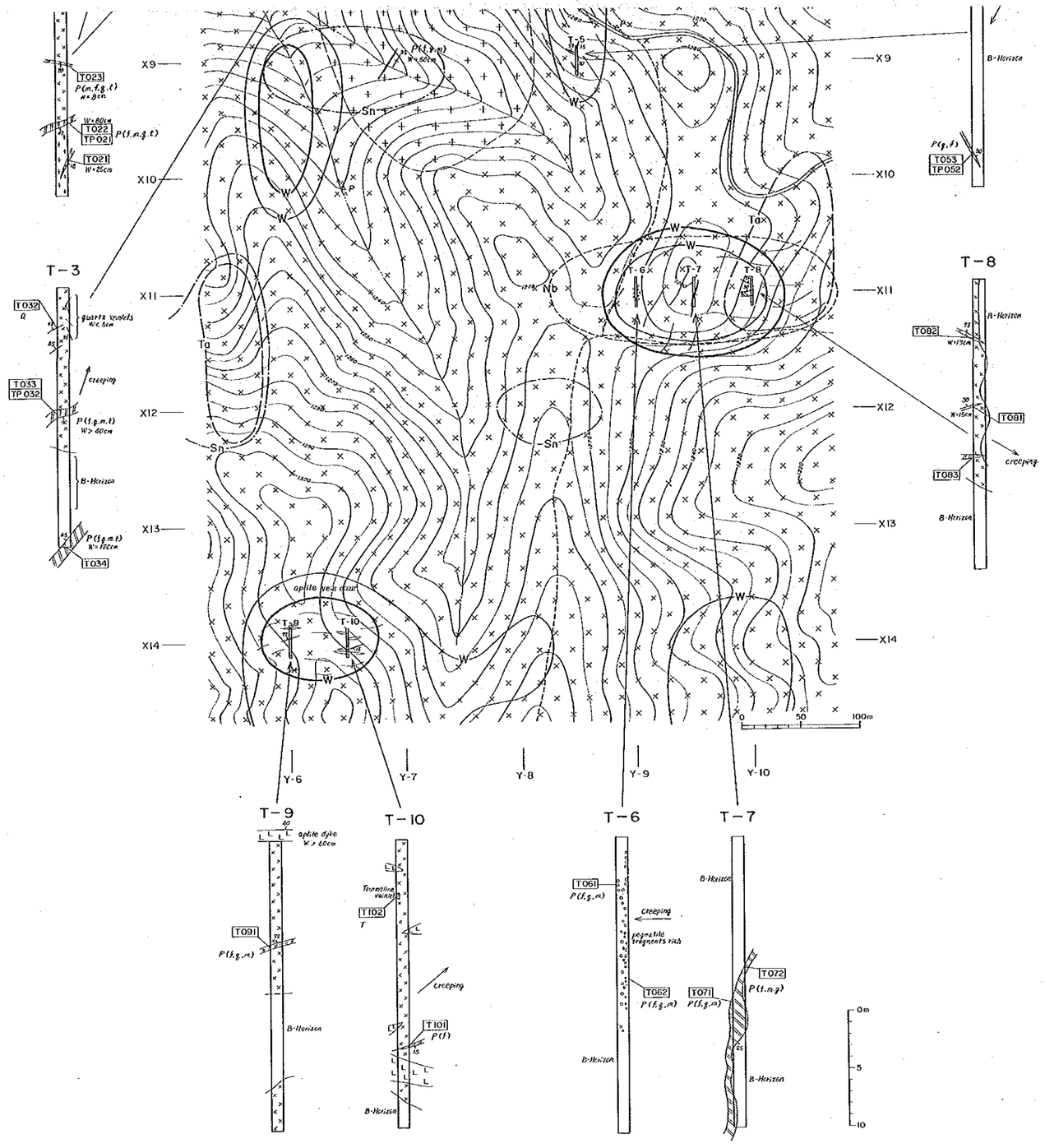
T-1 trench number
- pegmatite vein
- quartz vein
- aplite vein
- biotite granite
- two mica granite
- T111 rock sample
- TP174 panning sample

### Panning samples (cassiterite)

- ○ abundant
- O common
- o rare

### Geochemical indication

| Element | Symbol | Class | Range (ppm) |
|---|---|---|---|
| Nb | Nb | high | 49 ≦ Nb |
| | Nb | moderate | 37 ≦ Nb < 49 |
| Ta | Ta | high | 27 ≦ Ta |
| | Ta | moderate | 16 ≦ Ta < 27 |
| Sn | Sn | high | 79 ≦ Sn |
| | Sn | moderate | 61 ≦ Sn < 79 |

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- quartz vein
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| Ta | Ta | high | 27 ≦ Ta |
| | Ta | moderate | 16 ≦ Ta < 27 |
| Sn | Sn | high | 79 ≦ Sn |
| | Sn | moderate | 61 ≦ Sn < 79 |
| W | W | high | 77 ≦ W |
| | W | moderate | 46 ≦ W < 77 |

### Assay

| Sample No. | Sn(%) | W (%) | Nb(ppm) | Ta(ppm) | remarks |
|---|---|---|---|---|---|
| T 011 | 0.004 | 0.001 | 40 | 18 | P(f,q,m,t) |
| T 012 | 0.005 | 0.000 | 35 | 27 | P(f,q,m,t) |
| T 013 | 0.004 | 0.001 | 32 | 13 | P(f,q,m,f) |
| T 014 | 0.005 | 0.000 | 15 | <10 | P(f,t,q,m) |
| T 021 | 0.004 | 0.001 | 16 | <10 | P(m,f,g,t) |
| T 022 | 0.003 | 0.001 | 82 | 48 | P(f,m,g,t) |
| T 023 | 0.008 | 0.001 | 24 | 42 | P(m,f,g,t) |
| T 032 | 0.001 | 0.001 | 5 | <10 | Q |
| T 033 | 0.011 | 0.001 | 80 | 41 | P(f,g,m,t) |
| T 034 | 0.007 | 0.001 | 74 | 57 | P(f,q,m,t) |
| T 041 | 0.004 | 0.002 | 98 | 31 | P(f,m,q,t) |
| T 042 | 0.001 | 0.000 | 11 | <10 | P(q,f) |
| T 043 | 0.001 | 0.001 | 15 | <10 | P(q,f) |
| T 051 | 0.002 | 0.002 | 42 | 23 | P(q,f) |
| T 053 | 0.003 | 0.002 | 15 | <10 | P(q,f) |
| T 061 | 0.003 | 0.002 | 21 | <10 | P(f,q,m) |
| T 062 | 0.003 | 0.002 | 37 | 20 | P(f,q,m) |
| T 071 | 0.002 | 0.001 | 74 | 39 | P(f,q,m) |
| T 072 | 0.002 | 0.001 | 21 | 11 | P(f,m,q) |
| T 081 | 0.012 | 0.002 | 88 | 34 | P(f,q,m) |
| T 082 | 0.002 | 0.001 | 12 | <10 | P(f,q,m) |
| T 083 | 0.004 | 0.001 | 30 | 18 | P(f,q,m) |
| T 091 | 0.005 | 0.030 | 23 | <10 | P(f,q,m) |
| T 101 | 0.003 | 0.006 | 16 | <10 | P(f) |
| T 102 | 0.003 | 0.002 | 21 | <10 | T |

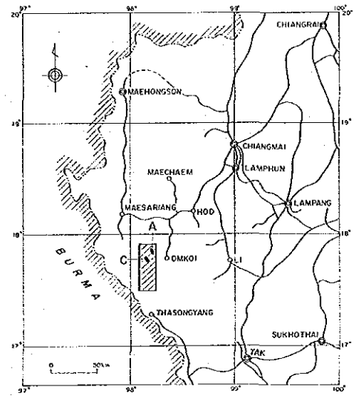
P ; pegmatite vein, Q ; quartz vein or quartz block
T ; tourmaline vein
f ; feldspar, q ; quartz, m ; muscovite, t ; tourmaline

MINERAL EXPLORATION
OF
THE YANG KIANG AREA, THAILAND
*PHASE II*

# SYNTHETIC MAP OF TRENCH SURVEY
## (SOUTH SUBAREA IN AREA A)

Scale 1 : 2,000

0 50 100 150 200m

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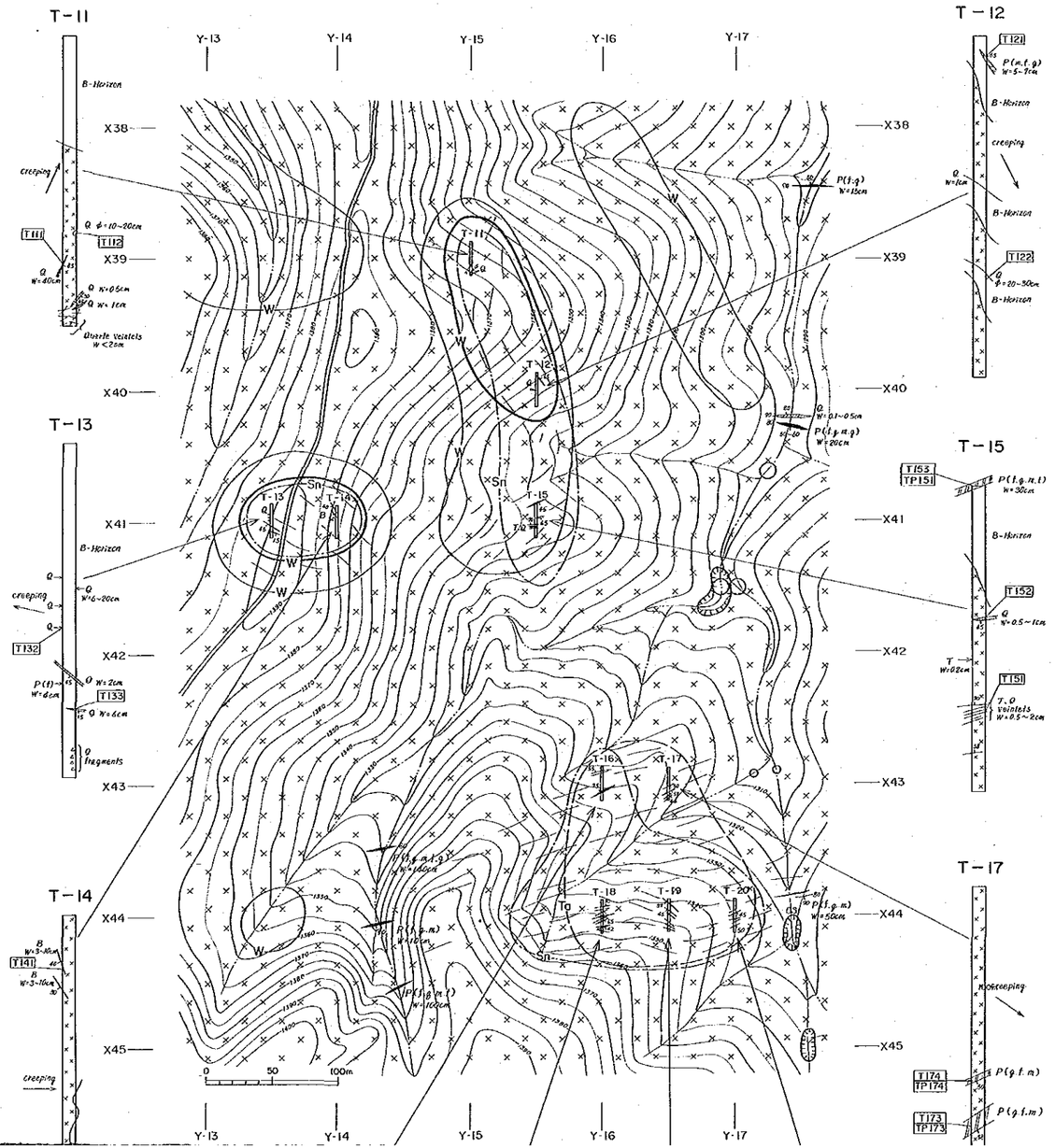


## LEGEND

- pegmatite vein
- quartz vein
- aplite vein
- biotite granite
- two mica granite
- T-1 trench and number
- mine works (inactive)

T-1 trench number
- pegmatite vein
- quartz vein
- aplite vein
- biotite granite
- two mica granite
- T111 rock sample
- TP174 panning sample

Panning samples (cassiterite)

- ○ abundant
- ○ common
- ○ rare

Geochemical indication

| Element | Symbol | Class | Range (ppm) |
|---|---|---|---|
| Nb | Nb | high | 49 ≦ Nb |
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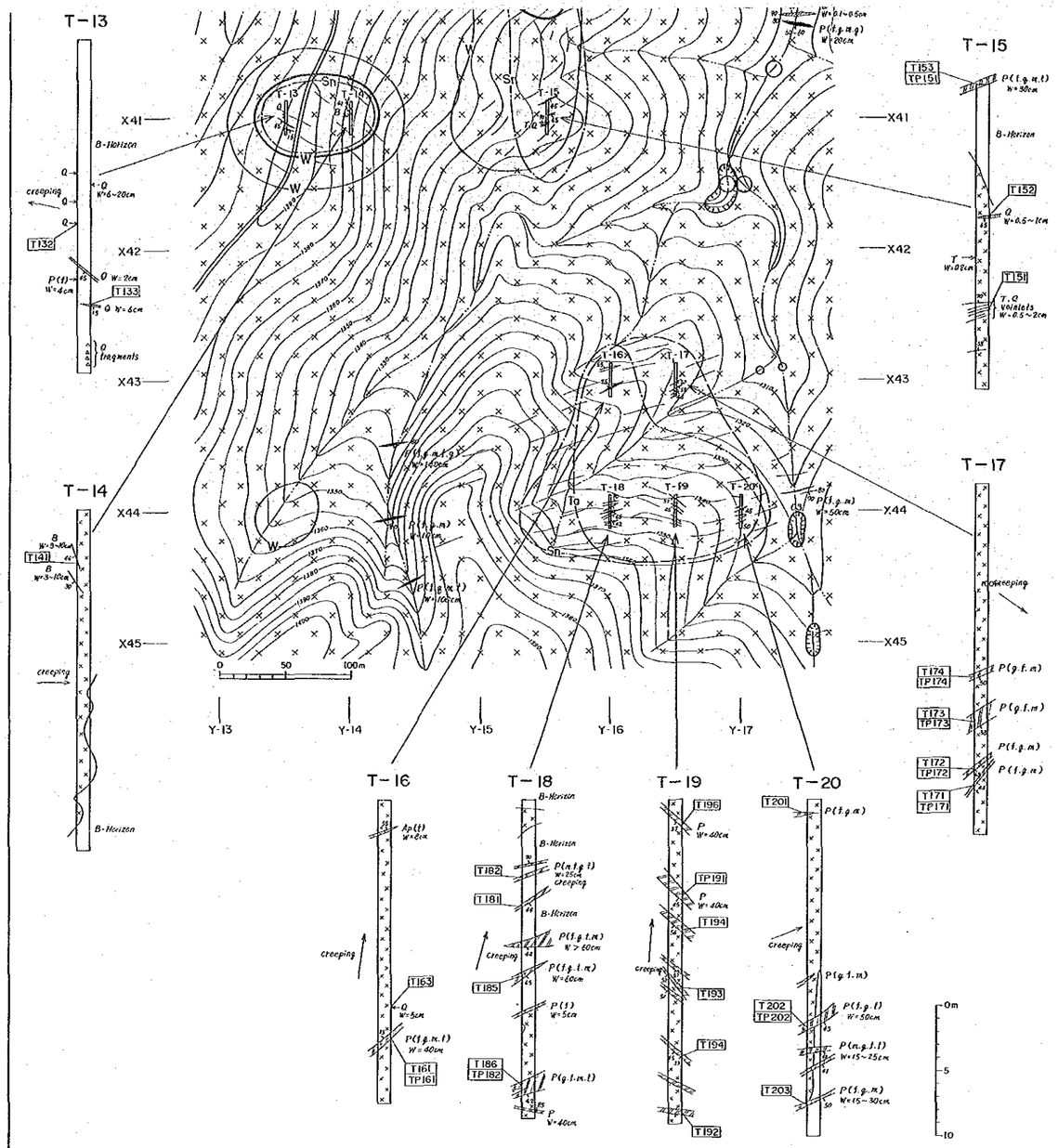


## LEGEND

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- quartz vein
- aplite vein
- biotite granite
- two mica granite
- T-1 trench and number
- mine works (inactive)

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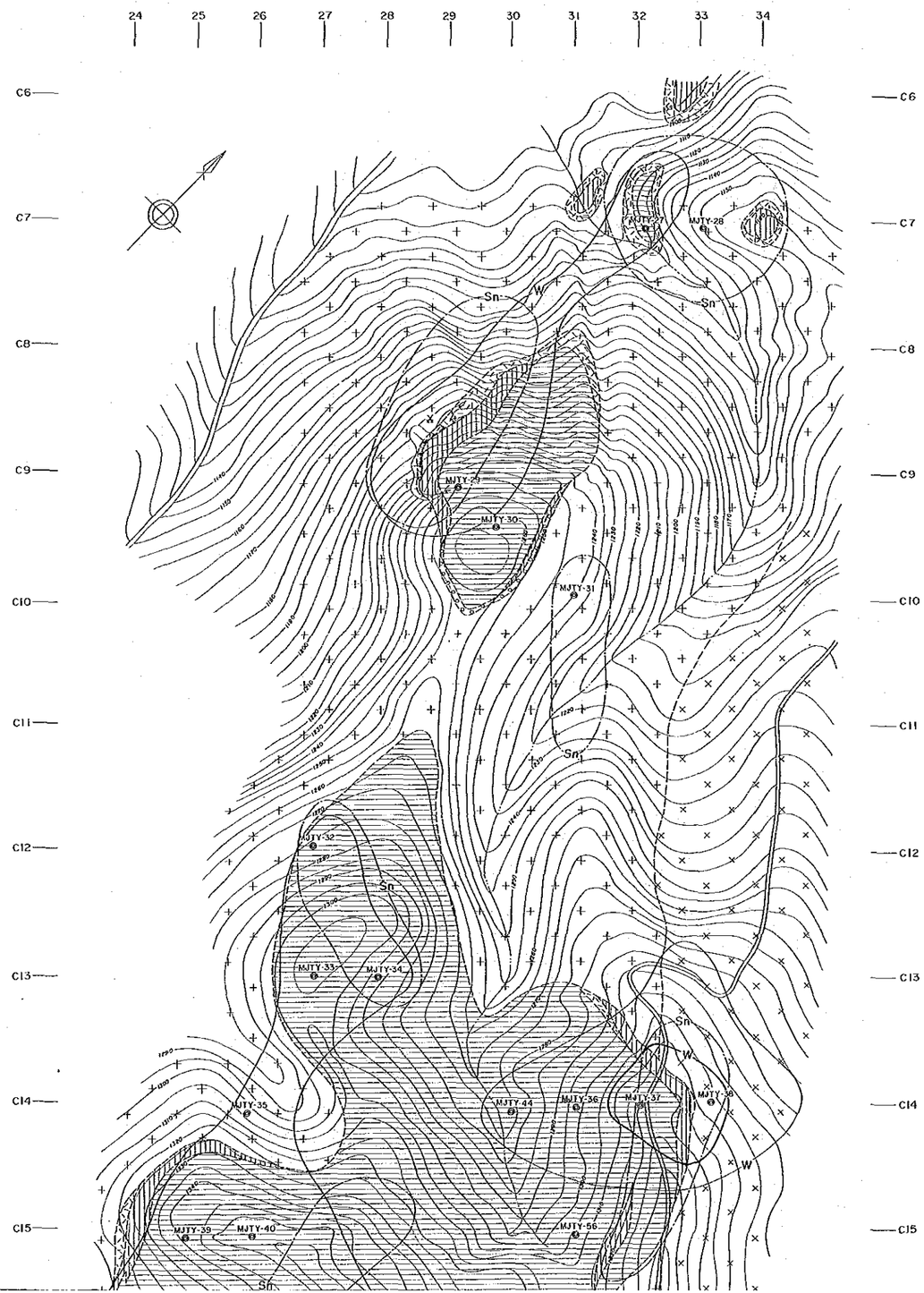
| Sn | Sn | high | 79 ≦ Sn |
| | Sn | moderate | 61 ≦ Sn < 79 |
| W | W | high | 77 ≦ W |
| | W | moderate | 46 ≦ W < 77 |

Assay

| Sample No. | Sn(%) | W (%) | Nb(ppm) | Ta(ppm) | remarks |
|---|---|---|---|---|---|
| T 111 | 0.001 | 0.001 | 4 | < 10 | Q |
| T 112 | 0.003 | 0.004 | 6 | < 10 | Q |
| T 121 | 0.013 | 0.009 | 170 | 160 | P(m.f.q) |
| T 122 | 0.001 | 0.001 | 6 | < 10 | Q |
| T 132 | 0.001 | 0.005 | 3 | < 10 | Q |
| T 133 | 0.002 | 0.011 | 7 | < 10 | Q(q.l) |
| T 141 | 0.007 | 0.016 | 21 | < 10 | granite |
| T 151 | 0.008 | 0.016 | 8 | < 10 | Q(q.l) |
| T 152 | 0.004 | 0.009 | 12 | < 10 | Q |
| T 153 | 0.011 | 0.009 | 45 | 110 | P(f.q.m.t) |
| T 161 | 0.009 | 0.004 | 58 | 96 | P(f.q.m.t) |
| T 163 | 0.000 | 0.000 | < 1 | < 10 | Q |
| T 172 | 0.010 | 0.007 | 170 | 300 | P(f.q.m.t) |
| T 173 | 0.011 | 0.004 | 69 | 130 | P(q.f.m) |
| T 174 | 0.009 | 0.004 | 76 | 110 | P(q.f.m) |
| T 182 | 0.004 | 0.004 | 49 | 37 | P(m.f.q.t) |
| T 185 | 0.018 | 0.008 | 82 | 200 | P(q.f.m) |
| T 186 | 0.011 | 0.005 | 130 | 73 | P(f.q.t.m) |
| T 192 | 0.008 | 0.002 | 68 | 140 | P(m.f.q.t) |
| T 193 | 0.004 | 0.004 | 72 | 89 | P(m.f.q.t.b) |
| T 194 | 0.005 | 0.002 | 45 | 25 | P(m.f.q.t) |
| T 196 | 0.005 | 0.004 | 59 | 20 | P(m.f.q.t) |
| T 201 | 0.012 | 0.002 | 31 | 32 | P(f.q.m) |
| T 202 | 0.009 | 0.003 | 72 | 64 | P(q.f.m) |
| T 203 | 0.008 | 0.006 | 70 | 47 | P(f.q.m.t) |

P ; pegmatite vein, Q ; quartz vein or quartz block
T ; tourmaline vein
f ; feldspar, q ; quartz, m ; muscovite, t ; tourmaline



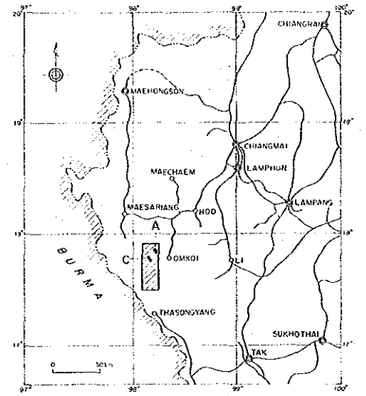

PL - 3

MINERAL EXPLORATION
OF
THE YANG KIANG AREA, THAILAND
PHASE Ⅲ

# GEOLOGIC MAP OF NORTHERN PART OF AREA C
## (AREA C)

Scale 1 : 2,000

0 50 100 150 200m

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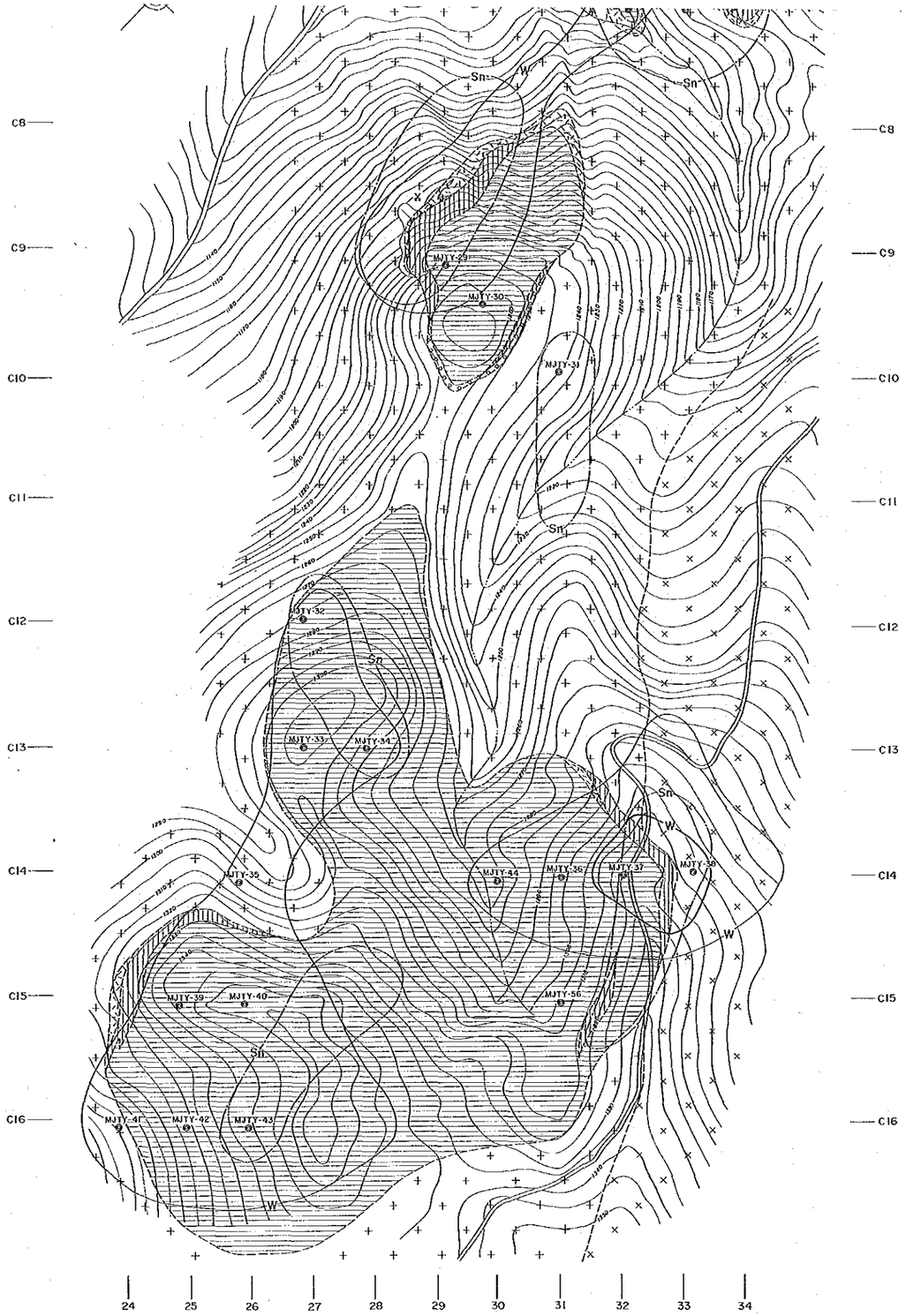
## LEGEND

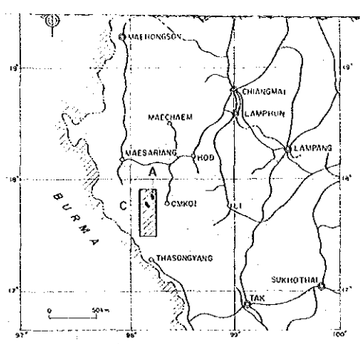
- two mica granite
- biotite granite
- sedimentary rocks
- gossan
- silicified rock
- skarn
- MJTY-1 drill hole and number

Geochemical indication

| Element | Symbol | Class | Range (ppm) |
|---|---|---|---|
| Sn | Sn | high | S 52 / T 956 / B 150 ≦ Sn |
| | Sn | moderate | S 30 / T 429 / B 90 ≦ Sn < S 52 / T 956 / B 150 |
| W | W | high | S 104 / T 946 / B 315 ≦ W |
| | W | moderate | S 46 / T 360 / B 131 ≦ W < S 104 / T 946 / B 315 |

S : Sedimentary rock area
T : Two mica granite area
B : Biotite granite area

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METAL MINING AGENCY OF JAPAN

JUNE 1989

## LEGEND

- two mica granite
- biotite granite
- sedimentary rocks
- gossan
- silicified rock
- skarn
- MJTY-1 drill hole and number

Geochemical indication

| Element | Symbol | Class | Range (ppm) |
|---|---|---|---|
| Sn | Sn | high | S 52 / T958 / B150 ≦ Sn |
| | Sn | moderate | S 30 / T429 / B 30 ≦ Sn < S 52 / T958 / B150 |
| W | W | high | S104 / T946 / B315 ≦ W |
| | W | moderate | S 46 / T389 / B131 ≦ W < S104 / T946 / B315 |

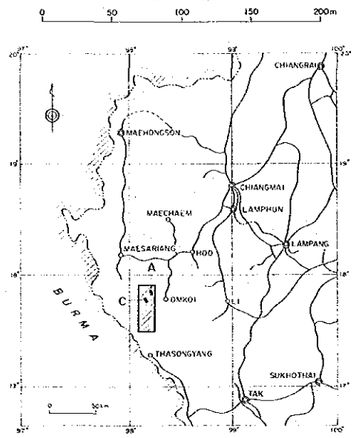
S : Sedimentary rock area
T : Two mica granite area
B : Biotite granite area

0 50 100m

MINERAL EXPLORATION
OF
THE YANG KIANG AREA, THAILAND
PHASE III

# GEOLOGIC MAP OF CENTRAL PART OF AREA C
## (AREA C)

Scale 1 : 2,000

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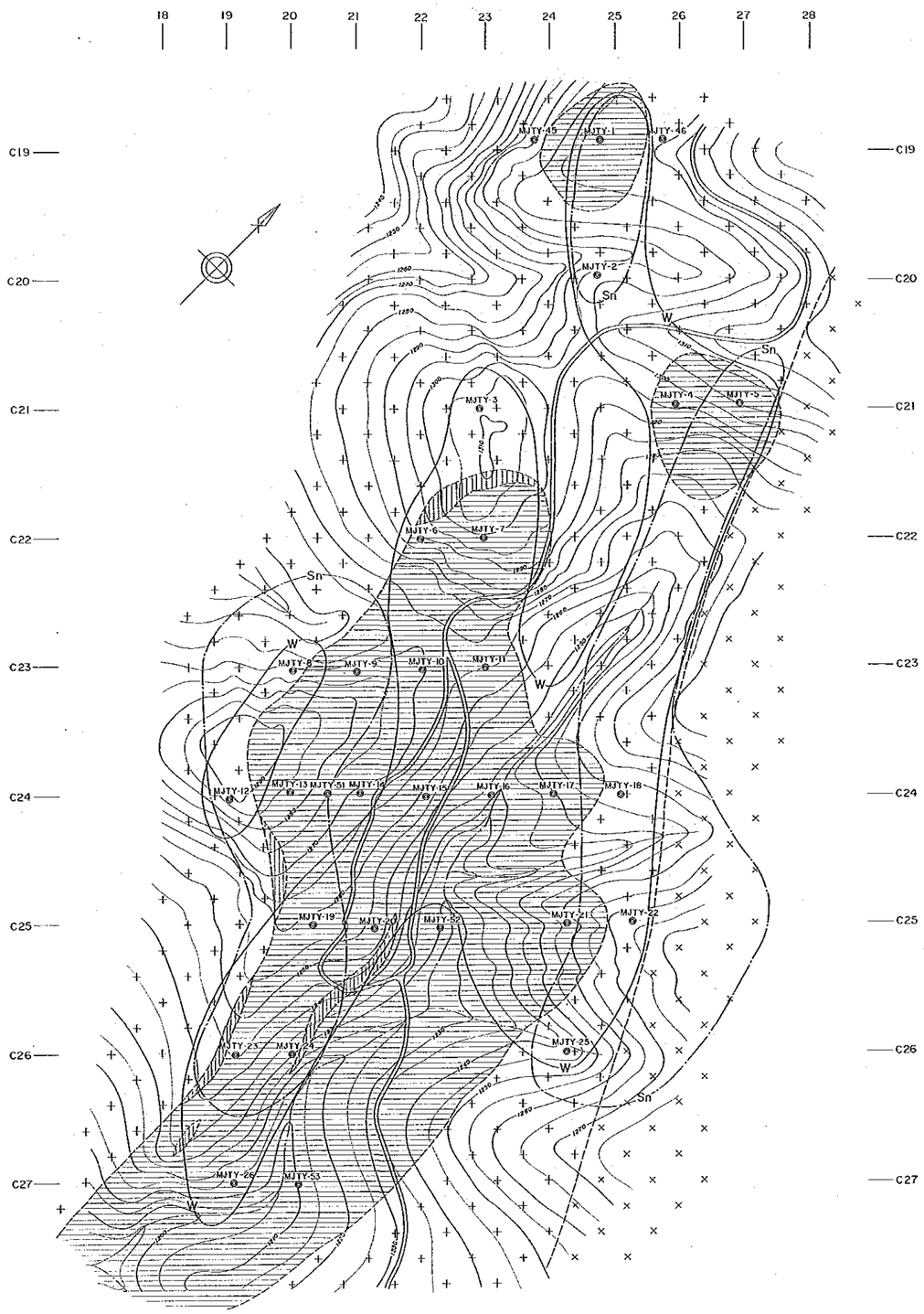


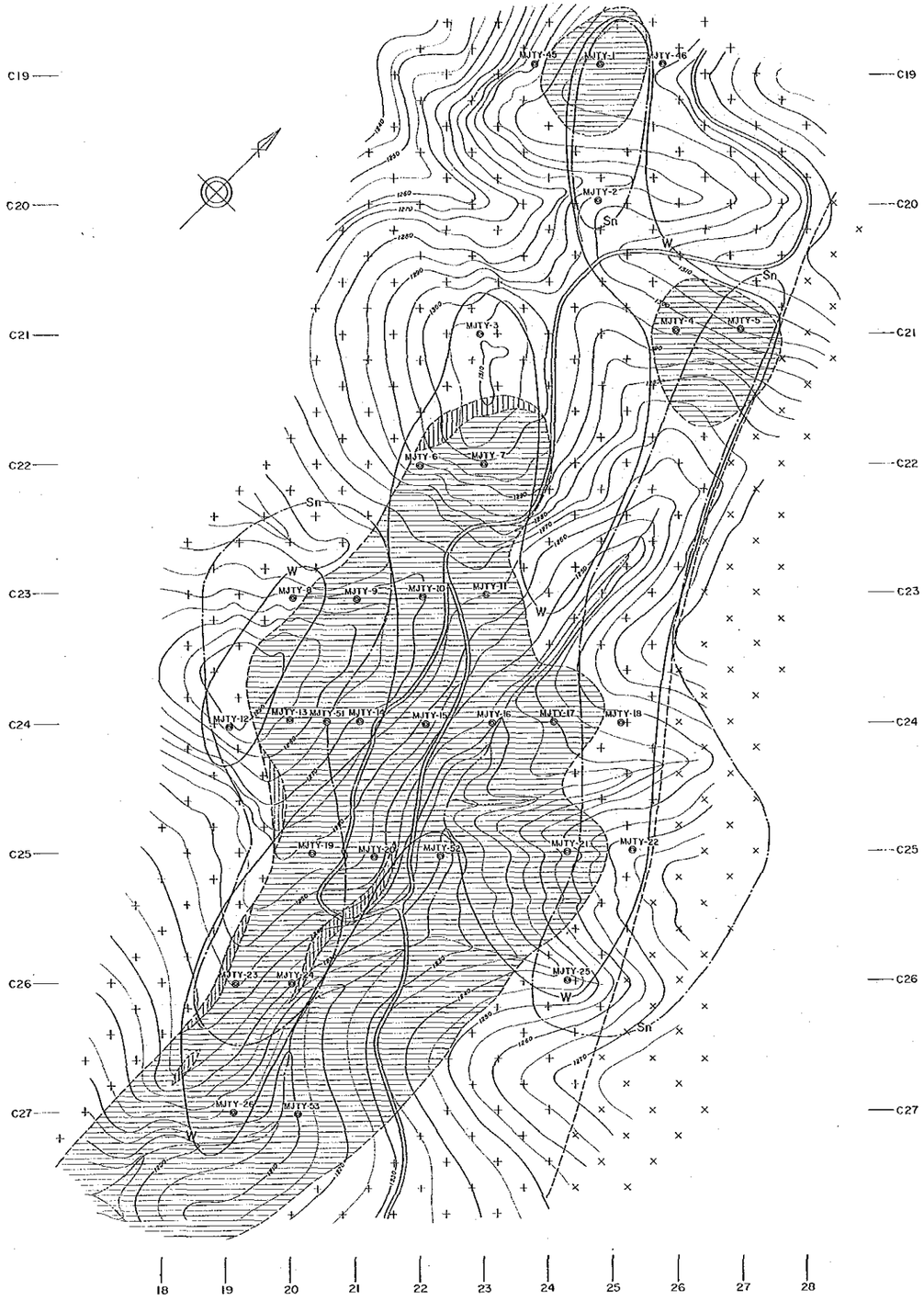

## LEGEND

- two mica granite
- biolite granite
- sedimentary rocks
- gossan
- MJTY-1 ◎ drill hole and number

Geochemical indication

| Element | Symbol | Class | Range (ppm) |
|---|---|---|---|
| Sn | Sn | high | S 52 / T958 / B150 ≦ Sn |
| | Sn | moderate | S 30 / T429 / B 90 ≦ Sn < S 52 / T958 / B150 |
| W | W | high | S104 / T946 / B315 ≦ W |
| | W | moderate | S 46 / T360 / B131 ≦ W < S104 / T946 / B315 |

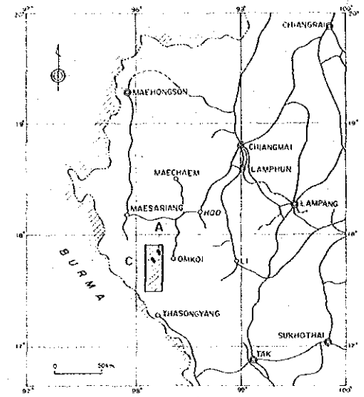
S : Sedimentary rock area
T : Two mica granite area
B : Biotite granite area




(AREA C)

Scale 1 : 2,000

0 50 100 150 200m

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## LEGEND

- two mica granite
- biotite granite
- sedimentary rocks
- gossan
- MJTY-1 drill hole and number

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T : Two mica granite area
B : Biotite granite area

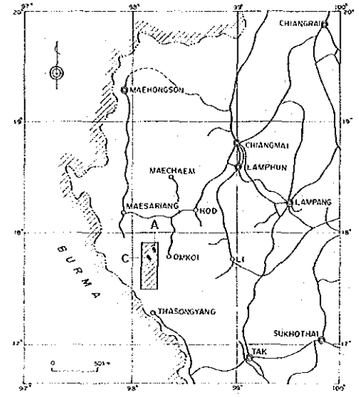
0 50 100m

MINERAL EXPLORATION
OF
THE YANG KIANG AREA, THAILAND
PHASE III

# GEOLOGICAL PROFILE OF DRILLING (1)
# (AREA C)

Scale 1 : 1,000

0 20 40 60 80 100m

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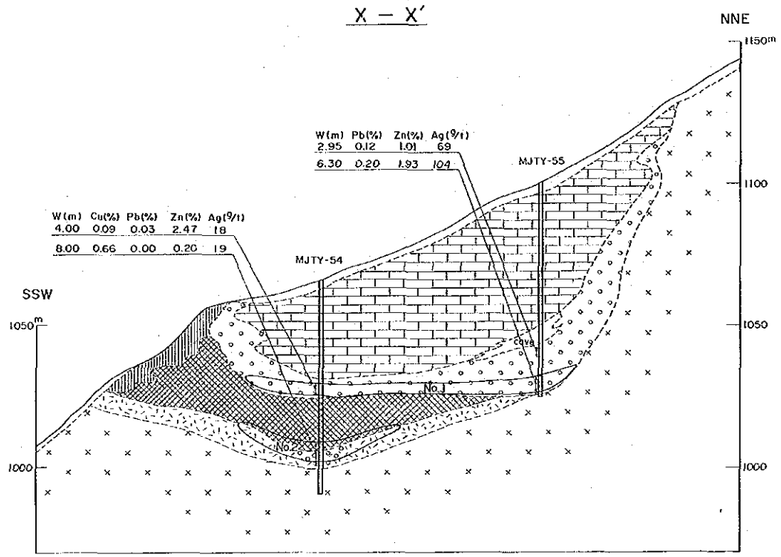
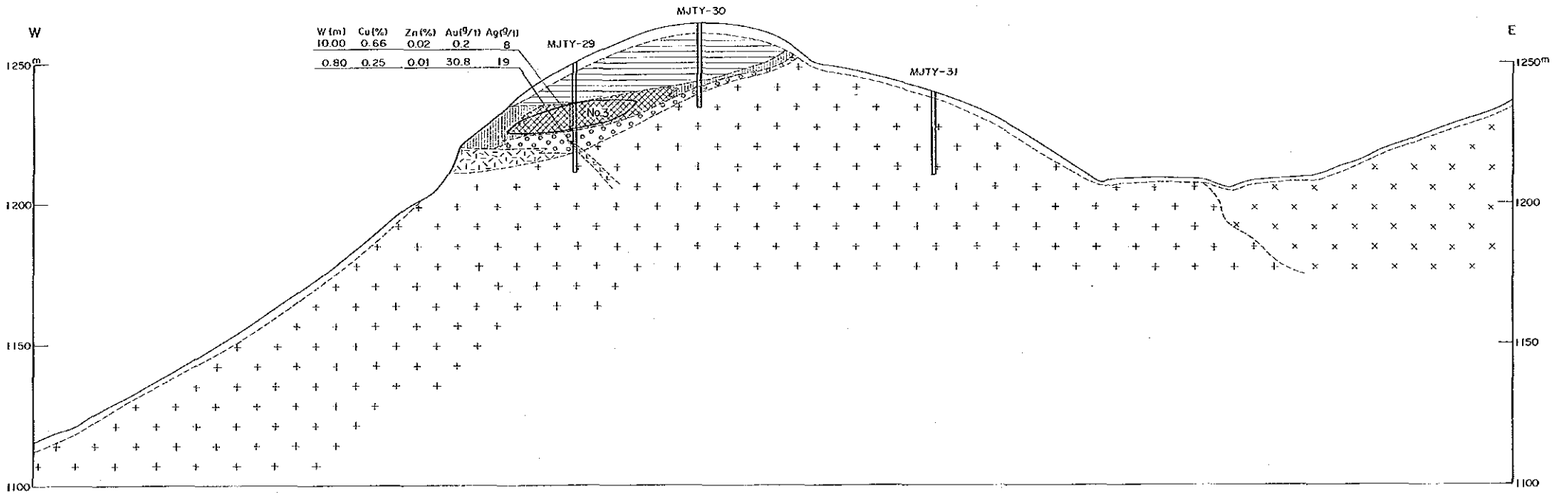
## X — X'



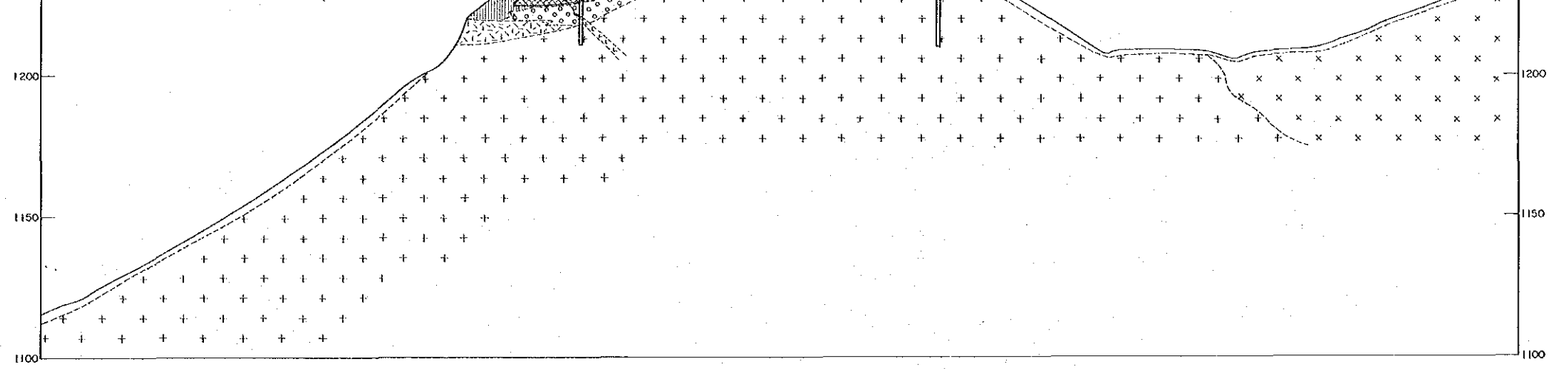

## Y — Y'



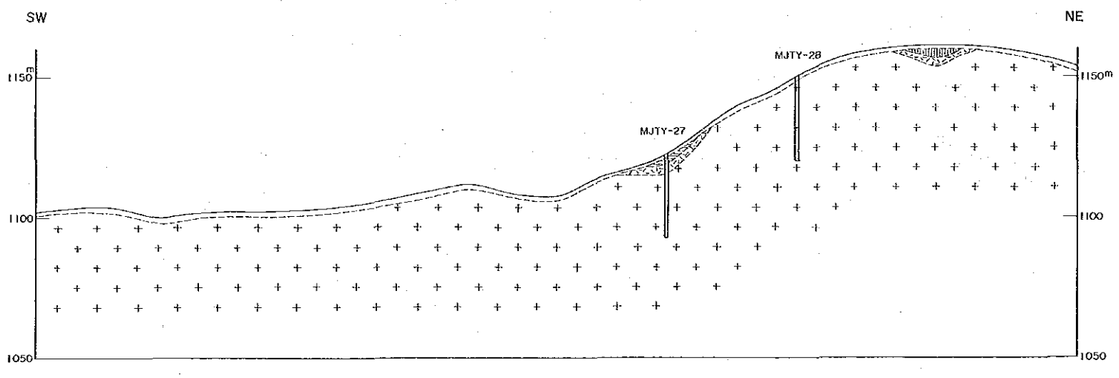

## Line C7

LEGEND

- overburden



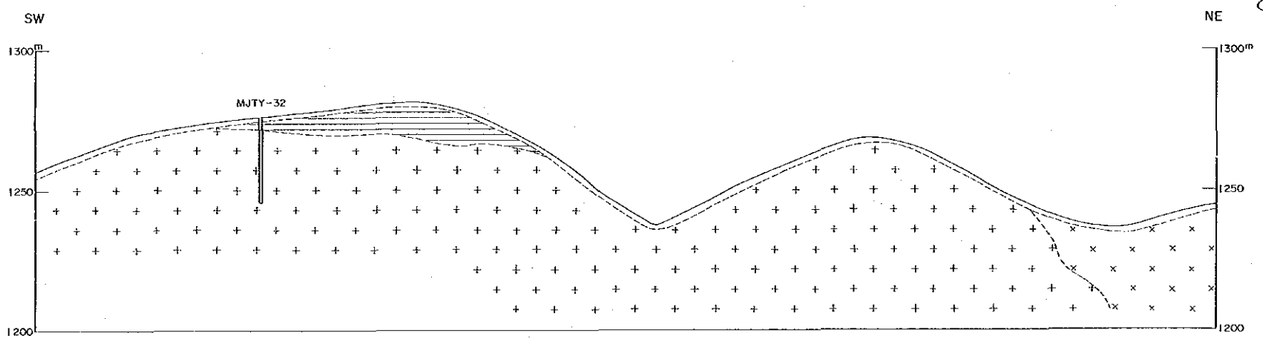

Line C7




LEGEND

- overburden
- aplite
- two mica granite
- biotite granite
- sedimentary rocks
- limestone
- gossan
- silicified rock
- massive sulfide
- skarn
- orebody

Line C12

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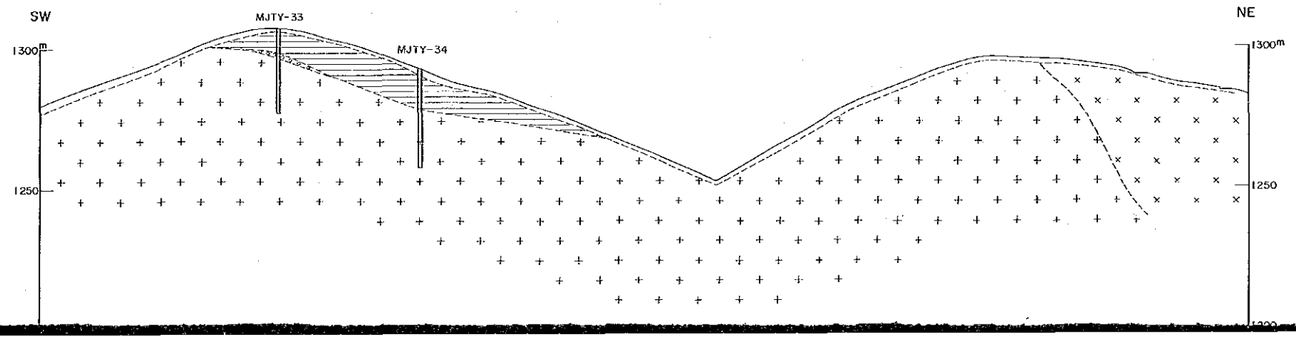
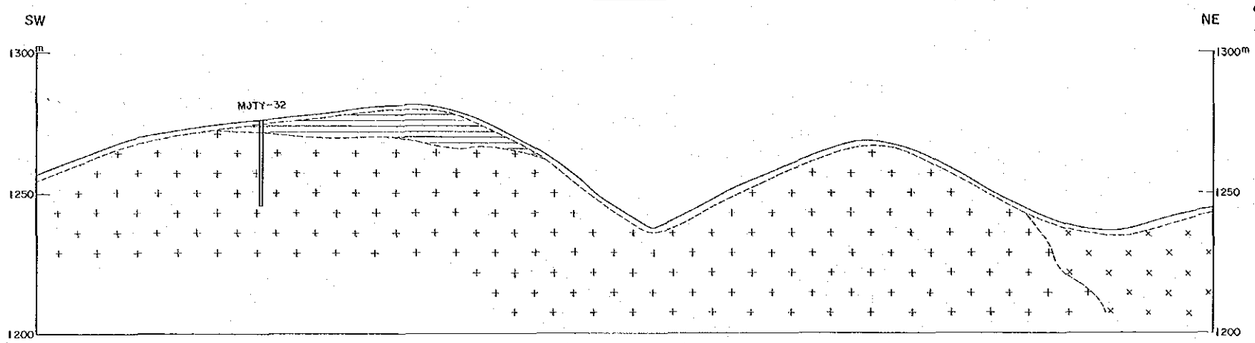


1050 1050

gossan
silicified rock
massive sulfide
skarn
orebody

## Line C12

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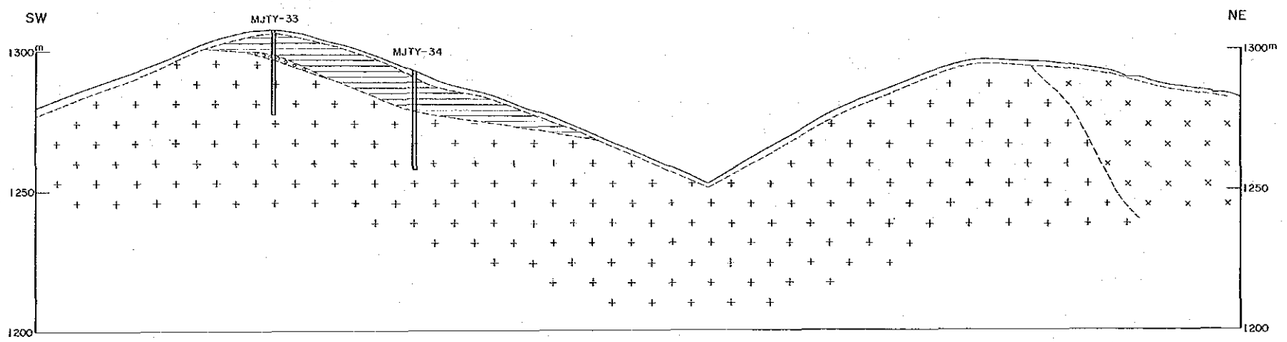


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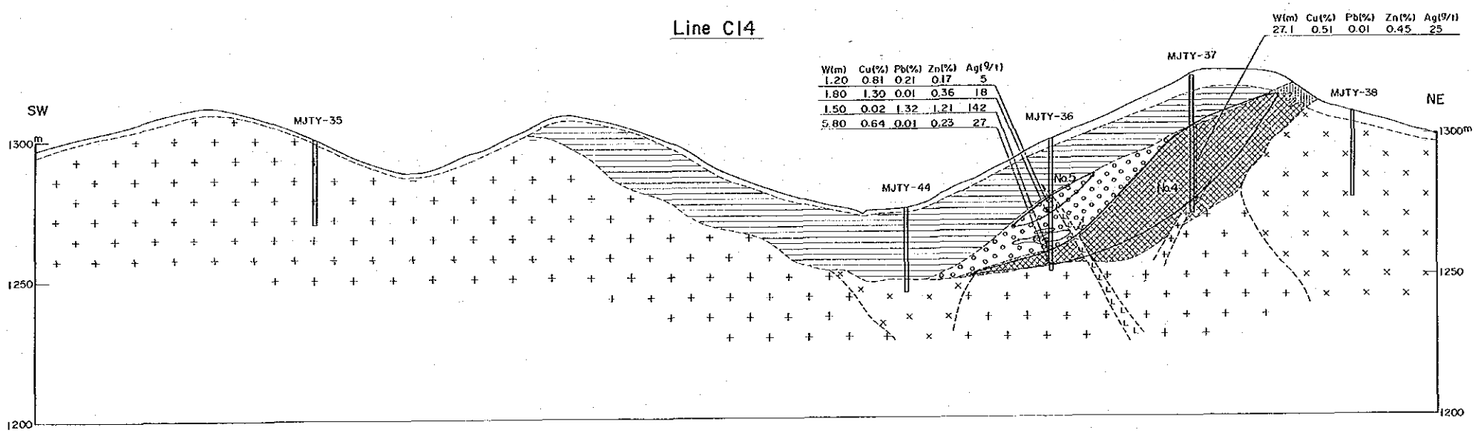


MINERAL EXPLORATION
OF
THE YANG KIANG AREA, THAILAND
PHASE III

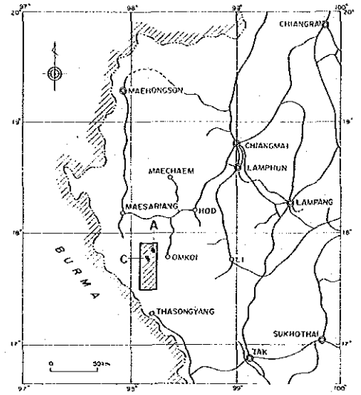
# GEOLOGICAL PROFILE OF DRILLING (2)
# (AREA C)

## LEGEND

- overburden
- two mica granite
- biotite granite
- sedimentary rocks
- gossan
- massive sulfide
- skarn
- orebody

Scale 1 : 1,000

0 20 40 60 80 100m

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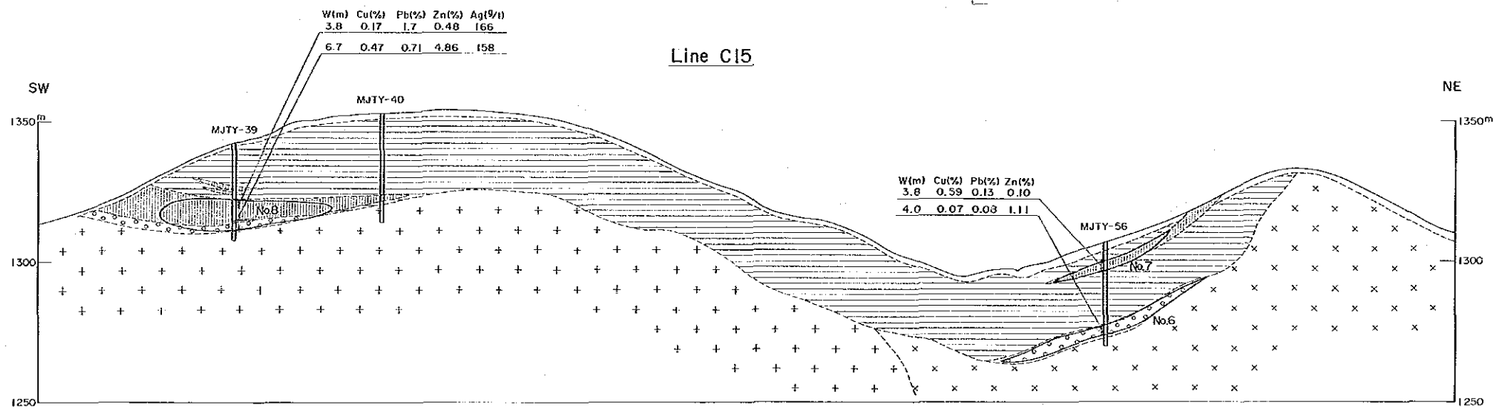
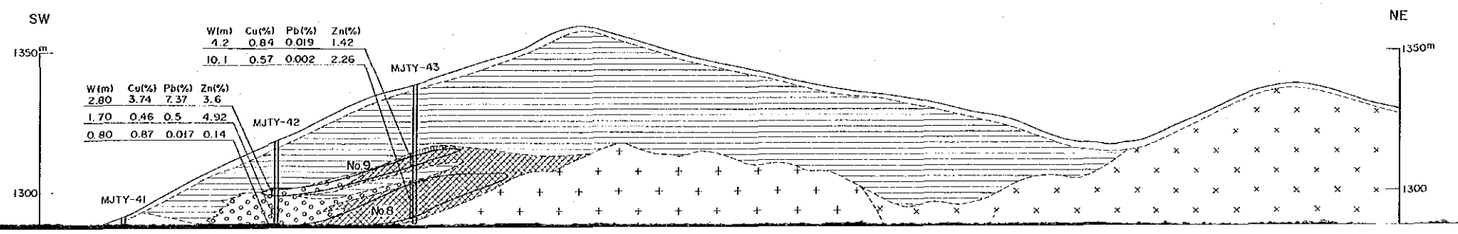
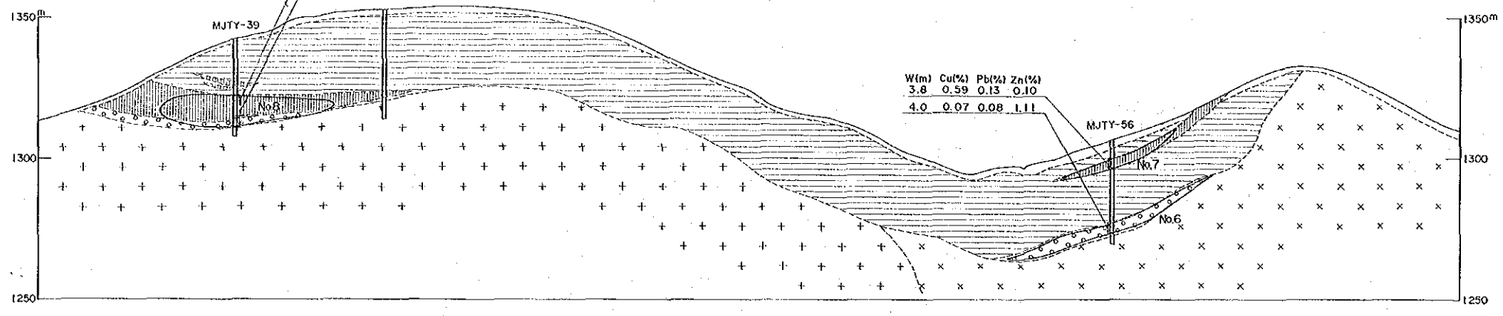
## Line C15

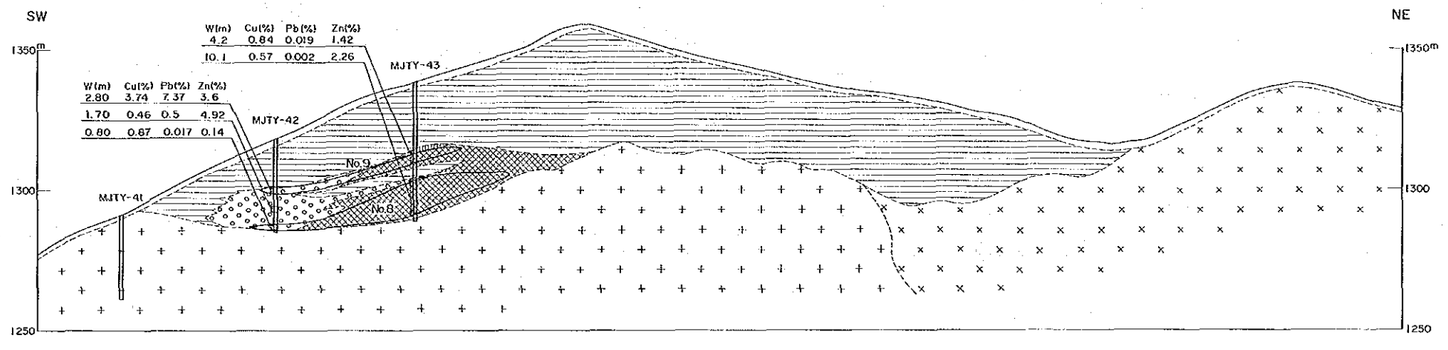



## Line C16






## Line C16

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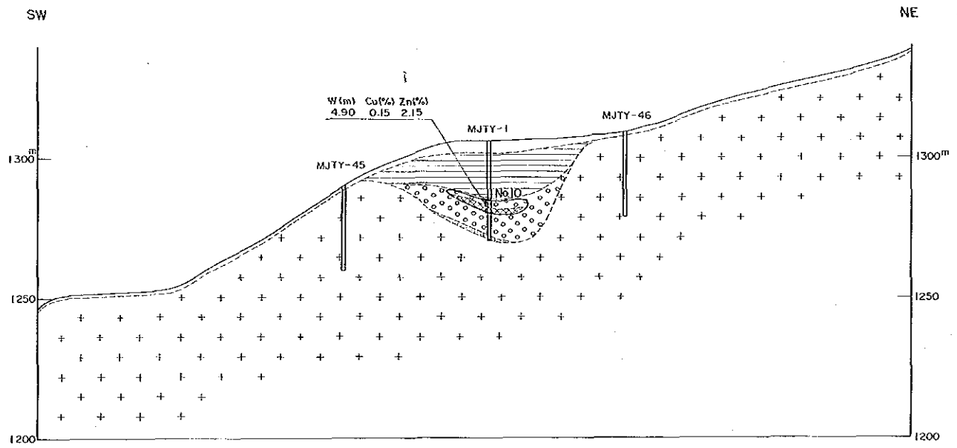
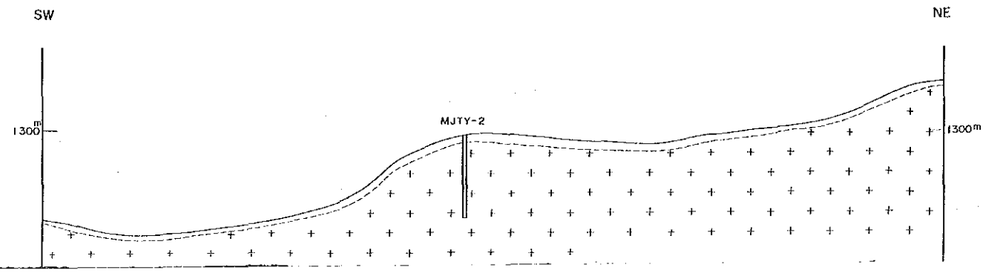
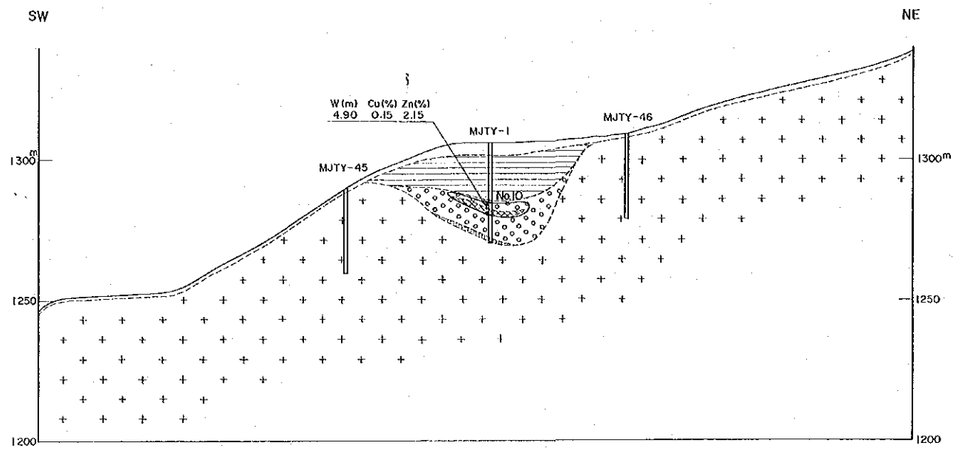


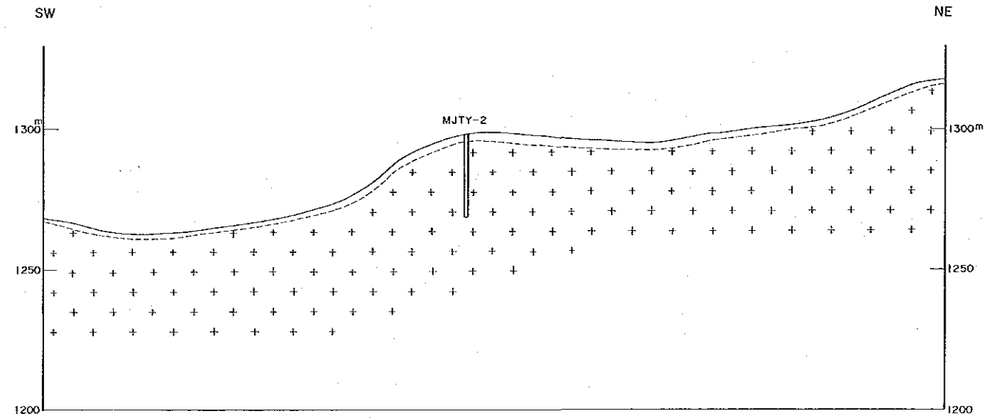

## Line C20



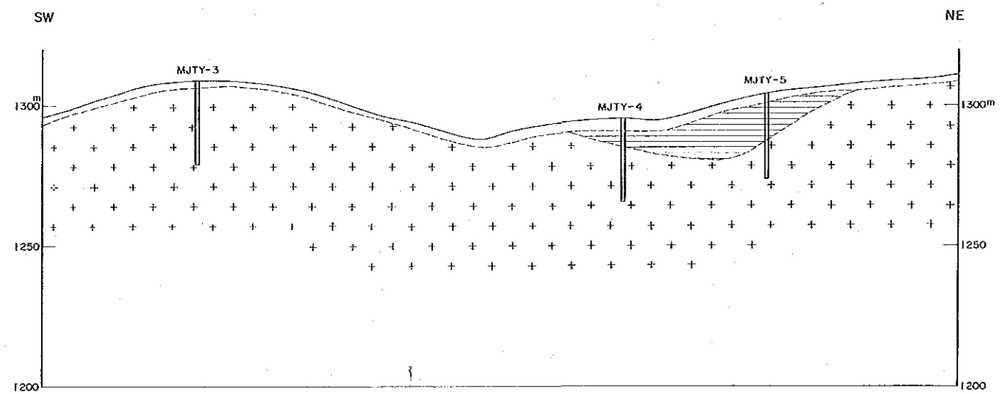
## Line C19




## Line C20




## Line C21



*MINERAL EXPLORATION*
OF
THE YANG KIANG AREA, THAILAND
PHASE Ⅲ

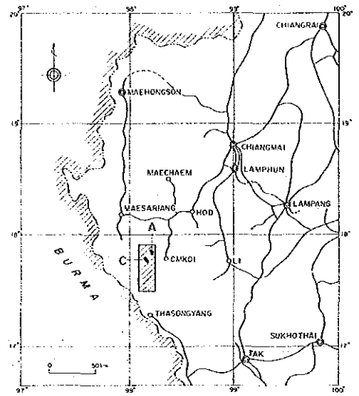
# GEOLOGICAL PROFILE OF DRILLING (3)
# (AREA C)

LEGEND

- overburden
- diabase
- two mica granite
- *biotite granite*
- sedimentary rocks
- gossan
- silicified rock
- *massive sulfide*
- skarn
- orebody

Scale 1 : 1,000

0 20 40 60 80 100m

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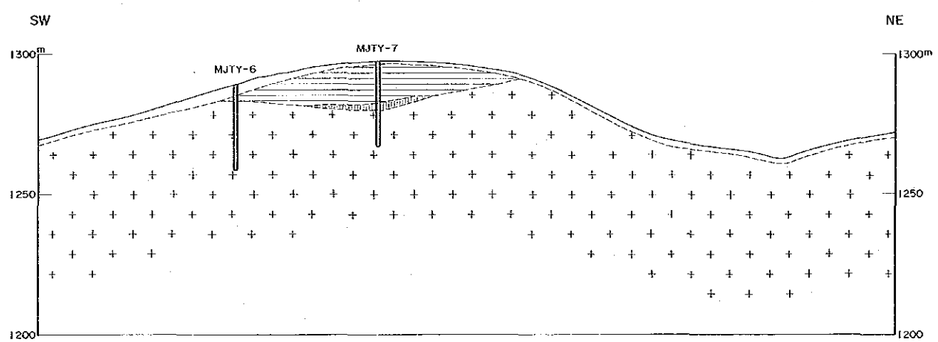
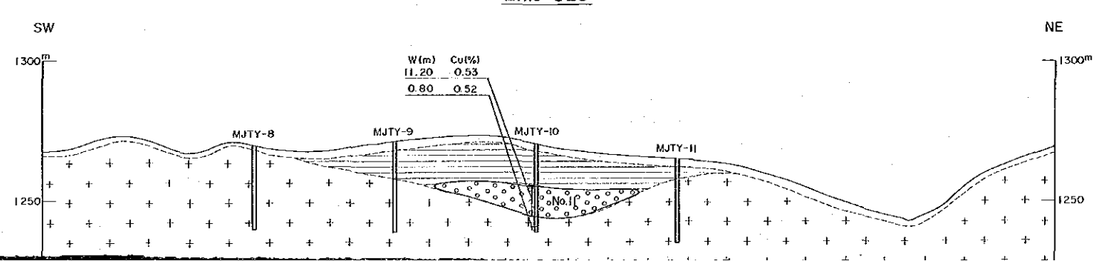
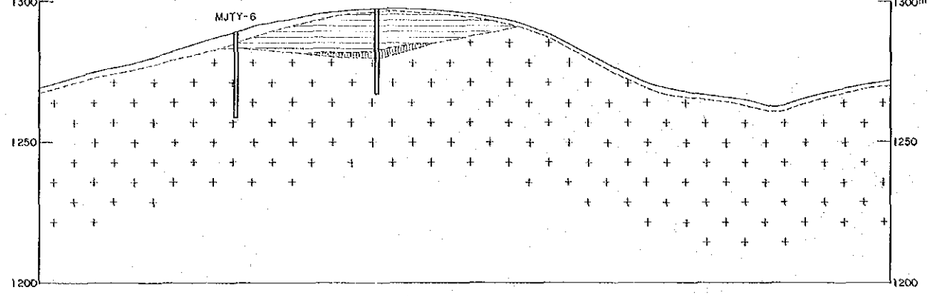
## Line C22

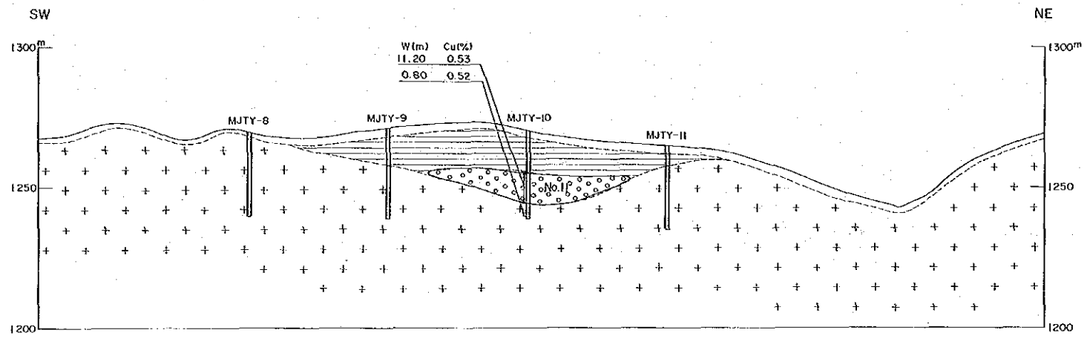



## Line C23






## Line C23

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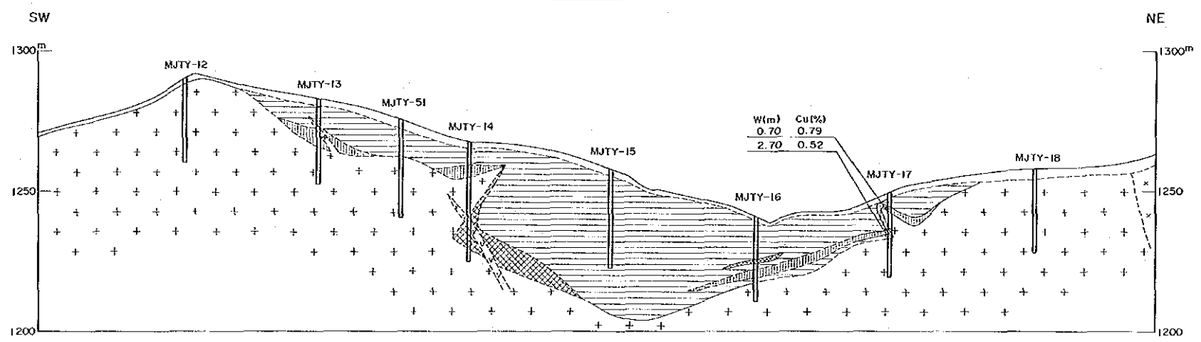


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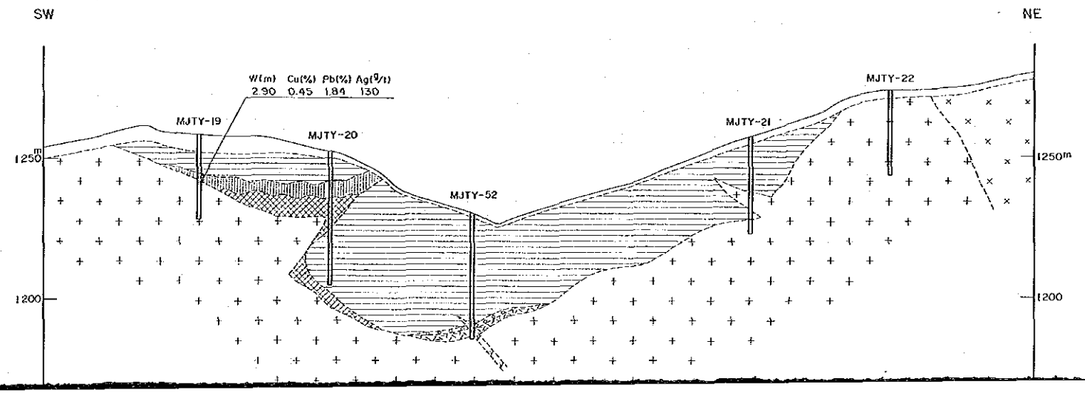
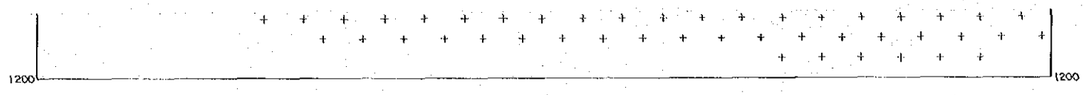
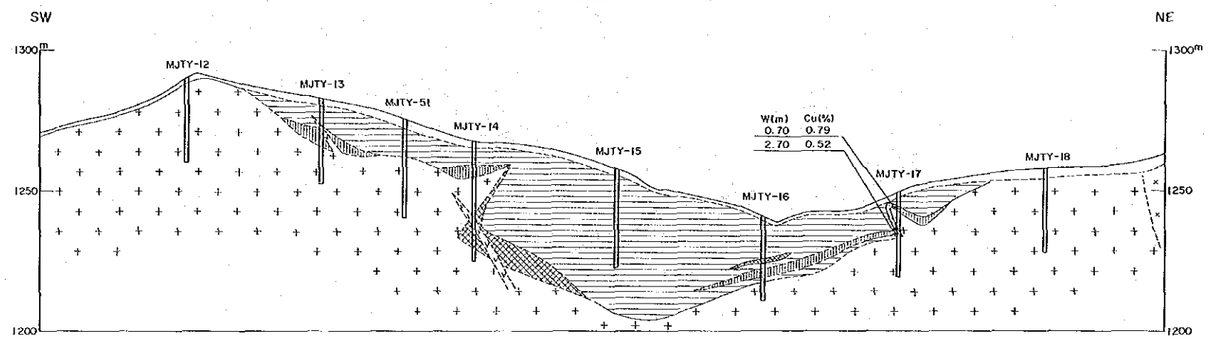





## Line C24

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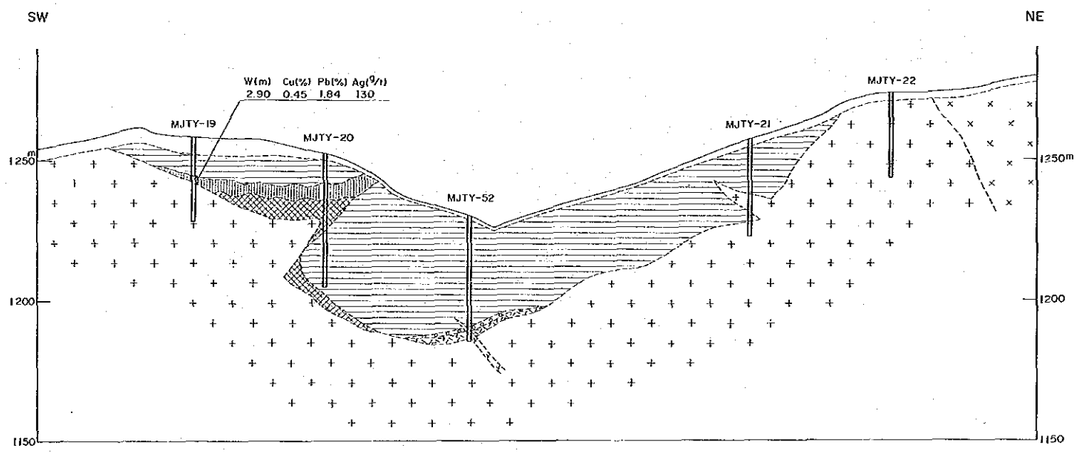
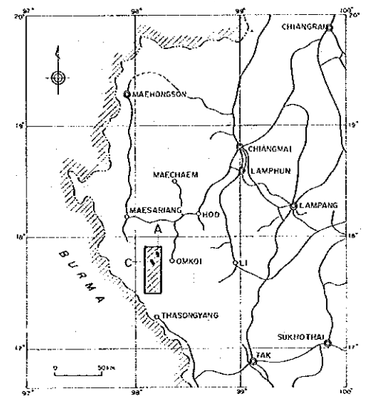


MINERAL EXPLORATION
OF
THE YANG KIANG AREA, THAILAND
PHASE II

# GEOLOGICAL PROFILE OF DRILLING (4)
# (AREA C)

Scale 1 : 1,000

0 20 40 60 80 100m



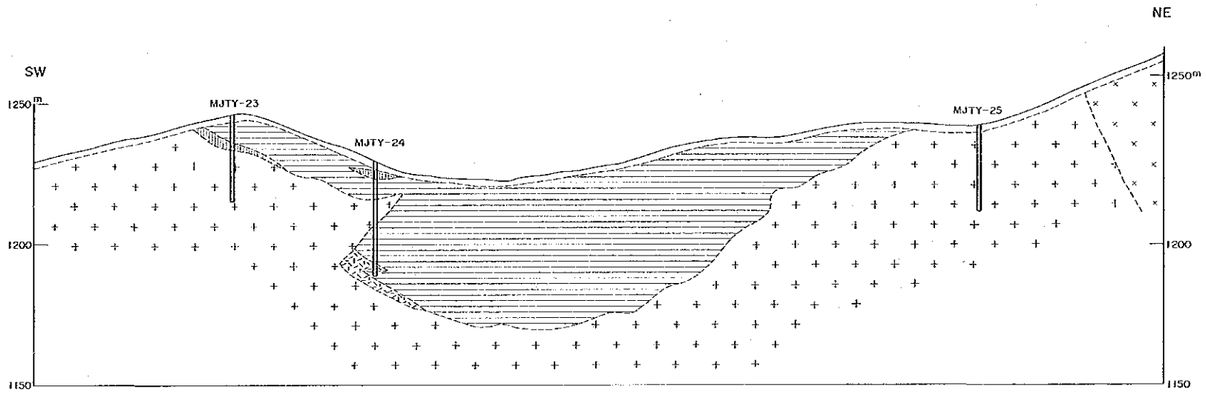

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN

JUNE 1989

## LEGEND

- overburden
- two mica granite
- biotite granite
- sedimentary rocks
- gossan
- silicified rock
- massive sulfide
- skarn
- orebody

## Line C26

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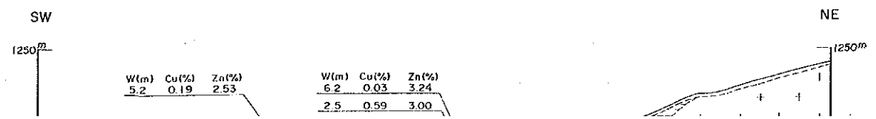

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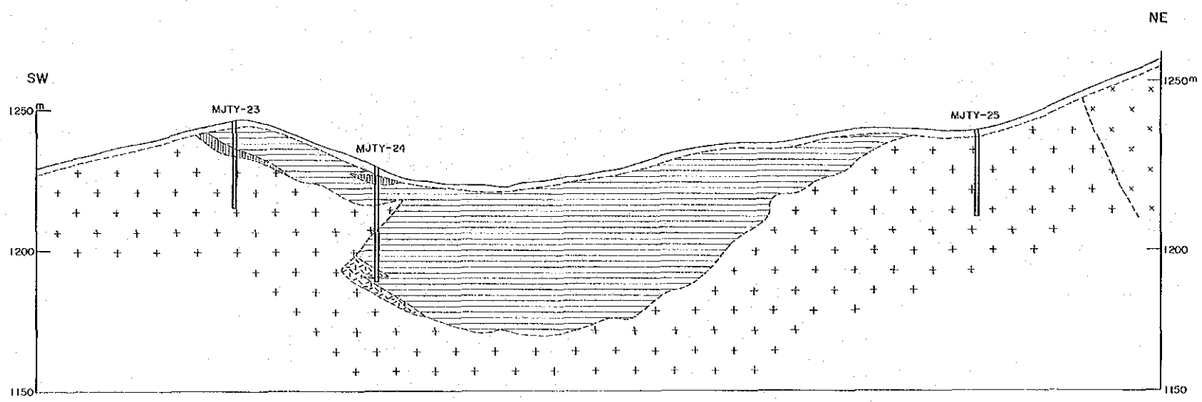


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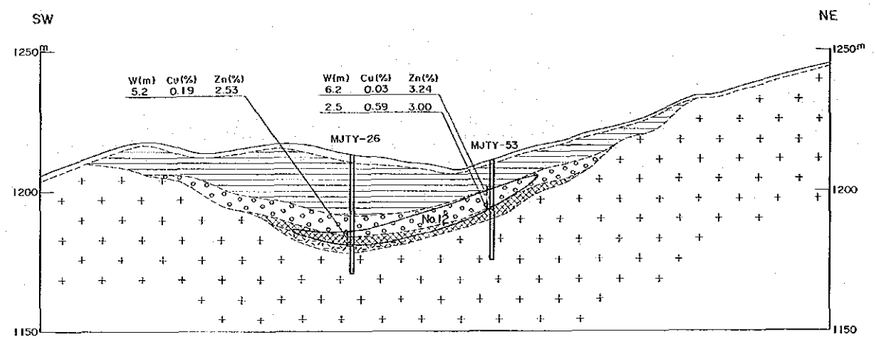
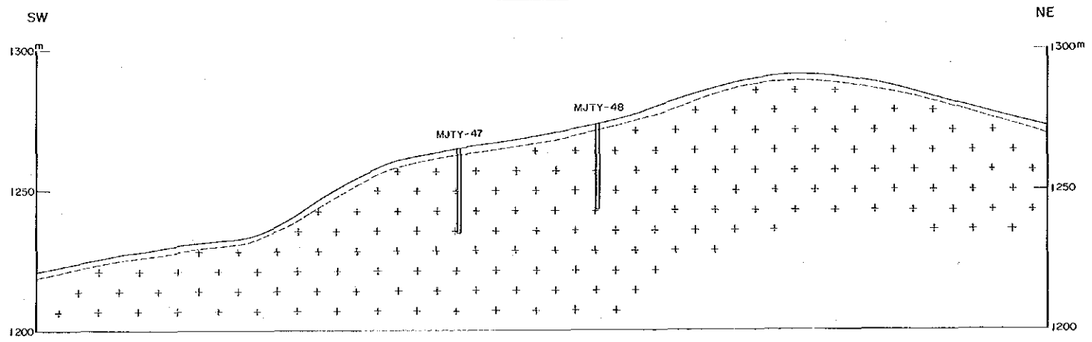
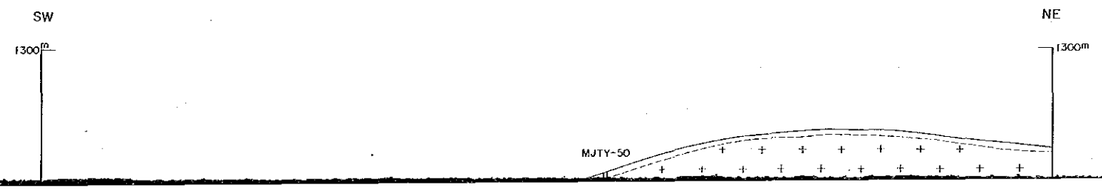
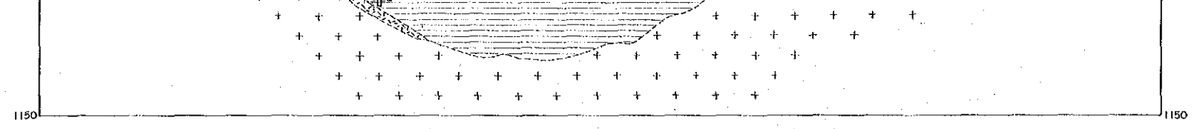



## Line C41

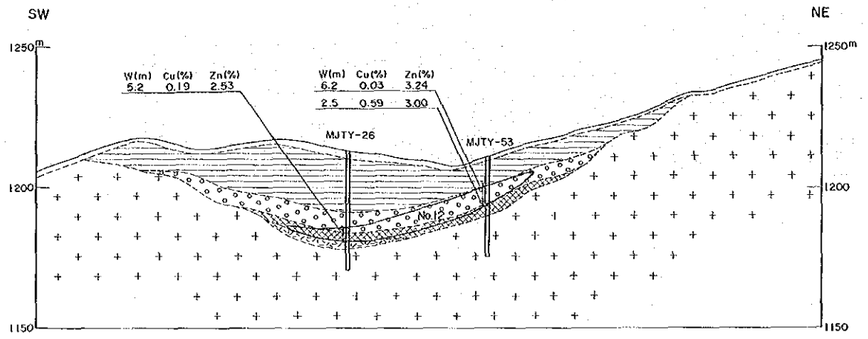



## Line C42

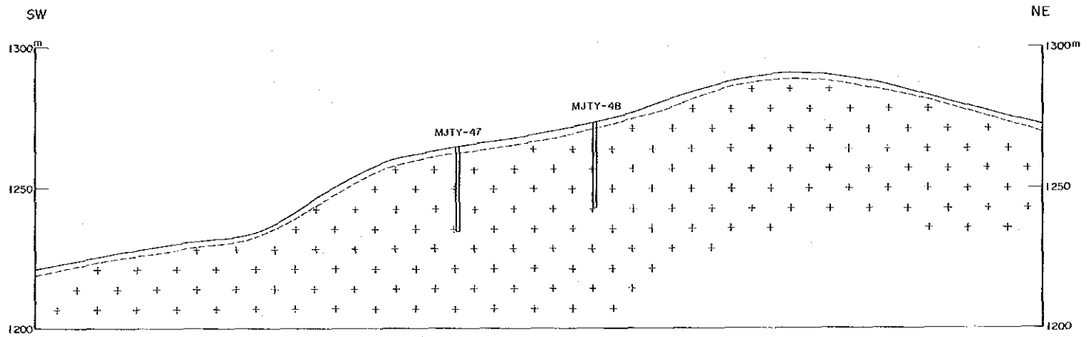


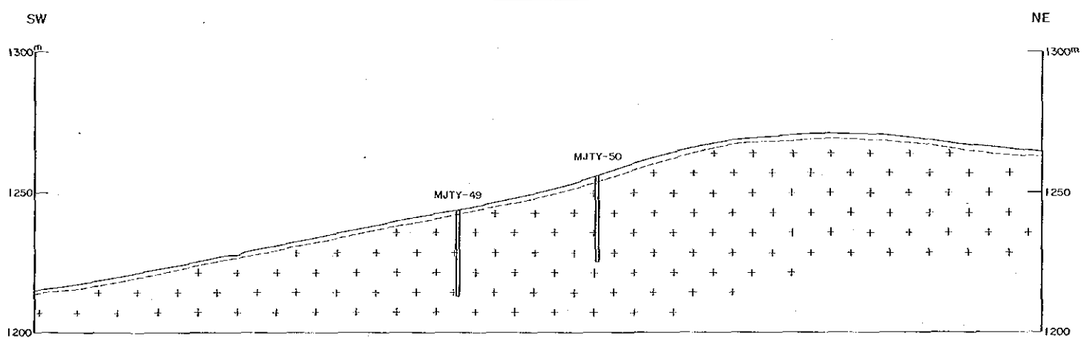



## Line C27




## Line C41




## Line C42