Apx. 28 (5) Summary of Drilling Results (MJP-15)

	Item	Working Period	Item of Working Period			Total Number of Workers
		Period	Number of Days	Actual Working Days	No Working Days	
Working period	Preparation	4th Aug. '87 – 30th Aug. '87	27days	27days	0days	481mans
	Drilling	31th Aug. '87 – 2th Oct. '87	33	Drilling 28	0	479.5
				Trouble 5	0	85.5
	Dismounting					
	Total	4th Aug. '87 – 2th Oct. '87	60	60	0	1,046

Drilling length, etc.				Core recovery for each 100m section		
Planned length	200.00m	Over burden	23.45m	Depth of hole	Section	Total
Increase or decrease in length	0.35m	Core length	189.95m	0 ~ 100m	91.2	91.2
Length drilled	200.35m	Core recovery	94.8%	100 ~ 200.35m	98.5	94.8

Working time				
	Drilling	203° 20′	29.7%	20.4%
	Hoisting & lowering rod casing	387° 40′	56.7	38.9
	Repairing	93° 00′	13.6	9.3
	Sub total	684° 00′	100.0	68.6
	Preparations	302° 00′		30.3
	Dismounting	11° 00′		1.1
	Others			
	Total	997° 00′		100.0

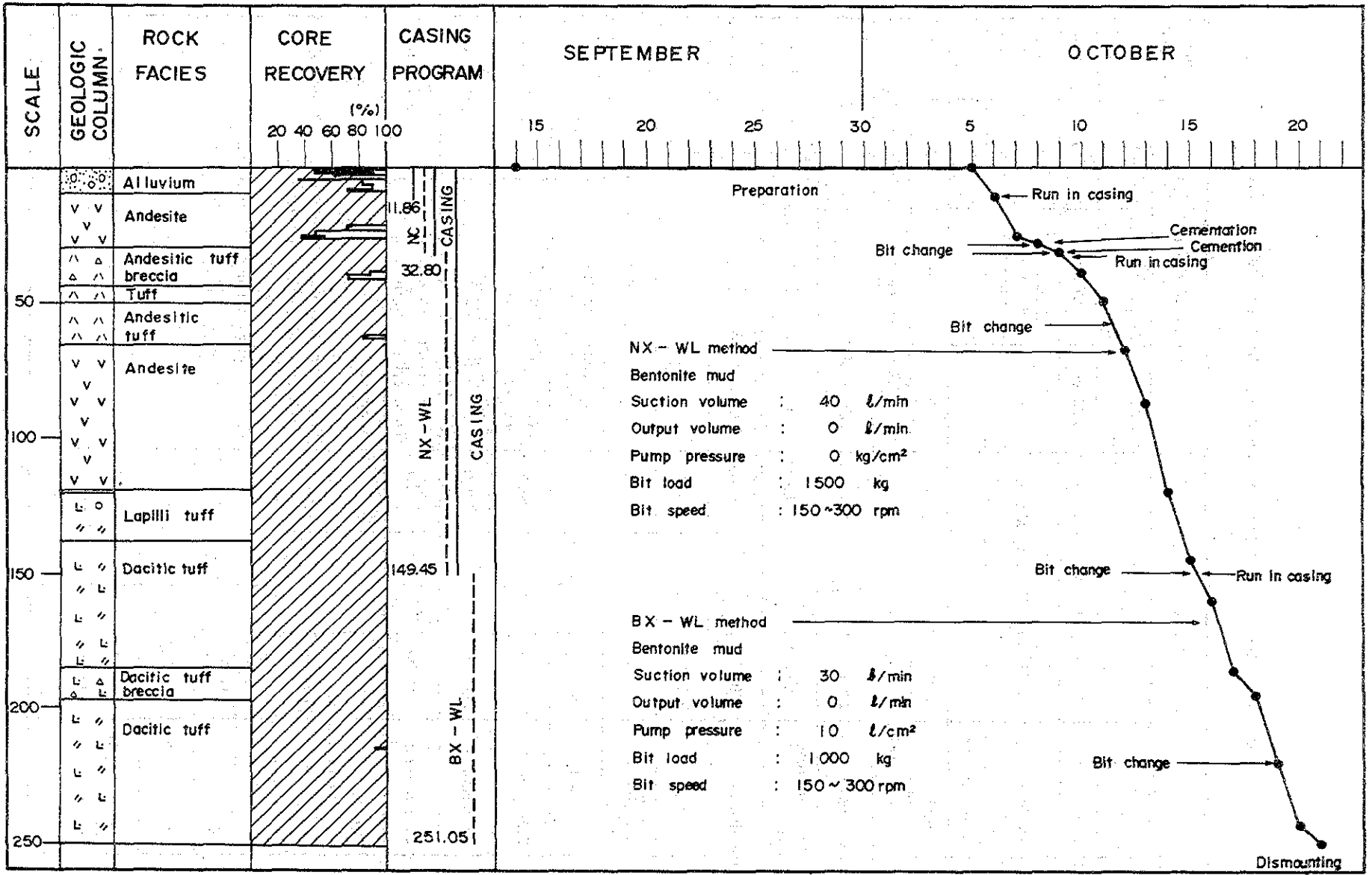
Drilling efficiency	
Total drilling length / Working Period	6.07m/day
Total drilling length / Net working days	6.07m/day
Total drilling length / Net drilling days	7.16m/day
Total drilling workers / Total drillig length	0.42man/m

Inserting casing pipe	Pipe size & inserted length (m)	Inserted length / Drilling length ×100 (%)	Recovery of casing pipe (%)
	NC × 29.70	14.8	100
	NX × 111.10	55.5	100

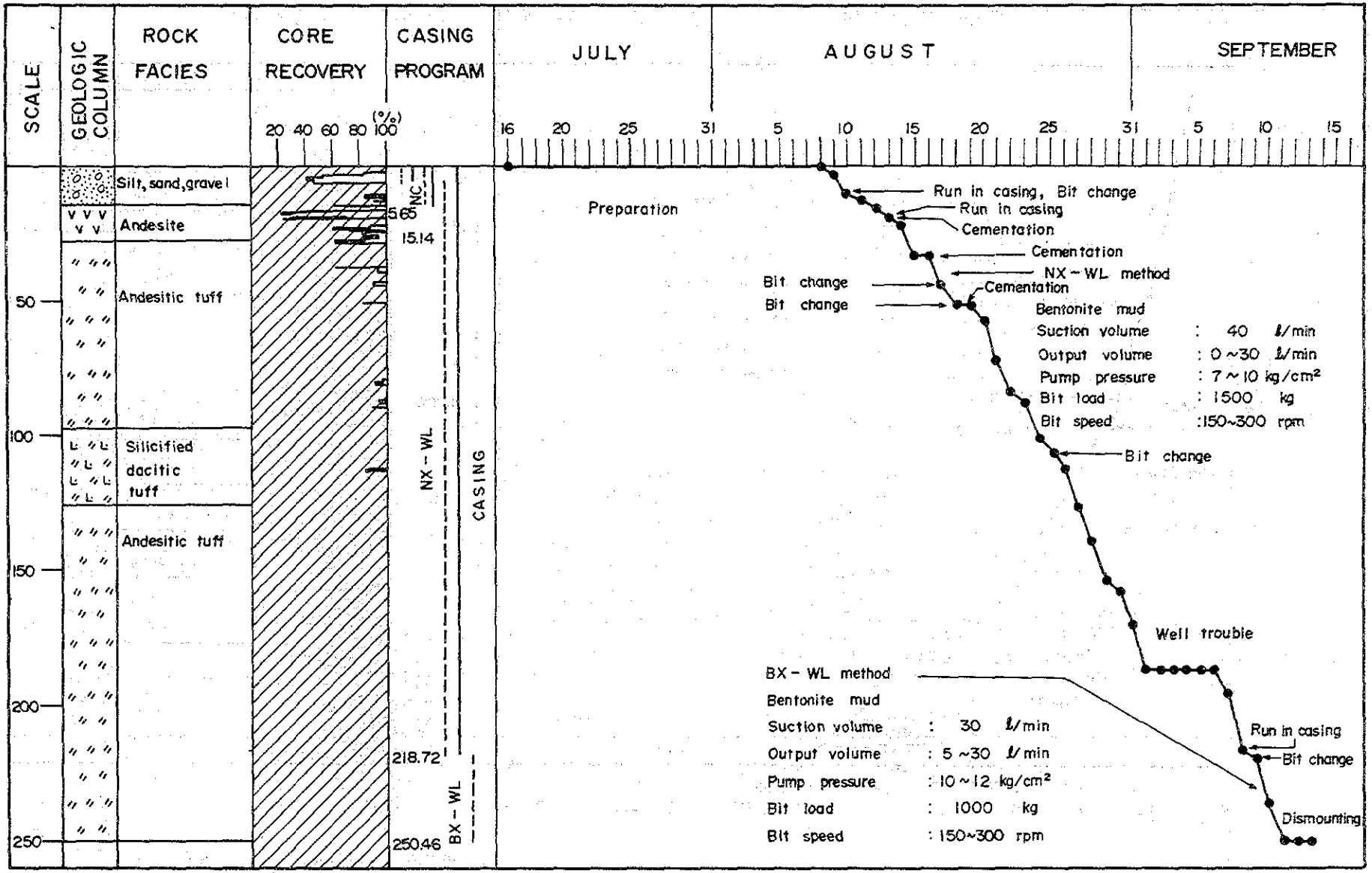
Remarks

Preparation includes transportation, transfer of machines and setting up derrick.

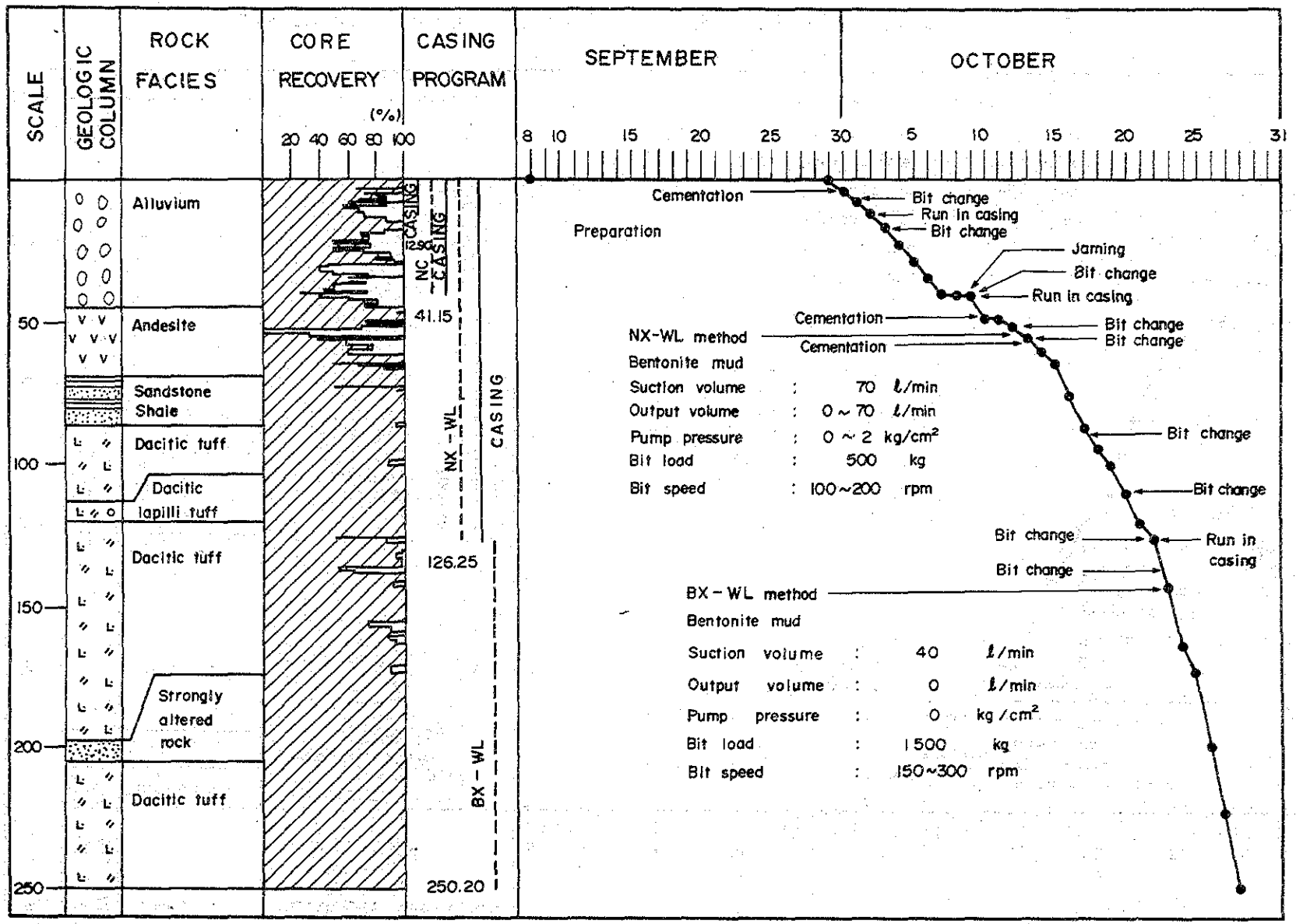
Core recovery includes overburden.



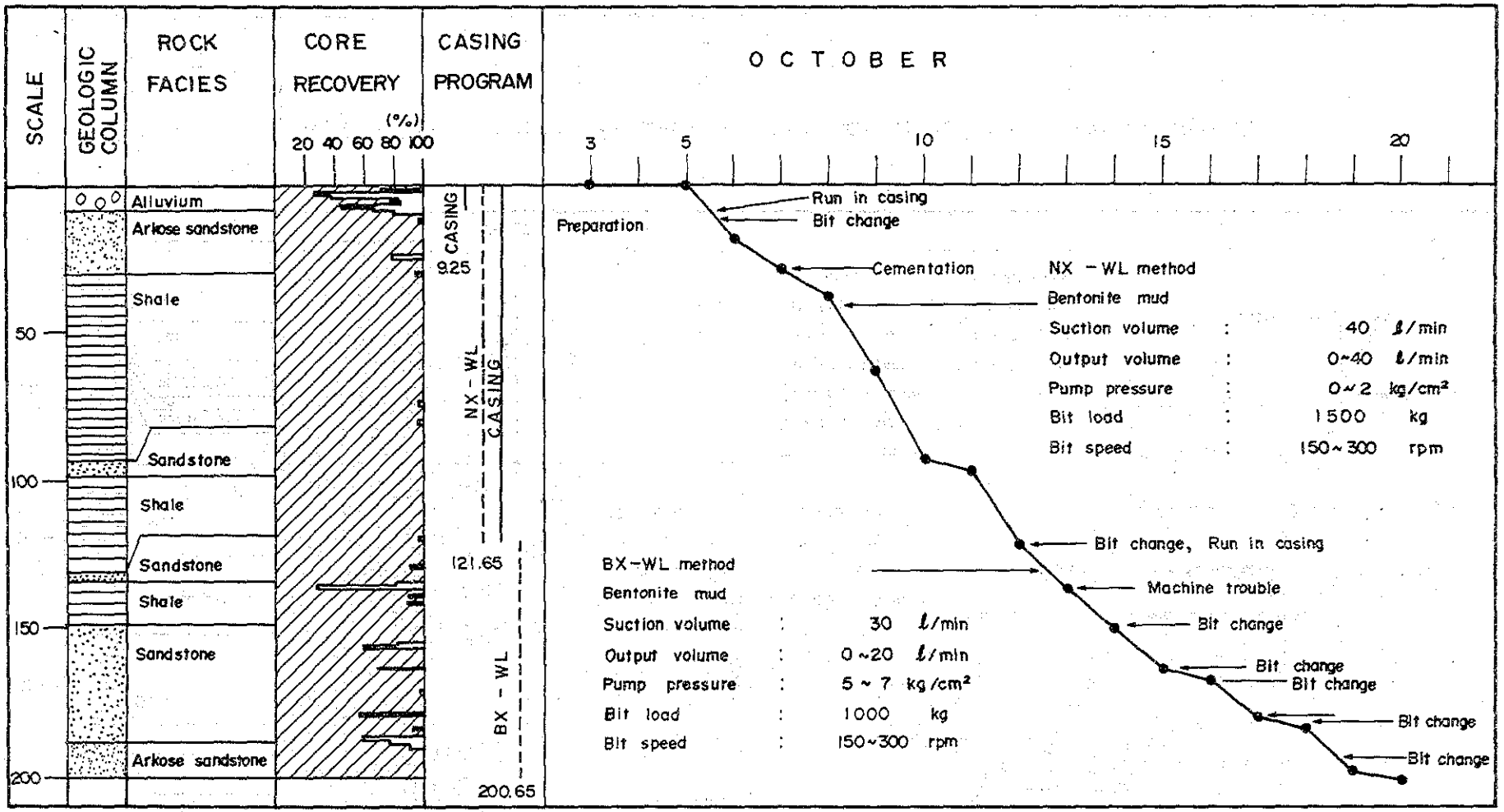
Apx.29(1) Drilling Progress of the Colpar Area (MJP-11)



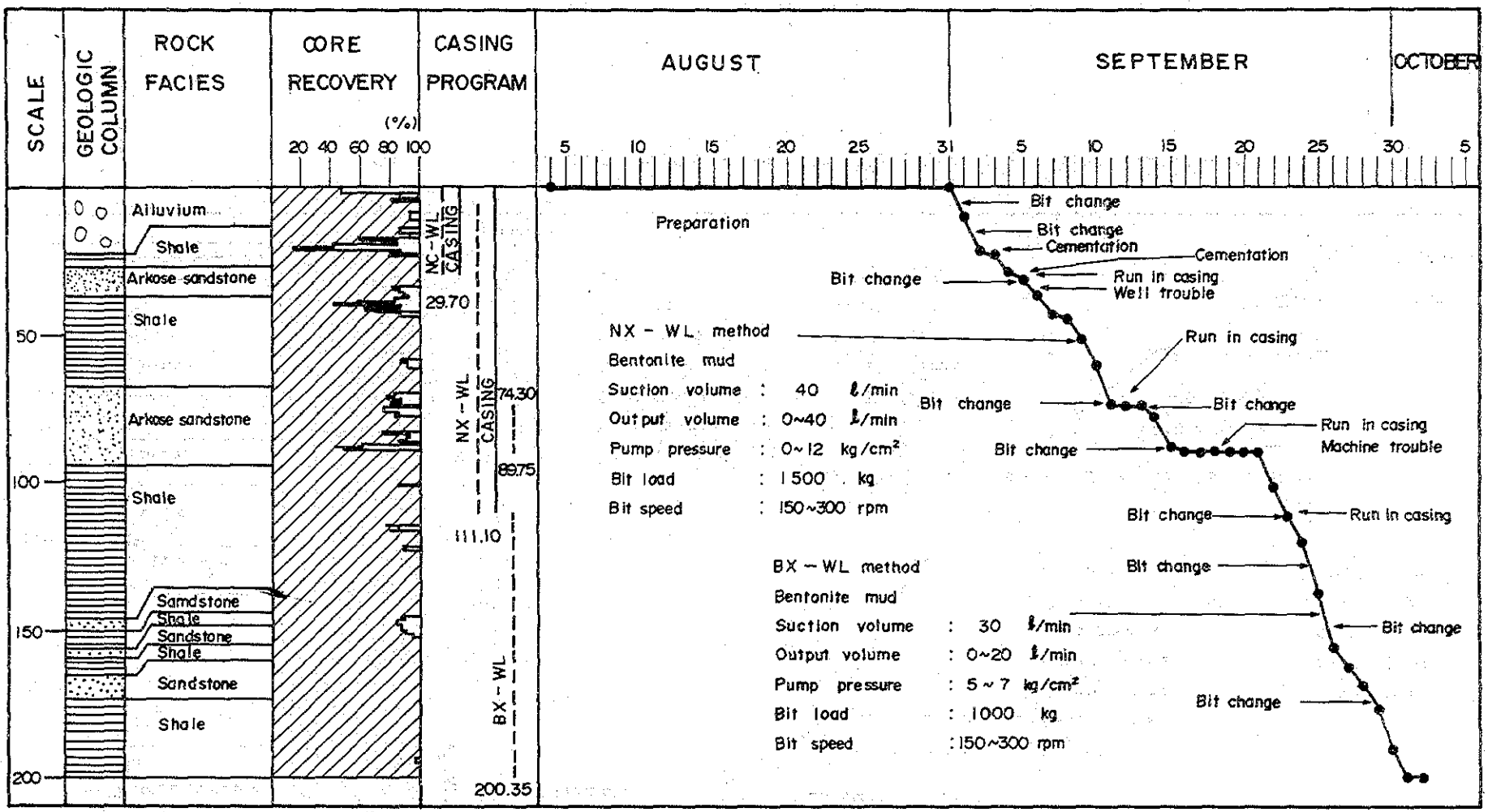
Apx.29(2) Drilling Progress of the Colpar Area. (MJP - 12)



Apx. 29(3) Drilling Progress of the Colpar Area (MJP - 13)



Apx.30(1) Drilling Progress of the Marcamalata Area (MJP - 14)



Apx.30(2) Drilling Progress of the Marcamalata Area (MJP-15)

Apx. 31 Drilling Equipment (MJP-11, 12)

Article	Model	Specification	Quantity
Drilling machine	Model "L-44" (LONGYEAR)	Capacity : NX 730m, BX 945m Inner diameter of spindle : 76mm Spindle speed : 700rpm Weight : 2,200kg	1set
Motor	353	Diesel engine : 4cycle Revolution : 2,200rpm Related power : 60ps	1set
Drilling pump	BEAN ROYAL420 (BEAN ROYAL)	Type : 3cylinders-single acting Capacity (max) : 75 ℓ/min Pressure (max) : 49kg/c ㎡	1set
Motor	TJD (TELEDYNE WISCONSIN MOTOR)	Diesel engine : 4cycle Revolution : 1,800rpm Related power : 32ps	1set
Water supply pump	BEAN ROYAL 435 (BEAN ROYAL)	Type : 3cylinders-single acting Capacity (max) : 135 ℓ/min Pressure (max) : 56kg/c ㎡	1set
Motor	TJD (TELEDYNE WISCONSIN MOTOR)	Gasoline engine : 4cycle Revolution : 1,800rpm Related power : 32ps	1set
Wire line hoist		Attached to drilling machine	1set
Derrick		Pipe structual derrick	1set
Generator	392 (MILWAUKEE WISCONSIN MOTOR)	Gasoline engine : 4cycle Revolution : 3,600rpm Related power : 10ps	1set
Drill rod	Wire line rod	NC 20m NX 250m BX 250m	
Water tank		0.5 ㎥ 2sets	

Apx. 32 Drilling Equipment (MJP-13)

Article	Model	Specification	Quantity
Drilling machine	Model "L-38" (LONGYEAR)	Capacity : NX 525m, BX 660m Inner diameter of spindle : 76mm Spindle speed : 700rpm Weight : 1,650kg	1set
Motor	353	Diesel engine : 4cycle Revolution : 2,200rpm Related power : 51ps	1set
Drilling pump	BEAN ROYAL 420 (BEAN ROYAL)	Type : 3cylinders-single acting Capacity (max) : 75 ℓ/min Pressure (max) : 49kg/c㎡	1set
Motor	TJD (TELEDYNE WISCONSIN MOTOR)	Diesel engine : 4cycle Revolution : 1,800rpm Related power : 32ps	1set
Water supply pump	BEAN ROYAL 435 (BEAN ROYAL)	Type : 3cylinders-single acting Capacity (max) : 135 ℓ/min Pressure (max) : 56kg/c㎡	1set
Motor	TJD (TELEDYNE WISCONSIN MOTOR)	Gasoline engine : 4cycle Revolution : 1,800rpm Related power : 32ps	1set
Wire line hoist		Attached to drilling machine	1set
Derrick		Pipe structual derrick	1set
Generator	392 (MILWAUKEE WISCONSIN MOTOR)	Gasoline engine : 4cycle Revolution : 3,600rpm Related power : 10ps	1set
Drill rod	Wire line rod	NC 50m NX 250m BX 250m	
Water tank		0.5 ㎥ 2sets	

Apx. 33 Drilling Equipment (MJP-14, 15)

Article	Model	Specification	Quantity
Drilling machine	Model "L-38" (LONGYEAR)	Capacity : NX 525m, BX 660m Inner diameter of spindle : 76mm Spindle speed : 700rpm Weight : 1,650kg	1set
Motor	353	Diesel engine : 4cycle Revolution : 2,200rpm Related power : 51ps	1set
Drilling pump	BEAN ROYAL 420 (BEAN ROYAL)	Type : 3cylinders-single acting Capacity (max) : 75 ℓ/min Pressure (max) : 49kg/c ㎡	1set
Motor	TJD (TELEDYNE WISCONSIN MOTOR)	Diesel engine : 4cycle Revolution : 1,800rpm Related power : 32ps	1set
Wire line hoist		Attached to drilling machine	1set
Derrick		Pipe structual derrick	1set
Generator	392 (MILWAUKEE WISCONSIN MOTOR)	Gasoline engine : 4cycle Revolution : 3,600rpm Related power : 10ps	1set
Drill rod	Wire line rod	NC 50m NX 150m BX 200m	
Water tank		0.5 ㎥ 2sets	

Apx. 34 Working Time and Efficiency of Drillings (MJP－11～MJP－15)

Working Time and Efficiency / Drill Holl No.	Drilling		Hoisting and Lowering Rod, Casing		Repairing		Sub Total		Number of Workers		Lenght (m)
	Total Time	H/M	Total Time	H/M	Total Time	H/M	Total Time	H/M	Total Number of Workers	Man /m	
MJP－11	178° 15′	0.71	144° 45′	0.58	48° 00′	0.19	371° 00′	1.48	351	1.40	0～251.05
MJP－12	250° 30′	1.00	268° 30′	1.07	186° 00′	0.74	705° 00′	2.81	815	3.25	0～250.46
MJP－13	219° 30′	0.88	323° 30′	1.29	144° 00′	0.58	687° 00′	2.75	313	1.25	0～250.20
MJP－14	158° 50′	0.79	154° 10′	0.77	32° 00′	0.16	345° 00′	1.72	301.5	1.50	0～200.65
MJP－15	203° 20′	1.01	387° 40′	1.93	93° 00′	0.46	684° 00′	3.41	565	2.82	0～200.35

Apx. 35 Results of Bit works (MJP－11, 12, 13)

MJP－11

Item \ Depth (m)		0~32.80	32.80~149.45	149.45~251.05
Circulating water		Bentonite mud	Bentonite mud	Bentonite mud
Change bit		Cutter crown NC1 Diamond NC2	Diamond NX0 Impregnated NX2	Diamond BX1 Impregnated BX1
Pump	Pressure (kg/cm²)	0~2	0	10
	Suction volume (ℓ/min)	70	40	30
	Output volume (ℓ/min)	0~70	0	0
Bit	Load (kg)	500	1500	1000
	Speed (rpm)	100~200	150~300	150~300
※ Core recovery (%)		89.3	99.6	99.9

MJP－12

Item \ Depth (m)		0~15.14	15.14~218.72	218.72~250.46
Circulating water		Bentonite mud	Bentonite mud	Bentonite mud
Change bit		Cutter crown NC1 Diamond NX1 Tricon 4 3/4" 1	Diamond NX1 Impregnated NX2	Impregnated BX1
Pump	Pressure (kg/cm²)	0~2	7~10	10~12
	Suction volume (ℓ/min)	70	40	30
	Output volume (ℓ/min)	0~30	0~30	5~30
Bit	Load (kg)	500	1500	1000
	Speed (rpm)	100~200	150~300	150~300
※ Core recovery (%)		84.5	97.8	100

MJP－13

Item \ Depth (m)		0~41.15	41.15~126.25	126.25~250.20
Circulating water		Bentonite mud	Bentonite mud	Bentonite mud
Change bit		Cutter crown NC1 Diamond NC1	Diamond NX2 Impregnated NX4	Diamond BX1 Impregnated BX1
Pump	Pressure (kg/cm²)	0~2	0	10
	Suction volume (ℓ/min)	70	40	30
	Output volume (ℓ/min)	0~70	0	0
Bit	Load (kg)	500	1,500	1,000
	Speed (rpm)	100~200	150~300	150~300
※ Core recovery (%)		73.6	90.4	97.8

※ Core recovery includes overburden.

Apx. 36 Results of Bit works (MJP-14, 15)

MJP-14

Item \ Depth (m)		0~9.25	9.25~121.65	121.65~200.65
Circulating water		Bentonite mud	Bentonite mud	Bentonite mud
Change bit		Cutter crown NC1 Diamond NX1	Diamond NX0 Impregnated NX1	Diamond BX4 Impregnated BX3
Pump	Pressure (kg/cm²)	0~2	0~2	5~7
	Suction volume (ℓ/min)	70	40	30
	Output volume (ℓ/min)	0~70	0~40	0~20
Bit	Load (kg)	500~800	1,500	1,000
	Speed (rpm)	100~200	150~300	150~300
※ Core recovery (%)		75.4	99.2	94.5

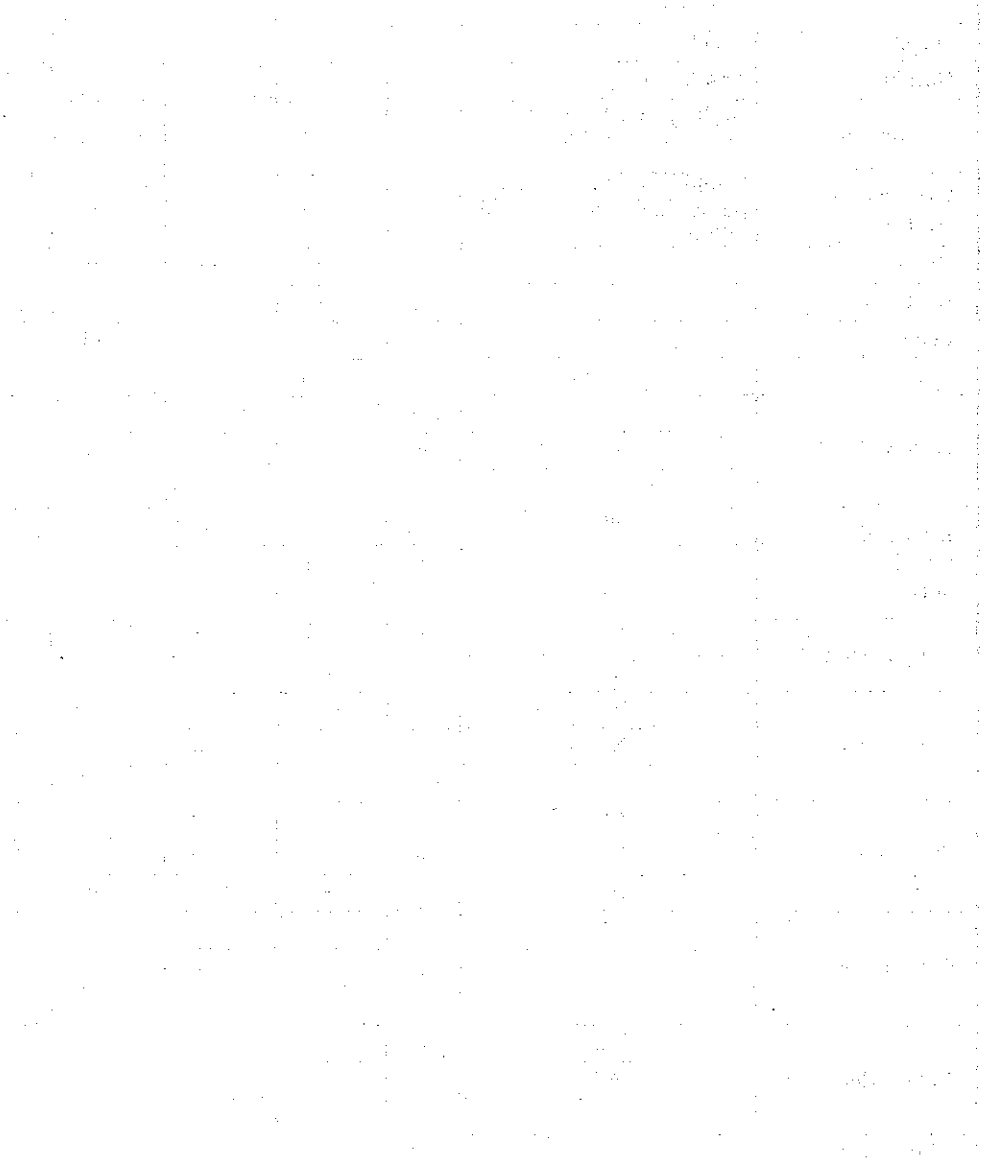
MJP-15

Item \ Depth (m)		0~29.70	29.70~111.10	111.10~200.35
Circulating water		Bentonite mud	Bentonite mud	Bentonite mud
Change bit		Cutter crown NC1 Diamond NX1 Impregrated NX1	Diamond NX2 Impregrated NX1	Diamond BX4 Impregrated BX1
Pump	Pressure (kg/cm²)	0~2	0~2	5~7
	Suction volume (ℓ/min)	70	40	30
	Output volume (ℓ/min)	0~70	0~40	0~20
Bit	Load (kg)	500~800	1,500	1,000
	Speed (rpm)	100~200	150~300	150~300
※ Core recovery (%)		87.7	93.4	98.4

※ Core recovery includes overburden.

Apx. 37 Consumed Materials (MJP-11~MJP-15)

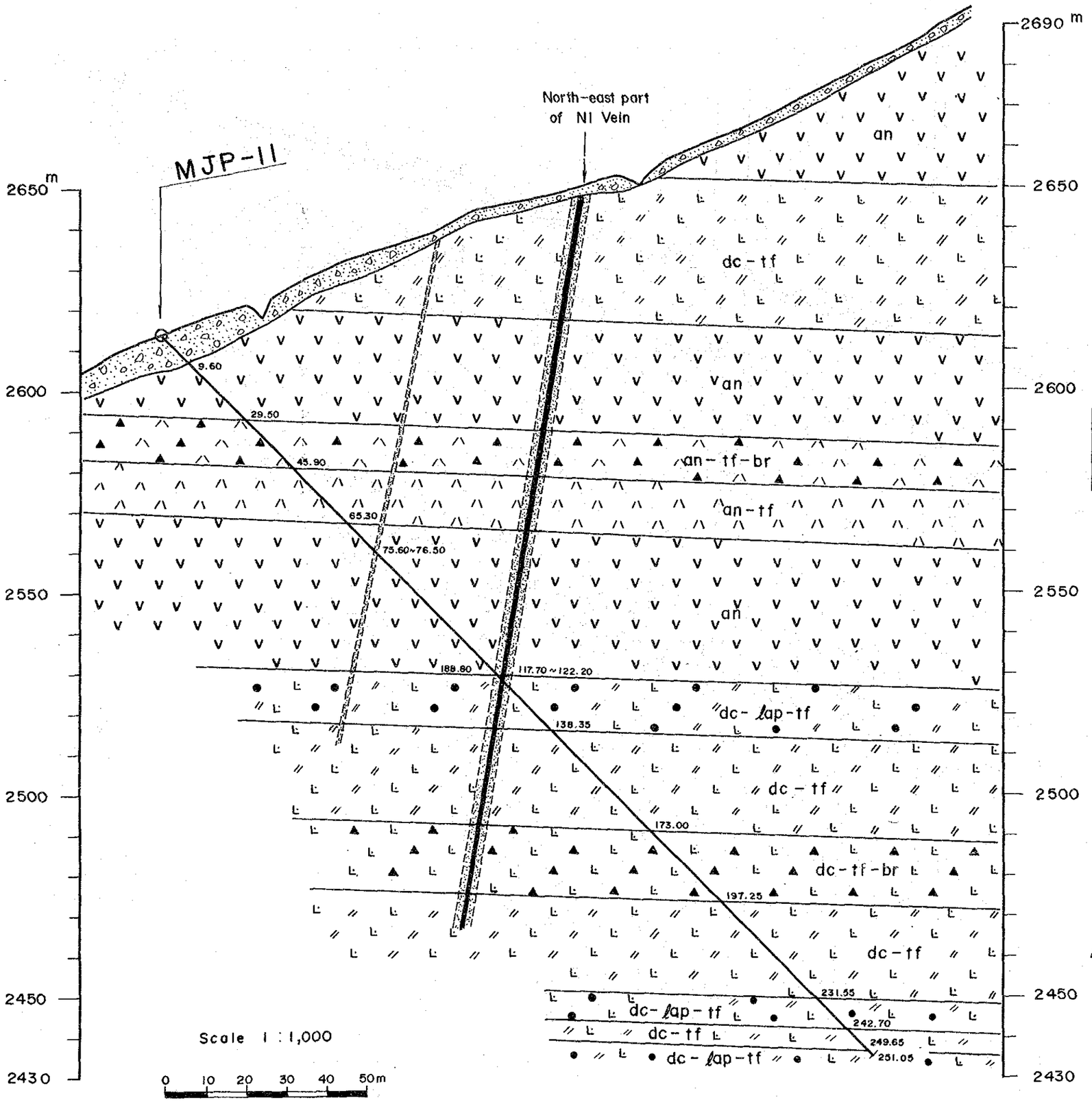
Article	Specification	Unit	Quantity					
			MJP-11	MJP-12	MJP-13	MJP-14	MJP-15	Total
Diesel	Drilling machine and drilling pump	ℓ	3,650	5,300	5,200	3,000	4,650	21,800
Gasoline	Water supply pump and generator	ℓ	2,230	2,750	2,800	320	600	8,700
Diesel	Truck	ℓ	–	–	–	–	–	7,400
Gasoline	Truck and jeep	ℓ	–	–	–	–	–	6,300
Engine oil	Drilling machine, drilling pump and water supply pump	ℓ	50	120	80	50	100	400
Cylinder oil Gear oil	Drilling machine, drilling pump and water supply pump	ℓ	90	160	120	100	130	600
Grease		kg	40	60	40	40	60	240
Bentonite		kg	2,775	3,525	7,525	1,375	2,925	18,125
Cement		sx	10	8	11	2	19	50
CMC		kg	10	3	–	6	25	44
Diamond bit	NC	pcs	2	–	1	–	–	3
	NX	pcs	2	4	6	2	5	19
	BX	pcs	2	1	2	7	5	17
Diamond reaming shell	NC	pcs	–	–	1	–	–	1
	NX	pcs	1	1	2	1	1	6
	BX	pcs	–	1	1	1	2	5
Casing shoe bit	NC	pcs	1	1	1	1	1	5
	NX	pcs	–	1	1	–	1	3
Core barrel	NC	pcs	–	1	1	–	1	3
	NX	pcs	–	2	2	–	2	6
	BX	pcs	–	2	2	–	2	6
Drill rod	NC	m	–	20	50	–	50	120
	NX	m	–	250	250	–	150	650
	BX	m	–	250	250	–	200	700
Core lifter	NC	pcs	1	–	1	–	–	2
	NX	pcs	1	2	3	1	2	9
	BX	pcs	1	1	1	3	3	9
Core lifter case	NC	pcs	1	–	–	–	–	1
	NX	pcs	1	2	3	1	2	9
	BX	pcs	1	1	1	2	3	8
Chuck piece		pcs	–	1	1	–	1	3
Wire	4mm	m	–	280	280	–	230	790
	12mm	m	–	15	15	–	15	45
Lost circulation materials		kg	25	20	20	10	25	100



Apx. 38~42 Geological Section of Drilling Holes

Abbreviations

an	: andesite
an-tf	: andesitic tuff
an-tf-br	: andesitic tuff breccia
dc-tf	: dacitic tuff
dc-lap-tf	: dacitic lapilli tuff
dc-tf-br	: dacitic tuff breccia
grn-pt	: green patch
s.s	: Sandstone
sh	: Shale
alt-s.s.-sh	: alternation of sandstone and shale
Vsp	: Volcanic Sediments
al-d	: Debris (gravel, sand, silt, clay)



MJP-11

Grand level : 2613.9m
Direction : SE 50°
Angle : -45°
Depth : 251.05m

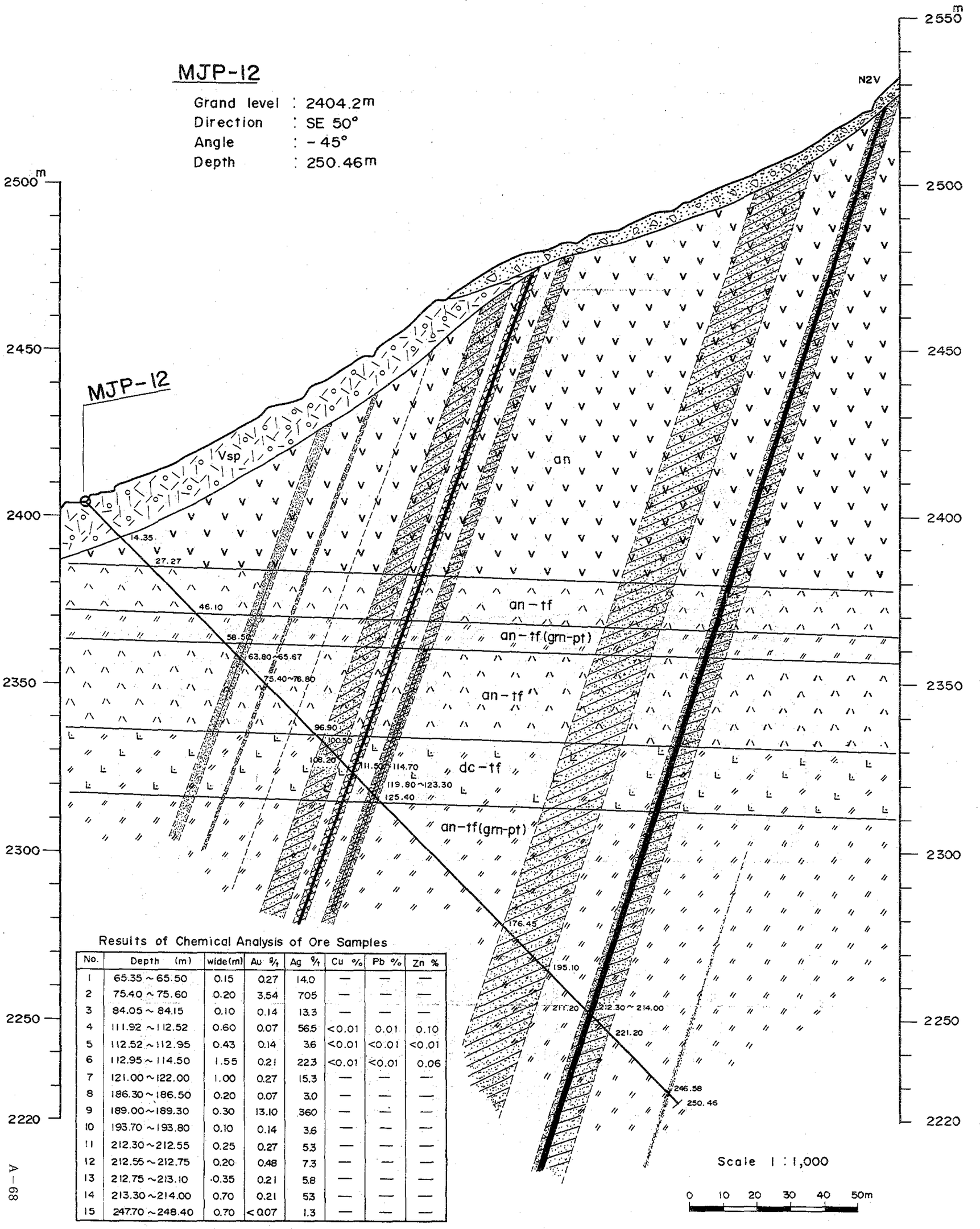
Results of Chemical Analysis of Ore Samples

No.	Depth (m)	wide(m)	Au g/t	Ag g/t	Cu %	Pb %	Zn %
1	119.35 ~ 119.70	0.35	0.41	104.0	0.34	2.96	0.01
2	119.70 ~ 120.10	0.40	0.14	32.3	0.08	0.29	<0.01
3	120.10 ~ 120.95	0.85	0.14	28.3	0.03	0.17	0.02

Apx.38 Geological Section of Drilling Hole MJP-11 in the Colpar Area

MJP-12

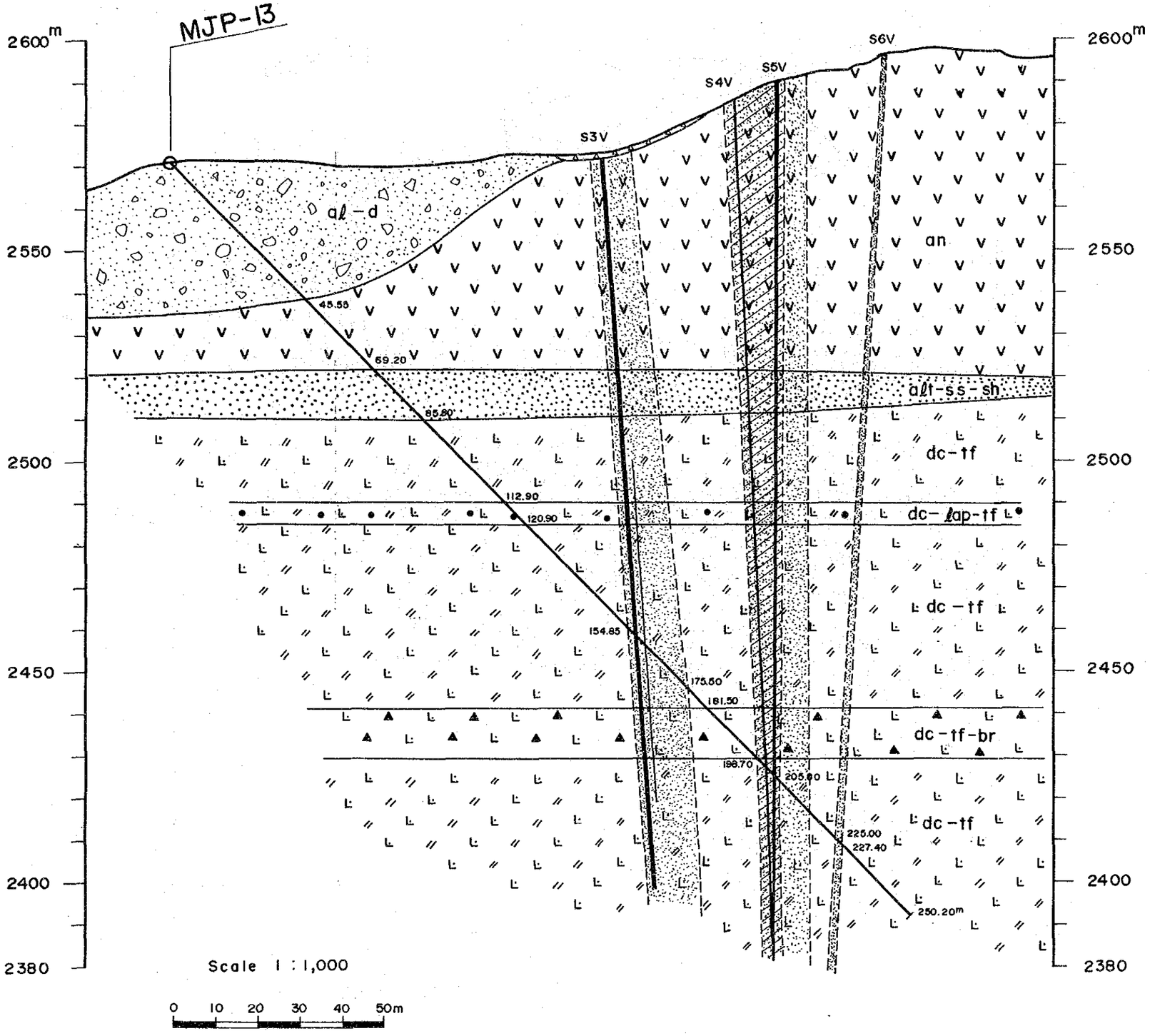
Grand level : 2404.2m
Direction : SE 50°
Angle : - 45°
Depth : 250.46m



Results of Chemical Analysis of Ore Samples

No.	Depth (m)	wide(m)	Au g/t	Ag g/t	Cu %	Pb %	Zn %
1	65.35 ~ 65.50	0.15	0.27	14.0	—	—	—
2	75.40 ~ 75.60	0.20	3.54	705	—	—	—
3	84.05 ~ 84.15	0.10	0.14	13.3	—	—	—
4	111.92 ~ 112.52	0.60	0.07	56.5	<0.01	0.01	0.10
5	112.52 ~ 112.95	0.43	0.14	3.6	<0.01	<0.01	<0.01
6	112.95 ~ 114.50	1.55	0.21	22.3	<0.01	<0.01	0.06
7	121.00 ~ 122.00	1.00	0.27	15.3	—	—	—
8	186.30 ~ 186.50	0.20	0.07	3.0	—	—	—
9	189.00 ~ 189.30	0.30	13.10	360	—	—	—
10	193.70 ~ 193.80	0.10	0.14	3.6	—	—	—
11	212.30 ~ 212.55	0.25	0.27	5.3	—	—	—
12	212.55 ~ 212.75	0.20	0.48	7.3	—	—	—
13	212.75 ~ 213.10	0.35	0.21	5.8	—	—	—
14	213.30 ~ 214.00	0.70	0.21	5.3	—	—	—
15	247.70 ~ 248.40	0.70	< 0.07	1.3	—	—	—

Apx.39 Geological Section of Drilling Hole MJP-12 in the Colpar Area



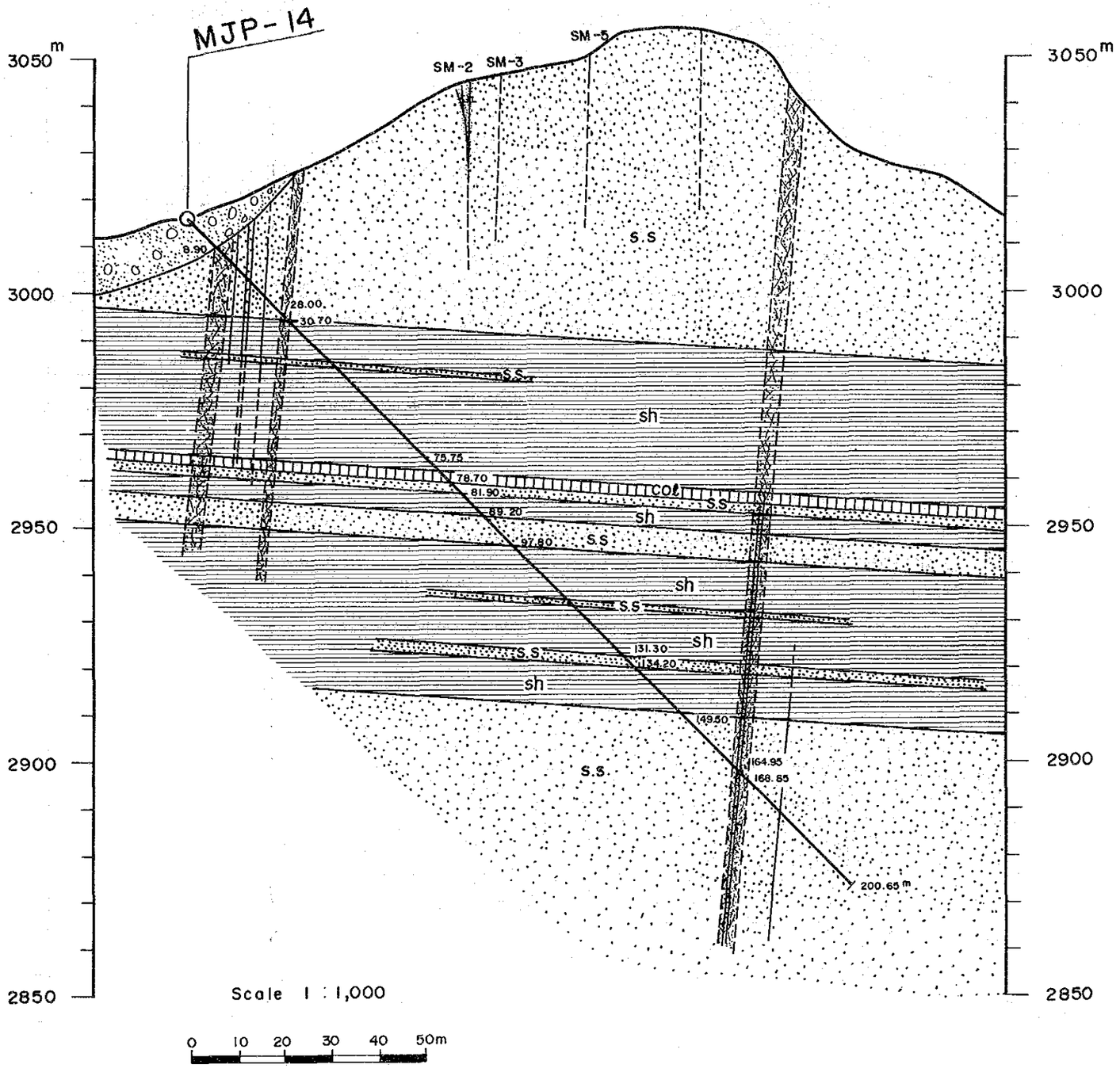
MJP-13

Grand level : 2571.3m
Direction : SE 35°
Angle : -45°
Depth : 250.20 m

Results of Chemical Analysis of Ore Samples

No.	Depth (m)	wide (m)	Au g/t	Ag g/t	Cu %	Pb %	Zn %
1	156.90 ~ 157.55	0.65	<0.07	3.6	—	—	—
2	199.45 ~ 199.60	0.15	2.33	8.0	0.03	0.33	0.48
3	199.60 ~ 200.60	1.00	0.27	1.9	<0.01	0.06	0.03
4	200.60 ~ 201.14	0.54	0.48	6.3	0.06	0.14	0.29
5	201.14 ~ 201.30	0.16	5.04	45.0	0.79	1.37	1.30
6	201.30 ~ 202.05	0.75	<0.07	2.3	<0.01	0.03	0.07
7	202.05 ~ 202.75	0.70	0.07	4.1	0.03	0.04	0.13
8	202.75 ~ 203.50	0.75	<0.07	5.0	0.06	0.12	0.14
9	203.50 ~ 204.20	0.70	0.21	18.0	0.18	0.86	1.62
10	204.20 ~ 205.05	0.85	<0.07	1.3	<0.01	0.01	0.02

Apx.40 Geological Section of Drilling Hole MJP-13 in the Colpar Area



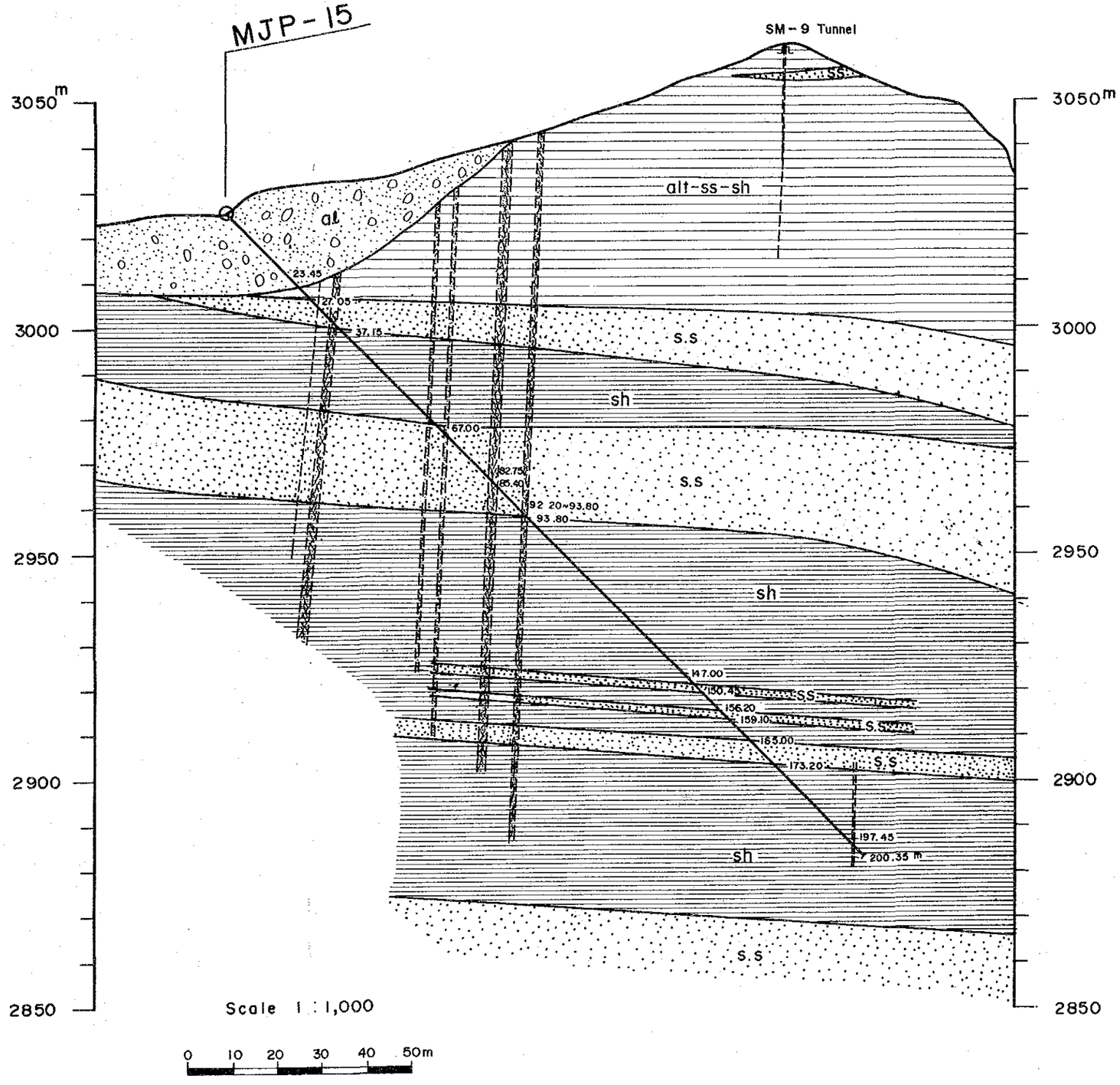
MJP-14

Grand level : 3015.6 m
Direction : SE 20°
Angle : − 45°
Depth : 200.65 m

Results of Chemical Analysis of Ore Samples

No.	Depth (m)	wide(m)	Au %	Ag %
1	8.90 ~ 10.15	1.25	< 0.07	2.3
2	10.15 ~ 11.60	1.45	< 0.07	1.9
3	11.60 ~ 12.75	1.15	< 0.07	0.3
4	14.15 ~ 14.25	0.10	< 0.07	< 0.3
5	17.40 ~ 17.50	0.10	< 0.07	0.3
6	18.40 ~ 18.47	0.07	< 0.07	0.3
7	23.15 ~ 23.25	0.10	< 0.07	0.5
8	28.50 ~ 29.65	1.15	< 0.07	0.5
9	29.65 ~ 30.70	1.05	< 0.07	3.3
10	115.40 ~ 115.60	0.20	< 0.07	2.5
11	165.30 ~ 165.70	0.40	< 0.07	2.3
12	165.70 ~ 166.55	0.85	< 0.07	2.5
13	167.30 ~ 167.85	0.55	< 0.07	0.5
14	167.85 ~ 168.55	0.70	< 0.07	0.5
15	179.22 ~ 179.40	0.18	0.07	2.5

Apx.41 Geological Section of Drilling Hole MJP-14 in the Marcamalata Area



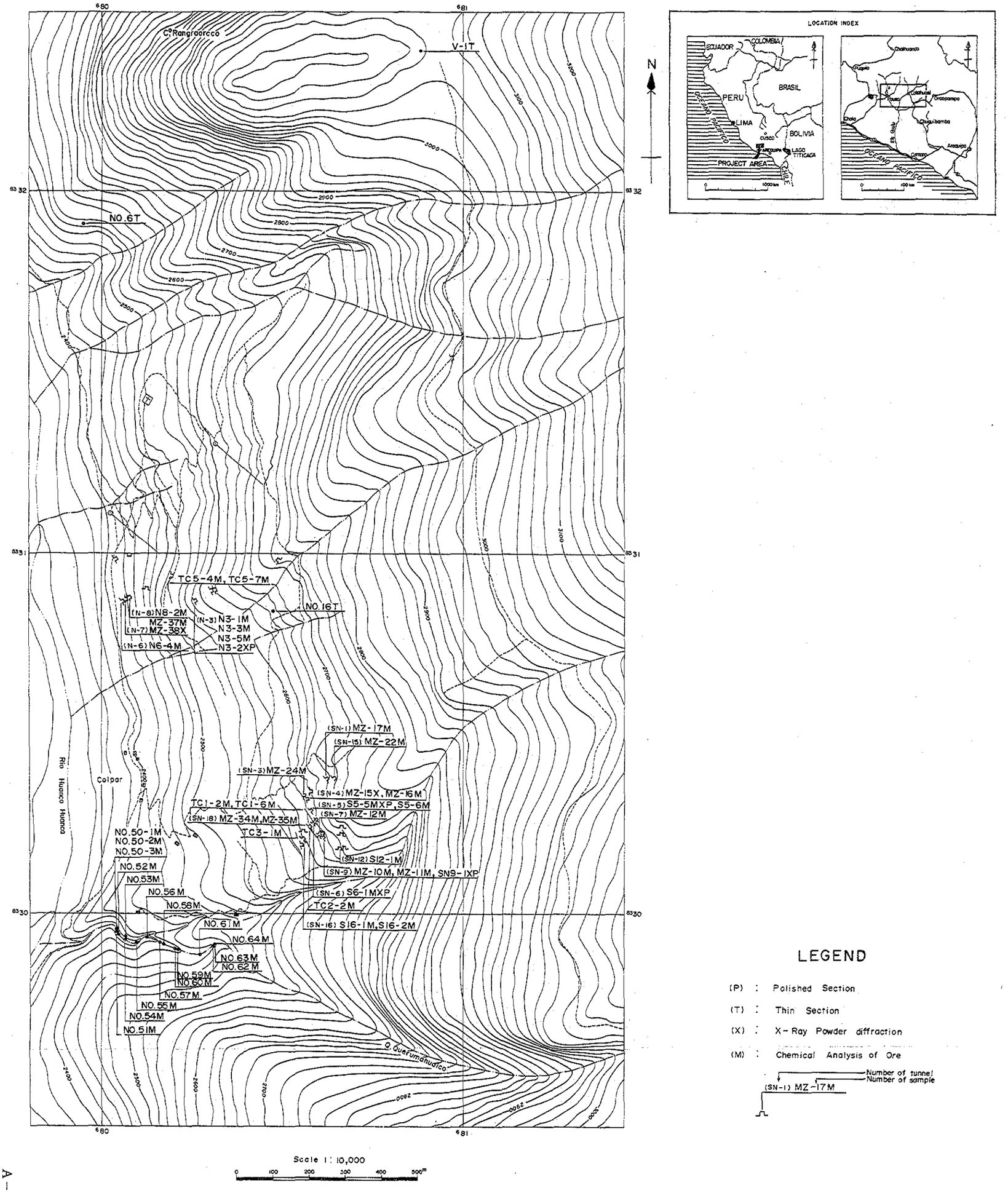
MJP-15

Grand level : 3026.7m
Direction : SE 20°
Angle : -45°
Depth : 200.35m

Results of Chemical Analysis of Ore Samples

No.	Depth (m)	wide(m)	Au g/t	Ag g/t
1	32.70 ~ 33.45	0.75	< 0.07	1.9
2	33.45 ~ 34.20	0.75	< 0.07	1.0
3	35.00 ~ 36.00	1.00	< 0.07	0.3
4	63.70 ~ 64.00	0.30	0.07	0.3
5	68.35 ~ 69.55	1.20	< 0.07	1.3
6	82.75 ~ 83.80	1.05	< 0.07	0.5
7	84.50 ~ 85.00	0.50	< 0.07	0.8
8	92.20 ~ 93.10	0.90	< 0.07	0.3
9	93.10 ~ 93.80	0.70	< 0.07	2.8
10	197.45 ~ 197.80	0.35	< 0.07	1.9

Apx.42 Geological Section of Drilling Hole MJP-15 in the Marcamalata Area



LEGEND

(P) : Polished Section

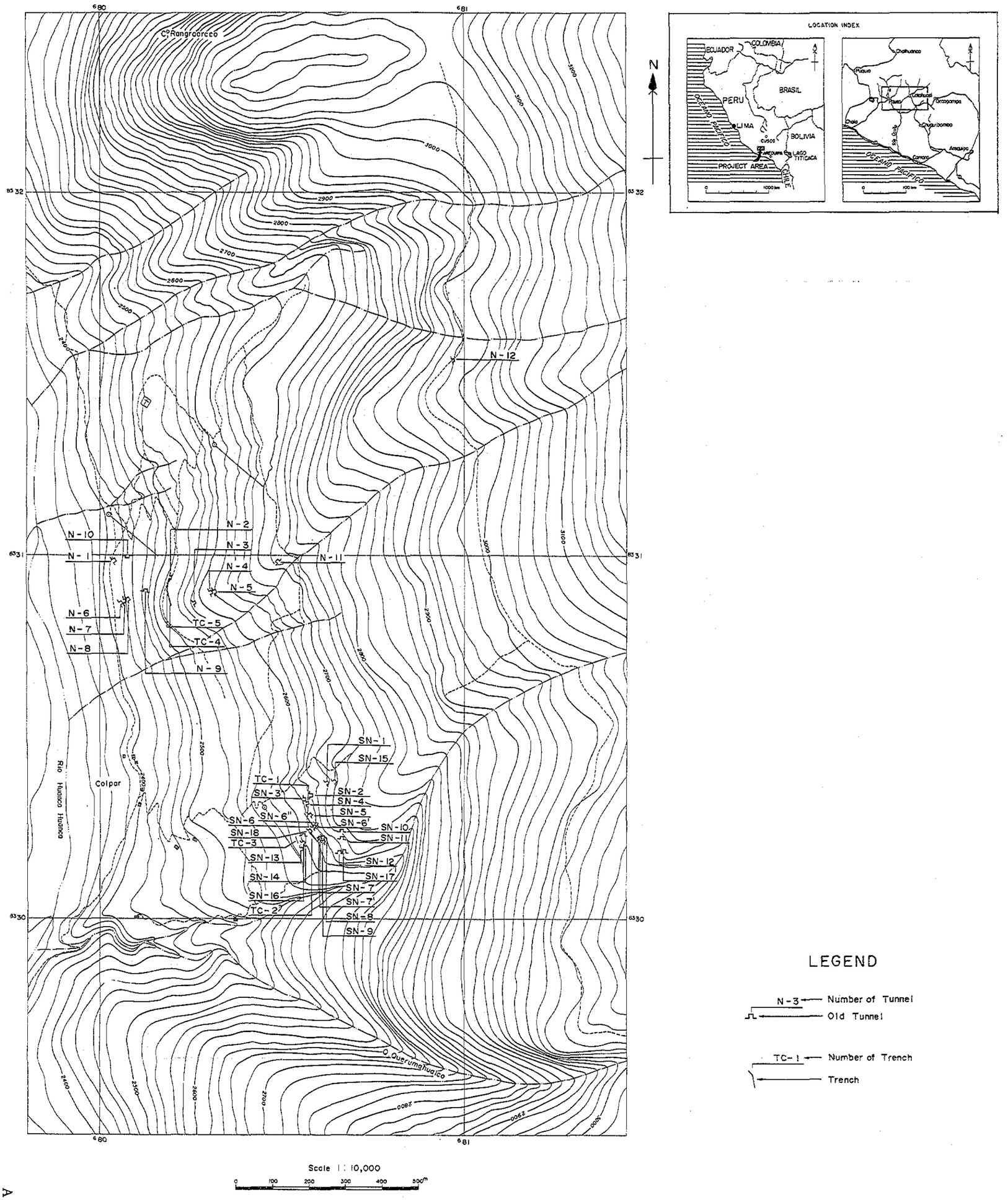
(T) : Thin Section

(X) : X-Ray Powder diffraction

(M) : Chemical Analysis of Ore

(SN-1) MZ-17M — Number of tunnel, Number of sample

Apx.43 Location Map of Rock and Ore Samples of the Colpar Area



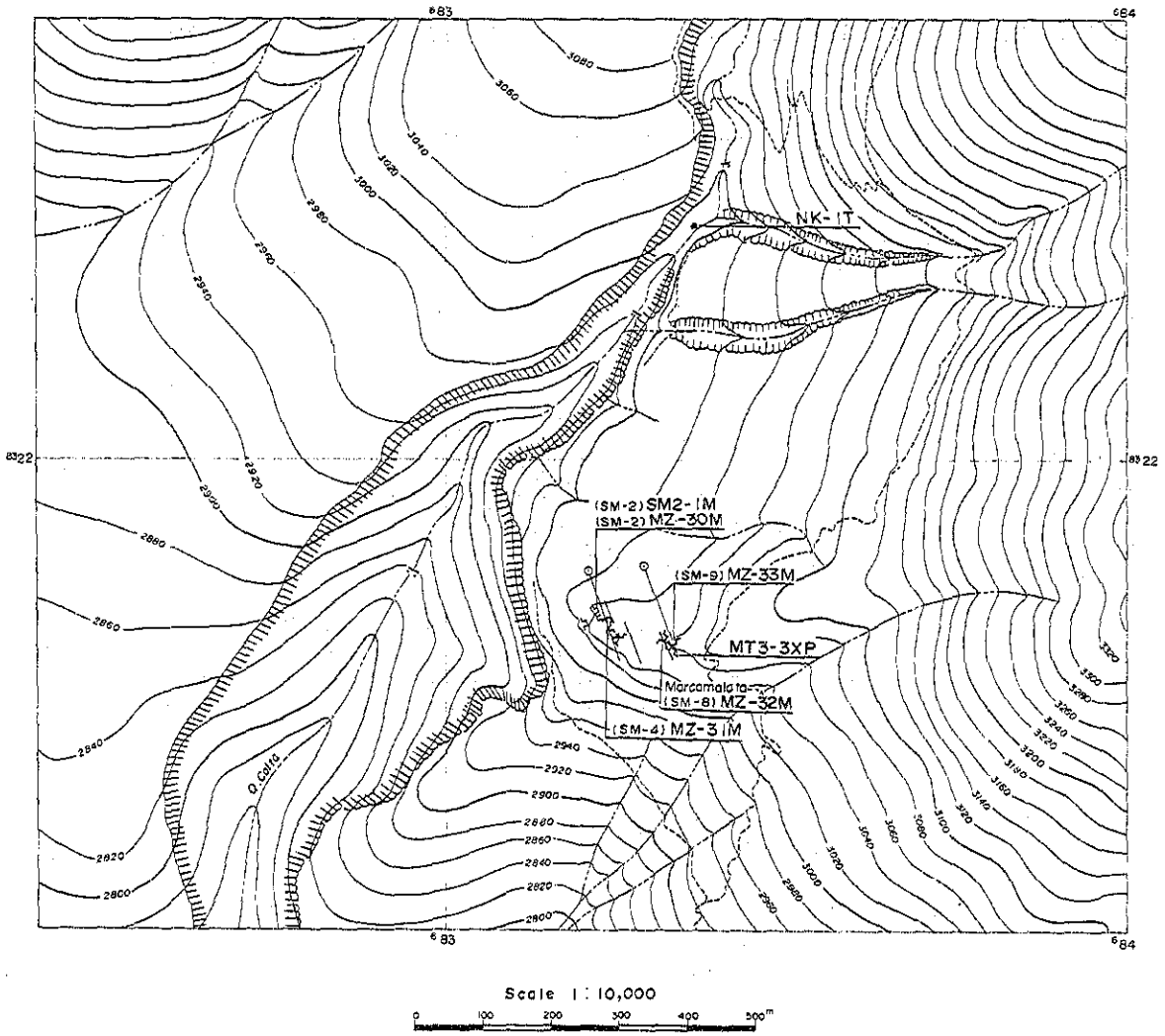
LEGEND

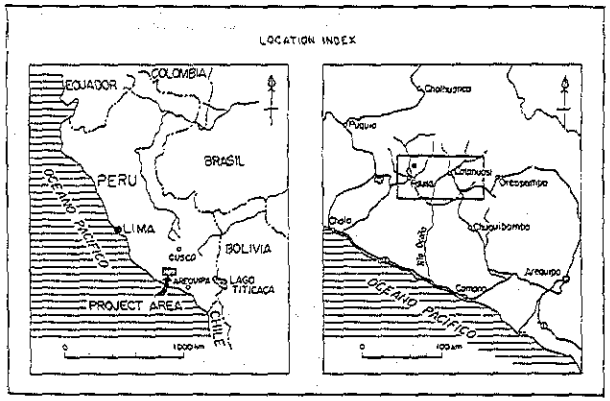
N-3 — Number of Tunnel
Old Tunnel

TC-1 — Number of Trench
Trench

A-73

Apx.44 Location Map of Old Tunnels and Trenches in the Colpar Area





LEGEND

(P) : Polished Section

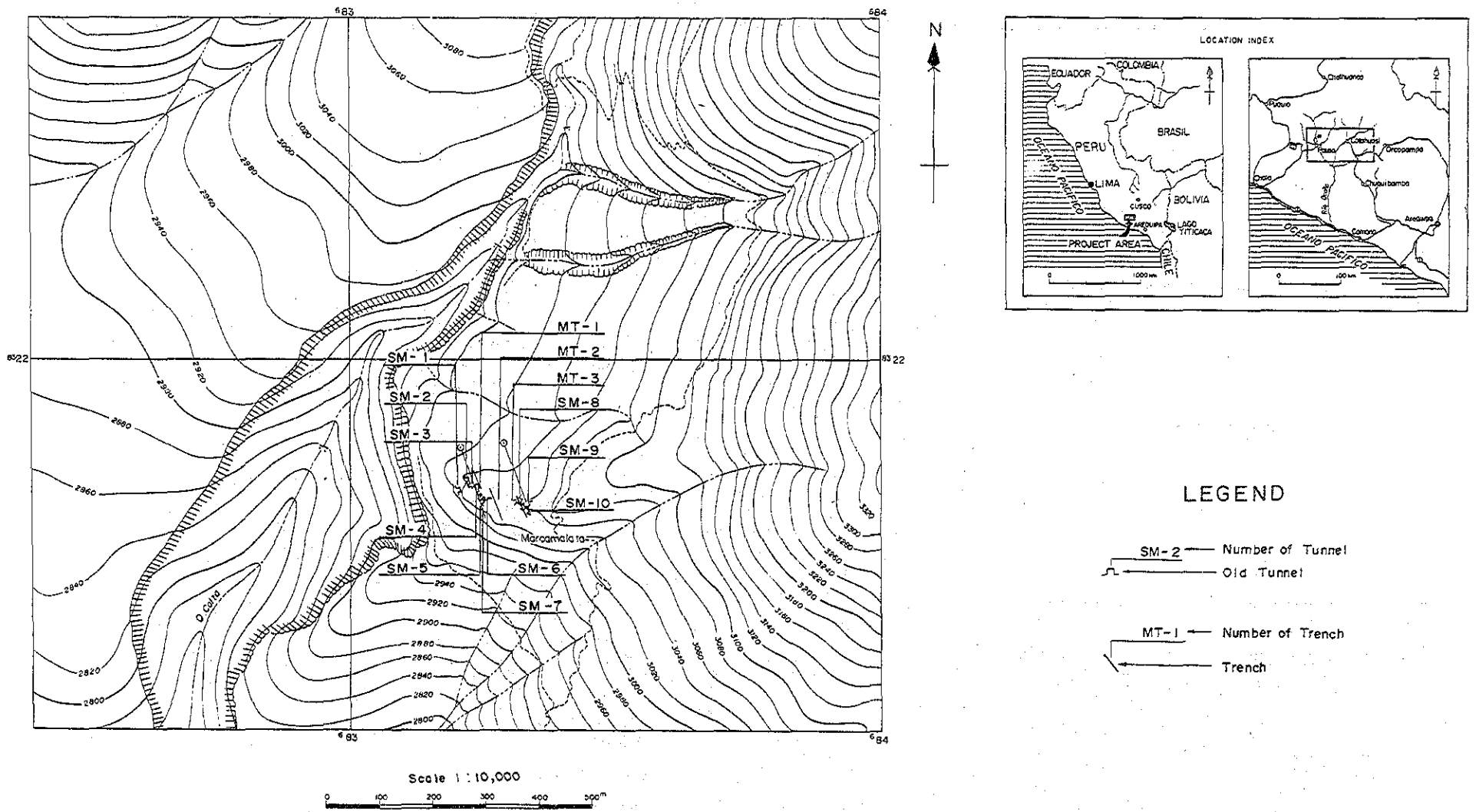
(T) : Thin Section

(X) : X-Ray Powder diffraction

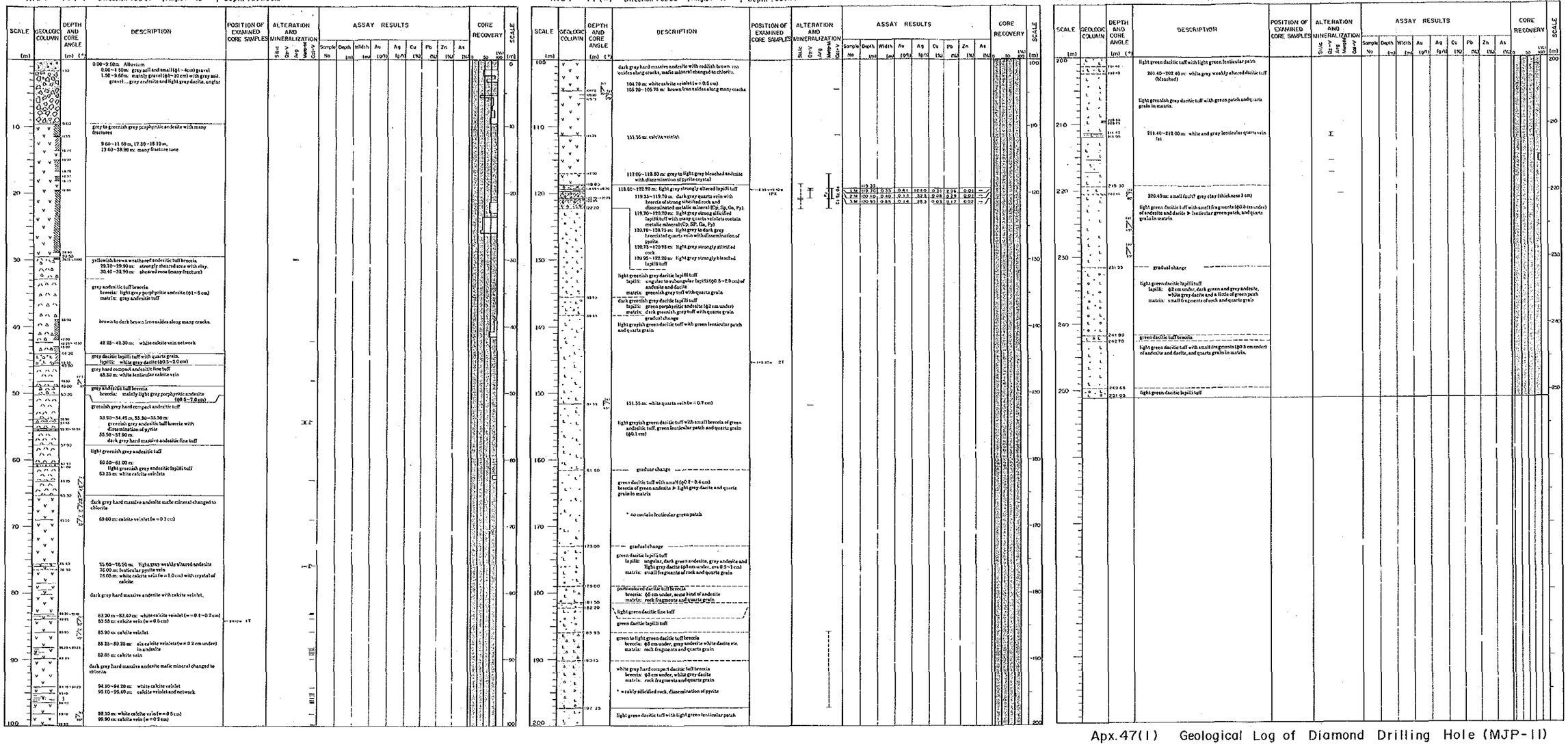
(M) : Chemical Analysis of Ore

(SN-1) MZ-17M — Number of tunnel, Number of sample

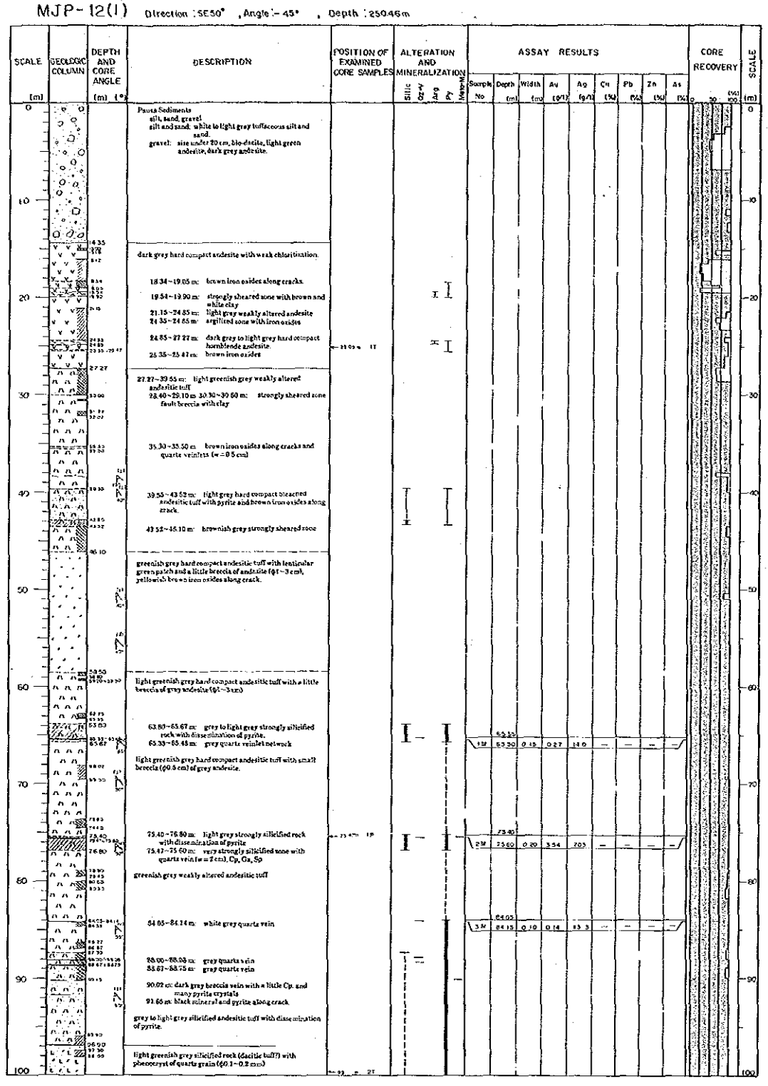
Apx. 45 Location Map of Rock and Ore Samples of the Marcamalata Area

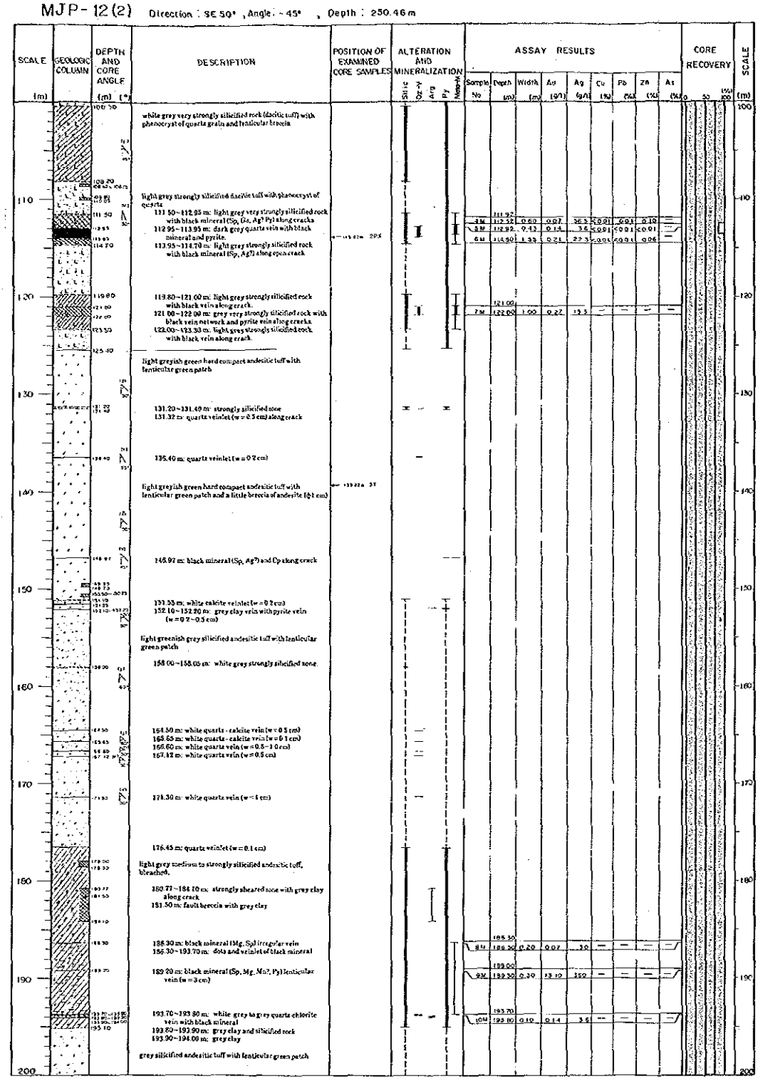


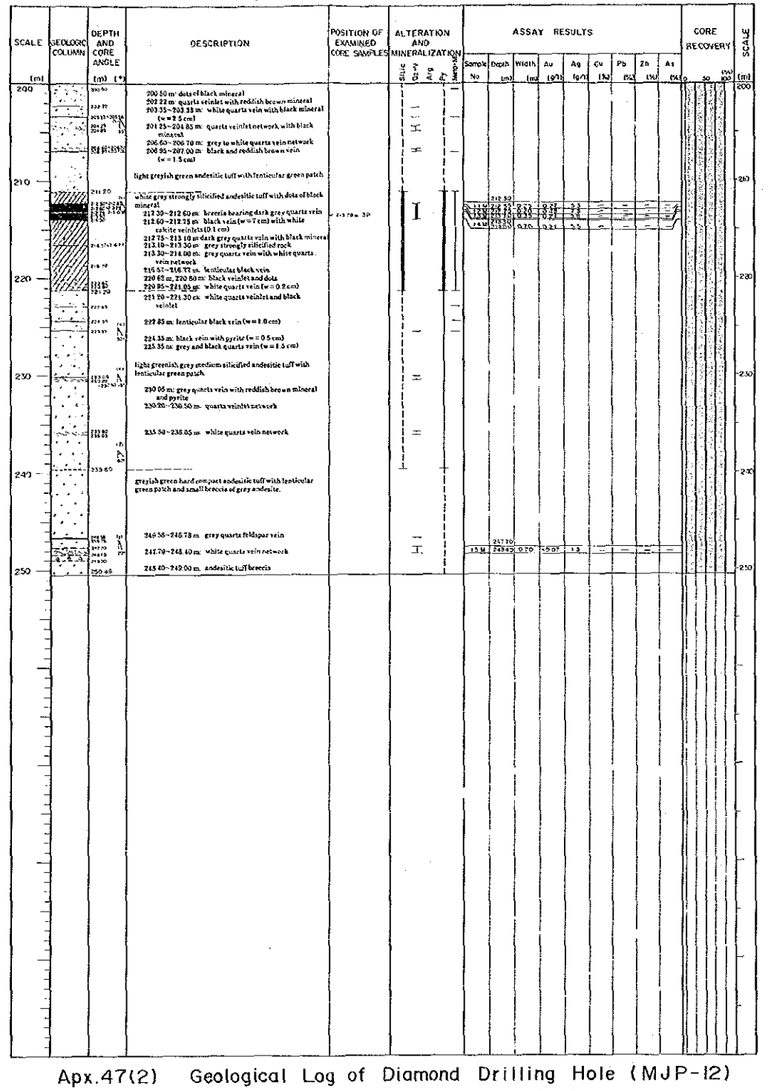
Apx.46 Location Map of Old Tunnels and Trenches in the Marcamalata Area



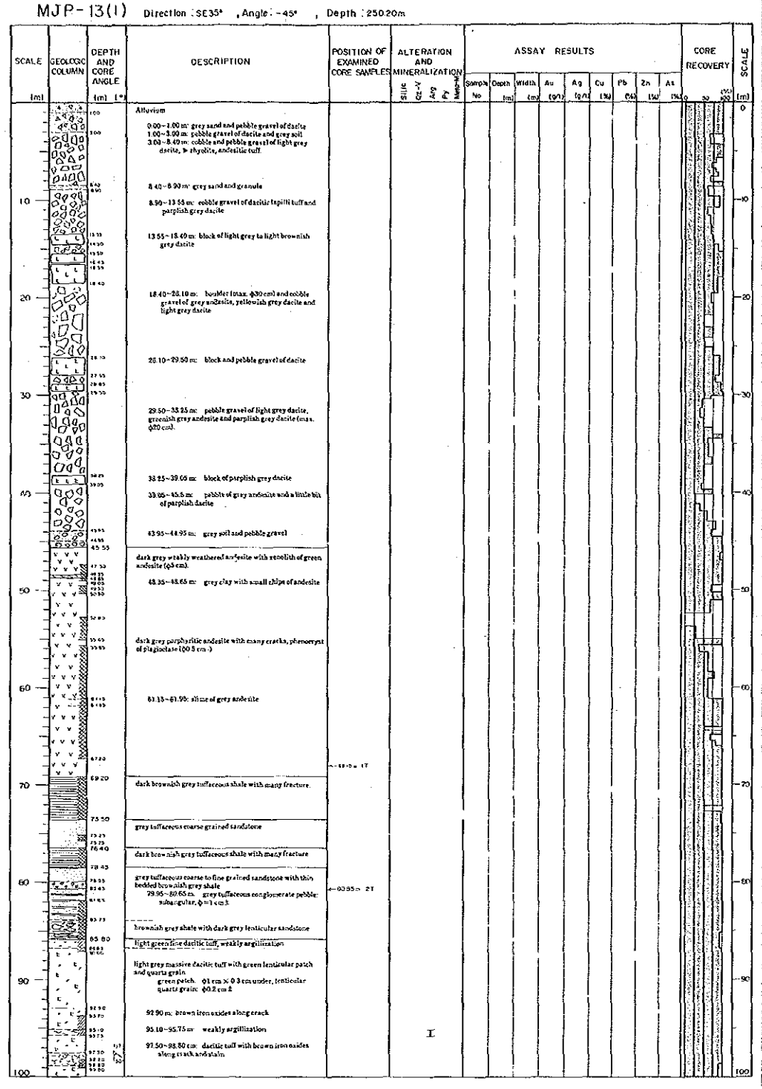
Apx.47(1) Geological Log of Diamond Drilling Hole (MJP-11)

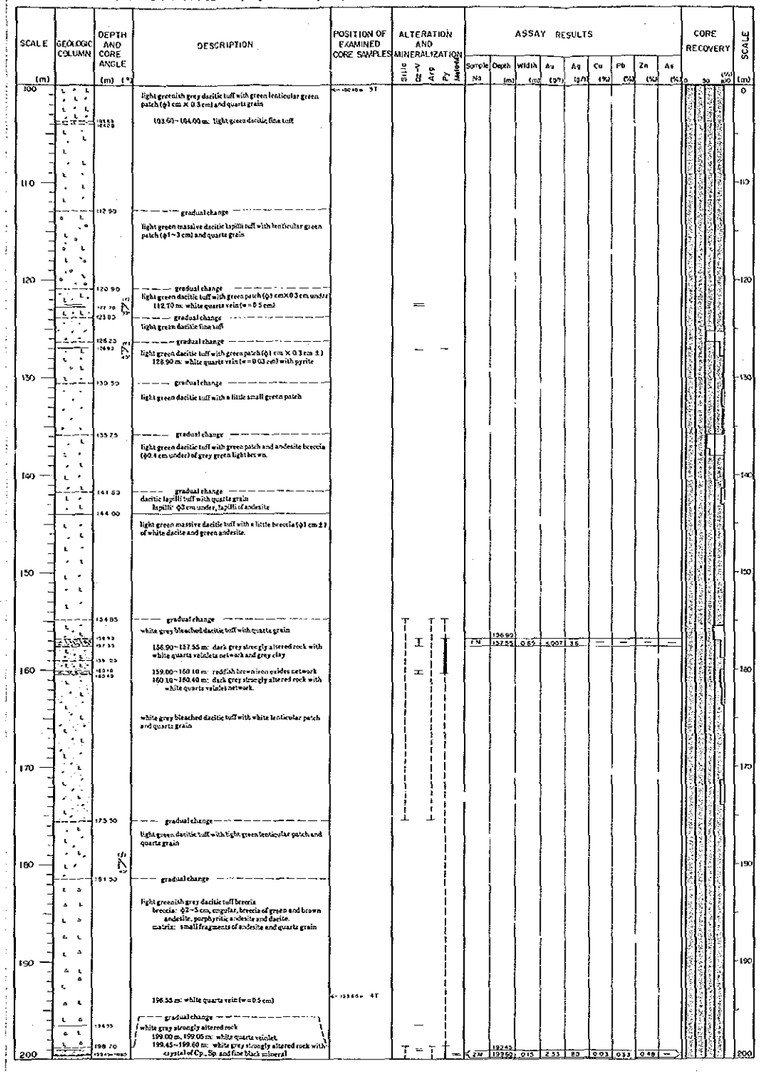


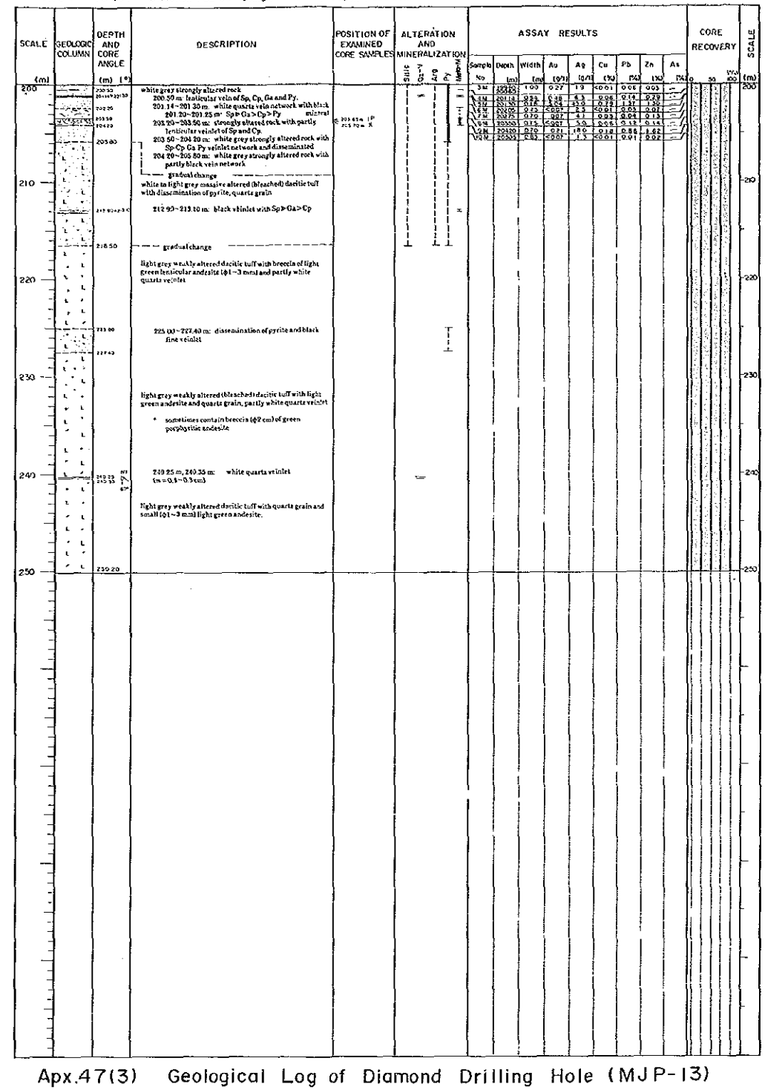




Apx.47(2) Geological Log of Diamond Drilling Hole (MJP-12)

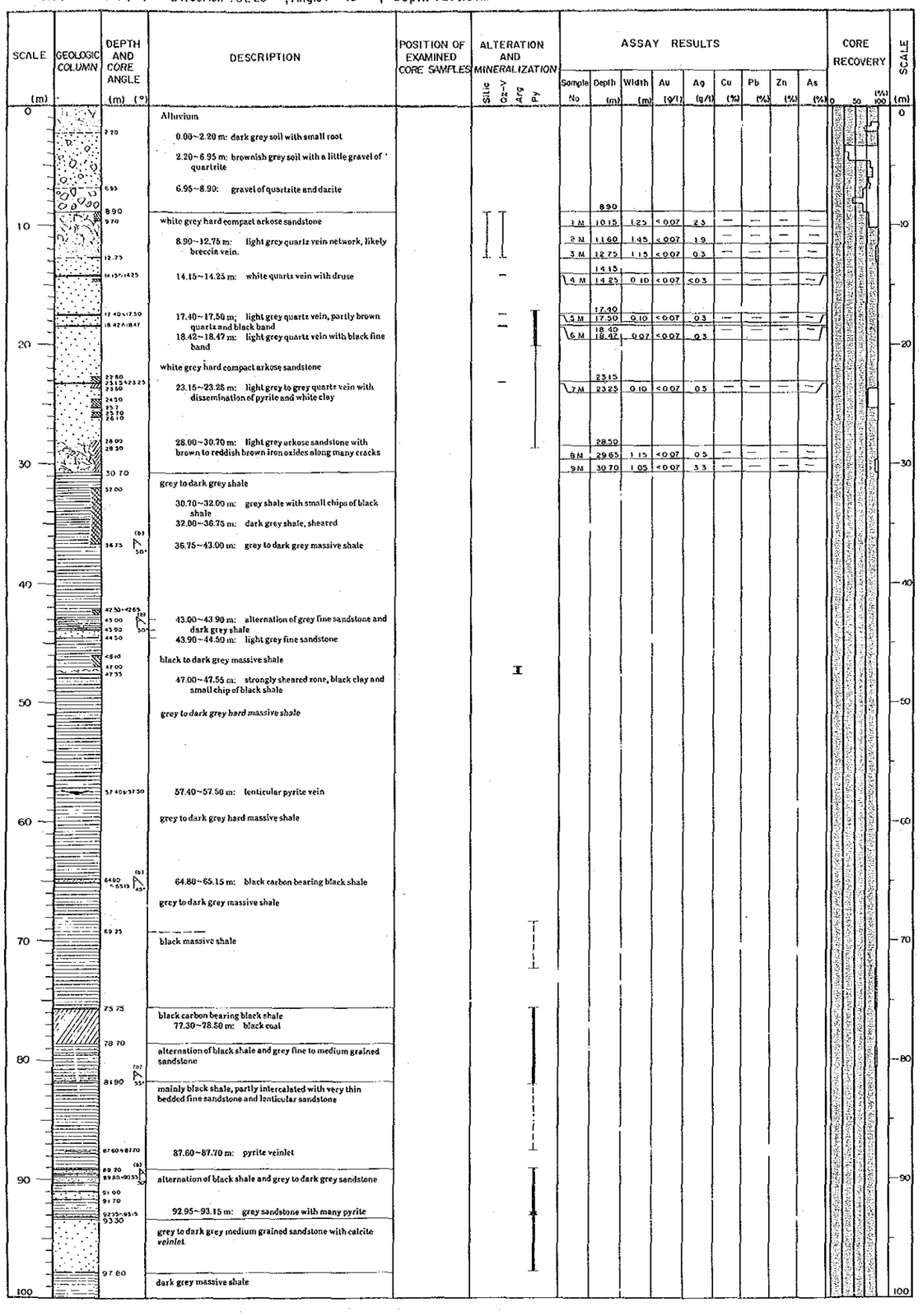




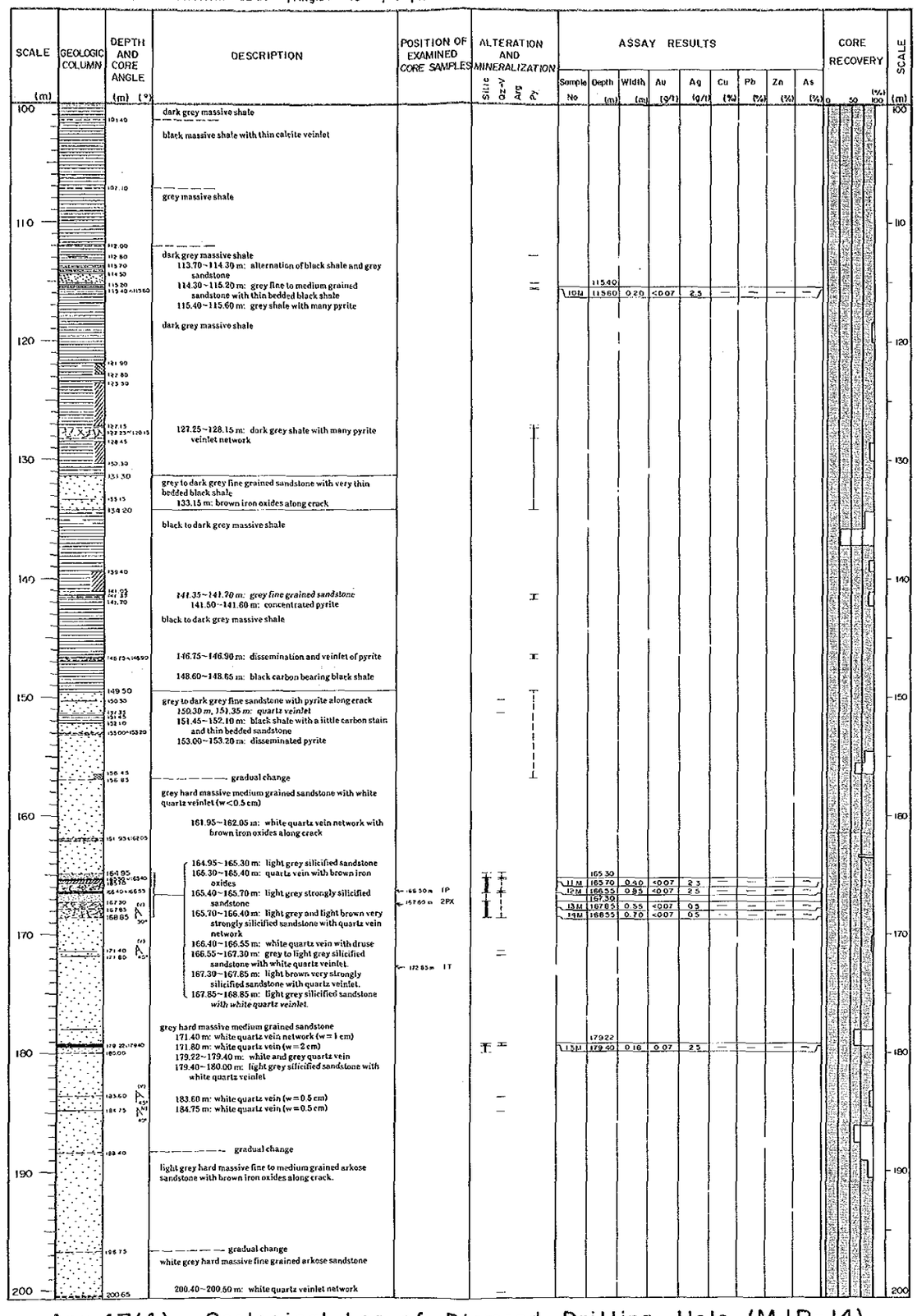


Apx.47(3) Geological Log of Diamond Drilling Hole (MJP-13)

MJP-14(1) Direction : SE 20° , Angle : -45° , Depth : 200.65m



MJP-14(2) Direction : SE 20° , Angle : -45° , Depth : 200.65m



Apx.47(4) Geological Log of Diamond Drilling Hole (MJP-14)

MJP-15(1) Direction : SE 20° , Angle : − 45° , Depth : 200.35m

SCALE (m)	GEOLOGIC COLUMN	DEPTH AND CORE ANGLE (m) (°)	DESCRIPTION	POSITION OF EXAMINED CORE SAMPLES	ALTERATION AND MINERALIZATION Silic Qz-V Arg Py
0		6.10	Alluvium light brownish grey soil (grey silt and sand)		
		12.80	grey soil contained gravel (φ1~5 cm) of black shale, grey andesite, green andesite and tuff.		
10		17.15 18.05 18.55 19.45 20.20	light brownish grey soil with a little gravel 17.15~18.05 m: gravel of grey to brownish grey andesite 18.05~18.55 m: grey sand 18.55~19.45 m: light brown soil 19.45~20.20 m: gravel of black shale and andesite 20.20~23.00 m: gravel of greenish grey diorite and grey sand		
20		23.00 23.45 24.05 25.65 27.05 28.75~29.00	23.00~23.45 m: gravel of brown shale and white sandstone reddish brown shale brown to greyish brown weathered shale white grey argillaceous weathered shale light grey to white grey hard compact arkose sandstone with brown to reddish brown iron oxides along crack. 28.75~29.00 m: white quartz veinlet network		
30		32.70 34.20 34.60 35.00 37.15 37.45	32.70~34.20 m: grey hard compact silicified arkose sandstone with white quartz vein network and black patch of pyrite 34.60 m: grey clay (w = 1 cm) 35.00~37.15 m: grey arkose sandstone with brown iron oxides along crack grey clay 37.45~37.65 m: grey arkose sandstone		
40		44.50	light grey to grey shale with yellow, brown and reddish brown iron oxides along crack.		
50		50.80 51.70	light grey to grey massive shale		
		56.30 56.80	56.30~56.80 m: grey shale		
60		59.00 63.35~63.65 63.95 64.90 67.00 67.60	light grey to grey massive shale 63.35~63.65 m: reddish brown iron oxides along crack with dissemination of pyrite 63.95~67.00 m: grey shale with pyrite veinlet and dissemination, weakly silicified. alternation of grey shale and light grey sandstone		
70		68.35 69.55 70.35~70.45 70.75~70.85	67.00~68.35 m: reddish brown iron oxides along crack. 68.35~69.55 m: dark grey arkose sandstone with pyrite and black mineral 70.35~70.45 m: grey shale 70.75~70.85 m: white quartz vein and yellowish brown clay (w = 5 cm)		
		74.80~85.00	74.80~85.00 m: iron oxides along crack grey to light grey arkose sandstone, hard compact.		
80		82.20~82.40 82.75 83.80 84.50~85.00 85.25~85.40	82.20~82.40 m: white quartz vein network 82.75~83.80 m: white quartz vein network and crystal quartz along open crack 84.50~85.00 m: quartz vein (w = 2 cm) × 6 85.25~85.40 m: white quartz vein network		
90		89.25 90.30 91.50 92.20 93.48~93.65 93.80 94.60 95.40	white grey arkose sandstone with brown to reddish brown iron oxides along crack 91.85 m: reddish brown iron oxides 92.20~93.80 m: white to greyish white strongly silicified arkose sandstone with veinlet and spot of pyrite 93.48~93.65 m: yellowish brown and reddish brown veinlet network of iron oxides grey to light grey clay with pyrite black carbon bearing black shale dark grey shale with pyrite along crack		
100		98.95	light grey to grey shale		

SCALE (m)	ASSAY RESULTS Sample No	Depth (m)	Width (m)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	As (%)	CORE RECOVERY 0 50 (%) 100	SCALE (m)
0											0
10											10
20											20
30	1 M	28.28	0.75	< 0.07	1.9	—	—	—	—		30
	2 M	34.25	0.75	< 0.07	1.0	—	—	—	—		
	3 M	35.00	1.00	< 0.07	0.3	—	—	—	—		
40											40
50											50
60	4 M	63.70 64.00	0.30	0.07	0.3	—	—	—	—		60
70	5 M	68.35 69.55	1.20	< 0.07	1.3	—	—	—	—		70
80	6 M	82.75 83.80	1.05	< 0.07	0.5	—	—	—	—		80
	7 M	84.50 85.00	0.50	< 0.07	0.8	—	—	—	—		
90		92.20									90
	8 M	93.10	0.90	< 0.07	0.3	—	—	—	—		
	9 M	93.80	0.70	< 0.07	2.8	—	—	—	—		
100											100

MJP-15(2) Direction : SE 20° , Angle : − 45° , Depth : 200.35m

SCALE (m)	GEOLOGIC COLUMN	DEPTH AND CORE ANGLE (m) (°)	DESCRIPTION	POSITION OF EXAMINED CORE SAMPLES	ALTERATION AND MINERALIZATION Silic Qz-V Arg Py
100		101.40	light grey to grey shale grey to dark grey shale with many fracture		
		105.85~106.00 106.80 107.20~107.40 108.10	105.85~106.00 m: black carbon bearing black shale 106.80~108.10 m: pyrite along fracture 107.20~107.40 m: black carbon bearing black shale		
110		110.10 111.10 111.45 112.75 113.55	blackish grey shale 111.10~111.45 m: black carbon bearing black shale mainly grey massive shale, partly light grey massive		
		117.90			
120		126.05			
130		136.80 136.90	grey to dark grey massive shale		
140		140.90 141.57 146.65 147.00 149.40 150.45	146.65~147.00 m: grey silt stone grey to dark grey sandstone with thin bedded black shale and pyrite along crack 148.40 m: crystal quartz veinlet (w = 0.1 cm) along crack black massive shale		
150		154.30 154.80 156.20 157.65 159.10	154.30~154.60 m: dissemination of pyrite 154.50~154.80 m: black carbon bearing black shale alternation of dark grey sandstone and black shale black shale and lenticular grey sandstone with pyrite black shale with thin bedded dark grey sandstone and thin lenticular sandstone		
160		165.00 165.40 165.80 167.20 167.70 171.55	grey medium grained sandstone with veinlet and dissemination of pyrite 165.40~165.80 m, 166.20~166.30 m, 167.20~167.70 m: black shale dark grey fine grained sandstone		
170		173.20 173.93 174.50 177.40 178.00 178.65	dark grey to black massive shale 177.40 m: lenticular pyrite vein		
180		181.80 182.60 184.00 185.70 186.00 187.75 188.90	181.80~182.60 m: strongly sheared zone 185.70 m: crystal of pyrite along crack 188.50 m: pyrite along crack		
190		194.10 194.80 195.55 196.80 197.45~197.80 198.25 199.10 199.80 200.55	dark grey to black massive shale 194.10~194.12 m: pyrite veinlet network (w = 2 cm) 194.80 m: pyrite 197.45~197.80 m: pyrite veinlet network		

SCALE (m)	ASSAY RESULTS Sample No	Depth (m)	Width (m)	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)	As (%)	CORE RECOVERY 0 50 (%) 100	SCALE (m)
100											100
110											110
120											120
130											130
140											140
150											150
160											160
170											170
180											180
190	10 M	197.45 197.80	0.35	< 0.07	1.9	—	—	—	—		190
200											200

Apx.47(5) Geological Log of Diamond Drilling Hole (MJP-15)

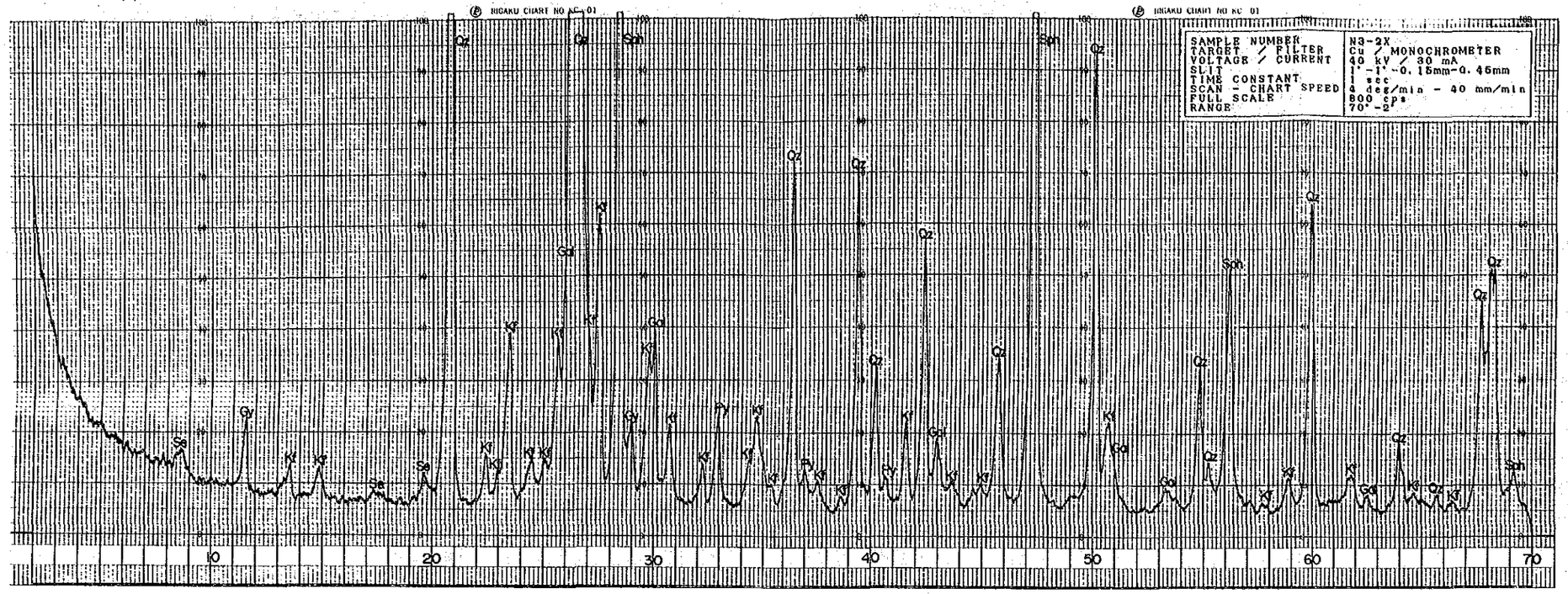
Apx. 48 X-ray Powder Diffraction Charts

Abbreviations

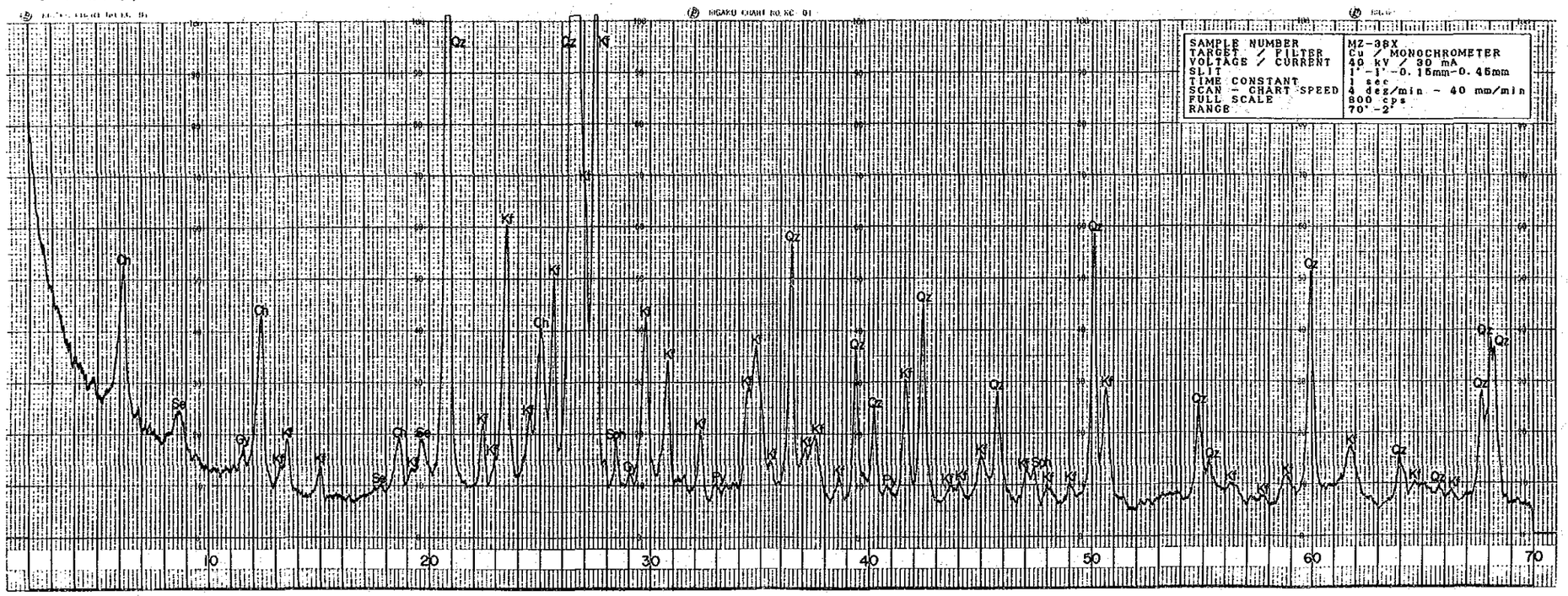
Mineral

Qz : quartz
Se : sericite
Ch : chlorite
Am : amesite
Kf : potassium feldspar
Cal : calcite
Do : dolomite
An : anhydrite
Gy : gypsum
Ja : jarosite
Py : pyrite
Go : goethite
Gal : galena
Sph : sphalerite
Ag : Ag mineral

Apx. 48 (1)



Apx. 48 (2)



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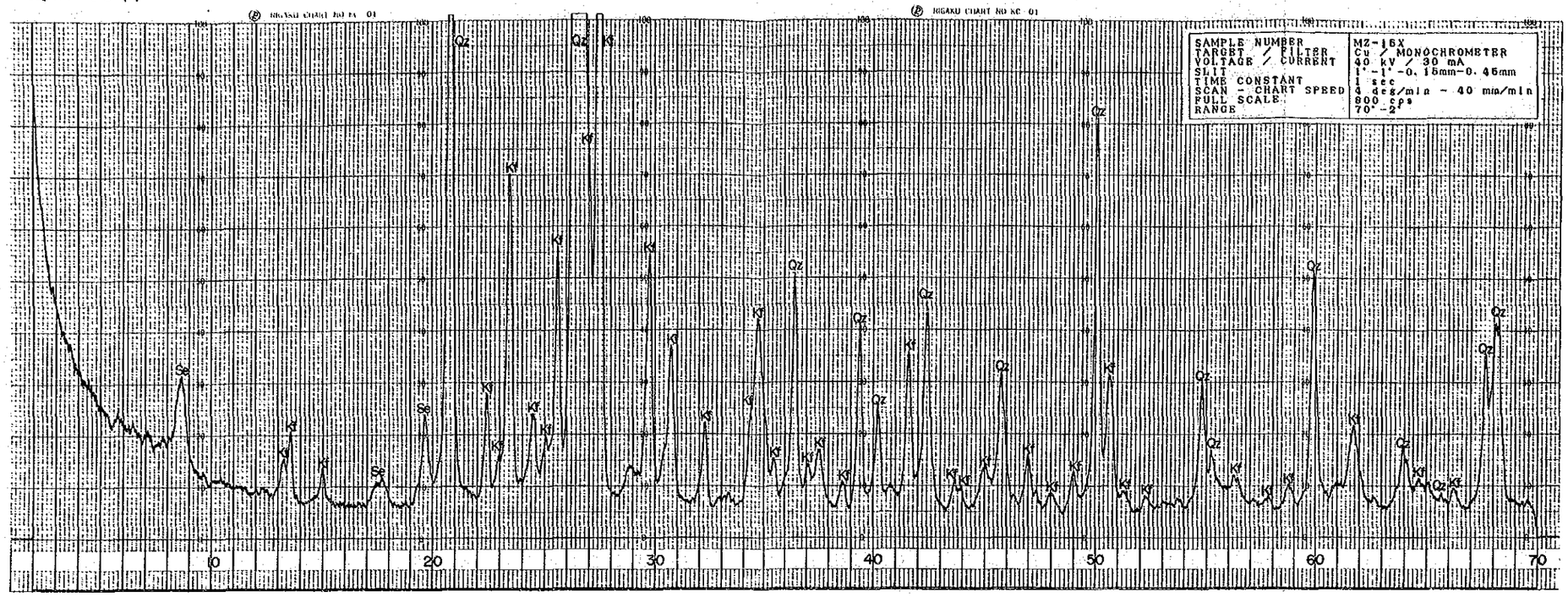

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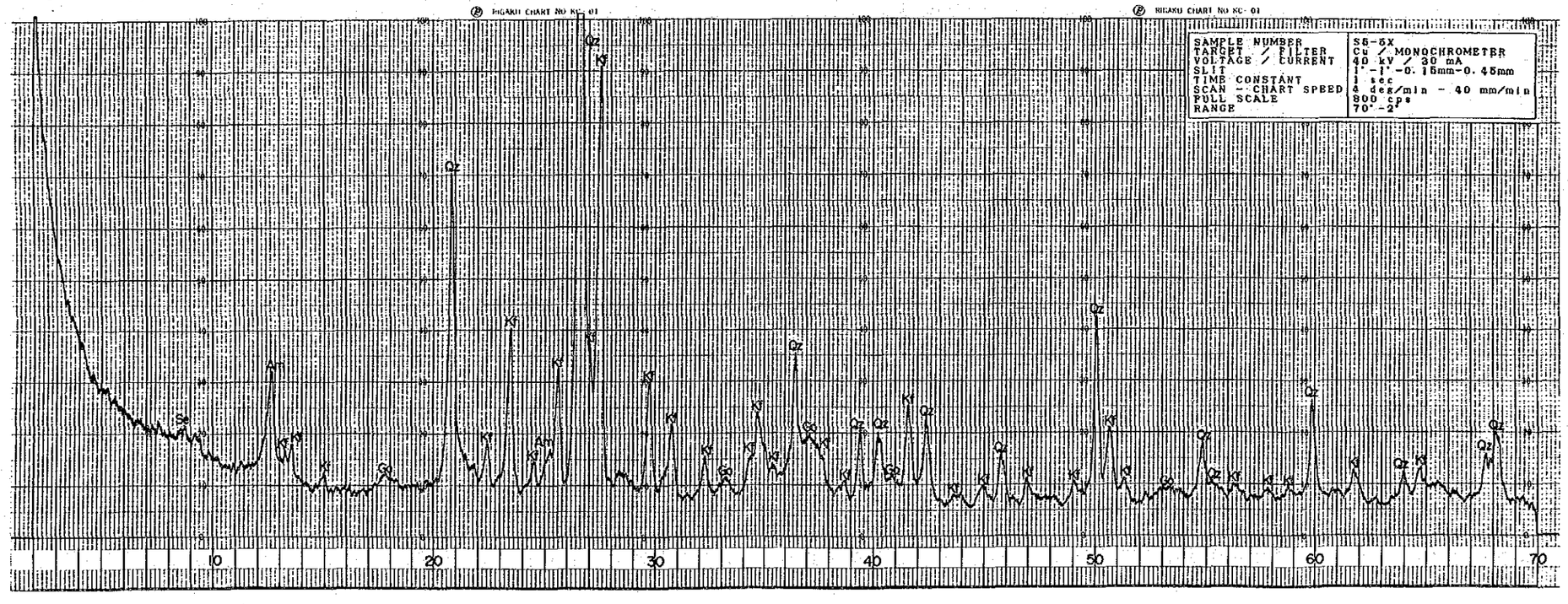

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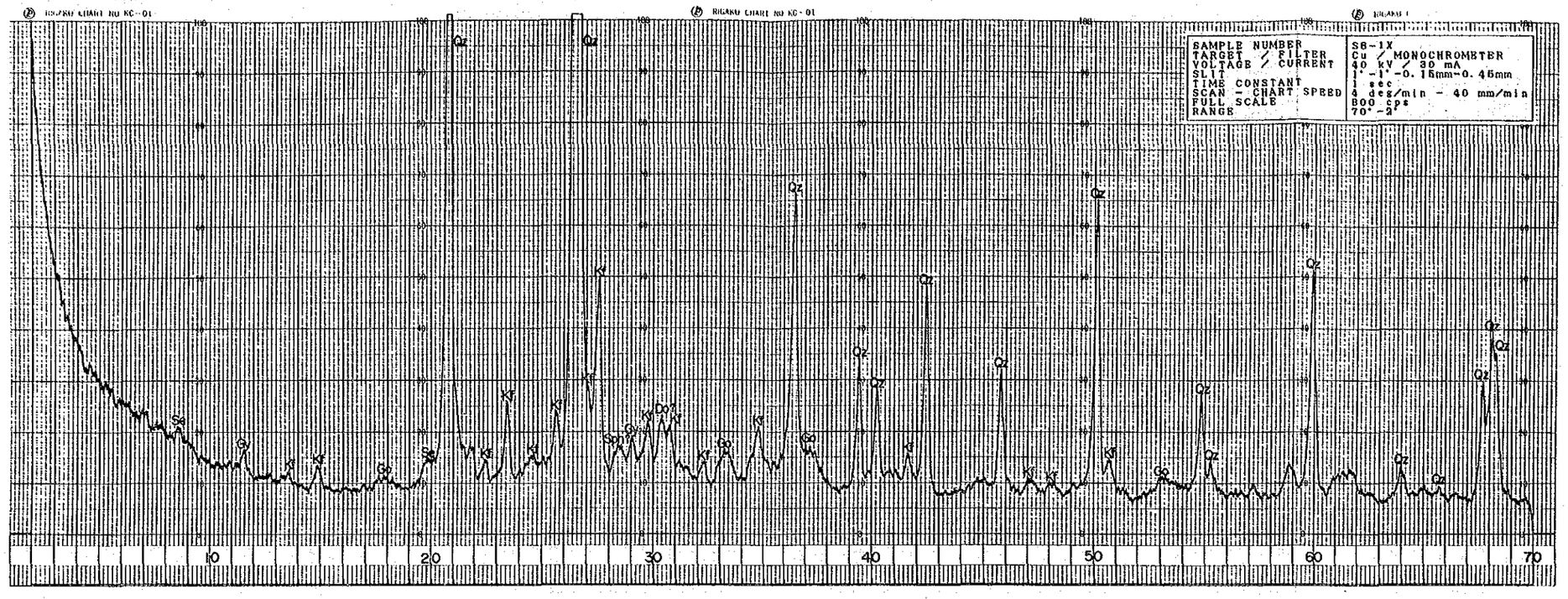

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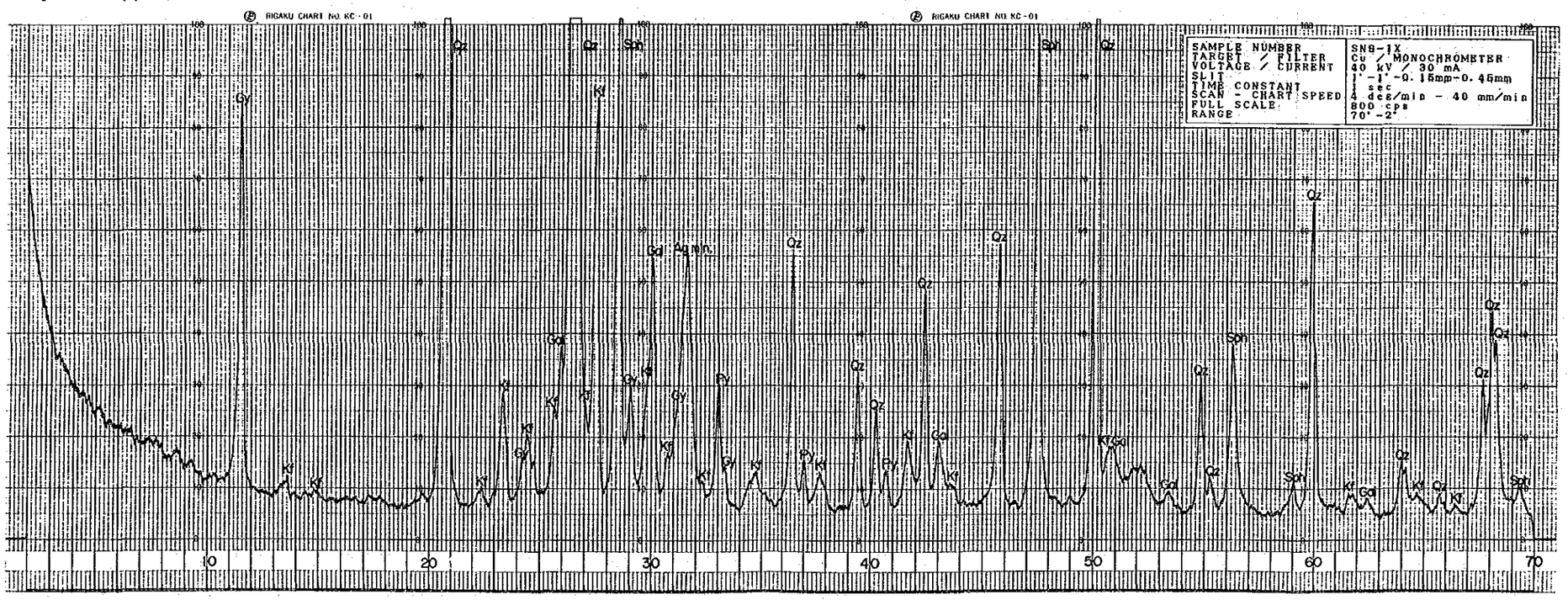
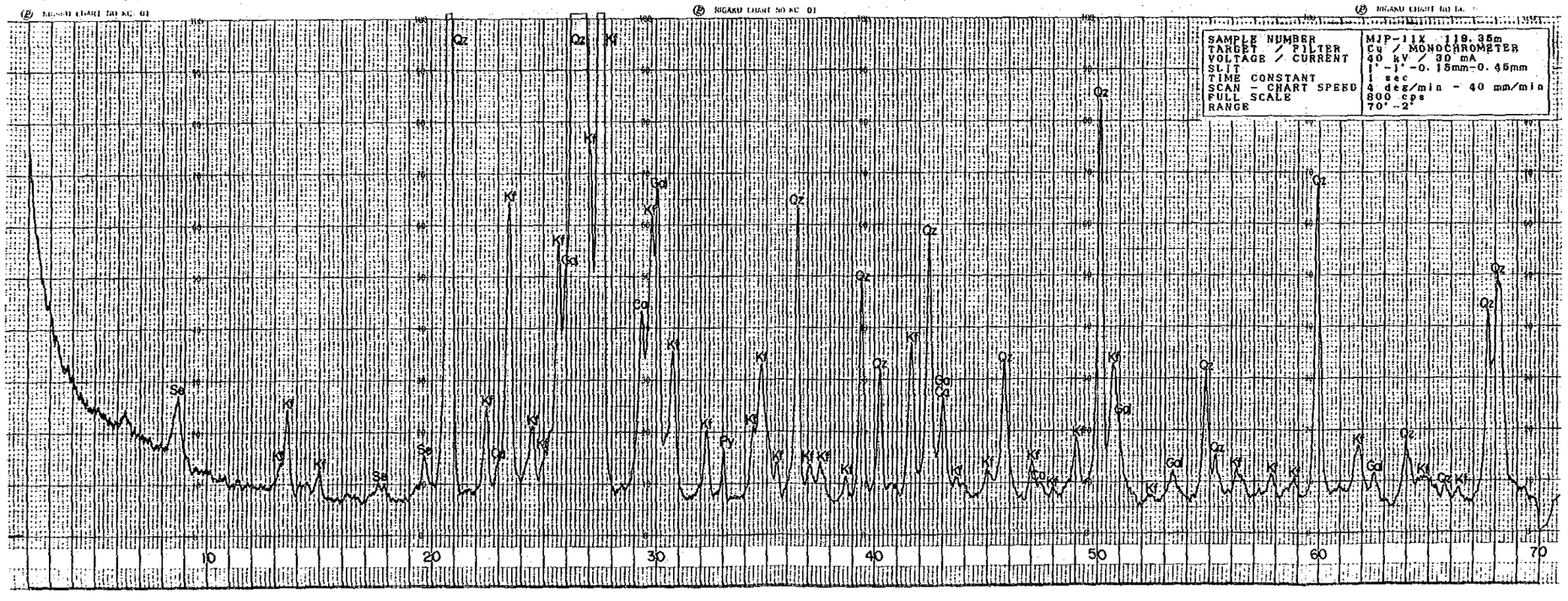


Apx. 48 (7)

Apx. 48 (8)



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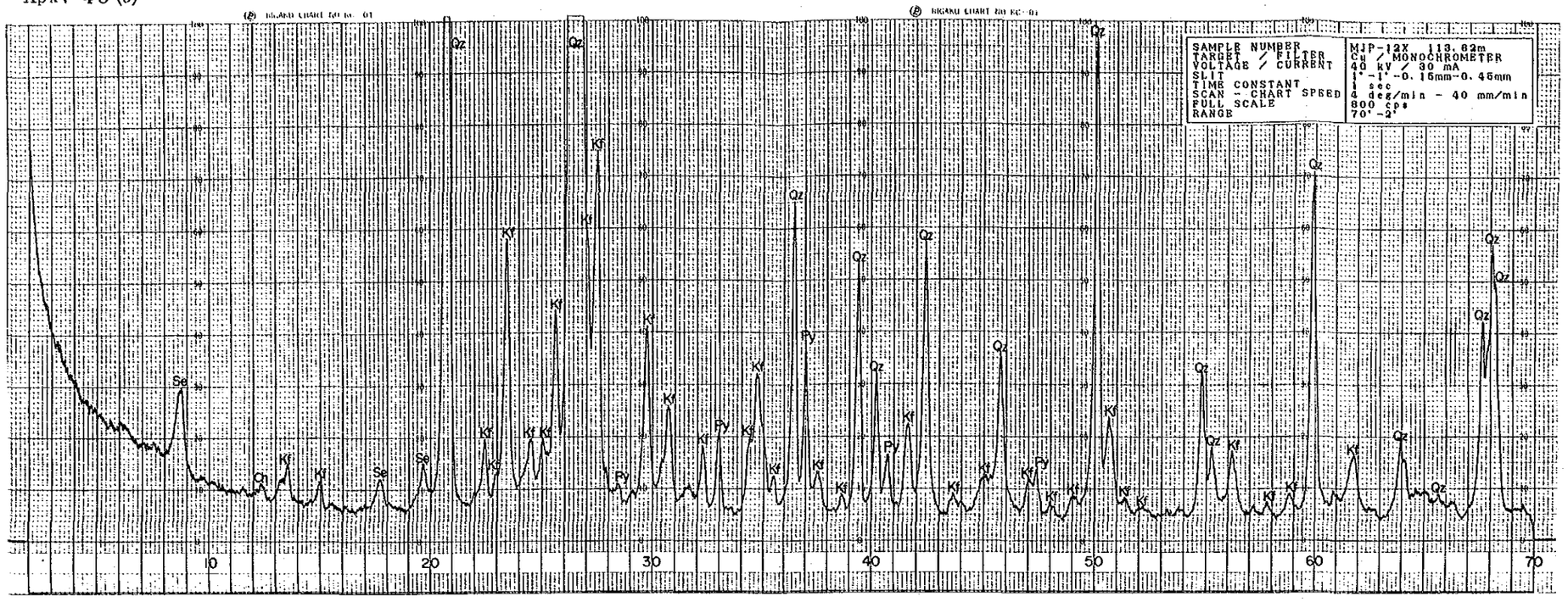

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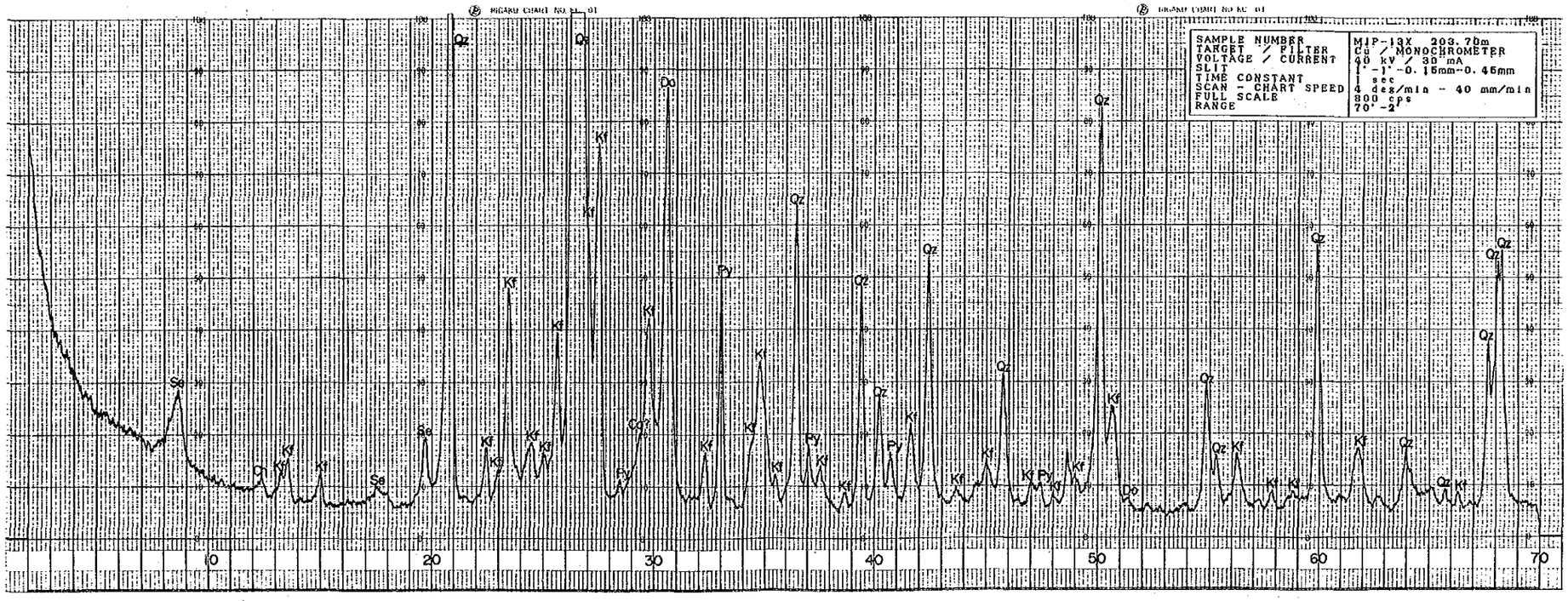

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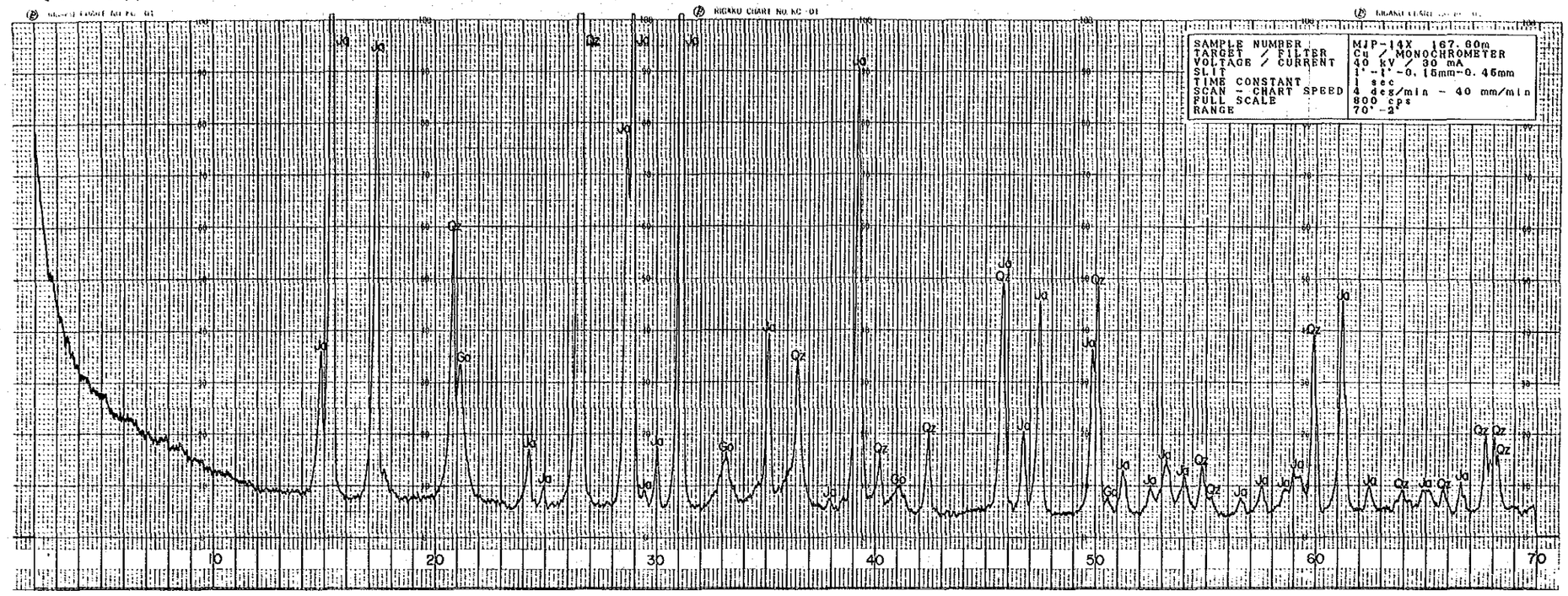

Apx. 48 (12)