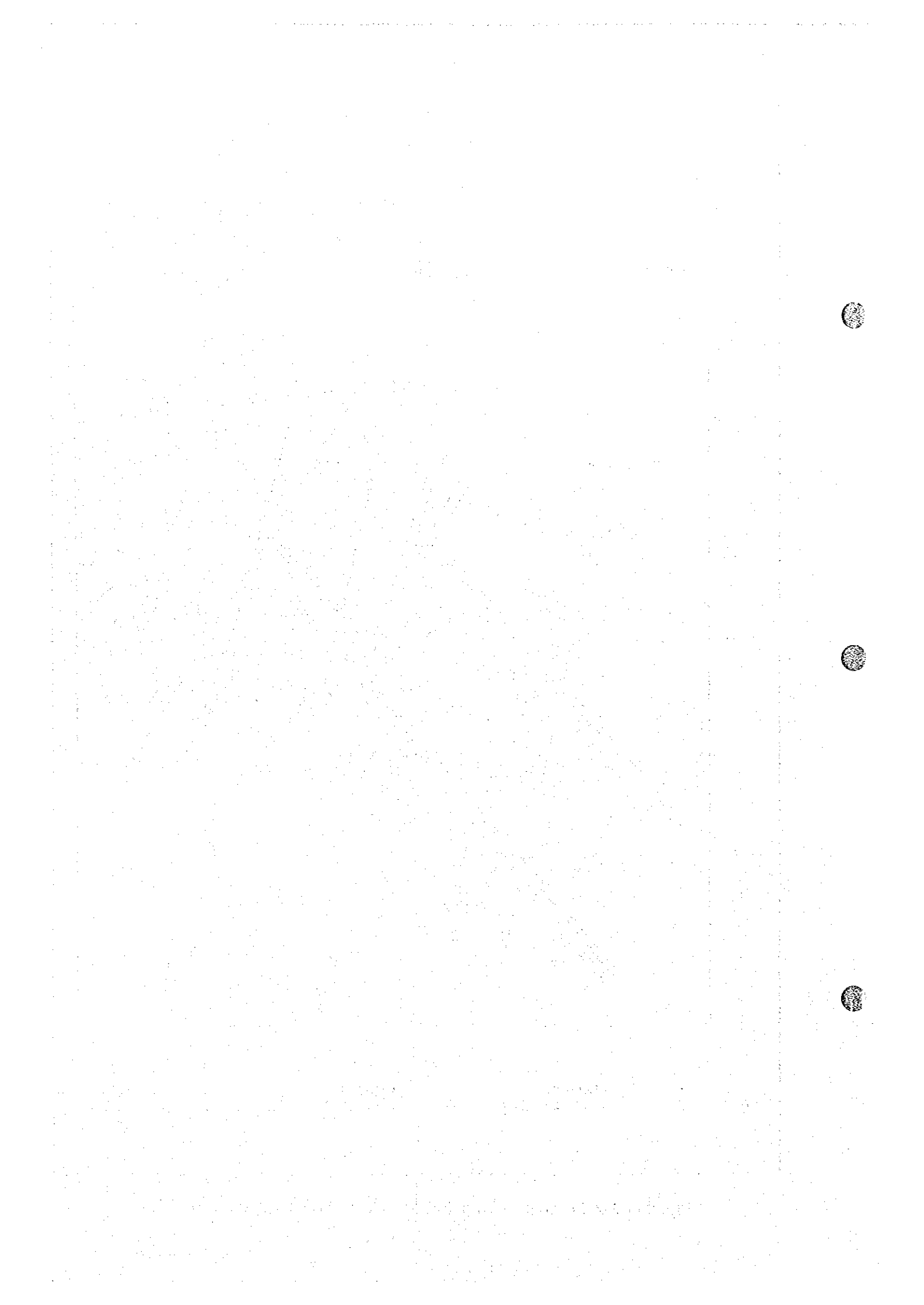
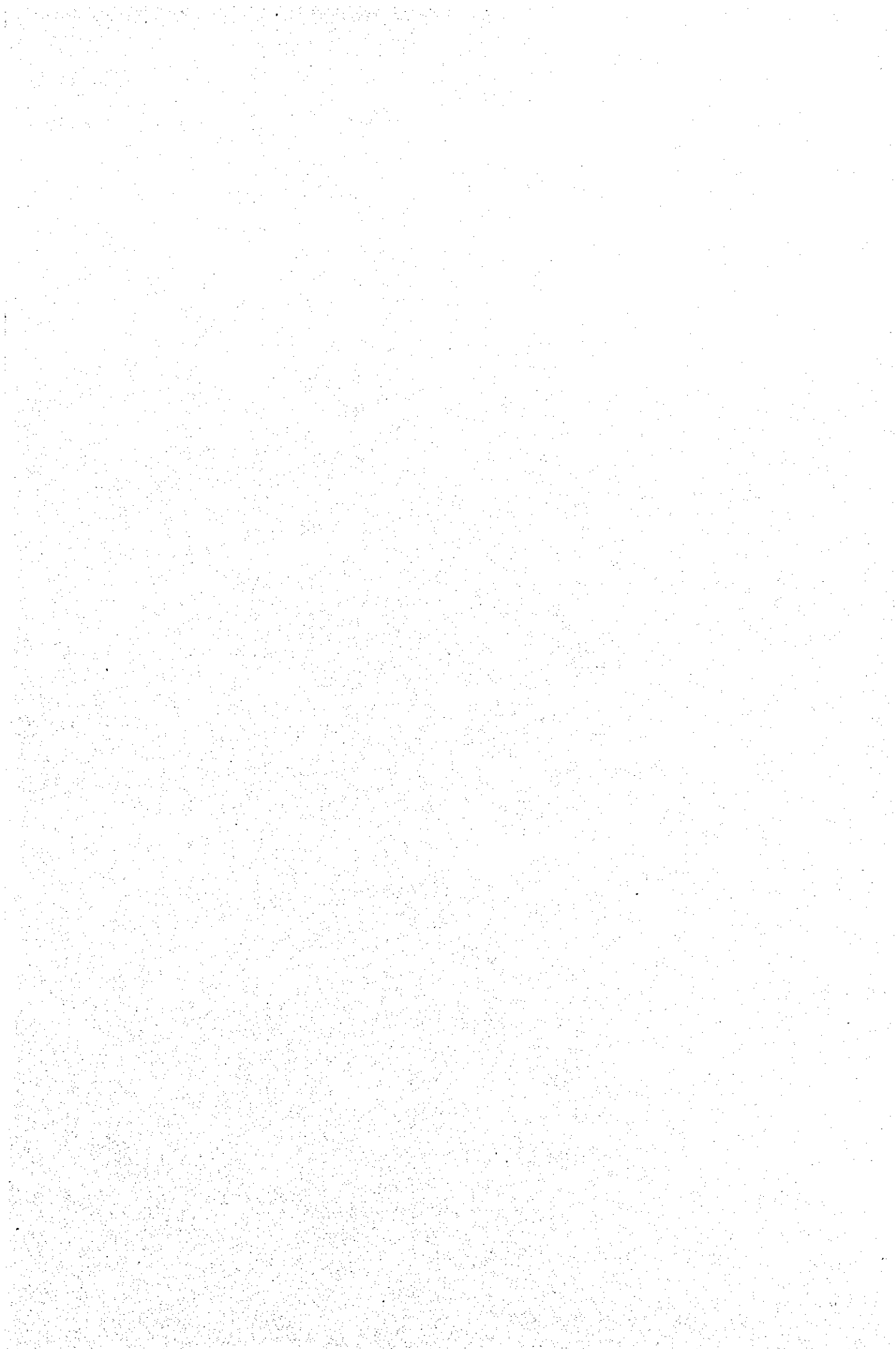


Fig. II-1-2-2 Geologic Cross Section along MJML-15 and 16 (L-7)





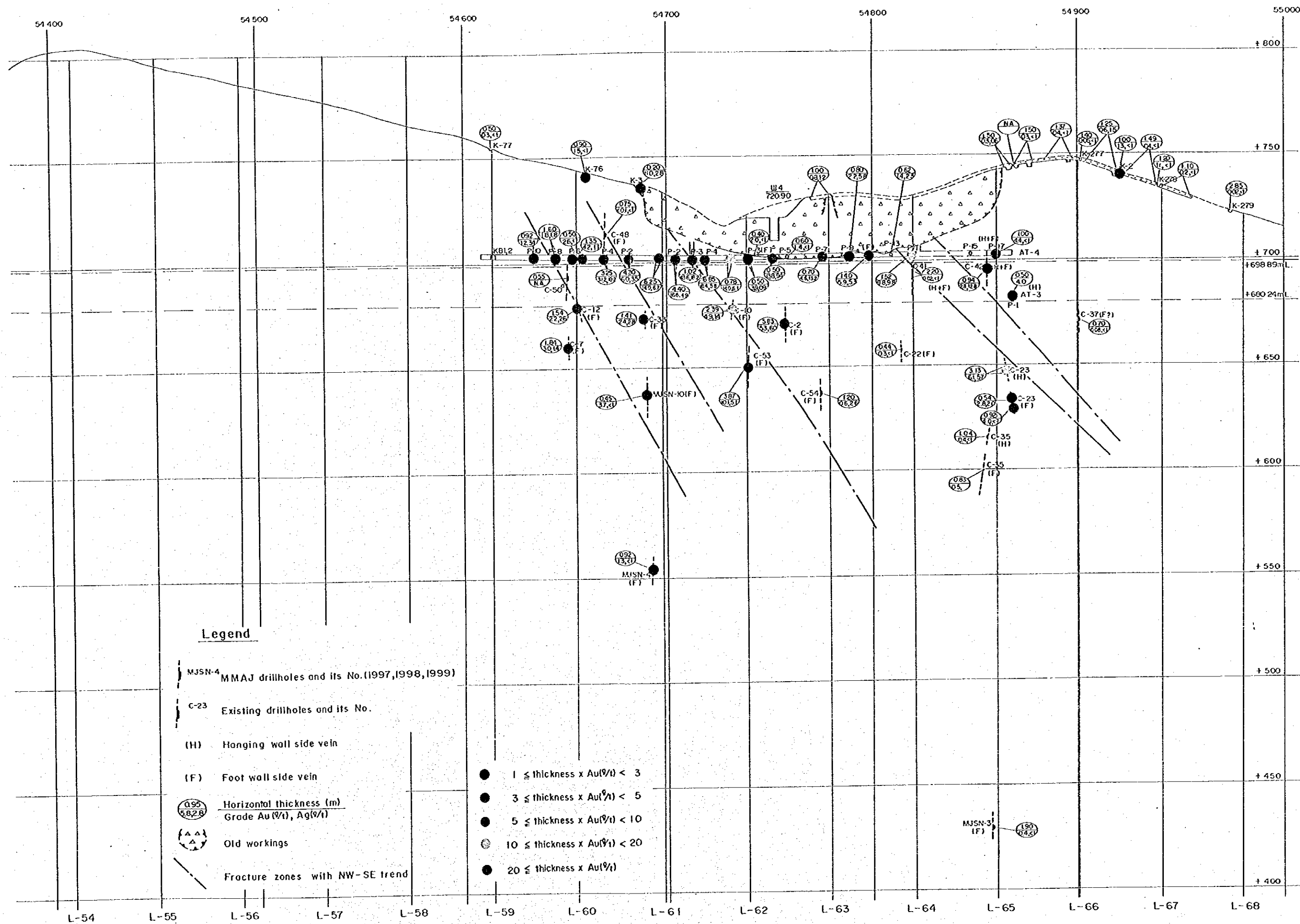


Fig.II-1-2-3 Perspective Section for Altynsai No.1 Vein

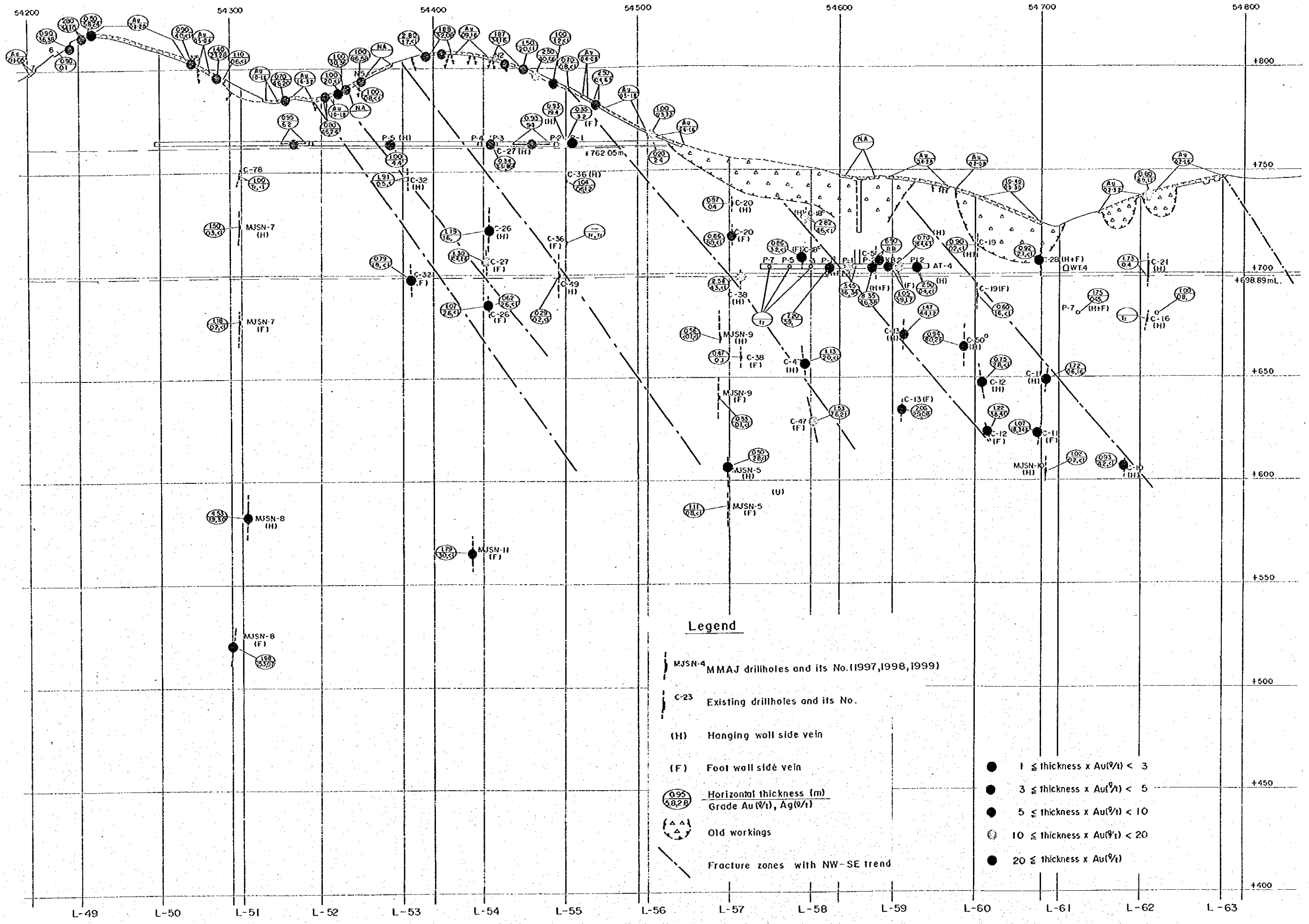
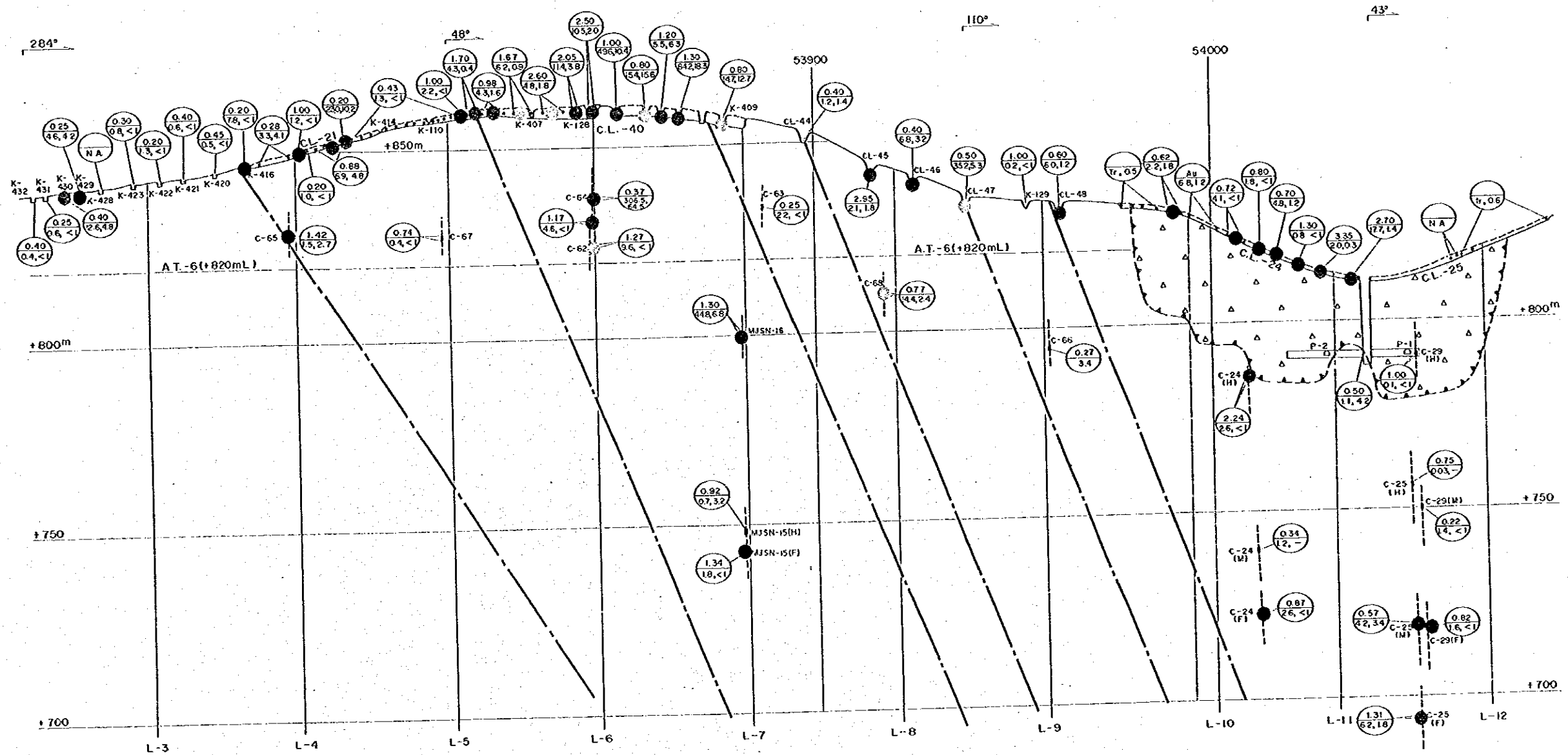


Fig. II-1-2-4 Perspective Section for Altynsai No.2 Vein



Legend

MJSN-4 MMAJ drillholes and its No.(1997,1998,1999)

C-23 Existing drillholes and its No.

(H) Hanging wall side vein

(F) Foot wall side vein

$\frac{0.95}{58,2.8}$ Horizontal thickness (m)
Grade Au(%) , Ag(%)

$\{\Delta\Delta\}$ Old workings

Fracture zones with NW-SE trend

- $1 \leq \text{thickness} \times \text{Au}(\%) < 3$
- $3 \leq \text{thickness} \times \text{Au}(\%) < 5$
- $5 \leq \text{thickness} \times \text{Au}(\%) < 10$
- $10 \leq \text{thickness} \times \text{Au}(\%) < 20$
- $20 \leq \text{thickness} \times \text{Au}(\%)$

Fig. II-1-2-5 Perspective Section for Altynsai No.8 Vain

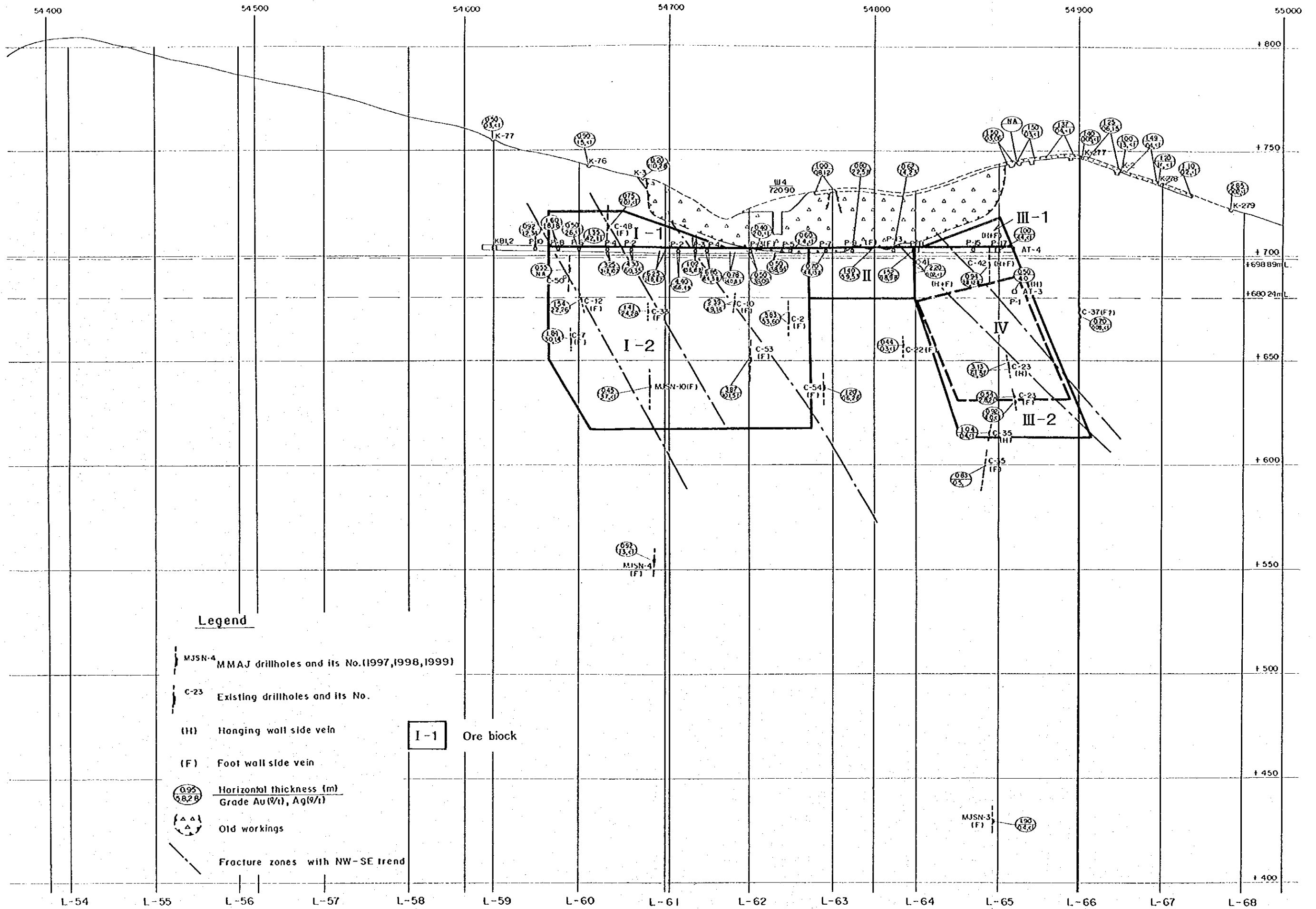


Fig.II-1-3-1 Perspective Section for Ore Reserves Calculation of Altynsai No.1 Vein

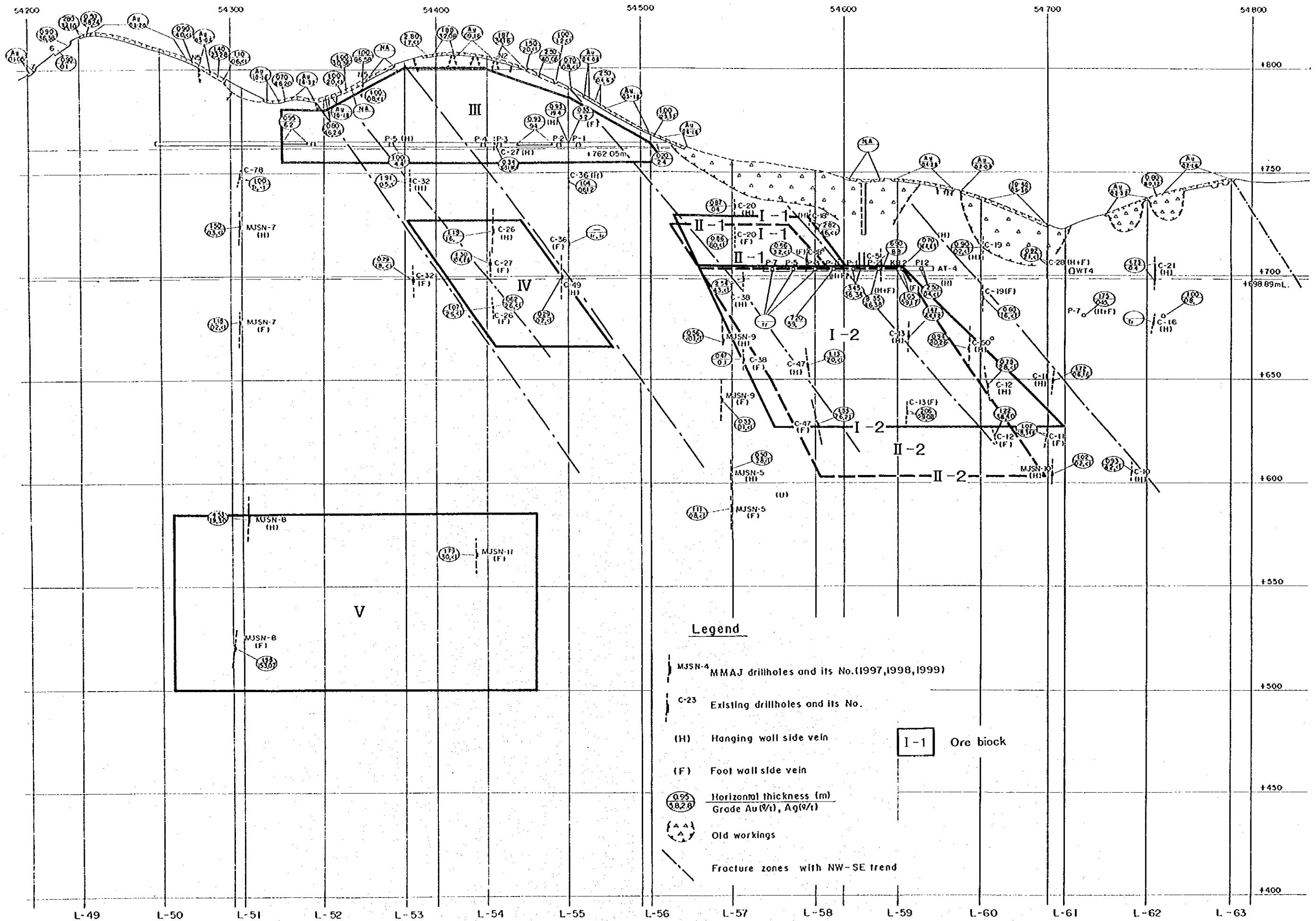
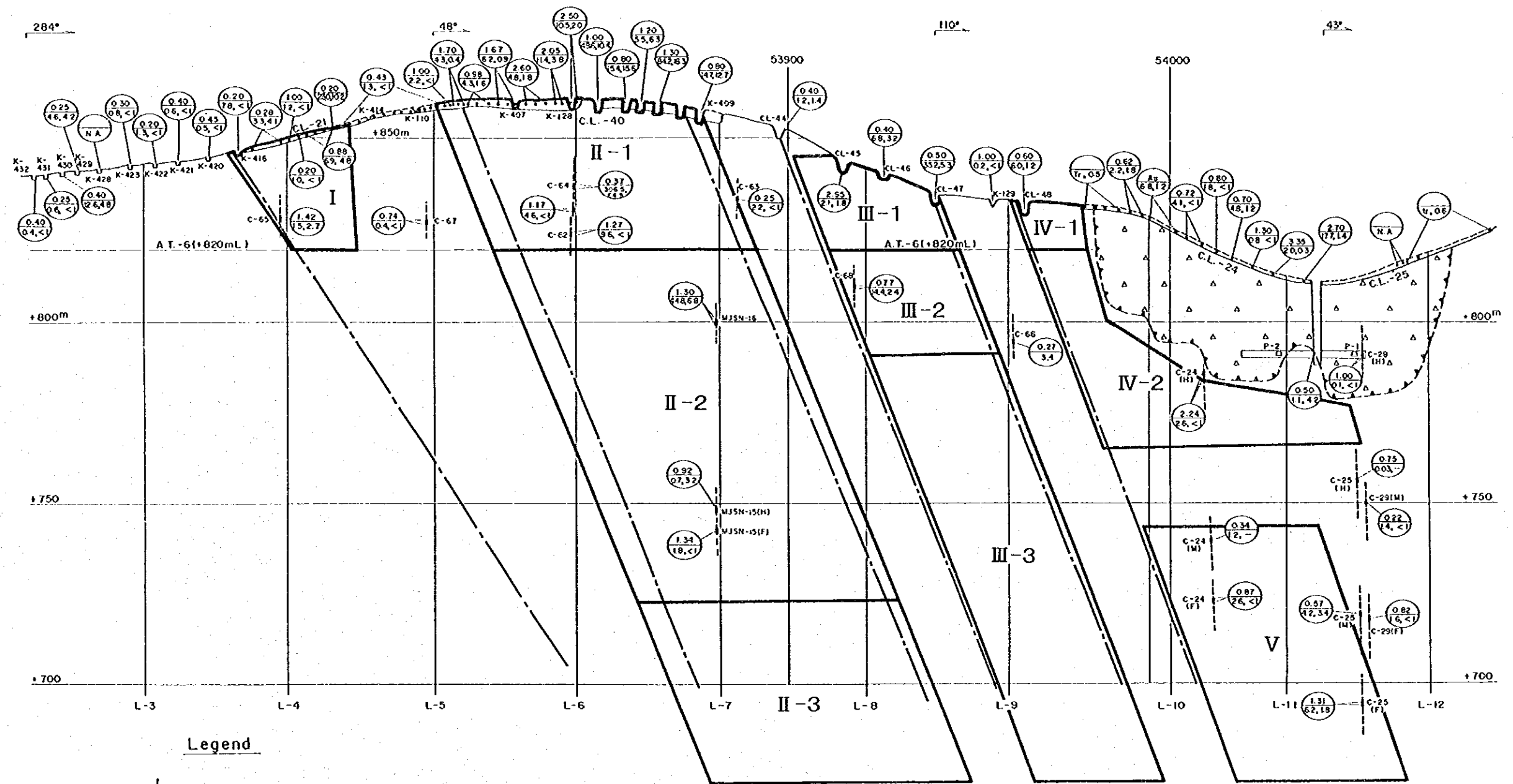


Fig. II-1-3-2 Perspective Section for Ore Reserves Calculation of Altynsai No.2 Vein



Legend

- MJSN-4 MMAJ drillholes and its No.(1997,1998,1999)
- C-23 Existing drillholes and its No.
- (H) Hanging wall side vein
- (F) Foot wall side vein
- I-1 Ore block
- $\frac{0.95}{8.20}$ Horizontal thickness (m)
Grade Au(%/t), Ag(%/t)
- $\triangle \triangle$ Old workings
- Fracture zones with NW-SE trend

Fig. II-1-3-3 Perspective Section for Ore Reserves Calculation of Altynsai No.8 Vein

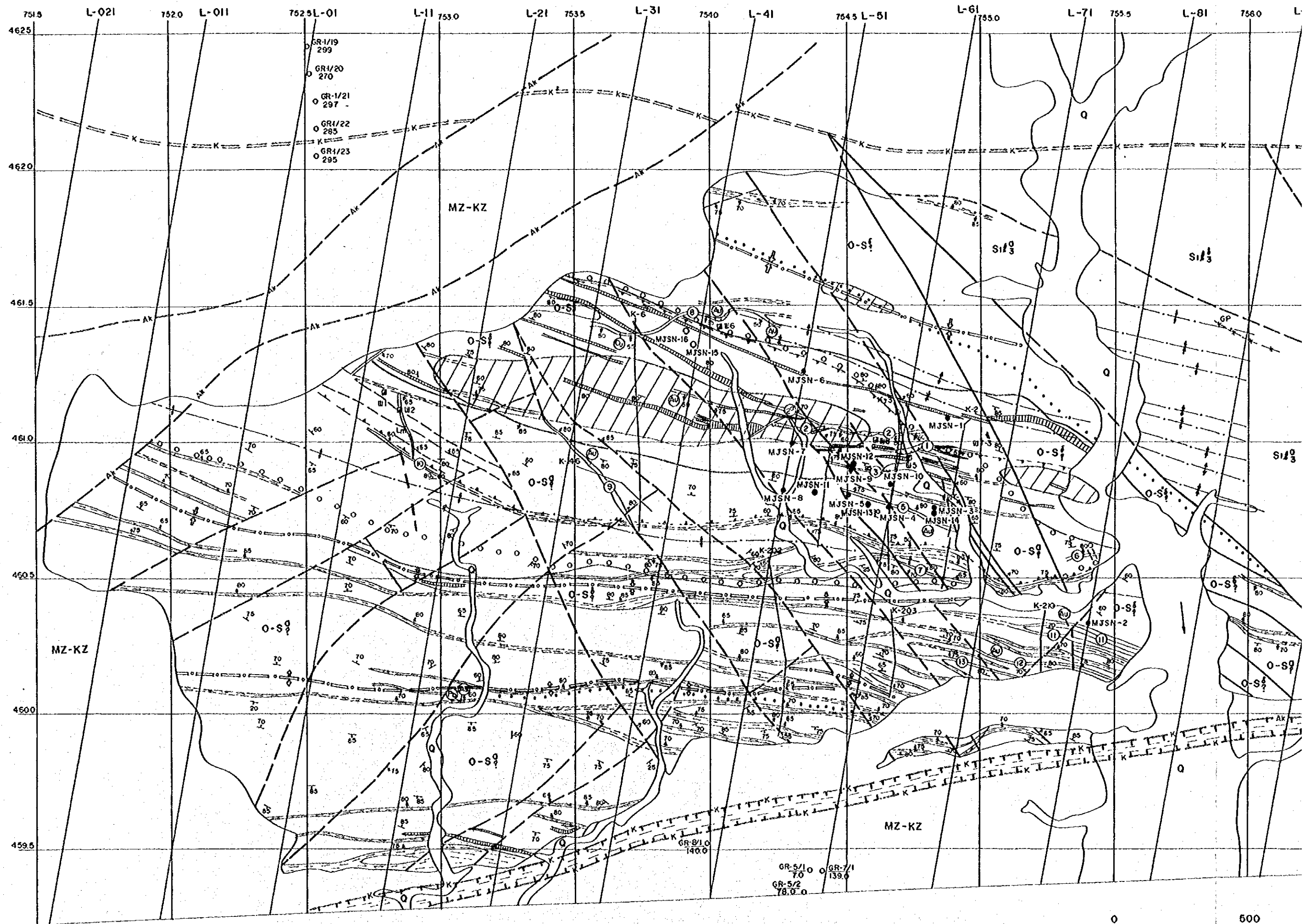


Fig. II-1-4-1 Integrated Interpretation Map of the Altynsai Deposit

(modified after V. A. Shebchenko;

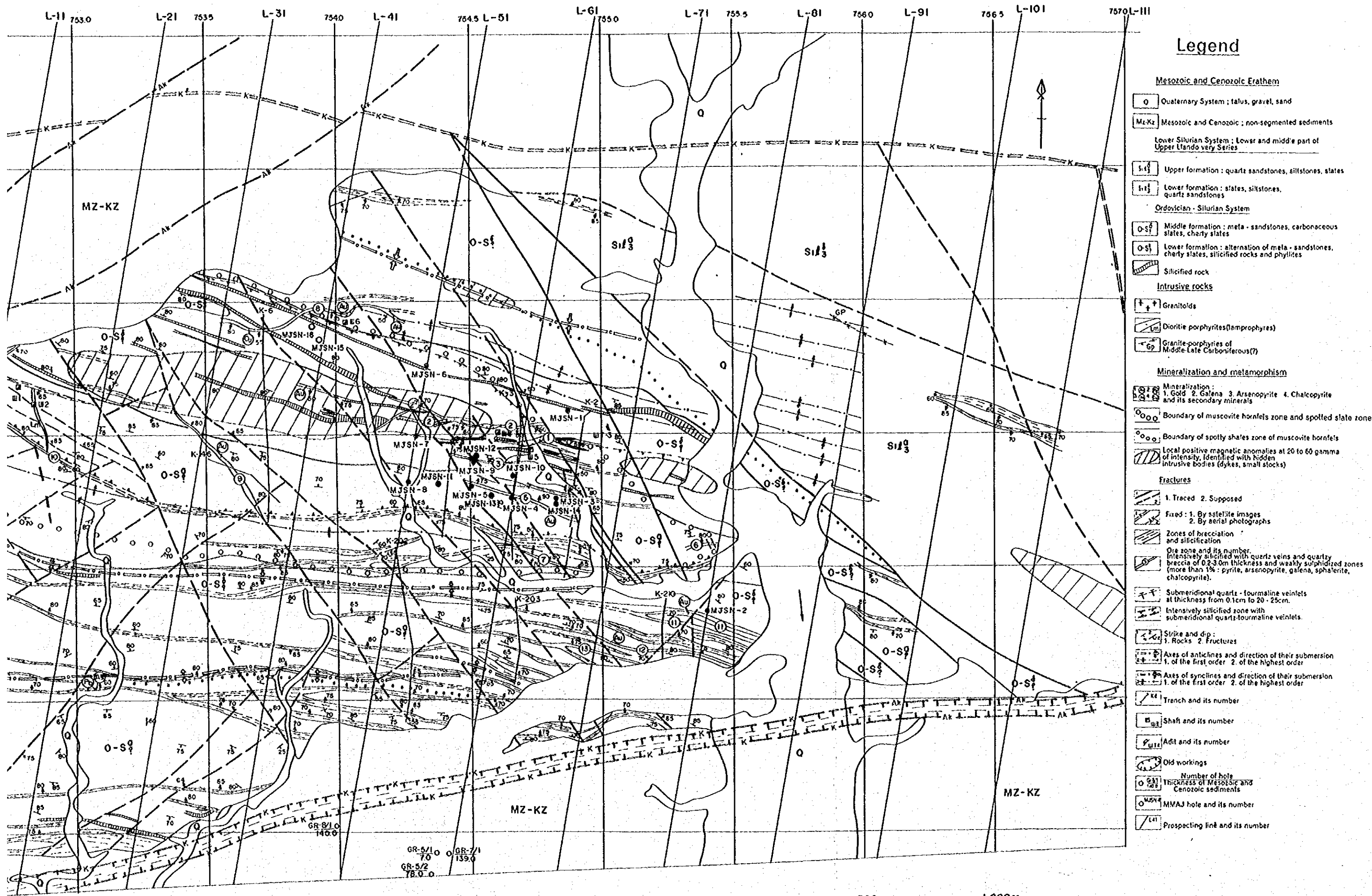
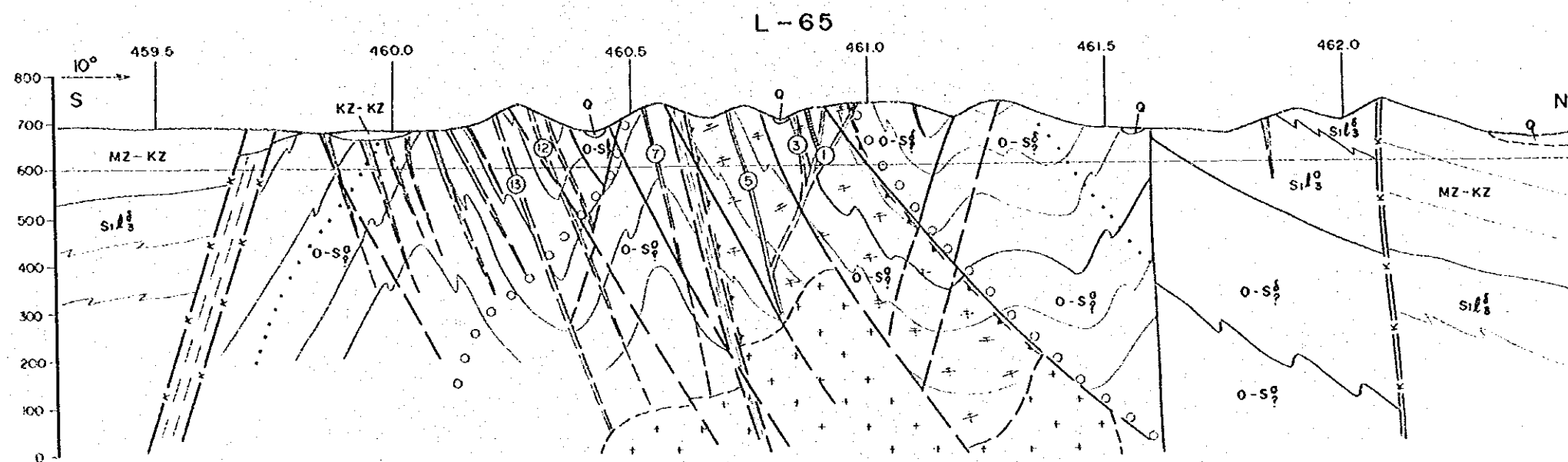
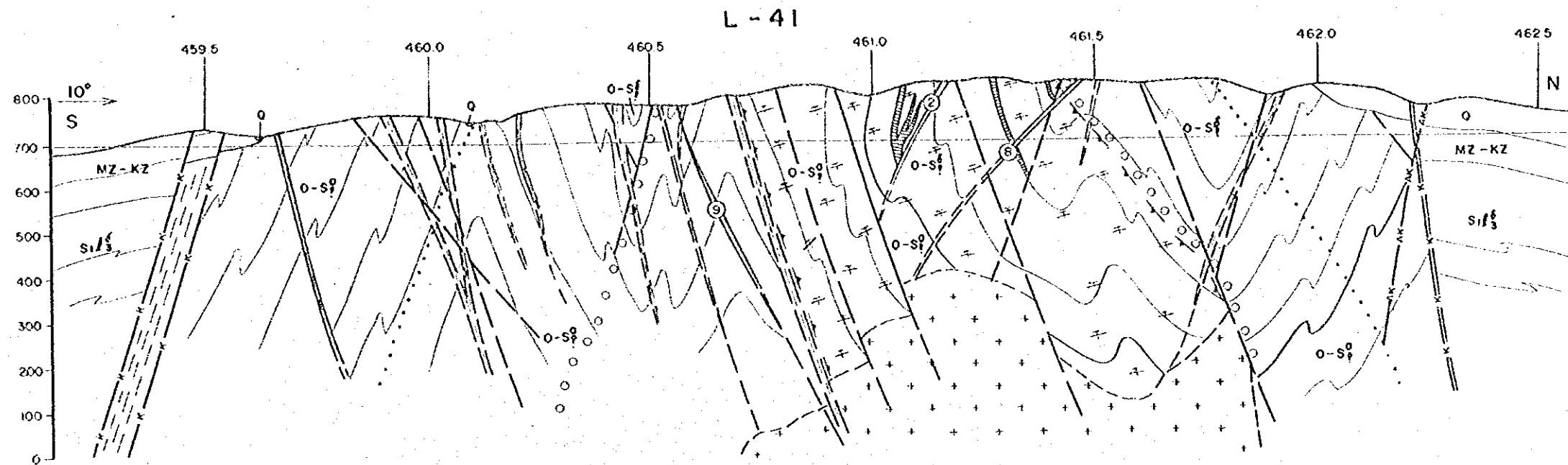


Fig. II-1-4-1 Integrated Interpretation Map of the Altynsai Deposit

0 600 1,000m

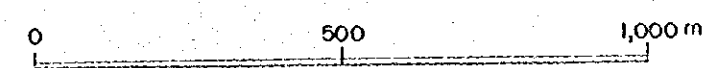


Legend

- Mesozoic and Cenozoic Era**
- Quaternary System: (silt, gravel, sand)
 - MZ-KZ: Mesozoic and Cenozoic: non-segmented sediments
 - Lower Silurian System: Lower and middle part of Upper Elanovirya Series
 - Upper formation: quartz sandstones, shales, slates
 - Lower formation: slates, shales, quartz sandstones
- Ordovician - Silurian System**
- Middle formation: meta-sandstones, carbonaceous slates, cherty slates
 - Lower formation: alternation of meta-sandstones, cherty slates, shifed rocks and phyllites
 - Silted rock
- Intrusive rocks**
- Granitoids
 - Diorite porphyrites/amphibolites
 - Granite porphyrites of Middle-Late Carboniferous(?)

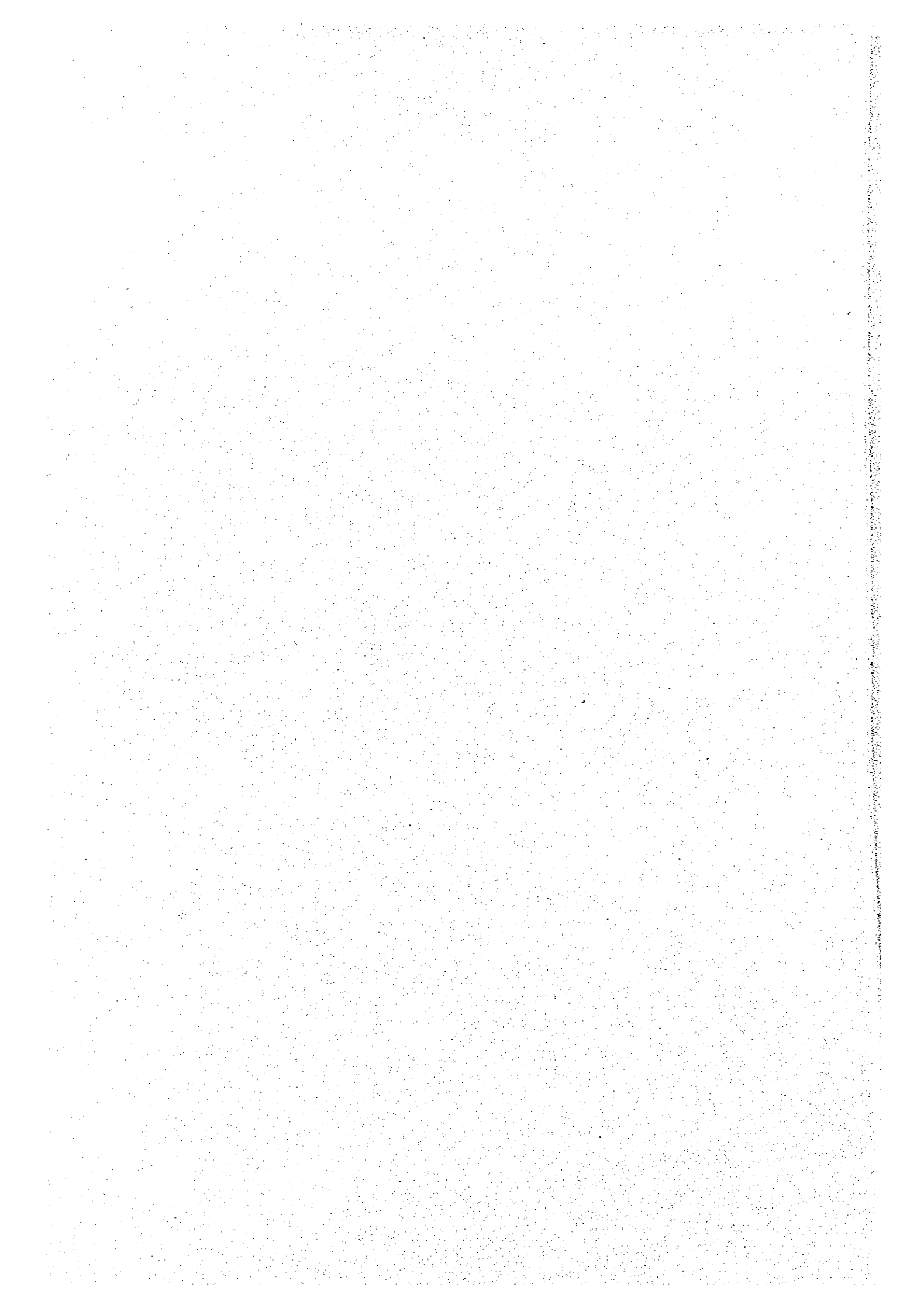
- Mineralization and metamorphism**
- Mineralization: 1 Gold, 2 Galena, 3 Arsenopyrite, 4 Chalcopyrite and its secondary minerals
 - Boundary of muscovite hornfels zone and andesite tuffs
 - Boundary of spotted shales zone of muscovite hornfels
 - Local positive magnetic anomalies: 20 to 60 gamma of intensity, identified with bodies of intrusive bodies (dykes, small stocks)
- Faults**
- 1 Traced, 2 Supposed
 - Fixed: 1. By satellite images, 2. By aerial photographs
 - Zones of precipitation and shifcation
 - One zone and its number, intensively shifed with quartz veins and quartz breccias of 0.2-3.0m thickness and weakly suphized zones (more than 15% pyrite, arsenopyrite, galena, sphalerite, chalcopyrite)
 - Submeridional quartz-tourmaline veins at thickness from 0.1cm to 20-25cm
 - Intensively shifed zone with submeridional quartz-tourmaline veins

- Strike and dip: 1 Rocks, 2 Fractures
- Axes of anticlines and direction of their submerision: 1. of the first order, 2. of the highest order
- Axes of synclines and direction of their submerision: 1. of the first order, 2. of the highest order
- Trench and its number
- Shaft and its number
- Adit and its number
- Old workings
- Number of hole
- Thickness of Mesozoic and Cenozoic sediments
- MMA2 hole and its number
- Prospecting bore and its number



(modified after V.A. Shebchenko; 1997)

Fig. II-1-4-2 Integrated Interpretation Cross Sections of the Altynsai Deposit



Chapter 2 Maulyan District

2-1 Outline of Geology and Ore Deposits of Maulyan District

The district is underlain by terrigenous sediments of Cambrian to Lower Silurian System (Fig.I-3-1). In the central and northern parts of the area, occurs limestone of Upper Silurian to Middle Carboniferous System. These rocks are intruded by Upper Silurian to Triassic dikes of lamprophyre and diabase, and Carboniferous to Permian granites. The sedimentary rocks in the southern and central parts of the district are metamorphosed into phyllites and schists containing biotite, muscovite, chlorite, staurolite, etc.

The regional tectonic direction of the basement rocks trends in the WNW-ESE direction, which is intersected by fractures that develop in the NE-SW and NW-SE directions. The geologic structure is inferred to have been formed by the Early Paleozoic Caledonian orogeny and Late Paleozoic Hercynian orogeny.

Ore manifestations mainly of gold in the subject area extend along the WNW-ESE fracture zones forming a part of the Aktau ore zone along the southern side of the Aktau granite bodies. The ore zone, aligned in parallel along the Aktau granite bodies, is inferred to have been formed through mineralization accompanied by the igneous activity of granites. There are gold manifestations such as Maulyan, Beshbulak, Taulyan and Shur. Besides, there is a niobium-tantalum manifestation at Aktau. Among these manifestations, exploration work is being carried out at Maulyan, Beshbulak and Shur.

In light of the findings of the Uzbek trenching survey and the subject Phase II geological survey, the gold manifestations at Beshbulak (vein width 1.7-2.5 m; Au max. 4 g/t), Taulyan (1 m; 4 g/t) and Shur (1.2 m; 1.4 g/t) are not considered worthy of further exploration, due to the low grades of gold. The Aktau niobium-tantalum manifestation (Nb-Ta max. 0.035 %) is also too low grade to justify further exploration. Of all the gold manifestations in the subject District, the Maulyan manifestation mineralization spreads over relatively extensive areas.

The Maulyan manifestation, located in the southern slope of the Aktau Range, was discovered in 1965 and prospecting started in the same year. The altitude is 850 m to 1,100 m and the area is deeply dissected mainly by streams of the N-S direction.

The manifestation area is composed mainly of siltstone, sandstone, slate and schist of the Nakrut Formation of Lower Silurian System, and of slate, siltstone, sandstone and schist of the Badamechalin Formation of Ordovician System (Figs.II-2-1-1, 2). The schistosity strikes WNW-ESE and dips 80° to 85° northward or is vertical. About ten of fracture-silicification zones, 1 m to 20-30 m wide, with the WNW-ESE trend, which cut the both Formations, have been confirmed by the Uzbek trenching.

Along the fracture zone, occur quartz veins, 0.5 m to 2 m wide and 5 m to 250 m long.

Gold is related mainly with quartz veins, accompanied by silicified sandstone or slate. Quartz veins are milky white-colored, often crushed and contain iron oxide, such as goethite and lepidocrocite, and sulfide minerals such as pyrite, pyrrhotite, arsenopyrite and chalcopyrite.

So far confirmed are the three ore bodies, 1 m to 4 m wide, i.e., the No.1 ore body, 1,000 m long, the No.2 ore body, 400 m long, and the No.3 ore body 200 m long. Gold and silver grades vary substantially from Au 1 g/t to 33.4 g/t and from Ag 1 g/t to 47.2 g/t. The bonanzas confirmed in trenches are the No.1 ore body (confirmed at K-31), 3.0 m wide, grading Au 8.1 g/t and Ag 0.9 g/t; No.2 ore body (confirmed at K-7), 4.2 m wide, grading Au 11.0 g/t and Ag 1.4 g/t; and No.3 ore body (confirmed at K-3), 2.4 m wide, grading Au 17.8 g/t and Ag 8.6 g/t.

During Phase II, two drillholes, MJML-1 and -2, aimed at the lower extension of the No.3 and No.2 ore bodies, intersected various parts of pyrite-bearing quartz veins and veinlets between 100 m to 135 m under the surface. They, however, only confirmed small size and low-grade mineralization (true width 0.2 m and 0.34 m; Au 2.0 g/t and 1.6 g/t) (Figs.II-2-2-23, 24).

The homogenization temperatures of fluid inclusions of quartz mostly fall within the range of 250°C to 370°C.

In the manifestation, trenching, drilling, and tunneling surveys are still carried out by the Uzbek side.

2-2 Drilling Survey

2-2-1 Purpose of the survey

Drilling survey aimed at verifying and describing stratigraphy and occurrence of ore deposits, and sampling and confirming the ore reserves was carried out in the Altynsai deposit.

2-2-2 Methods of the survey

1) Outline of drilling operation

With the personnel and equipment arranged by the Samarkandgeology, drilling work of 20 drillholes totaling 600.0 m was performed.

Locations of the respective drillholes are shown in Figs.II-2-2-1.

Two Russian-made SKB-41 drilling machines were used, capable of drilling of 300 m for a 76 mm dia. hole and 500 m for a 59 mm dia. hole.

The drilling operation was conducted in two 12-hour shifts for one machine and three 8-hour shifts for the other, with one foreman and one operator per unit.

Two bulldozers were used for the transportation of drilling rigs and supplies, road

construction, drill site leveling and preparations.

For the drilling operation, the regular method was employed.

For the surface soil drilling, 93 mm-dia. metallic bits were used. After drilling reached the rock, 89 mm-dia. casing pipes were inserted and installed, and drilling operation was completed with 76 mm-dia. diamond and metal bits. Mud water was not prepared at the drilling site but at the Zarmitan Expedition base's mud water plant and transported to the drilling site by a 4m³ tank truck.

The drilling work lasted for 51 days from July 8 to August 27, 1999. The drilling length and core recoveries of each drillhole are tabulated in Table II-2-2-1. The drilling efficiency, working time, consumption of drilling articles and bits are shown in Tables II-2-2-2 through -5. The main equipment used, results of work, progress record and results of hole deviation measurement by drillhole are respectively shown in Appendices 3-1 through 3-4.

2) Drilling operation

The drilling operation is outlined in Table II-2-2-6.

2-2-3 Results of the drilling survey

The survey results are displayed in the geologic cross section along the drillholes (Figs.II-2-2-2~21).

1) MJML-3 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.2 ore body bonanza (vein width 4.2 m; Au 11.0 g/t) intersected by the Uzbek trenching K-7.

- (1) Geology: The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System, accompanied by phyllite.
- (2) Mineralization: Although quartz veins and veinlets were found in various parts of the drillhole, only low-grade gold mineralization (true width 1.06 m; Au 2.1 g/t) in a quartz veins and veinlets accompanied by pyrite and limonite, which was intersected between 6.70 m and 9.80 m, as shown in Fig.II-2-2-2.

Main showings of mineralization are indicated in Table II-2-2-7.

2) MJML-4 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.2 ore body (vein width 1.7 m; Au 3.6 g/t) intersected by the Uzbek trenching K-74.

- (1) Geology : The entire drillhole is made of phyllite of the Nakrut Formation of Lower

Silurian System, accompanied by sandy phyllite.

- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in Fig.II-2-2-3.

- 3) MJML-5 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.2 ore body (vein width 0.7 m; Au 1.6 g/t) intersected by the Uzbek trenching K-315.

- (1) Geology : The entire drillhole is made of phyllite of the Nakrut Formation of Lower Silurian System.
- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, only weak gold mineralization (true width 0.38 m; Au 9.6 g/t) was intersected between 4.70 m and 5.60 m, as shown in Fig.II-2-2-4.

Main showings of mineralization are indicated in Table II-2-2-7.

- 4) MJML-6 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.2 ore body's 60 m western extension (vein width 4.0 m; Au 4.2 g/t) intersected by the Uzbek trenching K-300.

- (1) Geology : The entire drillhole is made of phyllite of the Nakrut Formation of Lower Silurian System.
- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in Fig.II-2-2-5.

- 5) MJML-7 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.2 ore body (vein width 4.0 m; Au 4.2 g/t) intersected by the Uzbek trenching K-300.

- (1) Geology : The entire drillhole is made of phyllite of the Nakrut Formation of Lower Silurian System.
- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in Fig.II-2-2-6.

- 6) MJML-8 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of

the No.2 ore body (vein width unknown; Au 5.8 g/t) intersected by the Uzbek trenching K-301.

- (1) Geology : The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System, accompanied by phyllite.
- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, only low-grade gold mineralization (true width 0.51 m; Au 1.8 g/t) was intersected between 24.80 m and 26.30 m, as shown in Fig.II-2-2-7.

Main showings of mineralization are indicated in Table II-2-2-7.

7) MJML-9 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.2 ore body's 110 m eastern extension (vein width unknown; Au 5.8 g/t) intersected by the Uzbek trenching K-301.

- (1) Geology : The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System, accompanied by phyllite.
- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in Fig.II-2-2-8.

8) MJML-10 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.1 ore body's 80 m western extension (vein width 3.0 m; Au 2.9 g/t) intersected by the Uzbek trenching K-73.

- (1) Geology : The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System, accompanied by phyllite.
- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in Fig.II-2-2-9.

9) MJML-11 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.1 ore body (vein width 3.0 m; Au 2.9 g/t) intersected by the Uzbek trenching K-73.

- (1) Geology : The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System, accompanied by phyllite.
- (2) Mineralization: Although quartz veins and veinlets were found in various parts of the drillhole, only low-grade gold mineralization (true width 1.90 m; Au 1.7 g/t) was

intersected between 2.20 m and 6.70 m, as shown in Fig.II-2-2-10.

Main showings of mineralization are indicated in Table II-2-2-7.

10) MJML-12 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.1 ore body's 120 m western extension (vein width 1.0 m; Au 1.6 g/t) intersected by the Uzbek trenching K-352.

- (1) Geology : The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System.
- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in Fig.II-2-2-11.

11) MJML-13 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.1 ore body (vein width 1.0 m; Au 1.6 g/t) intersected by the Uzbek trenching K-352.

- (1) Geology : The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System, accompanied by phyllite.
- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in Fig.II-2-2-12.

12) MJML-14 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.1 ore body's 70 m eastern extension (vein width 1.7 m; Au 5.7 g/t) intersected by the Uzbek trenching K-78.

- (1) Geology : The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System, accompanied by phyllite.
- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in Fig.II-2-2-13.

13) MJML-15 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.1 ore body (vein width 1.7 m; Au 2.9 g/t) intersected by the Uzbek trenching K-353.

- (1) Geology : The entire drillhole is made of sandy phyllite of the Nakrut Formation of

Lower Silurian System, accompanied by phyllite.

- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in Fig.II-2-2-14.

14) MJML-16 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.1 ore body (vein width 0.7 m; Au 1.8 g/t) intersected by the Uzbek trenching K-30.

- (1) Geology : The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System, accompanied by phyllite.
- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, only low-grade gold mineralization (true width 1.27 m; Au 1.7 g/t) was intersected between 0.00 m and 3.00 m, as shown in Fig.II-2-2-15.

Main showings of mineralization are indicated in Table II-2-2-7.

15) MJML-17 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.1 ore body (vein width 5.0 m; Au 2.5 g/t) intersected by the Uzbek trenching K-32.

- (1) Geology: The entire drillhole is composed of sandy phyllite and phyllite of the Nakrut Formation of Lower Silurian System.
- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in Fig.II-2-2-16.

16) MJML-18 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.1 ore body's 65 m eastern extension (vein width 4.1 m; Au 4.5 g/t) intersected by the Uzbek trenching K-354.

- (1) Geology : The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System, accompanied by phyllite.
- (2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in Fig.II-2-2-17.

17) MJML-19 (Direction S20° W; inclination -75°; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of

the No.1 ore body (vein width 0.4 m; Au 9.4 g/t) intersected by the Uzbek trenching K-75.

(1) Geology: The entire drillhole is composed of sandy phyllite and phyllite of the Nakrut Formation of Lower Silurian System.

(2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, only low-grade gold mineralization (true width 0.35 m; Au 5.8 g/t) was intersected between 22.90 m and 23.80 m, as shown in Fig.II-2-2-18.

Main showings of mineralization are indicated in Table II-2-2-7.

18) MJML-20 (Direction S20° W; inclination -75° ; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.1 ore body (vein width 1.0 m; Au 4.8 g/t) intersected by the Uzbek trenching K-355.

(1) Geology: The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System.

(2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, only low-grade gold mineralization (true width 0.47 m; Au 2.0 g/t) was intersected between 16.80 m and 17.80 m, as shown in Fig.II-2-2-19.

Main showings of mineralization are indicated in Table II-2-2-7.

19) MJML-21 (Direction S20° W; inclination -75° ; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.1 ore body's 90 m eastern extension (vein width 1.0 m; Au 4.8 g/t) intersected by the Uzbek trenching K-355.

(1) Geology : The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System, accompanied by phyllite.

(2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in Fig.II-2-2-20.

20) MJML-22 (Direction S20° W; inclination -75° ; drilling length 30.0 m)

The drilling objective was to examine mineralization approx. 15 m below the surface of the No.1 ore body's 170 m eastern extension (vein width 1.0 m; Au 4.8 g/t) intersected by the Uzbek trenching K-355.

(1) Geology : The entire drillhole is made of sandy phyllite of the Nakrut Formation of Lower Silurian System, accompanied by phyllite.

(2) Mineralization : Although quartz veins and veinlets were found in various parts of the drillhole, no showings of mineralization exceeding Au 1.0 g/t were verified as shown in

Fig.II-2-2-21.

2-3 Ore Reserves Estimation of the Maulyan Manifestation

The ore bodies in the Maulyan manifestation have varied shapes, sizes and grade distribution, as the survey findings indicate. The exploration so far conducted is not sufficient for clarification in detail of the ore bodies nor for accurate estimation of ore reserves, therefore, tentative calculation was made for rough estimation of ore reserves and grade.

2-3-1 Calculation method

(1) Ore body of estimation

Among the ore bodies with the WNW-ESE trend occurring in sediments of Ordovician-Silurian System, Nos. 1, 2 and 3 ore bodies constitute the subject ore bodies of this estimation.

(2) Definition of ore zone

Among the ore bodies confirmed by the trenching, drilling and tunneling surveys, the estimation is limited to those that have the horizontal width more than 1 m and Au grade higher than 1 g/t.

(3) Definition of ore block

The extent of ore block is defined by straight lines of max. 30 m in strike and max. 20 m perpendicularly from the center point of respective ore zones caught by the trenching, drilling and tunneling surveys (Figs.II-2-3-1~3). In case no ore zone is confirmed by trenching or drilling at an extension of an ore body, the extent of ore block is limited only up to the median point.

(4) Specific gravity

The specific gravity of the ore is assumed to be 2.7 that are determined for the ore of Maulyan manifestation by the Zarmitan Expedition.

(5) Ore reserves by ore block

Ore reserves of respective blocks are calculated by the following formula:

$$V = L \times H \times HT \times SG \times 0.75$$

where, L: Length (m) of ore body

H: Height (m) of ore body

HT: Horizontal thickness (m) of ore body

SG: Specific gravity (2.7)

0.75: Existence possibility of ore

The existence possibility of ore is assumed to be 75 %, because grade distribution of the ore bodies in Maulyan manifestation varies remarkably.

(6) Grade of ore block

For the grade of an ore block, the length-weighted average (by the sampling length) of the ore-zone grade was applied.

2-3-2 Results of estimation

Results of the tentative calculation are exhibited in Figs.II-2-3-1~3, while the ore reserves estimation is tabulated in Tables II-2-3-1 (1~4).

At the cutoff grade of 1.0 g/t (Au), the tentative estimation of the total ore reserves of No.1, No.2 and No.3 ore bodies indicated 252,000 t, grading 4.2 g/t Au, or approximately 1.1 t of Au in terms of metal content. While those of No.1, No.2 and No.3 ore bodies are 149,000t, grading 3.8 g/t Au (0.6 t of Au content), 87,000 t, grading 5.0 g/t Au (0.4 t of Au content) and 16,000 t, grading 4.2 g/t Au (0.07 t of Au content), respectively.

2-4 Summary and Considerations

The district is underlain by sedimentary rocks such as limestone, slate and sandstone of Upper Cambrian to Middle Carboniferous System and Upper Carboniferous to Triassic dikes of lamprophyre, diabase and metadiorite, and Carboniferous to Permian granites (Figs.I-3-1). The sedimentary rocks are metamorphosed into phyllites and schists through low temperature, medium pressure-type metamorphism, and consist of biotite, muscovite, chlorite, staurolite, etc..

These strata are folded along an axis in the WNW-ESE direction and divided in blocks by faults in the WNW-ESE, NE-SW and NW-SE directions. The geologic structure is inferred to have been formed by the Early Paleozoic Caledonian orogeny and Late Paleozoic Hercynian orogeny.

The Manifestation is located in the Aktau ore zone, 70km E-W and 2km to 5km N-S, where gold manifestations occur in fractures and silicification zones in the WNW-ESE direction. Gold manifestations have been confirmed at Beshbulak, Taulyan and Shur. The Phase II geological survey and Uzbek trenching survey indicate Beshbulak, Taulyan and Shur manifestations have low Au grade. Of all the gold manifestations in the subject District, the Malyan manifestation mineralization has relatively high Au grade and spreads over relatively extensive areas. In the manifestation, trenching, drilling, and tunneling surveys are still carried out by the Uzbek side.

So far, three ore bodies having 1 m to 4 m in vein width have been confirmed; the No.1 ore body is 1,000 m long, No.2 ore body is 400m long and the No.3 ore body is 200 m long (Figs.II-2-1-1, 2). The gold grade varies from 1 g/t to 33.4 g/t.

Samples collected from gold-bearing quartz veins at the Malyan manifestation are

accompanied by ore minerals such as pyrite, goethite, lepidocrocite, arsenopyrite, chalcopyrite and sphalerite, while gold occurs as electrum.

Homogenization temperatures of fluid inclusions at the ore zone mostly fall within the range of 250°C-350°C. The homogenization temperatures of quartz samples grading Au 1.2-2.0 g/t were 221°C-281°C, higher than the general temperature range of gold occurrence, 100°C-250 °C (Fig.I-4-1). No significant correlation was observed between homogenization temperature and depth at which drilling samples were taken (Fig.I-4-3).

In light of the occurrence of the Aktau granites, characteristics of the surrounding manifestations, drilling results and homogenization temperatures, gold-bearing quartz veins at the subject manifestation are inferred to have been formed under high temperature ambience in the vicinity of pegmatite-type mineralization, which is considered to lack the conditions required for a high-grade, large-scale gold concentration zone.

During the Phase II, drilling was performed at two drillholes (MJML-1, -2), aimed at the lower extension of the No.3 and No.2 ore bodies, intersected various parts of pyrite-bearing quartz veins and veinlets between 100 m to 135 m under the surface. They, however, only confirmed small size and low-grade mineralization (true width 0.2 m and 0.34 m; Au 2.0 g/t and 1.6 g/t) (Figs.II-2-2-23, 24).

The Uzbek drilling survey independently confirmed, between 16 m and 90 m under the surface, the continuity of the No.1 ore body (1.2 m to 1.5 m wide; Au 2 g/t to 8 g/t) at drillholes C-3, C-7, C-8 and C-10, and continuity of the No.2 ore body (1.7 m to 1.8 m wide; Au 5 g/t to 7 g/t) at the drillholes C-6 and C-9.

Twenty drillholes (MJML-3~-22) of the Phase III drilling survey were aimed to examine mineralization of shallow portion of the No.1 and No.2 ore bodies, between 10 m and 15 m under the surface, and also examine the feasibility of open pit mining. Among the thirteen drillholes, aimed to examine mineralization of lower portion of the No.1 ore body, four drillholes discovered low-grade gold mineralization (true width 0.4-1.9 m; Au 1.7-5.8 g/t) (Fig.II-2-2-22). Among the seven drillholes aimed to examine mineralization of the No.2 ore body, three drillholes confirmed weak gold mineralization (true width 0.4-1.1 m; Au 1.8-9.6 g/t) (Fig.II-2-2-23). However, analyses of ore samples collected from another thirteen drillholes indicated Au grade lower than 1.0 g/t.

The tentative estimation indicated the total ore reserves of No.1, No.2 and No.3 ore bodies combined are 252,000 t, grading 4.2 g/t Au, or approximately 1.1 t of Au in terms of metal content (Table II-2-3-1 (4)). While those of No.1, No.2 and No.3 ore bodies are 149,000 t, grading 3.8 g/t Au (0.6 t of Au content), 87,000 t, grading 5.0 g/t Au (0.4 t of Au content) and 16,000 t, grading 4.2 g/t Au (0.07 t of Au content), respectively (Tables II-2-3-1(1~3)).

A certain increase in ore reserves by further exploration may be anticipated but a significant improvement in Au grade is unlikely.

Table II-2-2-1 Quantity of Drilling Works and Core Recovery in the Maulyan District

Hole No.	Planned Length(m)	Drilling length (m)	Length of core (m)	Core recovery (%)
MJML- 3	30.00	30.00	26.10	87.0
MJML- 4	30.00	30.00	25.10	83.7
MJML- 5	30.00	30.00	25.10	83.7
MJML- 6	30.00	30.00	25.50	85.0
MJML- 7	30.00	30.00	24.70	82.3
MJML- 8	30.00	30.00	25.10	83.7
MJML- 9	30.00	30.00	24.90	83.0
MJML- 10	30.00	30.00	28.00	93.3
MJML- 11	30.00	30.00	28.00	93.3
MJML- 12	30.00	30.00	27.10	90.3
MJML- 13	30.00	30.00	26.10	87.0
MJML- 14	30.00	30.00	26.10	87.0
MJML- 15	30.00	30.00	26.20	87.3
MJML- 16	30.00	30.00	26.10	87.0
MJML- 17	30.00	30.00	25.30	84.3
MJML- 18	30.00	30.00	24.40	81.3
MJML- 19	30.00	30.00	25.10	83.7
MJML- 20	30.00	30.00	24.60	82.0
MJML- 21	30.00	30.00	25.10	83.7
MJML- 22	30.00	30.00	27.60	92.0
Total	600.00	600.00	516.20	86.0

Table II-2-2-2 Efficiency of Each Drillhole in the Maulyan District

Hole No.	Drilling Machine	Working Period	Drilling Length (m)	Core		Working Day			Efficiency		
				Length (m)	Recovery (%)	Drilling* (day*)	Others (day)	Total** (day**)	m/day*	m/day**	m/working Period
MJML-3	SKB-41	Aug 11, '99 → Aug. 17, '99	30.00	26.10	87.0	2.00	4.67	6.67	15.00	4.50	4.50
MJML-4	SKB-41	Aug 16, '99 → Aug. 20, '99	30.00	25.10	83.7	1.33	3.00	4.33	22.56	6.93	6.93
MJML-5	SKB-41	Aug 18, '99 → Aug. 23, '99	30.00	25.10	83.7	1.67	4.33	6.00	17.96	5.00	5.00
MJML-6	SKB-41	Aug 6, '99 → Aug. 12, '99	30.00	25.50	85.0	2.46	3.87	6.33	12.20	4.74	4.74
MJML-7	SKB-41	July 25, '99 → Aug. 5, '99	30.00	24.70	82.3	2.29	9.38	11.67	13.10	2.57	2.57
MJML-8	SKB-41	Aug 21, '99 → Aug. 27, '99	30.00	25.10	83.7	2.42	4.25	6.67	12.40	4.50	4.50
MJML-9	SKB-41	July 22, '99 → July 26, '99	30.00	24.90	83.0	1.75	2.75	4.50	17.14	6.67	6.00
MJML-10	SKB-41	Aug 21, '99 → Aug. 26, '99	30.00	28.00	93.3	2.04	3.96	6.00	14.71	5.00	5.00
MJML-11	SKB-41	Aug 17, '99 → Aug. 23, '99	30.00	28.00	93.3	2.33	4.17	6.50	12.88	4.62	4.62
MJML-12	SKB-41	Aug 14, '99 → Aug. 19, '99	30.00	27.10	90.3	1.88	4.12	6.00	15.96	5.00	5.00
MJML-13	SKB-41	Aug 5, '99 → Aug. 14, '99	30.00	26.10	87.0	2.67	7.00	9.67	11.24	3.10	3.10
MJML-14	SKB-41	July 30, '99 → Aug. 6, '99	30.00	26.10	87.0	2.75	5.25	8.00	10.91	3.75	3.75
MJML-15	SKB-41	July 25, '99 → July 31, '99	30.00	26.20	87.3	2.00	5.00	7.00	15.00	4.29	4.29
MJML-16	SKB-41	July 23, '99 → July 27, '99	30.00	26.10	87.0	1.17	3.83	5.00	25.64	6.00	6.00
MJML-17	SKB-41	July 21, '99 → July 25, '99	30.00	25.30	84.3	1.00	4.00	5.00	30.00	6.00	6.00
MJML-18	SKB-41	July 20, '99 → July 24, '99	30.00	24.40	81.3	1.79	2.88	4.67	16.76	6.42	6.42
MJML-19	SKB-41	July 16, '99 → July 22, '99	30.00	25.10	83.7	1.33	5.00	6.33	22.56	4.74	4.74
MJML-20	SKB-41	July 13, '99 → July 20, '99	30.00	24.60	82.0	3.50	3.83	7.33	8.57	4.09	4.09
MJML-21	SKB-41	July 19, '99 → July 23, '99	30.00	25.10	83.7	0.92	3.58	4.50	32.61	6.67	6.67
MJML-22	SKB-41	July 8, '99 → July 21, '99	30.00	27.60	92.0	2.38	11.62	14.00	12.61	2.14	2.14
Total			600.00	516.20	86.0	39.68	96.49	136.17	15.12	4.41	4.39

* includes drilling and out drilling

** includes drilling out drilling, recovery from accident, preparation, dismount/mobilization and others.

Table II-2-2-3 Working Time of Diamond Drilling in the Maulyan District

Hole No.	Working Period		Number of Works				Working						Total (hour)
	Period	(day)	Foreman (man)	Worker (man)	Drilling (hour)	Out Drilling (hour)	Recovery from Accident (hour)	Preparation (hour)	Dismount/Mobilization (hour)	Others (hour)			
MJML-3	Aug 11, '99 → Aug 17, '99	6.67	21	19	30.0	18.0	41.0	19.0	13.0	9.0	130.0		
MJML-4	Aug 16, '99 → Aug 20, '99	4.33	11	8	22.0	10.0	8.0	17.0	8.0	9.0	74.0		
MJML-5	Aug 18, '99 → Aug 23, '99	6.00	14	11	22.0	18.0	16.0	17.0	8.0	18.0	99.0		
MJML-6	Aug 6, '99 → Aug 12, '99	6.33	22	20	25.0	34.0	45.0	16.0	8.0	9.0	137.0		
MJML-7	July 25, '99 → Aug 5, '99	11.67	36	33	33.0	22.0	157.0	18.0	8.0	12.0	250.0		
MJML-8	Aug 21, '99 → Aug 27, '99	6.67	16	13	29.0	29.0	10.0	21.0	8.0	18.0	115.0		
MJML-9	July 22, '99 → July 26, '99	5.00	12	15	24.0	18.0	0.0	16.0	6.0	26.0	90.0		
MJML-10	Aug 21, '99 → Aug 26, '99	6.00	10	11	38.0	11.0	5.0	30.0	12.0	18.0	114.0		
MJML-11	Aug 17, '99 → Aug 23, '99	6.50	11	13	47.0	11.0	2.0	21.0	12.0	18.0	111.0		
MJML-12	Aug 14, '99 → Aug 19, '99	6.00	16	14	34.0	11.0	3.0	21.0	12.0	18.0	99.0		
MJML-13	Aug 5, '99 → Aug 14, '99	9.67	31	27	29.0	35.0	92.0	21.0	8.0	18.0	203.0		
MJML-14	July 30, '99 → Aug 6, '99	8.00	16	18	39.0	27.0	30.0	21.0	12.0	18.0	147.0		
MJML-15	July 25, '99 → July 31, '99	7.00	13	17	39.0	9.0	24.0	21.0	12.0	18.0	123.0		
MJML-16	July 23, '99 → July 27, '99	5.00	6	13	23.0	5.0	0.0	21.0	8.0	18.0	75.0		
MJML-17	July 21, '99 → July 25, '99	5.00	9	13	16.0	8.0	12.0	24.0	12.0	18.0	90.0		
MJML-18	July 20, '99 → July 24, '99	4.67	13	15	23.0	20.0	0.0	22.0	8.0	9.0	82.0		
MJML-19	July 16, '99 → July 22, '99	6.33	12	21	24.0	8.0	0.0	25.0	8.0	27.0	92.0		
MJML-20	July 15, '99 → July 20, '99	7.33	20	19	54.0	30.0	0.0	19.0	10.0	18.0	131.0		
MJML-21	July 19, '99 → July 23, '99	4.50	7	12	15.0	7.0	0.0	17.0	6.0	18.0	63.0		
MJML-22	July 8, '99 → July 21, '99	14.00	23	34	34.0	23.0	91.0	26.0	12.0	45.0	231.0		
Total	-	136.67	319	346	600.0	354.0	536.0	413.0	191.0	362.0	2,456.0		

Table II-2-2-4 Consumable Drilling Articles in the Maulyan District

Item	Specifi- cation	Unit	Quantity																				Total
			MJML	MJML	MJML	MJML	MJML	MJML	MJML	MJML	MJML	MJML	MJML	MJML	MJML	MJML	MJML	MJML	MJML	MJML	MJML		
Bentonite		kg	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	0
Clear mud		kg																					0
Nl mud water		m ³	10.8	10	6.2	14.4	7.2	14.4	5.9	9.0	10.8	10.8	10.8	10.8	7.2	5.1	7.8	8.9	2.3	3.6	3.8	7.2	167.0
C.M.C.		kg																					0
UNIFLOK		kg																					0
Clay		kg																					0
Diamond bit	93mm	pc																					0
Diamond bit	76mm	pc	3	3	4	2	3	3	5									3	1	2	1	2	32
Diamond bit	59mm	pc																					0
Diamond single bit	59mm	pc																					0
Diamond reamer	76mm	pc	1	1	1	1	1	1	1									1	1	1	1	1	12
Diamond reamer	59mm	pc																					0
Metal crown	112mm	pc																					0
Metal crown	93mm	pc	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
Metal crown	76mm	pc	2	11	7	17	5	15	2	8	11	12	20	8	10	10	31	7	17	16	14	17	240
Metal shoe	89mm	pc	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
Metal shoe	73mm	pc																					
Core box			5	5	5	6	5	5	5	5	6	5	5	5	5	5	5	5	5	5	5	5	102

Table II-2-2-5 Drilling Length of Bits in the Maulyan District

Size	Number of bits (pcs)	Drilling Meterage by Drillhole (m)																				Total	Efficiency m/bit				
		MML	MML	MML	MML	MML	MML	MML	MML	MML	MML	MML	MML	MML	MML	MML	MML	MML	MML	MML	MML						
Metal bits (ϕ 76mm)	2	4.90																			4.90	2.45					
	11		10.70																			10.70	0.97				
	7			5.80																		5.80	0.83				
	17				19.20																	19.20	1.13				
	5					7.20																7.20	1.44				
	15						18.00															18.00	1.20				
	2							3.60														3.60	1.80				
	8								30.00													30.00	3.75				
	11									30.00												30.00	2.73				
	12										30.00											30.00	2.50				
	20											30.00										30.00	1.50				
	8												30.00									30.00	3.75				
	10													30.00								30.00	3.00				
	10														30.00							30.00	3.00				
	31															30.00						30.00	0.97				
	7																11.40					11.40	1.63				
	17																	22.90				22.90	1.35				
16																		19.60			19.60	1.23					
14																				21.00	21.00	1.50					
17																					8.90	0.52					
Sub total	240	4.90	10.70	5.80	19.20	7.20	18.00	3.60	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	11.40	22.90	19.60	21.00	8.90	393.20	1.64
Diamond bits (ϕ 76mm)	3	25.10																								25.10	8.37
	3		19.30																							19.30	6.43
	4			24.20																						24.20	6.05
	2				10.80																					10.80	5.40
	3					22.80																				22.80	7.60
	3						12.00																			12.00	4.00
	5							26.40																		26.40	5.28
	3																					18.60				18.60	6.20
	1																						7.10			7.10	7.10
	2																							10.40		10.40	5.20
1																								9.00	9.00	9.00	
2																									21.10	21.10	10.55
Sub total	32	25.10	19.30	24.20	10.80	22.80	12.00	26.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.60	7.10	10.40	9.00	21.10	206.80	6.46
Grand total	272	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	600.00	2.21

Table II-2-2-6 Results of Drilling Works in the Maulyan District (1)

Item	MJML-3	MJML-4	MJML-5	MJML-6	MJML-7	MJML-8	Sub total
Period of drilling							
Started date	Aug.11,99	Aug.16,99	Aug.18,99	Aug. 6,99	July 25,99	Aug.21,99	
Finished date	Aug.17,99	Aug.20,99	Aug.23,99	Aug.12,99	Aug. 5,99	Aug.27,99	
Total day	6.67	4.33	6.00	6.33	11.67	6.67	
Drilling machine	SKB-41	SKB-41	SKB-41	SKB-41	SKB-41	SKB-41	
Direction	S20° W	S20° W	S20° W	S20° W	S20° W	S20° W	
Inclination	-75°	-75°	-75°	-75°	-75°	-75°	
Drilling length (m)	30.00	30.00	30.00	30.00	30.00	30.00	180.00
Length of core (m)	26.10	25.10	25.10	25.50	24.70	25.10	151.60
Core recovery (%)	87.0	83.7	83.7	85.0	82.3	83.7	84.2
Bit	φ93mm	-	-	-	-	-	
	φ76mm	30.00m	30.00m	30.00m	30.00m	30.00m	30.00m
	φ59mm	-	-	-	-	-	
Casing	φ89mm	3.00m	3.00m	3.00m	3.00m	3.00m	3.00m
	φ73mm	-	-	-	-	-	
Drilling (day)*	6.67	4.33	6.00	6.33	11.67	6.67	41.67
Drilling (day)**	6.67	4.33	6.00	6.33	11.67	6.67	41.67
Efficiency (m/day)*	4.50	6.93	5.00	4.74	2.57	4.50	4.32
Efficiency (m/day)**	4.50	6.93	5.00	4.74	2.57	4.50	4.32

* working days

** including no working days for recovery from accident and others

Table II-2-2-6 Results of Drilling Works in the Mauyan District (2)

Item	MJML-9	MJML-10	MJML-11	MJML-12	MJML-13	MJML-14	Sub total
Period of drilling							
Started date	July 22,99	Aug.21,99	Aug.17,99	Aug.14,99	Aug. 5,99	July 30,99	
Finished date	July 26,99	Aug.26,99	Aug.23,99	Aug.19,99	Aug.14,99	Aug. 6,99	
Total day	5.00	6.00	6.50	6.00	9.67	8.00	
Drilling machine	SKB-41	SKB-41	SKB-41	SKB-41	SKB-41	SKB-41	
Direction	S20° W	S20° W	S20° W	S20° W	S20° W	S20° W	
Inclination	-75°	-75°	-75°	-75°	-75°	-75°	
Drilling length (m)	30.00	30.00	30.00	30.00	30.00	30.00	180.00
Length of core (m)	24.90	28.00	28.00	27.10	26.10	26.10	160.20
Core recovery (%)	83.0	93.3	93.3	90.3	87.0	87.0	89.0
Bit	φ93mm	-	-	-	-	-	
	φ76mm	30.00m	30.00m	30.00m	30.00m	30.00m	
	φ59mm	-	-	-	-	-	
Casing	φ89mm	3.00m	3.00m	3.00m	3.00m	3.00m	
	φ73mm	-	-	-	-	-	
Drilling (day)*	4.50	6.00	6.50	6.00	9.67	8.00	40.67
Drilling (day)**	5.00	6.00	6.50	6.00	9.67	8.00	41.17
Efficiency (m/day)*	6.67	5.00	4.62	5.00	3.10	3.75	4.43
Efficiency (m/day)**	6.00	5.00	4.62	5.00	3.10	3.75	4.37

* working days

** including no working days for recovery from accident and others

Table II-2-2-6 Results of Drilling Works in the Maulyan District (3)

Item	MJML-15	MJML-16	MJML-17	MJML-18	MJML-19	MJML-20	Sub total
Period of drilling							
Started date	July 25,99	July 23,99	July 21,99	July 20,99	July 16,99	July 13,99	
Finished date	July 31,99	July 27,99	July 25,99	July 24,99	July 22,99	July 20,99	
Total day	7.00	5.00	5.00	4.67	6.33	7.33	
Drilling machine	SKB-41	SKB-41	SKB-41	SKB-41	SKB-41	SKB-41	
Direction	S20° W	S20° W	S20° W	S20° W	S20° W	S20° W	
Inclination	-75°	-75°	-75°	-75°	-75°	-75°	
Drilling length (m)	30.00	30.00	30.00	30.00	30.00	30.00	180.00
Length of core (m)	26.20	26.10	25.30	24.40	25.10	24.60	151.70
Core recovery (%)	87.3	87.0	84.3	81.3	83.7	82.0	84.3
Bit	φ93mm	-	-	-	-	-	-
	φ76mm	30.00m	30.00m	30.00m	30.00m	30.00m	30.00m
	φ59mm	-	-	-	-	-	-
Casing	φ89mm	3.00m	3.00m	3.00m	3.00m	3.00m	3.00m
	φ73mm	-	-	-	-	-	-
Drilling (day)*	7.00	5.00	5.00	4.67	6.33	7.33	35.33
Drilling (day)**	7.00	5.00	5.00	4.67	6.33	7.33	35.33
Efficiency (m/day)*	4.29	6.00	6.00	6.42	4.74	4.09	5.09
Efficiency (m/day)**	4.29	6.00	6.00	6.42	4.74	4.09	5.09

* working days

** including no working days for recovery from accident and others

Table II-2-2-6 Results of Drilling Works in the Mauyan District (4)

Item	MJML-21	MJML-22				Sub total	Grand total
Period of drilling							
Started date	July 19,99	July 8,99					
Finished date	July 23,99	July 21,99					
Total day	4.50	14.00					
Drilling machine	SKB-41	SKB-41					
Direction	S20° W	S20° W					
Inclination	-75°	-75°					
Drilling length (m)	30.00	30.00				60.00	600.0
Length of core (m)	25.10	27.60				52.70	516.2
Core recovery (%)	83.7	92.0				87.8	86.0
Bit	φ93mm	-	-				
	φ76mm	30.00m	30.00m				
	φ59mm	-	-				
Casing	φ89mm	3.00m	3.00m				
	φ73mm	-	-				
Drilling (day)*	4.50	14.00				18.50	136.17
Drilling (day)**	4.50	14.00				18.50	136.67
Efficiency (m/day)*	6.67	2.14				3.24	4.41
Efficiency (m/day)**	6.67	2.14				3.24	4.39

* working days

** including no working days for recovery from accident and others

Table II-2-2-7 Major Mineralization Zones Revealed by Drillings in the Maulyan District

Hole No.	Depth (m)	True width (m)	Au (g/t)	Ag (g/t)	Remarks
MJML- 3	6.70~ 9.80 (3.10)	1.06	2.1	<1	No.2 Ore Body
	9.80~10.40 (0.60)	0.21	0.8	<1	No.2 Ore Body
MJML- 5	4.70~ 5.60 (0.90)	0.38	9.6	2.0	No.2 Ore Body
	15.20~16.90 (1.70)	0.72	1.0	<1	No.2 Ore Body
MJML- 6	5.90~ 6.80 (0.90)	0.38	0.5	<1	No.2 Ore Body
MJML- 8	2.60~ 3.80 (1.20)	0.41	0.6	<1	No.2 Ore Body
	24.80~26.30 (1.50)	0.51	1.8	1.8	No.2 Ore Body
	27.20~28.20 (1.00)	0.34	0.5	<1	No.2 Ore Body
MJML- 11	2.20~ 6.70 (4.50)	1.90	1.7	2.2	No.1 Ore Body
MJML- 15	14.60~15.20 (0.60)	0.28	0.8	<1	No.1 Ore Body
	28.00~29.70 (1.70)	0.80	0.5	<1	No.1 Ore Body
MJML- 16	0.00~ 3.00 (3.00)	1.27	1.7	<1	No.1 Ore Body
	26.00~26.90 (0.90)	0.38	0.5	8.0	No.1 Ore Body
MJML- 18	10.10~10.90 (0.80)	0.34	0.8	1.6	No.1 Ore Body
MJML- 19	22.90~23.80 (0.90)	0.35	5.8	<1	No.1 Ore Body
MJML- 20	5.00~ 6.10 (1.10)	0.52	0.6	<1	No.1 Ore Body
	16.80~17.80 (1.00)	0.47	2.0	<1	No.1 Ore Body
	20.70~21.30 (0.60)	0.28	0.8	<1	No.1 Ore Body
MJML- 21	14.40~15.40 (1.00)	0.47	0.6	<1	No.1 Ore Body
	16.40~18.50 (2.10)	0.99	0.6	<1	No.1 Ore Body
	27.20~28.40 (1.20)	0.56	0.6	<1	No.1 Ore Body

Table II-2-3-1(1) Ore Reserves Calculation of Maulayan Ore Manifestation (No. 1 Ore Body)

Ore Body	Ore Block	Area		Horizontal Thickness	Volume (m ³)	Specific Gravity	Existence Possibility	Tonnage (t)	Grade		Metal Content		Note	
		Length(m)	Height(m)						Area(m ²)	Au(g/t)	Ag(g/t)	Au(kg)		Ag(kg)
No. 1	I-1	64	max.103	6,176	1.78	10,993	2.70	0.75	22,261	2.4	1.1	53.4	24.5	
	I-2	104	max.71	6,579	1.17	7,697	2.70	0.75	15,587	3.8	1.6	59.2	24.9	
	I-3	306	max.96	24,462	1.87	45,744	2.70	0.75	92,631	4.1	1.0	379.8	92.6	
	I-4	184	max.56	7,536	1.22	9,194	2.70	0.75	18,618	3.6	0.6	67.0	11.2	
Total				44,753	1.65	73,629	2.70	0.75	149,098	3.8	1.0	559.5	153.2	

Table II-2-3-1(2) Ore Reserves Calculation of Maulayan Ore Manifestation (No. 2 Ore Body)

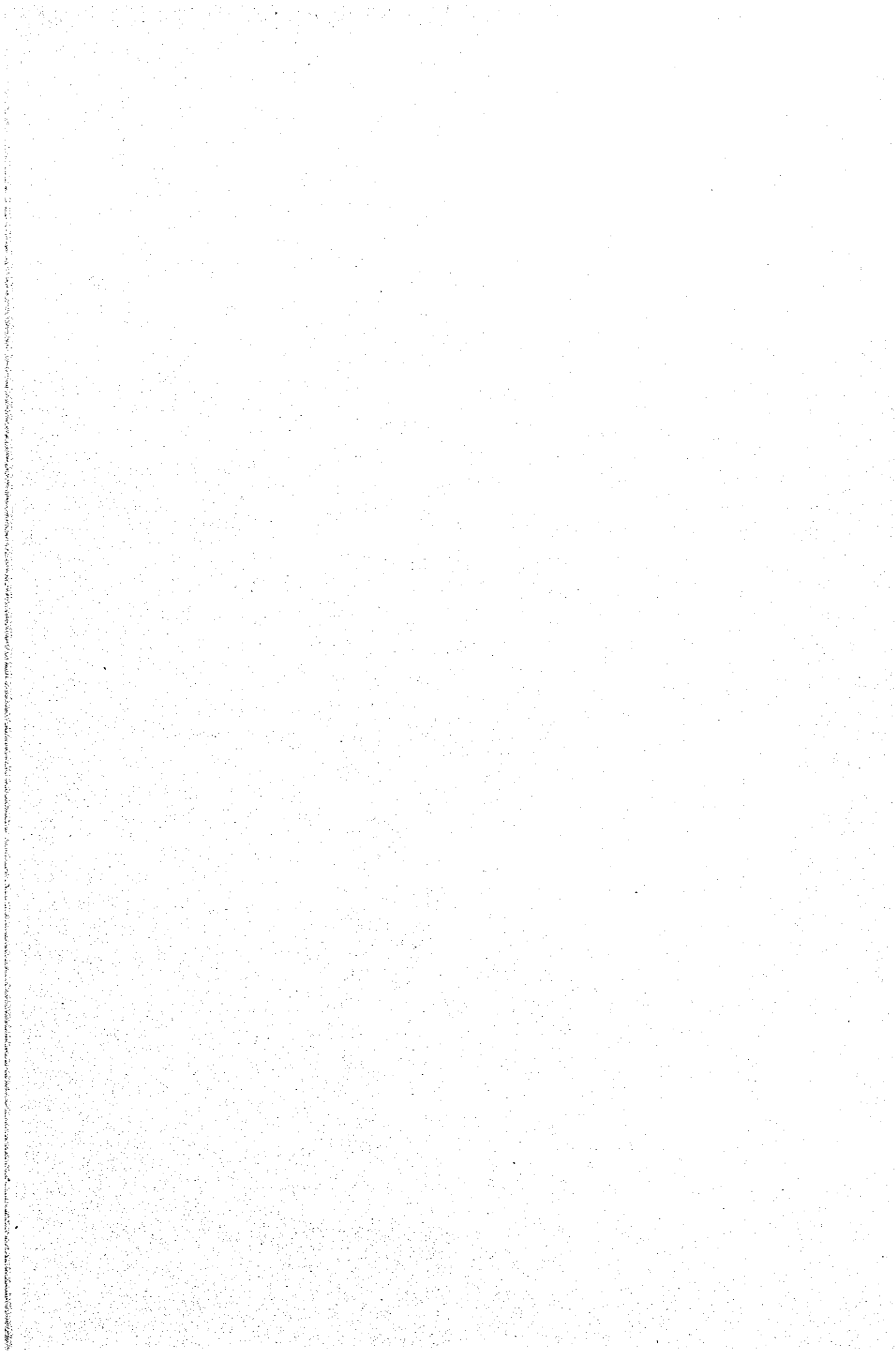
Ore Body	Ore Block	Area		Horizontal Thickness	Volume (m ³)	Specific Gravity	Existence Possibility	Tonnage (t)	Grade		Metal Content		Note	
		Length(m)	Height(m)						Area(m ²)	Au(g/t)	Ag(g/t)	Au(kg)		Ag(kg)
No. 2	II-1	202	max.100	18,575	1.29	23,962	2.70	0.75	48,523	5.8	1.1	281.4	53.4	
	II-2	167	max.80	11,059	1.72	19,021	2.70	0.75	38,518	3.9	2.2	150.2	84.7	
Total				29,634	1.45	42,983	2.70	0.75	87,041	5.0	1.6	431.7	138.1	

Table II-2-3-1(3) Ore Reserves Calculation of Maulayan Ore Manifestation (No. 3 Ore Body)

Ore Body	Ore Block	Area		Horizontal Thickness	Volume (m ³)	Specific Gravity	Existence Possibility	Tonnage (t)	Grade		Metal Content		Note	
		Length(m)	Height(m)						Area(m ²)	Au(g/t)	Ag(g/t)	Au(kg)		Ag(kg)
No. 8	III-1	145	max.53	7,214	0.63	4,545	2.70	0.75	9,203	5.8	5.7	53.4	52.5	
	III-2	47	max.74	3,384	1.00	3,384	2.70	0.75	6,853	2.0	7.2	13.7	49.3	
Total				10,598	0.75	7,929	2.70	0.75	16,056	4.2	6.3	67.1	101.8	

Table II-2-3-1(4) Ore Reserves Calculation of Maulyan Ore Manifestation (Total)

Ore Body	Area	Horizontal	Volume	Specific Gravity	Existence Possibility	Tonnage (t)	Grade		Metal Content	
	Area(m ²)	Thickness					Volume (m ³)	Au(g/t)	Ag(g/t)	Au(kg)
No. 1	44,753	1.65	73,629	2.70	0.75	149,098	3.8	1.0	559.5	153.2
No. 2	29,634	1.45	42,983	2.70	0.75	87,041	5.0	1.6	431.7	138.1
No. 3	10,598	0.75	7,929	2.70	0.75	16,056	4.2	6.3	67.1	101.8
Total	84,985	1.47	124,541	2.70	0.75	252,195	4.2	1.6	1,058.3	393.1



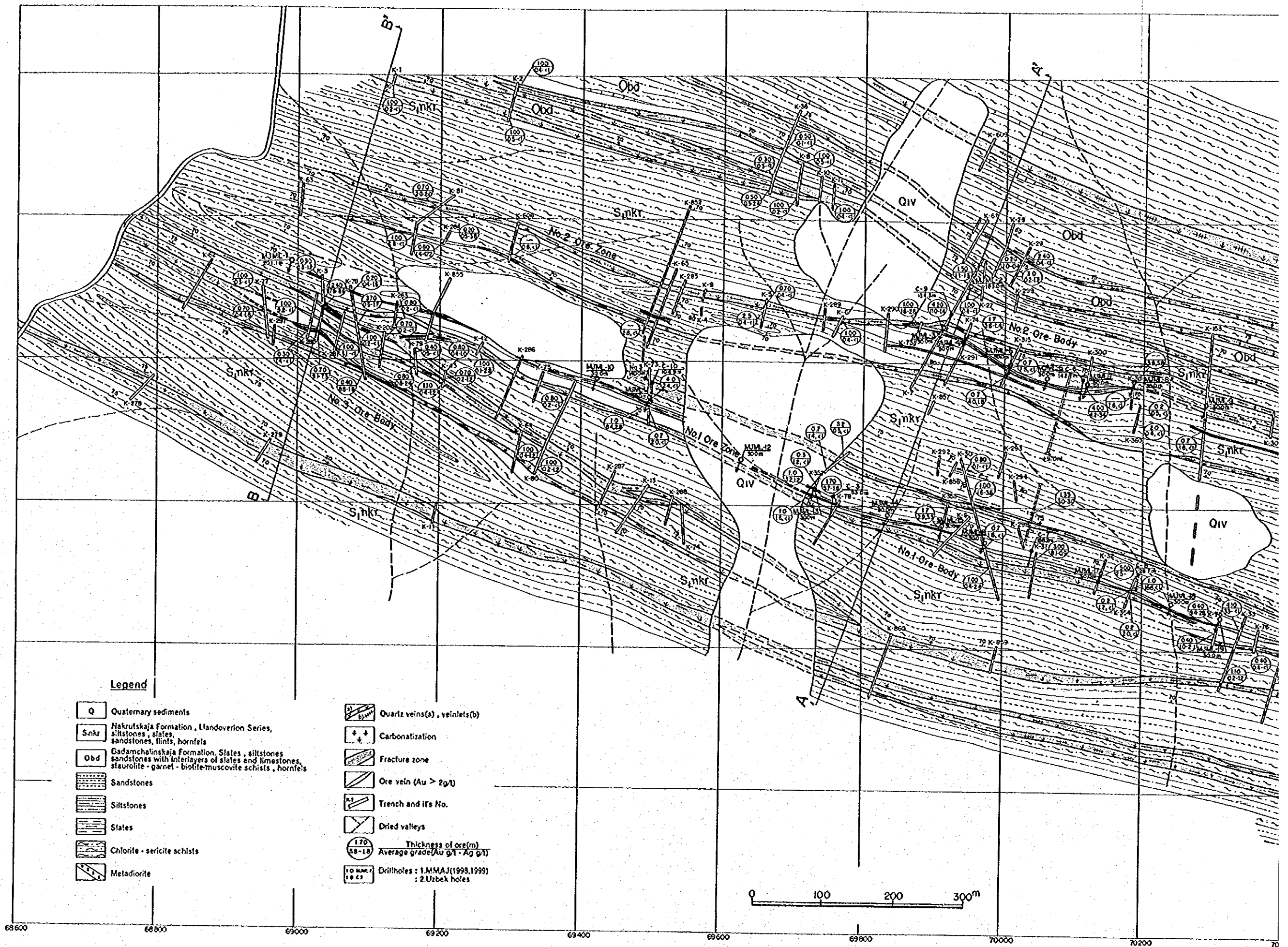
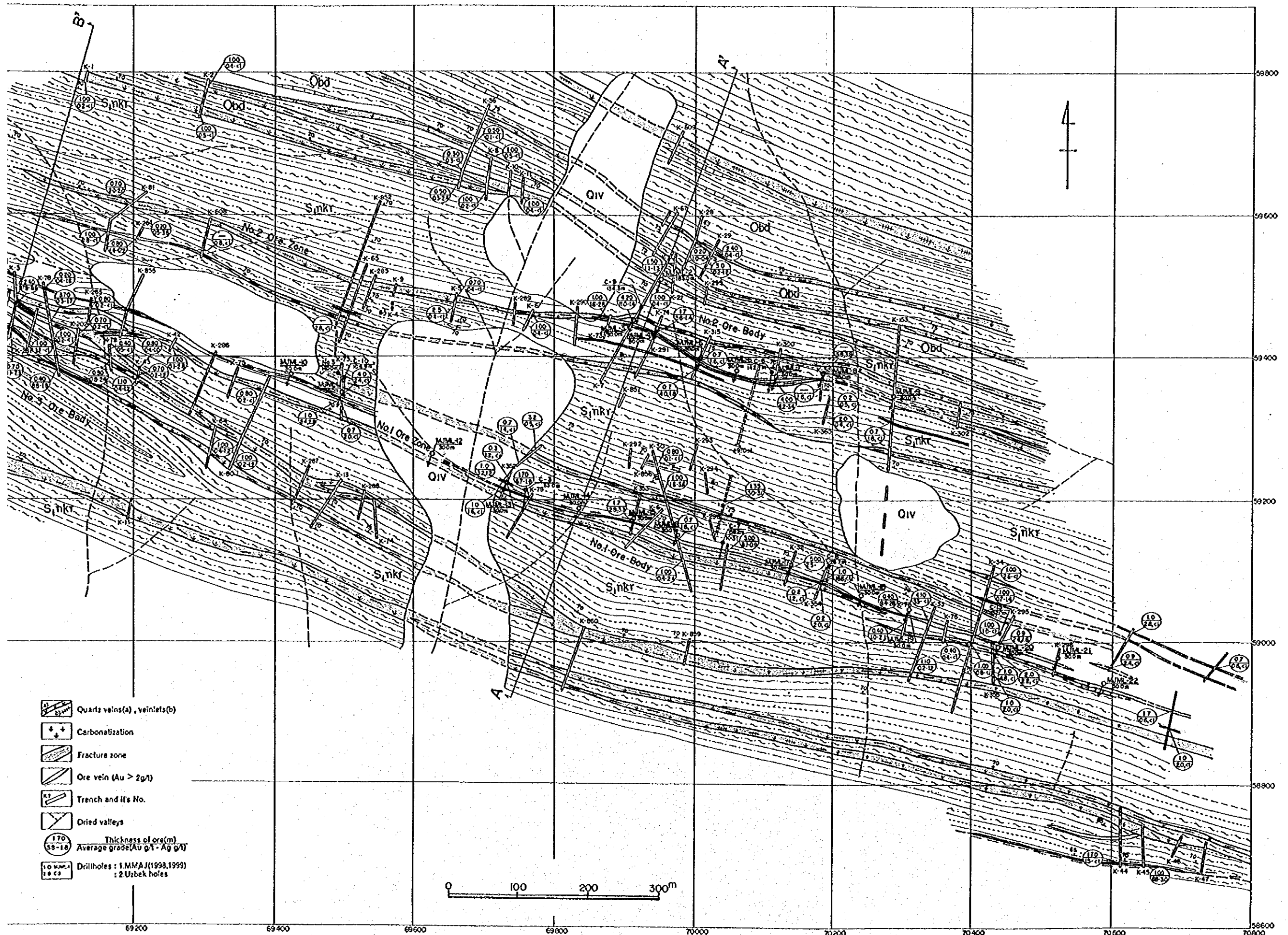


Fig.II-2-1-1 Geologic Map of the Maulyan Ore Manifestation



- Quartz veins(a), veinlets(b)
- Carbonalization
- Fracture zone
- Ore vein (Au > 2g/t)
- Trench and its No.
- Dried valleys
- Thickness of ore(m)
- Average grade(Au g/t - Ag g/t)
- Drillholes: 1.MMAJ(1998,1999)
- Drillholes: 2.Uzbek holes

Fig.II-2-1-1 Geologic Map of the Maulyan Ore Manifestation

(after Zornistan Expedition, 1997, 1998, 1999)

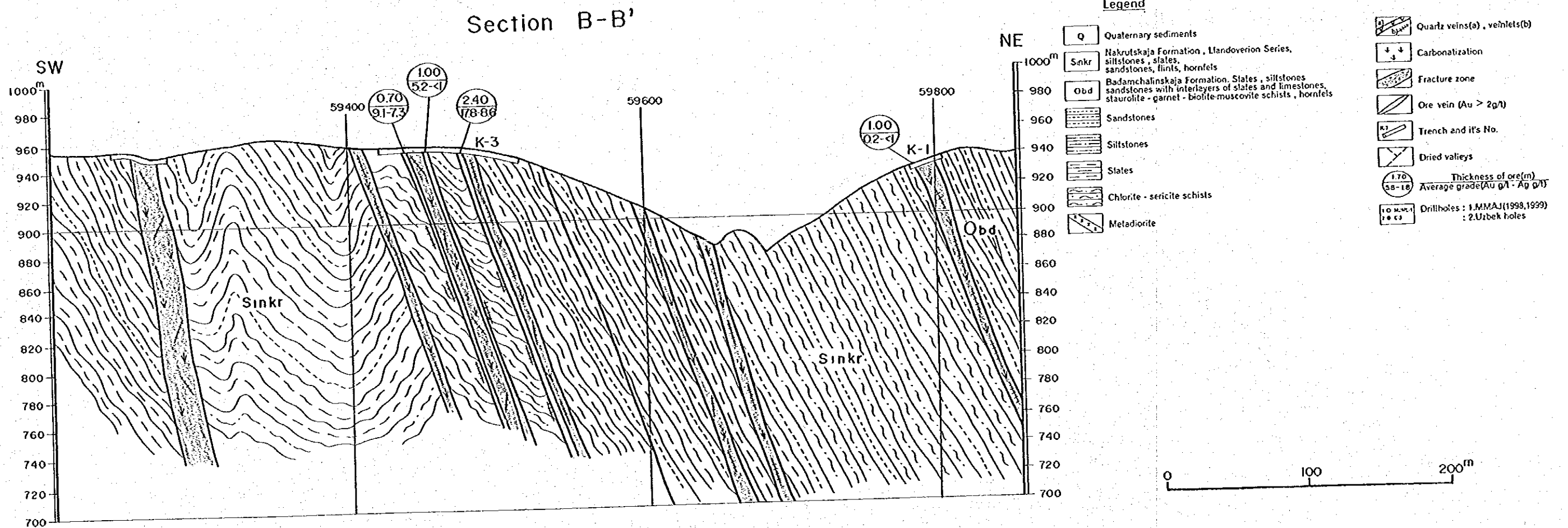
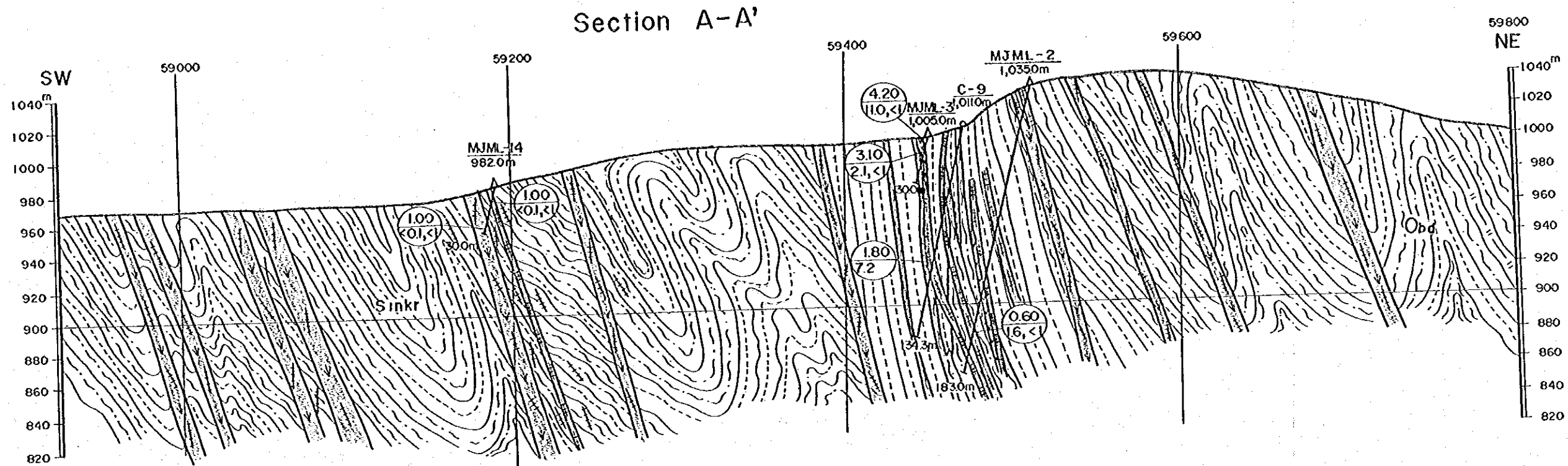


Fig. II-2-1-2 Geologic Cross Section of the Maulyan Ore Manifestation