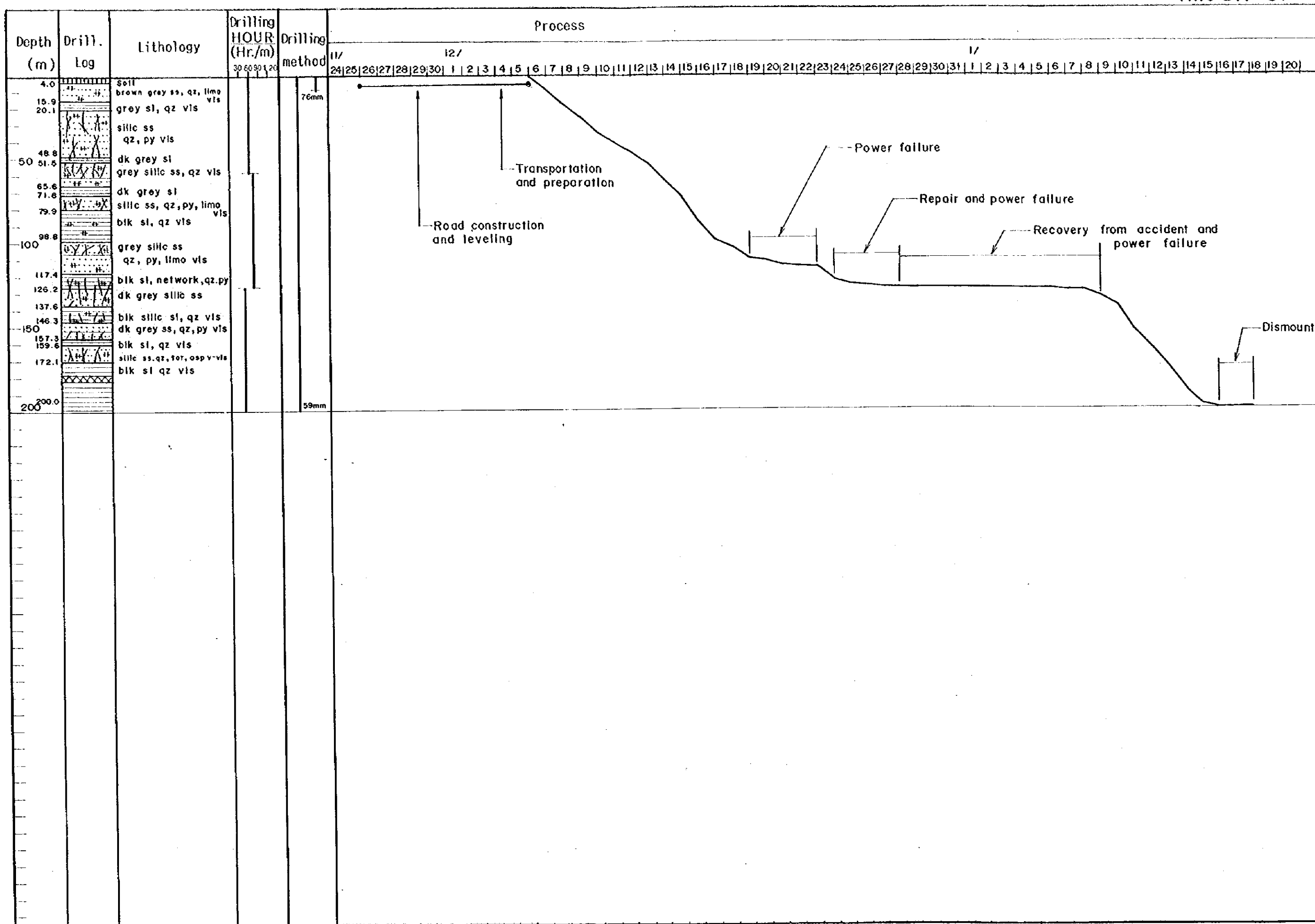


Depth (m)	Drill. Log	Lithology	Drilling HOUR (Hr./m)	Drilling method	Process																															
					9/ 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 1 2 3 4 5 6 7 8																															
1.0		soil			Casing (ø 73mm, 4.50m)																															
30.3		dk grey phy ss		76mm																																
		silic ss with qz py net work vls																																		
50		greish red phy-ss with qz, limo v vls																																		
54.4		frac zone																																		
65.3		qz, py vls																																		
		phy-ss																																		
		qz, py vls																																		
100																																				
102.8		grey silic ss with qz, py v																																		
130.6																																				
		dk grey silic sl with ss bands																																		
150																																				
160.0		grey silic ss		59mm																																
164.7																																				
173.0																																				
200																																				

A-183

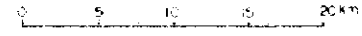


THE MINERAL EXPLORATION
IN
THE SOUTHERN NURATA AREA
THE REPUBLIC OF UZBEKISTAN
(PHASE D)
Geologic Map of the General Survey Area (I)



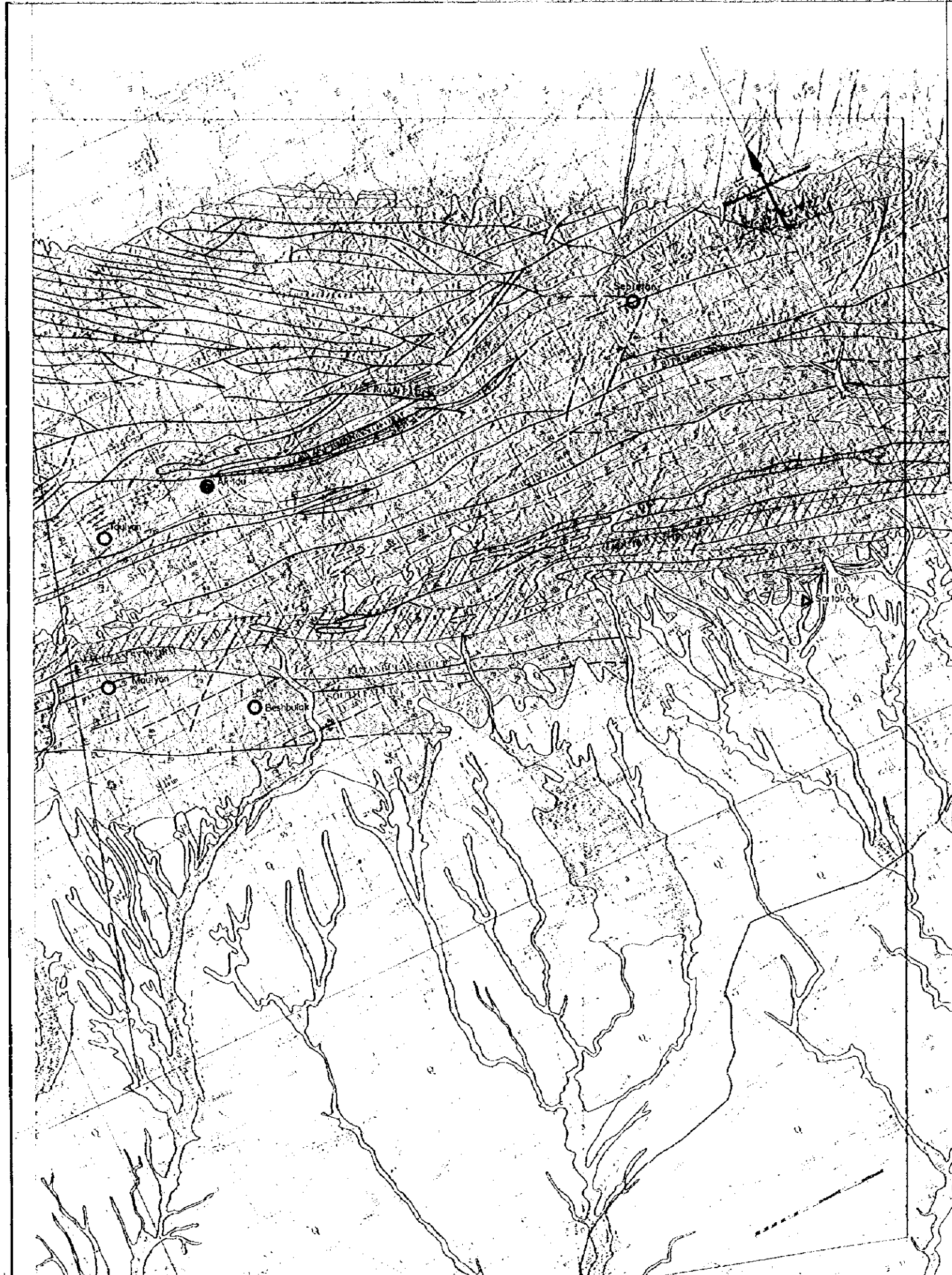
JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
FEBRUARY 1968
Project No. M-3600

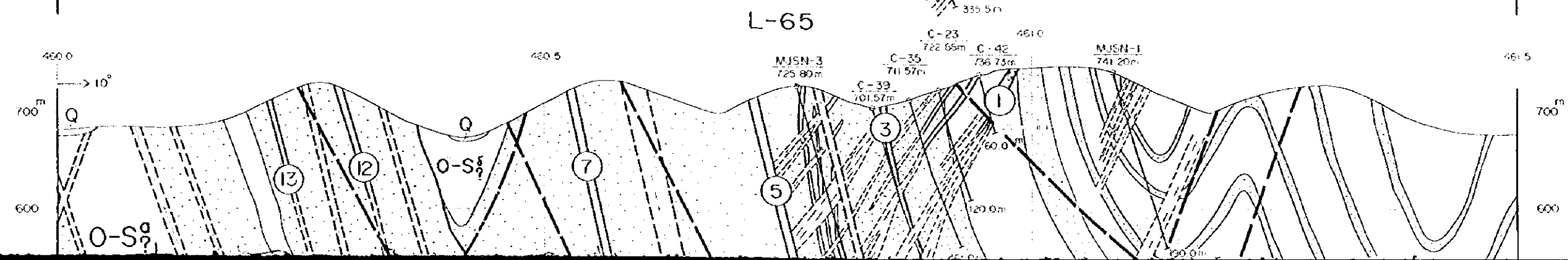
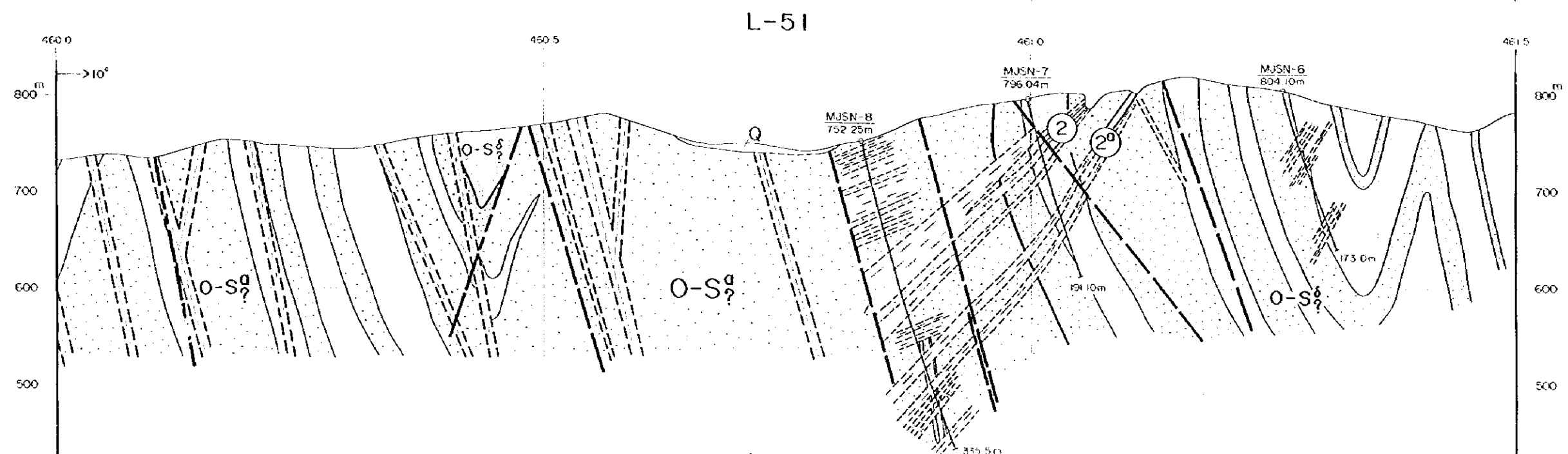
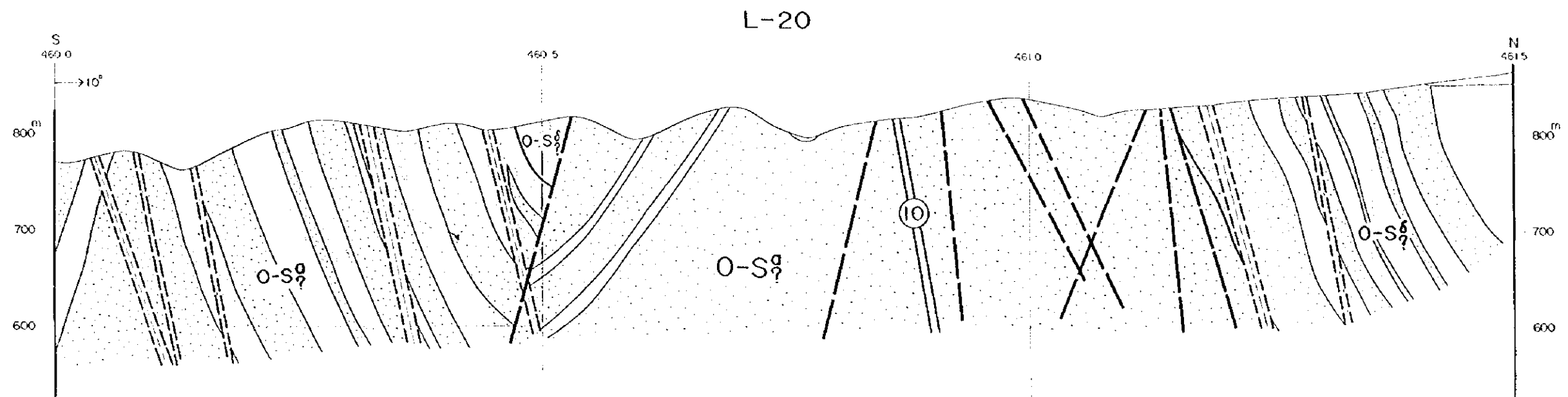
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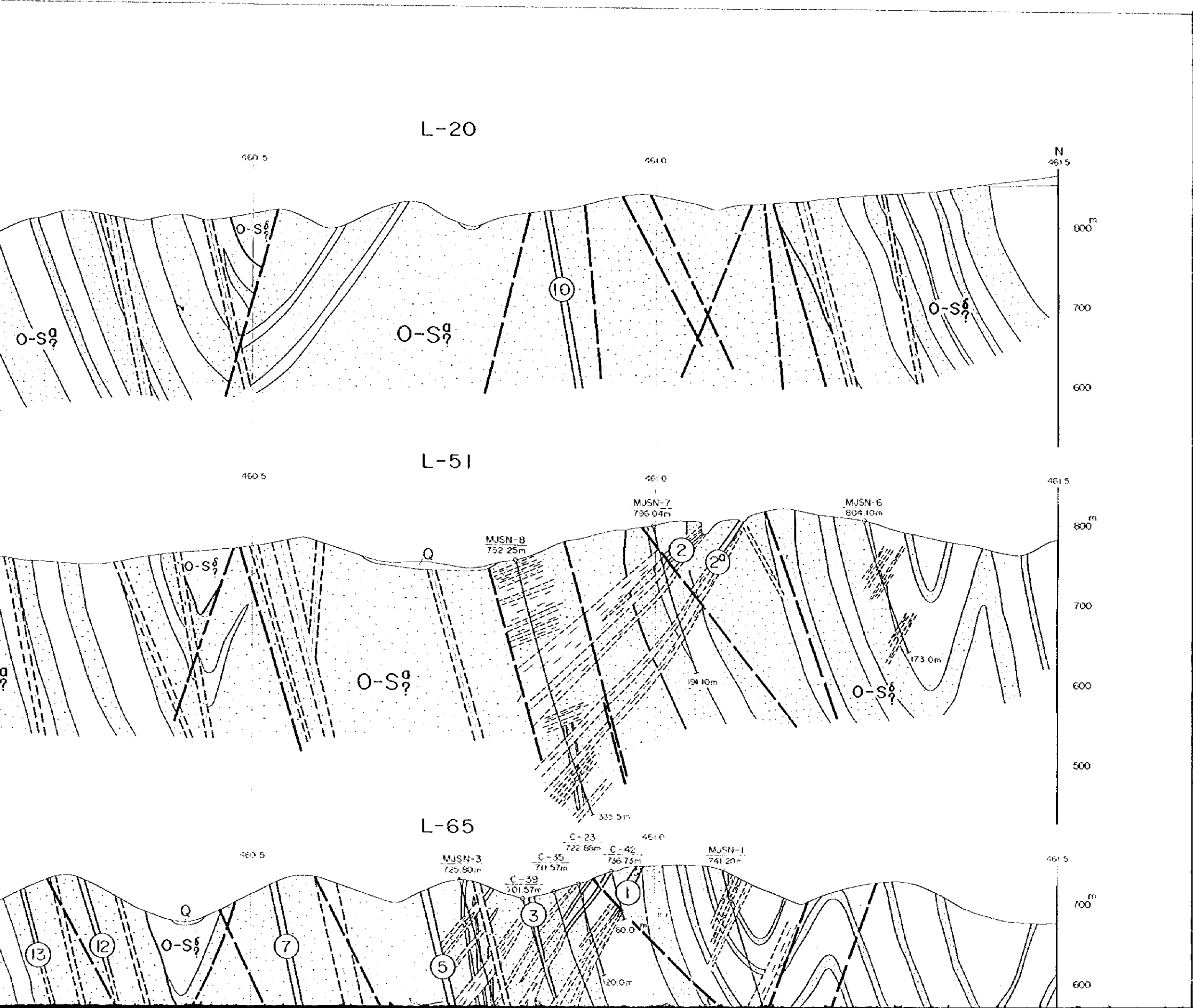


Legend

- Blank**
- Q present river bed sediments, sand, gravel, silt
 - Q terrace, fan and proluvial sediments, sand, gravel, silt
 - N recent sand, gravel, silt and clay
 - P recent alluvial fans, blank sediments of plateau
 - K sandstone, siltstone, claystone
- Basement Complex**
- Q₁ Batai formation, conglomerate, sandstone
 - D₁ Bakhtau formation, limestone
 - D₂ Charkhanov formation, limestone, part of sandstone
 - O₁ Durash formation, siliceous limestone, sandstone, limestone
 - S₁ Angden formation, limestone, part of limestone
 - S₂ Aktau formation, limestone, clay
 - S₃ Yansara formation, sandstone, clay, siltstone, limestone, conglomerate
 - S₄ Tamsai formation, sandstone, siltstone, shale, clay
 - S₅ Sarsulik formation, sandstone, siltstone, shale, clay, limestone
 - O₂ Tashkent formation, limestone, sandstone, shale, clay
 - O₃ Karakoram formation, shale, siltstone, sandstone
 - O₄ Shurhan formation, limestone, shale, sandstone, clay
 - O₅ Karakoram formation, shale, siltstone, sandstone, limestone
- Granite Body**
- G₁ Karakoram granitoids (200-250 Ma)
 - G₂ Gashan granitoids (200-250 Ma)
 - G₃ Sharak granitoids (200-250 Ma)
 - G₄ Darsan granitoids (200-250 Ma)
- Other**
- W₁ quartzite (200-250 Ma)
 - W₂ quartzite (200-250 Ma)



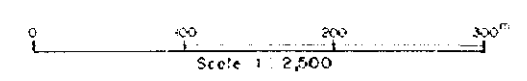




Pl. H-34-2

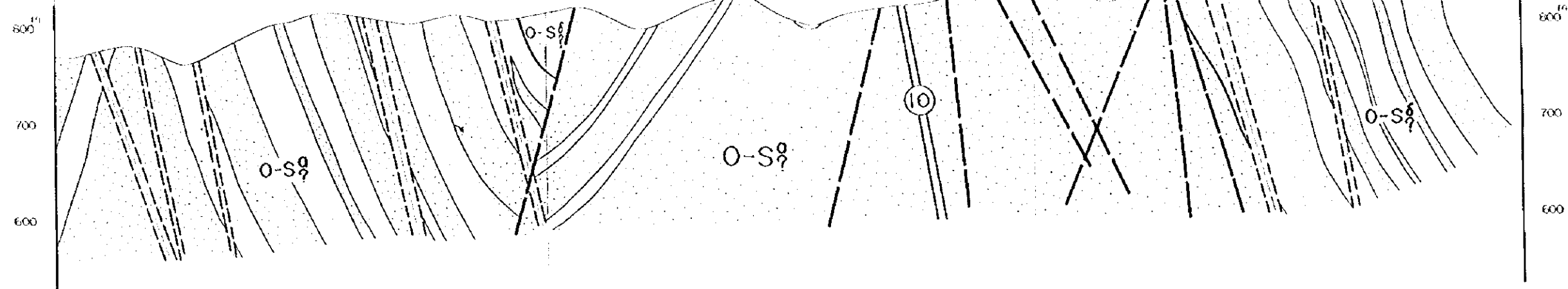
THE MINERAL EXPLORATION
IN
THE SOUTHERN SURATAU AREA
THE REPUBLIC OF UZBEKISTAN
(PHASE D)
GEOLOGIC CROSS SECTIONS
OF THE ALTYNSAI DISTRICT

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
FEBRUARY 1978
Printed by MAPRECO

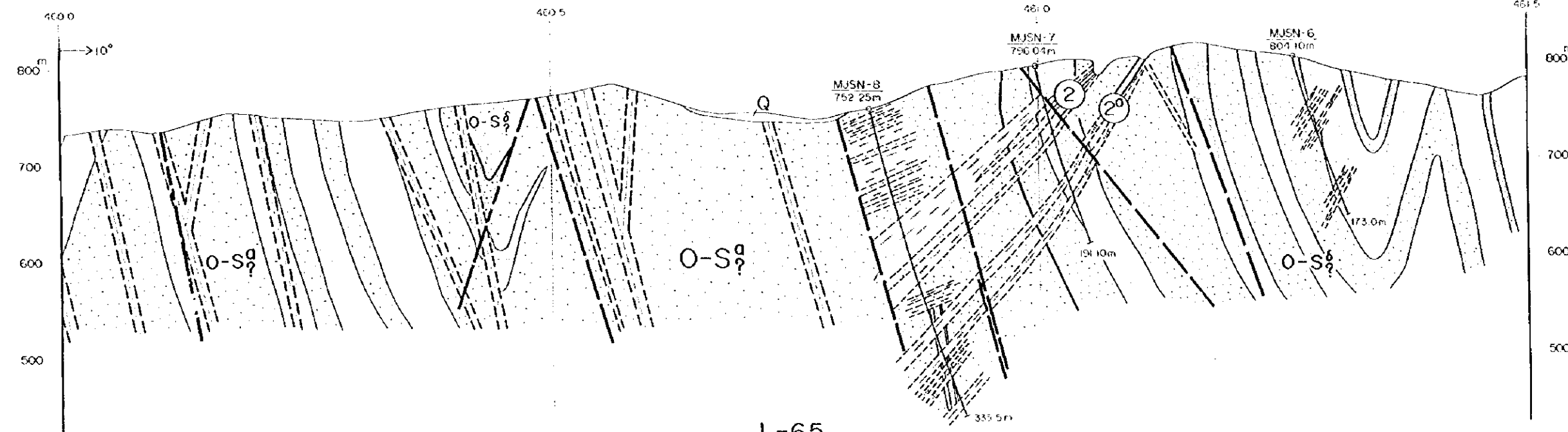


Legend

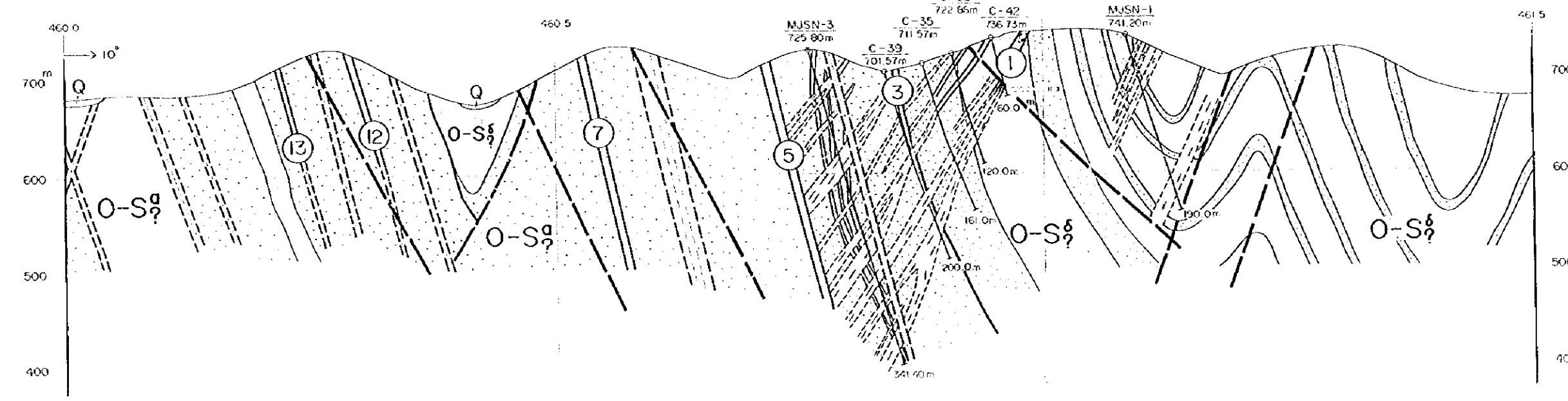
Quaternary	Q	Talus, gravel, sand
Lower Silurian	(diagonal lines)	Slates, Siltstones
	(stippled)	Quartz sandstones
Silurian	(O-S1)	Cherty slates
	(O-S2)	Sandstones
Ordovician	(O-S3)	Cherty slates
	(O-S4)	Sandstones
Dyke	(diagonal lines)	Lamprophyres
	(dashed lines)	Fractures: 1 Traced 2 Supposed
	(stippled)	Zones of brecciation and stratification
	(stippled)	Zones of quartz veins and ventlets
	(circle with number)	Ore zone and its number
	(circle with number)	Drillholes: 1. Existed 2. MMAJ(1977)

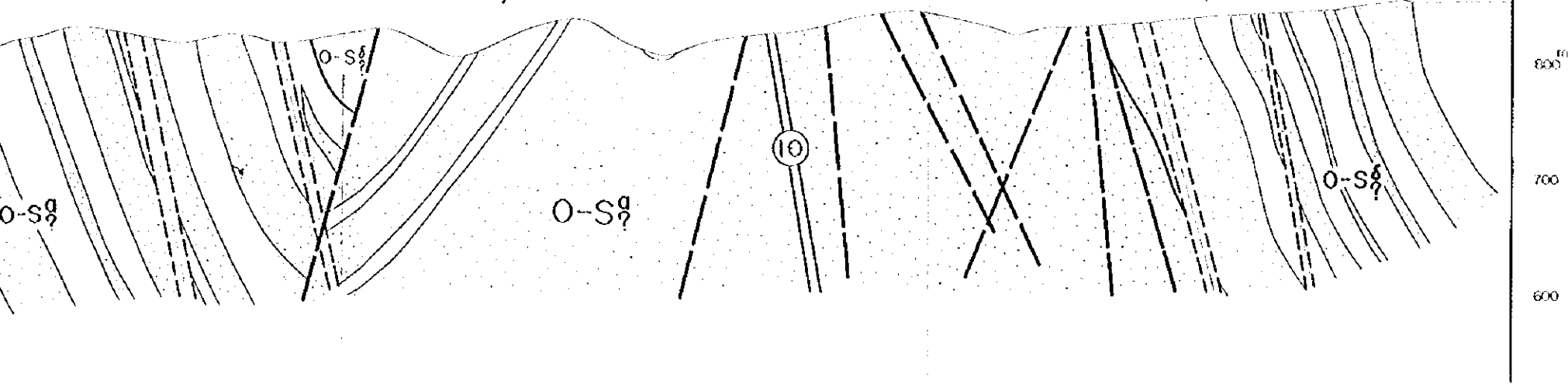


L-51

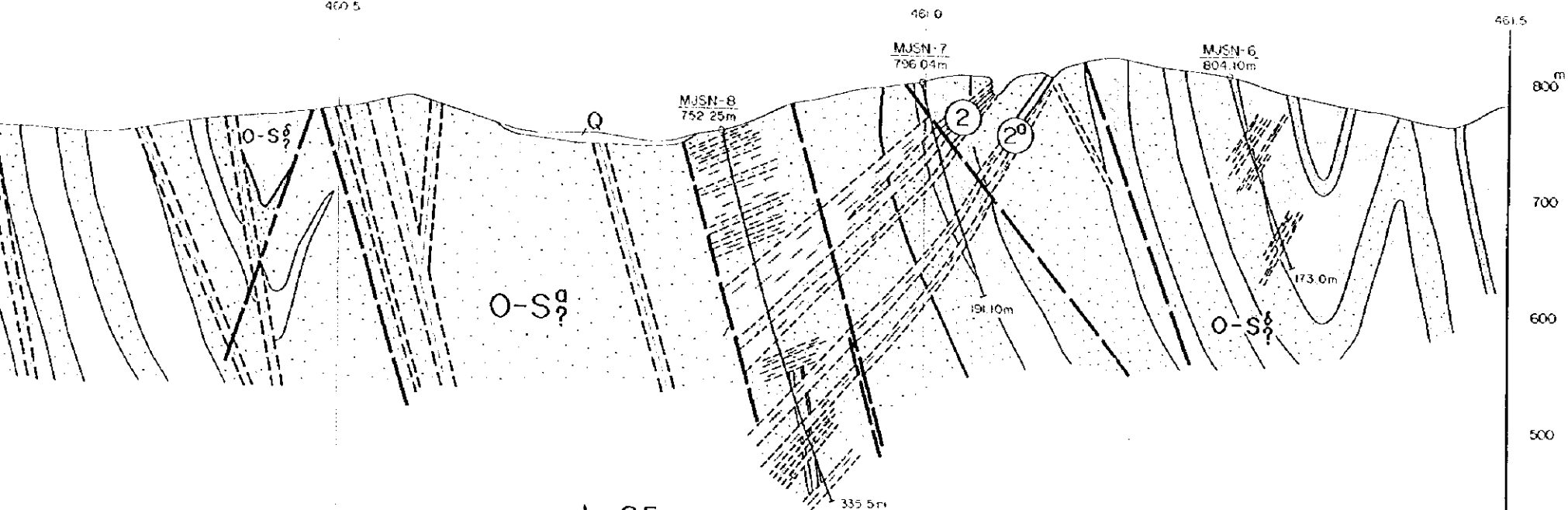


L-65

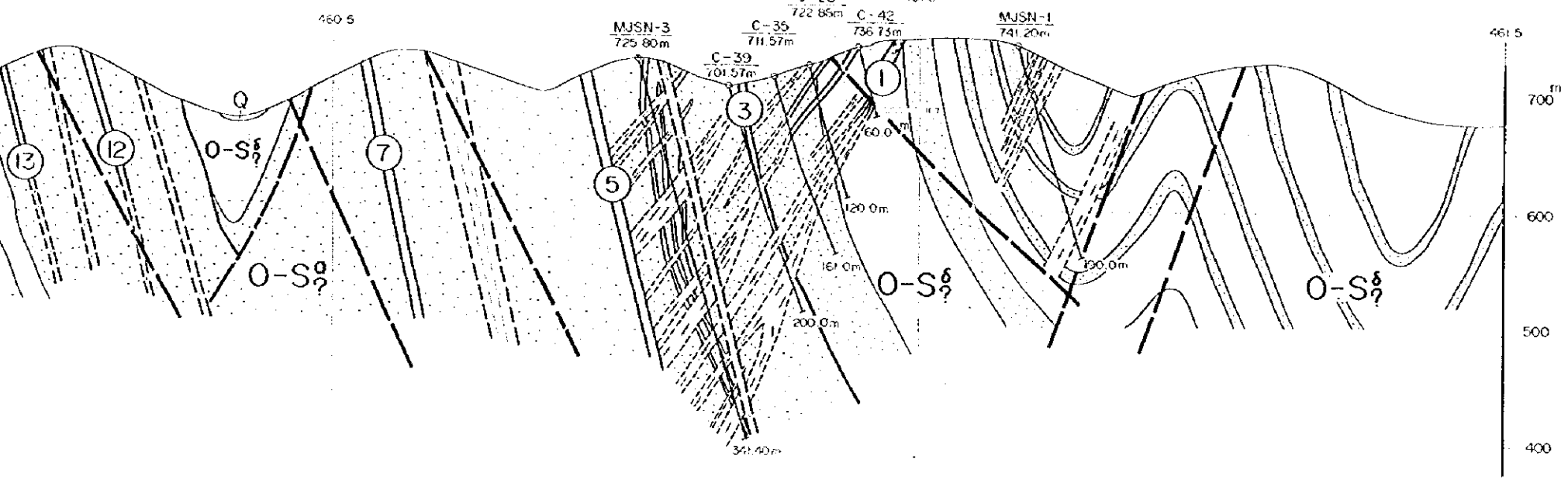




L-51



L-65



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
FEBRUARY 1998
D. L. G. M. B. C. C.

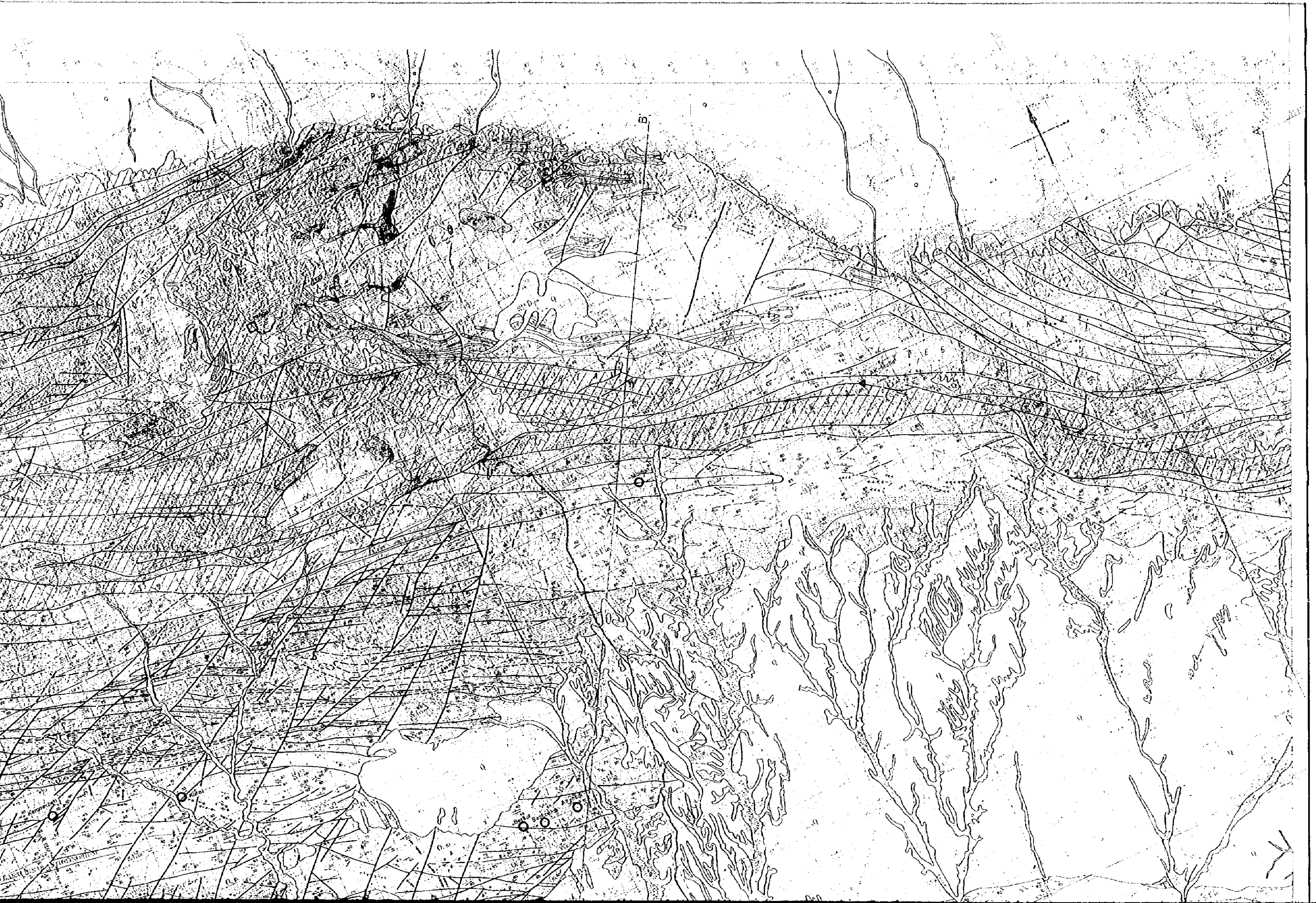
Legend

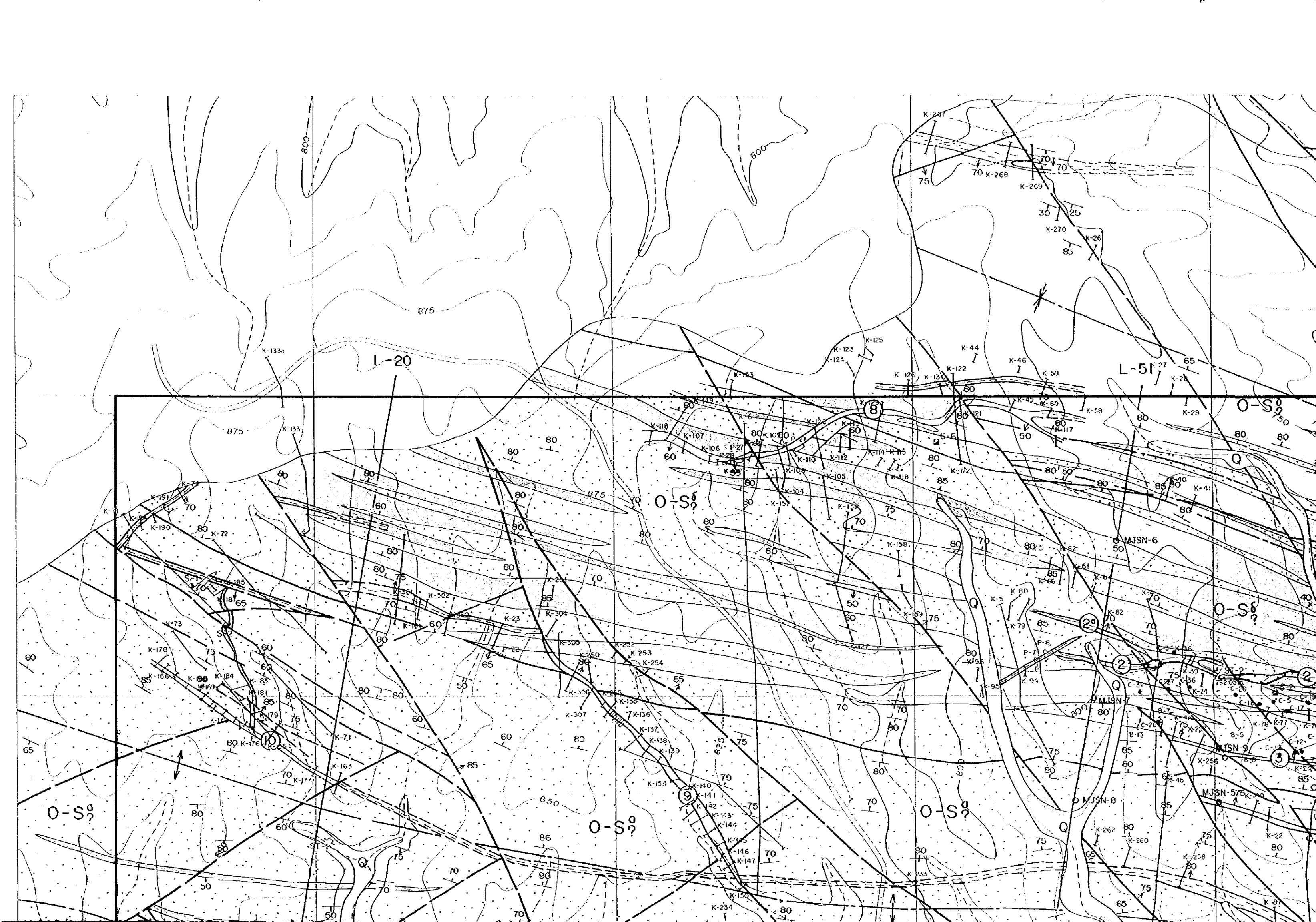
Quaternary	Q	Talus, gravel, sand
Lower Silurian	S1	Slates, Siltstones
	S2	Quartz sandstones
Silurian	O-S1^a	Cherty slates
	O-S2^a	Sandstones
Ordovician	O-S1^b	Cherty slates
	O-S2^b	Sandstones
Dyke	Diagonal lines	Lamprophyres
	Dashed lines	Fractures: 1. Filled 2. Supposed
	Stippled area	Zones of leucocrystallization and silicification
	Horizontal lines	Zones of quartz veins and veinlets
	Circle with number	Ore zone and its number
	Circle with number and vertical line	Drillholes: 1. Existed 2. MMAJ(1997)

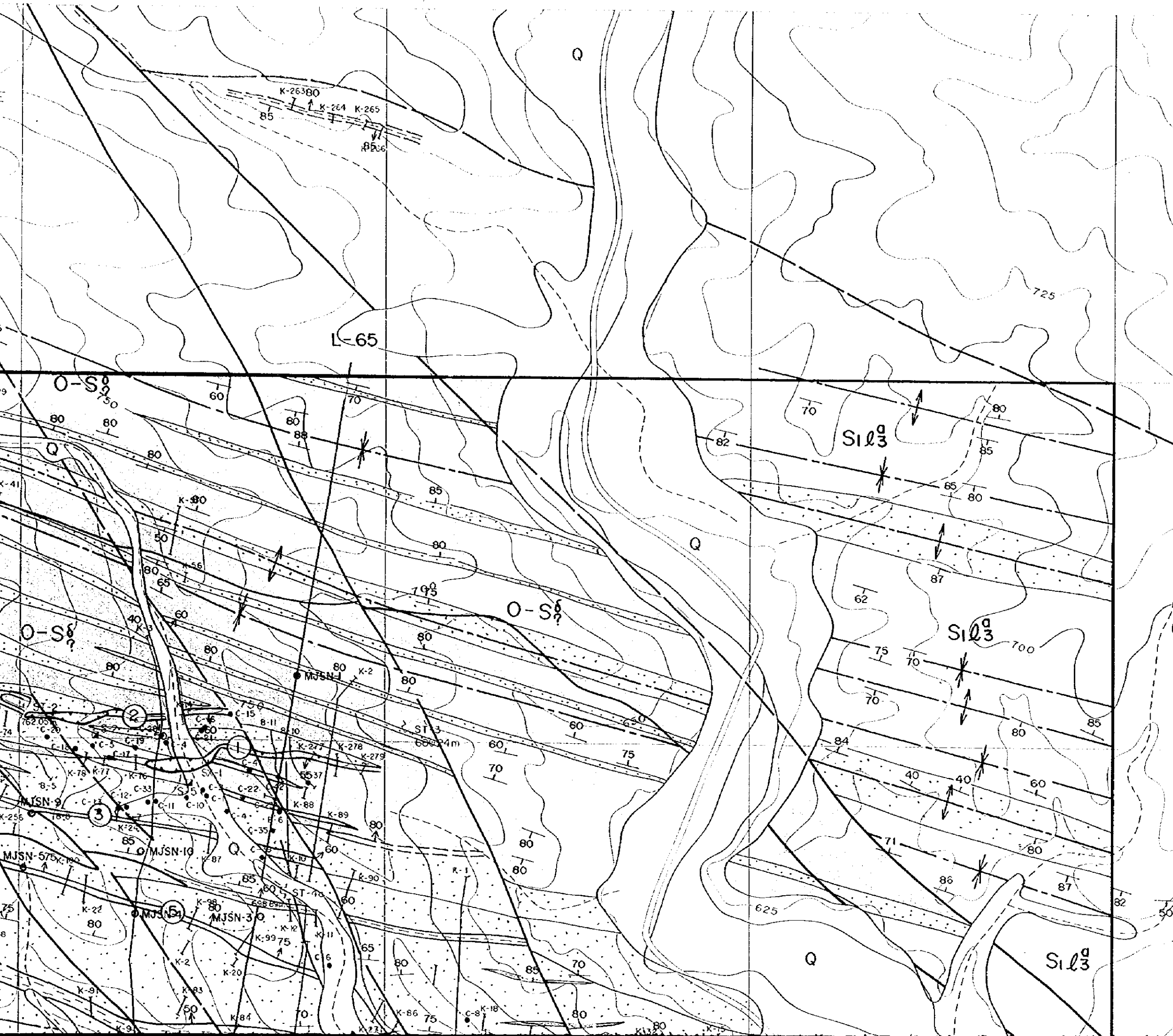


Legend

- Blank present faulted and faults
 - Quaternary C terrace, fan and piedmont sediments
 - Neogene N conglomerate
 - Paleogene P sandstone, shale, limestone, Miocene sediments of platform
 - Cretaceous K conglomerate, sandstone, shale
- Range of Complexes
- O.S. Ogish formation
 - O.P. Ogish formation
 - O.R. Rahibau formation







462.0

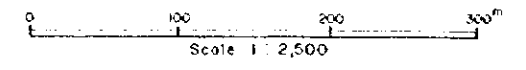
461.5

461.0

PL. B-3-1-1

THE MINERAL EXPLORATION
IN
THE SOUTHERN NURATAV AREA
THE REPUBLIC OF UZBEKISTAN
PHASE D
GEOLOGIC MAP OF THE ALTAYNAL DISTRICT

JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
FEBRUARY 1998
Prepared by MANGCO



Legend

Quaternary	Q	Talus, gravel, sand
Lower Silurian	Stippled pattern	Slates, Siltstones
	Pattern with dots	Quartz sandstones
Silurian	Pattern with horizontal lines	Cherty slates
	Pattern with vertical lines	Sandstones
Ordovician	Pattern with diagonal lines (top-left to bottom-right)	Cherty slates
	Pattern with diagonal lines (bottom-left to top-right)	Sandstones
Dyke	Pattern with diagonal lines (top-right to bottom-left)	Lamprophyres
	Pattern with diagonal lines (top-left to bottom-right)	Fractures: 1. Trenched 2. Supposed
	Pattern with wavy lines	Zones of brecciation and silicification
	Pattern with dashed lines	Zones of quartz veins and veinlets
	Circle with number	Ore zone and its number
	Circle with number and lines	Strike and dip: 1. Bedding 2. Fractures
	Circle with number and lines	1. Anticlinal axes 2. Synclinal axes
	Circle with number and lines	Trench and its number
	Circle with number and lines	Shaft and its number
	Circle with number and lines	Add and its number
	Circle with number and lines	Oil seeping
	Circle with number and lines	Drillholes: 1. Existed 2. MMAJ(1998)

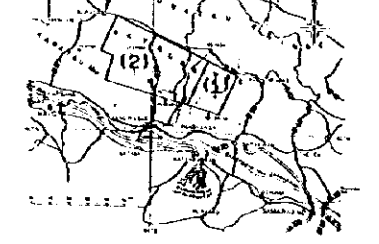


02.5 L-20 753.0 7535 754.0 L-51 7545 L-6



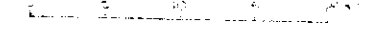
Legend	
Quaternary	Q Talus gravel sand
Lower Silurian	Stales, Siltstones
	Quartz sandstones
Silurian	Cherty stales
	Sandstones
Ordovician	Cherty stales
	Sandstones
Dyke	Lamprophyres
	Fractures: 1. Trench 2. Supposed
	Zones of Brecciation and sulfidation
	Zones of quartz veins and veinlets
	Ore zone and its number
	Strike and dip: 1. Bedding 2. Fractures
	1. Anticlinal axes 2. Synclinal axes
	Trench and its number
	Shaft and its number
	Adit and its number
	Old workings
	Drillholes: 1. Existed 2. MMAJ(1997)
	Detailed survey area

THE MINERAL EXPLORATION
IN
THE SOUTHERN NURATAU AREA
THE REPUBLIC OF UZBEKISTAN
(PHASE D)
LOCATION MAP OF THE SAMPLES
OF THE GENERAL SURVEY AREA (D)



JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
FEBRUARY 1978
Prepared by MINCECO

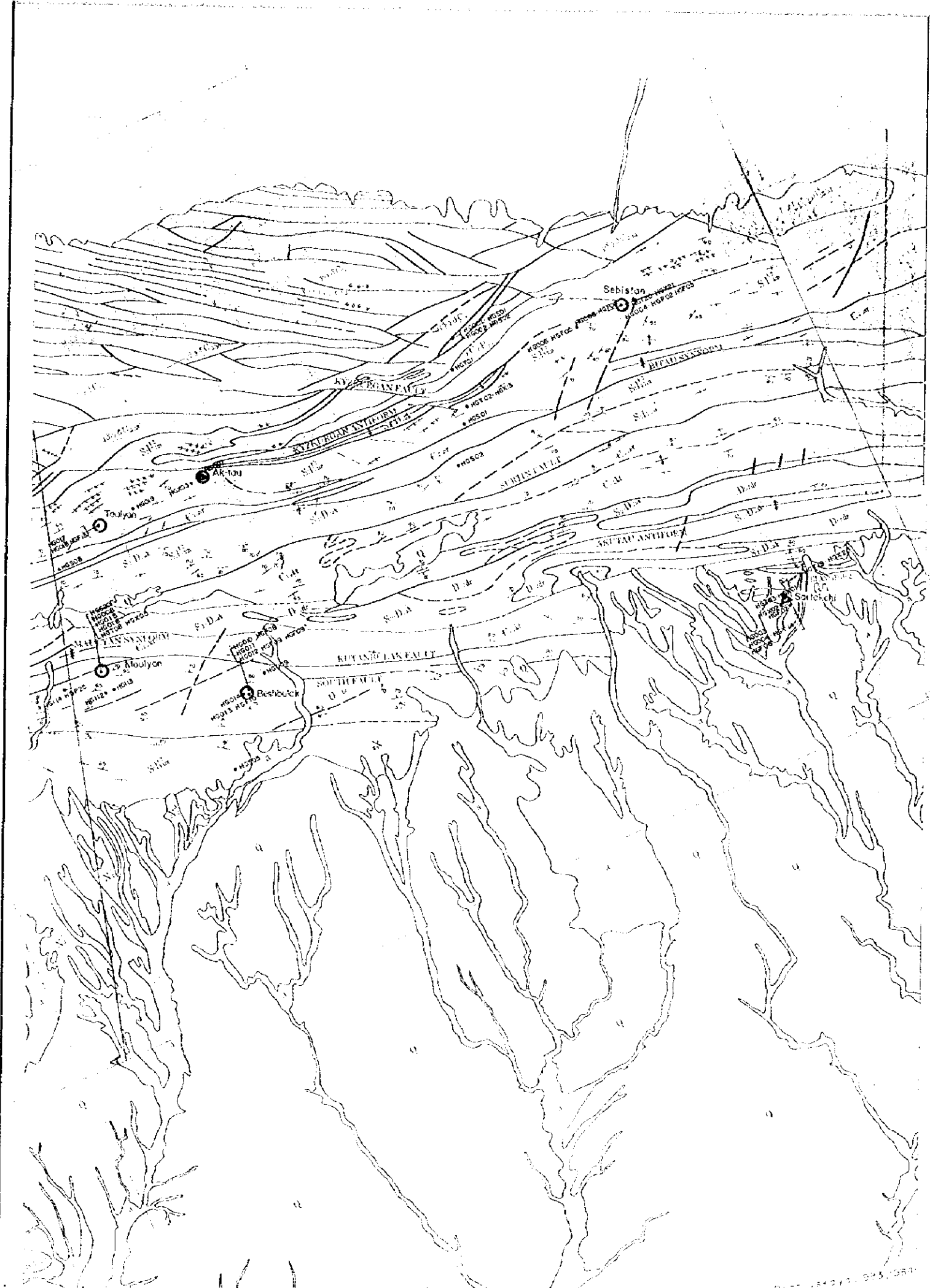
1:25,000



Legend

- three digits: Assay
- P: Polished section
- F: Fluid inclusion measurement
- HGT01, HGT02, HGT12: numbers on a line: taken from a same point
- HGT05, HGT12: X-ray analysis
- T: Thin section

- Quaternary**
- Q: present river bed sediments, sand and silts
 - Q: terrace fan and preglacial sediments, sand and silts
- Neogene**
- N: Miocene
- Paleogene**
- P: Paleocene-Eocene
- Cretaceous**
- K: Upper Cretaceous
- Permian Group**
- Ch: Bishkek formation (Permian)
 - D: Dzhirgatala formation (Permian)
 - D: Chirchik formation (Permian)
- Devonian**
- D: Devonian formation (Devonian)
 - S.D: Anzhan formation (Devonian)
 - S.D: Aktau formation (Devonian)
- Silurian**
- S: Tansai formation (Silurian)
 - S: Tansai formation (Silurian)
 - S: Sibirsk formation (Silurian)
- Ordovician**
- O: Tuzus formation (Ordovician)
 - O: Karakhan formation (Ordovician)
- Carboniferous**
- C: Shakhmat formation (Carboniferous)
 - C: Karabulak formation (Carboniferous)
- Triassic**
- T: Karabulak formation (Triassic)





- Legend**
- Three digits: Stage
 - P: Packed section
 - F: Fluid inclusion measurement
 - H0651 H0692 H0712: numbers on a line: taken from a same point
 - H0765 H0442
 - X: X-ray analysis
 - T: Thin section
- Quaternary**
- Q: present river bed sediments
 - Q1: terrace fan and gravel sediments
- Neogene**
- N: Neogene
- Paleogene**
- P: Paleogene
- Cretaceous**
- K: Cretaceous
- Basement Complex**
- Ch: Chukotka formation
 - D: Duzan formation
 - S: Shurbin formation
 - T: Tuzun formation
 - K: Kutanbulak formation
- Granite**
- G: Granite
- Other**
- quartz porphyry
 - quartzite
 - granite porphyry
 - granite
 - serpentinite
 - epidiorite
 - diabase
 - gabbro
- Other**
- Au
 - △ Sb, Fe
 - W
 - ▽ Fe, Mn
- Other**
- fault
 - boundary
 - boundary

letter T.A. Pyanovskaya, 1983, 1984

Section A - A'

