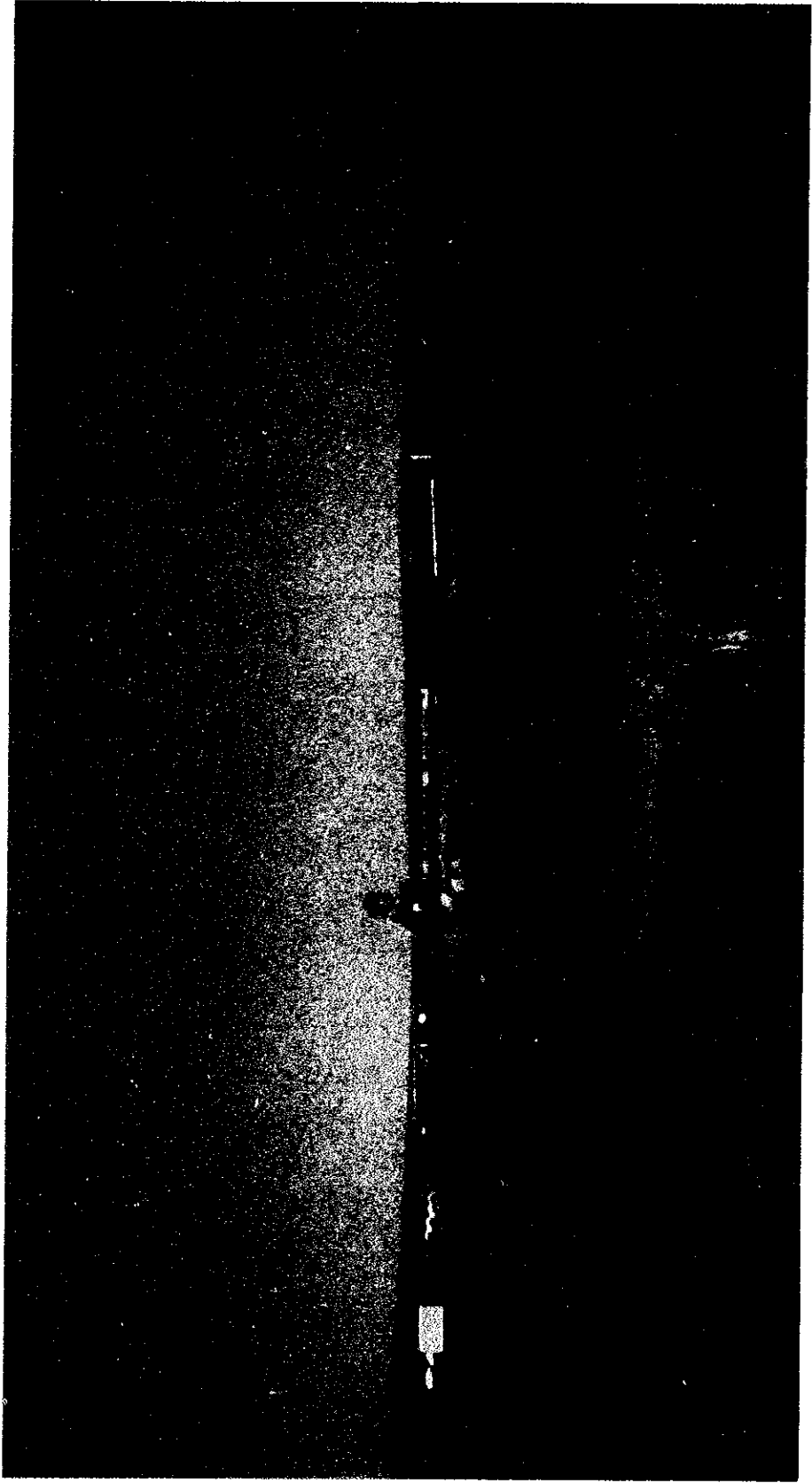


Photographs  
of  
Working

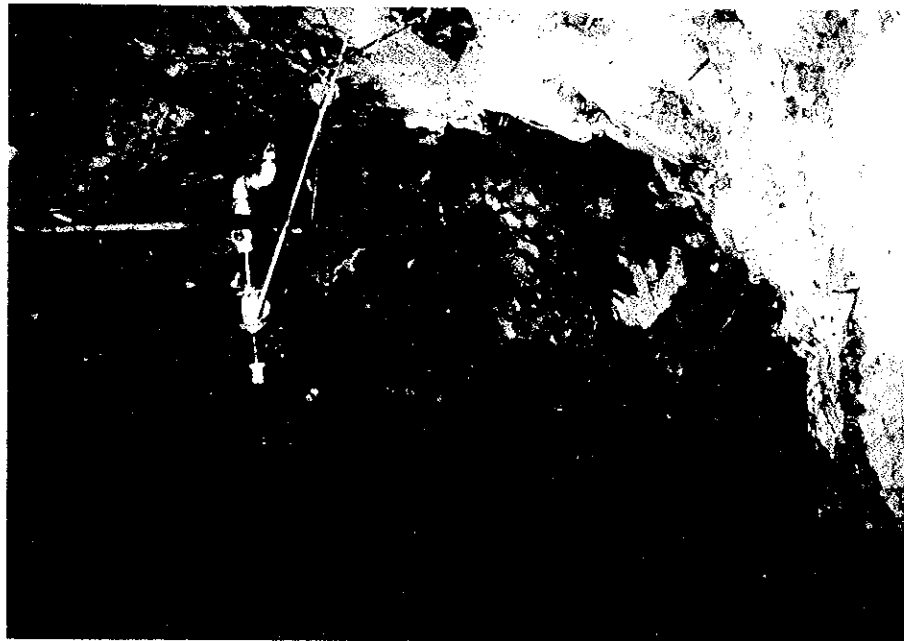




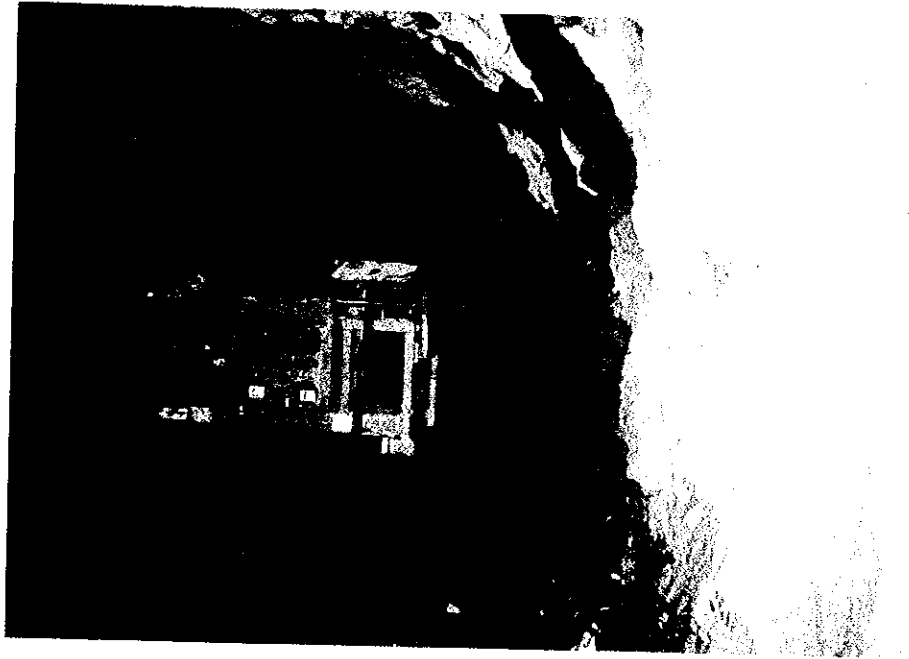
General view of TSAV



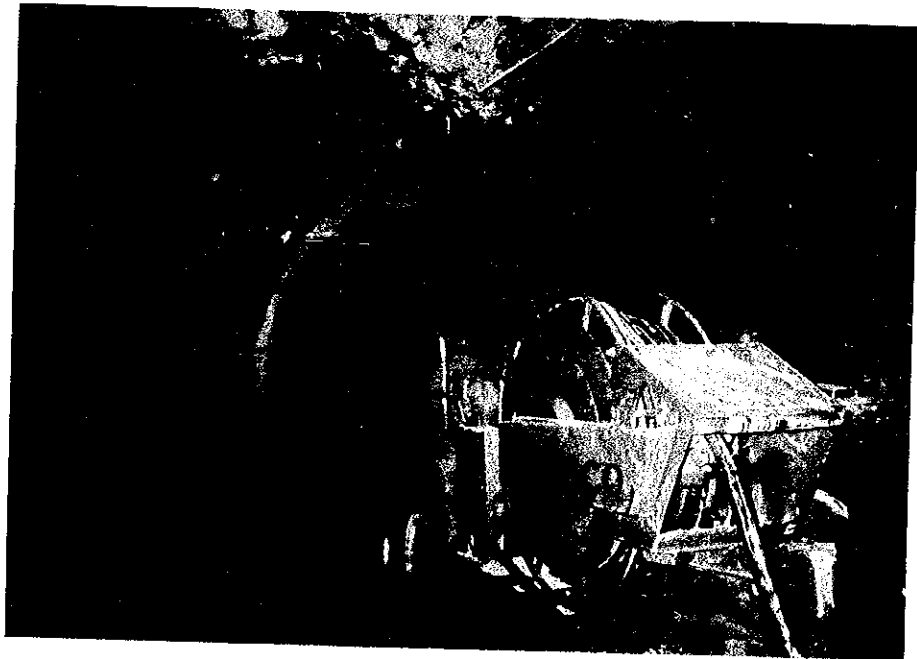
Junction (Northward drift–Southward drift)



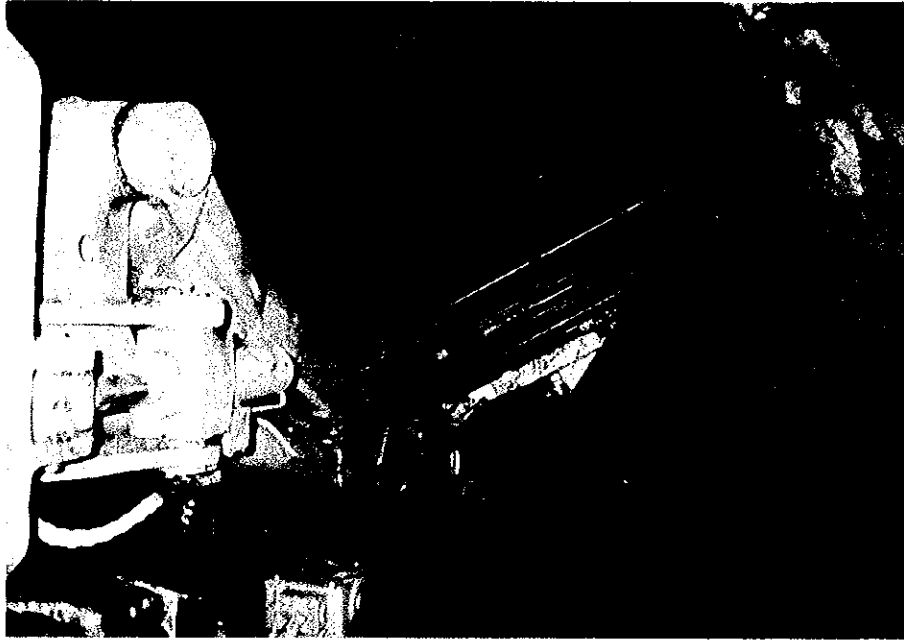
Pump station



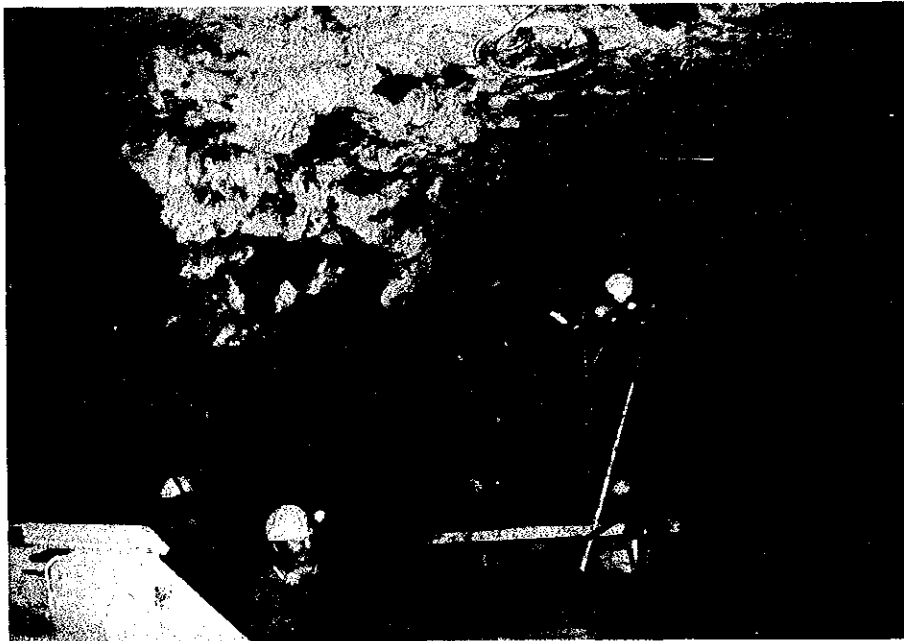
Drilling blast hole work (Type-1)



Drilling blast hole work (Type-2)



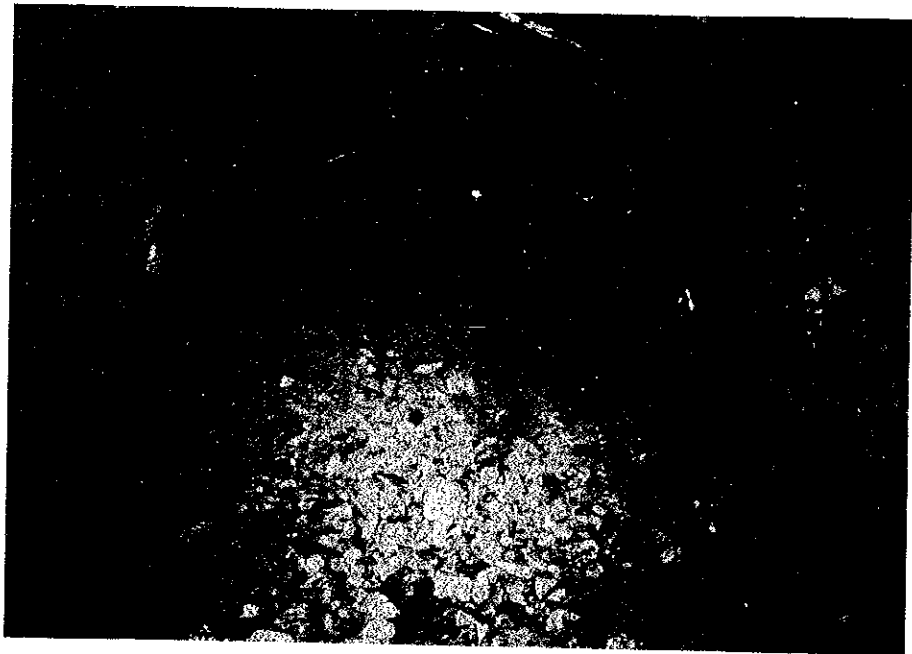
Drilling rock--bolt hole work



Rock-bolting



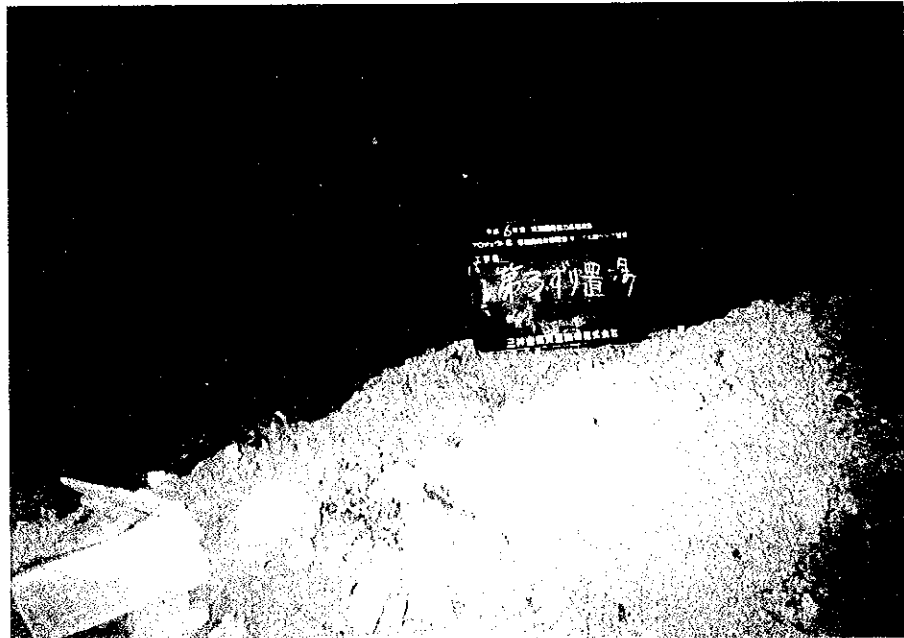
Falling in No.3 Waste pit



Spolling work in No.3 Waste pit



Spolling work in No.3 Waste pit



Filling in No.3 Waste pit





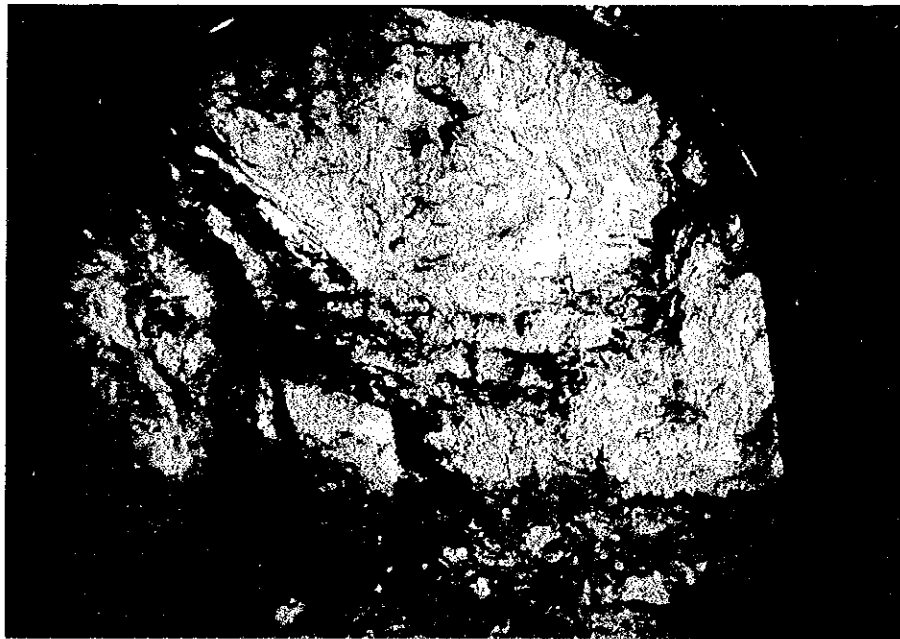
Face (Cross cut drift)



General view of Cross cut drift



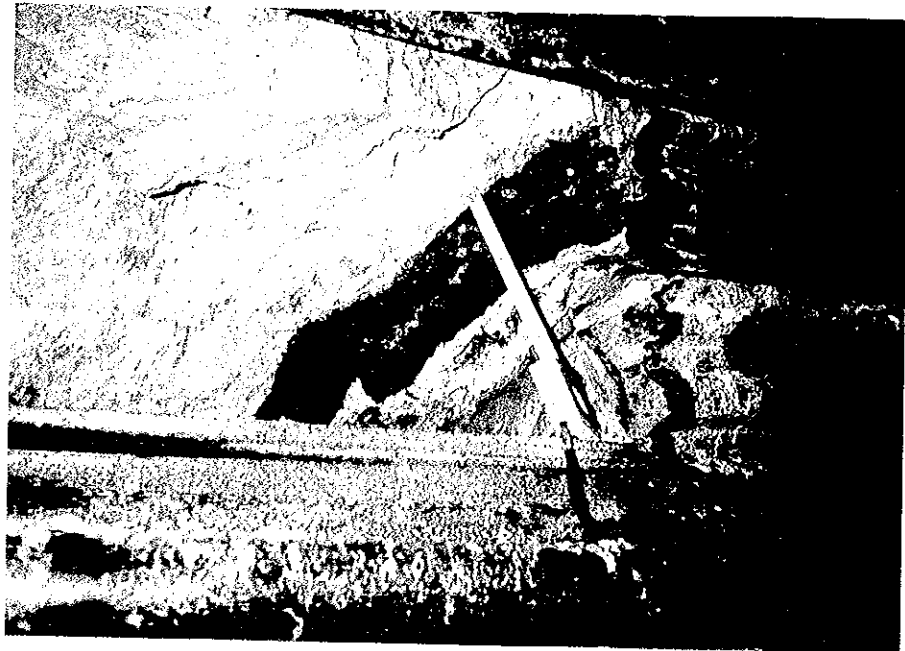
Mineralized zone (Right wall of Cross cut drift)



Mineralized zone (face of Cross cut drift)



General view of No.4 Waste pit



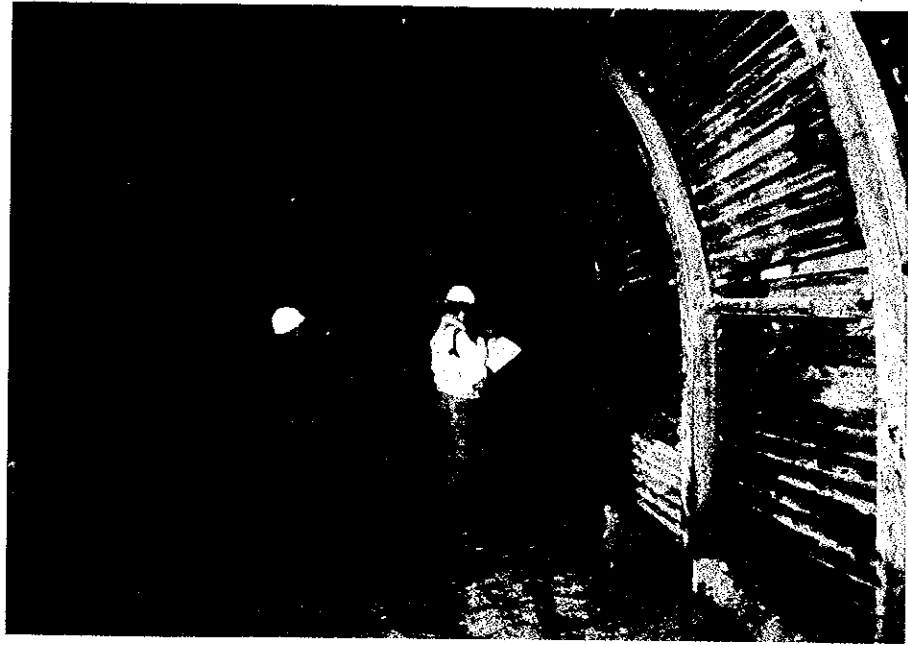
Right wall of No.4 Waste pit



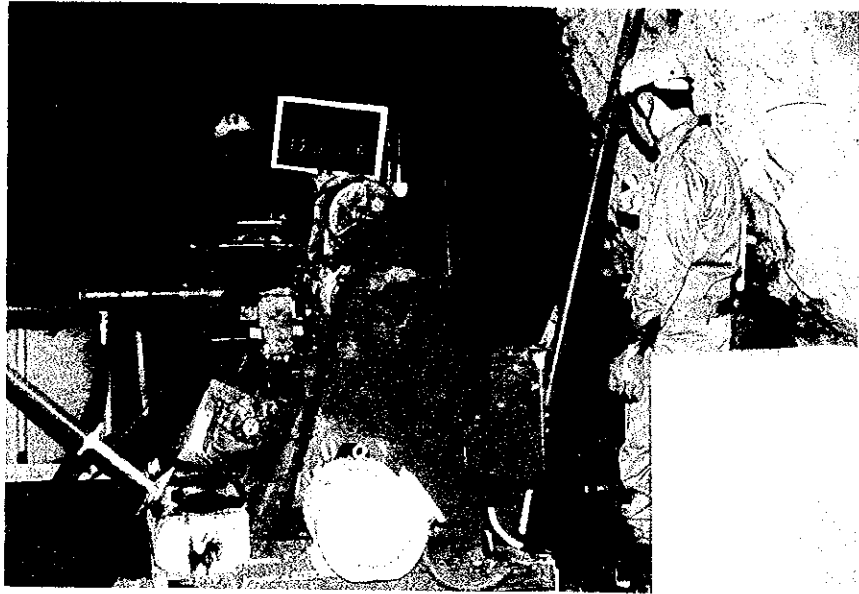
Face of No.4 Waste pit



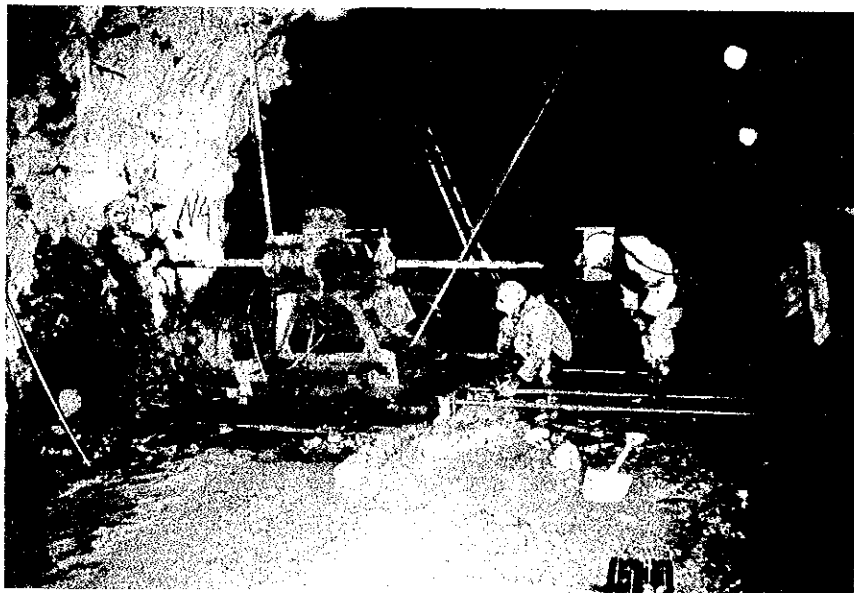
Fan and Air Duct



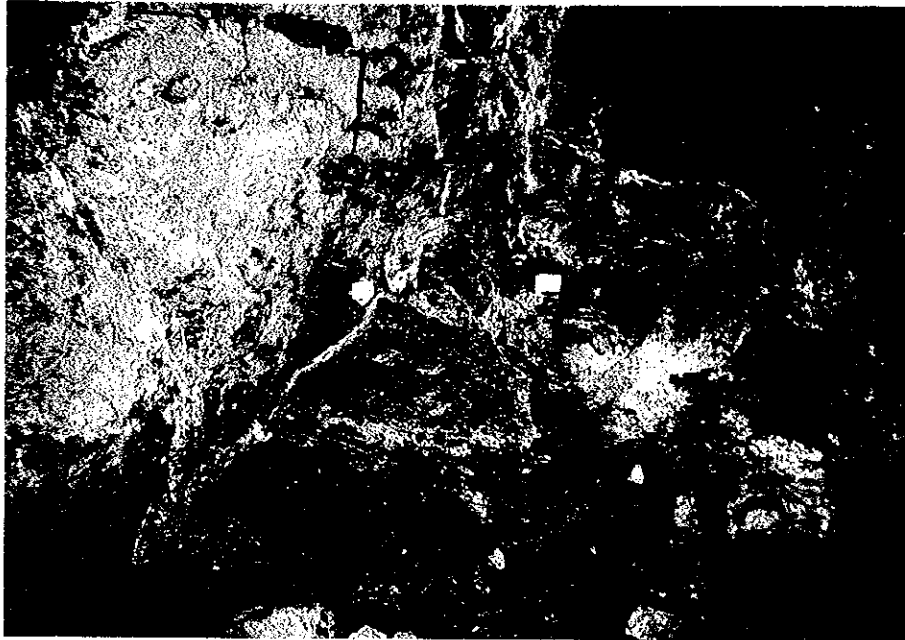
JICA/MMAJ Inspection



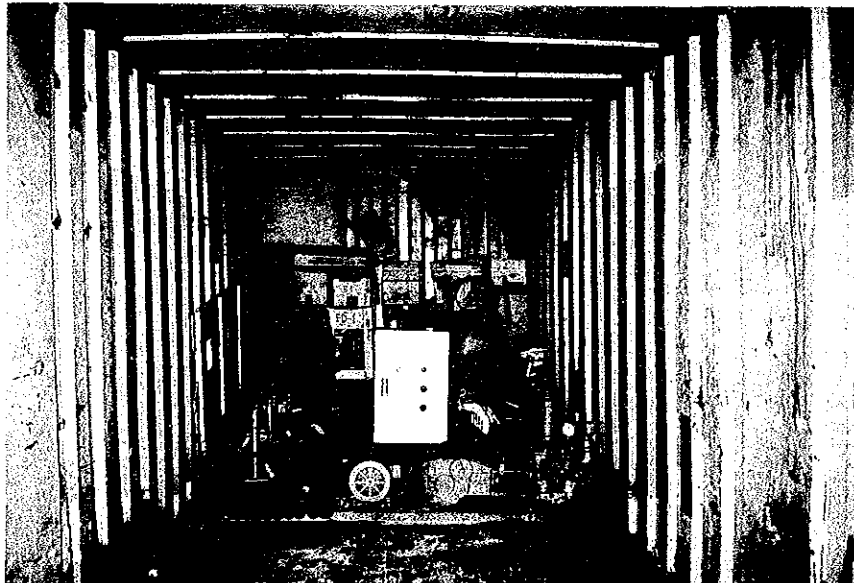
Diamond drilling work



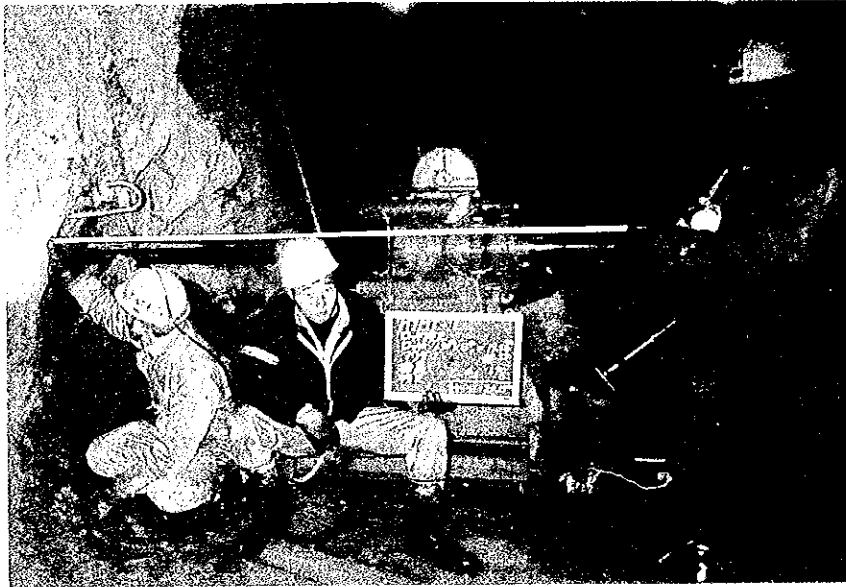
Setting diamond drilling machine



Tamping for bore holes (MJMT-13,-14)



Storing



Rod measuring (MJMT- 1)

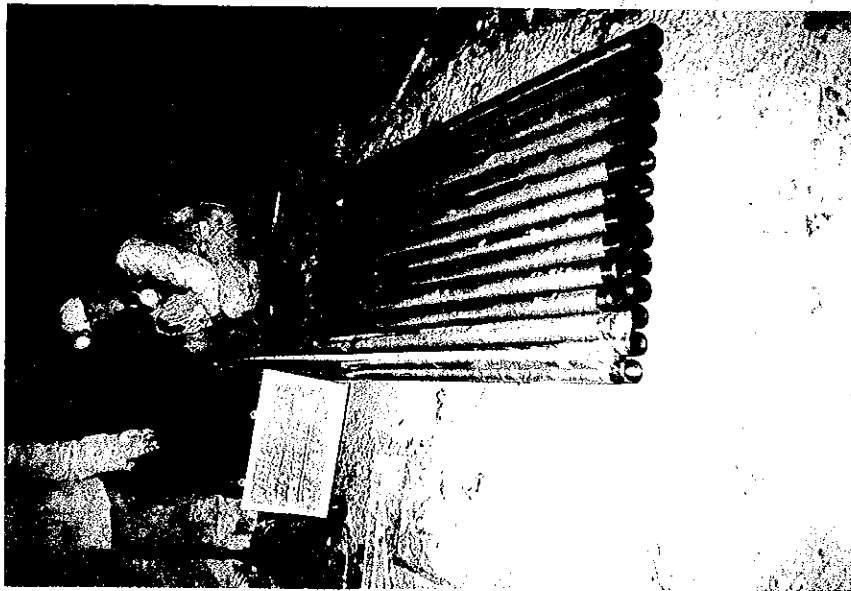


Rod measuring (MJMT- 2)

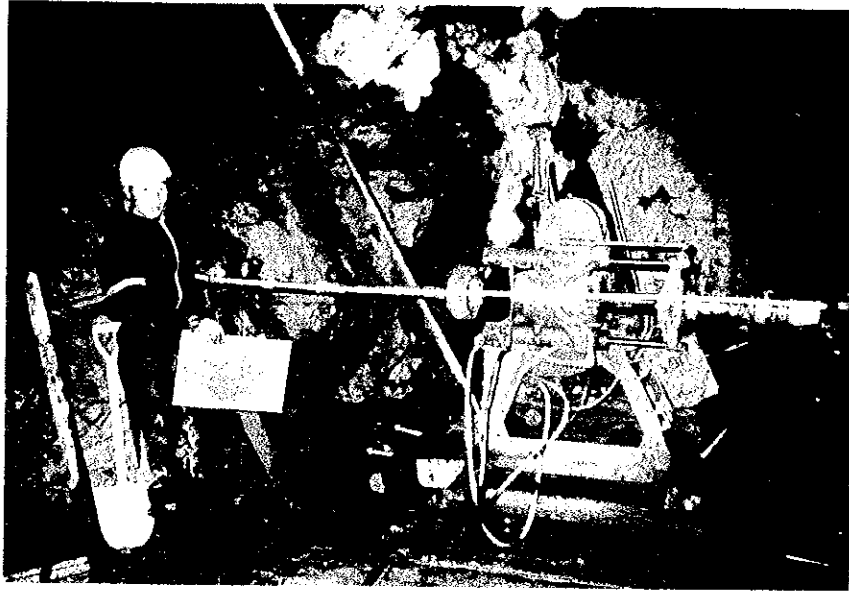




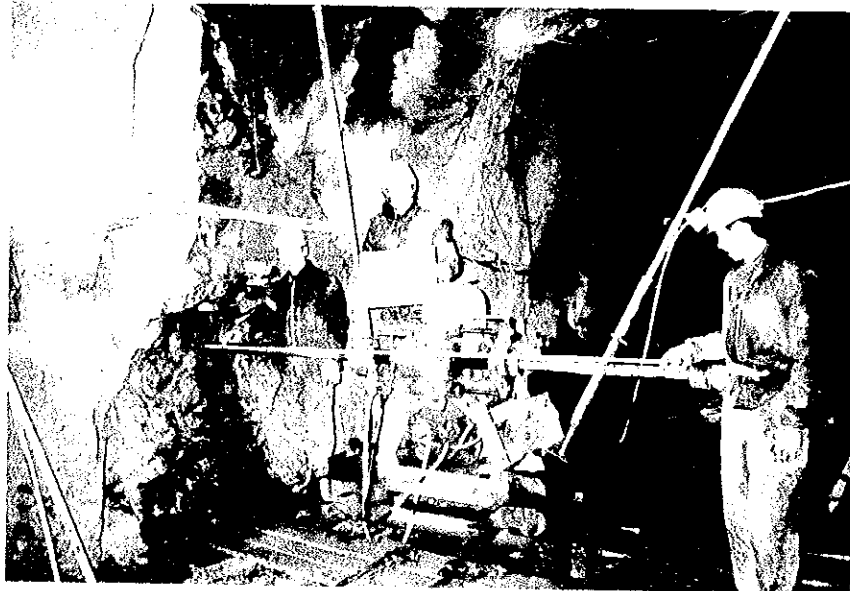
Rod measuring (MJMT- 3)



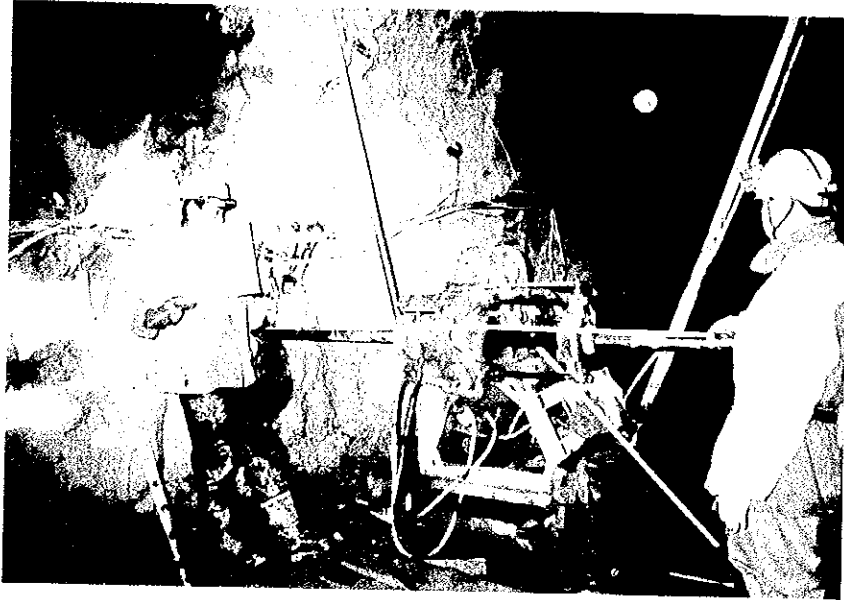
Rod measuring (MJMT- 4)



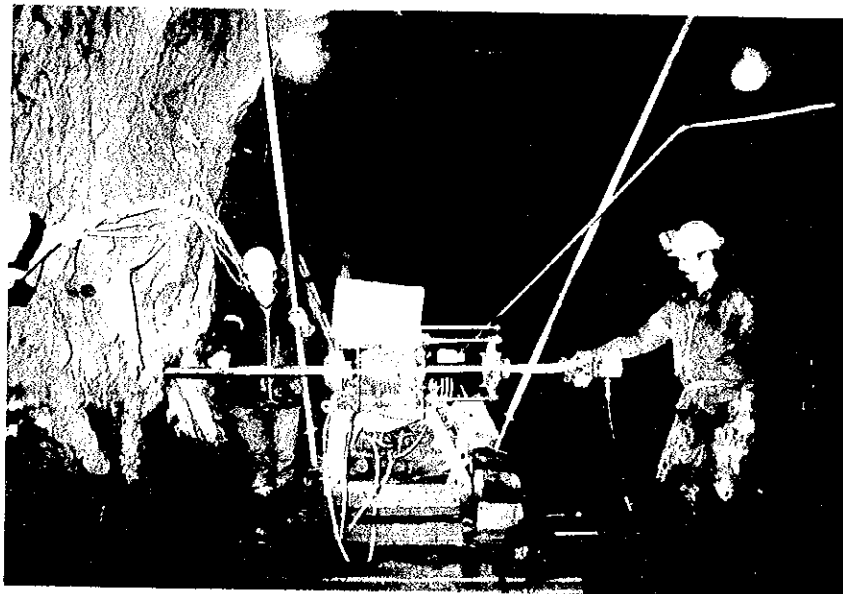
Rod measuring (MJMT- 5)



Rod measuring (MJMT- 6)



Rod measuring (MJMT- 7)



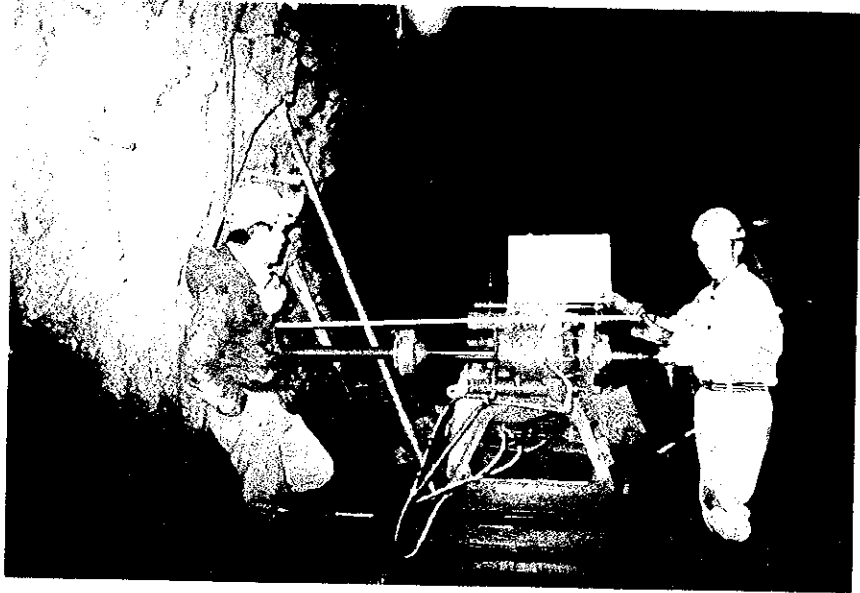
Rod measuring (MJMT- 8)



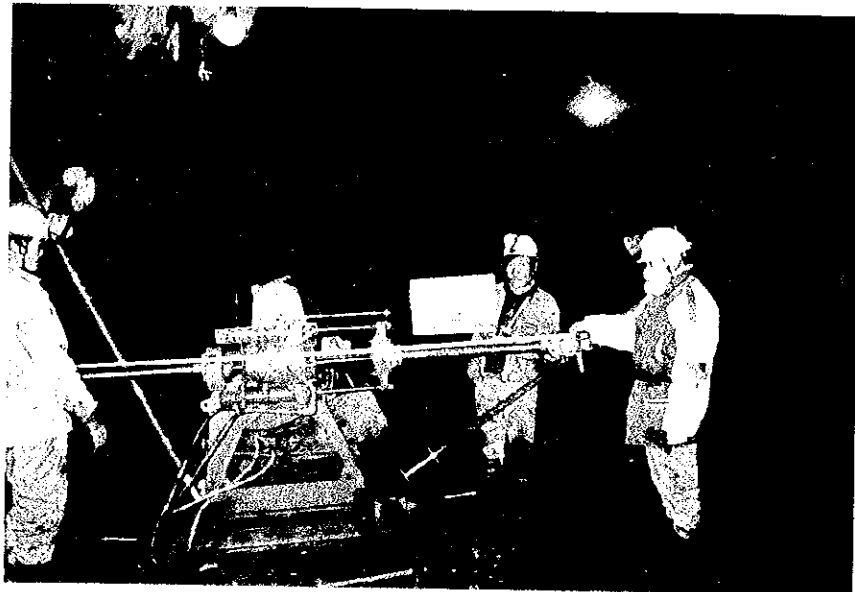
Rod measuring (MJMT- 9)



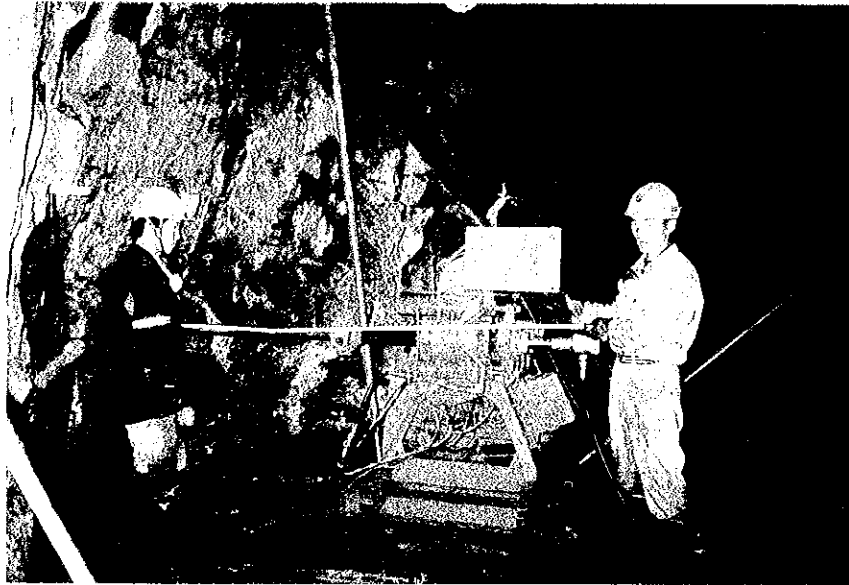
Rod measuring (MJMT-10)



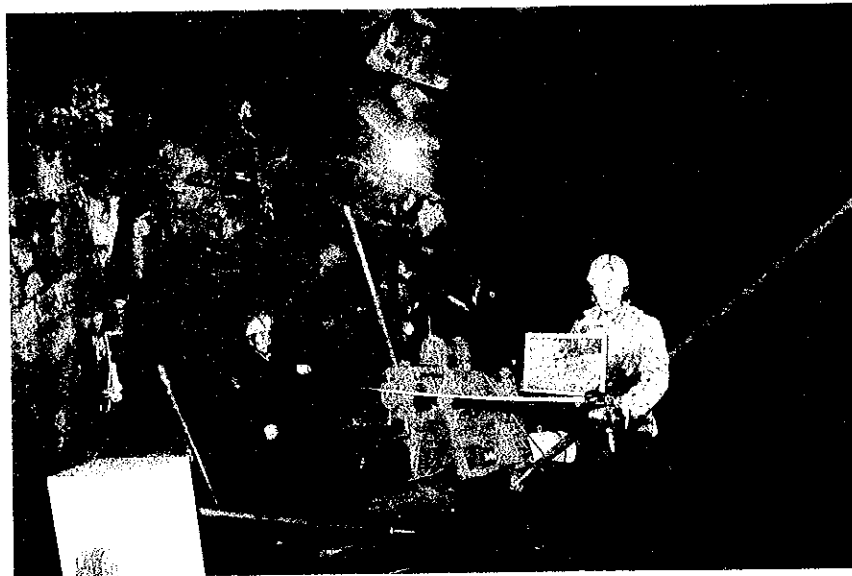
Rod measuring (MJMT-11)



Rod measuring (MJMT-12)



Rod measuring (MJMT-13)



Rod measuring (MJMT-14)



Trench excavation by LHD



Trench excavation by Back Hoe



Trench excavation by Manpower



Sampling in No.4 Vein





Sampling work



Underground surveying



Mineralized zone in Cross cut (at about 21.5m point)



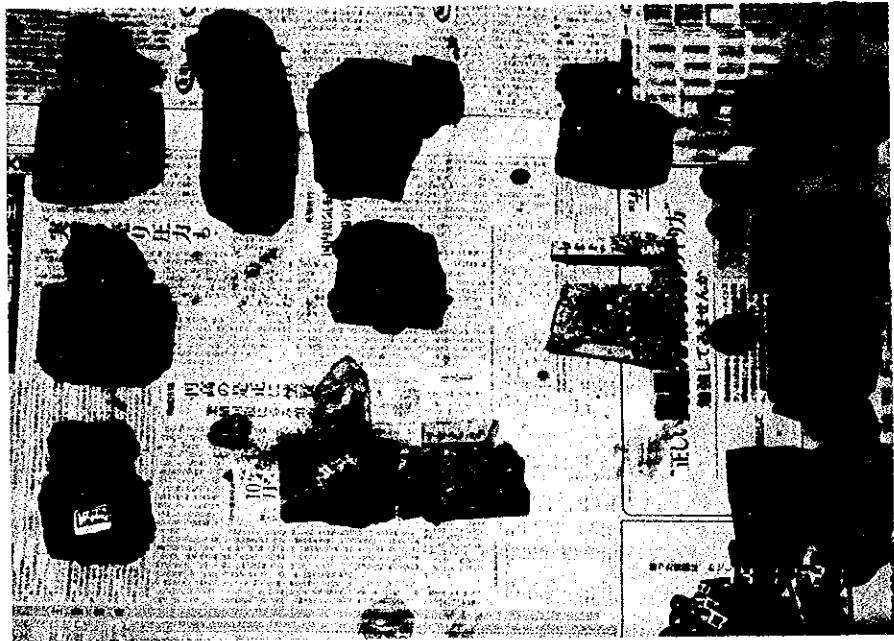
Mineralized zone in Cross cut (at about 23.0m point)



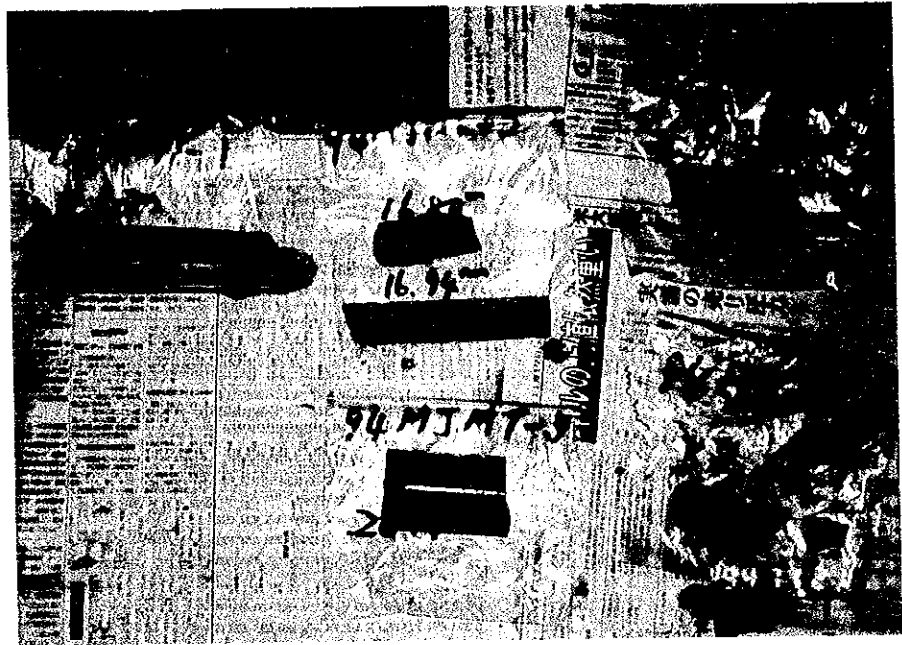
Mineralized zone in No.4 Waste pit



Cutting samples



Samples



Samples of diamond drilling

LINEAME

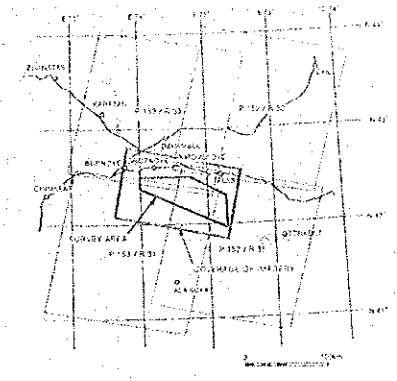


|  |            |
|--|------------|
|  | Fault (bs) |
|  | Inferred   |
|  | Thrust Fa  |
|  | Major Lin  |
|  | Minor Lin  |
|  | Circular   |
|  | Anticline  |
|  | Drainage   |
|  | Lake, Pon  |
|  | Urban Are  |
|  | Major Ros  |
|  | Rail Way   |

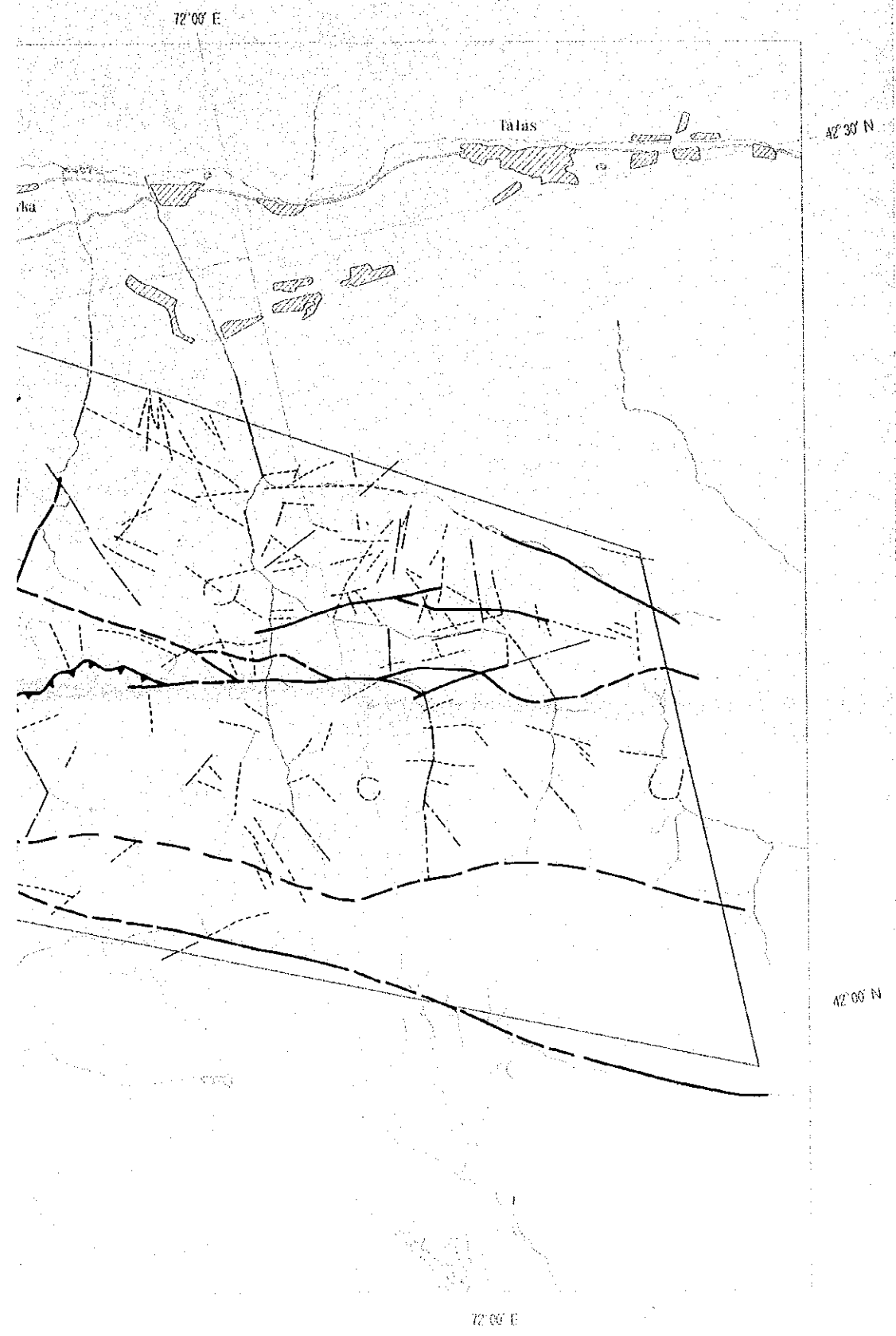
Scale 1:50,000

THE MINERAL EXPLORATION  
IN THE TALAS AREA,  
THE KYRGYZ REPUBLIC  
(PHASE I)

LINEAMENT MAP OF LANDSAT TM IMAGE

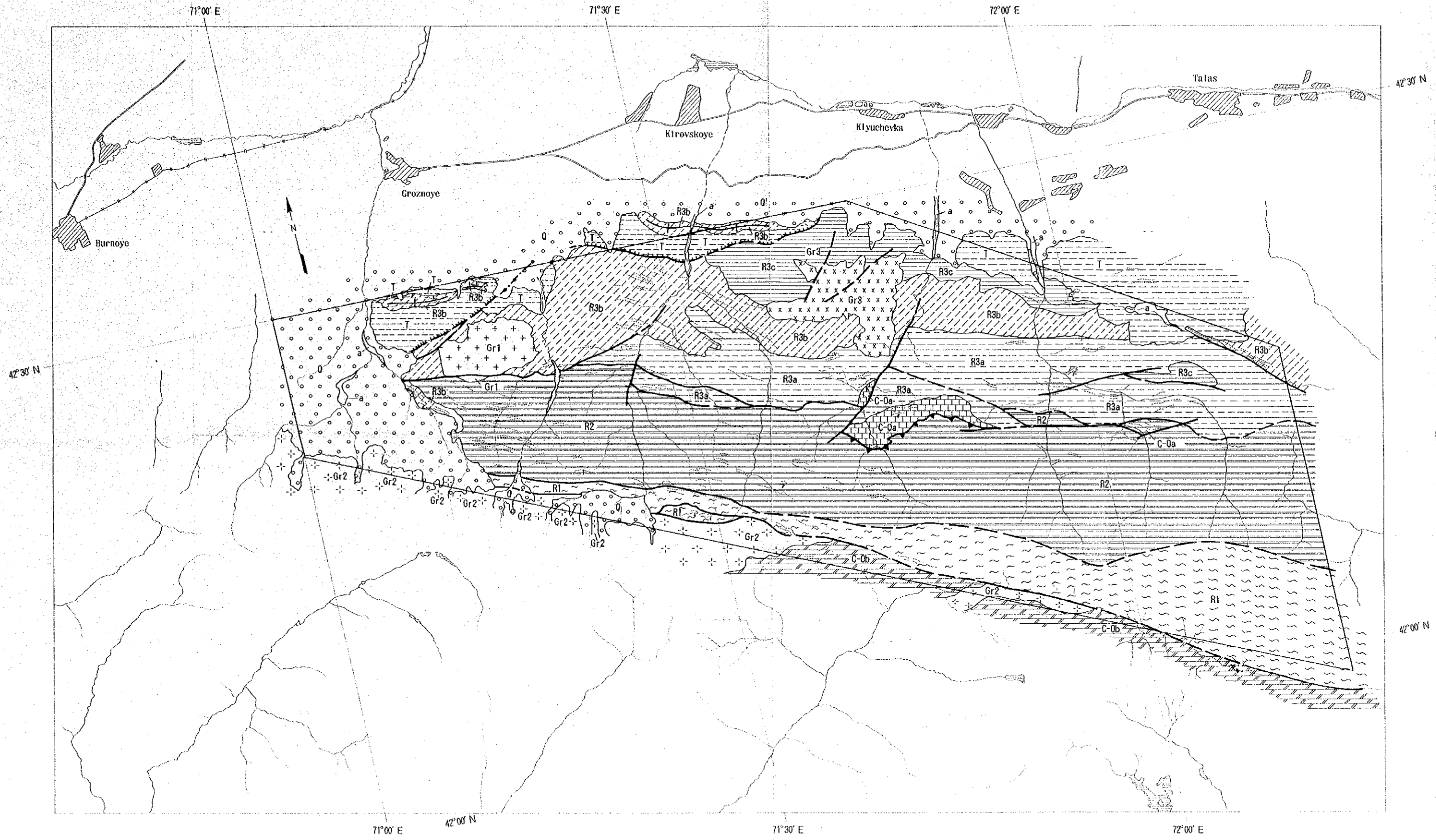


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FEBRUARY, 1995



LEGEND

|  |   |
|--|---|
|  | Fault (barbs on downfall side)          |
|  | Inferred Fault (barbs on downfall side) |
|  | Thrust Fault                            |
|  | Major Lineament                         |
|  | Minor Lineament                         |
|  | Circular Structure                      |
|  | Anticline                               |
|  | Drainage                                |
|  | Lake, Pond                              |
|  | Urban Area                              |
|  | Major Road                              |
|  | Rail Way                                |



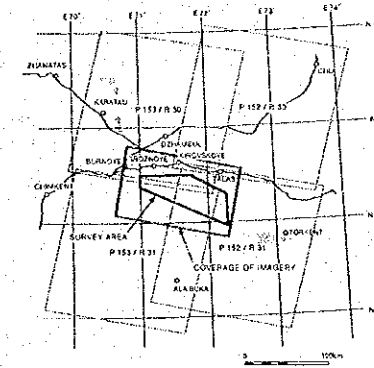
| Symbol             | Unit |
|--------------------|------|
| (unshaded)         | a    |
| (dots)             | Q    |
| (dashed)           | T    |
| (brick pattern)    | C-Oa |
| (diagonal lines)   | C-Ob |
| (horizontal lines) | R3c  |
| (diagonal lines)   | R3b  |
| (horizontal lines) | R3a  |
| (horizontal lines) | R2   |
| (wavy)             | R1   |
| (x-hatched)        | Gr3  |
| (cross-hatched)    | Gr2  |
| (stippled)         | Gr1  |

|  |           |
|--|-----------|
| (dashed line)                            | Bedding   |
| (solid line with ticks)                  | Fault     |
| (solid line with ticks on down-dip side) | Normal    |
| (solid line with ticks on up-dip side)   | Thrust    |
| (solid line with ticks on both sides)    | Anticline |
| (solid line with arrow)                  | Drainage  |
| (solid line with wavy interior)          | Lake, P   |
| (hatched)                                | Urban A   |
| (solid line)                             | Major R   |
| (dashed line with cross-ticks)           | Rail Wa   |

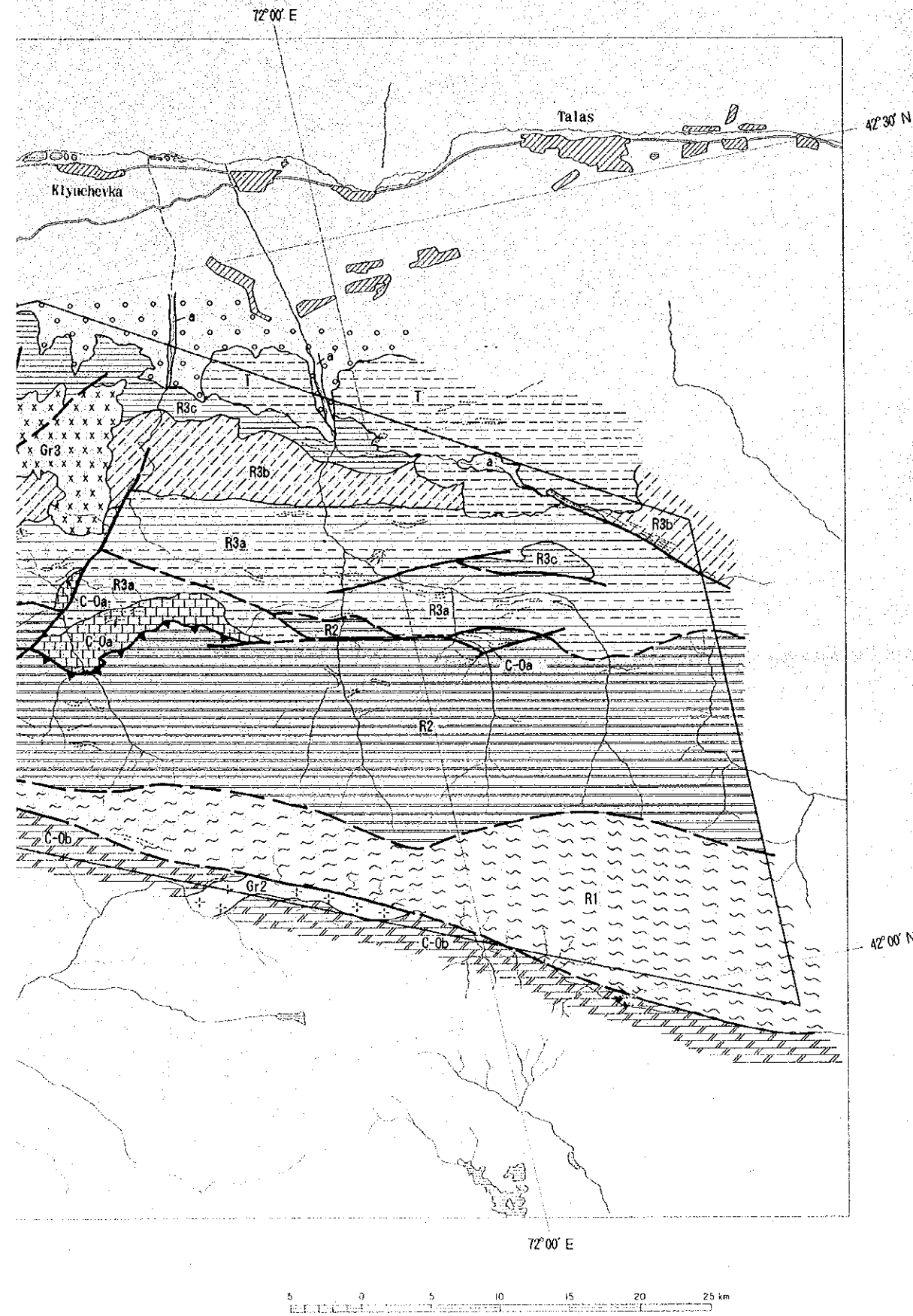


THE MINERAL EXPLORATION  
IN THE TALAS AREA,  
THE KYRGYZ REPUBLIC  
(PHASE I)

GEOLOGIC INTERPRETATION MAP OF  
LANDSAT TM FALSE COLOR IMAGE



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METAL MINING AGENCY OF JAPAN  
FEBRUARY, 1995



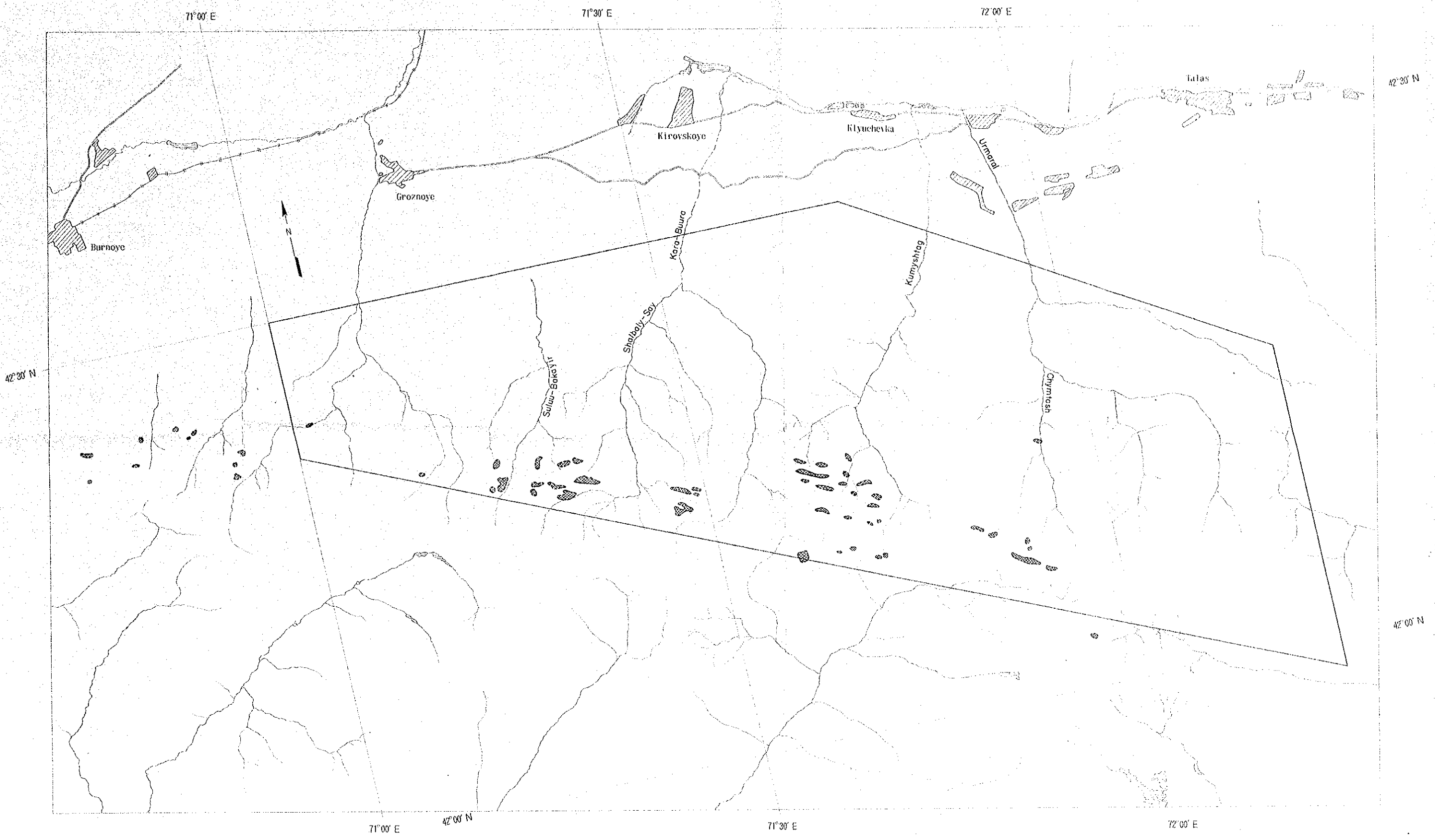
LEGEND

| Symbol | Unit | Correlation with Geologic Map | Probable Rock Types                   |
|--------|------|-------------------------------|---------------------------------------|
|        | a    | Q                             | gravel, loam                          |
|        | Q    |                               |                                       |
|        | T    | N1-2, P3-N1                   | clay, sandstone                       |
|        | C-0a | C-02fs                        | limestone                             |
|        | C-0b |                               |                                       |
|        | R3c  | R3sr                          | shale, siltstone, sandstone           |
|        | R3b  |                               |                                       |
|        | R3a  | R3sr, R3ct                    | shale, siltstone, sandstone           |
|        | R2   | R3cl, R1-2kb                  | sandstone, shale, phyllite, limestone |
|        | R1   | R1-2kb                        | phyllite, limestone                   |
|        | Gr3  | ySd                           | granitic rock                         |
|        | Gr2  |                               | granitic rock ?                       |
|        | Gr1  | yOv?                          | granitic rock                         |

|  |  |
|--|--|
|  | Bedding Trace or Schistosity (arrows show dip direction) |
|  | Fault (barbs on downfall side)                           |
|  | Inferred Fault (barbs on downfall side)                  |
|  | Thrust Fault   |
|  | Anticline  |
|  | Drainage   |
|  | Lake, Pond   |
|  | Urban Area   |
|  | Major Road   |
|  | Rail Way   |



THE  
I  
DISTRIBUTION

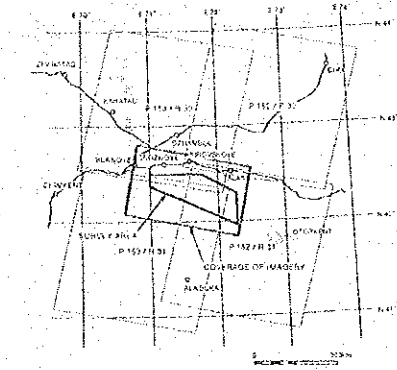


|  |               |
|--|---------------|
|  | Spectral Area |
|  | Drainage      |
|  | Lake, Pond    |
|  | Urban Area    |
|  | Major Road    |
|  | Rail Way      |

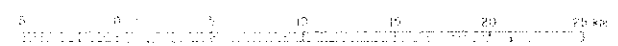
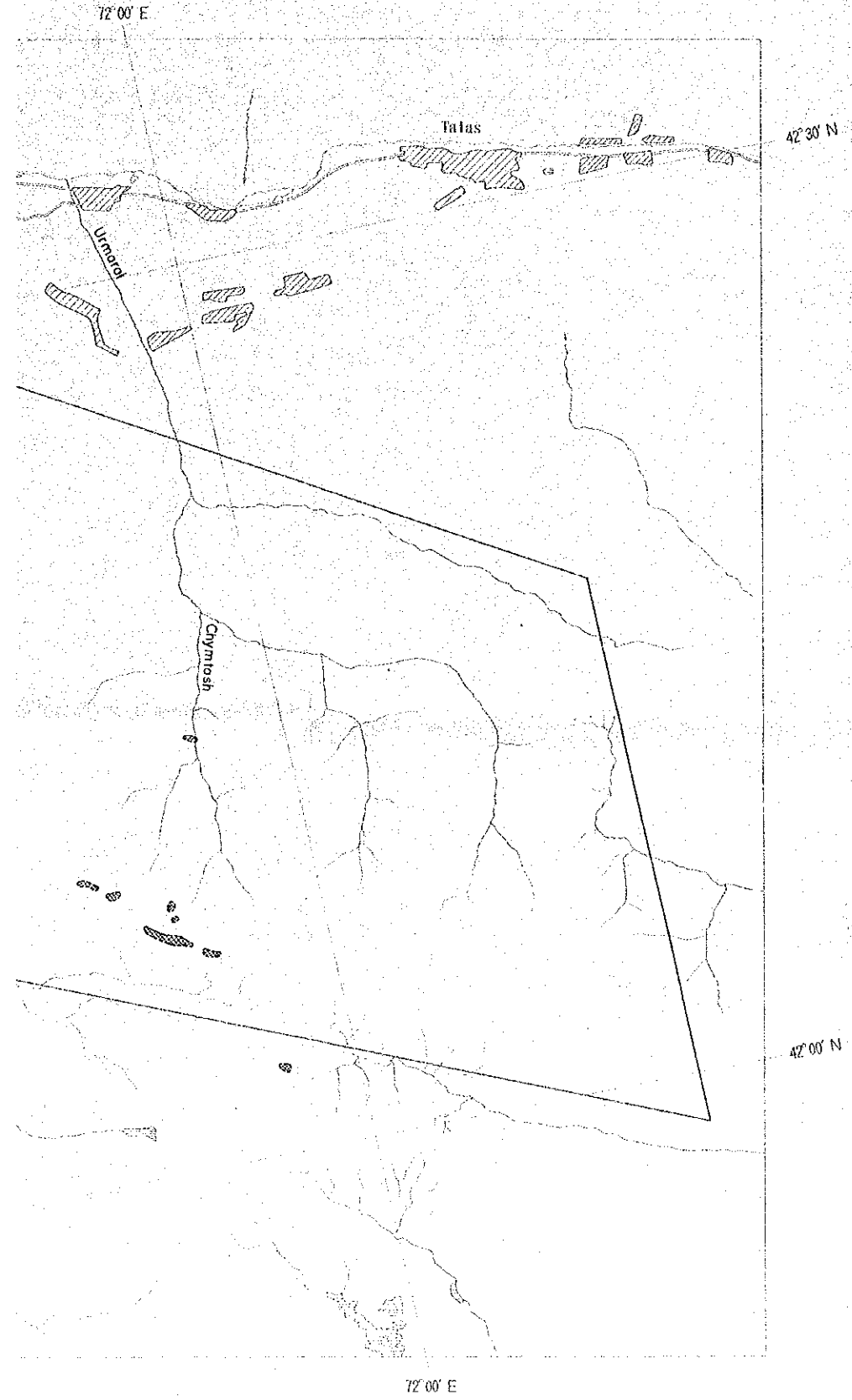
Scale: 1:50,000

THE MINERAL EXPLORATION  
IN THE TALAS AREA,  
THE KYRGYZ REPUBLIC  
(PHASE I)

DISTRIBUTION OF SPECTRAL ANOMALIES  
ON LANDSAT TM IMAGE

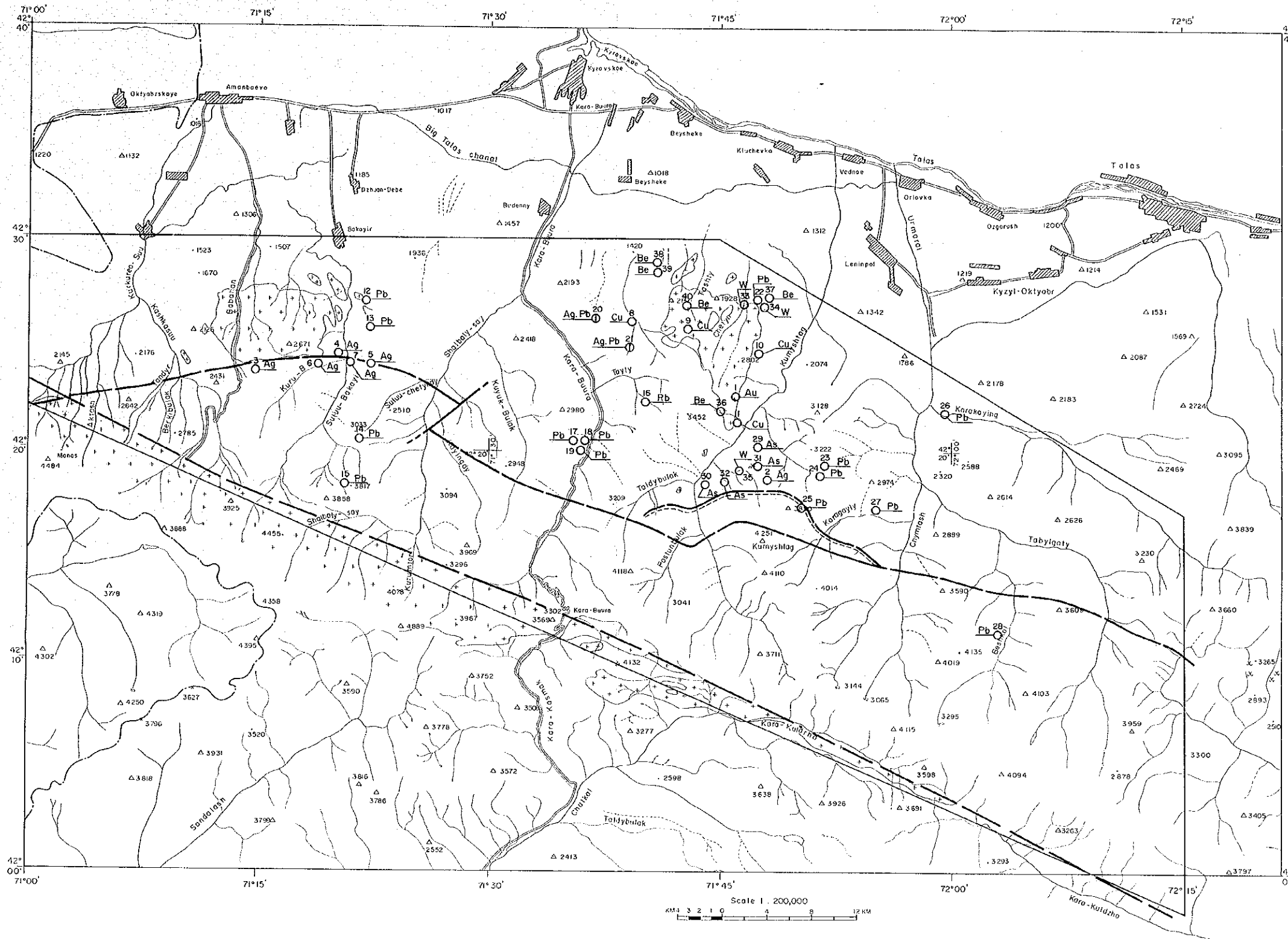


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LEGEND

| Spectral Anomalies on Band3/Band1 Ratio and DPCA Image |  |
|--|--|
|  | Spectral Anomalies on Band3/Band1 Ratio and DPCA Image |
|  | Drainage   |
|  | Lake, Pond   |
|  | Urban Area   |
|  | Major Road   |
|  | Rail Way   |



PL.-4

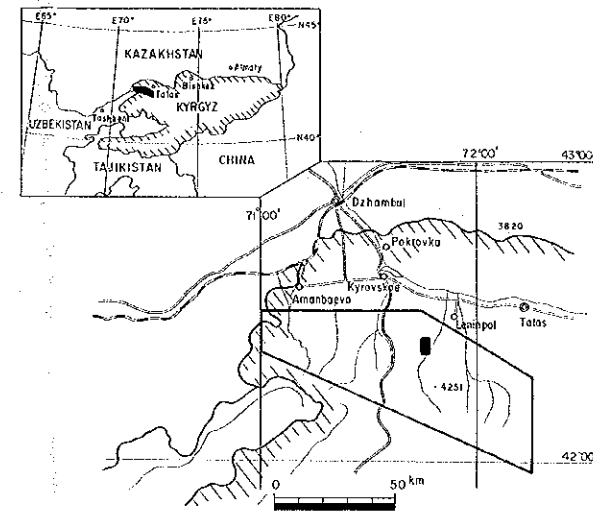
THE MINERAL EXPLORATION  
IN  
THE TALAS AREA, THE KYRGYZ REPUBLIC  
( PHASE I )  
**Distribution of Ore Deposit and Mineral Occurrences**

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FEBRUARY 1995  
Prepared by MINDECO

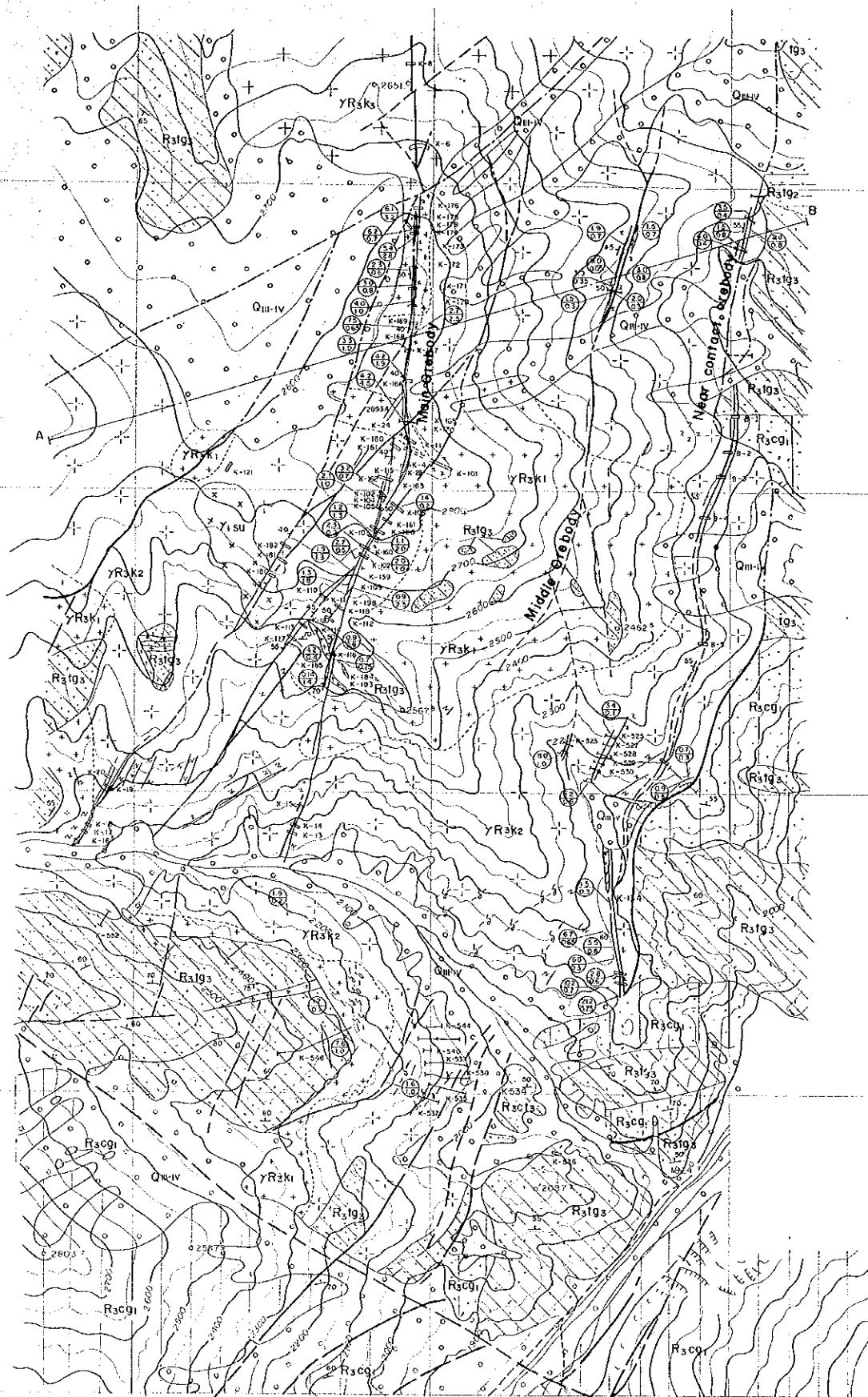
LEGEND

- Site of deposit, number and kind of element
- Granitic batholith
- Fault

THE MINERAL EXPLORATION  
IN  
THE TALAS AREA, THE KYRGYZ REPUBLIC  
( PHASE I )  
**Geological Map of Shyrdaldzhyn Deposit**



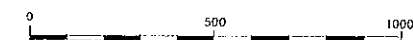
JAPAN INTERNATIONAL COOPERATION AGENCY  
METAL MINING AGENCY OF JAPAN  
FEBRUARY 1995  
Prepared by MINDECO



A

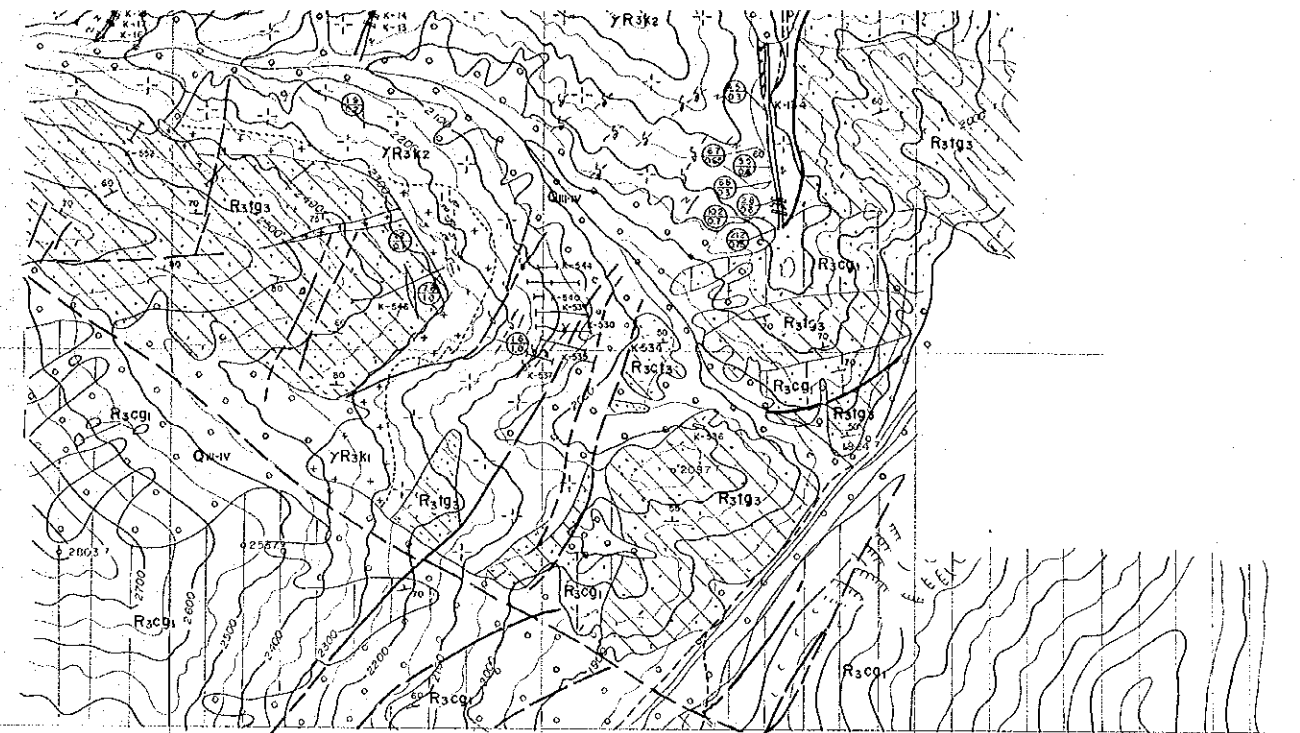
Section A - B




















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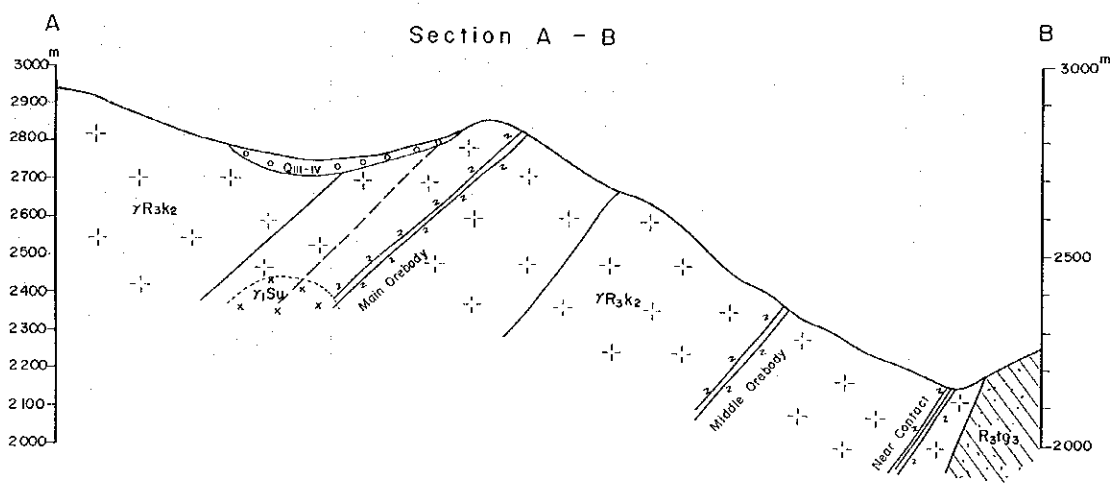


LEGEND

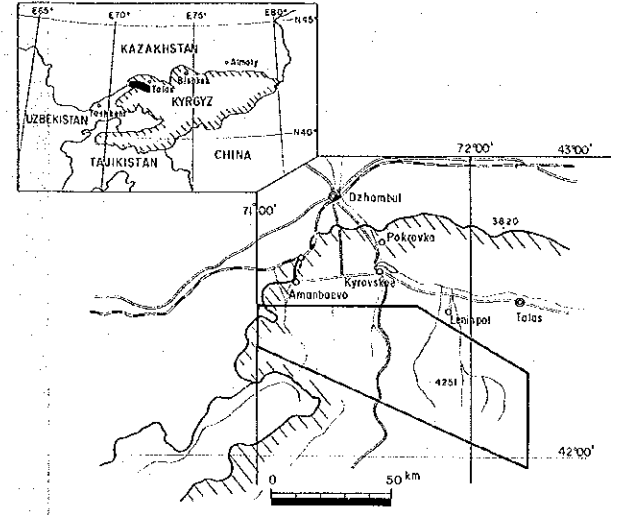
- Upper Quaternary - recent sediments : undivided diluvial-proluvial, loams, detritus
- Chydygoloyskaya formation ; Lower Chydygoloysa sub-formation : limestone, thin layers of conglomerate, sandstone, calciferous siltstone
- Layer 3. Alternation of greyish-green conglomerate, variable grained sandstone
- Layer 2. Medium-grained sandstone, thin layers of conglomerate
- Fine-grained grey, pinkish-grey granite
- Leucocratic fine-grained grey, pinkish-grey granite
- Leucocratic medium-grained grey, pinkish grey, pinkish-red granite
- Coarse-grained lilac-coloured porphyritic granite
- Dykes of aplittic granite
- Dykes of quartz diorite porphyry
- Quartz-hornblende-pyroxene hornfels, hornblende-pyroxene hornfels
- a) Greisenization zone    b) Hydrothermal altered zone
- Quartzmanganosiderite veins, quartz veins  
a) already known    b) presumed
- gold grade (g/t)  
width (m)
- Trenches
- Strikes and dips (bedding, faults)



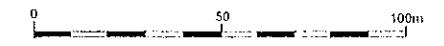
-  sub-formation : limestone, thin layers of conglomerate, sandstone, calciferous siltstone
-  Layer 3. Alternation of greyish-green conglomerate, variable grained sandstone
-  Layer 2. Medium-grained sandstone, thin layers of conglomerate
-  Fine-grained grey, pinkish-grey granite
-  Leucocratic fine-grained grey, pinkish-grey granite
-  Leucocratic medium-grained grey, pinkish grey, pinkish-red granite
-  Coarse-grained lilac-coloured porphyritic granite
-  Dykes of apilitic granite
-  Dykes of quartz diorite porphyry
-  Quartz-hornblende-pyroxene hornfels, hornblende-pyroxene hornfels
-  a) Greisenization zone
-  b) Hydrothermal altered zone
-  Quartzmanganosiderite veins, quartz veins
-  a) already known
-  b) presumed
-  gold grade (g/t)  
width (m)
-  Trenches
-  Strikes and dips (bedding, faults)
-  Fault a) actual b) inferred c) concealed



THE MINERAL EXPLORATION  
IN  
THE TALAS AREA, THE KYRGYZ REPUBLIC  
( PHASE I )  
Assay Map of Main Orebody in Shyraldzhyn Deposit

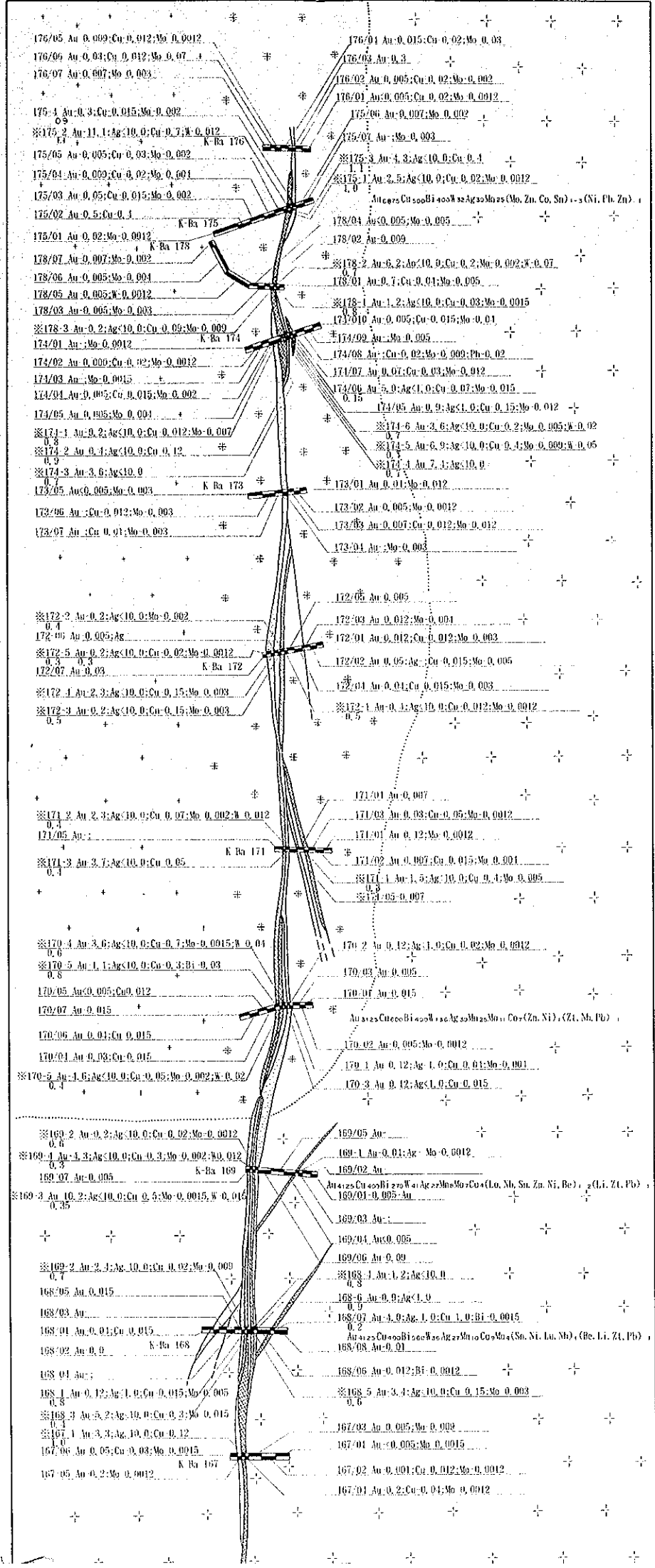


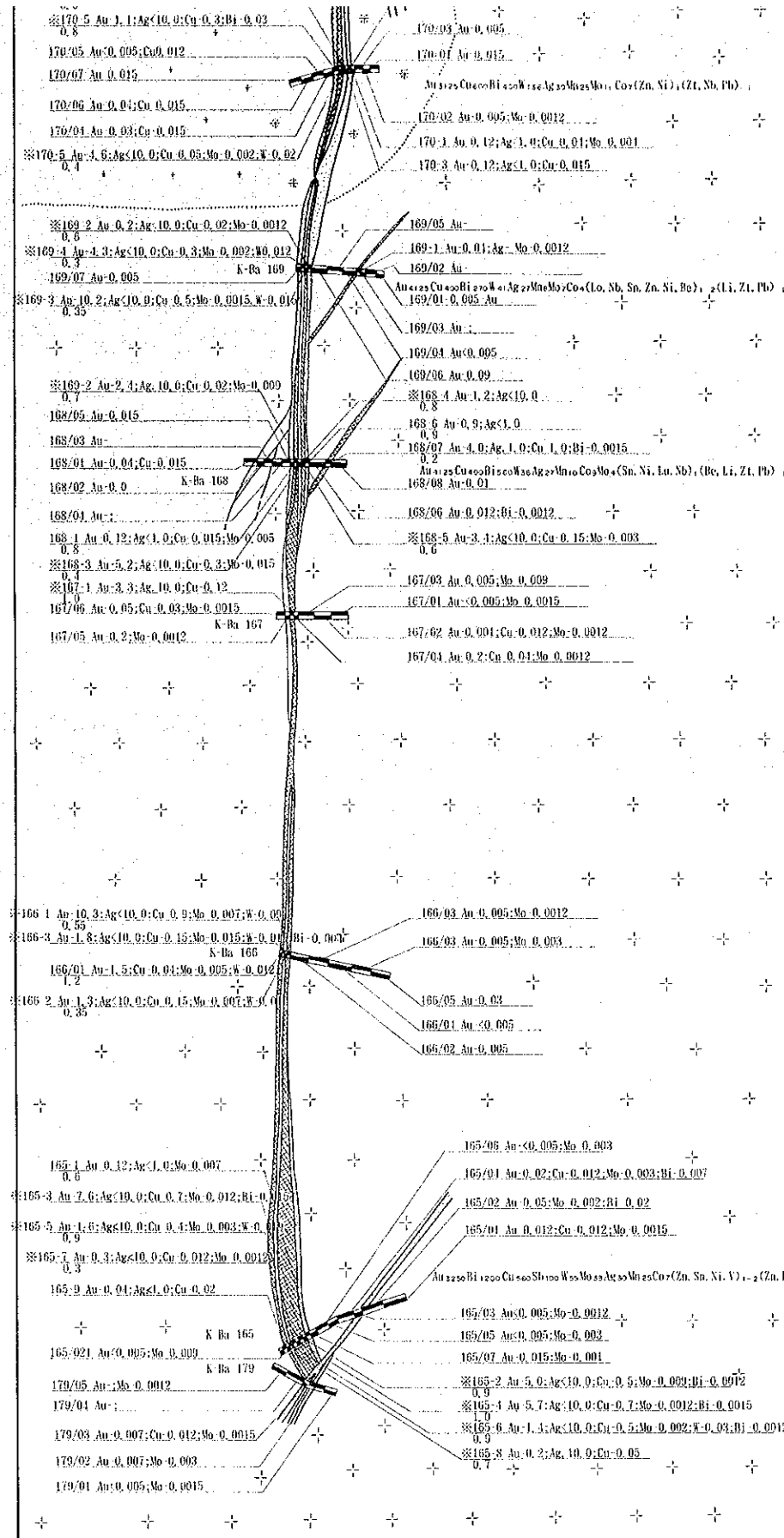
JAPAN INTERNATIONAL COOPERATION AGENCY  
METAL MINING AGENCY OF JAPAN  
FEBRUARY 1995  
Prepared by MINDECO



LEGEND

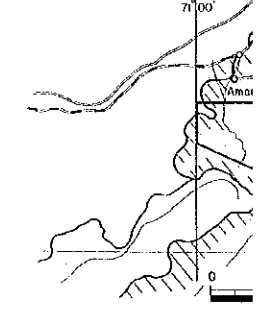
- Fine grained grey to pinkish grey leucocratic granite
- Middle grained grey to pinkish red leucocratic granite
- Greisenization
- Veins : a) quartz - manganosiderite    b) quartz
- Crushing zones
- Trench and trench No.
- Sample No. Au(g/t), Cu(%), Mo(%), W(%)  
width (m) (spectral analysis)
- Sample No. Au(g/t), Ag(g/t)  
width (m) (fire assay)
- Geochemical characteristic of ore body after trench survey
- Actual faults
- Channel samples
- Linear spot samples





- Veins : a) quartz - manganosiderite    b) quartz
- Crushing zones
- Trench and trench No.
- Sample No. Au(g/t), Cu(%), Mo(%), W(%)  
width (m) (spectral analysis)
- Sample No. Au(g/t), Ag(g/t)  
width (m) (fire assay)
- Geochemical characteristic of  
ore body after trench survey
- Actual faults
- Channel samples
- Linear spot samples

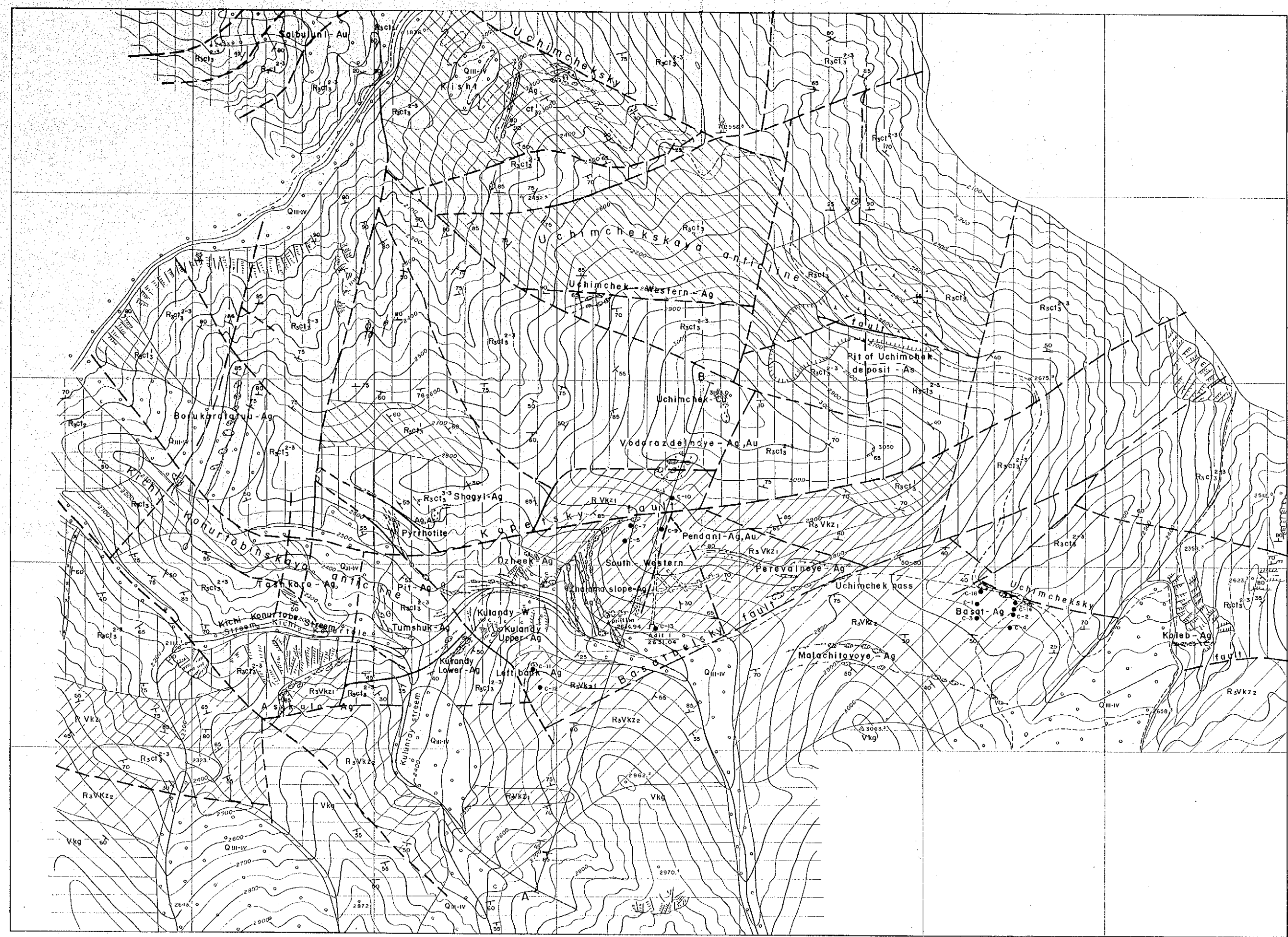
THE MINER  
THE TALAS AREA,  
(PF)  
Geological Map



JAPAN INTERNATIONAL  
METAL MINING  
FEBR  
Prepared

LEGEND

- Upper Quaternary reccer (dituvial, proluvial, alluv)
- Kurganskaya formation limestone, conglomerate
- Upper Kyzylbayskaya su sandstone, lenses of li
- Lower Kyzylbayskaya su siltstone, greenish siltst
- Upper Chatkaragaiskaya Alternation of hornfels, :
- Upper Chatkaragaiskaya hornfels, siltstone with t
- Middle Chatkaragaiskaya limestone with layers of
- z) limestone b) :
- a) shale b) sa
- granule conglomerate
- Quartz-porphry dy
- Manganosiderite vc
- Skarn zone
- Faults
- Strike and dip a) r

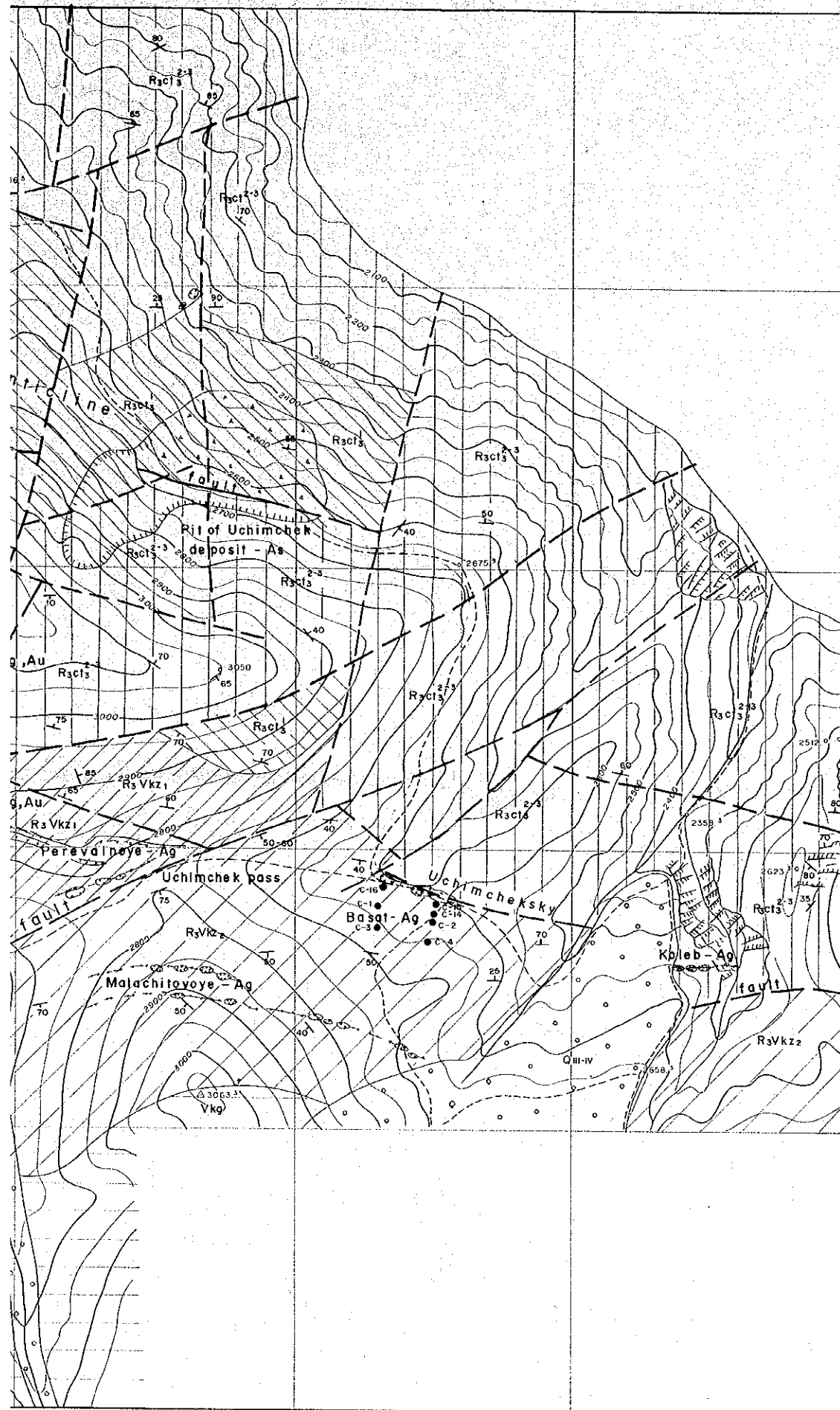


A  
3200m

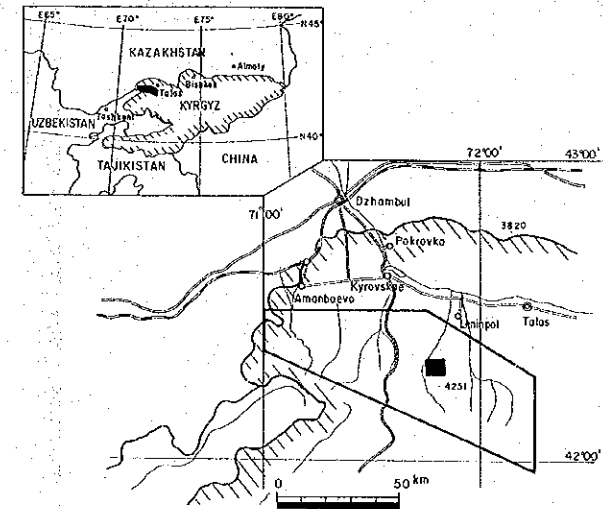
Section A - B

B  
3200m

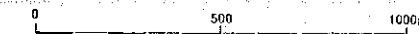



















THE MINERAL EXPLORATION  
IN  
THE TALAS AREA, THE KYRGYZ REPUBLIC  
( PHASE I )  
**Geological Map of Kumyshtag Area**

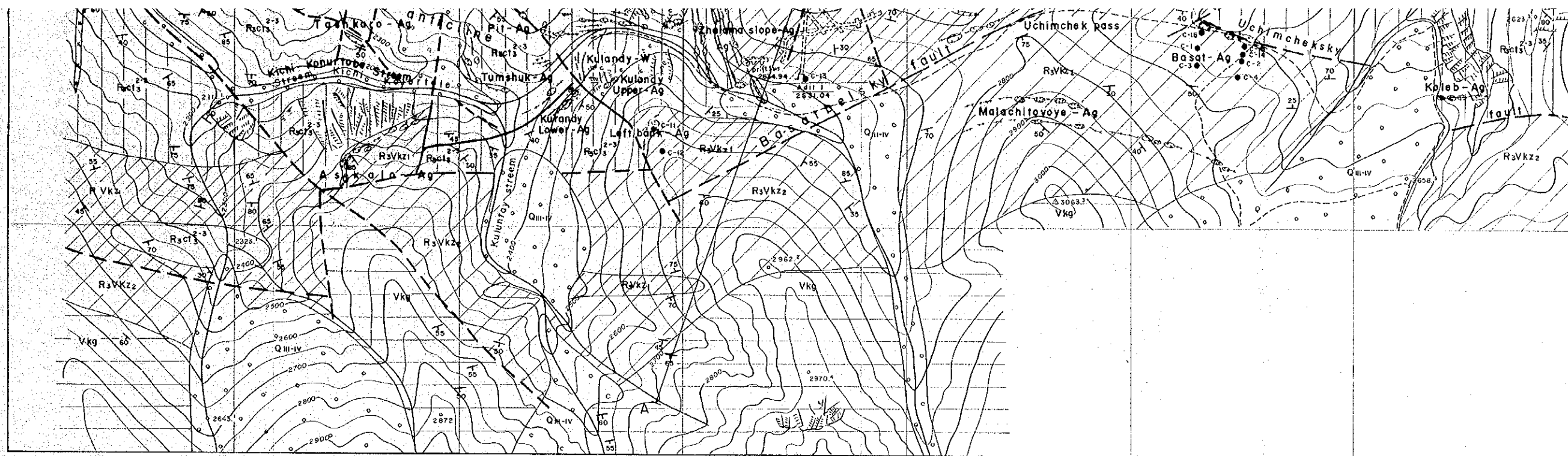


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FEBRUARY 1995  
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


















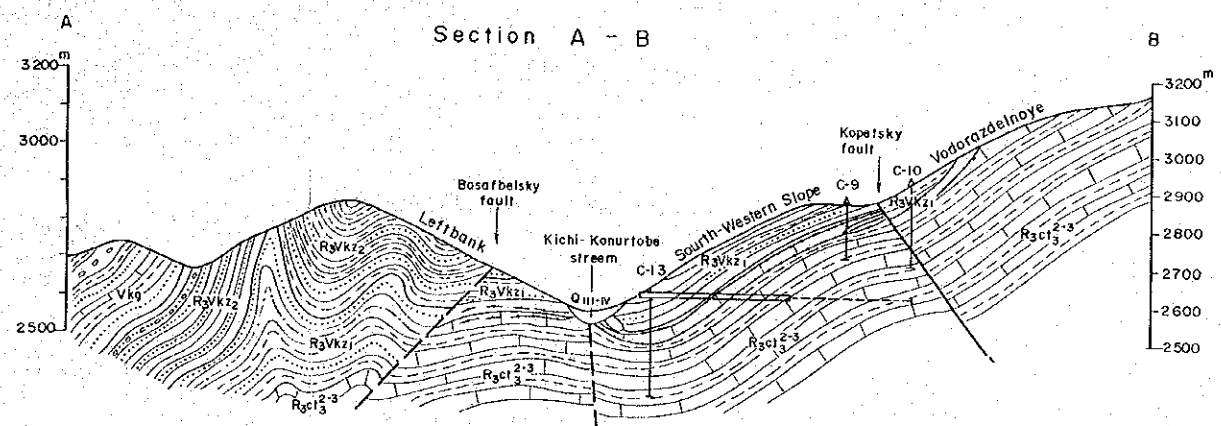
LEGEND

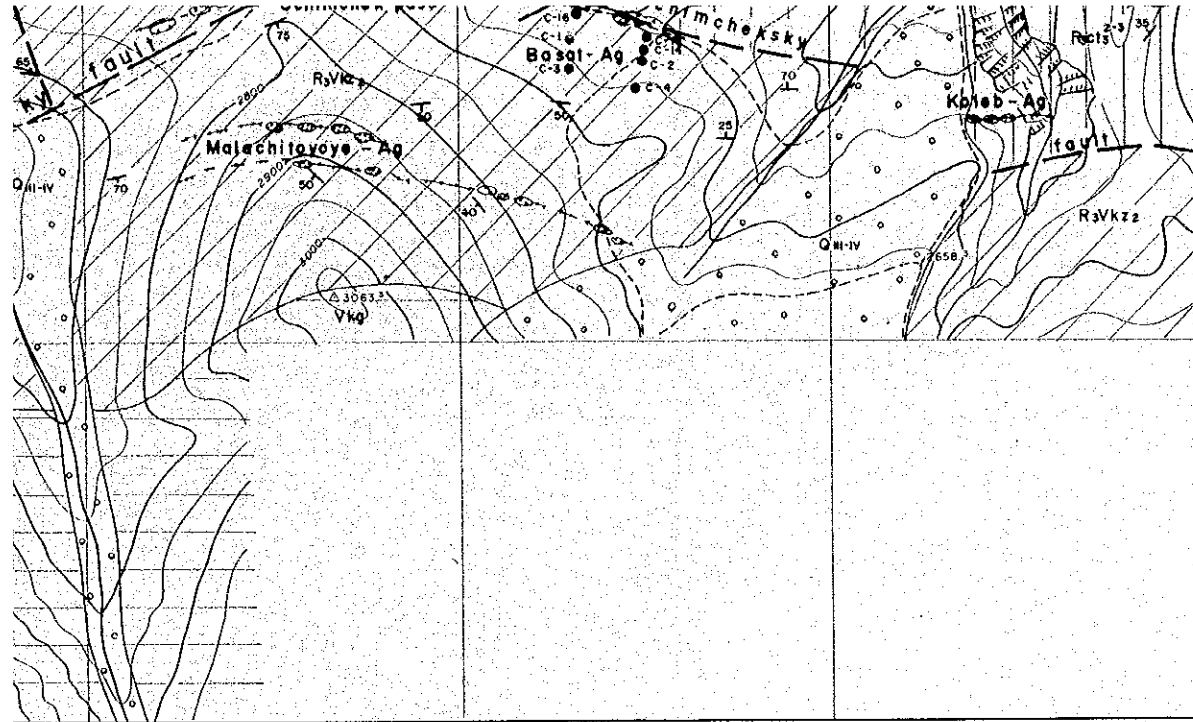
-  Upper Quaternary recent sediments (diluvial, proluvial, alluvial, glacial)
-  Kurganskaya formation : sandstone, shale, jasper lydite, limestone, conglomerate, tuff, tuffaceous sandstone, chert
-  Upper Kyzylbelskaya sub-formation : shale (mostly dark-red sandstone), lenses of limestone
-  Lower Kyzylbelskaya sub-formation : sandstone dark-grey siltstone, greenish siltstone, greyish-green and wine red shale
-  Upper Chatkaragaiskaya sub-formation : upper and middle layers ; Alternation of hornfels, siltstone, limestone
-  Upper Chatkaragaiskaya sub-formation : lower layer ; hornfels, siltstone with thin layers of sandstone, conglomerate
-  Middle Chatkaragaiskaya sub-formation : medium-grained limestone with layers of carbonate shale
-  a) limestone    b) siltstone
-  a) shale    b) sandstone
-  granule conglomerate
-  Quartz-porphry dykes
-  Manganosiderite veins
-  Skarn zone
-  Faults
-  Strike and dip a) rock beds





















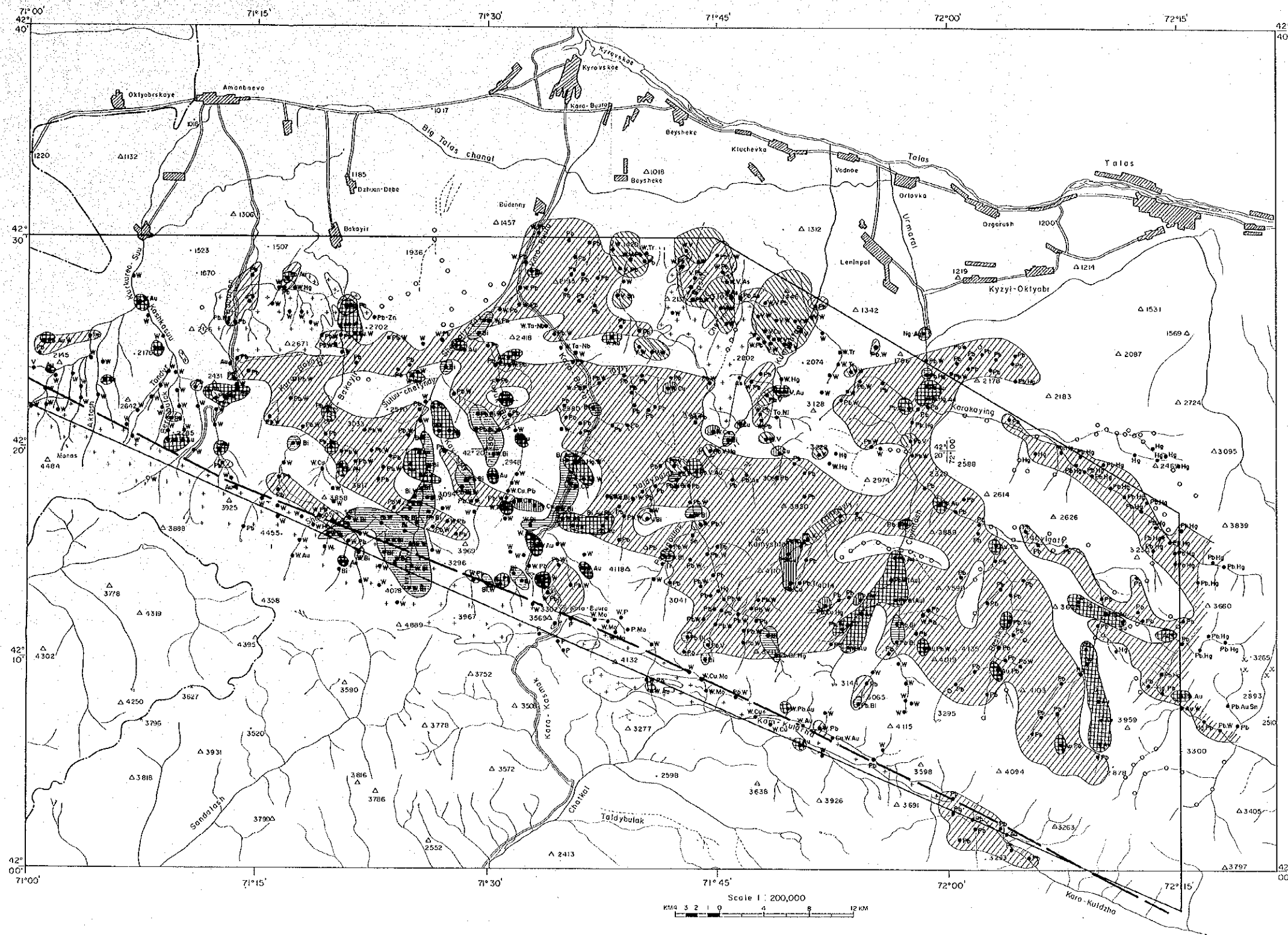
LEGI

-  Upper Quaternary recent (diluvial, proluvial, alluvial)
-  Kurganskaya formation limestone, conglomerate
-  Upper Kyzylbelskaya sandstone, lenses of siltstone
-  Lower Kyzylbelskaya siltstone, greenish siltstone
-  Upper Chatkaragaiskaya alternation of hornfels
-  Upper Chatkaragaiskaya hornfels, siltstone with limestone
-  Middle Chatkaragaiskaya limestone with layers of shale
-  a) limestone b) shale
-  a) shale b) sandstone
-  granule conglomerate
-  Quartz-porphry dyke
-  Manganosiderite vein
-  Skarn zone
-  Faults
-  Strike and dip a) underground horizon
-  Drill holes
-  a) Ancient mines



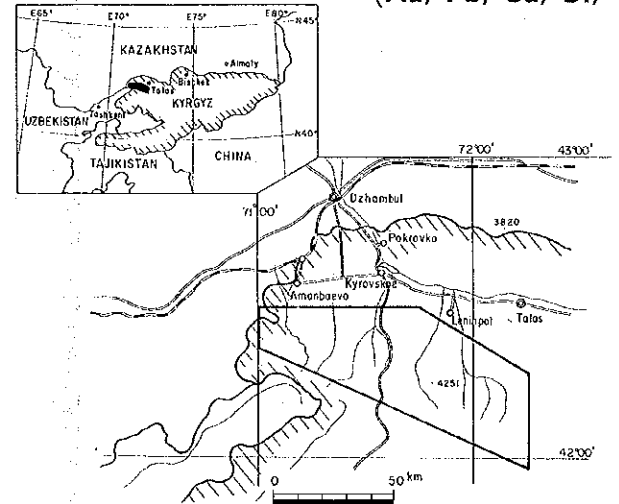


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-  Upper Chatkaragaiskaya sub-formation : lower layer : hornfels, siltstone with thin layers of sandstone, conglomerate
-  Middle Chatkaragaiskaya sub-formation : medium-grained limestone with layers of carbonate shale
-  a) limestone    b) siltstone
-  a) shale    b) sandstone
-  granule conglomerate
-  Quartz-porphry dykes
-  Manganosiderite veins
-  Skarn zone
-  Faults
-  Strike and dip a) rock beds
-  Underground horizontal workings
-  Drill holes
-  a) Ancient mines    b) Ancient rock dumps



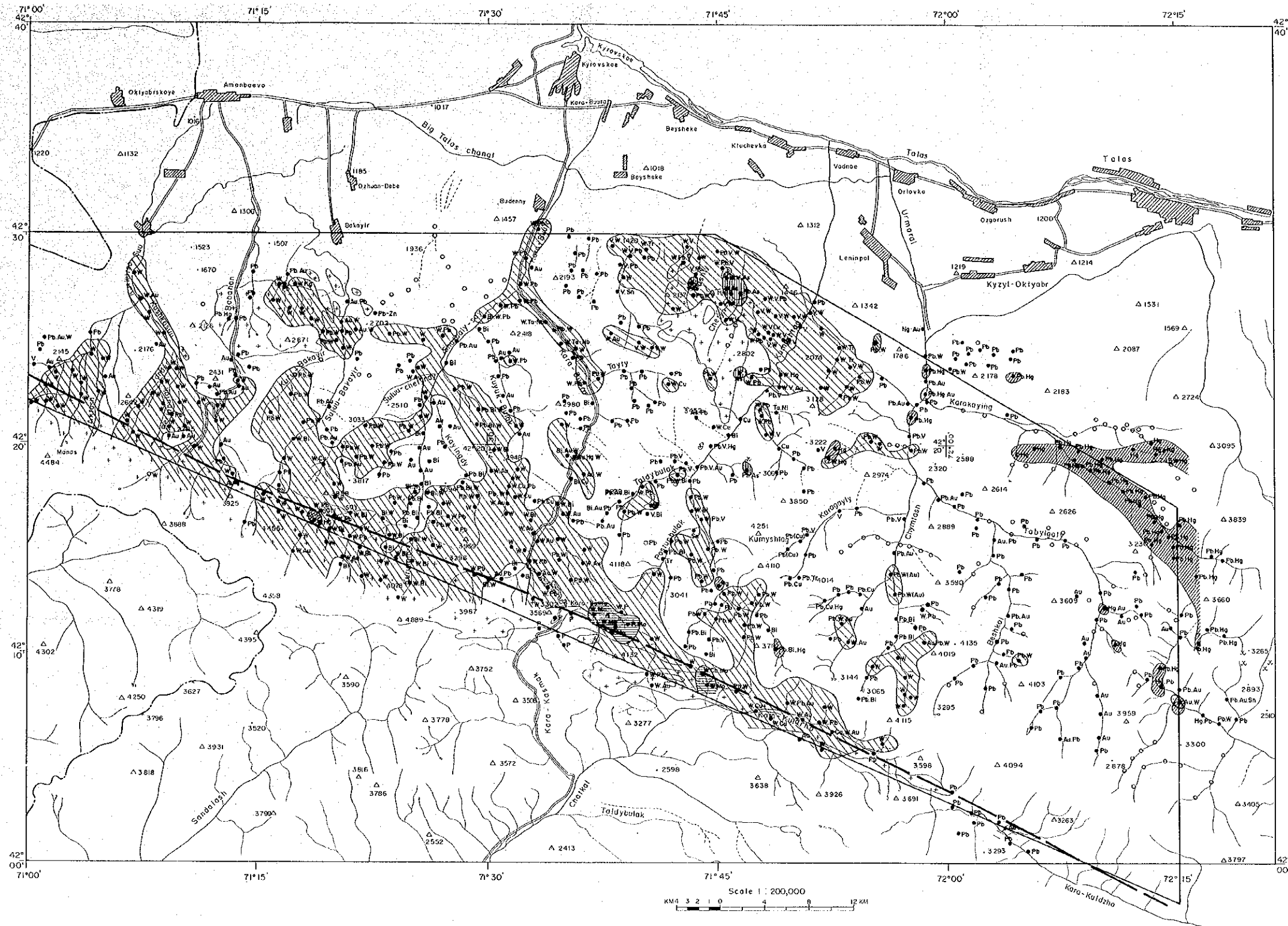
PL-8(1)

THE MINERAL EXPLORATION  
IN  
THE TALAS AREA, THE KYRGYZ REPUBLIC  
( PHASE I )  
**Geochemical Anomaly Map of the Survey Area**  
( Au, Pb, Cu, Bi, V )



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METAL MINING AGENCY OF JAPAN  
FEBRUARY 1995  
Prepared by MINDECO

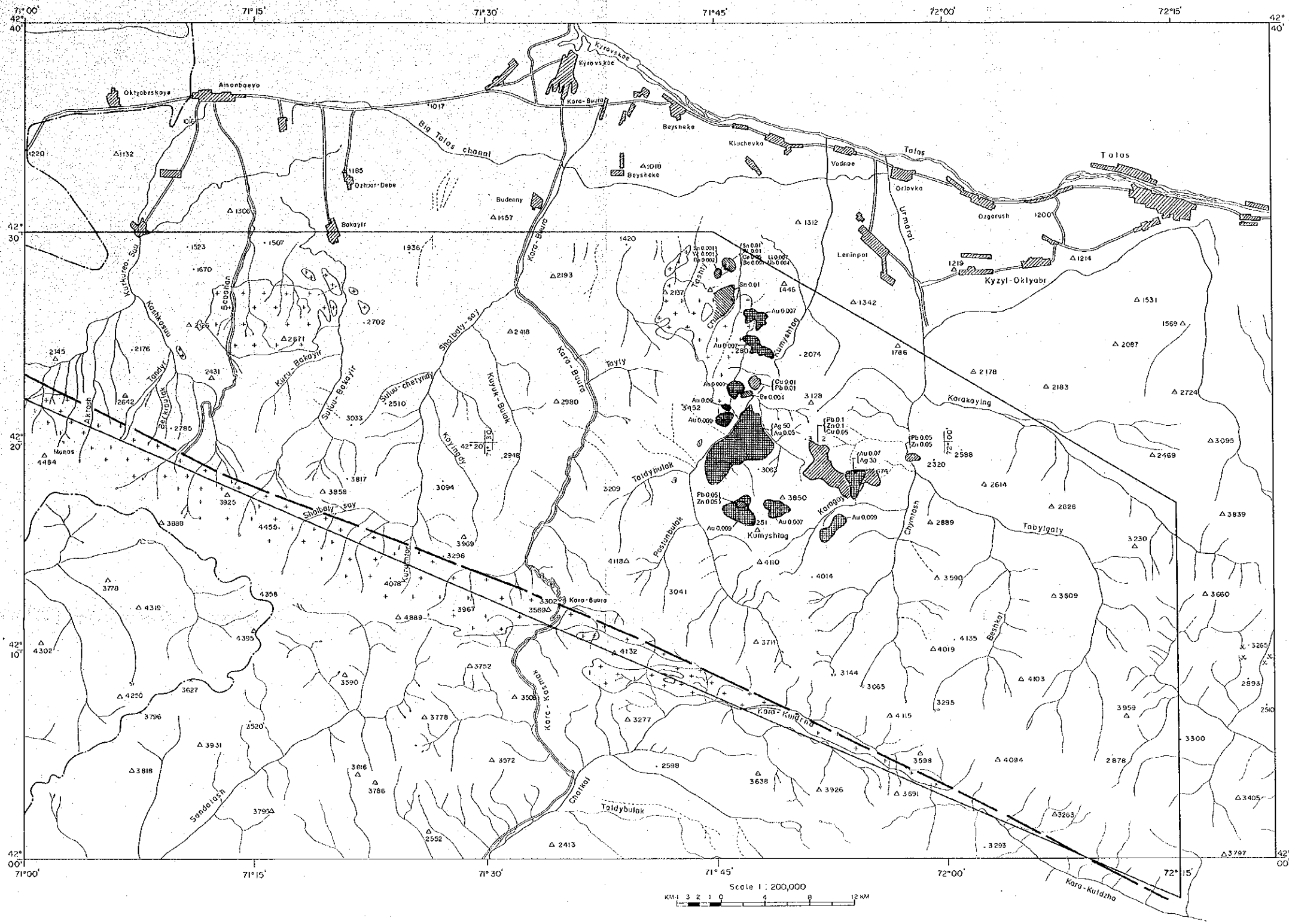
- LEGEND**
- Gold
  - Lead-Zinc
  - Copper
  - Vanadium
  - Bismuth
  - Panning points containing metal minerals
  - Panning points without metal minerals
  - Granitic batholith
  - Fault



THE MINERAL EXPLORATION  
IN  
THE TALAS AREA, THE KYRGYZ REPUBLIC  
( PHASE I )  
**Geochemical Anomaly Map of the Survey Area  
(As, Hg, W, Mo)**

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METAL MINING AGENCY OF JAPAN  
FEBRUARY 1995  
Prepared by MINDECO

- LEGEND**
- Arsenic
  - Mercury
  - Tungsten
  - Molybdenum
  - Panning points containing metal minerals
  - Panning points without metal minerals
  - Granitic batholith
  - Fault



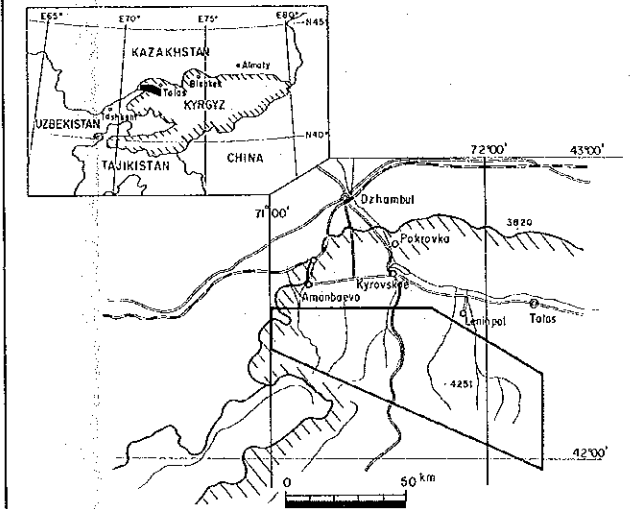
PL-9

THE MINERAL EXPLORATION  
IN  
THE TALAS AREA, THE KYRGYZ REPUBLIC  
( PHASE I )  
**Geochemical Anomaly Map of the Shyraldzhyyn  
and Kumyshtag Area**

JAPAN INTERNATIONAL COOPERATION AGENCY  
METAL MINING AGENCY OF JAPAN  
FEBRUARY 1995  
Prepared by MINDECO

- LEGEND**
- Au, Ag (g/t)
  - Pb, Zn, Cu (%)
  - Sn, W, Be, Nb, Ce, Li (%)
  - Granitic batholith
  - Fault

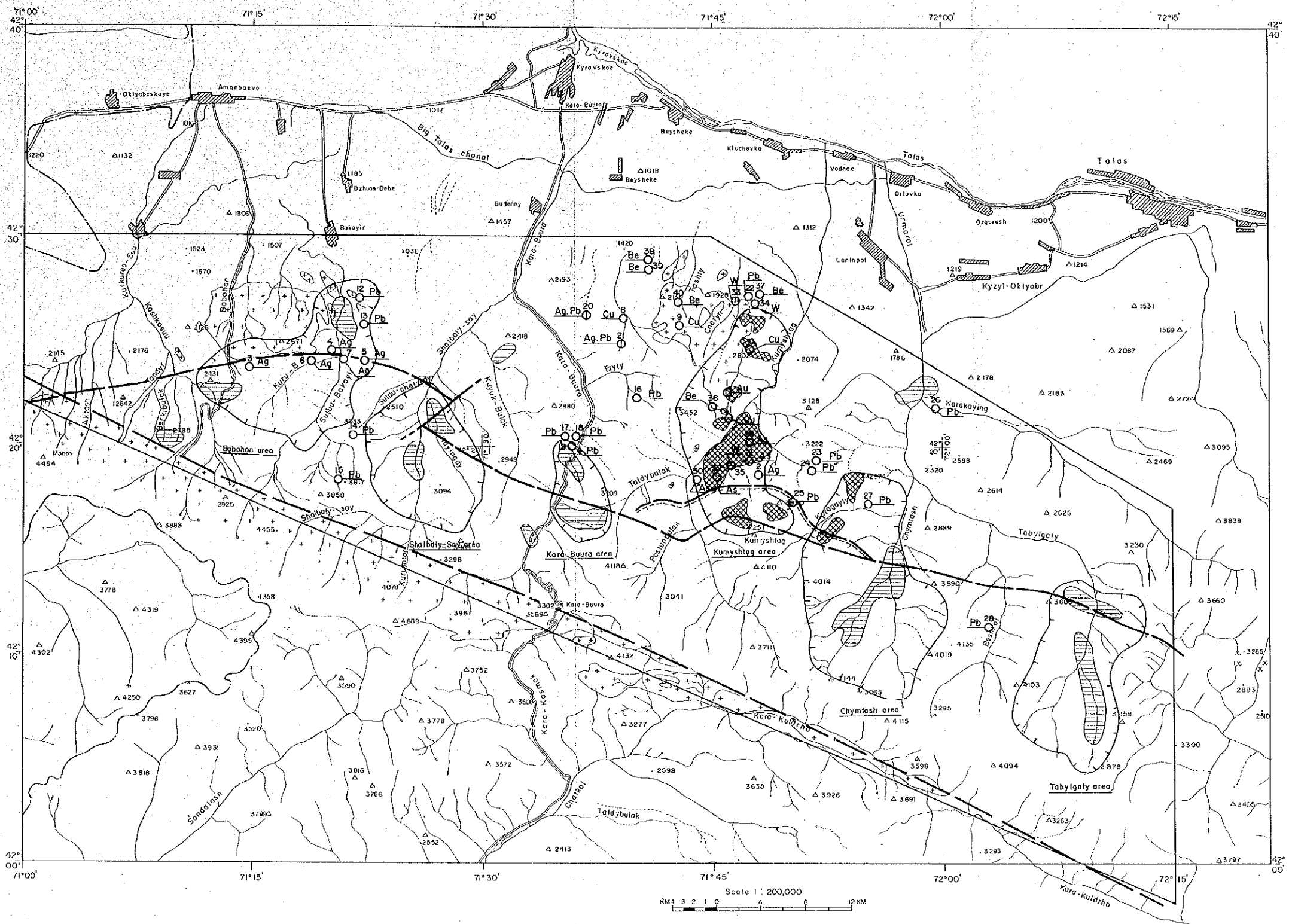
THE MINERAL EXPLORATION  
IN  
THE TALAS AREA, THE KYRGYZ REPUBLIC  
( PHASE I )  
Summary of the Compilation

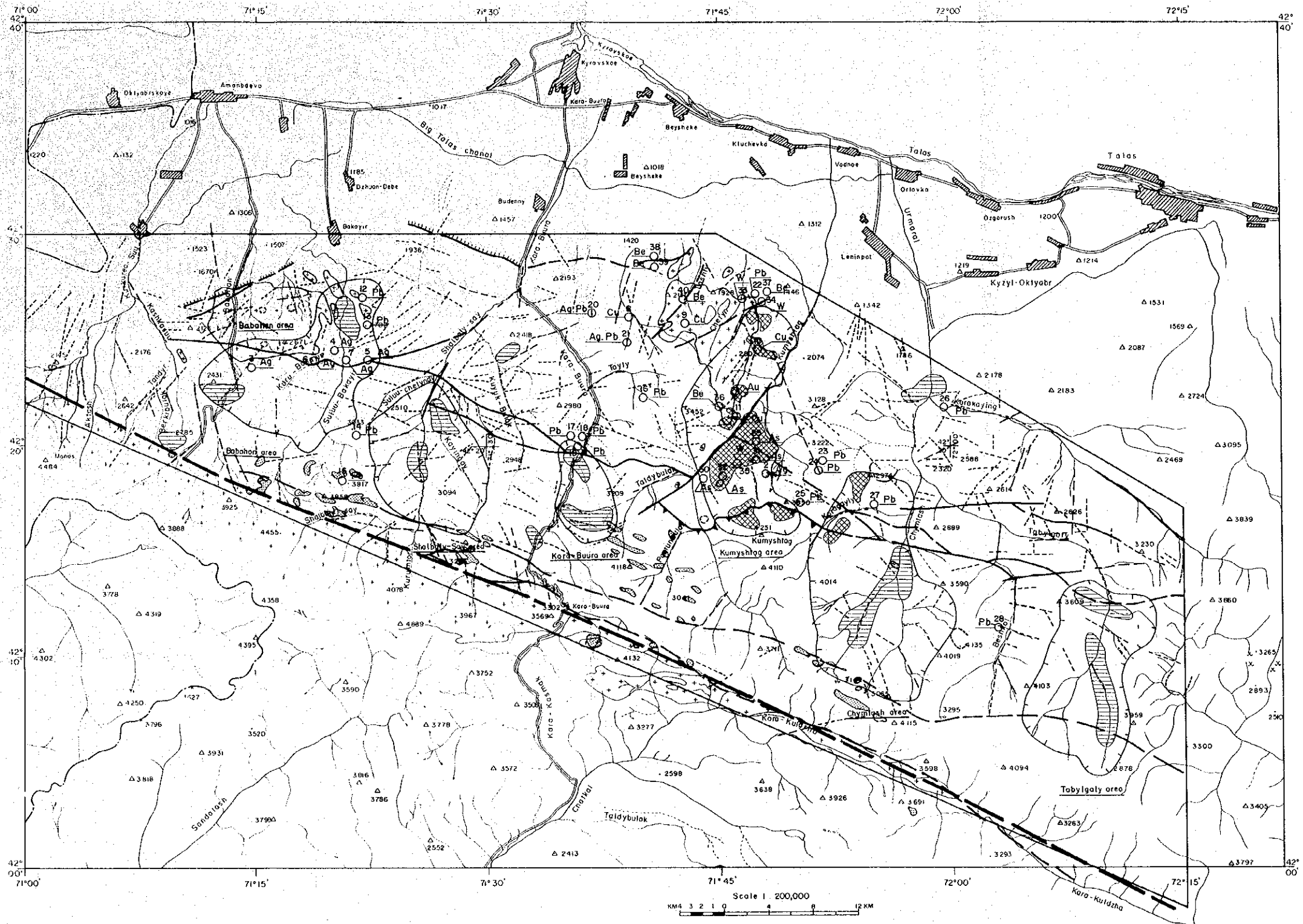


JAPAN INTERNATIONAL COOPERATION AGENCY  
METAL MINING AGENCY OF JAPAN  
FEBRUARY 1995  
Prepared by MINDECO

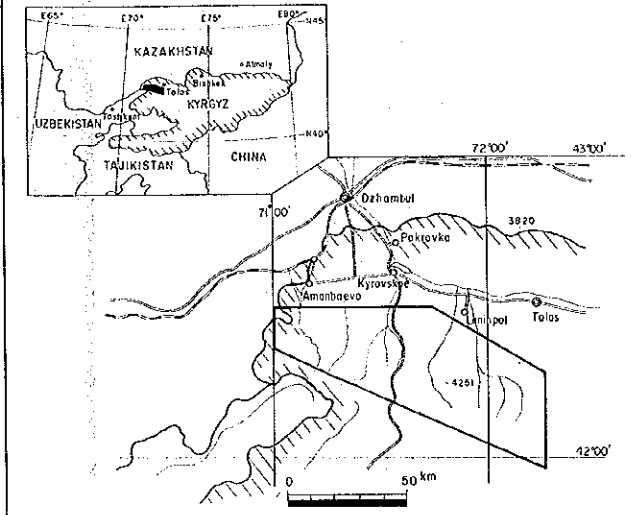
LEGEND

- The promising area for future survey
- Site of deposit, number and kind of element
- Geochemical gold anomaly of semi-detail survey
- Geochemical gold anomaly of reconnaissance survey
- Granitic batholith
- Fault





THE MINERAL EXPLORATION  
IN  
THE TALAS AREA, THE KYRGYZ REPUBLIC  
( PHASE I )  
**Generalized Results of the Survey**



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**LEGEND**

- The promising area for future survey
- Site of deposit, number and kind of element
- Geochemical gold anomaly of semi-detail survey
- Geochemical gold anomaly of reconnaissance survey
- Spectral anomaly after satellite image analysis
- Interpreted fault and major lineament
- Minor lineament
- Granitic batholith
- Fault



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