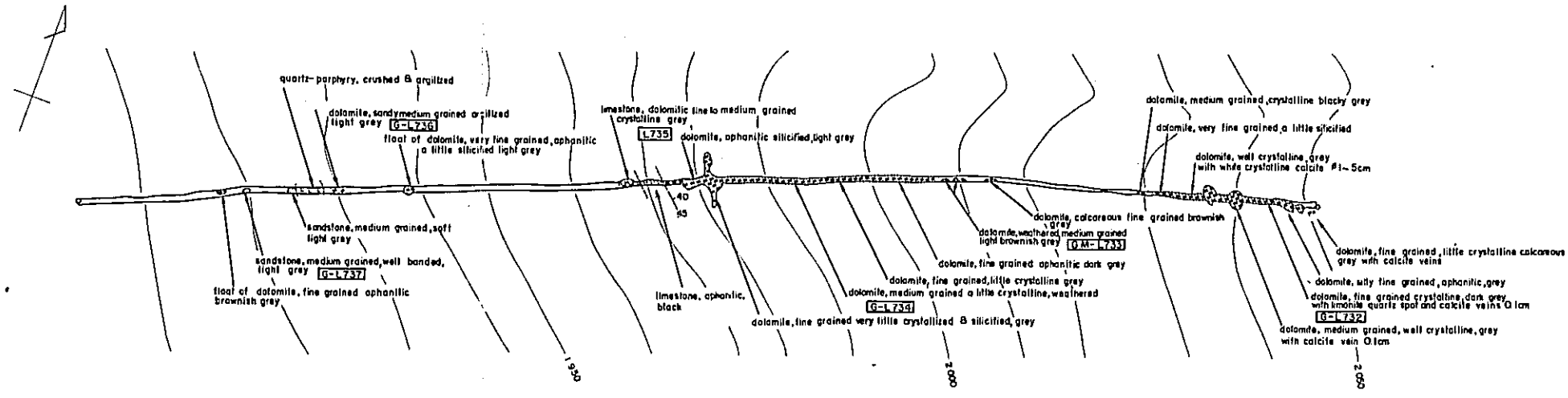
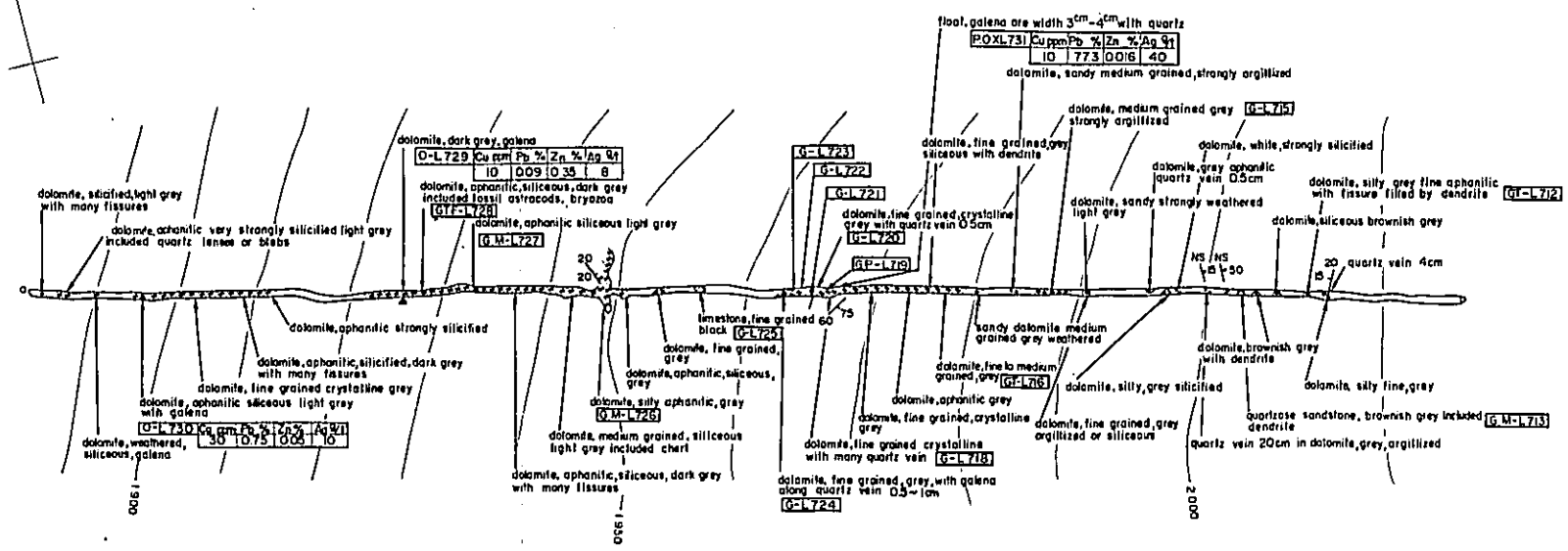


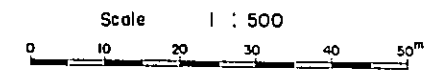
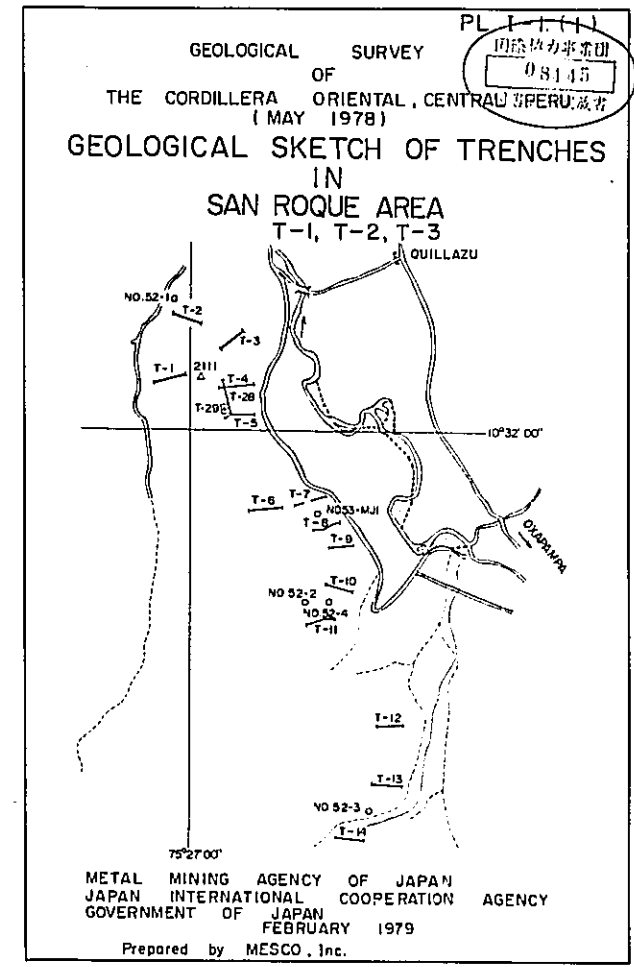
T-1 (200m)



T-2 (192m)

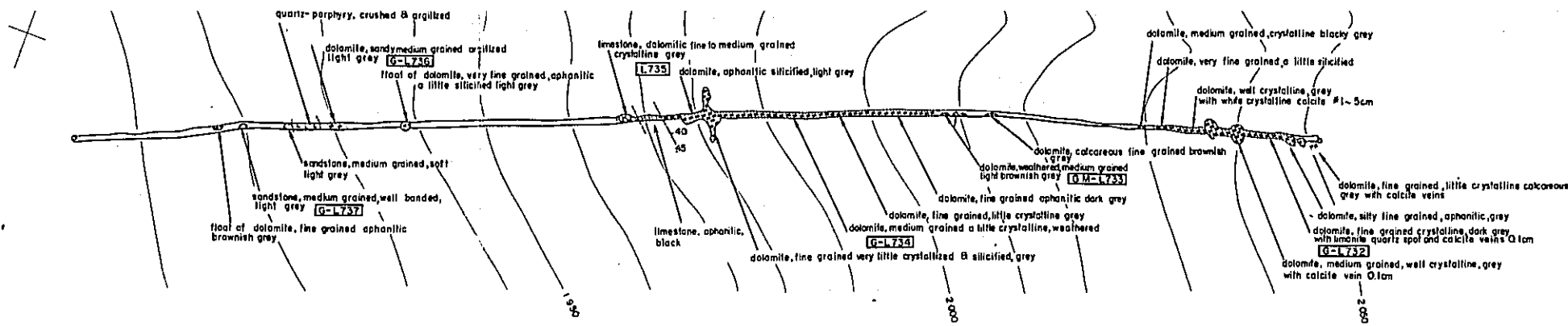


T-3 (207m)

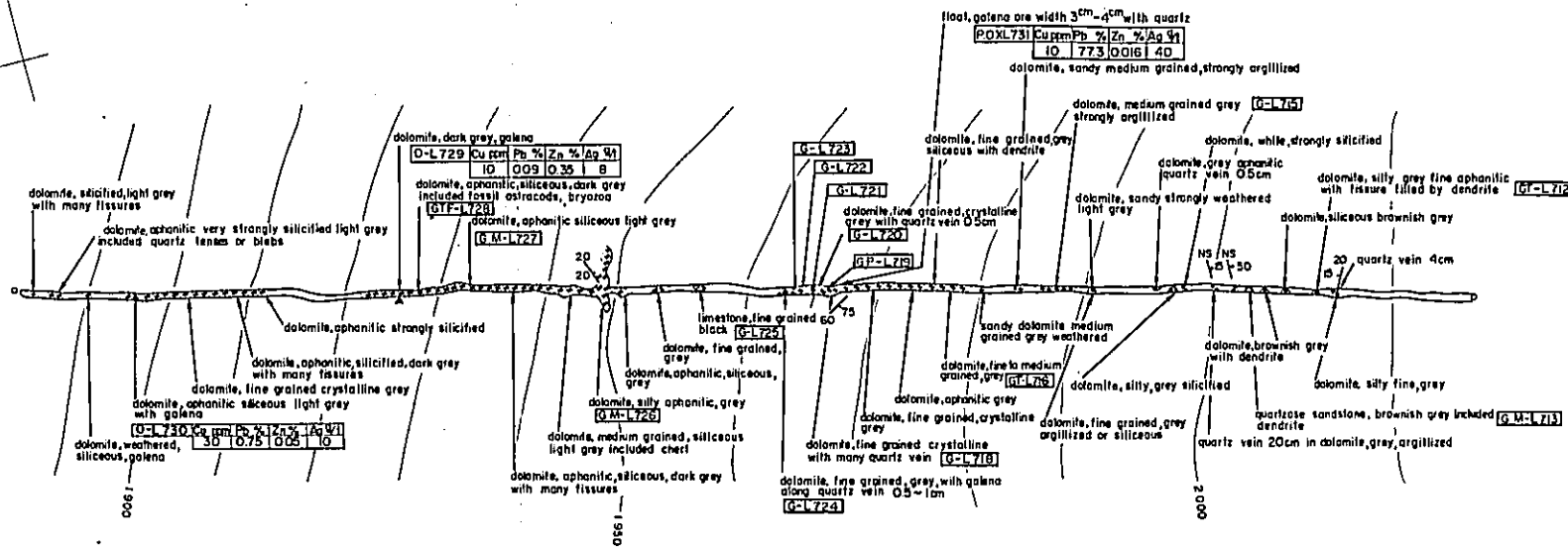


LEGEND

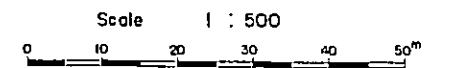
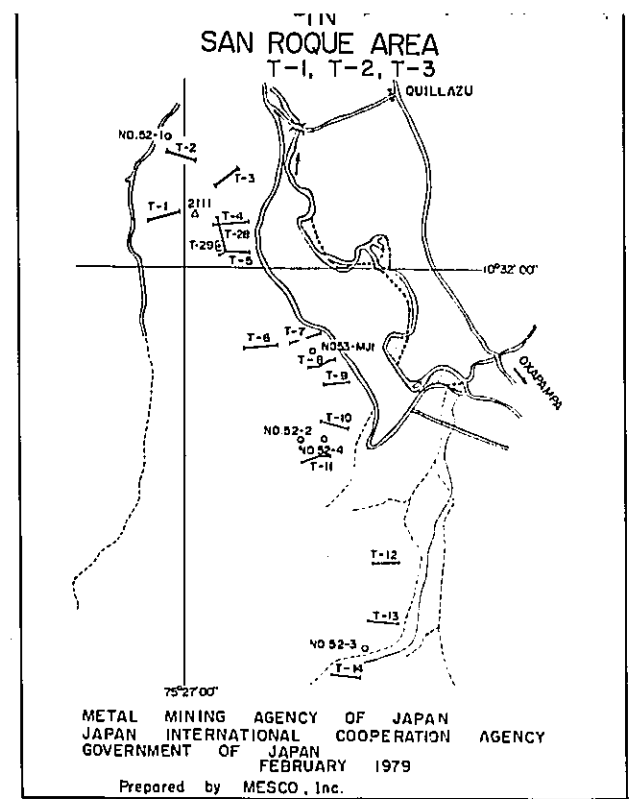
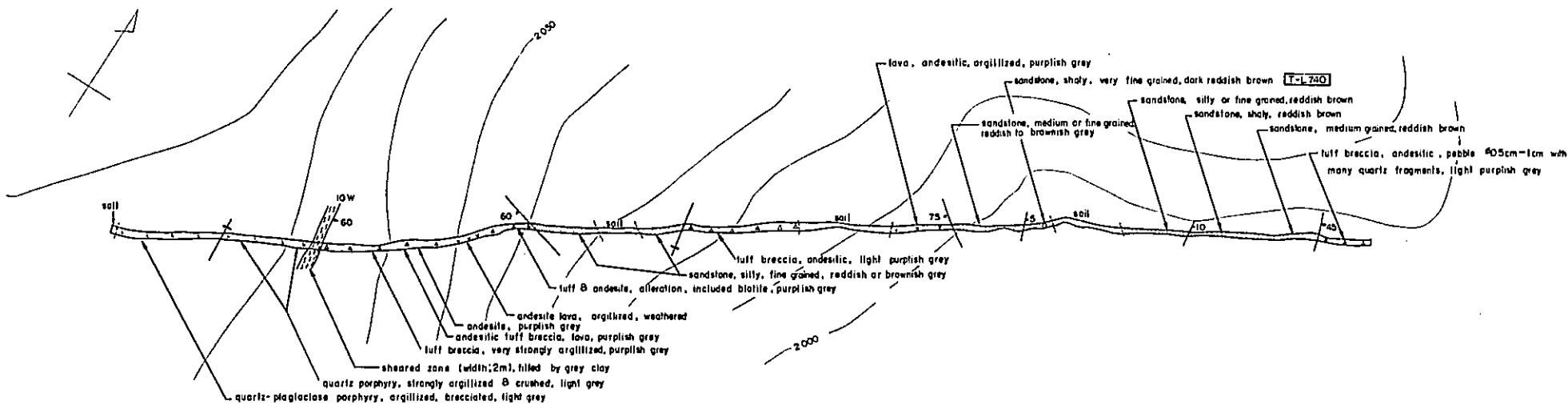
SEDIMENTARY ROCK		IGNEOUS ROCK	
	LIMESTONE		QUARTZ PORPHYRY
	DOLOMITIC LIMESTONE		LAVA
	DOLOMITE (DOLOSTONE)		TUFF BRECCIA & VOLCANIC BRECCIA
	BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE)		
	SANDSTONE		
	CONGLOMERATE		
	FLOAT		F - FOSSIL
	DIP & STRIKE		M - MINOR ELEMENT ANALYSIS
	FISSURE OR JOINT		O - ORE ANALYSIS
	ZEBRA BAND		P - POLISHED SECTION
	MINERALIZATION		T - THIN SECTION



T-2 (192m)



T-3 (207m)

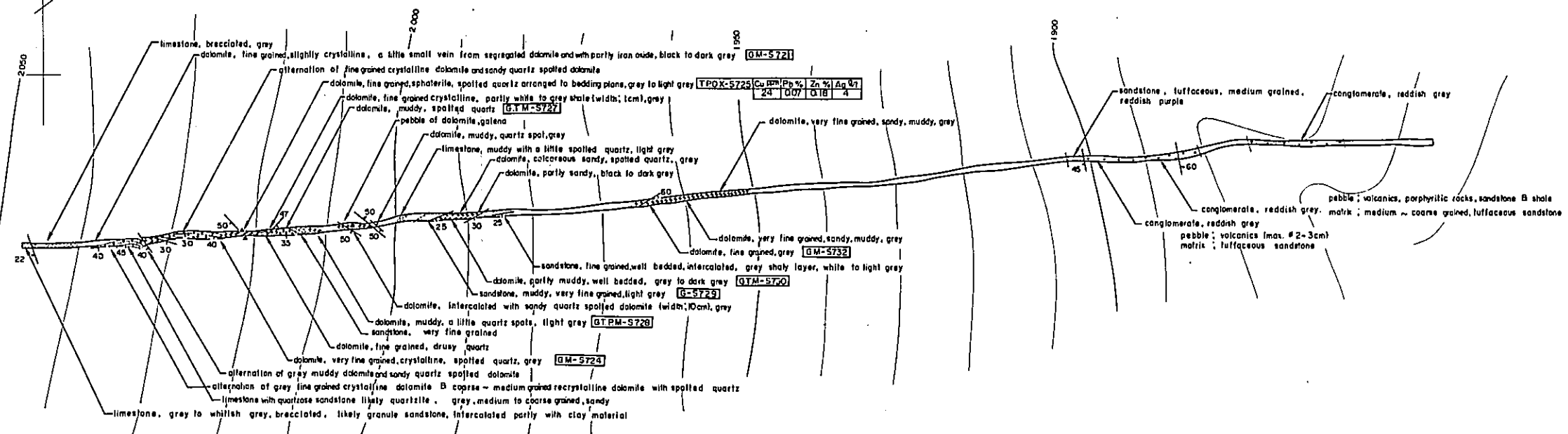


LEGEND

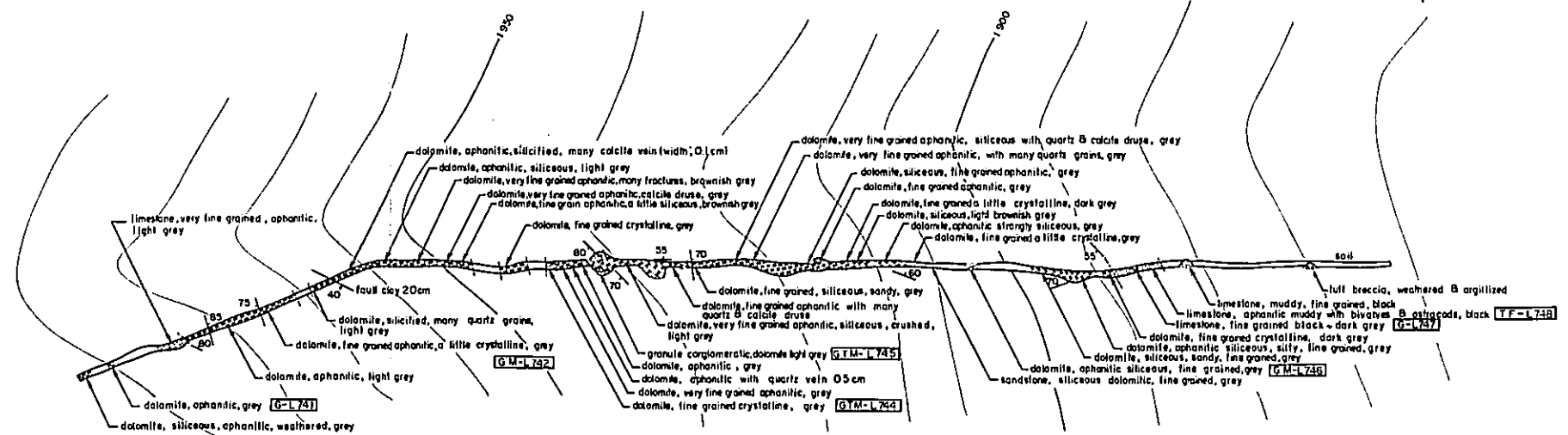
- | | | | |
|--|---|--|---------------------------------|
| | LIMESTONE | | QUARTZ PORPHYRY |
| | DOLOMITIC LIMESTONE | | LAVA |
| | DOLOMITE (DOLOSTONE) | | TUFF BRECCIA & VOLCANIC BRECCIA |
| | BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE) | | |
| | SANDSTONE | | |
| | CONGLOMERATE | | |

- | | | | |
|--|------------------|--|---------------------------------|
| | FLOAT | | F - FOSSIL |
| | DIP & STRIKE | | M - MINOR ELEMENT ANALYSIS |
| | FISSURE OR JOINT | | O - ORE ANALYSIS |
| | ZEBRA BAND | | P - POLISHED SECTION |
| | MINERALIZATION | | T - THIN SECTION |
| | | | X - X-RAY ANALYSIS |
| | | | G - GEOCHEMICAL ANALYSIS (ROCK) |

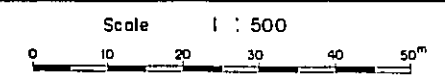
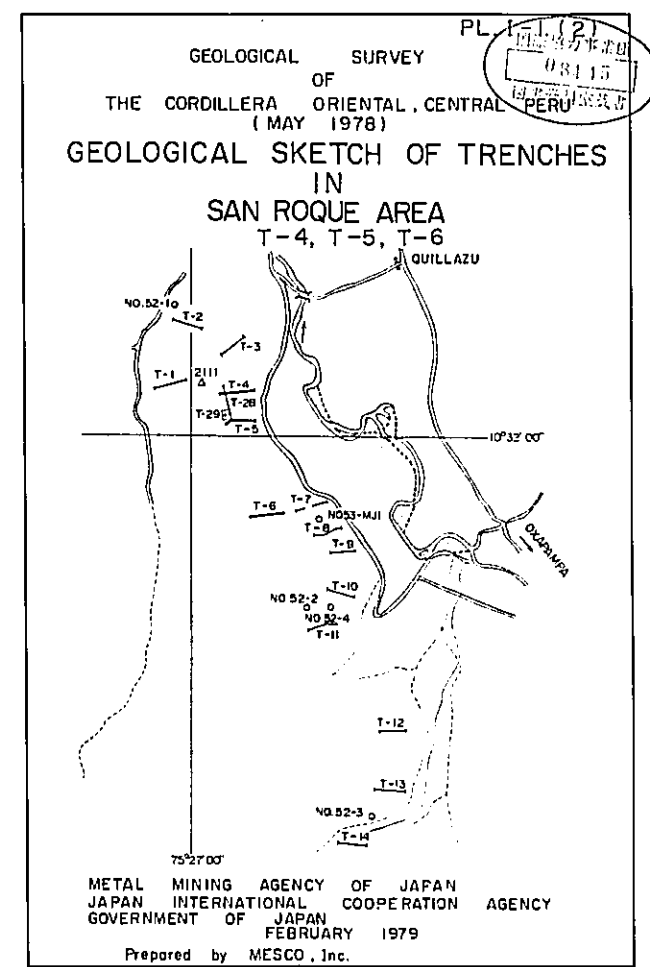
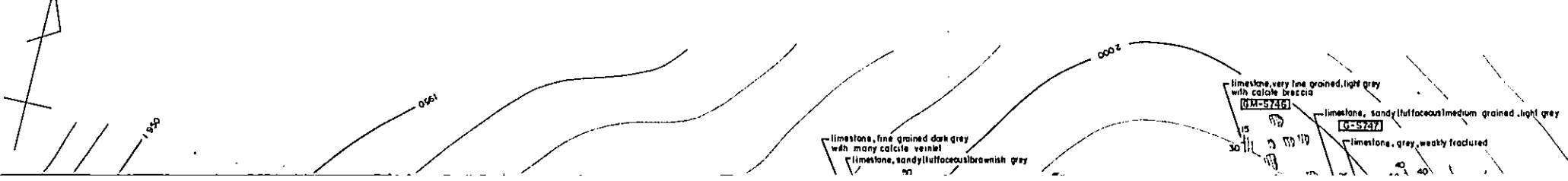
T-4 (266m)



T-5 (204m)

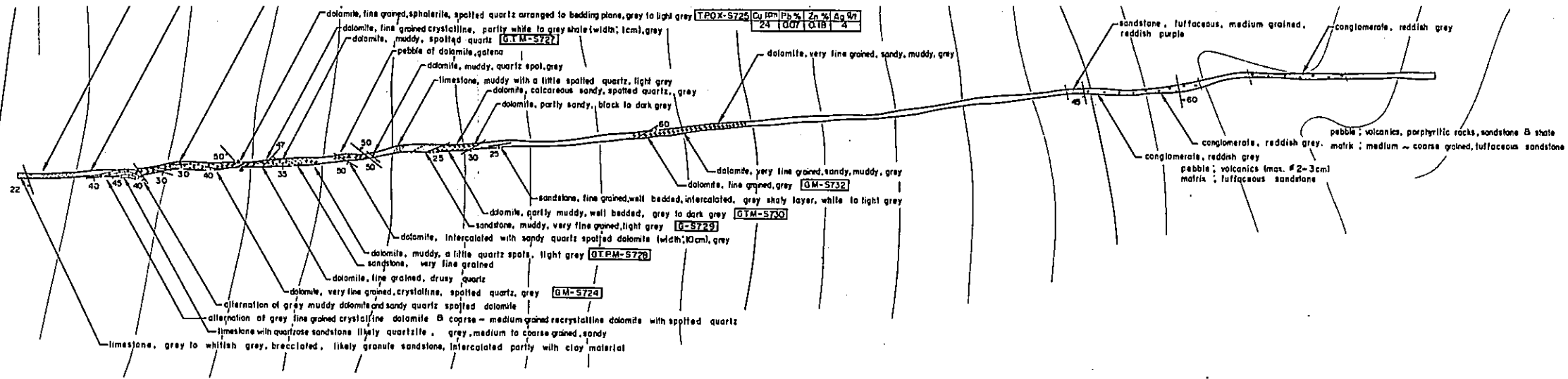


T-6 (272m)

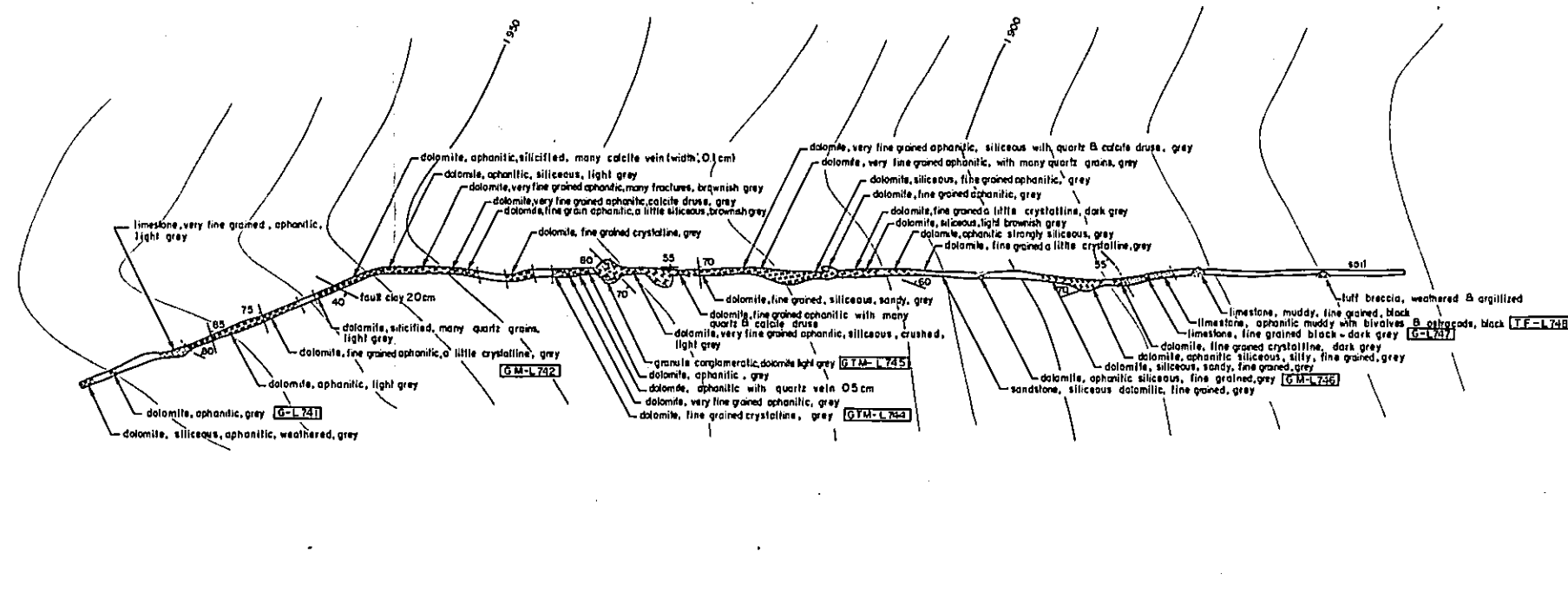


LEGEND

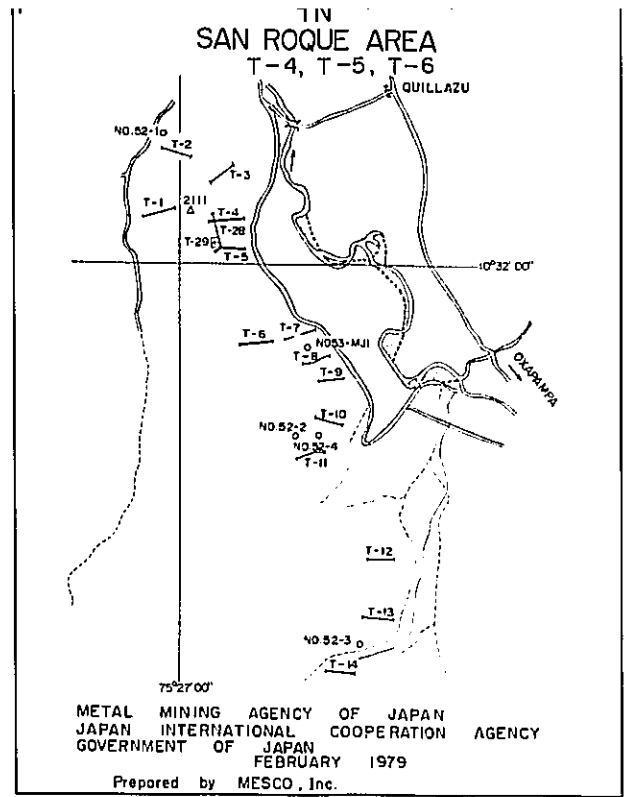
SEDIMENTARY ROCK		IGNEOUS ROCK	
[Symbol]	LIMESTONE	[Symbol]	QUARTZ PORPHYRY
[Symbol]	DOLOMITIC LIMESTONE	[Symbol]	LAVA
[Symbol]	DOLOMITE (DOLOSTONE)	[Symbol]	TUFF BRECCIA & VOLCANIC BRECCIA
[Symbol]	BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE)		
[Symbol]	SANDSTONE		
[Symbol]	CONGLOMERATE		
[Symbol]	NUMBER OF ROCK SAMPLE		
[Symbol]	FLOAT	[Symbol]	F - FOSIL
[Symbol]	DIP & STRIKE	[Symbol]	M - L 714 = M - MINOR ELEMENT ANALYSIS
[Symbol]	FISSURE OR JOINT	[Symbol]	O - L 715 = O - ORE ANALYSIS
[Symbol]	ZEBRA BAND	[Symbol]	P - L 716 = P - POLISHED SECTION
[Symbol]	MINERALIZATION	[Symbol]	T - L 718 = T - THIN SECTION



T-5 (204m)



T-6 (272m)



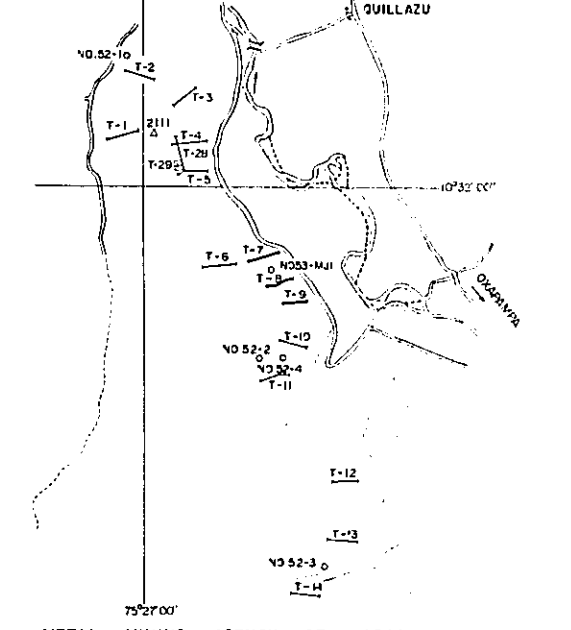
LEGEND

SEDIMENTARY ROCK	IGNEOUS ROCK
LIMESTONE	QUARTZ PORPHYRY
DOLOMITIC LIMESTONE	LAVA
DOLOMITE (DOLOSTONE)	TUFF BRECCIA & VOLCANIC BRECCIA
BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE)	
SANDSTONE	
CONGLOMERATE	

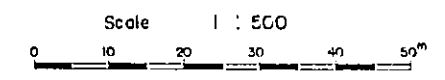
NUMBER OF ROCK SAMPLE	
	F - L 713 = F - FOSSIL
	M - L 714 = M - MINOR ELEMENT ANALYSIS
	O - L 715 = O - ORE ANALYSIS
	P - L 716 = P - POLISHED SECTION
	T - L 718 = T - THIN SECTION
	X - L 719 = X - X-RAY ANALYSIS
	G - L 720 = G - GEOCHEMICAL ANALYSIS (ROCK)

PL 1-173
 08145
 PERU

GEOLOGICAL SURVEY OF THE CORDILLERA ORIENTAL, CENTRAL (MAY 1978)
GEOLOGICAL SKETCH OF TRENCHES IN SAN ROQUE AREA
 T-7, T-8, T-9



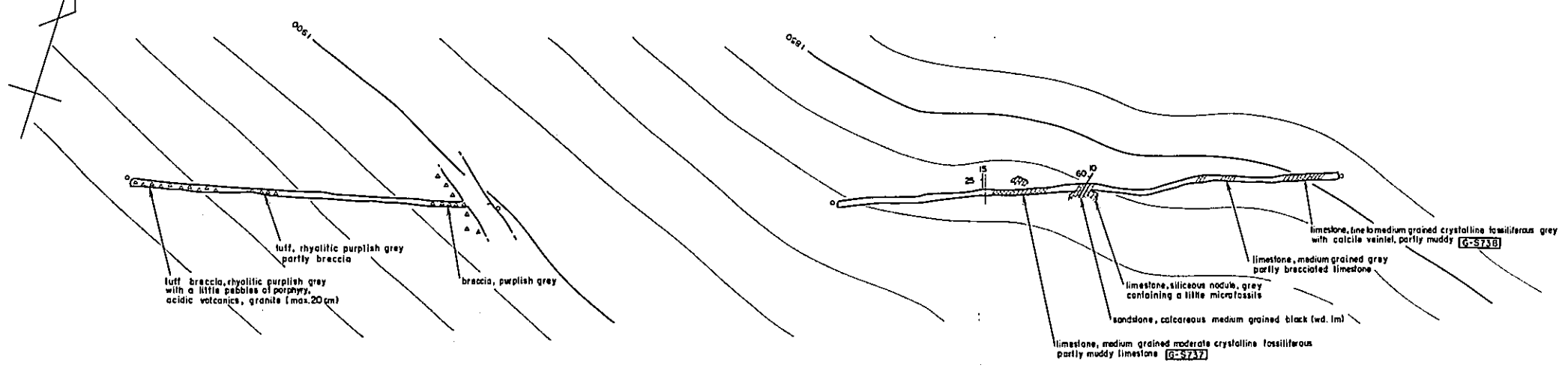
METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 Prepared by MESCO, Inc.



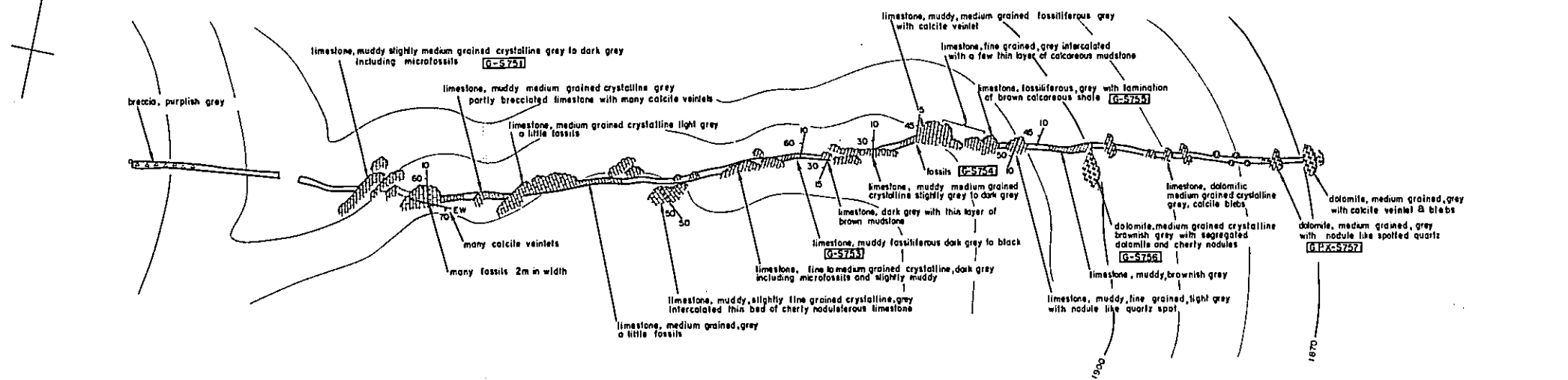
LEGEND

SEDIMENTARY ROCK	IGNEOUS ROCK
LIMESTONE	QUARTZ PORPHYRY
DOLOMITIC LIMESTONE	LAVA
DOLOMITE (DOLOSTONE)	TUFF BRECCIA & VOLCANIC BRECCIA
BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE)	
SANDSTONE	
CONGLOMERATE	
FLOAT	NUMBER OF ROCK SAMPLE
DIP & STRIKE	F-L 713 = F - FOSSIL
FISSURE OR JOINT	M-L 714 = M - MINOR ELEMENT ANALYSIS
ZEBRA BAND	O-L 715 = O - ORE ANALYSIS
MINERALIZATION	P-L 716 = P - POLISHED SECTION
	T-L 718 = T - THIN SECTION

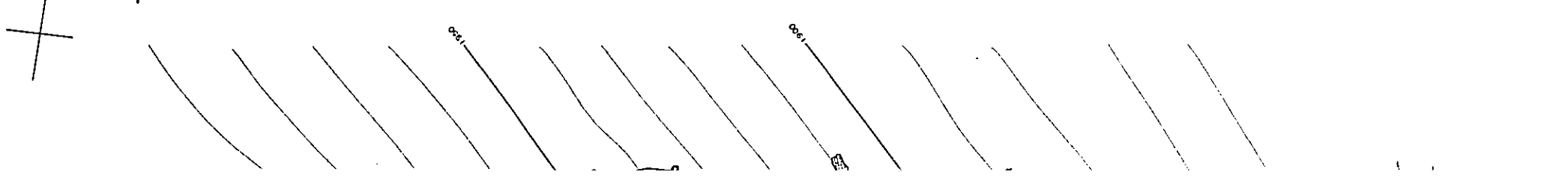
T-7 (147m)



T-8 (200m)

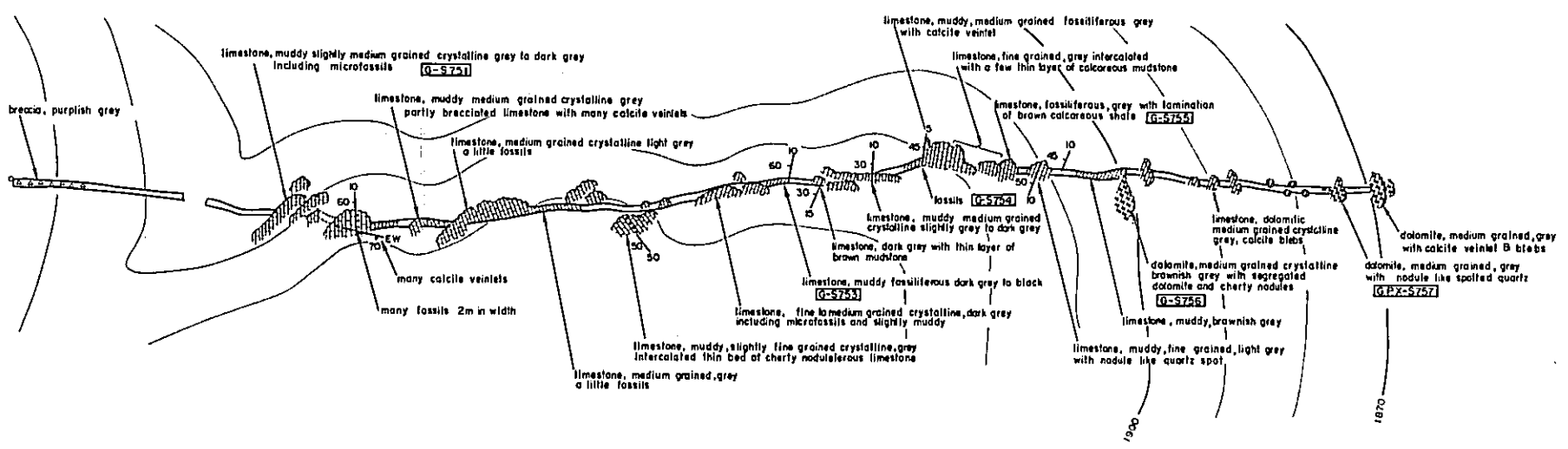


T-9 (186m)

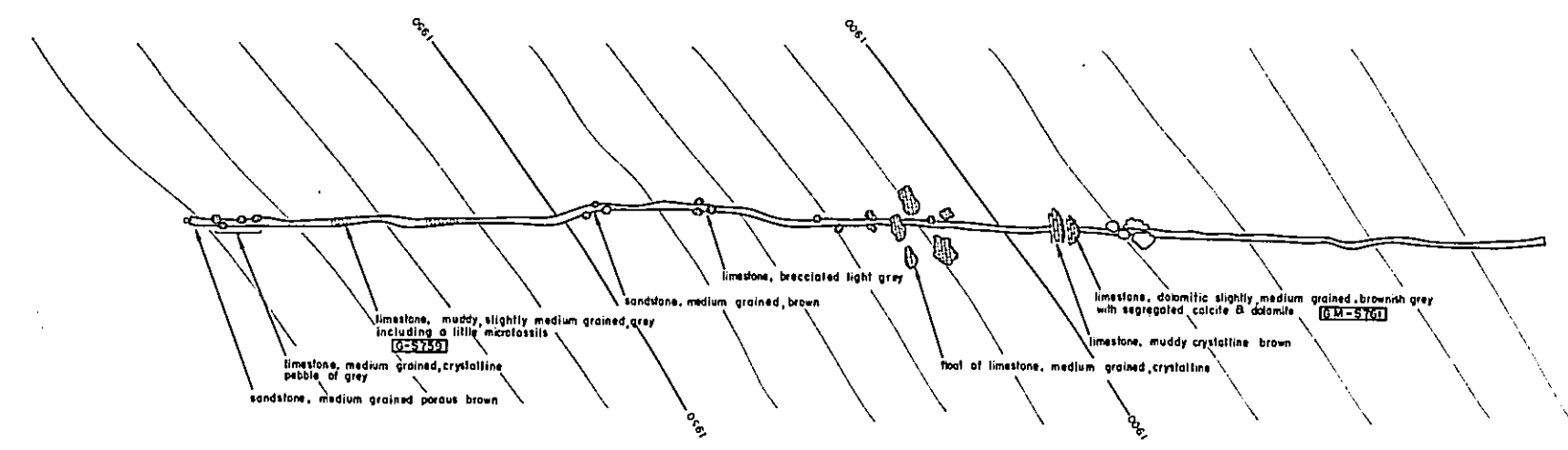




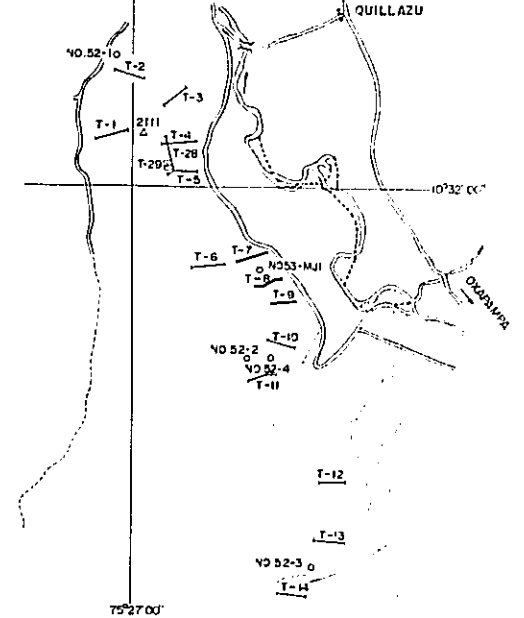
T-8 (200m)



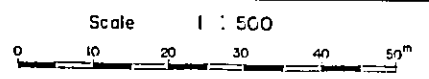
T-9 (186m)



IN SAN ROQUE AREA T-7, T-8, T-9



METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 Prepared by MESCO, Inc.

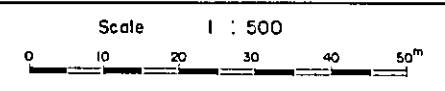


LEGEND

SEDIMENTARY ROCK	IGNEOUS ROCK
LIMESTONE	QUARTZ PORPHYRY
DOLOMITIC LIMESTONE	LAVA
DOLOMITE (DOLOSTONE)	TUFF BRECCIA & VOLCANIC BRECCIA
BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (OOLOSTONE)	
SANDSTONE	
CONGLOMERATE	
FLOT	
DIP & STRIKE	
FISSURE OR JOINT	
ZEBRA BAND	
MINERALIZATION	
	NUMBER OF ROCK SAMPLE
	F - L713 = F - FOSSIL
	M - L714 = M - MINOR ELEMENT ANALYSIS
	O - L715 = O - ORE ANALYSIS
	P - L716 = P - POLISHED SECTION
	T - L718 = T - THIN SECTION
	X - L719 = X - X-RAY ANALYSIS
	G - L720 = G - GEOCHEMICAL ANALYSIS (ROCK)

PL. 1-1-1 (4)
08113
08113
08113

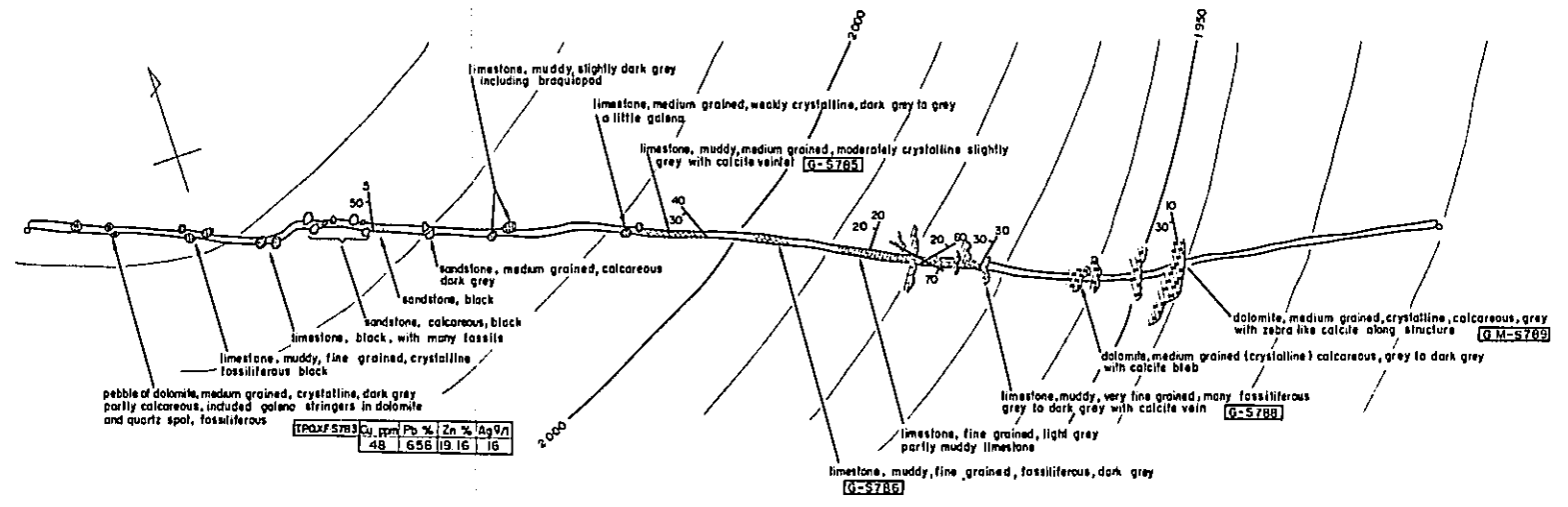
GEOLOGICAL SURVEY OF THE CORDILLERA ORIENTAL, CENTRAL PHILIPPINES (MAY 1978)
GEOLOGICAL SKETCH OF TRENCHES IN SAN ROQUE AREA T-10, T-11, T-12
QUILLAZU
40 52' 10" T-2
T-1 2111
T-3
T-4
T-28
T-5
10°32' 00"
T-6
T-7
T-8
T-9
40 52' 20" T-10
40 52' 40" T-11
T-12
T-13
40 52' 30" T-14
75°27' 00"
METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1979
Prepared by MESCO, Inc.



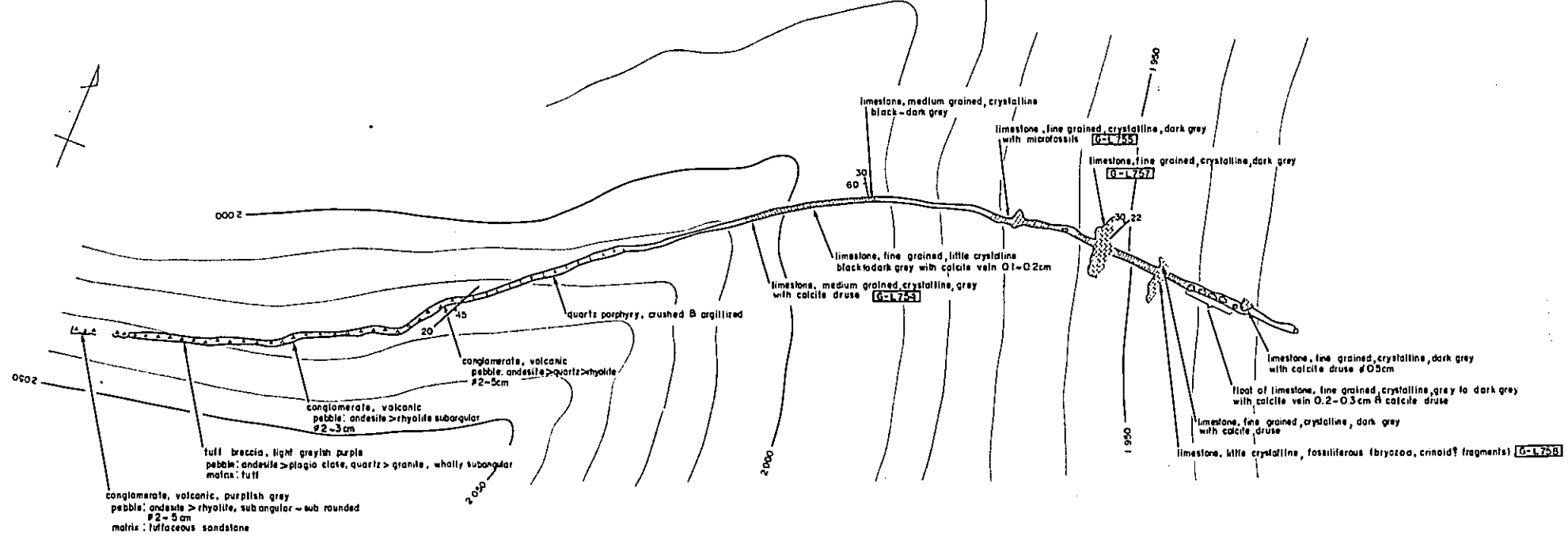
LEGEND

- | | | | |
|------------------|---|-----------------------|--|
| SEDIMENTARY ROCK | | IGNEOUS ROCK | |
| | LIMESTONE | | QUARTZ PORPHYRY |
| | DOLOMITIC LIMESTONE | | LAVA |
| | DOLOMITE (DOLOSTONE) | | TUFF BRECCIA & VOLCANIC BRECCIA |
| | BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE) | | |
| | SANDSTONE | | |
| | CONGLOMERATE | | |
| | | NUMBER OF ROCK SAMPLE | |
| | FLOAT | | F - L 713 = F - FOSSIL |
| | DIP & STRIKE | | M - L 714 = M - MINOR ELEMENT ANALYSIS |
| | FISSURE OR JOINT | | O - L 715 = O - ORE ANALYSIS |
| | ZEBRA BAND | | P - L 716 = P - POLISHED SECTION |
| | MINERALIZATION | | T - L 718 = T - THIN SECTION |

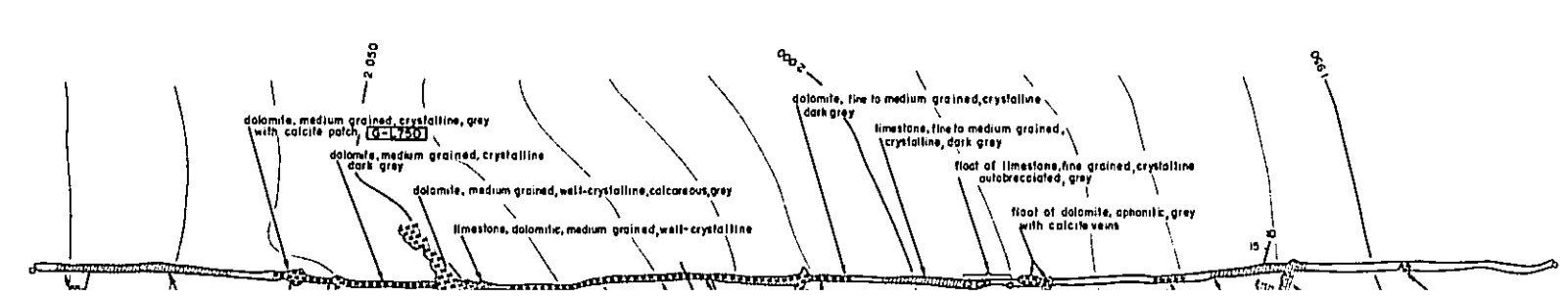
T-10 (187m)

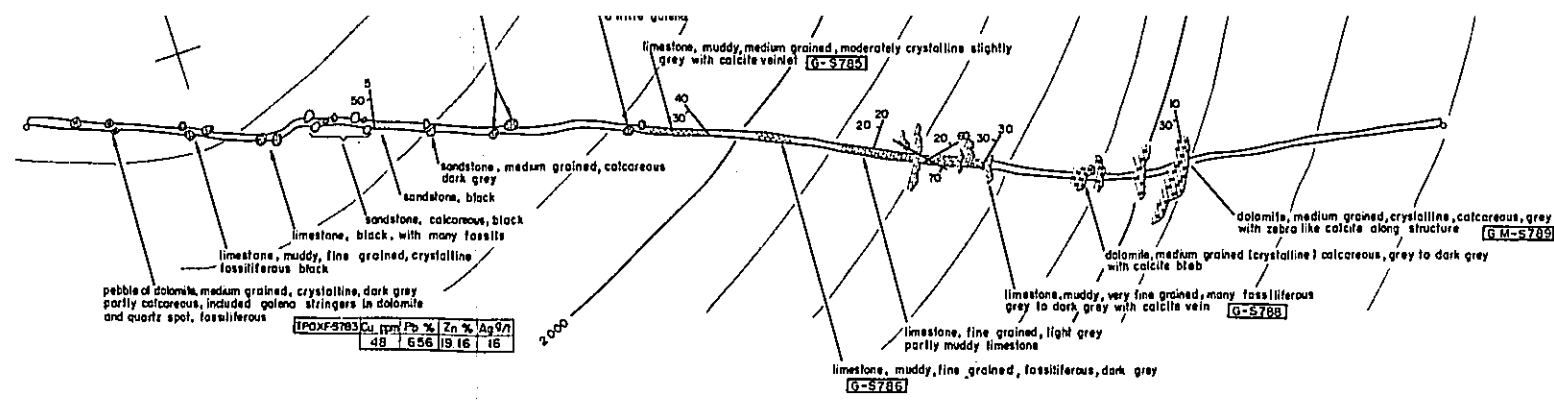


T-11 (200m)

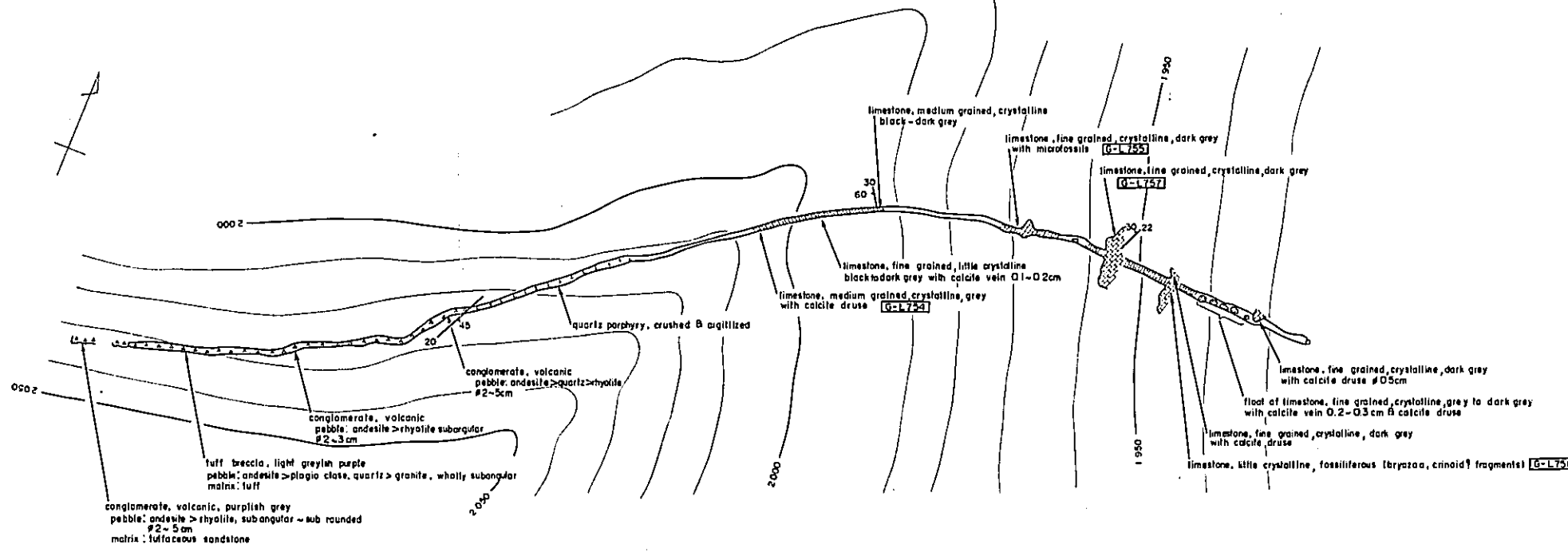


T-12 (204m)

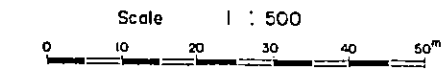
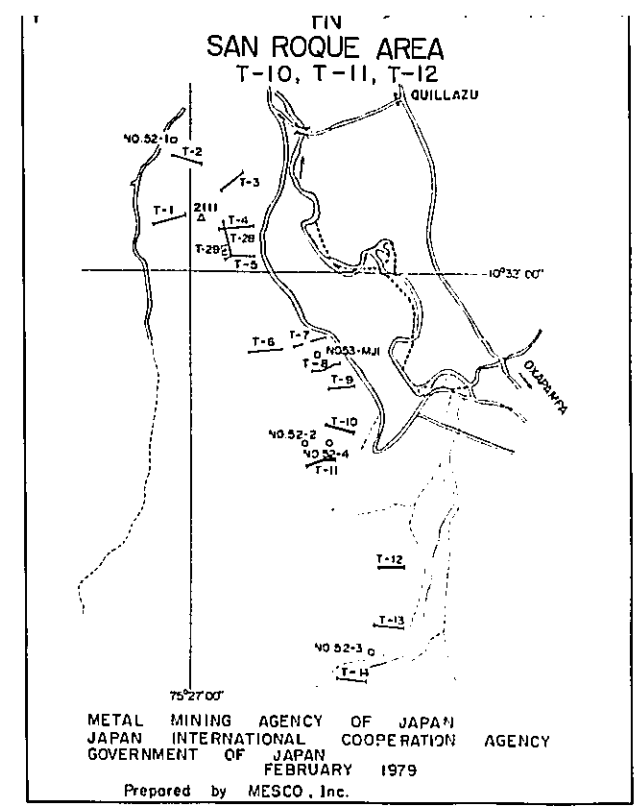




T-11 (200m)



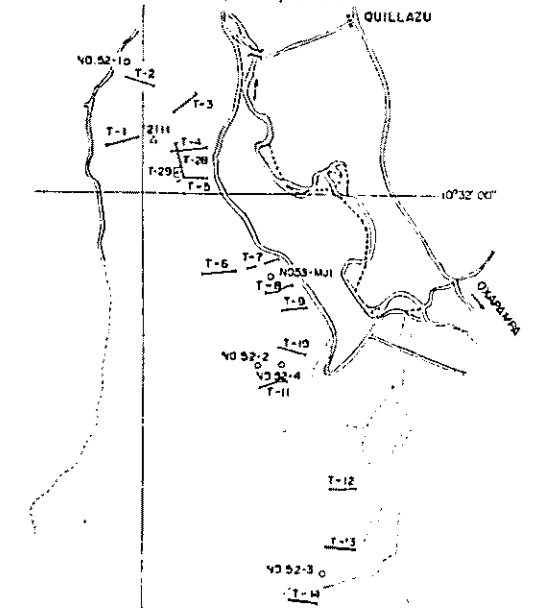
T-12 (204m)



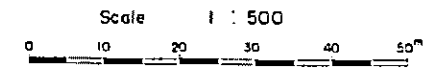
LEGEND

- | | |
|---|---------------------------------|
| SEDIMENTARY ROCK | IGNEOUS ROCK |
| LIMESTONE | QUARTZ PORPHYRY |
| DOLOMITIC LIMESTONE | LAVA |
| DOLOMITE (DOLOSTONE) | TUFF BRECCIA & VOLCANIC BRECCIA |
| BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE) | |
| SANDSTONE | |
| CONGLOMERATE | |
-
- | | |
|------------------|---|
| FLOAT | NUMBER OF ROCK SAMPLE |
| DIP & STRIKE | F- L713 = F - FOSSIL |
| FISSURE OR JOINT | M- L714 = M - MINOR ELEMENT ANALYSIS |
| ZEBRA BAND | O- L715 = O - ORE ANALYSIS |
| MINERALIZATION | P- L716 = P - POLISHED SECTION |
| | T- L718 = T - THIN SECTION |
| | X- L719 = X - X-RAY ANALYSIS |
| | G- L720 = G - GEOCHEMICAL ANALYSIS (ROCK) |

GEOLOGICAL SURVEY
OF
THE CORDILLERA ORIENTAL, CENTRAL PERU
(MAY 1978)
GEOLOGICAL SKETCH OF TRENCHES
IN
SAN ROQUE AREA
T-13, T-14



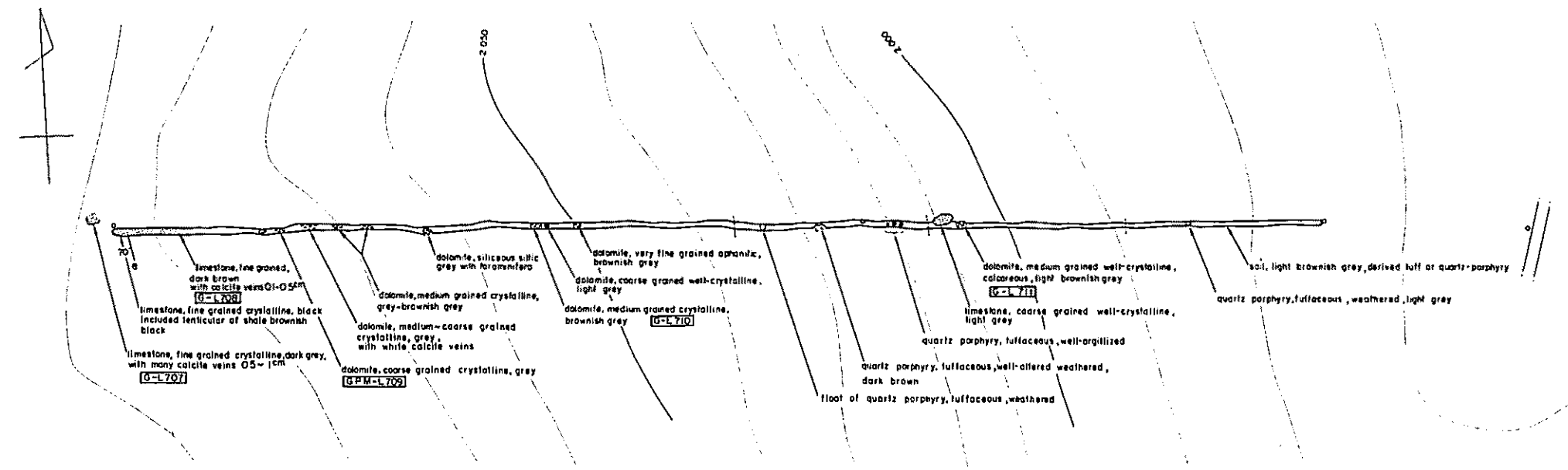
METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1979
Prepared by MESCO, Inc.



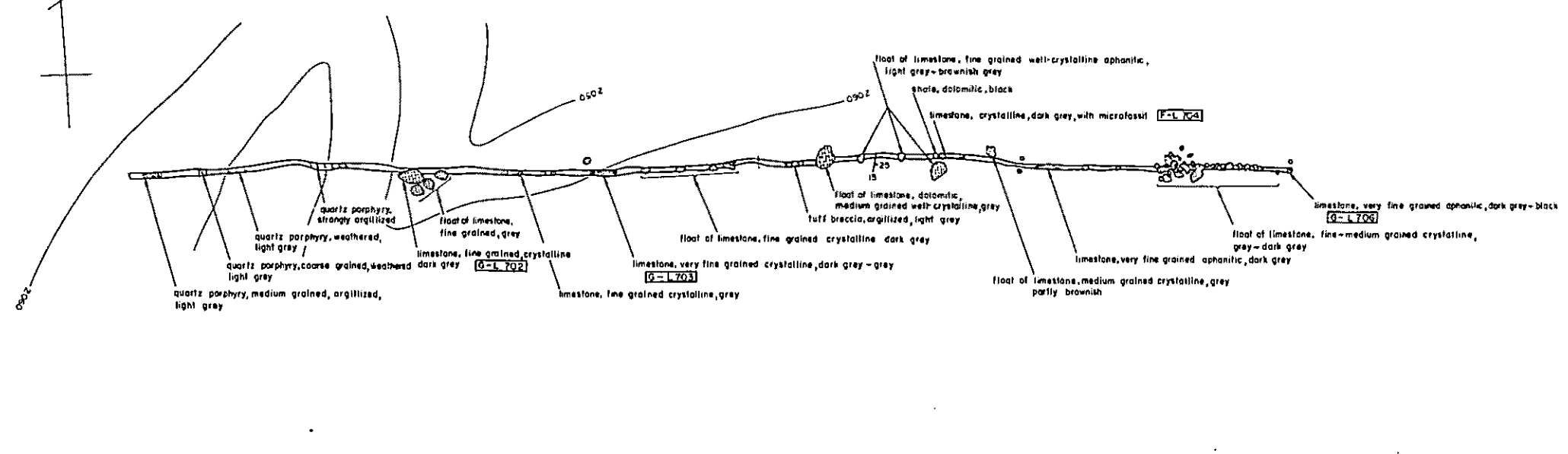
LEGEND

SEDIMENTARY ROCK		IGNEOUS ROCK	
	LIMESTONE		QUARTZ PORPHYRY
	DOLOMITIC LIMESTONE		LAVA
	DOLOMITE (DOLOSTONE)		TUFF BRECCIA & VOLCANIC BRECCIA
	BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE)		
	SANDSTONE		
	CONGLOMERATE		
NUMBER OF ROCK SAMPLE			
	FLOAT		F - FOSSIL
	DIP & STRIKE		M - MINDER ELEMENT ANALYSIS
	FISSURE OR JOINT		O - ORE ANALYSIS
	ZEBRA BAND		P - POLISHED SECTION
	MINERALIZATION		T - THIN SECTION

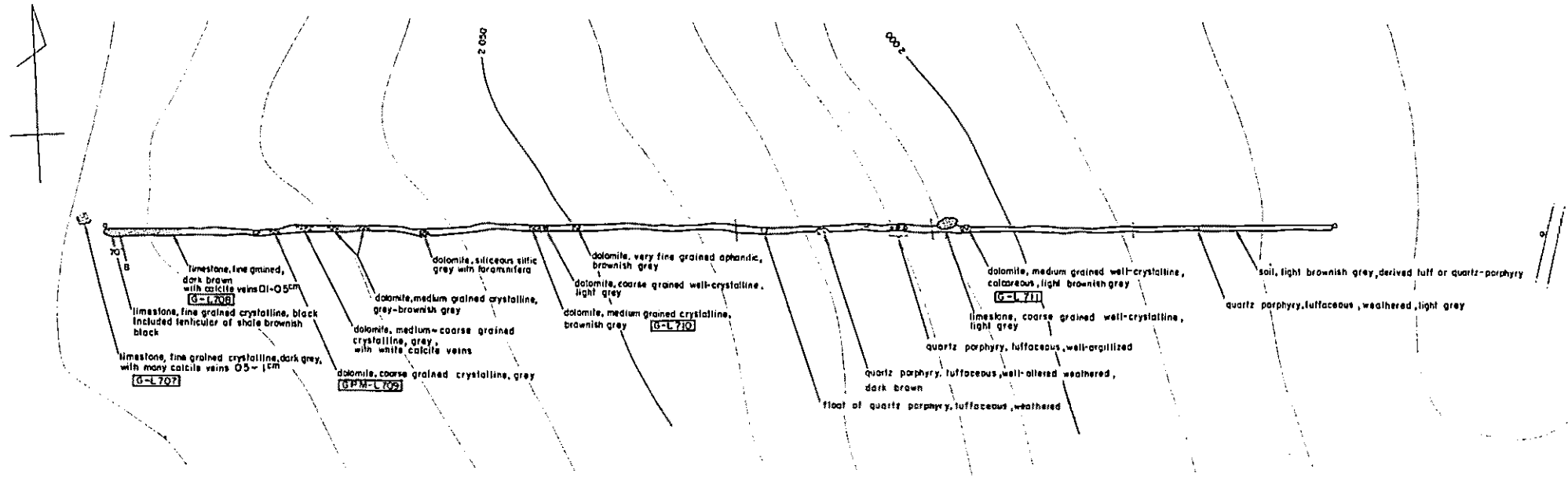
T-13 (205m)



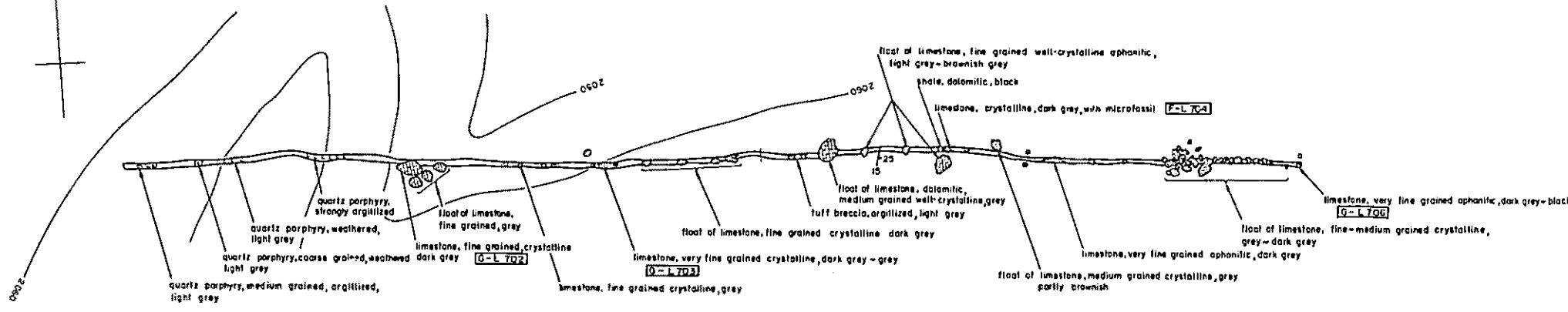
T-14 (200m)



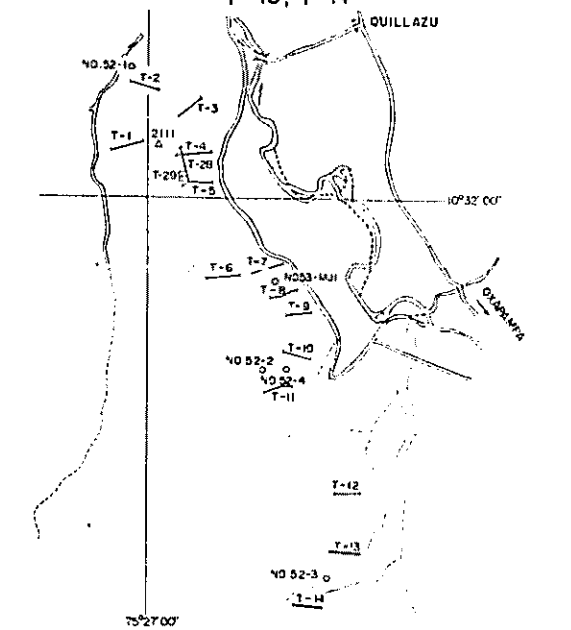
T-13 (205m)



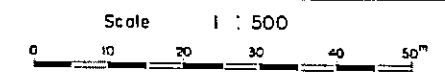
T-14 (200m)



IN
SAN ROQUE AREA
T-13, T-14

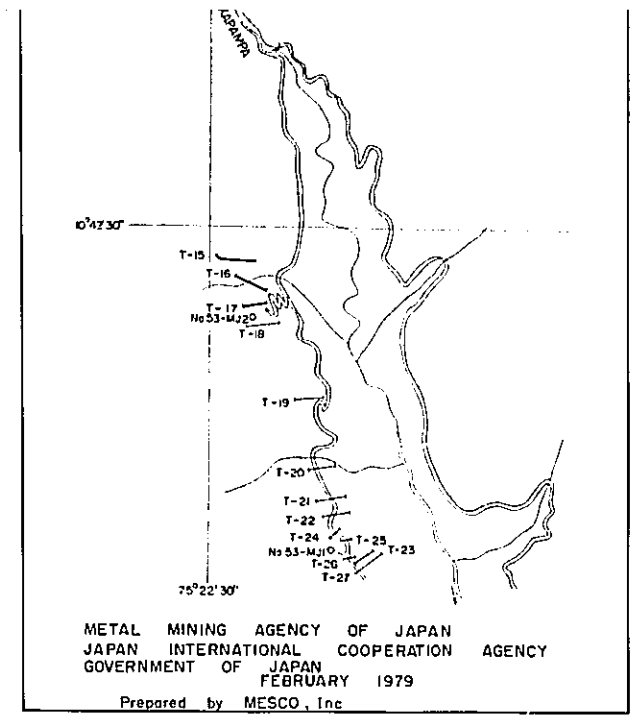
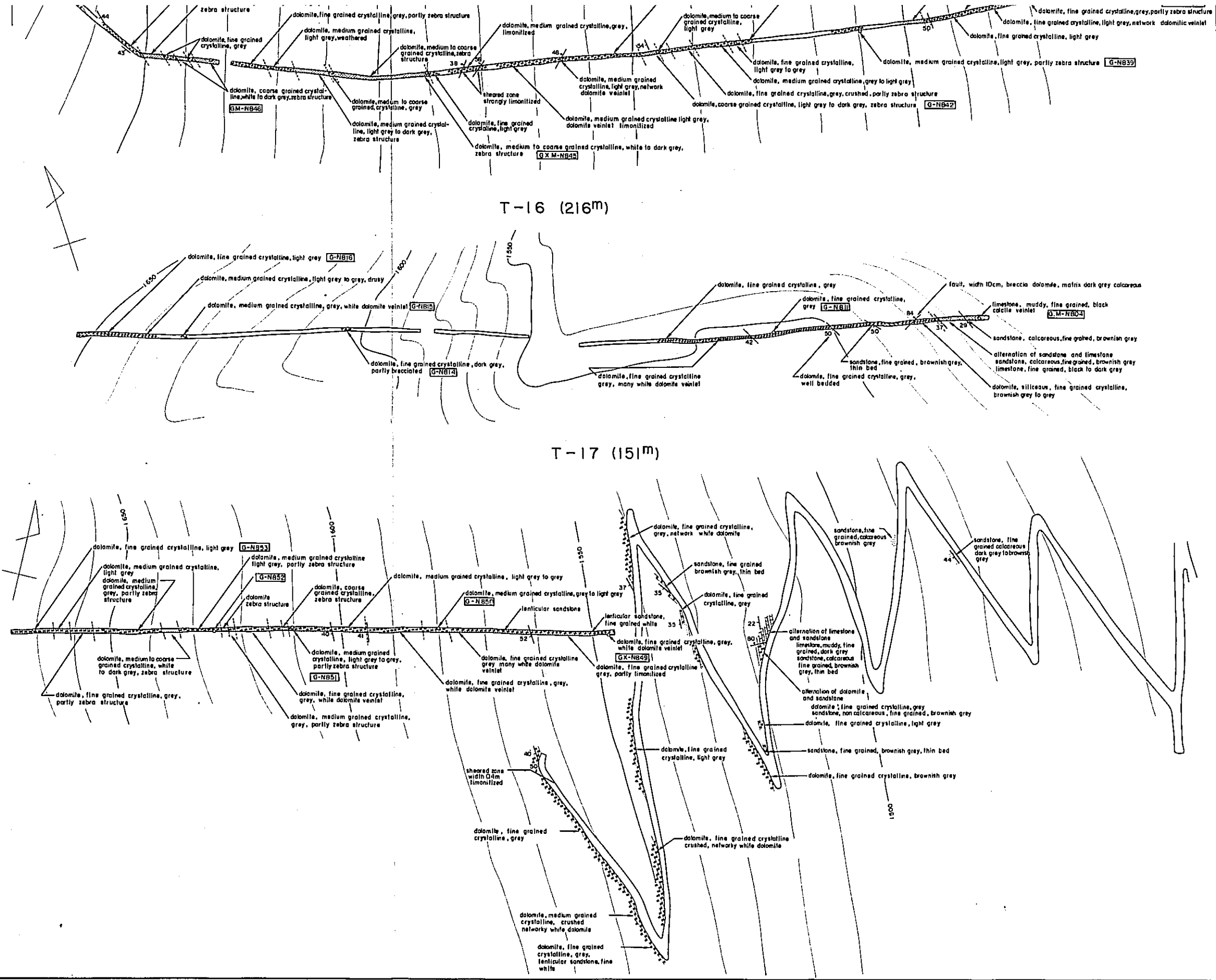


METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1979
Prepared by MESCO, Inc.



LEGEND

SEDIMENTARY ROCK	IGNEOUS ROCK
LIMESTONE	QUARTZ PORPHYRY
DOLOMITIC LIMESTONE	LAVA
DOLOMITE (DOLOSTONE)	TUFF BRECCIA OR VOLCANIC BRECCIA
BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE)	
SANDSTONE	
CONGLOMERATE	
FLOAT	NUMBER OF ROCK SAMPLE
DIP & STRIKE	F - L 713 = F - FOSSIL
FISSURE OR JOINT	M - L 714 = M - MINOR ELEMENT ANALYSIS
ZEBRA BAND	O - L 715 = O - ORE ANALYSIS
MINERALIZATION	P - L 716 = P - POLISHED SECTION
	T - L 718 = T - THIN SECTION
	X - L 719 = X - X-RAY ANALYSIS
	G - L 720 = G - GEOCHEMICAL ANALYSIS (ROCK)



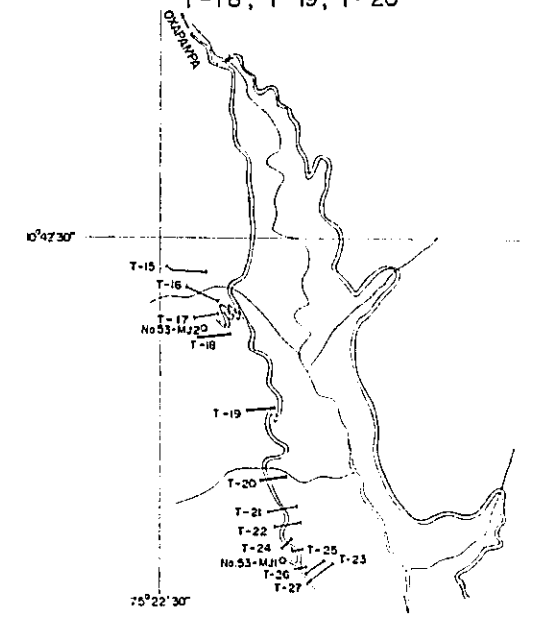
METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 Prepared by MESCO, Inc.

LEGEND

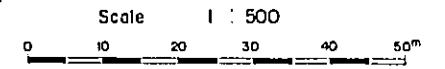
SEDIMENTARY ROCK	IGNEOUS ROCK
LIMESTONE	QUARTZ PORPHYRY
DOLOMITIC LIMESTONE	LAVA
DOLOMITE (DOLOSTONE)	TUFF BRECCIA B VOLCANIC BRECCIA
BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE)	
SANDSTONE	
CONGLOMERATE	
NUMBER OF ROCK SAMPLE	
FLOAT	F - L713 = F - FOSSIL
DIP & STRIKE	M - L714 = M - MINOR ELEMENT ANALYSIS
FISSURE OR JOINT	O - L715 = O - ORE ANALYSIS
ZEBRA BAND	P - L716 = P - POLISHED SECTION
MINERALIZATION	T - L718 = T - THIN SECTION
	X - L719 = X - X-RAY ANALYSIS
	G - L720 = G - GEOCHEMICAL ANALYSIS(ROCK)

PL. I
0814

GEOLOGICAL SURVEY OF THE CORDILLERA ORIENTAL, CENTRAL PERU (MAY 1978)
GEOLOGICAL SKETCH OF TRENCHES IN TAMBO MARIA
T-18, T-19, T-20



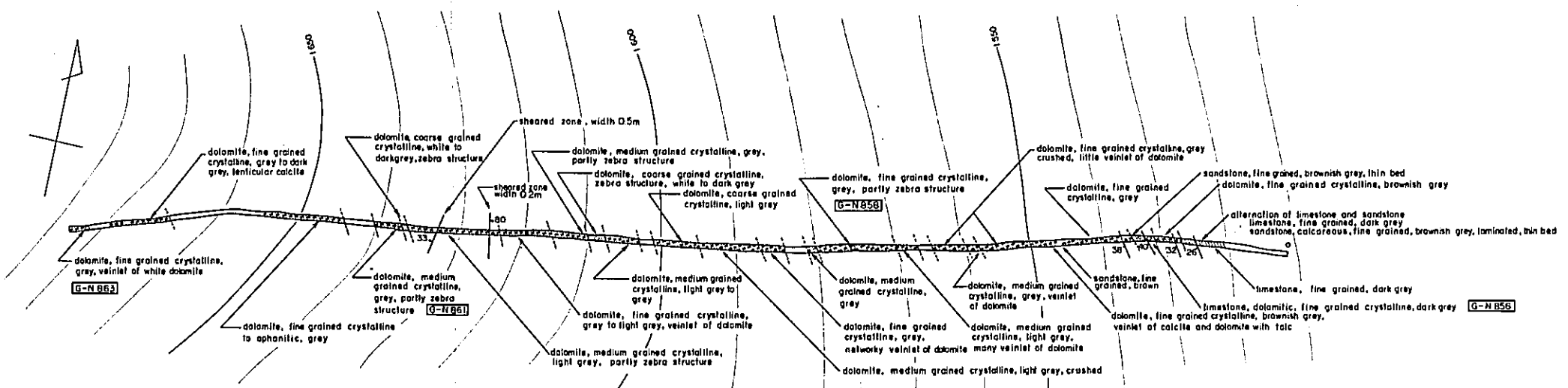
METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1979
Prepared by MESCO, Inc



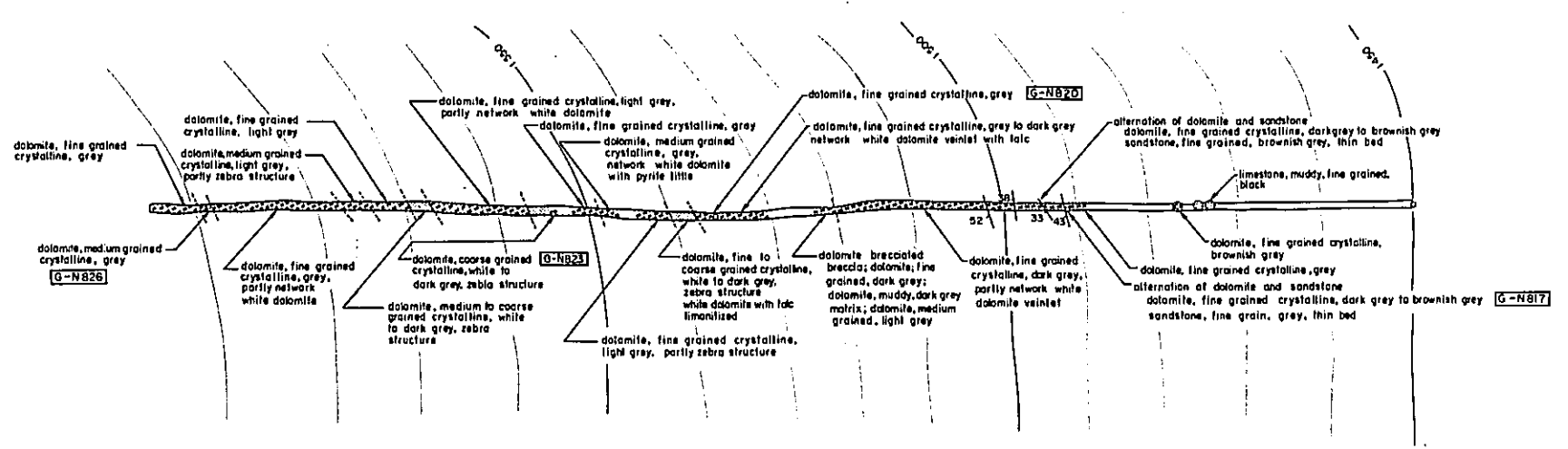
LEGEND

SEDIMENTARY ROCK	IGNEOUS ROCK
LIMESTONE	QUARTZ PORPHYRY
DOLOMITIC LIMESTONE	LAVA
DOLOMITE (DOLOSTONE)	TUFF BRECCIA & VOLCANIC BRECCIA
BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE)	
SANDSTONE	
CONGLOMERATE	
FLOAT	F - FOSSIL
DIP & STRIKE	M - MINOR ELEMENT ANALYSIS
FISSURE OR JOINT	O - ORE ANALYSIS
ZEBRA BAND	P - POLISHED SECTION
MINERALIZATION	T - THIN SECTION
	X - X-RAY ANALYSIS

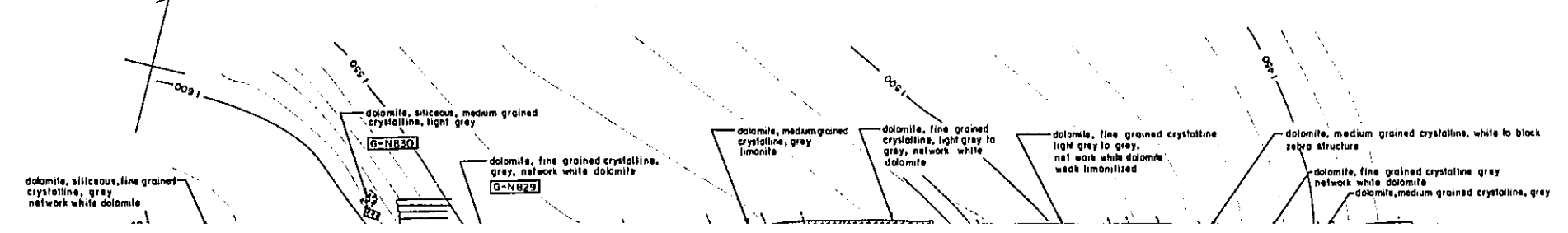
T-18 (212m)

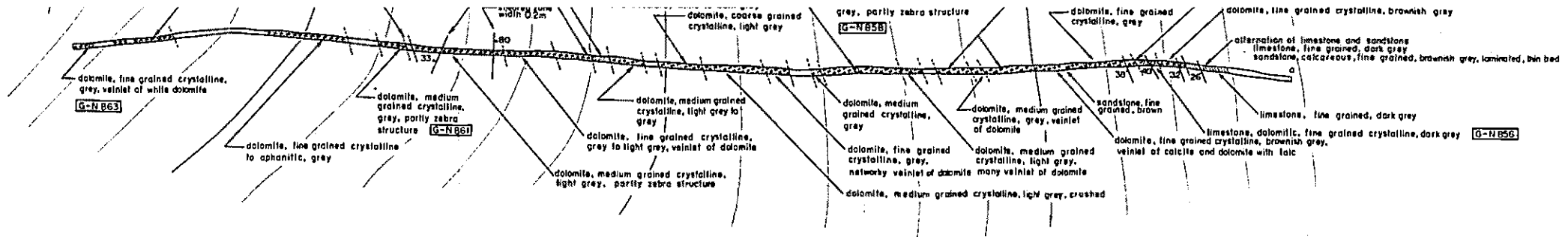


T-19 (183m)

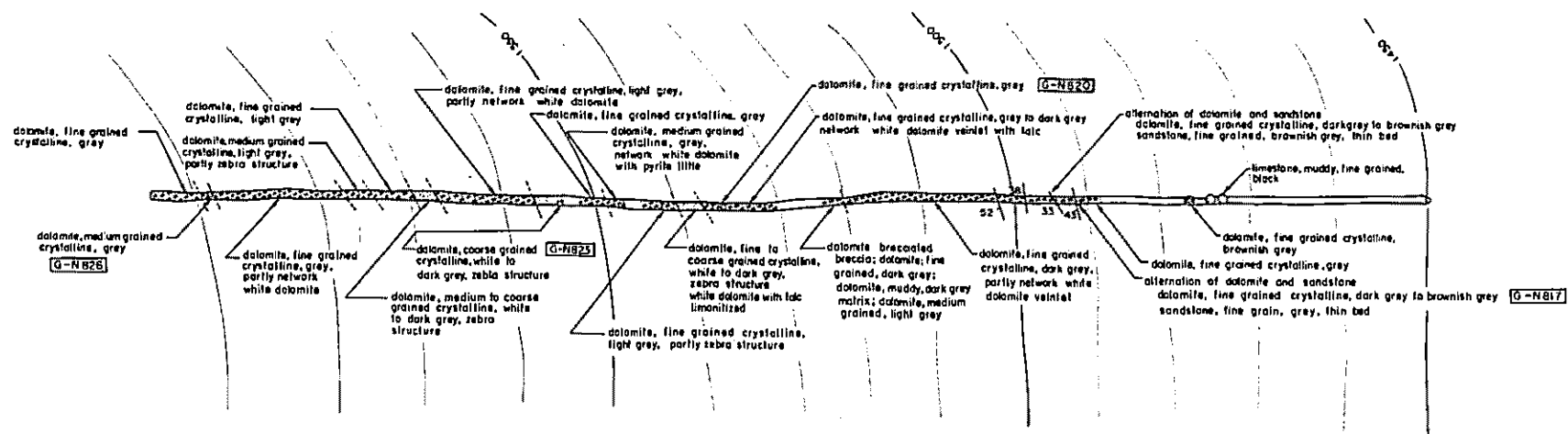


T-20 (200m)

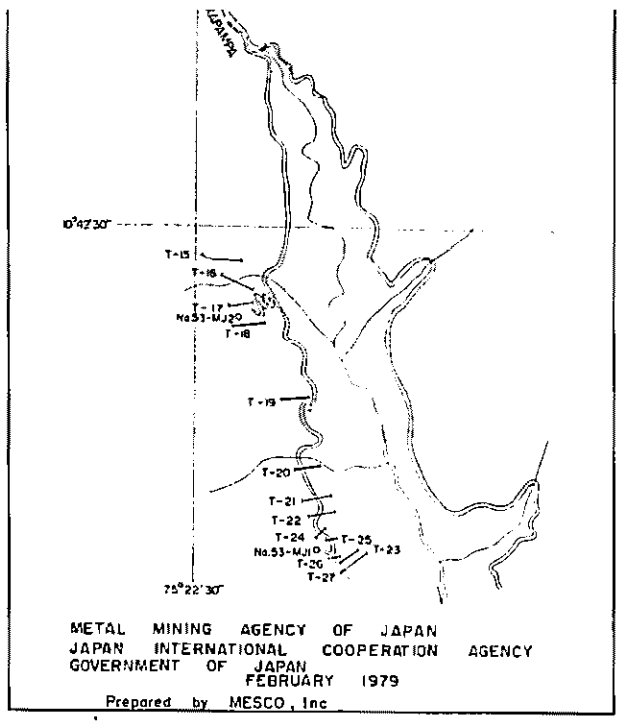
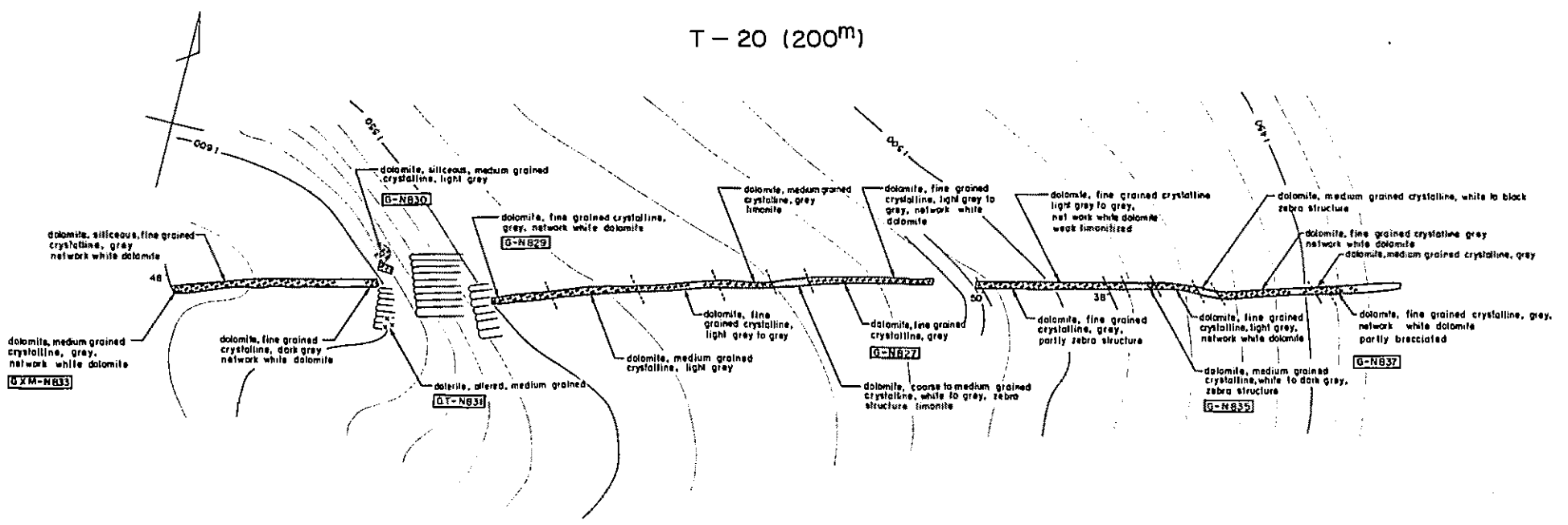




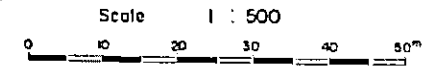
T - 19 (183m)



T - 20 (200m)

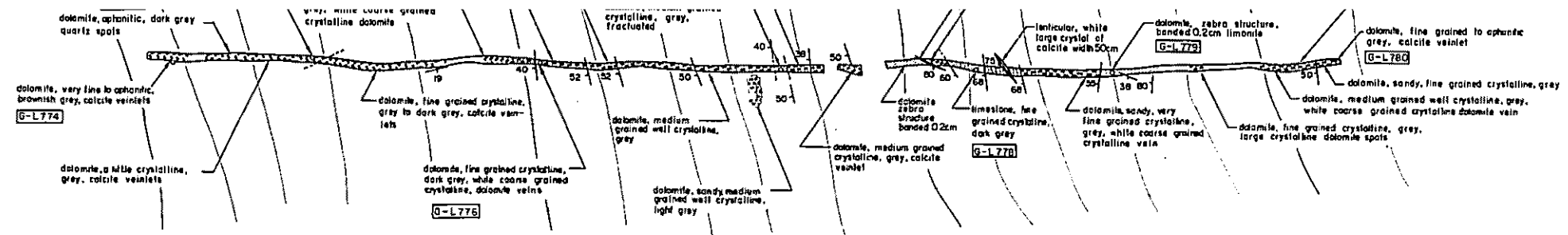


METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 Prepared by MESCO, Inc

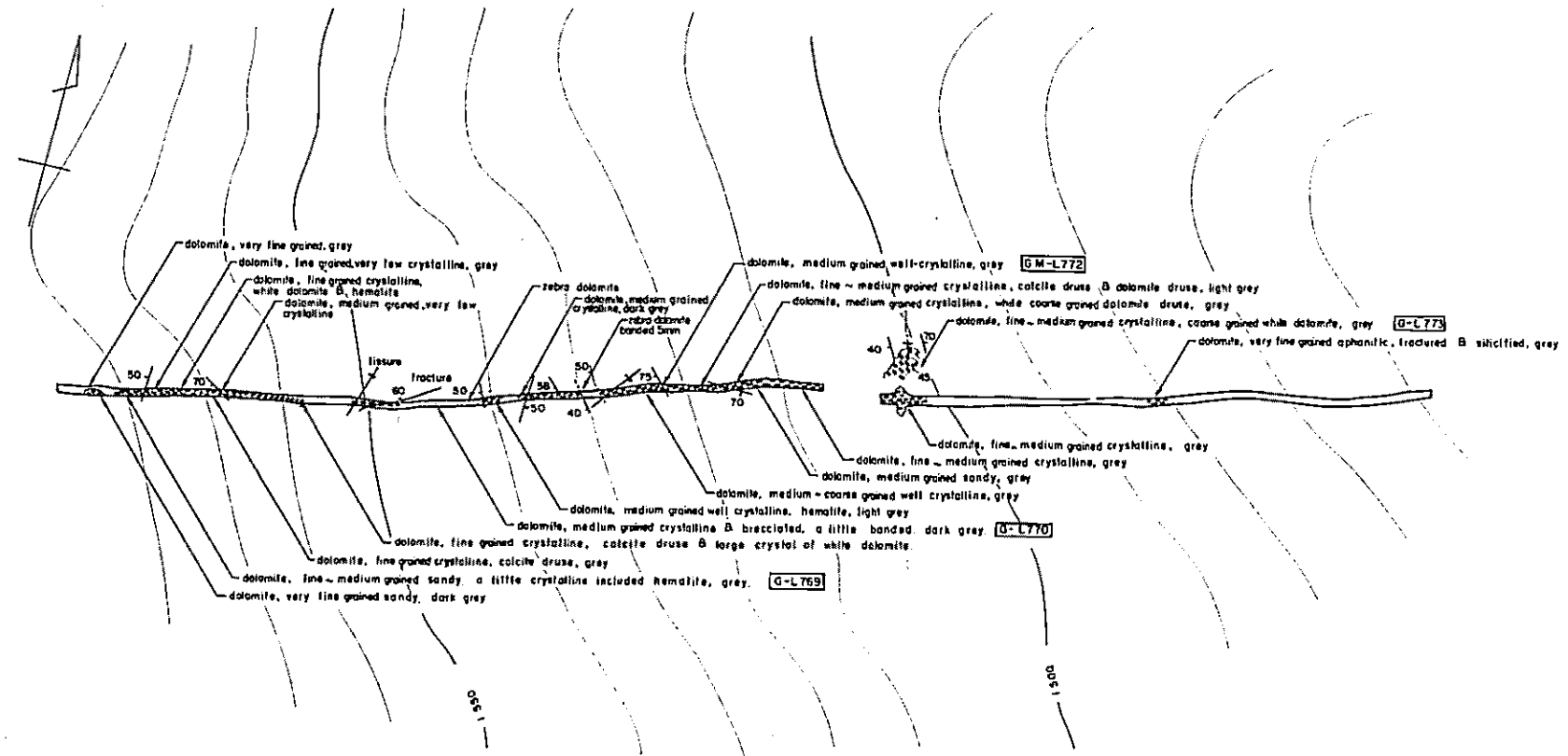


LEGEND

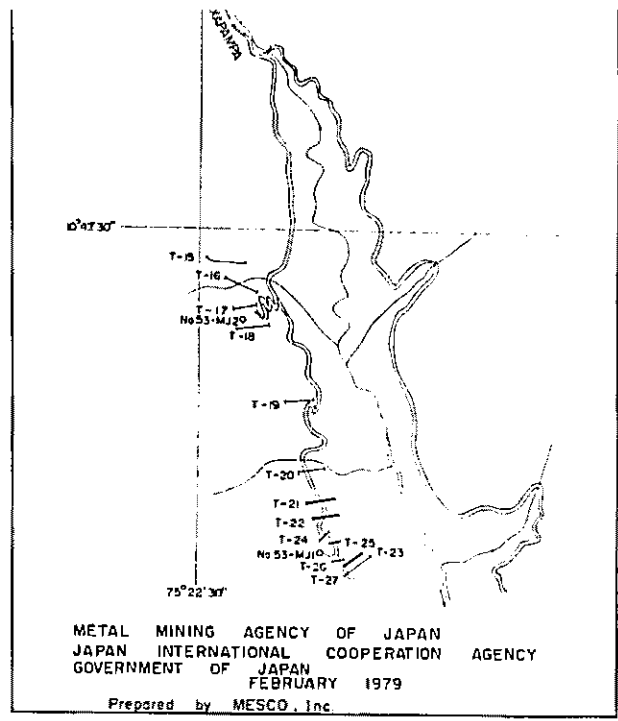
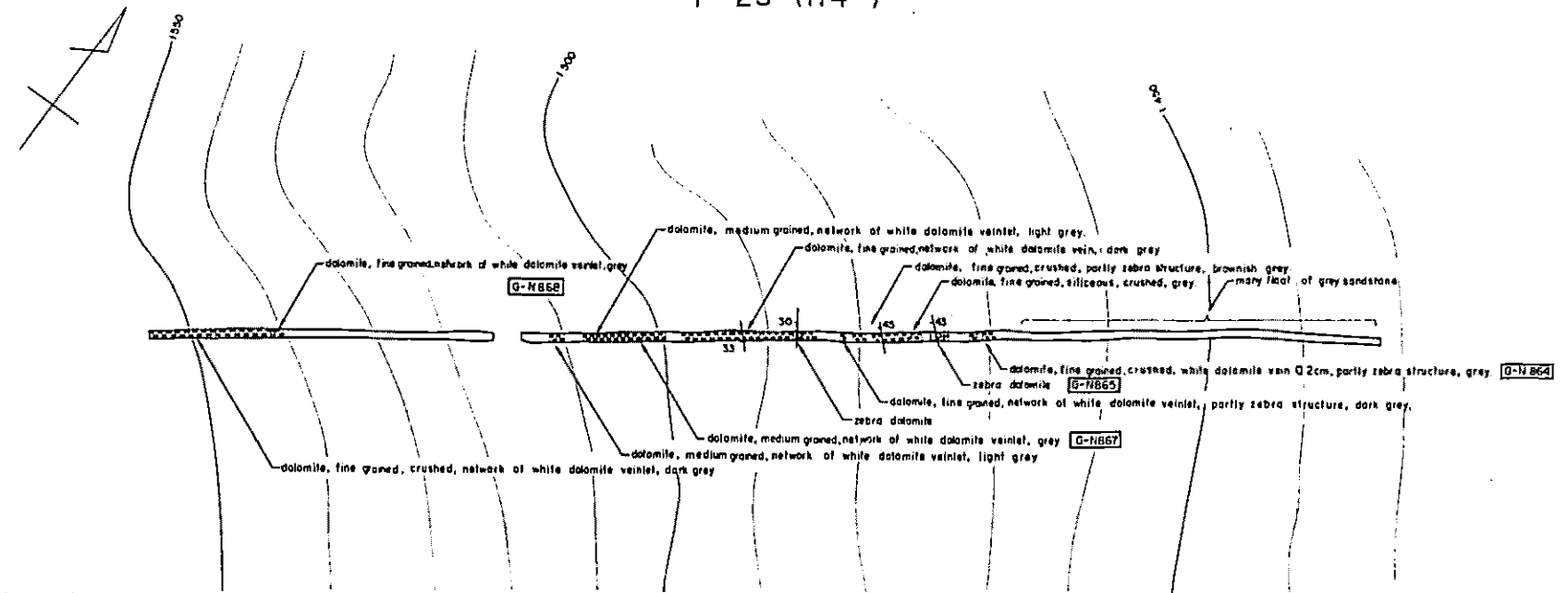
SEDIMENTARY ROCK		IGNEOUS ROCK	
	LIMESTONE		QUARTZ PORPHYRY
	DOLOMITIC LIMESTONE		LAVA
	DOLOMITE (DOLOSTONE)		TUFF BRECCIA & VOLCANIC BRECCIA
	BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE)		
	SANDSTONE		
	CONGLOMERATE		
NUMBER OF ROCK SAMPLE			
	FLOAT		F - L713 = F - FOSSIL
	DIP & STRIKE		M - L714 = M - MINOR ELEMENT ANALYSIS
	FISSURE OR JOINT		O - L715 = O - ORE ANALYSIS
	ZEBRA BAND		P - L716 = P - POLISHED SECTION
	MINERALIZATION		T - L718 = T - THIN SECTION
			X - L719 = X - X-RAY ANALYSIS
			G - L720 = G - GEOCHEMICAL ANALYSIS (ROCK)



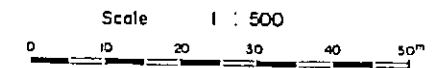
T-22 (184^m)



T-23 (174^m)



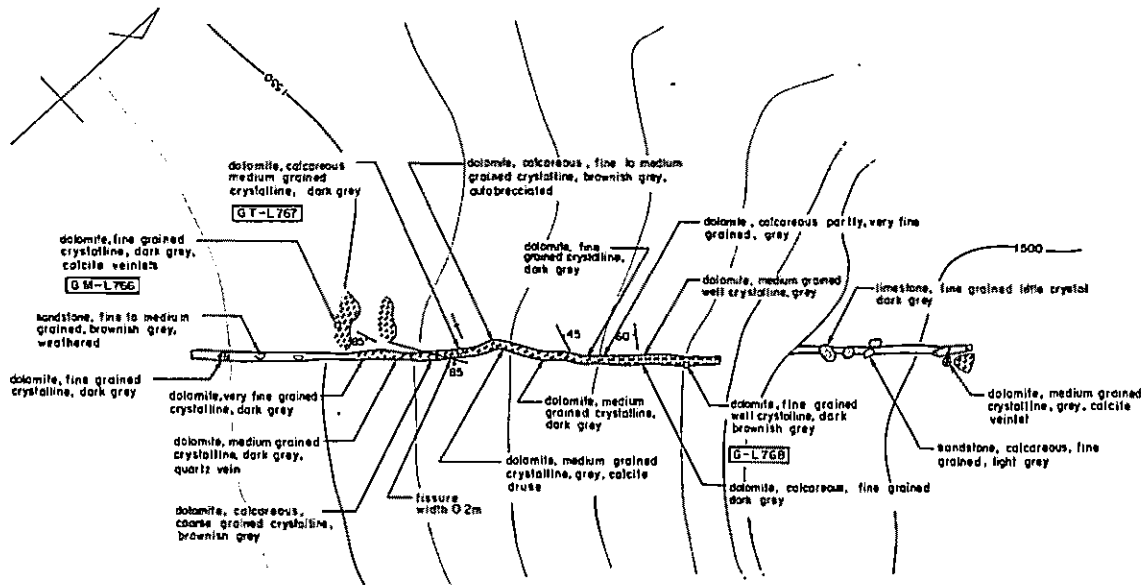
METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 Prepared by MESCO, Inc.



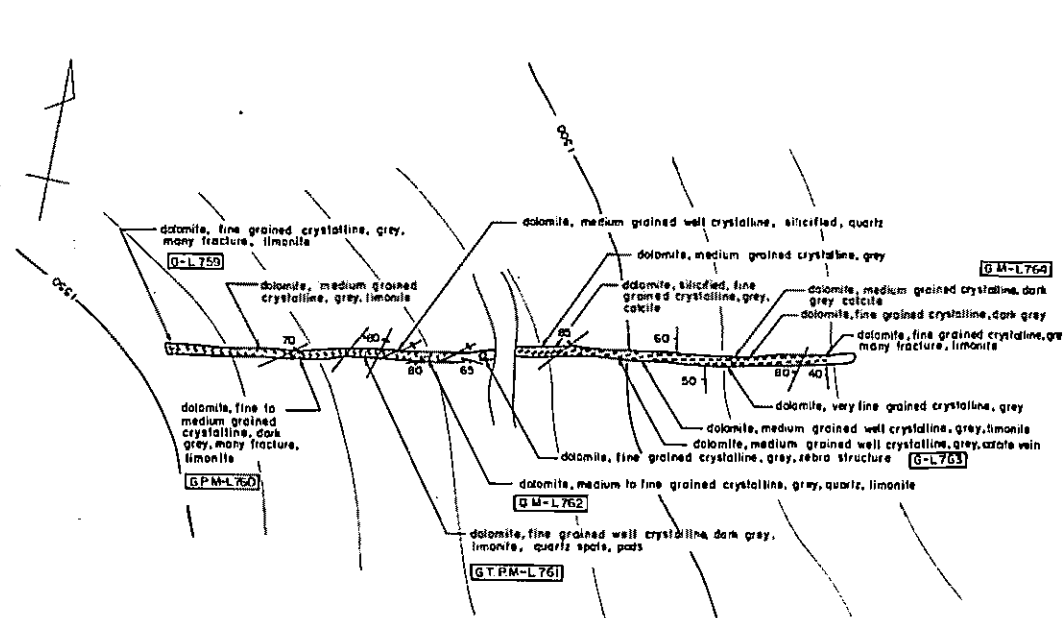
LEGEND

SEDIMENTARY ROCK		IGNEOUS ROCK	
[Symbol]	LIMESTONE	[Symbol]	QUARTZ PORPHYRY
[Symbol]	DOLOMITIC LIMESTONE	[Symbol]	LAVA
[Symbol]	DOLOMITE (DOLOSTONE)	[Symbol]	TUFF BRECCIA & VOLCANIC BRECCIA
[Symbol]	BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE)		
[Symbol]	SANDSTONE		
[Symbol]	CONGLOMERATE		
[Symbol]	MINERALIZATION		
[Symbol]	FLOAT	[Symbol]	F - FOSSIL
[Symbol]	DIP & STRIKE	[Symbol]	M - MINOR ELEMENT ANALYSIS
[Symbol]	FISSURE OR JOINT	[Symbol]	O - ORE ANALYSIS
[Symbol]	ZEBRA BAND	[Symbol]	P - POLISHED SECTION
[Symbol]		[Symbol]	T - THIN SECTION
[Symbol]		[Symbol]	X - X-RAY ANALYSIS
[Symbol]		[Symbol]	G - GEOCHEMICAL ANALYSIS (ROCK)

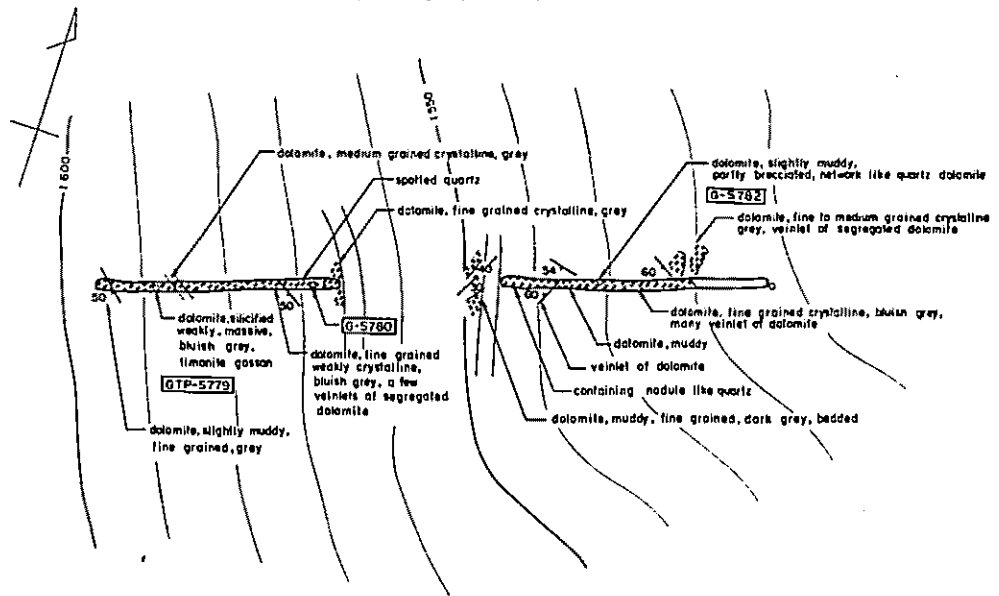
T-24 (92^m)



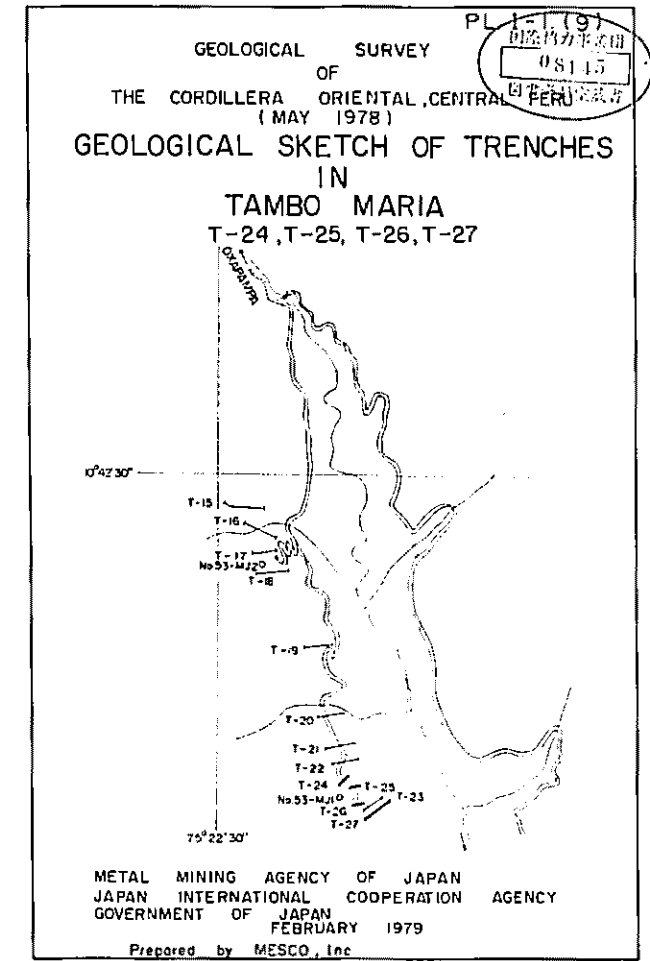
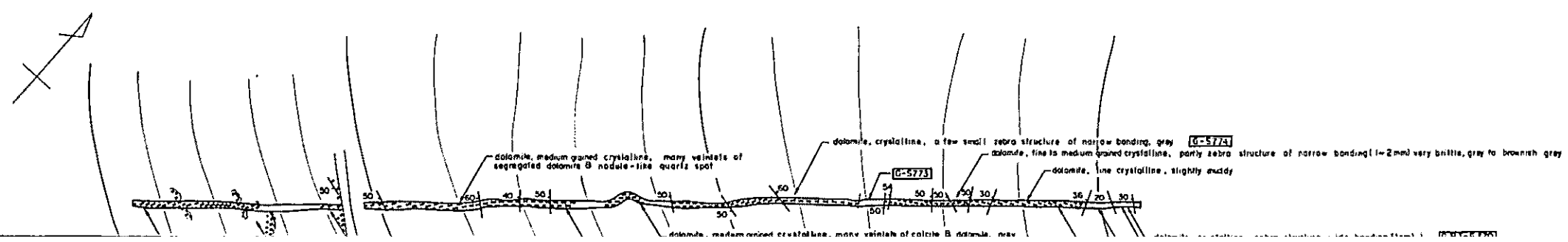
T-25 (87^m)



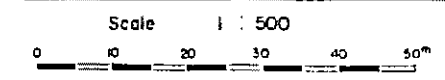
T-26 (67^m)



T-27 (234^m)

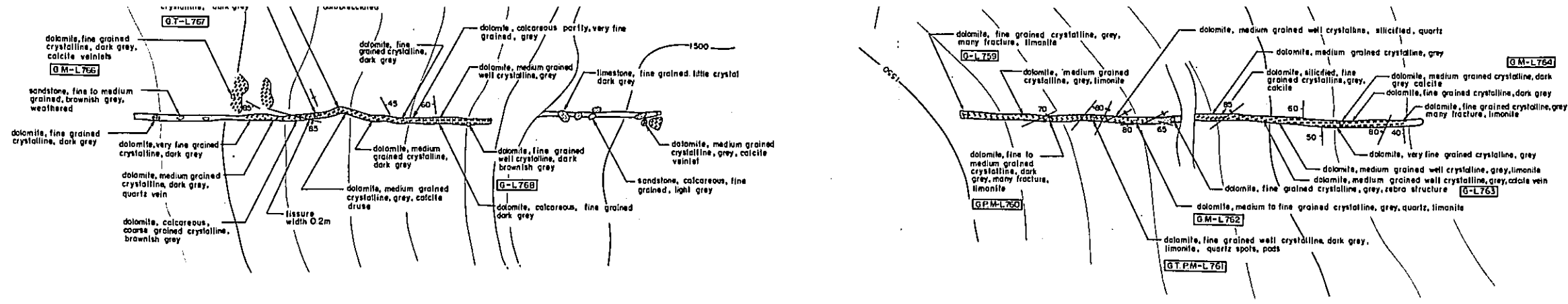


METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 Prepared by MESCO, Inc



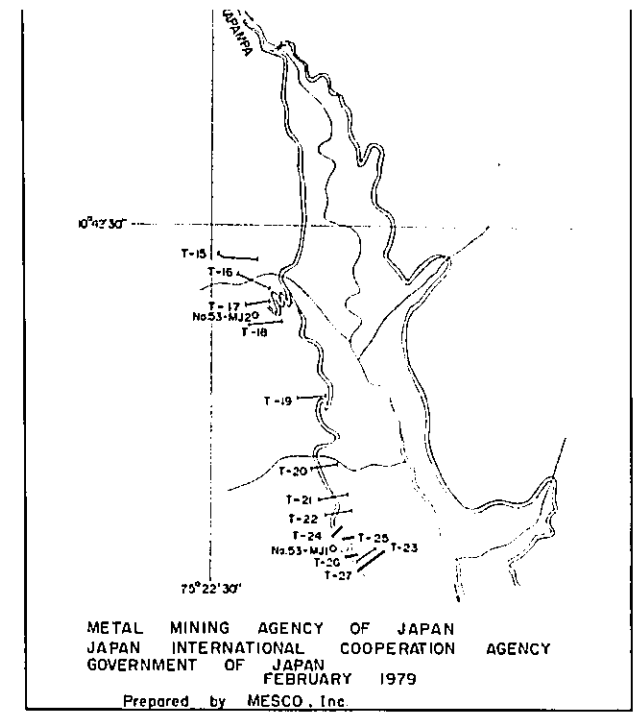
LEGEND

SEDIMENTARY ROCK		IGNEOUS ROCK	
[Symbol]	LIMESTONE	[Symbol]	QUARTZ PORPHYRY
[Symbol]	DOLOMITIC LIMESTONE	[Symbol]	LAVA
[Symbol]	DOLOMITE (DOLOSTONE)	[Symbol]	TUFF BRECCIA & VOLCANIC BRECCIA
[Symbol]	BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE)		
[Symbol]	SANDSTONE		
[Symbol]	CONGLOMERATE		
[Symbol]	NUMBER OF ROCK SAMPLE		
[Symbol]	FLOAT	[Symbol]	F-1713 = F - FOSSIL
[Symbol]	DIP & STRIKE	[Symbol]	M-1714 = M - MINOR ELEMENT ANALYSIS
[Symbol]	FISSURE OR JOINT	[Symbol]	O-1715 = O - ORE ANALYSIS
[Symbol]	ZEBRA BAND	[Symbol]	P-1716 = P - POLISHED SECTION
[Symbol]	MINERALIZATION	[Symbol]	T-1718 = T - THIN SECTION

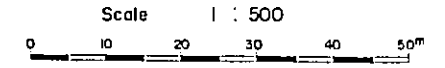


T-26 (67m)

T-27 (234m)

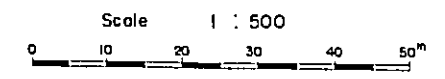
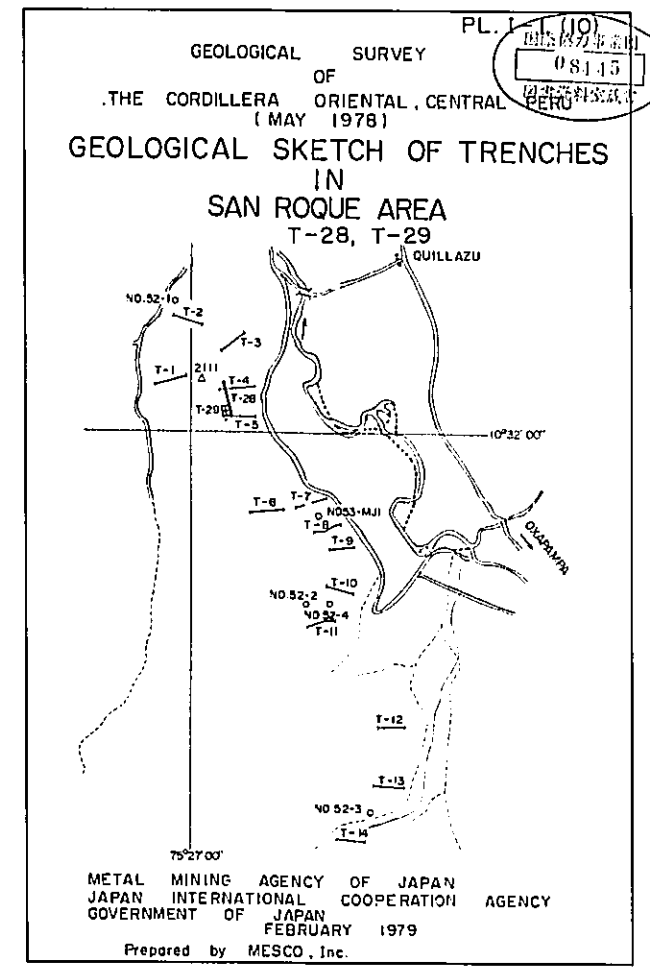
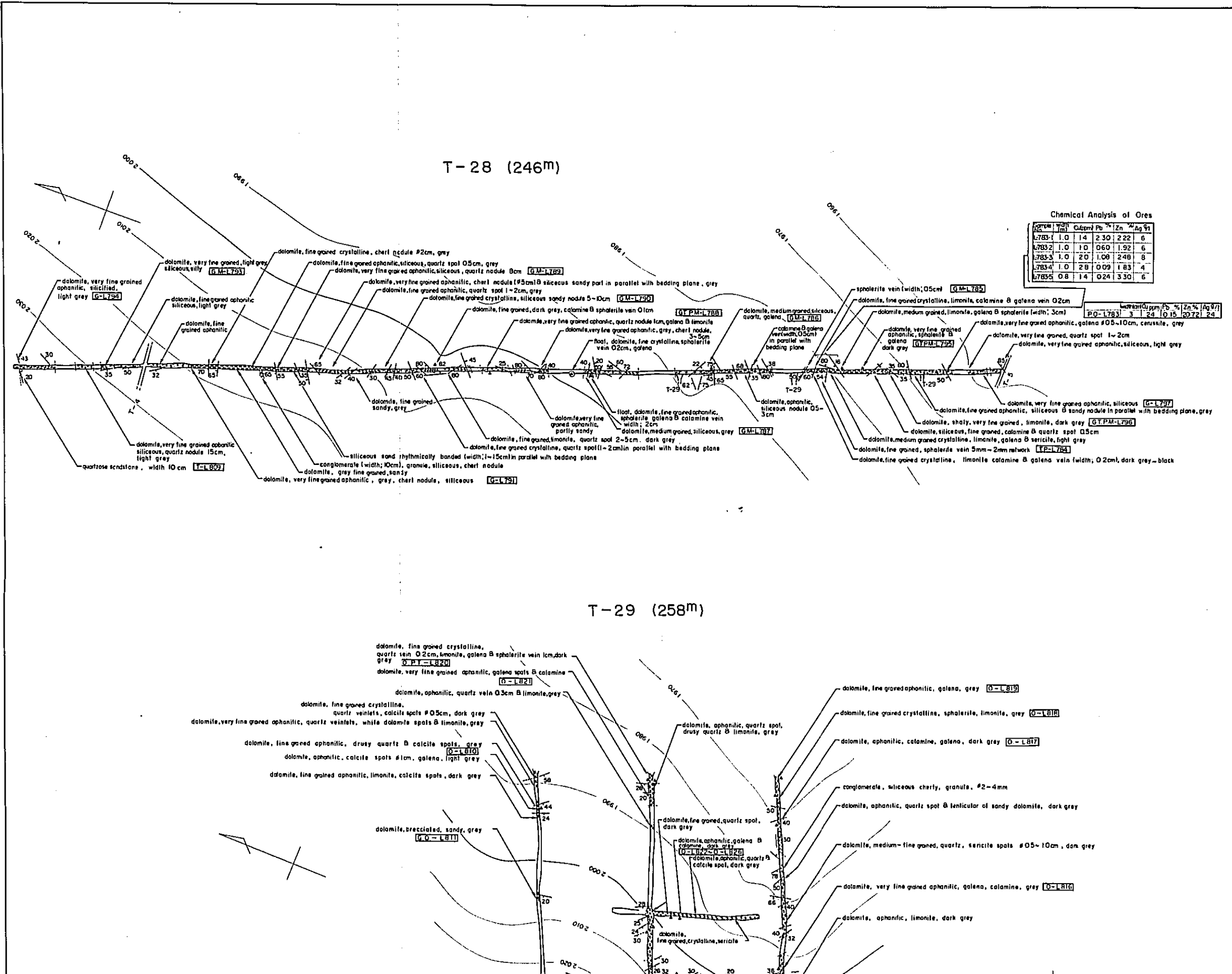


METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 Prepared by MESCO, Inc.



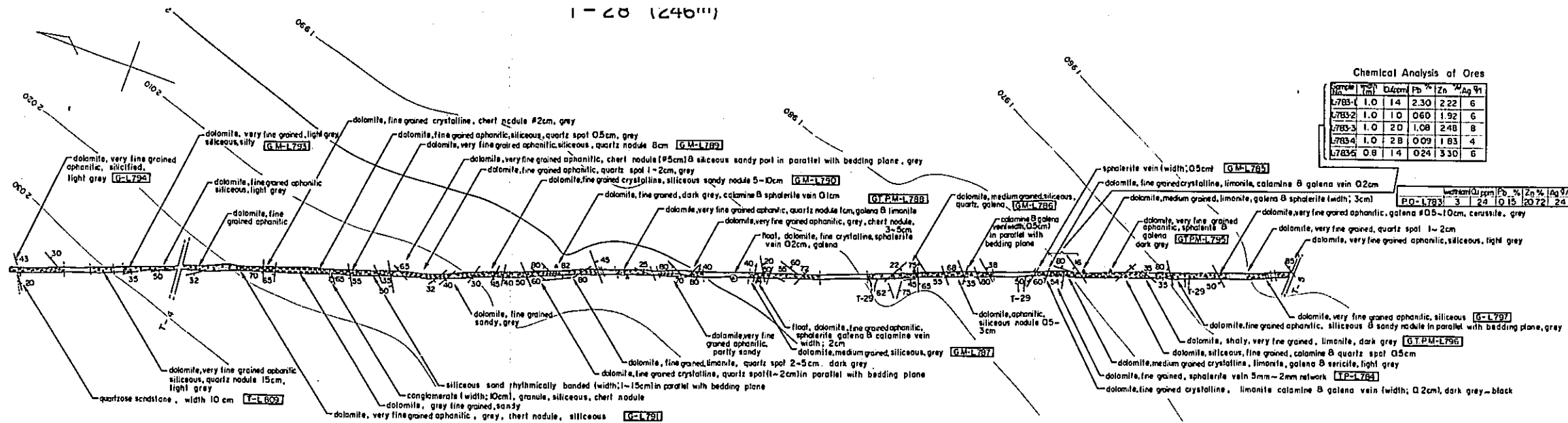
LEGEND

- | | |
|---|--|
| SEDIMENTARY ROCK | IGNEOUS ROCK |
| LIMESTONE | QUARTZ PORPHYRY |
| DOLOMITIC LIMESTONE | LAVA |
| DOLOMITE (DOLOSTONE) | TUFF BRECCIA & VOLCANIC BRECCIA |
| BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE) | |
| SANDSTONE | |
| CONGLOMERATE | |
| FLOAT | NUMBER OF ROCK SAMPLE |
| DIP & STRIKE | F - L713 = F - FOSSIL |
| FISSURE OR JOINT | M - L714 = M - MINOR ELEMENT ANALYSIS |
| ZEBRA BAND | O - L715 = O - ORE ANALYSIS |
| MINERALIZATION | P - L716 = P - POLISHED SECTION |
| | T - L718 = T - THIN SECTION |
| | X - L719 = X - X-RAY ANALYSIS |
| | G - L720 = G - GEOCHEMICAL ANALYSIS (ROCK) |



- LEGEND**
- | | | | |
|--|---|--|---------------------------------------|
| | LIMESTONE | | QUARTZ PORPHYRY |
| | DOLOMITIC LIMESTONE | | LAVA |
| | DOLOMITE (DOLOSTONE) | | TUFF BRECCIA & VOLCANIC BRECCIA |
| | BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE) | | SANDSTONE |
| | CONGLOMERATE | | FLAT |
| | OIP & STRIKE | | F - FOSSIL |
| | FISSURE OR JOINT | | M - L714 = M - MINOR ELEMENT ANALYSIS |
| | ZEBRA BAND | | O - L715 = O - ORE ANALYSIS |
| | MINERALIZATION | | P - L716 = P - POLISHED SECTION |
| | | | T - L718 = T - THIN SECTION |

1-28 (246m)

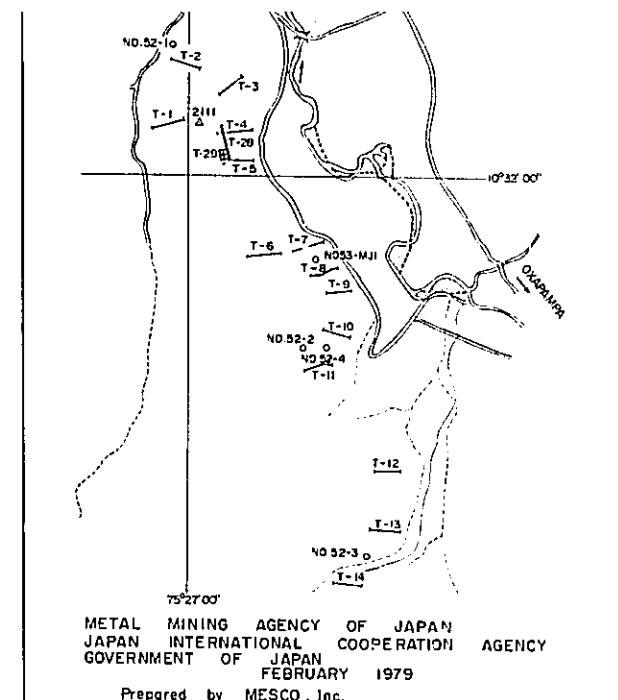
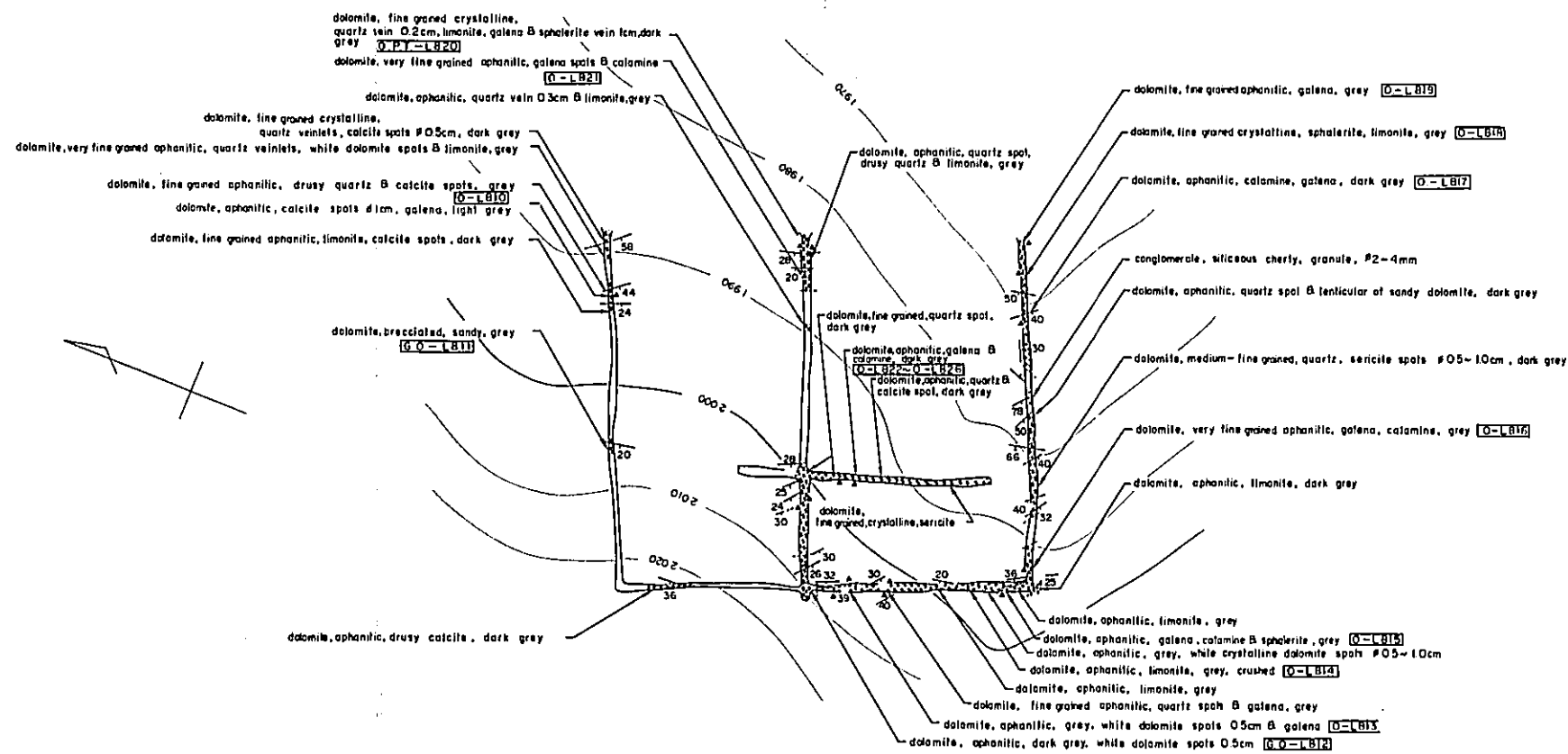


Chemical Analysis of Ores

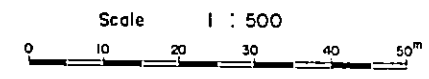
Sample No.	Fe	Ca	Pb	Zn	Ag	g/t
L783-1	1.0	1.4	2.30	2.22	6	
L783-2	1.0	1.0	0.60	1.92	6	
L783-3	1.0	2.0	1.08	2.48	8	
L783-4	1.0	2.8	0.09	1.83	4	
L783-5	0.8	1.4	0.24	3.30	6	

Sample No.	Fe	Ca	Pb	Zn	Ag	g/t
P.O.-L783-1	3	24	10	20	24	

T-29 (258m)

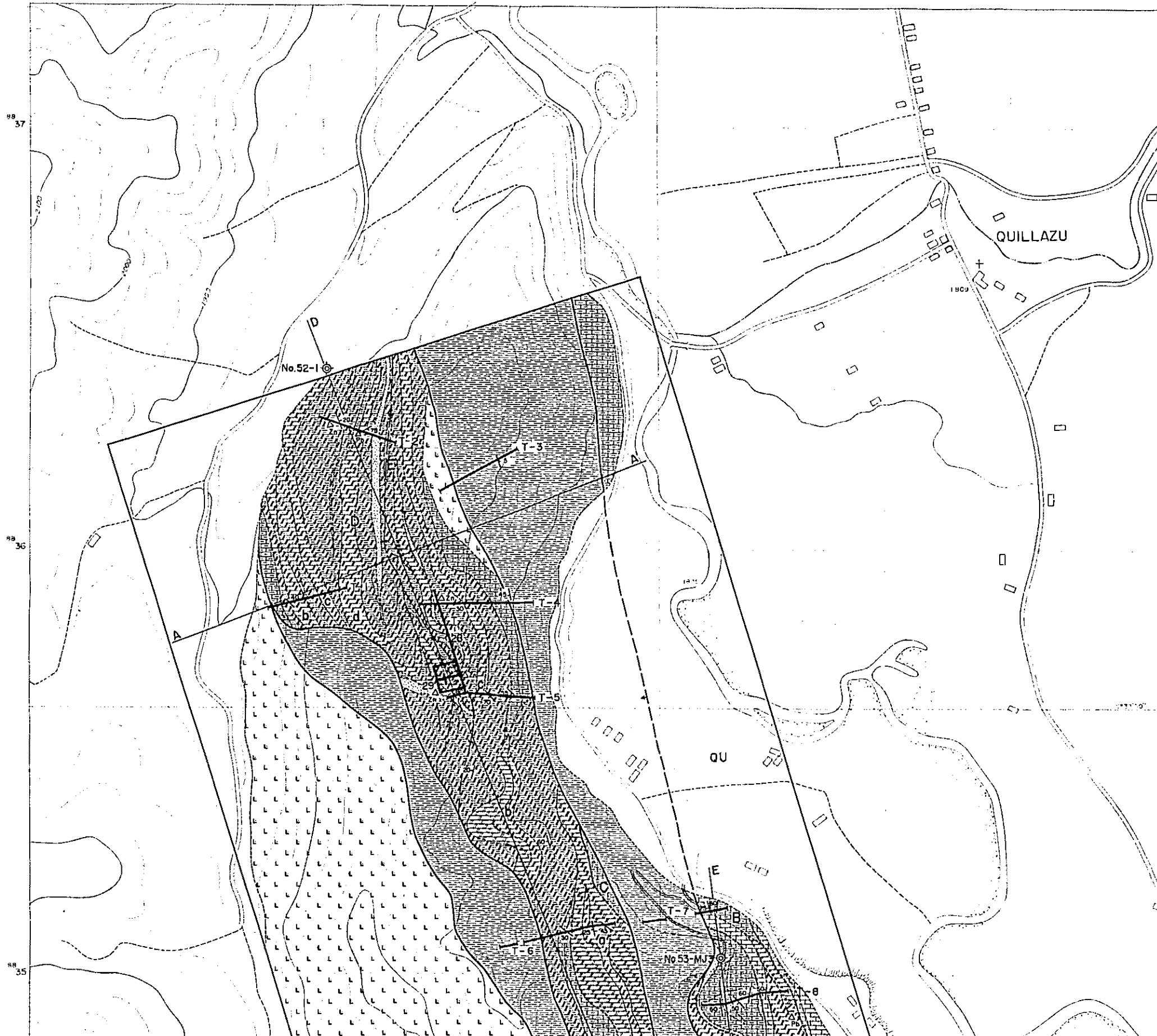


METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 Prepared by MESCO, Inc.



LEGEND

- | | |
|---|--|
| SEDIMENTARY ROCK | IGNEOUS ROCK |
| LIMESTONE | QUARTZ PORPHYRY |
| DOLOMITIC LIMESTONE | LAVA |
| DOLOMITE (DOLOSTONE) | TUFF BRECCIA & VOLCANIC BRECCIA |
| BRECCIA DOLOMITE OR DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE) | |
| SANDSTONE | |
| CONGLOMERATE | |
| FLOAT | NUMBER OF ROCK SAMPLE |
| DIP & STRIKE | F - L713 = F - FOSSIL |
| FISSURE OR JOINT | M - L714 = M - MINOR ELEMENT ANALYSIS |
| ZEBRA BAND | O - L715 = O - ORE ANALYSIS |
| MINERALIZATION | P - L716 = P - POLISHED SECTION |
| | T - L718 = T - THIN SECTION |
| | X - L719 = X - X-RAY ANALYSIS |
| | G - L720 = G - GEOCHEMICAL ANALYSIS (ROCK) |

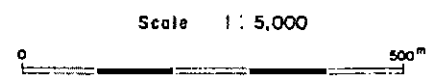


PL. 1 2 (1)
08115
国書院資料室蔵書

GEOLOGICAL SURVEY
OF
THE COROILLERA ORIENTAL, CENTRAL PERU
(MAY 1978)

GEOLOGICAL MAP
OF
THE SPECIALLY DETAILED SURVEY AREA
(SAN ROQUE)

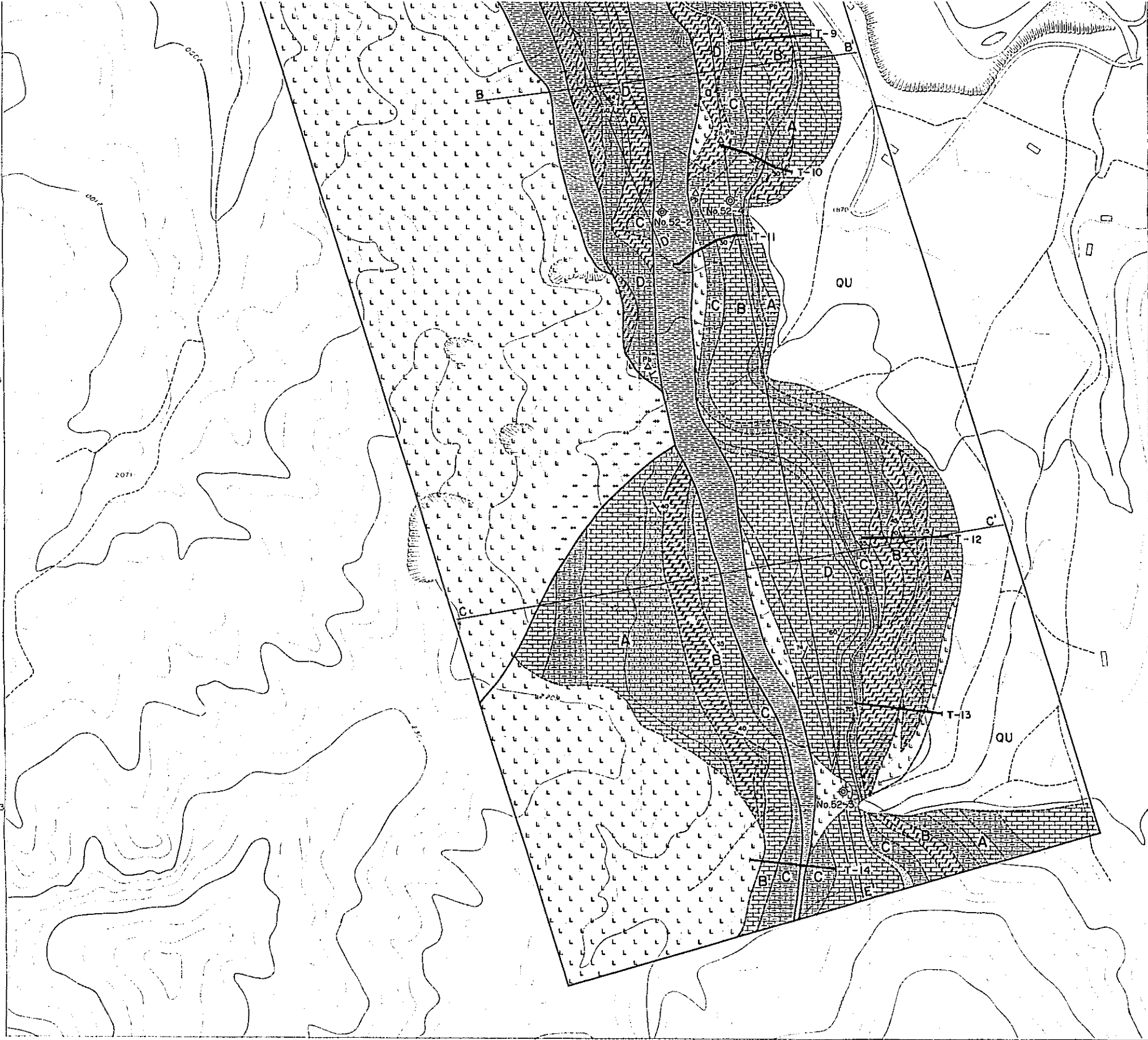
METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1979
prepared by MESCO, Inc.



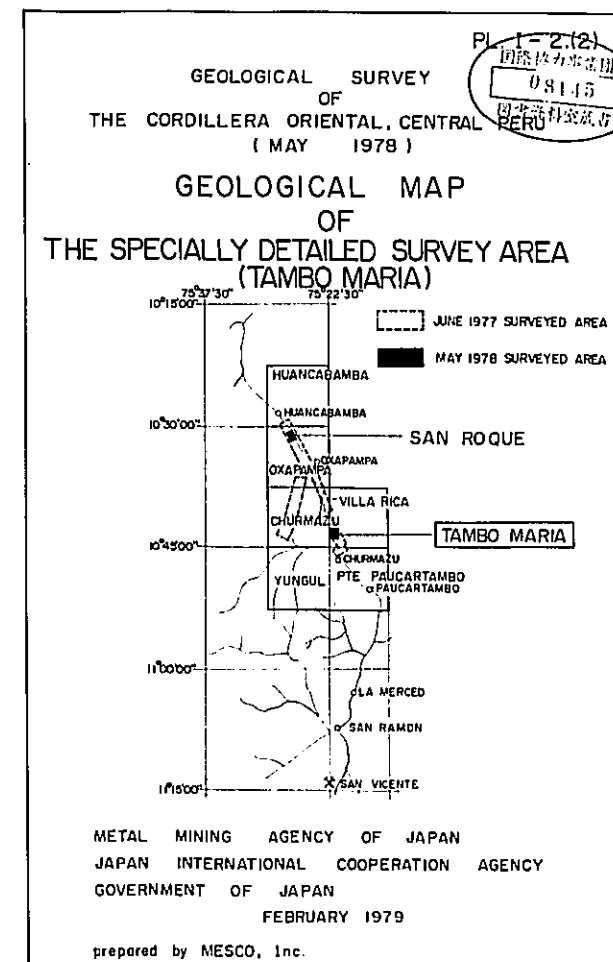
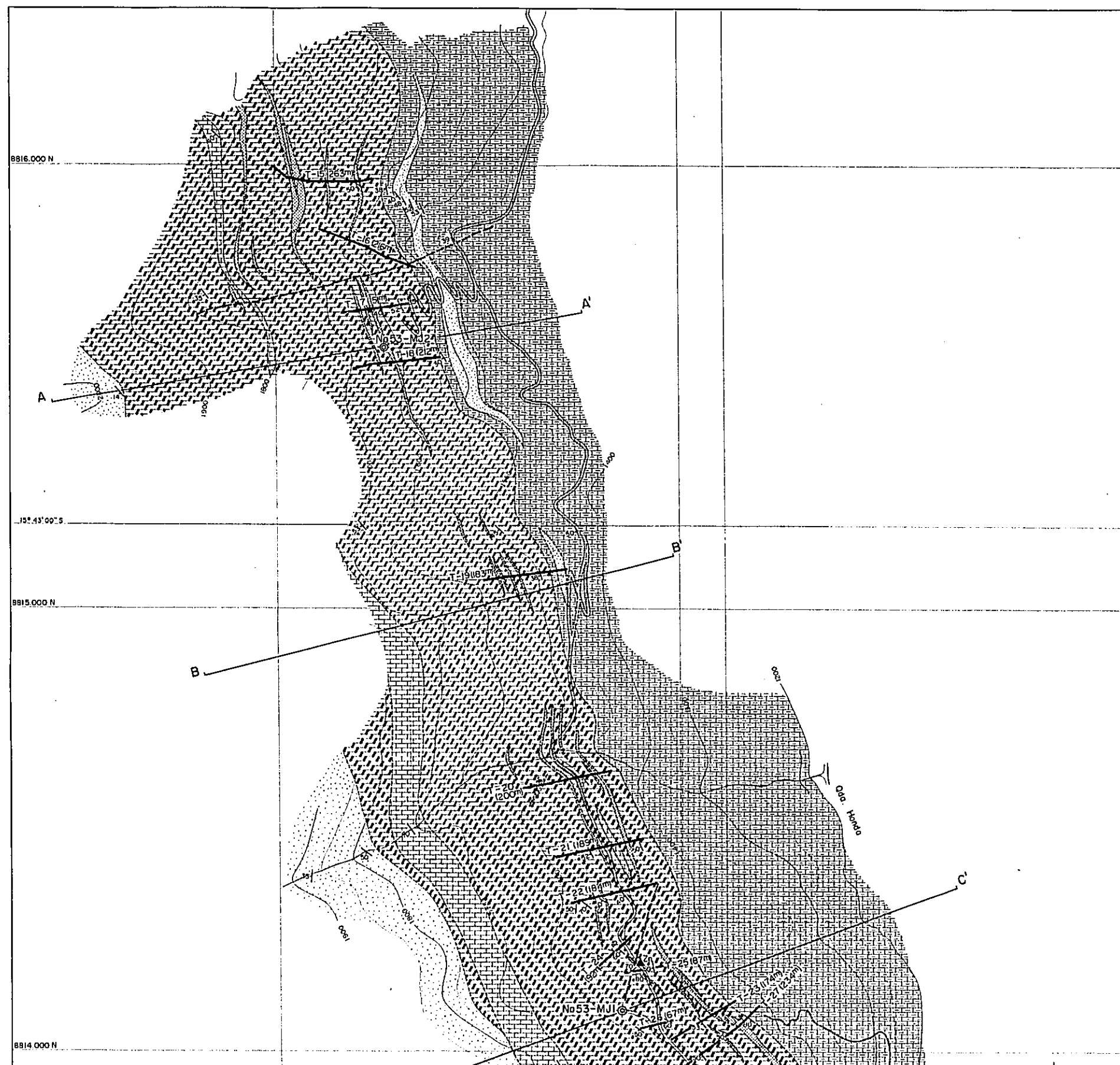
LEGEND

SEDIMENTARY ROCK

QU	Gravel & Sand	Quaternary
[Cross-hatch pattern]	Limestone	Pucara Group (Triassic Jurassic)
[Dotted pattern]	Muddy Limestone	
[Horizontal lines pattern]	Sandy Limestone	
[Vertical lines pattern]	Dolomitic Limestone	
[Diagonal lines pattern]	Dolomite (Dolostone)	
[Wavy lines pattern]	Calcareous Dolomite (Calcareous Dolostone)	
[Stippled pattern]	Muddy Dolomite & Silty Dolomite (Muddy Dolostone) (Silty Dolostone)	
[Diagonal lines pattern]	Sandy Dolomite & Dolomitic Sandstone (Sandy Dolostone)	



- (Sandy Dolostone)
 - Sandstone, Siltstone
 - Volcanic conglomerate & tuffaceous sandstone
- Mitu Group
(Permian)
- IGNEOUS ROCK**
- Granite
 - Quartz porphyry or Granite porphyry
- bedding plane
 - synclinal folding axis
 - anticlinal folding axis
 - fault
 - confirmed A, B, C, D, E
 - estimated a, b, c, d, e
 - geological boundary
 - mineral indication
- Trench
 - Old adit
 - Diamond drill hole
 - Transect line (cf. PLI-4(II))
 - Submember's symbols









Scale 1 : 5,000



LEGEND

SEDIMENTARY ROCK


-  SANDSTONE OR MUDSTONE
-  MUDDY LIMESTONE
-  SANDY LIMESTONE
-  LIMESTONE
-  DOLOMITE (DOLOSTONE)
-  DOLOSTONE WITH ZEBRA STRUCTURE OR BRECCIA DOLOMITE

PUCARA GROUP
(TRIASSIC-JURASSIC)

IGNEOUS ROCK

-  DOLERITE

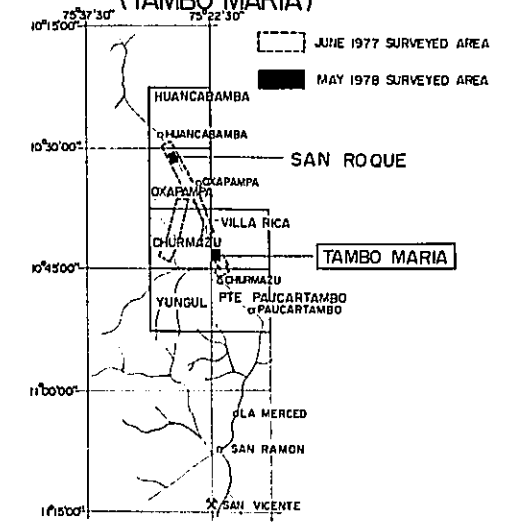
 bedding plane showing dip ▲ Zn mineralization

 fault (estimated)

A - A' transect line (cf. PL.1-4(2))



THE SPECIALLY DETAILED SURVEY AREA
(TAMBO MARIA)



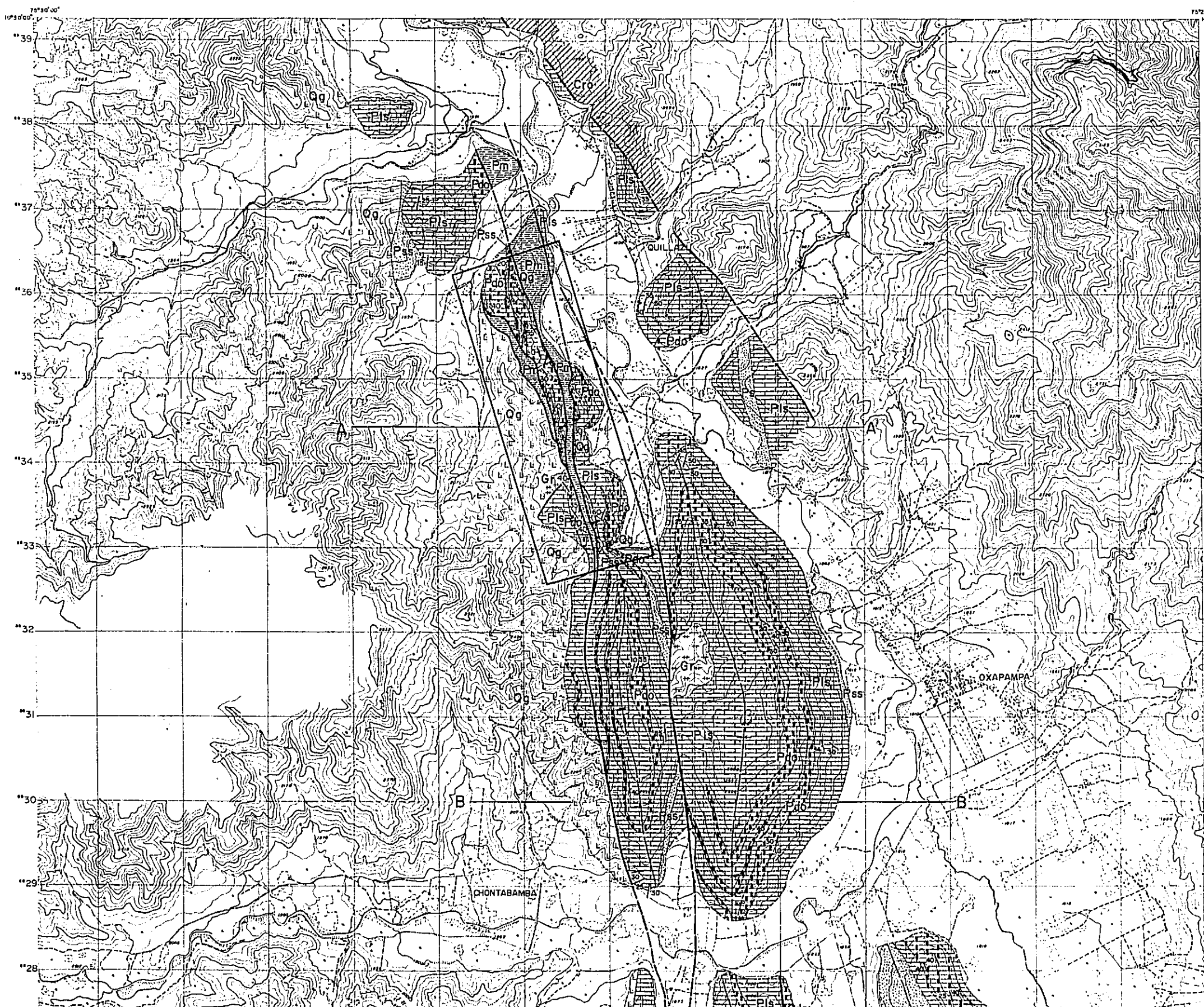
METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 prepared by MESCO, Inc.

Scale 1 : 5,000



LEGEND

- | | | | |
|-------------------------|---|-------------------------------------|--------------------------------------|
| SEDIMENTARY ROCK | | | |
| | SANDSTONE OR MUDSTONE | PUCARA GROUP
(TRIASSIC-JURASSIC) | |
| | MUDDY LIMESTONE | | |
| | SANDY LIMESTONE | | |
| | LIMESTONE | | |
| | DOLOMITE (DOLOSTONE) | | |
| | DOLOSTONE WITH ZEBRA STRUCTURE
OR BRECCIA DOLOMITE | | |
| IGNEOUS ROCK | | | |
| | DOLERITE | | |
| | bedding plane showing dip | | Zn mineralization |
| | fault (estimated) | | A - A' transect line (cf. PL.I-4(2)) |
| | geological boundary | | |
| | trench for geological survey | | |
| | diamond drill hole | | |
| | roadway | | |
| | pathway | | |



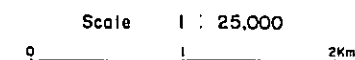
PL.I - 5 (1)

GEOLOGICAL SURVEY
OF
THE CORDILLERA ORIENTAL, CENTRAL PERU
(MAY 1978)

GEOLOGICAL MAP
OF
THE DETAILED SURVEY AREA

08115

METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1979
prepared by MESCO, Inc.



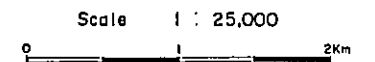
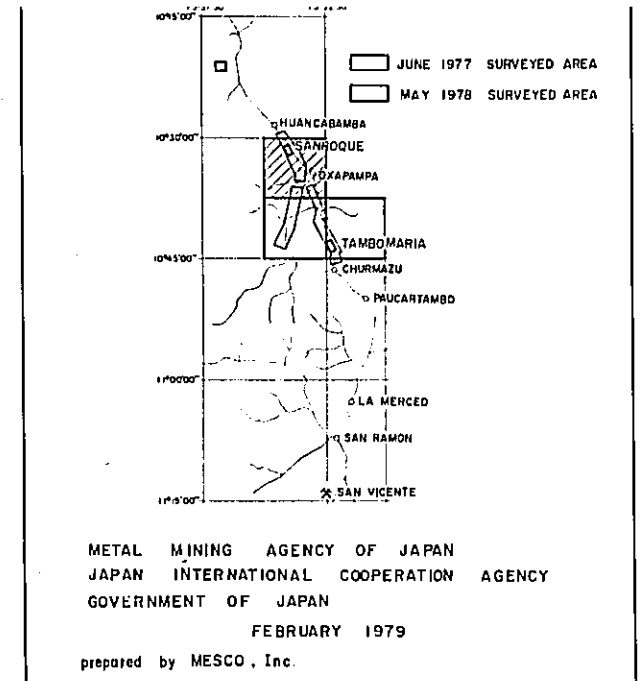
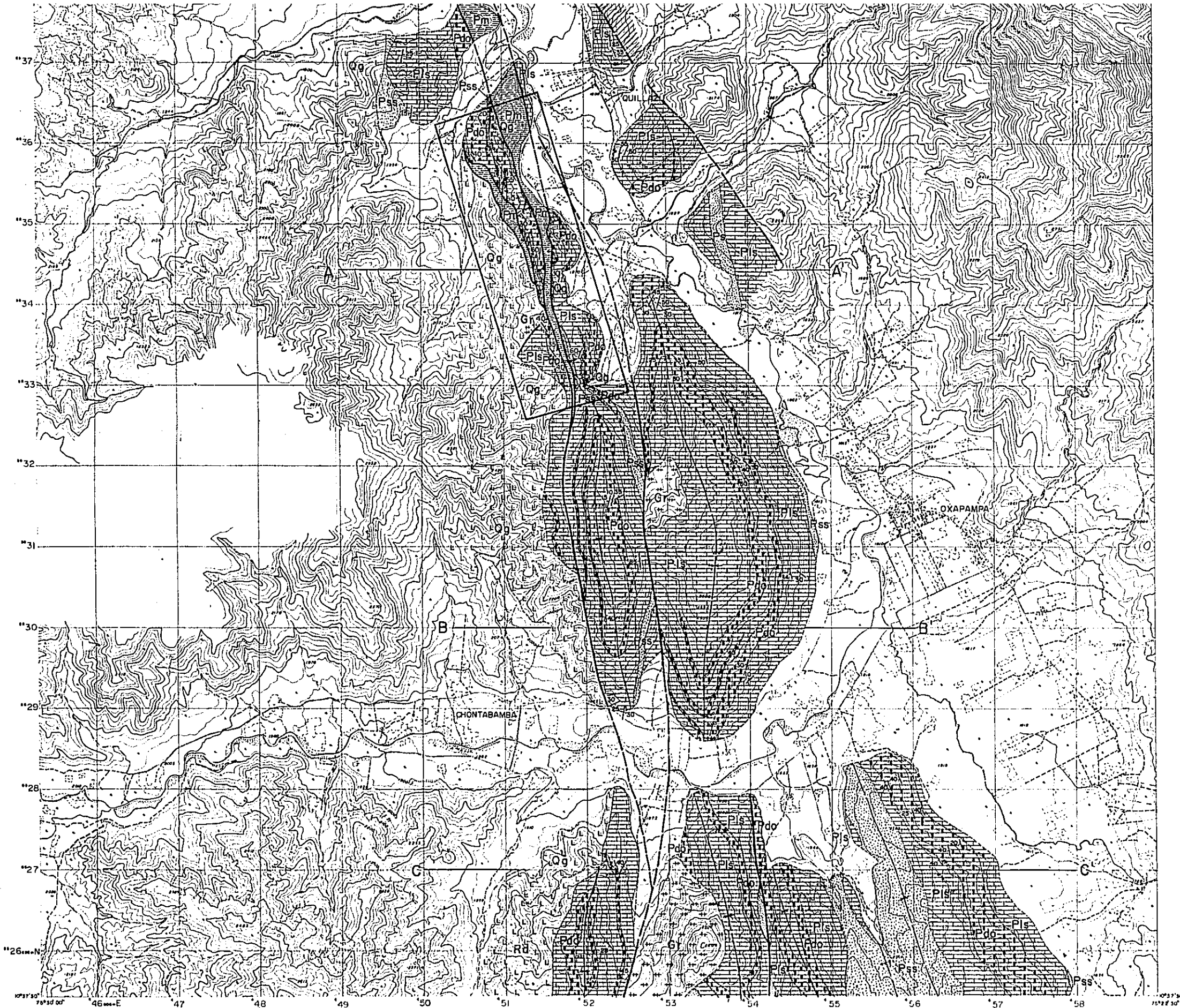
LEGEND
SEDIMENTARY ROCK

	Gravel & Sand	Quaternary
	Merced F.	Tertiary
	Chonta G.	Cretaceous
	Oriente G.	
	Sarayaquillo F.	Jurassic
	Pucara G.	
	Sandstone	Triassic
	Mitu G.	Permian

IGNEOUS ROCK

	Monzonite porphyry
	Rhyolite & Dacite
	Quartz porphyry & Granite porphyry
	Granite
	Diorite complex

- bedding plane
- synclinal folding axis



- LEGEND**
- SEDIMENTARY ROCK**
- | | | |
|--|----------------------|------------|
| | Gravel & Sand | Quaternary |
| | Merced F. | Tertiary |
| | Chonta G. | Cretaceous |
| | Oriente G. | |
| | Sarayaquillo F. | Jurassic |
| | Limestone | |
| | Dolomite (Dolostone) | Triassic |
| | Pucara G. | |
| | Sandstone | Permian |
| | Mitu G. | |
- IGNEOUS ROCK**
- | | |
|--|------------------------------------|
| | Manzanite porphyry |
| | Rhyolite & Dacite |
| | Quartz porphyry & Granite porphyry |
| | Granite |
| | Diabase complex |
- bedding plane
 —+— synclinal folding axis
 —+— anticlinal folding axis
 —+— fault { confirmed
 —+— estimated
 - - - geological boundary
 A—A' geological section line

JUNIN 1:25,000

CHURMAZU

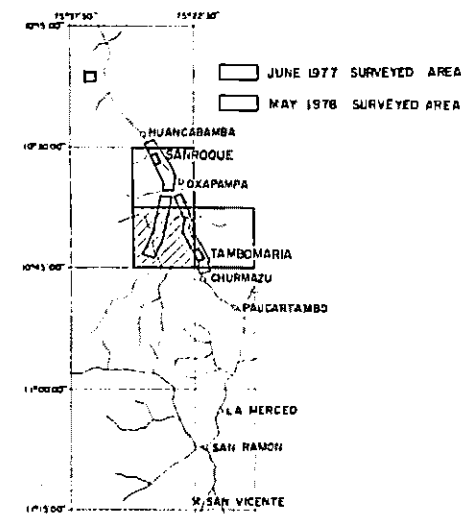
HOJA 22M-IV-S0



PL.I - 3(2)

GEOLOGICAL SURVEY
OF
THE CORDILLERA ORIENTAL, CENTRAL PERU
(MAY 1978)

GEOLOGICAL MAP
OF
THE DETAILED SURVEY AREA



METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

FEBRUARY 1979

prepared by MESCO, Inc.



LEGEND

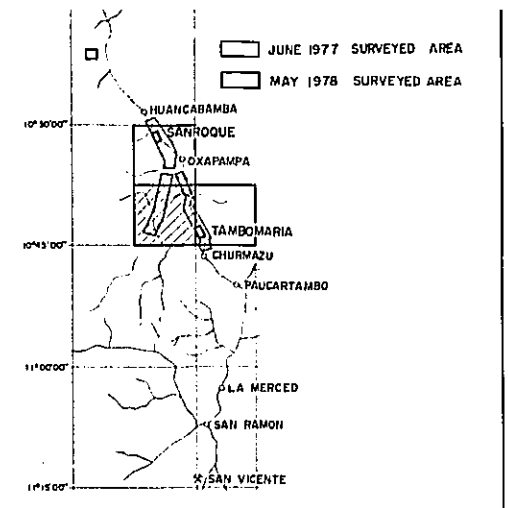
SEDIMENTARY ROCK

	Gravel & Sand	Quaternary
	Merced F.	Tertiary
	Chonta G.	Cretaceous
	Oriente G.	
	Sarayaquito F.	Jurassic
	limestone sandstone Pucara G.	Triassic
	Mitu G.	Permian

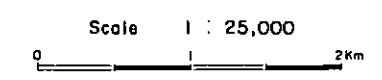
IGNEOUS ROCK

	Manzonite porphyry
	Rhyolite & Dacite
	Quartz porphyry & Granite porphyry
	Granite
	Diorite complex

bedding plane
 synclinal folding axis



METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 prepared by MESCO, Inc.



LEGEND

SEDIMENTARY ROCK

	Gravel & Sand	Quaternary
	Merced F.	Tertiary
	Chonta G.	Cretaceous
	Oriente G.	
	Sarayaquillo F.	Jurassic
	Limestone (Sandstone) Pucara G.	Triassic
	Mitu G.	Permian

IGNEOUS ROCK

	Monzonite porphyry
	Rhyolite & Dacite
	Quartz porphyry & Granite porphyry
	Granite
	Diorite complex

	bedding plane
	synclinal folding axis
	anticlinal folding axis
	fault
	geological boundary
	geological section line

JUNIN 1:25,000

VILLA RICA

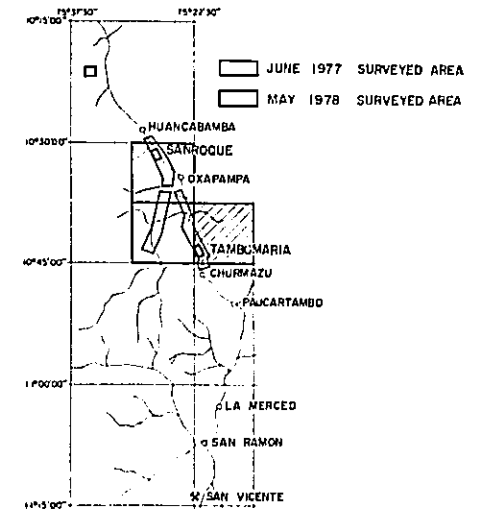
HOJA 22M-IV-SE

国土地力事業団
08145
調査区 調査区

PL. I - 3. (3)

GEOLOGICAL SURVEY
OF
THE CORDILLERA ORIENTAL, CENTRAL PERU
(MAY 1978)

GEOLOGICAL MAP
OF
THE DETAILED SURVEY AREA



METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1979

prepared by MESCO, Inc.

Scale 1 : 25,000



LEGEND

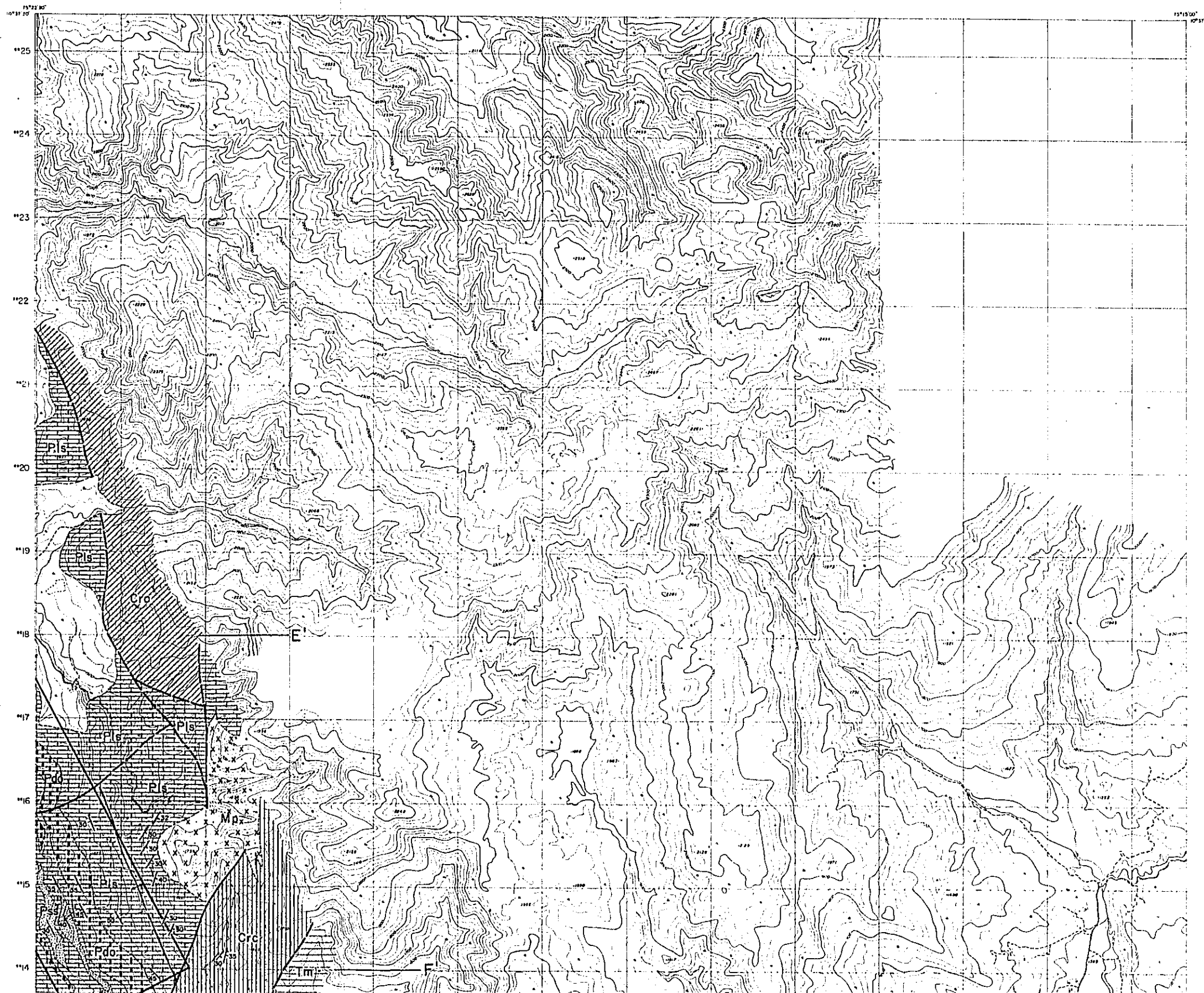
SEDIMENTARY ROCK

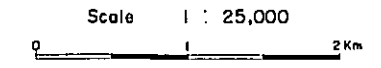
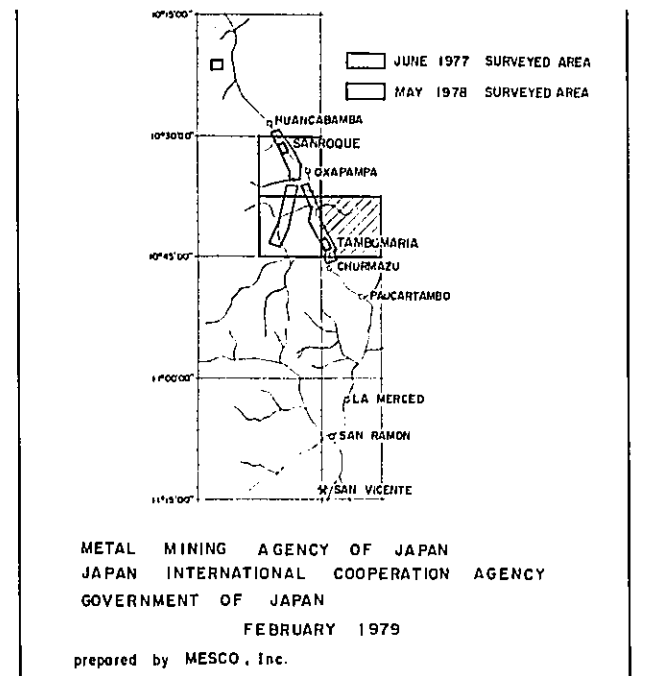
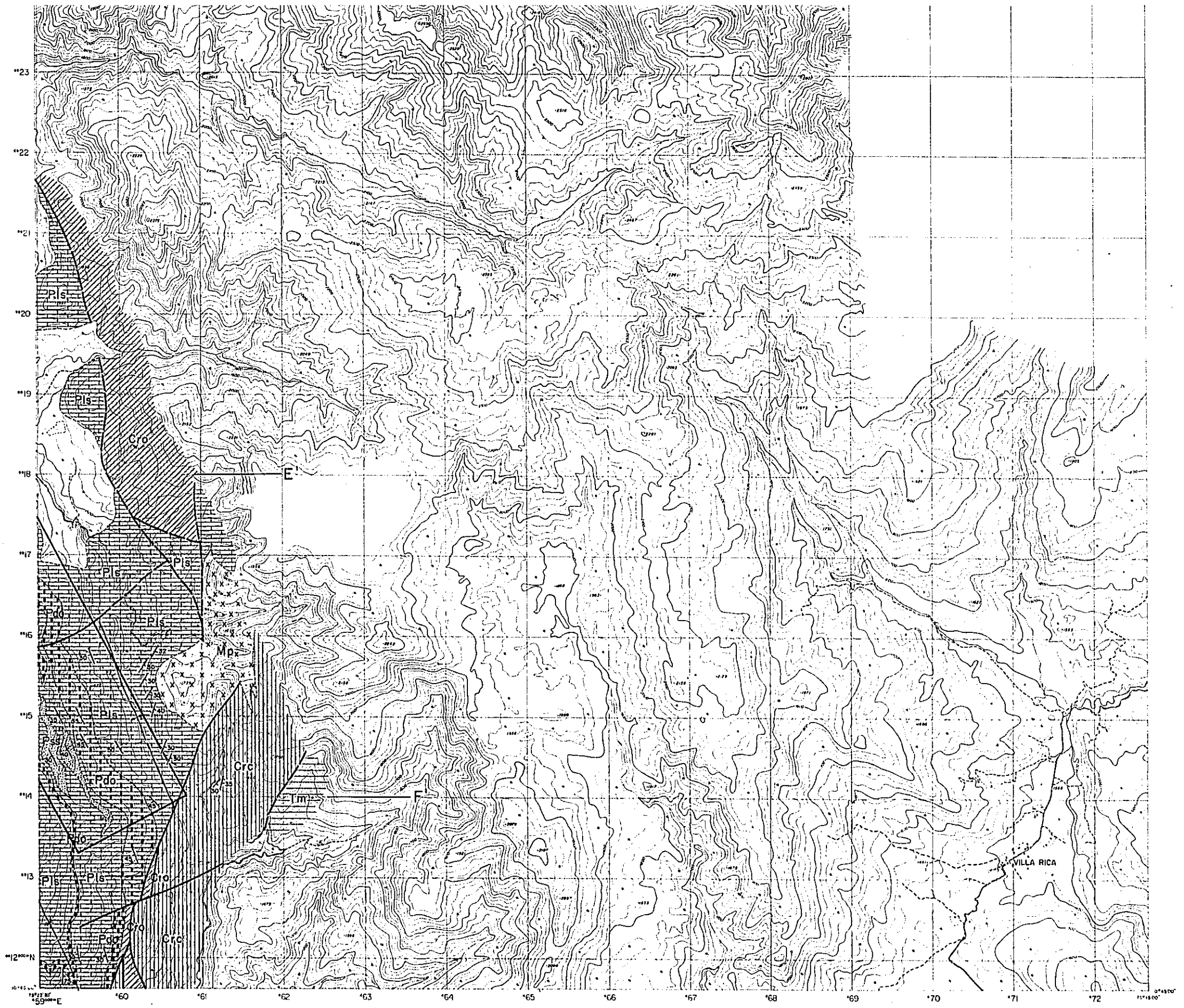
[Symbol]	Gravel & Sand	Quaternary
[Symbol]	Merced F.	Tertiary
[Symbol]	Chonta G.	Cretaceous
[Symbol]	Oriente G.	
[Symbol]	Sarayaquillo F.	Jurassic
[Symbol]	Limestone Dolomite (Dolostone) Sandstone	
[Symbol]	Mitu G.	Permian

IGNEOUS ROCK

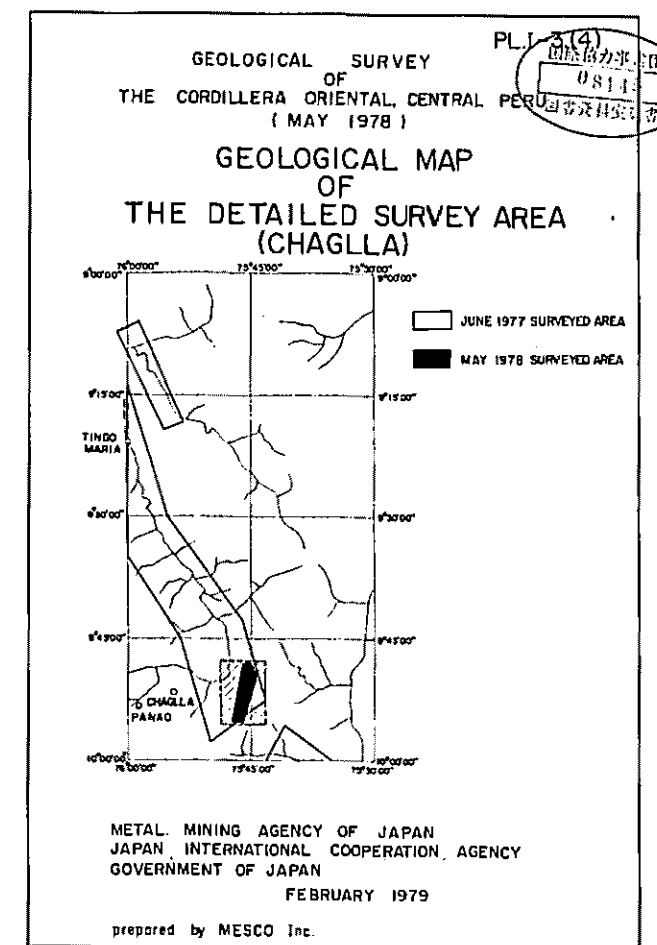
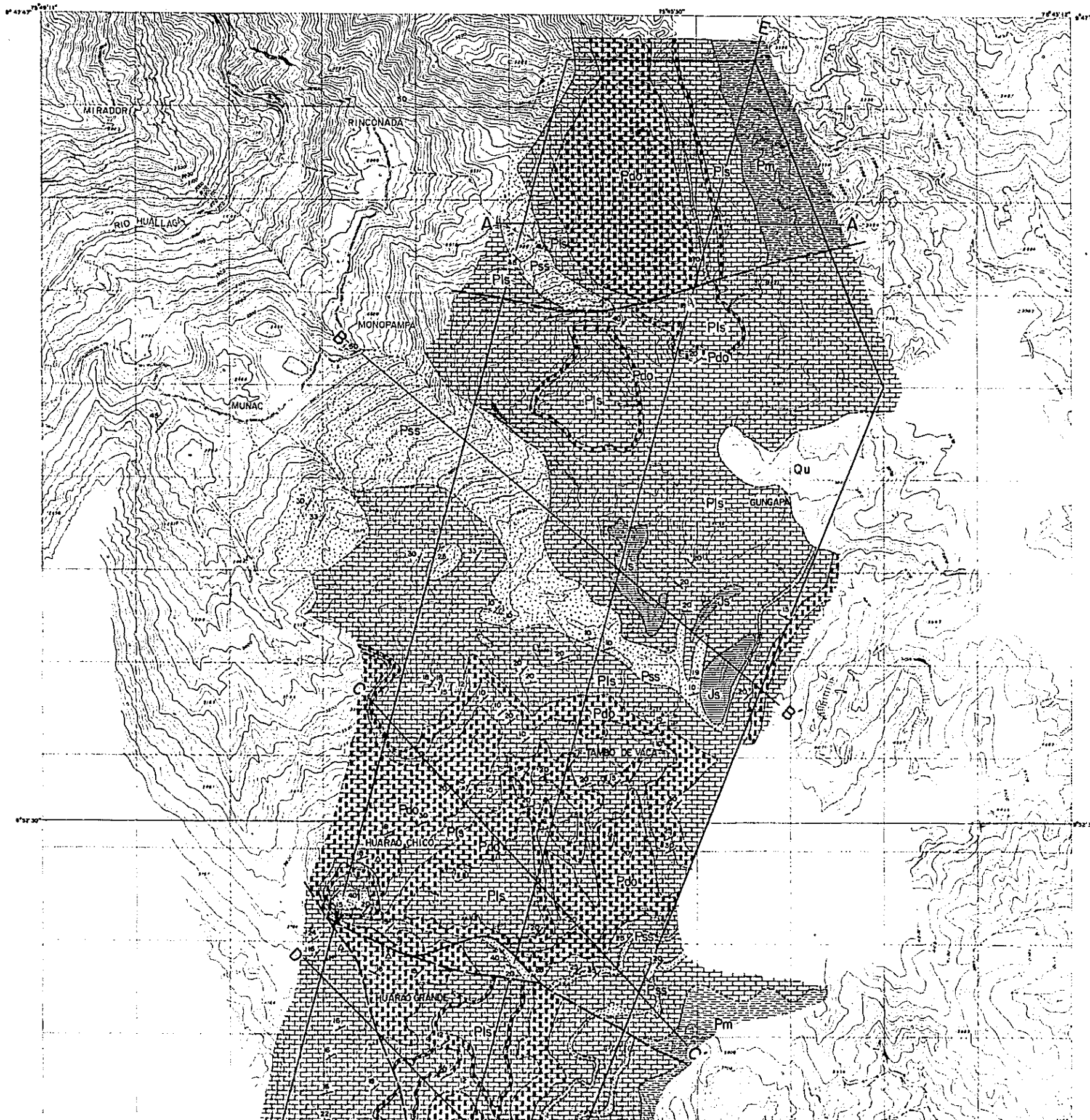
[Symbol]	Manzonite porphyry
[Symbol]	Rhyolite & Dacite
[Symbol]	Quartz porphyry & Granite porphyry
[Symbol]	Granite
[Symbol]	Diorite complex

— bedding plane
— synclinal folding axis





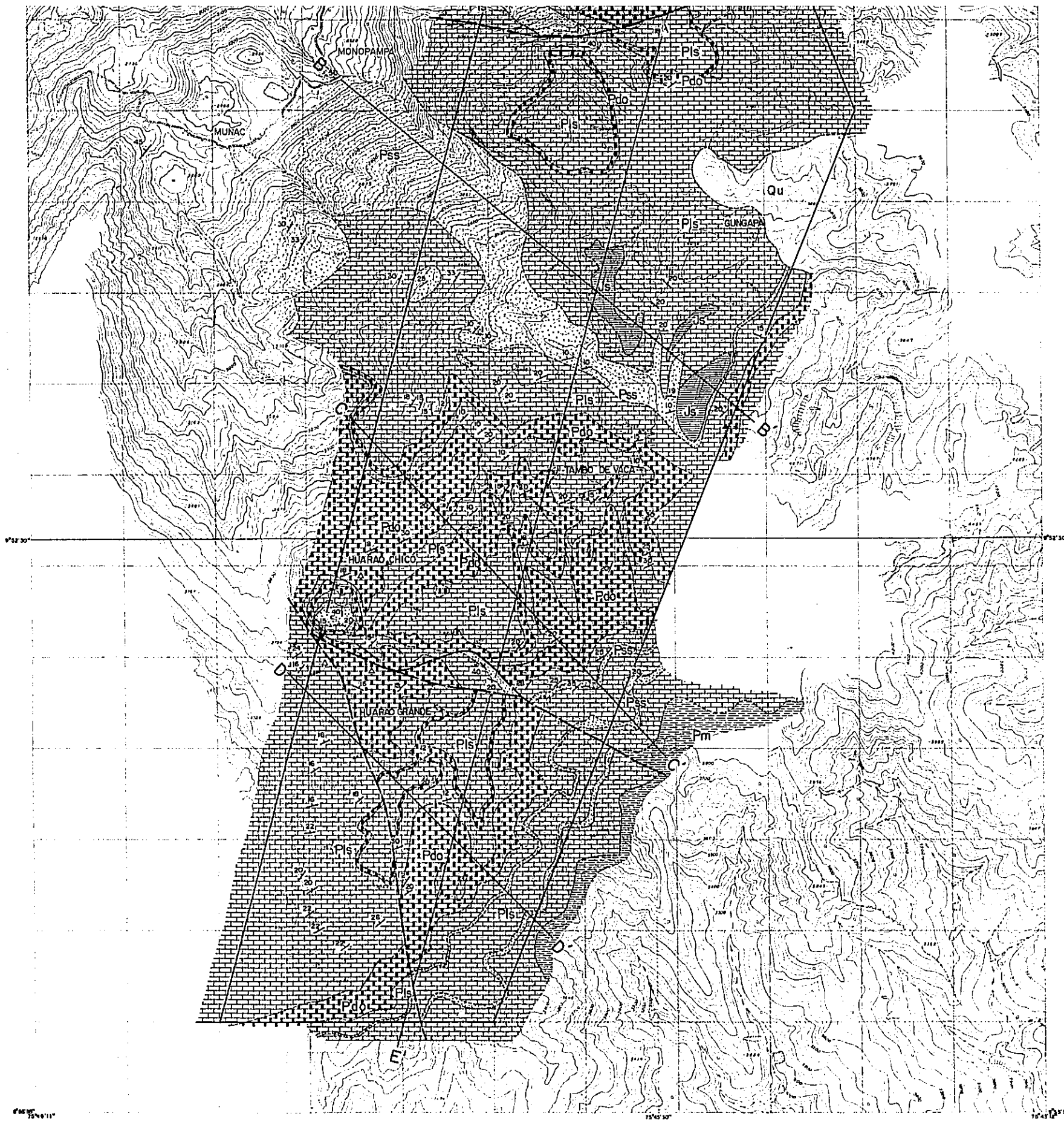
- LEGEND**
- SEDIMENTARY ROCK**
- | | | |
|--|---------------------------------|------------|
| | Gravel & Sand | Quaternary |
| | Merced F. | Tertiary |
| | Chonta G. | Cretaceous |
| | Oriente G. | |
| | Sarayaquilla F. | Jurassic |
| | Limestone (Dolostone) Pucara G. | |
| | Sandstone | Triassic |
| | Mitu G. | Permian |
- IGNEOUS ROCK**
- | | |
|--|------------------------------------|
| | Monzonite porphyry |
| | Rhyolite & Dacite |
| | Quartz porphyry & Granite porphyry |
| | Granite |
| | Diorite complex |
- bedding plane
 synclinal folding axis
 anticlinal folding axis
 confirmed fault
 estimated fault
 geological boundary
 geological section line



Scale 1 : 25,000
0 1 2 km

LEGEND

Qu	Gravel and Sand	Quaternary
Js	Sarayaquillo F.	Jurassic
Pli	Limestone	Pucara G. Triassic-Jurassic
Pdo	Dolomite (Dolostone)	
Pis	Sandstone	
Pm	Mitu G.	Permian
△	mineralization	
—	bedding plane	
—	synclinal folding axis	
—	anticlinal folding axis	
—	fault	confirmed estimated
—		



MARIA

10°30'00"

10°45'00"

10°00'00"

10°15'00"

75°00'00"

75°15'00"

75°30'00"

CHALLA
PANAQ

METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979

prepared by MESCO Inc.

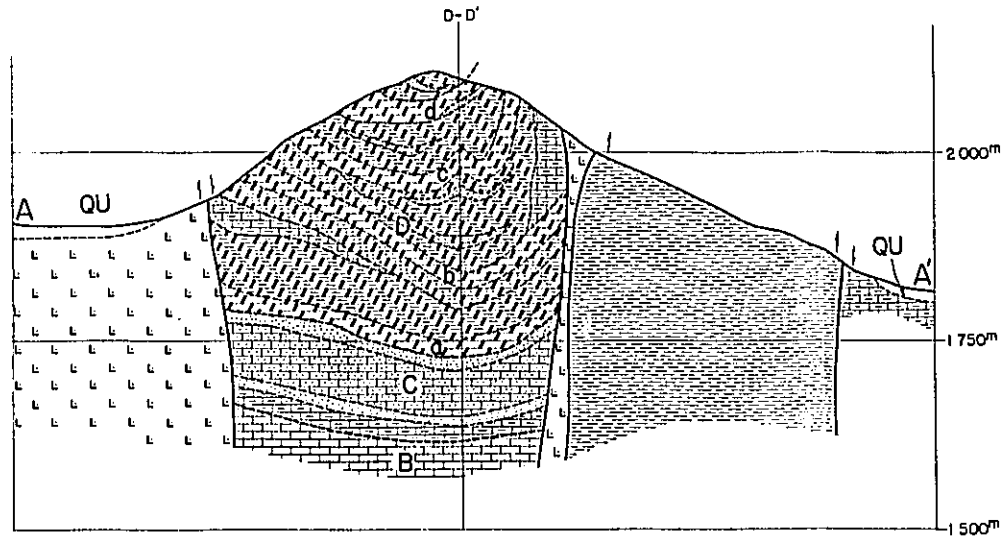
Scale 1 : 25,000

0 2 km

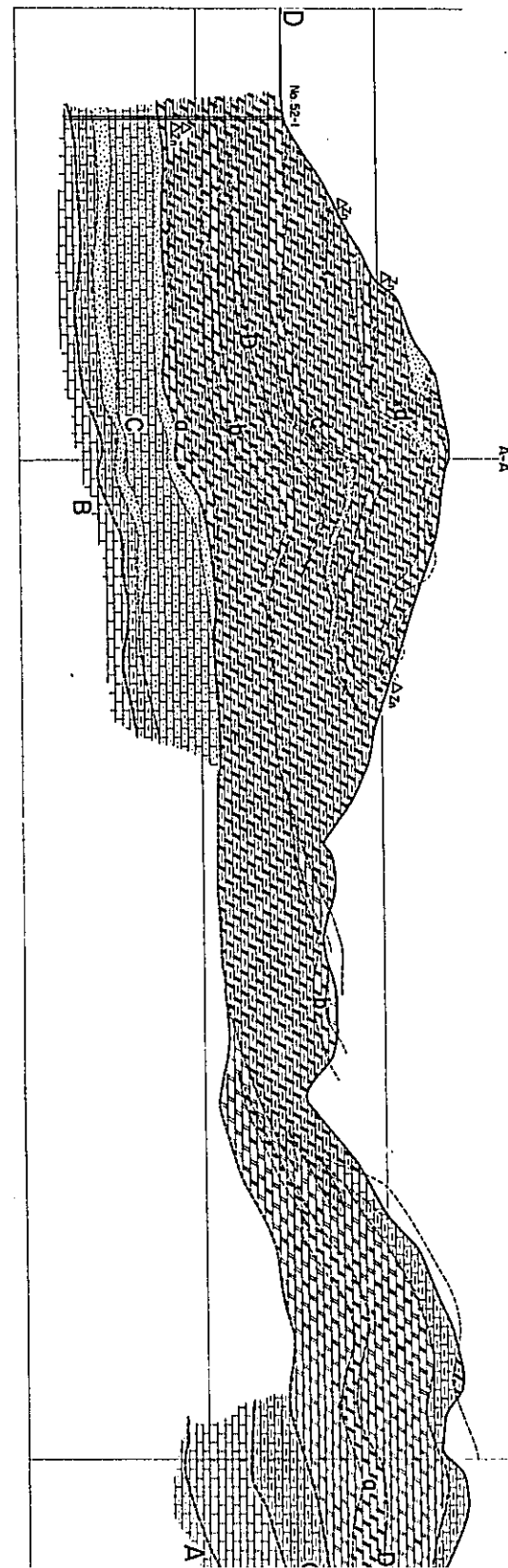
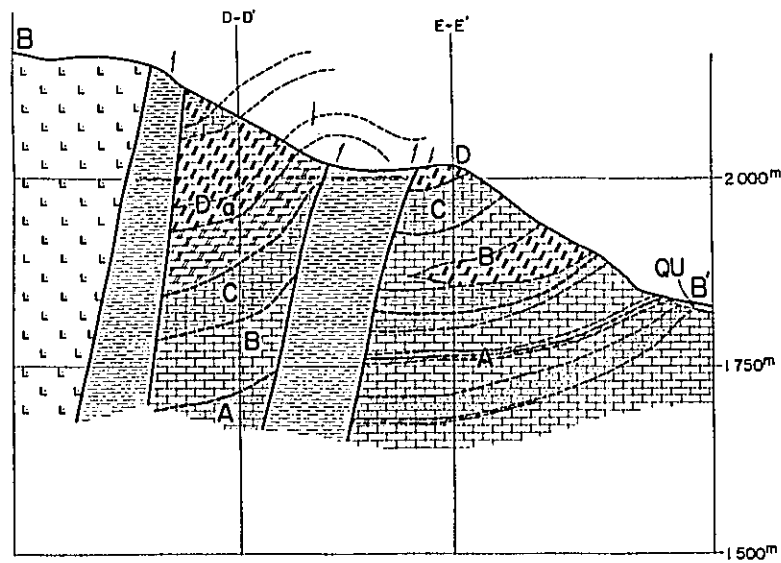
LEGEND

- | | | |
|--|------------------------------|-------------------------------|
| | Gravel and Sand | Quaternary |
| | Sarayaquillo F. | Jurassic |
| | Limestone | Pucara G. Triassic ~ Jurassic |
| | Dolomite (Dolostone) | |
| | Sandstone | |
| | Mitu G. | Permian |
| | mineralization | |
| | bedding plane | |
| | synclinal folding axis | |
| | anticlinal folding axis | |
| | fault | { confirmed
estimated |
| | geological boundary | |
| | A—A' geological section line | |

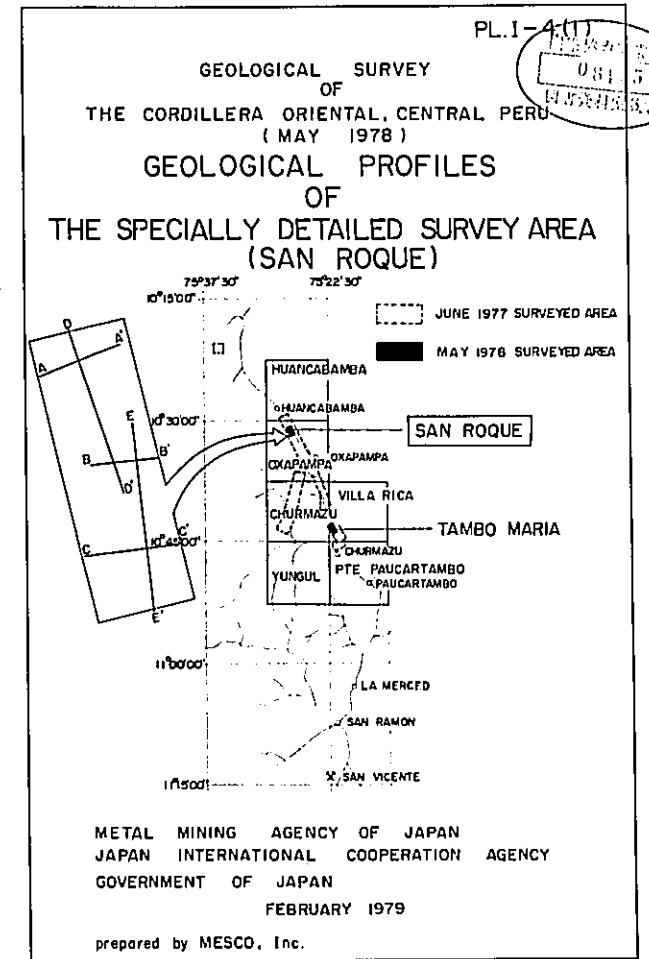
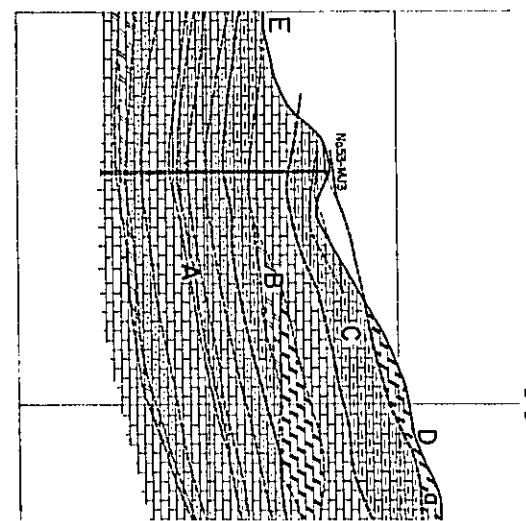
A ~ A' SECTION



B ~ B' SECTION



D ~ D' SECTION



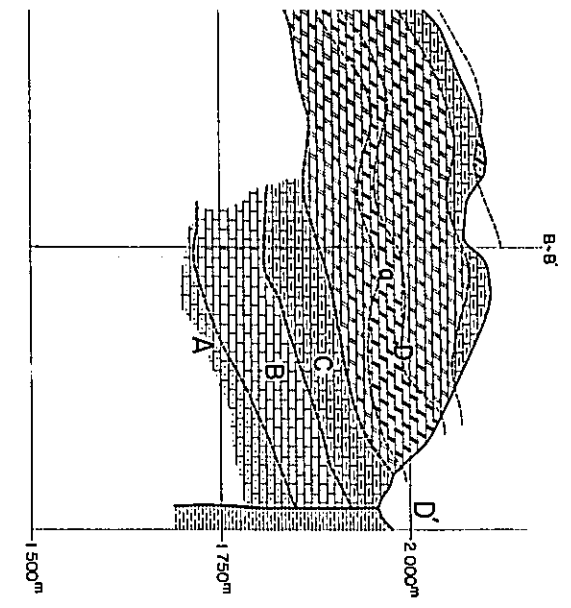
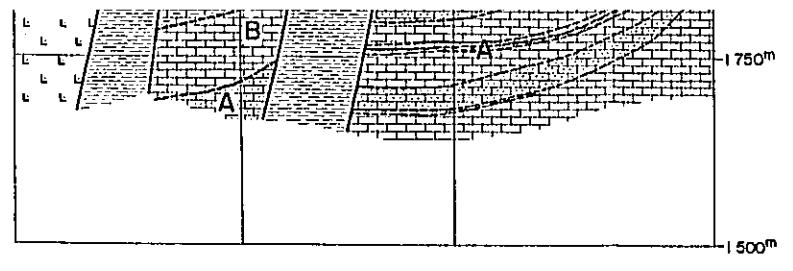
Scale 1 : 5,000



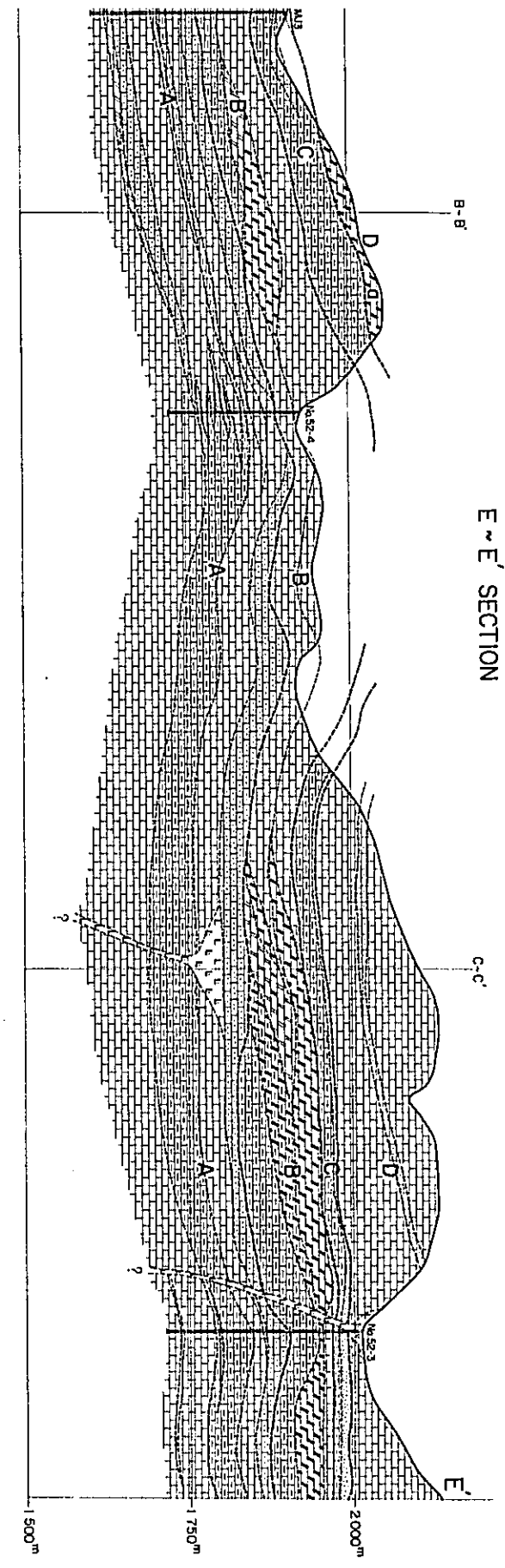
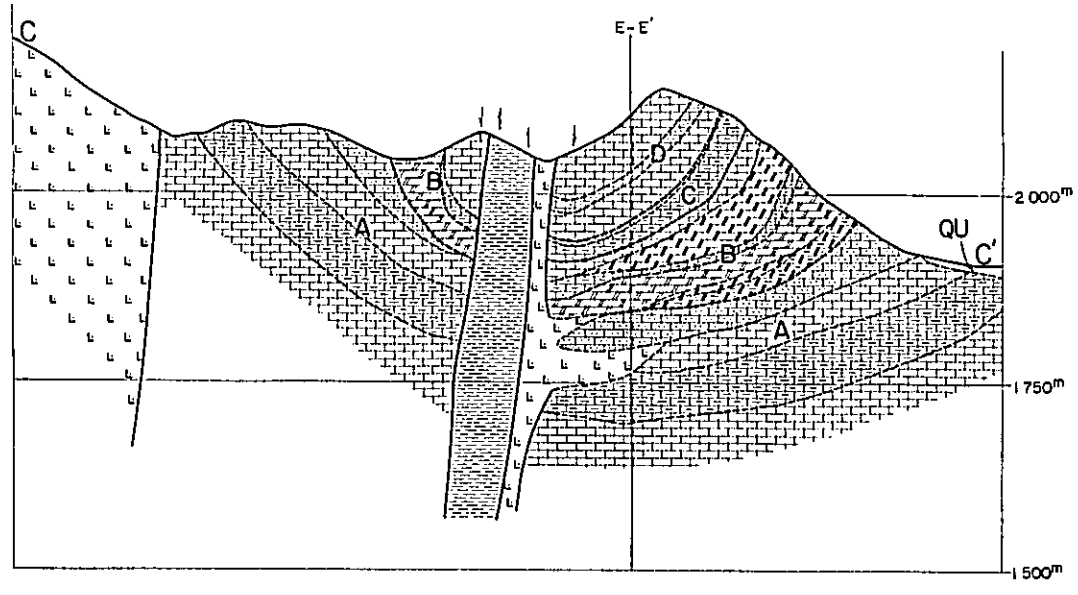
LEGEND

SEDIMENTARY ROCK

QU	Gravel & Sand	Quaternary
[Pattern]	Limestone	Pucara G. (Triassic-Jurassic)
[Pattern]	Muddy Limestone	
[Pattern]	Sandy Limestone	
[Pattern]	Dolomitic Limestone	
[Pattern]	Dolomite (Dolostone)	
[Pattern]	Calcareous Dolomite (Calcareous Dolostone)	
[Pattern]	Muddy Dolomite & Silty Dolomite (Muddy Dolostone) (Silty Dolostone)	
[Pattern]	Sandy Dolomite & Dolomitic Sandstone (Sandy Dolostone)	
[Pattern]	Sandstone	



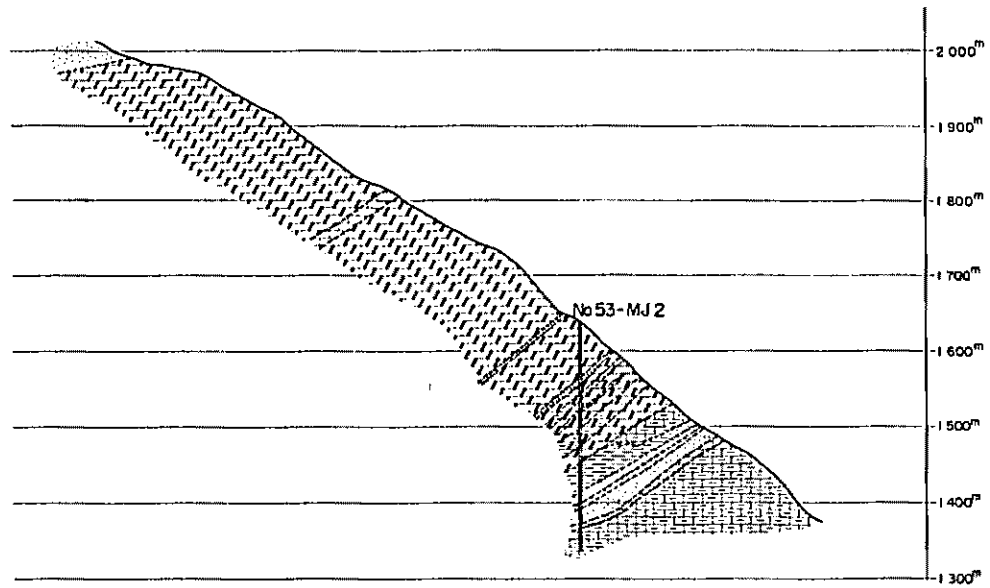
C~C' SECTION



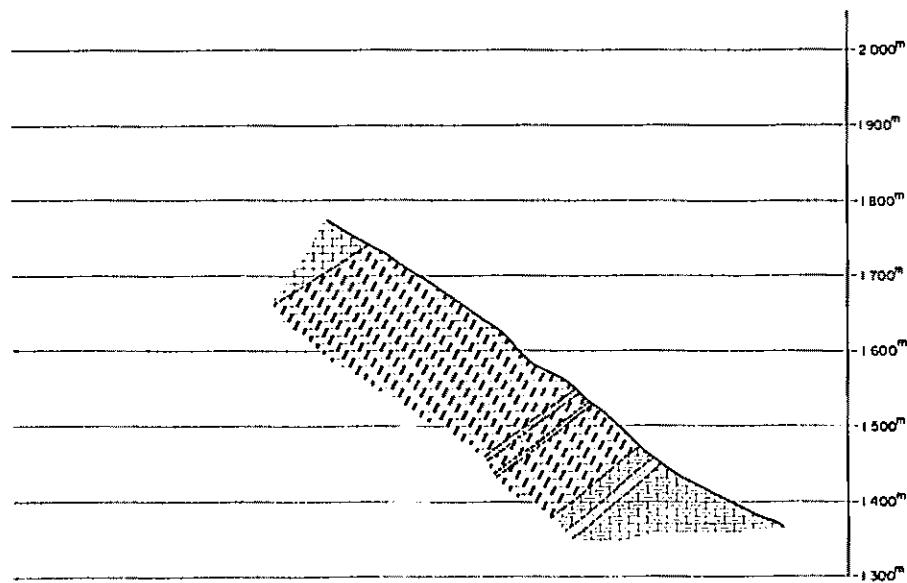
E~E' SECTION

- Sandy Limestone
 - Dolomitic Limestone
 - Dolomite (Dolostone)
 - Calcareous Dolomite (Calcareous Dolostone)
 - Muddy Dolomite & Silty Dolomite (Muddy Dolostone) (Silty Dolostone)
 - Sandy Dolomite & Dolomitic Sandstone (Sandy Dolostone)
 - Sandstone
 - Volcanic Conglomerate & Tuffaceous Sandstone
- Pucara G. (Triassic-Jurassic)
- Mitu G. (Permian)
- IGNEOUS ROCK**
- Quartz porphyry or Granite porphyry
- No 52-1 diamond drill hole
- fault
 - geological boundary

A — A' SECTION

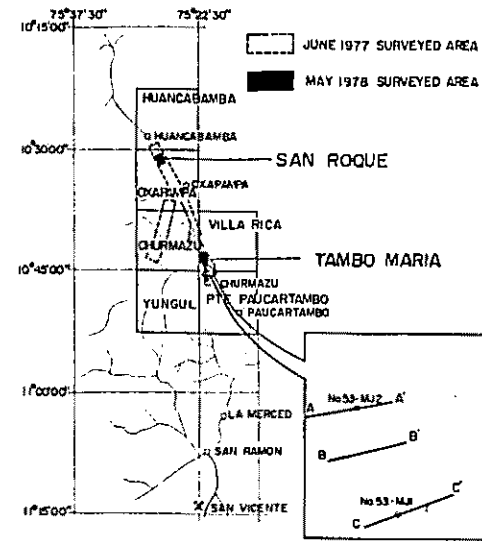


B — B' SECTION



08145
PL. I - 4(2)

GEOLOGICAL SURVEY
OF
THE CORDILLERA ORIENTAL, CENTRAL PERU
(MAY 1978)
GEOLOGICAL PROFILES
OF
THE SPECIALLY DETAILED SURVEY AREA
(TAMBO MARIA)



METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1979

prepared by MESCO, Inc.

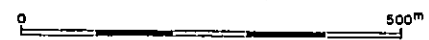
Scale 1 : 5,000



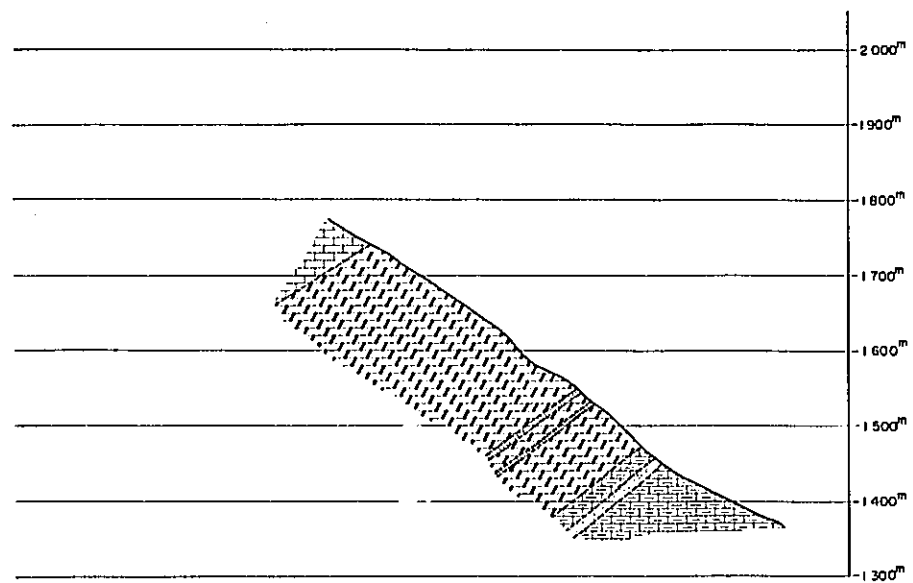
LEGEND

- | | | |
|--|---|-------------------------------------|
| | SANDSTONE | PUCARA GROUP
(TRIASSIC-JURASSIC) |
| | MUDSTONE OR SILTSTONE | |
| | LIMESTONE | |
| | MUDDY LIMESTONE | |
| | SANDY LIMESTONE | |
| | DOLOMITE (DOLOSTONE) | |
| | MUDDY DOLOMITE
(MUDDY DOLOSTONE) | |
| | DOLOMITE WITH ZEBRA STRUCTURE
(DOLOSTONE)
OR BRECCIA DOLOMITE | |









Scale 1 : 5,000



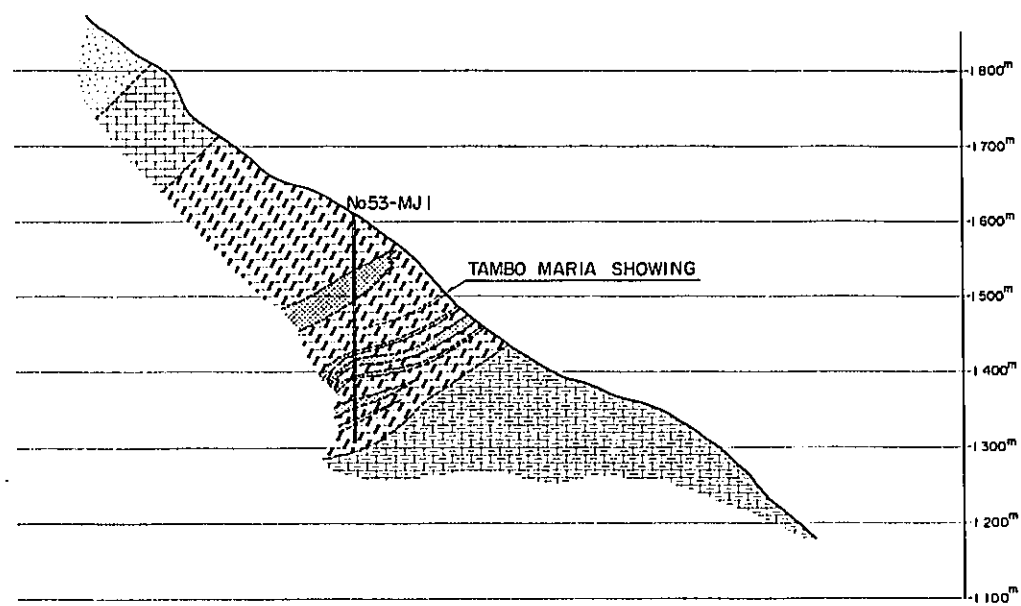
B — B' SECTION



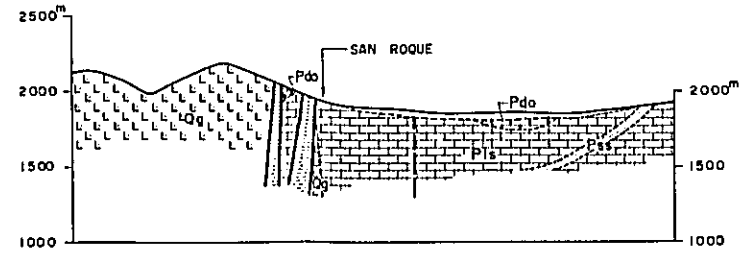
LEGEND

-  SANDSTONE
 -  MUDSTONE OR SILTSTONE
 -  LIMESTONE
 -  MUDDY LIMESTONE
 -  SANDY LIMESTONE
 -  DOLOMITE (DOLOSTONE)
 -  MUDDY DOLOMITE (MUDDY DOLOSTONE)
 -  DOLOMITE WITH ZEBRA STRUCTURE (DOLOSTONE) OR BRECCIA DOLOMITE
- PUCARA GROUP
(TRIASSIC-JURASSIC)

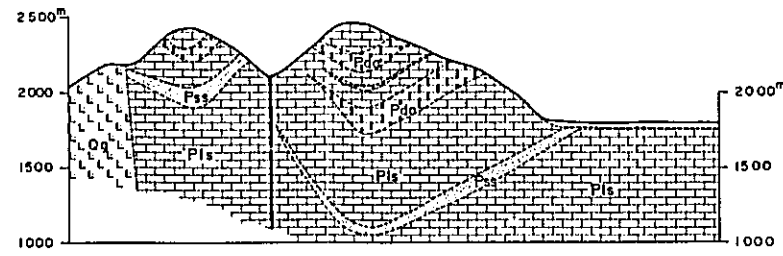
C — C' SECTION



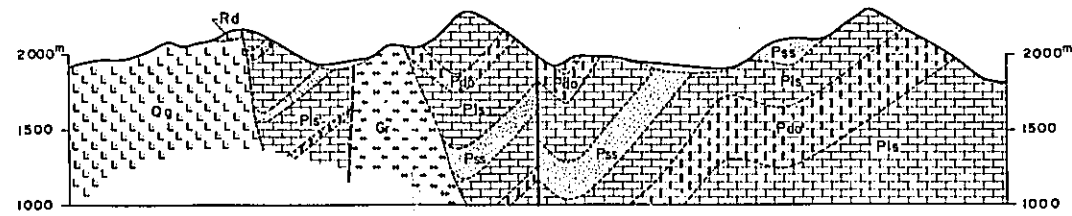
SECTION A - A'



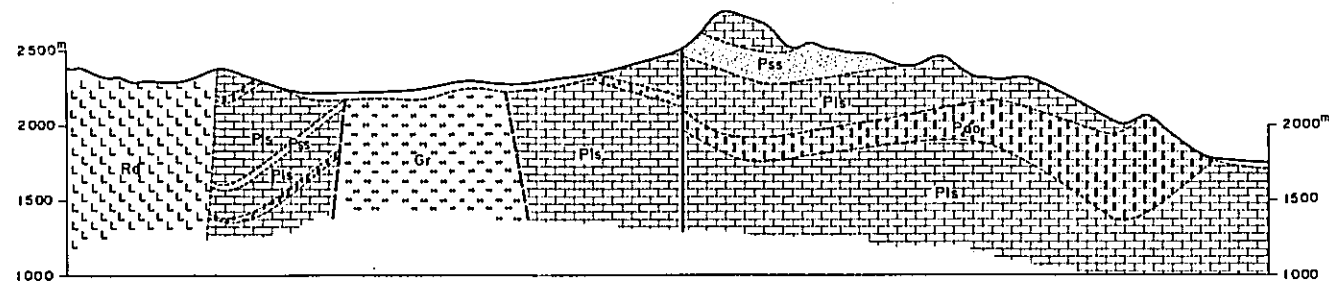
SECTION B - B'



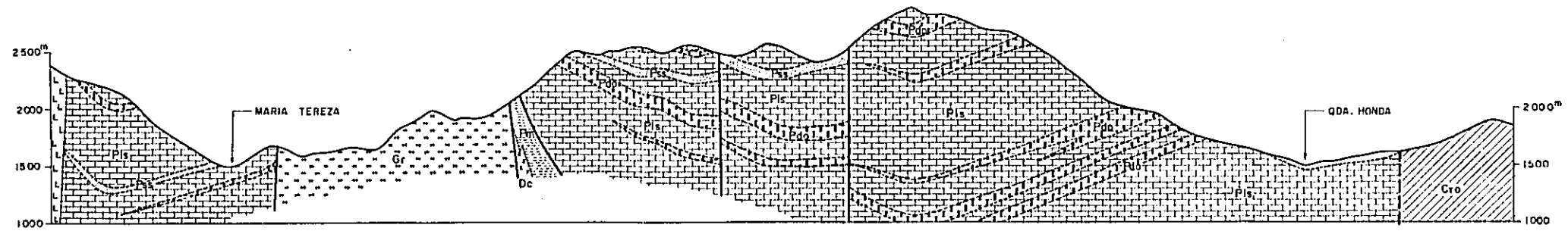
SECTION C - C'



SECTION D - D'



SECTION E - E'



GEOLOGICAL
THE CORDILLERA C
(M
GEOLOGICAL
THE DETAILS

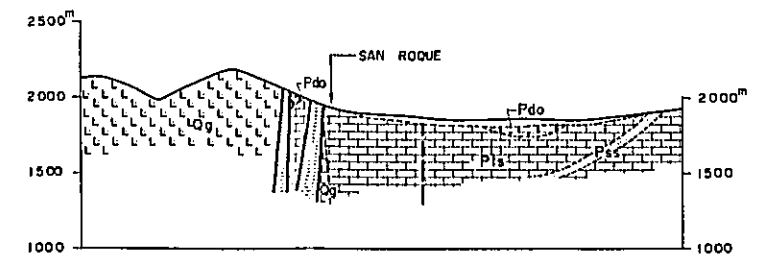
METAL MINING AND
JAPAN INTERNATIONAL
GOVERNMENT OF J
FEB
Prepared by MESCO, Inc.

Scale
0

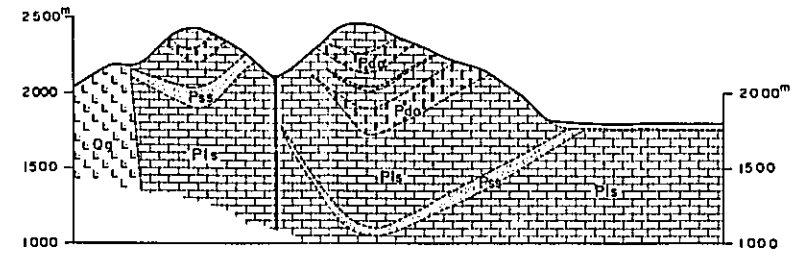
- SEDIMENTARY
- G
 - M
 - C
 - O
 - L
 - M
- IGNEOUS
- Rd
 - Og
 - Gr
 - De

0815

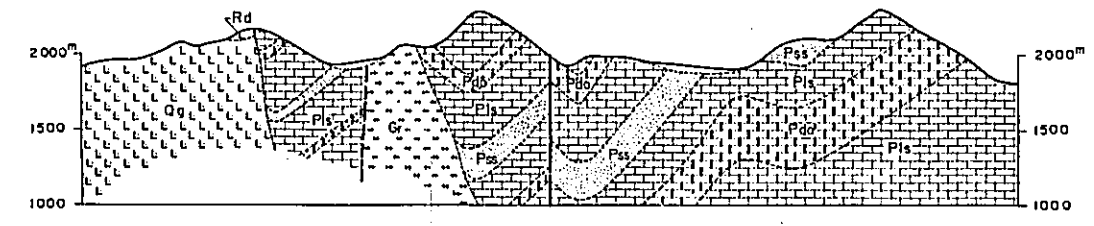
SECTION A - A'



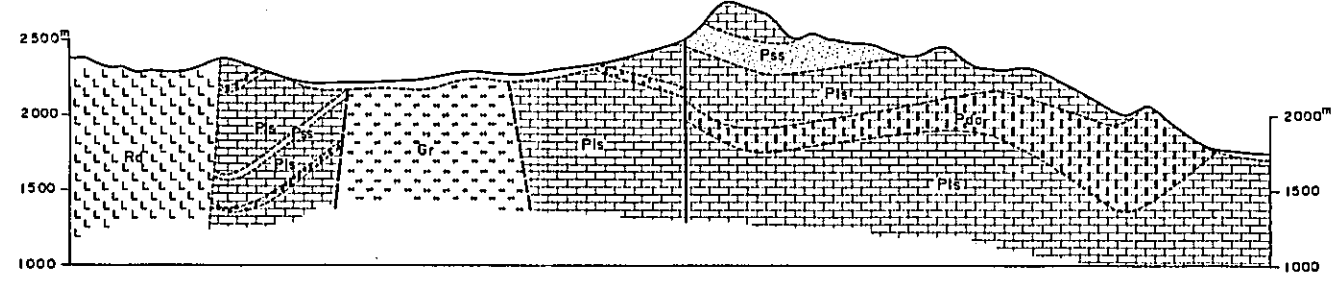
SECTION B - B'



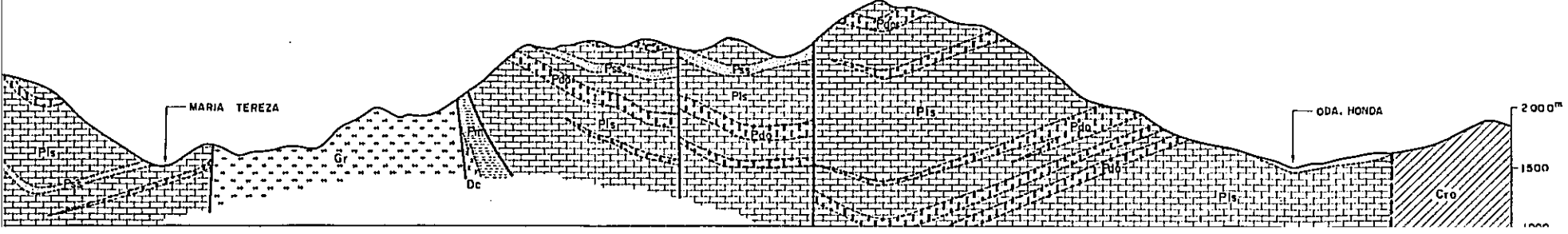
SECTION C - C'



SECTION D - D'



SECTION E - E'



GEOLOGICAL SURVEY
OF
THE CORDILLERA ORIENTAL, CENTRAL PERU
(MAY 1978)

GEOLOGICAL PROFILES
OF
THE DETAILED SURVEY AREA
(OXAPAMPA)

METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1979

Prepared by MESCO, Inc.

Scale 1:25,000
0 2 Km

LEGEND

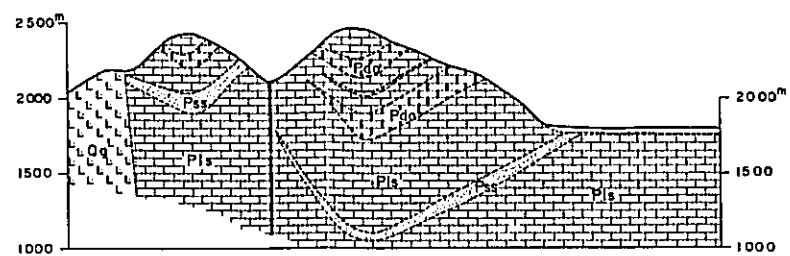
SEDIMENTARY ROCK

	Gravel & Sand	Quaternary
	Merced F.	Tertiary
	Chonta G.	Cretaceous
	Oriente G.	
	Limestone Dolomite (Dolostone) Sandstone	Pucara G. Triassic-Jurassic
	Mitu G.	Permian

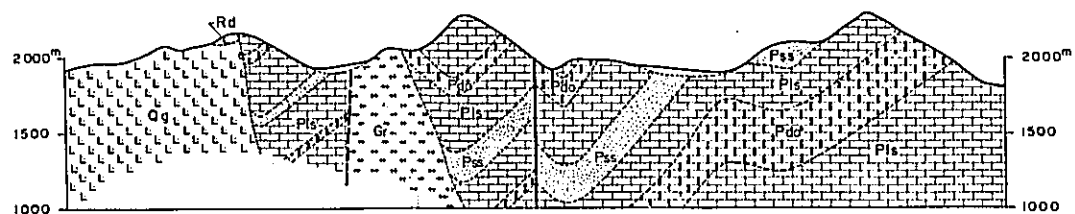
IGNEOUS ROCK

	Rhyolite & Dacite
	Quartz porphyry & Granite porphyry
	Granite
	Diorite complex

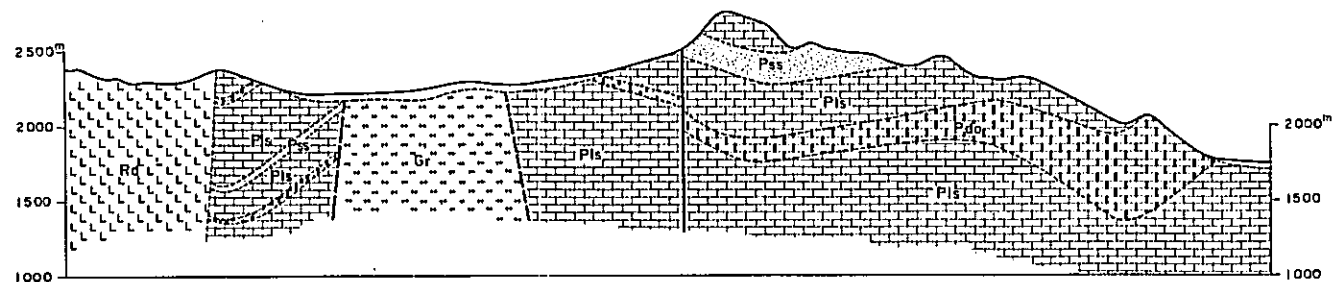
SECTION B - B'



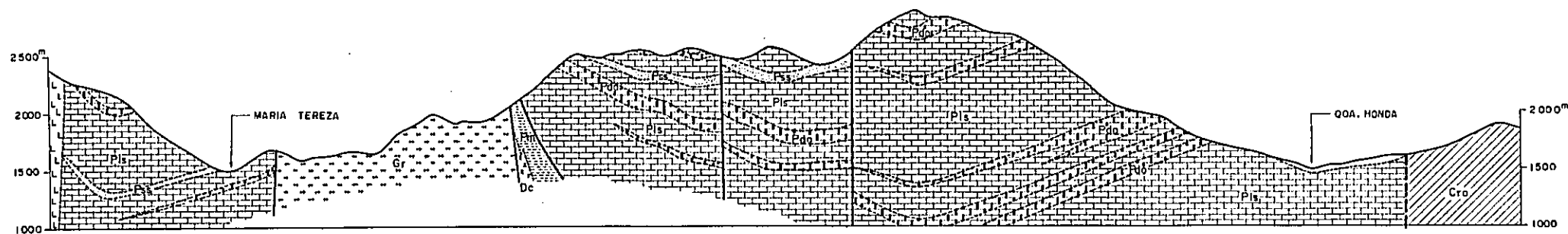
SECTION C - C'



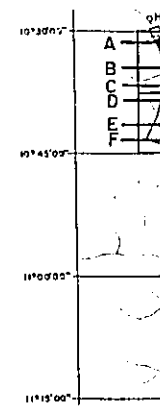
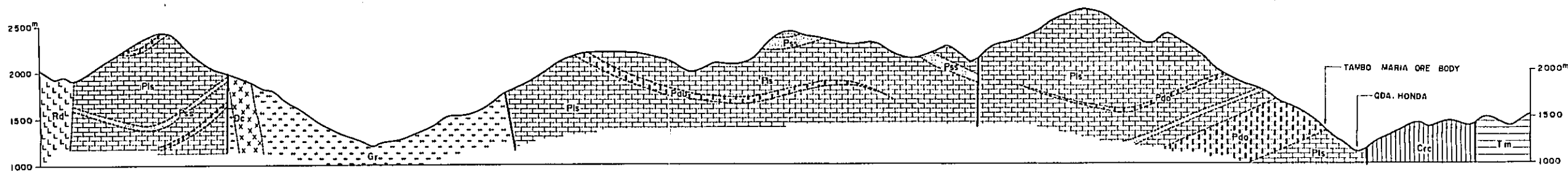
SECTION D - D'



SECTION E - E'



SECTION F - F'



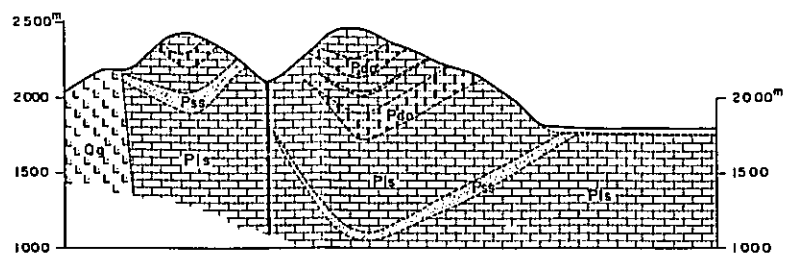
METAL MINING AGENCY
JAPAN INTERNATIONAL
COOPERATION CORPORATION
GOVERNMENT OF JAPAN
FEBRUARY 1961
Prepared by MESCO, Inc.

Scale
0

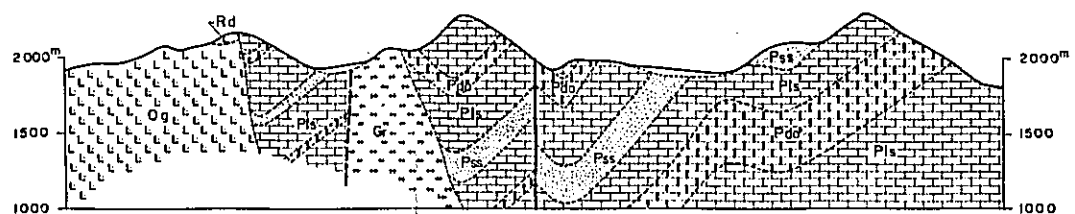
- SEDIMENTARY
- Gr
 - Tm
 - Cr
 - Cr
 - Pis
 - Pis
 - Pis
- IGNEOUS
- Rd
 - Qg
 - Gf
 - Dc

- fc
- g

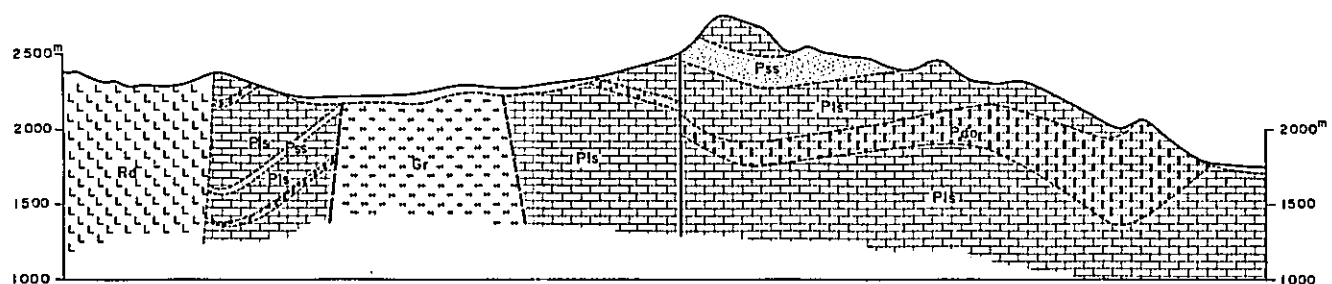
SECTION B-B'



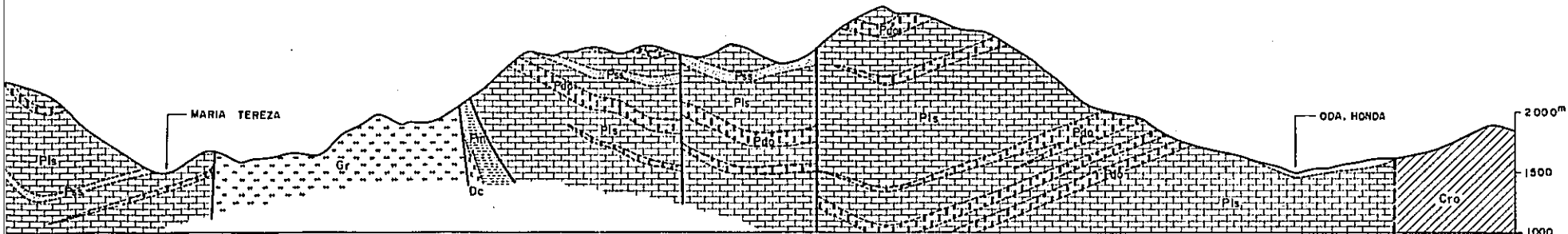
SECTION C-C'



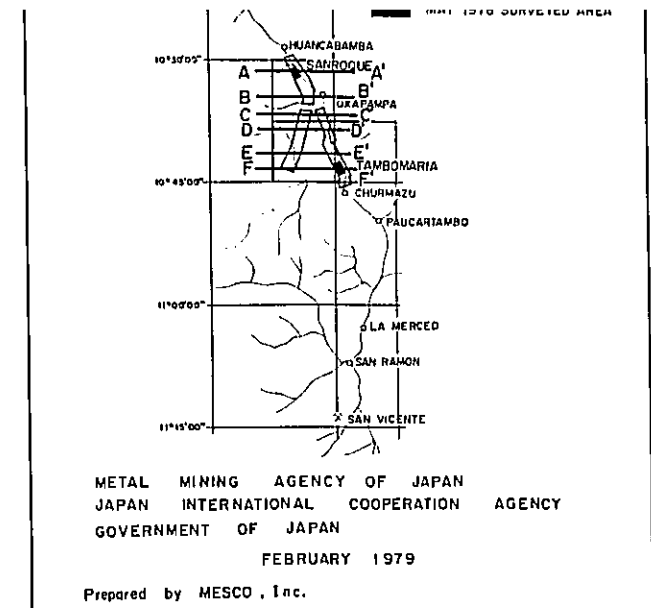
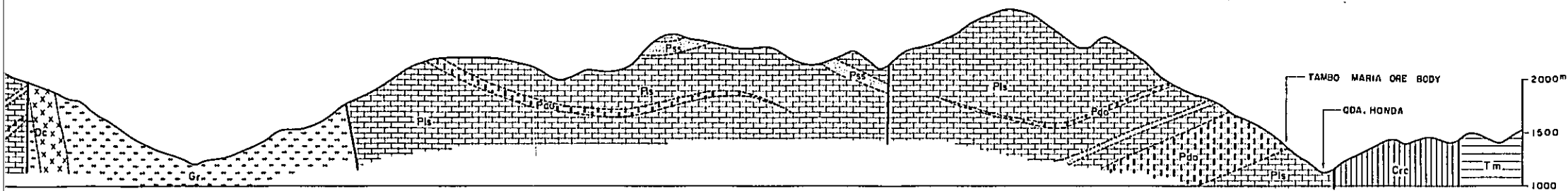
SECTION D-D'



SECTION E-E'



SECTION F-F'



Scale 1:25,000
0 2Km

LEGEND

SEDIMENTARY ROCK

[Symbol]	Gravel & Sand	Quaternary	
[Symbol]	Merced F.	Tertiary	
[Symbol]	Chonta G.	Cretaceous	
[Symbol]	Oriente G.		
[Symbol]	Limestone Dolomite (Dolostone) Sandstone	Pucara G.	Triassic-Jurassic
[Symbol]	Mitu G.		Permian

IGNEOUS ROCK

[Symbol]	Rhyolite & Dacite
[Symbol]	Quartz porphyry & Granite porphyry
[Symbol]	Granite
[Symbol]	Diorite complex

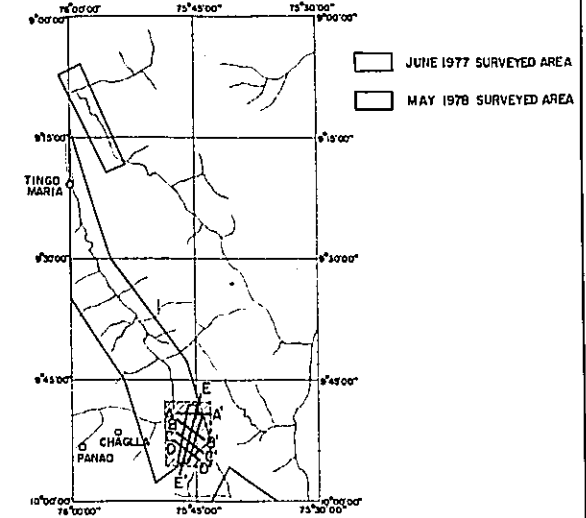
— fault confirmed
- - - fault estimated
- - - geological boundary

03145

PL.1-5(2)

GEOLOGICAL SURVEY
OF
THE CORDILLERA ORIENTAL, CENTRAL PERU
(MAY 1978)

GEOLOGICAL PROFILES
OF
THE DETAILED SURVEY AREA
(CHAGLLA)

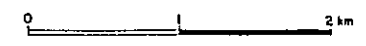


METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

FEBRUARY 1979

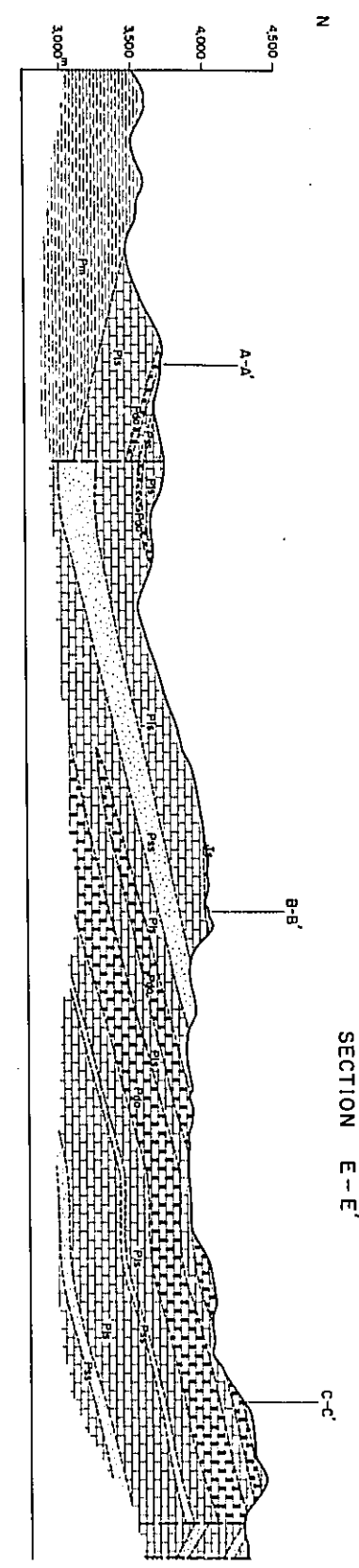
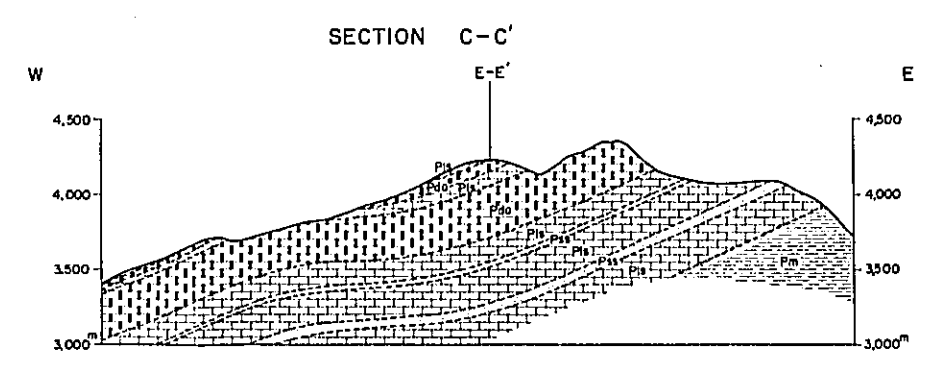
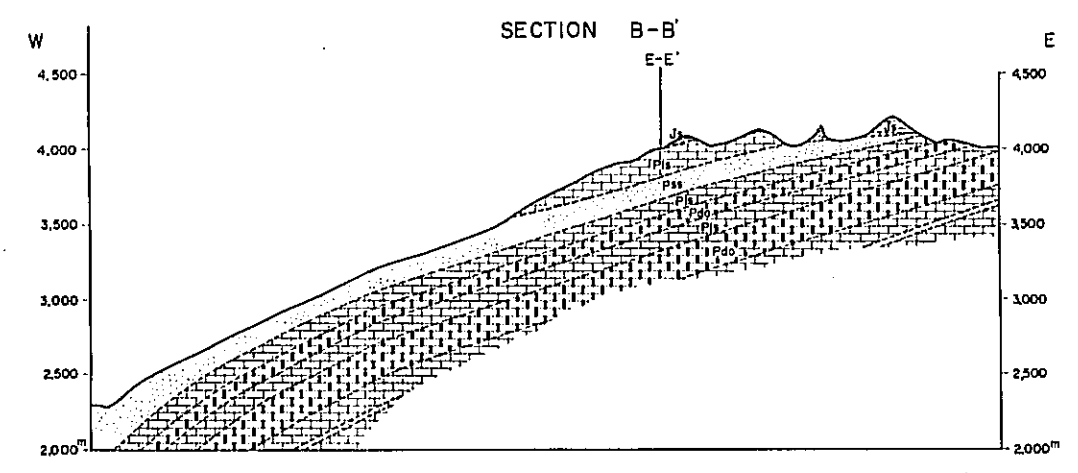
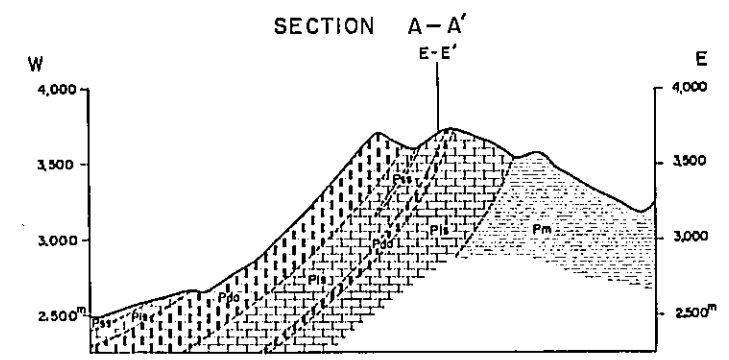
Prepared by MESCO, Inc.

Scale 1 : 25,000

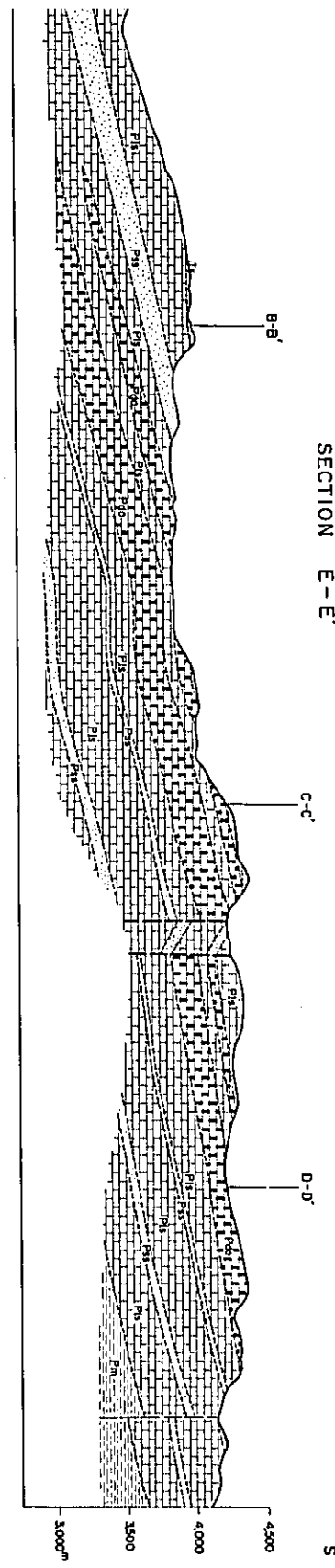
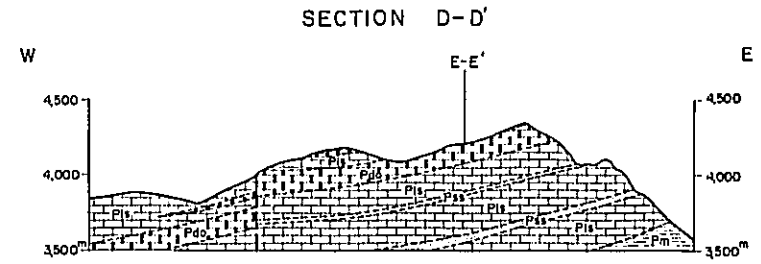
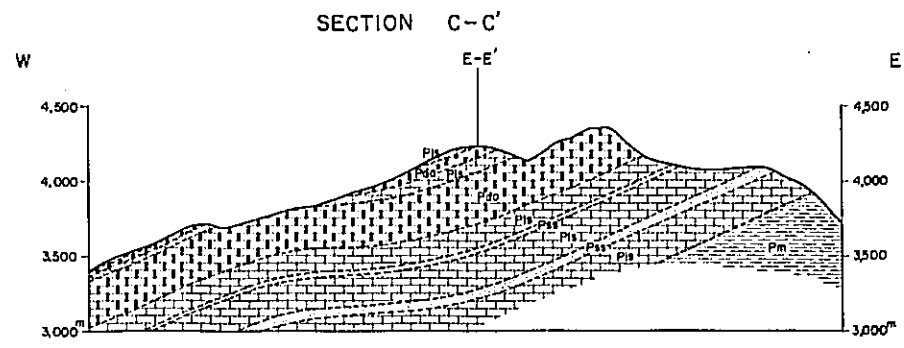
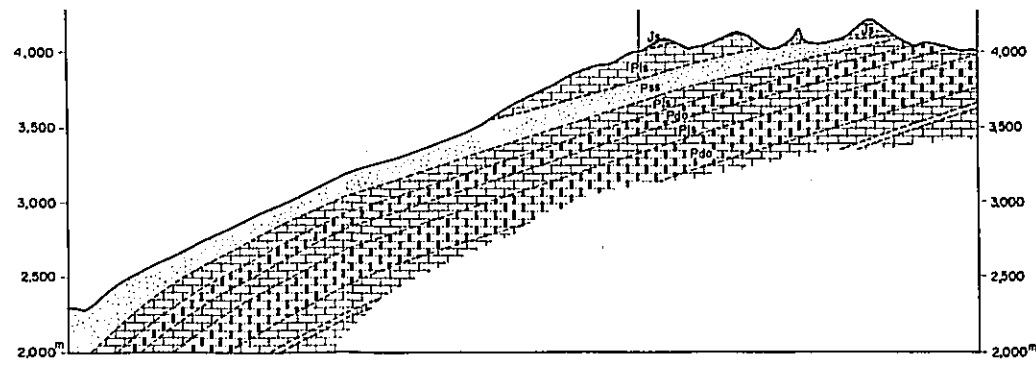


LEGEND

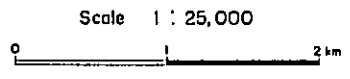
	Gravel and Sand	Quaternary
	Sarayaquilla F.	Jurassic
	Limestone	Pucara G. Triassic-Jurassic
	Dolomite (Dolostone)	
	Sandstone	
	Mitu G.	Permian
	bedding plane	
	synclinal folding axis	
	anticlinal folding axis	
	fault	{ confirmed estimated



SECTION E-E'



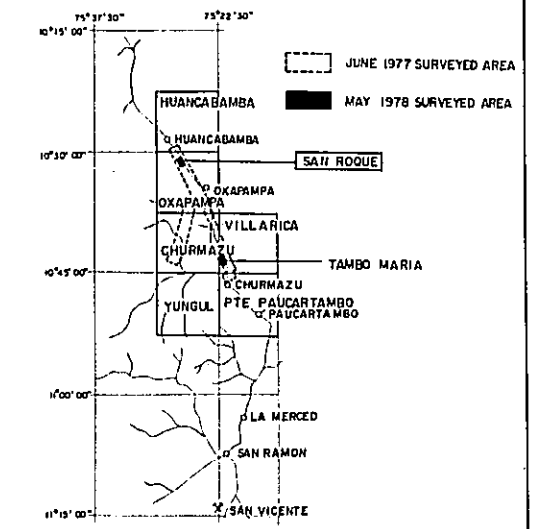
METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 Prepared by MESCO, Inc.



LEGEND

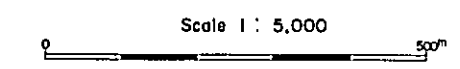
	Gravel and Sand	Quaternary
	Sarayaquillo F.	Jurassic
	Limestone	Pucara G. Triassic-Jurassic
	Dolomite (Dolostone)	
	Sandstone	
	Mitu G.	Permian
	bedding plane	
	synclinal folding axis	
	anticlinal folding axis	
	fault	confirmed
		estimated
	geological boundary	
	geological section line	

GEOLOGICAL SURVEY
OF
THE CORDILLERA ORIENTAL, CENTRAL PERU
(MAY 1978)
SAMPLE LOCATION AND GEOCHEMICAL
ASSAY MAP OF THE SURVEY AREA
(SAN ROQUE)



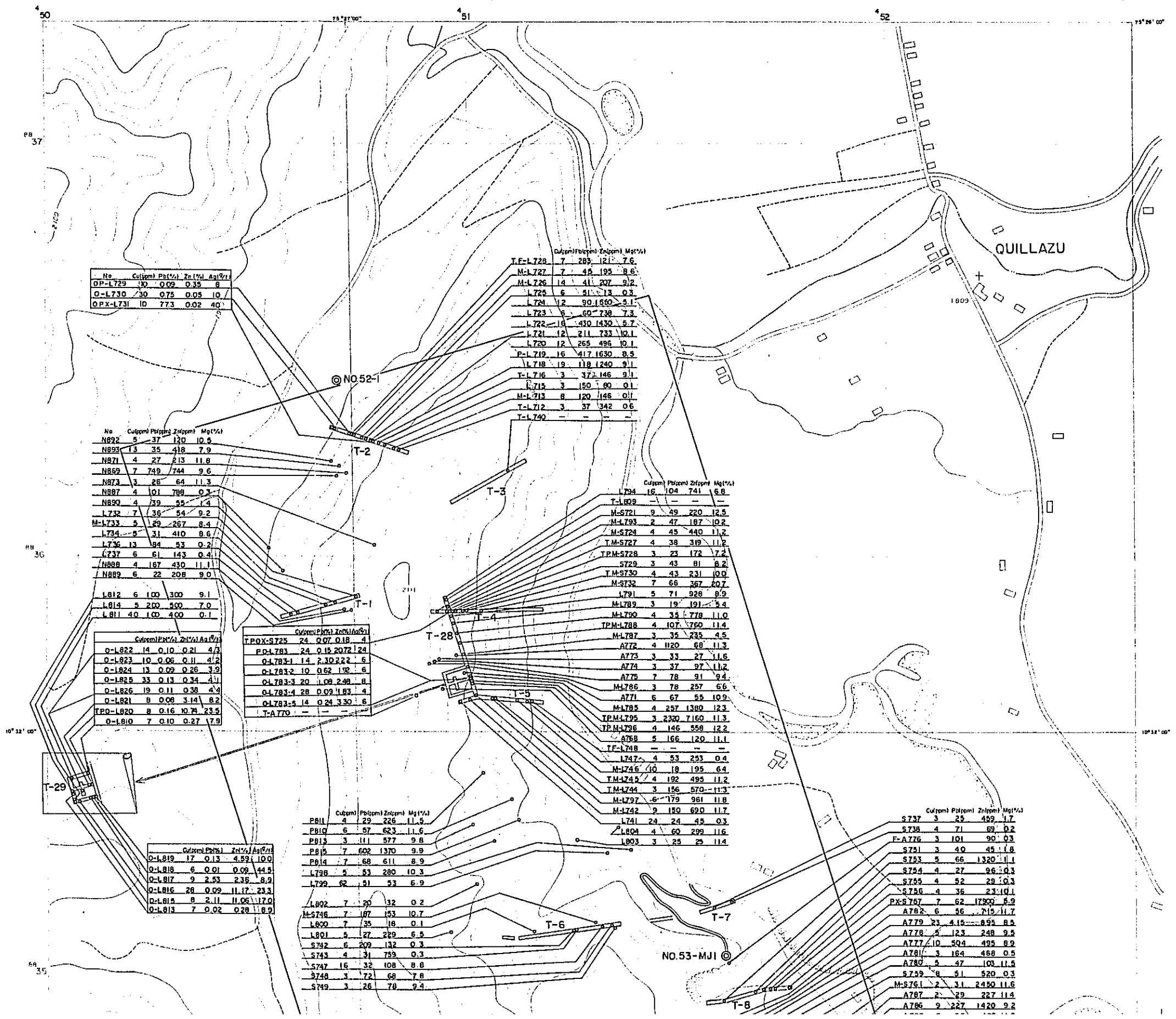
METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1979

prepared by MESCO Inc.



LEGEND

- o Locality of Rock Sample
- A751 24 28 11 10.6 Number of Rock Sample and Geochemical Analysis [Cu(ppm) Pb(%) Zn(ppm) Mg(%)]
- O-L730 30 0.75 0.05 10 Ore Analysis [Cu(ppm) Pb(%) Zn(%) Ag(%)]
- F-A701 Sample of Fossil
- M-A702 Sample for Minor Element Analysis
- O-A703 Sample for Ore Analysis
- P-A704 Sample for Polished Section
- T-A705 Sample for Thin Section
- X-A706 Sample for X-ray Analysis
- ⊙ Diamond Drill Hole
- Detailed Survey Area





L852	7	142	118	0.1
L801	9	27	229	6.5
S742	6	202	132	0.3
S743	4	31	753	0.3
S747	16	32	108	8.8
S748	3	72	68	7.8
S749	3	26	78	9.4

A778	5	123	248	9.5
A777	10	504	495	8.9
A781	3	164	468	0.5
A780	5	47	103	11.5
S799	8	51	520	0.3
M-S781	2	31	2450	11.6
A787	2	29	227	11.4
A786	9	227	1420	9.2
A788	3	23	190	11.0
A789	3	34	16	0.3
A790	5	184	347	9.5
S785	4	75	161	0.3
S786	5	35	206	6.4
S788	4	44	18	0.3
M-S789	3	30	136	12.6



No. Cullpmi Polipmi Zilpmi Mgt(%)				
A-785	7	533	413	34

Cullpmi Polipmi Zilpmi Mgt(%)				
TPOXF-S783	48	656	1916	16

Cullpmi Polipmi Zilpmi Mgt(%)				
A783	3	413	930	0.2
A784	10	117	735	10.0
L754	6	1020	30	0.3
L755	4	39	62	0.3
L757	10	252	378	0.5
L758	6	224	165	1.2
L805	8	95	274	0.3
L806	11	52	207	1.6
L808	8	50	40	0.1
L807	4	53	27	0.1

Cullpmi Polipmi Zilpmi Mgt(%)				
P825	4	29	110	0.4
P823	3	26	896	10.1
P827	5	54	285	0.8
P824	2	24	164	11.6
P830	6	196	179	0.8
P829	9	486	32	0.8
P821	14	460	330	0.8
P822	13	26	763	10.5
P826	4	36	91	0.3
P828	6	133	572	0.3
L749	4	93	132	0.3
L750	4	36	63	12.2
L751	8	50	165	8.3
L753	4	41	352	5.3

Cullpmi Polipmi Zilpmi Mgt(%)				
N884	8	240	270	0.5
N885	3	31	528	9.8
N881	4	75	93	0.7
N880	6	305	145	0.8
N879	6	62	143	0.2
N878	6	40	135	0.3
N877	5	52	115	0.3
N876	3	34	403	11.4
N875	3	25	157	11.9
L707	4	54	218	0.3
L708	4	47	182	0.3
L709	8	51	6120	11.8
L710	7	37	866	9.6
L711	9	47	692	10.4
P820	16	32	49	0.2
P819	5	81	123	0.3
P818	20	189	44	0.4
P817	26	94	130	5.9
P809	8	41	685	0.2
P816	637	67	270	5.6
P832	4	30	34	0.3
P831	53	30	44	2.4
L702	9	238	510	0.2
L703	5	285	237	0.1
F-L704	-	-	-	-
L706	8	852	163	1.7

 Diamond Drill Hole
 Detailed Survey Area

35

34

10°31' 00"

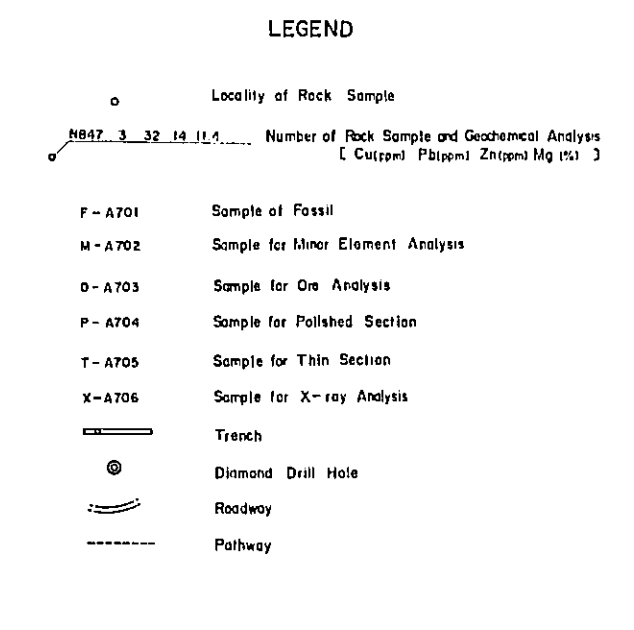
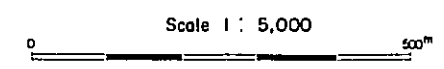
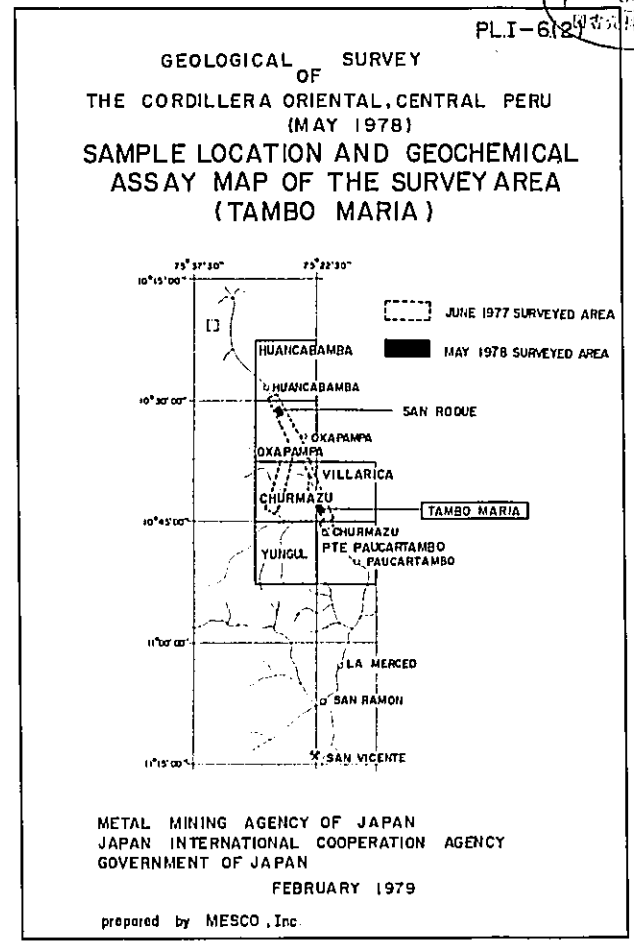
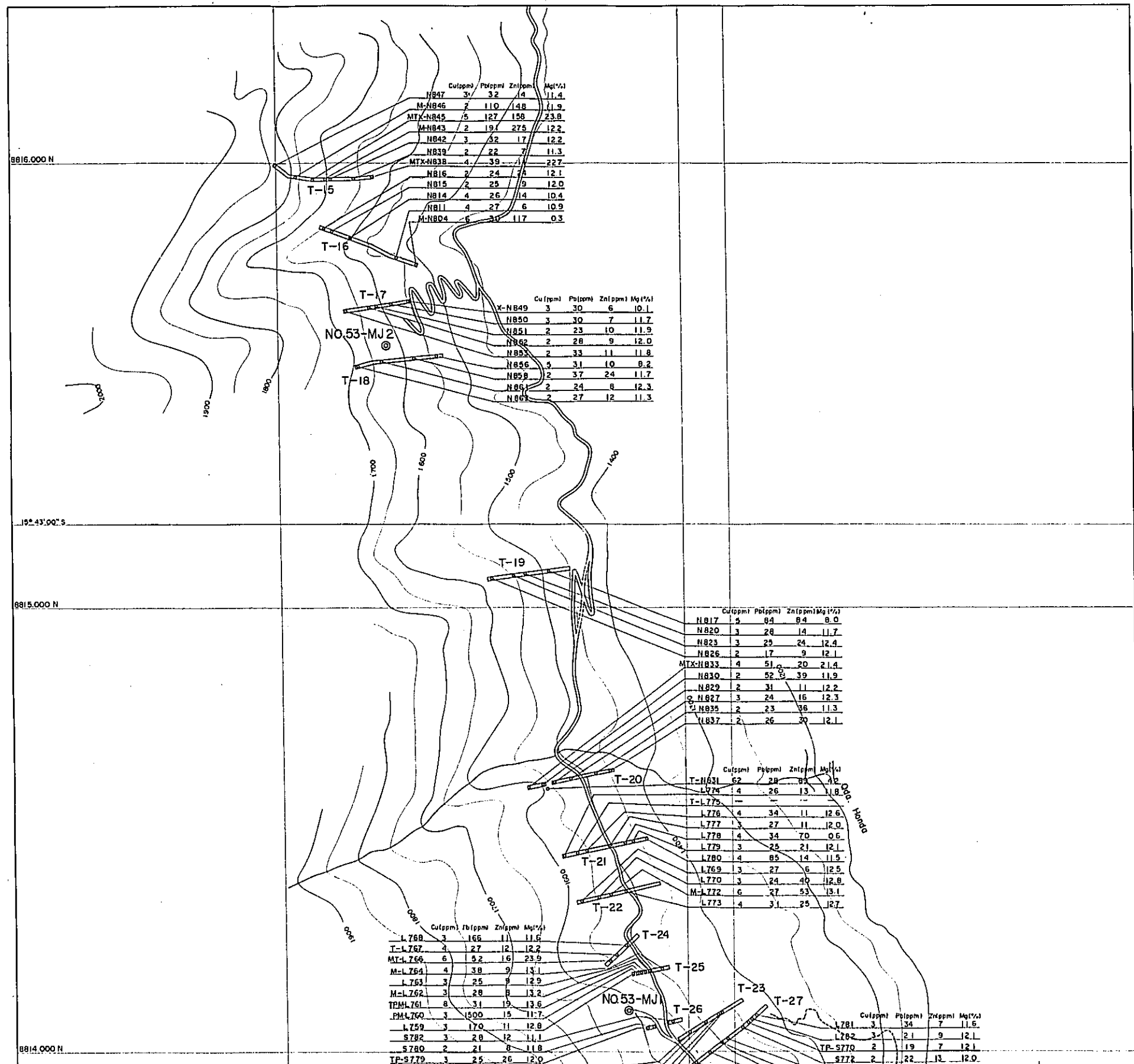
33

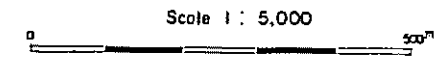
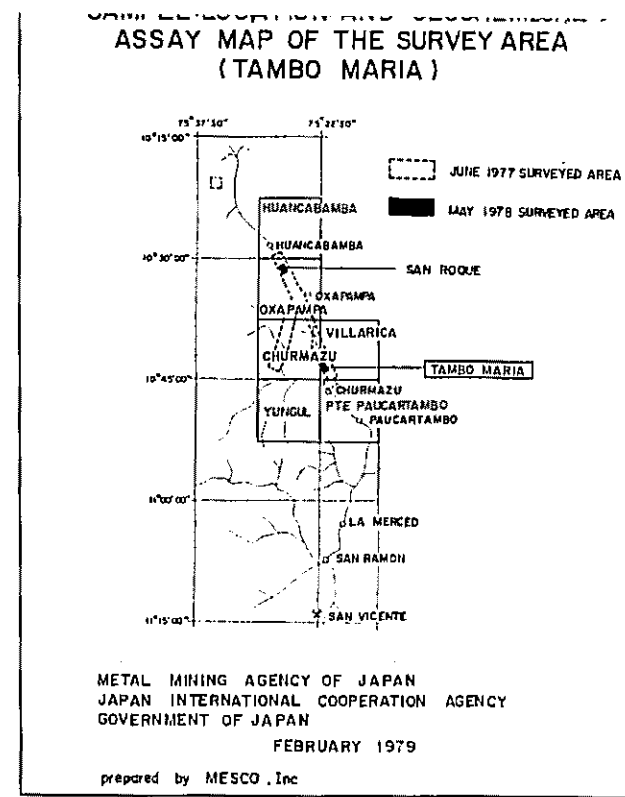
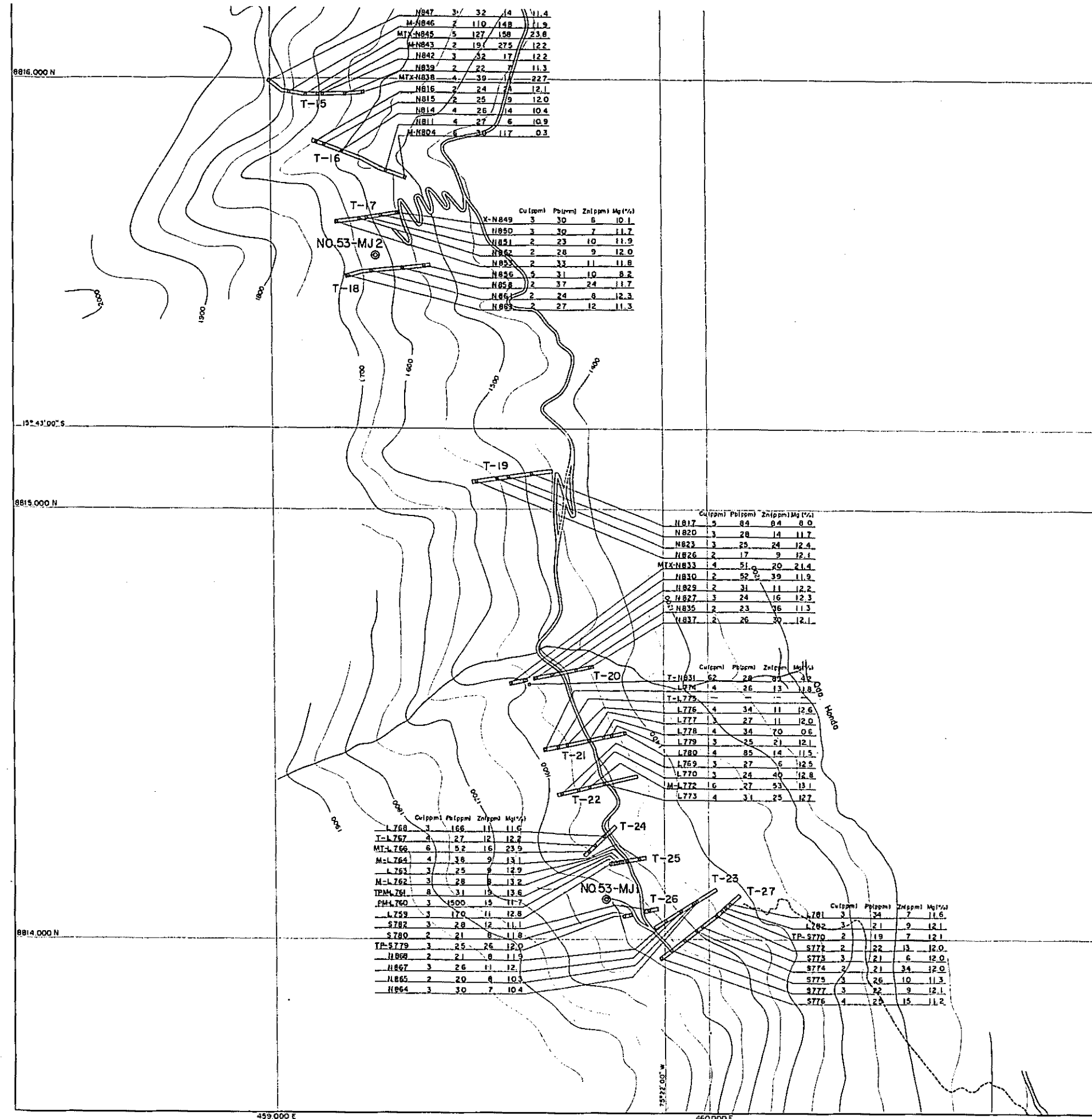
15°31' 00"

51

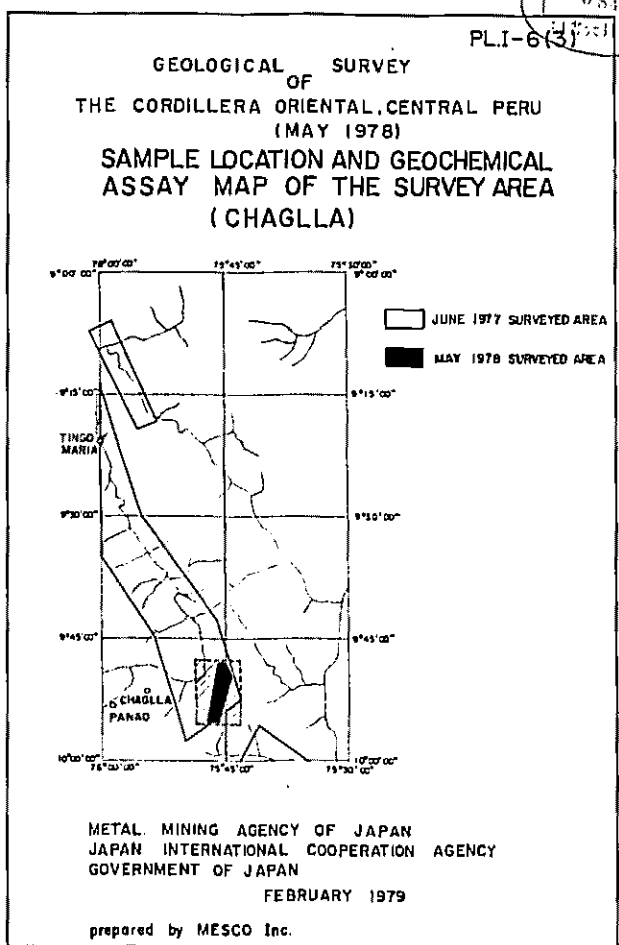
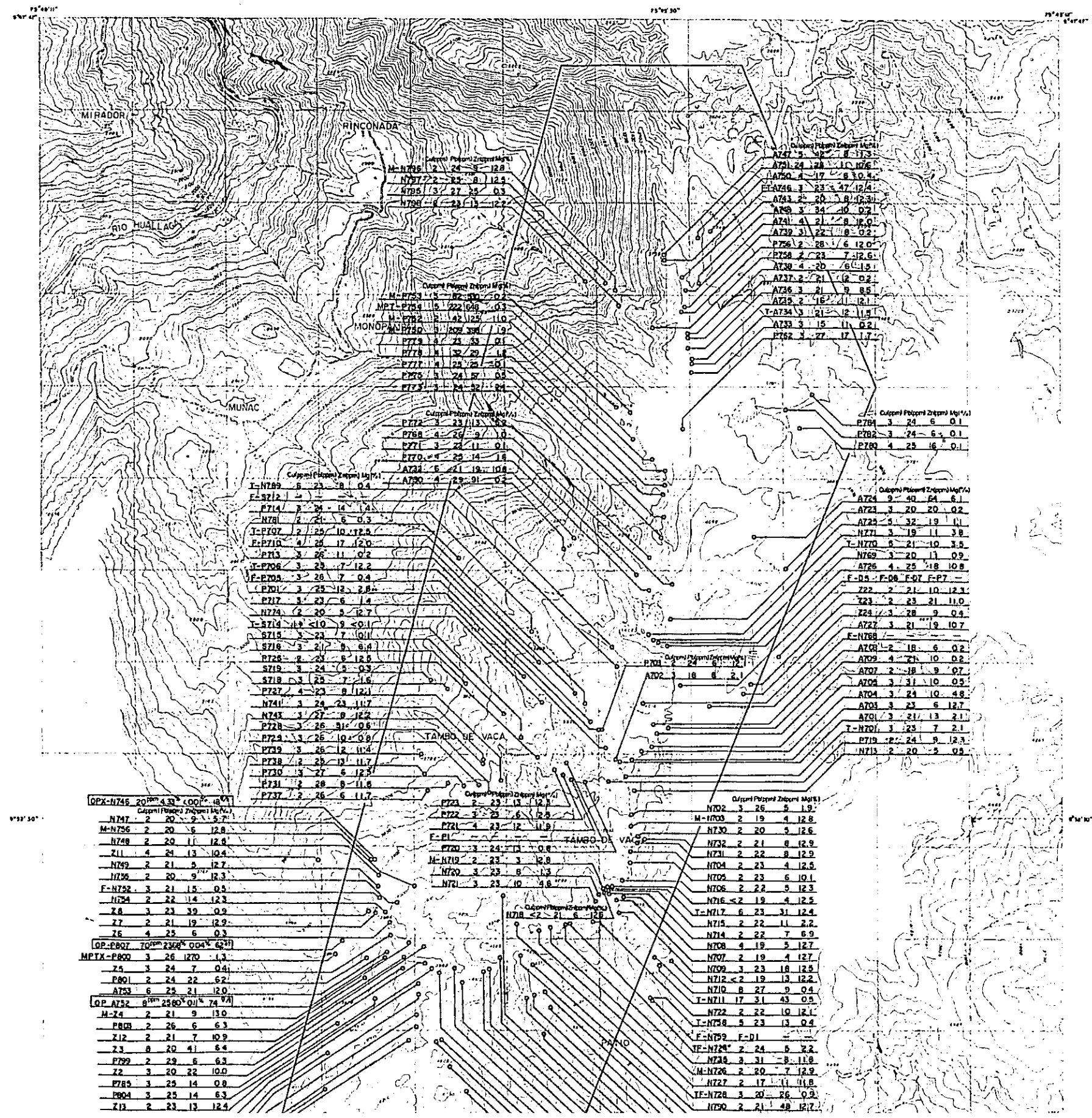
52

15°31' 00"





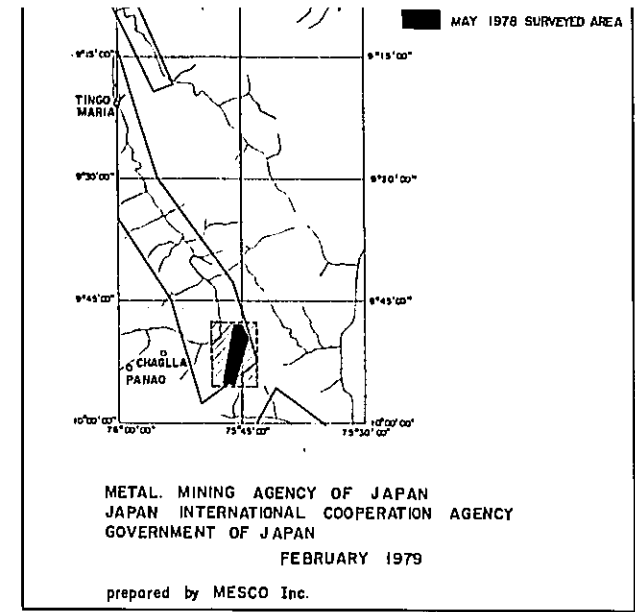
- #### LEGEND
- Locality of Rock Sample
 - NB47 3 32 14 11.4 — Number of Rock Sample and Geochemical Analysis [Cu (ppm) Pb (ppm) Zn (ppm) Mg (%)]
 - F-A701 Sample of Fossil
 - M-A702 Sample for Minor Element Analysis
 - O-A703 Sample for Ore Analysis
 - P-A704 Sample for Polished Section
 - T-A705 Sample for Thin Section
 - X-A706 Sample for X-ray Analysis
 - Trench
 - ⊙ Diamond Drill Hole
 - Roadway
 - Pathway



Scale 1:25,000

LEGEND

- o Locality of Rock Sample
- A751 24 26 11 10.6 Number of Rock Sample and Geochemical Analysis [Cu(ppm) Pb(ppm) Zn(ppm) Mg(%)]
- OP-X-N746 20ppm 4.33% 0.04% 18.0% Ore Analysis [Cu(ppm) Pb(%) Zn(%) Ag(%)]
- F-A701 Sample of Fossil
- M-A702 Sample for Minor Element Analysis
- O-A703 Sample for Ore Analysis
- P-A704 Sample for Polished Section
- T-A705 Sample for Thin Section
- X-A706 Sample for X-ray Analysis
- D Detailed Survey Area



Scale 1:25,000

0 1 2 km

LEGEND

- o Locality of Rock Sample
- A751 24 28 11 10.6 Number of Rock Sample and Geochemical Analysis [Cu(ppm) Pb(ppm) Zn(ppm) Mg(%)]
- OPX-N746 20 21 4 33 4.00 18.7 Ore Analysis [Cu(ppm) Pb(%) Zn(%) Ag(%)]
- F-A701 Sample of Fossil
- M-A702 Sample for Minor Element Analysis
- O-A703 Sample for Ore Analysis
- P-A704 Sample for Polished Section
- T-A705 Sample for Thin Section
- X-A706 Sample for X-ray Analysis
- D Detailed Survey Area

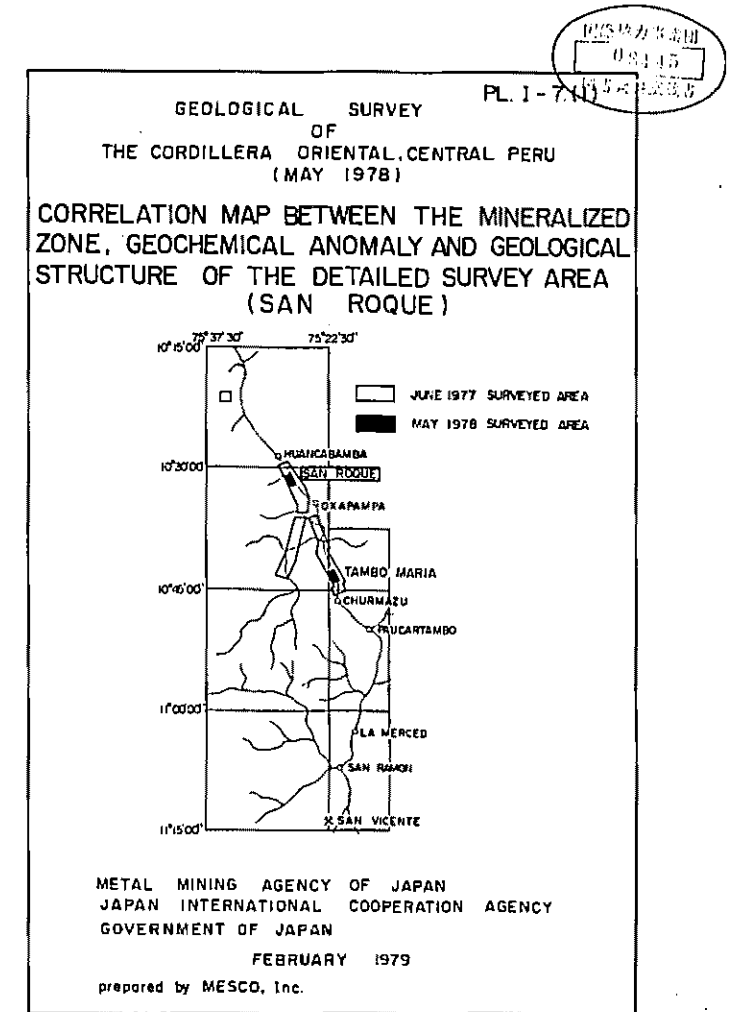
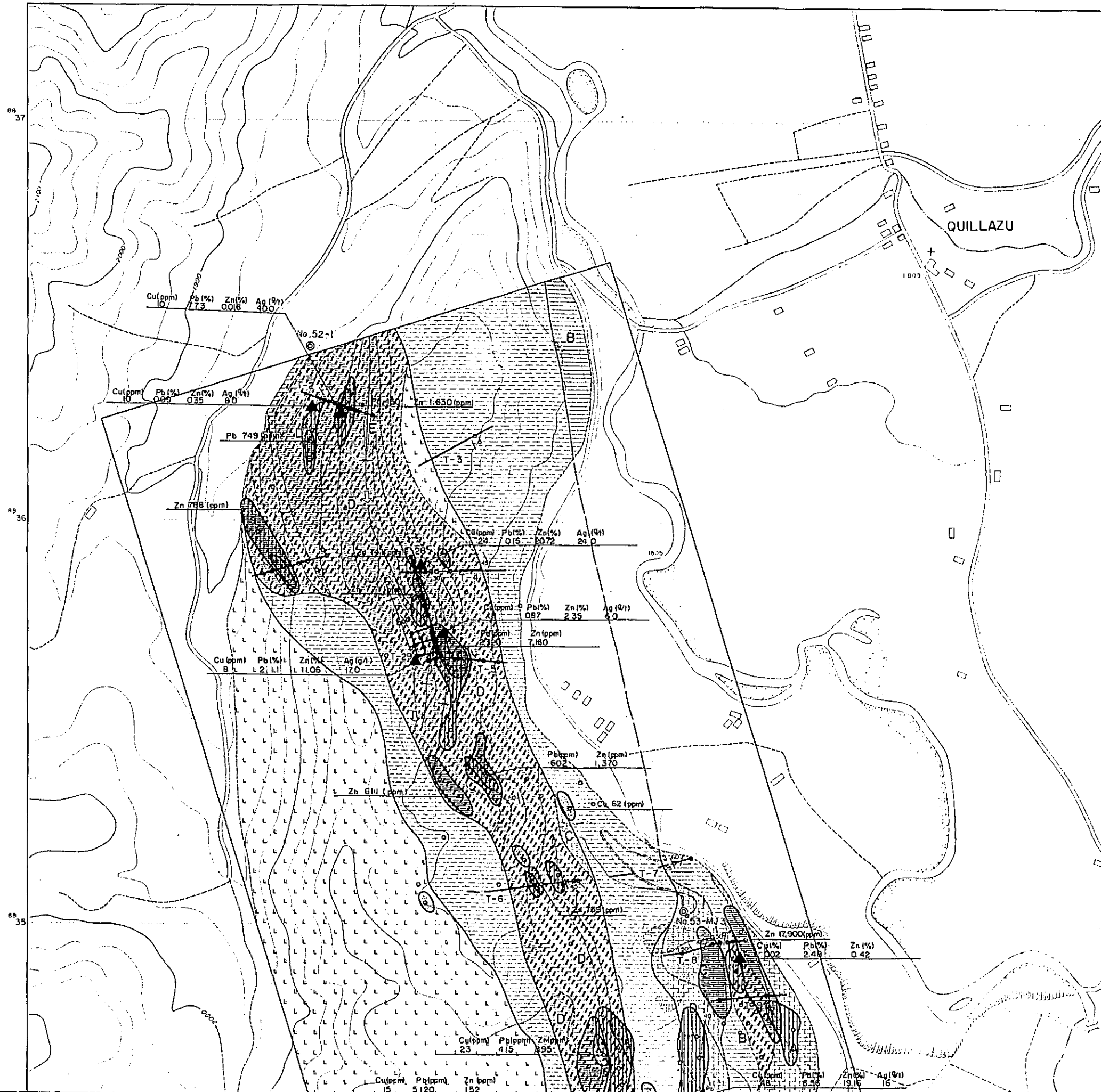
OPX-N746	20	21	4	33	4.00	18.7
N747	2	20	9	11	6.7	11.1
M-N756	2	20	6	12.8		
N748	2	20	11	12.5		
Z11	4	24	13	10.4		
N749	2	21	5	12.7		
N756	2	20	9	12.3		
F-N752	3	21	15	0.5		
N754	2	22	14	12.3		
Z8	3	23	39	0.9		
Z7	2	21	19	12.9		
Z6	4	25	6	0.3		
OP-P807	70	23	6	0.04	6.2	11
MPTX-P800	3	26	12	1.3		
Z5	3	24	7	0.4		
P801	2	24	22	6.2		
A753	6	25	21	12.0		
OP-A752	8	25	0	11	7.4	7.4
M-Z4	2	21	9	13.0		
P805	2	26	6	6.3		
Z12	2	21	7	10.9		
Z3	8	20	41	6.4		
P799	2	29	6	6.3		
Z2	3	20	22	10.0		
P785	3	25	14	0.8		
P804	3	25	14	6.3		
Z13	2	23	13	12.4		
A754	5	23	11	12.4		
P786	5	41	12	0.8		
M-A759	32	25	17	12.9		
A756	6	24	56	2.4		
A757	14	23	27	1.3		
P788	3	23	16	0.6		
A758	6	27	18	0.2		
P790	2	23	15	0.2		
P792	3	21	17	0.2		

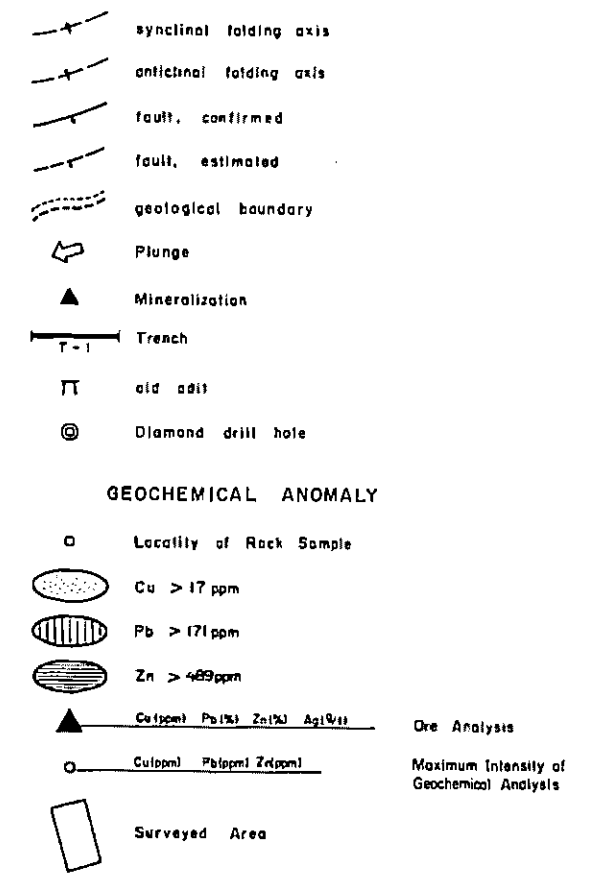
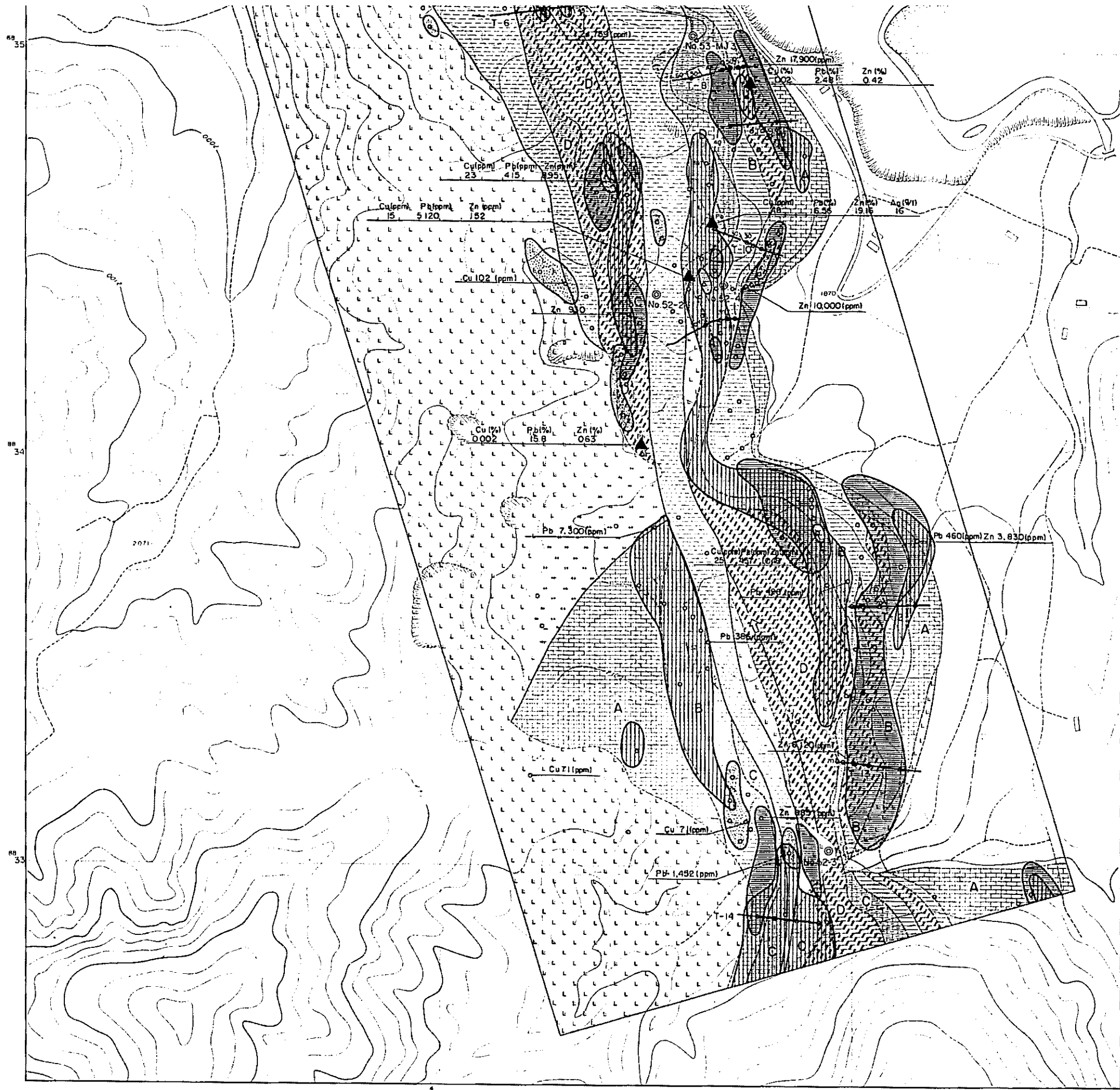
N702	3	25	5	1.9		
M-N703	2	19	4	12.8		
N730	2	20	5	12.5		
N732	2	21	8	12.9		
N731	2	22	8	12.9		
N704	2	23	4	12.5		
N705	2	23	6	10.1		
N706	2	22	5	12.3		
N716	2	19	4	12.5		
T-N717	6	23	31	12.4		
N715	2	22	11	2.2		
N714	2	22	7	6.9		
N708	4	19	5	12.7		
N707	2	19	4	12.7		
N709	3	23	18	12.5		
N712	2	19	13	12.2		
N710	8	27	9	0.4		
T-N711	17	31	43	0.5		
N722	2	22	10	12.1		
T-N728	5	23	13	0.4		
F-N759	F-01					
TF-N724	2	24	5	2.2		
N733	3	31	8	11.0		
M-N726	2	20	7	12.9		
N727	2	17	11	11.8		
TF-N728	3	20	26	0.9		
N730	2	21	4	12.7		
N731	1	24	53	12.6		
N760	2	23	5	12.8		
N763	2	21	8	12.0		
N761	2	21	4	12.8		
N762	2	21	4	12.5		
N764	2	25	19	11.4		
F-02	F-05					
Z20	2	4	24	8	1.5	
Z19	4	25	26	0.3		
Z18	3	24	27	0.2		
Z17	7	25	5	2.5		
Z16	4	24	14	0.2		
Z14	4	22	9	0.2		
A760	4	26	4	12.2		
TF-A759						
A761	10	25	20	0.9		
A762	3	23	13	10.3		
M-A763	5	22	6	12.8		

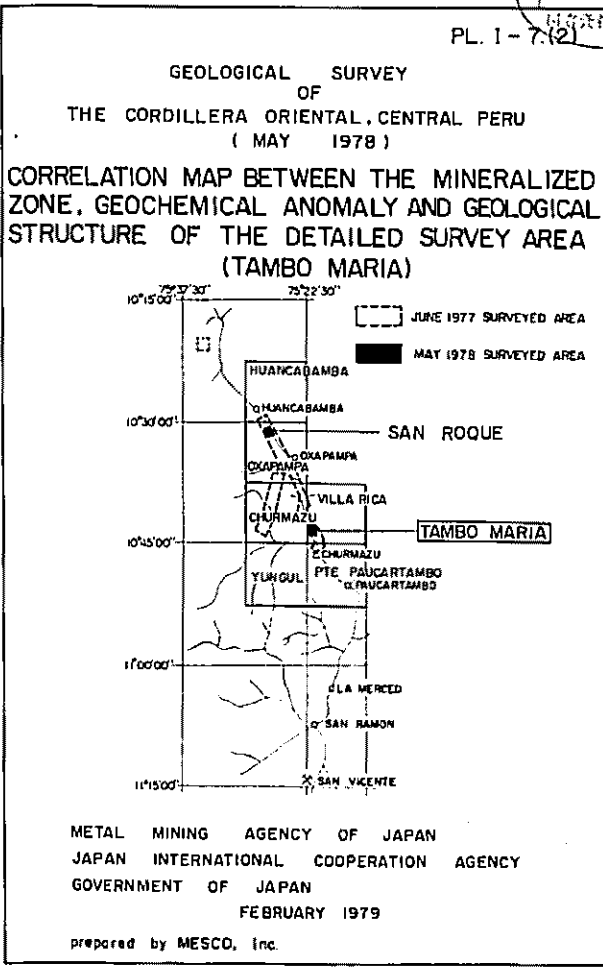
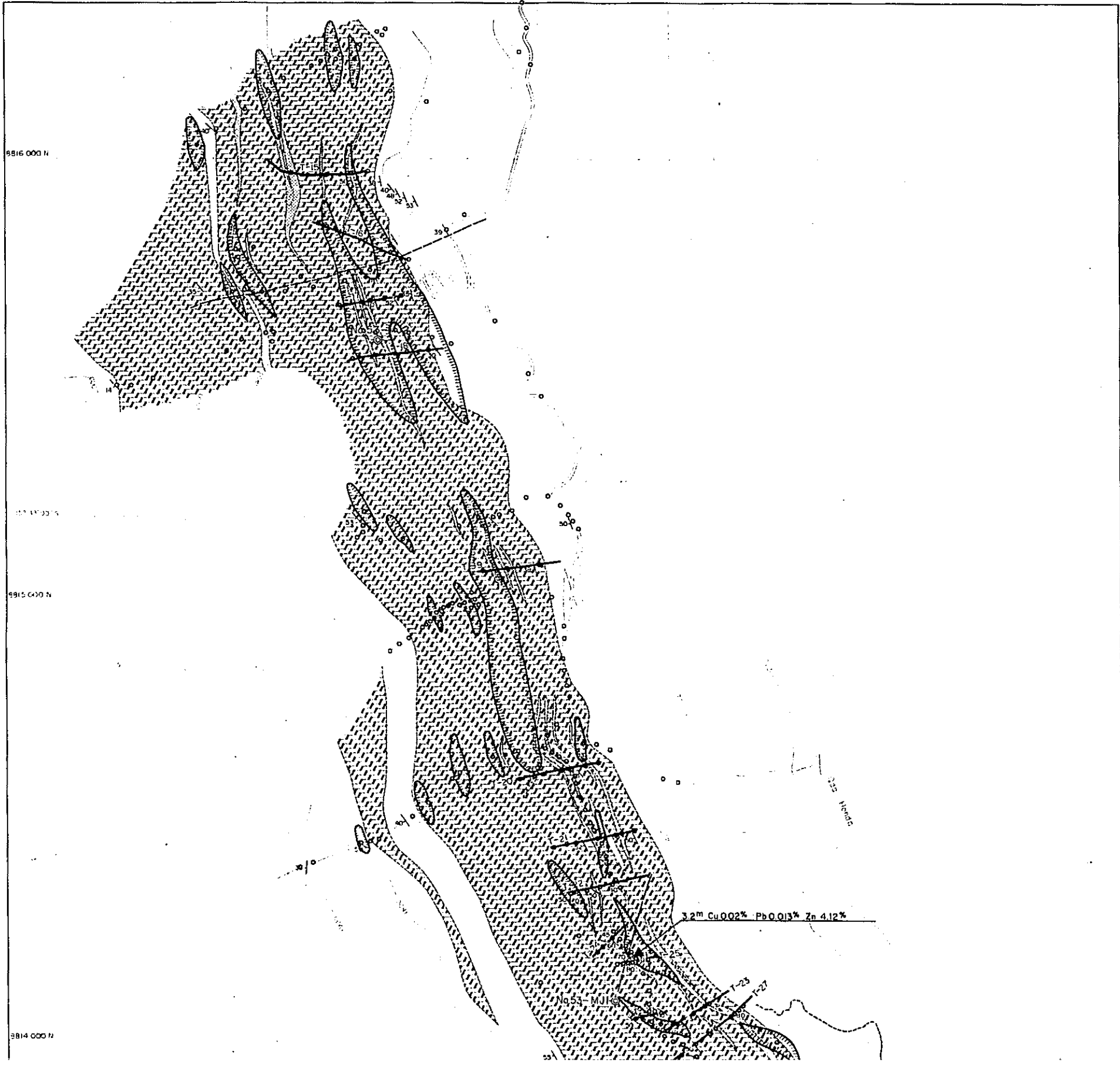
9°52'30"

75°45'30"

9°51'30"

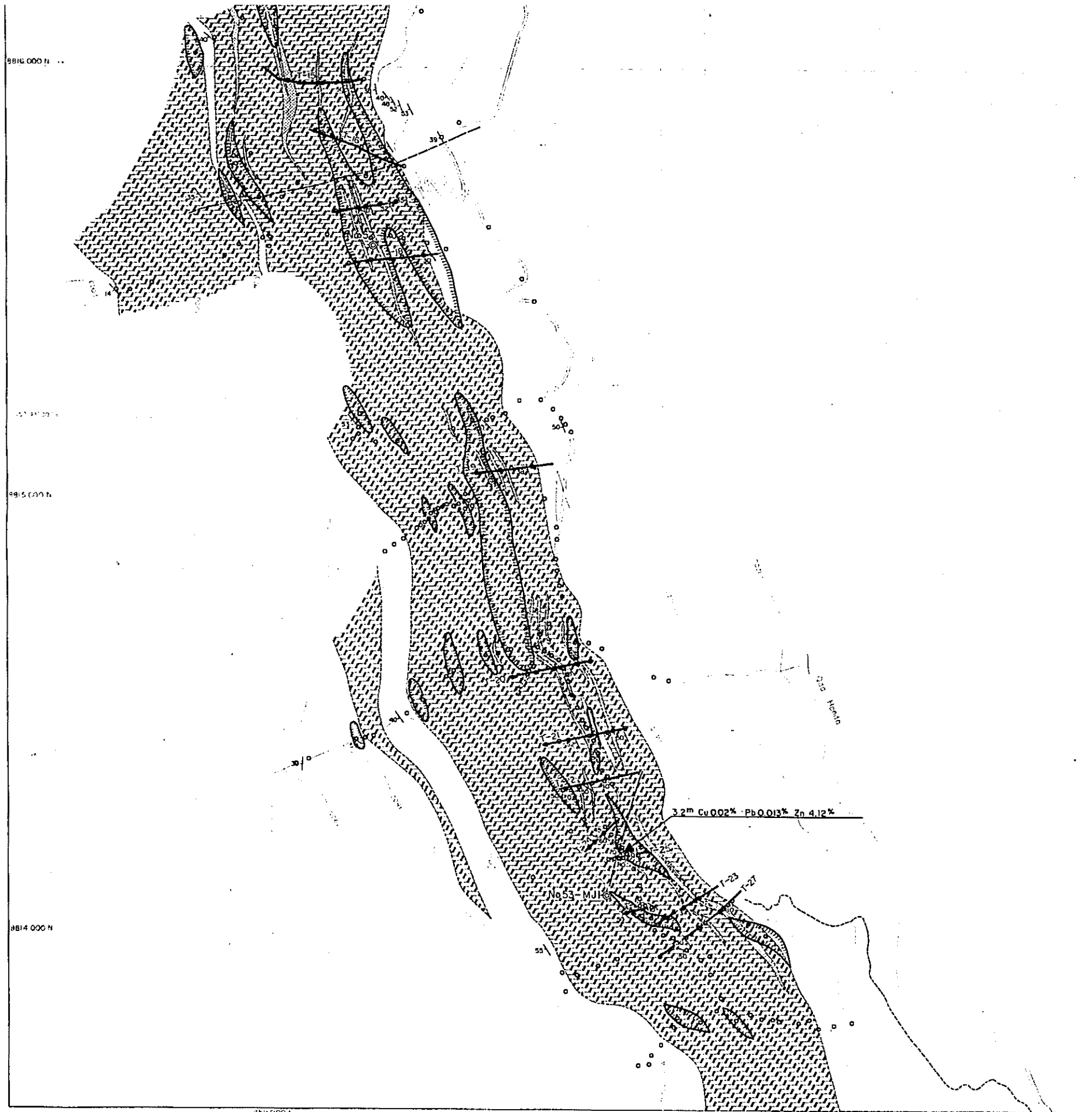




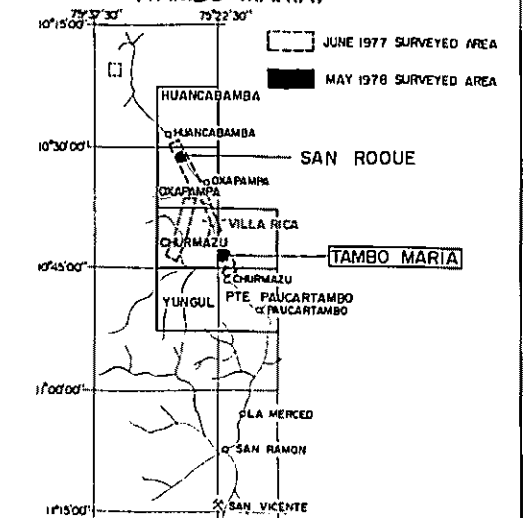


LEGEND

- GEOLOGY
- Dolomite
 - Zebra Dolomite or Breccia Dolomite
 - Golerite
 - bedding plane
 - fault (estimated)
 - geological boundary
 - Mineralization
 - Trench
 - Diamond drill hole
 - roadway
 - pathway
- GEOCHEMICAL ANOMALY



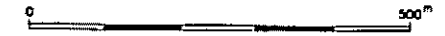
CORRELATION MAP BETWEEN THE MINERALIZED ZONE, GEOCHEMICAL ANOMALY AND GEOLOGICAL STRUCTURE OF THE DETAILED SURVEY AREA (TAMBO MARIA)



METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979

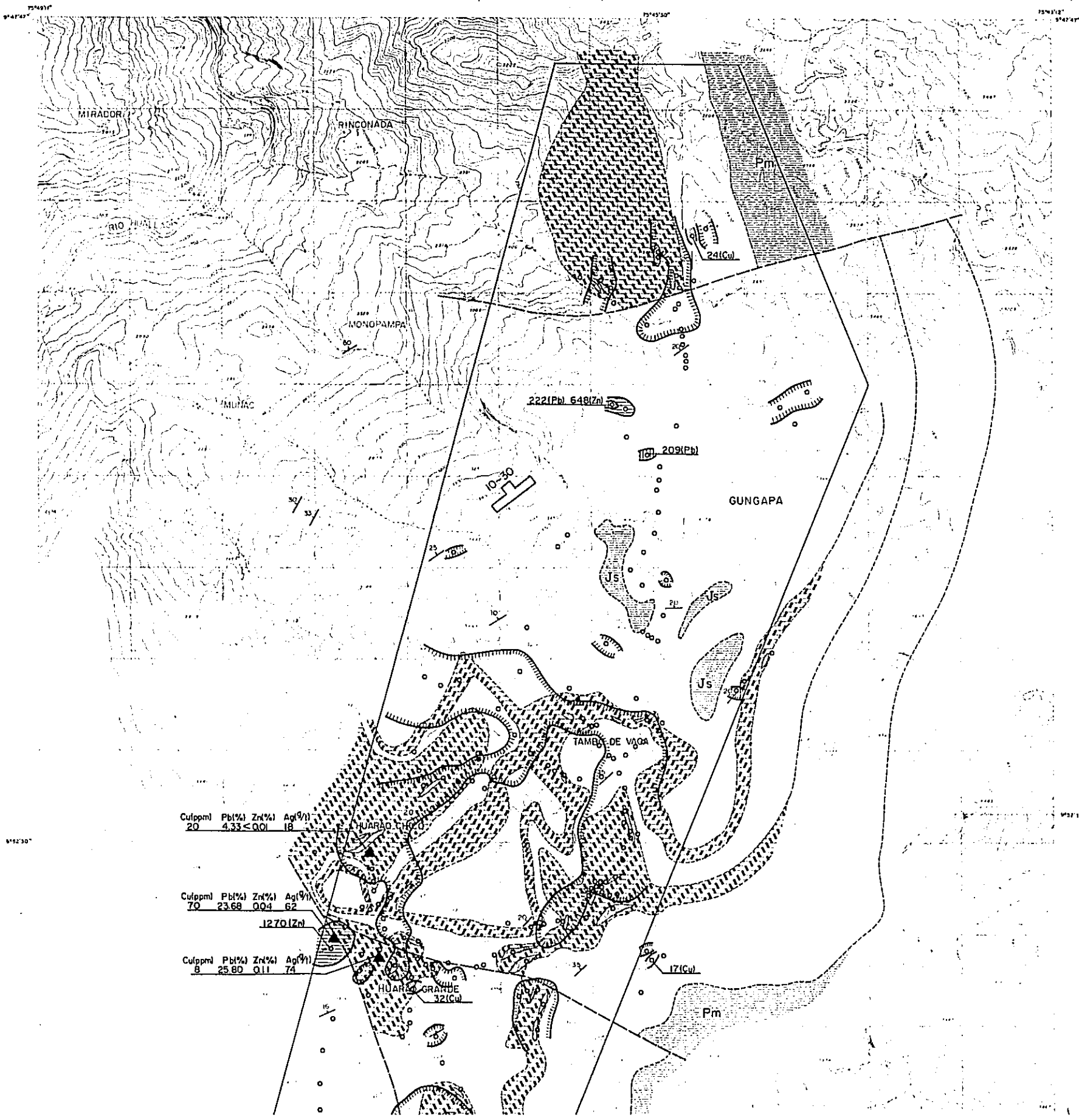
prepared by MESCO, Inc.

Scale 1:5,000



LEGEND

- GEOLOGY**
- Dolostone
 - Zebra Dolomite or Breccia Dolomite
 - Dolerite
 - bedding plane
 - fault (estimated)
 - geological boundary
 - Mineralization
 - Trench
 - Diamond drill hole
 - roadway
 - pathway
- GEOCHEMICAL ANOMALY**
- Locality of Rock Sample
 - Tambo Maria type anomaly (Zn < 10ppm)
 - Cu (%) Pb (%) Zn (%) Ore Analysis
- } Pucara Group



Cu(ppm) Pb(%) Zn(%) Ag(%)
20 4.33 < 0.01 18

Cu(ppm) Pb(%) Zn(%) Ag(%)
70 23.68 0.04 62

Cu(ppm) Pb(%) Zn(%) Ag(%)
8 25.80 0.11 74

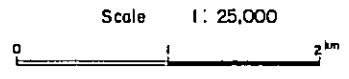
08145
PL. I-7(3)

GEOLOGICAL SURVEY
OF
THE CORDILLERA ORIENTAL, CENTRAL PERU
(MAY 1978)

CORRELATION MAP BETWEEN THE MINERALIZED
ZONE, GEOCHEMICAL ANOMALY AND GEOLOGICAL
STRUCTURE OF THE DETAILED SURVEY AREA
(CHAGLLA)

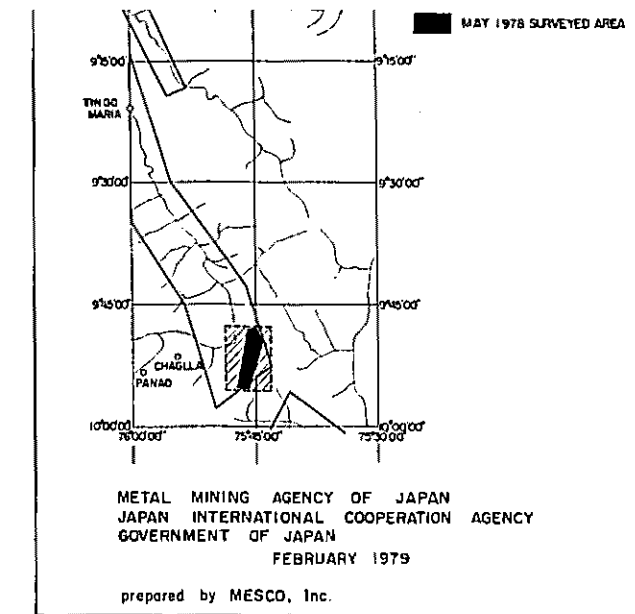
METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN
FEBRUARY 1979

prepared by MESCO, Inc.



LEGEND

- GEOLOGY**
- Sarayaquilla F.
 - Limestone, sandstone
 - Dolomite upper layer (member II)
 - Dolomite lower layer
 - Zebra Dolomite
 - Mitu Group
 - strike, dip
 - Fault (estimated)
- GEOCHEMICAL ANOMALY**
- Locality of Rock Sample
 - Cu > 17 ppm
 - Pb > 171 ppm



Scale 1: 25,000



LEGEND

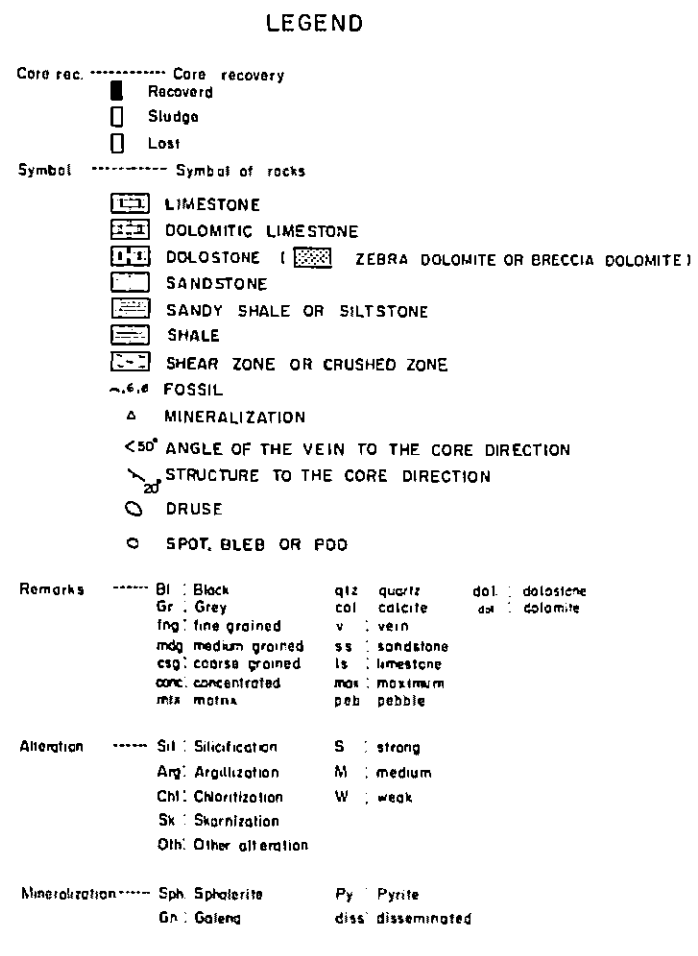
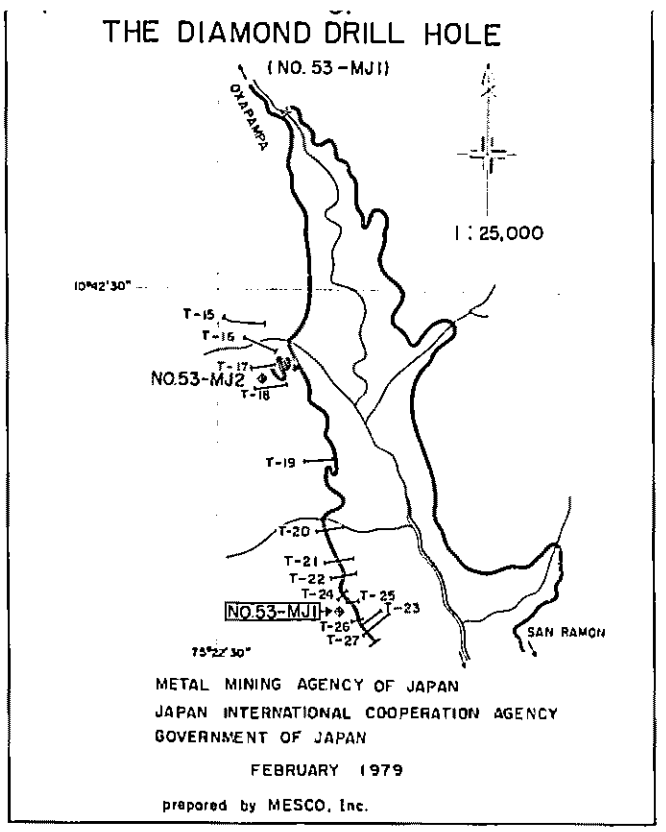
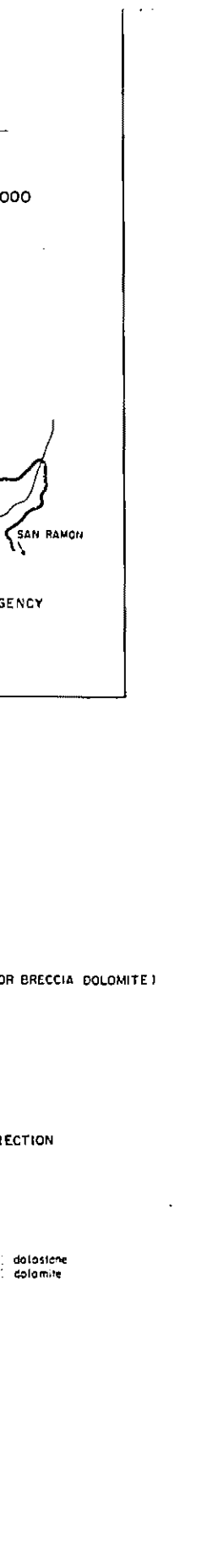
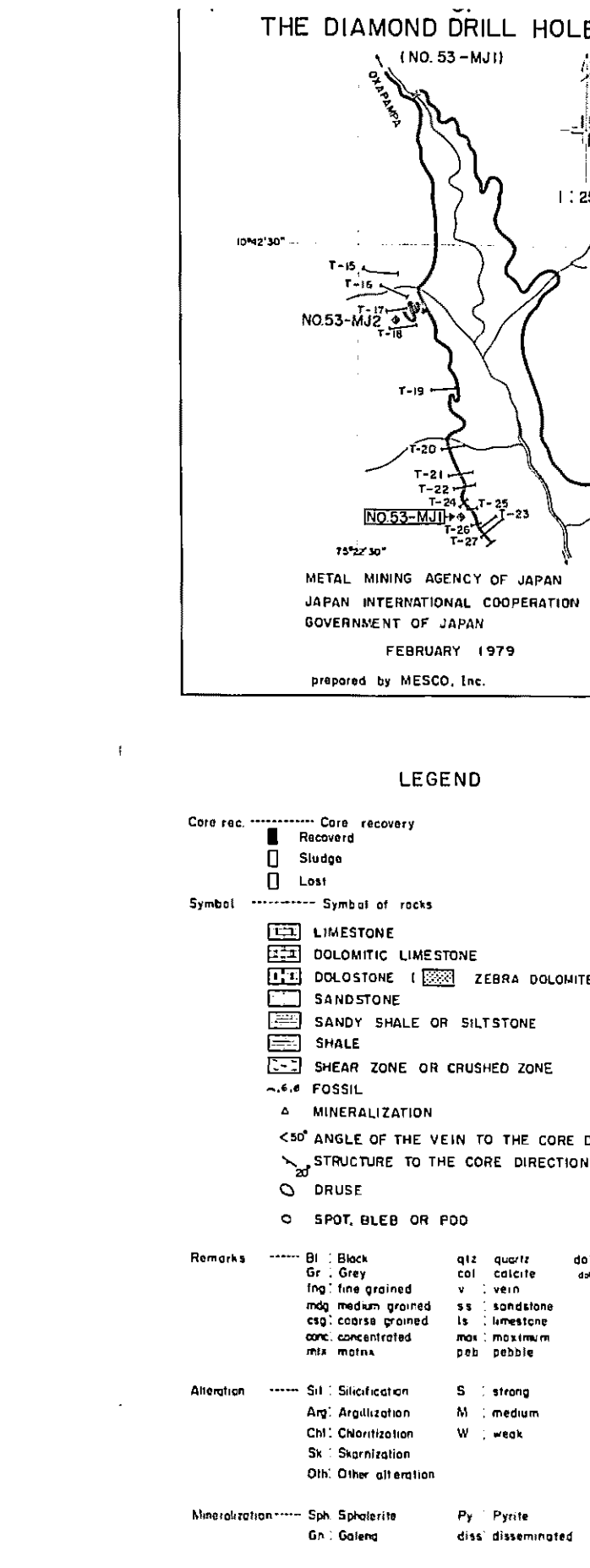
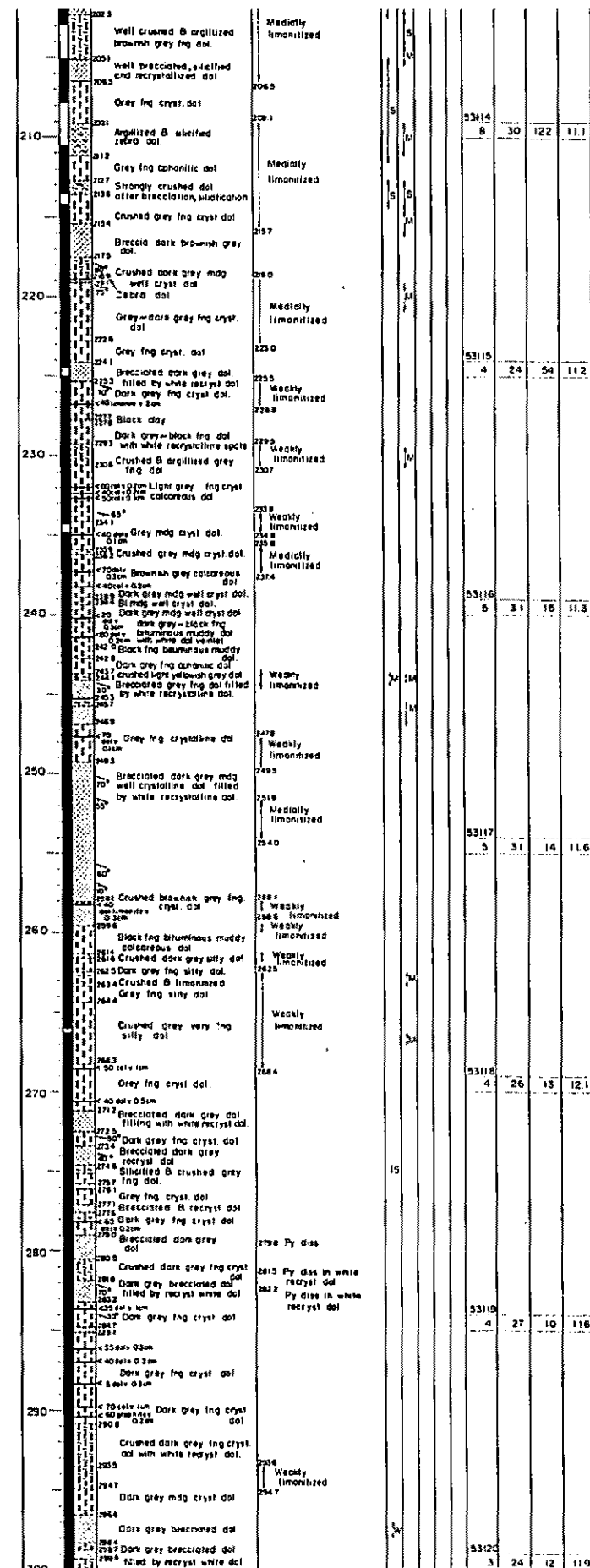
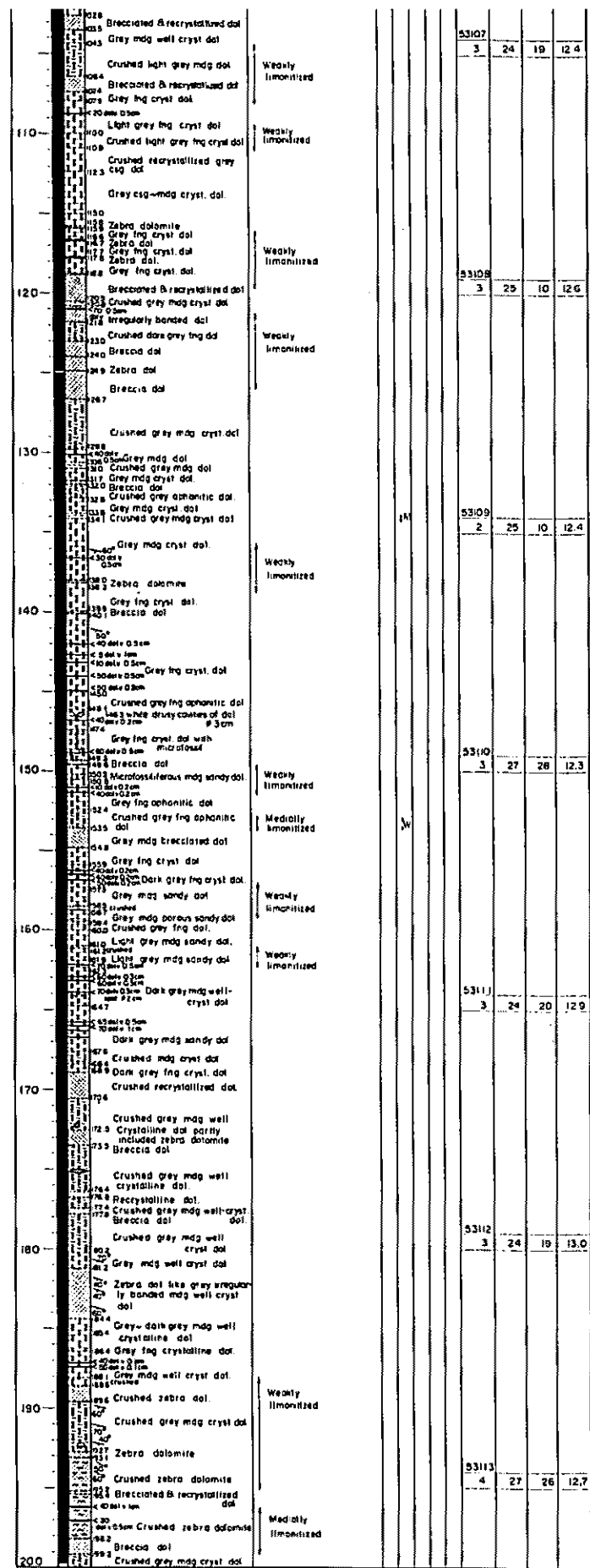
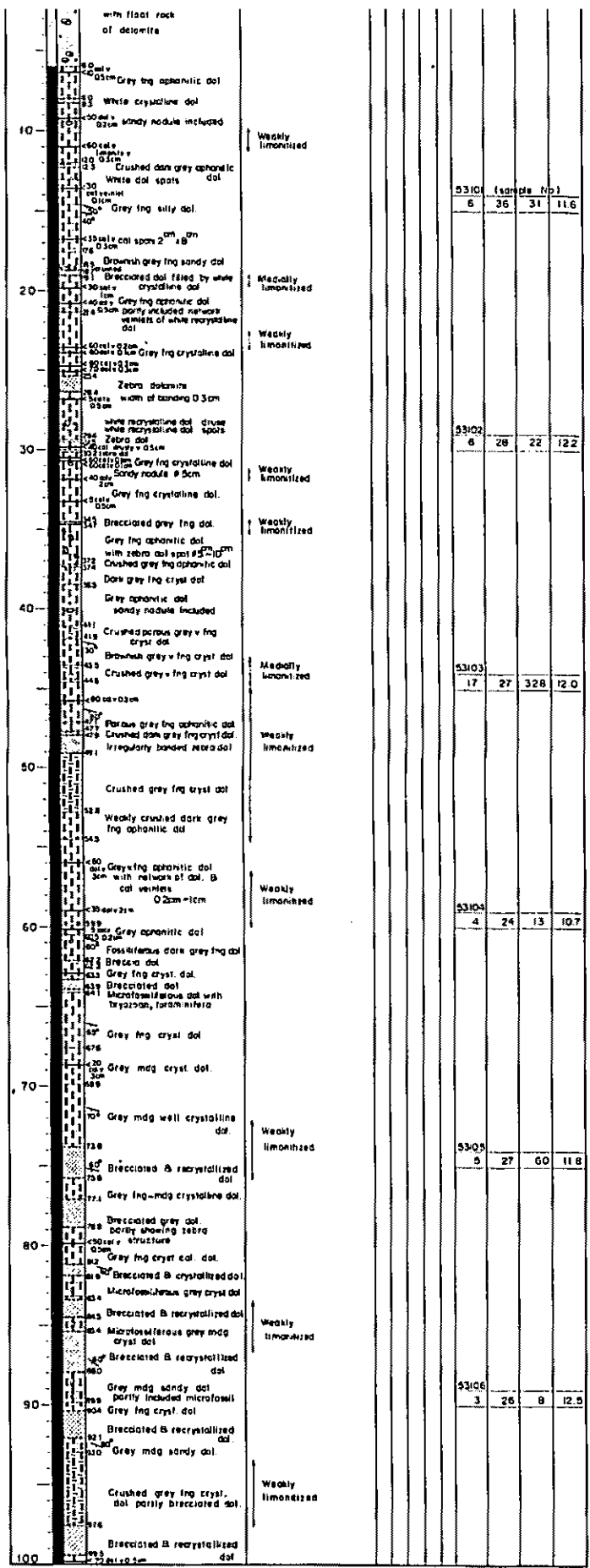
GEOLOGY

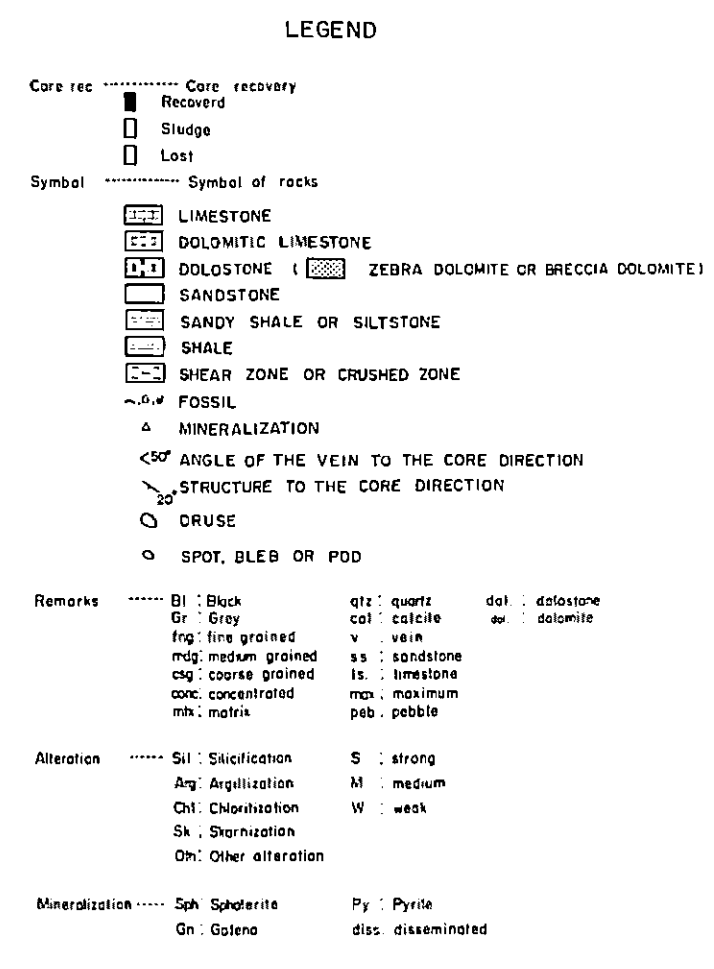
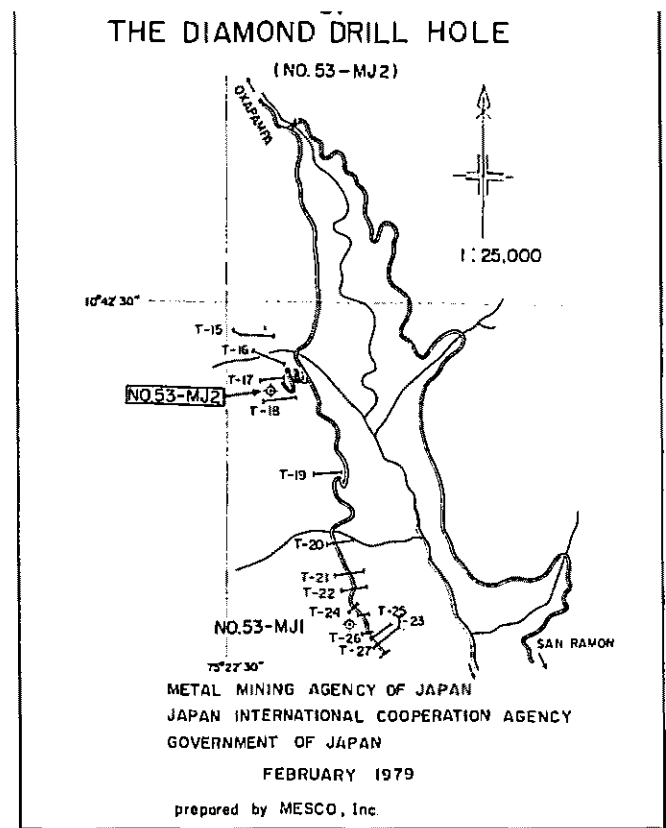
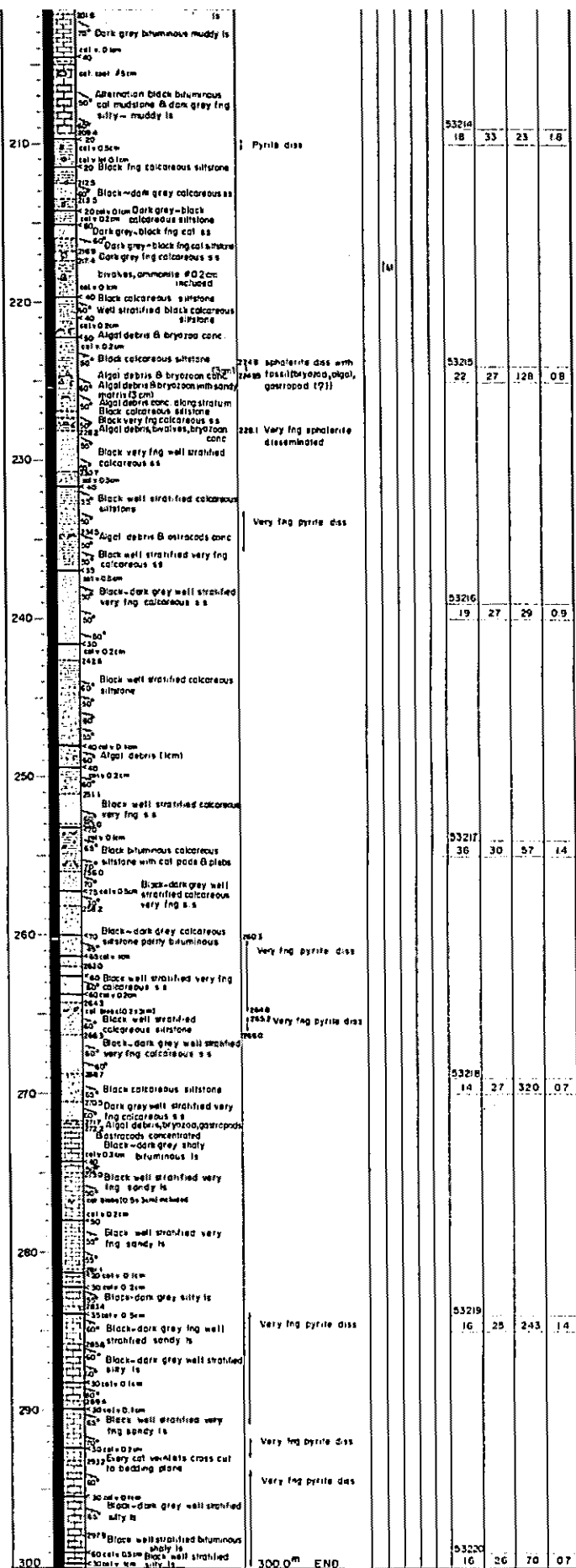
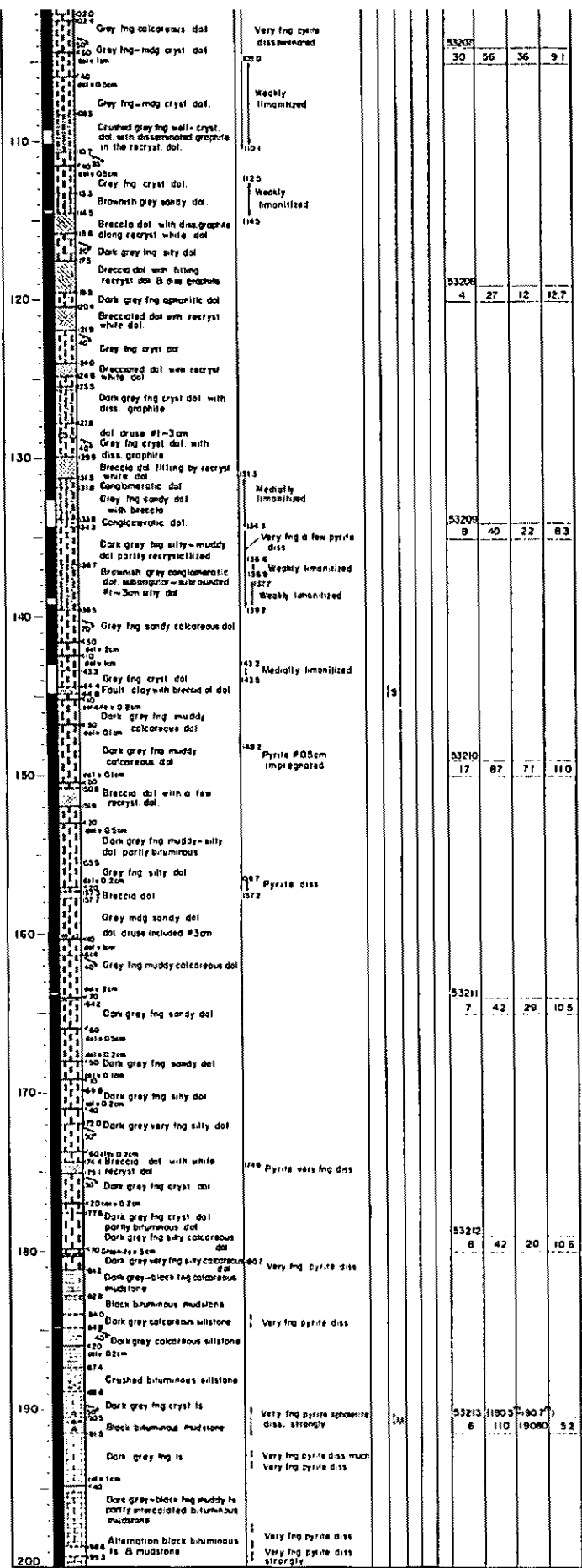
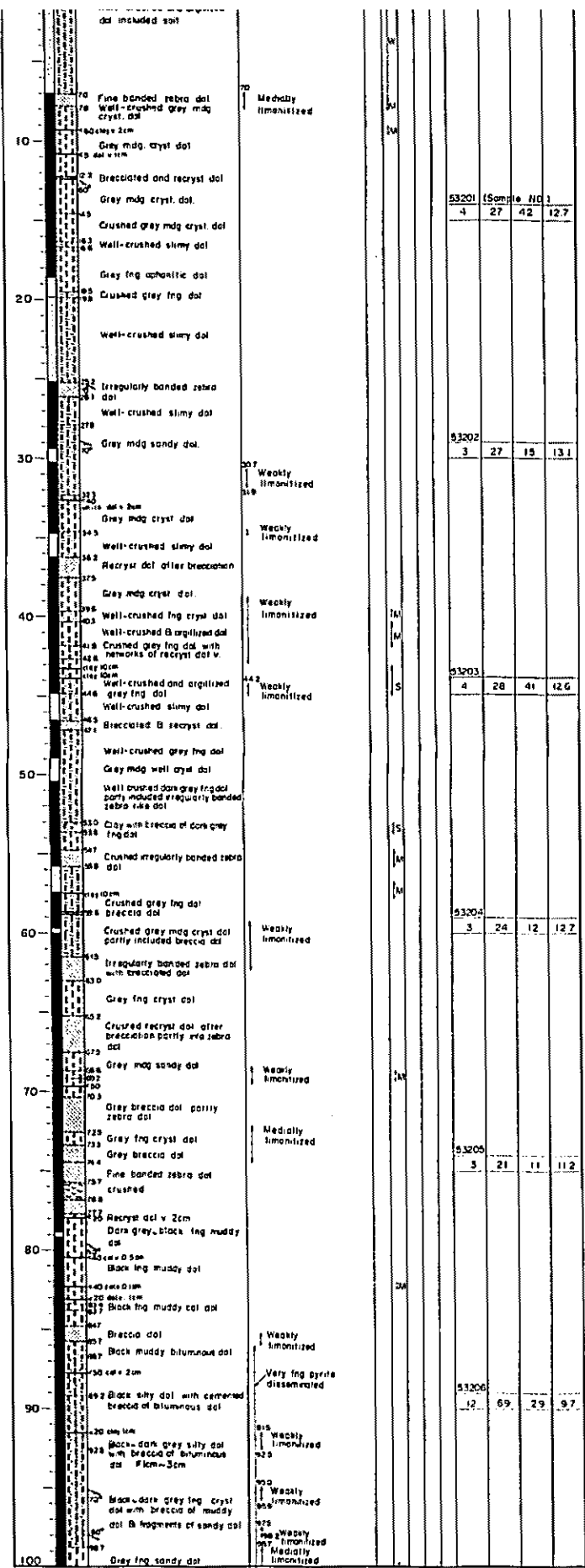
- Sorayaquito F.
- Limestone, sandstone
- Dolomite upper layer (member II)
- Dolomite lower layer
- Zebra Dolomite
- Mitu Group
- strike, dip
- Fault (estimated)

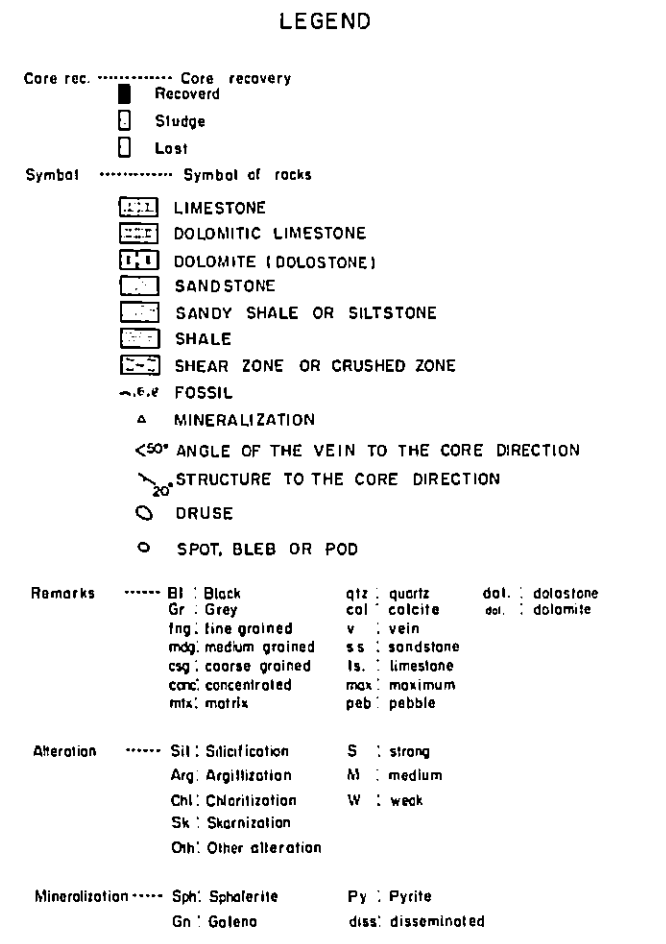
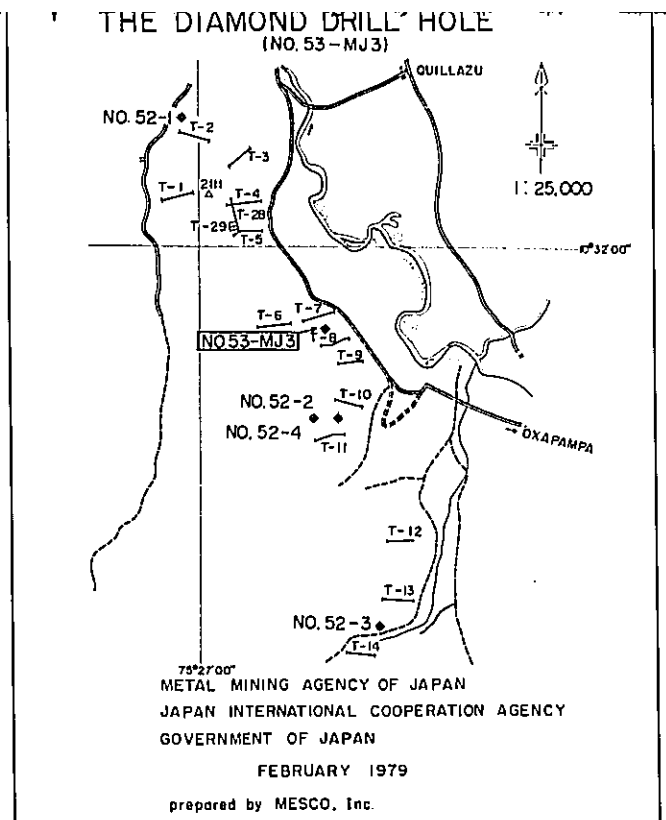
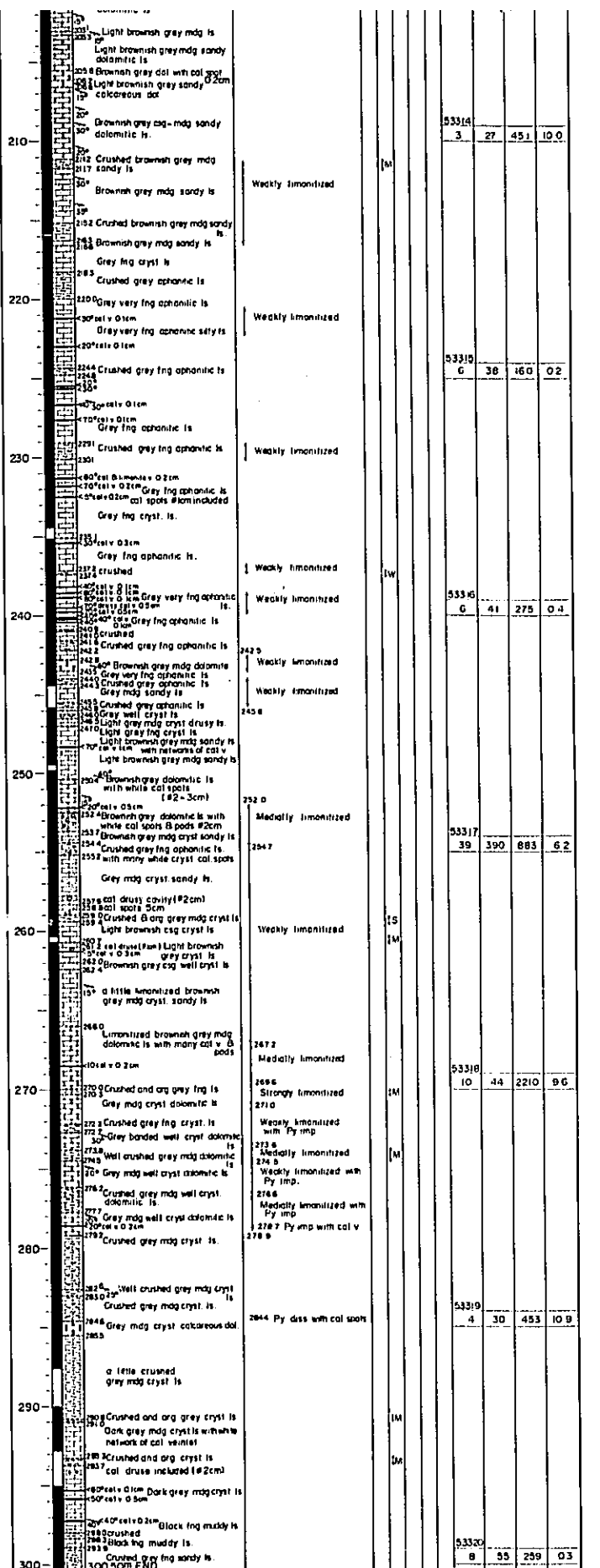
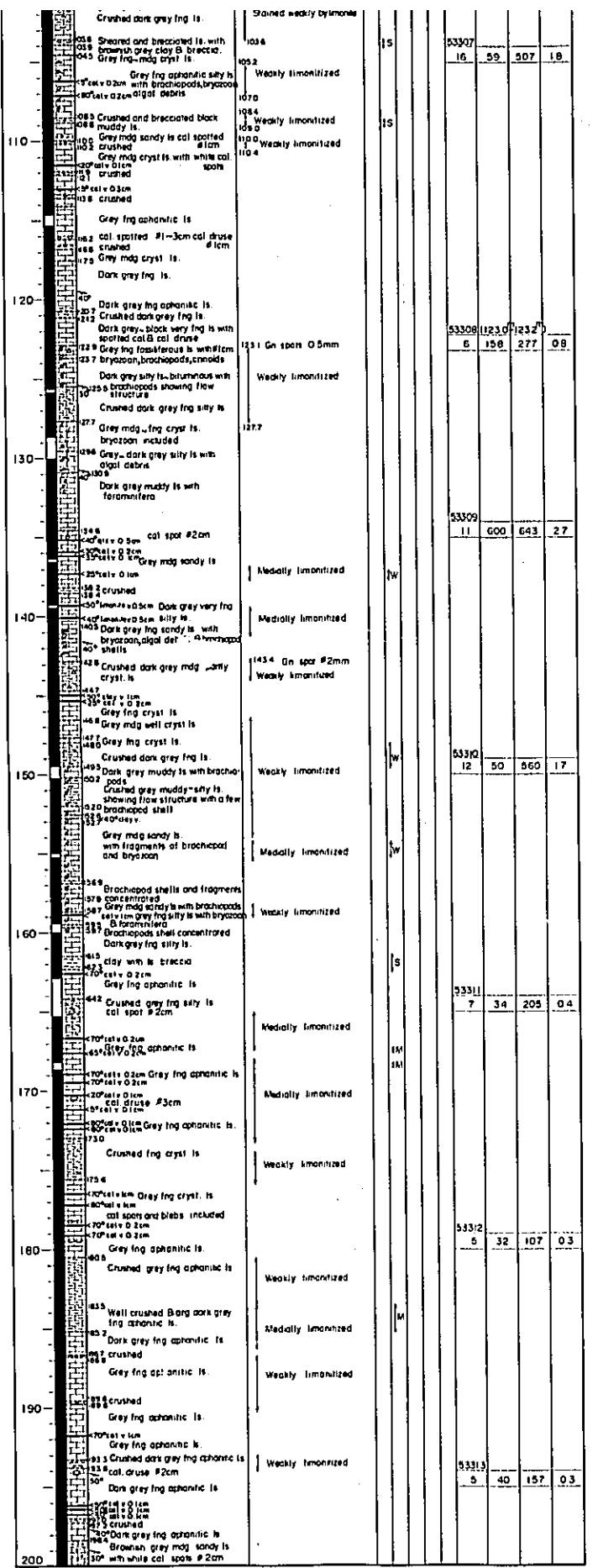
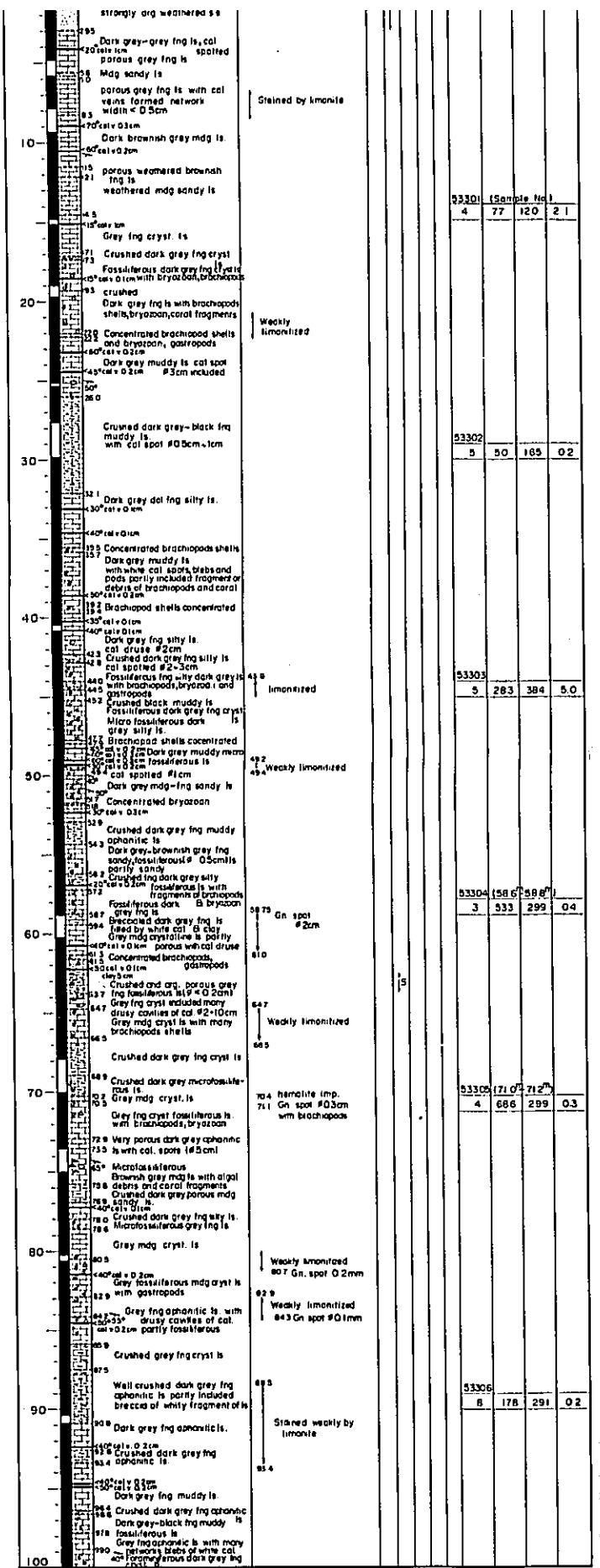
GEOCHEMICAL ANOMALY

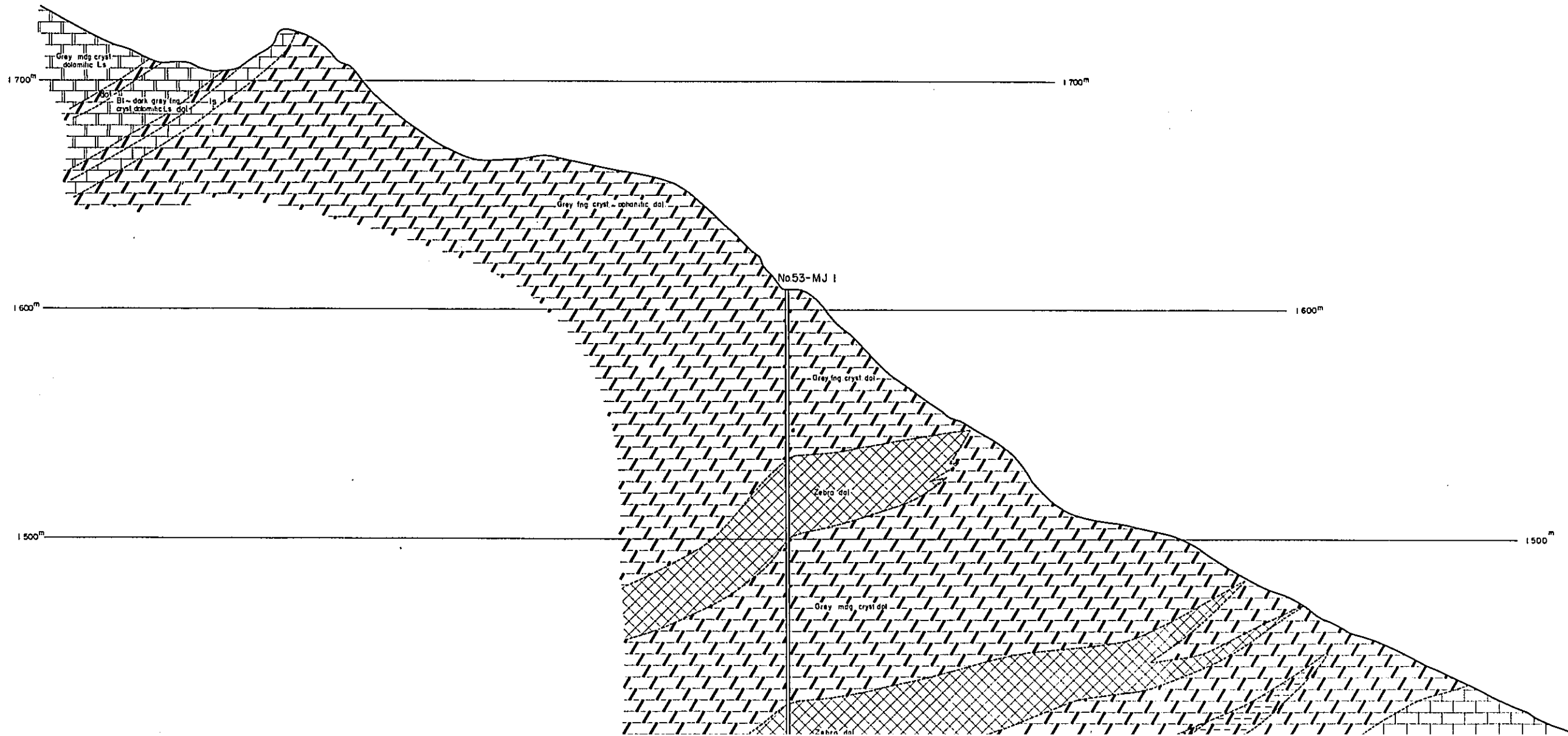
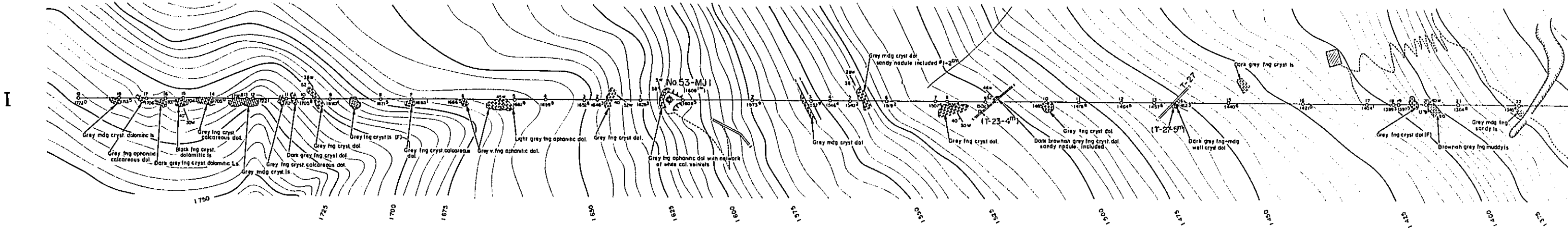
- Locality of Rock Sample
- Cu > 17 ppm
- Pb > 171 ppm
- Zn > 489 ppm
- Tamba Maria type anomaly (Zn < 10 ppm)

- Mineralization
- Ore Analysis
Cu(ppm) Pb(%) Zn(%) Ag(%)
- Maximum Intensity of Geochemical Analysis
ppm(Cu) ppm(Pb) ppm(Zn)
- Surveyed Area





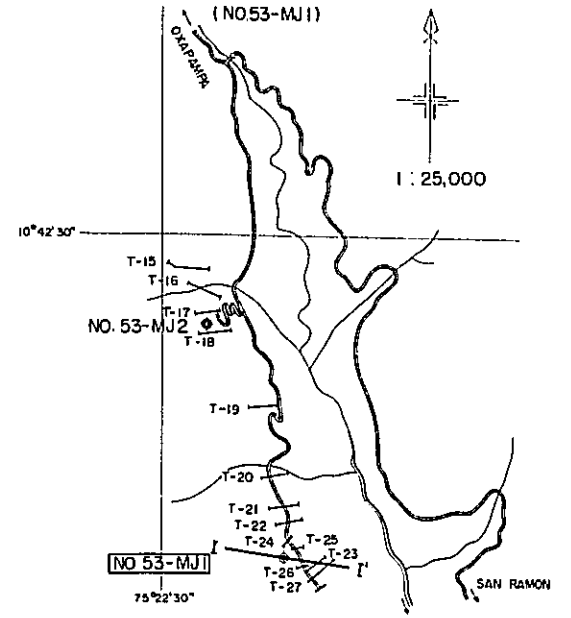




PL II-2(1)
08145

GEOLOGICAL SURVEY
OF
THE CORDILLERA ORIENTAL, CENTRAL PERU

GEOLOGICAL PROFILE
OF
THE DIAMOND DRILL HOLE

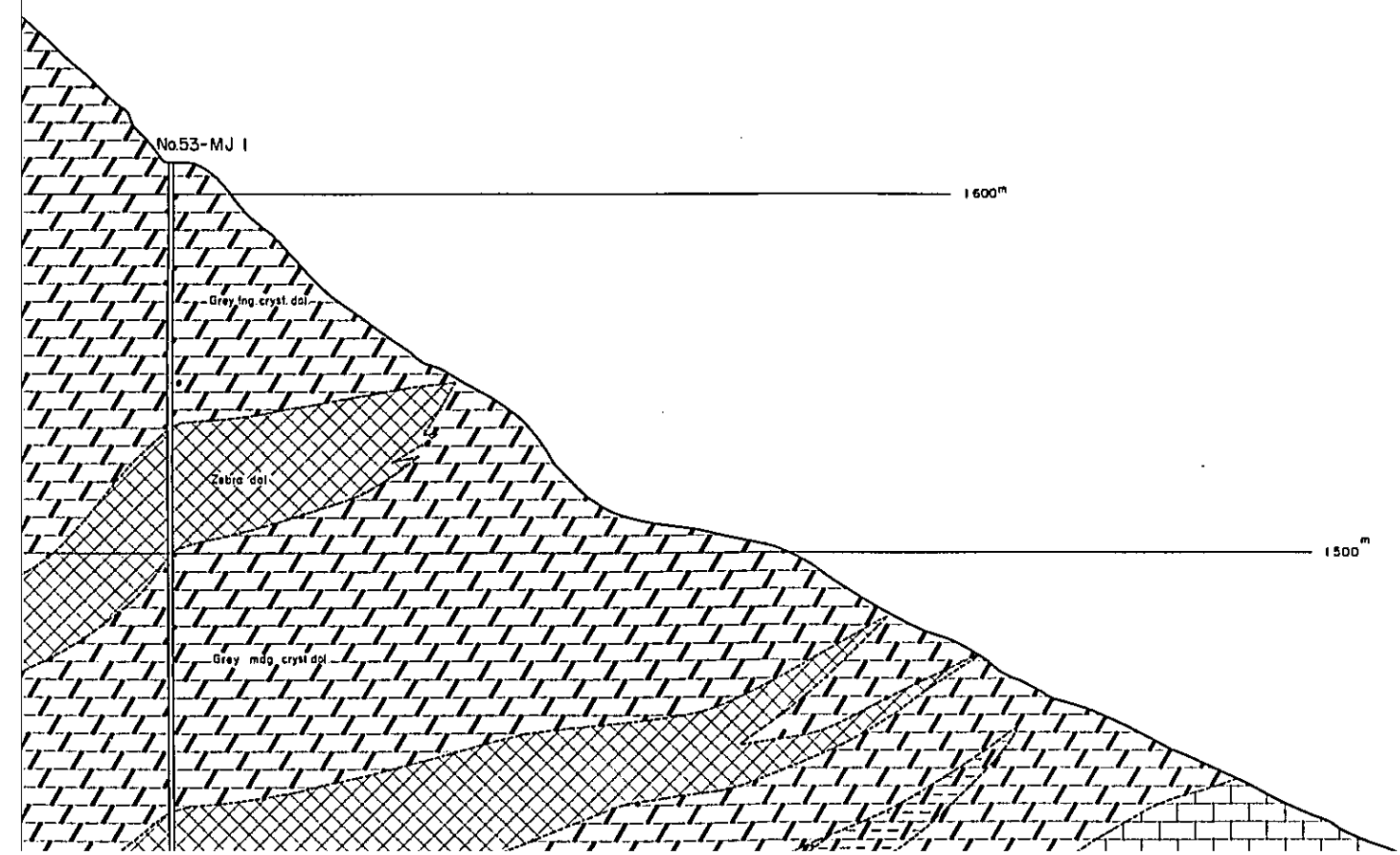
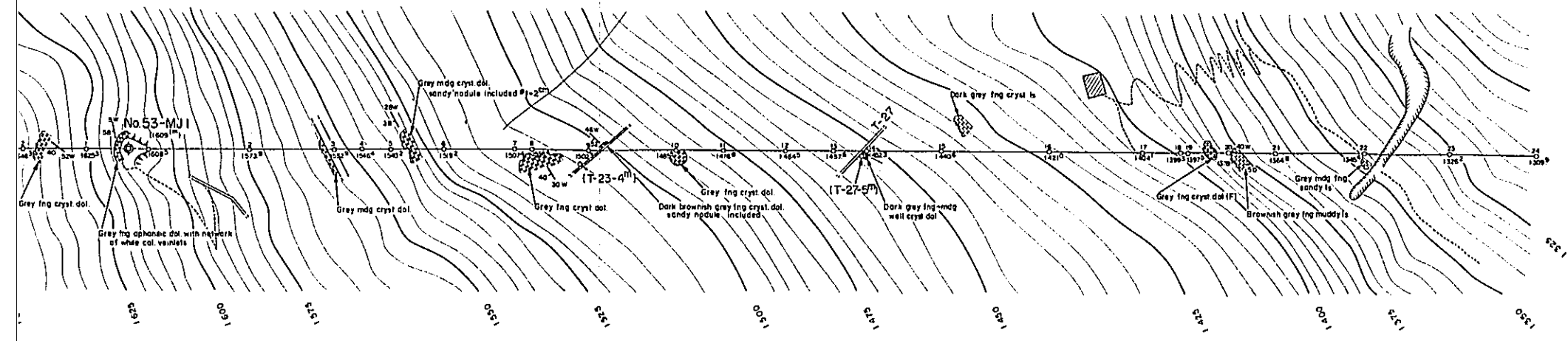
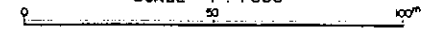


METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

FEBRUARY 1979

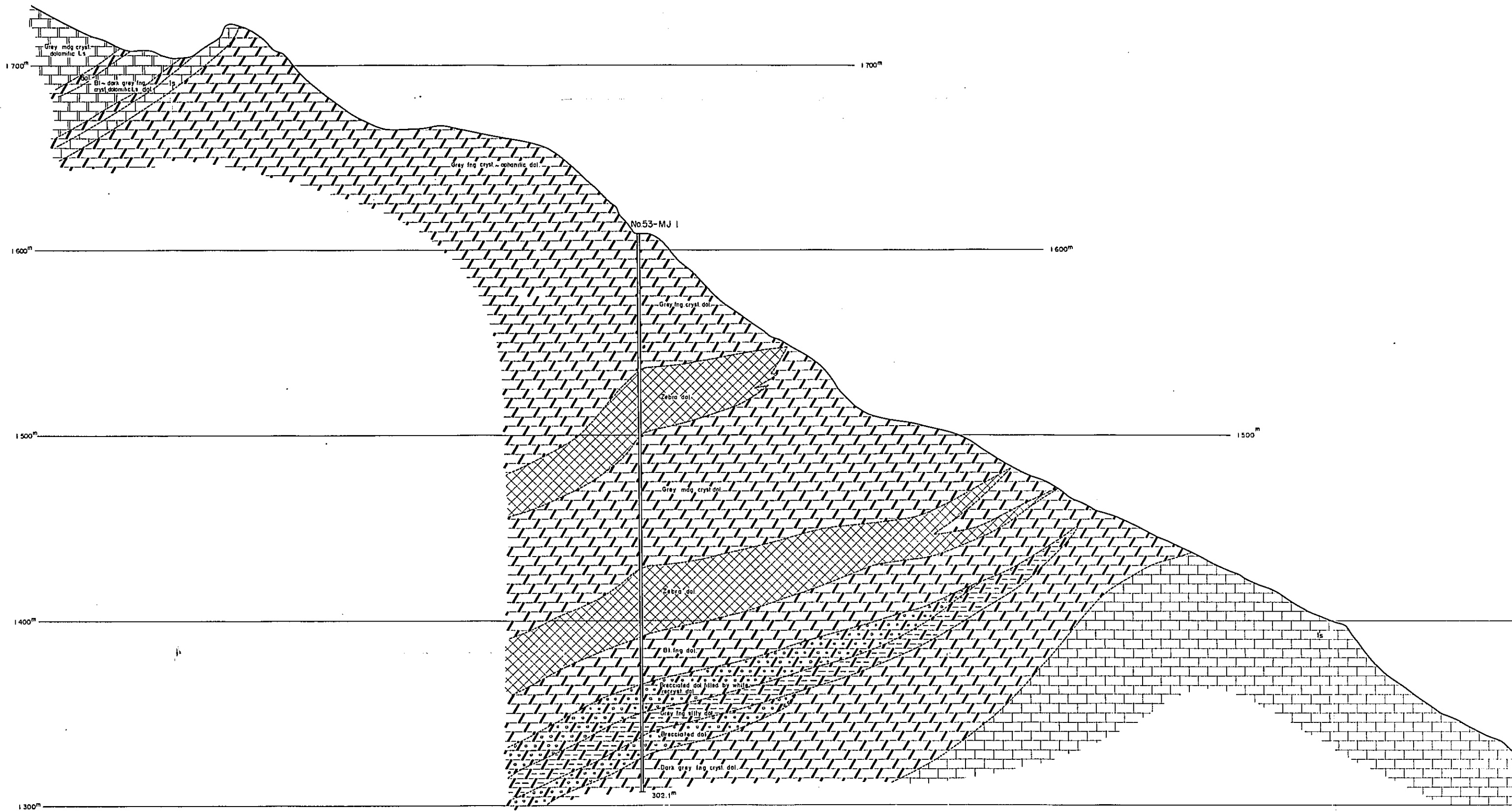
prepared by MESCO, Inc.

SCALE 1:1,000



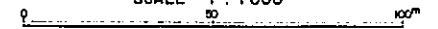
GEOLOGICAL INDEX

- QUATERNARY
 - LIMESTONE
 - MUDDY LIMESTONE & SILTY LIMESTONE
 - SANDY LIMESTONE
 - DOLOMITIC LIMESTONE
 - DOLOMITE (DOLOSTONE)
 - ZEBRA DOLOMITE
 - MUDDY DOLOMITE & SILTY DOLOMITE (MUDDY DOLOSTONE) (SILTY DOLOSTONE)
 - SANDY DOLOMITE (SANDY DOLOSTONE)
 - BRECCIATED DOLOMITE
 - SANDSTONE
 - SILTSTONE
 - FAULT
- PUCARA GROUP





















METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 prepared by MESCO, Inc.

SCALE 1 : 1000



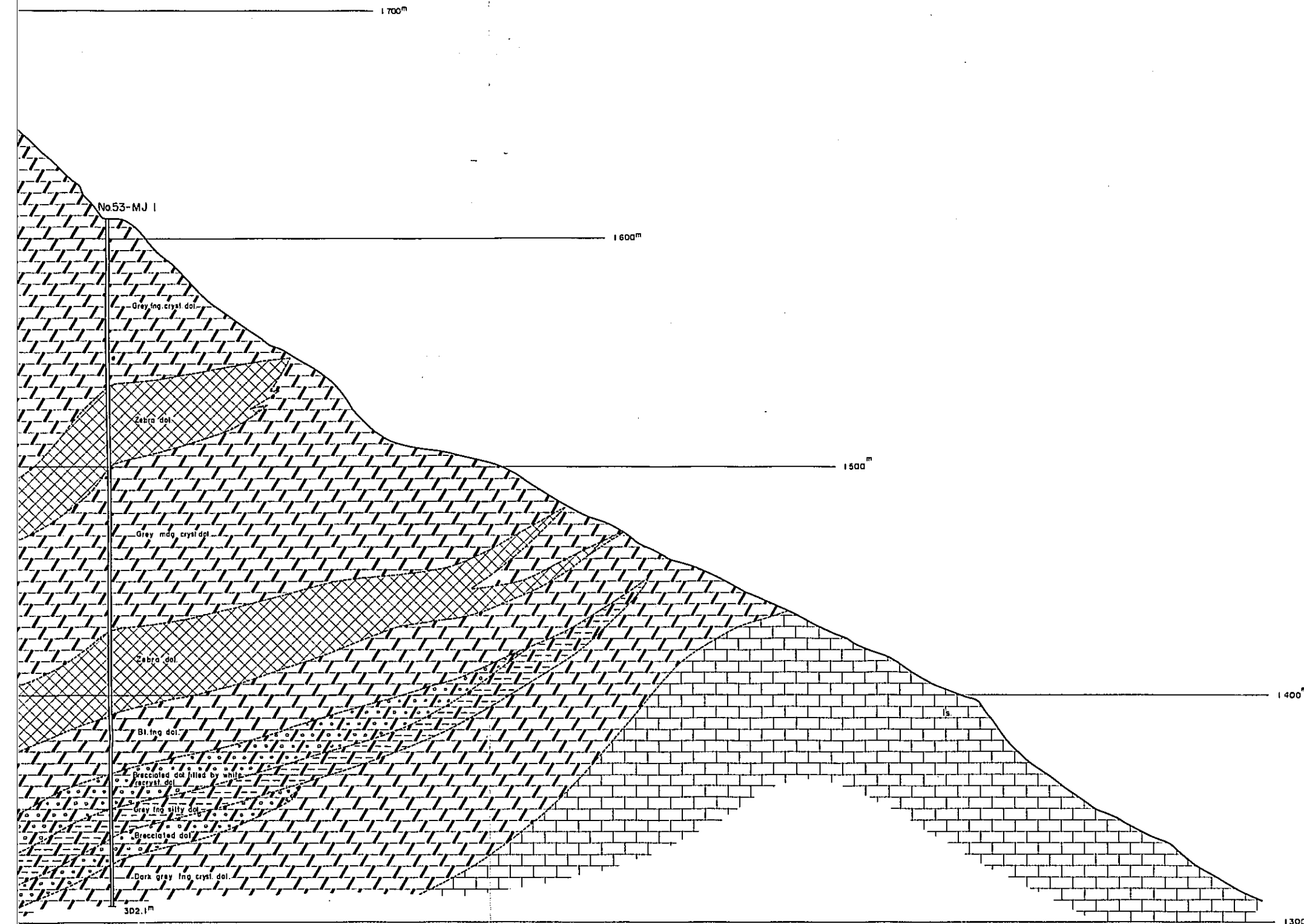
GEOLOGICAL INDEX

-  QUATERNARY
-  LIMESTONE
-  MUDDY LIMESTONE & SILTY LIMESTONE
-  SANDY LIMESTONE
-  DOLOMITIC LIMESTONE
-  DOLOMITE (DOLOSTONE)
-  ZEBRA DOLOMITE
-  MUDDY DOLOMITE & SILTY DOLOMITE
(MUDDY DOLOSTONE) (SILTY DOLOSTONE)
-  SANDY DOLOMITE
(SANDY DOLOSTONE)
-  BRECCIATED DOLOMITE
-  SANDSTONE
-  SILTSTONE
-  FAULT
- FOSSILS
-  Algal debris or coral fragments
-  Bryozoon or Gastropods
-  Foraminifera or Microfossils
- MINERALIZATION
-  Galena (Gn), Pyrite (Py)
-  Sphalerite (Sph)

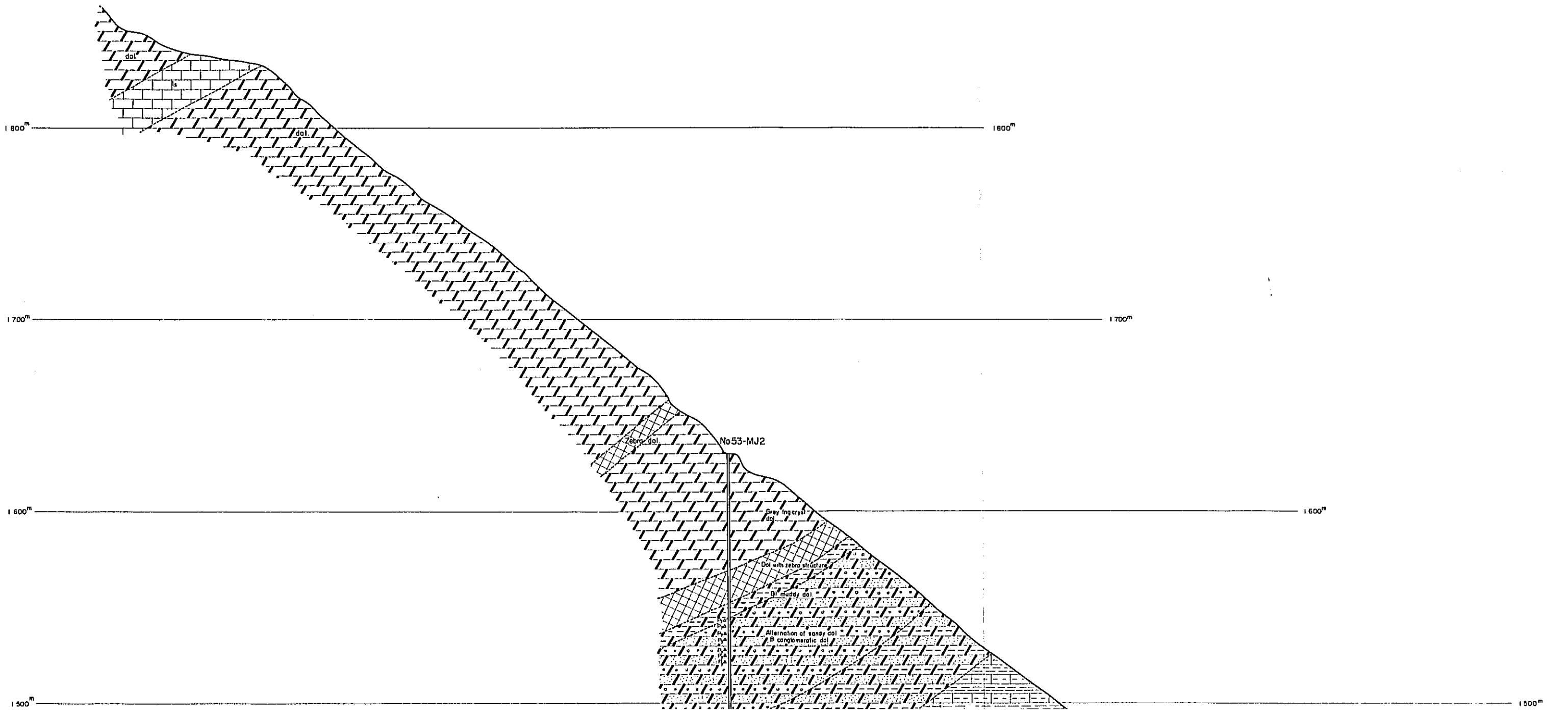
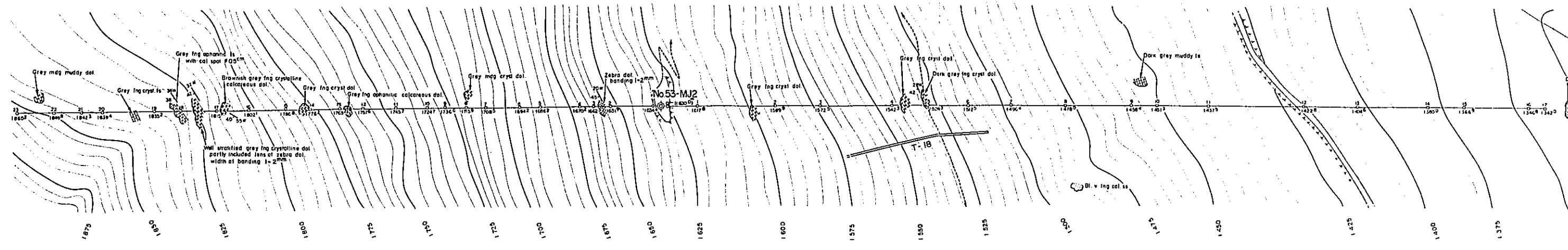
PUCARA GROUP

ABBREVIATION

- | | |
|-----------------------|---------------------|
| Bl. : black | ls : limestone |
| Gr. : grey | dal. : dolostone |
| fng. : fine grained | s.s. : sandstone |
| mdg. : medium grained | cgl. : conglomerate |
| csg. : coarse grained | Sph. : sphalerite |
| qtz. : quartz | Gn. : galena |
| cal. : calcite | Py. : pyrite |
| cryst. : crystalline | |



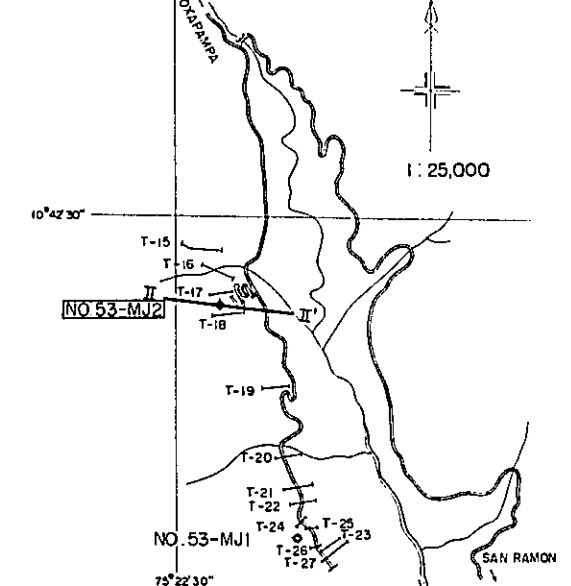
II



PL. 1-2(2)
08115

GEOLOGICAL SURVEY
OF
THE CORDILLERA ORIENTAL, CENTRAL PERU

GEOLOGICAL PROFILE
OF
THE DIAMOND DRILL HOLE
(NO53-MJ2)

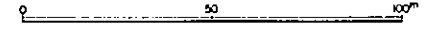


METAL MINING AGENCY OF JAPAN
JAPAN INTERNATIONAL COOPERATION AGENCY
GOVERNMENT OF JAPAN

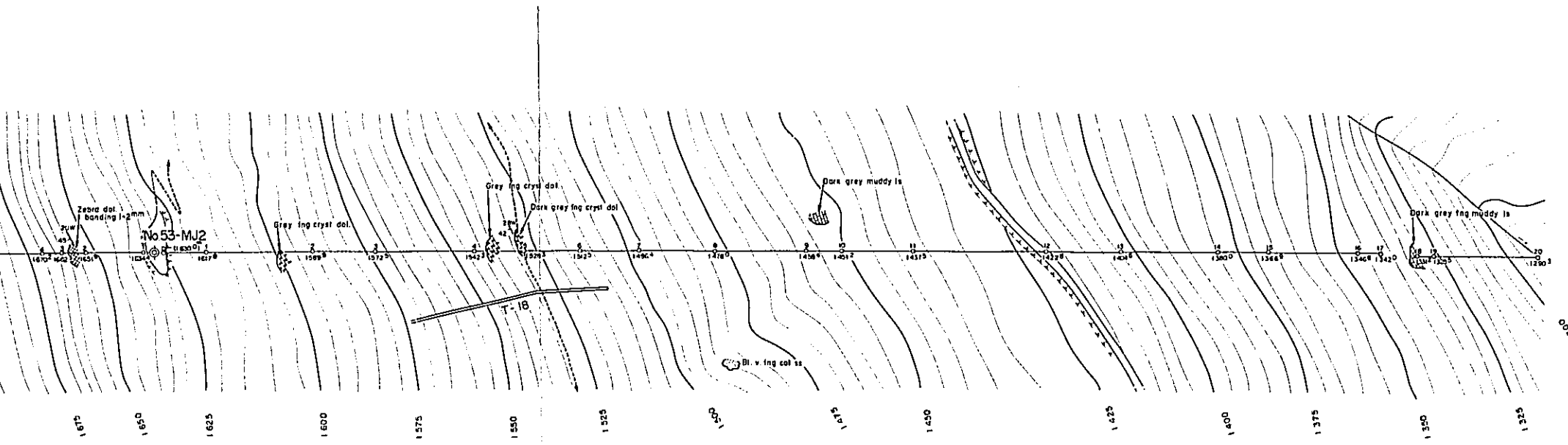
FEBRUARY 1979

prepared by MESCO, Inc.

SCALE 1 : 1 000

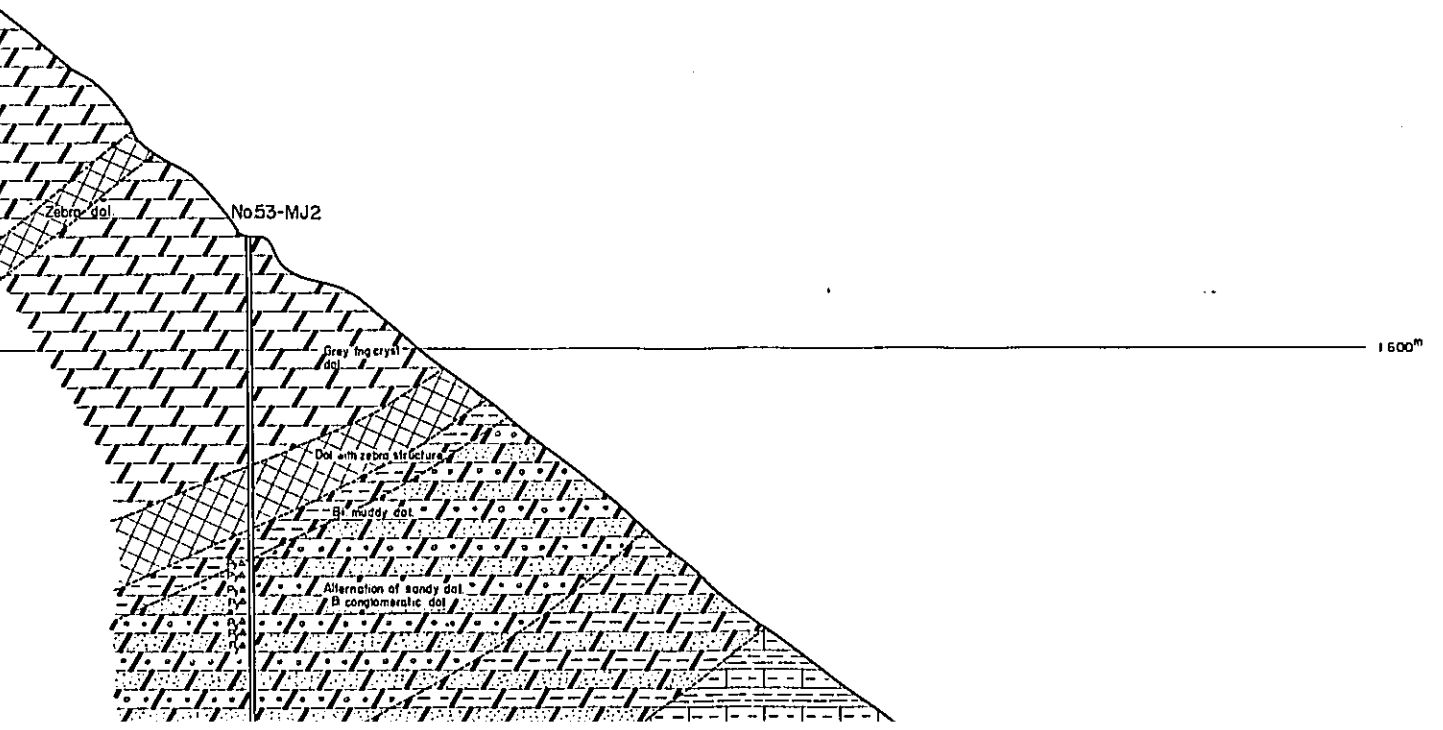


II'



1800^m

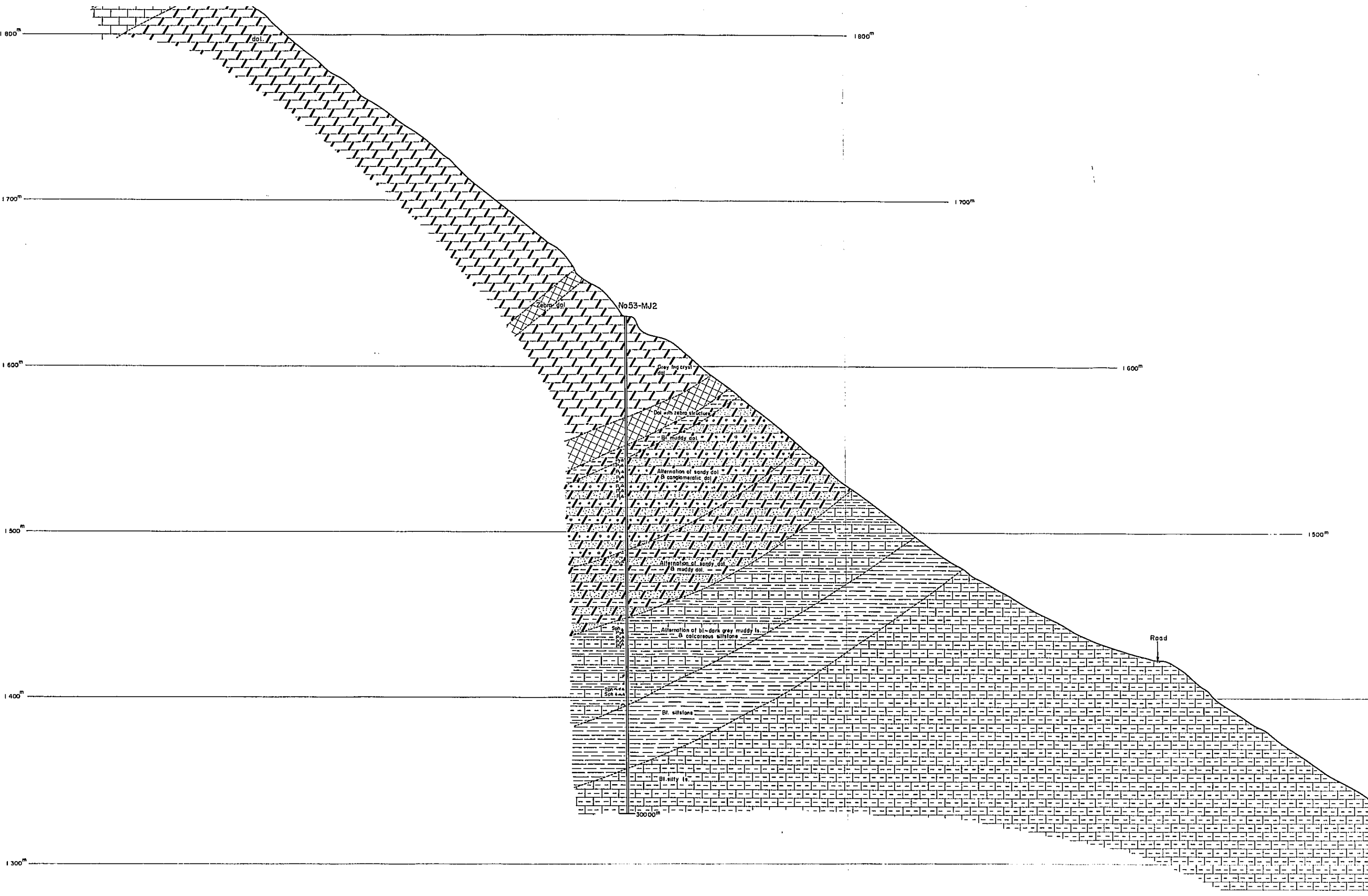
1700^m


















GEOLOGICAL INDEX

- QUATERNARY
- LIMESTONE
- MUDDY LIMESTONE & SILTY LIMESTONE
- SANDY LIMESTONE
- DOLOMITIC LIMESTONE
- DOLOMITE (DOLOSTONE)
- ZEBRA DOLOMITE
- MUDDY DOLOMITE & SILTY DOLOMITE (MUDDY DOLOSTONE) (SILTY DOLOSTONE)
- SANDY DOLOMITE (SANDY DOLOSTONE)
- ALTERNATION OF SANDY DOLOMITE & CONGLOMERATIC DOLOMITE (CONGLOMERATIC DOLOSTONE)
- ALTERNATION OF SANDY DOLOMITE & MUDDY DOLOMITE (SANDY DOLOSTONE) (MUDDY DOLOSTONE)
- ALTERNATION OF MUDDY LIMESTONE & CALCAREOUS SILTSTONE
- SANDSTONE

PUCARA GROUP






GEOLOGICAL INDEX



-  QUATERNARY
-  LIMESTONE
-  MUDDY LIMESTONE & SILTY LIMESTONE
-  SANDY LIMESTONE
-  DOLOMITIC LIMESTONE
-  DOLOMITE (DOLOSTONE)
-  ZEBRA DOLOMITE
-  MUDDY DOLOMITE & SILTY DOLOMITE (MUDDY DOLOSTONE) (SILTY DOLOSTONE)
-  SANDY DOLOMITE (SANDY DOLOSTONE)
-  ALTERNATION OF SANDY DOLOMITE & CONGLOMERATIC DOLOMITE (CONGLOMERATIC DOLOSTONE)
-  ALTERNATION OF SANDY DOLOMITE & MUDDY DOLOMITE (SANDY DOLOSTONE) (MUDDY DOLOSTONE)
-  ALTERNATION OF MUDDY LIMESTONE & CALCAREOUS SILTSTONE
-  SANDSTONE
-  SILTSTONE
-  FAULT

PUCARA GROUP

FOSSILS

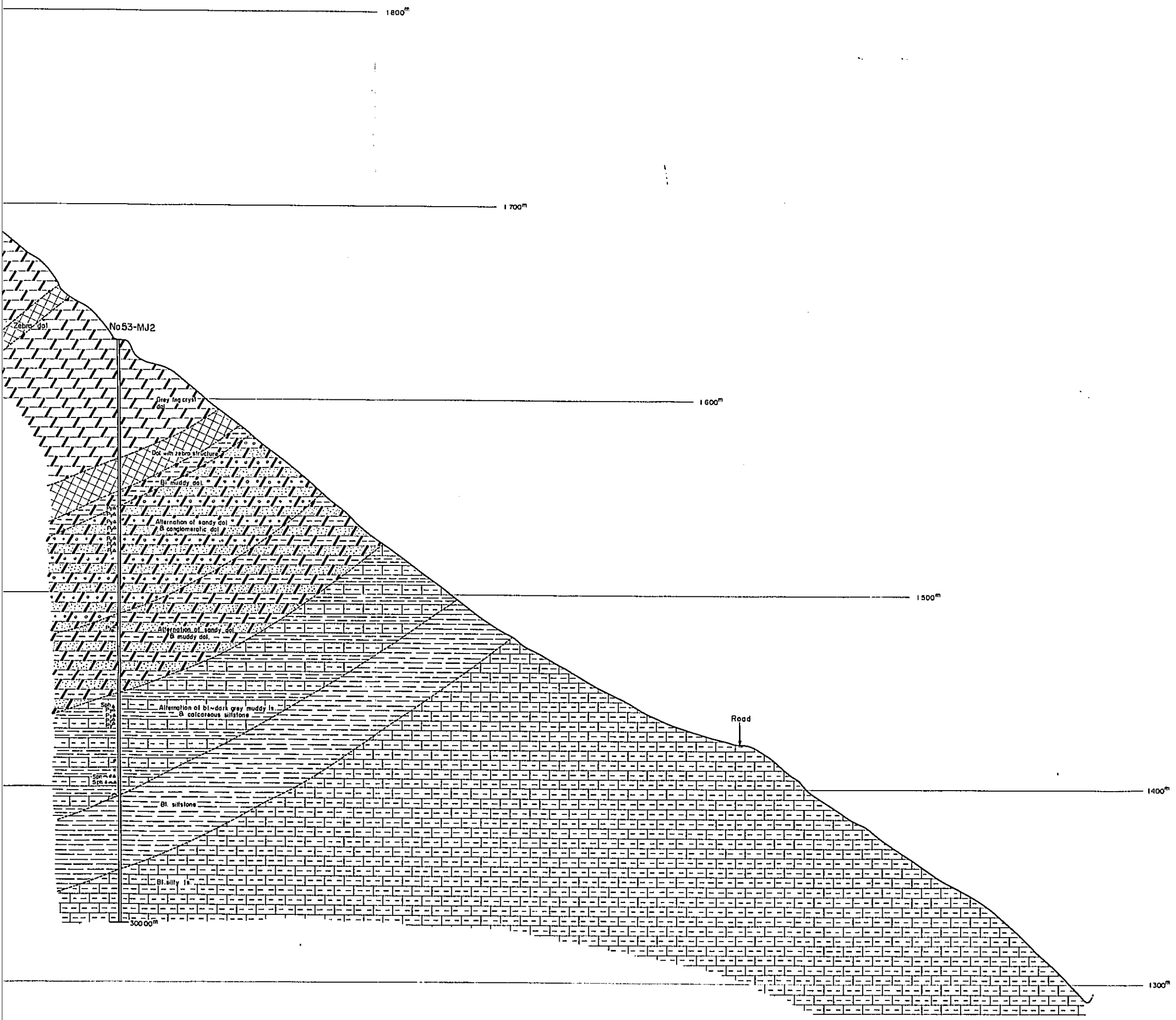
-  Algal debris or coral fragments
-  Bryozoan or Gastropods
-  Foraminifera or Microfossils

MINERALIZATION

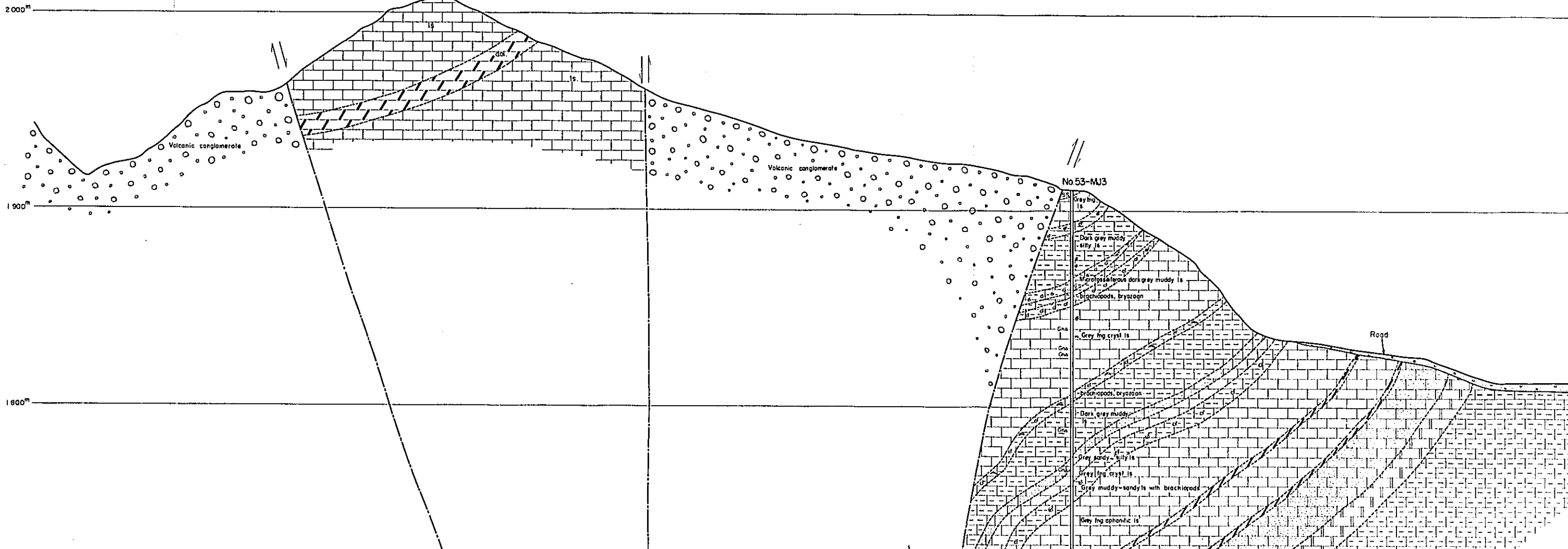
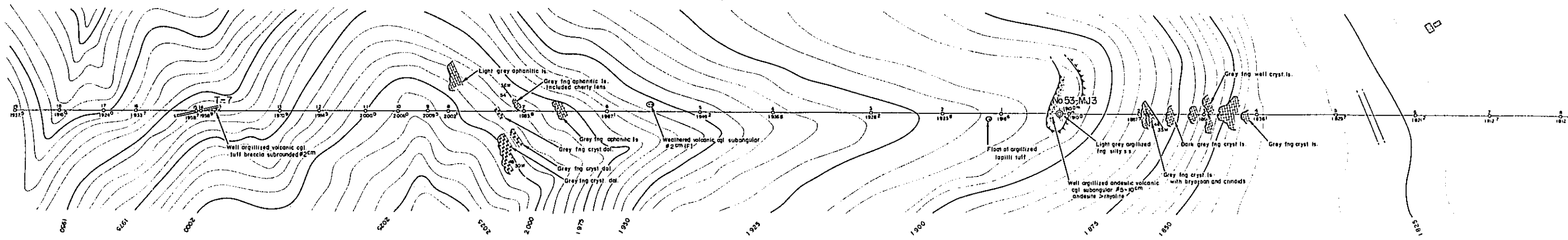
-  Galena (Gn), Pyrite (Py)
-  Sphalerite (Sph)

ABBREVIATION

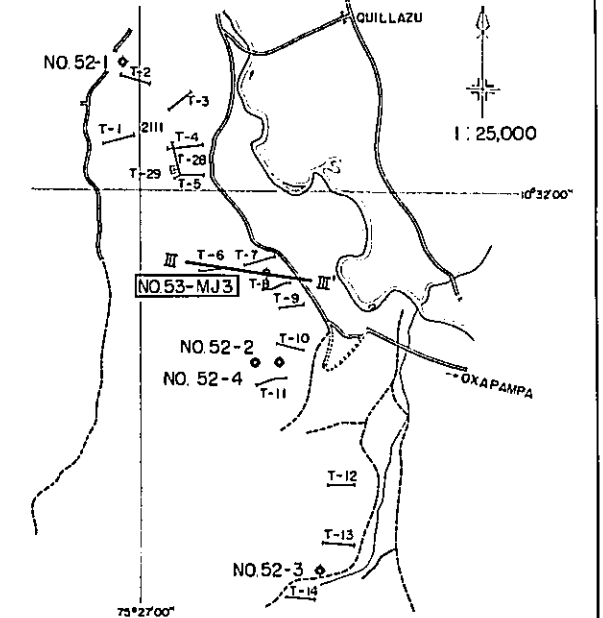
- | | |
|-----------------------|---------------------|
| Bl. : black | ls. : limestone |
| Gr. : grey | dol. : dolostone |
| fng. : fine grained | s.s. : sand stone |
| mdg. : medium grained | cgl. : conglomerate |
| csg. : coarse grained | Sph. : sphalerite |
| qtz. : quartz | Gn. : galena |
| col. : calcite | Py. : pyrite |
| cryst. : crystalline | |



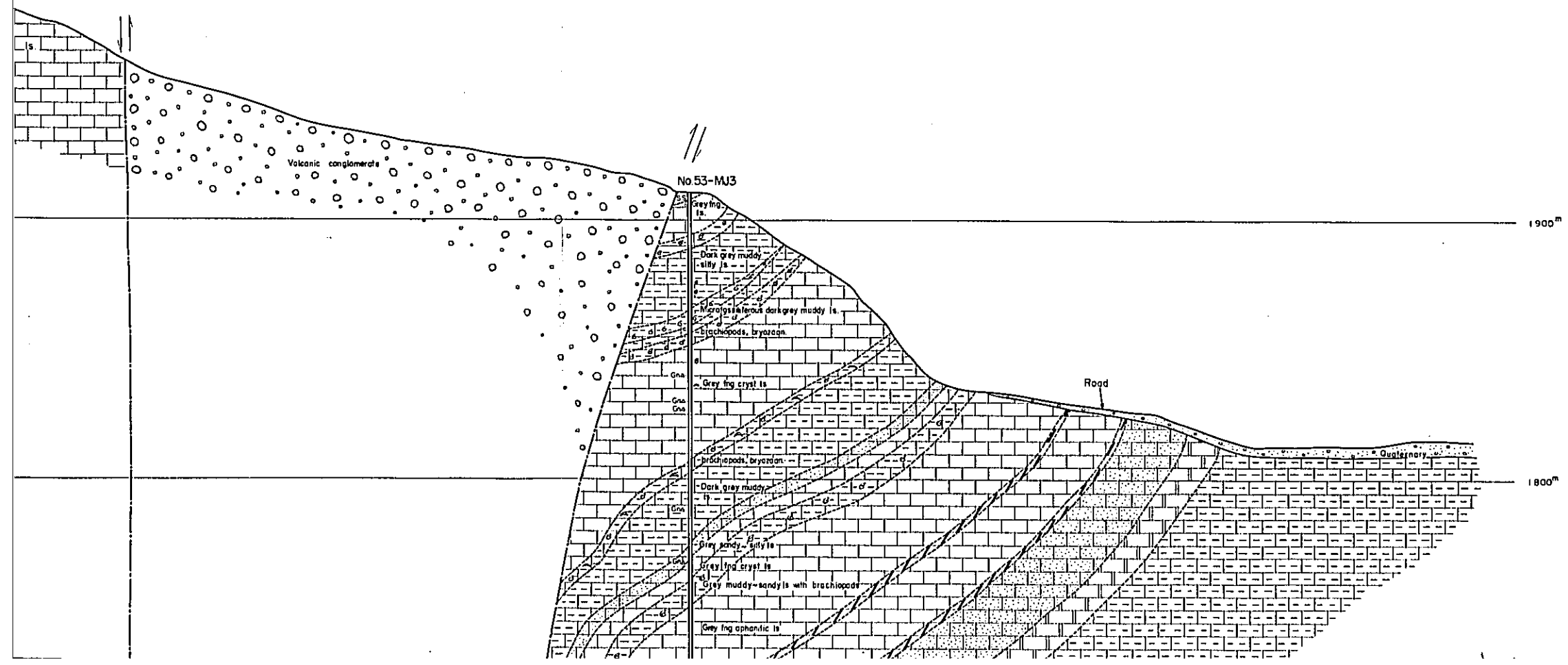
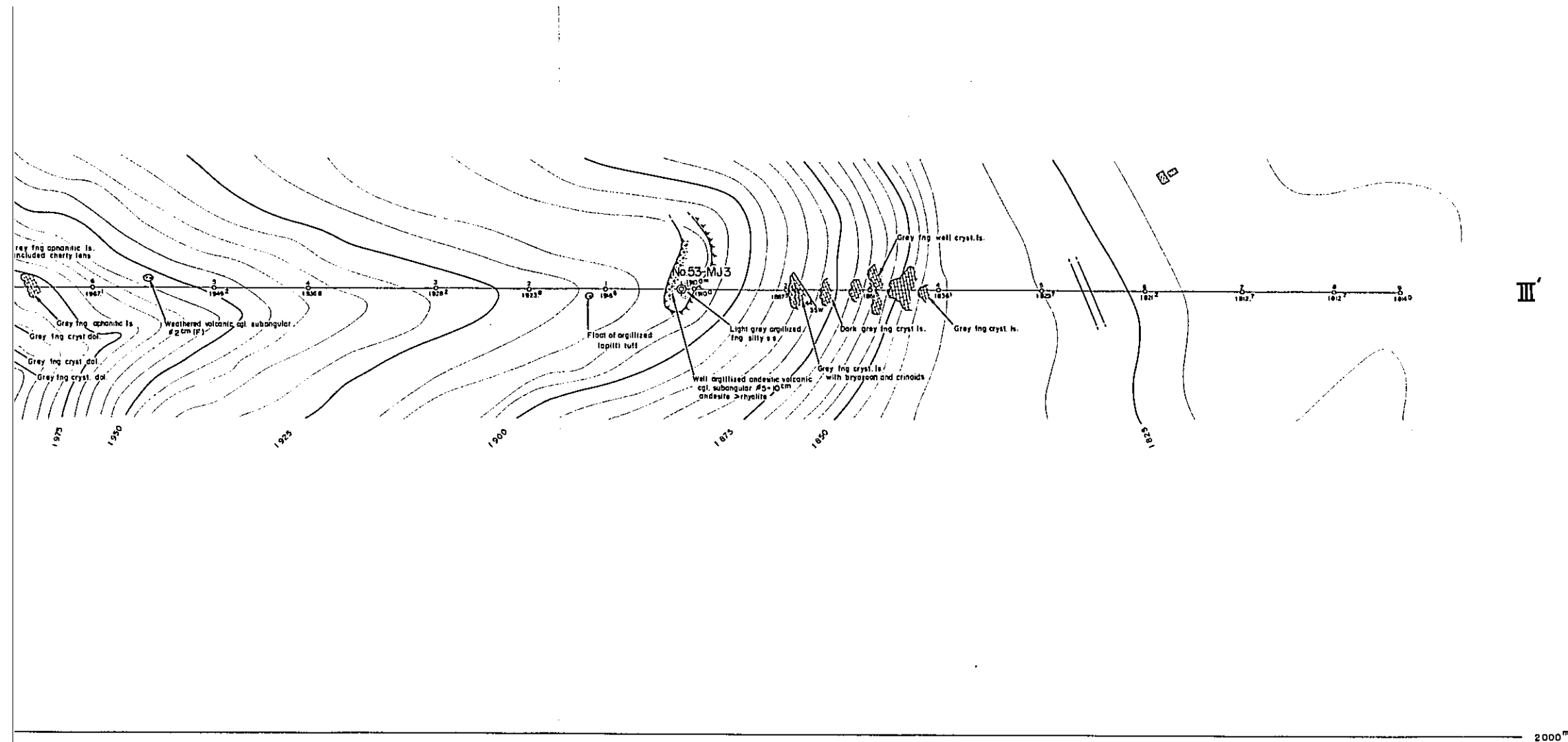
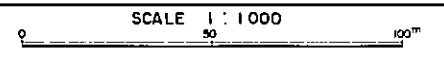
III



GEOLOGICAL SURVEY
 OF
 THE CORDILLERA ORIENTAL, CENTRAL PERU
 GEOLOGICAL PROFILE
 OF
 THE DIAMOND DRILL HOLE
 (NO.53-MJ3)

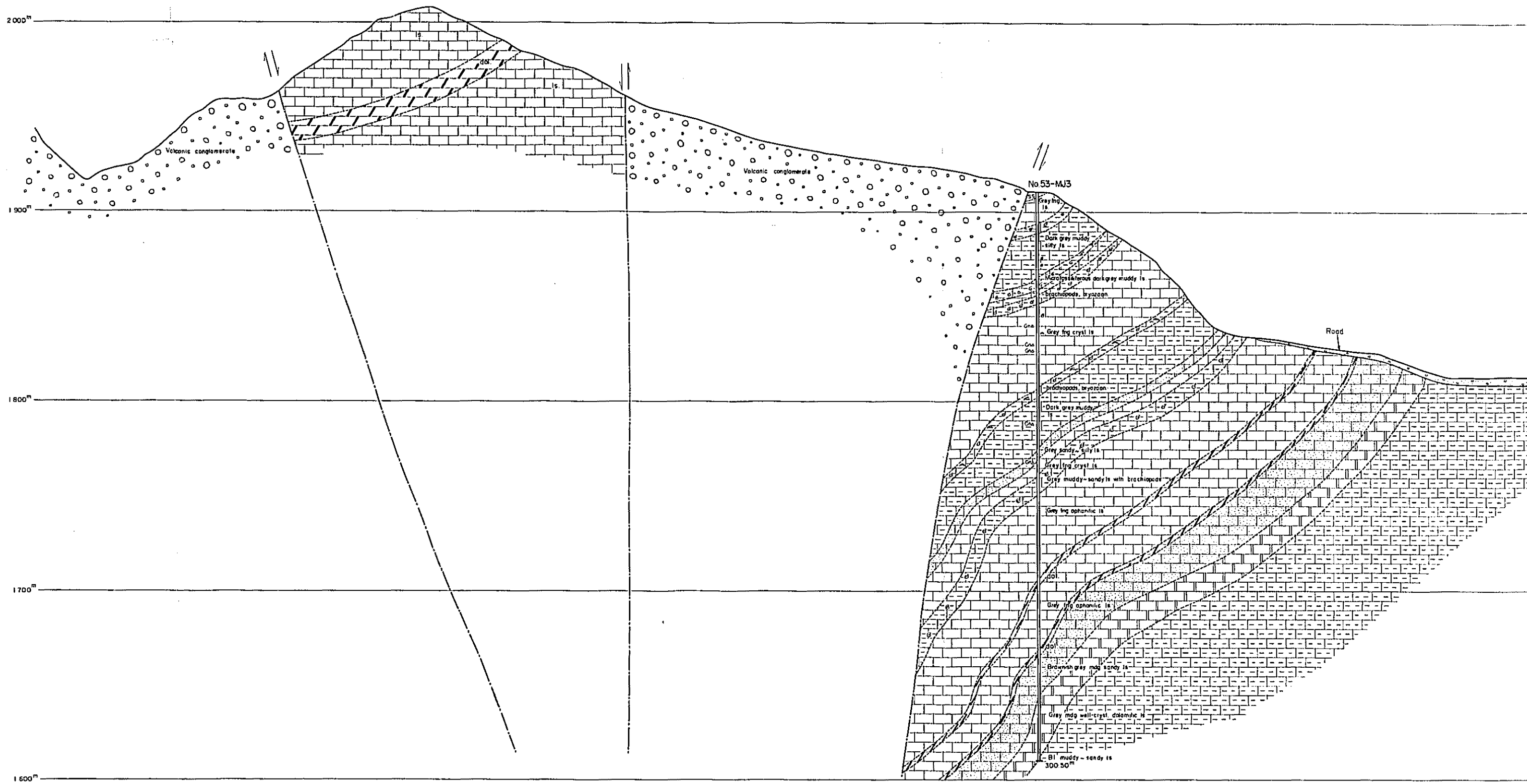


METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN
 FEBRUARY 1979
 prepared by MESCO, Inc.



GEOLOGICAL INDEX

- QUATERNARY
- LIMESTONE
- MUDDY LIMESTONE & SILTY LIMESTONE
- SANDY LIMESTONE
- DOLOMITIC LIMESTONE
- DOLOMITE (DOLOSTONE)
- ZEBRA DOLOMITE
- MUDDY DOLOMITE & SILTY DOLOMITE (MUDDY DOLOSTONE) (SILTY DOLOSTONE)
- SANDY DOLOMITE (SANDY DOLOSTONE)
- SANDSTONE
- SILTSTONE
- VOLCANIC CONGLOMERATE OR BRECCIA (MITÚ GROUP)
- FAULT
- FOSSIL

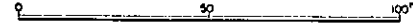


75*2700
 METAL MINING AGENCY OF JAPAN
 JAPAN INTERNATIONAL COOPERATION AGENCY
 GOVERNMENT OF JAPAN

FEBRUARY 1979

prepared by MESCO, Inc.

SCALE 1 : 1000



GEOLOGICAL INDEX

- QUATERNARY
- LIMESTONE
- MUDDY LIMESTONE & SILTY LIMESTONE
- SANDY LIMESTONE
- DOLOMITIC LIMESTONE
- DOLOMITE (DOLOSTONE)
- ZEBRA DOLOMITE
- MUDDY DOLOMITE & SILTY DOLOMITE (MUDDY DOLOSTONE) (SILTY DOLOSTONE)
- SANDY DOLOMITE (SANDY DOLOSTONE)
- SANDSTONE
- SILTSTONE
- VOLCANIC CONGLOMERATE OR BRECCIA (MITU GROUP)
- FAULT
- FOSSILS**
 - Algal debris or coral fragments
 - Bryozoan or Gastropods
 - Foraminifera or Microfossils
- MINERALIZATION**
 - Galena (Gn), Pyrite (Py)
 - Sphalerite (Sph)

ABBREVIATION

- | | |
|-----------------------|---------------------|
| Bl. : black | ls : limestone |
| Gr. : gray | dal. : dolostone |
| fng. : fine grained | s.s. : sandstone |
| mdg. : medium grained | cgl. : conglomerate |
| csg. : coarse grained | Sph. : sphalerite |
| qtz. : quartz | Gn. : galena |
| cal. : calcite | Py. : pyrite |
| cryst. : crystalline | |

