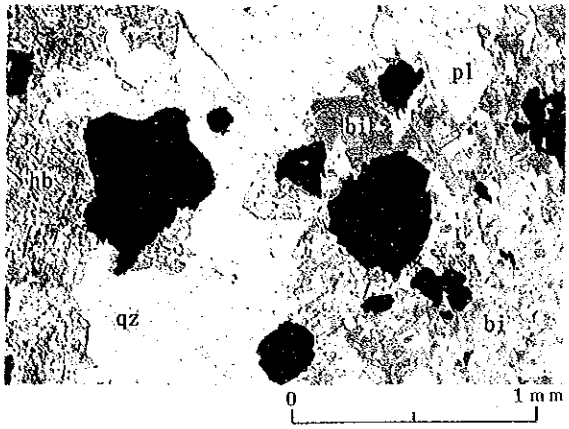
付　録

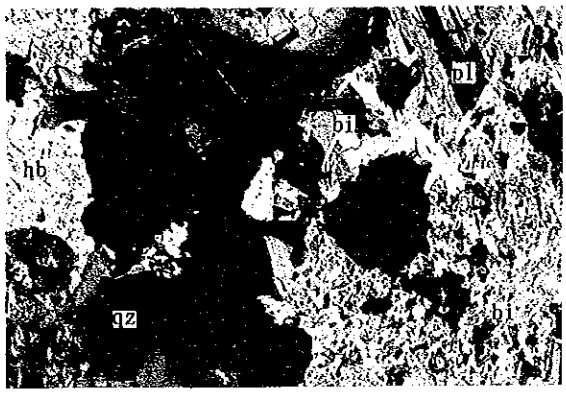
Photo A-1 Microphotograph of thin section

Abbreviation

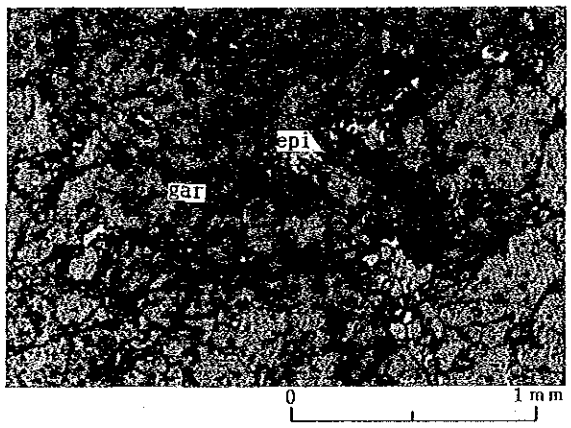
qz	:	quartz
pl	:	plagioclase
kf	:	potash feldspar
mus	:	muscovite
bi	:	biotite
bi(p)	:	biotite(deformed)
bi(h)	:	biotite(biotitization)
hb	:	hornbrende
act	:	actinolite
chl	:	chlorite
epi	:	epidote
cal	:	calcite
gar	:	garnet



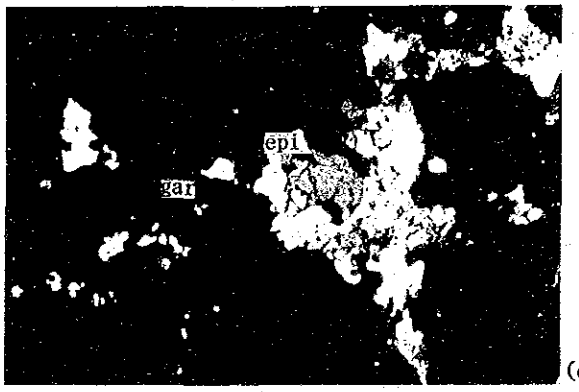
Sample No. : B3043
Rock name : Hornbrede - (biotite) quartz diorite
Location : Osohuayco
Texture : Holosrystalline altered by biotite
(only lower polar)



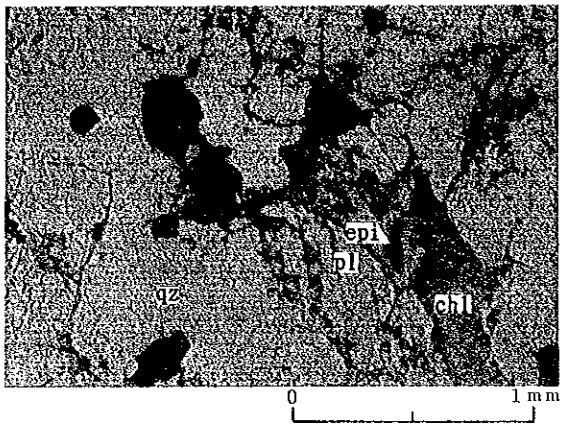
(crossed polars)



Sample No. : C3098
Rock name : Altered dacitic lapilli tuff(?)
Location : Osohuayco
Texture : with lithic fragments(?)
(only lower polar)

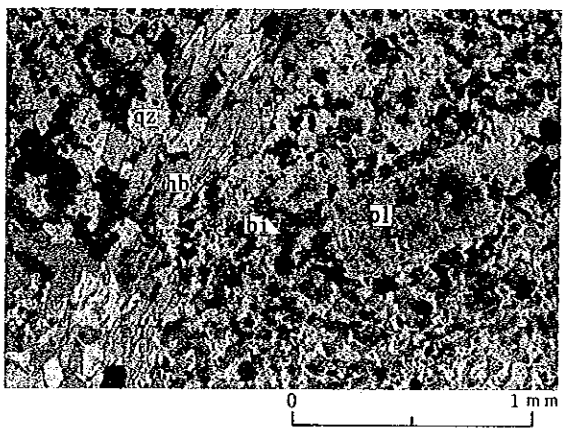


(crossed polars)

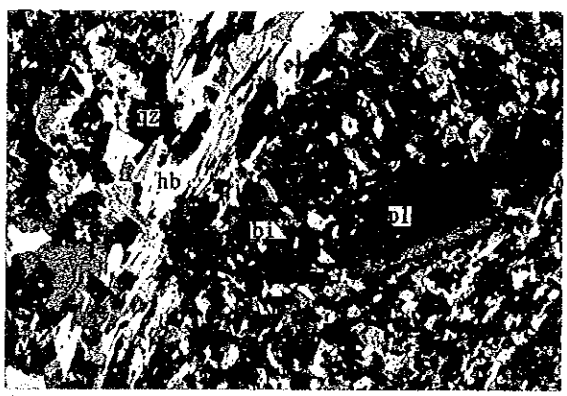


Sample No. : C3001
Rock name : Garnet skarn
Location : Osohuayco
Texture : Massive, granular
(only lower polar)

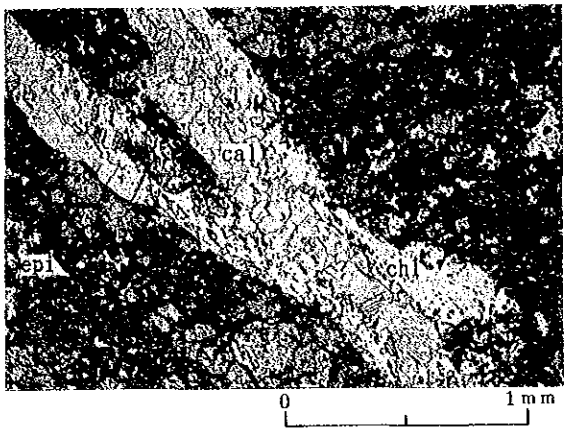
(crossed polars)



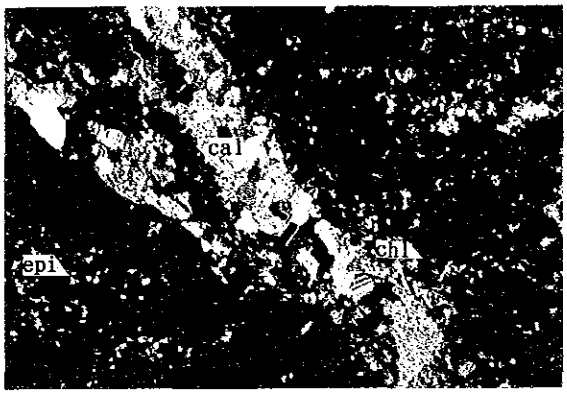
Sample No. : MJE-7 (267.3m)
Rock name : Contact-metamorphosed Hornbrende andesite
Location : Osohuayco
Texture : Porphyritic
(only lower polar)



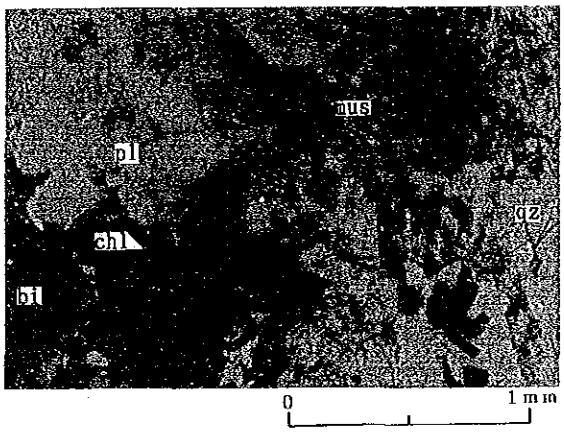
(crossed polars)



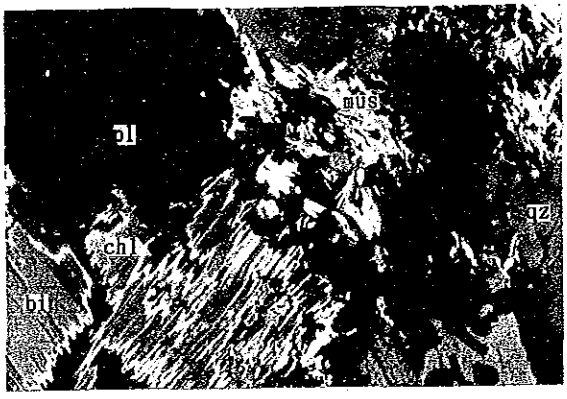
Sample No. : MJE - 7 (98.0m)
Rock name : Garnet skarn with calcite veinlets
Location : Osohuayco
Texture : Granular aggregate
(only lower polar)



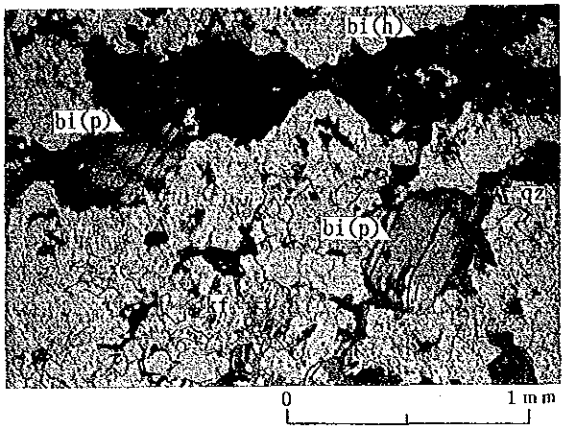
(crossed polars)



Sample No. : C3033
Rock name : Biotite - hornbrende quartz diorite
Location : Telimbela
Texture : Holocrystalline with preferred orientation
(only lower polar)

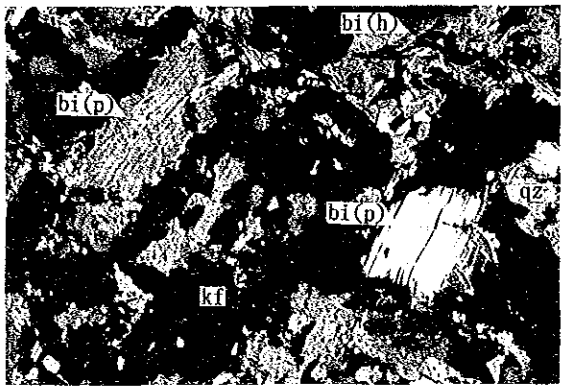


(crossed polars)

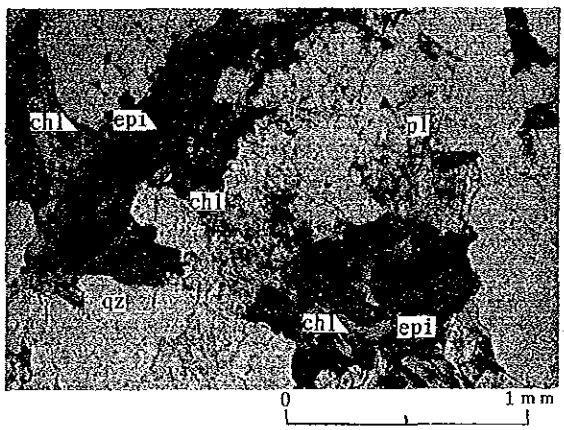


Sample No. : MJE - 8 (55.0m)
Rock name : Biotite granodiorite
Location : Telimbela
Texture : Holocrystalline sheared

(only lower polar)

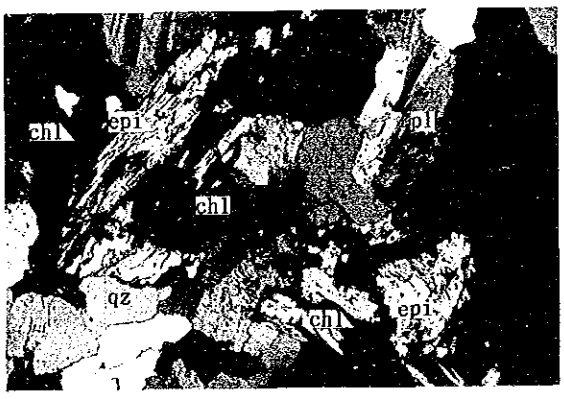


(crossed polars)

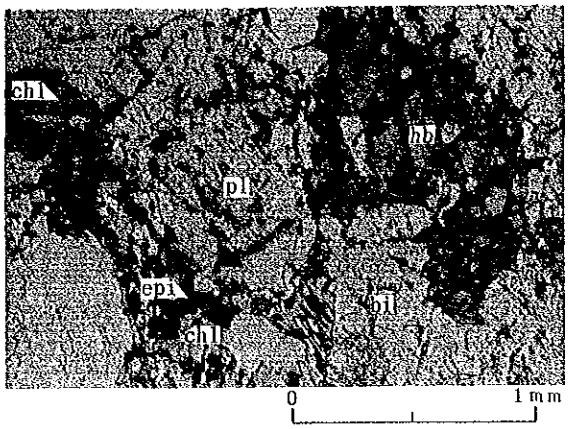


Sample No. : MJE - 8 (119.0m)
Rock name : Biotite granodiorite
Location : Telimbela
Texture : Holocrystalline sheared

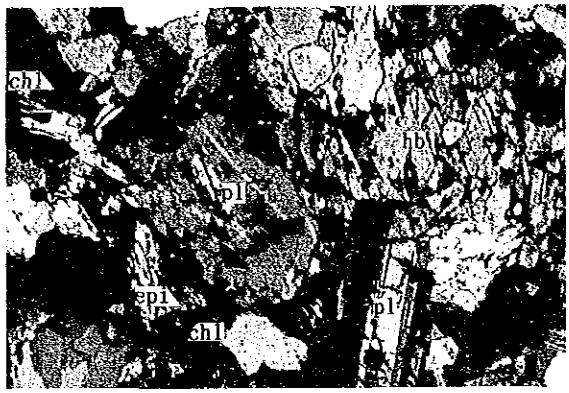
(only lower polar)



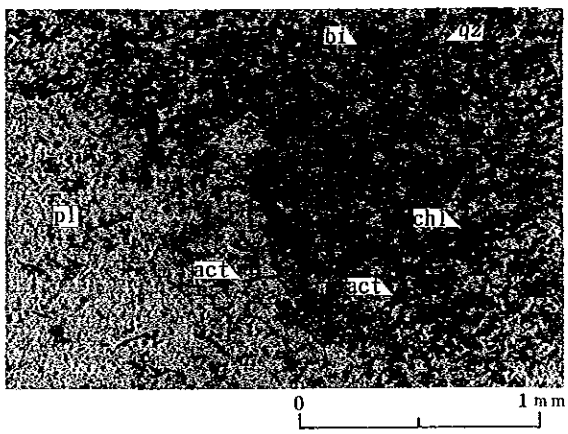
(crossed polars)



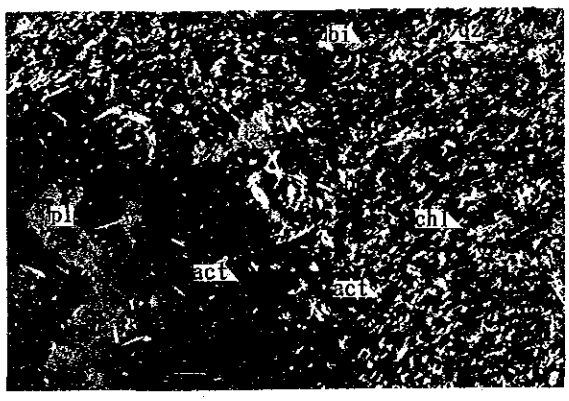
Sample No. : MJE -9 (100.0m)
Rock name : Hornblende - biotite quartz diorite
Location : Telimbela
Texture : Holocrystalline sheared
(only lower polar)



(crossed polars)



Sample No. : C3050
Rock name : Biotite quartz diorite
Location : Telimbela
Texture : Holocrystalline
(only lower polar)

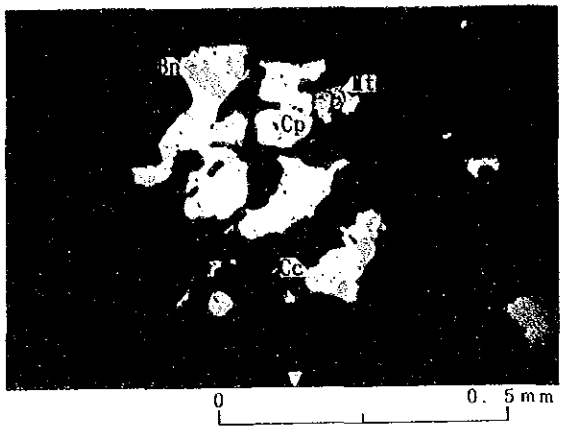


(crossed polars)

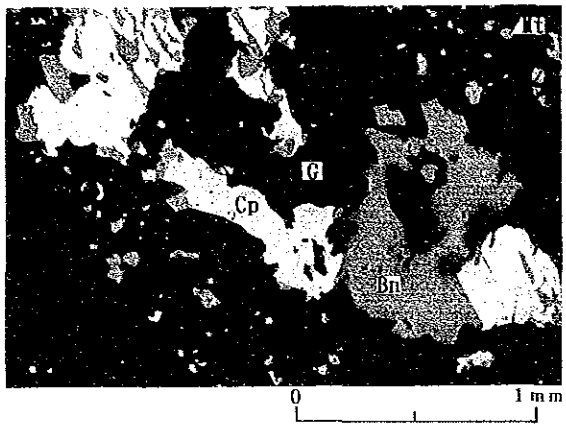
Photo A-2 Microphotograph of polished section

Abbreviation

Cp	:	Chalcopyrite
Py	:	Pyrite
Mo	:	Molybdenite
Mt	:	Magnetite
Hm	:	Hematite
Bn	:	Bonite
Cc	:	Chalcocite
Lm	:	Limonite
G	:	Gangue minerals

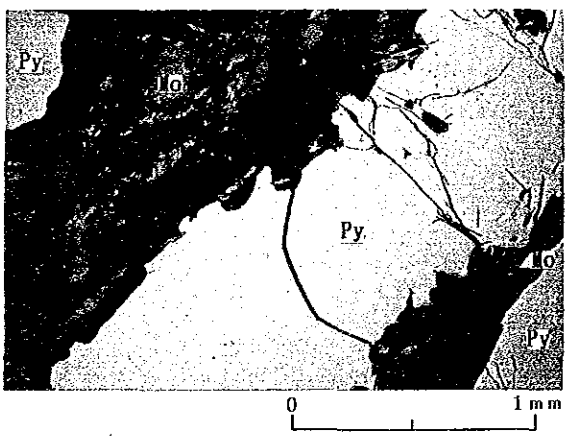


Sample No. : B3043
Occurrence : Cp - Mo - Mt dissemination
Location : Osohuayco

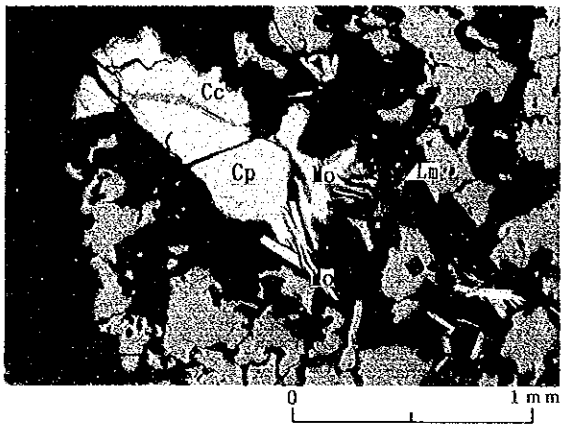


Sample No. : MJE - 7 (245.5m)
Occurrence : Cp - Py veinlets (~3m wide), and Py - Mt dissemination
Location : Osohuayco

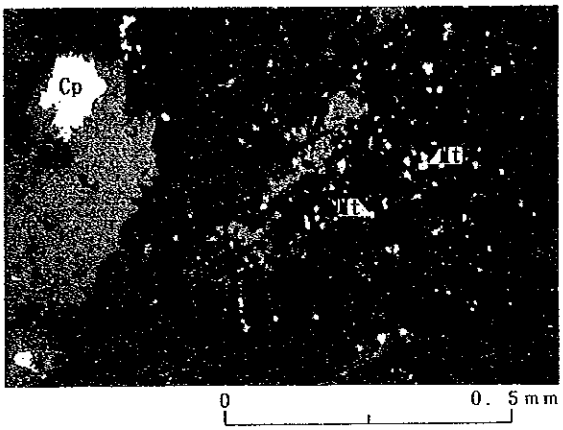
Sample No. : MJE - 7 (267.4m)
Occurrence : Py - Mt veinlets (~3m wide), and Mt dissemination
Location : Osohayco



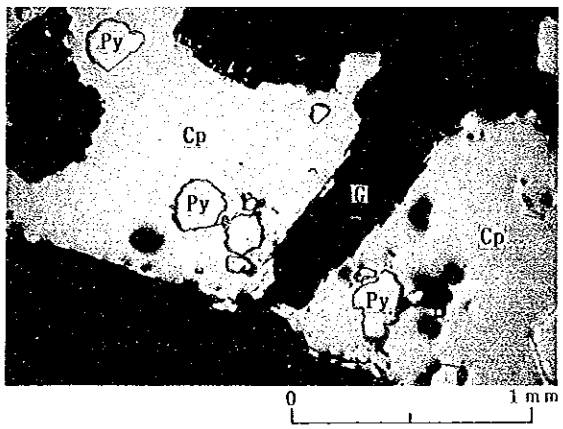
Sample No. : A3027
Occurrence : Mo - Py - Cp - Mt dissemination
Location : Telimbela



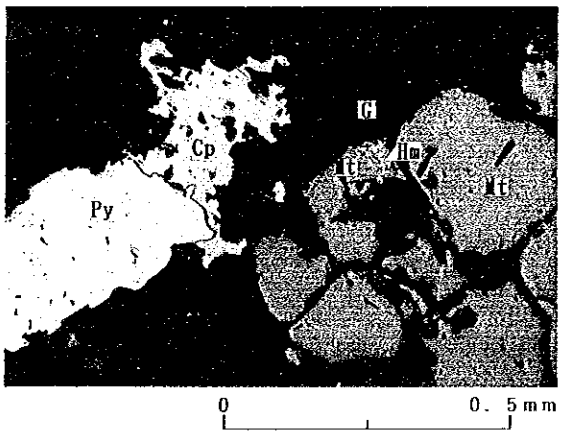
Sample No. : B3005
Occurrence : Cp - Py veinlets (1mm wide), and Mt dissemination
Location : Telimbela



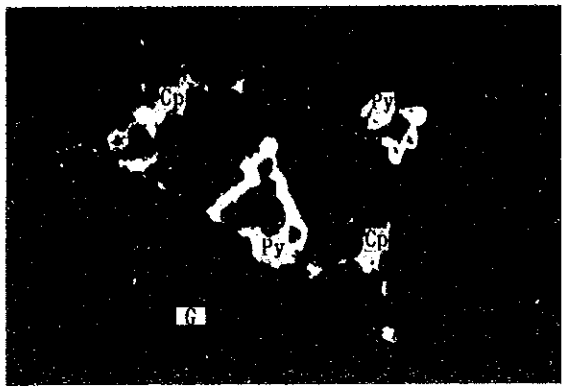
Sample No. : B3018
Occurrence : Mo - Cp -Mt dissemination
Location : Telimbela



Sample No. : MJE - 8 (53.8m)
Occurrence : Cp veinlets
Location : Telimbela

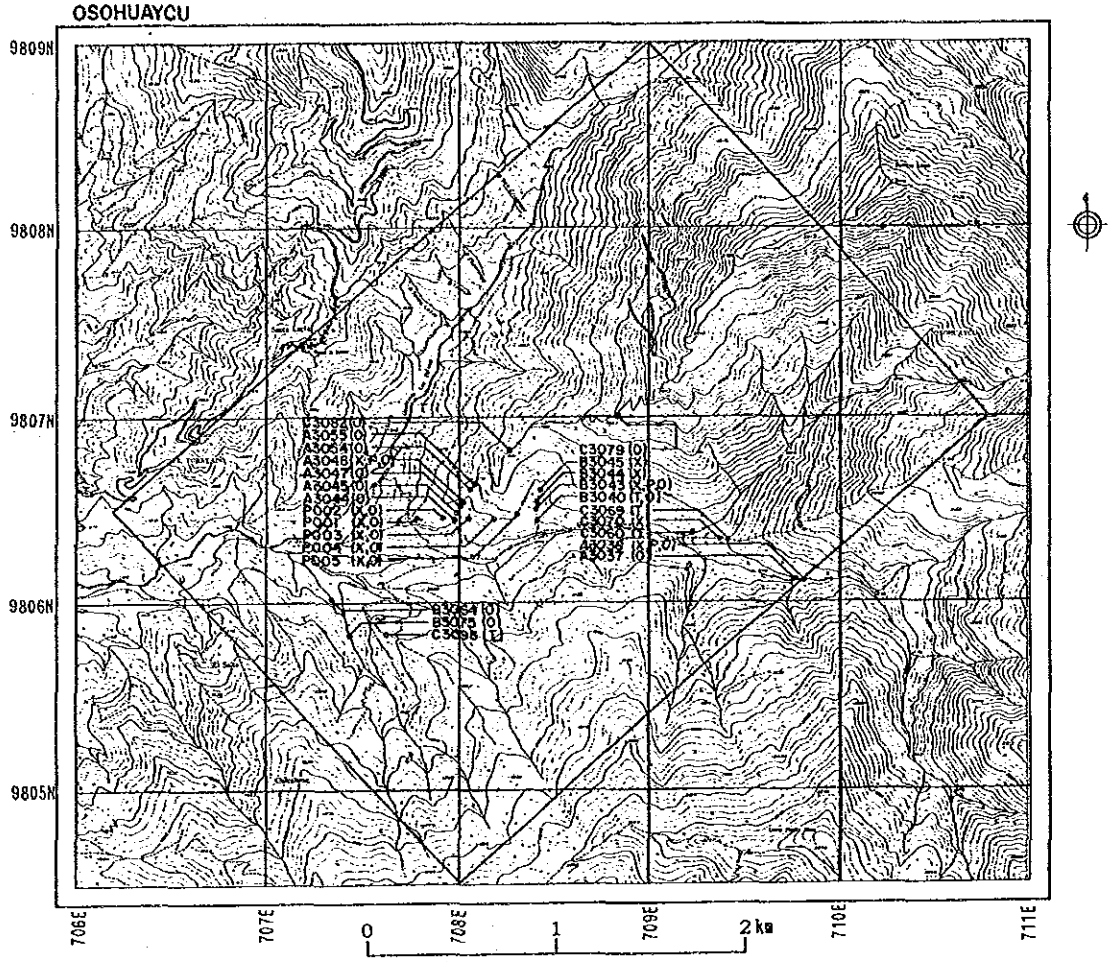


Sample No. : MJE - 8 (251.1m)
Occurrence : Py veinlets (~ 2mm wide), and Cp, Py, & Mt dissemination
Location : Telimbela

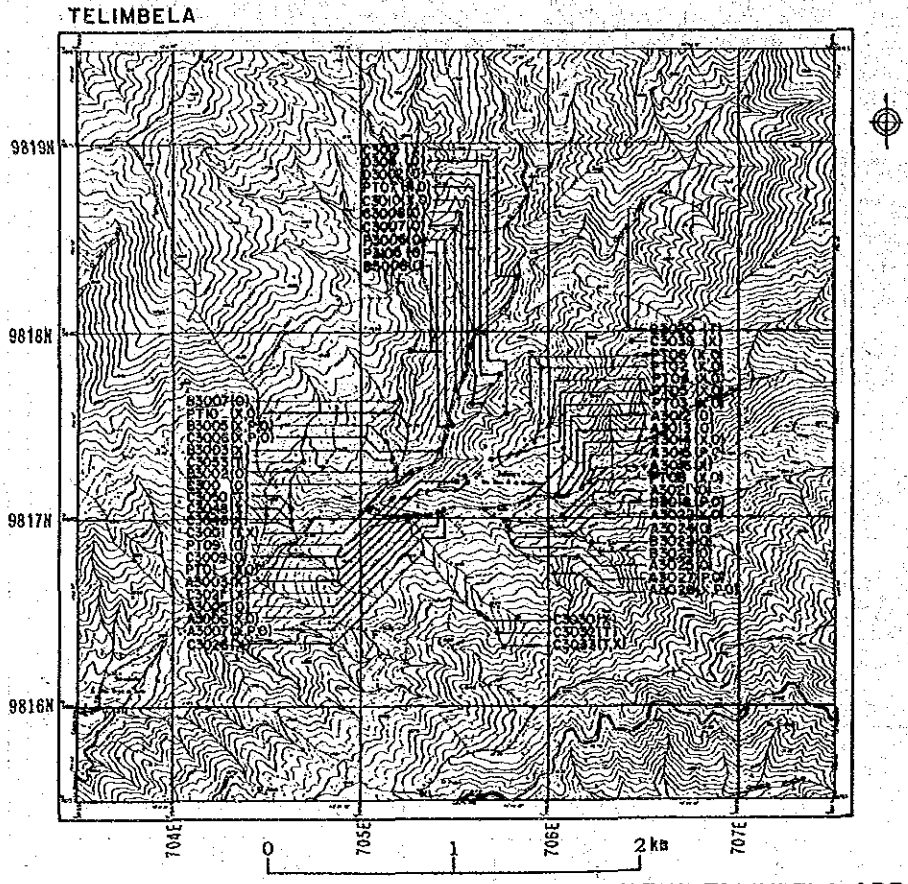


Sample No. : MJE - 9 (93.2m)
Occurrence : Cp & Py dissemination
Location : Telimbela

Fig.A-1 Location map of the sample tested

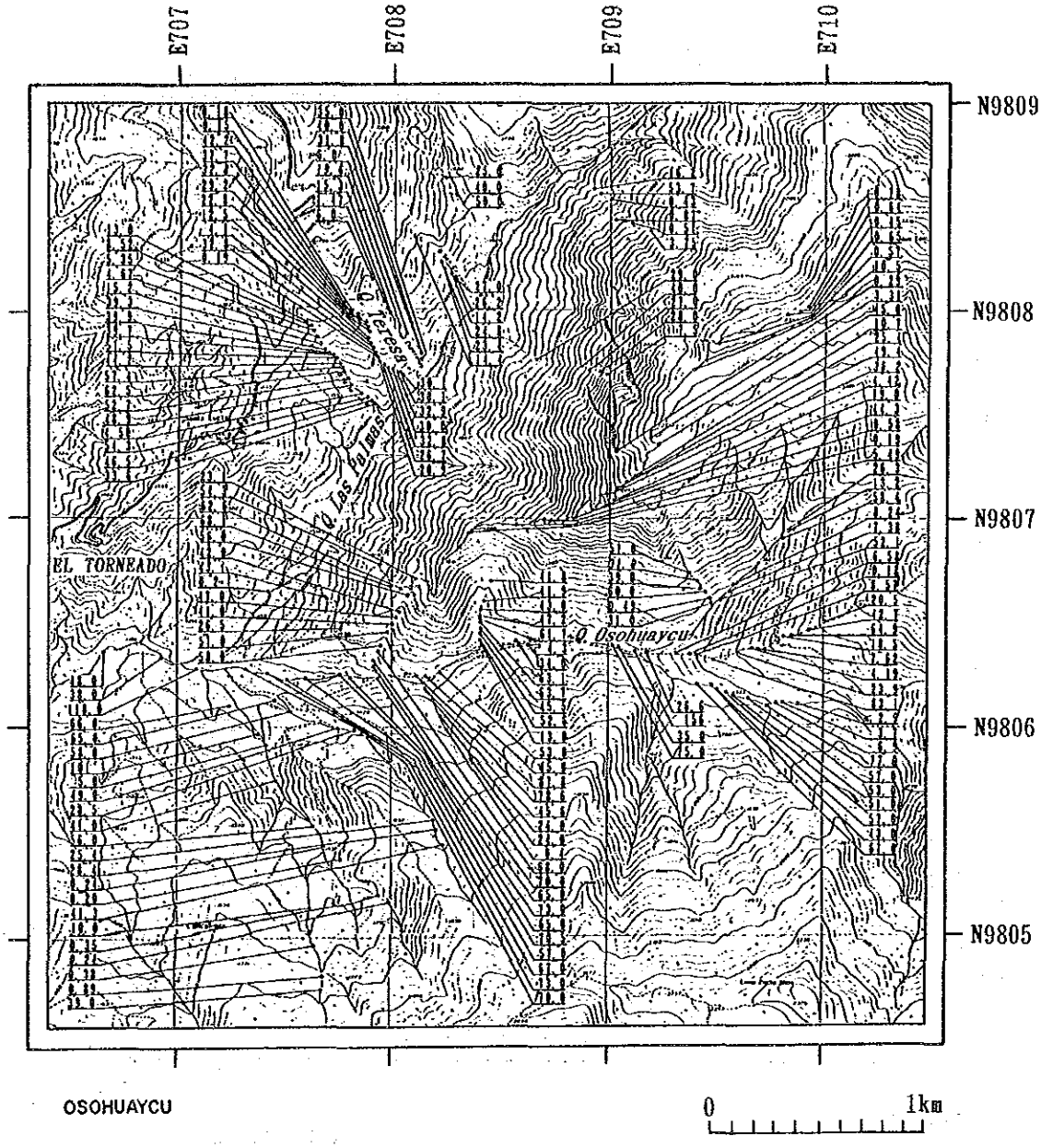


LOCATION MAP OF THE SAMPLES TESTED IN THE OSOHUAYCU AREA



LOCATION MAP OF THE SAMPLES TESTED IN THE TELIMBELA ARE

Fig.A-2 Distribution map of the measured magnetic susceptibility


E707
E708
E709
E710
N9809
N9808
N9807
N9806
N9805
Q. Las Palmas
EL TORNEADO
Q. Osohuaycu
OSOHUAYCU
0
1km

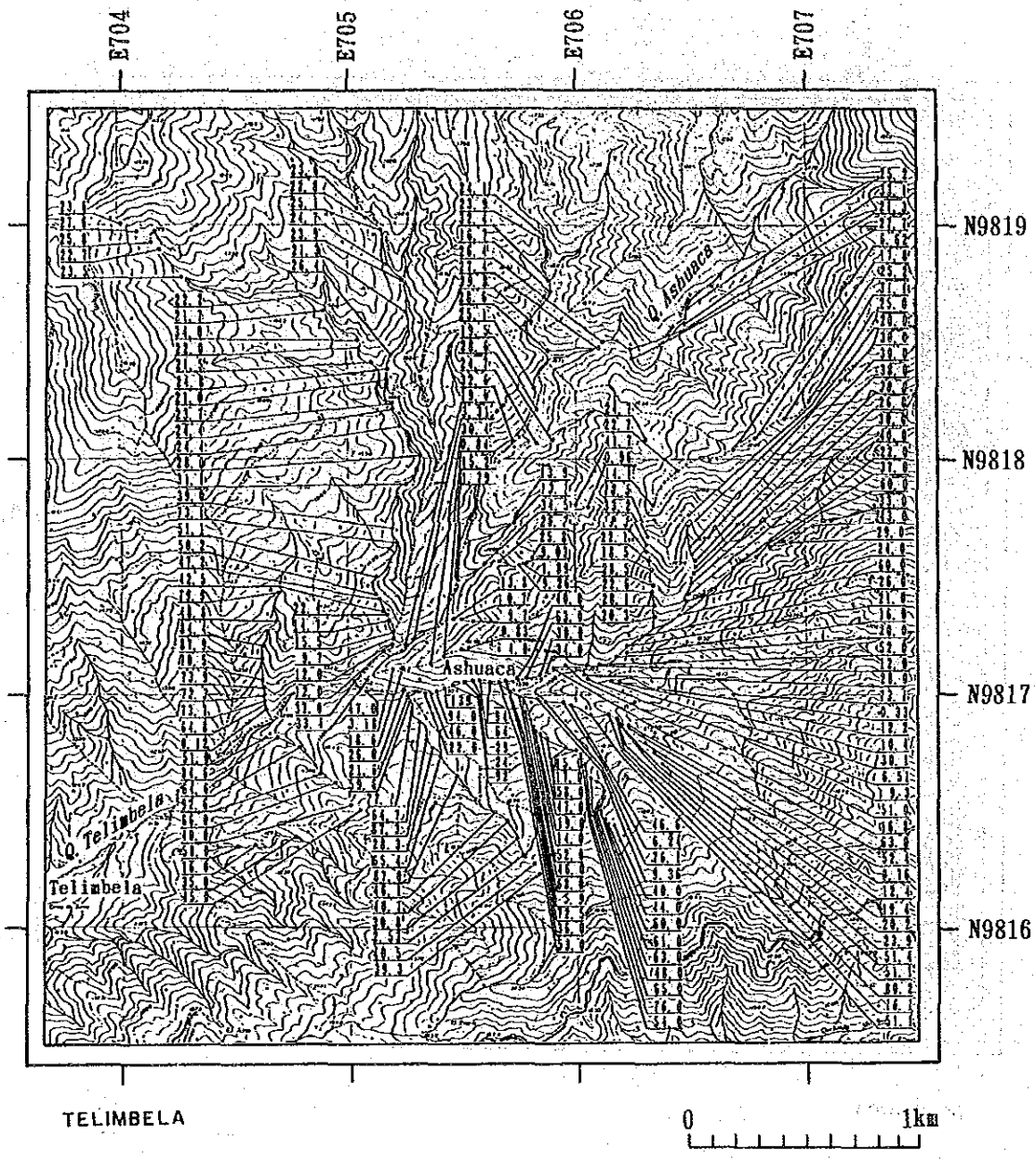
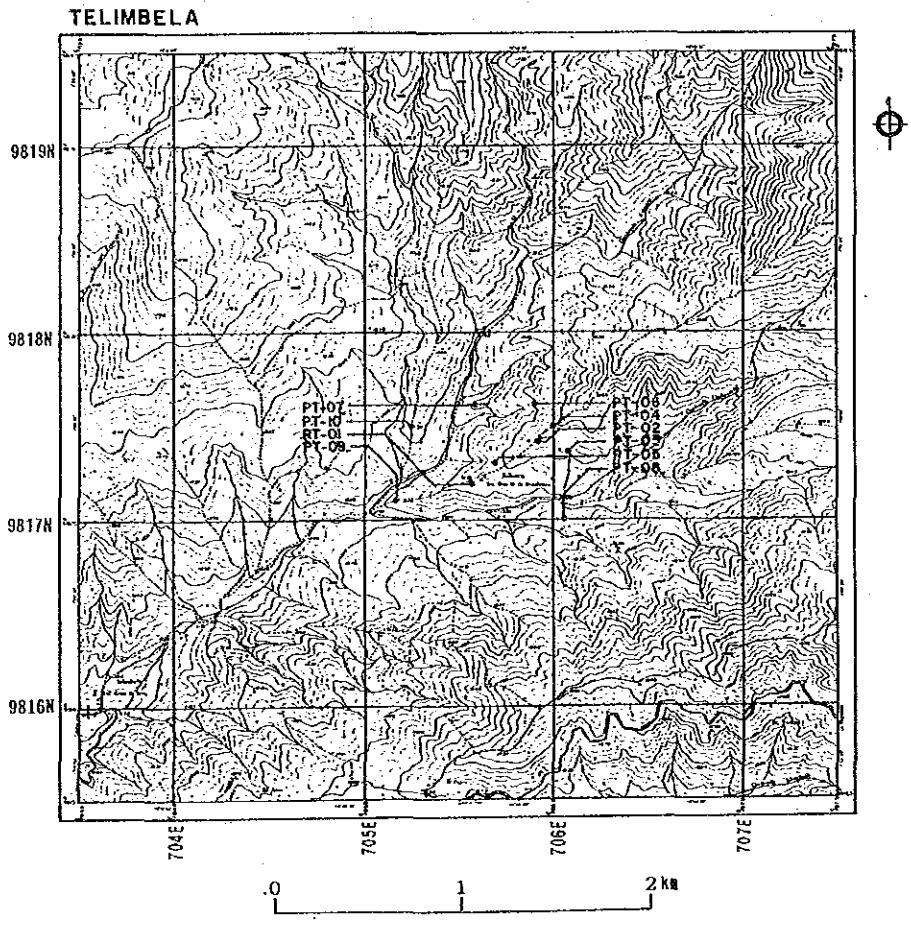
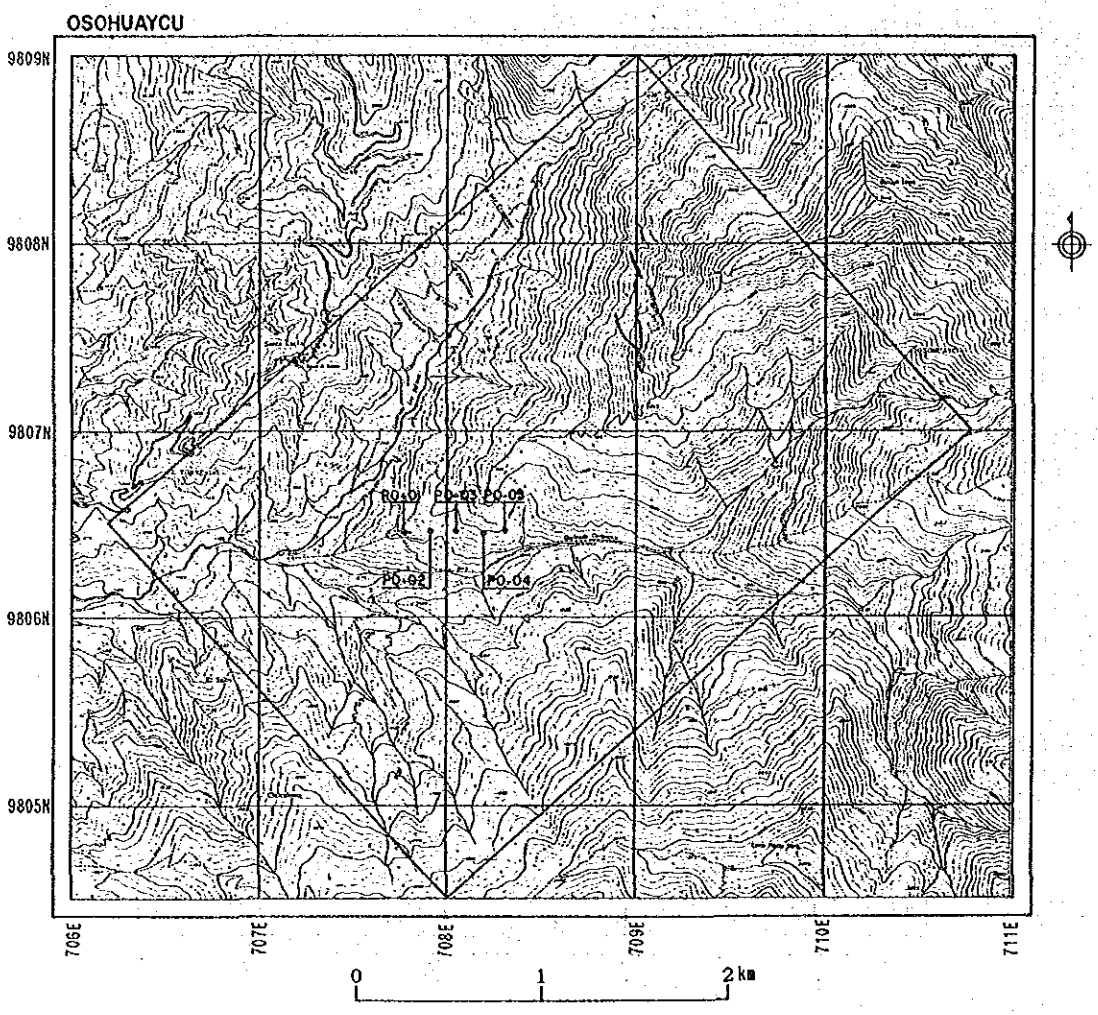
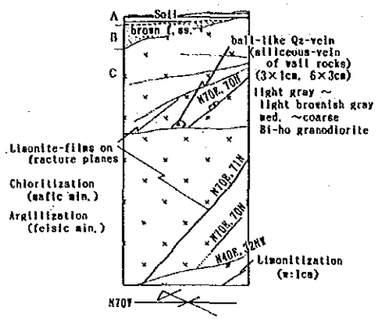

E704
E705
E706
E707
N9819
N9818
N9817
N9816
Q. Ashuaca
Ashuaca
Q. Telimbela
Telimbela
TELIMBELA
0
1km

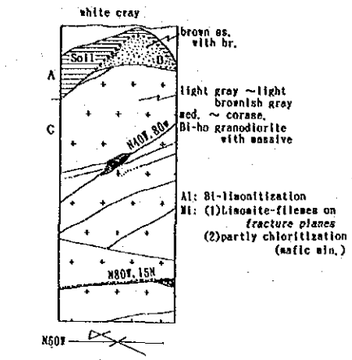
Fig.A-3 Location map of the pits tested


TELIMBELA
9819N
9818N
9817N
9816N
704E
705E
706E
707E
PT-07
PT-10
RT-01
PT-09
PT-06
PT-04
PT-02
PT-05
PT-08
0
1
2 km

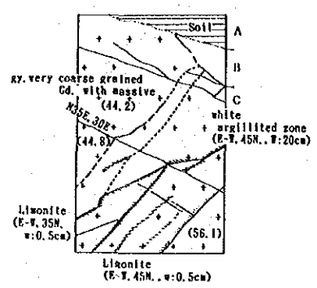

OSOHUAYCU
9809N
9808N
9807N
9806N
9805N
706E
707E
708E
709E
710E
711E
PO-01
PO-02
PO-03
PO-04
PO-05
0
1
2 km



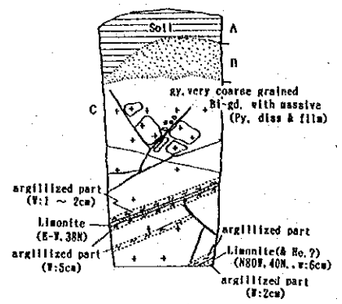
P O − 0 1



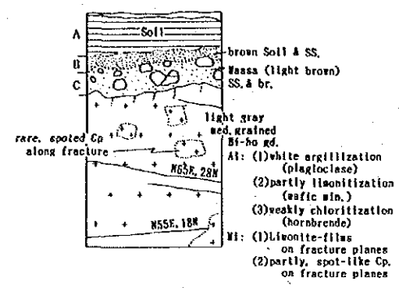
P O − 0 2



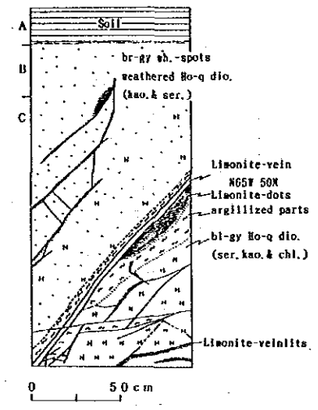
P O − 0 3



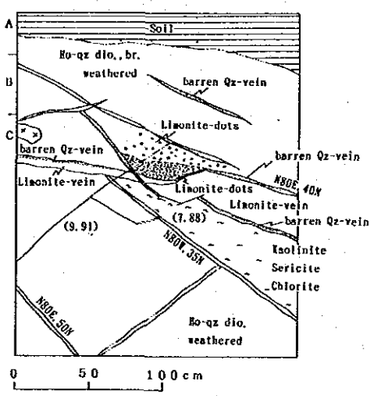
P O − 0 4



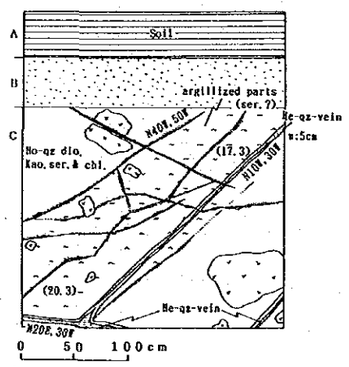
P O − 0 5



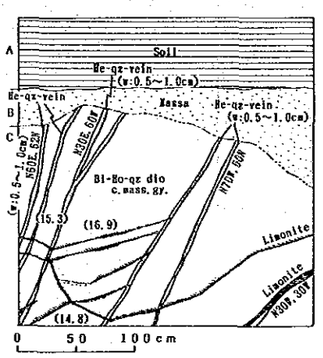
P T − 0 1



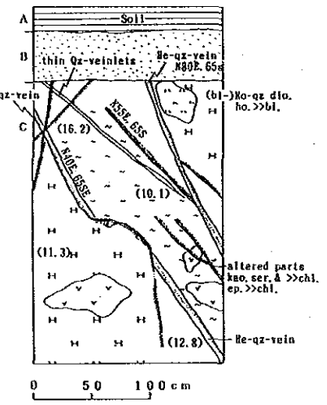
P T − 0 2



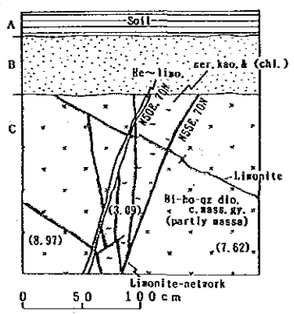
P T − 0 3



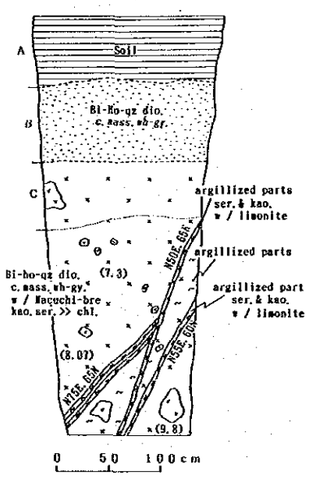
P T − 0 4



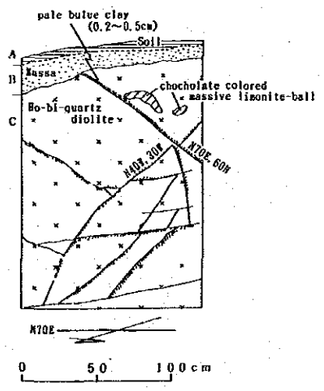
P T − 0 5



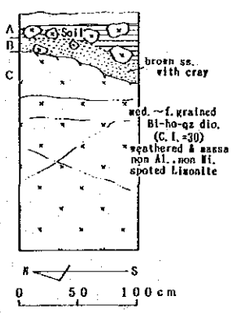
P T − 0 6



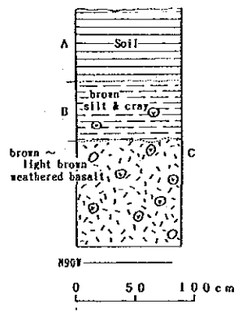
P T − 0 7



P T − 0 8

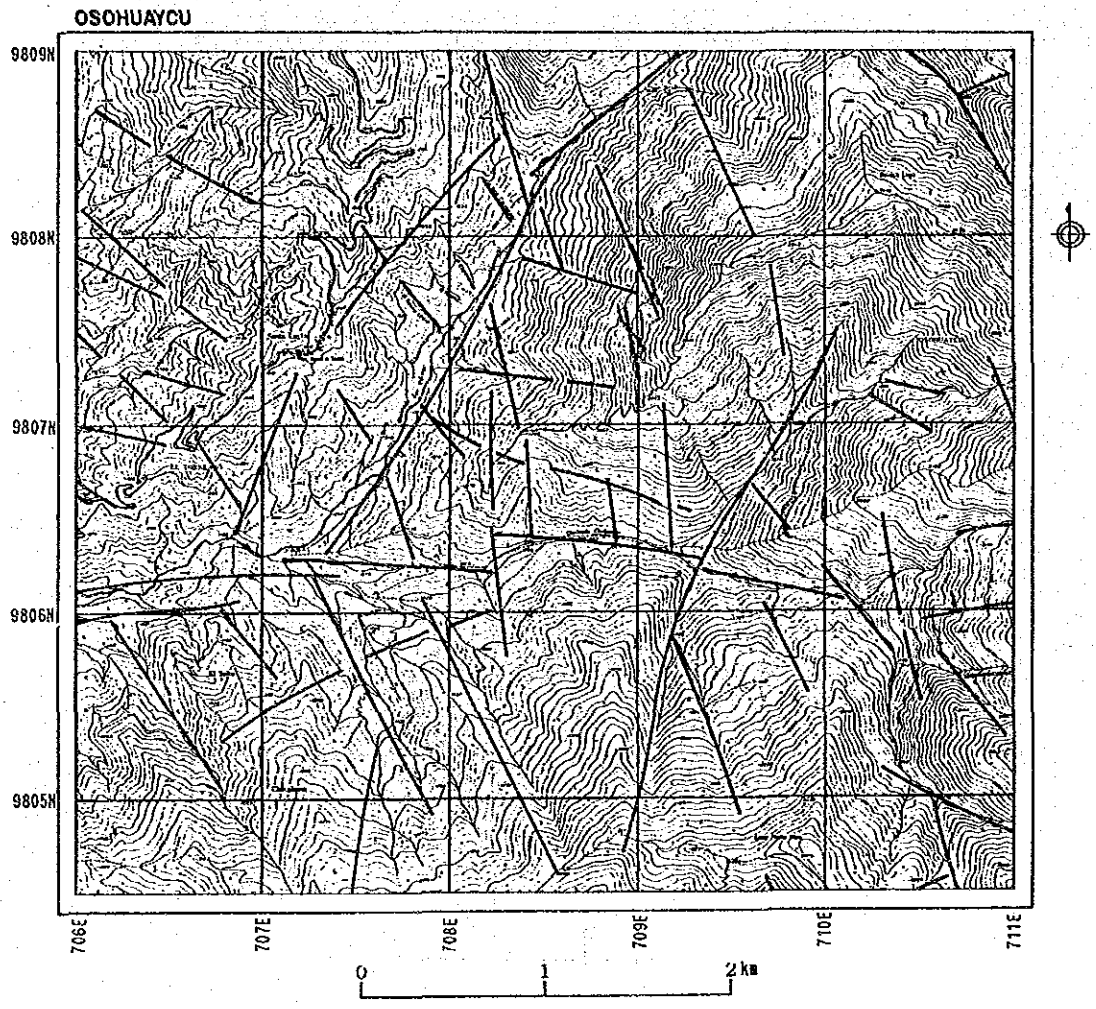


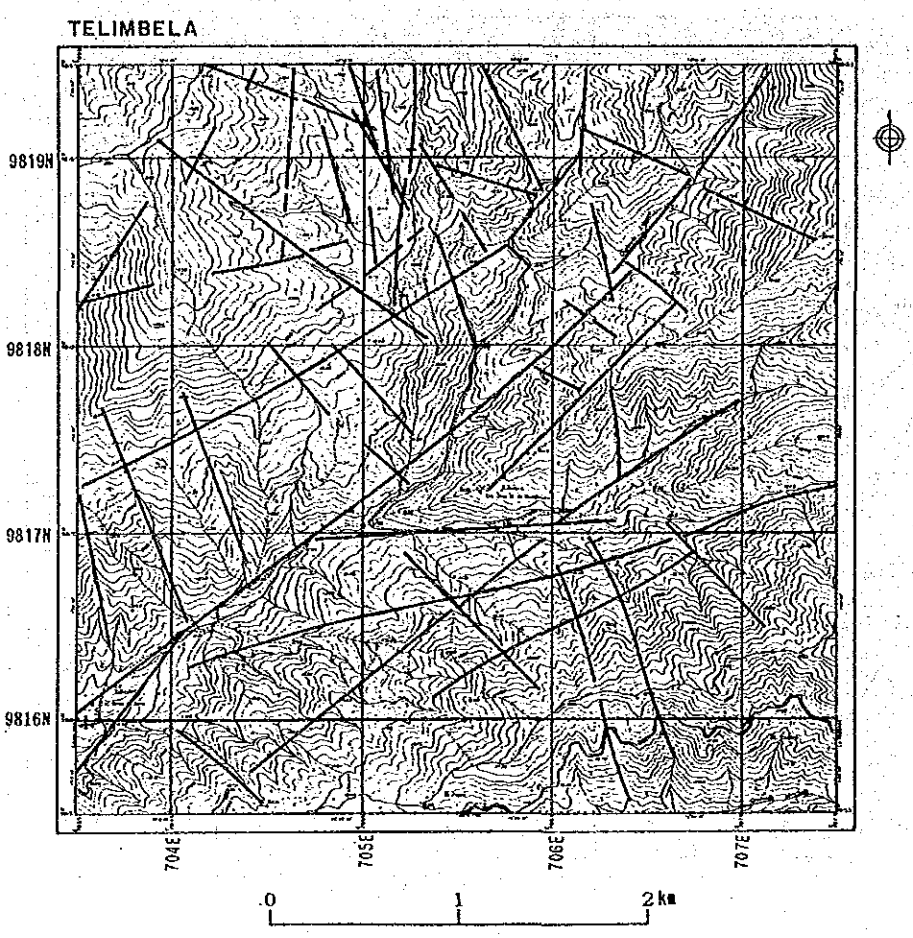
P T − 0 9

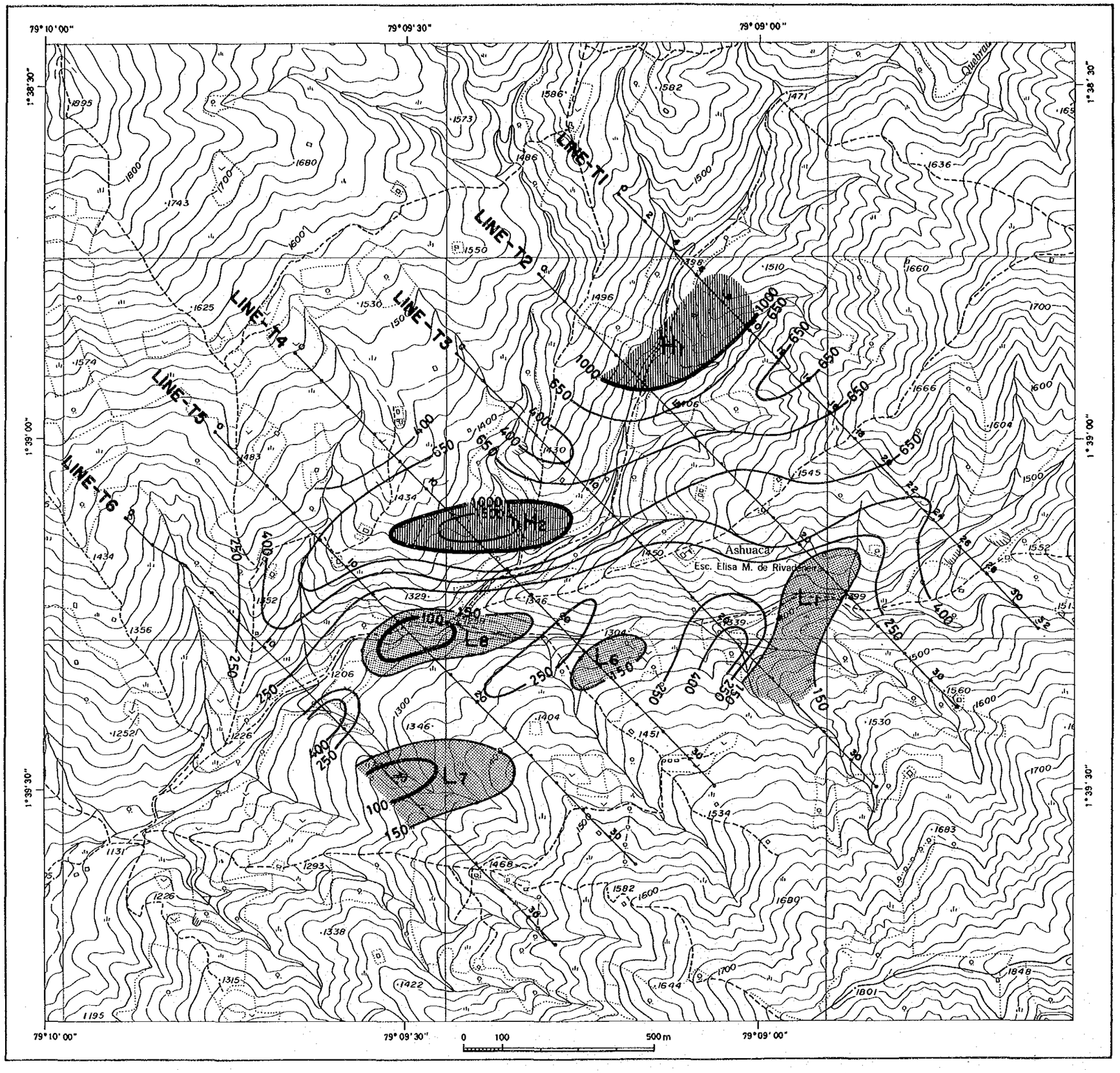


P T − 1 0

Fig.A-5 Interpretation map of lineaments on aerial photograph


OSOHUAYCU
9809N
9808N
9807N
9806N
9805N
706E
707E
708E
709E
710E
711E
0
1
2 km


TELIMBELA
9819N
9818N
9817N
9816N
704E
705E
706E
707E
0
1
2 km



LEGEND

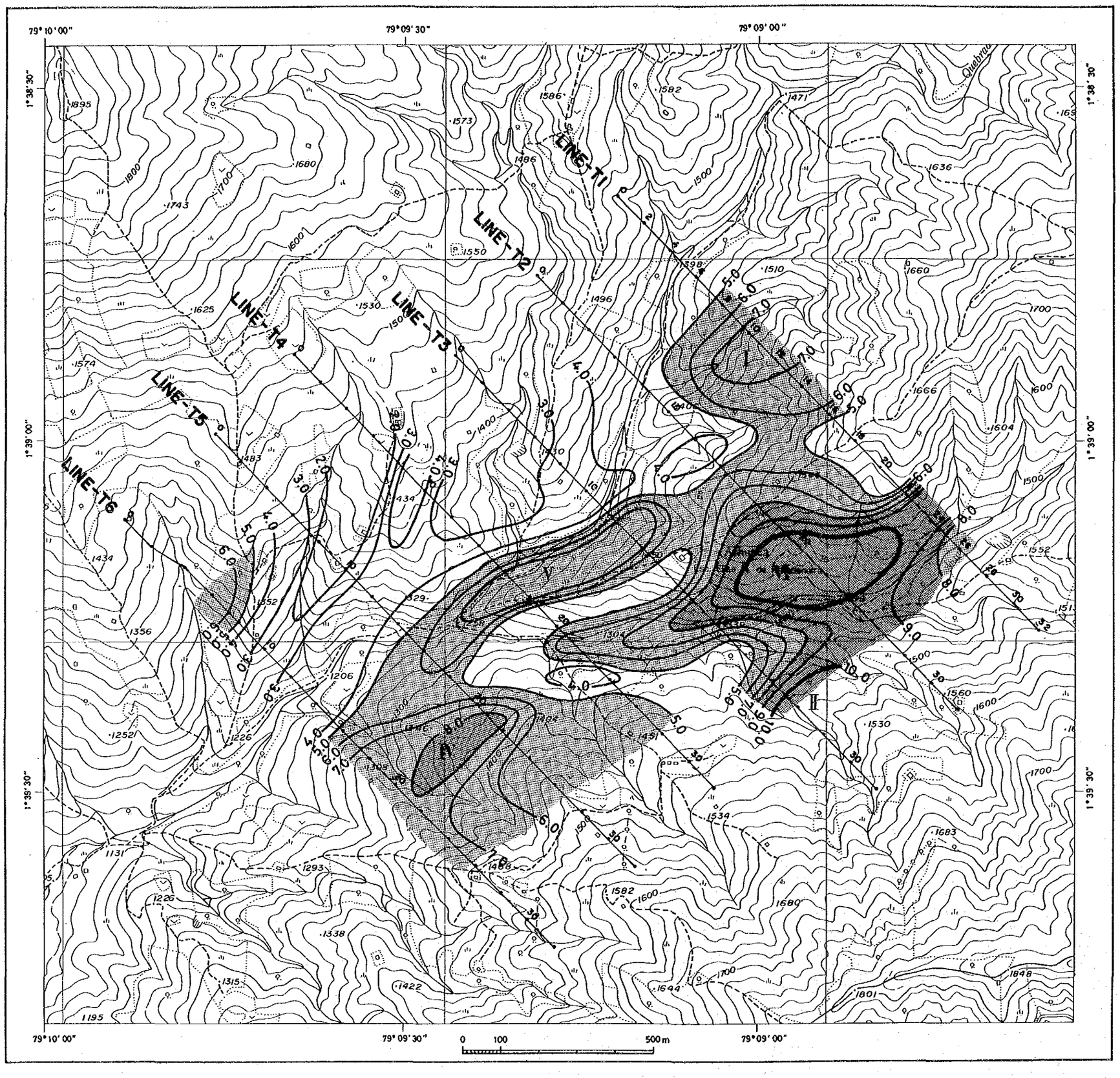
1,000 ≦ ρa

150 ≦ ρa < 1,000

ρa < 150

UNIT : Ω·m

Fig.A-6 Apparent resistivity plan map (n=5) of the Telimbela area



LEGEND

8.0 ≦ PFE

5.0 ≦ PFE < 8.0

PFE < 5.0

UNIT : %

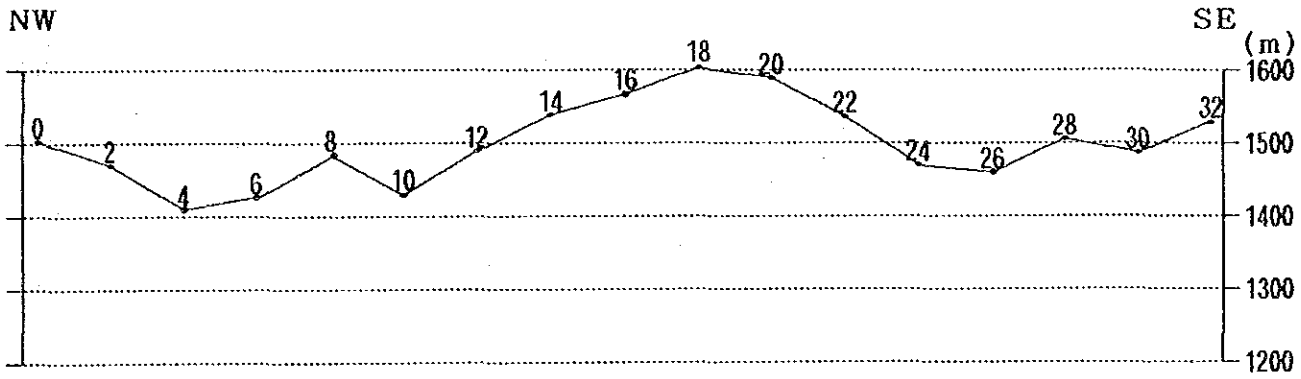
Fig.A-7 Frequency effect plan map (n=5) of the Telimbela area

PSEUDO SECTION OF IP SURVEY

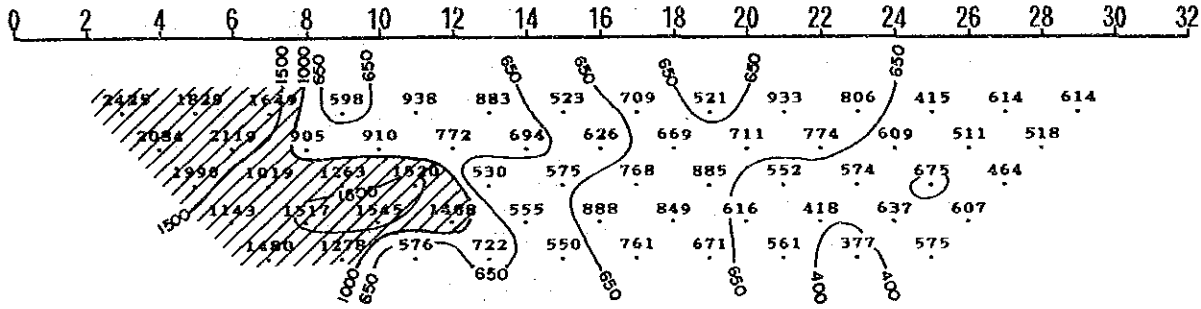
TELIMBELA AREA, BOLIVAR, ECUADOR

LINE T-1

TOPOGRAPHICAL SECTION (m)



APPARENT RESISTIVITY (Ω·m)



PERCENT FREQUENCY EFFECT (%)

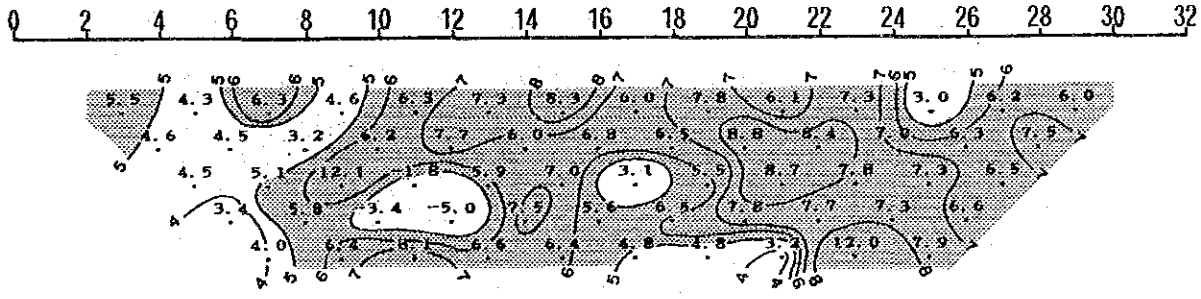


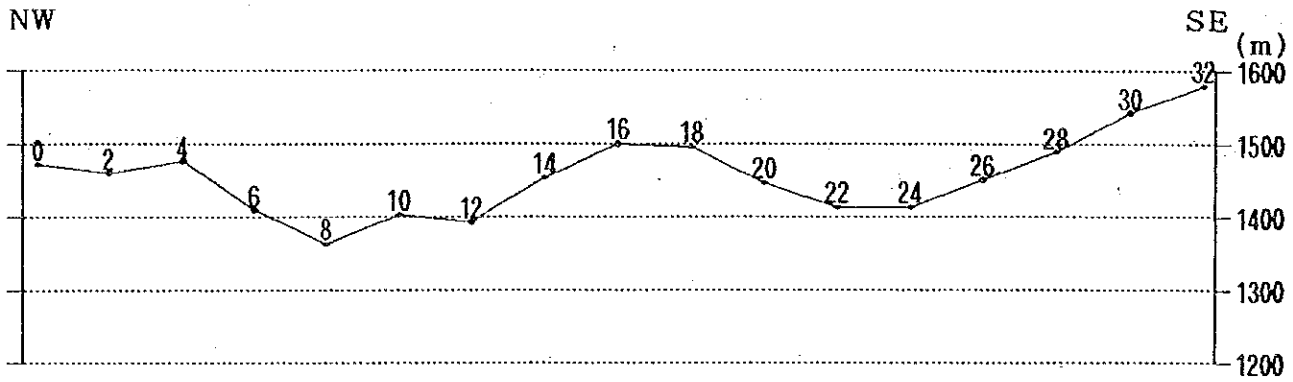
Fig.A-8-1 Psedo-section of lines T-1 of the Telimbela area

PSEUDO SECTION OF IP SURVEY

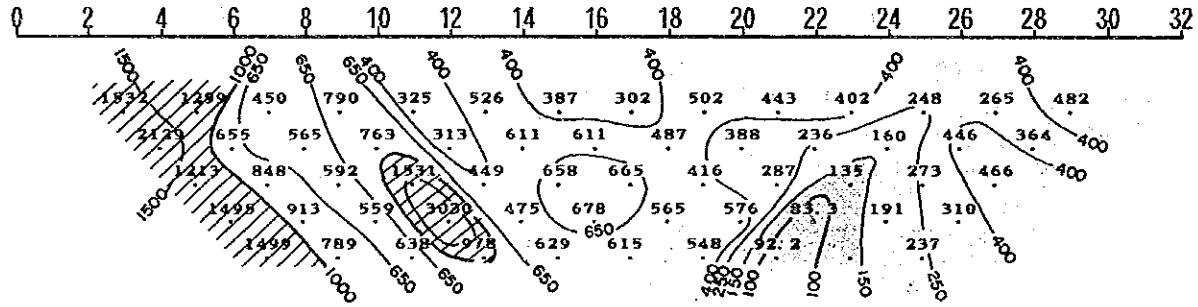
TELIMBELA AREA, BOLIVAR, ECUADOR

LINE T-2

TOPOGRAPHICAL SECTION (m)



APPARENT RESISTIVITY (Ω·m)



PERCENT FREQUENCY EFFECT (%)

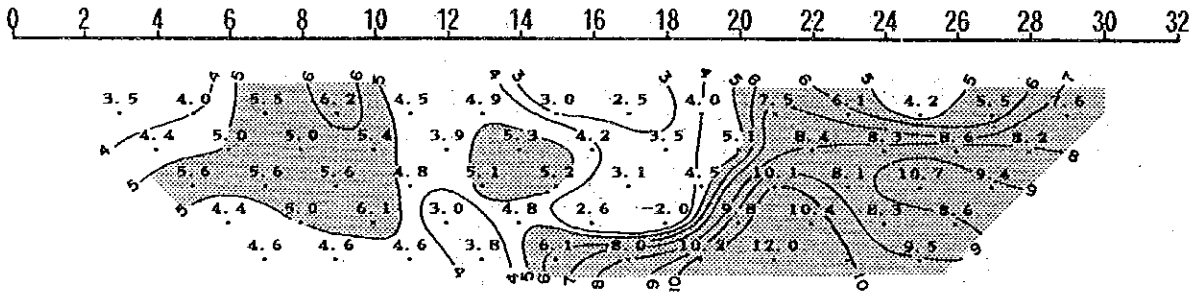


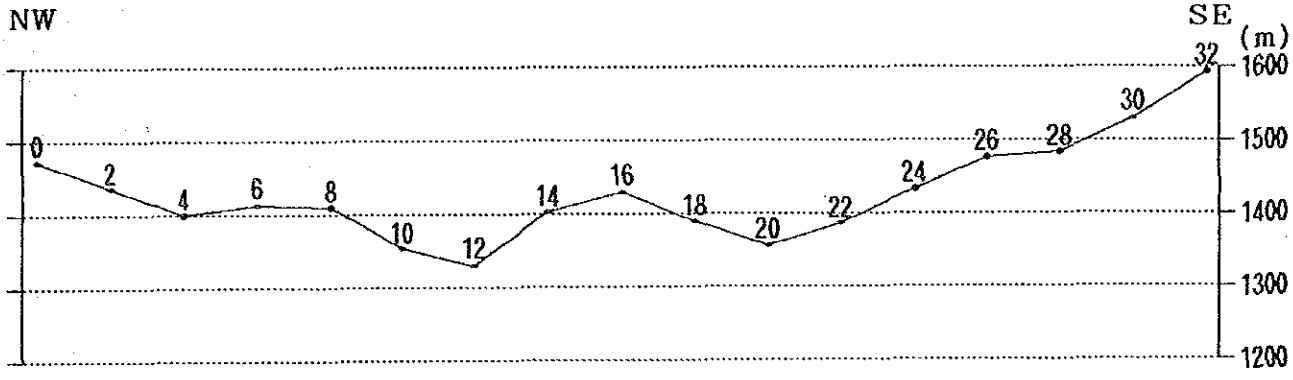
Fig.A-8-2 Psedo-section of lines T-2 of the Telimbela area

PSEUDO SECTION OF IP SURVEY

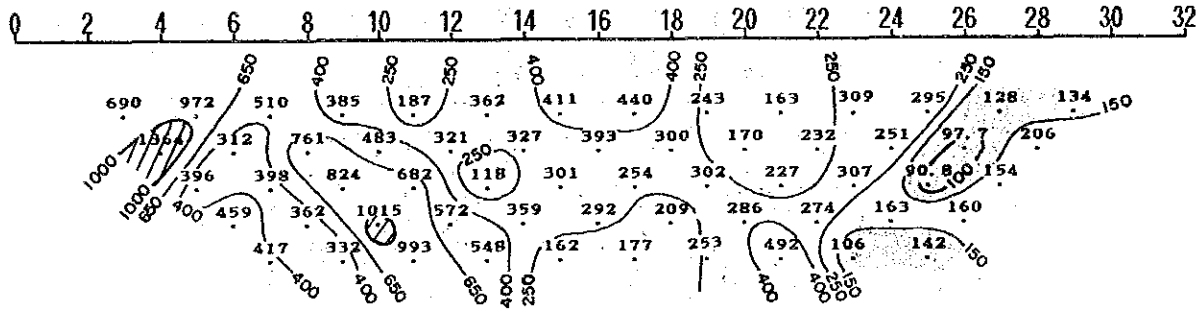
TELIMBELA AREA, BOLIVAR, ECUADOR

LINE T-3

TOPOGRAPHICAL SECTION (m)



APPARENT RESISTIVITY (Ω·m)



PERCENT FREQUENCY EFFECT (%)

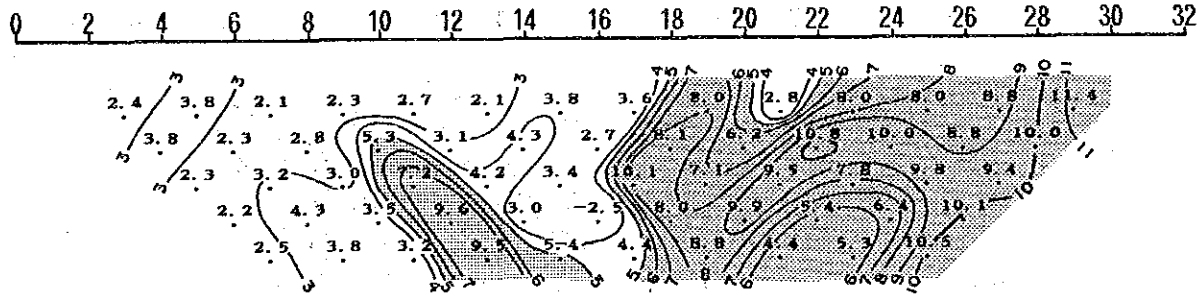


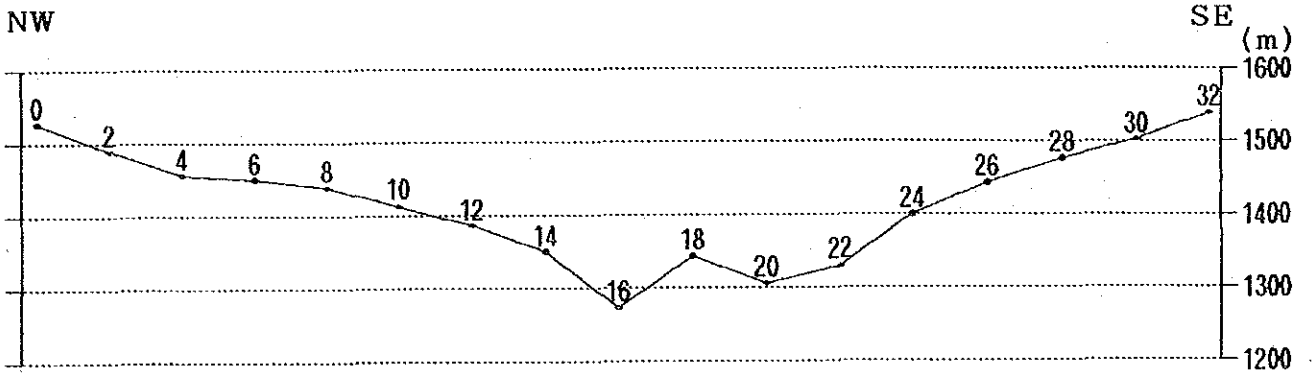
Fig.A-8-3 Psedo-section of lines T-3 of the Telimbela area

PSEUDO SECTION OF IP SURVEY

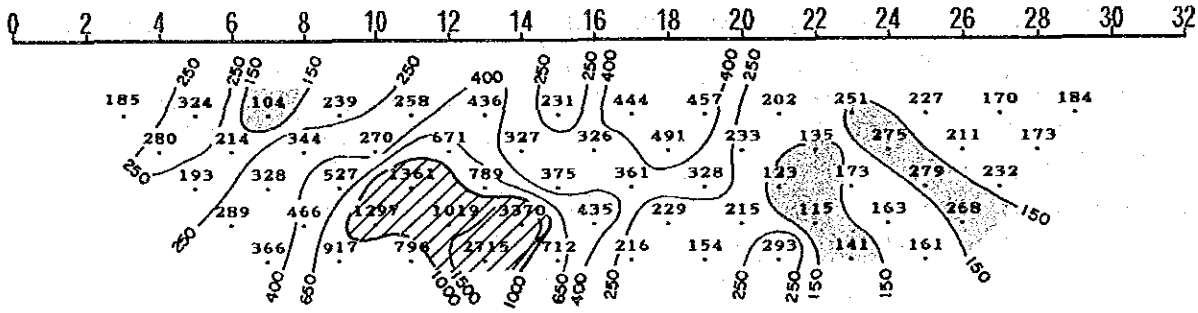
TELIMBELA AREA, BOLIVAR, ECUADOR

LINE T-4

TOPOGRAPHICAL SECTION (m)



APPARENT RESISTIVITY (Ω·m)



PERCENT FREQUENCY EFFECT (%)

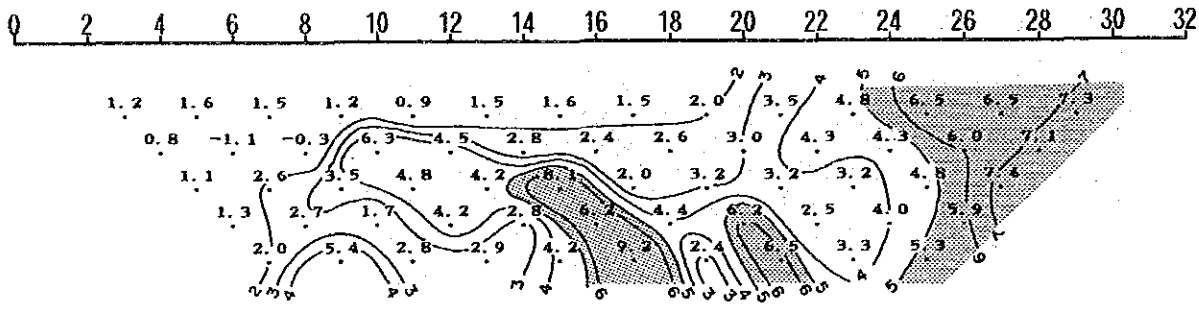


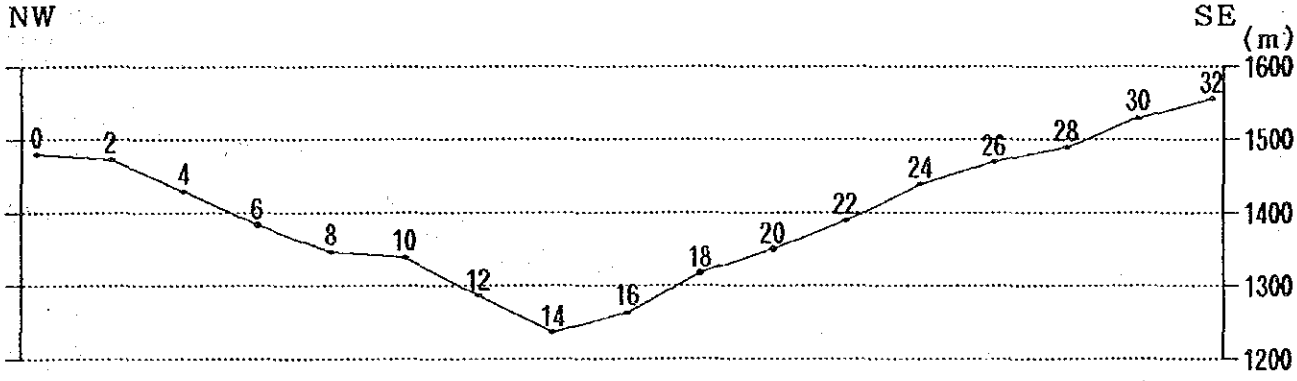
Fig.A-8-4 Psedo-section of lines T-4 of the Telimbela area

PSEUDO SECTION OF IP SURVEY

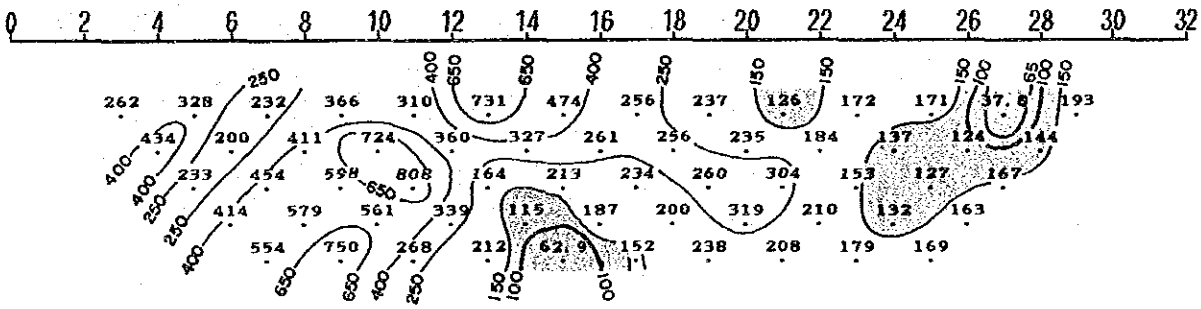
TELIMBELA AREA, BOLIVAR, ECUADOR

LINE T-5

TOPOGRAPHICAL SECTION (m)



APPARENT RESISTIVITY (Ω·m)



PERCENT FREQUENCY EFFECT (%)

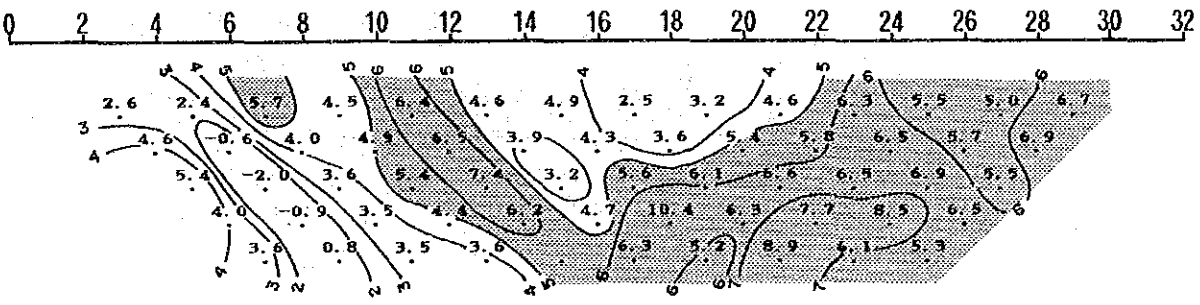


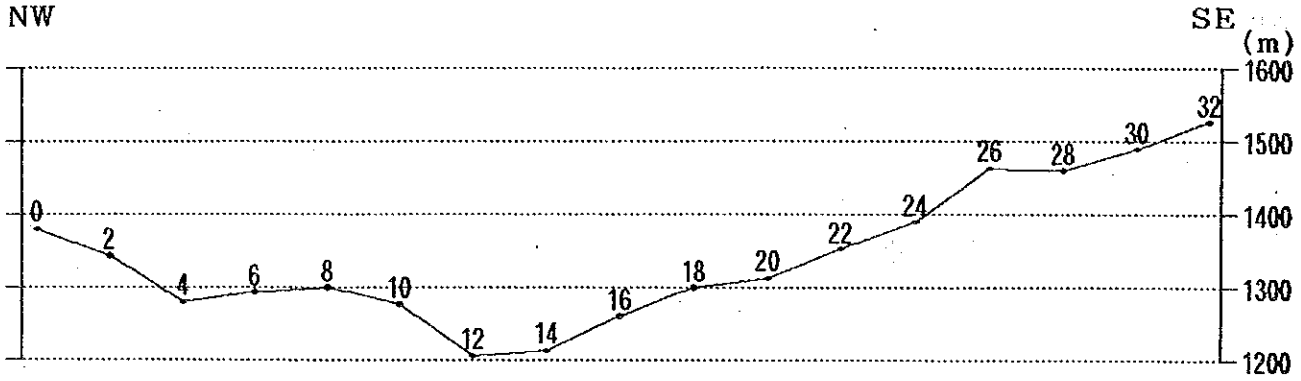
Fig.A-8-5 Psedo-section of lines T-5 of the Telimbela area

PSEUDO SECTION OF IP SURVEY

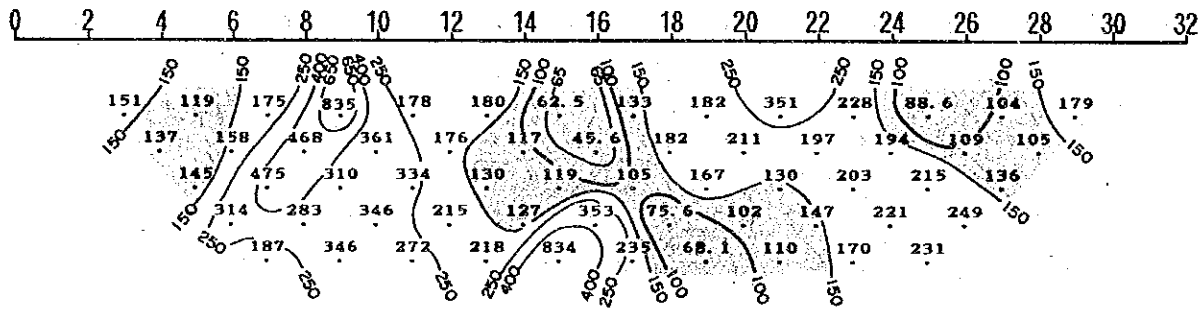
TELIMBELA AREA, BOLIVAR, ECUADOR

LINE T-6

TOPOGRAPHICAL SECTION (m)



APPARENT RESISTIVITY (Ω·m)



PERCENT FREQUENCY EFFECT (%)

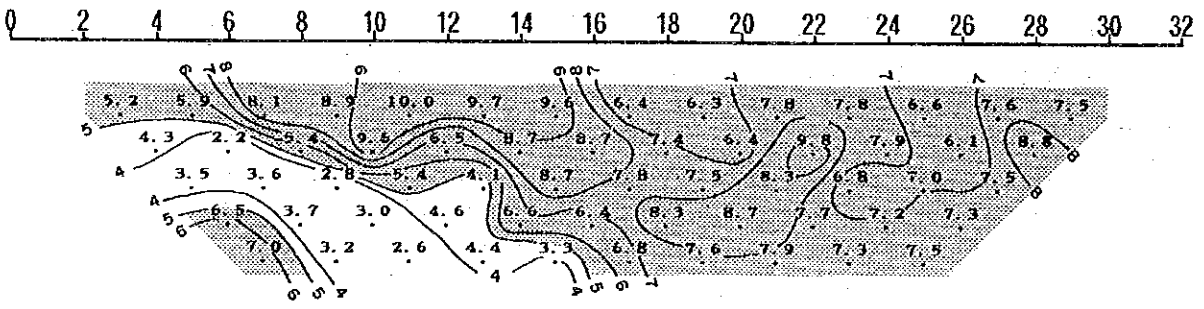
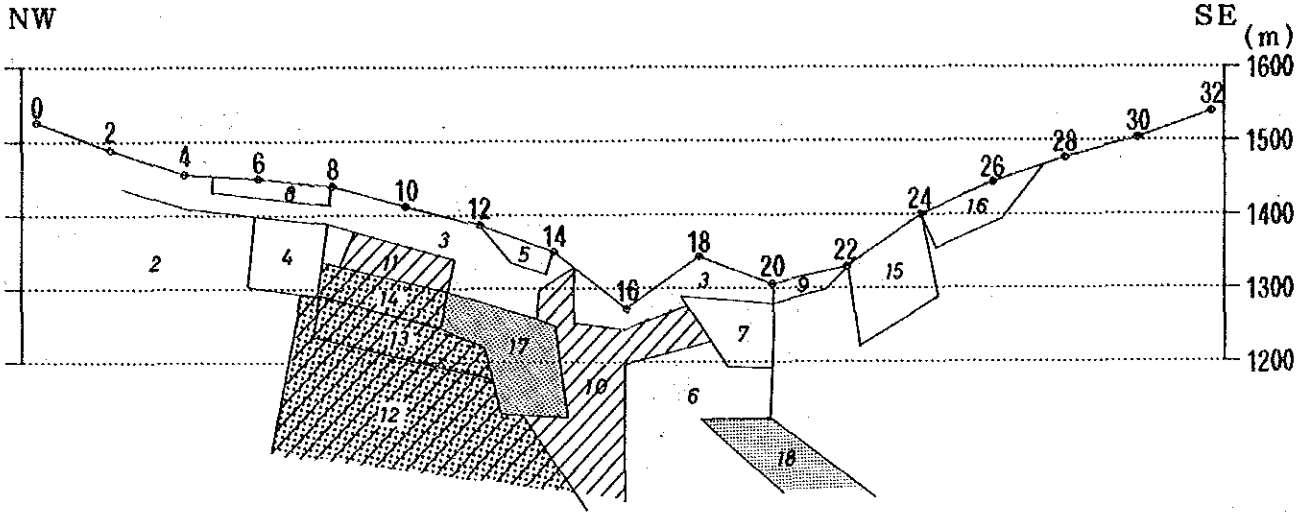


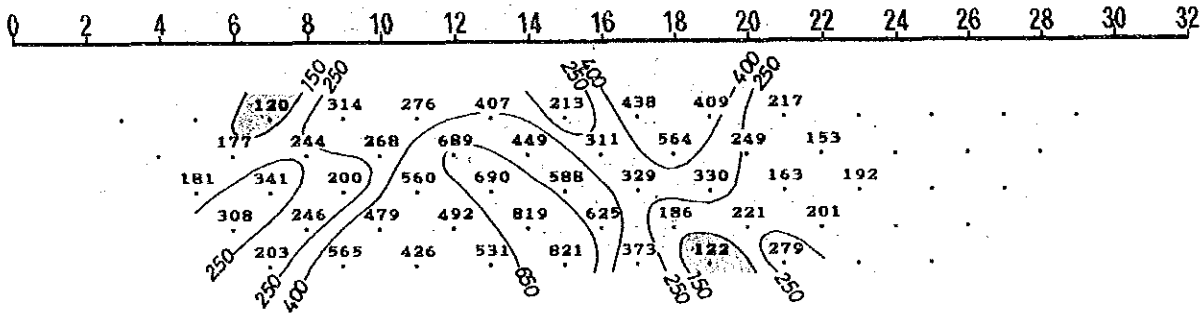
Fig.A-8-6 Psedo-section of lines T-6 of the Telimbela area

ASSUMED MODEL

CODE NUMBER :	1	2	3	4	5	6	7	8	9
RESISTIVITY (ohm-m) :	200.0	400.0	230.0	30.00	100.0	300.0	500.0	500.0	350.0
P.F.E. (%) :	4.00	1.50	.800	1.50	1.50	1.50	1.80	2.00	2.80
CODE NUMBER :	10	11	12	13	14	15	16	17	18
RESISTIVITY (ohm-m) :	1000.	1500.	8000.	4000.	2000.	200.0	100.0	200.0	200.0
P.F.E. (%) :	2.50	2.80	5.00	20.0	25.0	5.00	5.50	13.0	20.0



APPARENT RESISTIVITY (Ω·m)



PERCENT FREQUENCY EFFECT (%)

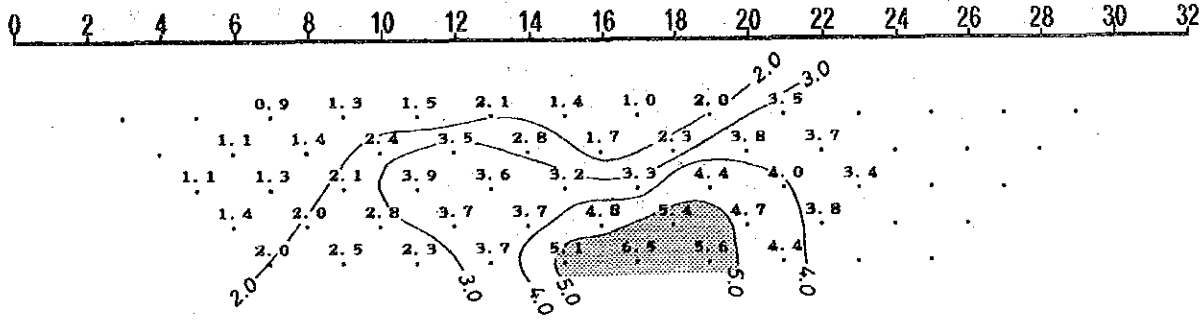
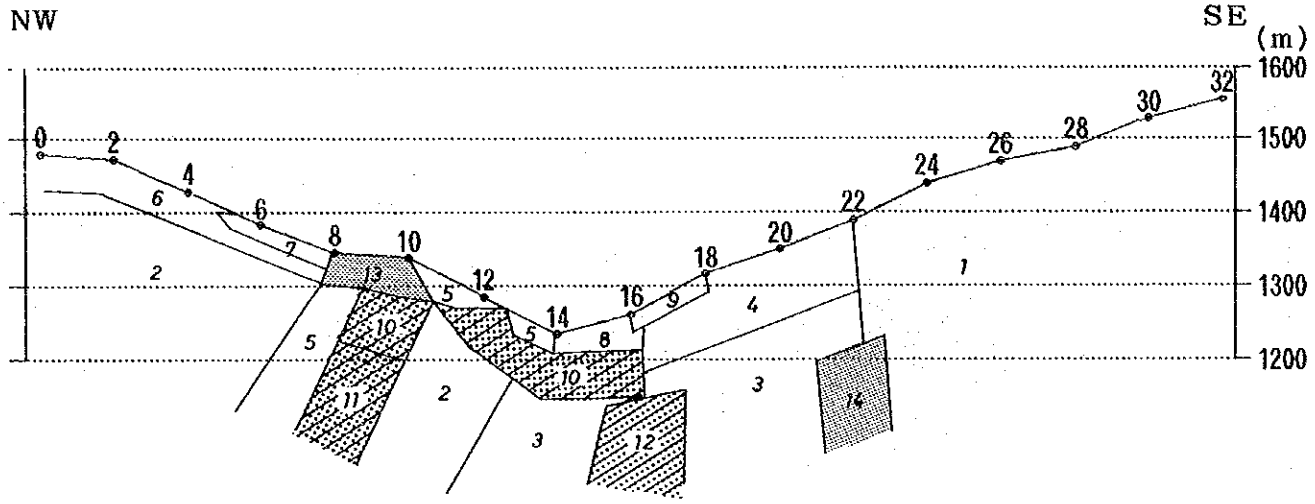


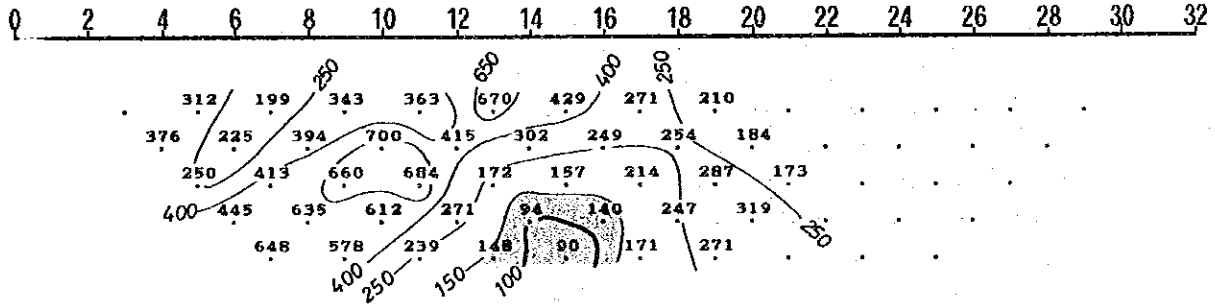
Fig.A-9-1 Analyzed sections of lines T-4 of the Telimbela area

ASSUMED MODEL

CODE NUMBER :	1	2	3	4	5	6	7	8
RESISTIVITY (ohm-m) :	250.0	400.0	60.00	230.0	350.0	250.0	350.0	600.0
P.F.E. (%) :	5.00	2.00	4.00	2.50	3.50	4.00	4.50	5.00
CODE NUMBER :	9	10	11	12	13	14		
RESISTIVITY (ohm-m) :	350.0	1200.	1300.	1200.	150.0	200.0		
P.F.E. (%) :	6.00	5.50	15.0	15.0	7.50	20.0		



APPARENT RESISTIVITY (Ω·m)



PERCENT FREQUENCY EFFECT (%)

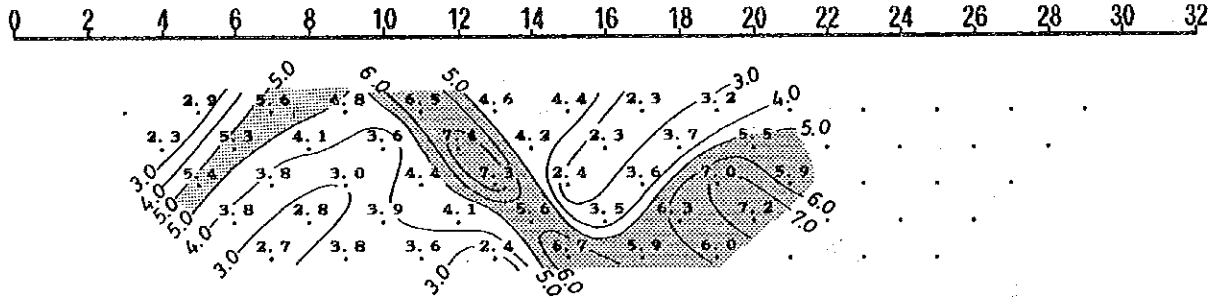
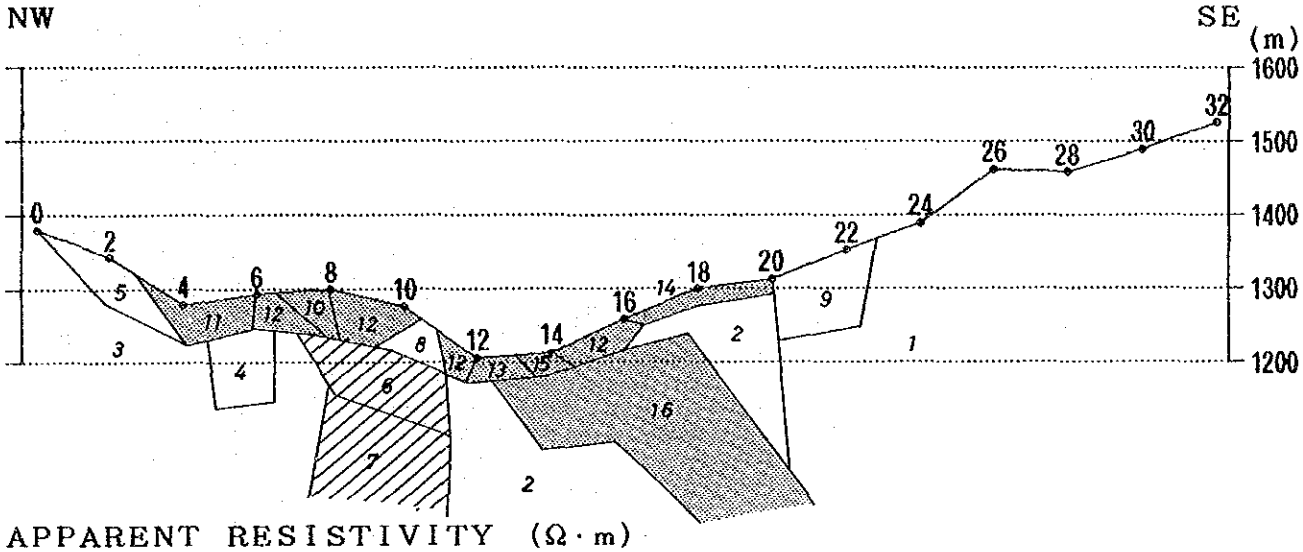


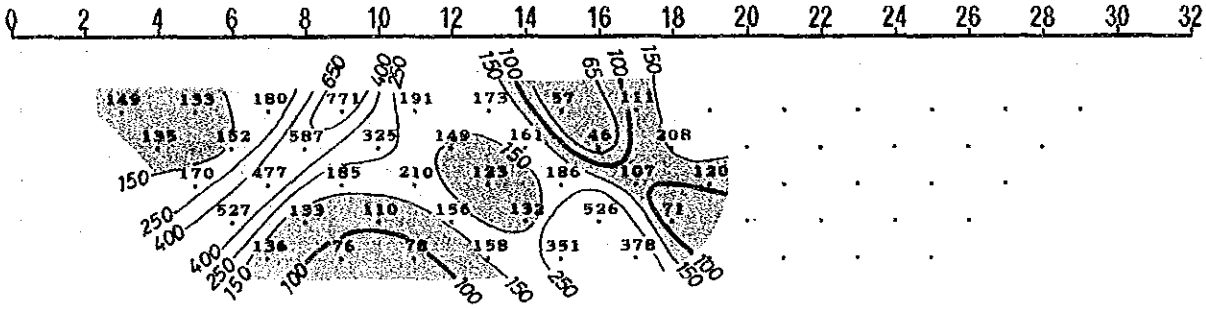
Fig.A-9-2 Analyzed sections of lines T-5 of the Telimbela area

ASSUMED MODEL

CODE NUMBER :	1	2	3	4	5	6	7	8
RESISTIVITY (ohm-m) :	200.0	200.0	200.0	100.0	100.0	2000.	5000.	900.0
P.F.E. (%) :	5.00	3.50	2.50	3.00	4.50	3.00	1.00	10.0
CODE NUMBER :	9	10	11	12	13	14	15	16
RESISTIVITY (ohm-m) :	400.0	300.0	230.0	180.0	180.0	100.0	80.00	60.00
P.F.E. (%) :	6.50	10.0	10.5	10.5	12.5	7.00	11.0	9.00



APPARENT RESISTIVITY (Ω·m)



PERCENT FREQUENCY EFFECT (%)

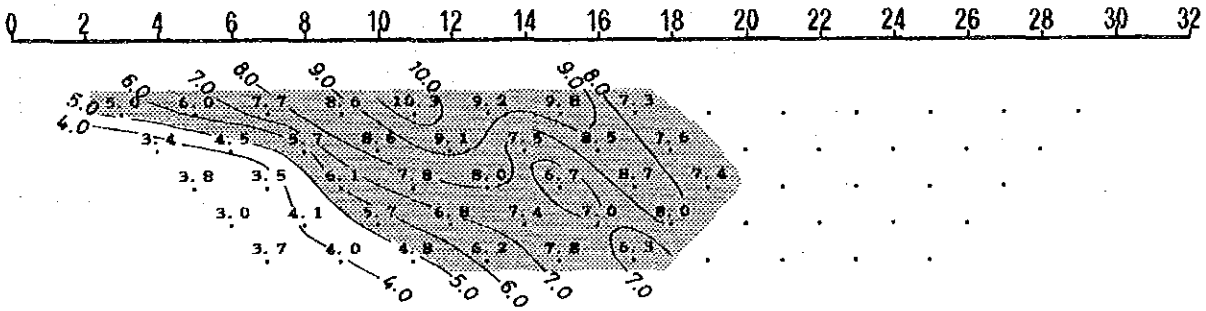


Fig.A-9-3 Analyzed sections of lines T-6 of the Telimbela area

Table A-1 Microscopic observations (thin section)

No.	Sample No.	Location: Area	Location: Coordinates E	Location: Coordinates N	Geological Unit*1	Rock Name	Texture	Minerals: Quartz	Potash feldspar	Plagioclase	Biotite	Hornblende	Pyroxene	Apatite	Allanite	Sphene	Zircon	Alteration Minerals, Minerals in Contact Zone etc.: Quartz	Albite	Biotite	Muscovite (Secondary origin)	Epidote	Actinolite	Chlorite	Calcite	Leucoxene	Smectite	Sphene	Garnet	Hematite	Limonite	Opaque minerals
1	B3040	Oshuayco	708.40	9804.45	Gd	Biot.-hornb. quartz diorite	holocrystalline	●		◎	○	○	·		·				·	·	·		·	·							●
2	B3043		708.41	9806.53	Gd	Hornb-(biot.) quartz diorite	holosrystalline, altered by biot.	○		◎	·									◎			·	·							·	●
3	C3060		709.18	9806.36	AAn	Altered hornb. andesite (?)	porphyritic			◎	●	·					○	·	○	●		·	·							·	·
4	C3069		708.41	9806.35	ATf	Altered dacitic lapilli tuff (?)	with lithic fragments (?)	●									◎		·	○											·
5	C3098		707.61	9805.85	ATf	Garnet skarn	massive, granular.															●						◎			
6	MJE - 7 267.30		707.88	9805.68	AAn	Contact-metamorphosed Hornblende Andesite	porphyritic	○		◎		○								○		·	●								●
7	MJE - 7 88.00		707.88	9805.68	Tf	Garnet skarn with calcite veinlets	granular aggregate	○														○	●	○				◎			
8	C3020	Telimbela	706.49	9817.64	Qd	Hornb.-biot quartz diorite	holocrystalline	○		◎	○	○	·		·				·				·	●							●
9	C3032		705.73	9816.39	Di	Biot.-hornb. quartz diorite	holocrystalline, with preferred orientation	●		◎	○	○	·		·						·		·	●		·	·				·
10	C3001		705.03	9817.05	QD	Hornb.-(biot) quartz diorite	holocrystalline	○		◎		·	·						·				·	●	○		·	·			●
11	MJE - 8 55.00		705.40	9817.17	HQd	Biotite-granodicrite	holocrystalline sheared	○	●	◎	○		·						●	◎	○		·	●	●	·					●
12	MJE - 8 119.00		705.40	9817.17	HQd	Biotite-granodicrite	holocrystalline sheared	○	○	◎									○		●		○	○		·					●
13	MJE - 9 100.00		705.67	9817.26	HQd	Hornblende-biotite quartz diorite	holocrystalline sheared	○		◎		○	·										●	○							●
14	C3050		705.77	9816.31	CQd	Biot. quartzdiorite (party sericitized)	holocrystalline	○		◎	○		·	·	·				·		●		·	○			·				●
15	C3050		704.64	9817.07	An	Contact-metamorphosed hornb.andesite (?)	blastoporphyritic, paetly granoblastic			◎	●						○			○		○	·	●							·
16	C3053		704.70	9817.31	Tf	Contact-metamorphosed basic tuff (?)	partly granoblastic										○	●			◎	○	○	·							●

◎>○>●>·

*1 Unit corresponding to those used in Geological Map

AAn : Andesitic part of Macuchi Formation
ATf : Tuffaceous part of Macuchi Formation
Gd : Granodiorite
An : Andesitic part of Macuchi Formation
Tf : Tuffaceous part of Macuchi Formation
Qd : Quartzdiorite
Di : Melanoctatic quartz diorite
HQd : Hornblende - quartzdiorite
CQd : Coarse quartzdiorite

Table A-2 Microscopic observations (polished section)

No.	Sample No.	Location: Area	Location: Coordinates E	Location: Coordinates N	Occurrence*	Minerals: Chalcopyrite (cp)	Bornite (bn)	Chalcocite (cc)	Covellite (cv)	Molybdenite (mo)	Sphalerite (sp)	Pyrite (py)	Magnetite (mt)	Hematite (hm)	Garena (gn)	Arsenopyrite(asp)	Cubanite (cb)	Gangue minerals(g)
P 1	A3038	Osohuayco	709.81	9806.12	Cp-Py-Q irregular Vein in strotgly sil. hornfels. Py-Cp veinlets and Py-Mt diss	·					·	●	·					◎
P 2	A3048	Osohuayco	708.04	9806.56	Cp-Py diss & thin Vein in sil.c. ho bearing gd. Cp-Py-Mt diss	○		·				○	●				·	◎
P 3	B3043	Osohuayco	708.41	9806.53	Cp>Py diss & film in bi-ho-gd. Cp-Mo-Mt diss	●	·	·	·	·	·	·	●					◎
P 4	MJE-7 245.5	Osohuayco	707.88	9805.68	Cp and Py diss & film in hornfels Cp-Py veinlets (~3mm wide), and Py-Mt diss	●	·				·	●	●					◎
P 5	MJE-7 267.4	Osohuayco	707.88	9805.68	Py>Cp diss & film in hornfels Py-Mt veinlets (~3mm wide), and Mt diss	·					·	○	●					◎
P 6	A3007	Tellimbela	708.41	9806.53	Cp-Py-diss & film in melano qd & hornfels Cp-Mo-Mt diss	●						·	○					◎
P 7	A3015	Tellimbela	708.41	9806.53	Cp-Py diss & film in melano qd & hornfels Cp-Mo-Mt diss	·	·					○	·					◎
P 8	A3027	Tellimbela	705.89	9816.80	Py-Mo thin Vein (1mm) in melano gd Mo-Py-Cp-Mt diss	·	·			○	·	◎						◎
P 9	A3028	Tellimbela	706.04	9816.70	Cp-Py diss in melano qd Py-Cp-Mt diss	·	·					○	●	·				◎
P 10	B3005	Tellimbela	705.41	9817.14	Py · Cp diss & film in hornfels (bs-Ad) Cp-Py veinlets (1mm wide) and Mt diss	●						·	●	·				◎
P 11	B3018	Tellimbela	706.02	9816.95	Py · Cp diss in melano - di Mo-Cp-Py-Mt diss	●		·		●		●	○	·				◎
P 12	C3006	Tellimbela	705.43	9817.38	Cp>Py diss & film in hornfels (andesite) Cp-Py-Mo diss 705.43 9817.38	○				·		●	·					◎
P 13	MJE-8 53.8	Tellimbela	705.40	9817.17	Cp film in ho-qd Cp veinlets (~5mm wide)	○					·	●	·					◎
P 14	MJE-8 251.1	Tellimbela	705.40	9817.17	Cp and Py film & diss in ho-qd Py veinlets (~2mm wide) and Cp, Py, & Mt diss	●						○	●	·				◎
P 15	MJE-9 93.2	Tellimbela	705.67	9817.26	Cp & Py diss in ho-qd Cp & Py diss	·						·						◎

◎ Abundant ○ Common ● A little · Rare

* Upper row : field occurrence ; lower row : microscopic observation

Cp : Chalcopyrite Py : Pyrite Mo : Molybdenite Mt : Magnetite

C : coarse gd : granodiorite qd : quartzdiorite melano : melanocratic

diss : dissmination

Table A-3 Assay results of ore samples (geological survey and drill core)

Table A-3(1) Assay results of ore samples (geological survey) (1)

No.	Hole No.	Location	Coordinates E	Coordinates N	Description	Assay Results Au (g/t)	Ag g/t	Cu (%)	Pb (%)	Zn (%)	Mo (%)
1	A3037	Osohuayco	709.77	9806.12	C.Py-Q irrg V. in st sil horn	Tr	Tr	0.01	0.00	0.00	0.00
2	A3038		709.81	9806.12	C.Py-Q irrg V. in st sil horn	Tr	Tr	0.00	0.00	0.01	0.00
3	A3044		707.98	9806.44	C.Py-Q V. in sil c. ho-bt-qd	Tr	Tr	0.08	0.00	0.00	0.00
4	A3045		708.00	9806.48	Cp-Py thin V. in crack of c. ho-bt qd	0.2	13.1	4.89	0.00	0.03	0.00
5	A3047		708.01	9806.52	Cp-Py diss & thin V. in sil c. ho-bt-qd	Tr	Tr	0.03	0.00	0.00	0.00
6	A3048		708.04	9806.56	Cp-Py diss & thin V. in sil c. ho-bt-qd	Tr	Tr	0.55	0.00	0.01	0.00
7	A3054		708.06	9806.62	F.Cp-Py diss & thin V.in sil c. ho-bt-qd	Tr	Tr	0.02	0.00	0.00	0.00
8	A3055		708.08	9806.64	Cp-Py thin V. in sil. c. ho-bt qd	Tr	Tr	0.11	0.00	0.00	0.00
9	B3040		708.40	9804.45	Cp-Py diss & film in vc. bt-ho qd	Tr	Tr	0.03	0.00	0.00	0.00
10	B3043		708.41	9806.53	Cp-Py diss & film in vc. bt-ho qd	0.5	4.1	0.41	0.00	0.00	0.01
11	B3044		708.41	9806.55	Q-Vlt w/ Cp-Py diss & in bt-ho qd	0.2	6.5	1.18	0.00	0.01	0.01
12	B3064		707.34	9806.02	Py diss & film in melano di	Tr	Tr	0.04	0.00	0.00	0.00
13	B3075		707.44	9805.82	Py diss & film in vc. bt-qd	Tr	Tr	0.05	0.00	0.00	0.00
14	C3079		708.84	9807.01	Py-Cp diss in f. Tf	Tr	Tr	0.02	0.00	0.00	0.00
15	C3082		708.27	9806.83	Cp spoted in bi-ho qd	Tr	Tr	0.06	0.00	0.00	0.00
16	PO-01		707.77	9806.46	Py diss & film in qd	Tr	Tr	0.06	0.00	0.01	0.00
17	PO-02		707.92	9806.47	Py diss & film in qd	Tr	Tr	0.06	0.00	0.00	0.00
18	PO-03		708.06	9806.46	Py diss & film in qd	Tr	Tr	0.04	0.00	0.00	0.00
19	PO-04		708.19	9806.46	Cp-Py diss & film in c. qd	Tr	Tr	0.13	0.00	0.00	0.00
20	PO-05		708.32	9806.48	Cp-Py diss & film in c. qd	Tr	Tr	0.17	0.00	0.00	0.00
21	A3005	Telimbela	705.49	9817.02	Cp-Py-film & diss in melano ho-qd	Tr	Tr	0.18	0.00	0.00	0.01
22	A3006		705.03	9817.42	Cp-Py(Mo) diss & V.	0.2	6.1	1.38	0.00	0.02	0.08
23	A3007		705.44	9817.04	Cp-Py diss & film in melano qd & Mac	Tr	3.6	0.71	0.00	0.01	0.01
24	A3012		705.90	9817.10	Cp-Py diss in melano bt-qd	Tr	Tr	0.10	0.00	0.00	0.00
25	A3013		706.05	9817.13	Py-Cp w diss in qd	Tr	Tr	0.11	0.00	0.00	0.00
26	A3014		706.10	9817.13	Cp-Py Mo film & diss in bt-qd	Tr	Tr	0.03	0.00	0.00	0.00
27	A3015		706.19	9817.17	Cp-Py diss & V. in altered Mac.	Tr	Tr	0.03	0.00	0.00	0.00
28	A3021		705.78	9816.94	Cp-Py w. diss in melano qd & Mac.	0.2	2.4	0.53	0.00	0.02	0.00
29	A3022		705.28	9816.96	Cp-Py w. diss in melano qd	Tr	Tr	0.06	0.00	0.01	0.00
30	A3024		705.81	9816.86	Cp-Py w. diss in melano qd	Tr	4.9	0.69	0.00	0.00	0.50
31	A3025		705.83	9816.83	Cp-Py-Mo thin V. & w. diss in melano qd	1.2	5.4	1.06	0.01	0.01	0.00
32	A3027		705.89	9816.80	Py-Mo thin V. (VW:1cm) in melano qd	Tr	Tr	0.02	0.00	0.00	0.84
33	A3028		706.04	9816.70	Cp-Py diss in melano qd	Tr	Tr	0.03	0.00	0.00	0.00
34	B3002		705.20	9817.22	Py-Cp diss in ho qd	0.1	3.5	0.08	0.01	0.03	0.00
35	B3005		705.16	9817.36	Cp-Py diss & film in horn (bs-Ad)	0.2	2.5	0.20	0.01	0.03	0.04
36	B3007		705.21	9817.64	Py-Cp diss in horn (bs-Ad)	0.2	7.5	0.78	0.01	0.07	0.00
37	B3008		705.27	9817.90	Py-Cp diss & film in bt-ho qd	Tr	Tr	0.02	0.00	0.00	0.00
38	B3018		705.99	9816.95	Py-Cp diss in melano di	Tr	Tr	0.20	0.00	0.01	0.06
39	B3022		706.25	9816.86	Py-Cp diss in bt-ho qd	Tr	Tr	0.14	0.00	0.00	0.00
40	B3023		706.27	9816.84	Py-Cp diss in bt-ho qd	Tr	Tr	0.02	0.00	0.00	0.00
41	C3004		705.27	9817.23	Cp-Py(Mo) diss in ho qd	0.1	10.4	0.86	0.00	0.02	0.01
42	C3006		705.43	9817.05	Cp-Py diss & film in horn (Ad)	0.2	2.1	0.89	0.00	0.00	0.02
43	C3007		705.51	9817.68	Py-Cp diss & film in ho bt qd	Tr	Tr	0.02	0.00	0.00	0.00
44	C3008		705.55	9817.75	Py-Cp diss & film in ho bt qd	Tr	Tr	0.02	0.01	0.02	0.00
45	C3009		705.52	9817.19	Green Cu film in ho qd	Tr	6.1	0.76	0.00	0.02	0.01
46	C3010		705.56	9817.81	Py-Cp diss in ho-bt qd	Tr	Tr	0.03	0.01	0.01	0.00
47	D3002		705.74	9817.77	Py-Cp diss in bt-ho qd	Tr	Tr	0.58	0.00	0.01	0.01
48	D3005		705.46	9817.50	Py-Cp diss in ho-bt qd	Tr	Tr	0.18	0.00	0.00	0.04
49	D3006		705.49	9817.50	Py-Cp diss in ho-bt qd	Tr	Tr	0.17	0.00	0.00	0.00
50	D3011		705.77	9817.56	Py-Cp diss in bt-ho qd	Tr	Tr	0.06	0.00	0.00	0.00
51	PT-01		705.59	9817.29	Py diss in bt-ho qd	Tr	Tr	0.11	0.00	0.01	0.00
52	PT-02		705.91	9817.42	Py diss in bt-ho qd	Tr	Tr	0.06	0.01	0.01	0.00
53	PT-03		706.08	9817.04	Py diss & Vlt in bt-ho qd	0.1	1.7	0.07	0.00	0.00	0.00

Table A-3(1) Assay results of ore samples (geological survey) (2)

No.	Hole No.	Location			Description	Assay Results					
			Coordinates			Au (g/t)	Ag g/t	Cu (%)	Pb (%)	Zn (%)	Mo (%)
			E	N							
54	PT-04	Telimbela	705.99	9817.13	Py diss & Vlt in bt-ho qd	Tr	Tr	0.06	0.01	0.00	0.00
55	PT-05		705.70	1817.18	Py diss & Vlt in bt-ho qd	Tr	3.7	0.14	0.01	0.02	0.00
56	PT-06		705.90	9816.96	Py diss & Vlt in bt-ho qd	Tr	Tr	0.06	0.00	0.00	0.00
57	PT-07		705.60	9816.70	Py diss & Vlt in bt-ho qd	Tr	Tr	0.09	0.00	0.00	0.00
58	PT-08		706.07	9817.00	Py·Cp diss & film in bt-ho qd	Tr	Tr	0.51	0.00	0.01	0.01
59	PT-09		705.17	9817.11	Py·Cp diss in ho-bt qd	Tr	Tr	0.03	0.00	0.01	0.00
60	PT-10		705.25	9817.50	Py diss in Mac	Tr	Tr	0.08	0.00	0.01	0.00

c. : coarse
f. : fine
V. : vein
Vlt : veinlet
bt-ho qd : biotite hornblende quartz-diorite
ho-bt qd : hornblende biotite quartz-diorite
melano di : melanocratic quartz-diorite
horn: hornfels
Ad : andesite
Tf : tuff
Py : Pyrite
Cp : Chalcopyrite
Mo : Molybdenite

Table A-3(2) Assay results of ore samples (drill core)

(3)

No.	Hole No.	Depth (m)	Assay Results						
			Au (g/t)	Ag g/t	Cu (%)	Pb (%)	Zn (%)	Mo (%)	W (%)
1	MJE-7	231.4 ~ 232.3	Tr	Tr	0.02	0.00	0.01	0.00	0.00
2	MJE-7	234.4 ~ 235.2	Tr	Tr	0.01	0.00	0.01	0.00	0.00
3	MJE-7	235.4 ~ 235.9	Tr	Tr	0.18	0.00	0.01	0.00	0.00
4	MJE-7	237.7 ~ 237.9	Tr	0.2	0.08	0.00	0.01	0.00	0.00
5	MJE-7	246.0 ~ 245.8	Tr	Tr	0.03	0.00	0.01	0.00	0.00
6	MJE-7	248.0 ~ 248.2	Tr	Tr	0.03	0.00	0.01	0.00	0.00
7	MJE-7	248.4 ~ 248.6	Tr	Tr	0.03	0.00	0.01	0.00	0.01
8	MJE-7	253.6 ~ 253.9	Tr	Tr	0.02	0.00	0.01	0.00	0.00
9	MJE-7	258.0 ~ 259.0	Tr	Tr	0.01	0.00	0.01	0.00	0.00
10	MJE-7	260.7 ~ 261.3	Tr	Tr	0.06	0.00	0.01	0.00	0.00
11	MJE-7	261.4 ~ 261.8	Tr	0.9	0.16	0.00	0.01	0.00	0.00
12	MJE-7	263.8 ~ 264.3	Tr	Tr	0.14	0.00	0.01	0.00	0.00
13	MJE-7	267.9 ~ 268.4	Tr	Tr	0.02	0.00	0.01	0.00	0.00
14	MJE-7	270.4 ~ 270.9	Tr	Tr	0.01	0.00	0.01	0.00	0.00
15	MJE-7	275.4 ~ 275.9	Tr	1.2	0.03	0.00	0.01	0.00	0.00
16	MJE-7	279.4 ~ 279.9	Tr	Tr	0.05	0.00	0.01	0.00	0.00
17	MJE-7	282.4 ~ 282.9	Tr	Tr	0.10	0.00	0.01	0.00	0.00
18	MJE-7	286.4 ~ 286.9	Tr	Tr	0.04	0.00	0.01	0.00	0.00
19	MJE-7	301.9 ~ 302.9	Tr	Tr	0.01	0.00	0.01	0.00	0.00
20	MJE-8	21.0 ~ 24.0	Tr	3.0	0.28	0.00	0.01	0.00	0.00
21	MJE-8	24.0 ~ 26.0	0.1	1.3	0.16	0.00	0.00	0.00	0.00
22	MJE-8	26.0 ~ 28.0	Tr	1.0	0.18	0.00	0.01	0.00	0.00
23	MJE-8	28.0 ~ 30.0	0.1	2.4	0.45	0.00	0.00	0.00	0.00
24	MJE-8	30.0 ~ 32.0	Tr	Tr	0.16	0.00	0.00	0.00	0.00
25	MJE-8	32.0 ~ 34.0	Tr	2.0	0.26	0.00	0.00	0.01	0.00
26	MJE-8	36.0 ~ 38.0	Tr	1.2	0.09	0.00	0.01	0.00	0.00
27	MJE-8	40.0 ~ 42.0	Tr	Tr	0.24	0.00	0.00	0.00	0.00
28	MJE-8	44.0 ~ 46.0	Tr	1.3	0.36	0.00	0.01	0.01	0.00
29	MJE-8	48.0 ~ 50.0	Tr	Tr	0.41	0.00	0.01	0.01	0.00
30	MJE-8	52.0 ~ 54.0	Tr	Tr	0.52	0.00	0.00	0.06	0.00
31	MJE-8	55.0 ~ 56.0	Tr	1.3	0.25	0.00	0.00	0.04	0.00
32	MJE-8	56.0 ~ 58.0	0.1	1.4	0.36	0.00	0.00	0.02	0.00
33	MJE-8	60.0 ~ 62.0	0.2	1.5	0.43	0.00	0.00	0.12	0.00
34	MJE-8	63.0 ~ 64.0	Tr	6.0	0.72	0.00	0.03	0.25	0.00
35	MJE-8	64.0 ~ 66.0	Tr	2.4	0.47	0.00	0.01	0.05	0.00
36	MJE-8	67.0 ~ 69.0	Tr	Tr	0.43	0.00	0.00	0.05	0.00
37	MJE-8	71.0 ~ 73.0	Tr	1.4	0.25	0.00	0.00	0.02	0.00
38	MJE-8	75.0 ~ 77.0	Tr	Tr	0.02	0.00	0.00	0.02	0.00
39	MJE-8	80.0 ~ 81.2	Tr	Tr	0.16	0.00	0.01	0.01	0.00
40	MJE-8	82.3 ~ 84.6	Tr	Tr	0.08	0.00	0.00	0.00	0.00
41	MJE-8	88.0 ~ 89.6	Tr	Tr	0.06	0.00	0.00	0.00	0.00
42	MJE-8	92.0 ~ 94.0	Tr	2.5	0.39	0.00	0.01	0.03	0.00
43	MJE-8	96.0 ~ 98.0	0.1	3.1	0.23	0.02	0.05	0.01	0.00
44	MJE-8	100.0 ~ 102.0	Tr	1.7	0.13	0.01	0.02	0.00	0.00
45	MJE-8	104.0 ~ 106.0	Tr	Tr	0.03	0.00	0.00	0.00	0.00
46	MJE-8	108.0 ~ 110.0	Tr	2.0	0.29	0.00	0.01	0.01	0.00
47	MJE-8	112.0 ~ 114.0	Tr	Tr	0.04	0.00	0.00	0.00	0.00
48	MJE-8	116.0 ~ 118.0	Tr	0.9	0.13	0.00	0.00	0.01	0.00
49	MJE-8	120.0 ~ 122.0	Tr	Tr	0.08	0.00	0.00	0.00	0.00
50	MJE-8	124.0 ~ 126.0	Tr	Tr	0.11	0.00	0.00	0.01	0.00
51	MJE-8	128.0 ~ 130.0	Tr	Tr	0.12	0.00	0.00	0.00	0.00
52	MJE-8	132.0 ~ 134.0	Tr	Tr	0.06	0.00	0.00	0.00	0.00
53	MJE-8	136.0 ~ 138.0	Tr	Tr	0.08	0.00	0.00	0.00	0.00

Table A-3(2) Assay results of ore samples (drill core)

(4)

No.	Hole No.	Depth (m)	Assay Results						
			Au (g/t)	Ag g/t	Cu (%)	Pb (%)	Zn (%)	Mo (%)	W (%)
54	MJE-8	140.0 ~ 142.0	Tr	Tr	0.05	0.00	0.01	0.00	0.00
55	MJE-8	144.0 ~ 146.0	Tr	Tr	0.05	0.00	0.00	0.00	0.00
56	MJE-8	148.0 ~ 150.0	Tr	Tr	0.03	0.00	0.01	0.00	0.00
57	MJE-8	155.0 ~ 157.0	Tr	Tr	0.02	0.00	0.00	0.00	0.00
58	MJE-8	160.0 ~ 162.0	Tr	Tr	0.04	0.00	0.00	0.00	0.00
59	MJE-8	165.0 ~ 167.0	Tr	1.8	0.05	0.00	0.00	0.00	0.00
60	MJE-8	170.0 ~ 172.0	Tr	Tr	0.38	0.00	0.01	0.02	0.00
61	MJE-8	175.0 ~ 177.0	Tr	Tr	0.07	0.00	0.00	0.01	0.00
62	MJE-8	180.0 ~ 182.0	Tr	Tr	0.01	0.00	0.01	0.00	0.00
63	MJE-8	185.0 ~ 187.0	Tr	Tr	0.03	0.00	0.00	0.02	0.00
64	MJE-8	190.0 ~ 192.0	Tr	Tr	0.05	0.00	0.01	0.01	0.00
65	MJE-8	195.0 ~ 197.0	Tr	Tr	0.04	0.00	0.00	0.01	0.00
66	MJE-8	200.0 ~ 202.0	Tr	Tr	0.03	0.00	0.00	0.08	0.00
67	MJE-8	205.0 ~ 207.0	Tr	Tr	0.03	0.00	0.00	0.00	0.00
68	MJE-8	210.0 ~ 212.0	Tr	Tr	0.06	0.00	0.01	0.01	0.00
69	MJE-8	215.0 ~ 217.0	Tr	Tr	0.03	0.00	0.00	0.00	0.00
70	MJE-8	220.0 ~ 222.0	Tr	Tr	0.03	0.00	0.01	0.00	0.00
71	MJE-8	225.0 ~ 227.0	Tr	Tr	0.08	0.01	0.02	0.00	0.00
72	MJE-8	230.0 ~ 232.0	Tr	Tr	0.03	0.00	0.00	0.00	0.00
73	MJE-8	235.0 ~ 236.0	Tr	Tr	0.03	0.00	0.01	0.00	0.00
74	MJE-8	240.0 ~ 241.0	Tr	1.1	0.05	0.01	0.05	0.00	0.00
75	MJE-8	245.0 ~ 246.0	Tr	Tr	0.02	0.00	0.01	0.00	0.00
76	MJE-8	250.0 ~ 251.0	Tr	1.5	0.07	0.01	0.03	0.00	0.00
77	MJE-8	255.0 ~ 256.0	Tr	1.6	0.04	0.00	0.02	0.00	0.00
78	MJE-8	260.0 ~ 261.0	Tr	Tr	0.08	0.00	0.01	0.00	0.00
79	MJE-8	270.0 ~ 271.0	Tr	Tr	0.02	0.00	0.00	0.00	0.00
80	MJE-8	280.0 ~ 281.0	Tr	Tr	0.04	0.00	0.00	0.00	0.00
81	MJE-8	290.0 ~ 291.0	Tr	Tr	0.04	0.00	0.00	0.00	0.00
82	MJE-8	300.0 ~ 301.0	Tr	1.8	0.07	0.00	0.12	0.00	0.00
83	MJE-9	28.0 ~ 29.0	Tr	Tr	0.09	0.00	0.00	0.01	0.00
84	MJE-9	36.0 ~ 37.0	Tr	1.0	0.19	0.00	0.00	0.00	0.00
85	MJE-9	44.0 ~ 45.0	Tr	Tr	0.01	0.00	0.00	0.06	0.00
86	MJE-9	52.0 ~ 53.0	Tr	Tr	0.12	0.00	0.00	0.00	0.00
87	MJE-9	60.0 ~ 61.0	0.1	5.4	0.09	0.00	0.00	0.01	0.00
88	MJE-9	64.0 ~ 65.0	Tr	1.0	0.09	0.00	0.01	0.01	0.00
89	MJE-9	68.0 ~ 69.0	Tr	Tr	0.08	0.00	0.01	0.03	0.00
90	MJE-9	72.0 ~ 73.0	Tr	Tr	0.02	0.00	0.00	0.00	0.00
91	MJE-9	76.0 ~ 77.0	Tr	Tr	0.09	0.00	0.01	0.01	0.00
92	MJE-9	80.0 ~ 31.0	Tr	Tr	0.31	0.00	0.01	0.06	0.00
93	MJE-9	84.0 ~ 85.0	Tr	Tr	0.26	0.00	0.01	0.00	0.00
94	MJE-9	88.0 ~ 89.0	Tr	Tr	0.10	0.00	0.01	0.00	0.00
95	MJE-9	92.0 ~ 93.0	Tr	2.0	0.17	0.00	0.01	0.00	0.00
96	MJE-9	96.0 ~ 97.0	Tr	Tr	0.17	0.00	0.00	0.00	0.00
97	MJE-9	100.0 ~ 101.0	Tr	Tr	0.26	0.00	0.00	0.00	0.00
98	MJE-9	104.0 ~ 105.0	Tr	2.6	0.33	0.00	0.01	0.01	0.00
99	MJE-9	108.0 ~ 109.0	Tr	Tr	0.04	0.00	0.00	0.00	0.00
100	MJE-9	112.0 ~ 113.0	Tr	Tr	0.04	0.00	0.01	0.00	0.00
101	MJE-9	116.0 ~ 117.0	Tr	1.0	0.17	0.00	0.01	0.00	0.00
102	MJE-9	120.0 ~ 121.0	Tr	Tr	0.06	0.00	0.01	0.00	0.00
103	MJE-9	124.0 ~ 125.0	Tr	Tr	0.13	0.00	0.01	0.00	0.00
104	MJE-9	128.0 ~ 129.0	Tr	3.4	0.34	0.00	0.01	0.01	0.00
105	MJE-9	132.0 ~ 133.0	Tr	2.0	0.28	0.00	0.01	0.01	0.00
106	MJE-9	136.0 ~ 137.0	Tr	1.1	0.11	0.00	0.01	0.01	0.00

Table A-3(2) Assay results of ore samples (drill core)

(5)

No.	Hole No.	Depth (m)	Assay Results						
			Au (g/t)	Ag g/t	Cu (%)	Pb (%)	Zn (%)	Mo (%)	W (%)
107	MJE-9	140.0 ~ 141.0	Tr	Tr	0.09	0.00	0.02	0.01	0.00
108	MJE-9	144.0 ~ 145.0	Tr	Tr	0.10	0.01	0.01	0.01	0.00
109	MJE-9	148.0 ~ 149.0	Tr	Tr	0.08	0.00	0.02	0.02	0.00
110	MJE-9	152.0 ~ 153.0	Tr	2.0	0.22	0.00	0.01	0.02	0.00
111	MJE-9	156.0 ~ 157.0	Tr	0.1	0.17	0.00	0.01	0.02	0.00
112	MJE-9	160.0 ~ 161.0	Tr	4.7	0.55	0.00	0.01	0.02	0.00
113	MJE-9	164.0 ~ 165.0	Tr	Tr	0.04	0.00	0.01	0.02	0.00
114	MJE-9	168.0 ~ 169.0	Tr	Tr	0.02	0.00	0.00	0.01	0.00
115	MJE-9	172.0 ~ 173.0	Tr	Tr	0.01	0.00	0.00	0.02	0.00
116	MJE-9	176.0 ~ 177.0	Tr	Tr	0.02	0.00	0.01	0.01	0.00
117	MJE-9	180.0 ~ 181.0	Tr	Tr	0.02	0.00	0.00	0.02	0.00
118	MJE-9	188.0 ~ 189.0	Tr	Tr	0.00	0.00	0.00	0.00	0.00
119	MJE-9	196.0 ~ 197.0	Tr	Tr	0.01	0.00	0.00	0.00	0.00
120	MJE-9	204.0 ~ 205.0	Tr	Tr	0.01	0.00	0.00	0.01	0.00

Table A-4 Results of X-ray diffractive analysis

Results of X-ray diffractive analysis

No.	Sample No.	Location			Geological Unit*1	Rock Name	Minerals																								
		Area	Coordinates E	Coordinates N			Quartz	Plagioclase	Potash-feldspar	Hornblende	Diopside	Hedenbergite	Grossular	Andradite	Prehnite	Epidote	Sphene	Calcite	Rhodocrosite	Biotite	Sericite	Chlorite	Kaline	Montmorillonite	Pyrophyllite	Lawsonite	Stilbite	Epistilbite	Pyrite	Chalcopyrite	Molybdenite
1	A3038	Oshuayco	709.81	9806.12	ATf	St.sil.Tf(horn)	◎	○												・		・									
2	A3048		708.04	9806.56	Gd	(Ho)-bi-qd	◎	○												○		●							●	●	
3	B3043		708.41	9806.53	Gd	V.c.bi-qd	◎	○		●										○											
4	B3045		708.46	9806.62	Gd	V.c.bi-qd	◎	○		○										○		・									
5	C3070		709.37	9806.40	ATf	St.sil rock	◎	○		・											・										
6	PO-01		707.77	9806.46	Gd	Bi-qd	○	○		●											・		・	●							
7	PO-02		707.82	9806.47	Gd	Bi-qd	○	●		●													・	・							
8	PO-03		708.06	9806.46	Gd	Bi-qd	○	○		○																					
9	PO-04		708.19	9806.46	Gd	Bi-qd	・																								
10	PO-05		708.32	9806.48	Gd	Bi-qd	◎	○		●											・										
11	A3003	Telimbela	705.01	9817.29	An	Ad	●	◎		○																					
12	A3006		705.03	9817.42	An	Ad		●			●		●					・													
13	A3007		705.44	9817.04	Di	Melano-dio		○		○												●									
14	A3014		706.10	9817.13	Qd	Bi-qd	◎	◎		●										・		・									
15	A3016		706.21	9817.18	Di	Melano-dio	○	●													●	●						●	●		
16	A3022		705.28	9816.96	Qd	Bi-qd	●	○		○										・		●									
17	B3028		706.04	9816.70	An	Melano-dio	◎	○		●										●		・							●	・	
18	B3003		705.17	9817.34	HQd	Ho-bi-qd	◎	○													●	○						・			
19	C3005		705.41	9817.14	An	Bs-Ad(horn)	●	○	●	・												○									
20	C3001		705.03	9817.50	HQd	Ho-bi-qd	◎	◎	・	・												・									

◎>○>●>・

*1 Unit corresponding to those used in Geological Map

ATf : Tuffaceous part of Macuchi Formation
Tf : Tuffaceous part of Macuchi Formation
An : Andesitic part of Macuchi Formation
Gd : Granodiorite
Qd : Quartzdiorite
Di : Melanocratic quartz diorite
HQd : Hornblende - quartzdiorite
CQd : Coarse quartzdiorite

Results of X-ray diffractive analysis

No.	Sample No.	Location: Area	Location: Coordinates E	Location: Coordinates N	Geological Unit*1	Rock Name	Minerals: Quartz	Plagioclase	Potash-feldspar	Hornblende	Diopside	Hedenbergite	Grossular	Andradite	Prehnite	Epidote	Sphene	Calcite	Rhodocrosite	Biotite	Sericite	Chlorite	Kaline	Montmorillonite	Pyrophyllite	Lawsonite	Stilbite	Epistilbite	Pyrite	Chalcopyrite	Molybdenite
21	C3006	Telimbela	705.43	9806.12	An	Ad(horn)	○	○		·										○	·								·	·	
22	C3010		705.56	9806.56	HQd	Ho-bi-qd	◎	◎												●		●							·		
23	C3013		705.34	9806.53	Gd	Sil-rock	◎														·			·	●				●		
24	C3021		705.26	9806.62	Tf	Tuff	●	◎		○																			·		
25	C3026		705.35	9806.40	Di	Melano-dio	●	◎		○										·	·										
26	C3030		705.63	9806.46	Di	Melano-dio	○	○		○										●	·										
27	C3033		705.77	9806.47	CQd	V.C.bi-qd	◎	◎	●											●	·										
28	C3039		706.45	9806.46	Pa	Ad-Por	◎	○		·											·										
29	C3046		704.87	9806.46	An	Sil Ad	◎	●		·										·	·								·		
30	C3048		704.86	9806.48	An	Ad-Tf	○	○		○										●											
31	PT-01		705.59	9817.29	Gd	Bi-qd	◎	●	·													●									
32	PT-02		705.91	9817.42	Gd	Bi-qd	◎														·		●								
33	PT-03		706.08	9817.04	Gd	Bi-qd	◎	○														·									
34	PT-04		705.99	9817.13	Gd	Bi-qd	◎	○														·									
35	PT-05		705.70	9817.18	Gd	Bi-qd	◎	●														·	·								
36	PT-06		705.90	9816.96	Gd	Bi-qd	◎	●													●	●									
37	PT-07		705.60	9816.70	Gd	Bi-qd	○	●		·																			·		
38	PT-08		706.07	9817.34	Gd	Bi-qd	◎	●	○													·									
39	PT-09		705.17	9817.14	HQd	Ho-bi-qd	◎	●	●																						
40	PT-10		705.25	9817.50	An	Brn-gy-Bs	○	●	◎																						

◎>○>●>·

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Qd : Quartzdiorite
Di : Melanoctatic quartz diorite
HQd : Hornblende - quartzdiorite
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Results of X-ray diffractive analysis

No.	Sample No.	Location: Area	Location: Coordinates E	Location: Coordinates N	Geological Unit*1	Rock Name	Minerals: Quartz	Plagioclase	Potash-feldspar	Hornblende	Diopside	Hedenbergite	Grossular	Andradite	Prehnite	Epidote	Sphene	Calcite	Rhodocrosite	Biotite	Sericite	Chlorite	Kaline	Montmorillonite	Pyrophyllite	Laumonite	Stilbite	Epistilbite	Pyrite	Chalcopyrite	Molybdenite
41	MJE-7 030.0	Oshuayco	707.88	9805.68	ABT	Sil-fTf	◎				●		○																		
42	MJE-7 060.0	Oshuayco	707.88	9805.68	ABT	Sil-fTf		◎	○	●																					
43	MJE-7 090.0	Oshuayco	707.88	9805.68	ABT	Sil-fTf					○		○		●			○													
44	MJE-7 135.0	Oshuayco	707.88	9805.68	AAn	Ad(horn)	○	◎		◎										●											
45	MJE-7 150.2	Oshuayco	707.88	9805.68	AAn	Ad(horn)	◎	○	○	◎																					
46	MJE-7 180.0	Oshuayco	707.88	9805.68	AAn	Ad(horn)	◎	◎		○										○		●									
47	MJE-7 210.0	Oshuayco	707.88	9805.68	AAn	Ad(horn)	◎	◎		○										○											
48	MJE-7 240.0	Oshuayco	707.88	9805.68	AAn	Ad(horn)	◎	◎		○										○											
49	MJE-7 270.9	Oshuayco	707.88	9805.68	AAn	Ad(horn)		◎		○							·			◎		●									
50	MJE-7 300.0	Oshuayco	707.88	9805.68	AAn	Ad(horn)	○	◎		○										○		·									
51	MJE-8 026.0	Telimbela	705.40	9817.17	HQd	Ho-Bi-qd	◎	○								·	·					○									
52	MJE-8 068.0	Telimbela	705.40	9817.17	HQd	Ho-Bi-qd	◎	◎	◎													●		◎							
53	MJE-8 109.0	Telimbela	705.40	9817.17	HQd	Ho-Bi-qd	◎	○	●	●							·					·									
54	MJE-8 160.0	Telimbela	705.40	9817.17	HQd	Ho-Bi-qd	◎										·		·			●				○	○	●			●
55	MJE-8 210.5	Telimbela	705.40	9817.17	HQd	Ho-Bi-qd	◎	◎												●		●									
56	MJE-8 268.5	Telimbela	705.40	9817.17	HQd	Ho-Bi-qd	◎															●		○			○				
57	MJE-9 029.0	Telimbela	705.67	9817.26	Qd	Bi-qd	◎	◎												○		●							·		
58	MJE-9 049.0	Telimbela	705.67	9817.26	Qd	Bi-qd	◎	◎												○		●							·		
59	MJE-9 089.0	Telimbela	705.67	9817.26	HQd	Ho-bi-qd	◎	○													·	◎		◎			○	◎	·		
60	MJE-9 178.0	Telimbela	705.67	9817.26	HQd	Ho-bi-qd	◎	◎													●	◎							·		

◎>○>●>·

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HQd : Hornblende - quartzdiorite
CQd : Coarse quartzdiorite

Table A-5 Lists of measured value of IP survey

測定値一覧表（１／６）　測線　Ｔ１

P1-P2	C1-C2	n	I (A)	V (mV)	ρ-a (Ω-m)	FE (%)	Tc	ρ-ac (Ω-m)
0- 2	4- 6	1	1.00	1210.00	2280.0	5.5	1.063	2425.0
0- 2	6- 8	2	1.00	105.00	792.0	4.6	2.631	2084.0
0- 2	8-10	3	1.00	66.50	1254.0	4.5	1.587	1990.0
0- 2	10-12	4	1.20	28.40	892.0	3.4	1.282	1143.0
0- 2	12-14	5	1.00	12.80	844.0	4.0	1.754	1480.0
2- 4	6- 8	1	1.00	398.00	750.0	4.3	2.439	1829.0
2- 4	8-10	2	1.00	222.00	1674.0	4.5	1.266	2119.0
2- 4	10-12	3	1.20	66.20	1040.0	5.1	0.980	1019.0
2- 4	12-14	4	1.00	29.40	1108.0	5.8	1.370	1517.0
2- 4	14-16	5	1.00	12.80	844.0	6.4	1.515	1278.0
4- 6	8-10	1	1.00	1330.00	2507.0	6.3	0.658	1649.0
4- 6	10-12	2	1.20	258.00	1621.0	3.2	0.559	905.0
4- 6	12-14	3	1.00	81.10	1529.0	12.1	0.826	1263.0
4- 6	14-16	4	1.00	44.70	1684.0	-3.4	0.917	1545.0
4- 6	16-18	5	1.00	7.34	484.0	8.1	1.190	576.0
6- 8	10-12	1	1.20	225.00	353.0	4.6	1.695	598.0
6- 8	12-14	2	1.00	55.50	419.0	6.2	2.174	910.0
6- 8	14-16	3	1.20	41.60	654.0	-1.8	2.326	1520.0
6- 8	16-18	4	1.50	19.60	493.0	-5.0	2.857	1408.0
6- 8	18-20	5	1.50	9.02	397.0	6.6	1.818	722.0
8-10	12-14	1	1.00	368.00	694.0	6.3	1.351	938.0
8-10	14-16	2	1.00	77.90	587.0	7.7	1.316	772.0
8-10	16-18	3	1.00	18.30	345.0	5.9	1.539	530.0
8-10	18-20	4	1.50	22.30	561.0	7.5	0.990	555.0
8-10	20-22	5	1.50	13.00	572.0	6.4	0.962	550.0
10-12	14-16	1	1.00	417.00	786.0	7.3	1.124	883.0
10-12	16-18	2	1.00	78.20	590.0	6.0	1.177	694.0
10-12	18-20	3	1.50	60.90	765.0	7.0	0.752	575.0
10-12	20-22	4	1.50	48.40	1217.0	5.6	0.730	888.0
10-12	22-24	5	1.50	40.00	1759.0	4.8	0.433	761.0
12-14	16-18	1	1.00	211.00	398.0	8.3	1.316	523.0
12-14	18-20	2	1.50	157.00	789.0	6.8	0.794	626.0
12-14	20-22	3	1.50	76.40	960.0	3.1	0.800	768.0
12-14	22-24	4	1.50	64.50	1621.0	6.5	0.524	849.0
12-14	24-26	5	1.50	35.10	1544.0	4.8	0.435	671.0
14-16	18-20	1	1.50	778.00	978.0	6.0	0.725	709.0
14-16	20-22	2	1.50	169.00	850.0	6.5	0.787	669.0
14-16	22-24	3	1.50	124.00	1558.0	5.5	0.568	885.0
14-16	24-26	4	1.50	46.80	1176.0	7.8	0.524	616.0
14-16	26-28	5	1.50	9.58	421.0	3.2	1.333	561.0
20-22	16-18	1	1.00	166.00	313.0	7.8	1.667	521.0
22-24	18-20	1	1.50	958.00	1204.0	6.1	0.775	933.0
22-24	16-18	2	1.00	89.50	675.0	8.8	1.053	711.0
24-26	20-22	1	1.50	455.00	572.0	7.3	1.409	806.0
24-26	18-20	2	1.50	194.00	975.0	8.4	0.794	774.0
24-26	16-18	3	1.00	28.70	541.0	8.7	1.020	552.0
26-28	22-24	1	1.50	135.00	170.0	3.0	2.439	415.0
26-28	20-22	2	1.50	39.90	201.0	7.0	3.030	609.0
26-28	18-20	3	1.50	22.80	287.0	7.8	2.000	574.0
26-28	16-18	4	1.00	4.32	163.0	7.7	2.564	418.0
28-30	24-26	1	1.50	718.00	902.0	6.2	0.680	614.0
28-30	22-24	2	1.50	67.00	337.0	6.3	1.515	511.0
28-30	20-22	3	1.50	23.60	297.0	7.3	2.273	675.0
28-30	18-20	4	1.50	15.70	395.0	7.3	1.613	637.0
28-30	16-18	5	1.00	2.75	181.0	12.0	2.083	377.0
30-32	26-28	1	1.50	381.00	479.0	6.0	1.282	614.0
30-32	24-26	2	1.50	175.00	880.0	7.5	0.588	518.0
30-32	22-24	3	1.50	31.40	395.0	6.5	1.177	464.0
30-32	20-22	4	1.50	12.80	322.0	6.6	1.887	607.0
30-32	18-20	5	1.50	9.42	414.0	7.9	1.389	575.0

測定値一覧表（２／６）　測線　Ｔ２

P1-P2	C1-C2	n	I (A)	V (mV)	ρ-a (Ω-m)	FE (%)	Tc	ρ-ac (Ω-m)
0- 2	4- 6	1	0.75	1250.00	3141.0	3.5	0.488	1532.0
0- 2	6- 8	2	0.80	488.00	4599.0	4.4	0.463	2129.0
0- 2	8-10	3	1.00	81.10	1529.0	5.6	0.794	1213.0
0- 2	10-12	4	1.50	69.60	1749.0	4.4	0.855	1495.0
0- 2	12-14	5	1.50	36.80	1619.0	4.6	0.926	1499.0
2- 4	6- 8	1	0.80	365.00	860.0	4.0	1.429	1229.0
2- 4	8-10	2	1.00	36.40	275.0	5.0	2.381	655.0
2- 4	10-12	3	1.50	27.00	339.0	5.6	2.500	848.0
2- 4	12-14	4	1.50	13.80	347.0	5.0	2.632	913.0
2- 4	14-16	5	1.50	4.84	213.0	4.5	3.704	789.0
4- 6	8-10	1	1.00	124.00	234.0	5.5	1.923	450.0
4- 6	10-12	2	1.50	67.40	339.0	5.0	1.667	565.0
4- 6	12-14	3	1.50	28.70	361.0	5.6	1.639	592.0
4- 6	14-16	4	1.50	9.78	246.0	6.1	2.273	559.0
4- 6	16-18	5	1.70	4.76	185.0	4.6	3.448	638.0
6- 8	10-12	1	1.50	629.00	790.0	6.2	1.000	790.0
6- 8	12-14	2	1.50	173.00	870.0	5.4	0.877	763.0
6- 8	14-16	3	1.50	99.90	1255.0	4.8	1.220	1531.0
6- 8	16-18	4	1.70	76.50	1697.0	3.0	1.786	3030.0
8-10	12-14	1	1.50	194.00	244.0	4.5	1.333	325.0
8-10	14-16	2	1.50	39.10	197.0	3.9	1.587	313.0
8-10	16-18	3	1.50	16.10	202.0	5.1	2.222	449.0
8-10	20-22	5	1.70	26.10	1013.0	3.8	0.621	629.0
10-12	14-16	1	1.50	318.00	400.0	4.9	1.316	526.0
10-12	16-18	2	1.50	75.40	379.0	5.3	1.613	611.0
12-14	16-18	1	1.50	231.00	290.0	3.0	1.333	387.0
18-20	14-16	1	1.50	445.00	559.0	2.5	0.540	302.0
18-20	12-14	2	1.50	215.00	1081.0	4.2	0.565	611.0
18-20	10-12	3	1.50	74.40	935.0	5.2	0.704	658.0
18-20	8-10	4	1.00	13.10	494.0	4.8	0.962	475.0
18-20	6-08	5	0.80	14.80	1220.0	6.1	0.800	978.0
20-22	16-18	1	1.50	259.00	326.0	4.0	1.539	502.0
20-22	14-16	2	1.50	152.00	764.0	3.5	0.637	487.0
20-22	12-14	3	1.50	115.00	1445.0	3.1	0.461	665.0
20-22	10-12	4	1.50	55.30	1390.0	2.6	0.488	678.0
22-24	18-20	1	1.50	247.00	310.0	7.5	1.429	443.0
22-24	16-18	2	1.50	39.30	198.0	5.1	1.961	388.0
22-24	14-16	3	1.50	37.10	466.0	4.5	0.893	416.0
22-24	12-14	4	1.50	39.30	988.0	-2.0	0.571	565.0
22-24	10-12	5	1.50	25.60	1126.0	8.0	0.546	615.0
24-26	20-22	1	1.50	304.00	382.0	6.1	1.053	402.0
24-26	18-20	2	1.50	35.30	177.0	8.4	1.333	236.0
24-26	16-18	3	1.50	10.50	132.0	10.1	2.174	287.0
24-26	14-16	4	1.50	22.00	553.0	9.8	1.042	576.0
24-26	12-14	5	1.50	19.30	849.0	10.2	0.645	548.0
26-28	22-24	1	0.75	77.90	196.0	4.2	1.266	248.0
26-28	20-22	2	1.50	26.70	134.0	8.3	1.191	160.0
26-28	18-20	3	1.50	6.45	81.1	8.1	1.667	135.0
26-28	16-18	4	1.50	1.20	30.2	10.4	2.778	83.3
26-28	14-16	5	1.50	1.53	67.3	12.0	1.370	92.2
28-30	24-26	1	0.75	92.80	233.0	5.5	1.136	265.0
28-30	22-24	2	0.75	36.80	370.0	8.6	1.205	446.0
28-30	20-22	3	1.50	17.20	216.0	10.7	1.266	273.0
28-30	18-20	4	1.50	4.24	107.0	8.3	1.786	191.0
28-30	16-18	5	1.50	0.00	0.0	-99.9	3.276	0.0
30-32	26-28	1	1.00	215.00	405.0	7.6	1.191	483.0
30-32	24-26	2	0.75	31.10	313.0	8.2	1.163	364.0
30-32	22-24	3	0.75	14.10	354.0	9.4	1.316	466.0
30-32	20-22	4	1.50	8.74	220.0	8.6	1.409	310.0
30-32	18-20	5	1.50	2.64	116.0	9.5	2.041	237.0

測定値一覧表（３／６）　測線　Ｔ３

P1-P2	C1-C2	n	I (A)	V (mV)	ρ-a (Ω-m)	FE (%)	Tc	ρ-ac (Ω-m)
0- 2	4- 6	1	1.00	355.00	669.0	2.4	1.031	690.0
0- 2	6- 8	2	1.00	59.70	450.0	3.8	3.030	1364.0
0- 2	8-10	3	1.00	17.00	321.0	2.3	1.235	396.0
0- 2	10-12	4	1.00	15.70	592.0	2.2	0.775	459.0
0- 2	12-14	5	1.00	5.25	346.0	2.5	1.205	417.0
2- 4	6- 8	1	1.00	165.00	311.0	3.8	3.122	972.0
2- 4	8-10	2	1.00	38.80	293.0	2.3	1.064	312.0
2- 4	10-12	3	1.00	30.80	581.0	3.2	0.685	398.0
2- 4	12-14	4	1.00	8.93	337.0	4.3	1.075	362.0
2- 4	14-16	5	1.00	1.87	123.0	3.8	2.703	332.0
4- 6	8-10	1	1.00	552.00	1040.0	2.1	0.490	510.0
4- 6	10-12	2	1.00	232.00	1749.0	2.8	0.435	761.0
4- 6	12-14	3	1.00	56.80	1071.0	3.0	0.769	824.0
4- 6	14-16	4	1.00	14.00	528.0	3.5	1.923	1015.0
4- 6	16-18	5	1.00	13.10	864.0	3.2	1.149	993.0
6- 8	10-12	1	1.00	149.00	281.0	2.3	1.370	385.0
6- 8	12-14	2	1.00	26.30	198.0	5.3	2.440	483.0
6- 8	14-16	3	1.00	6.13	116.0	7.2	5.882	682.0
6- 8	16-18	4	1.00	4.40	166.0	9.6	3.448	572.0
6- 8	18-20	5	0.70	3.50	329.0	9.5	1.667	550.0
8-10	12-14	1	1.00	51.70	97.5	2.7	1.923	187.0
8-10	14-16	2	1.00	11.50	86.7	3.1	3.704	321.0
8-10	16-18	3	1.00	3.12	58.8	4.2	2.000	118.0
8-10	18-20	4	0.70	7.12	384.0	3.0	0.935	359.0
10-12	14-16	1	1.00	102.00	192.0	2.1	1.887	362.0
10-12	16-18	2	1.00	49.40	373.0	4.3	0.877	327.0
10-12	18-20	3	0.70	25.60	689.0	3.4	0.437	301.0
12-14	16-18	1	1.00	379.00	714.0	3.8	0.575	411.0
12-14	18-20	2	0.50	62.60	944.0	2.7	0.417	393.0
18-20	14-16	1	1.00	212.00	400.0	3.6	1.099	440.0
20-22	16-18	1	1.00	72.20	136.0	8.0	1.786	243.0
20-22	14-16	2	1.00	23.10	174.0	8.1	1.724	300.0
20-22	12-14	3	1.00	21.60	407.0	10.1	0.625	254.0
20-22	10-12	4	1.00	14.70	554.0	-2.5	0.526	292.0
20-22	8-10	5	1.00	2.35	155.0	5.4	1.042	162.0
22-24	18-20	1	0.70	54.80	148.0	2.8	1.099	163.0
22-24	16-18	2	1.00	12.20	92.0	6.2	1.852	170.0
22-24	14-16	3	1.00	7.20	136.0	7.1	2.222	302.0
22-24	12-14	4	1.00	6.97	263.0	8.0	0.794	209.0
22-24	10-12	5	1.00	4.24	280.0	4.4	0.633	177.0
24-26	20-22	1	0.70	95.20	256.0	8.0	1.205	309.0
24-26	18-20	2	0.70	18.10	195.0	10.8	1.191	232.0
24-26	16-18	3	1.00	5.39	102.0	9.5	2.222	227.0
24-26	14-16	4	1.00	2.66	100.0	9.9	2.857	286.0
24-26	12-14	5	1.00	3.72	246.0	8.8	1.031	253.0
26-28	22-24	1	1.00	158.00	298.0	8.0	0.990	295.0
26-28	20-22	2	0.70	23.30	251.0	10.0	1.000	251.0
26-28	18-20	3	0.50	7.83	295.0	7.8	1.042	307.0
26-28	16-18	4	1.00	3.62	137.0	5.4	2.000	274.0
26-28	14-16	5	1.50	4.24	187.0	4.4	2.632	492.0
28-30	24-26	1	1.00	65.00	123.0	8.8	1.042	128.0
28-30	22-24	2	1.00	16.90	127.0	8.8	0.769	99.7
28-30	20-22	3	0.50	3.13	118.0	9.8	0.769	90.8
28-30	18-20	4	0.50	2.74	207.0	6.4	0.787	163.0
28-30	16-18	5	1.00	1.04	68.6	5.3	1.539	106.0
30-32	26-28	1	1.00	52.00	98.0	11.4	1.370	134.0
30-32	24-26	2	1.00	22.40	169.0	10.0	1.220	206.0
30-32	22-24	3	1.20	10.50	165.0	9.4	0.935	154.0
30-32	20-22	4	0.50	2.40	181.0	10.1	0.885	160.0
30-32	18-20	5	0.50	1.23	162.0	10.5	0.877	142.0

測定値一覧表（４／６）　測線　Ｔ４

P1-P2	C1-C2	n	I (A)	V (mV)	ρ-a (Ω-m)	FE (%)	Tc	ρ-ac (Ω-m)
0- 2	4- 6	1	1.00	101.00	190.0	1.2	0.971	185.1
0- 2	6- 8	2	1.00	19.00	143.0	0.8	1.961	280.0
0- 2	8-10	3	1.20	12.20	191.0	1.1	1.010	193.0
0- 2	10-12	4	1.50	11.00	277.0	1.3	1.042	289.0
0- 2	12-14	5	1.50	7.48	329.0	2.0	1.111	366.0
2- 4	6- 8	1	1.00	78.80	149.0	1.6	2.174	324.0
2- 4	8-10	2	1.00	29.90	225.0	-1.1	0.952	214.0
2- 4	10-12	3	1.50	26.30	331.0	2.6	0.990	328.0
2- 4	12-14	4	1.50	17.80	447.0	2.7	1.042	466.0
2- 4	14-16	5	1.50	34.00	1495.0	5.4	0.615	917.0
4- 6	8-10	1	1.20	174.00	273.0	1.5	0.439	120.0
4- 6	10-12	2	1.50	102.00	513.0	-0.3	0.671	344.0
4- 6	12-14	3	1.50	56.20	706.0	3.5	0.746	527.0
4- 6	14-16	4	1.50	111.00	2790.0	1.2	0.465	1297.0
4- 6	16-18	5	1.50	23.90	1051.0	2.8	0.758	796.0
6- 8	10-12	1	1.50	122.00	153.0	1.2	1.563	239.0
6- 8	12-14	2	1.50	33.80	170.0	6.3	1.587	270.0
6- 8	14-16	3	1.50	105.00	1320.0	4.8	1.031	1361.0
6- 8	16-18	4	1.50	23.90	601.0	4.2	1.695	1019.0
6- 8	18-20	5	1.50	25.30	1113.0	2.9	2.439	2715.0
8-10	12-14	1	1.50	187.00	235.0	0.9	1.099	258.0
8-10	14-16	2	1.00	129.00	973.0	4.5	0.690	671.0
8-10	16-18	3	1.00	35.60	671.0	4.2	1.177	789.0
8-10	18-20	4	1.50	81.80	2056.0	2.8	1.640	3370.0
8-10	20-22	5	1.50	17.80	783.0	4.2	0.909	712.0
10-12	14-16	1	1.00	287.00	541.0	1.5	0.807	436.0
10-12	16-18	2	1.00	30.70	232.0	2.8	1.409	327.0
10-12	18-20	3	1.50	15.20	191.0	8.1	1.961	375.0
10-12	20-22	4	1.50	16.80	422.0	6.2	1.031	435.0
10-12	22-24	5	1.50	3.13	138.0	9.2	1.563	216.0
12-14	16-18	1	1.00	55.40	104.0	1.6	2.222	231.0
12-14	18-20	2	1.50	25.30	127.0	2.4	2.564	326.0
12-14	20-22	3	1.50	21.80	274.0	2.0	1.316	361.0
12-14	22-24	4	1.50	4.73	119.0	4.4	1.923	229.0
12-14	24-26	5	1.50	1.40	61.6	2.4	2.500	154.0
14-16	18-20	1	1.50	300.00	377.0	1.5	1.177	444.0
14-16	20-22	2	1.50	171.00	860.0	2.6	0.571	491.0
14-16	22-24	3	1.50	29.00	364.0	3.2	0.901	328.0
14-16	24-26	4	1.50	7.26	183.0	6.2	1.177	215.0
14-16	26-28	5	1.50	6.08	267.0	6.5	1.099	293.0
20-22	16-18	1	1.20	369.00	580.0	2.0	0.787	457.0
22-24	18-20	1	1.50	82.10	103.0	3.5	1.961	202.0
22-24	16-18	2	1.20	28.20	177.0	3.0	1.316	233.0
24-26	20-22	1	1.50	164.00	206.0	4.8	1.220	251.0
24-26	18-20	2	1.50	12.40	62.3	4.3	2.174	135.0
24-26	16-18	3	1.50	5.86	73.6	3.2	1.667	123.0
26-28	22-24	1	1.50	177.00	222.0	6.5	1.020	227.0
26-28	20-22	2	1.50	56.20	283.0	4.3	0.971	275.0
26-28	18-20	3	1.50	7.28	91.5	3.2	1.887	173.0
26-28	16-18	4	1.50	3.07	77.2	2.5	1.493	115.0
28-30	24-26	1	1.50	124.00	156.0	6.5	1.087	170.0
28-30	22-24	2	1.50	47.00	236.0	6.0	0.893	211.0
28-30	20-22	3	1.50	26.40	332.0	4.8	0.840	279.0
28-30	18-20	4	1.50	3.96	99.5	4.0	1.639	163.0
28-30	16-18	5	1.50	2.44	107.0	3.3	1.316	141.0
30-32	26-28	1	1.50	136.00	171.0	7.3	1.075	184.0
30-32	24-26	2	1.50	35.10	176.0	7.1	0.980	173.0
30-32	22-24	3	1.50	22.10	278.0	7.4	0.833	232.0
30-32	20-22	4	1.50	14.40	362.0	5.9	0.741	268.0
30-32	18-20	5	1.50	2.53	111.0	5.3	1.449	161.0

測定値一覧表（５／６）　測線　Ｔ５

P1-P2	C1-C2	n	I (A)	V (mV)	ρ-a (Ω-m)	FE (%)	Tc	ρ-ac (Ω-m)
0- 2	4- 6	1	1.50	196.00	246.0	2.6	1.064	262.0
0- 2	6- 8	2	1.50	100.00	503.0	4.6	0.862	434.0
0- 2	8-10	3	1.50	11.10	140.0	5.4	1.667	233.0
0- 2	10-12	4	1.50	14.00	352.0	4.0	1.177	414.0
0- 2	12-14	5	1.50	13.60	598.0	3.6	0.926	554.0
2- 4	6- 8	1	1.50	271.00	341.0	2.4	0.962	328.0
2- 4	8-10	2	1.50	22.30	112.0	-0.6	1.786	200.0
2- 4	10-12	3	1.50	29.30	368.0	-2.0	1.235	454.0
2- 4	12-14	4	1.50	23.50	591.0	-0.9	0.980	579.0
2- 4	14-16	5	1.50	16.70	735.0	0.8	1.020	750.0
4- 6	8-10	1	1.50	86.40	109.0	5.7	2.128	232.0
4- 6	10-12	2	1.50	67.10	337.0	4.0	1.220	411.0
4- 6	12-14	3	1.50	49.00	615.0	3.6	0.971	598.0
4- 6	14-16	4	1.50	25.60	643.0	3.5	1.020	656.0
6- 8	10-12	1	1.50	454.00	571.0	4.5	0.641	366.0
6- 8	12-14	2	1.50	242.00	1217.0	4.9	0.595	724.0
6- 8	14-16	3	1.50	93.80	1179.0	5.4	0.685	808.0
6- 8	16-18	4	1.50	12.70	319.0	4.4	1.064	339.0
6- 8	18-20	5	1.50	3.67	161.0	3.6	1.316	212.0
8-10	12-14	1	1.50	202.00	254.0	6.4	1.220	310.0
8-10	14-16	2	1.50	51.60	259.0	6.5	1.389	360.0
8-10	16-18	3	1.50	6.01	75.5	7.4	2.174	164.0
8-10	18-20	4	1.50	1.73	43.5	6.2	2.632	115.0
8-10	20-22	5	1.50	.64	28.3	-99.9	2.222	62.9
10-12	14-16	1	1.50	448.00	563.0	4.6	1.299	731.0
10-12	16-18	2	1.50	36.30	183.0	3.9	1.786	327.0
10-12	18-20	3	1.50	8.10	102.0	3.2	2.083	213.0
10-12	20-22	4	1.50	4.38	110.0	4.7	1.695	187.0
10-12	22-24	5	1.50	1.93	84.9	6.3	1.786	152.0
12-14	16-18	1	1.50	260.00	327.0	4.9	1.449	474.0
12-14	18-20	2	1.50	35.80	180.0	4.3	1.449	261.0
12-14	20-22	3	1.50	16.00	201.0	5.6	1.163	234.0
12-14	22-24	4	1.50	6.83	172.0	10.4	1.163	200.0
12-14	24-26	5	1.50	4.17	183.0	5.2	1.299	238.0
16-18	4- 6	5	1.50	3.96	174.0	3.5	1.539	268.0
18-20	14-16	1	1.50	179.00	225.0	2.5	1.136	256.0
20-22	16-18	1	1.50	200.00	251.0	3.2	0.943	237.0
20-22	14-16	2	1.50	59.40	299.0	3.6	0.855	256.0
22-24	18-20	1	1.50	81.50	102.0	4.6	1.235	126.0
22-24	16-18	2	1.50	47.10	237.0	5.4	0.990	235.0
22-24	14-16	3	1.50	23.40	294.0	6.1	0.885	260.0
24-26	20-22	1	1.50	112.00	141.0	6.3	1.220	172.0
24-26	18-20	2	1.50	27.10	136.0	5.8	1.351	184.0
24-26	16-18	3	1.50	20.80	261.0	6.6	1.163	304.0
24-26	14-16	4	1.50	12.70	319.0	6.3	1.000	319.0
26-28	22-24	1	1.50	140.00	176.0	5.5	0.971	171.0
26-28	20-22	2	1.50	28.20	142.0	6.5	0.962	137.0
26-28	18-20	3	1.50	10.60	133.0	6.5	1.150	153.0
26-28	16-18	4	1.50	8.44	212.0	7.7	0.990	210.0
26-28	14-16	5	1.50	5.61	247.0	8.9	0.840	208.0
28-30	24-26	1	1.50	29.80	37.4	5.0	1.010	37.8
28-30	22-24	2	1.50	30.00	151.0	5.7	0.820	124.0
28-30	20-22	3	1.50	12.30	155.0	6.9	0.820	127.0
28-30	18-20	4	1.50	5.52	139.0	8.5	0.952	132.0
28-30	16-18	5	1.50	4.95	218.0	6.1	0.820	179.0
30-32	26-28	1	1.50	114.00	143.0	6.7	1.351	193.0
30-32	24-26	2	1.50	23.40	118.0	6.9	1.220	144.0
30-32	22-24	3	1.50	13.10	165.0	5.5	1.010	167.0
30-32	20-22	4	1.50	6.72	169.0	6.5	0.962	163.0
30-32	18-20	5	1.50	3.51	154.0	5.3	1.099	169.0

測定値一覧表（６／６）　測線　Ｔ６

P1-P2	C1-C2	n	I (A)	V (mV)	ρ-a (Ω-m)	FE (%)	Tc	ρ-ac (Ω-m)
0- 2	4- 6	1	1.20	70.00	110.0	5.2	1.370	151.0
0- 2	6- 8	2	1.50	16.40	82.4	4.3	1.667	137.0
0- 2	8-10	3	0.75	2.95	74.1	3.5	1.961	145.0
0- 2	10-12	4	0.75	6.75	339.0	6.5	0.926	314.0
0- 2	12-14	5	1.50	5.22	230.0	7.0	0.813	187.0
2- 4	6- 8	1	1.50	78.60	98.8	5.9	1.205	119.0
2- 4	8-10	2	0.75	12.50	126.0	2.2	1.250	158.0
2- 4	10-12	3	0.75	31.00	779.0	3.6	0.610	475.0
2- 4	12-14	4	1.40	18.60	501.0	3.7	0.565	283.0
2- 4	14-16	5	1.50	8.02	353.0	3.2	0.980	346.0
4- 6	8-10	1	0.75	62.10	156.0	8.1	1.124	175.0
4- 6	10-12	2	0.75	84.20	847.0	5.4	0.553	468.0
4- 6	12-14	3	1.40	39.10	527.0	2.8	0.588	310.0
4- 6	14-16	4	1.50	12.80	322.0	3.0	1.075	346.0
4- 6	16-18	5	1.50	4.88	215.0	2.6	1.266	272.0
6- 8	10-12	1	0.75	541.00	1359.0	8.9	0.614	835.0
6- 8	12-14	2	1.40	79.80	430.0	9.6	0.840	361.0
6- 8	14-16	3	1.50	16.20	204.0	5.4	1.639	334.0
6- 8	16-18	4	1.50	4.62	116.0	4.6	1.852	215.0
8-10	12-14	1	1.40	78.00	105.0	10.0	1.695	178.0
8-10	14-16	2	1.50	11.90	59.8	6.5	2.941	176.0
8-10	16-18	3	1.50	3.32	41.7	4.1	3.125	130.0
10-12	14-16	1	1.50	78.90	99.2	9.7	1.818	180.0
10-12	16-18	2	1.50	15.10	75.9	8.7	1.539	117.0
12-14	16-18	1	1.50	40.30	50.6	9.6	1.235	62.5
18-20	14-16	1	1.50	116.00	146.0	6.4	0.909	133.0
18-20	12-14	2	1.40	9.92	53.4	8.7	0.855	45.6
18-20	10-12	3	0.75	3.93	98.8	8.7	1.205	119.0
18-20	8-10	4	0.75	1.01	50.8	6.6	2.500	127.0
18-20	6- 8	5	1.50	3.12	137.0	4.4	1.587	218.0
20-22	16-18	1	1.50	122.00	153.0	6.3	1.191	182.0
20-22	14-16	2	1.50	42.70	215.0	7.4	0.848	182.0
20-22	12-14	3	1.50	10.80	136.0	7.8	0.769	105.0
20-22	10-12	4	0.75	6.53	328.0	6.4	1.075	353.0
20-22	8-10	5	0.75	4.17	367.0	3.3	2.273	834.0
22-24	18-20	1	1.50	235.00	295.0	7.8	1.191	351.0
22-24	16-18	2	1.50	33.60	169.0	6.4	1.250	211.0
22-24	14-16	3	1.50	14.90	187.0	7.5	0.893	167.0
22-24	12-14	4	1.50	3.64	91.5	8.3	0.826	75.6
22-24	10-12	5	0.75	2.22	195.0	6.8	1.205	235.0
24-26	20-22	1	1.50	160.00	201.0	7.8	1.136	228.0
24-26	18-20	2	1.50	34.10	171.0	9.8	1.149	197.0
24-26	16-18	3	1.50	7.73	97.1	8.3	1.333	130.0
24-26	14-16	4	1.50	4.26	107.0	8.7	0.952	102.0
24-26	12-14	5	1.50	1.78	78.3	7.6	0.870	68.1
26-28	22-24	1	1.50	49.30	62.0	6.6	1.429	88.6
26-28	20-22	2	1.50	26.30	132.0	7.9	1.471	194.0
26-28	18-20	3	1.50	9.99	126.0	6.8	1.613	203.0
26-28	16-18	4	1.50	3.10	77.9	7.7	1.887	147.0
26-28	14-16	5	1.50	1.87	82.2	7.9	1.333	110.0
28-30	24-26	1	1.50	112.00	141.0	7.6	0.741	104.0
28-30	22-24	2	1.50	30.90	155.0	6.1	0.704	109.0
28-30	20-22	3	1.50	22.20	279.0	7.0	0.769	215.0
28-30	18-20	4	1.50	10.20	256.0	7.2	0.862	221.0
28-30	16-18	5	1.50	3.80	167.0	7.3	1.020	170.0
30-32	26-28	1	1.50	82.80	104.0	7.5	1.724	179.0
30-32	24-26	2	1.50	19.70	99.0	8.8	1.064	105.0
30-32	22-24	3	1.50	11.20	141.0	7.5	0.962	136.0
30-32	20-22	4	1.50	10.10	254.0	7.3	0.980	249.0
30-32	18-20	5	1.50	4.89	215.0	7.5	1.075	231.0

Table A-6 Generalized drilling results

Drill Hole No.	Machine Type	Drilling Period	Drilled Length	Core		Number of Drilling Shift			Drilling Speed	
				Length	Recovery	Drilling	Preparation & Removing	Total	m/shift *	m/shift **
MJE - 7	L - 38	Sep. 7, 1990 ~ Sep. 26, 1990	305.00m	292.80m	96.0%	29	17	46	6.63	10.52
MJE - 8	L - 38	Oct. 12, 1990 ~ Oct. 23, 1990	301.00m	277.00m	100.0%	25	16	41	7.34	12.04
MJE - 9	L - 38	Nov. 2, 1990 ~ Nov. 11, 1990	205.00m	176.90m	99.8%	18	19	37	5.54	11.39
Total	—	—	811.00m	746.70m	98.4%	72	52	124	6.54	11.26

Note * Drilled Length per one shift covering total works operated.

** Drilled Length per one shift covering net drilling operation.

Each hole (MJE 7,8 & 9) were drilled in 3 shifts / day. (8 hours / shift)

Table A-7 Summary record of drilling results (MJE-7,8 and 9)

M J E - 7

		Periods			Number Of Days	Actual Working Days	Pay off	Total Number of Workers
Drilling Period	Preparation	Aug. 24, 1990 ~ Sep. 6, 1990			14	14	—	287
	Drilling	Sep. 7, 1990 ~ Sep. 26, 1990			20	20	—	372
	Removing	Sep. 27, 1990 ~ Sep. 29, 1990			3	3	—	72
	Total	Aug. 24, 1990 ~ Sep. 29, 1990			37	37	—	731
Drilling Length	Planned Length	300.00 m	Overburden	— m	Core Recovery for Each 100m Section			
	Increase or Decrease in Length	+ 5.00 m	Core Length	292.80 m	Depth (m)	Section (m)	Core Length (m)	Core Recovery (%)
	Drilled Length	305.00 m	Core Recovery	96.0 %	0 ~ 96.10	96.10	84.60	88.0
Working Time	Drilling	169°20'	39.9 %	29.4 %	96.10~199.90	103.80	103.10	99.3
	Accompanying Works	254°40'	60.1 %	44.2 %	199.90~305.00	105.10	105.10	100.0
	Repairing	0°	—	—	—	—	—	—
	Sub Total	424°	100.0 %	73.6 %	Drilling Efficiency			
	Preparation	24°	—	4.2 %	$\frac{305}{20}$ ($\frac{\text{Total Length}}{\text{Drilling Days}}$)			15.3 m/Day
	Moving	16°	—	2.8 %	$\frac{305}{37}$ ($\frac{\text{Total Length}}{\text{Total Working Days}}$)			8.2 m/Day
	Others	112°	—	19.4 %	$\frac{372}{305}$ ($\frac{\text{Net Drilling Workers}}{\text{Total Length}}$)			1.22 mens/m
	Grand Total	576°	—	100.0 %	$\frac{731}{305}$ ($\frac{\text{Total Workers}}{\text{Total Length}}$)			2.40 mens/m

Inserted Casing Pipe	Pipe Size & Inserted Length	$\frac{\text{Inserted Length}}{\text{Drilled Length}} \times 100$	Recovery of Casing Pipe	Remarks
	NQ — NUCP 16.50 m	5.4 %	100.0 %	
	BWCP 151.00 m	49.5 %	100.0 %	
	—	—	—	

		Periods			Number Of Days	Actual Working Days	Pay off	Total Number of Workers
Drilling Period	Preparation	Sep. 30, 1990 ~ Oct. 11, 1990			12	12	—	364
	Drilling	Oct. 12, 1990 ~ Oct. 23, 1990			12	12	—	286
	Removing	Oct. 24, 1990 ~ Oct. 27, 1990			4	4	—	104
	Total	Sep. 30, 1990 ~ Oct. 27, 1990			28	28	—	754
Drilling Length	Planned Length	300.00 m	Overburden	24.00 m	Core Recovery for Each 100m Section			
	Increase or Decrease in Length	+ 1 00 m	Core Length	277.00 m	Depth (m)	Section (m)	Core Length (m)	Core Recovery (%)
	Drilled Length	301.00 m	Core Recovery	100.0 %	24.00~120.50	96.50	94.60	98.0
Working Time	Drilling	134°10'	55.9 %	29.9 %	120.50~202.90	82.40	82.40	100.0
	Accompanying Works	105°50'	44.1 %	23.6 %	202.90~301.00	98.10	98.10	100.0
	Repairing	0°	—	—	—	—	—	—
	Sub Total	240°	100.0 %	53.6 %	Drilling Efficiency			
	Preparation	40°	—	8.9 %	$\frac{301}{12}$ ($\frac{\text{Total Length}}{\text{Drilling Days}}$)			25.08 m/Day
	Moving	24°	—	5.4 %	$\frac{301}{28}$ ($\frac{\text{Total Length}}{\text{Total Working Days}}$)			10.75 m/Day
	Others	144°	—	32.1 %	$\frac{286}{301}$ ($\frac{\text{Net Drilling Workers}}{\text{Total Length}}$)			0.95 mens/m
	Grand Total	448°	—	100.0 %	$\frac{754}{301}$ ($\frac{\text{Total Workers}}{\text{Total Length}}$)			2.50 mens/m
Inserted Casing Pipe	Pipe Size & Inserted Length	$\frac{\text{Inserted Length}}{\text{Drilled Length}} \times 100$		Recovery of Casing Pipe	Remarks			
	NQ — NUCP 33.00 m	11.0 %		100.0 %				
	BWCP 195.50 m	65.0 %		100.0 %				
	—	—		—				

M J E - 9

		Periods			Number Of Days	Actual Working Days	Pay off	Total Number of Workers
Drilling Period	Preparation	Oct. 28, 1990 ~ Nov. 1, 1990			5	5	—	120
	Drilling	Nov. 2, 1990 ~ Nov. 11, 1990			10	10	—	210
	Removing	Nov. 12, 1990 ~ Nov. 25, 1990			14	14	—	397
	Total	Oct. 28, 1990 ~ Nov. 25, 1990			29	29	—	727
Drilling Length	Planned Length	200.00 m	Overburden	27.80 m	Core Recovery for Each 100m Section			
	Increase or Decrease in Length	+ 5.00 m	Core Length	176.90 m	Depth (m)	Section (m)	Core Length (m)	Core Recovery (%)
	Drilled Length	205.00 m	Core Recovery	99.8 %	27.80~113.00	85.20	84.90	99.6
Working Time	Drilling	87°40'	60.9 %	25.5 %	113.00~205.00	92.00	92.00	100.0
	Accompanying Works	56°20'	39.1 %	16.4 %	—	—	—	—
	Repairing	0°	—	—	—	—	—	—
	Sub Total	144°	100.0 %	41.9 %	Drilling Efficiency			
	Preparation	40°	—	11.6 %	$\frac{205}{10}$ ($\frac{\text{Total Length}}{\text{Drilling Days}}$)			20.50 m/Day
	Moving	112°	—	32.5 %	$\frac{205}{29}$ ($\frac{\text{Total Length}}{\text{Total Working Days}}$)			7.07 m/Day
	Others	48°	—	14.0 %	$\frac{210}{205}$ ($\frac{\text{Net Drilling Workers}}{\text{Total Length}}$)			1.02 mens/m
	Grand Total	344°	—	100.0 %	$\frac{727}{205}$ ($\frac{\text{Total Workers}}{\text{Total Length}}$)			3.55 mens/m

	Pipe Size & Inserted Length	$\frac{\text{Inserted Length}}{\text{Drilled Length}} \times 100$	Recovery of Casing Pipe	Remarks
Inserted Casing Pipe	NQ — NUCP 28.00 m	13.7 %	100.0 %	
	BWCP —— m	— %	— %	
	—	—	—	

Table A-8 Drilling equipments and consumed materials

A. Drilling Equipment

Article	Model	Specification	Quantity
Drilling Machine	L 38	Maker : Longyear Capacity : BQ WL 725m Dimensions : Height 1,450mm Length 2,120mm Weight (without Power Unit) : 1,150kg	1 set
Diesel Engine	F4L 912	Maker : Mitsui Deutz Horse Power : 52HP / 1,800rpm	1 set
Drilling Pump	520 RQ	Maker : Longyear Piston Diameter 57mm Stroke 57mm Max. Capacity 76l / min Max. Pressure 49kg / cm^2 Weight (without Power Unit) : 395kg	2 set
Diesel Engine	FIL 210	Maker : Mitsui Duetz Horse Power : 8.5HP / 1,800rpm	2 set
Mixer	Jet Type	Run by Drilling Pump	1 set
Drill Rod		NQWL (3.00m / joint) BQWL (3.00m / joint) NQ – NU (2.50m / joint) BW (2.80m / joint)	85 joints 130 joints 18 joints 100 joints
Wireline Hoist		Attached to Drilling Machine	1 set
Water Supply Pump	MS 1,503	Maker : MARUYAMA Max. Capacity 150 l / min Max. Pressure 30kg / cm^2 Weight (without Power Unit) : 40.8kg	2 set
Diesel Engine	NF 13 EK	Maker : YANMAR Diesel Horse Power : 12.5HP / 2,400rpm	2 set

B. Consumed Materials

Article	Specification	Unit	Quantity			
			MJE - 7	MJE - 8	MJE - 9	Total
Light Oil	Engine	ℓ	1,937	975	810	3,722
Cement	40Kg/Sx	Sx	5	6	6	17
Bentonite	25Kg/Sx	Sx	118	48	40	206
Libonite	20Kg/Sx	Sx	18	7	4	29
C.M.C.	10Kg/Sx	Kg	138	76	66	280
TK60B	20Kg/Sx	Sx	45	25	18	88
TELSTOP	25Kg/Sx	Sx	7	4	4	15
Mud Oil	16ℓ /can	ℓ	509	230	177	916

C. Consumed Bit

Hole No. / Bit Type		MJE - 7		MJE - 8		MJE - 9		Total	
		Drilled Length	Quantity	Drilled Length	Quantity	Drilled Length	Quantity	Drilled Length	Quantity
101㎜ Single	Metal Bit	16.50 m	8 pcs	33.00 m	4 pcs	28.00 m	4 pcs	77.50 m	16 pcs
	Dia. Shoe Bit	16.50	1	33.00	1	28.00	1	77.50	3 pcs
NQWL	Dia. Bit	134.50	15	162.50	4	177.00	4	474.00	23
	Dia. Reamer	134.50	6	162.50	3	177.00	3	474.00	12
BQWL	Dia. Bit	154.00	4	105.50	3	—	—	259.50	7
	Dia. Reamer	154.00	2	105.50	2	—	—	259.50	4

Dia. : Diamond