Fig. II-3-1-1 Geologic Map of Altynsai Deposit

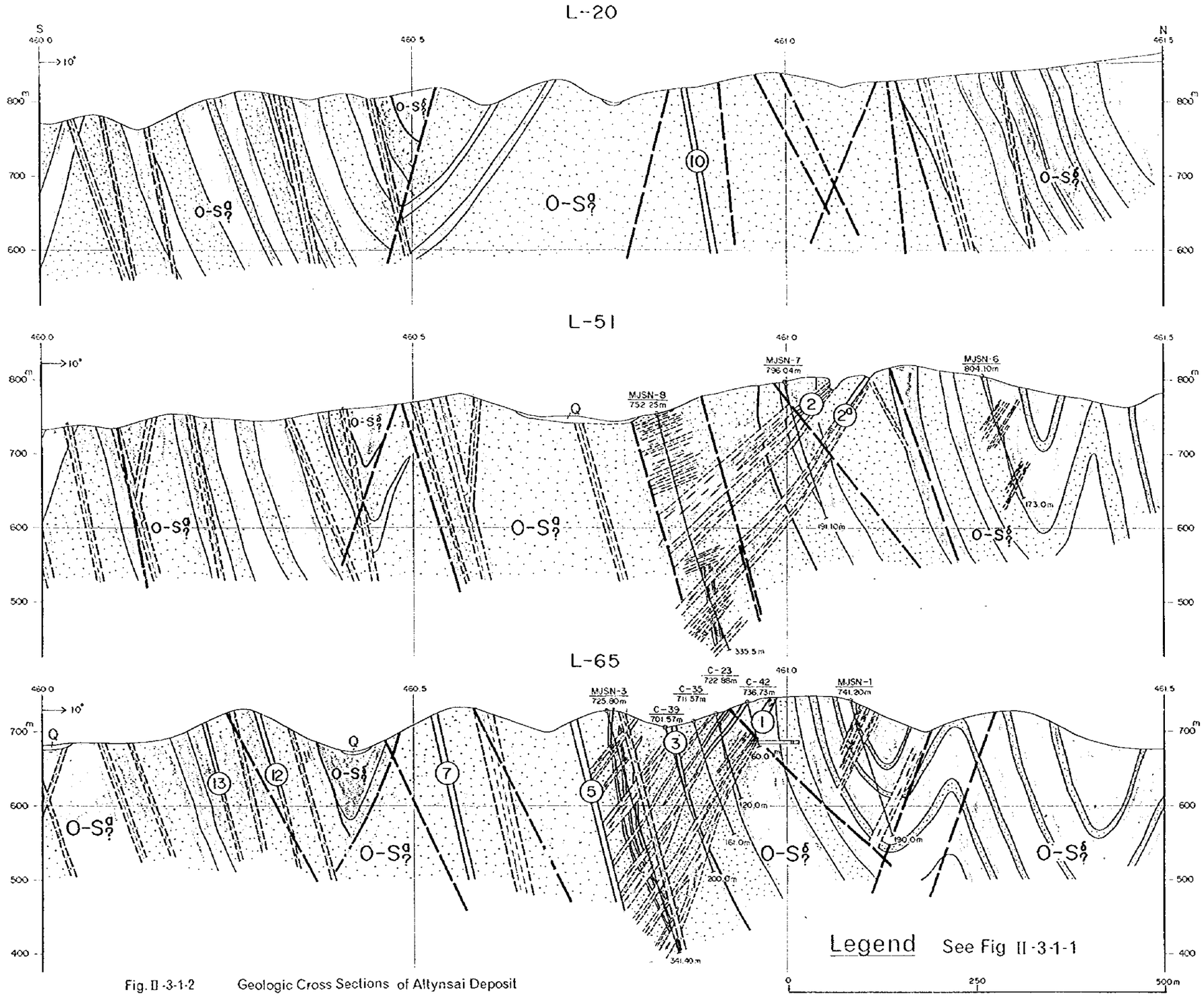
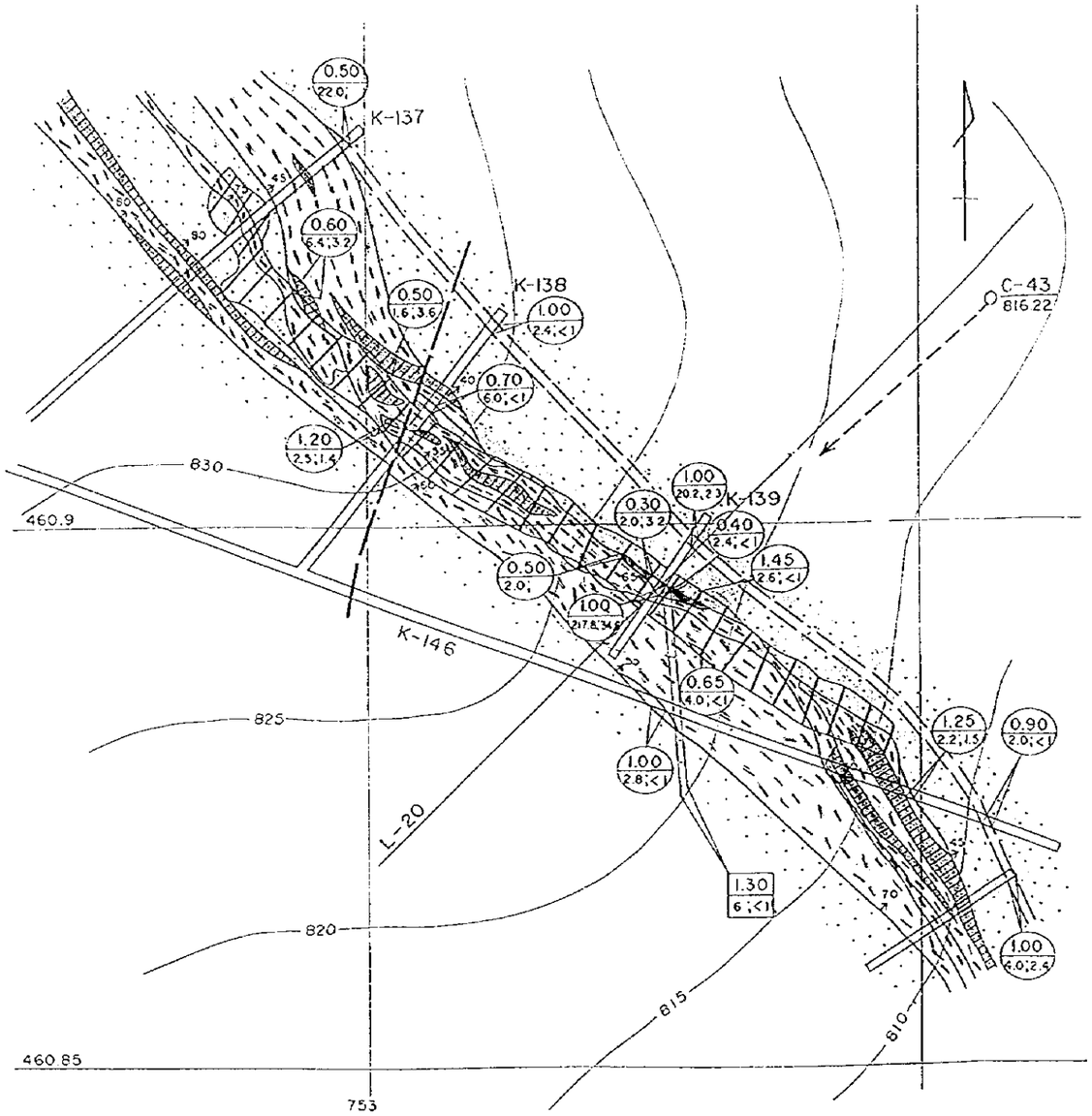


Fig. II-3-1-2 Geologic Cross Sections of Altynsai Deposit



Legend

- Sandstone
- Slate
- Quartz vein
- Quartz veinlets
- Crushed zone
- Fault
- Ore zone(Au ≧ 2g/t)
- Trench
- Sampling channel
- 1.09 / 6.0;3.2 — Width(m) / Au g/t ; Ag g/t (Existing data)
- 1.00 / 6.0;3.2 — Width(m) / Au g/t ; Ag g/t (MMAJ, 1997)

Section L-20

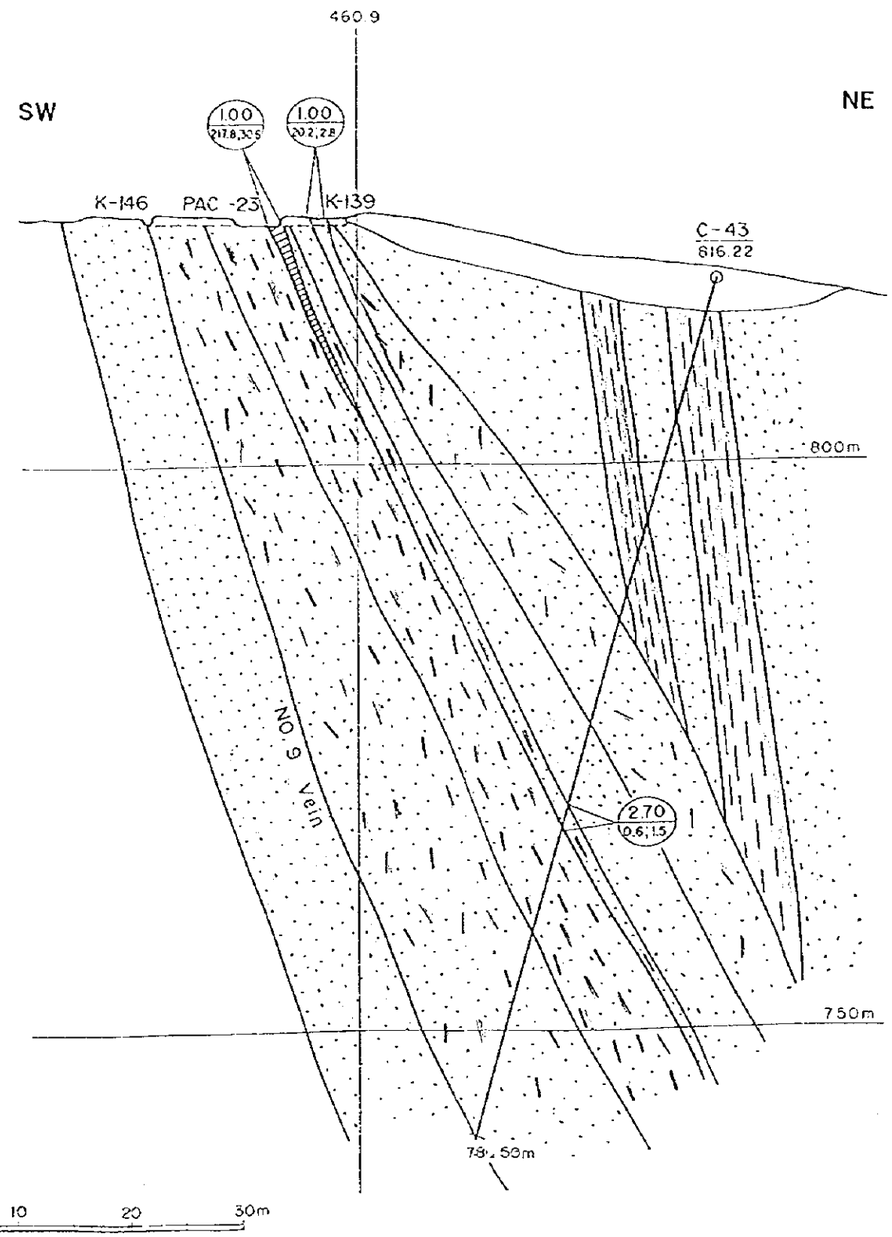


Fig. II -3-1-3 Geologic Map and Cross Section of No.9 Vein(Kazanbulak Vein)

3-2 Drilling Survey

3-2-1 Purpose of the survey

In order to ascertain and describe the stratigraphy and mode of occurrence of ore deposits in the Altynsai District, drilling survey was carried out.

3-2-2 Methods of the survey

1) Survey work

With the personnel and equipment arranged by the Samarkandgeology, drilling work of 10 holes totaling 2,451.1 m was performed.

Locations of the respective drillholes are indicated in Figs. II-3-2-1.

The drilling machines used were a unit of SKB-4, two units of SKB-41 and a unit of ZIF-650, all Russian-made, capable of drilling 300 m to 500 m in case of 76 mm dia. and 500 m to 600 m in case of 59 mm dia.

The drilling operation was done in two 12-hour shifts, with one foreman and one operator per unit, in principle.

A buldozer and a trailer were used for the transportation of drilling rigs and supplies, road construction, drill site leveling and preparations.

The normal methods and wireline methods were employed for the drilling operation in an effort to improve core recovery and work progress.

For the surface soil drilling, single diamond bits and metal bits of 93 mm dia. or 76 mm dia. were used. After reaching the rock portion, casing pipes of 89 mm dia. and 73 mm dia. were installed, and drilling operation was continued with the diamond bits of 76 mm dia. or 59 mm dia. as the final diameter. Mud water was not prepared at the drilling site but at the mud water plant of the Altynkazgan Geological party's base and transported to the drilling site by 2-m^3 and 4-m^3 tank trucks.

The drilling work lasted for 147 days from August 24, 1997 to January 17, 1998. The drilling lengths and core recovery by hole are tabulated in Table II-3-2-1.

The drilling efficiency, working time, consumption of drilling articles and diamond bits are shown in Table II-3-2-2 thru II-3-2-5. The main equipment used, results of work and progress record by drillhole are respectively shown in Appendices 3-1 thru 3-3.

2) Drilling operation

Particulars of the drilling operations performed are shown in Table II-3-2-6.

3-2-3 Results of the drilling survey

The survey findings are indicated in the geological cross sections along the drillholes(Figs. II-3-2-2 thru -6).

1) MJSN-1 (Direction N 10°E; inclination –75°; drilling length 190.0 m) (Exploration Line L-65)

The drilling was aimed to examine mineralization in the eastern extension of No.8 vein(the northwest vein) at the 900 m point, from the surface to an approximate depth of 150 m.

(1) Geology : Except the near-surface portion, the drillhole is composed of slate of the Middle Formation of Ordovician to Silurian Systems, accompanied by sandstone.

(2) Mineralization : As shown in Fig. II-3-2-2, no showings of mineralization grading Au 1.0 g/t or more was found.

2) MJSN-2 (Direction S 10°W; inclination –75°; drilling length 160.1 m) (Exploration line L-81)

The drilling was aimed to explore a silicified zone(No.11 vein, 0.65 m wide, grading Au 19.2 g/t) accompanied by quartz veins, as confirmed in the trenches K-221 and K-53 excavated by the Uzbek side, from the surface to an approximate depth of 150 m.

(1) Geology : Except for the near-surface, it consists of slate of the Middle Formation of Ordovician to Silurian Systems up to 22.8 m in depth, after which it changes mainly to sandstone of the Lower Formation of the same system, accompanied by slate.

(2) Mineralization : As seen in Fig. II-3-2-3, no mineralization showings grading Au 1.0 g/t or higher was discovered.

3) MJSN-3 (Direction N 10°E; inclination –75°; drilling length 341.4 m) (Exploration line L-65)

The drilling was aimed to examine mineralization in the veins parallel with the hanging side of No.1 vein and also that in the No.1 vein from the surface to an approximate depth of 300m.

(1) Geology : Except for the near-surface, it consists mainly of sandstone of Lower Formation of Ordovician to Silurian Systems, accompanied by slate.

(2) Mineralization : At various locations in the lower part of No.1 vein and its hanging side, gold mineralization accompanied by quartz veins-veinlets containing tourmaline, pyrite and arsenopyrite was found, as seen in Fig. II-3-2-2. The mineralization showings are tabulated in Table II-3-2-7.

4) MJSN-4 (Direction N 10°E; inclination –75°; drilling length 320.0 m) (Exploration line L-61)

The drilling was intended to examine mineralization some 150 m beneath the bonanza of No.1 vein, which was confirmed in the +698.89 m addit, and also that of No.2 vein from the surface to an approximate depth of 250 m.

(1) Geology : Except the near-surface portion, the drillhole is composed mainly of sandstone of Lower Formation of Ordovician to Silurian Systems.

(2) Mineralization : As seen in Fig. II-3-2-4, the drilling revealed mineralization accompanied by quartz veins-veinlets containing tourmaline, pyrite and arsenopyrite in the lower part of No.5 vein, while, near the lower part of No.1 vein, low-grade gold mineralization accompanied by quartz veins-veinlets containing tourmaline, pyrite and arsenopyrite was found. The showings of mineralization are listed in Table II-3-2-7.

5) MJSN-5 (Direction N10°E; inclination –75°; drilling length 320.0m) (Exploration line L-57)

The drilling was aimed to examine mineralization in the western extension of No.1 vein from the surface to an approximate depth of 150 m and also that in the portion some 120 m beneath the bonanza of No.2 vein, which was confirmed in the +698.89 m addit.

(1) Geology : Excepting the near-surface portion, it consists mainly of sandstone of the Lower Formation of Ordovician to Silurian Systems.

(2) Mineralization : As shown in Fig. II-3-2-5, the drilling revealed in the lower part of No.5 vein gold mineralization accompanied by quartz veins-veinlets containing tourmaline, pyrite and arsenopyrite. Furthermore, low-grade gold mineralization accompanied by quartz veins-veinlets containing tourmaline, pyrite and arsenopyrite was found near the lower part of No.2 vein and in the veins parallel with the foot wall. The showings of mineralization are indicated in Table II-3-2-7.

6) MJSN-6 (Direction N 10°E; inclination –75°; drilling length 173.0 m) (Exploration line L-51)

The drilling was intended to grasp mineralization at the 300 m point of the eastern extension of No.8 vein(the northwest vein) from the surface to an approximate depth of 130m.

(1) Geology : Except the near-surface portion, it consists mainly of sandstone of the Middle Formation of Ordovician to Silurian Systems, accompanied by slate.

(2) Mineralization : As Fig. II-3-2-6 indicates, no mineralization showings grading Au 1.0 g/t or higher was found.

7) MJSN-7 (Direction N10°E; inclination –75°; drilling length 191.1 m) (Exploration line L-51)

The drilling was aimed to examine mineralization in the western extension of No.1 vein from the surface to an approximate depth of 50m and also that in the western extension of No.2 vein some 100 m beneath the surface.

(1) Geology : Except the near-surface portion, it is composed mainly of slate of the Middle Formation of Ordovician to Silurian Systems.

(2) Mineralizattion : A dominant quartz vein-veinlet zone containing pyrite and arsenopyrite was encountered between 115.5 m and 145.2 m in depth, which corresponds to the No.2 vein; however, no showings of mineralization grading Au 1.0 g/t or more were found, as indicated in Fig. II-3-2-6.

8) MJSN-8 (Direction N 10°E; inclination –75°; drilling length 335.5 m) (Exploration line L-51)

The drilling was intended to examine mineralization in the western extension of No.1 vein from the surface to an approximate depth of 250 m and also that in the western extension of No. 2 vein from the surface to an approximate depth of 300 m.

(1) Geology : Except for the near-surface portion, it is composed mainly of sandstone of the Lower Formation of Ordovician to Silurian Systems.

(2) Mineralization : The drilling revealed gold mineralization accompanied by dominant quartz veins-veinlets containing tourmaline, pyrite and arsenopyrite, between 229.3 m and 246.3 m in depth, which corresponds to the No. 2 vein. At the drillhole, many quartz veinlet zones containing tourmaline and arsenopyrite, presumably with the N-S trend, were seen, accompanied by low-grade gold mineralization at various locations. The showings of mineralization are indicated in Fig. II-3-2-6.

9) MJSN-9 (Direction N 10°E; inclination –80°; drilling length 200.0 m) (Exploration line L-57)

The drilling was intended to examine mineralization in the western extension of No. 1 vein from the surface to an approximate depth of 70 m and also that in the portion some 70 m beneath the bonanza of No.2 vein, which was ascertained in the +698.89 m addit.

(1) Geology : Except for the near-surface portion, it consists mainly of sandstone of the Lower Formation of Ordovician to Silurian Systems, accompanied by slate.

(2) Mineralization : As shown in Fig. II-3-2-5, many quartz veinlet zones containing tourmaline and arsenopyrite, presumably with the N-S trend, were encountered, accompanied by low-grade gold mineralization at various locations. Although quartz veins-veinlets were confirmed around the anticipated locations of the Nos.1 and 2 veins, their mineralization showings are weak. The showings of mineralization are indicated in Table II-3-2-7.

10) MJSN-10 (Direction N 10°E; inclination –75°; drilling length 220.0 m) (Exploration line L-61)

The drilling was aimed to examine mineralization some 50 m beneath the bonanza of

No.1 vein, which was confirmed in the +698.89 m addit and also that in the No.2 vein from the surface to an approximate depth of 150 m.

(1) Geology : Excepting the near-surface portion, it consists mainly of sandstone of the Lower Formation of Ordovician to Silurian Systems, accompanied by slate.

(2) Mineralization : As shown in Fig. II-3-2-4, the drilling revealed low-grade gold mineralization accompanied by quartz veins-veinlets containing tourmaline, pyrite and arsenopyrite around the lower part of No.1 and No.2 veins. Showings of mineralization are indicated in Table II-3-2-7.

3-3 Summary and Considerations

The District is underlain by Ordovician-Silurian slate, siltstone, sandstone, phyllite and lower Silurian slate, siltstone and sandstone, which are intruded by lamprophyre dikes. Sedimentary rocks and metamorphic rocks in the District are folded in anticline and syncline trending in the WNW-ESE direction, where many fracture zones with the WNW-ESE and NW-SE trends and joints with the N-S trend develop. Ore deposits in the District are gold-bearing quartz veins controlled by many fracture zones with the WNW-ESE and NW-SE trends, or tourmaline-quartz veins with the N-S trend. More than 20 ore zones have been confirmed in the District, which include the veins Nos. 1, 2, 5, 8 ("Northwest Vein"), 9 ("Kazanbulak Vein") and 10 ("Berkut Vein").

Fracture zones with the WNW-ESE trend that control the Nos. 1 and 2, major veins of the northern ore zone, dips 45° to 70° southward., whilst a fracture zone with the same trend that controls the Nos. 5, 6, 7 and 12 veins of the southern ore zone dips 70° to 80° northward. Which of the fracture zones that have the same trend but dip in different directions continues to a greater depth after intersecting has been unclarified. In view of the fact that fracture zones dipping north outnumber those dipping south, it is likely that fracture zones in the southern ore zone continue into the deep, thereby forming main ore bodies and that the No.1 and No.2 veins are their branch veins.

Inumerable joints trending in the N-S direction and dipping 45° to 80° westward develop in an area, 2.5 km long and 500 m to 800 m wide, which embraces the Nos, 1, 2, 5, 8 and 10 veins. In these joints, tourmaline-quartz veinlets, 0.1 cm to 25 cm wide, occur (Figs. II-3-3-1 and - 2). The veinlet zone almost coincides with the biotite-muscovite hornfels zone. From the anomalies (20-60 gamma) detected by the Uzbek airborne magnetic prospecting, it has been inferred that granite stocks exist aligned in the WNW-ESE direction under the veinlet zone. The veinlet zone is considered to be tourmaline greisen formed by "pneumatolysis" of granites in cross joints formed by upward intrusion of the granite stocks. The drilling survey executed in the subject year indicates that the gold grade of the tourmaline-quartz veinlet zone is 0.3 g/t to 1.0 g/t, partially 2 - 5 g/t. Portions where veinlets are concentrated and gold grade exceeds 1-1.5 g/t may be mined by

open pit.

Component minerals in quartz veins occurring in the fracture zone with the WNW-ESE and NW-SE trends are mainly quartz, pyrite, marcasite, arsenopyrite, chalcopyrite, sphalerite, goethite and lepidochrocite, accompanied by galena, native bismuth, aikinite, wittichenite, scheelite, rutyle and electrum.

Electrum identified in the polished sections is 5-10μm in grain size and occurs in quartz, associated with chalcopyrite, native bismuth and wittichenite in vein-like alignment but is independently existing without contact with the other minerals. Of the tourmaline-quartz veins accompanying the joints with the N-S trend, main component minerals are quartz, tourmaline, pyrite and arsenopyrite. While the Uzbek study indicates that wolframite, cassiterite, topaz, beryl and native gold are included, it was not verified in the subject survey.

Homogenization temperature of ores of the Altynsai deposit is generally 250°C to 350°C, some of veins in the WNW-ESE and NW-SE directions indicate 110°C to 200°C. Homogenization temperature of the tourmaline quartz veins is 250°C to 340°C (Appendix 2-8).

Out of the seven drillholes MJSN-3, -4, -5, -7, -8, -9 and -10 aimed at the lower portions of the No.1 and No.2 veins of the Altynsai deposit, the drilling MJSN-8 caught a dominant gold-bearing quartz vein (true width 1.6 m; Au 15.3 g/t) in the No.2 vein some 250 m under the surface. The MJSN-4 and -10 confirmed a low-grade gold mineralization zone in the lower portion of the No.1 vein, while the MJSN-5 also confirmed a low-grade gold mineralization zone in the lower portion of the No.2 vein and also in a vein parallel with the footwall side of the No.2 vein. The MJSN-3 confirmed gold mineralization zones in three veins parallel with the hanging side of the No.1 vein. The MJSN-4 and -5 caught in the lower portion of the No.5 vein a gold mineralization zone accompanied by quartz veinlets. Beside, MJSN-8, -9, and -10 confirmed a low-grade mineralization zone in a quartz-tourmaline-arsenopyrite veinlet swarm presumably with the N-S trend.

The MJSN-1, -2 and -7 did not come across a mineralization zone grading Au 2.0 g/t or higher. As the result of the drilling survey of the subject fiscal year, relatively substantial mineralization was caught on the hanging side of the No.1 vein and in the No.5 vein, whilst no dominant mineralization was encountered in the major veins such as Nos. 1 and 2, except the MJSN-8. The MJSN-4 and -10 aimed at the lower portion of the drift of the No.1 vein where strong gold mineralization has been confirmed (extension 135 m; average width 2.29 m; Au 15.7 g/t) only caught low-grade mineralization (true width 0.95 m; Au 5.8 g/t). The MJSN-5 and -9 aimed at the lower portion of the drift of the No.2 vein (extension 55 m; average width 4.28 m; Au 4.5 g/t) also resulted in finding low-grade mineralization (true width 1.91 m; Au 2.1 g/t). It is due presumably to these ore bodies

being small in size and ununiform in grade distribution that no remarkable gold mineralization was caught by drilling at promising zones.

Table II-3-2-1 Quantity of Drilling Works and Core Recovery in the Altynsai District

Hole No.	Programmed Length(m)	Drilled length (m)	Length of core (m)	Core recovery (%)
MJSN-1	190.00	190.00	155.95	83.0
MJSN-2	160.00	160.10	129.70	82.9
MJSN-3	400.00	341.40	275.55	81.2
MJSN-4	300.00	320.00	261.40	82.3
MJSN-5	320.00	320.00	269.20	84.8
MJSN-6	130.00	173.00	144.80	84.1
MJSN-7	180.00	191.10	176.00	92.6
MJSN-8	320.00	335.50	278.10	83.4
MJSN-9	200.00	200.00	171.70	87.6
MJSN-10	200.00	220.00	188.25	86.0
Total	2,400.00	2,451.10	2,050.65	84.4

Table II-3-2-2 Efficiency of Each Drillhole in the Altynsai District (1)

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
MJSN-1	SKB-4	Aug.24,'97 ↓ Oct. 1,'97	190.00	155.95	83.0	20.2	9.2	29.4	9.41	6.46	4.87
MJSN-2	SKB-4	Oct. 5,'97 ↓ Nov.25,'97	160.10	129.70	82.9	16.5	12.3	28.8	9.70	5.56	3.08
MJSN-3	SKB-41	Aug.29,'97 ↓ Dec.28,'97	341.40	275.55	81.2	50.1	54.2	104.3	6.81	3.27	2.80
MJSN-4	SKB-41	Sept.14,'97 ↓ Nov.29,'97	320.00	261.40	82.3	42.7	13.2	55.9	7.49	5.72	4.16
MJSN-5	ZIF-650	Sept.22,'97 ↓ Nov.14,'97	320.00	269.20	84.8	35.1	11.2	46.3	9.12	6.91	5.93
MJSN-6	SKB-41	Sept.10,'97 ↓ Oct. 6,'97	173.00	144.80	84.1	14.0	6.8	20.8	12.36	8.32	6.41
MJSN-7	SKB-4	Sept.22,'97 ↓ Oct.29,'97	191.10	176.00	92.6	20.6	9.3	29.9	9.28	6.39	5.03

* includes drilling and out drilling

** includes drilling, out drilling, regain of accident, preparation, dismount/mobilization and others.

Table II-3-2-2 Efficiency of Each Drillhole in the Altynsai District (2)

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
MJSN-8	ZIF-650	Oct.29,'97 ↓ Jan.16,'98	335.50	278.10	83.4	37.2	26.1	63.3	9.02	5.30	4.19
MJSN-9	SKB-41	Nov.26,'97 ↓ Jan.17,'98	200.00	171.70	87.6	24.8	21.8	46.6	8.06	4.29	3.77
MJSN-10	SKB-4	Nov.19,'97 ↓ Jan. 3,'98	220.00	188.25	86.0	28.4	11.7	40.1	7.75	5.49	4.78
Total			2,451.10	2,050.65	84.4	289.6	175.8	465.4	8.46	5.27	4.17

* includes drilling and out drilling

** includes drilling, out drilling, regain of accident, preparation, dismount/mobilization and others.

Table II-3-2-3 Working Time of Diamond Drilling in the Altynsai District (1)

Hole No.	Working Period		Number of Works		Working						
	Period	(day)	Foreman (man)	Worker (man)	Drilling (hour)	Out Drilling (hour)	Regain of Accident (hour)	Preparation (hour)	Dismount/ Mobilization (hour)	Others (hour)	Total (hour)
MJSN-1	Aug.24,'97 ↓ Oct. 1,'97	39	90	115	158.0	327.0	87.0	9.0	25.0	99.0	705.0
MJSN-2	Oct. 5,'97 ↓ Nov.25,'97	52	77	101	132.5	262.5	85.0	0.0	24.0	186.0	690.0
MJSN-3	Aug.29,'97 ↓ Dec.28,'97	122	274	308	393.5	809.5	1,053.0	36.0	84.0	126.0	2,502.0
MJSN-4	Sept.14,'97 ↓ Nov.29,'97	77	159	137	291.5	732.5	188.0	0.0	48.0	81.0	1,341.0
MJSN-5	Sept.22,'97 ↓ Nov.14,'97	54	133	148	283.0	559.0	142.0	60.0	21.0	45.0	1,110.0
MJSN-6	Sept.10,'97 ↓ Oct. 6,'97	27	56	95	126.5	208.5	47.0	18.0	33.0	65.0	498.0
MJSN-7	Sept.22,'97 ↓ Oct.29,'97	38	85	107	158.5	335.5	94.0	0.0	33.0	96.0	717.0

Table II-3-2-3 Working Time of Diamond Drilling in the Altynsai District (2)

Hole No.	Working Period		Number of Works		Working						
	Period	(day)	Foreman (man)	Worker (man)	Drilling (hour)	Out Drilling (hour)	Regain of Accident (hour)	Preparation (hour)	Dismount/ Mobilization (hour)	Others (hour)	Total (hour)
MJSN-8	Oct.29,'97 ↓ Jan.16,'98	80	173	178	338.5	554.5	463.0	9.0	90.0	63.0	1,518.0
MJSN-9	Nov.26,'97 ↓ Jan.17,'98	53	150	154	184.5	409.5	390.0	9.0	72.0	54.0	1,119.0
MJSN-10	Nov.19,'97 ↓ JAn. 3,'98	46	114	143	245.0	437.0	170.0	9.0	48.0	54.0	963.0
Total	—	588	1,311	1,486	2,311.5	4,635.5	2,719.0	150.0	478.0	869.0	11,163.0

Table II-3-2-4 Consumable Drilling Articles in the Altynsai District

Item	Specification	Unit	Quantity										
			MJSN-1	MJSN-2	MJSN-3	MJSN-4	MJSN-5	MJSN-6	MJSN-7	MJSN-8	MJSN-9	MJSN-10	Total
Bentonite		kg											0
Clear mud		kg	310				450	290	250				1,300
Nl mud water		m^3	143	62	217	194	165	108	87	136	119	93	1,324
C. M. C.		kg					20		10				30
UNIFLOK		kg		70	480	200				270	250	190	1,460
Clay		kg		240	810	630				660	790	480	3,610
Diamond bit	93mm	pc		1						1			2
Diamond bit	76mm	pc	1	1	18	1	1	1	1	1	1	1	27
Diamond bit	59mm	pc	11	9	2	15	15	10	10	16	14	11	113
Diamond single bit	59mm	pc									3		3
Diamond reamer	76mm	pc			3								3
Diamond reamer	59mm	pc	1	3	1	3	3	1	1	4	5	4	26
Metal crown	112mm	pc											0
Metal crown	93mm	pc		1	2							1	4
Metal crown	76mm	pc	1	2		1	1	1	2	1	1		10
Metal shue	89mm	pc		1	2					1		1	5
Metal shue	73mm	pc	1	1		1	1	1	1	1	1	1	9
core box			21	25	46	44	38	20	21	46	28	29	318

Table II-3-2-5 Drilling Meterage of Diamond Bits in the Altynsai District

Size	Number of bits (pcs)	Drilling Meterage by Drillhole (m)										Total	Efficiency
		MJSN-1	MJSN-2	MJSN-3	MJSN-4	MJSN-5	MJSN-6	MJSN-7	MJSN-8	MJSN-9	MJSN-10		M/bit
ϕ98mm	1								5.00			5.00	5.00
ϕ76mm	1	7.00										7.00	7.00
	1		8.50									8.50	8.50
	1				4.00							4.00	4.00
	1					9.00						9.00	9.00
	1						4.50					4.50	4.50
	1							3.00				3.00	3.00
	1								4.30			4.30	4.30
	1									7.00		7.00	7.00
	1										3.70	3.70	3.70
	18			325.20								325.20	18.06
Sub total	27	7.00	8.50	325.20	4.00	9.00	4.50	3.00	4.30	7.00	3.70	376.20	13.93
ϕ59mm	11	183.00										183.00	16.64
	9		151.60									151.60	16.84
	2			16.20								16.20	8.10
	15				316.00							316.00	21.07
	15					311.00						311.00	20.73
	10						168.50					168.50	16.85
	10							188.10				188.10	18.81
	16								326.20			326.20	20.39
	14									193.00		193.00	13.79
	11										216.30	216.30	19.66
Sub total	113	183.00	151.60	16.20	316.00	311.00	168.50	188.10	326.20	193.00	216.30	2,069.90	18.32
Grand total	141	190.00	160.10	341.40	320.00	320.00	173.00	191.10	335.50	200.00	220.00	2,451.10	17.38

Table II-3-2-6 Results of Drilling Works in the Altynsai District

Hole No.		MJSN-1	MJSN-2	MJSN-3	MJSN-4	MJSN-5	MJSN-6	MJSN-7	MJSN-8	MJSN-9	MJSN-10
Direction Dip		N10°E -75°	S10°W -75°	N10°E -75°	N10°E -75°	N10°E -75°	N10°E -75°	N10°E -75°	N10°E -75°	N10°E -80°	N10°E -75°
	ϕ mm										
	ϕ93mm								5.00		
Bit (m)	ϕ76mm	7.00	8.50	325.20	4.00	9.00	4.50	3.00	4.30	7.00	3.70
	ϕ59mm	183.00	151.60	16.20	316.00	311.00	168.50	188.10	326.20	193.00	216.30
	ϕ mm										
	ϕ mm										
	ϕ mm										
	ϕ mm										
	ϕ89mm		1.00	29.00					5.00		4.00
Casing (m)	ϕ73mm	23.00	22.60		5.00	9.00	4.50	25.00	9.30	7.00	11.60
	ϕ mm										
	ϕ mm										

Table II-3-2-7 Major Mineralization Zones Revealed by Drillings in the Altinsai District(1)

Hole No.	Depth (m)	True width (m)	Au (g/t)	Ag (g/t)	As (%)	W (%)	Remarks
MJSN-3	73.8 - 75.0 (1.2)	0.95	23.6	<1	<0.01	0.001	parallel vein(hanging wall side) of No.1 Vein
	134.6 - 135.6(1.0)	0.78	3.2	<1	<0.01	0.008	parallel vein(hanging wall side) of No.1 Vein
MJSN-4	77.95 - 79.2(1.25)	0.15	10.3	2.4	0.02	0.01	No.5 Vein
	85.5 - 86.3 (0.8)	0.1	3.8	<1	0.04	0.003	No.5 Vein
	87.6 - 88.5 (0.9)	0.11	11.2	3.8	0.04	0.003	No.5 Vein
	103.8 - 105.0(1.2)	0.15	3.4	<1	0.07	0.004	No.5 Vein
	155.1 - 157.55(2.45)	0.43	2.4	0.6	0.02	0.002	No.5 Vein
	182.0 - 183.4(1.4)	0.24	2.2	6.4	0.37	0.004	No.5 Vein
	188.9 - 189.9(1.0)	0.87	3.8	<1	0.02	0.01	No.1 Vein Upper
	194.4 - 195.6(1.2)	1.04	2.2	<1	0.1	0.01	No.1 Vein Upper
	234.9 - 236.0(1.1)	0.89	5.8	<1	0.03	0.68	No.2 Vein Upper
MJSN-5	19.5 - 21.3 (1.8)	0.44	3.0	2.2	0.05	0.003	No.5 Vein
	23.3 - 24.3 (1.0)	0.24	2.4	<1	0.01	0.005	No.5 Vein
	28.6 - 30.2 (1.6)	0.39	2.2	<1	0.01	0.07	No.5 Vein
	48.2 - 49.7 (1.5)	0.36	2.4	2.0	0.01	0.004	No.5 Vein
	72.0 - 73.0 (1.0)	0.21	16.4	8.6	2.2	0.005	No.5 Vein
	84.0 - 85.0 (1.0)	0.22	3.6	1.4	0.05	0.004	No.5 Vein
	177.2 - 177.65(0.45)	0.4	2.8	<1	0.1	0.002	No.2 Vein Upper
	180.3 - 182.5(2.2)	1.98	2.1	<1	0.06	0.003	No.2 Vein Upper
	273.4 - 274.5(1.1)	0.87	2.0	<1	0.03	0.001	parallel vein(foot wall side) of No.2 Vein
	279.2 - 280.2(1.0)	0.79	3.2	<1	0.04	0.002	parallel vein(foot wall side) of No.2 Vein
	315.1 - 315.5(0.4)	0.32	2.8	<1	0.14	<0.001	parallel vein(foot wall side) of No.2 Vein

Table II-3-2-7 Major Mineralization Zones Revealed by Drillings in the Altinsai District(2)

Hole No.	Depth (m)	True width (m)	Au (g/t)	Ag (g/t)	As (%)	W (%)	Remarks
MJSN-8	80.4 - 80.8 (0.4)	0.39	2.2	<1	0.12	0.02	vein N-S system
	148.9 - 149.9(1.0)	0.91	3.0	<1	0.08	0.003	No.1 Vein
	159.6 - 160.6(1.0)	0.87	2.8	<1	0.03	0.02	vein N-S system
	179.2 - 180.2(1.0)	0.99	3.6	5.6	0.14	0.003	vein N-S system
	186.0 - 186.7(0.7)	0.61	2.0	<1	0.07	0.08	No.2 Vein Upper
	238.1 - 239.1(1.0)	0.87	2.0	<1	0.22	0.002	No.2 Vein Lower
	241.15 - 243.0(1.85)	1.6	15.3	0.7	0.23	0.003	No.2 Vein Lower
	254.3 - 255.2(0.9)	0.77	6.2	tr	0.15	0.48	No.2 Vein Lower
	315.0 - 315.8(0.8)	0.67	2.4	1.6	0.06	0.004	parallel vein(foot wall side) of No.2 Vein
MJSN-9	73.6 - 73.8 (0.2)	0.19	2.0	<1	0.04	0.002	vein N-S system
	93.5 - 94.2 (0.7)	0.69	4.6	3.4	0.04	0.002	vein N-S system
	94.9 - 96.0 (1.1)	1.09	2.2	4.6	0.08	0.007	vein N-S system
MJSN-10	120.1 - 120.45(0.35)	0.3	3.7	<1	0.03	0.002	No.1 Vein Lower
	125.3 - 125.58(0.28)	0.24	2.8	3.4	2.26	0.08	No.1 Vein Lower
	162.3 - 163.4(1.1)	0.99	2.0	2.4	0.02	0.002	No.2 Vein Upper

Fig.II-3-2-1 Location Map of the Drillholes in Altynsai District

● M3SN-1 ··· Drillholes MMAJ (1997)

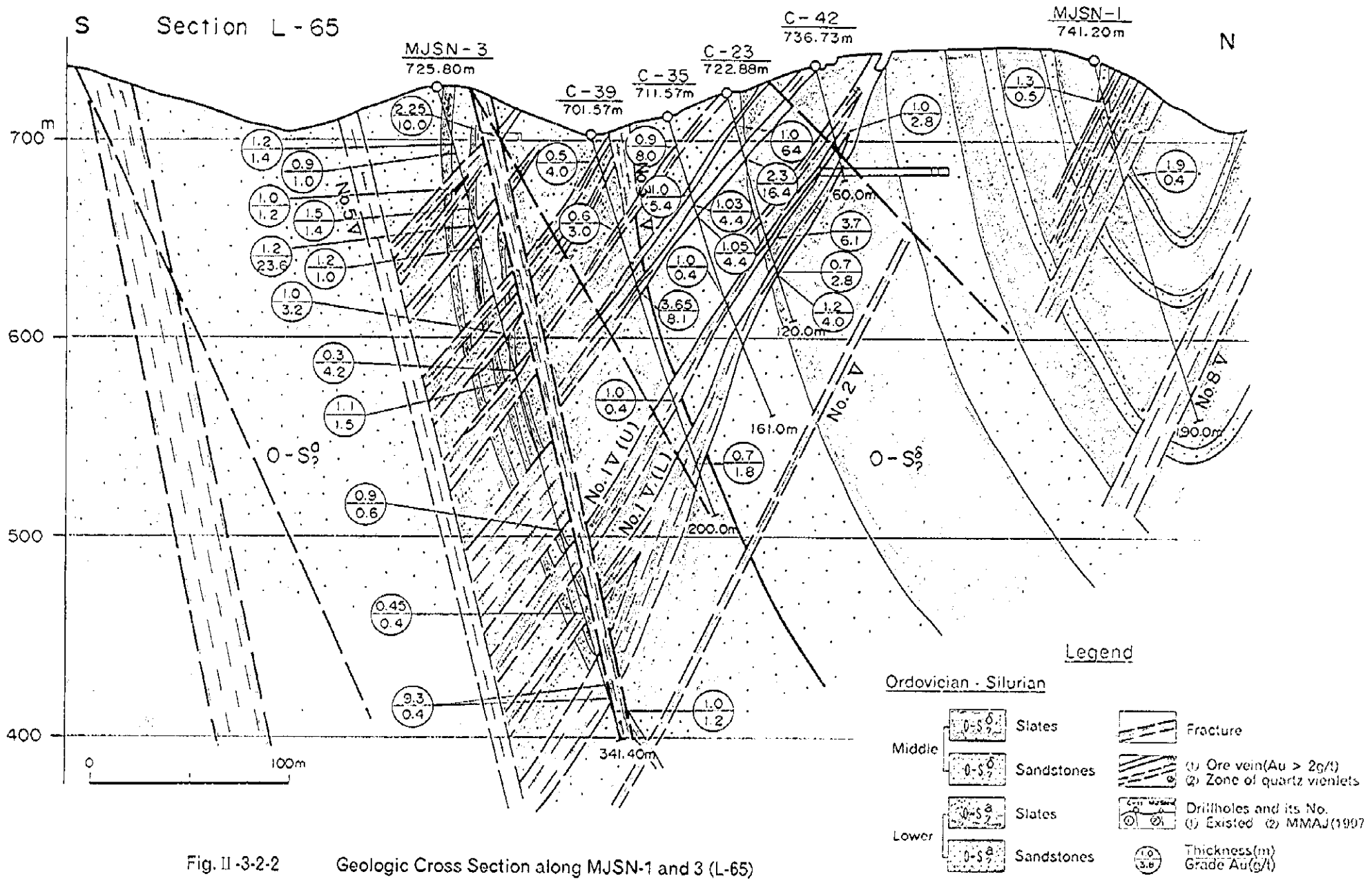


Fig. II-3-2-2 Geologic Cross Section along MJSN-1 and 3 (L-65)

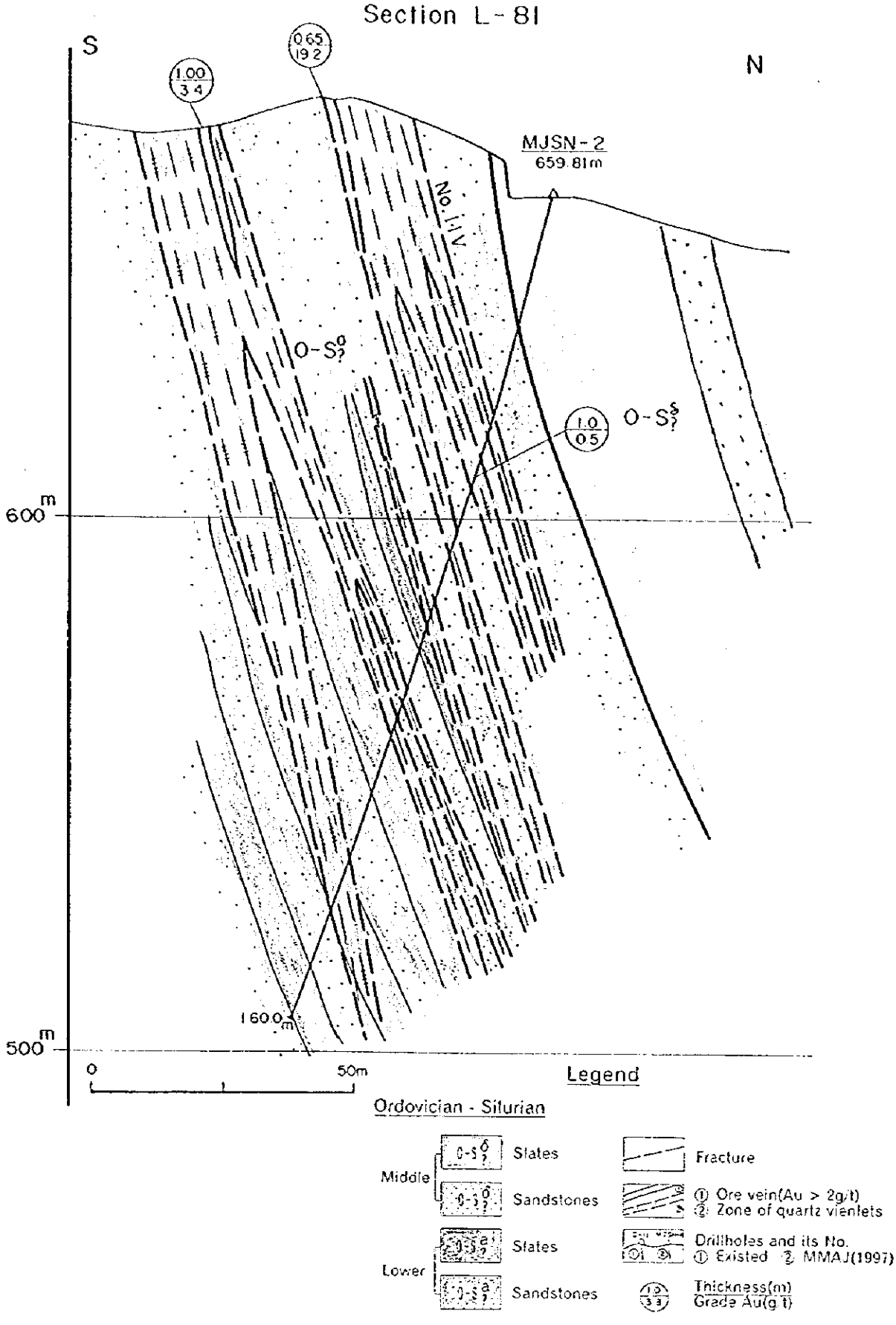


Fig. II-3-2-3 Geologic Cross Section along MJSN-2 (L-81)

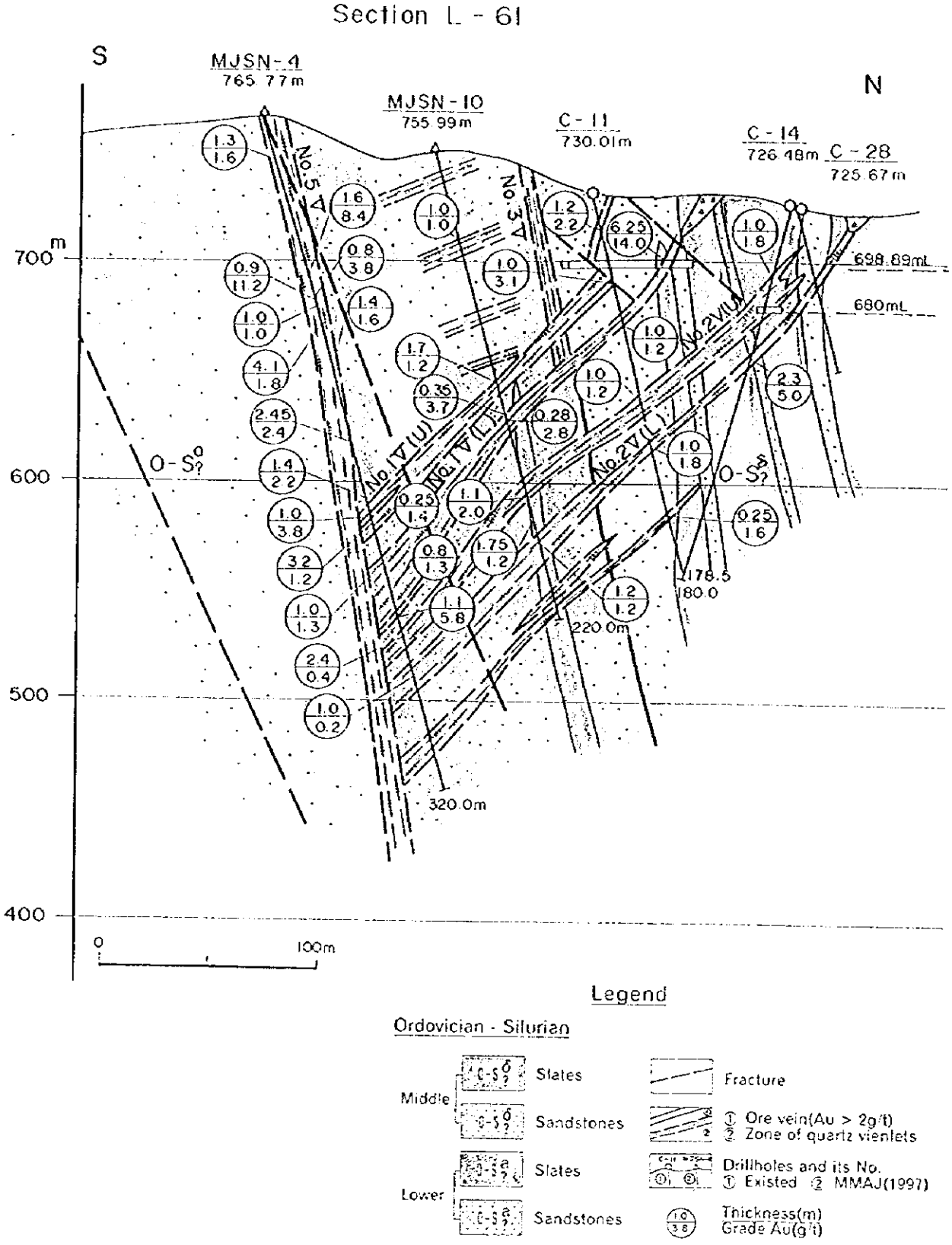


Fig. II-3-2-4 Geologic Cross Section along MJSN-4 and 10 (L-61)

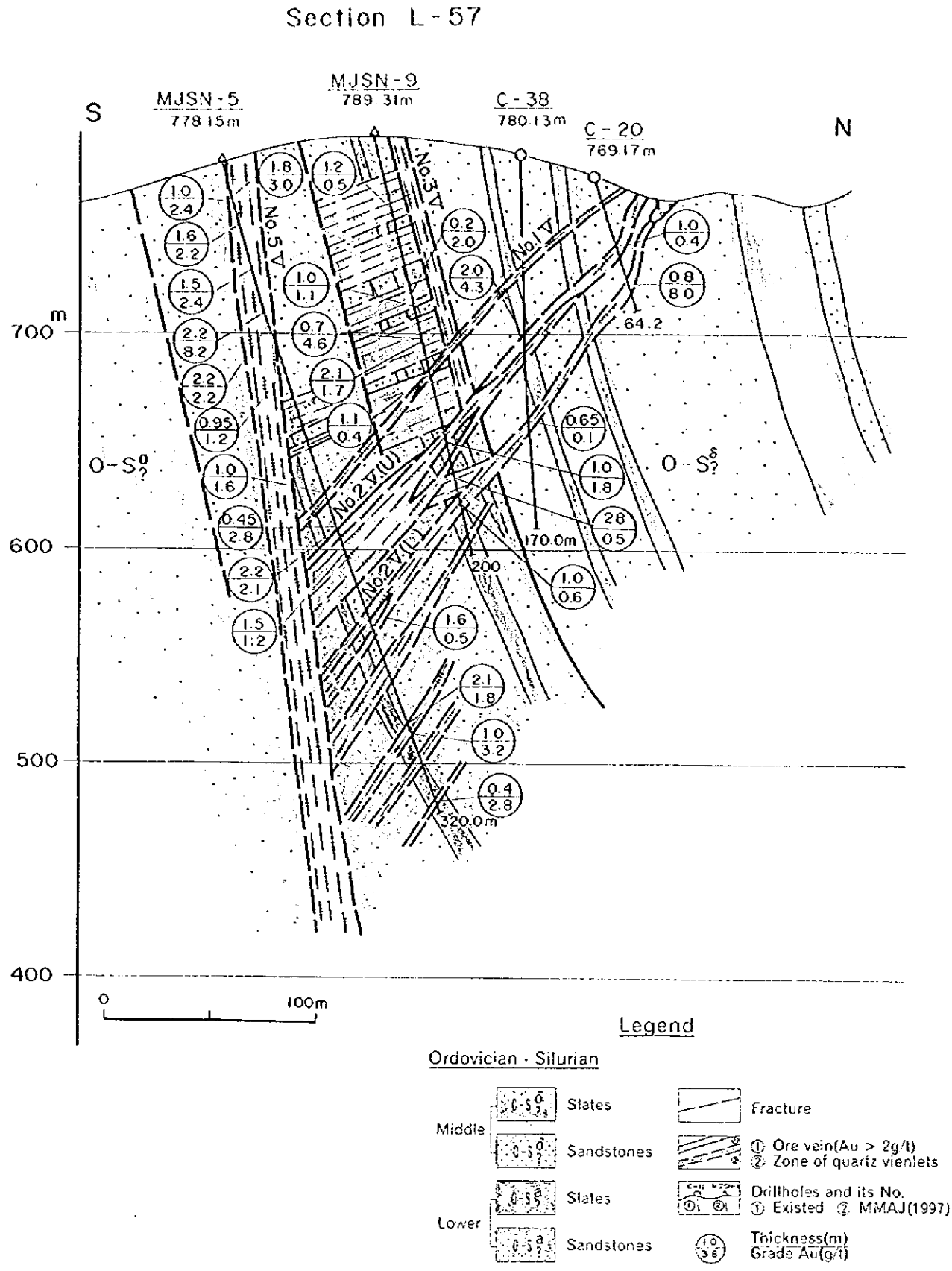


Fig. II-3-2-5 Geologic Cross Section along MJSN-5 and 9 (L-57)

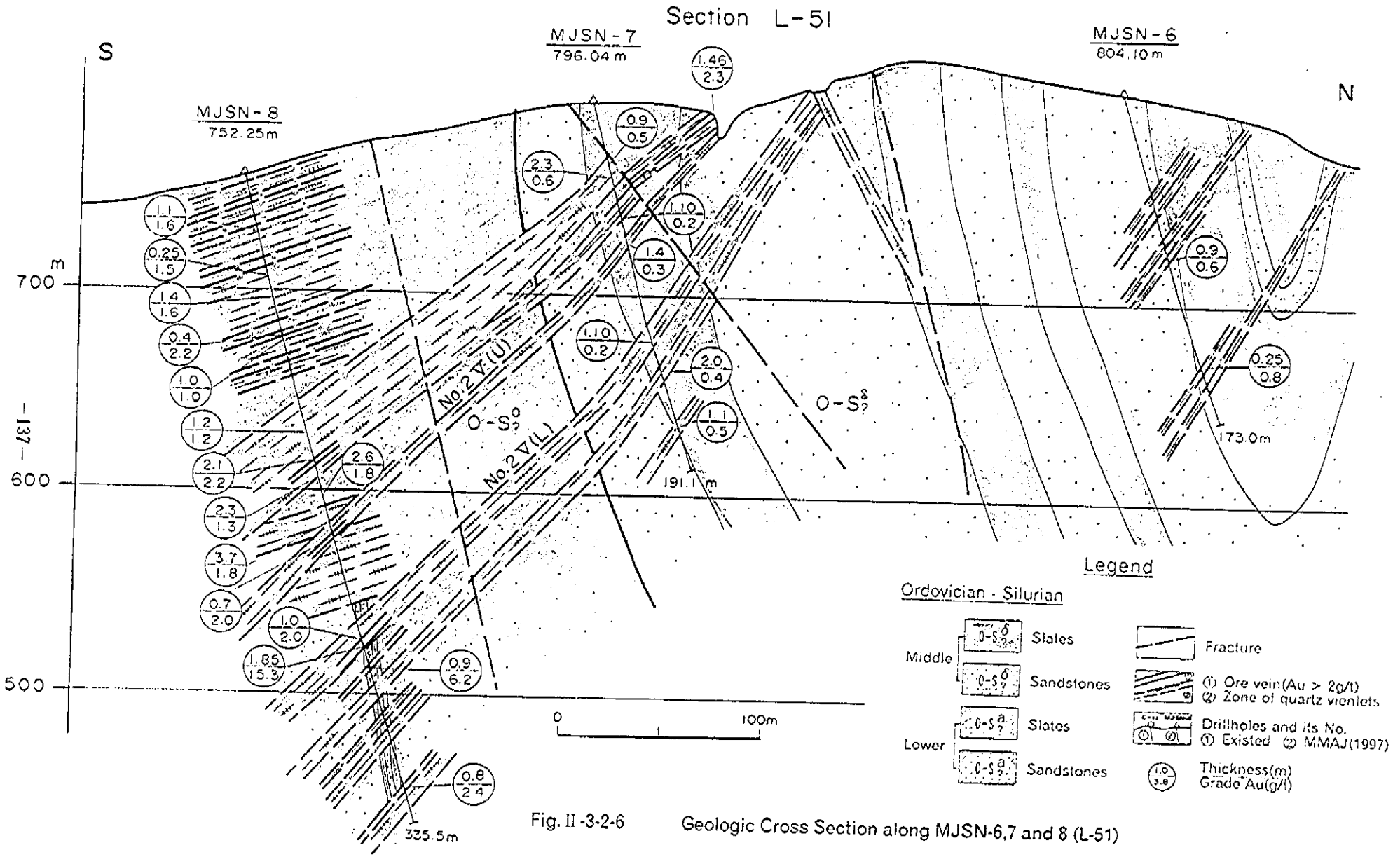


Fig. II -3-2-6 Geologic Cross Section along MJSN-6,7 and 8 (L-51)

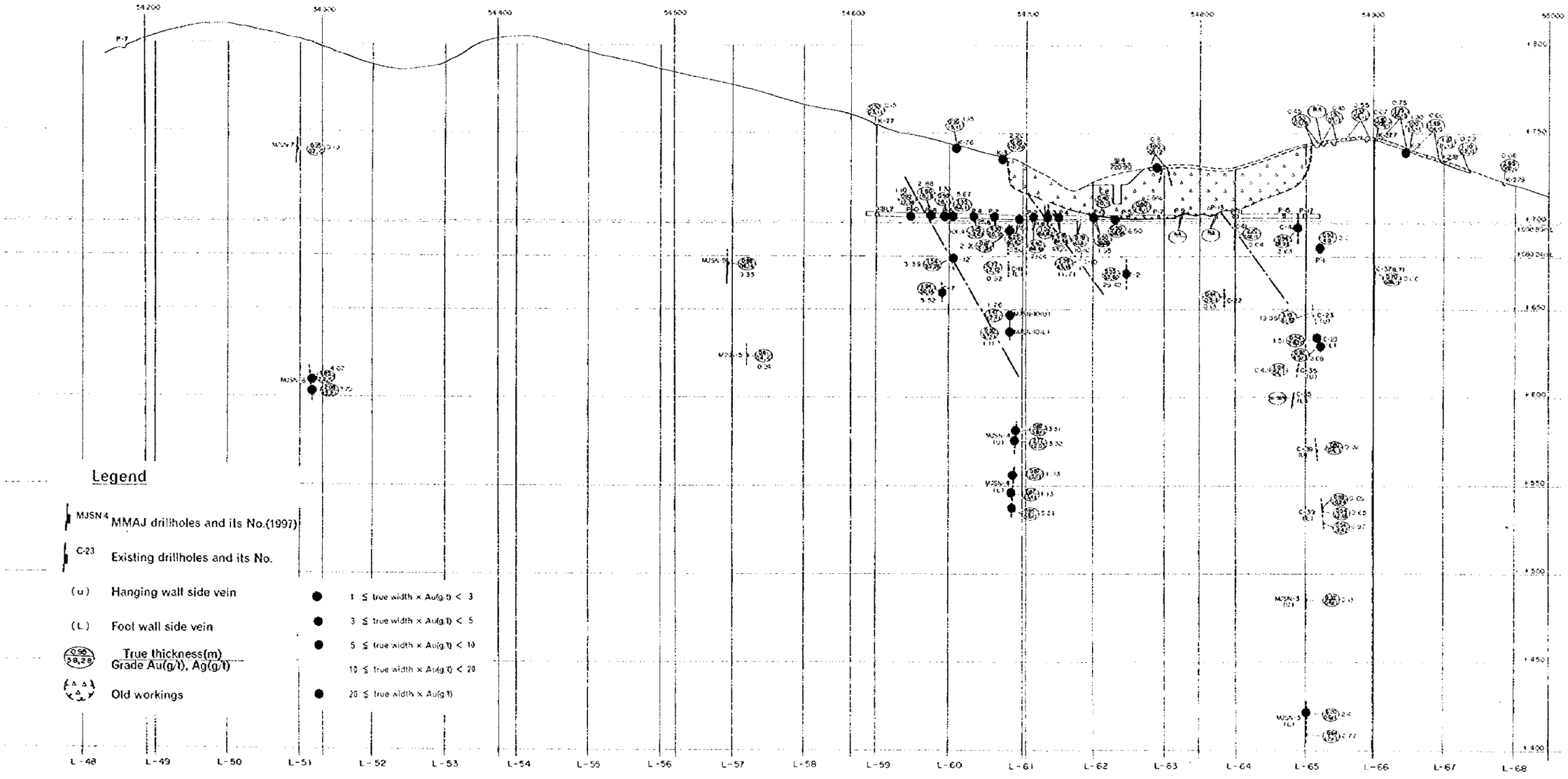


Fig. II-3-2-7 Perspective Section for Altynsai No.1 Vein

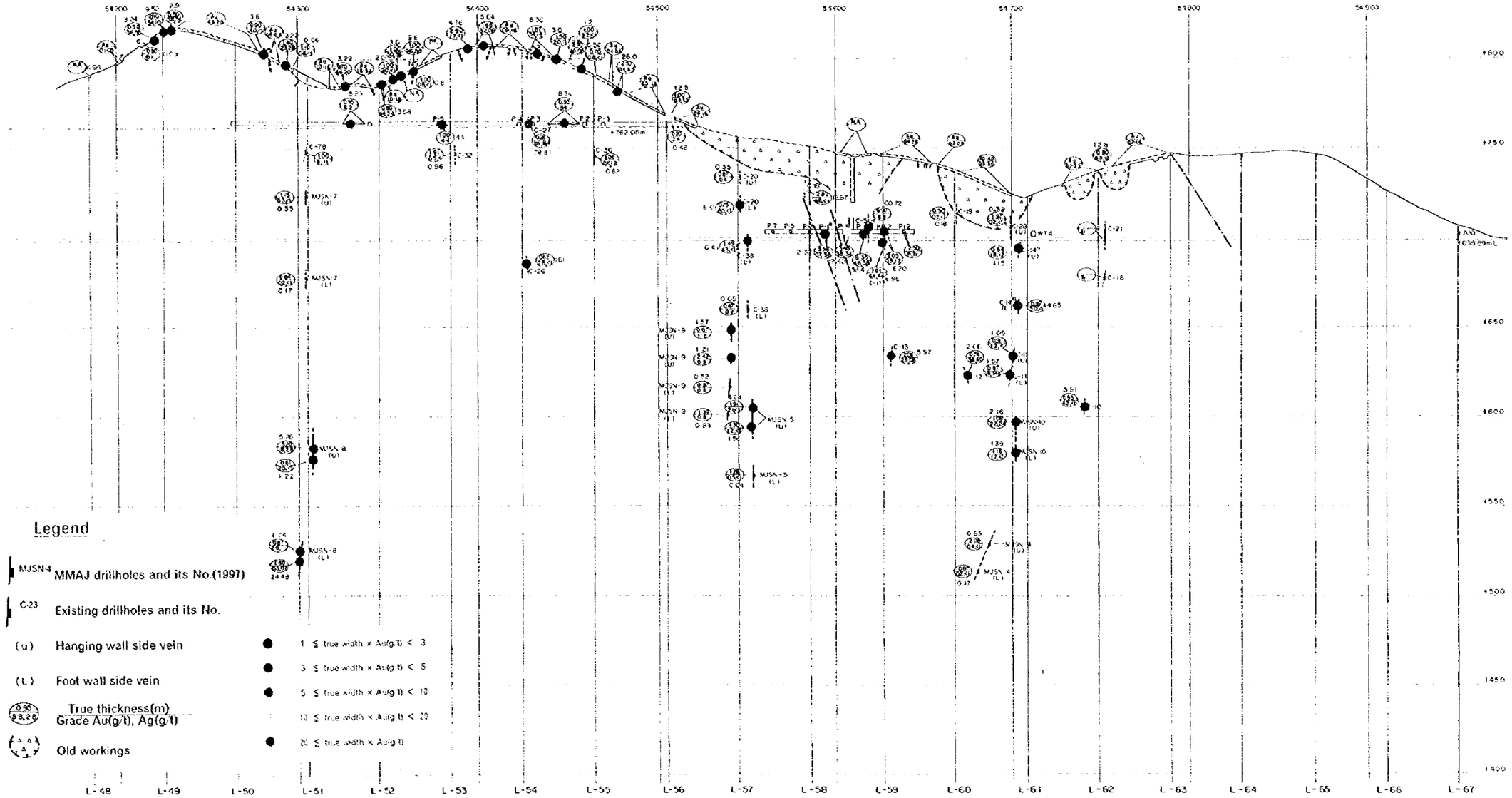


Fig. II-3-2-8 Perspective Section for Altynsai No.2 Vein

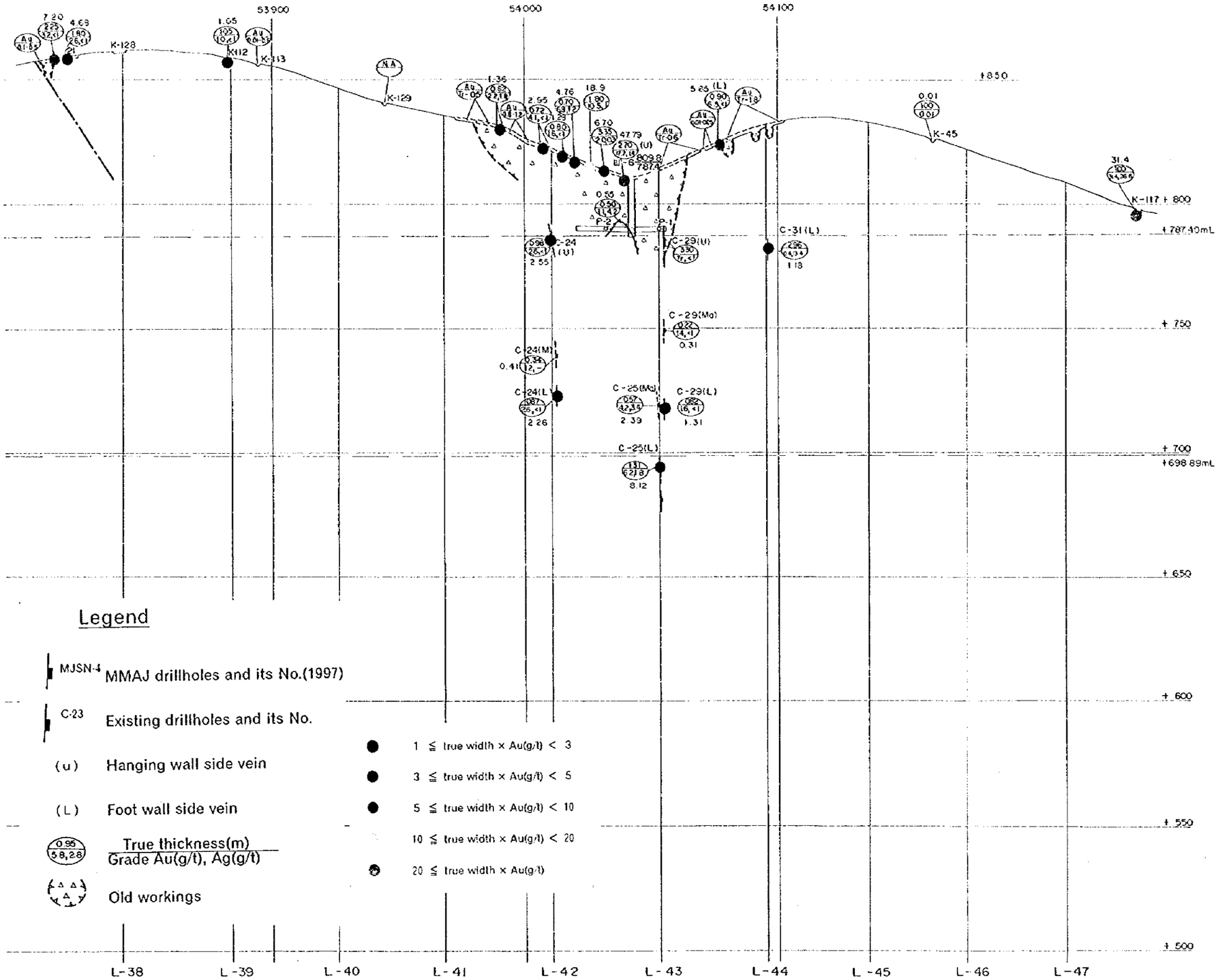
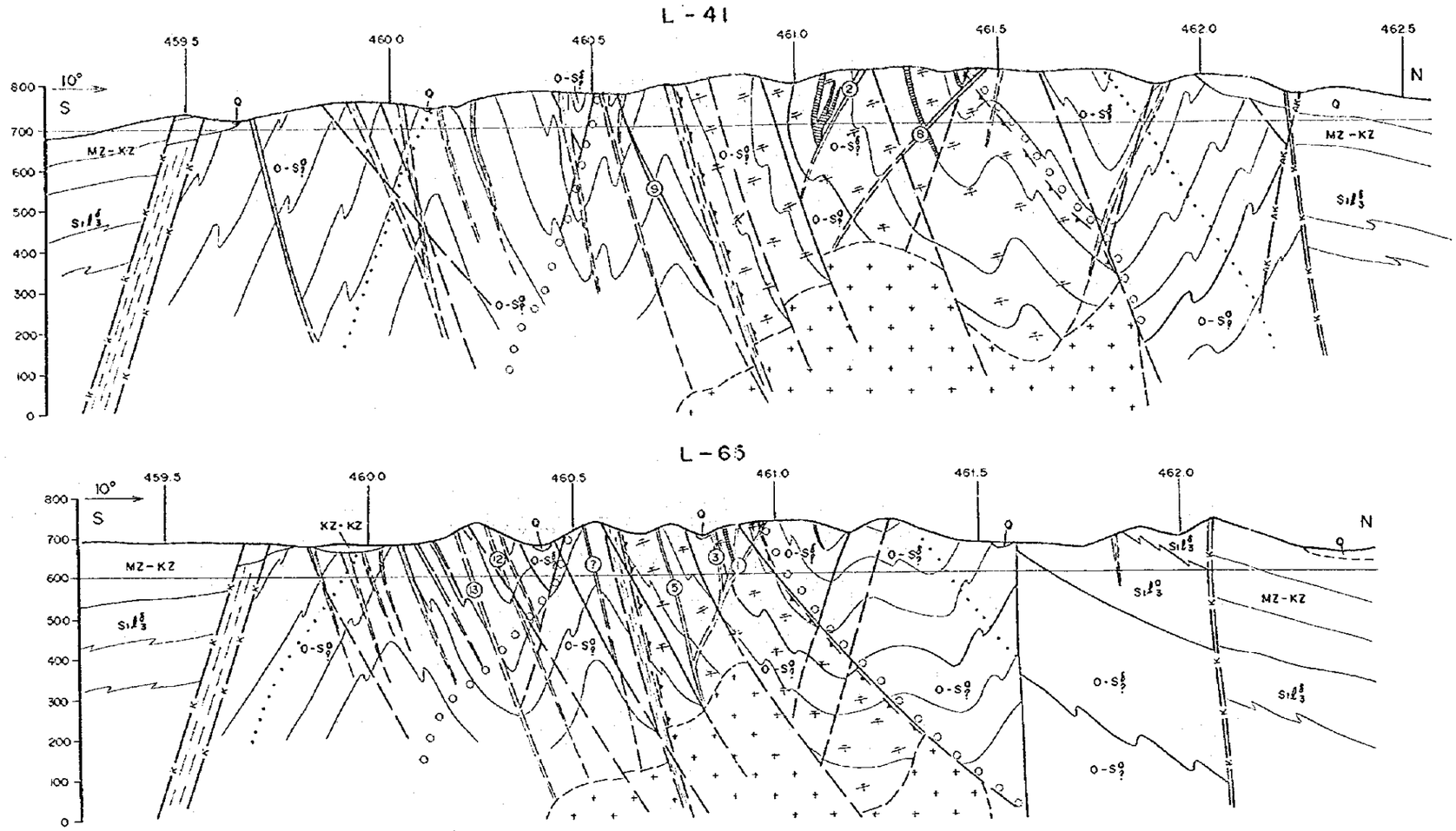


Fig. II -3-2-9 Perspective Section for Altynsai No.8 Vein

Fig II-3-3-1 Integrated interpretation Map of Allynsai Deposit

(modified after V.A. Shebchenko, 1997)



Legend

Mesozoic and Cenozoic Erathem

- Q — Quaternary System : talus, gravel, sand
- MZ-KZ — Mesozoic and Cenozoic : undifferentiated sediments

Lower Silurian System ; Lower and middle part of Upper Llandovery Series

- Upper formation : quartz sandstones, siltstones, slates
- Lower formation : slates, siltstones, quartz sandstones

Ordovician - Silurian System

- Middle formation : meta - sandstones, carbonaceous slates, cherty slates
- Lower formation : alternation of meta - sandstones, cherty slates, silicified rocks and phyllites
- Silicified rock

Intrusive rocks

- Granitoids
- Granite porphyrites(lamprophyres)
- Granite porphyries of Middle-Late Carboniferous(?)

Mineralization and metamorphism

- Mineralization : 1. Gold 2. Galena 3. Arsenopyrite 4. Chalcopyrite and its secondary minerals
- Boundary between muscovite hornfelse zone and spotted slate zone
- Boundary between spotted slate zone and none-metamorphic zone
- Local positive magnetic anomalies at 20 to 60 gamma of intensity, identified as hidden intrusive bodies (dykes, small stocks)

Fractures

- 1. Traced 2. Supposed
- Fixed : 1. By satellite images 2. By aerial photographs
- Zones of brecciation and silicification
- Ore zone and its number. Intensively silicified with quartz veins and quartz breccia of 0.2-3.0m thickness and weakly silicified zones (more than 1% : pyrite, arsenopyrite, galena, sphalerite chalcopyrite).
- Submeridional quartz - tourmaline veinlets of thickness from 0.1cm to 20 - 25cm
- Intensively silicified zone with submeridional quartz-tourmaline veinlets

- Strike and dip : 1. Bedding 2. Fractures
- Axes of anticlines and direction of plunge 1. First order 2. Highest order
- Axes of synclines and direction of plunge 1. First order 2. 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
- MMAJ hole and its number
- Prospecting line and its number

0 — 500 — 1,000 m

(modified after V.A. Shebchenko; 1997)

Fig. II-3-3-2 Integrated interpretation Cross Sections of Altynsai Deposit

Part III CONCLUSIONS AND RECOMMENDATIONS

Chapter 1 Conclusions

1-1 The Entire Area of the Southern Nuratau

(1) The survey area is situated in the Zarafshan-Turkestan Tectonic Zone of the Southern Tien-Shan Zone, underlain by Lower Cambrian to Lower Silurian terrigenous sediments in the central to southern part, while in the northern part, mainly by Upper Silurian to Middle Carboniferous limestones. The rocks are intruded by Silurian to Triassic dikes and Carboniferous to Permian granites. The strata are folded around a folding axis in the WNW-ESE direction and cut by fractures in similar directions, forming a narrow tectonic zone stretching in the WNW-ESE direction. Traversing the direction, fractures develop also in the NE-SW and E-W direction.

(2) The satellite image produced on a basis of the LANDSAT TM data clearly reflects the geological units and tectonic structure, proving to be effective for the geologic interpretation in the survey area. It was learned that the clear lineament in the NW-SE direction traversing the center of the survey area represents a fault with fracture zones, about 100 m wide. In the zone extracted as an iron oxide zone by the ratioing processing of TM data, iron oxide zones were really verified in some parts while the rest represented a shaded slope. The zones extracted as argillized, carbonatized alteration zones were not those accompanied by mineralization; however, occurrence of weathered granites including kaolinite, sericite and calcite was verified.

(3) Ore deposits and manifestations mainly of gold in the survey area occur along fracture zones in the WNW-ESE direction, forming the Karatau ore zone (70 km east to west and 2 km to 4 km from north to south) along the northern side of the Karatau granite bodies and the Aktau ore zone (70 km east to west and 2 km to 5 km north to south) along the southern side of the Aktau granite bodies.

(4) In the Karatau ore zone, there occur gold-silver bearing quartz vein-type deposits and manifestations such as the Karamechet-Kurai manifestations and the Altynsai deposit in the detailed survey area. The Aktau ore zone embraces gold-silver bearing quartz vein-type manifestations such as Bitab, Bashtut, Maulyan and Taulyan. Besides, there are the iron-manganese manifestation at Akmulla, the niobium-tantalum manifestation at Sartakchi and the skarn-type tungsten-molybdenum deposit at Lyangar.

(5) Component minerals of the gold bearing quartz veins are mainly quartz, pyrite, goethite and lepidochrocite, accompanied, in minor quantities, by marcasite, arsenopyrite, chalcopyrite, sphalerite, galena, pyrrhotite, scheelite and electrum.

(6) At the Maulyan manifestation, independent gold grains, 2 mm in diameter, were observed in quartz, which was determined to be primary gold. Electrum confirmed by observation of polished section from the Bitab manifestation is associated with pyrite and manganese oxide in cracks of quartz, which has possibly be generated by the secondary enrichment.

(7) Homogenization temperature of fuild inclusions of quartz ranges between 140°C and 340°C, which is divided into a relatively low temperature group (140°C to 170°C) and a high temperature group (270°C to 340°C). In view of the mode of occurrence, the low temperature group is inferred to indicate that of secondary fluid inclusions originated in hydrothermal solution of a later stage which was trapped in the cracks of quartz. Quartz of Kurai, Sebistan and Sartakchi fall within the low temperature group whilst the high temperature group includes Karamechet, Maulyan, Taulyan and Lyangar.

(8) In the Maulyan manifestation, gold mineralization accompanies quartz veins and silicified veins along about 10 of fracture or silicified zones in the WNW-ESE direction. Three ore bodies, 1 m to 4 m wide and 150 m, 200 m and 800 m long, have been ascertained up to now. Their gold grade varies from 1 g/t to 18 g/t. Homogenization temperature of fluid inclusions of quartz, as measured of a sample, showed 328°C, which is rather high for a gold vein. Native gold, 2 mm in diameter, is included in fresh quartz accompanied by tourmaline, which was determined to be primary gold. The manifestation has relatively good continuity of mineralization zones and high gold grade. The east and west extensions and the lower portion of the ore bodies are worthy of exploration; the Maulyan manifestation is considered to be most promising of all in the general survey area.

1-2 Altynsai District

(1) The area is underlain by the Ordovician-Silurian slate, siltstone, sandstone and phyllite, as well as lower Silurian slate, siltstone and sandstone, intruded by lamprophyre dikes during late Permian to early Triassic times in the vicinity of the No.10 vein ("Berkut Vein") in the west. Ore deposits in the District are either gold-bearing quartz veins controlled by fracture zones with the WNW-ESE and NW-SE trends, or vein-type deposits composed of tourmaline-quartz veins which accompanies joints with the N-S trend. More than 20 ore zones have been ascertained, which include the veins Nos. 1, 2, 5, 8 ("Northwest Vein"), 9 ("Kazanbulak Vein") and 10 ("Berkut Vein").

(2) In an area, 2.5 km long and 500 m to 800 m wide, that embraces the veins Nos. 1, 2, 5, 8 and 10, inumerable joints with the N-S trend develop, forming tourmaline-quartz veinlet

zones. In view of the fact that the veinlet zones almost coincide with the areas of occurrence of biotite-muscovite hornfels as the host rocks and of the Uzbek airborne magnetic survey findings, it is inferred that granite stocks extist aligned in the WNW-ESE direction beneath the veinlet zones.

(3) Component minerals of the quartz veins that occur in fractures zones with the WNW-ESE and NW-SE trends are mainly quartz, pyrite, marcasite, arsenopyrite, chalcopyrite, sphalerite, goethite and lepidochrocite, accompanied by galena, native bismuth, aikinite, wittichenite, scheelite, rutile and electrum. Electrum, 5-10μm in grain size, observed in polished sections in the subject survey occurs in quartz, associated with chalcopyrite, native bismuth and wittichenite in a vein-like alignment but exists independently, which was determined to be primary electrum.

(4) The tourmaline-quartz veins with the N-S trend are composed mainly of quartz, tourmaline, pyrite, arsenopyrite. The Uzbek study indicates inclusion of wolframite, cassiterite, topaz, beryl and native gold. The veins are considered to be tourmaline greisen-type.

(5) Homogenization temperature of fluid inclusions of quartz is generally 250°C to 340°C, while some of the veins in the WNW-ESE and NW-SE direction showed the low teperature from 110°C to 200°C. The low temperature group is inferred to indicate that of secondary fluid inclusions, as well as in the general survey area. Homogenization temperature of tourmaline-quartz veins with the N-S trend being 250°C to 340°C, which makes no significant difference from that of the veins with WNW-ESE and NW-SE directions.

(6) The Phase I drilling survey discovered relatively rich mineralization (true width 0.2 m to 1 m; Au 2 g/t to 20 g/t) on the hanging side of No.1 vein and in No.5 vein, while dominant mineralization (true width 1.6 m; Au 15.3 g/t) was confirmed by the drilling MJSN-8 in the lower portion of No.2 vein. The MJSN-4, -5, 9 and -10, aimed at portions beneath the bonanzas confirmed by the drift at No. 1 vein (extension 135 m; average width 2.29 m; Au 15.7 g/t) and the drift at No. 2 vein (extension 55 m, average width 4.28 m; Au 4.5 g/t), however, only encountered low-grade mineralization (Au 4 g/t or less). This is due presumably to the ore bodies being small in size and ununiform in grade distribution. The MJSN-8 captured good mineralization 250 m under the surface, which confirmed that the mineralization of No.2 vein continuous fairly into the deep.

Chapter 2 Recommendations for the Phase II Survey

1) Maulyan District

The analysis of existing data and geological surveys conducted during Phase I indicated that the Maulyan manifestation has relatively good continuity of mineralization zones and high gold grade. It is advisable to execute drilling survey, in order to clarify mineralization in the deep portions of the ore bodies confirmed by the Uzbek trenching survey. It is also advisable to execute detailed geological survey in the Maulyan district, including adjacent ore manifestations such as Taulyan and Beshbulak.

2) Altynsai District

(1) The drilling survey during the subject year revealed good mineralization 250 m under the surface, which indicates continuation of the mineralization into the deep; it is advisable to continue the drilling survey to verify mineralization in the western extension and deeper portion of the No. 2 vein.

(2) As the downward extension of the bonanza of the No. 1 vein (extension 135 m; average width 2.29 m; Au 15.7 g/t), which was discovered at the drift, remains to be investigated; it is advisable to explore the portion by drilling survey.

(3) The lower portions of the veins Nos. 5, 6, 7, 11, 12, etc. in the southern ore zone remain almost unexplored, except the portions surveyed by drilling in Phase I. It is likely that the fractures dipping north continue to the deep as far as granite body, bearing major ore bodies and that the No.1 and No. 2 veins are its branch veins. In order to verify mineralization in the deep, it is advisable to carry out drilling survey.

(4) As the result of the Phase I drilling, gold grades in the tourmaline-quartz veinlet zones with the N-S trend were 0.3 g/t to 1 g/t, partially 2 g/t to 5 g/t. Zones where veinlets concentrate in stockworks and gold grades 1 - 1.5 g/t or higher can posssibly be open-pitted. It is advisable to explore the lower portions of the veinlet concentration zones by drilling survey.

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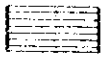
APPENDICES

Appendix 1. Geologic Core Logs of the Drillings

Legend


Soil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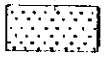
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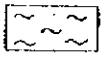
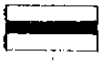
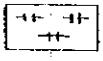
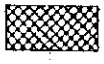

Phyllite


Quartz vein


Quartz veinlets


Silicification


Fracture zone

Dip (bedding plane)

Dip (joint plane, fault plane, contact plane of silicified rock)

Au	Ag	As	W
2.0	7.8	0.38	0.005

Assay Result
Au(g/t), Ag(g/t), As(%) (W%)

LAB TEST $\frac{B\,1-5}{F\cdot T\cdot P\cdot X}$ ---------- Laboratory Test $\frac{\text{Sample No.}}{\text{Samples}}$

F------Fluid inclusion test sample, T------Thin section sample
P------Polished section sample, X------X-Ray diffraction analysis sample

Abbreviation

qz, v ---------- quartz vein
qz vls ---------- quartz veinlets
sℓ ---------- slate
ss ---------- sandstone
bℓk ---------- black
dk ---------- dark
diss ---------- disseminate
frac ---------- fracture
silic ---------- silicified

asp ---------- arsenopyrite
chℓ ---------- chlorite
cp ---------- chalcopyrite
limo ---------- limonite
tor ---------- tourmaline
py ---------- pyrite

int ---------- interval
w ---------- width

GEOLOGIC CORE LOG OF MJSN-1 (1/4)

1/200

MJSN-1 (1/4) 0 m ~ 50 m

Level 741.20m Direction N10°E
X 61,087.45m Inclination -25°
Y 54,769.01m Length 190.0 m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS
	0	Sand with pebbles
	2.00	2.00~16.60m blk sl with py, limo — Casing 23.0m
		76mm; 0~7.0m
		59mm; 7.0m~
	8.50	8.5~16.60m frac. sl with py, limo
		9.0m joint, 30°
		13.8m joint with limo., 38°
	16.60	16.3m joint with limo, 30°
		16.60~25.35m grey, silic. ss with few qz, limo vls
		18.2m, qz limo V. w=0.3cm
	21.70	21.70~25.35m frac. silic ss with few qz, limo vls (w=1~3cm int=25cm)
	25.35	25.35~30.25m blk sl with limo
	26.75	26.75~29.60m frac. sl with limo
	29.60	
	30.70	30.70~34.50m dk grey silic sl with network qz vls (w=1~2mm, int=2cm)
		33.0m joint with qz (w=2mm, 38°)
		34.50m qz V (w=5mm, 18°)
	34.50	34.50~36.40m blk sl with few qz vls & limo
	36.40	36.40~40.80m blk silic. sl with qz vls & limo
	39.70	39.70~40.00m frac. zone
	40.00	
	40.80	40.00~47.60m grey very fine ss
		42.50m joint with limo, 44°
		45.80m joint with limo, 12°
	47.60	47.6~49.40m dk grey silic. sl with net work qz (w=1~2mm)
	49.40	49.40~53.40m blk sl with qz Vs network vls (w=0.1~5cm)

DEPTH (m)	SAMPLE No.	ASSAY RESULT Au	Ag	As	W	LAB. TEST
16.60	B-101	<0.1	<1	<0.01	<0.001	
18.00	102	<0.1	<1	0.03	0.001	
19.00	103	<0.1	<1	0.02	<0.001	
20.00	104	<0.1	<1	0.01	0.003	
21.70	105	0.5	<1	0.08	0.003	
23.00	106	<0.1	<1	0.02	0.001	
25.35						
30.70	107	<0.1	<1	<0.01	<0.001	
32.00	108	<0.1	<1	<0.01	<0.001	
33.00	109	0.2	<1	<0.01	<0.001	
34.50	149	<0.1	<1	<0.01	<0.001	
36.40	110	<0.1	<1	<0.01	<0.001	
38.00	111	<0.1	<1	<0.01	<0.001	
39.50	112	<0.1	<1	<0.01	<0.001	
40.80						
47.60	113	<0.1	<1	<0.01	<0.001	
49.40	114	<0.1	<1	<0.01	<0.001	

GEOLOGIC CORE LOG OF MJSN-1 (2/4)

1/200

MJSN-1 (2/4) 50 m ~ 100 m

Level . m Direction °
X , . m Inclination °
Y , . m Length m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS
	51.00	51.00 m qz, py V (w=5cm)
	57.40	53.4~58.30 m blk sl with qz vls (w=1~3mm, int=4cm)
		54.60 m qz V (w=6mm, 35°)
	58.30	58.30~63.1 m blk sl with few qz vls (w=1~3mm, int=20cm)
	62.40	62.1 m qz, asp, py V. (w=6mm, 42°)
	63.10	62.4~63.1 m abu qz, py, asp V & vls
	64.00	63.1~64.0 m blk sl with few ss bands
		64.00~104.10 m blk sl with py (bedding plane)
		72.1 m qz, py asp V (w=2cm, 35°)
		77.2~77.8 m qz, py, asp vls
	77.20	77.3 m qz, py V (w=3mm, 18°)
	77.80	
	78.50	78.5 m qz, py, asp V. w=1.5cm
	79.50	78.5~79.5 qz, py, asp V. & vls
		80.4 m qz, py V (w=3mm, 40°)
		81.3 m qz, py V (w=1cm, 40°)
		86.5 m qz, py V. (w=5mm, 45°)
		93.2 m qz, py V (w=3cm, 25°)
		97.4 m joint with py
	98.50	98.5~99.30 m qz, py, asp vls
	99.30	99.3 m qz, py, asp V (w=6mm, 40°)

DEPTH (m)	SAMPLE No.	ASSAY RESULT Au	Ag	As	W	LAB. TEST
51.00	8-114	<0.1	<1	<0.01	<0.001	
52.00	115	<0.1	2.4	<0.01	<0.001	
52.40	116	<0.1	<1	0.02	<0.001	
55.00	117	<0.1	<1	<0.01	<0.001	
56.00	118	<0.1	<1	<0.01	<0.001	
57.00	119	<0.1	<1	<0.01	<0.001	
58.30	120	<0.1	<1	<0.01	<0.001	
60.20	121	0.4	17.8	<0.01	<0.001	
62.40	122	<0.1	<1	0.04	<0.001	
63.10	123	<0.1	<1	0.02	<0.001	
77.20	150	<0.1	<1	<0.01	<0.001	
77.80						
78.50	151	<0.1	<1	0.28	<0.001	
79.50						
98.50						
99.30	152	<0.1	<1	0.06	<0.001	

GEOLOGIC CORE LOG OF MJSN-1 (3/4) 1/200

MJSN-1 (3/4) 100 m ~ 150 m

Level . m Direction °
X . m Inclination °
Y . m Length m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS
	102.50	102.50m qz, py, asp V (w=2cm, 35°)
	103.40	103.40m qz, py V (w=2mm, 30°)
	104.10	104.10 ~ 108.20m dk grey silic. sl with few qz vls (w=1~2mm)
	105.40	105.40 ~ 106.80m qz, py, asp vls
	106.80	
	108.20	108.20 ~ 110.10m dk grey ss with py
	109.70	109.70 ~ 112.00m qz, py, asp vls
	110.10	110.10 ~ 119.90m blk sl with ss bands
	112.00	
	116.20	116.50m qz, py, asp V (w=2mm, 20°)
	117.10	
	119.80	119.80 ~ 121.10m qz, py, vls
	119.90	119.90m qz, py V (w=3mm, 18°)
	119.93	119.93 ~ 125.30m alt (grey ss > sl)
	121.10	
	125.30	125.30 ~ 131.80m blk sl with ss bands
	128.10	128.10m qz, py, asp V (w=2cm, 25°)
	130.80	130.80m joint with py, 35°
	131.10	131.10 ~ 131.80m qz, py, asp vls
	131.40	131.40m qz, py, asp V (w=1.5cm, 22°)
	131.80	131.80 ~ 155.20m blk sl with few qz, py, asp vls
	138.30	138.30m qz, py V (w=1mm, 30°)
	139.30	139.3 ~ 139.5m grey ss
	139.50	
	141.50	141.5m qz, py, asp V (w=3.5cm, 25°)
	142.30	142.3m qz, py V (w=4mm, 15°)
	142.90	143.8m qz, py, asp V (w=4mm, 20°)
	147.40	147.4 ~ 147.75m qz, py, cp V. (15°)
	147.75	147.75 ~ 155.2m blk sl with few qz vls (w=1~3mm, int=25~30cm)

DEPTH (m)	SAMPLE No.	ASSAY RESULT Au	Ag	As	W	LAB. TEST
105.40	B-124	<0.1	< 1	0.04	<0.001	
106.80						
109.7						
110.10	153	<0.1	< 1	<0.01	<0.001	
112.00	125	<0.1	< 1	0.02	<0.001	
116.2						
117.1	154	<0.1	< 1	0.02	<0.001	
119.8						
121.1	155	<0.1	< 1	0.04	<0.001	
131.1						
131.8	156	<0.1	< 1	0.04	<0.001	
141.3						
142.8	157	<0.1	< 1	0.03	<0.001	
147.40						
147.75	126	<0.1	< 1	<0.01	<0.001	

GEOLOGIC CORE LOG OF MJSN-1 (4/4)

1/200

MJSN-1 (4/4) 150 m ~ 190 m

Level . m Direction °
X . m Inclination °
Y . m Length m

DEPTH (m)	DESCRIPTIONS
151.2	151.2m gz, py V (w=2mm, 52°)
152.3	152.3-152.8m frac. zone with gz vls
153.6	153.6 gz, py V (w=2mm, 27°)
153.9	153.9-157.7m fract zone
155.20	155.20-157.70m frac. sl with gz V & vls (w=0.2-5cm, int=10-15cm)
157.7	157.7-161.8m grey ss with few gz vls
158.9	158.9-160.0 frac. zone
161.8	161.8-164.2m blk sl with few network gz
162.50	162.50-164.70m frac. zone with few gz vls
164.70	164.70-165.40m blk sl with network gz, py vls
166.2	166.2-166.9m gz, py, asp V & network vls
168.2	168.2-170.3m gz, py, asp network vls
169.0	169.0-170.3m frac. zone
171.0	171.0-175.8m frac zone with gz V & vls (w=0.1~3cm)
176.2	176.2-177.3m frac zone with few gz vls
177.5	177.5-178.3m frac zone with few gz vls
179.8	179.8-181.50m blk sl with ss bands & gz, py, asp V & vls (w=0.1~5cm, int=15cm)
181.1	181.1m gz V (w=3cm) with py & asp
181.5	181.5-190.0m blk sl with few gz vls (w=0.1-0.3cm)
185.0	185.0-186.0m gz vls with py
186.8	186.8-187.6m gz vls with py
188.0	188.0-190.0m frac zone with few gz V
189.9	189.9m gz V with py (w=3cm)
190.00	190.00m Bottom of the hole

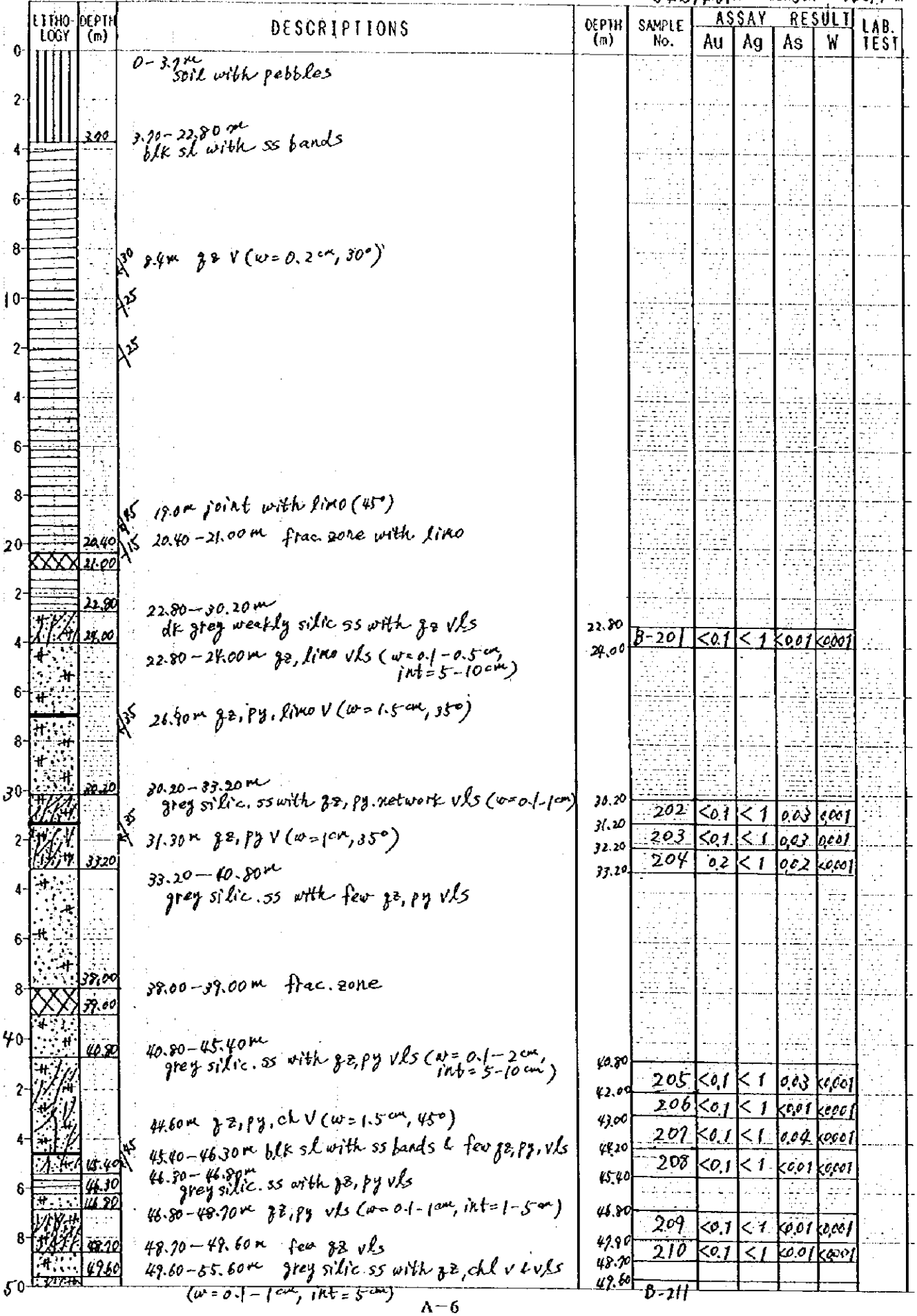
DEPTH (m)	SAMPLE No.	ASSAY RESULT Au	Ag	As	W	LAB. TEST
155.20						
156.20	B-127	<0.1	<1	<0.01	<0.001	
157.70	128	<0.1	<1	0.02	<0.001	
159.00	129	<0.1	<1	<0.01	<0.001	
160.0	130	<0.1	2.4	<0.01	<0.001	
161.80	131	<0.1	<1	<0.01	<0.001	
162.9	132	<0.1	<1	<0.01	<0.001	
164.7	133	<0.1	<1	<0.01	<0.001	
165.4	134	<0.1	<1	<0.01	<0.001	
166.2	135	<0.1	<1	<0.01	<0.001	
166.9	136	0.2	<1	0.01	<0.001	
168.20	137	<0.1	<1	<0.01	<0.001	
170.3	138	<0.1	<1	<0.01	<0.001	
172.0	139	<0.1	<1	0.01	<0.001	
173.4	140	<0.1	<1	<0.01	<0.001	
174.8	141	<0.1	<1	<0.01	<0.001	
176.2	142	<0.1	<1	<0.01	<0.001	
178.3	143	<0.1	<1	<0.01	<0.001	
179.8	144	0.2	<1	0.10	<0.001	
181.5	145	<0.1	<1	<0.01	<0.001	B1-4 X,F
185.0						
186.0	146	<0.1	<1	0.01	<0.001	
186.8						
187.6	147	<0.1	<1	0.01	<0.001	
189.0						
190.0	148	<0.1	<1	0.01	<0.001	

GEOLOGIC CORE LOG OF MJSN-2(1/4)

1/200

MJSN-2(1/4) 0 m ~ 50 m

Level 659.81 m Direction S10°W
X 60,334.96 m Inclination -25°
Y 54,394.61 m Length 160.1 m



DEPTH (m)	SAMPLE No.	ASSAY RESULT Au	Ag	As	W	LAB. TEST
22.80	B-201	<0.1	< 1	<0.01	<0.001	
24.00						
30.20	202	<0.1	< 1	0.03	<0.001	
31.20	203	<0.1	< 1	0.03	0.001	
32.20	204	0.2	< 1	0.02	<0.001	
33.20						
40.80	205	<0.1	< 1	0.03	<0.001	
42.00	206	<0.1	< 1	<0.01	<0.001	
43.00	207	<0.1	< 1	0.04	<0.001	
44.20	208	<0.1	< 1	<0.01	<0.001	
45.40						
46.80	209	<0.1	< 1	<0.01	<0.001	
47.90	210	<0.1	< 1	<0.01	<0.001	
48.70						
49.60	B-211					

GEOLOGIC CORE LOG OF MJSN-2 (2/4)

1/200

MJSN-2 (2/4) 50m ~ 100m

Level . . m Direction °
X . . m Inclination °
Y . . m Length m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS
	50	
	52	
	53.20	53.20m gz V (w=0.5cm, 35°)
	55.60	55.60 ~ 62.80m grey silic. ss with few gz vls
	57.00	57.00 ~ 57.90m str. silic ss with network gz vls
	57.90	
	60	
	62.10	62.10 ~ 63.50m blk sl with few gz vls
	63.50	63.50 ~ 68.80m dk grey silic. ss with gz V. & vls (partly network) (w=0.1 ~ 1.5m, int = 1 ~ 5cm)
	66.30	66.30m gz V (w=0.5cm, 30°)
	66.70	66.70 ~ 68.00m network gz, py vls
	68.00	68.00 ~ 70.00m blk sl
	68.80	68.00 ~ 69.30m gz, py vls
	69.30	68.80 ~ 69.30m grey silic ss with gz, py vls
	70.00	70.00 ~ 77.50m grey silic ss with few gz, py vls
	70	
	72.00	72.00m gz, py V (w=0.7cm, 35°)
	74.00	74.00 ~ 74.90m blk sl with few gz vls
	74.90	
	77.50	77.50 ~ 77.80m blk sl with few gz vls
	77.80	77.80 ~ 79.80m grey silic ss with gz, py network vls
	79.80	79.80 ~ 81.70m grey silic ss with gz, py vls (w=0.1 ~ 1cm int = 3 ~ 10cm)
	80	
	81.70	81.70 ~ 82.90m network gz, py vls
	82.90	82.90 ~ 86.40m blk sl with few gz vls
	86.40	86.40 ~ 93.00m grey silic. ss with few gz vls
	88.80	88.80 ~ 89.60m gz, py vls
	89.60	
	90.35	90.35 ~ 91.35m gz, py vls
	90	90.75 ~ 91.25m gz, py V (w=5cm, 5°)
	91.25	
	91.35	
	92	
	93.00	93.00 ~ 94.40m silic ss with gz, py vl vls (w=0.1 ~ 1cm, int = 2 ~ 3cm) (partly network)
	94	
	94.40	94.40 ~ 94.70m blk sl with few gz vls
	94.70	94.70 ~ 95.80m grey str. silic ss with network gz vls
	95.80	95.80 ~ 97.20m blk sl with gz vls
	97.20	97.20 ~ 99.40m grey silic ss with gz, py vls (w=0.1 ~ 1cm, int=0.5 ~ 3cm)
	98	
	99.40	99.71m gz V (w=0.5cm, 40°)
	100	

DEPTH (m)	SAMPLE No.	ASSAY RESULT Au	Ag	As	W	LAB. TEST
51.00	B-211	<0.1	< 1	0.01	0.004	
52.00	212	<0.1	< 1	<0.01	0.001	
53.50	213	<0.1	< 1	<0.01	0.001	
54.50	214	0.5	< 1	<0.01	<0.001	
55.60	215	<0.1	< 1	<0.01	<0.001	
57.00						
57.90	216	<0.1	< 1	<0.01	<0.001	
63.50						
64.50	217	<0.1	< 1	<0.01	<0.001	
65.50	218	<0.1	< 1	<0.01	<0.001	
66.70	219	<0.1	< 1	<0.01	<0.001	
68.00	220	<0.1	< 1	<0.01	<0.001	
69.30	221	<0.1	< 1	<0.01	<0.001	
77.80						
78.90	222	<0.1	< 1	<0.01	<0.001	
79.80	223	<0.1	< 1	0.01	<0.001	
80.80	224	<0.1	4.4	<0.01	<0.001	
81.70	225	<0.1	< 1	<0.01	<0.001	
82.90	226	<0.1	< 1	<0.01	<0.001	
89.80						
89.60	227	<0.1	< 1	<0.01	<0.001	
90.35						
91.35	228	<0.1	1.6	0.01	<0.001	
93.00						
94.40	229	<0.1	2.4	<0.01	<0.001	
94.70						
95.80	230	<0.1	< 1	<0.01	<0.001	
97.20	231	<0.1	< 1	<0.01	<0.001	
98.20	232	<0.1	< 1	0.02	0.001	
99.40	233	<0.1	< 1	<0.01	<0.001	

GEOLOGIC CORE LOG OF MJSN-2 (3/4)

1/200

MJSN-2(3/4) 100 m ~ 150 m

Level . m Direction °
X . m Inglination °
Y . m Length m

DEPTH (m)	DESCRIPTIONS
100.20	100.20 ~ 101.10 m blk sl
101.10	101.10 ~ 105.20 m blk sl with gz vls (w=0.1~3cm, 1~4cm) (partly network)
	105.00 m gz V (w=3cm, 45°)
105.20	105.20 ~ 110.00 m blk sl
	107.70 m gz V. (w=0.2cm, 42°)
110.00	110.00 ~ 111.70 m greg ss with few gz vls
	110.30 m gz V (w=0.8cm, 5°)
111.70	111.70 ~ 113.10 m dk grey sl
	112.20 m gz, py, cp V (w=0.6cm, 25°)
113.10	113.10 ~ 114.60 m grey silic. ss with few gz, py vls
114.60	114.60 ~ 116.10 m blk sl with few gz, py, chl vls
116.10	116.10 ~ 120.10 m grey silic ss with few gz, py vls
115.70	115.70 ~ 118.60 m gz, py V & vls (w=0.1~2cm, int=5~10cm)
118.60	116.50 m gz, py, V (w=0.5~2.5cm, 20°)
120.10	120.1 ~ 121.20 m gz py vls (w=0.1~2.5cm)
121.20	121.20 ~ 122.00 m blk sl with few gz vls
122.00	122.00 ~ 130.10 m dk grey silic. ss with few gz vls
128.50	128.50 ~ 130.10 m frac. zone with few gz, py vls
	128.85 m gz, py V (w=0.5cm, 25°)
130.10	130.10 ~ 138.70 m dk greg sl with gz, py vls (w=0.1~2cm int=4~8cm)
130.80	130.80 ~ 131.20 m frac. zone with gz vls
131.70	131.70 ~ 132.40 m frac zone with gz vls
133.50	134.10 ~ 134.80 m frac zone with gz vls
135.30	135.3 ~ 139.5 m frac. zone
136.80	138.70 ~ 144.10 m greg silic. ss with few gz, py vls
138.70	140.0 m gz V (w=0.7cm, 40°)
144.10	144.10 ~ 145.30 m blk sl with few gz, py vls
145.30	145.30 ~ 148.90 m dk grey ss with few gz, py vls
	146.40 m gz V (w=0.5m, 20°)
148.90	148.90 ~ 150.30 m blk sl with few gz, py vls

DEPTH (m)	SAMPLE No.	ASSAY RESULT Au	Ag	As	W	LAB. TEST
101.10	B-234	<0.1	1.6	0.01	<0.001	
102.50	235	<0.1	1.4	0.02	<0.001	
104.00	236	<0.1	2.8	<0.01	<0.001	
105.20						
115.70	237	<0.1	<1	<0.01	<0.001	
116.20	238	<0.1	<1	<0.01	<0.001	
117.60	239	<0.1	<1	<0.01	<0.001	
118.60						B2-5 ↓ T
120.10	240	<0.1	<1	<0.01	<0.001	B2-6 ↓ F
121.20						
130.10	241	<0.1	<1	<0.01	<0.001	
131.70	242	0.1	<1	0.01	<0.001	
133.50	243	<0.1	<1	<0.01	<0.001	
135.30	244	0.1	<1	<0.01	<0.001	
136.80	245	<0.1	<1	<0.01	<0.001	
138.70						

GEOLOGIC CORE LOG OF MJSN-2 (4/4)

1/200

MJSN-2 (4/4) 150 m ~ 160.10m

Level . . m Direction °
X , . . m Inclination °
Y , . . m Length m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS
	150.30	150.30 – 153.70m frac. sl with few gs, py vls
	153.70	153.70 – 158.20m blk sl with few gs vls
	154.00	154.00 – 155.20m gs, py network vls
	155.20	
	156.00	156.00 – 157.40m gs, py vl (w=0.1–0.3cm int=1–3cm) (partly network)
	157.40	
	158.00	158.20 – 160.10m grey silic. ss
	160.10	160.10m bottom of the hole

DEPTH (m)	SAMPLE No.	ASSAY RESULT Au	Ag	As	W	LAB. TEST
						B2-7
154.00	B-246	<0.1	<1	<0.01	<0.01	X
155.20						
156.00	247	<0.1	<1	0.01	<0.01	
157.40						

GEOLOGIC CORE LOG OF MJSN-3 (1/7)

1/200

MJSN-3 (1/7) 0 m ~ 50 m

Level 725.80 m Direction N10°E
X 60,758.0 m Inclination -75°
Y 54,826.7 m Length 341.4 m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS
	0	
	1.90	0-1.90m soil with pebbles
		1.90-6.30m dk grey fine ss with few qz vls
	6.30	
	7.60	6.30-29.70m blk sl with few qz vls
		7.40m qz V (w=1.5cm, 25°)
	9.55	7.60~9.55m frac. zone with qz, py, limo
		10.70m qz V (w=0.2cm, 30°)
		13.00m qz V (w=0.3cm, 25°)
		14.70m qz V (w=0.2cm, 20°)
	17.30	17.30-29.20m blk sl with qz vls
	20.20	20.2-21.60m frac. zone with qz, limo vls
	21.60	
	22.10	22.1-23.3m frac. zone with qz, limo vls & clay
	23.30	
	23.90	23.9-24.85m frac zone with qz, limo vls
	24.85	24.85-29.70m frac. zone with few qz, limo vls
	27.95	
	29.70	29.70-42.2m dk grey ss with few qz vls (w=0.1-1cm, int=20cm)
	30.50	30.50-33.7m dk grey ss with qz, py, asp V (w=0.1-1.5cm, int=5-7cm)
		31.2m qz V (w=0.3cm, 20°)
	33.70	
	34.0	34.0m qz V (w=1cm, 40°)
	34.75	
	35.40	36.0m qz V (w=0.7cm, 50°)
	36.80	
	37.80	36.8-38.70m dk grey ss with qz, py vls (w=0.1-1.5cm, int=10cm)
	38.70	
	42.20	42.20-44.90m dk grey silic ss with qz, py vls
	43.05	
	44.00	43.05-44.85m abu network qz, py vls (w=0.1-2cm, int=0.5~3cm)
	44.85	
	46.00	
	47.00	
	47.90	47.90m qz, py V (w=3cm, 30°)
		47.90-52.80m silic. ss with few qz, py vls
	50	

DEPTH (m)	SAMPLE No.	ASSAY RESULT Au	Ag	As	W	LAB. TEST
7.60	B-301	0.2	<1	0.02	0.008	
8.45	302	0.2	<1	0.02	0.006	
9.55						
17.30	303	<0.1	<1	<0.01	0.001	
18.50	304	<0.1	<1	<0.01	0.001	
20.20	305	0.2	<1	0.02	0.005	
21.60	306	<0.1	<1	0.02	0.006	
23.30	307	0.2	<1	0.02	0.005	
24.85	308	<0.1	<1	0.01	0.010	
26.55	309	<0.1	<1	0.01	0.007	
27.95	310	0.2	<1	<0.01	0.007	
29.70						
30.50	311	0.8	<1	0.02	0.002	
31.50	312	0.4	<1	0.04	0.003	
32.50	313	1.4	<1	0.20	0.006	B3-1
33.70						P, X
34.75	3491	0.2	<1	0.02	0.002	
35.40						
36.80	314	0.4	<1	0.02	0.100	
37.80	315	1.0	<1	<0.01	0.006	
38.70						
42.20	316	0.2	<1	<0.01	0.005	
43.05	317	0.2	<1	<0.01	0.002	
44.00	318	0.6	<1	<0.01	0.003	
44.85	319	0.4	<1	<0.01	0.001	
46.00	320	<0.1	<1	<0.01	0.001	
47.00	321	0.8	3.2	<0.01	<0.001	
47.90						

GEOLOGIC CORE LOG OF MJSN-3 (2/7)

1/200

MJSN-3 (2/7) 50 m ~ 100 m

Level . m Direction °
X , . m Inclination °
Y , . m Length m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS
	50.40	50.10m gz, Py V. (w=9cm)
	51.40	51.8m gz, Py V. (w=6cm)
	52.80	52.80~55.00m gz vls (w=0.1-1cm, int=1-5cm)
	54.00	
	55.00	55.00 – 56.50 m str. silic. rock with network gz, Py vls
	56.50	55.00m gz V. (w=30cm, 30°) (w=0.1-2cm)
	57.90	56.50 – 57.90 m gz, Py V & vls (w=0.1-2cm, int=2-5cm)
	60.00	57.90 – 60.00 m silic. ss with few gz, Py vls (w=0.1-3cm, int=10-20cm)
	61.00	60.0 – 62.0m gz, Py, vls
	62.00	61.3m gz V (w=0.2cm, 20°)
	62.40	62.00 – 73.80m silic ss with few gz, Py vls
	63.00	63.5m gz, Py V (w=1cm, 30°)
	63.85	65.2m gz, Py V (w=1cm, 45°)
	67.40	
	67.60	67.4m gz, Py V (w=1cm, 30°)
	68.90	67.4-68.9m gz, Py vls (w=0.1-2cm, int=5-10cm)
	69.38	69.8m gz V (w=4cm, 38°)
	73.80	73.8–76.4m gz, Py vls
	76.40	76.40–81.70m abu network gz, Py V
	78.00	78.00 – 80.70 m alt (ss > sl)
	78.18	78.10 – 79.10m frac zone
	79.10	79.10 – 81.60m gz, Py vls
	80.70	80.70 – 84.10 m alt (sl > ss)
	81.60	81.60m gz V (w=7cm, 43°)
	84.10	84.10 – 89.30 m alt (ss > sl)
	84.80	84.10 – 86.40m gz, Py vls
	86.00	84.80 – 86.00m frac. zone
	86.80	
	88.40	88.40 – 90.90 m frac. zone with gz vls
	89.30	89.30 – 93.50 m blk sl with few gz vls
	90.10	90.10 – 90.90m gz vls
	90.90	92.3 – 93.5m gz vls
	92.30	93.50 – 95.20 m dk grey ss with few gz V.
	93.50	93.90 – 98.55m frac. zone with clay
	93.90	95.20 – 100.10 m dk grey ss with network gz
	95.20	
	98.55	

DEPTH (m)	SAMPLE No.	ASSAY RESULT Au	Ag	As	W	LAB. TEST
50.40						
51.40	B-322	0.2	< 1	<0.01	0.001	
52.80						
54.00	323	0.2	< 1	<0.01	0.001	
55.00	324	1.2	< 1	<0.01	0.002	
56.50	325	0.8	< 1	0.03	0.003	
57.90	326	0.7	< 1	<0.01	<0.001	
60.00						
61.00	327	0.6	< 1	<0.01	0.030	
62.00	328	0.8	< 1	0.02	0.010	
62.40						
67.60						
68.90	329	1.4	< 1	0.05	0.004	
73.80						
75.00	330	23.6	< 1	<0.01	0.001	
76.40	331	0.4	2.8	0.01	0.002	
78.00	332	0.2	3.6	<0.01	0.002	
79.10						
80.30	333	0.2	< 1	<0.01	0.004	B3-2
81.40	334	0.4	< 1	0.02	0.006	F B3-4
81.60	335	0.4	12.0	0.02	0.020	P
84.10						
85.20	336	0.5	2.6	0.02	0.007	
86.40	337	1.0	< 1	0.02	0.010	
88.40						
89.30	338	0.4	2.4	<0.01	0.005	
90.10						
90.90	339	0.4	< 1	<0.01	0.100	
92.30						
93.50	340	<0.1	< 1	0.01	0.010	
95.20						
96.40	341	0.6	< 1	<0.01	0.008	
97.30	342	0.2	11.2	<0.01	0.008	
98.50	343	<0.1	3.0	<0.01	0.005	
	344	1.2	< 1	<0.01	0.004	

GEOLOGIC CORE LOG OF MJSN-3 (3/7)

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MJSN-3 (3/7) 100 m ~ 150 m

Level . m Direction °
X . m Inclination °
Y . m Length m

DEPTH (m)	DESCRIPTIONS
100.10	100.10 – 101.00 m blk sl with few gz, limo vls
101.00	101.00 – 103.00 m alt (sl > ss) with few gz V.
103.00	103.00 – 108.20 m gz, py vls (w = 0.1 – 0.5 cm, int = 1 cm)
106.90	106.90 – 111.70 m dk grey ss with few gz vls
108.20	108.40 m gz, py V. (w = 0.3 cm, 25°)
111.70	111.7 – 115.9 m dk grey silic. ss with gz, py, asp V. (max = 8 cm)
112.30	111.7 – 113.0 m frac. zone 112.30 m gz, py, asp V. (w = 8 cm)
113.30	113.3 – 114.0 m frac. zone
114.75	115.9 – 119.20 m dk grey silic. ss with sl bands and few gz vls
115.90	117.3 m gz, brown-tor, asp. V. (w = 2.5 cm, 30°)
119.20	119.20 – 119.80 m frac. zone
119.80	119.80 – 122.20 m dk grey silic ss with gz, asp. V & vls
121.00	120.50 m gz, asp V (w = 1 cm, 40°)
121.00	121.00 – 139.85 m frac. zone with gz, asp. V & vls
123.35	123.35 – 124.40 m frac. zone with gz, py network
124.40	123.50 m gz V (w = 4 cm, 36°)
127.20	127.20 – 129.80 m blk sl with few gz, py, asp vls in joints
128.50	
129.80	129.80 – 138.45 m frac. zone of dk grey ss with few py, asp in joints
131.00	
132.60	
134.60	134.60 – 135.60 m grey silic ss with gz, py vls
135.60	
138.45	138.45 – 154.70 m blk sl with few gz vls
139.90	139.90 m gz, py V (w = 4 cm, 26°)
143.25	143.25 – 145.10 m dk grey sl with ss bands and gz, py, asp V & vls
145.10	145.10 m gz, py, asp V (w = 10 cm, 46°)
	146.80 m gz, tor, py V (w = 2 cm, 30°)

DEPTH (m)	SAMPLE No.	ASSAY RESULT Au	Ag	As	W	LAB. TEST
100.10						
103.10	B-345	<0.1	< 1	<0.01	0.001	
104.00	346	<0.1	< 1	<0.01	0.002	
105.00	347	<0.1	< 1	<0.01	0.003	
106.00	348	<0.1	< 1	0.07	0.002	
106.90	349	<0.1	< 1	<0.01	0.001	
108.20						
111.70	350	<0.1	< 1	<0.01	0.030	
112.30	351	0.2	< 1	<0.01	0.004	
113.30	352	0.4	< 1	0.03	0.006	
114.75	353	<0.1	< 1	0.03	0.003	
115.90						
119.80						
121.00	354	<0.1	< 1	0.02	0.003	
122.00	355	0.8	< 1	0.05	0.020	
123.35	356	0.1	< 1	<0.01	0.008	
124.40	357	0.2	< 1	<0.01	0.006	
125.90	358	0.2	< 1	<0.01	0.003	
127.20	359	0.2	< 1	0.01	0.050	
128.50	360	0.1	< 1	<0.01	0.006	
129.80	361	<0.1	< 1	<0.01	0.004	
131.00	362	<0.1	< 1	<0.01	0.005	
132.60	363	0.4	< 1	0.01	0.030	
134.60	364	0.2	< 1	<0.01	0.010	
135.60	365	3.2	< 1	<0.01	0.008	
143.25	366	0.5	< 1	<0.01	0.006	
145.10						

GEOLOGIC CORE LOG OF MJSN-3 (4/7)

1/200

MJSN-3 (4/7) 150 m ~ 200 m

Level . m Direction °
X , . m Inclination °
Y , . m Length m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS
	150	
	151.70	151.70m qz, brown-tor, asp, py V (w=3cm, 40°)
		152.00m qz, brown tor, py V (w=3cm, 45°)
		153.00 m qz, brown tor, py V (w=3cm, 40°)
	154.20	154.40 – 180.30 m grey weakly silic ss with few qz V.
		154.90m qz, py V (w=2.5cm, 40°)
		155.90m qz, py V (w=6cm, 43°)
		156.70m qz, tor, py V (w=3cm, 45°)
		157.8m qz, py V (w=2cm)
		159.00 qz, brown tor, py asp V (w=4cm, 48°)
	160	
	161.30	161.30 – 164.50m qz, py V & Vls
		161.40m qz, py, brown tor. V (w=2cm, 50°)
	164.50	164.50m qz, py, brown tor, asp V (w=1.5cm, 45°)
	170	
		173.30m qz V (w=0.2cm, 30°)
		178.80m qz V (w=1cm, 40°)
		180.30 – 181.40m qz, Py, asp V & Vls
	180	180.30m qz, brown tor; py, asp V. (w=3cm, 40°)
	180.30	180.30 – 183.80m frac. zone
	181.40	
		183.80 – 188.0m dk grey silic. ss
	183.80	
	184.40	184.40 – 186.80m frac. zone
	186.80	
		188.0 – 189.0m qz, brown tor, py, asp V. & Vls
	188.0	188.0m qz, brown tor, Py, asp V (w=1cm)
	189.0	189.0m qz, brown tor, py asp V (w=3cm, 30°)
	190	189.00 – 200.00m blk sl with few qz V & Vls
		191.90m qz, tor, py V (w=1cm, 35°)
	192.80	
		193.40 – 194.50m frac zone with chl and few py, qz Vls
	194.50	
		194.50 – 197.90m frac zone with qz, Py Vls
	197.90	197.80m qz, brown tor, Py V (w=2cm, 45°)
	199.00	
	200	

DEPTH (m)	SAMPLE No.	ASSAY RESULT Au	Ag	As	W	LAB. TEST
151.70	B-367					
152.00		4.2	< 1	<0.01	0.005	
154.80	368	1.5	< 1	<0.01	0.005	
156.00						
156.70	369	0.5	< 1	<0.01	0.004	
161.30	370	0.2	< 1	<0.01	0.003	
162.50						
163.50	371	<0.1	< 1	<0.01	0.003	
164.50	372	0.2	< 1	0.02	0.007	
180.30	373	<0.1	< 1	0.01	0.003	
181.40						
188.00	374	0.2	< 1	0.01	0.001	
189.00						
194.50	375	<0.1	< 1	0.03	0.001	
195.50	376	<0.1	< 1	<0.01	0.001	
196.50	377	0.2	< 1	0.02	0.002	
197.90						