

Fig. II-4-1 Geological Map of the Bulutkan District

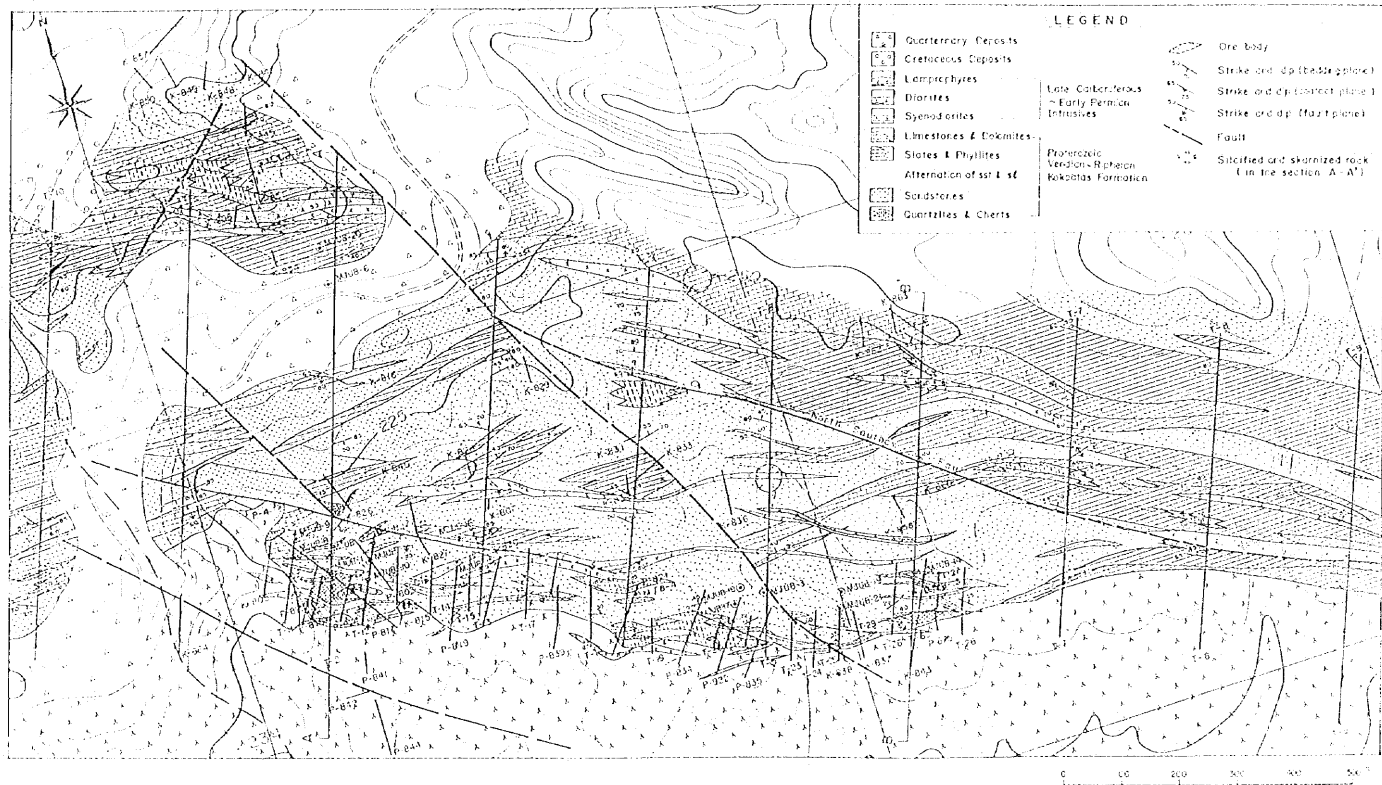


Fig. 11-4-1 Geological Map of the Bulutkan District



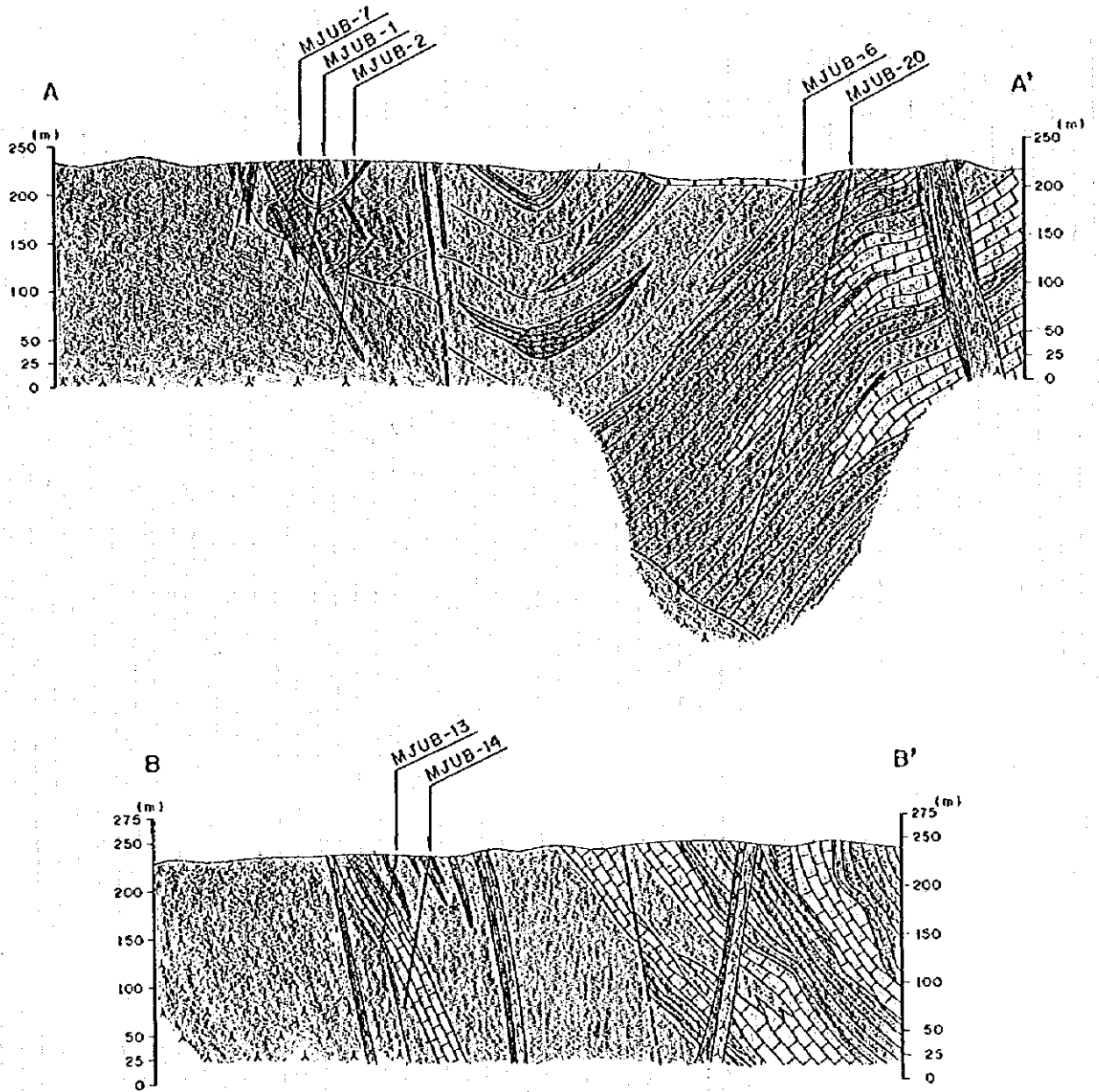


Fig. II-4-2 Geological Cross Section of the Bulutkan District





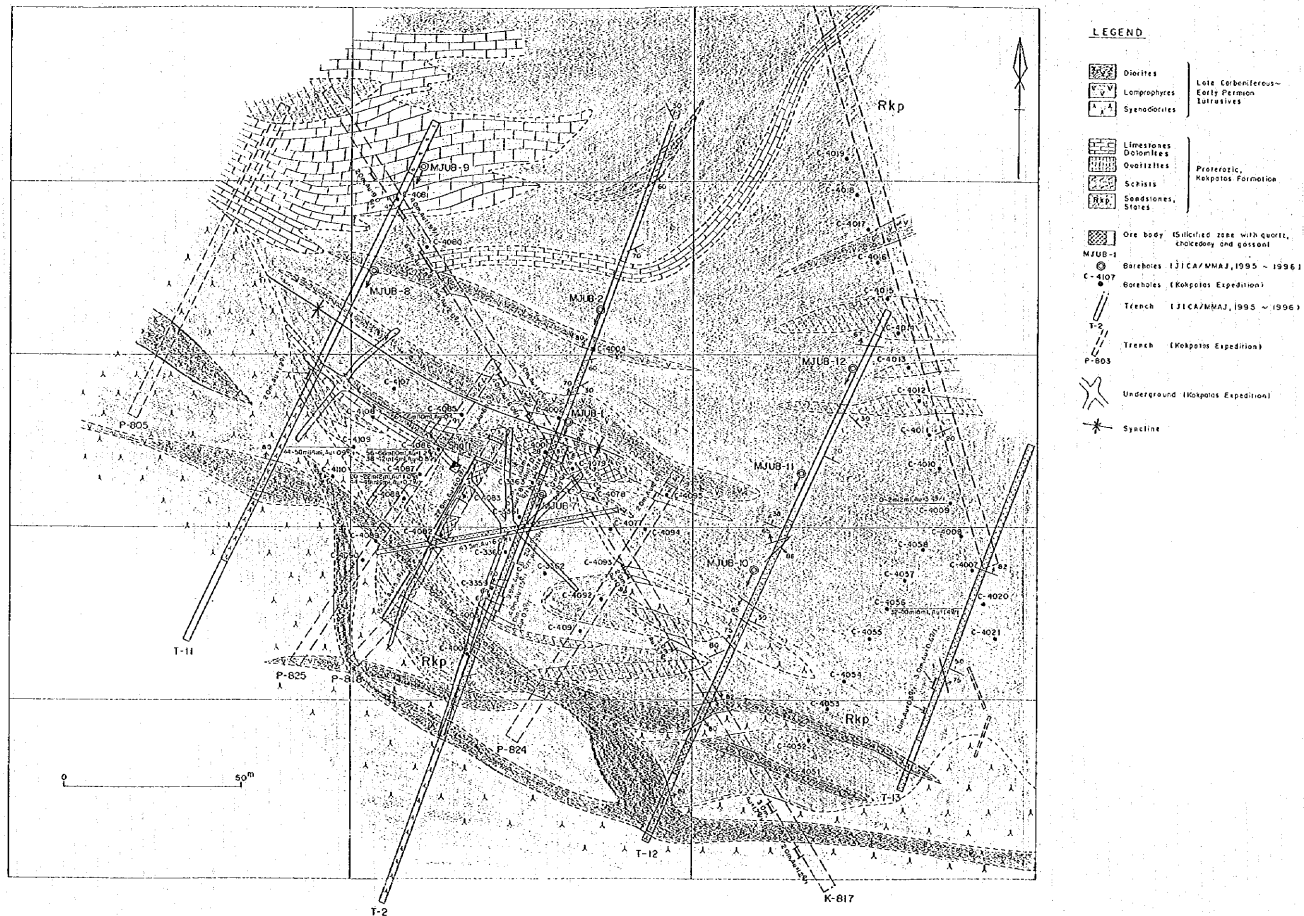


Fig. II-4-3 Geological Map of the Buluntan Ore Deposit

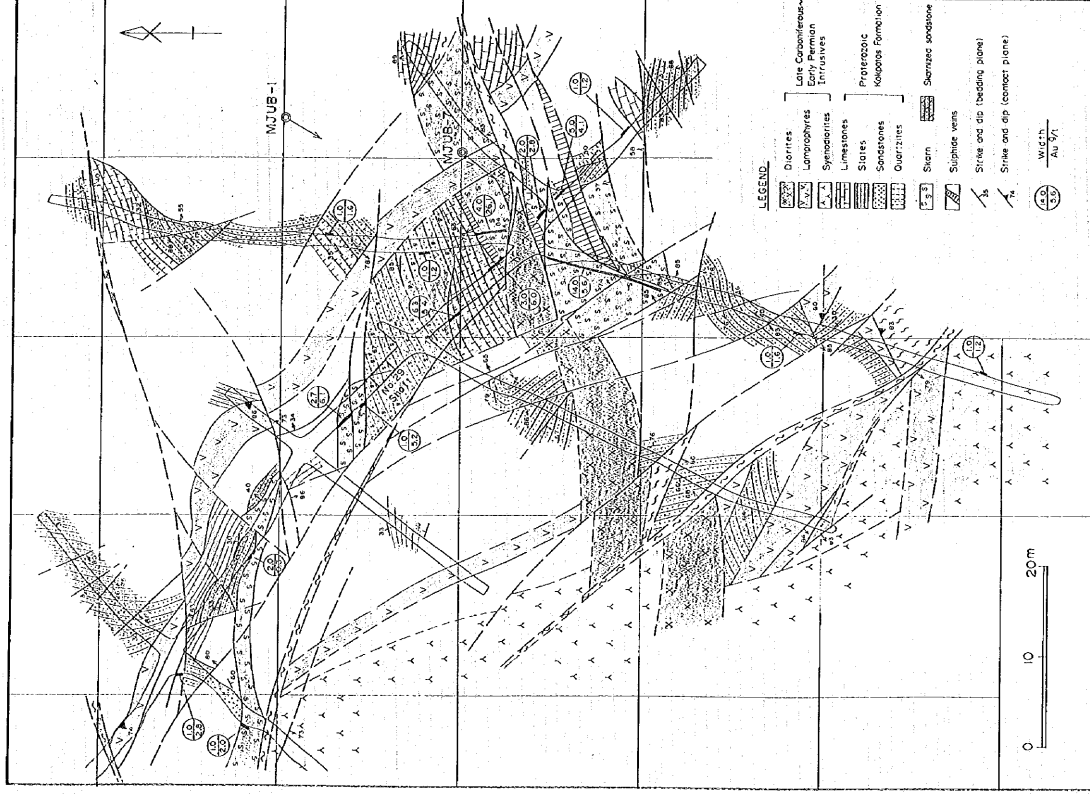


Fig. II-4-4 Underground Geological Map of the Bulurtan Ore Deposit(+210m. Level)



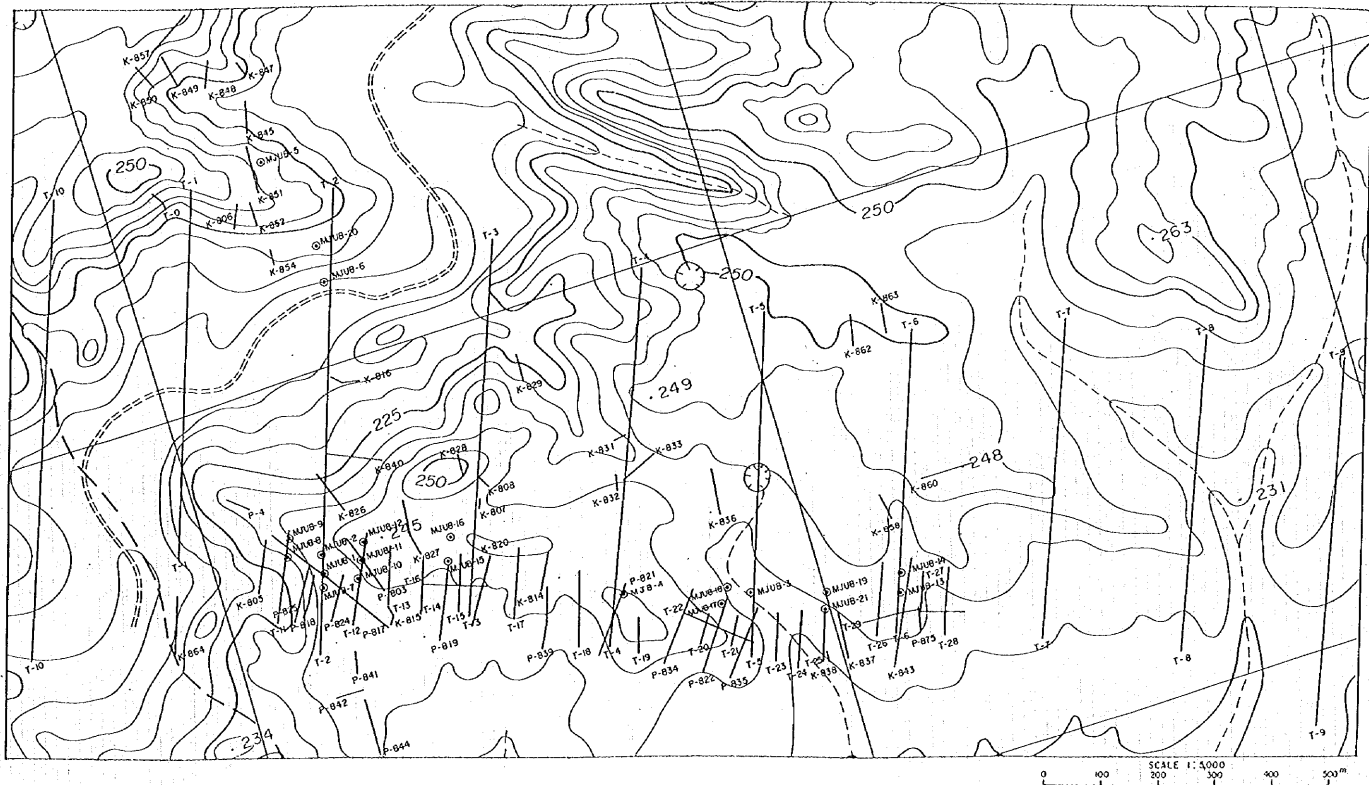


Fig. II-4-5 Location Map of the Trenches and Drillholes

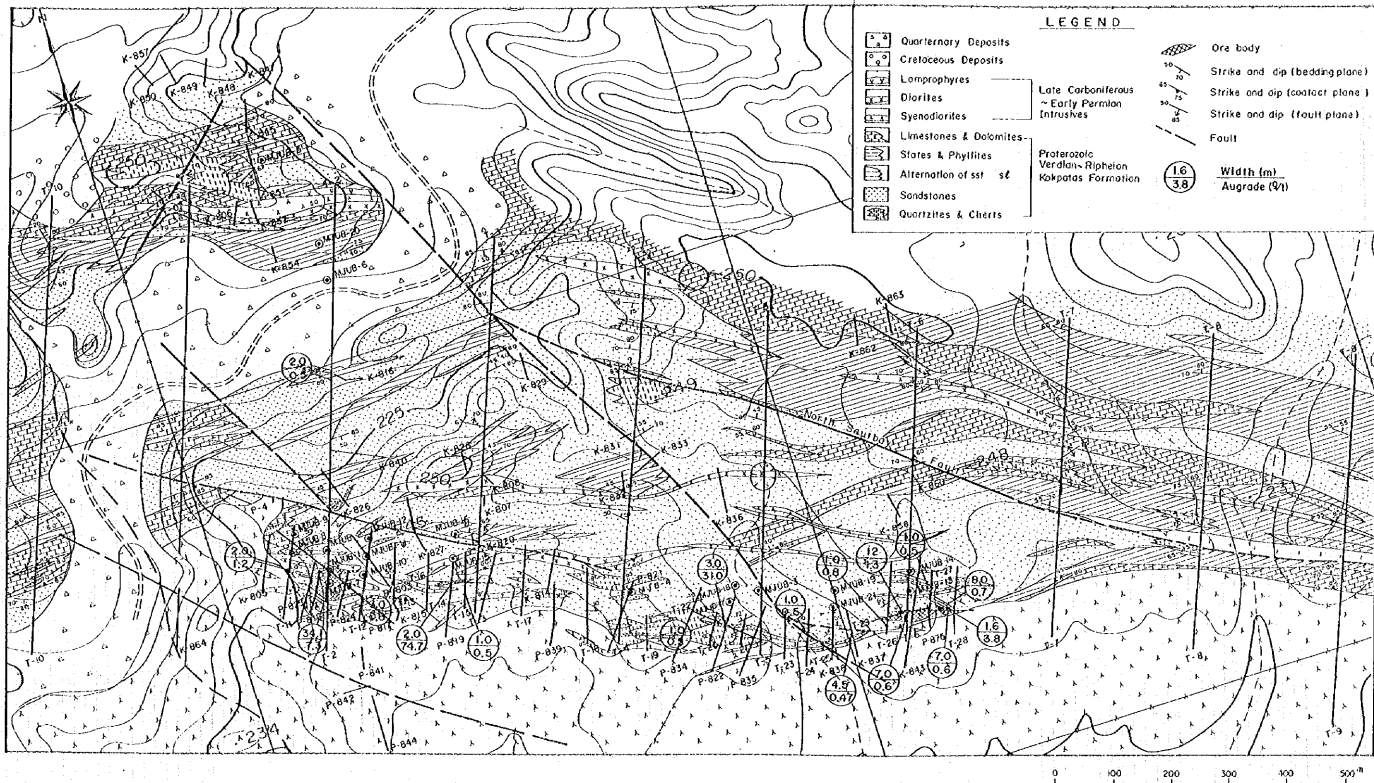


Fig. II-4-6 Major Mineralized Zones Caught by Trenches



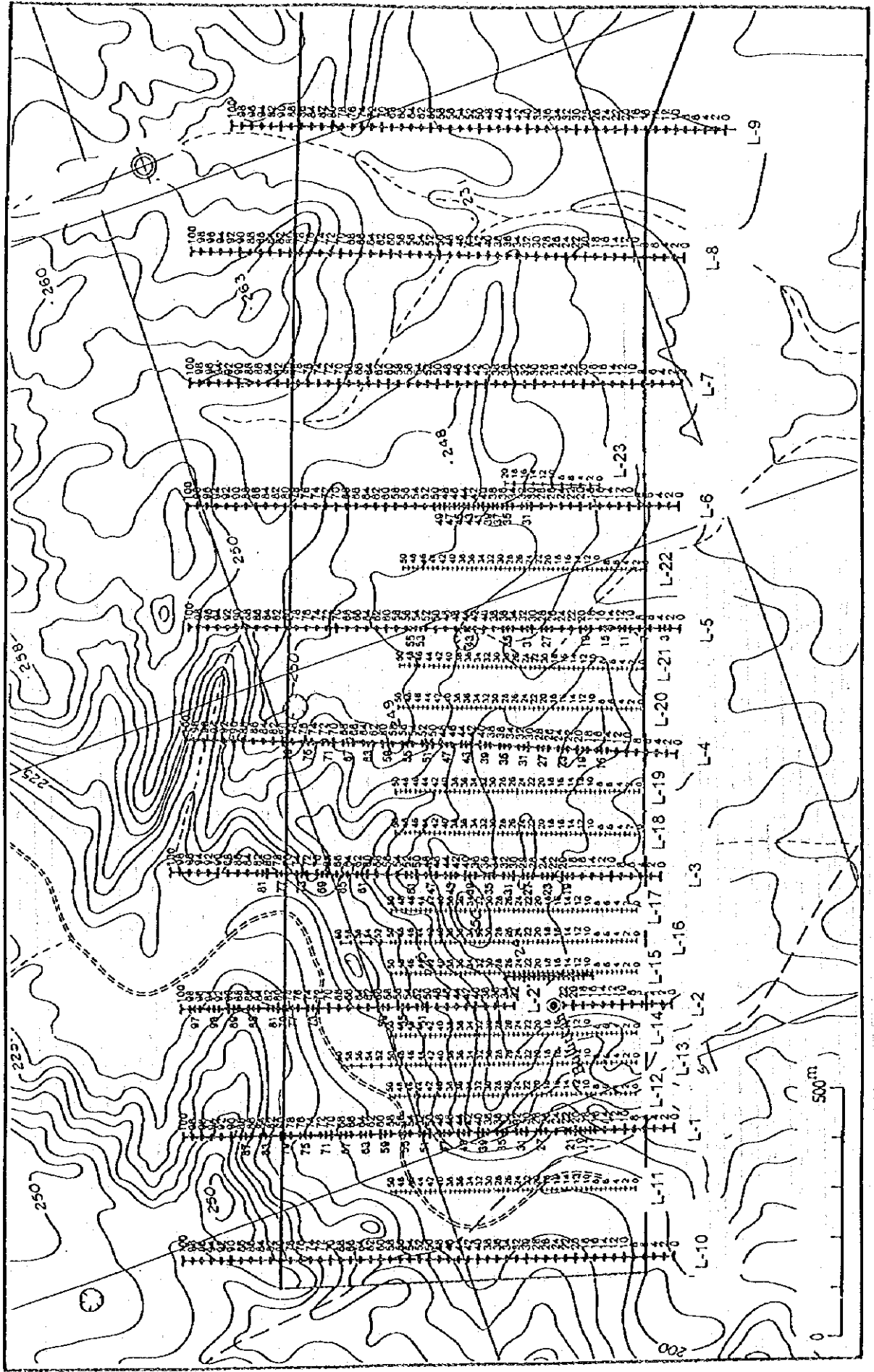
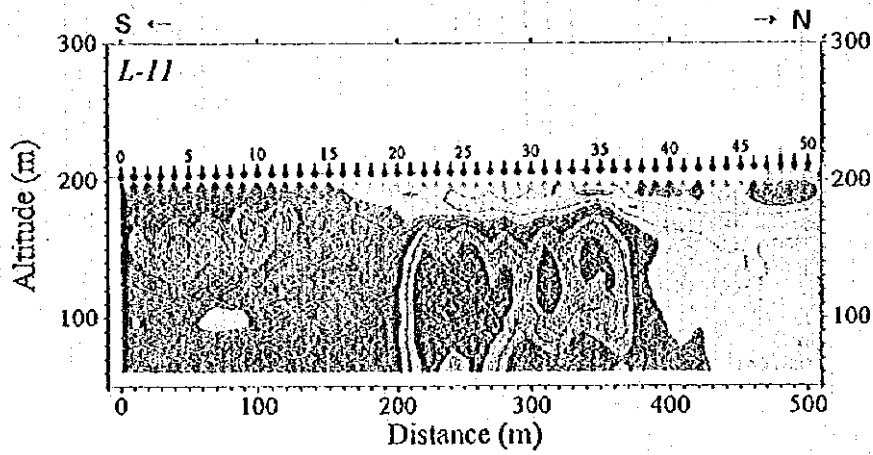
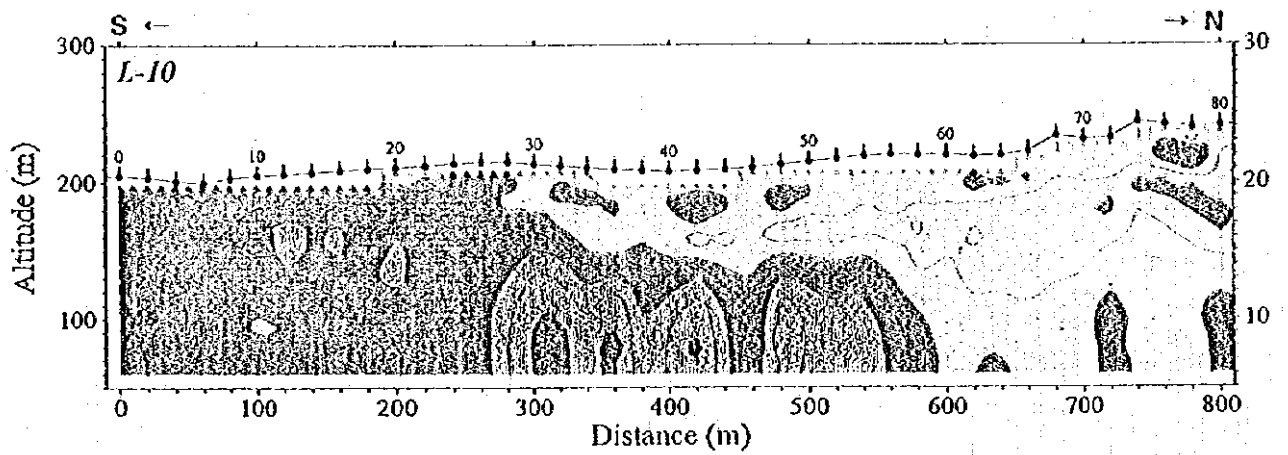


Fig. II-4-7 Locations of TEM Survey Lines and Sites





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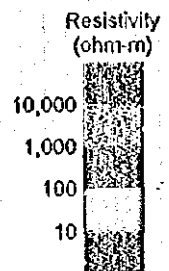


Fig. II-4-9(1) Resistivity Structure Sections (Line-10 and Line-11)

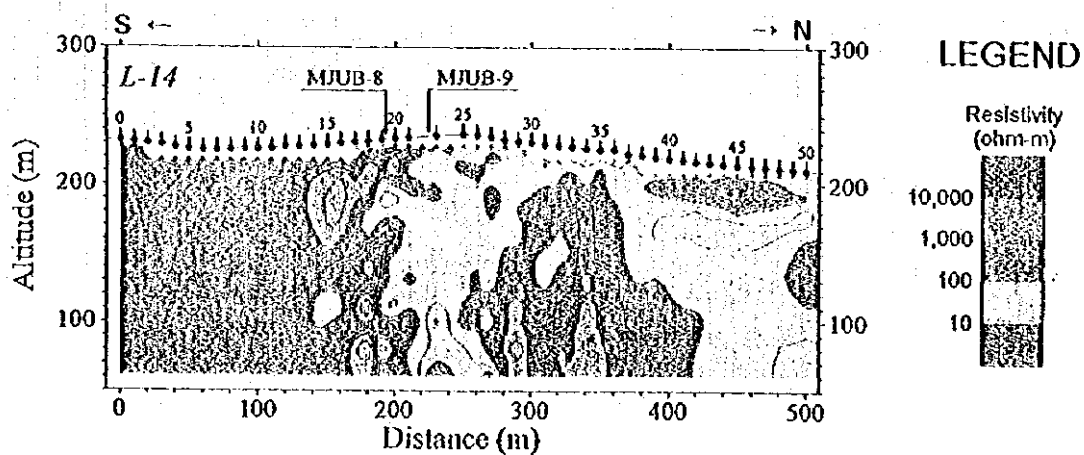
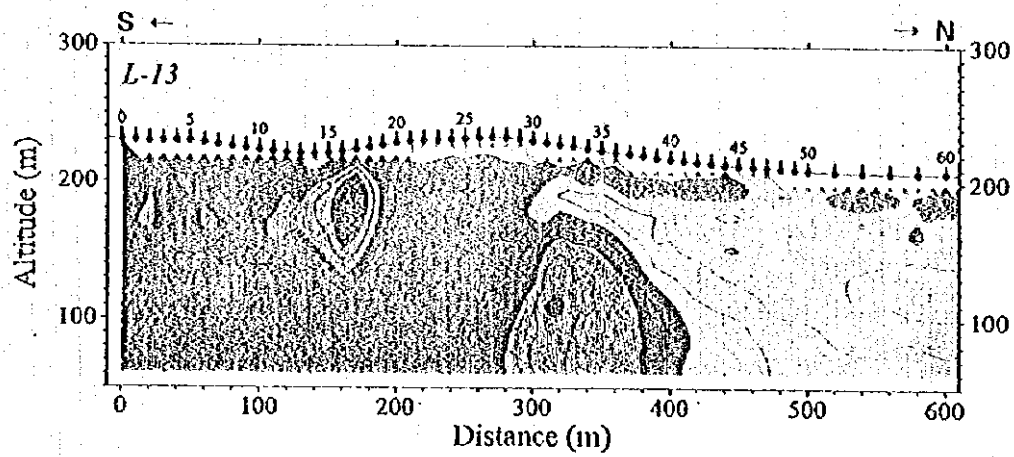
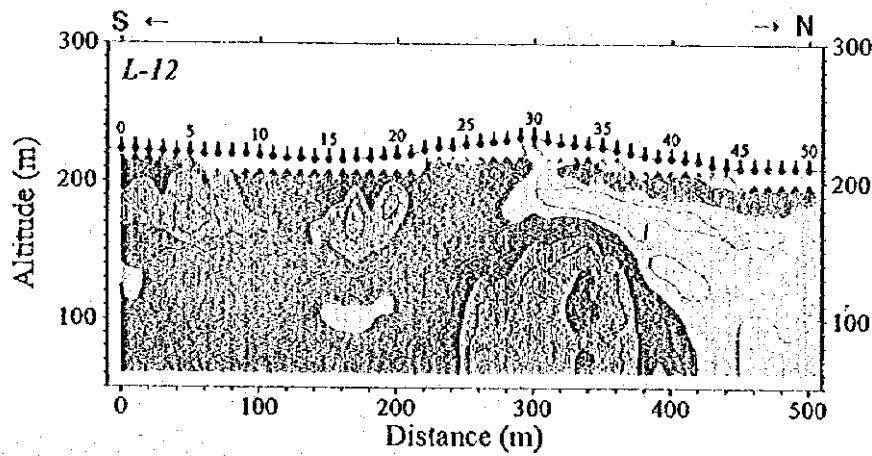
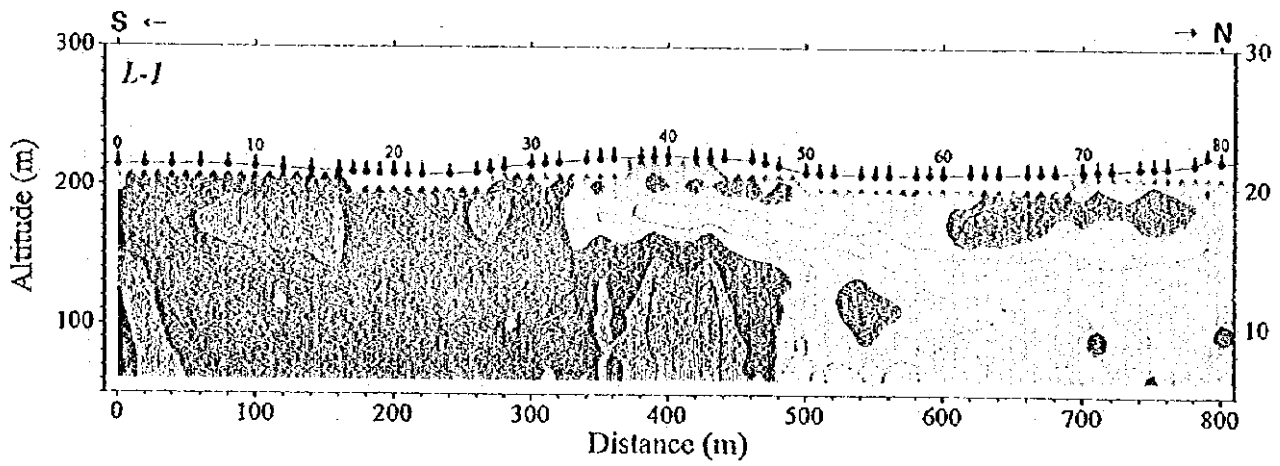


Fig. II-4-9(2) Resistivity Structure Sections (Line-1, Line-12, Line-13 and Line-14)

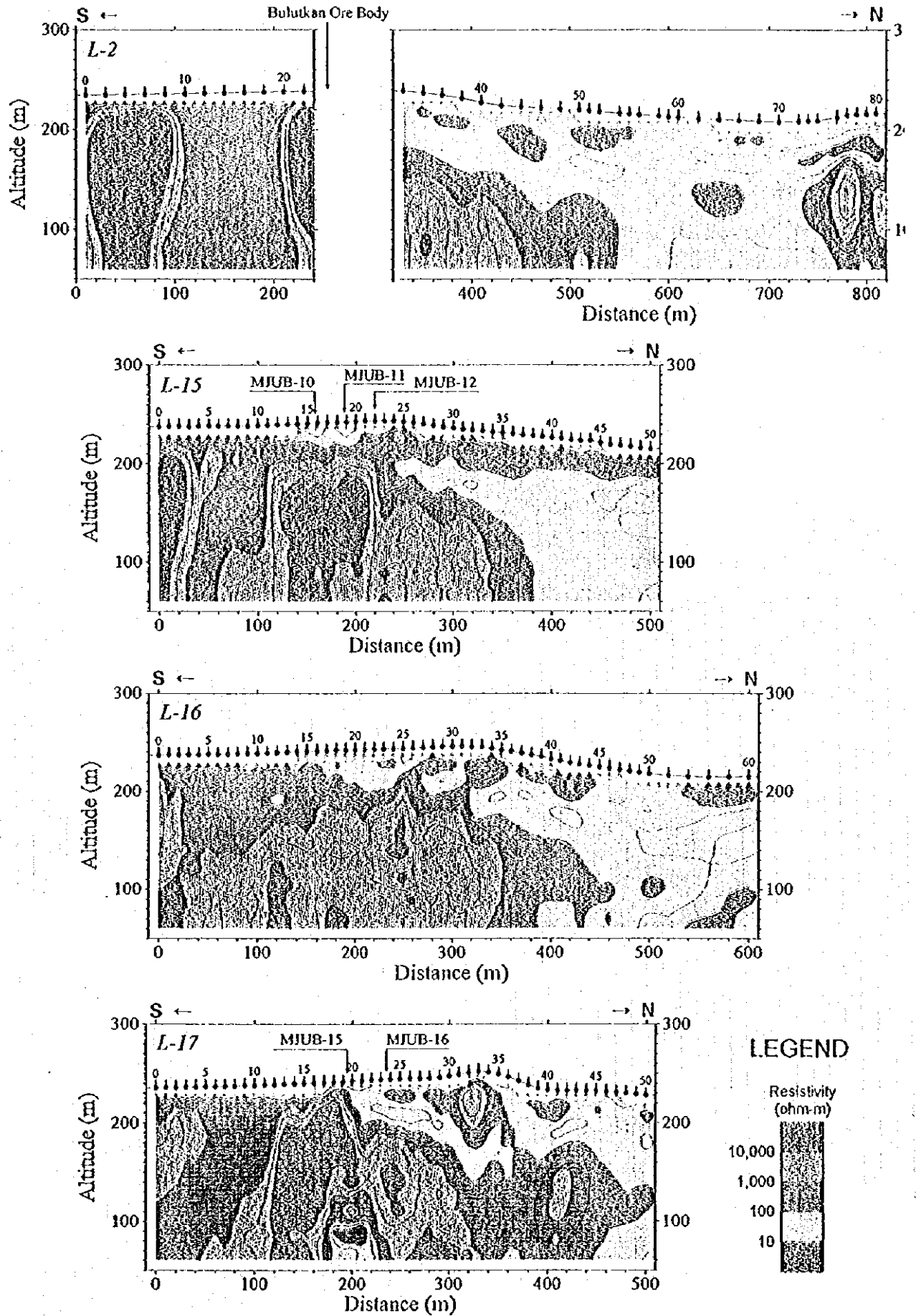


Fig. II-4-9(3) Resistivity Structure Sections (Line-2, Line-15, Line-16 and Line-17)



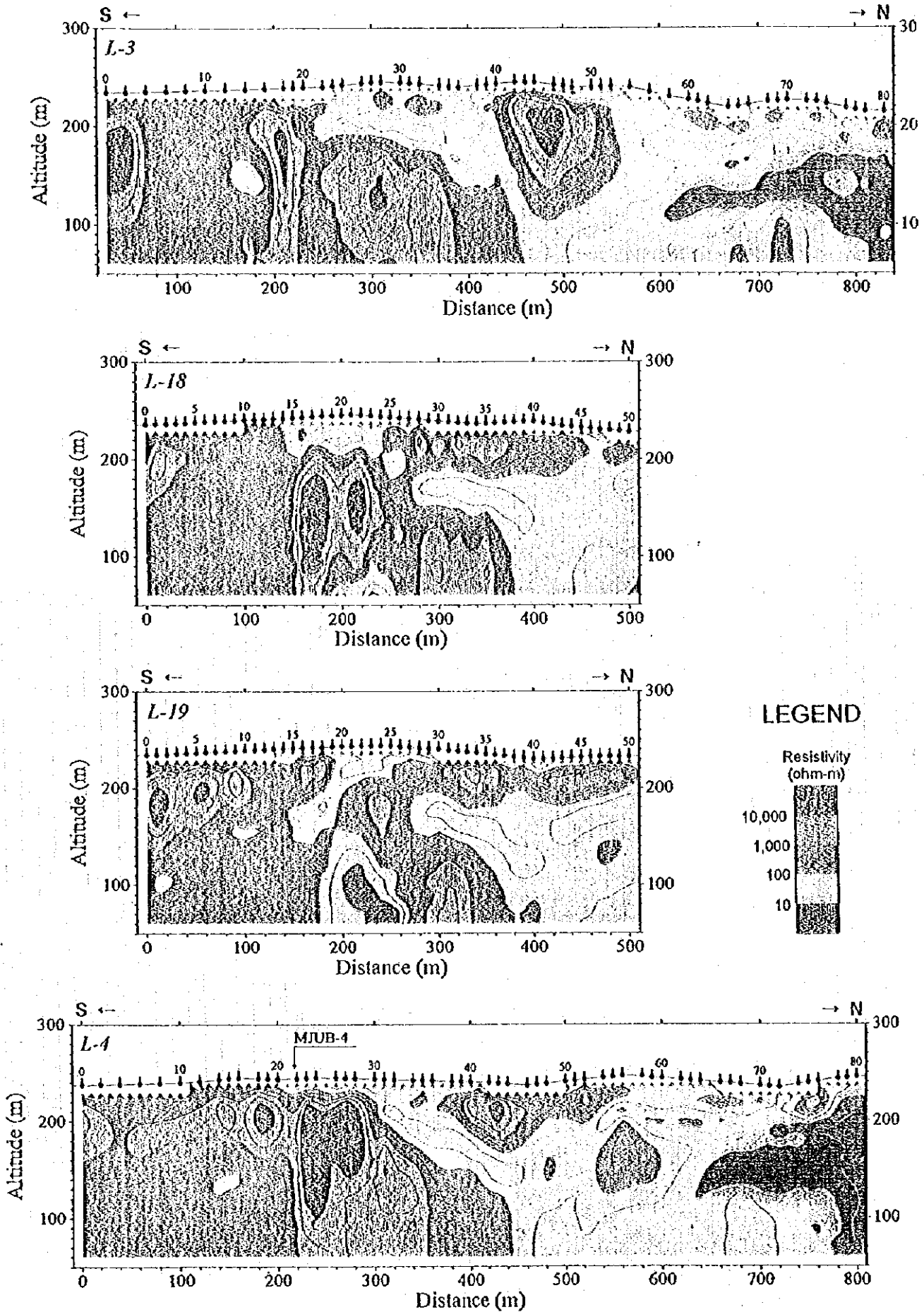


Fig. II-4-9(4) Resistivity Structure Sections (Line-3, Line-18, Line-19 and Line-4)

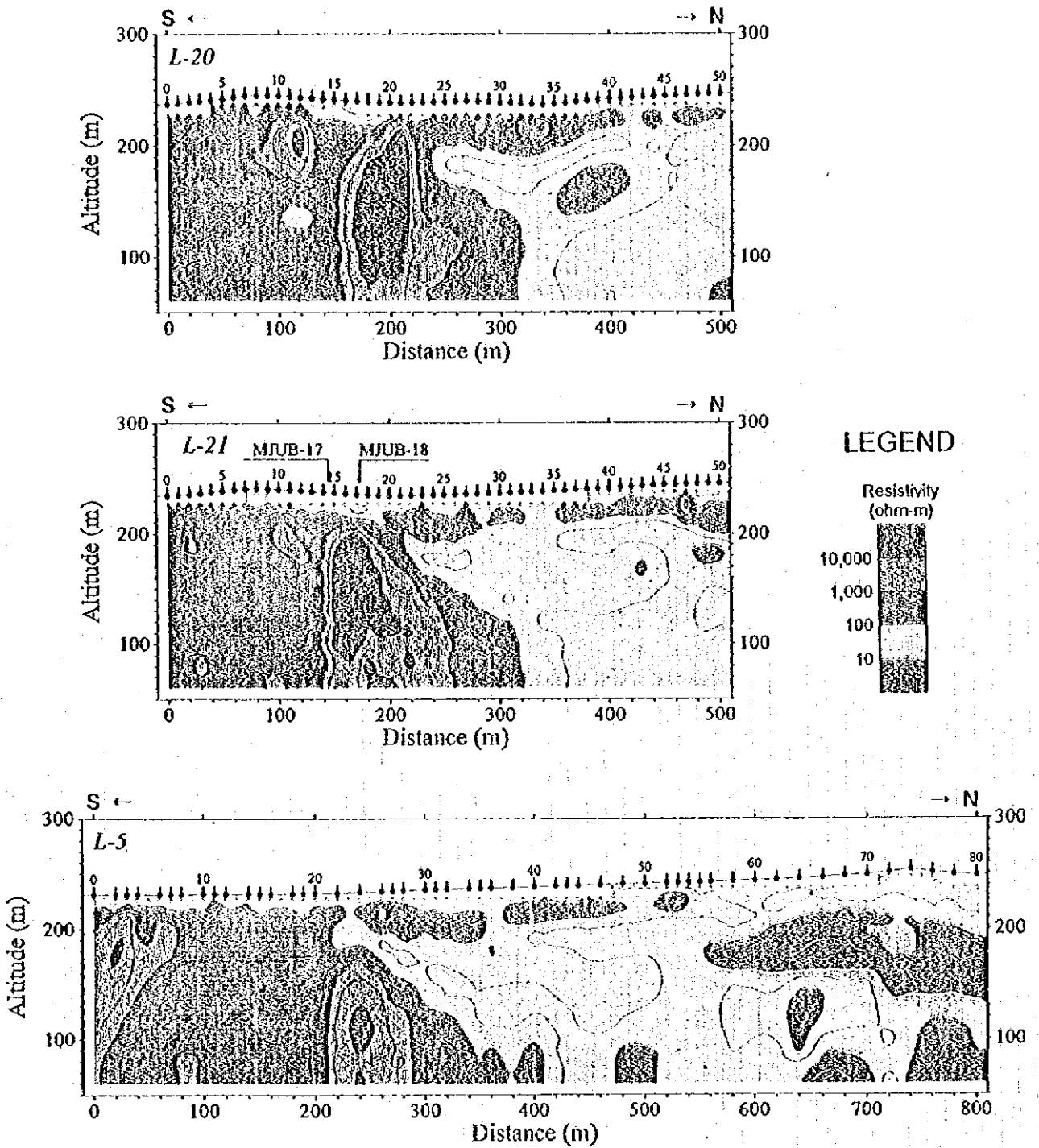


Fig. II-4-9(5) Resistivity Structure Sections (Line-20, Line-21 and Line-5)

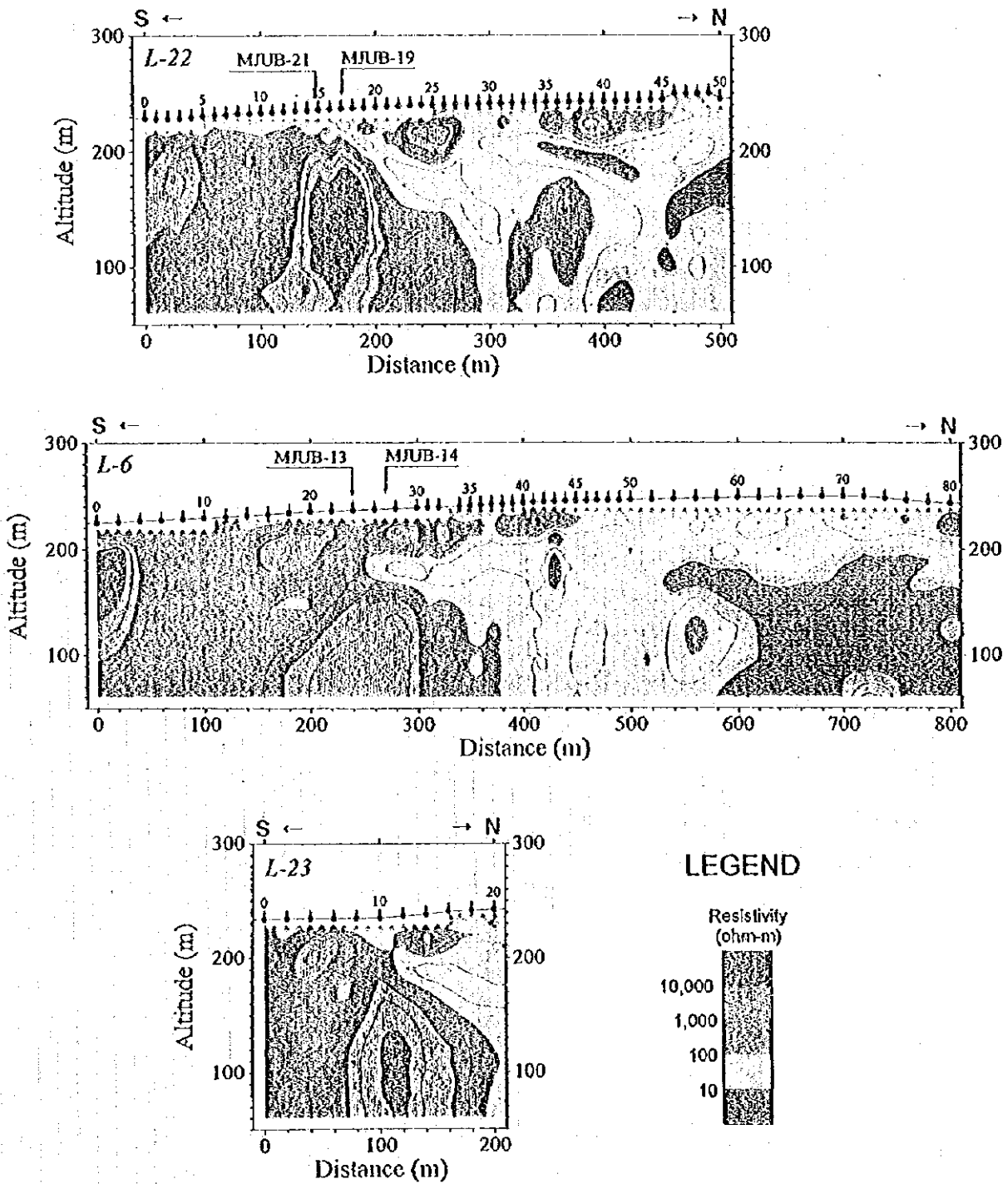


Fig. II-4-9(6) Resistivity Structure Sections. (Line-22, Line-6, and Line-23)

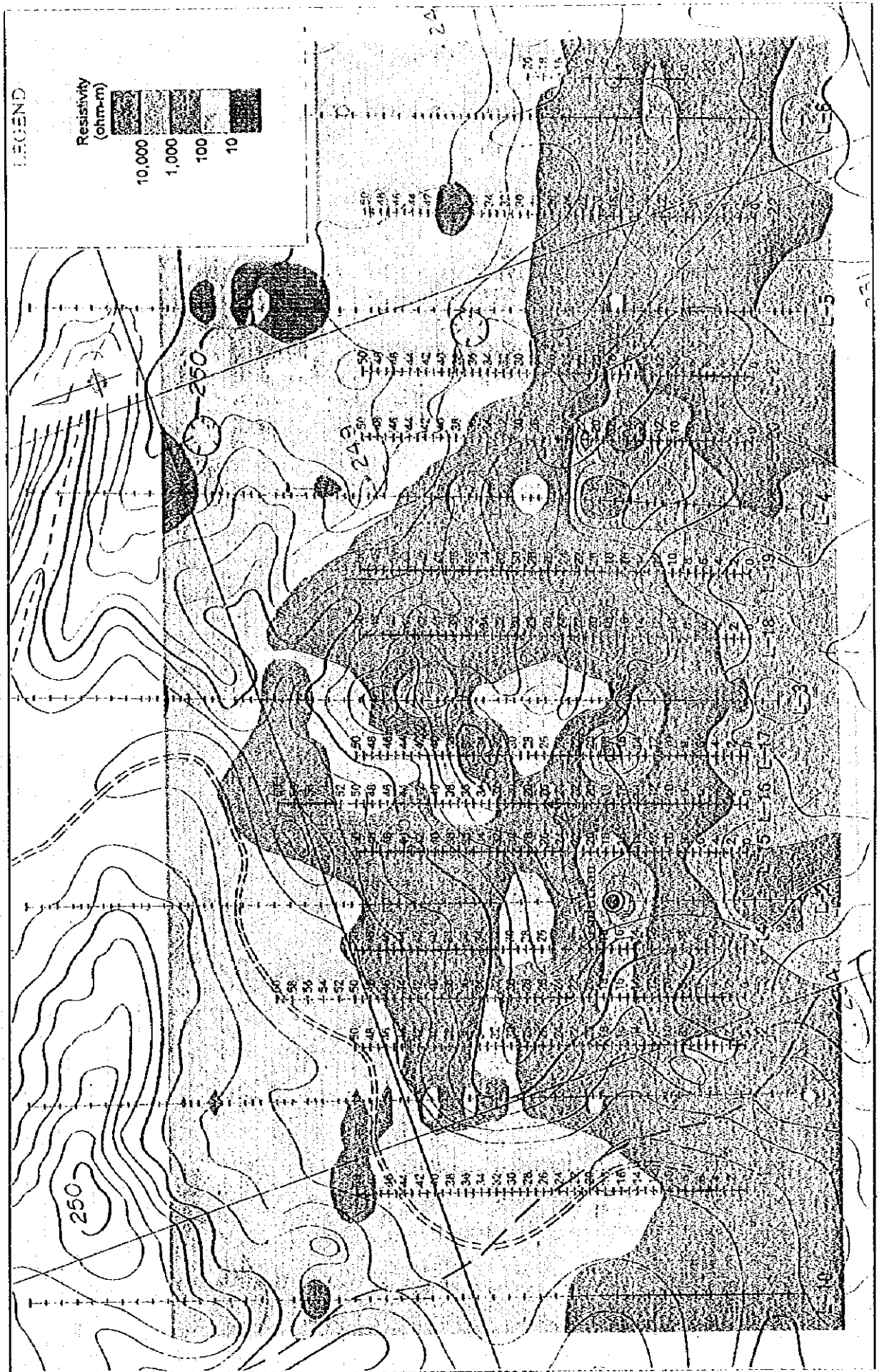


Fig. II-4-10(1) Resistivity Structure Map (200m A.S.I.)

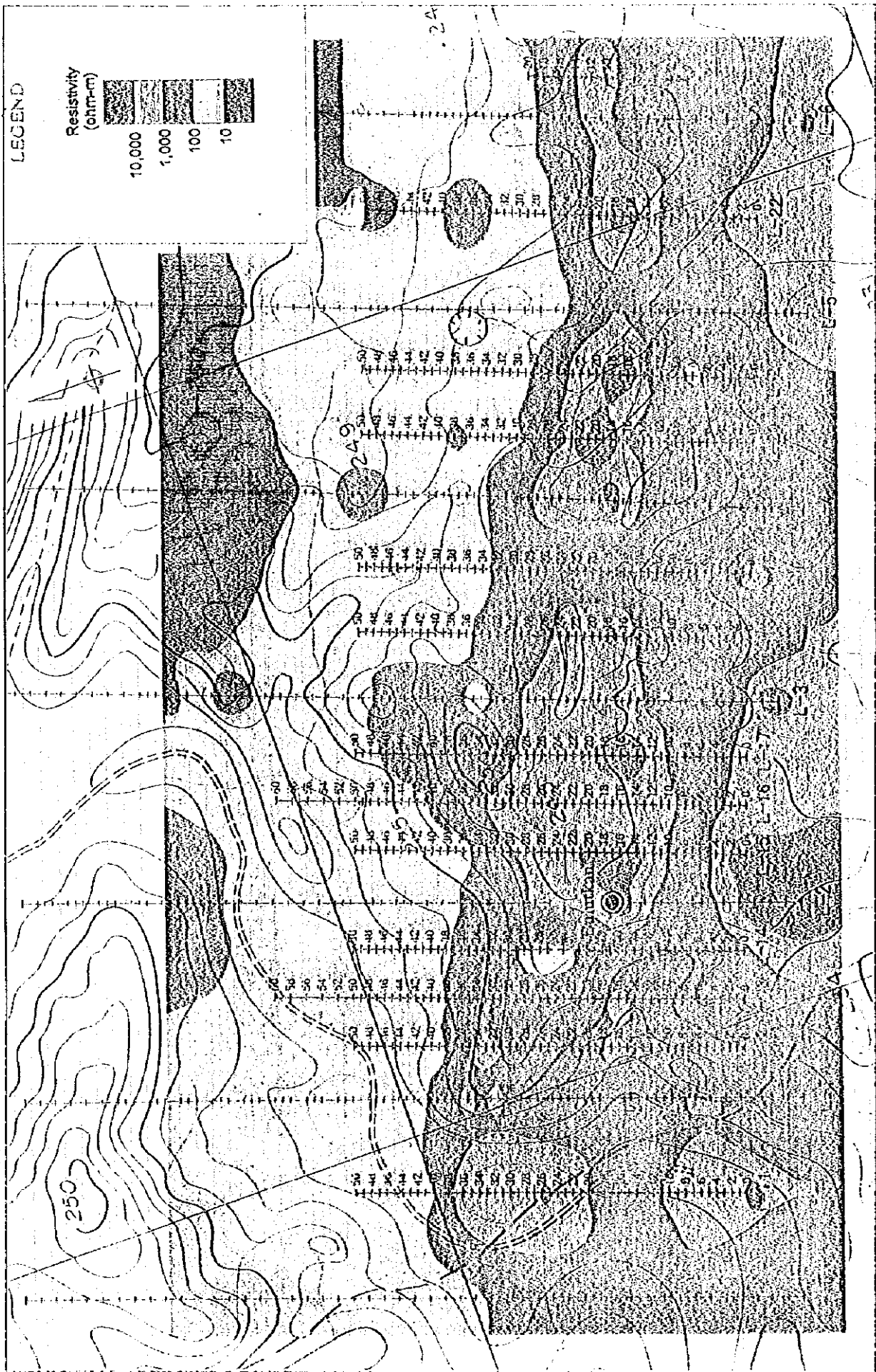


Fig. II-4-10(2) Resistivity Structure Map (150m A.S.L.)





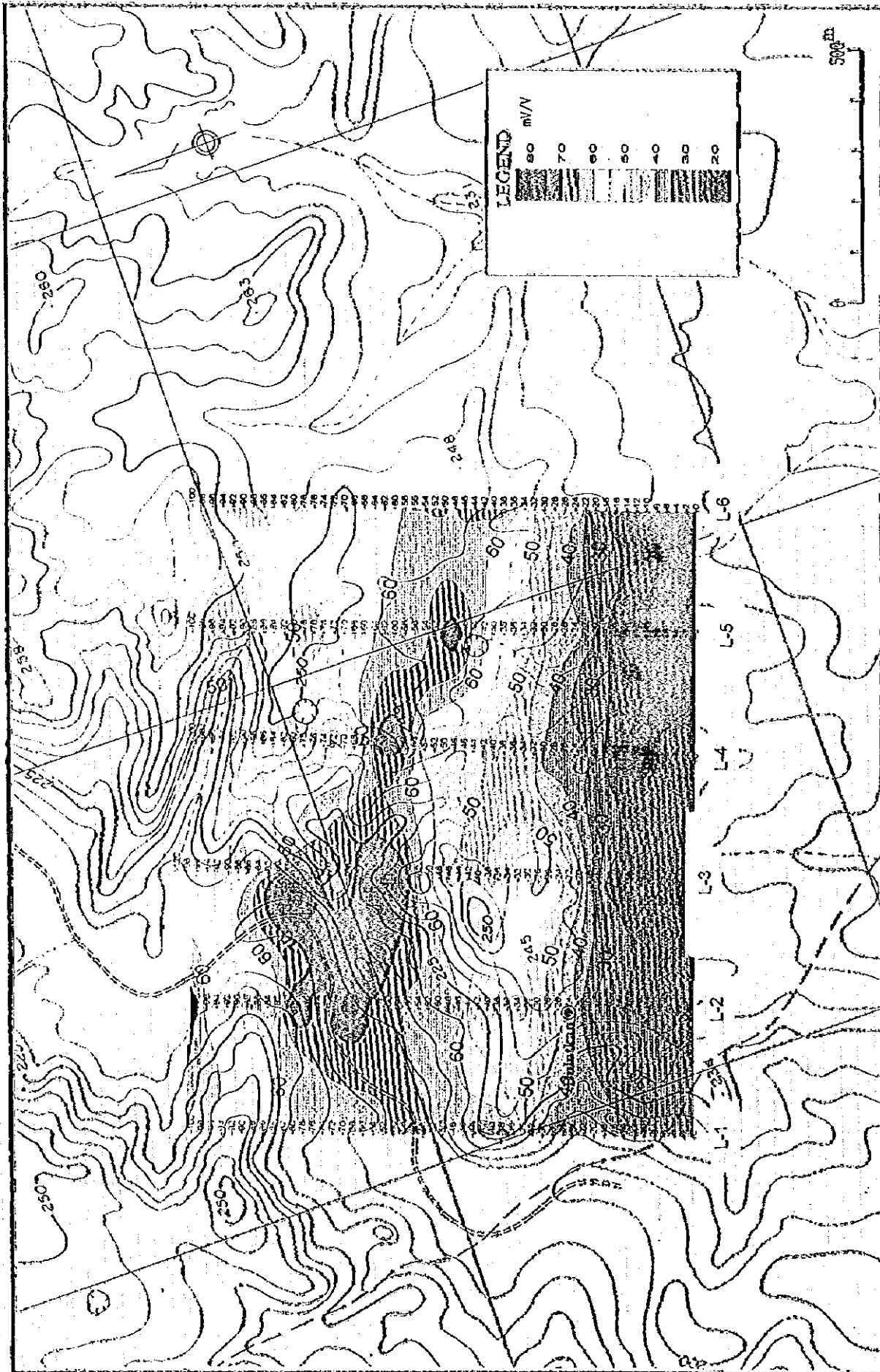


Fig. II-4-11 IP value (Chargeability) Distribution Map

Table II-4-1 Resistivity and IP value(Chargeability) of Rock Samples

Sample No.	Locality	Rock name	Py	Resistivity (ohm-m)	I P (mV/V)
B-1B1	MJUB-1 37.5 m	Metasomatite	○	357	380.7
B-1B2	MJUB-1 44.4 m	Metasomatite	○	17,073	20.8
B-1B3	MJUB-1 59.5 m	Metasomatite		22,920	5.1
B-1B4	MJUB-1 77.5 m	Metasomatite		74,964	8.2
B-1B5	MJUB-1 85.5 m	Skarn	○	1,245	20.1
B-1B6	MJUB-1 149.6 m	Syenodiorite		802	1.6
B-2B1	MJUB-2 11.4 m	Limy sandstone		123,271	19.1
B-2B2	MJUB-2 17.6 m	Limestone		35,569	7.2
B-2B3	MJUB-2 35.8 m	Metasomatite	○	757	26.5
B-2B4	MJUB-2 95.1 m	Sulphide vein	○	0.9	181.6
B-2B5	MJUB-2 99.8 m	Alt. (ss>sl)	○	2,149	143.3
B-2B6	MJUB-2 109.2 m	Metasomatite	○	278	344.1
B-2B7	MJUB-2 189.5 m	Syenodiorite		9,248	3.1
B-3B1	MJUB-3 24.3 m	Skarnized sandstone	○	21	32.3
B-3B2	MJUB-3 45.3 m	Hornfels(ss)	○	17	119.0
B-3B3	MJUB-3 50.0 m	Alt. (sl>ss)	○	24	230.2
B-3B4	MJUB-3 64.0 m	Limestone		18,392	7.8
B-3B5	MJUB-3 81.5 m	Sulphide vein	○	0.4	288.4
B-3B6	MJUB-3 96.0 m	Marble with wollastonite		2,836	4.3
B-3B7	MJUB-4 130.6 m	Syenodiorite		302	3.2
B-4B1	MJUB-4 20.8 m	Granite		74	13.2
B-4B2	MJUB-4 22.4 m	Limestone		5,566	5.0
B-4B3	MJUB-4 45.9 m	Metasomatite	○	1,372	118.4
B-4B4	MJUB-4 64.0 m	Sandstone		45,393	22.2
B-4B5	MJUB-4 85.5 m	Lamprophyre	○	742	134.3
B-4B6	MJUB-4 103.8 m	Syenodiorite		46,400	8.5
B-6B1	MJUB-6 35.4 m	Alt. (sl>ss)	○	2,491	31.0
B-6B2	MJUB-6 48.0 m	Metasomatite	○	43	128.5
B-6B3	MJUB-6 78.5 m	Porphyrite		6,766	17.3
B-6B4	MJUB-6 82.7 m	Alt. (sl>ss)	○	44,041	187.7
B-6B5	MJUB-6 133.7 m	Alt. (sl>ss)	○	96,593	5.2
B-7B1	MJUB-7 9.4 m	Chalcedony		166	1.3
B-7B2	MJUB-7 24.3 m	Lamprophyre		13	8.1
B-7B3	MJUB-7 49.4 m	Skarn	○	6.7	133.0
B-7B4	MJUB-7 59.4 m	Metasomatite		4,101	22.4
B-7B5	MJUB-7 71.8 m	Diorite		2,739	23.1
B-5B1	MJUB-5 6.8 m	Dolomite		29	2.0
B-5B2	MJUB-5 36.0 m	Lamprophyre		580	6.7
B-5B3	MJUB-5 100.2 m	Limestone		5,989	3.7
B-5B4	MJUB-5 106.6 m	Diorite		65,087	6.4

Rock type	Resistivity (ohm-m)	I P (mV/V)
Syenodiorite	14,200	4
Sulphide vein	1	240
Altered rock	9,000	89
No altered rock	29,200	60
Others	10,900	30
average	16,000	68

remark:Alt.=Alternation of strata,sl=slate,ss=sandstone



Table II-4-3 Major Mineralized Zones Caught by Drillings in the Bulutkan District(1)

Hole No.	Depth (m)	True width (m)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	As (%)	Bi (%)	Mo (%)	WO <sub>3</sub> (%)	Remarks
MJUB-1	80.3-81.0 (0.7)	0.4	1.4	tr	tr	tr	tr	0.62	tr	tr	tr	Silicified and skarnized metasomatiite
	83.4-86.0 (2.6)	1.5	0.8	0.9	0.12	tr	tr	0.30	tr	tr	tr	Skarn and pyrite vein
	86.0-88.0 (2.0)	1.1	2.8	tr	0.06	tr	tr	0.01	0.01	tr	tr	Skarn
	92.0-95.0 (3.0)	1.7	0.5	1.1	0.05	tr	tr	0.13	tr	tr	tr	Skarn
MJUB-3	80.0-82.0 (2.0)	1.6	0.4	tr	tr	tr	tr	tr	tr	tr	0.02	Skarnized limestone and pyrite vein
	82.0-84.0 (2.0)	1.6	2.3	36.1	0.09	tr	tr	tr	tr	tr	0.02	Skarnized limestone
MJUB-7	0 -10.4(10.4)	5.5	4.3	1.1	0.05	tr	tr	0.03	tr	tr	tr	Silicified rock with drusey quartz, gossan and chalcodony
	10.4-15.6 (5.2)	2.8	0.4		0.05	tr	0.01	0.01	tr	tr	tr	Silicified rock with gossan
	15.6-16.6 (1.0)	0.5	0.6	2.8	0.08	tr	tr	0.04	tr	tr	tr	Silicified rock
	26.0-27.0 (1.0)	0.5	0.8	tr	0.10	tr	tr	tr	tr	tr	tr	Lamprophyre
	36.1-51.0(14.9)	7.9	21.2	4.3	0.07	tr	tr	0.09	tr	tr	tr	Skarn and skarnized sandstone
52.1-66.5(14.4)	7.6	0.3		0.01	tr	tr	tr	tr	tr	tr	Silicified and skarnized metasomatiite	

Table II-4-3 Major Mineralized Zones Caught by Drillings in the Bulukan District(2)

Hole No.	Depth (m)	True width (m)	Au (g/t)	Ag (g/t)	Cu (%)	As (%)	Mo (%)	VO <sub>3</sub> (%)	Remarks
MJUB-8	18.1-19.3(1.2)	0.5	1.1	1.8	0.03	tr	tr	tr	Silicified and skarnized metasomatite
	27.7-30.0(2.3)	1.1	8.5	7.8	0.12	0.01	tr	0.03	Silicified and skarnized metasomatite
	30.0-34.6(4.6)	2.2	0.4	1.3	0.06	tr	tr	tr	Silicified and skarnized metasomatite
	34.6-37.4(2.8)	1.6	3.4	3.2	0.09	tr	tr	tr	Skarn and diorite with sulfide (pyrite, marcasite)
MJUB-9	41.2-42.2(1.0)	0.6	0.5	tr	0.01	0.02	tr	0.01	Skarnized diorite
	47.0-48.0(1.0)	0.5	8.5	7.8	0.38	1.70	tr	0.01	Quartz, sulfide (pyrite, marcasite, chalcopyrite) vein
MJUB-11	81.0-82.2(1.2)	0.9	0.5	1.8	0.03	tr	tr	tr	Silicified sandstone with pyrite, calcite veinlets
	123.3-125.9(2.6)	2.4	0.5	48.6	0.01	tr	tr	tr	Diorite with pyrite, calcite veinlets
MJUB-12	11.0-12.8(1.8)	1.6	0.8	10.4	0.07	0.02	tr	tr	Silicified and skarnized metasomatite
	135.0-137.0(2.0)	1.8	0.4	tr	0.03	0.04	tr	tr	Skarn with pyrite, chalcopyrite, marcasite
MJUB-13	19.8-21.0(1.2)	0.7	0.5	tr	0.02	tr	tr	tr	Silicified lamprophyre
	39.5-41.5(2.0)	1.1	11.9	1.0	tr	tr	tr	tr	Quartz, calcite vein

Table II-4-3 Major Mineralized Zones Caught by Drillings in the Bulutkan District(3)

Hole No	Depth (m)	True width (m)	Au (g/t)	Ag (g/t)	Cu (%)	As (%)	Mo (%)	W <sub>05</sub> (%)	Remarks
MJUB-14	93.4-95.0(1.6)	0.9	0.4	tr	0.05	tr	0.04	tr	Silicified alternation (sandstone > slate) with pyrite, quartz veinlets Skarnized and fractured limestone
	116.0-117.5(1.5)	1.0	0.4	tr	tr	tr	tr	tr	
MJUB-17	23.4-26.4(3.0)	2.0	1.3	tr	0.02	0.02	tr	tr	Fracture zone with lamprophyre and calcite
	30.5-31.5(1.0)	0.6	0.4	8.4	0.05	0.20	tr	tr	Silicified and fractured sandstone with quartz, calcite, pyrite
	74.8-75.5(0.7)	0.5	6.0	23.8	0.33	0.75	tr	tr	Silicified and skarnized metasomatite with sulfide (pyrite, pyrrhotite, chalcopyrite) vein
MJUB-18	69.0-69.5(0.5)	0.5	9.8	72.8	3.5	0.45	tr	0.02	Quartz, sulfide (pyrite, chalcopyrite) vein

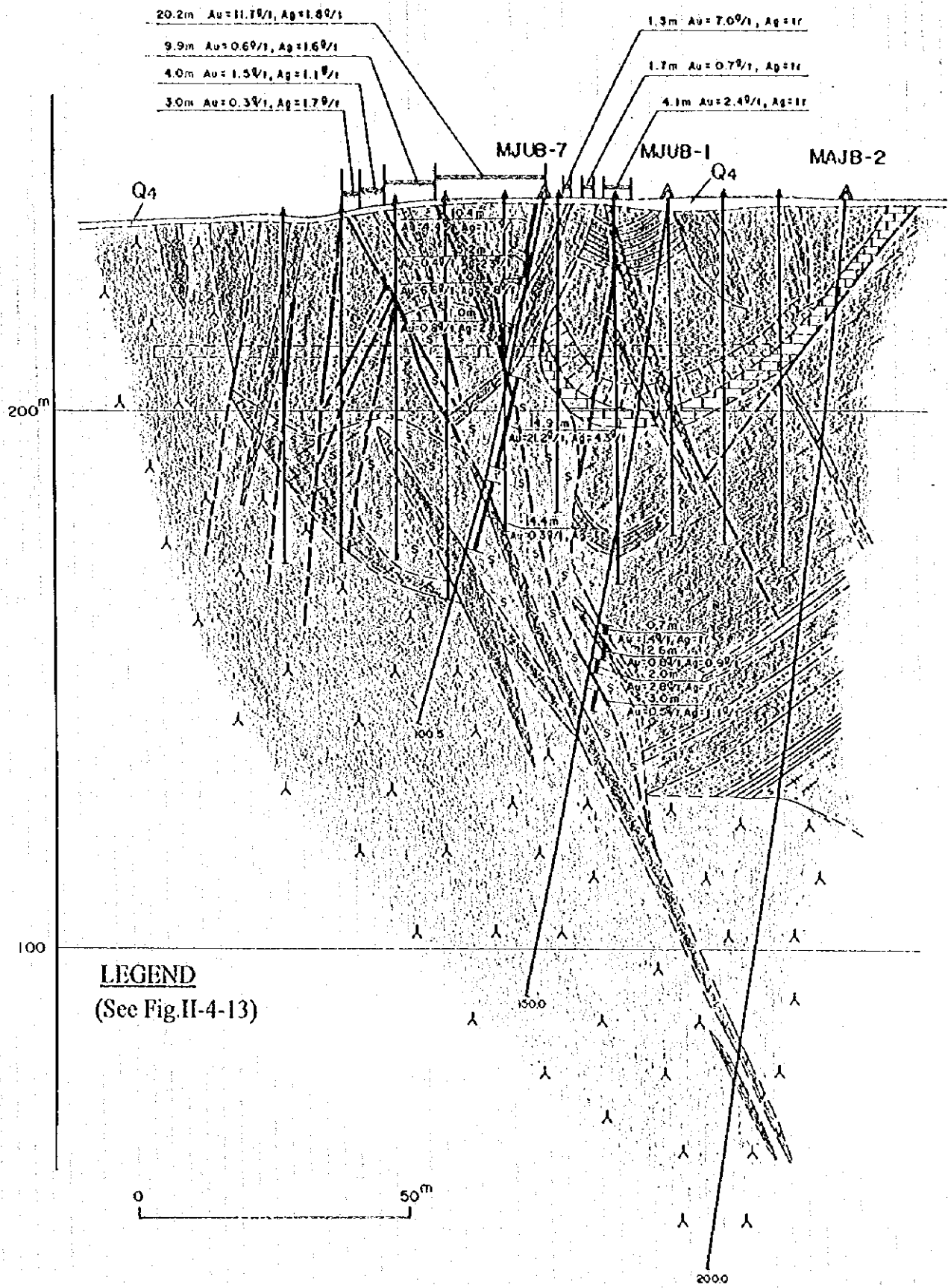


Fig. II-4-12 Geological Cross Section along MJUB-1,2 and 7

**LEGEND**

- |  |   |   |
|--|---|---|
|  | Quaternary Deposits   |   |
|  | Diorites  | ] Late Carboniferous~<br>Early Permian Intrusives |
|  | Porphyrites   |   |
|  | Granites  |   |
|  | Lamprophyres  |   |
|  | Syenodiorites   |   |
|  | Limestones  | ] Proterozoic<br>Kokpatala Formation              |
|  | Dolomites   |   |
|  | Slates  |   |
|  | Sandstones  |   |
|  | Quartzites  |   |
|  | Silicified rock with gold mineralization                        |   |
|  | Skarn with gold mineralization                                  |   |
|  | Silicified rock with drusey quartz and weak gold mineralization |   |
|  | Silicified and skarnized metasomatite                           |   |

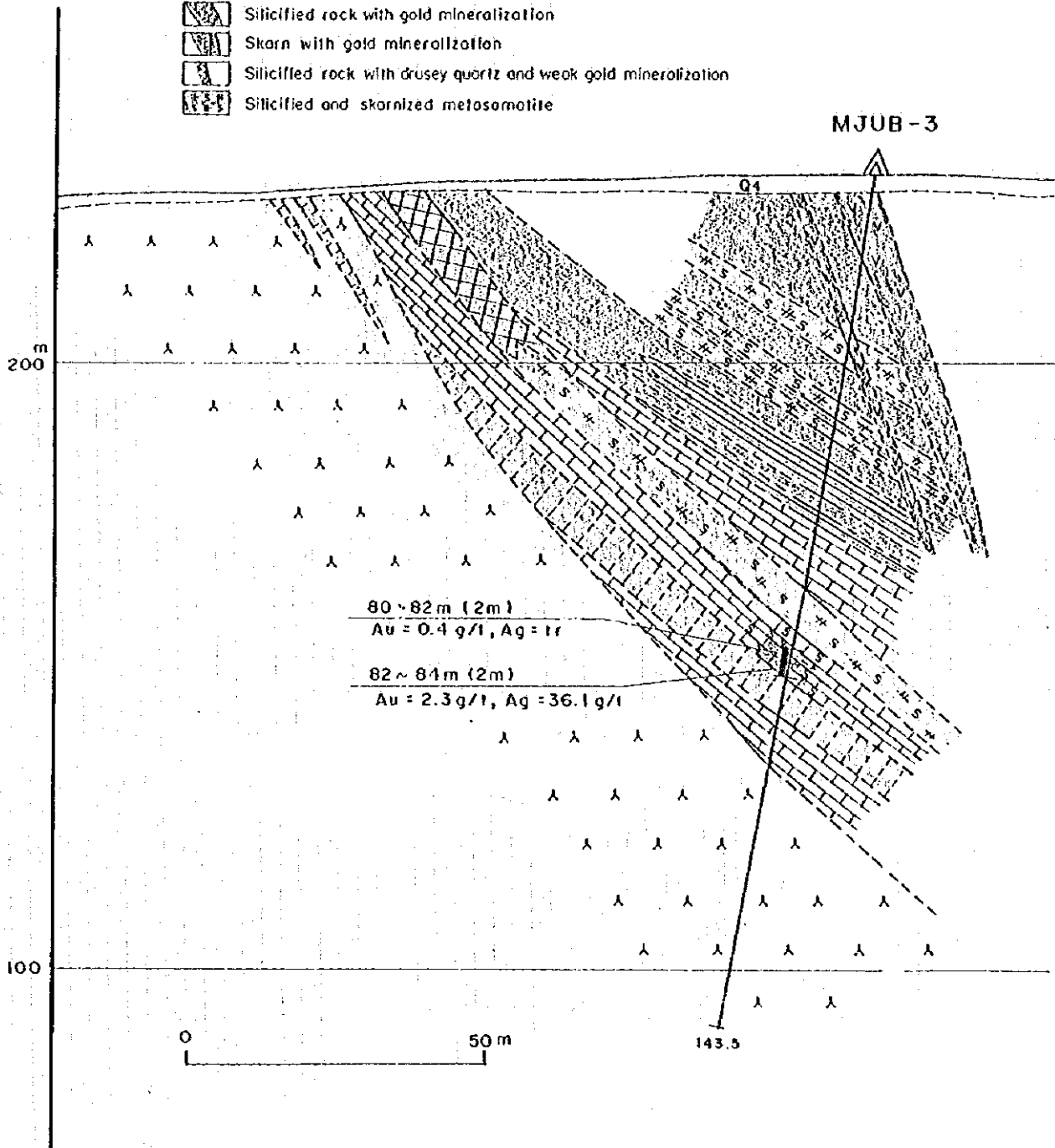


Fig. II-4-13 Geological Cross Section along MJUB-3

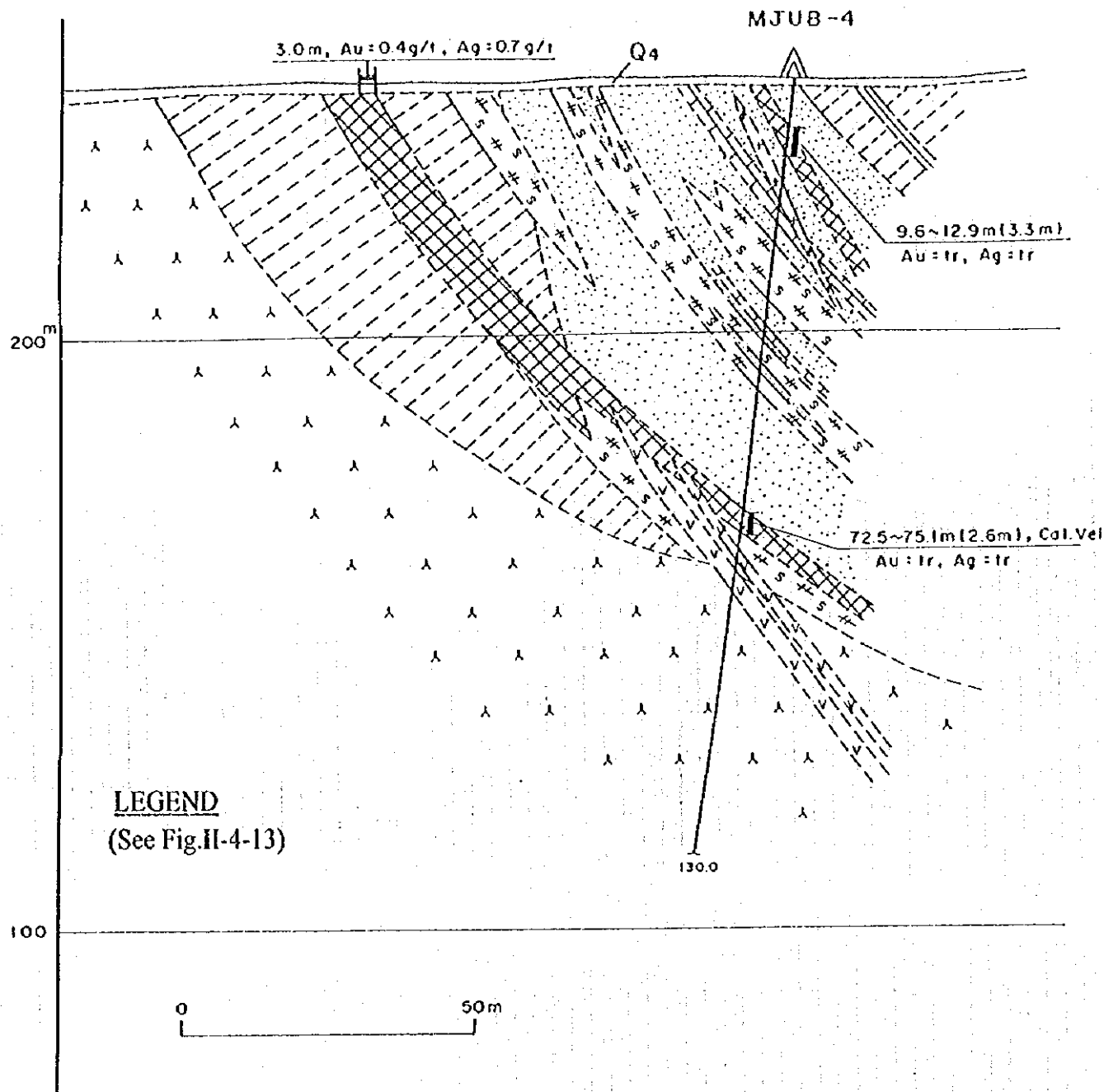


Fig. II-4-14 Geological Cross Section along MJUB-4

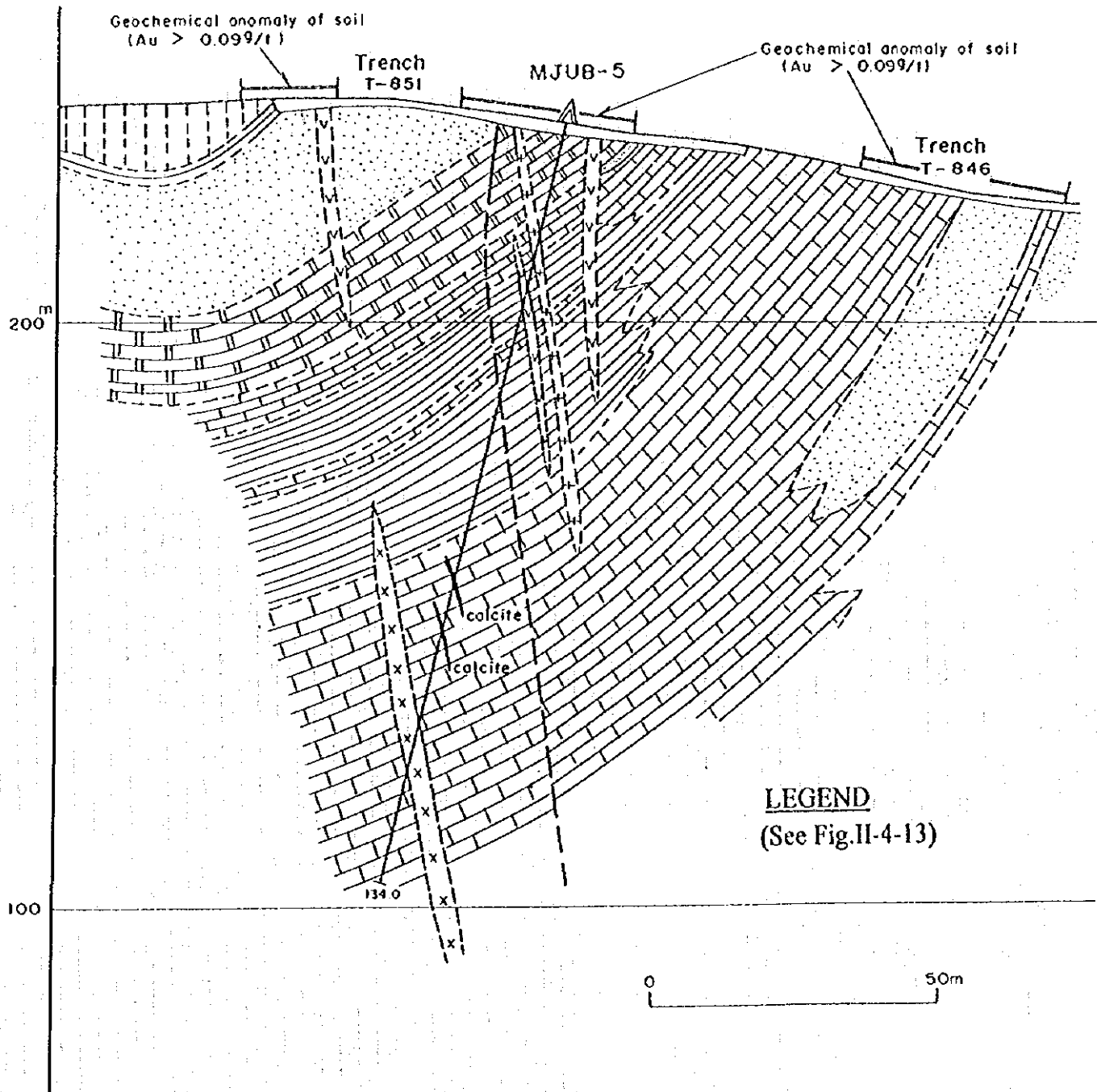


Fig. II-4-15 Geological Cross Section along MJUB-5

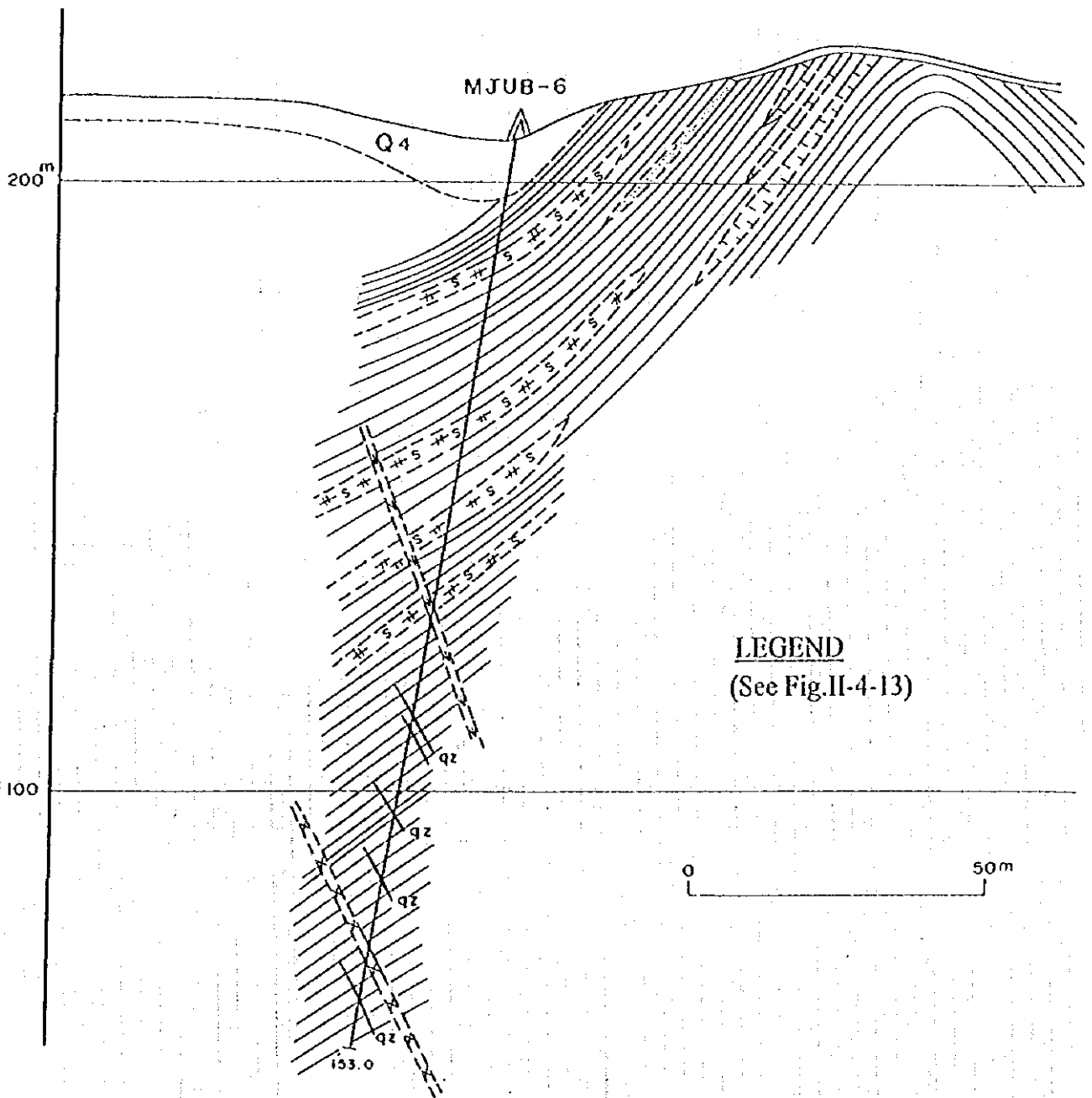


















Fig. II-4-16 Geological Cross Section along MJUB-6



**LEGEND**

-  Quaternary Deposits
  -  Diorites
  -  Porphyrites
  -  Apatites
  -  Granites
  -  Lamprophyres
  -  Syenodiorites
  -  Limestones
  -  Dolomites
  -  Slates
  -  Sandstones
  -  Quartzites
- ] Late Carboniferous -  
Early Permian Intrusives
- ] Proterozoic  
Kokpatos Formation
-  Silicified rock with gold mineralization
  -  Skarn
  -  Brecciated silicified rock with drusy quartz
  -  Silicified and skarnized metasomaltite
- / / Fault
- / / Fractured zone
- - - Vein (qz; quartz, cal; calcite, su; sulfide)

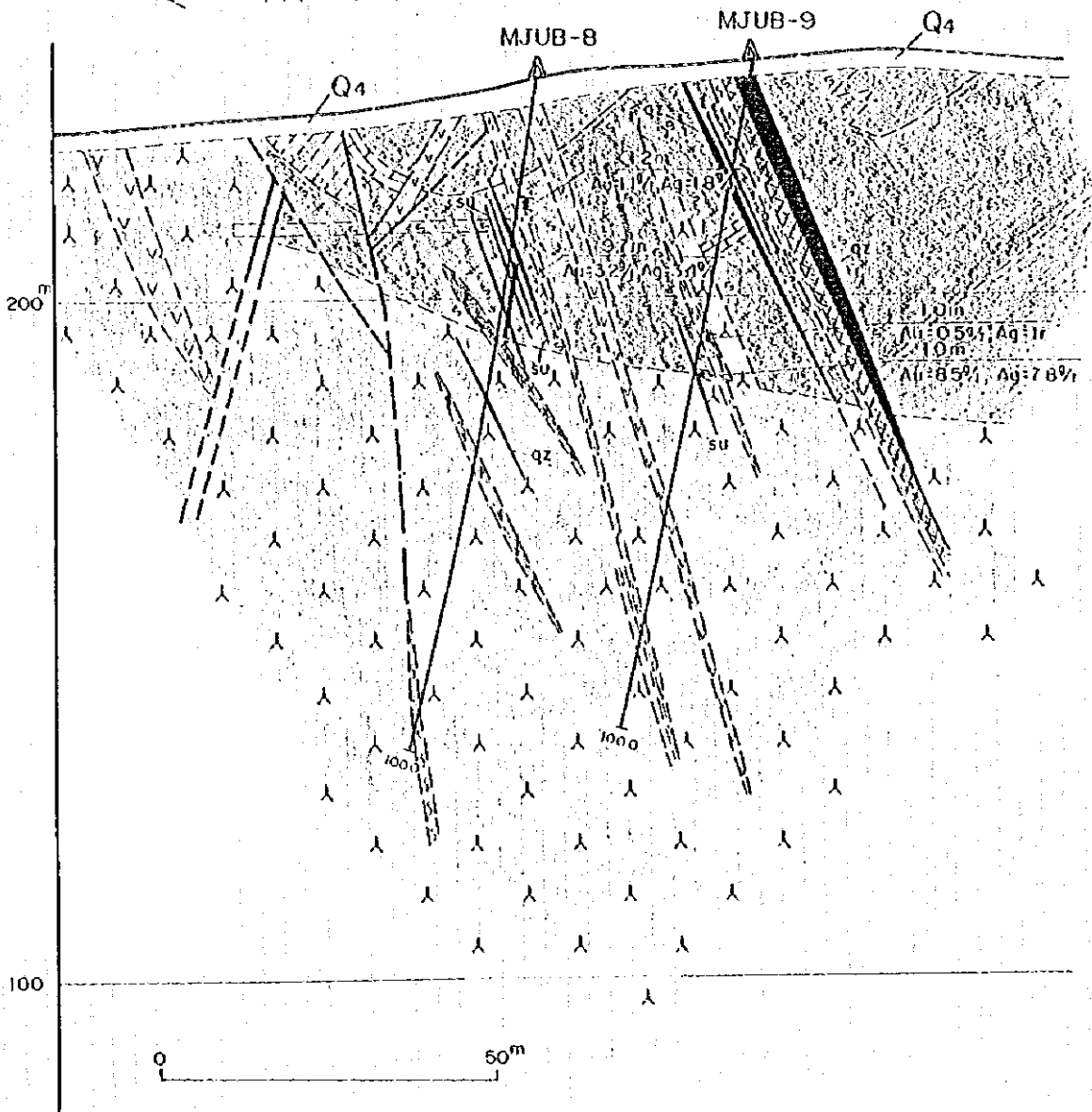


Fig. II-4-17 Geological Cross Section along MJUB-8,9

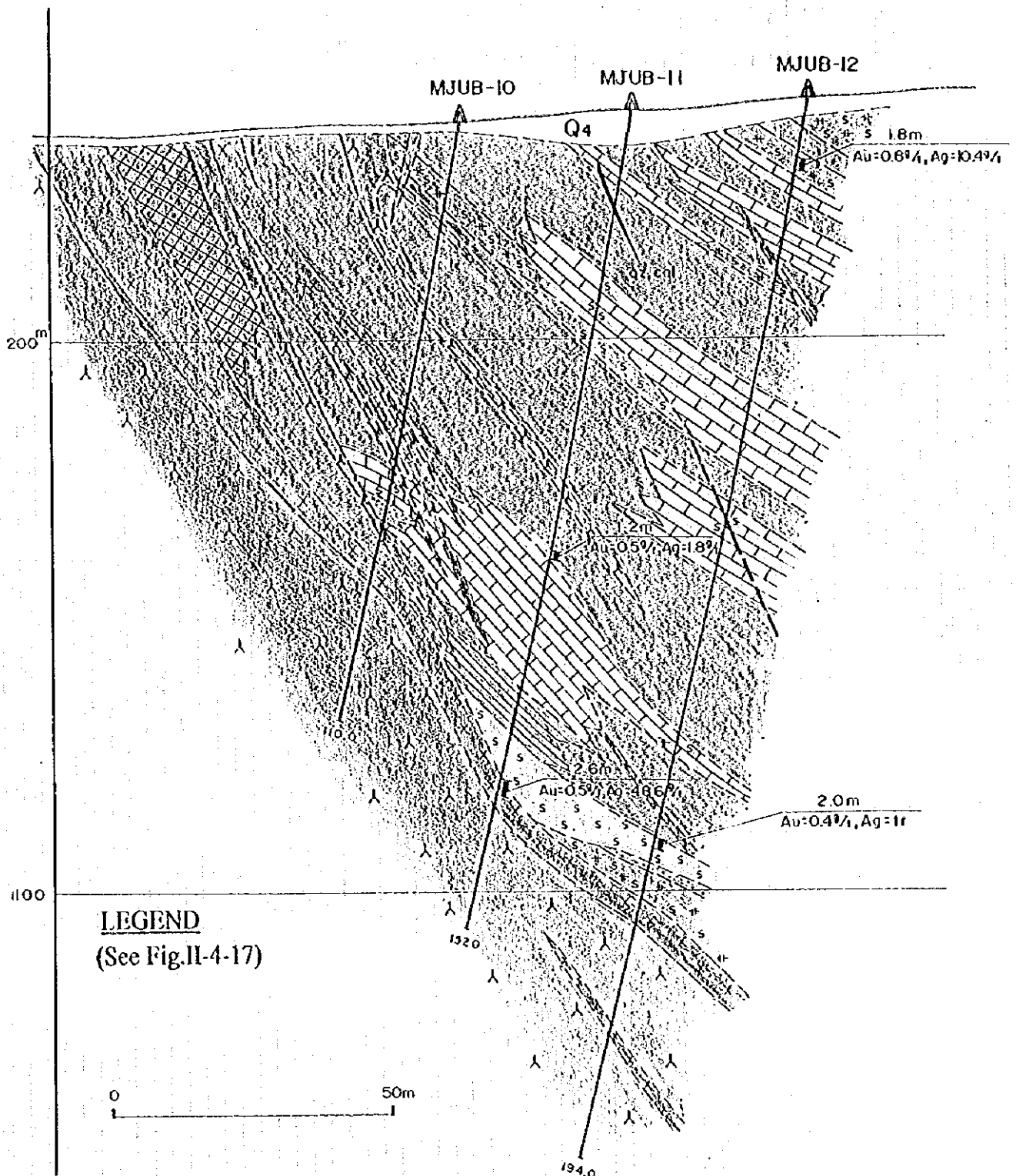


Fig. II-4-18 Geological Cross Section along MJUB-10,11 and 12

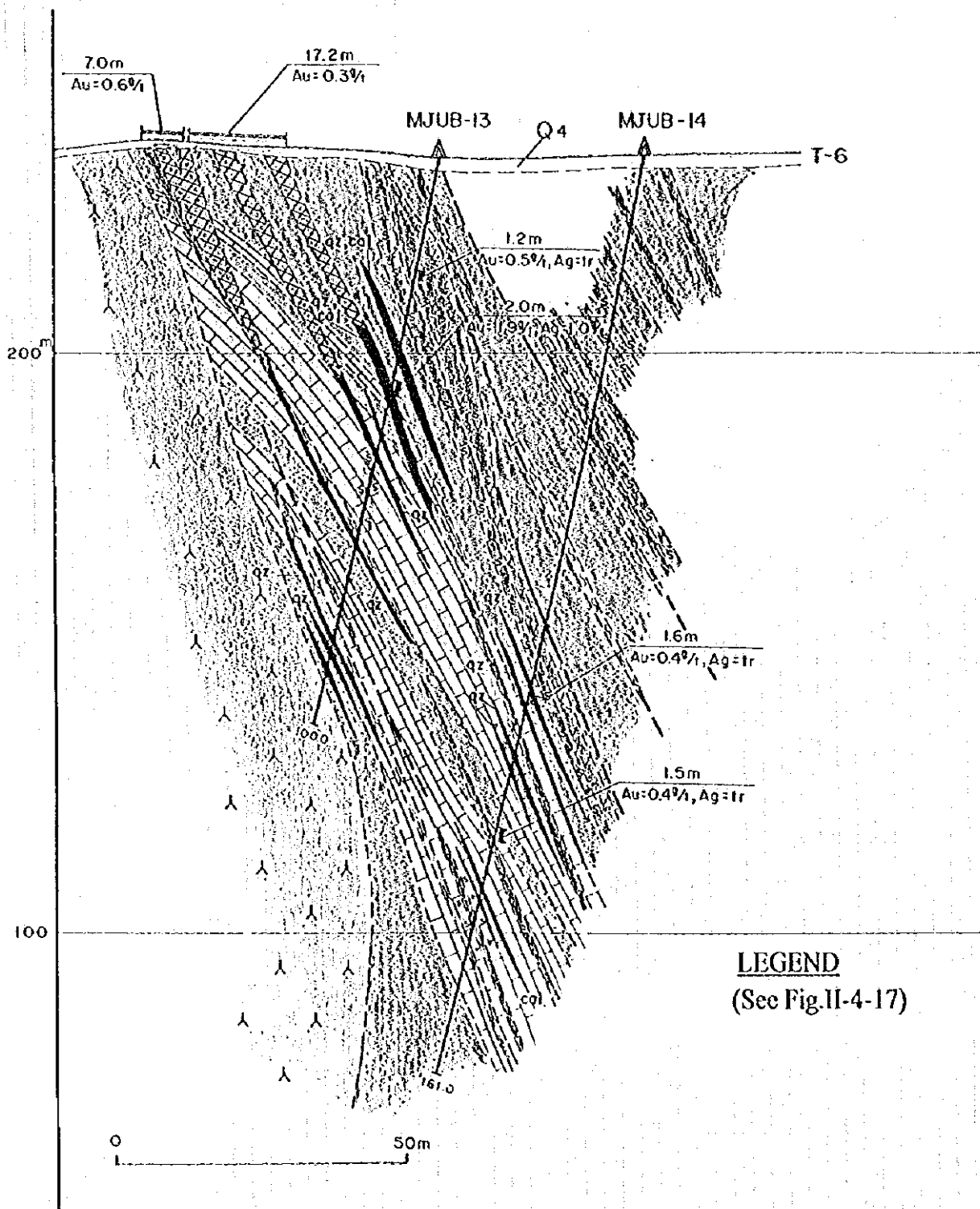


Fig. II-4-19 Geological Cross Section along MJUB-13,14

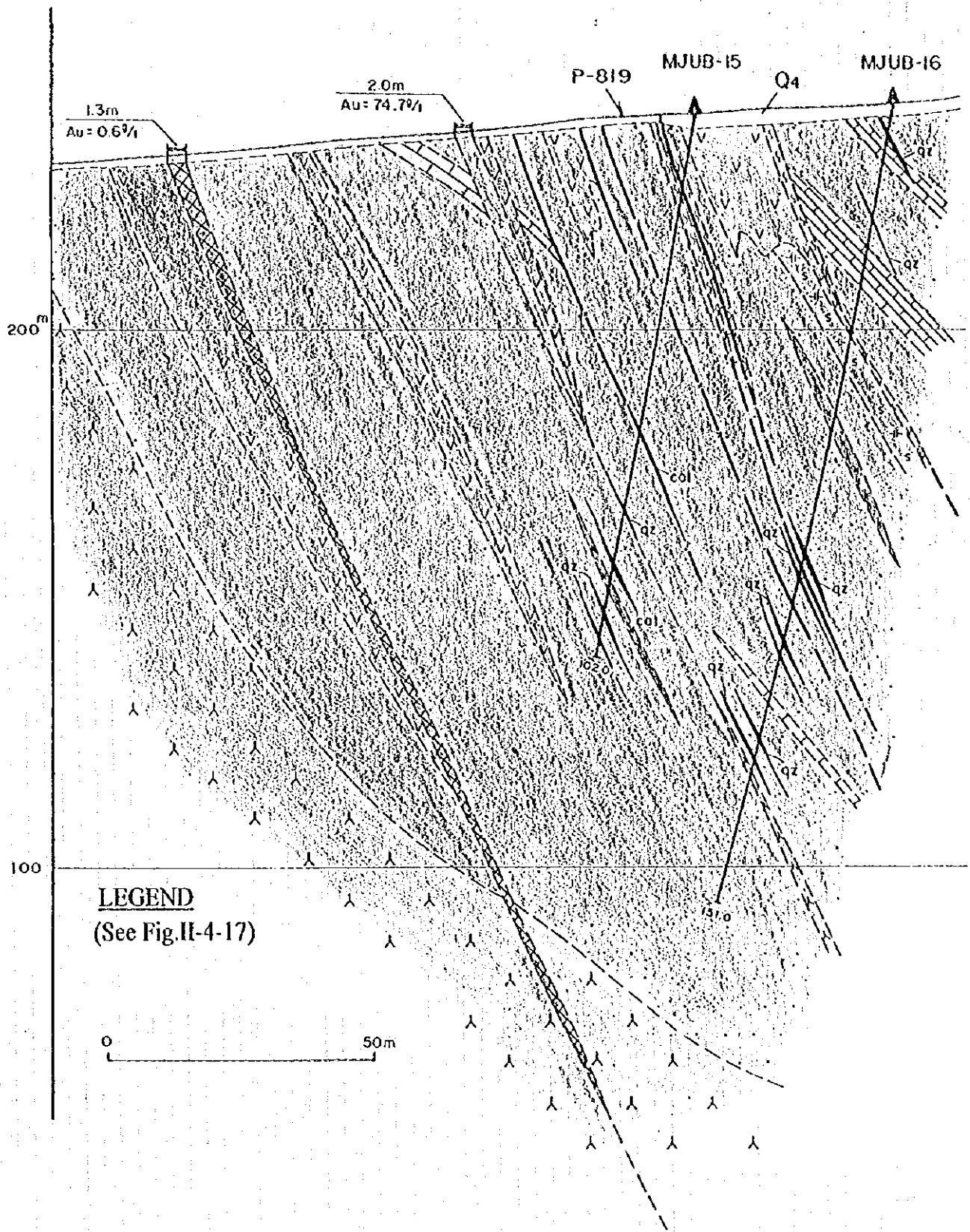


Fig. II-4-20 Geological Cross Section along MJUB-15,16



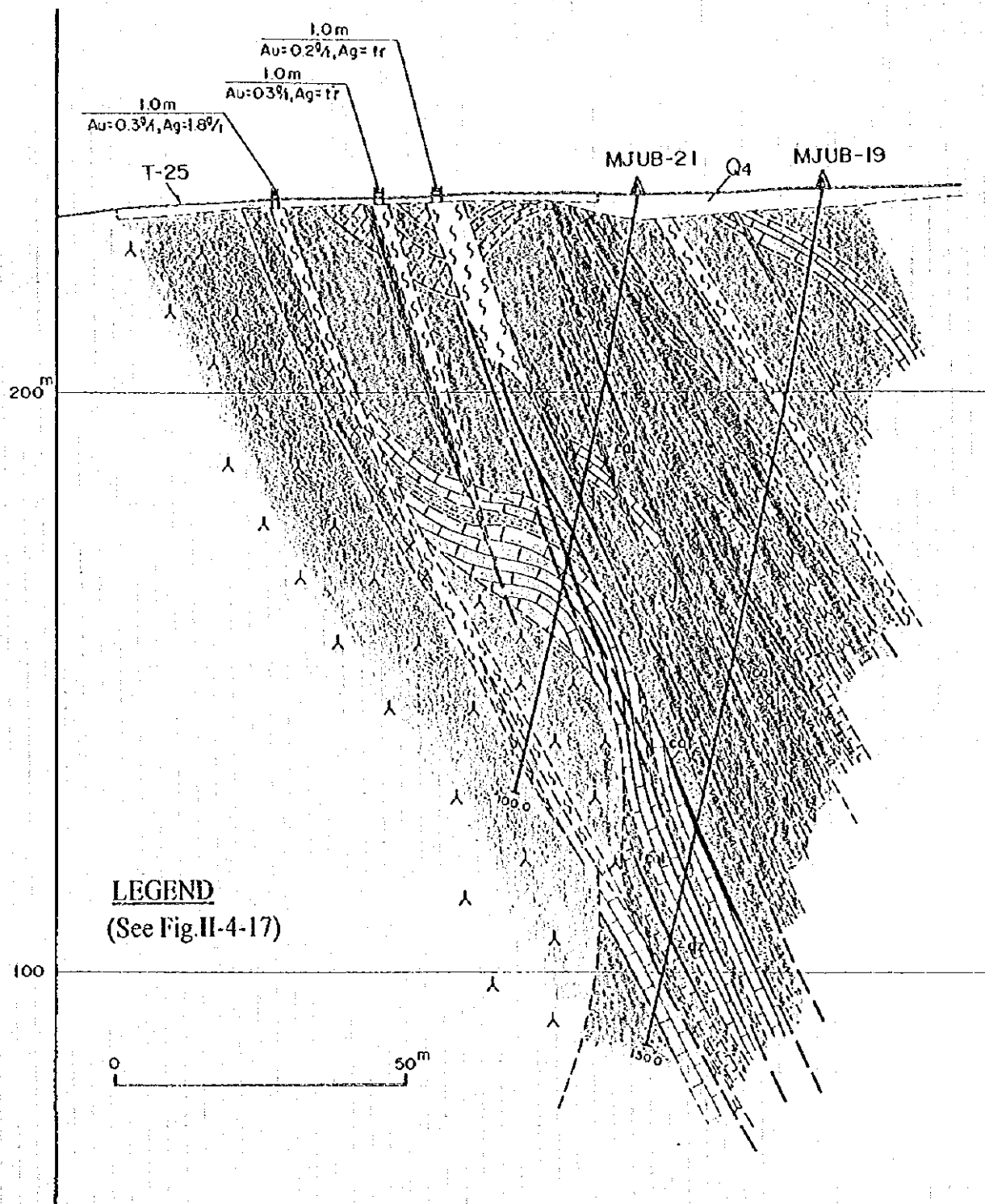


Fig. II-4-22 Geological Cross Section along MJUB-19,21