

FOR FALCONBRIDGE NIKKELVERK A/S
A/S SULFIDMALM

Project 905-17

Ground surveys and prospect drilling
on Ruvvačokka in 1976, Masi.

By
E. Kreivi

Report No. 411/76/17

Introduction (Fig.1)

The Ruvvačokka-grid is situated 4 kms north of Suolovuobme. It was sited in 1975 to follow up geochemical and airborne-EM-anomalies from the 1974 Masi reconnaissance programme (Rep. 341/74/17 and 335/74/17). Detailed mapping VLF-survey and till-sampling in 1975 (Rep. 367/75/17) revealed very strong till anomalies, with maximum values of 8500 ppm Zn, 3000 ppm Pb, 2870 ppm Cu and 600 ppm Ni, associated with VLF-indicated conductive zones and acid volcanics. In 1976 detailed Shoot-Back- and Magnetometer surveys were done on the anomalous areas to locate them for prospect drilling.

Geophysics (Fig.2)

Four very strong (max. amplitude 260) Shoot-Back-conductive zones associated with the strong till-anomalies were found in the grid area. According to the Shoot-Back-curves the conductors are dipping gently westwards.

Magnetic relief is very low in the whole area.

Geochemistry and Geology (Fig.3)

See Rep. 367/75/17.

Drilling Fig.4)

Seven diamond-drill-holes (totalling 250,6 m) were drilled by a contractor, called Terranor A/S, to find a source of the Shoot-Back-EM- and geochemical anomalies.

The drill-holes are collared:

1-R/1776	60°NE/29.40 m	at	1475N/10E
2-R/1776	60°NE/30.40 m	at	1350N/80E
3-R/1776	60°NE/60 m	at	950N/80E
4-R/1776	60°NE/30.90 m	at	950N/200E
5-R/1776	60°NE/28.60 m	at	700N/190E
6-R/1776	60°NE/32.40 m	at	700N/345E
7-R/1776	<u>60°NE/38.90 m</u>	at	1150N/335E
	<u>Total 173 m</u>		

In the core we found basic volcanics on the top and under it we found different types of acid volcanics-beds, quartz-keratophyre or chert with graphitic beds, layers of weathering sediments, which were called mica-schist or if carbonate-contain was higher and amphibole-or chlorite-fragments were abundant then the rock was called volcanic greywacke. This latter is often also strongly brecciated by carbonate. In the hole 4-R we found also about 5 ms of pure quartz and in the last 3 ms of the hole 7-R we found phyllite under acid volcanics.

The graphitic beds are always strongly mineralized, more than 50% sulphides, mainly pyrrhotite less pyrite, occasionally chalcopyrite and sphalerite in joints (5-R/1776). Some weak po-py-mineralization was also found in chert and greywacke. The graphitic beds are usually up to 3 ms thick except in the hole 2-R we got a 23 ms thick bed right from the top.

The best analyzes were:

0.15% Ni	in	7-R/1776	at	16-17 m
0.12% Cu	in	5-R/1776	at	4-5 m
2.90% Zn	in	1-R/1776	at	18-19 m
1.10% Pb	in	1-R/1776	at	18-19 m

Conclusions

It means that in till we got more copper (2870 ppm = 0.287% Cu) than in any of the drill-holes. Also Zn- and Pb-values are considerably low compared with the strong anomalies in till (8500 ppm Zn and 3000 ppm Pb). The rock in most of the area, especially in the anomalous-places, is very deeply weathered, and fresh exposures of the mineralized graphitic rock have not been found. Some of the till-samples are obviously taken from the residual weathered rock, where metals might have been enriched. The whole area is above the tree-limit and anomalies are mainly concentrated in the valleys filled by drift brought by melting water. Small streams are running southwards and the glacial striae is to the north. The source of the anomalies are apparently in these mineralized graphitic beds.

Site No. Masi 1776

Date 8/11 1976

Investigator: E. Krivá

Core No.	Interval	Provetype	Depth	Ni	Co	Zn	Pb	Remarks
1-R	18-19	Ruvvaidka	Core	0.02	0.04	2.90	1.10	
6	19-20			0.10	0.06	0.205	0.05	
7	2-3			0.03	0.04	0.113	<0.02	
8	3-4			0.08	0.04	0.23	<0.02	
9	4-5			0.03	0.04	0.118	<0.02	
0	5-6			0.06	0.04	0.068	<0.02	
1	6-7			0.02	0.04	0.060	<0.02	
2	7-8			0.07	0.06	0.048	<0.02	
3	8-9			0.03	0.06	0.100	<0.02	
4	9-10			0.07	0.07	0.100	<0.02	
5	10-11			0.03	0.05	0.110	<0.02	
6	11-12			0.07	0.06	0.108	<0.02	
7	12-13			0.03	0.03	0.115	<0.02	
8	13-14			0.08	0.10	0.105	<0.02	
9	14-15			0.03	0.06	1.68	0.35	

acknowledgments:

Shipment No. 17/10

Masi 1770

Dato 9/11 1976

Innskrift av: E. Kivi

No	Prov	Lokalitet	Provetyp	Bestn	Ni					Bemärk
					Co	Zn	Pb	Au		
70	2-R 15-16	Ruvvikk	Loose		007	004	0115	<0.02		
71	16-17				002	004	0070	<0.02		
72	17-18				007	006	0072	<0.02		
73	18-19				002	004	<0.01	<0.02		
74	19-20				007	007	<0.01	<0.02		
75	3-R 13-135				003	005	001	<0.02		
76	14-15				008	005	<0.01	<0.02		
77	15-16				005	010	<0.01	<0.02		
78	38.5-40 ?				010	003	0070	<0.02		
79	40-41				002	002	0017	<0.02		
80	4-R 125-13				011	005	0020	<0.02	<0.6	
81	18-185				001	001	<0.01	<0.02	0.6	
82	5-R 4-5				011	012	001	<0.02		
83	5-6				003	004	0019	<0.02		
84	6-7				010	004	0025	<0.02		

Antal minser:

Shippent No. 17/10

Masi 1776

Dato 9/11 1976

Innsendt av: E. Keevi

No.	Lokalitet	Provetype	Bestr.	Ni	Cu	Zn	Pb		Bemerk:
5	5-R 7-8 Ruvaiokka	Core		0.05	0.07	0.015	<0.02		
6	15-15.5			0.10	0.04	0.012	<0.02		
7	24-25			0.02	0.03	<0.01	<0.02		
38	6-R 7-8			0.09	0.02	<0.01	<0.02		
39	8-9			0.02	0.01	0.015	<0.02		
70	9-10			0.12	0.01	<0.01	<0.02		
71	7-R 15-15			0.04	0.06	0.070	<0.02		
72	16-17			0.15	0.07	0.040	<0.02		

Antal prover:

Shipment No. 17/10

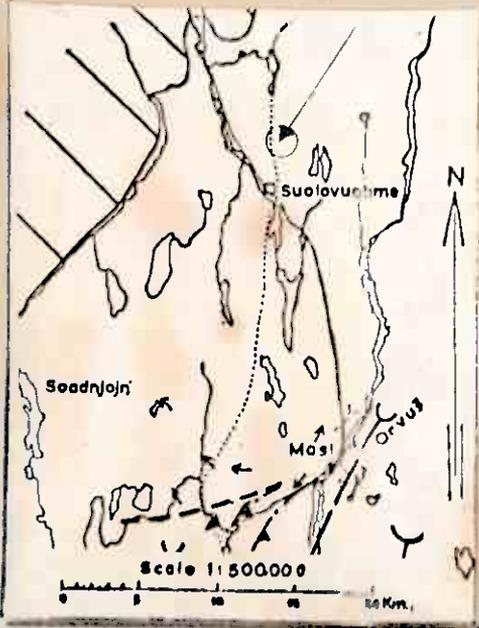
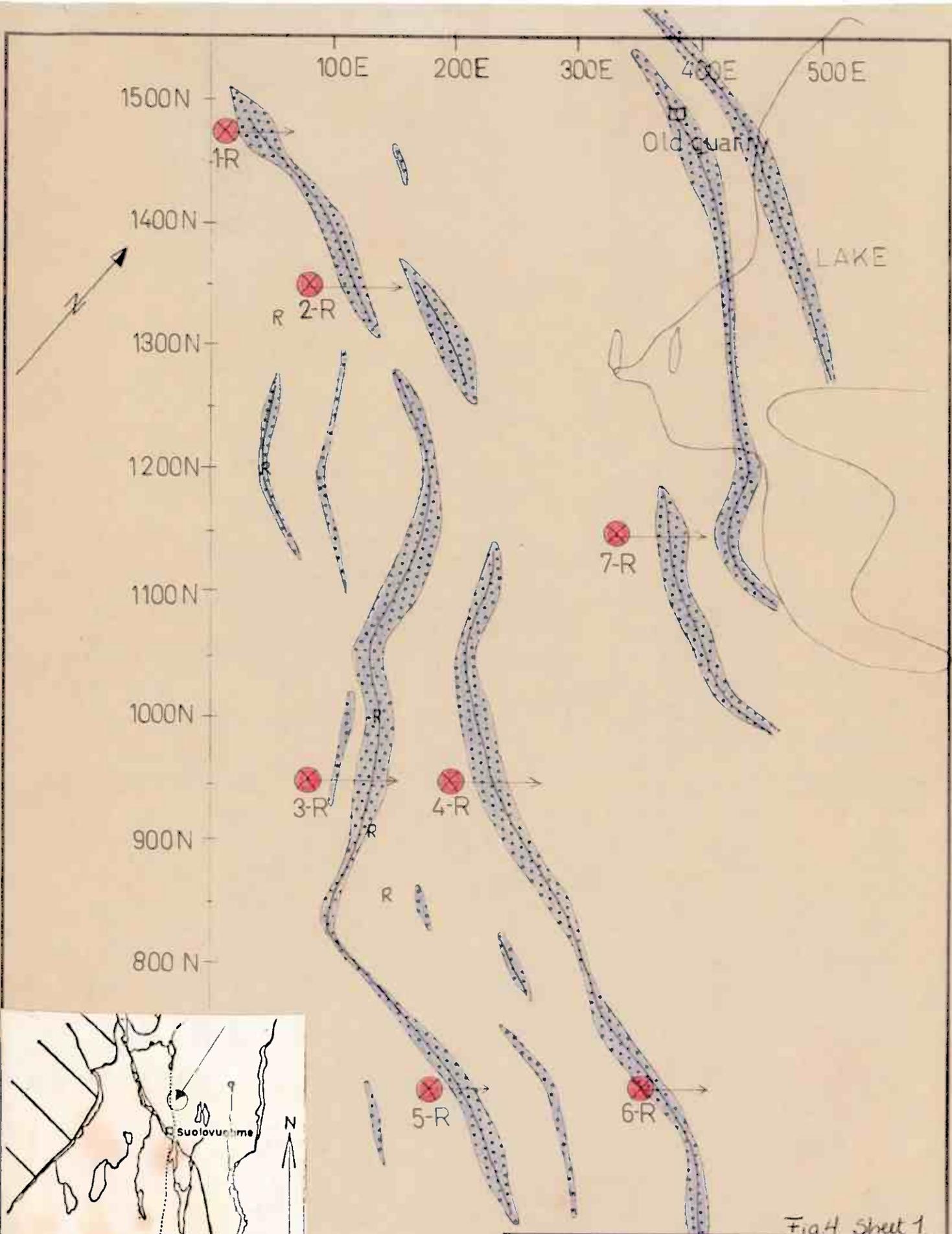


Fig 4 Sheet 1

A/S SULFIDMALM	
RUVVAČOKKA, Masi 1776.	
Shoot-back-amplitudes	
Drill hole locations.	
SCALE	1:4000
DATE	10-76
DRAWN	EK
TRACED	BB

1-R/1776

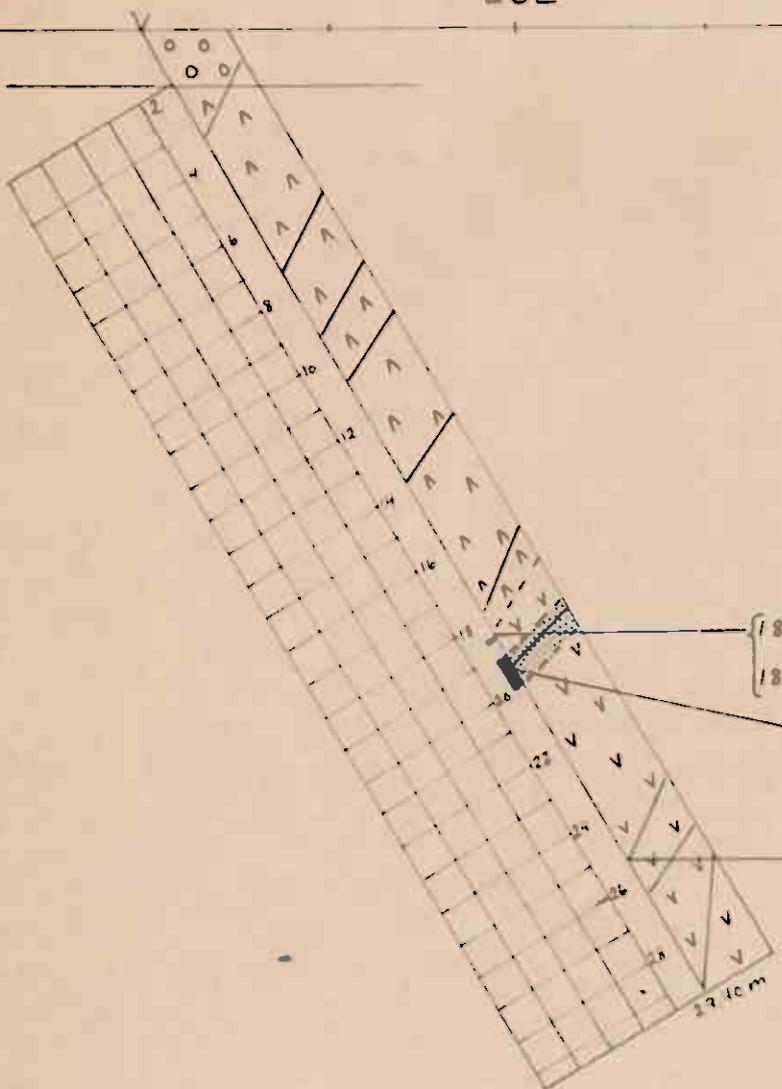
20E

30E

40E

1475 N

- Over burden
- △ Basic volcanics
- ∇ Acid
- ▨ Graphitic rock
- Sulphides
- Sulphides in outcrop



18.30 - 19.10 Thin veins of sphalerite,
less than 5% sphalerite
18.50 - 18.60 Graphitic rock, brecciated
by 70% po.
19.10 - 19.95 80-90% po, occasionally
thin sphalerite-veins
and cp.
19.95 - 29.40 10% po - breccia
28.55 - 29.70 30-40% —

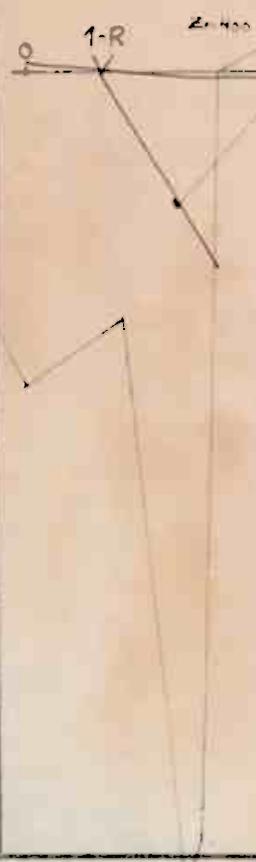
(Till-geochem 1450N)
N: 16
Cu: 25
Zn: 3700
Pb: 2500

N: 130
Cu: 125
Zn: 5000
Pb: 3000

Cu: 1850
Zn: 100
Pb: 110
Ag: 0

Zn: 137
100E

150E → 1475 N



Sheet 1214

Fig. 4 Sheet 2

A S SULFIDMALM	
RUVVAČOKKA, Masi 1776	
1-R/1776	1475N/10E
Terranor as	60°NE / 29.4m
SCALE	DRAWN
DATE	TRACED

2-R/1776

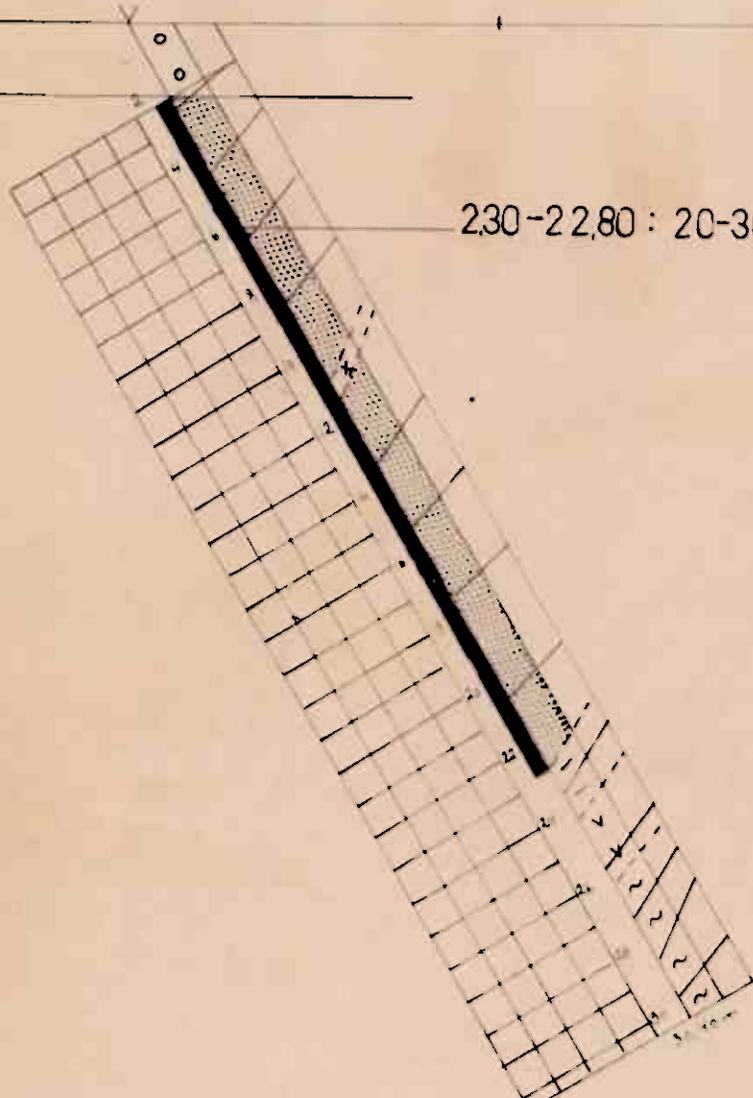
90 E

100 E

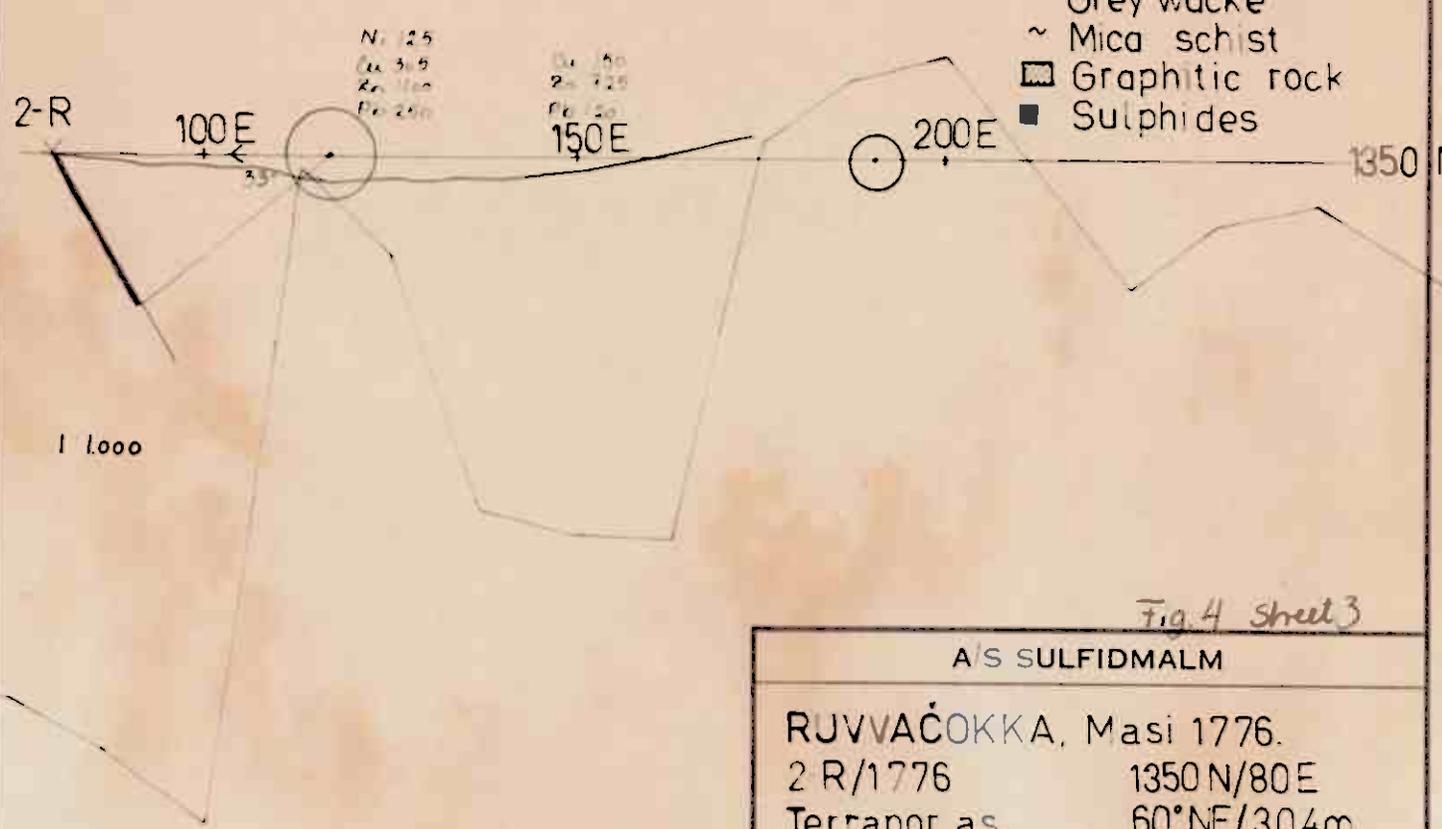
110 E

1300 N

2.30-22.80 : 20-30%_{py} 10% py, some cp, occasionally sh.



- o Overburden
- v Acid volcanics
- x Fel-vein
- Grey wacke
- ~ Mica schist
- ▨ Graphitic rock
- Sulphides



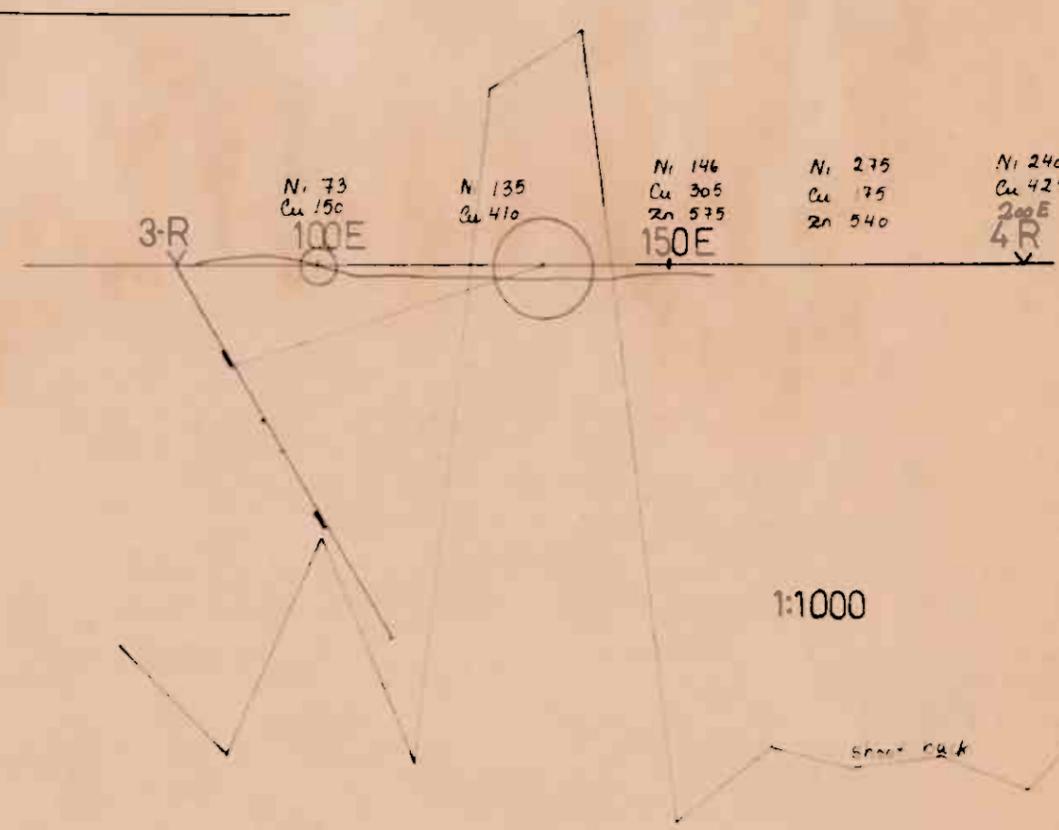
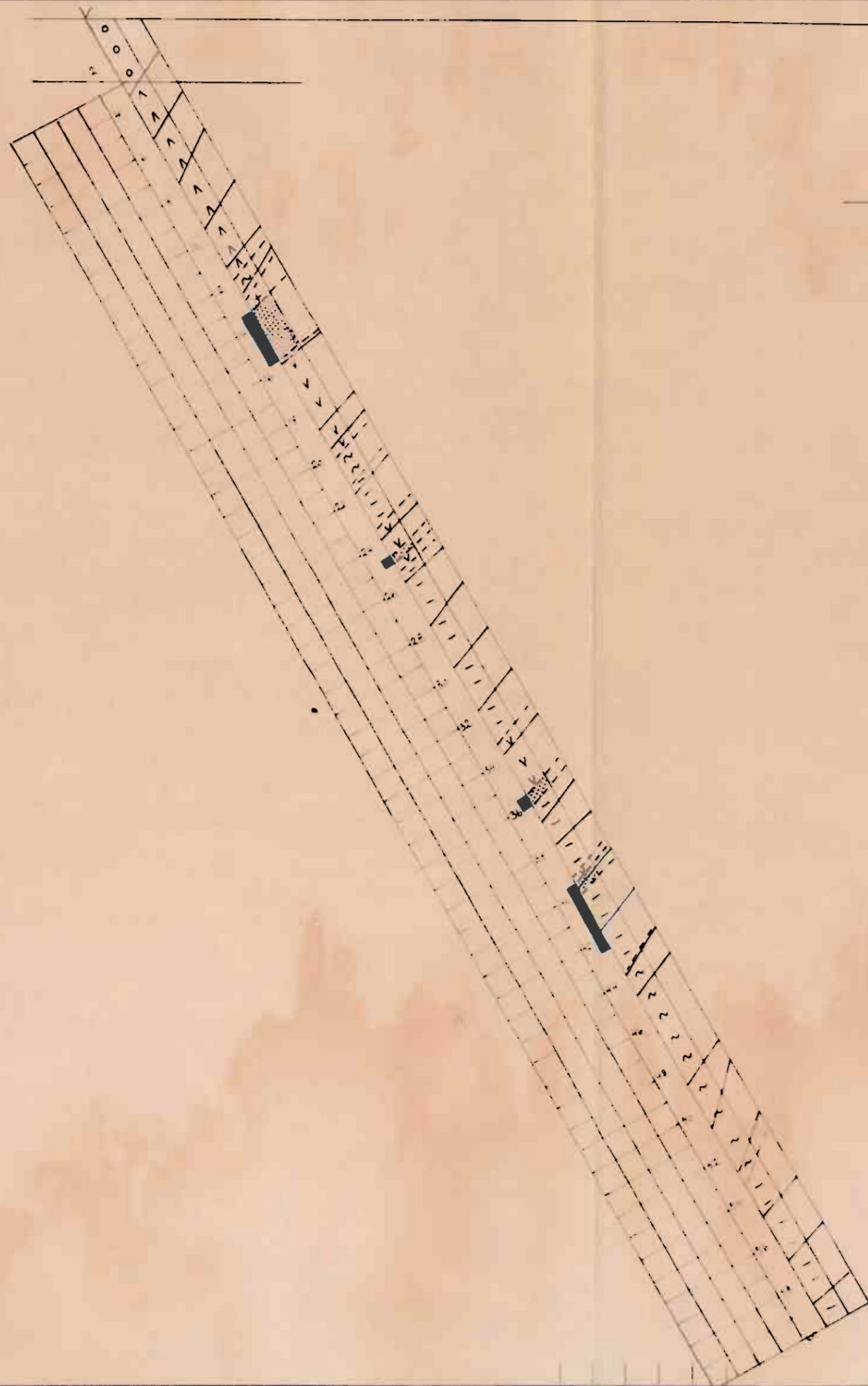
N: 25
 Cu: 3.9
 Zn: 11.0
 Pb: 2.6

Gr: 1.0
 Zn: 2.5
 Pb: 1.0

1:1000

Fig. 4 sheet 3

A/S SULFIDMALM	
RUVVAČOKKA, Masi 1776.	
2 R/1776	1350 N/80 E
Terranor as.	60° NE/30,4m
SCALE 1:200	DRAWN EK
DATE 10-76	TRACED BB



KEY:

- o Overburden
- ^ Basic volcanics
- v Acid — " —
- ~ Mica schist
- Greywacke
- + Qtz-vein
- Graphitic rock
- Sulphides

Fig. 4 Sheet 4

A/S SULFIDMALM	
RUVVAČOKKA, MASI 1776.	
3-R/1776	950N/80E 60NE/60m
SCALE 1:200	DRAWN EK
DATE 10-76	TRACED BB

4-R/1776

210E

220E

230E

950 N

Key:

- Overburden
- ∨ Acid volcanics
- ~ Mica schist
- Greywacke
- + Qtz vein
- ▣ Graphitic rock
- Sulphides

4.50-12.55:
- 10% po, 5% py

12.55-12.90:
- 50% py, 20% po

19.40-19.80:
- 30% po, 10% py

22.50-22.60:
- 40% py, 10% po

3-R

Ni 23
Cu 50
100E

Ni 215
Cu 410

Ni 216
Cu 425
Zn 375

Ni 216
Cu 425
Zn 340

Ni 240
Cu 425

Ni 93
Cu 95
Zn 120

Ni 84
Cu 425
Zn 85

4-R

250E

190

Sheet br.K

Fig. 4 Sheets

A/S SULFIDMALM

RUVVAČOKKA, Masi 1776.

4-R/1776

950 N/200E

Terranor a.s

60°NE/309m

SCALE

DRAWN

DATE

TRACED

5 R/1776

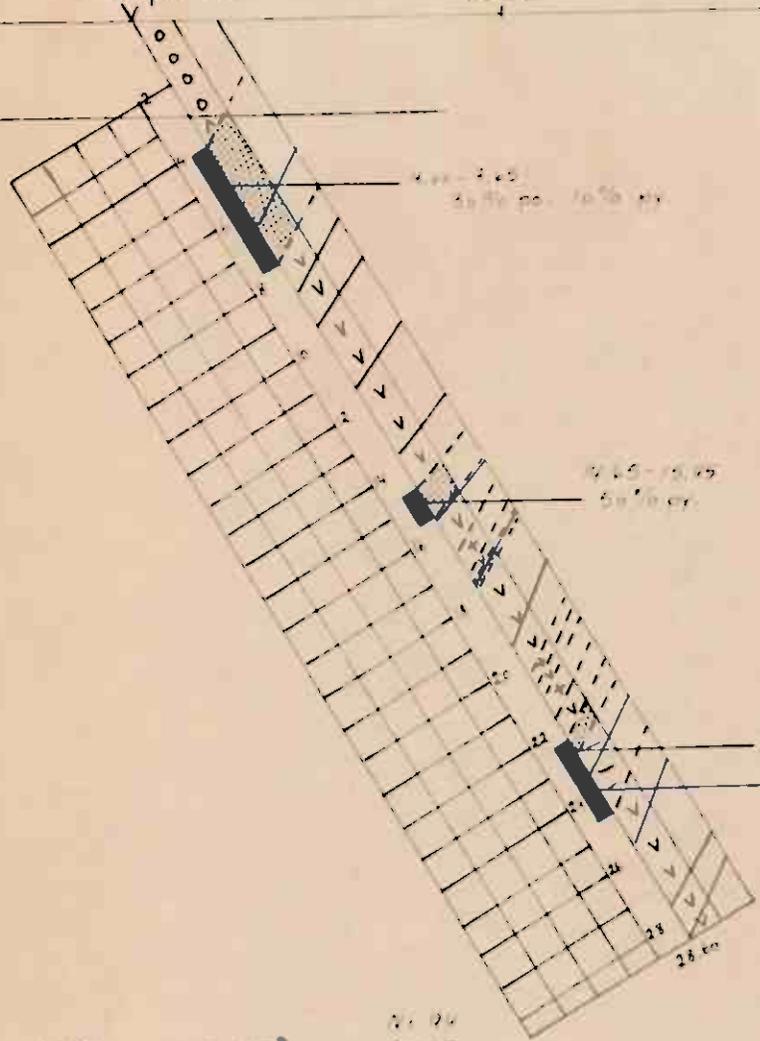
190E

200E

210E

700N

- o Overburden
- ^ Basic volcanics
- v Acid
- Grey wacke
- + Qtz-vein
- Graphitic rock
- Sulphides.



Ni 12
Zn 15

Ni 14.5
Zn 14.5

Ni 16
Cu 15
Zn 15

5R

200E

250E

300E

6R

1:1000

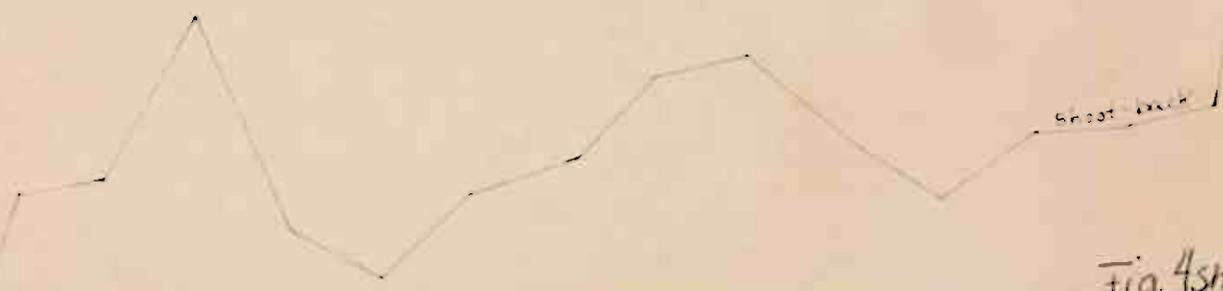


Fig. 4 sheet 6

A'S SULFIDMALM			
RUVVACOKKA, Masi 1776.			
5R/1776		700N/180E	
Terranor a.s		60° NE/286 m	
SCALE	1:200	DRAWN	EK
DATE	10-76	TRACED	BB

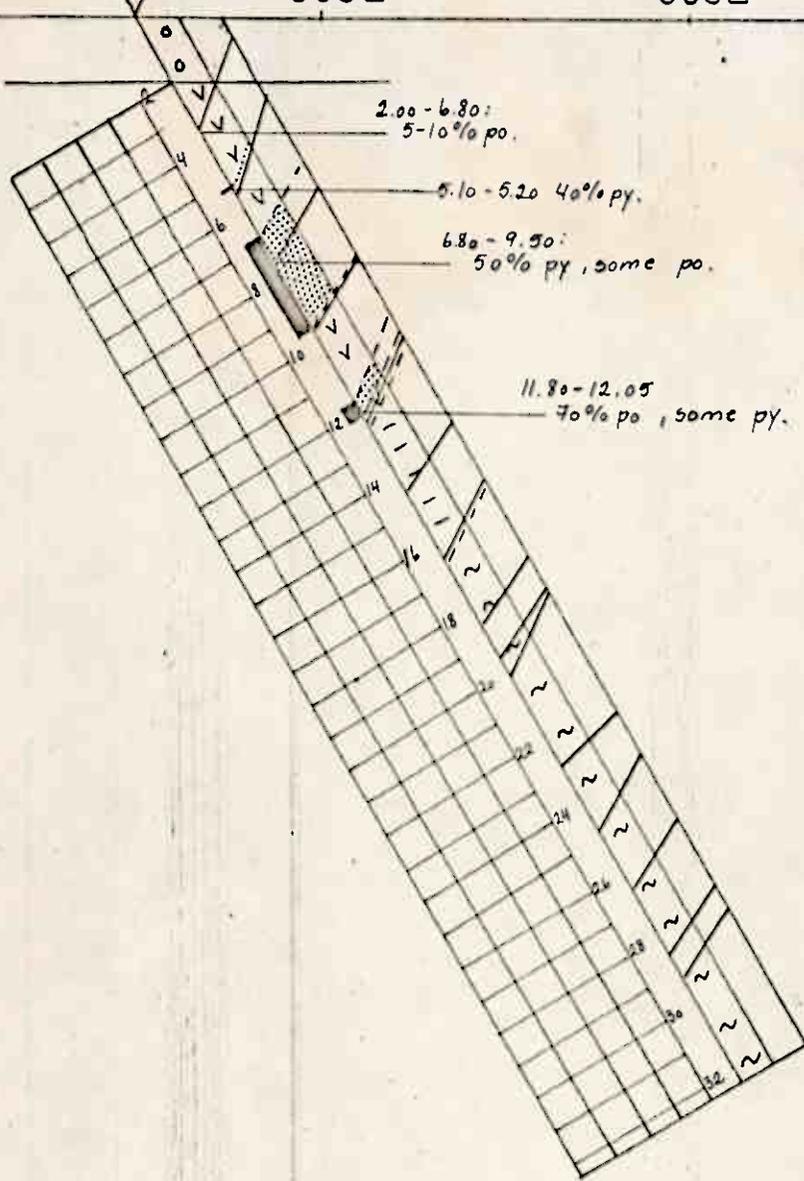
6 R/1776

350E

360E

370E

700 N



2.00-6.80:
5-10% po.

5.10-5.20 40% py.

6.80-9.50:
50% py, some po.

11.80-12.05
70% po, some py.

Key:

- o Overburden.
- v Acid volcanics.
- Grey-wacke
- ~ Mica-schist.

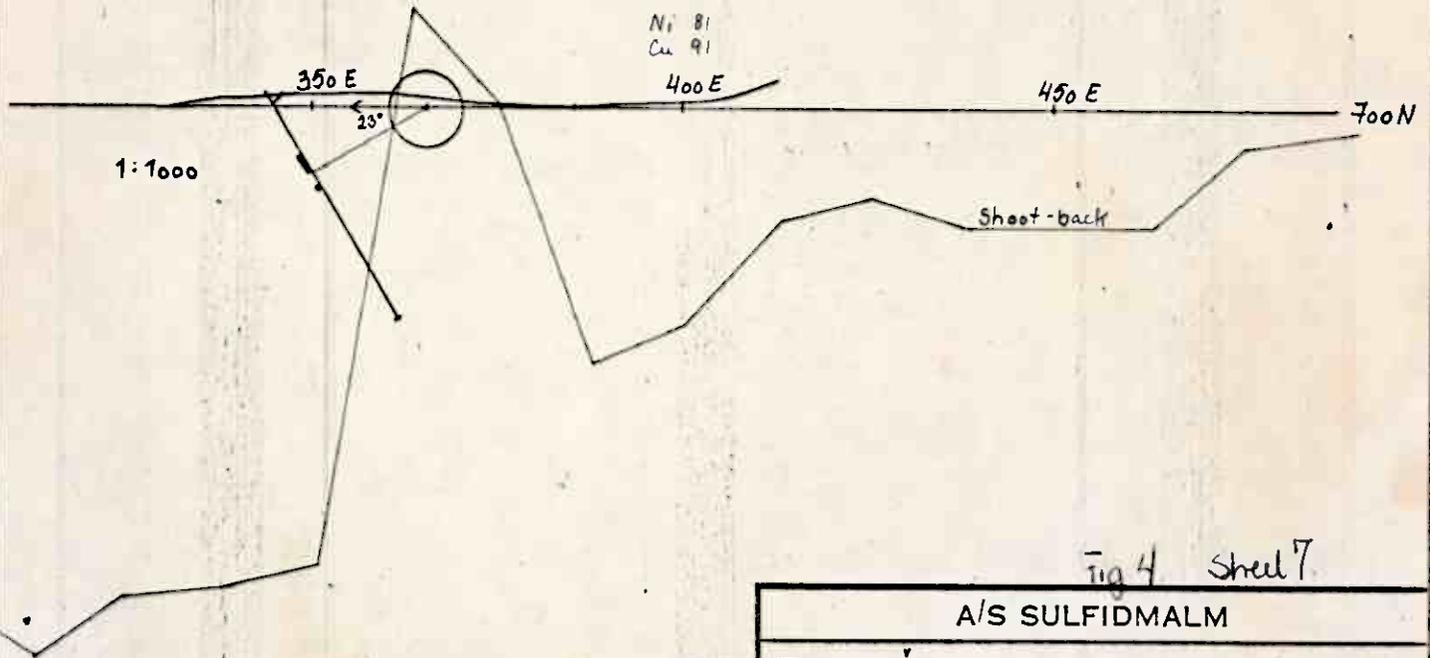


Fig 4 Sheet 7

A/S SULFIDMALM

RUVVAČOKKA, Masi 1776.

6R/1776

700N/345E

Terranor a.s.

60°NE/32,4m

SCALE 1:200

DRAWN EK

7R-1776

340E

350E

360E

1150 N

- o Overburden
- Grey-wacke
- v Acid volcanics
- ▨ Fyllite
- ▤ Graphitic rock
- Sulphides

15.35-16.60
60% po, some py, tc. cp.

16.60-36.30
Thin graphitic beds.

Ni 275
Cu 2870
Zn 1200

350E

400E

450E

1150 N

1:1000

Shoot-back

Fig 4. Sheet 8

A/S SULFIDMALM

RUVVAČOKKA, Masi 1776.

7-R/1776.

1150 N/335 E

Terranor a.s.

60°NE/39,0m

SCALE 1:200

DRAWN EK

SOLFIDMALM

DIAMOND DRILL RECORD

LOCATION: Masi 1776 BEARING: NE DIP: 60° HOLE NO: 1-R SHEET NO: 1
 LOGGED BY: E. Kreivi STARTED: 7/10 1976 PROPERTY: Ruvvačokka
 CASING: 0-5.00 FINISHED: 8/10 1976 1475N/10E
 CORE SIZE: TT 46 TESTS (CORRECTED):

From	To	Description
0	1.70	Overburden
1.70	18.30	Greenschist - narrow carb- and qtz-veins - very broken down to 5.30 - very chlorite-rich and schisted, the schistosity is mainly parallel to bedding 17.80-18.30 mica-rich - sometimes some po-impregnation
18.30	19.10	Acid volcanics - some narrow, up to 2 mm thick veins of sphalerite and po-impregnation and some mica
	0.10m 18.50-18.60	Graphitic rock, brecciated by 70% po
19.10	19.95	Graphitic rock 0.85m - brecciated by 80-90% po, occasionally sh in narrow veins 19.70-19.75 3 mm thick sh-vein - occasionally cp
19.95	29.40	Acid volcanics (chert) - 10% po-breccia 0.15m 28.55-28.70 30-40% po 28.35-29.40 very hard chert
29.40		End of hole
		B: 33°/ 3.20 33°/ 7.30 30°/ 9.30 25°/10.90 24°/13.90 36°/17.90 35°/25.30 25°/26.40 15°/19.40 55°/29.30
	1.10m	60-70% po, some sphalerite

1/s SULFIDMALM

DIAMOND DRILL RECORD

LOCATION: Masi 1776 BEARING: NE DIP: 60° HOLE NO: 2-R SHEET NO: 1
 LOGGED BY: E. Kreivi STARTED: 9/10-76 PROPERTY: Ruvvačokka
 CASING: 0-3.30 FINISHED: 9/10-76 1350N/80E
 CORE SIZE: TT 46 TESTS (CORRECTED):

From	To	Description
0	2.30	Overburden
2.30	22.80	20.50m Graphitic rock
		- brecciated by albitic feldspar and 40% carbonate, 20-30% po and 10% py
		- po also as impregnation
		- some cp and occasionally sphalerite in thin carb- and Fel-veins
		- the rock is often folded
		11.00-11.40 90% Ab-Fel, some grains of sh
		- very fine grained
22.80	24.30	Greywacke, volcanic
		- 40% carb, 20% mica, 40% Fel, some chlorite
24.30	26.20	Acid volcanics (chert)
		24.30-24.80 some chlorite
26.20	30.40	Mica-schist
		- some chlorite and carbonate
		29.50-30.40 Chlorite-rich
		29.50-29.70 Folded
30.40		End of hole
		B: 40°/11.50 25°/13.50 19°/15.30 13°/17.50 17°/20.60
		27°/23.60 23°/25.90 29°/27.30 36°/28.80 23°/29.80
	20.50m	30% po, traces of sphalerite

SULFIDMALM

DIAMOND DRILL RECORD

LOCATION: Masi 1776 BEARING: NE DIP: 60° HOLE NO: 3-R SHEET NO: 1
 LOGGED BY: E. Kreivi STARTED: 10/10 1976 PROPERTY: Ruvvačokka
 CASING: 0-3.00 FINISHED: 11/10 1976 950N/80E
 CORE SIZE: TT 46 TESTS (CORRECTED):

From	To	Description
0	3.00	Overburden
3.00	11.90	Greenschist - some mica-rich beds 10.30-11.00 Mica-rich
11.90	12.85	Mica-schist - some carbonate
12.85	13.30	Quartz-vein
13.30	15.75	Graphitic rock - brecciated by 50% po, 10% py, occasionally cp - some carb 13.70-14.00 Qtz-vein
15.75	20.10	Acid volcanics - 10% po-breccia, some thin graphitic beds
20.10	21.35	Mica-schist - some po-impregnation - some carb and chlorite
21.35	23.40	Greywacke, volcanic - carbonate-rich, some graphite - 10% po
23.40	24.65	Acid volcanics - some po-, py-breccia - thin beds of graphite
24.65	24.90	Graphitic rock - 30% po-, 30% carb-breccia
24.90	25:20	Acid volcanics - some thin graphitic beds

1/5 SULFIDMALM

DIAMOND DRILL RECORD

LOCATION: Masi 1776 BEARING: NE DIP: 60° HOLE NO: 3-R SHEET NO: 1a
 LOGGED BY: E. Kreivi STARTED: 10/10 1976 PROPERTY: Ruvvačokka
 CASING: 0-3.00 FINISHED: 11/10 1976 950N/80E
 CORE SIZE: TT 46 TESTS (CORRECTED):

From	To	Description
0	3.00	Overburden
3.00	11.90	Greenschist
11.90	12.85	Mica-schist
12.85	13.30	Qtz-vein
13.30	15.75	Graphitic rock 2.45m -50% po, 10% py, occasionally cp
15.75	20.10	Acid volcanics -10% po, some graphite
20.10	21.35	Mica-schist - some po
21.35	23.40	Greywacke -10% po
23.40	24.65	Acid volcanics - some po, py, graph.
24.65	24.90	Graphitic rock 0.25m -30% po
24.90	25.20	Acid volcanics - some graph.
25.20	33.20	Greywacke
33.20	35.70	Acid volcanics -5% po

SULFIDMALM

DIAMOND DRILL RECORD

LOCATION: Masi 1776 BEARING: NE DIP: 60° HOLE NO: 3-R SHEET NO: 1b
 LOGGED BY: E. Kreivi STARTED: 10/10 1976 PROPERTY: Ruvvačokka
 CASING: 0-3.00 FINISHED: 11/10 1976 950N/80E
 CORE SIZE: TT 46 TESTS (CORRECTED):

From	To	Description
35.70	36.05	Graphitic rock
	0.35m	-50% po, some py
36.05	39.30	Greywacke
		-5% po
39.30	39.55	Acid volcanics
		-10% po
39.55	40.05	Graphitic rock
	0.50m	-30% py, 30% po
40.05	43.80	2.45m Greywacke - 40.05-42.50 30% py-, 10% po-breccia
43.80	53.30	Mica-schist
53.30	60.00	Greywacke
60.00		End of hole
		B: 25°/ 3.50 30°/ 5.50 35°/ 7.50 29°/ 9.60 21°/11.30 28°/12.70
		10°/15.95 18°/18.90 20°/19.80 20°/21.80 16°/23.95 12°/25.90
		23°/27.80 20°/29.80 22°/31.80 21°/33.80 21°/36.80 12°/37.90
		19°/39.30 22°/41.80 28°/43.80 23°/44.80 26°/48.90 46°/50.80
		40°/52.90 20°/54.90 17°/56.90 11°/58.90
	6.00m	40% po, 10% py, traces of cp

SULFIDMALM

DIAMOND DRILL RECORD

LOCATION: Masi 1776 BEARING: NE DIP: 60° HOLE NO: 3-R SHEET NO: 2
 LOGGED BY: E. Kreivi STARTED: 10/10 1976 PROPERTY: Ruvvačokka
 CASING: 0-3.00 FINISHED: 11/10 1976 950N/80E
 CORE SIZE: TT 46 TESTS (CORRECTED):

From	To	Description
25.20	33.20	Greywacke, volcanic 25.20-27.00 rich of carb, 5% po 27.00-33.20 some carb-breccia, some chlorite and graphite
33.20	35.70	Acid volcanics - rich of carb, 5% po
35.70	36.05	Graphitic rock - brecciated by 50% po, some py
36.05	39.30	Greywacke, volcanic - carb-rich, some chlorite and mica - 5% po
39.30	39.55	Acid volcanics - 10% po
39.55	40.05	Graphitic rock - 30% py-, 30% po-breccia
40.05	43.80	Greywacke, volcanic - 40% carb-breccia 40.05-42.50 30% py-, 10% po-breccia - some chlorite and mica 43.40-43.55 some amphibole
43.80	53.30	Mica-schist 45.60-45.80 Chert - some carb
53.30	60.00	Greywacke, volcanic - carb-breccia, mica-rich 59.50-60.00 graphite-bearing
60.00		End of hole

DIAMOND DRILL RECORD

LOCATION: Masi 1776 BEARING: NE DIP: 60° HOLE NO: 4-R SHEET NO: 1
 LOGGED BY: E. Kreivi STARTED: 11/10 1976 PROPERTY: Ruvvačokka
 CASING: 0-3.30 FINISHED: 11/10 1976 950N/200E
 CORE SIZE: TT 46 TESTS (CORRECTED): _____

From	To	Description
0	2.30	Overburden
2.30	4.50	Mica-schist - a little of po-impregnation
4.50	12.55	Greywacke, volcanic - very carb-rich - 10% py, 5% po 4.50- 7.30 some graphite 7.30-12.55 60% carb, 10% po, some py, tc. cp
12.55	12.90	Graphitic rock - brecciated by 50% py, 20% po
12.90	13.40	Acid volcanics - some carb-veins
13.40	17.70	Qtz-vein 13.60-13.65 14.30-14.60 14.70-14.75 15.50-15.55 } Acid volcanics 15.65-16.00 16.10-16.15 16.40-16.50 17.45-17.55
17.70	18.50	Acid volcanics - some po-, py-breccia, some Qtz-veins
18.50	19.20	Qtz-vein
19.20	20.35	Acid volcanics 19.40-19.45 } graphitic beds 19.60-19.65 } 19.40-19.80 30% po, 10% py 20.00-20.35 some Afb-crystals

1/5 SULFIDMALM

DIAMOND DRILL RECORD

LOCATION: Masi 1776 BEARING: NE DIP: 60° HOLE NO: 4-R SHEET NO: 1a
 LOGGED BY: E. Kreivi STARTED: 11/10 1976 PROPERTY: Ruvvačokka
 CASING: 0-3.30 FINISHED: 11/10 1976 950N/200E
 CORE SIZE: TT 46 TESTS (CORRECTED):

From	To	Description
0	2.30	Overburden
2.30	4.50	Mica-schist - po-impregnation
4.50	12.55	Greywacke - 10% py, 5-10% po
12.55	12.90	Graphitic rock - brecciated by 50% py, 20% po 0.35m
12.90	13.40	Acid volcanics
13.40	17.70	Qtz-vein
17.70	18.50	Acid volcanics - some po-, py-breccia
18.50	19.20	Qtz-vein
19.20	20.35	Acid volcanics 19.40-19.80 30% po, 10% py 0.40m
20.35	23.00	Greywacke - 5% py, po
23.00	26.30	Mica-schist
26.30	30.90	Greywacke - some po- py-impregnation
30.90		End of hole
		0.75m 30% po, 30% py

SULFIDMALM

DIAMOND DRILL RECORD

LOCATION: Masi 1776 BEARING: NE DIP: 60° HOLE NO: 4-R SHEET NO: 2
 LOGGED BY: E. Kreivi STARTED: 11/10 1976 PROPERTY: Ruvvačokka
 CASING: 0-3.30 FINISHED: 11/10 1976 950N/200E
 CORE SIZE: TT 46 TESTS (CORRECTED):

From	To	Description
20.35	23.00	Greywacke, volcanic
		20.35-20.90 Afb-bearing
		- graphite-bearing
		- 5% py, po
		20.90-21.30 40% carb
		22.50-22.60 40% py, 10% po
		22.60-23.00 40% carb
23.00	26.30	Mica-schist
26.30	30.90	Greywacke, volcanic
		- some po-, py-impregnation
30.90		End of hole
		Core-angles
		B: 17°/ 3.00 16°/ 4.00 12°/ 5.70 33°/12.30
		14°/13.10 22°/19.70 35°/20.80 21°/22.80
		22°/24.70 31°/26.10 20°/27.80

7s SULFIDMALM

DIAMOND DRILL RECORD

LOCATION: Masi 1776 BEARING: NE DIP: 60° HOLE NO: 5-R SHEET NO: 1
 LOGGED BY: E. Kreivi STARTED: 12/10 1976 PROPERTY: Ruvvačokka
 CASING: 0-5.00 FINISHED: 12/10 1976 700N/180E
 CORE SIZE: TT 46 TESTS (CORRECTED):

From	To	Description
0	3.00	Overburden
3.00	4.00	Greenschist - very broken
4.00	7.65	Graphitic rock
7.65	14.65	3.65m - brecciated by 30% po, 10% py and some carb. Acid volcanics - some py-impregnation (5% py) - some thin graphitic beds - some mica
14.65	15.45	Graphitic rock 0.80m - 50% py mainly parallel to bedding
15.45	22.40	Acid volcanics - graphite-bearing - some py
		16.55-17.20 Qtz-vein
		17.40-17.60 "
		20.40-20.65 "
		21.05-21.70 "
22.40	22.80	Graphitic rock 0.40m - brecciated by 60% py, some po
22.80	24.70	Greywacke, volcanic 1.90m - 20% py, 10% po - amphibole-crystals and some graphite - 30% carb 24.60-24.70 70% py
24.70	28.60	Acid volcanics
		B: 32°/6.50 30°/8.60 25°/9.50 24°/11.50 19°/13.60 19°/15.60
28.60		End of hole
		29°/17.70 36°/19.60 33°/23.50 37°/25.80 30°/27.70 35°/28.60
		6.75m 20% po, 30% py

SULFIDMÄLM

DIAMOND DRILL RECORD

LOCATION: Masi 1776 BEARING: NE DIP: 60° HOLE NO: 6-R SHEET NO: 1
 LOGGED BY: E. Kreivi STARTED: 13/10 1976 PROPERTY: Ruvvačokka
 CASING: 0-3.00 FINISHED: 13/10 1976 700N/345E
 CORE SIZE: TT 46 TESTS (CORRECTED):

From	To	Description
0	2.00	Overburden
2.00	6.80	Acid volcanics - 5-10% po-impregnation - some carb and mica
	0.10m	5.10-5.20 Graphitic rock -40% py
		5.90-6.40 Chlorite-rich, mica-bearing
6.80	9.50	Graphitic rock - brecciated by 50% py and some po
	2.70m	
9.50	11.80	Acid volcanics
11.80	12.05	Graphitic rock - 70% po-breccia, some cp
	0.25m	
12.05	12.35	Acid volcanics
12.35	16.65	Greywacke, volcanic - carb-rich, mica-bearing, some Afb-crystals
16.65	32.40	Mica-schist B: 40°/ 3.40 43°/ 5.40 30°/ 7.40 27°/ 9.60 36°/12.40 27°/14.40 32°/16.40 25°/18.50 26°/19.40 33°/20.10 13°/22.80 31°/24.90 28°/26.60 26°/28.60 26°/29.20
32.40		End of hole
	3.05m	40% py, 10% po, traces of cp

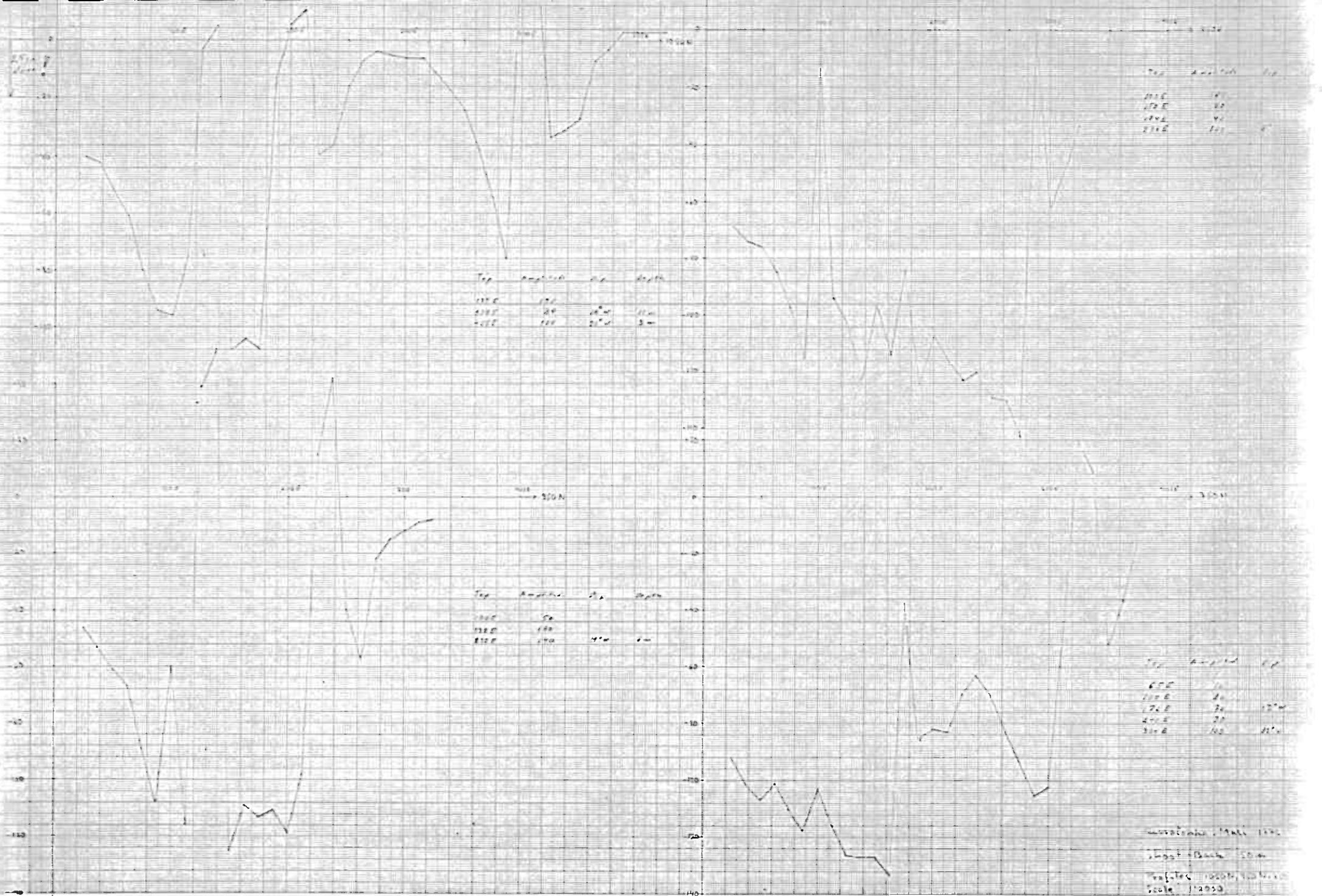
7s SULFIDMALM

DIAMOND DRILL RECORD

LOCATION: Masi 1776 BEARING: NE DIP: 60° HOLE NO: 7-R SHEET NO: 1
 LOGGED BY: E. Kreivi STARTED: 14/10 1976 PROPERTY: Ruvvačokka
 CASING: 0-2.40 FINISHED: 15/10 1976 1150N/335E
 CORE SIZE: TT 46 TESTS (CORRECTED):

From	To	Description
0	0.50	Overburden
0.50	15.05	Greywacke, volcanic 0.50-1.80 Chlorite-rich - carb-rich, some Afb-crystals - sometimes a little of graph. - 5% po - mica-bearing - some thin beds of acid volcanics 9.30-10.00 5-10% Afb
15.05	15.35	Acid volcanics
15.35	16.60	Graphitic rock 1.25m - impregnated and brecciated by 60% po, some py and traces of cp
16.60	36.30	Acid volcanics (cherty beds) - thin graphitic beds - some po-impregnation 27.90-27.95 Garnet-rich bed, 90% red garnets - very hard to drill 35.30-36.30 Mica-rich 36.05-36.30 Afb-crystals
36.30	39.00	Fyllitic rock - a little of po
39.00		End of hole B: 20°/ 2.80 30°/ 4.60 23°/ 6.60 43°/ 8.60 33°/10.70 30°/12.40 12°/14.60 16°/15.10 30°/16.80 24°/18.90 40°/20.50 26°/22.80 23°/24.80 22°/26.90 22°/28.80 17°/30.80 20°/32.80 24°/34.90 26°/36.80 27°/37.70 30°/38.90 1.25m 60% po, some py, traces of cp

GEOPHYSICS



Top	Amplitude	Depth
1100	10	10
1200	20	10
1300	30	10
1400	40	10

Top	Amplitude	Depth
1100	10	10
1200	20	10
1300	30	10

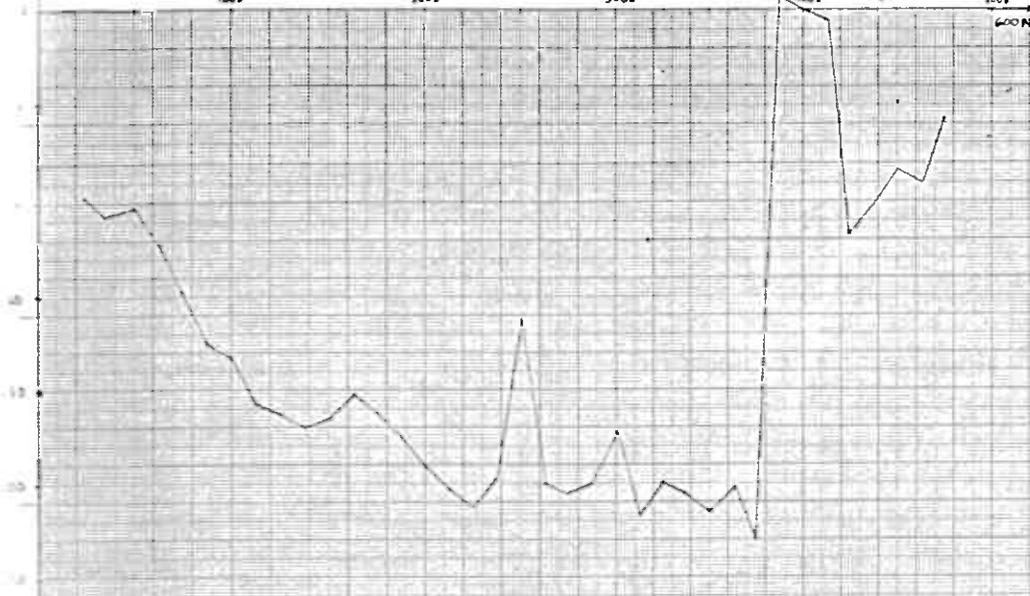
Top	Amplitude	Depth
1100	10	10
1200	20	10
1300	30	10

Top	Amplitude	Depth
1100	10	10
1200	20	10
1300	30	10
1400	40	10

Instrument: [unclear]
 Log: [unclear]
 Scale: [unclear]
 Date: [unclear]
 Drawn: [unclear]

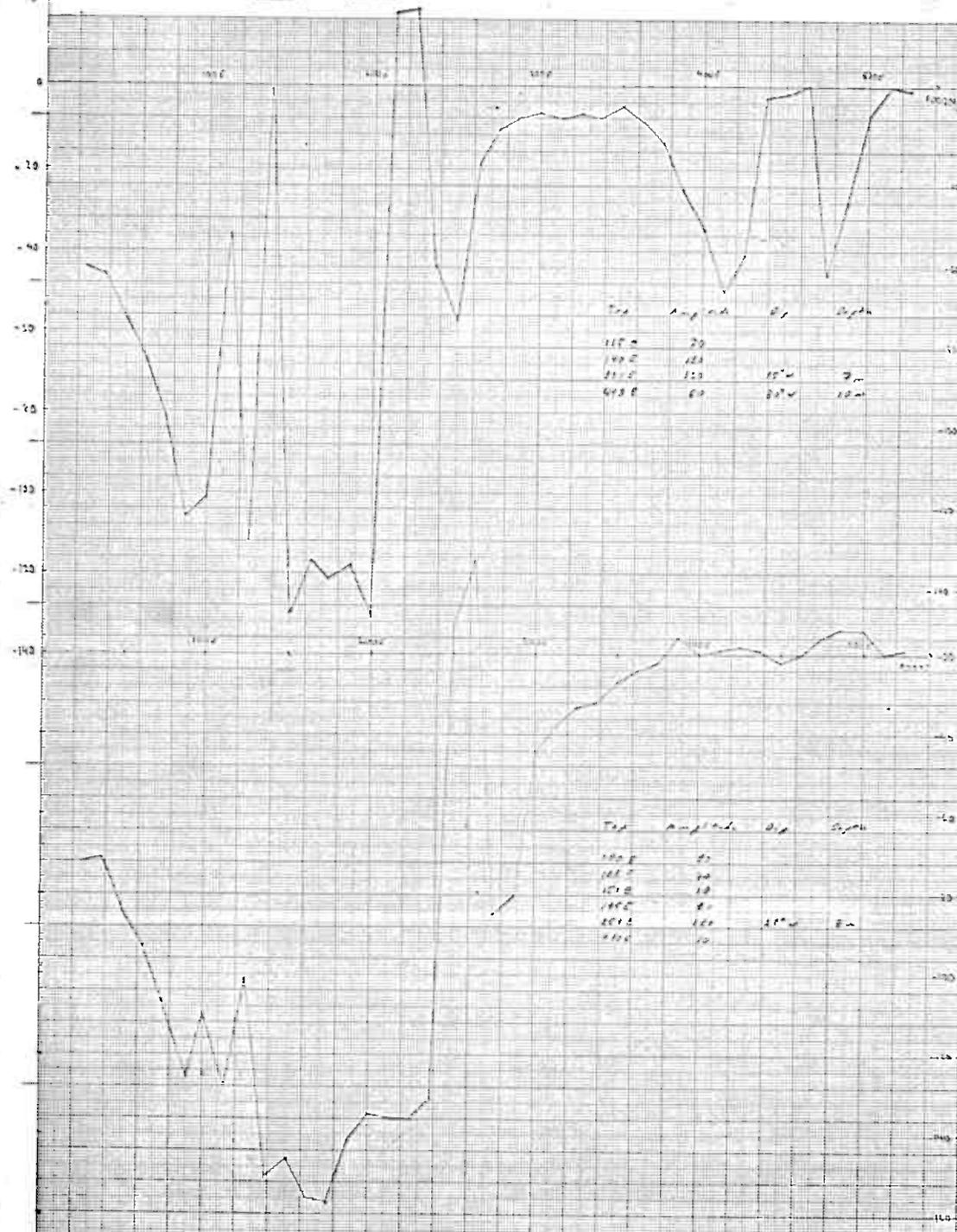
100F 200F 300F

400F 500F



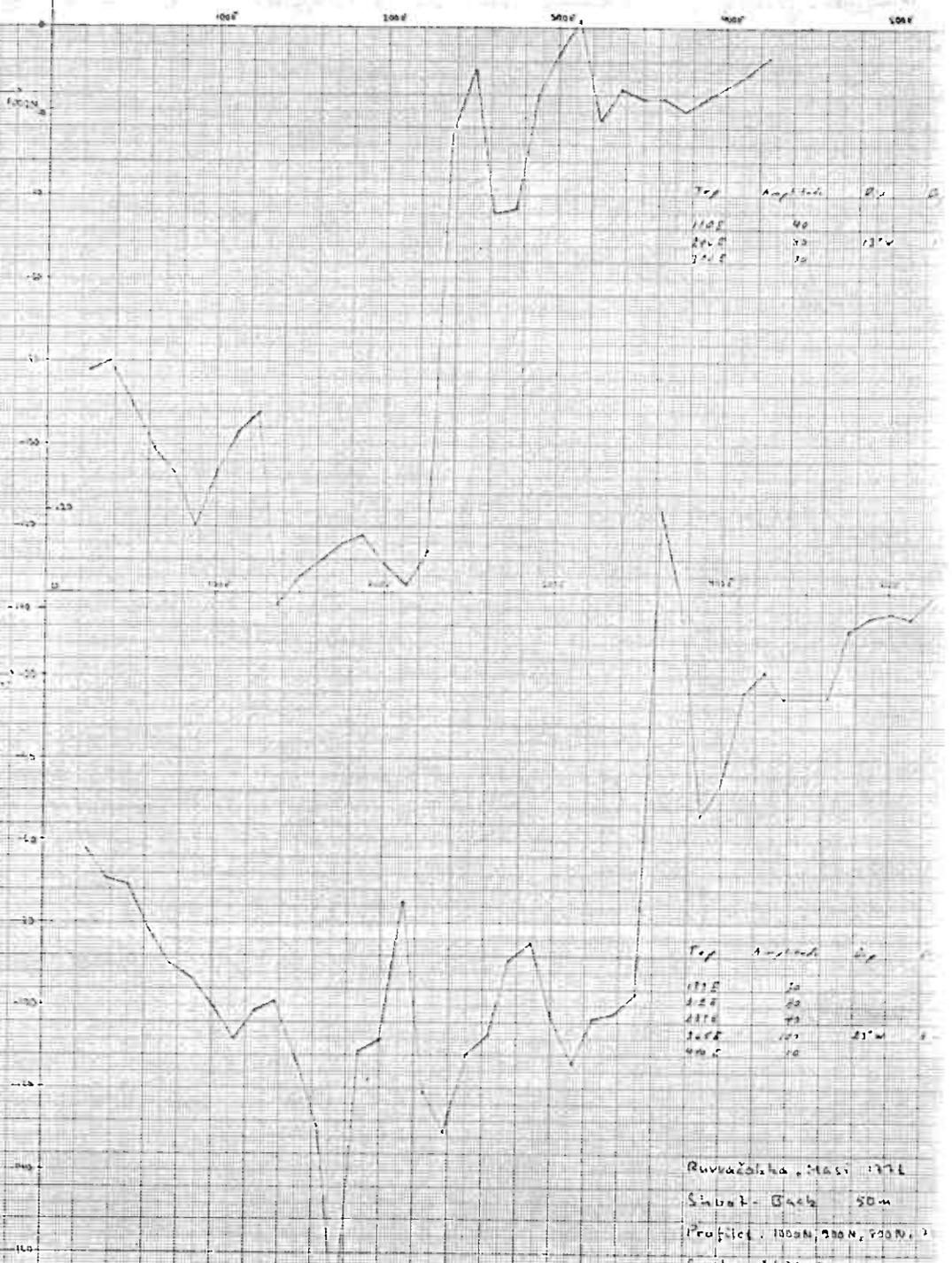
Tap	Amplitude	Dist	Depth
115 E	10		
550 E	40		
200 E	50	50m	
400 E	100		1m

Kinsolaka, Mass. 1950
 Sheet Size 50cm
 Frequency 400Hz
 Scale 1:2000
 Obs. MP, PH 8-70
 Drawn MP, PH 8-70



Top	Amplitude	Dip	Depth
115 E	20		
120 E	12		
125 E	15	15° W	7m
135 E	20	25° W	12m

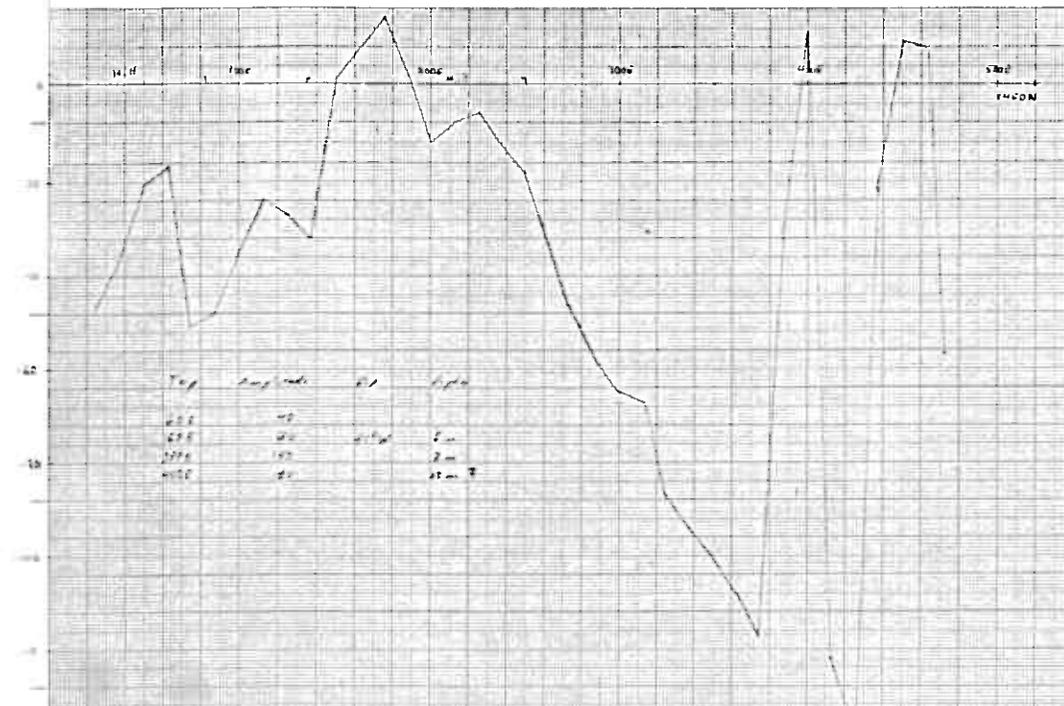
Top	Amplitude	Dip	Depth
100 E	20		
105 E	20		
110 E	18		
115 E	20		
120 E	20	25° W	8m
125 E	20		



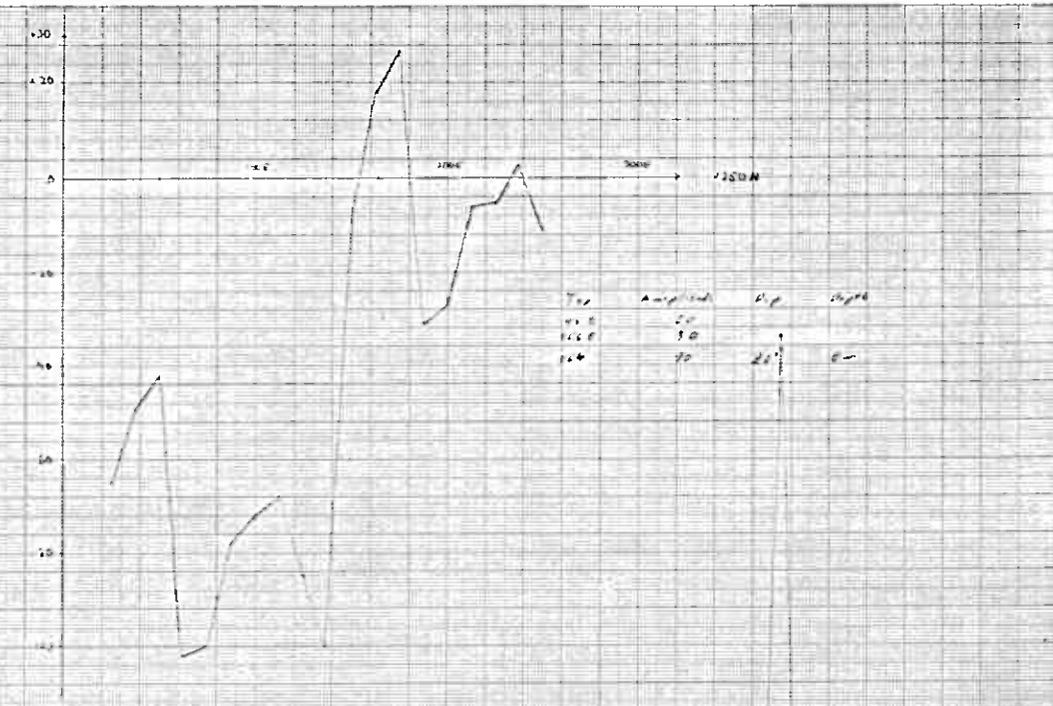
Top	Amplitude	Dip	Depth
110 E	20		
120 E	20	15° W	
130 E	20		

Top	Amplitude	Dip	Depth
115 E	20		
120 E	20		
125 E	20		
130 E	20	25° W	
140 E	20		

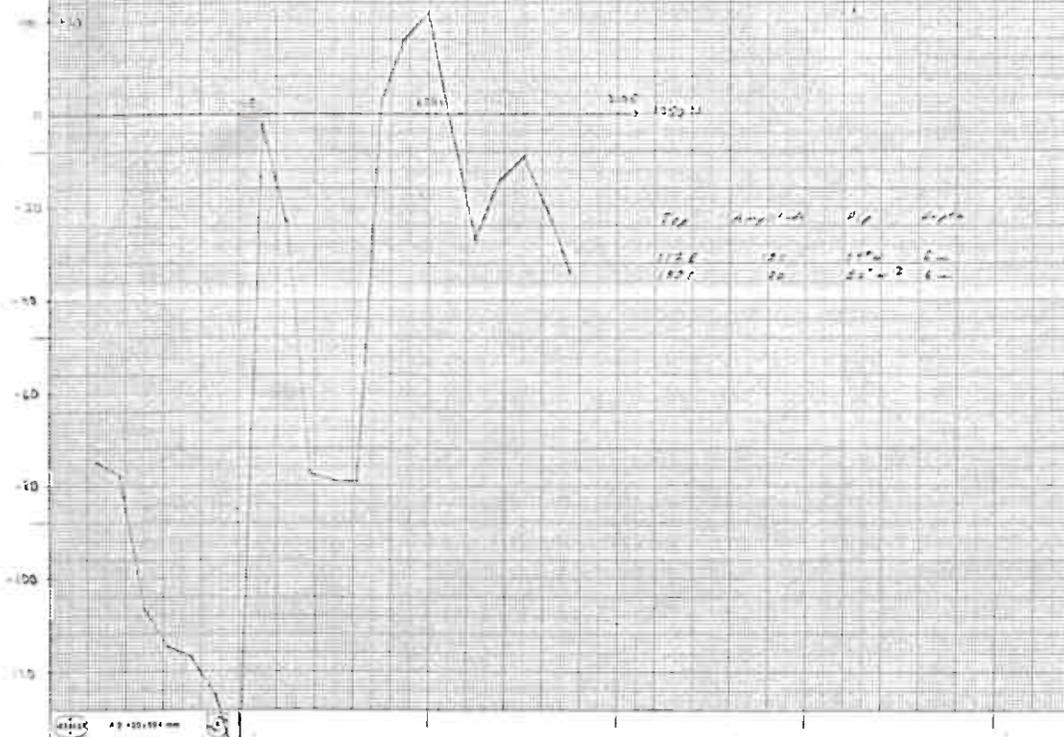
Ruvkažaha, Masi 1971
 Siatki - Baki 50m
 Profiles: 100m, 200m, 300m, 400m
 Scale 1:1000
 Obs MP,ca 4-78
 Drawn MP,ca 4-78



Top	Amplitude	Sp	Depth
425	10		
475	20	100%	5m
525	10		2m
575	20		2m 2



Top	Amplitude	Sp	Depth
425	10		
475	20		
525	10		
575	20	20%	5m



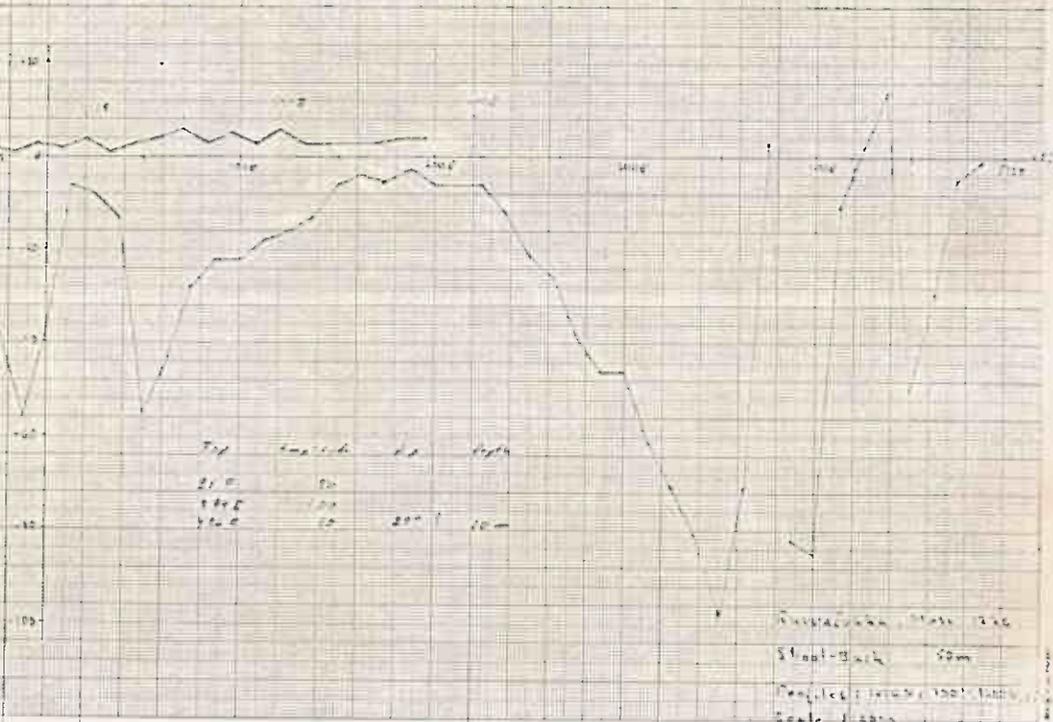
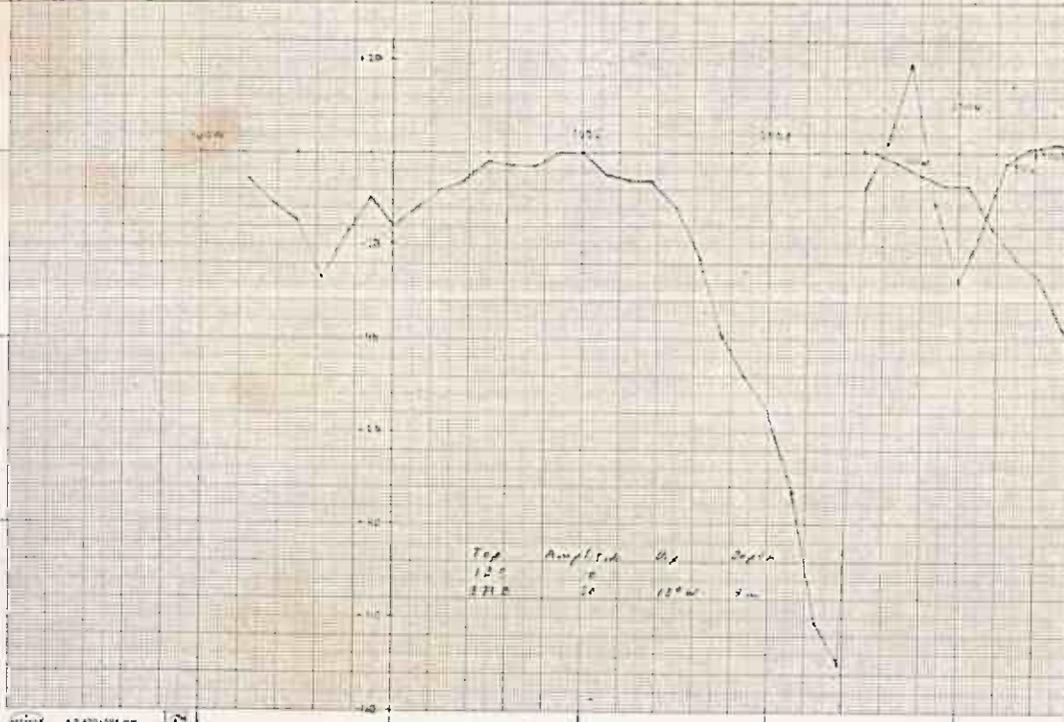
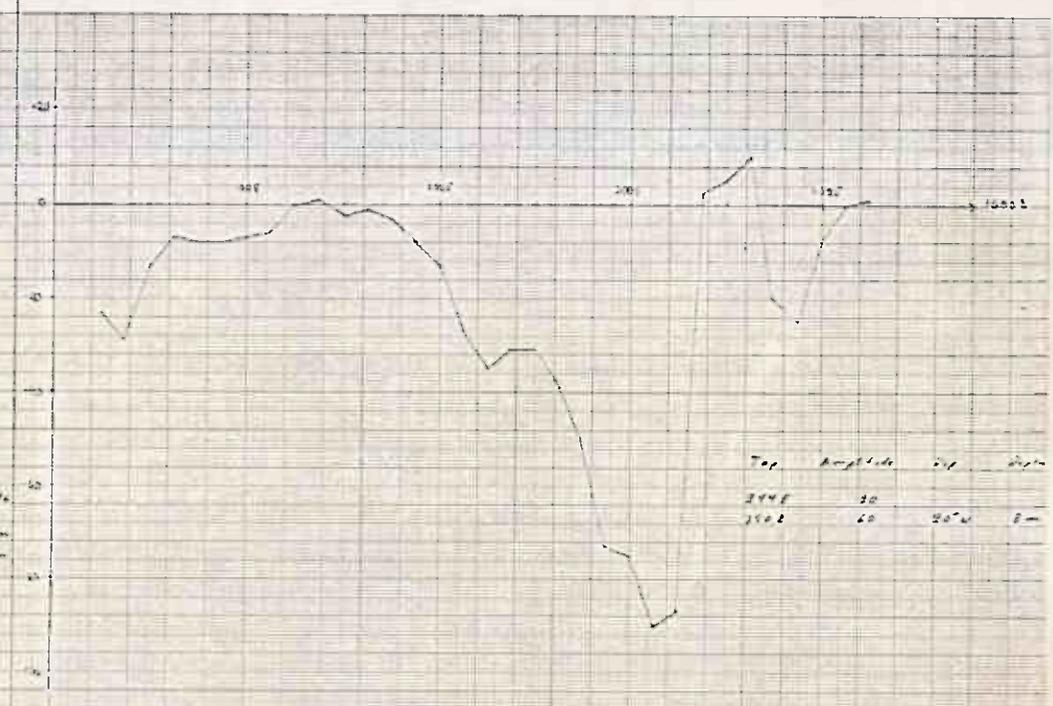
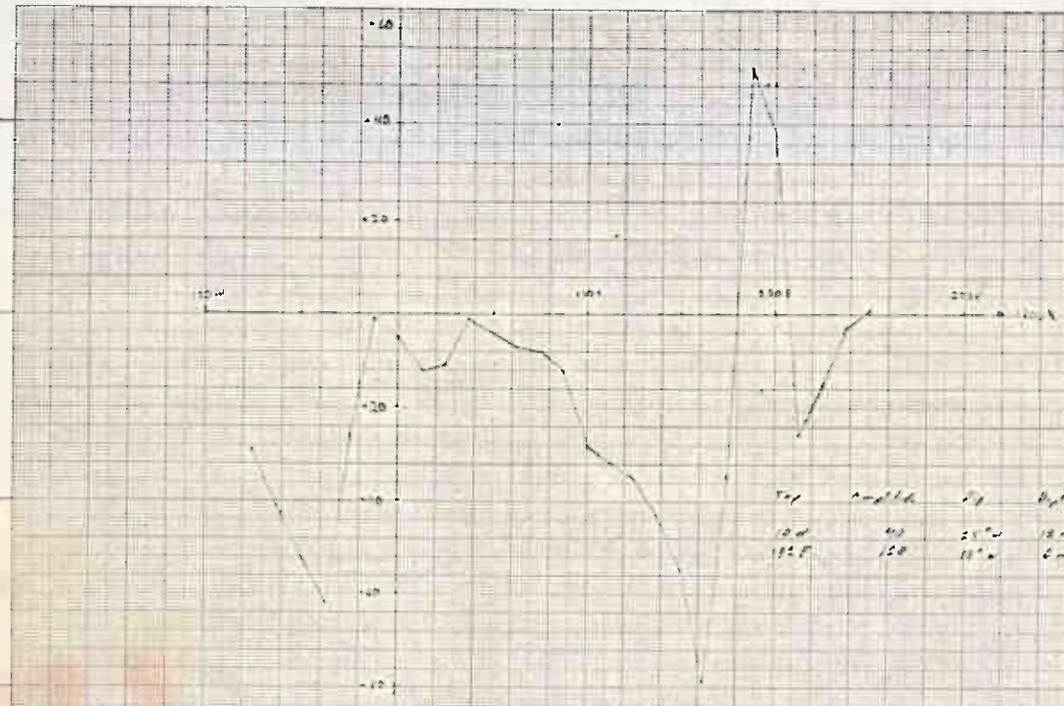
Top	Amplitude	Sp	Depth
425	10	100%	5m
475	20	20% 2	5m



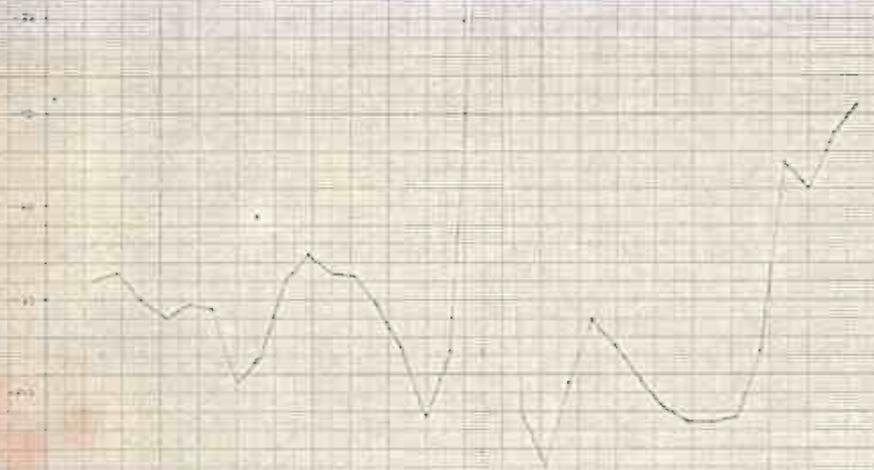
Top	Amplitude	Sp	Depth
425	10		
475	20		
525	10		
575	20	100%	5m

Top	Amplitude	Sp	Depth	Remarks	Date
425	10				1936
475	20				
525	10				
575	20	100%	5m	Short-Dist.	50m
625	10				
675	20				
725	10				

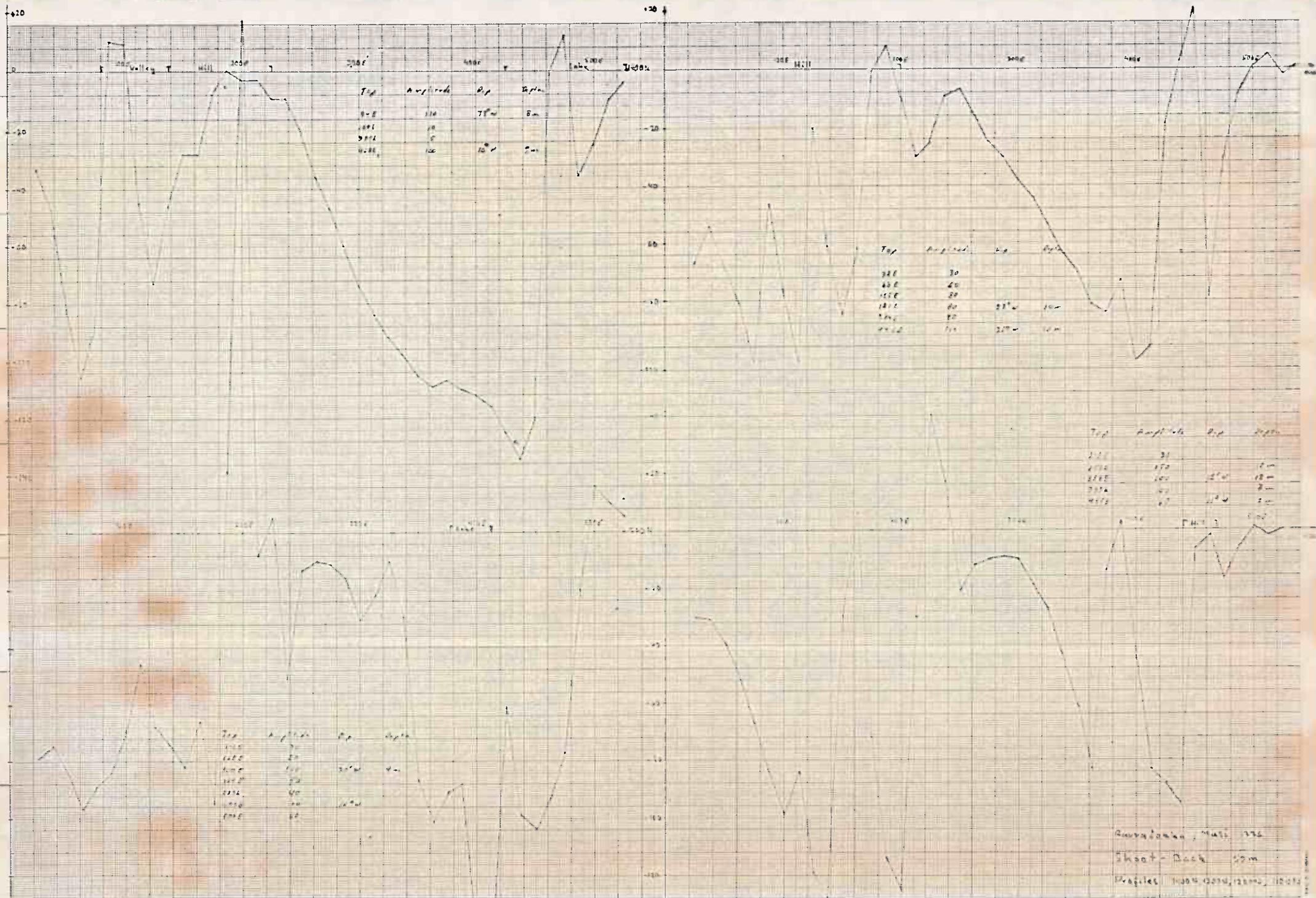
Scale 1:2000
 Date 11/14/36
 Drawn M.P. 1/4 y. 26



714
 302 10
 1718 14
 2118 100
 2114 10
 7118 10



Roundabout Hill 1976
 Sheet: 50m
 Profile: 6500
 Date: 11/11/76
 Drawn: 11/11/76



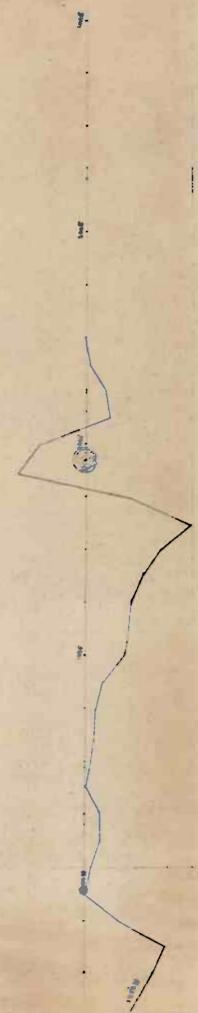
Top	Amplitude	Sp	Depth
9-8	110	75'	5-
10-1	10		
10-2	5		
10-3	100	10'	2-

Top	Amplitude	Sp	Depth
10-1	30		
10-2	20		
10-3	20	25'	10-
10-4	20		
10-5	10	25'	10-

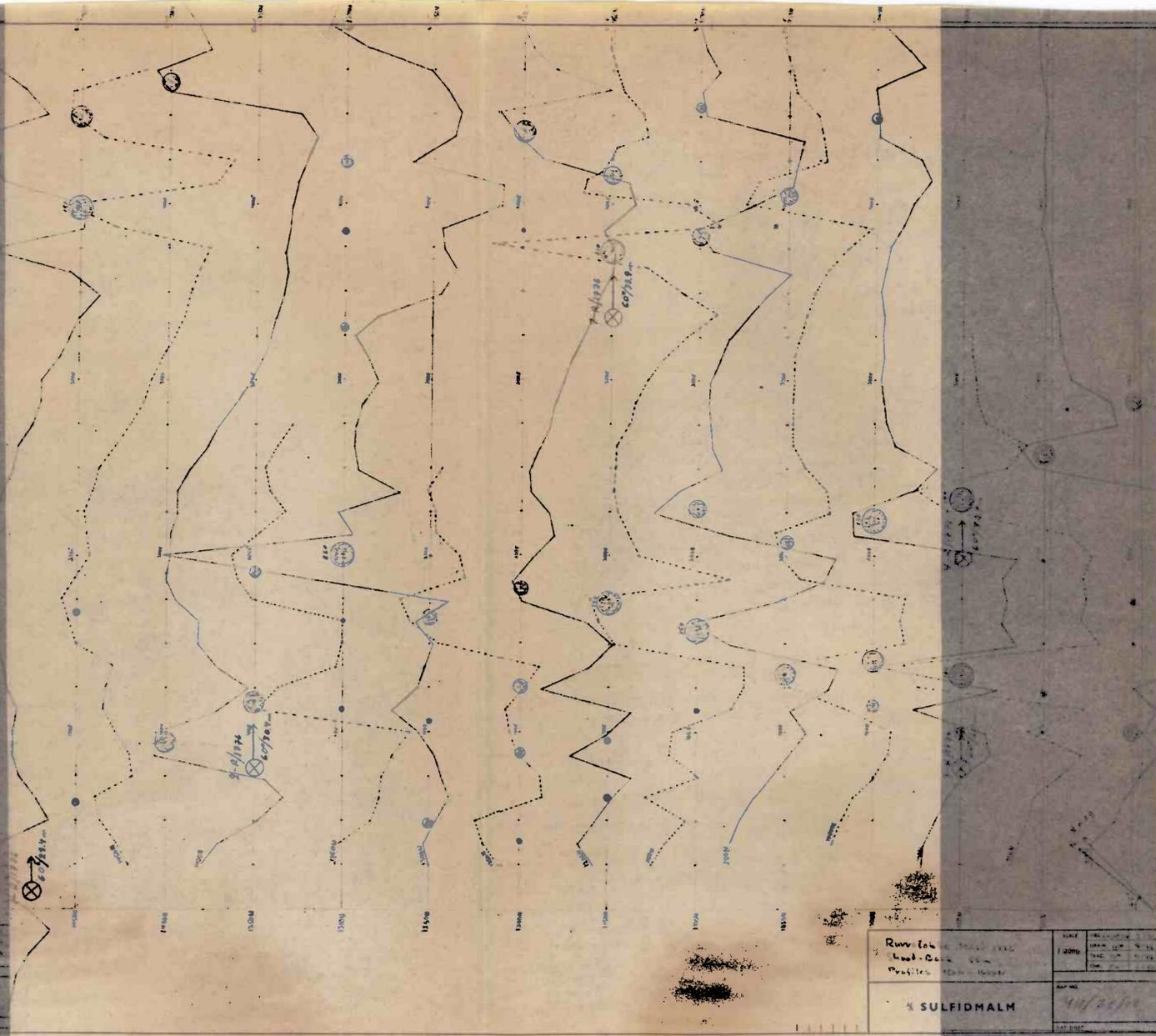
Top	Amplitude	Sp	Depth
11-1	30		
11-2	150		10-
11-3	100	25'	15-
11-4	40		5-
11-5	20	15'	5-

Top	Amplitude	Sp	Depth
12-1	20		
12-2	20		
12-3	10	25'	5-
12-4	20		
12-5	40		
12-6	20	15'	
12-7	20		

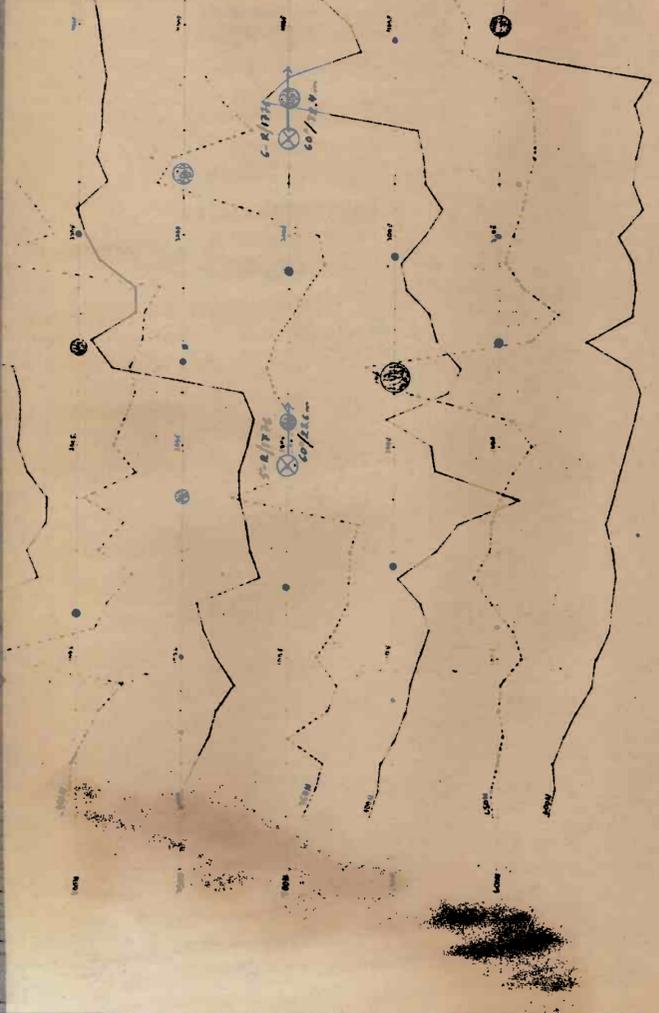
Roxbury, Mass. 1936
 Sheet - Back 10m
 Profiles 1000, 1000, 1000, 1000
 Scale 1:2000
 Oct 24, 1936 7-20
 18-20 2-21



SULFIDMALM	
Scale: 1:2000	Map No. 411/76/12



SULFIDMALM	
Scale: 1:2000	Map No. 411/76/12

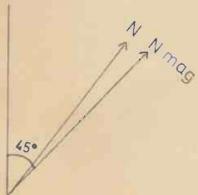
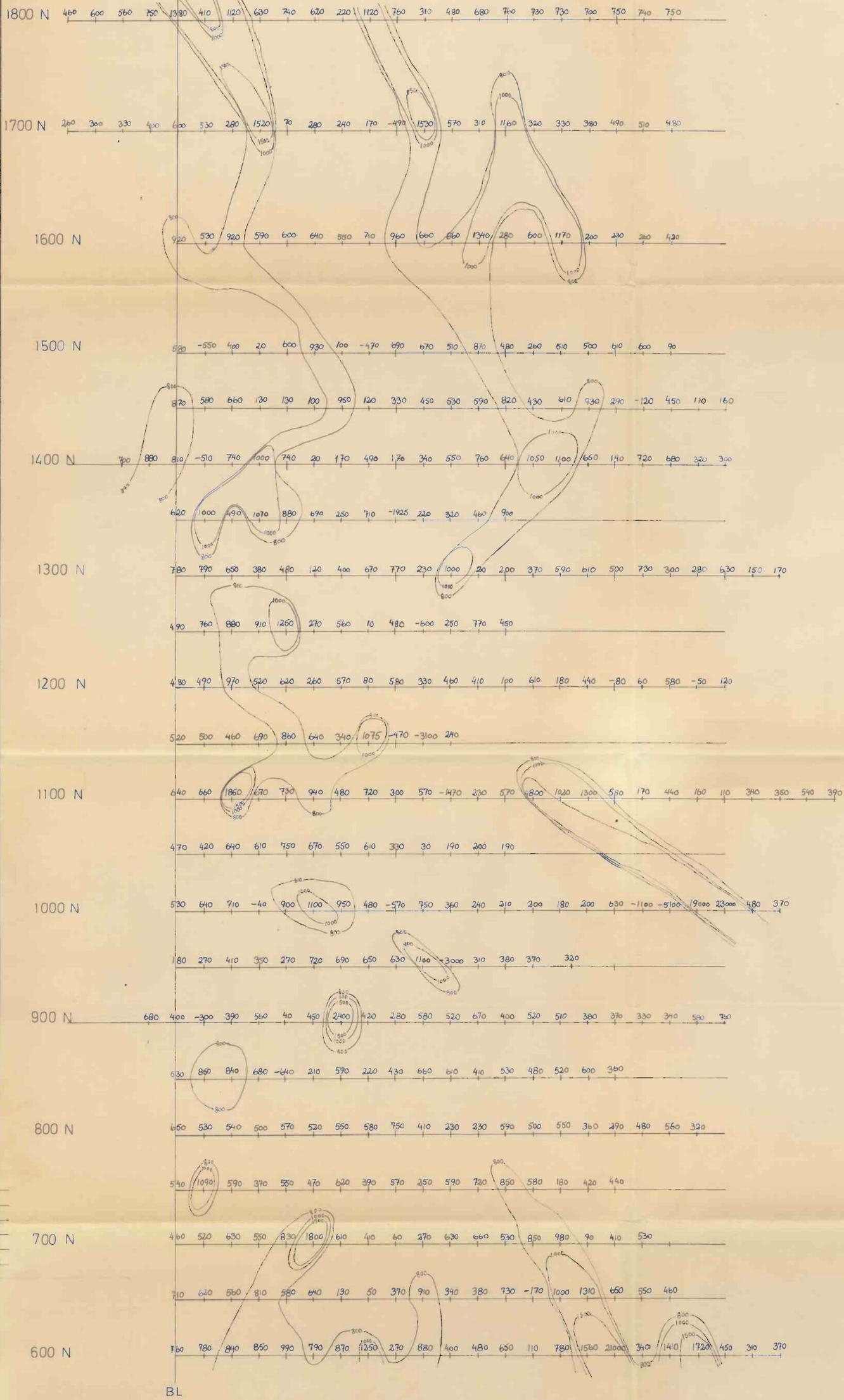


SULFIDMALM	
Scale: 1:2000	Map No. 411/76/12



Rowačokka, Maa: 1776 Shoot back 50m Profile 600m 900m Fig. sheet.

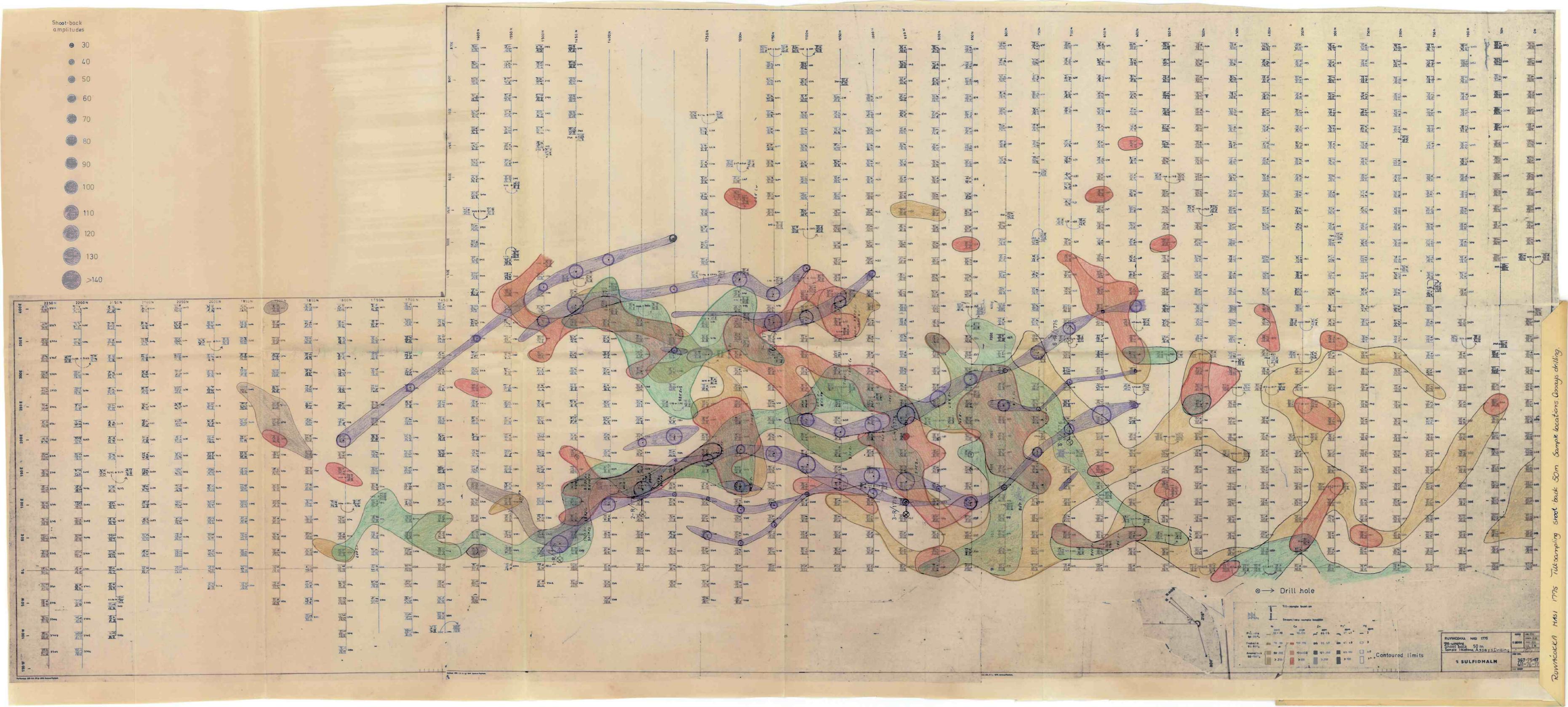
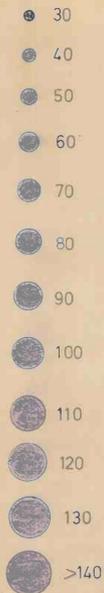
100 W 100 E 200 E 300 E 400 E 500 E



Ruvvačokka, Masi Magnetic data Mc Phar 700	SCALE	OBS. RB	3-76
	1:2000	DRAW. OH	3-76
% SULFIDMALM	MAP NO.	TRAC. K.A.	2-77
	411/76/17	CHK.	

Drilling
GEOCHEMISTRY

Shoot-back amplitudes



○ → Drill hole



RUTVACOKKA HASI 1775
 Till-sampling 50 m
 Sample locations 5 days drilling
 1 SULFIDMALM

RUTVACOKKA HASI 1775 Till-sampling 50 m Sample locations 5 days drilling