



752.5 L-20 753.0 753.5 754.0 L-51 754.5



Legend

Quaternary	Q	Talus, gravel, sand	
Lower Silurian	[Symbol]	Slates, Siltstones	
	[Symbol]	Quartz sandstones	
Silurian	[Symbol]	Cherty slates	Middle Formation
	[Symbol]	Sandstones	
Ordovician	[Symbol]	Cherty slates	Lower Formation
	[Symbol]	Sandstones	
Dyke	[Symbol]	Lamprophyres	
	[Symbol]	Fractures: 1. Traced 2. Supposed	
	[Symbol]	Zones of brecciation and silicification	
	[Symbol]	Zones of quartz veins and veinlets	
	[Symbol]	Ore zone and its number	
	[Symbol]	Strike and dip: 1. Bedding 2. Fractures	
	[Symbol]	1. Anticlinal axes 2. Synclinal axes	
	[Symbol]	Trench and its number	
	[Symbol]	Shaft and its number	
	[Symbol]	Adit and its number	
	[Symbol]	Old workings	
	[Symbol]	Drillholes: 1. Existed 2. MMAJ(1997)	
	[Symbol]	Detailed survey area	

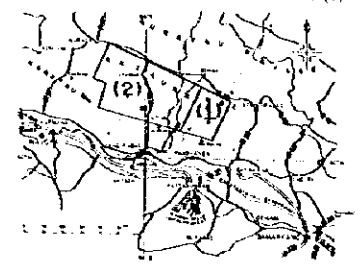
54.5 L-65 755.0 755.5 756.0

461.0

460.5

460.0

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 1998
Prepared by MIDECO

1 : 25,000

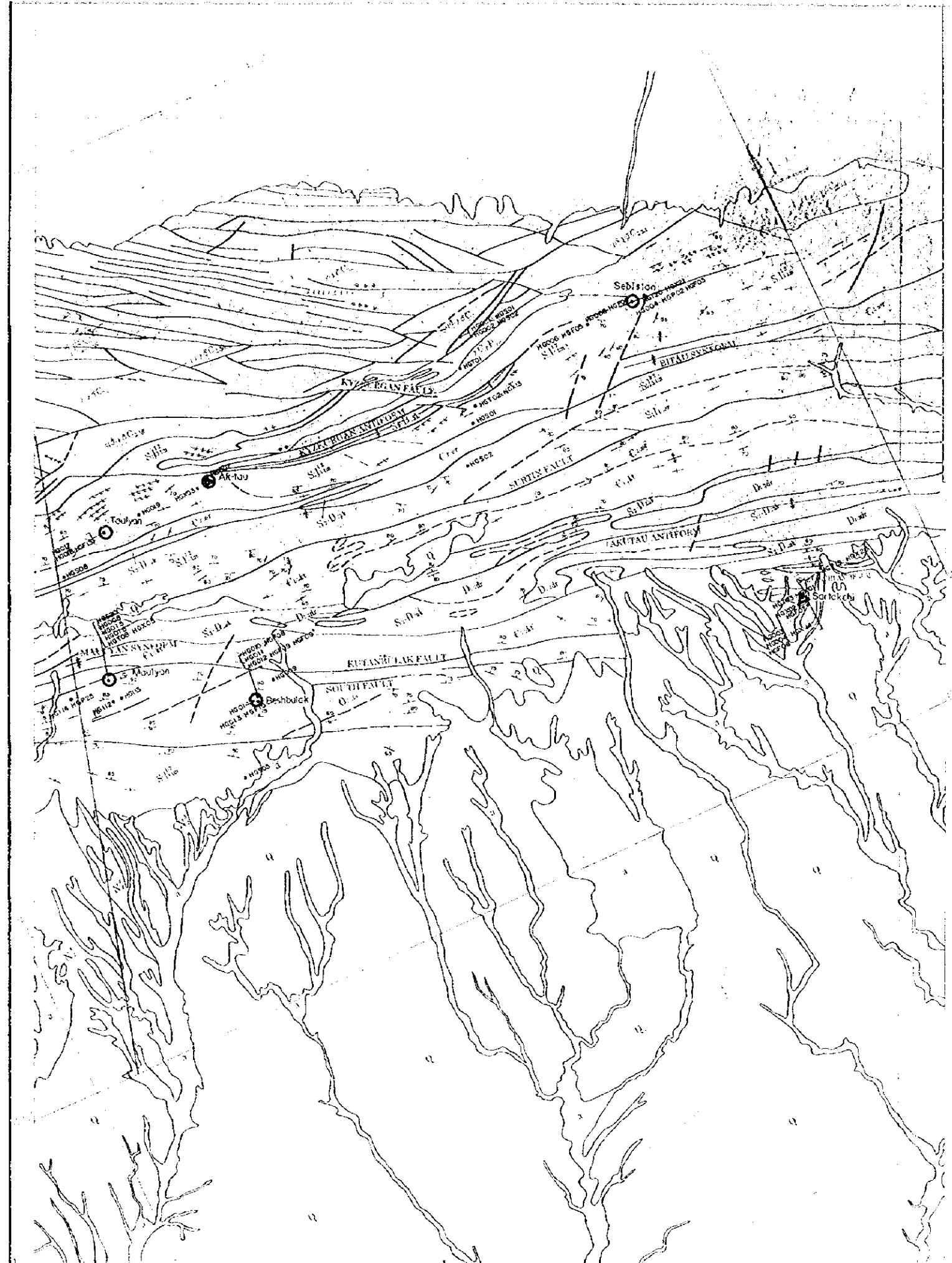
Legend

- three digits: Assay
- P: Polished section
- F: Fluid inclusion measurement
- HG051, HG052, HG053, HG054, HG055, HG056, HG057, HG058, HG059, HG060, HG061, HG062, HG063, HG064, HG065, HG066, HG067, HG068, HG069, HG070, HG071, HG072, HG073, HG074, HG075, HG076, HG077, HG078, HG079, HG080, HG081, HG082, HG083, HG084, HG085, HG086, HG087, HG088, HG089, HG090, HG091, HG092, HG093, HG094, HG095, HG096, HG097, HG098, HG099, HG100: numbers on a line taken from a same point
- X: X-ray analysis
- T: Thin section

- Quaternary**
- Q1: present river channels and flood plains
 - Q2: terrace fan and gravelly sediments
- Neogene**
- N1: Karakoram formation
 - N2: Karakoram formation
- Paleogene**
- P1: Karakoram formation
 - P2: Karakoram formation

- Permian**
- P1: Karakoram formation
 - P2: Karakoram formation
- Triassic**
- T1: Karakoram formation
 - T2: Karakoram formation
- Jurassic**
- J1: Karakoram formation
 - J2: Karakoram formation
- Cretaceous**
- C1: Karakoram formation
 - C2: Karakoram formation

- Quaternary**
- Q1: present river channels and flood plains
 - Q2: terrace fan and gravelly sediments

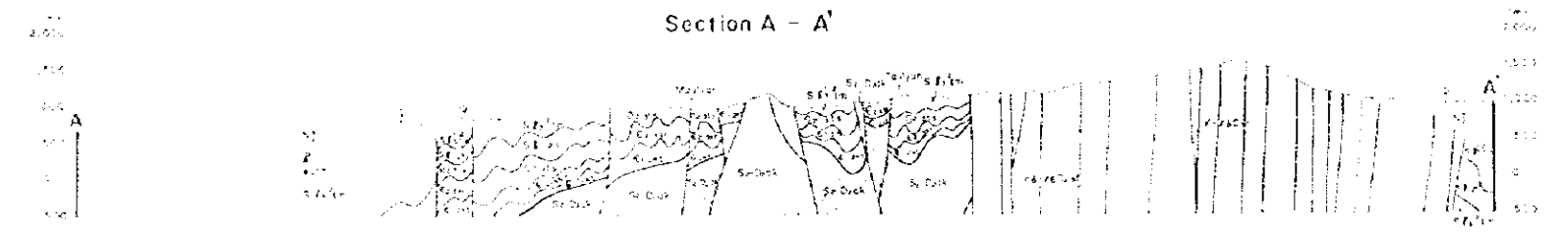




- Legend**
- (Symbol) - Trace of the Assay
 (Symbol) - P - Fluid inclusion section
 (Symbol) - F - Fluid inclusion measurement
 (Symbol) - HG051, HG052, HG053 - numbers on a line taken from a sample point
 (Symbol) - X - X-ray analysis
 (Symbol) - T - This section
- Faults**
- (Symbol) - present or believed to be present
 - (Symbol) - normal fault (upthrown to the right)
 - (Symbol) - normal fault (upthrown to the left)
 - (Symbol) - strike-slip fault
 - (Symbol) - fault with displacement
 - (Symbol) - fault with strike-slip movement
- Stratigraphic units**
- Permian-Cambrian**
- (Symbol) - Chirchik formation (sandstone, siltstone)
 - (Symbol) - Chirchik formation (sandstone, siltstone)
 - (Symbol) - Chirchik formation (sandstone, siltstone)
- Devonian**
- (Symbol) - Duzov formation (sandstone, siltstone, shale)
 - (Symbol) - Angren formation (sandstone, siltstone)
 - (Symbol) - Aktau formation (sandstone, siltstone)
- Silurian**
- (Symbol) - Tuzov formation (sandstone, siltstone, shale)
 - (Symbol) - Tuzov formation (sandstone, siltstone)
 - (Symbol) - Tuzov formation (sandstone, siltstone)
 - (Symbol) - Sarikhan formation (sandstone, siltstone, shale)
- Ordovician**
- (Symbol) - Tuzov formation (sandstone, siltstone, shale)
 - (Symbol) - Karakax formation (sandstone, siltstone, shale)
- Carboniferous**
- (Symbol) - Shurhan formation (sandstone, siltstone, shale)
 - (Symbol) - Kuvshinov formation (sandstone, siltstone, shale)
- Granite**
- (Symbol) - Karatau granite body (granite)
 - (Symbol) - Gatchin granite body (granite)
 - (Symbol) - Shurhan granite body (granite)
 - (Symbol) - Baras granite body (granite)
- Other**
- (Symbol) - quartzite
 - (Symbol) - gneiss
 - (Symbol) - amphibolite
 - (Symbol) - talc schist
 - (Symbol) - talc schist
 - (Symbol) - talc schist
 - (Symbol) - talc schist
 - (Symbol) - talc schist
 - (Symbol) - talc schist
- Map Symbols**
- (Symbol) - A - strike-slip fault
 - (Symbol) - M - normal fault
 - (Symbol) - W - fault with displacement
 - (Symbol) - S - fault with strike-slip movement
- (Symbol) - fault
 (Symbol) - fault
 (Symbol) - fault
 (Symbol) - fault

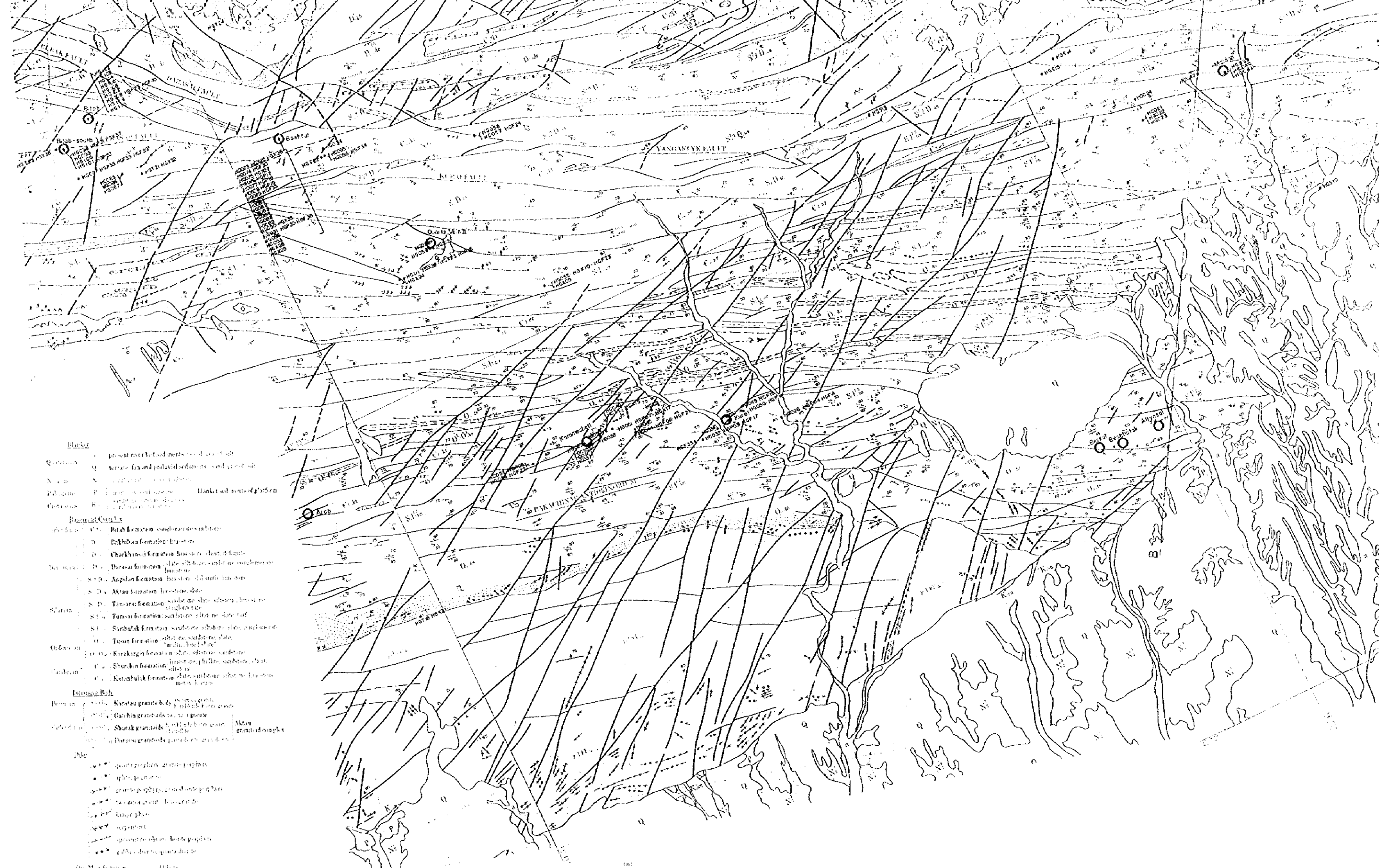
latier I.A. Pyanovskaya (1983, 1984)

Section A - A'

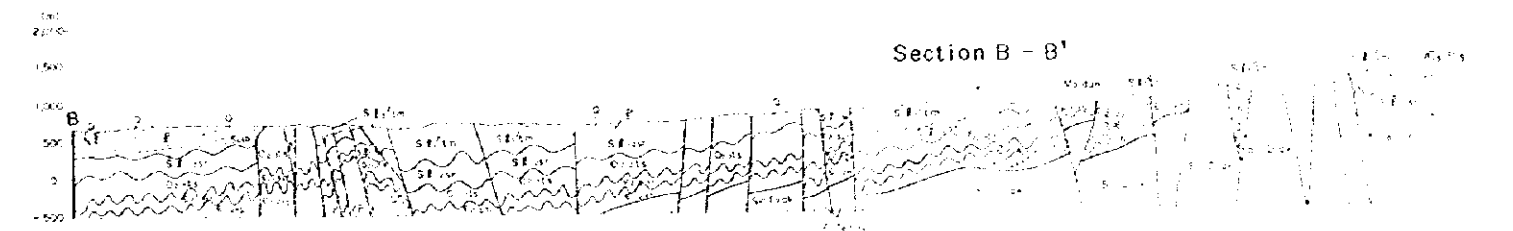








- Legend**
- Q present river bed sediments (see loc. 13)
 - Q terrace, fan and pedimental sediments (see loc. 13)
 - N Neogene
 - P Pleistocene
 - R Recent
- Basin Complex**
- C-1 Bitab formation conglomerate sandstone
 - D Bakhsaa formation limestone
 - D Charkhasai formation limestone (short & light)
 - D Darasai formation slate, shales, sandstone, conglomerate limestone
 - S-D Argidin formation limestone, dolomite limestone
 - S-D Aktau formation limestone, slate
 - S-D Tamsara formation sandstone, shale, silty limestone, conglomerate
 - S-T Tomsai formation sandstone, siltstone, shale, coal
 - S-T Sarbulak formation sandstone, siltstone, shale, conglomerate
 - O Tuvon formation siltstone, sandstone, shale, limestone
 - O Karakargin formation slate, siltstone, sandstone
 - C Shurchin formation limestone, phyllite, sandstone, shale
 - C Kstanbulak formation slate, sandstone, siltstone, limestone, mica shales
- Granite Batholith**
- Granite bodies
 - Granite dykes
 - Granite veins
 - Granite sills
 - Granite dikes
 - Granite dykes
 - Granite veins
 - Granite sills
 - Granite dikes
- Phyllite**
- quartz phyllite, granite phyllite
 - phyllite
 - granite phyllite, coarse grained phyllite
 - fine grained phyllite
 - limp phyllite
 - supersaturated
 - sparsely chlorite, hornblende phyllite
 - chlorite, hornblende, quartz dikes
- Other Symbols**
- A-1
 - △ M-1
 - W
 - ◇ B-1

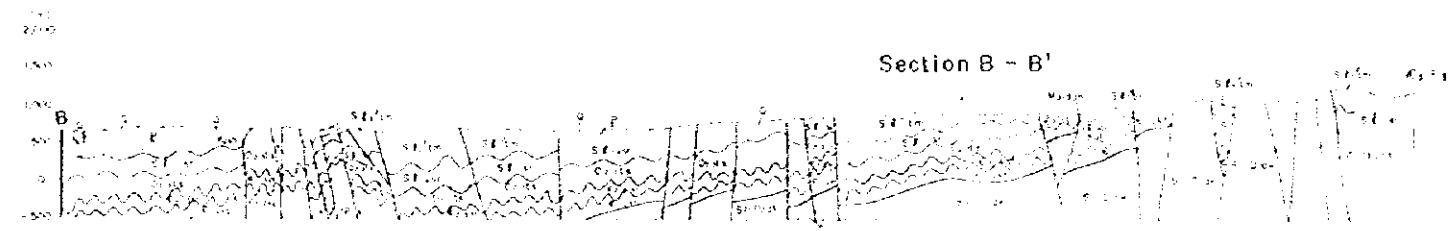




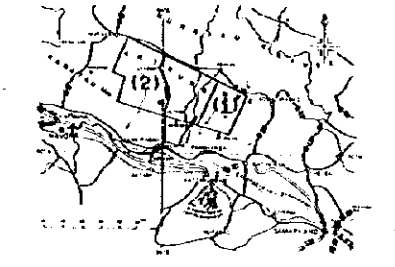
(after I. A. Pyonovskaya, 1983, 1984)

Legend

- three digits: Assay
- P: Polished section
- F: Fluid inclusion measurement
- : HG051, HG052, HG054 numbers on a line, taken from a same point
- HG055, HG056
- X: X ray analysis
- T: Thin section

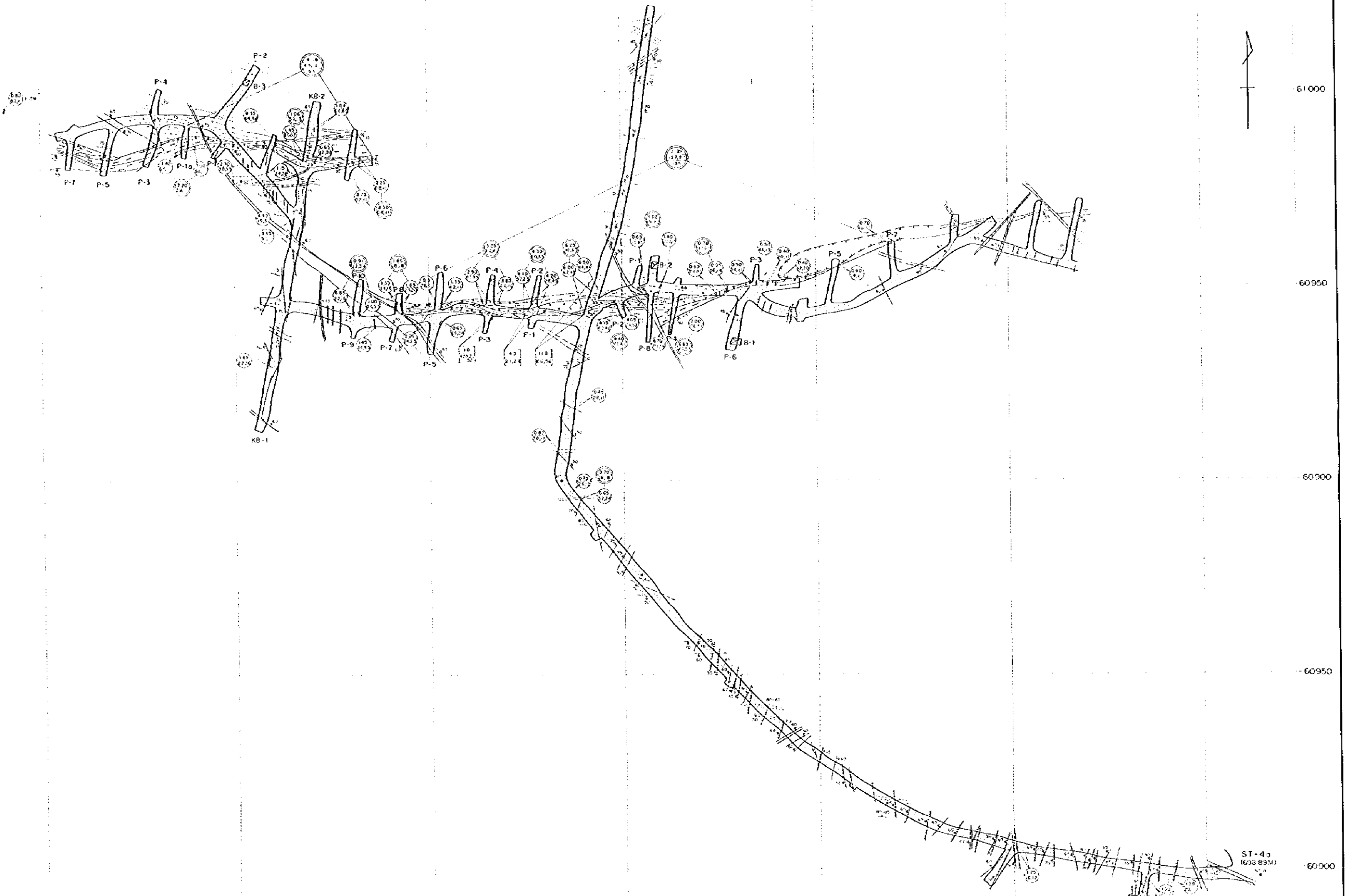


PL. II-2-22
 THE MINERAL EXPLORATION
 IN
 THE SOUTHERN NURATAU AREA
 THE REPUBLIC OF UZBEKISTAN
 (PHASE D)
 LOCATION MAP OF THE SAMPLES
 OF THE GENERAL SURVEY AREA (2)



JAPAN INTERNATIONAL COOPERATION AGENCY
 METAL MINING AGENCY OF JAPAN
 FEBRUARY 1989
 Prepared by IMAGCO

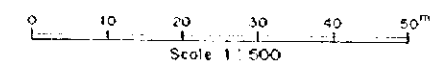
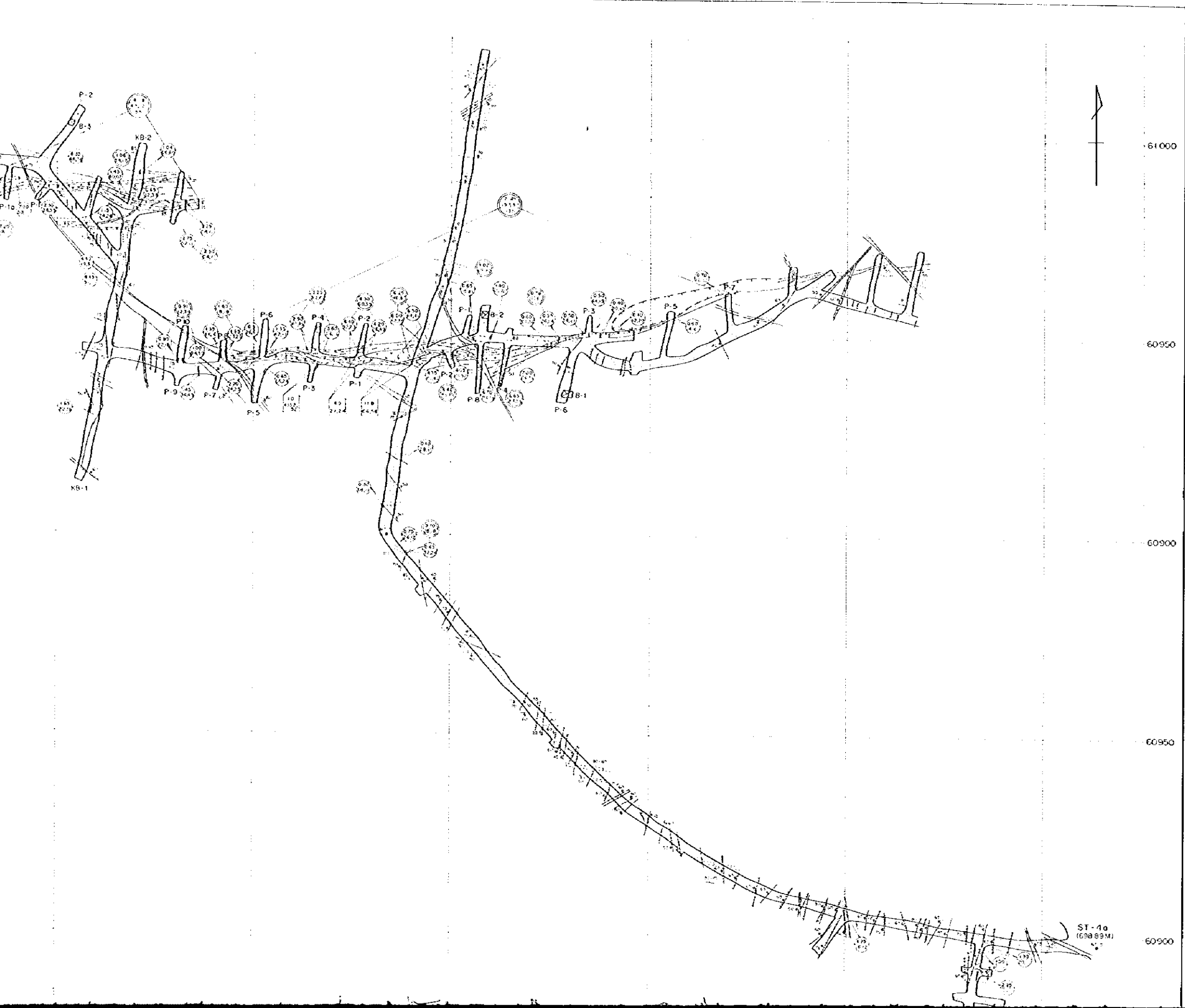
1:25,000



1
L
GEOLOGICAL
JAPANESE

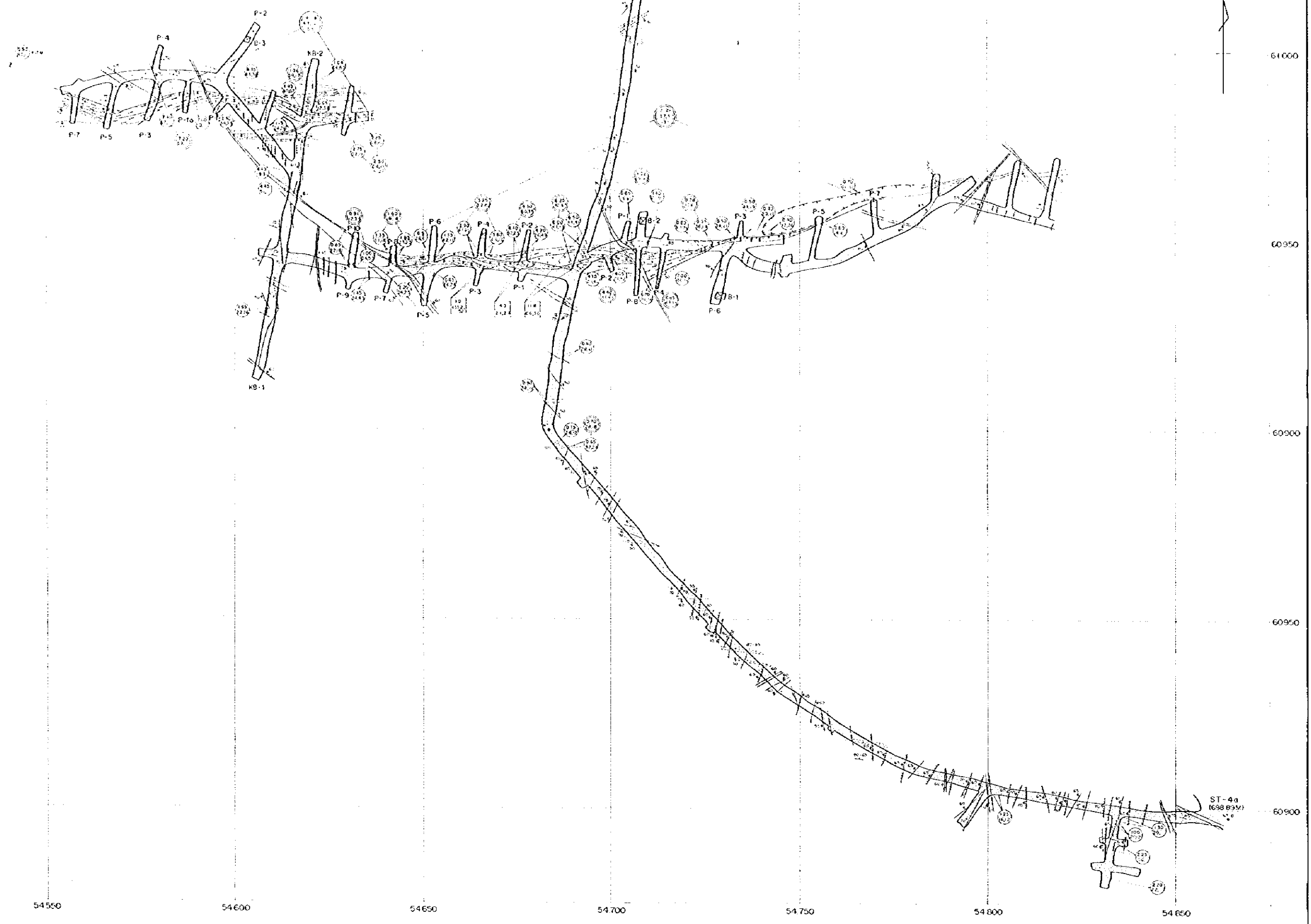
0
L

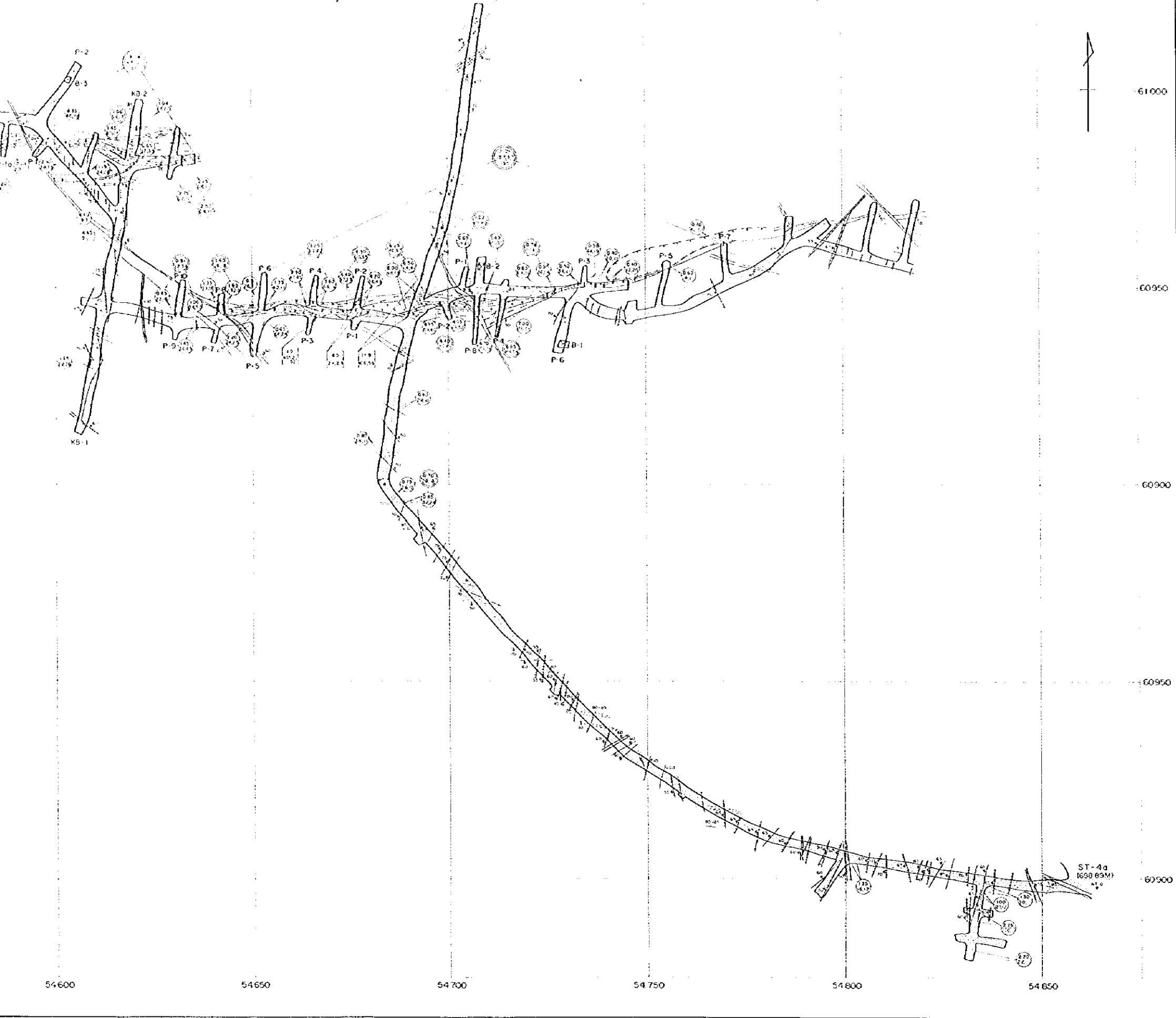
ST-4a
(60389M)



Legend

- Sandstone
- Slate
- Quartz-tourmaline veins
- Quartz veinlets
- Shear zone
- Joint
- Strike and dip of bedding plane
- Ore zone (Au ≥ 2g/t)
- Thickness(m)
Au(g/t); Ag(g/t) Previous results
- Thickness(m)
Au(g/t); Ag(g/t) MMAJ(1997)
- Average thickness(m)
Au(g/t); Ag(g/t)
Length of ore body(m)





61000

60950

60900

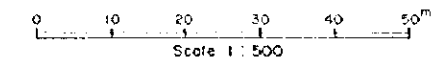
60950

60900

54600 54650 54700 54750 54800 54850

THE SOUTHERN NURATAU AREA
 THE REPUBLIC OF UZBEKISTAN
 (PHASE D)
 GEOLOGIC MAP OF THE ADIR (69889M LEVEL)
 OF THE ALAYNSAI DEPOSIT

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



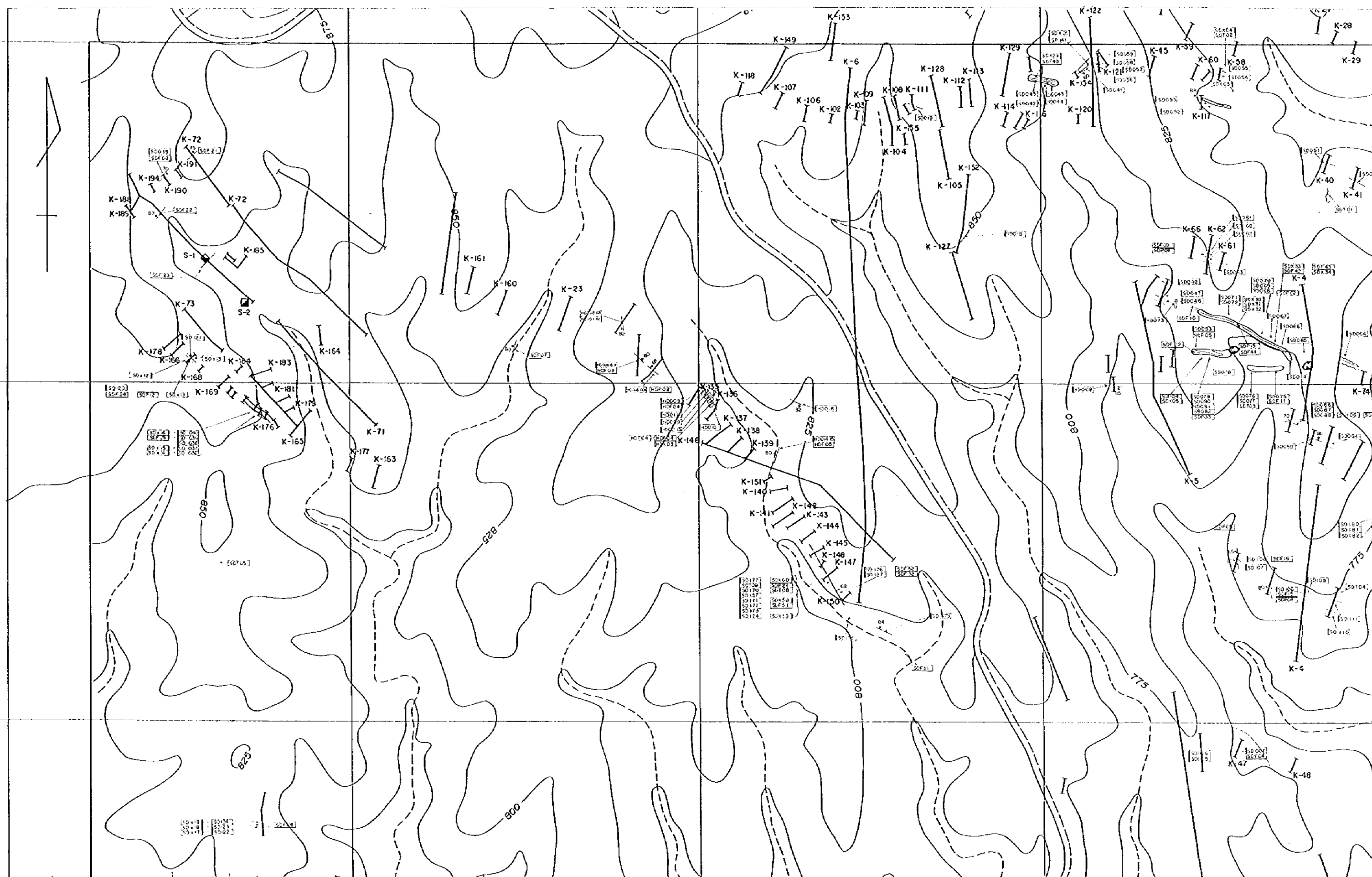
Legend

- Sandstone
- Slate
- Quartz - tourmaline vein
- Quartz veinlets
- Shear zone
- Joint
- Strike and dip of bedding plane
- Ore zone (Au \geq 2g/t)
- Thickness(m)
Au(g/t) ; Ag(g/t) Previous results
- Thickness(m)
Au(g/t) ; Ag(g/t) MMAJ(1997)
- Average thickness(m)
Au(g/t) ; Ag(g/t)
Length of ore body(m)

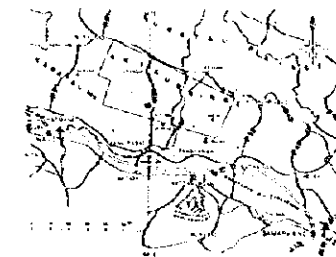
461.5

461.0

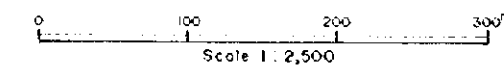
460.5



THE MINERAL EXPLORATION
IN
THE SOUTHERN SURATAU AREA
THE REPUBLIC OF UZBEKISTAN
(PHASE D)
LOCATION MAP OF THE SAMPLES
IN THE ALYNSAI DISTRICT

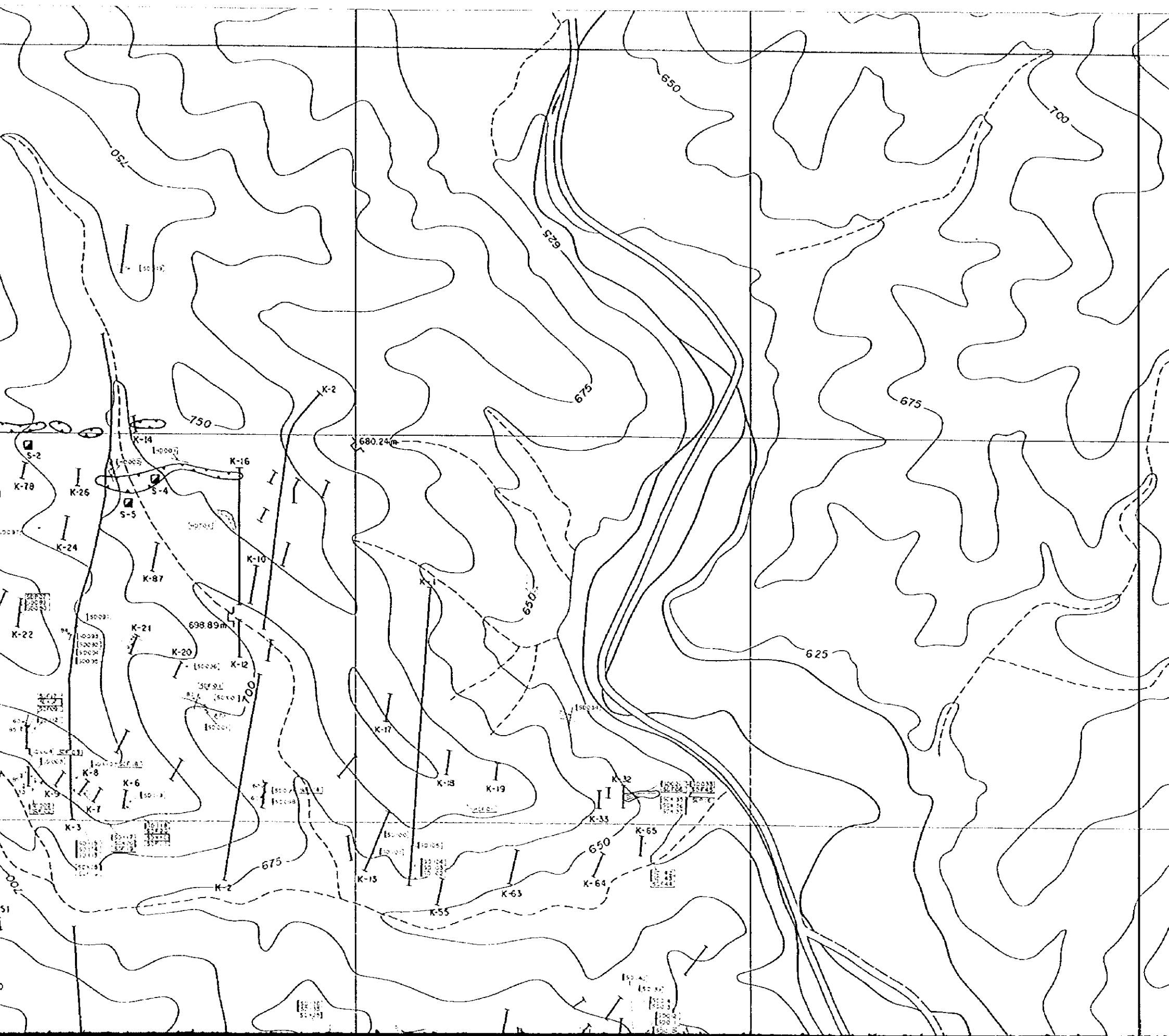


JAPAN INTERNATIONAL COOPERATION AGENCY
METAL MINING AGENCY OF JAPAN
FEBRUARY 1993
Prepared by MNDCCO



Legend

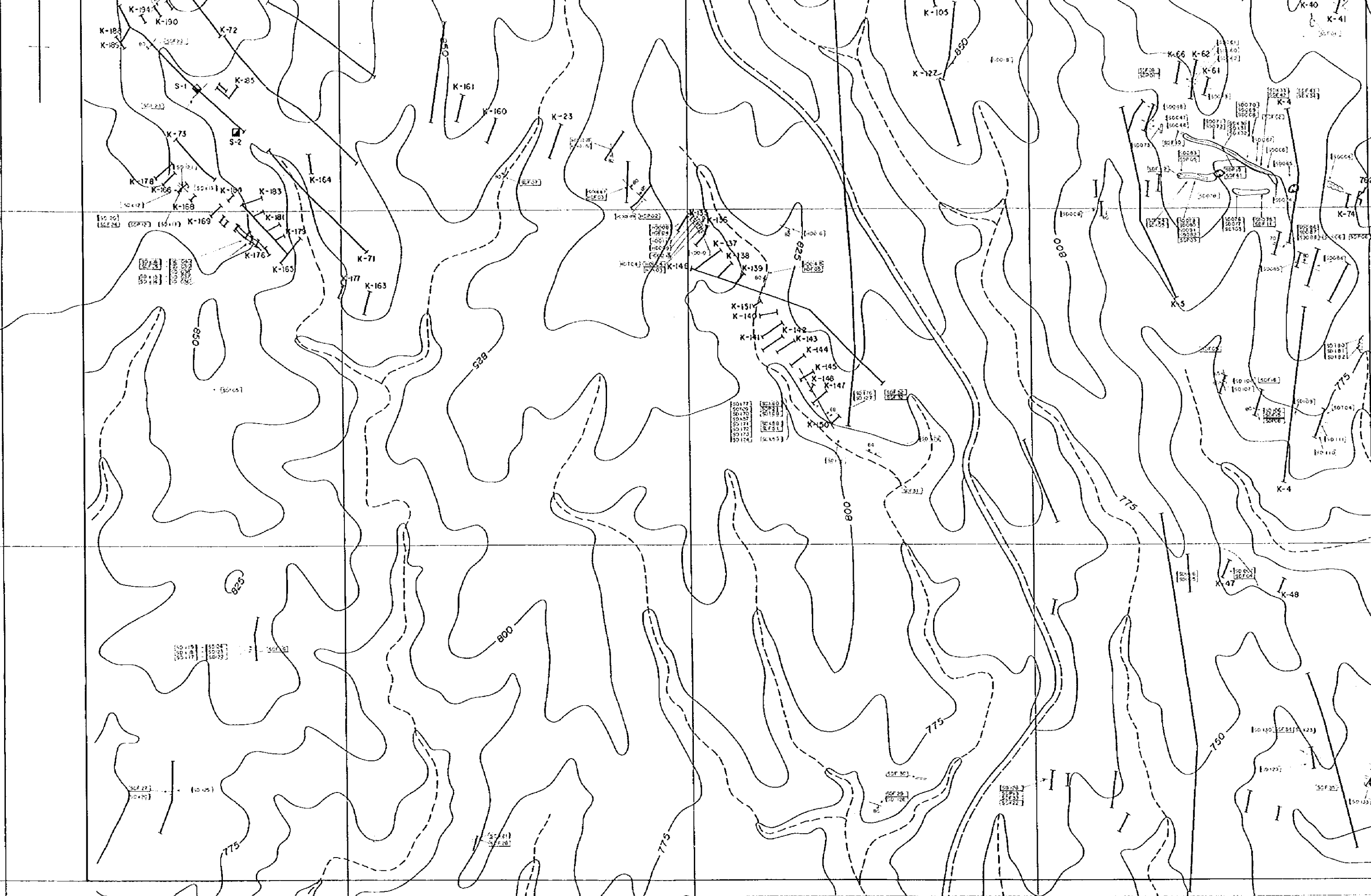
- SD199 Ore analysis sample and its No.
- SD152 Fluid inclusion test sample and its No.
- SD116 Thin section sample and its No.
- SEP21 Polished section sample and its No.
- SD168 X-Ray diffraction analysis sample and its No.
- Detailed survey area

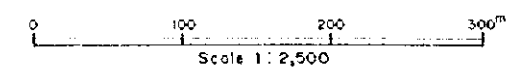


461.0

460.5

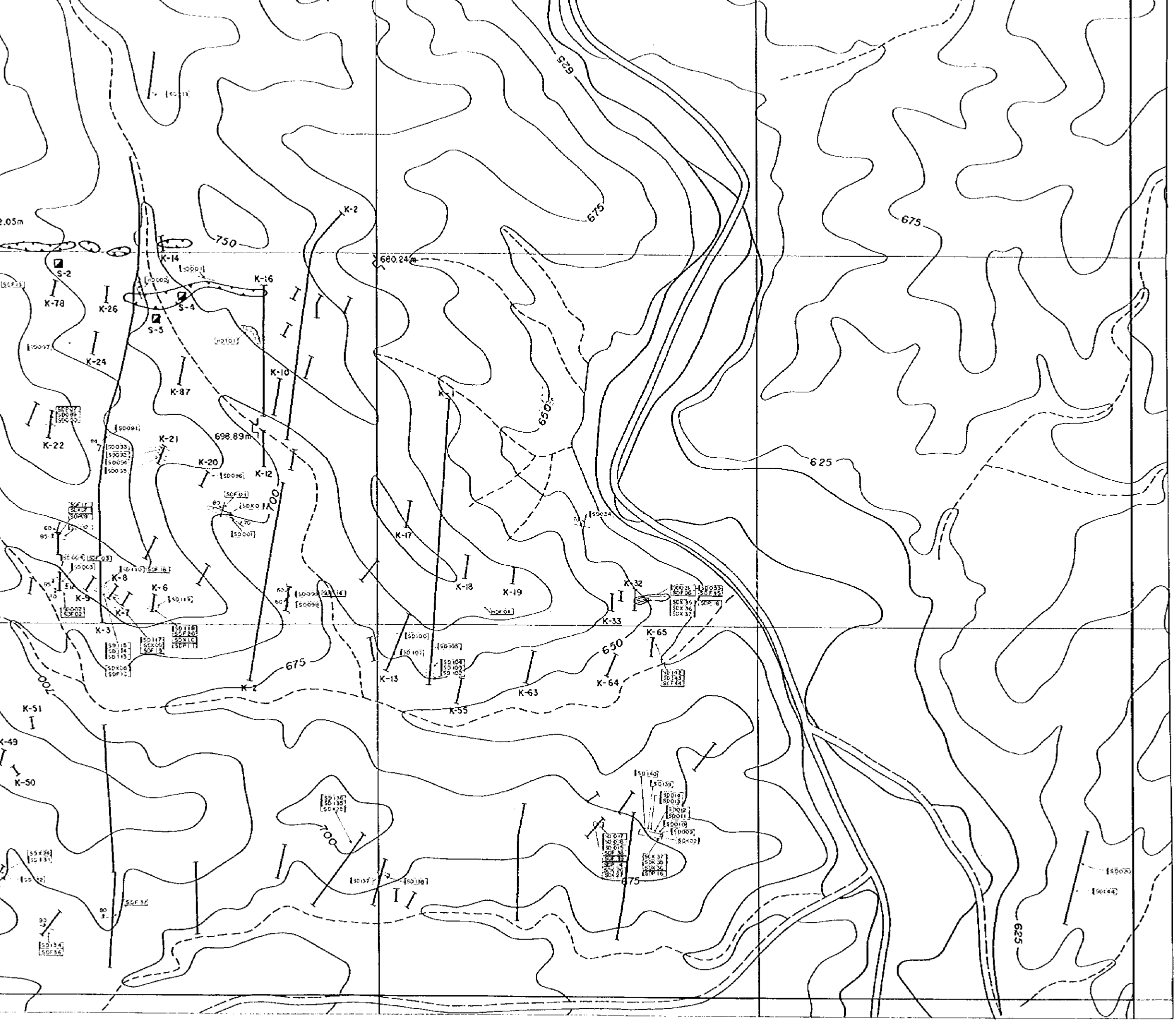
460.0

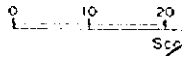




Legend

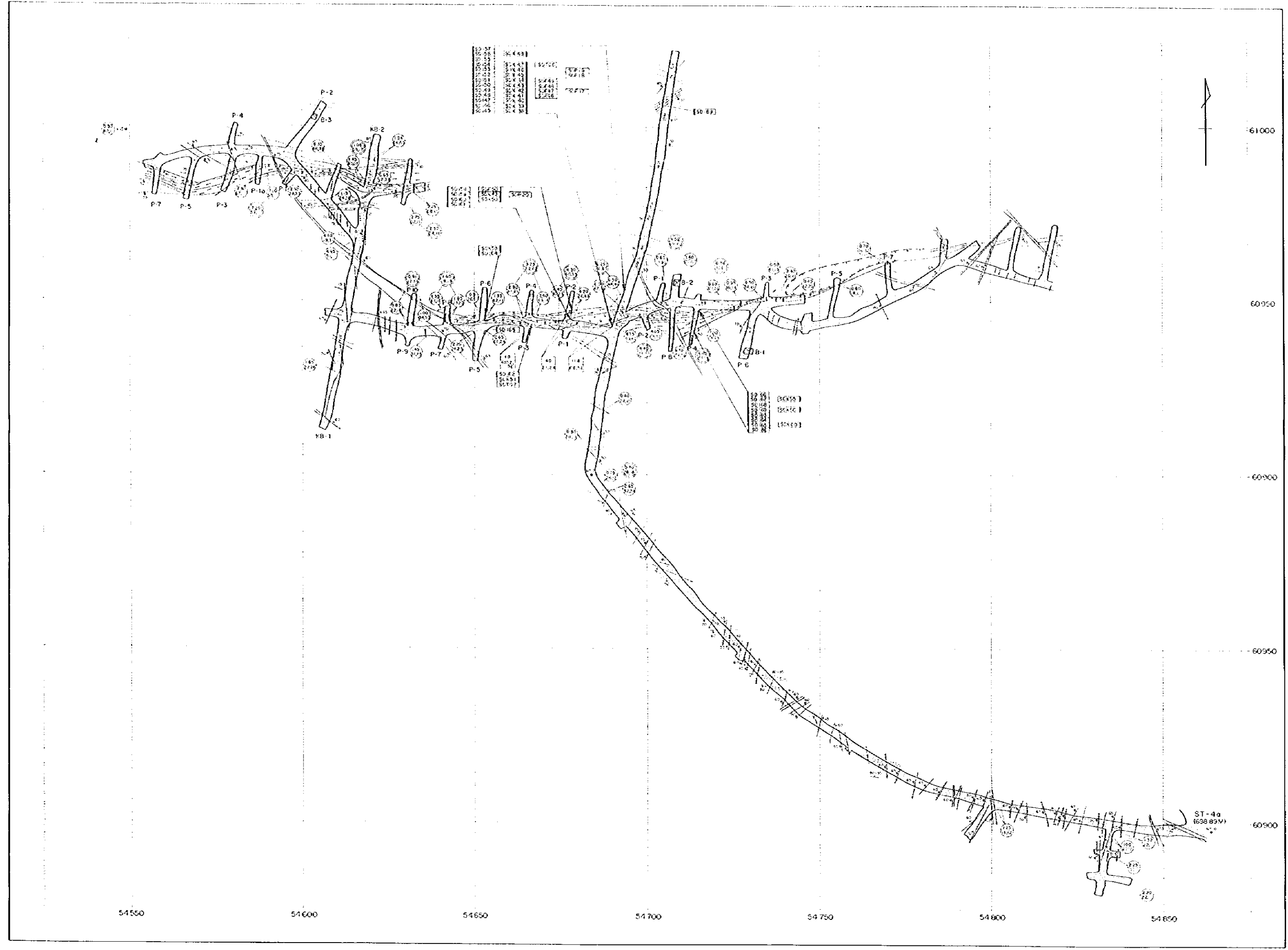
- SD100 Ore analysis sample and its No.
- SD152 Fluid inclusion test sample and its No.
- SD109 Thin section sample and its No.
- SDP21 Polished section sample and its No.
- SD160 X-Ray diffraction analysis sample and its No.
- Detailed survey area





Legend

- SD190 Ore analysis sample
- SDF52 Fluid inclusion test
- SDT09 Thin section sample
- SDP21 Polished section
- SDX60 X-Ray diffraction



54550

54600

54650

54700

54750

54800

54850

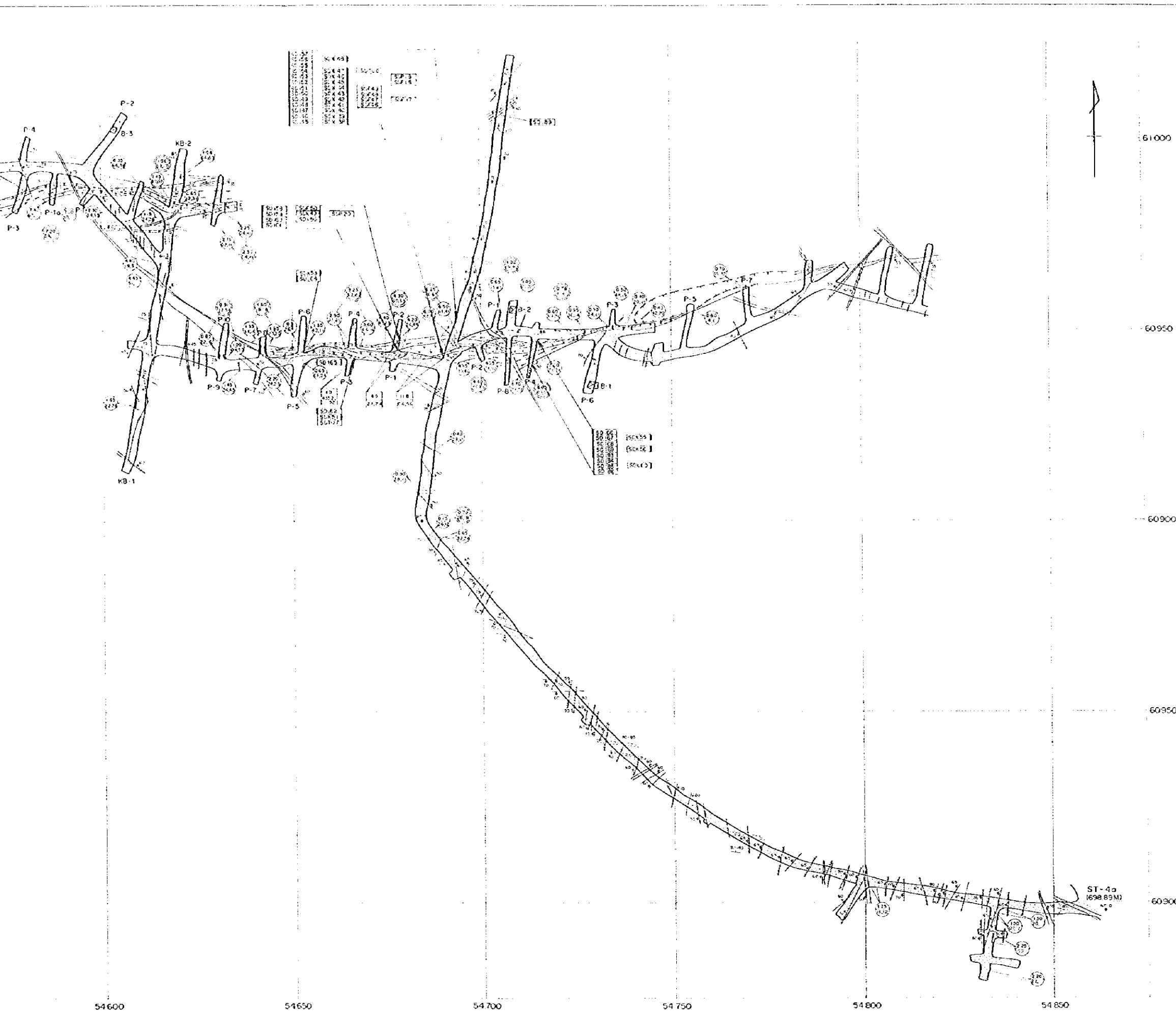
61000

60950

60900

60950

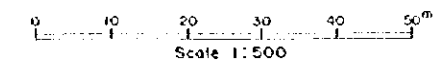
60900



PL. II-3-15

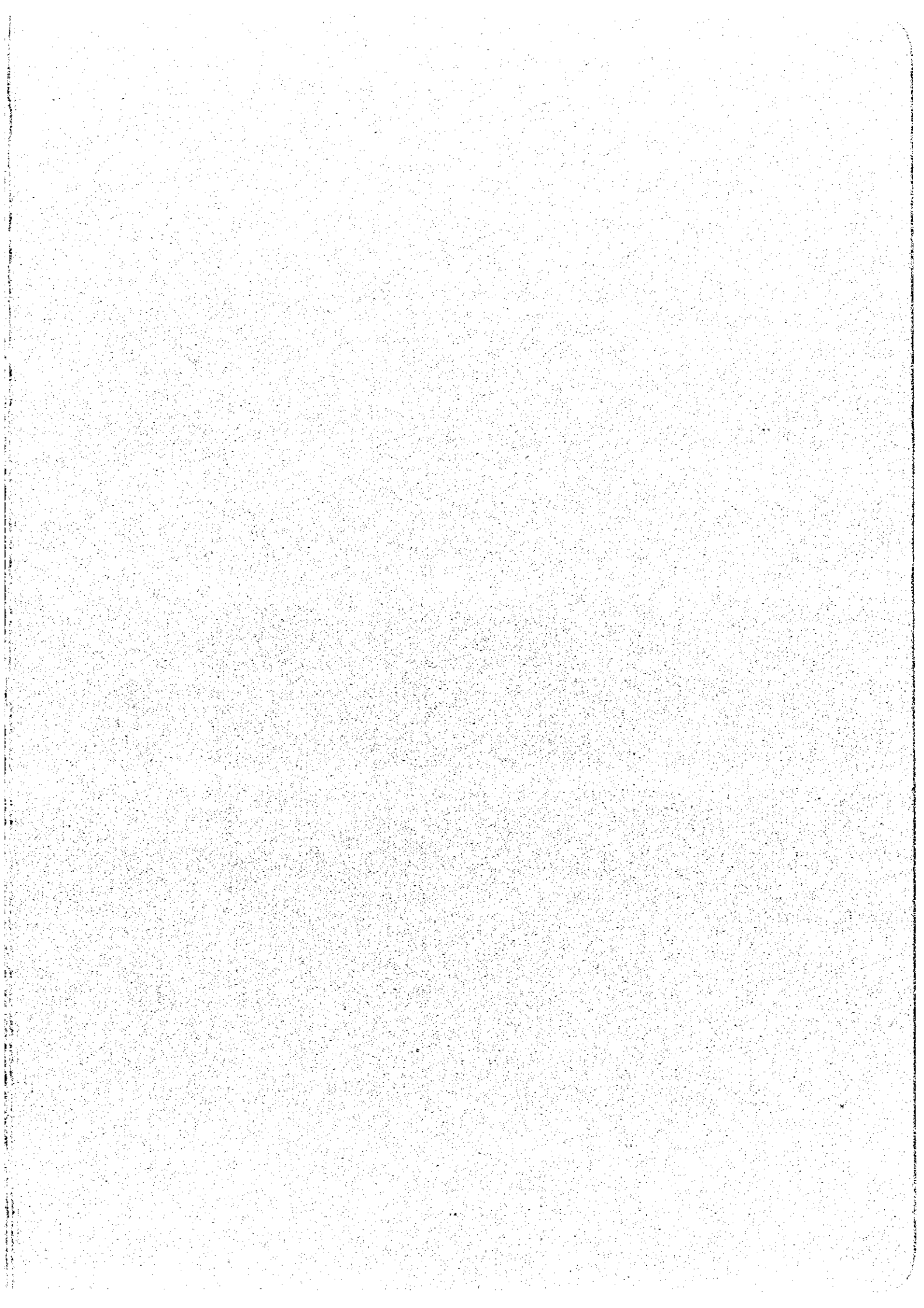
THE MINERAL EXPLORATION
IN
THE SOUTHERN NURATAU AREA
THE REPUBLIC OF UZBEKISTAN
(PHASE D)
LOCATION MAP OF THE SAMPLES
IN THE AREA (6098.89M ELEV.)
OF THE ALLYSSAI DEPOSIT

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



Legend

- SD130 Ore analysis sample and its No.
- SD062 fluid inclusion test sample and its No.
- SD069 Thin section sample and its No.
- SDP21 Polished section sample and its No.
- SDX60 X-Ray diffraction analysis sample and its No.



JICA