



GEOPHYSICAL REPORT

GENO CLAIMS

SHEET 105-D-11

D. Tenney, June 1971

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$1350.00.

D.B. Craig

~~Resident Geologist or~~
~~Resident Mining Engineer~~

Considered as representation work under Section 53 (4) Yukon Quartz Mining Act.

[Signature]

Commissioner of Yukon Territory

1350

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ATTACHED MAPS

- A) 1" = 1/2 Mile Claim Location Map
- B) 1" = 200' Chargeability Contour Map
- C) 1" = 200' Chargeability and Resistivity Profiles
- D) 1" = 200' Magnetometer Survey

1. Introduction

During June of 1970 Spartan Aero under contract to New Imperial Mines (now Whitehorse Copper Mines) carried out an Induced Polarization survey over a low order magnetic anomaly north of Big Chief and the underground portal. Lines were extended eastward onto the tailings pond to test the diorite sediments/contact known to be in the area. Claims covering the survey area are: Geno 1 (75972), Geno 2 (75973), New 6 (90378), New 8 (90380), New 22 (Y-12211).

2. Access

Access is from the Alaska Highway to the main offices of Whitehorse Copper Mines and then along the War Eagle haulage road for a distance of a quarter mile. The lines surveyed form part of the Little Chief grid which uses the Whitehorse Reference Traverse as a baseline. Line 60 north coincides with survey monument B.L. 32 on the traverse.

3. Method of Survey

Time domain induced polarization equipment was used with a three electrode array, and electrode spreads of 100, 200, and 400 feet: the first separation was used only for detail work, and the two larger separations for reconnaissance.

The equipment comprised a transmitter, a modified Sharp MKV unit, and a receiver of the "Newmont Type" built by Data Control Systems. Results are recorded in milliseconds, and corresponding resistivity readings are also calculated.

4. Results

The area surveyed covers a known sediments/diorite contact approximately parallel to the baseline. To the east of the baseline on lines 56 and 60 north at 8-12 east lies a strong 40-42 millisecond anomaly. This zone is separate from the strong anomaly near the baseline caused by graphitic limestone, and probably owes its origin to pyritic sediments mapped as outcropping in the area. A weak magnetic

high correlated with an area of weaker chargeability at 48N 10E is not thought worthy of drilling.

5. Recommendations

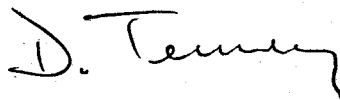
No more work is suggested by these induced polarization results.

6. Assessment Claimed

Lines	3 miles @ \$100/mile	= \$ 300.
I.P.	1½ miles @ \$500/mile	= \$ 750.
Magnetometer	3 miles @ \$100/mile	= <u>\$ 300.</u>
	Total	= \$1,350.

7. Field Crew

K. Hendry, I.P. Operator, c/o Spartan Aero, Ottawa
T. Birkett, c/o New Imperial Mines Ltd., Whitehorse
A. Van Oeveren, Whitehorse
A. Mitchell, Whitehorse



D. Tenney
B. Sc. D.I.C. A.M.I.M.M.

DT/ja

Whitehorse Copper Mines Ltd.

P.O. Box 4280, Whitehorse, Yukon Territory, Canada
telephone (403) 668-2171 telex 049-8218

January 11th, 1972

THIS IS TO CERTIFY THAT

**I, David Tenney, do reside at 8 McQuesten Road,
Whitehorse, Yukon Territory**

**I am an Associate Member of the Institute of Mining and
Metallurgy, London, England, and have been practicing as a mining
and exploration geologist for nine years.**

**My academic qualifications comprise the degree of B.Sc.
in geology from the University of Leicester, England, and a diploma
in mineral exploration (B.I.G. Min Ex.) from the Royal School of
Mining, London.**

**This certificate is related to geophysical work carried out
from June 16th to July 13rd, 1971, on the property of New Imperial
Mines Ltd. (subsequently renamed Whitehorse Copper Mines Ltd.).**

**I personally directed the work described in this report,
and also wrote the report.**

D. Tenney

**D. Tenney, B.Sc. D.I.G.
Chief Geologist
Whitehorse Copper Mines Ltd.**

DZ/ja



Department of Indian Affairs and Northern Development
YUKON QUARTZ MINING ACT

FORM "C" - APPLICATION FOR A CERTIFICATE OF WORK

(This form required in duplicate with sketch showing location of work.)



I (Name)	Dave Tenney	Occupation	Geologist
(Postal Address)	8 McQuesten Rd., Whitehorse, Y. T.		

OFFICE DATE STAMP

MAKE OATH AND SAY, THAT :-

1. I am the owner, or agent of the owner, of the mineral claim(s) to which reference is made herein.

2. I have done, or caused to be done, work on the following mineral claim(s):
(Here list claims on which work was actually done by number and name)

- 75972 Geno 1
- 75973 Geno 2
- 90378 New 6
- 90380 New 8
- Y-12211 New 22 Fr

situated at Whitehorse, Y. T. Claim Sheet No. 105-D-11

in the Whitehorse Mining District, to the value of at least \$1,350

dollars, since the First day of January 19 71.

to represent the following mineral claims under the authority of Grouping Certificate No. _____
(Here list claims to be renewed in numerical order, by number and name, showing renewal period requested).

- 24 YRS*
- Y-52473 Geno 13 FR *1 Jan 71* Four years on all claims at \$200/claim = \$1,200.
 - Y-52474 Geno 14 FR
 - Y-52475 Geno 15 FR
 - Y-52476 Geno 16 FR
 - Y-52477 Geno 17 FR
 - Y-52478 Geno 18 FR

3. The following is a detailed statement of such work: (Set out full particulars of the work done in the twelve months in which such work is required to be done, as shown by Section 53.)

Magnetometer and I.P. surveys and line cutting.

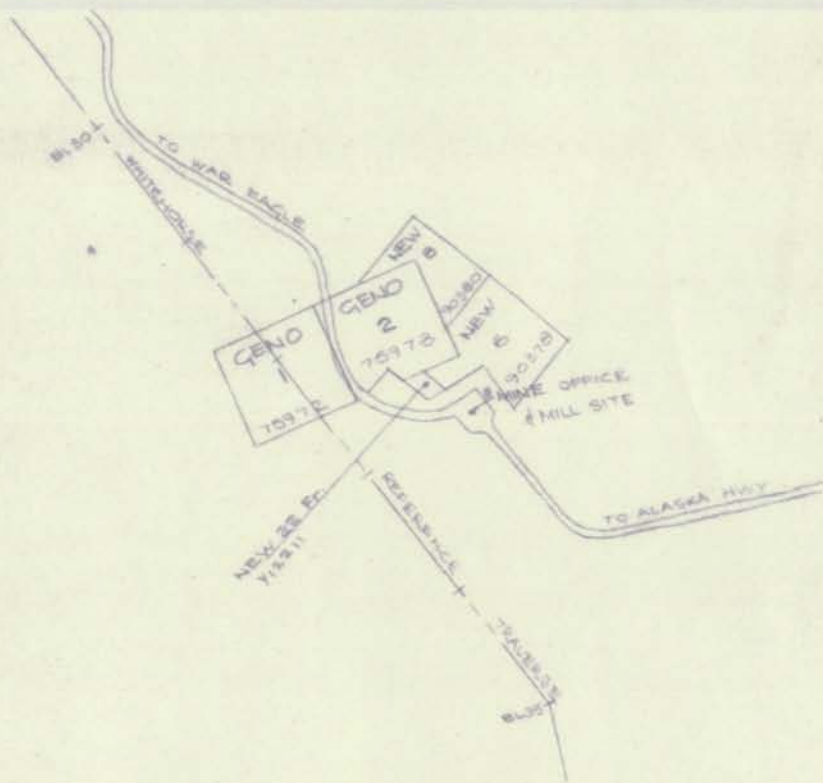
Lines 3 miles @ \$100/mile = \$300.
I.P. 1½ miles @ \$500/mile = \$750.
Mag. 3 miles @ \$100/mile = \$300.
\$1,350.

Sworn before me at Whitehorse, Y. T.

this DEC 31 day of 1971 19

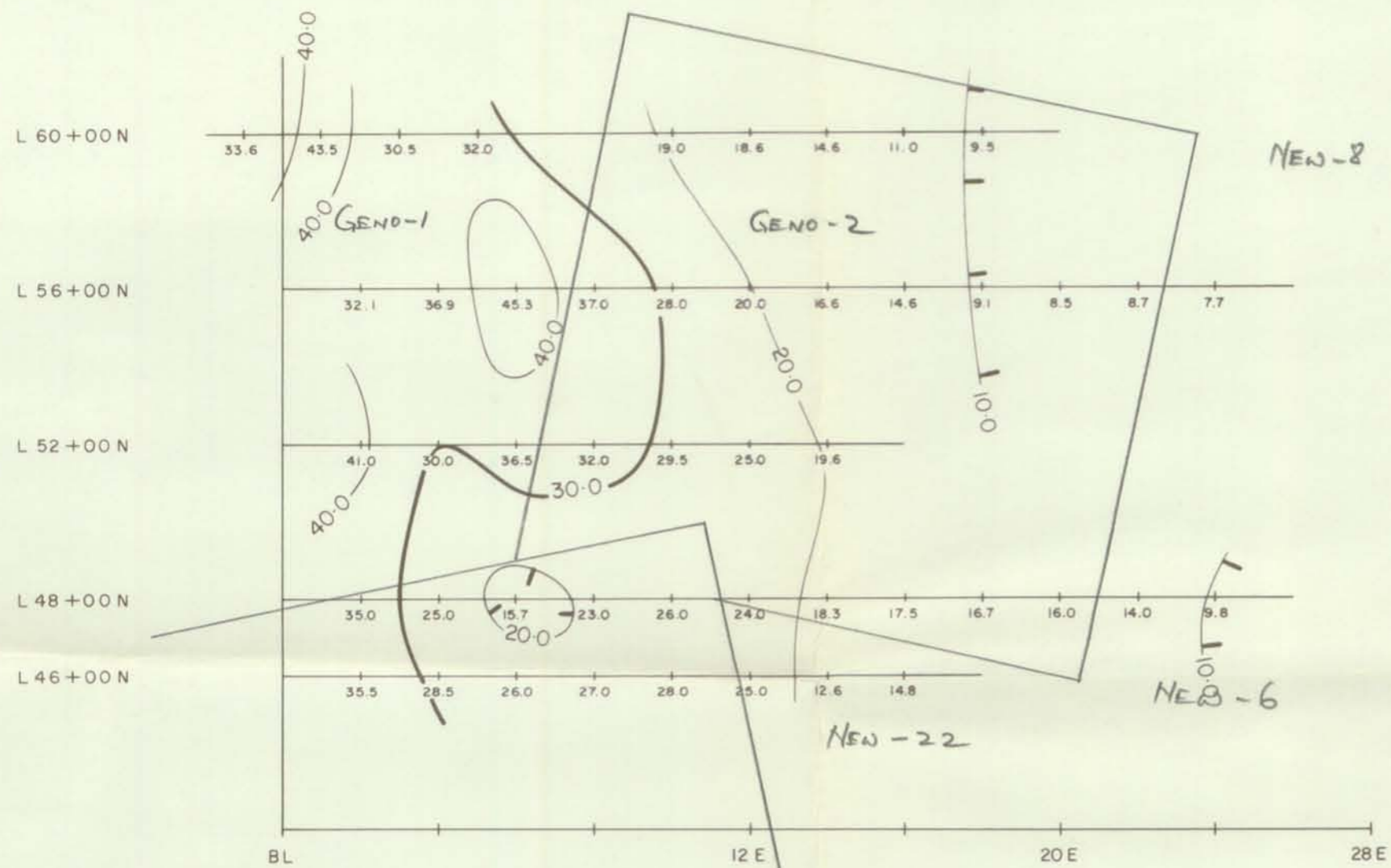
[Signature]
Notary Public

[Signature]
D. Tenney
Applicant.
Agent for Whitehorse Copper Mines Ltd.

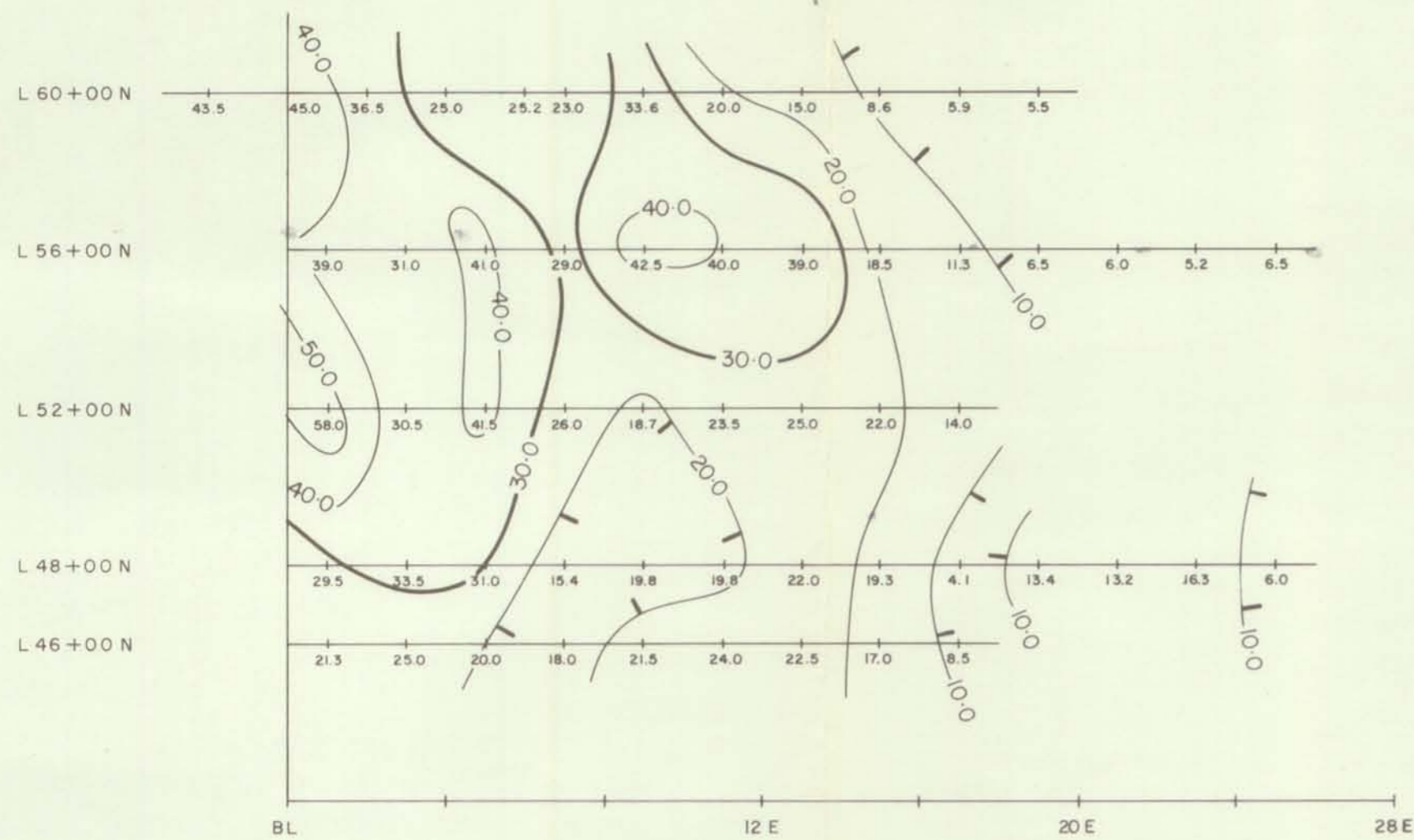


WHITEHORSE COPPER MINES LTD.
 CLAIMS LOCATION MAP
 DEC. (6/71) RWKROEGER

1" = 1/2 MILE



ELECTRODE SPACING
 $\alpha = 400'$

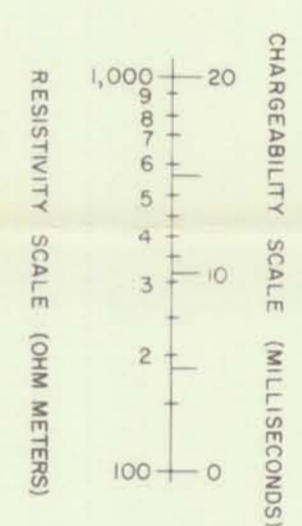
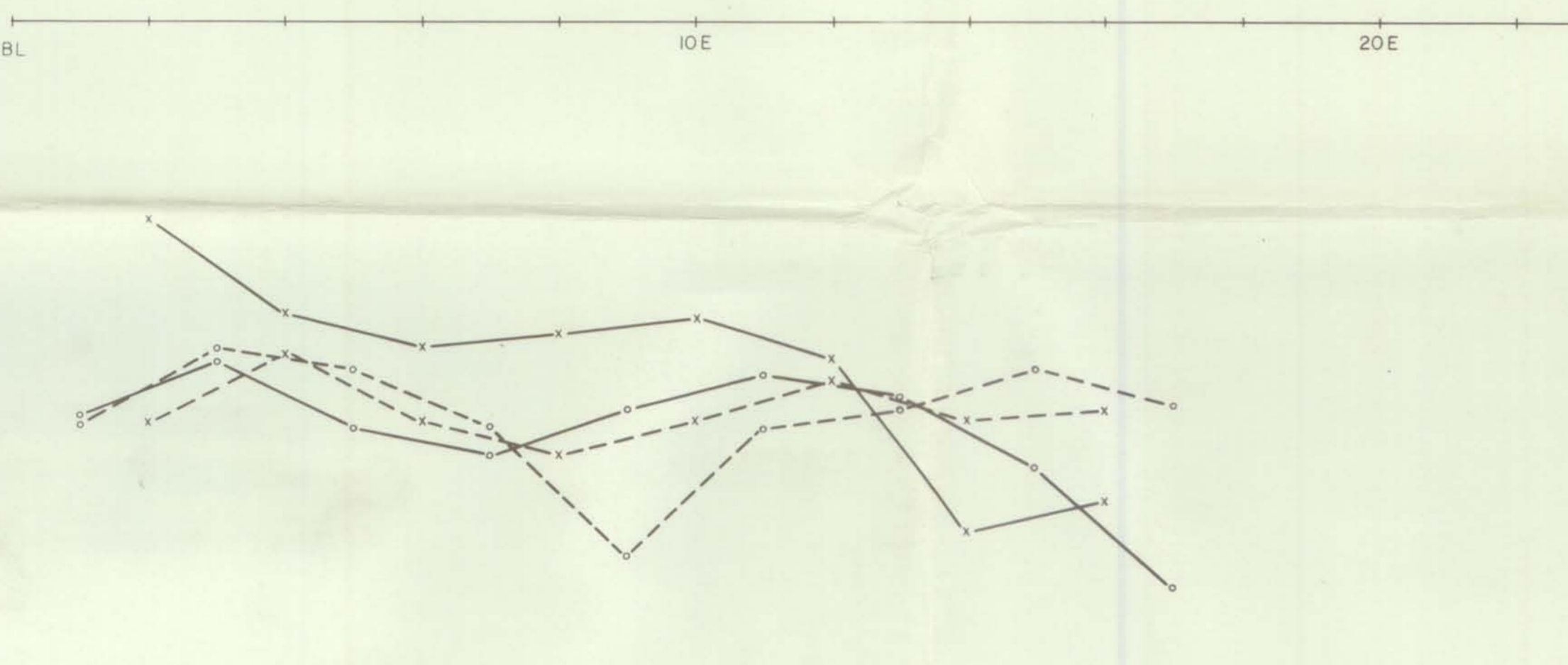
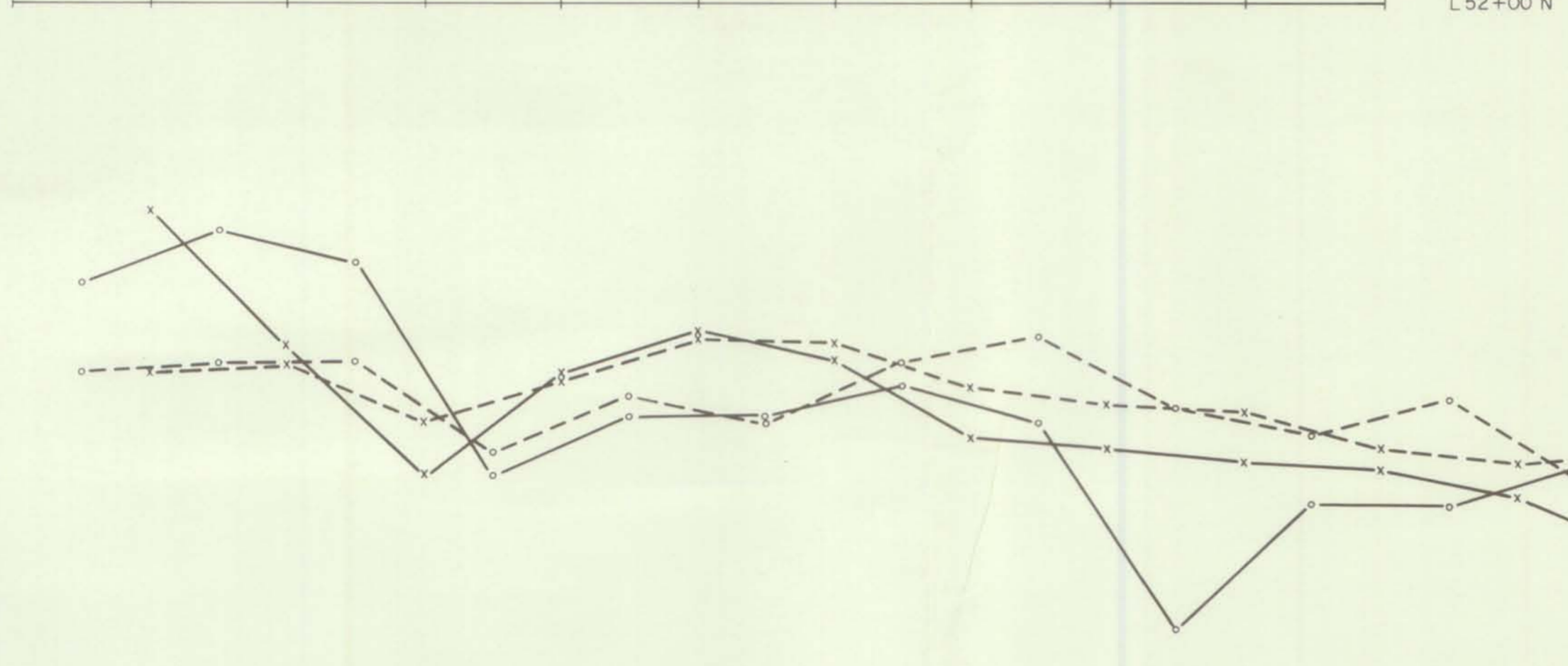
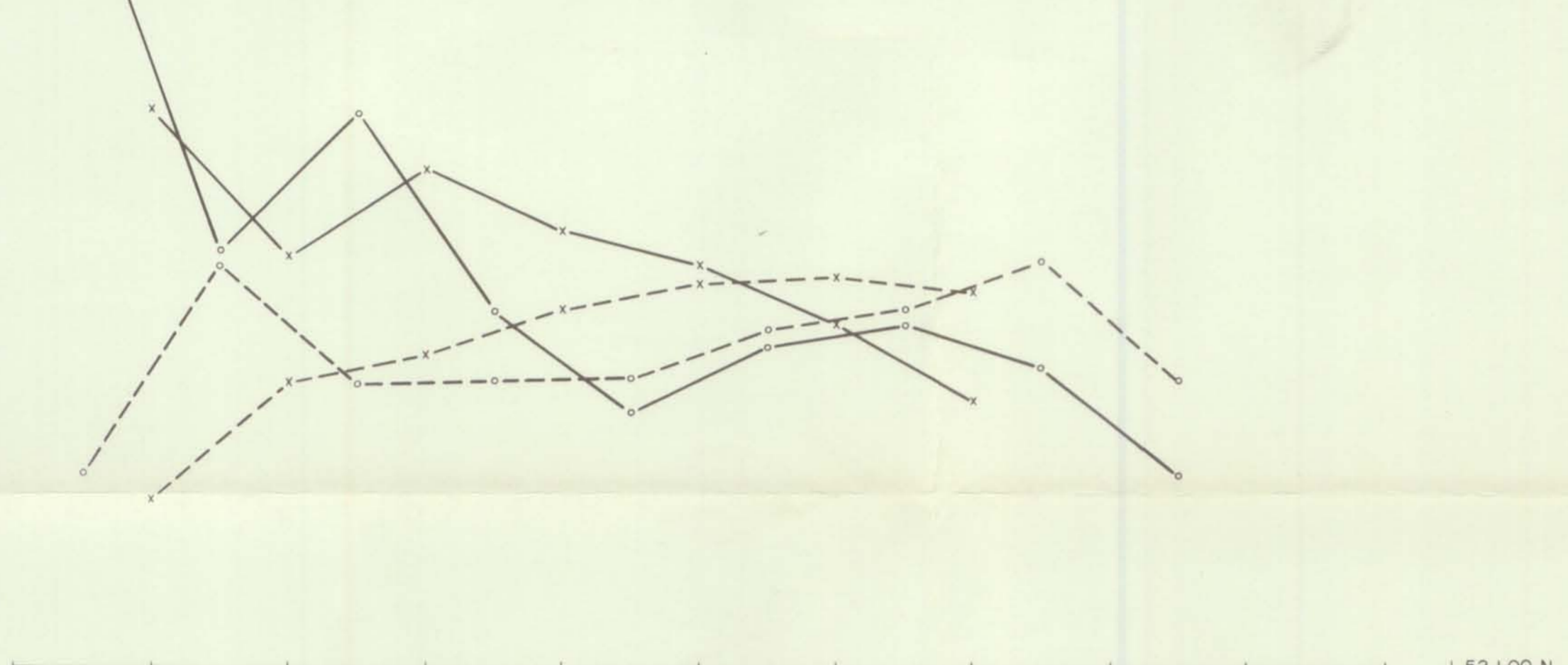
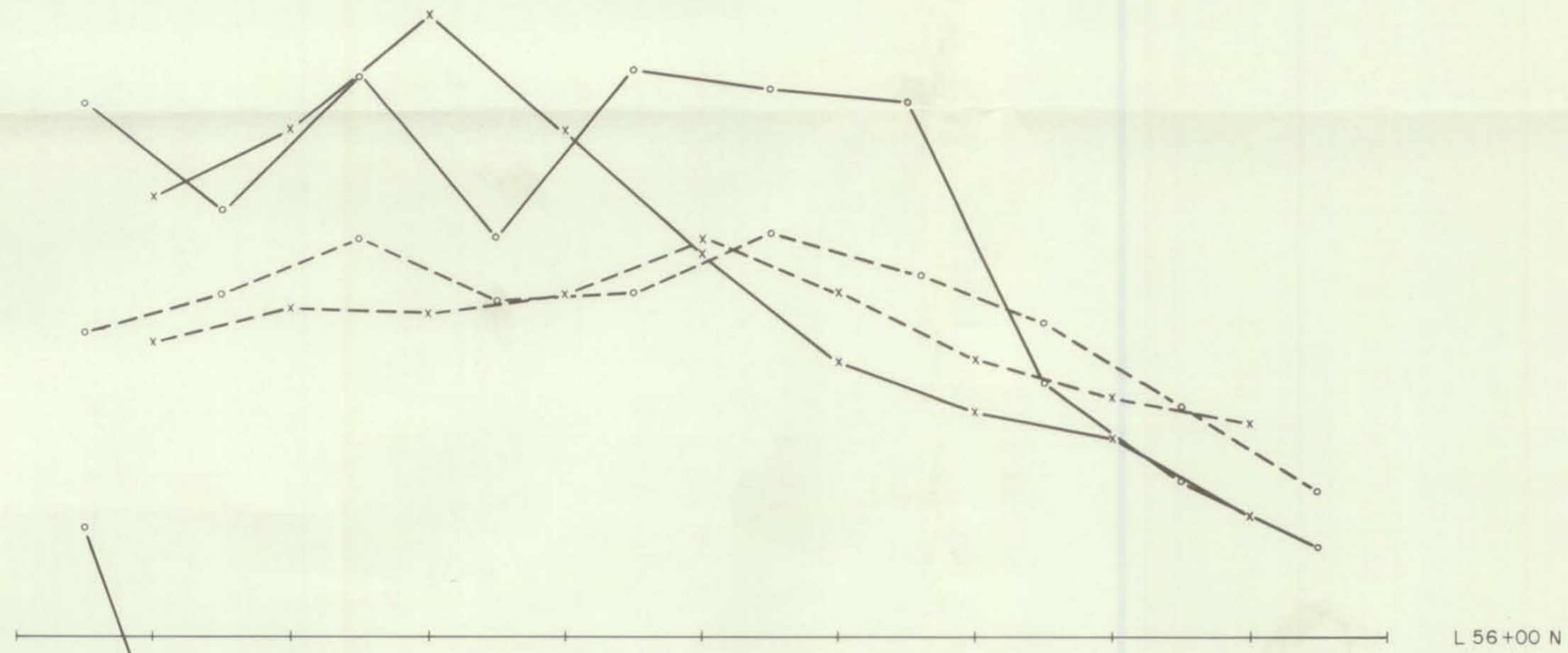
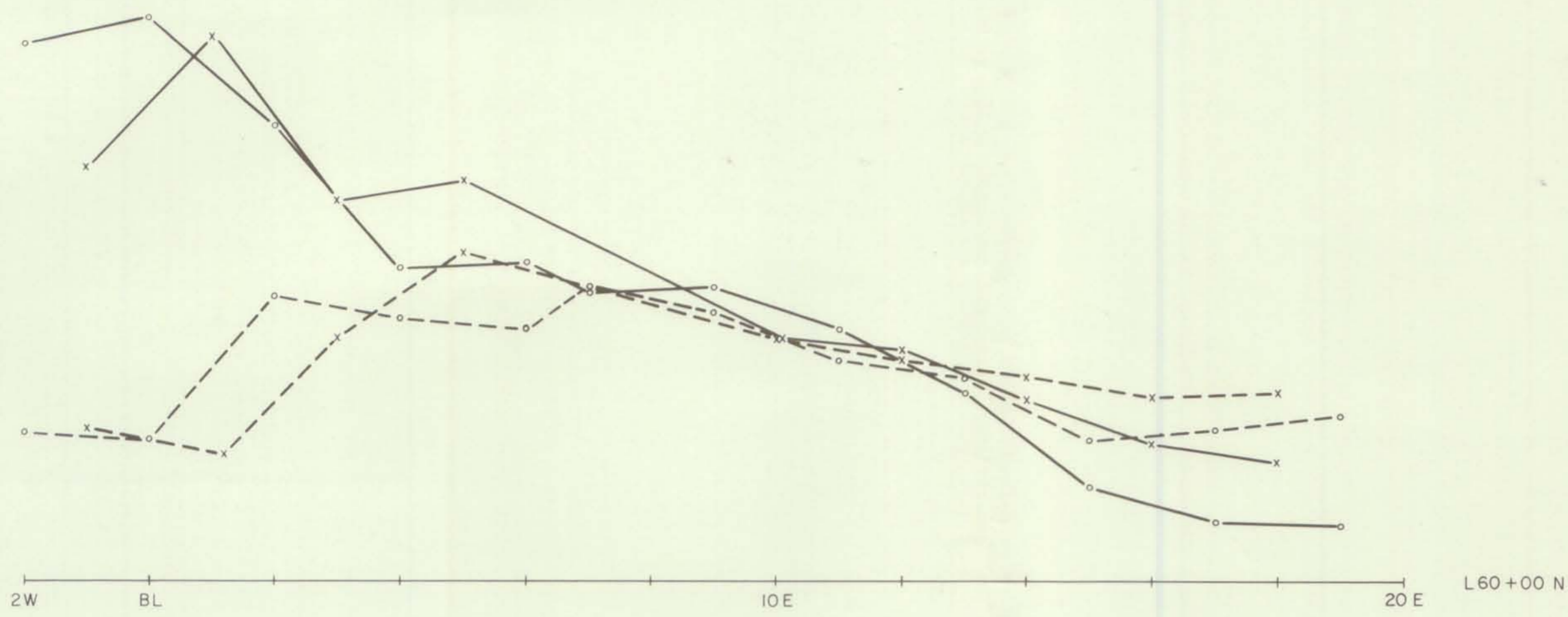


ELECTRODE SPACING
 $\alpha = 200'$

ELECTRODE CONFIGURATION 3 ARRAY
CONTOUR INTERVAL 10.0 MILLISECONDS



NEW IMPERIAL MINES LTD.		
WHITEHORSE Y.T.		
LITTLE CHIEF GRID - CONTOUR PLAN (CHARGEABILITY)		
DR. BY	APP'D BY	REVISIONS
DATE	SCALE 1" = 400'	
REF. No.	DWG. No.	



LEGEND

ELECTRODE CONFIGURATION 3 ARRAY
 ELECTRODE SPACING AS SHOWN

CHARGEABILITY **RESISTIVITY**

○ ——— ○ ○ ——— ○
 x ——— x x ——— x

○ = 200' ○ = 200'
 x = 400' x = 400'

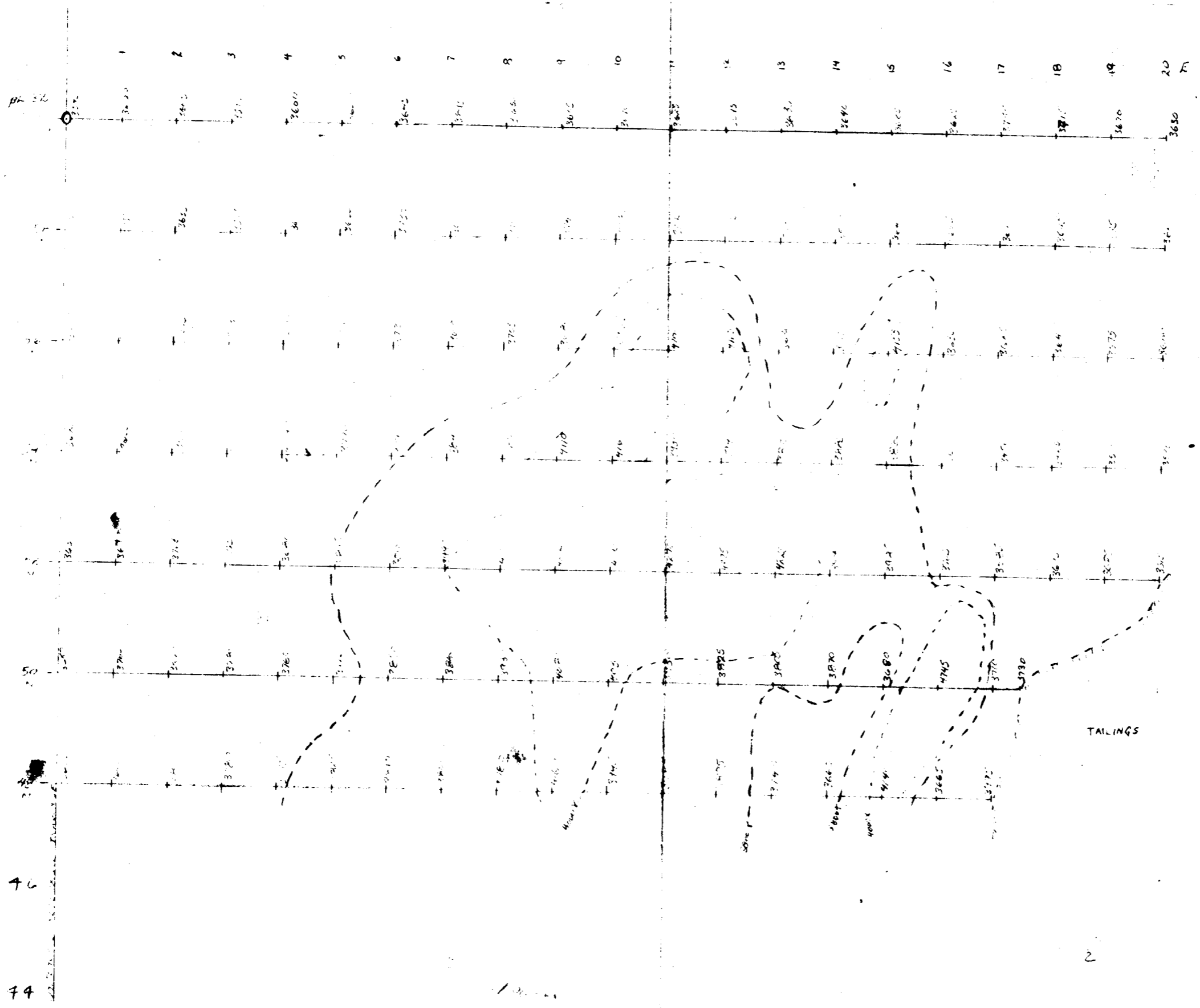
SCALE

APPARENT CHARGEABILITY 1" = 10 MILLISECONDS
 APPARENT RESISTIVITY 2" = 1 CYCLE (100-1000Ωm)

NOTE: LINES NOT SPACED TO SCALE



NEW IMPERIAL MINES LTD.		
WHITEHORSE Y.T.		
LITTLE CHIEF GRID — PROFILE PRESENTATION		
DR. BY	APP'D BY	REVISIONS
DATE	SCALE 1" = 200'	
REF. No.	DWG. No.	



Phase I
Area 1

TAILINGS

Littlefield
Jama Magnetics
C. BIRKETT
June 1, 1971
1" = 200'

PA 22

76

74