

GEOPHYSICAL SURVEY

ADRIANA CLAIM #346

SIMILKAMEEN M.D. B.C.

10 UNITS

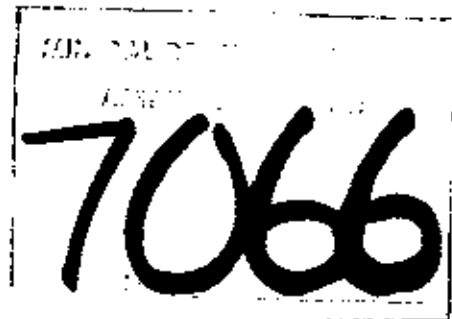
120-50 NW 25/5/78 - 25/7/78

Alfred R. Allen, P.Eng.

For:

BUTE RESOURCES INC.

302 - 750 West Pender Street
Vancouver, B.C.



By:

ALLEN GEOLOGICAL ENGINEERING LIMITED

202 - 2025 Bellevue
West Vancouver, B.C.

July 31, 1978.

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ELECTROMAGNETIC SURVEY

ADRIANA CLAIM #346

25-5-78 : 25-7-78

INTRODUCTION

The Adriana property is 33 kilometers north of Princeton and 64 kilometers south of Merritt, via Highway #5. It is 600 meters east of Highway #5 and 1,500 meters north of Allison Lake.

Access over the claim is provided by logging roads.

The legal corner post is located on the south side of the Hydro line road, on the north side of the sharp bend in Allison Creek. This is approximately 2000 meters northeasterly from the bridge over Allison Creek on Highway #5.

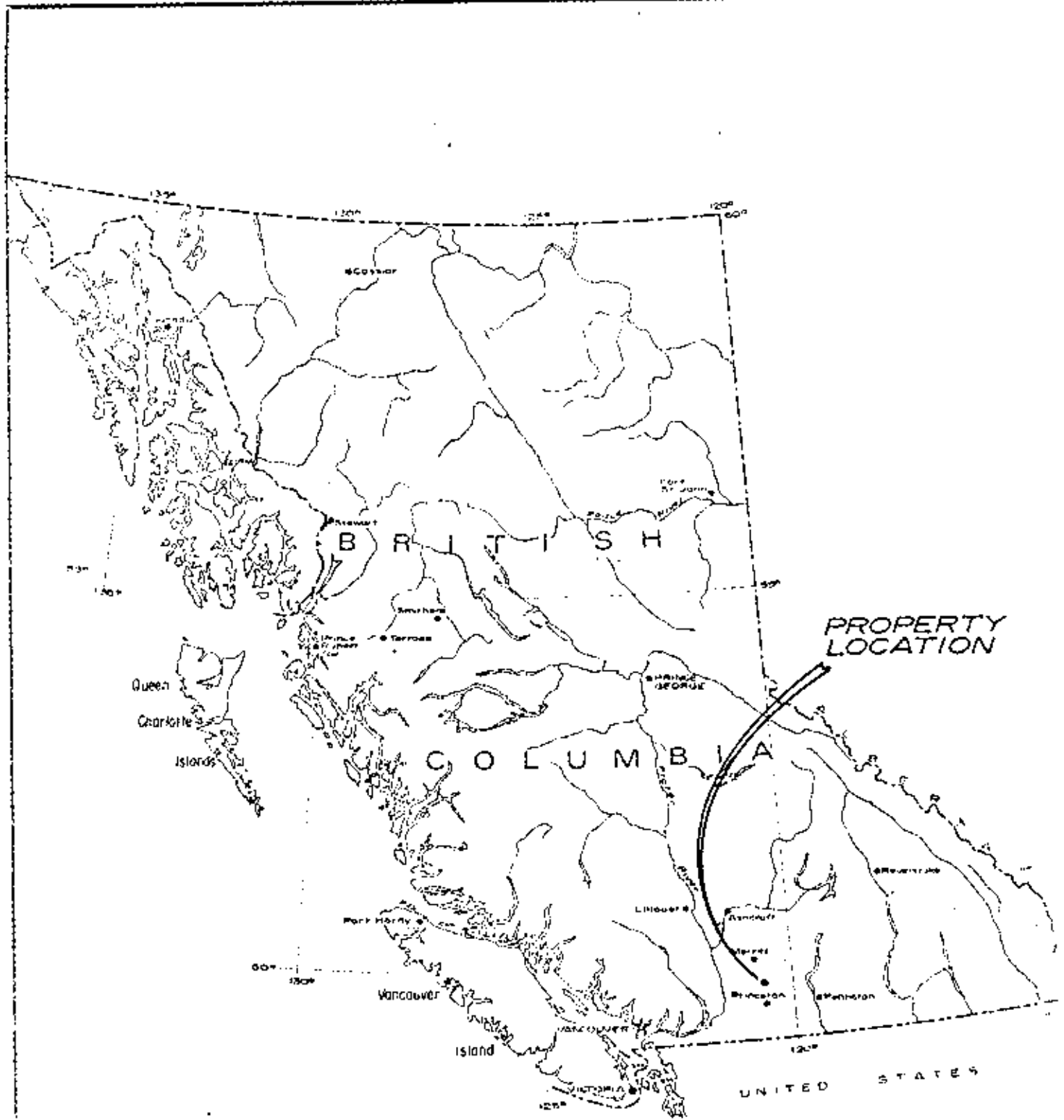
The original claim was abandoned and relocated on behalf of Bute Resources Inc., May 23, 1978.

Prior to the survey no significant copper mineralization had been exposed on the Adriana claim, but two kilometers to the south geological and geophysical investigations had outlined sufficient copper mineralization to warrant trenching and diamond drilling.

A surveyed grid was established over the 10 unit Adriana claim. A base line was surveyed by chain and Brunton compass along the west boundary. At 100 meter intervals cross lines were surveyed 1,000 meters to the east boundary. Stations were established along the lines at 50 meters intervals.

An electromagnetic survey was conducted over the grid on the Adriana claim by Alfred R. Allen and T. Thomas June 5-16, 1978. A Ronka EM16 instrument was used. Using the Seattle VLF transmitter dip angle observations were recorded at each grid station.

Line profiles of in phase and quadrature tilt angles, and a plan of in phase filtered tilt angles illustrate the results.



BUTE RESOURCES INC.

LOCATION MAP

SCALE: 1" = 135 Miles

Drawn by Date 3/7/78

Checked by Drg. no. 1

ALLEN GEOLOGICAL
ENGINEERING LTD

William K. Allen

PROPERTY

The Adriana claim extends from the legal corner post west 2 units and north 5 units. Metal tag # 36870 is attached to the post on the south side of the Hydro line and north bank of Allison Creek at the sharp bend. This is approximately 2000 meters northeasterly from the Allison Creek bridge on Highway #5.

The claim was staked May 20 and 21 by T. Thomas and recorded as agent for Bute Resources Inc. on May 23, 1978.
The record number is 346.

TOPOGRAPHY

The property lies on a broad rolling ridge between elevations of 1,230 and 1,340 meters above sea level on the northwesterly slopes of Missezula Mountain. Allison Creek flows across the southeast corner of the claim.

A topographic survey was made of the claim area.

GRID CONTROL

A chain and Brunton compass survey was made over the Adriana claim and a grid tied to a baseline along the west boundary established. Stations were staked every 100 meters along the base line, from which cross lines were surveyed to the east boundary, a distance of 1,000 meters. Along the cross lines stations were established at 50 meter intervals by stakes and flagging.

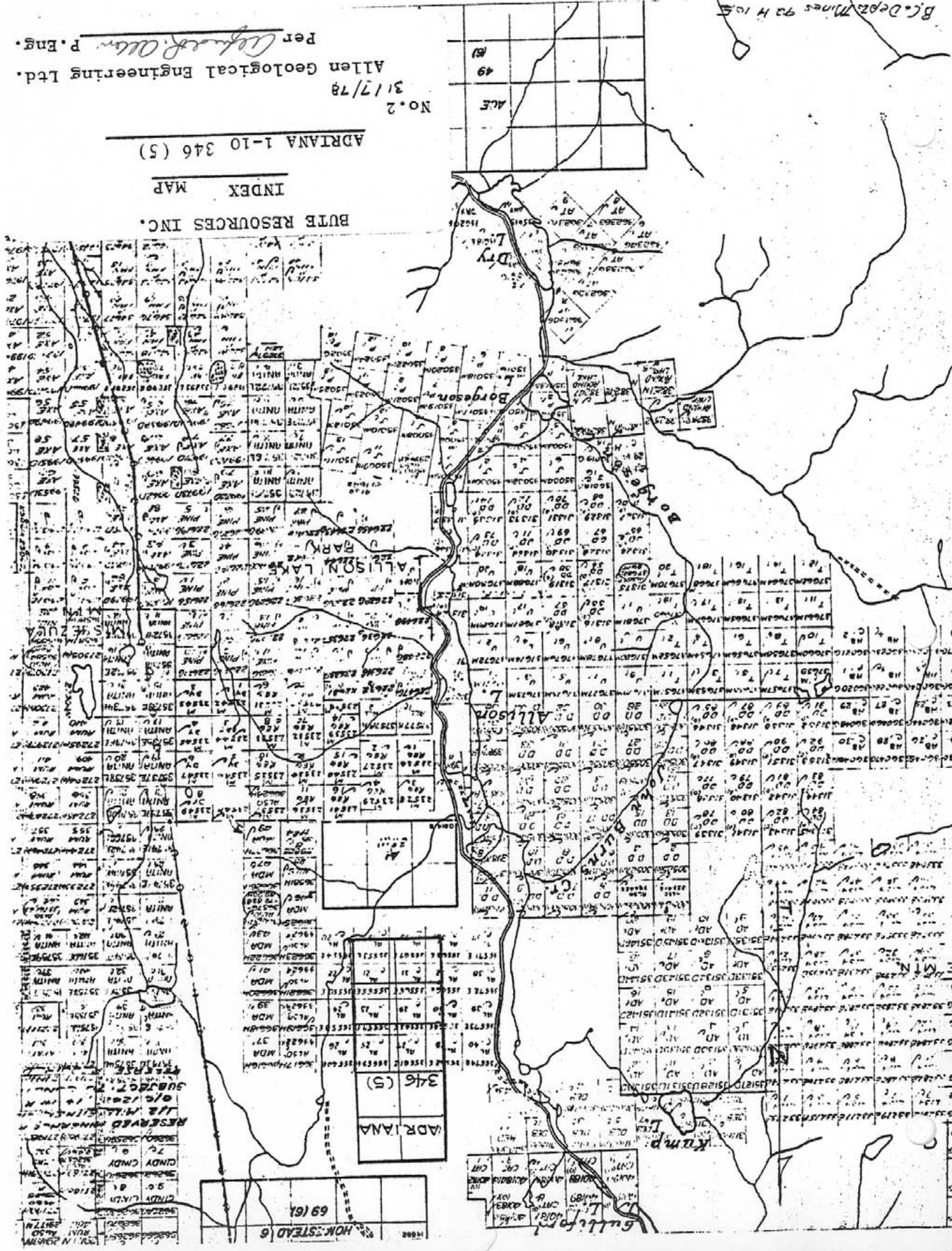
B.C. Dept. Mines 92 H 105

Allen Geological Engineering Ltd.
Per *Allen P. Eng.*
No. 2
31/7/78

ADRIANA 1-10 346 (5)

INDEX MAP

BUTE RESOURCES INC.



GEOLOGY

Lack of outcrops obviated the possibility of a meaningful geological survey. From the Princeton Sheet (East Half) Map #888, the general geology of the area is shown on a 1 inch to 4 mile scale.

A contact between Coast Range granitic intrusives and Nicola andesitic, tuffaceous and basaltic rocks strikes about 5 degrees east of north for the length of the claim. About the western two-thirds of the area is underlain by granitic rocks. A major fault strikes north northwesterly just west of the claim.

Outcrops observed on and near the claim comprise the following rock types:

Coast Range

Grey medium-grained granodiorite.

Reddish fine-to coarse-grained granodiorite.

Bleached and iron-stained granodiorite with sparse copper staining in and near strong fractures.

Wide zone of highly altered brown sheared granodiorite.

Nicola

Black compact andesite.

Dark green andesite porphyry, altered and highly fractured, epidote in fractures.

Black andesitic rock with light green amygdules.

Light brown highly oxidized and fractured volcanic rock.

ELECTROMAGNETIC SURVEY

At each grid station and at intermediate stations on lines 1-19 observations were taken with a Ronka 16 instrument. The Seattle, Wsshington, VLF transmitter provided clear reception. In phase and quadrature tilt angles were recorded and mapped on line profiles. The in phase tilt angles were filtered to clarify the results, the plan of which is included in the pocket of this report.

SURVEY RESULTS

The filtered VLF-EM survey results are interpreted as follows:

The pipeline and Hydro line distorted the electromagnetic configuration of the southern map area, and the strong conductor zones are not related to mineralized zones.

The following conductor zones are indicated:

1. This conductor extends from 2E to 3E between lines 22N and 23N. It has a range of 43 to 53. It lies between geochemical anomalies #2 and #8. It is 150 meters long and directed N24E.
2. This extends from 6E to 7E between lines 18.5N and 19.3N. It lies on the north side of #1 geochemical anomaly. It ranges from 40 to 47. It is 175 meters long and is directed N17E.
3. This extends from 12 $\frac{1}{2}$ E to 12E between lines 18N and 19.5N. It has a range of 44. It lies on the north side of geochemical anomaly #1. It is 200 meters long and directed N13W.

4. This extends from line 13.5N to 15N
It has a range of 42 to 43.
It is 150 meters long and directed N3E.

5. This extends from 18E to 19E between lines $13\frac{1}{2}$ N and 143/4N.
It has a range of 40 to 69.
It is 150 meters long and is directed N27E.
It lies on the east boundary of the claim on the south side of #3 geochemical anomaly.

6. This is along 19E between lines $7\frac{1}{2}$ N and $9\frac{1}{2}$ N.
It has a range of 51 to 60.
It is 200 meters long and directed N8E.
It is located on the east boundary of the claim.

7. This extends from 4E and 6E between lines 0 and $1\frac{1}{2}$ N.
It has a range of 40 to 64.
It is 200 meters long and directed N38E.
It may be partly caused by the gas pipeline.

8. This extends from $7\frac{1}{2}$ E to 93/4E between lines 2N and 3N.
It has a range of 42 to 59.
It is 160 meters long and directed N43E.
It is near the south central part of the claim and appears to be too far from the gas pipeline and hydro line to be affected by them.

SUMMARY AND CONCLUSIONS

The electromagnetic determinations were distorted on the south of the property by the gas pipeline and hydro line.

The filtered results indicate eight conductor zones.

Conductors #1 to #5 are near, but not directly over geochemical anomalies, and are more or less perpendicular to them.

Conductors #5 and #6 are on the east boundary of the claim.

Conductor #7 may be influenced by the presence of the gas pipeline, whereas conductor #8 appears to be beyond this influence.

It is concluded that during the recommended stripping and trenching to expose the bedrock on and near the geochemical anomalous zones, that conductor zones #2 to #5 may be exposed to assist in the determination for the electromagnetic effects.

Respectfully submitted,

ALLEN GEOLOGICAL ENGINEERING LIMITED

Per *Alfred R. Allen* P.Eng.
Alfred R. Allen

West Vancouver, B.C.

July 31, 1978.

REFERENCES

- Rice, H.M.A., Geological Survey of Canada Memoir 243 1947
- Cochrane, D.r.l Geophysical and Geochemical
Surveys on AT Group Assessment Report
#4349, 1972.
- Skerl, A.C., Geochemical Survey, Allison
Lake Claims,
near Princeton, B.C. Assessment Report
#1857, 1969.
- Geology, Exploration and Mining,
B.C. Department of Mines and
Petroleum Resources 1971-72

* * * * *

Allen Geological Engineering Limited

2025 BELLEVUE AVENUE
WEST VANCOUVER, B.C. V7V 1B9

Telephone
604-928-4785

CERTIFICATE

July 31, 1978.

I, Alfred R. Allen, certify that:

I am a graduate of the University of British Columbia and hold the following degrees therefrom:

BASc Geological Engineering 1939

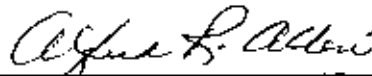
MASc Geological Engineering 1941

I am a member of the Association of Professional Engineers of the Province of British Columbia.

I hold no interest in the properties or securities of Bute Resources Inc., or affiliates thereof, nor do I expect to receive any, directly or indirectly.

The report on the Adriana property, Allison Lake Area, Similkameen M.D., B.C., is based on field work on the Adriana claim June 5, 1978 to June 16, 1978.

I consent to this report being filed with the British Columbia Securities Commission.



Alfred R. Allen

Allen Geological Engineering Limited

2025 BELLEVUE AVENUE
WEST VANCOUVER, B.C. V7V 1B9

Telephone
604-926-4785

July 31, 1978.


British Columbia Securities Commission
756 Fort Street
Victoria, B.C.

Dear Sirs:

Re: Bute Resources Inc.

I hereby consent to the use of my report dated July 31, 1978, on the Adriana property, Allison Lake Area, Similkameen M.D., B.C., for Bute Resources Inc., in any prospectus or statement of material facts or other material to be filed with the British Columbia Securities Commission or the Vancouver Stock Exchange by Bute Resources Inc.

Yours very truly,

 P. Eng.

Alfred R. Allen

For:

ALLEN GEOLOGICAL ENGINEERING LTD.

THE ADRIANA CLAIM - #346 - Map 92H-10ESIMILKAMEEN M.D. B.C.FOR: BUTE RESOURCES INC.TOPOGRAPHIC SURVEYGEOCHEMICAL SURVEYELECTROMAGNETIC SURVEYPERSONNEL & TIMEFIELD TIME

<u>Name</u>	<u>Month</u>	<u>Topography</u>	<u>Geochemical</u>	<u>E.M.</u>	<u>Man Days</u>
A.R. Allen	June 6-10	1	2	2	5
T. Thomas	May 25		$\frac{1}{2}$	$\frac{1}{2}$	1
	June 5-16, 22	3	5	5	13

MOB. & DE-MOB., MAPPING REPORTS

A.R. Allen	May 25	$\frac{1}{2}$		$\frac{1}{3}$	1
	June 1-3, 15, 22-25, 30	1	3	3	7
	July 1, 2, 6-8, 22-25	$\frac{1}{2}$	3	3	$6\frac{1}{2}$
TOTAL					<u>$33\frac{1}{2}$</u>

(A.R. Allen)

D.

THE ADRIANA CLAIM - #346 - Map 92H-10E

SIMILKAMEEN M.D. B.C.

FOR: BUTE RESOURCES INC.

ELECTROMAGNETIC SURVEY

PERSONNEL & TIME & COSTS

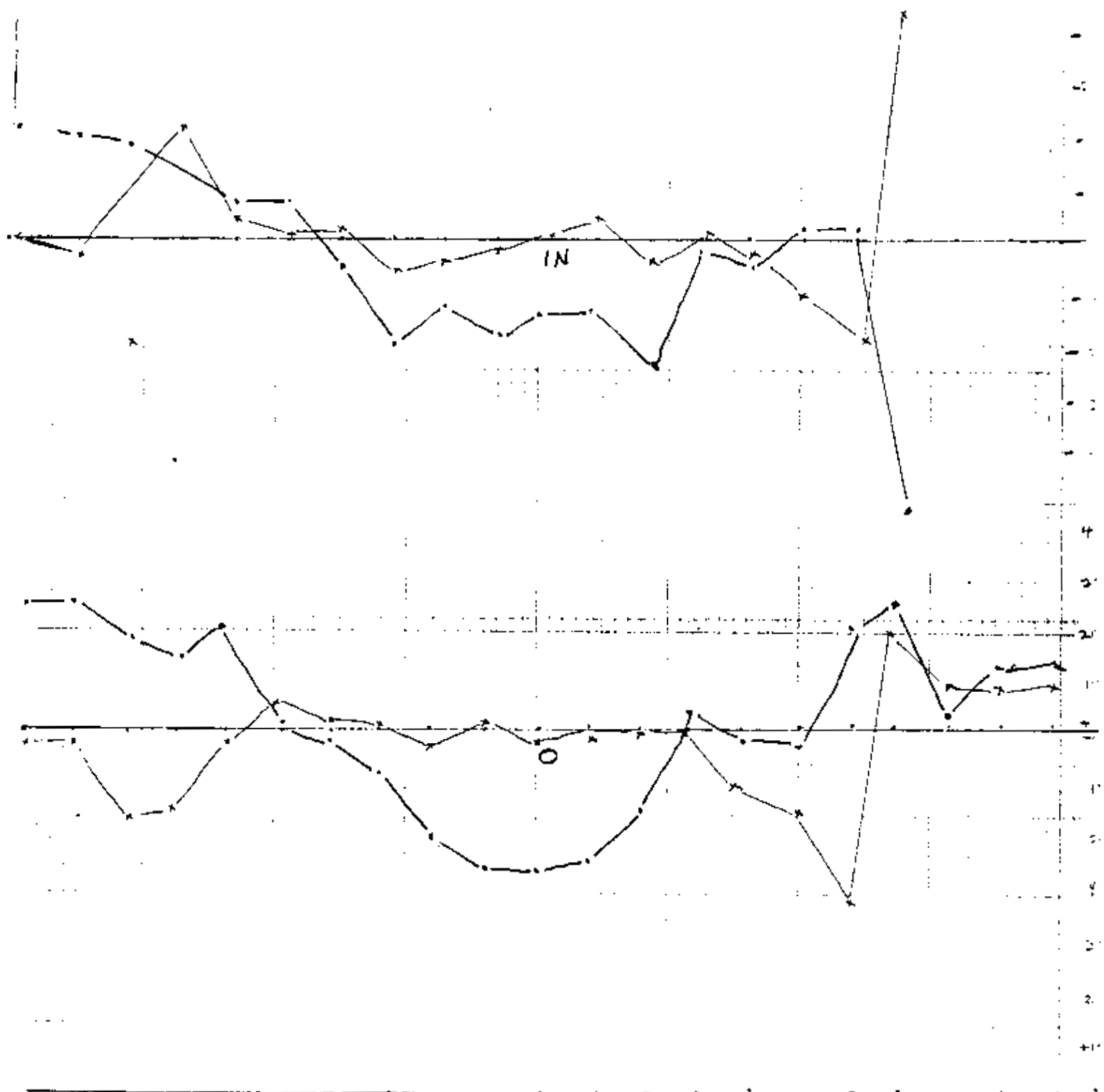
OPERATOR: Alfred R. Allen, Geological Engineer @ \$185.00/day
202 - 2025 Bellevue, West Vancouver, B.C.
May 25 - July 25, 1978.

ASSISTANT: T. Thomas, Experienced field man @ \$90.00/day
plus 20% for benefits
Shook Road, Mission, B.C.
May 25, June 5-16 and 22, 1978.

SURVEY:

	<u>Man Days</u>	<u>Costs</u>
A.R. Allen	8½	\$1,572.50
T. Thomas	5½	594.00
Transportation, 2 vehicles		75.00
Accommodation		63.05
Cash outlay, food and supplies		50.00
Maps and air photos		30.00
Instrument rental		229.00
		<hr/>
		\$2,613.55

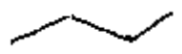
Alfred R. Allen




M →

ADRIANA #346
E.M. PROFILES

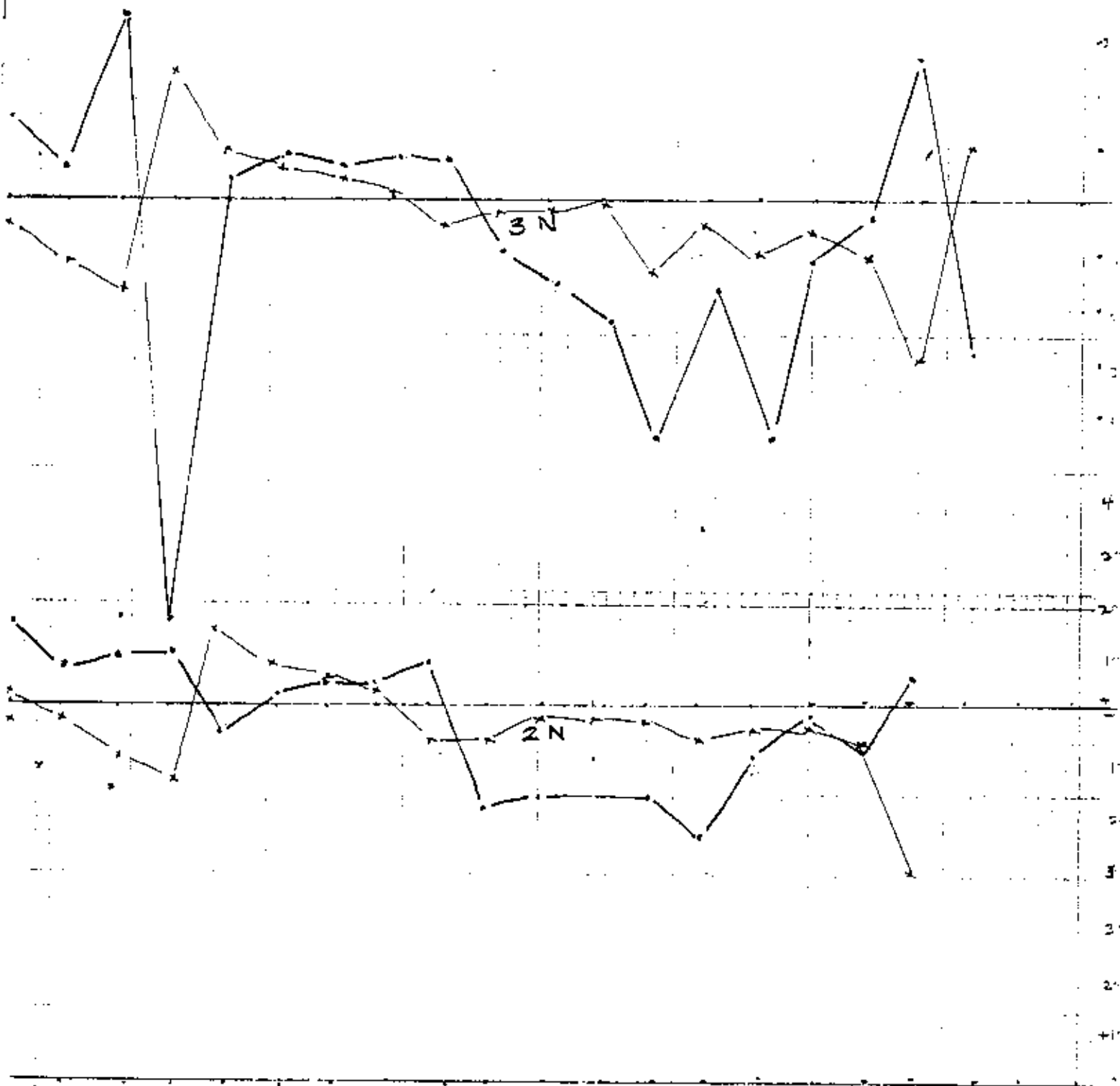
June 1978 by R. Allen, R. Eng. 3

In Phase :  4

Quadrature:  4

— Degrees

- - - Meters



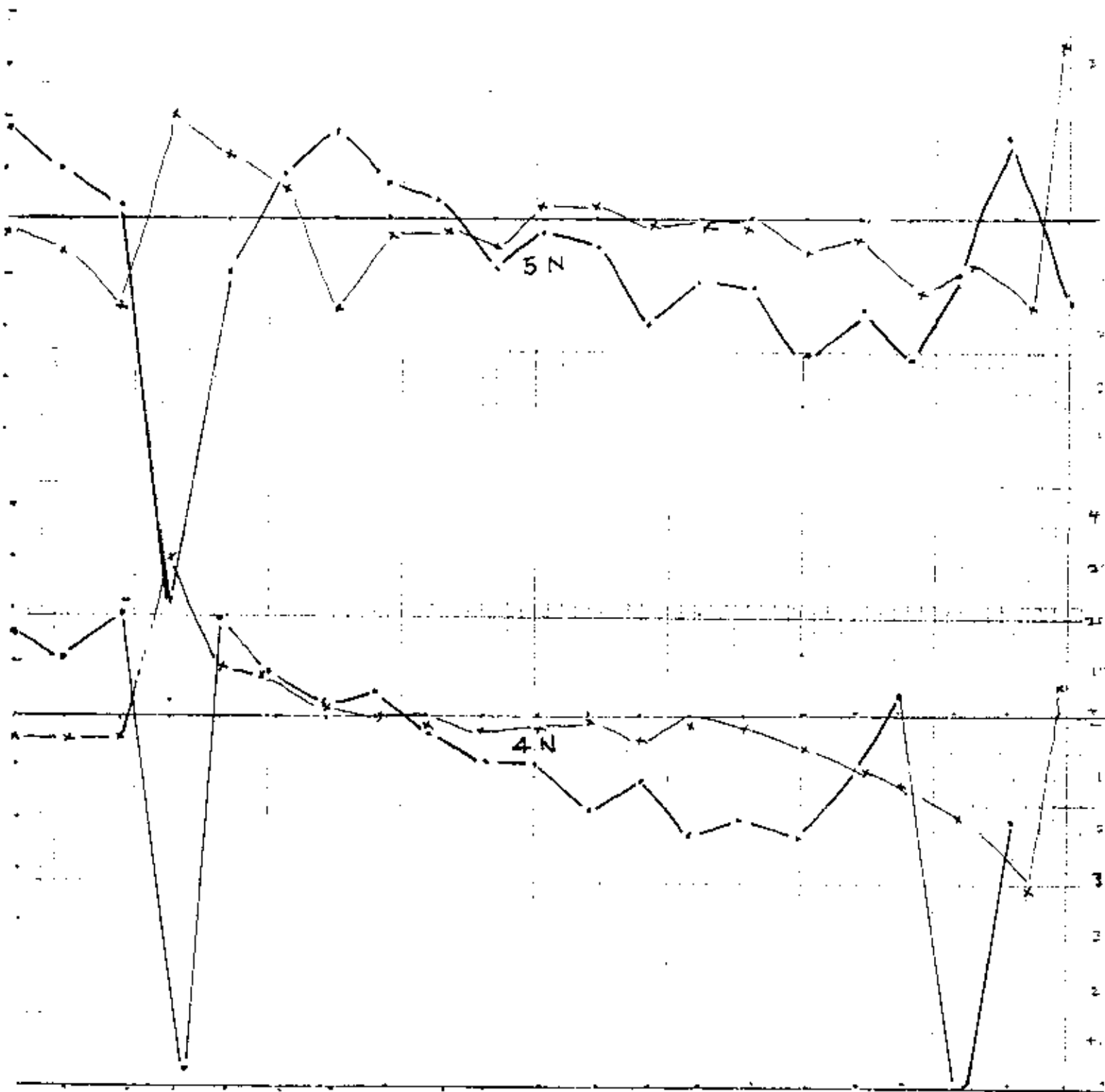
ADRIANA #346
E.M. PROFILES

June 1978 Alfred R. Allen, R. Eng.

In Phase : 4

Quadrature:


— Degrees
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E.M. PROFILES

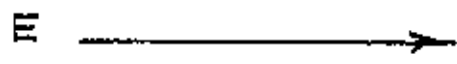
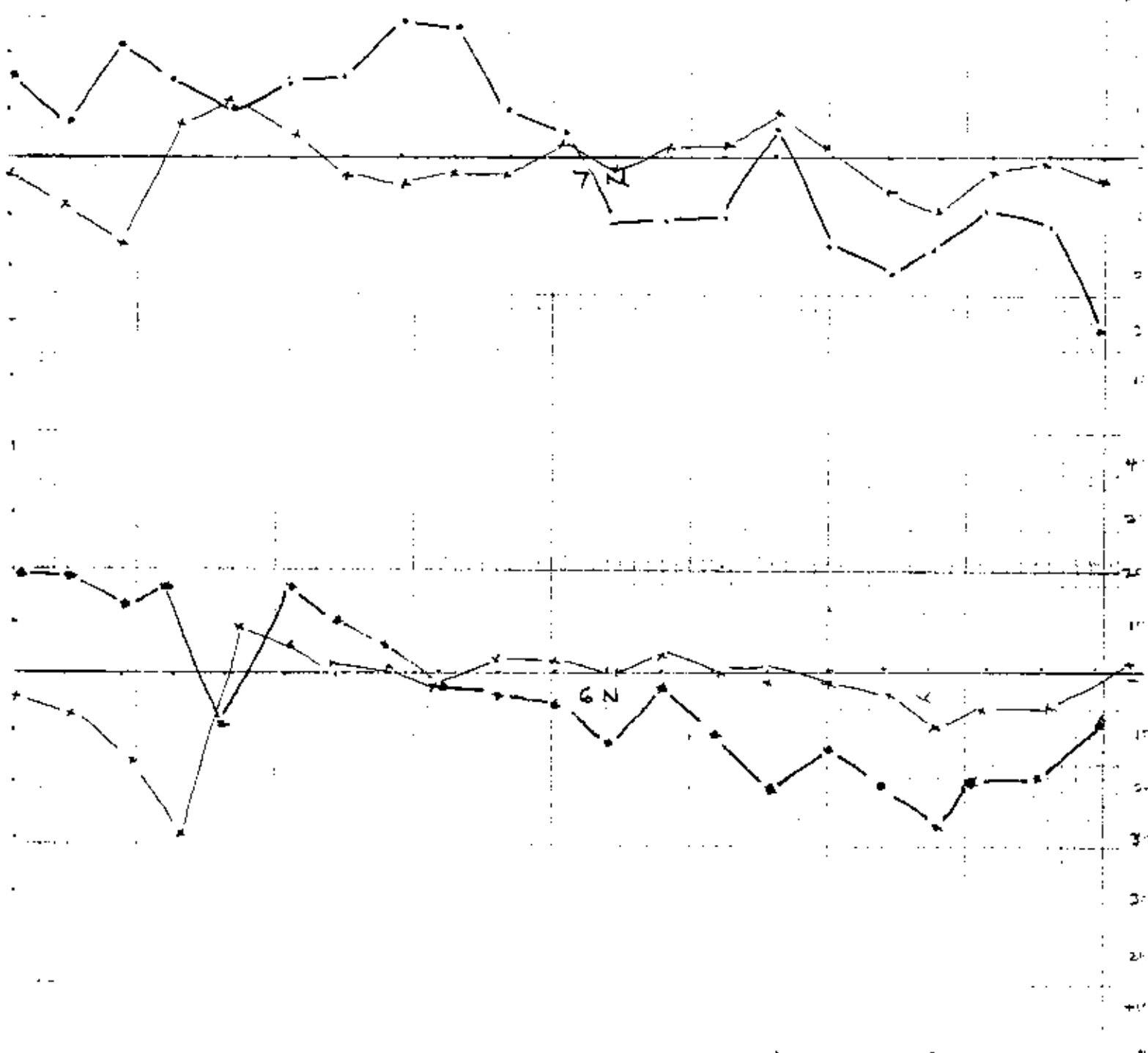
June 1978 Alfred R. Allen, R. Eng. 2

In Phase : 

Quadrature: 

— Degrees

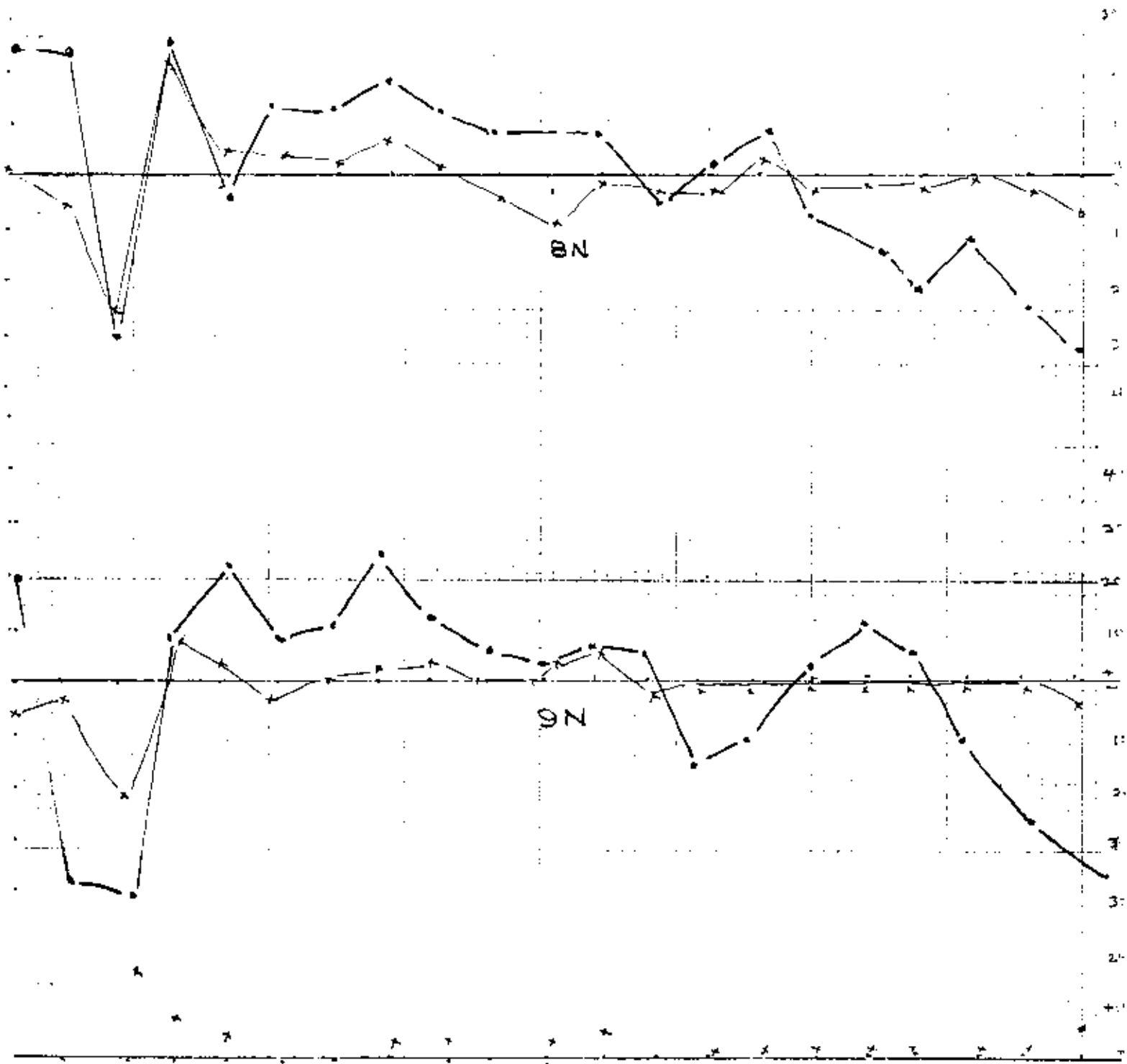
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ADRIANA #346
E.M. PROFILES

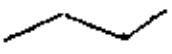
June 1978 Alfred R. Allen, P.Eng.


- In Phase : 4
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ADRIANA #346
E.M. PROFILES

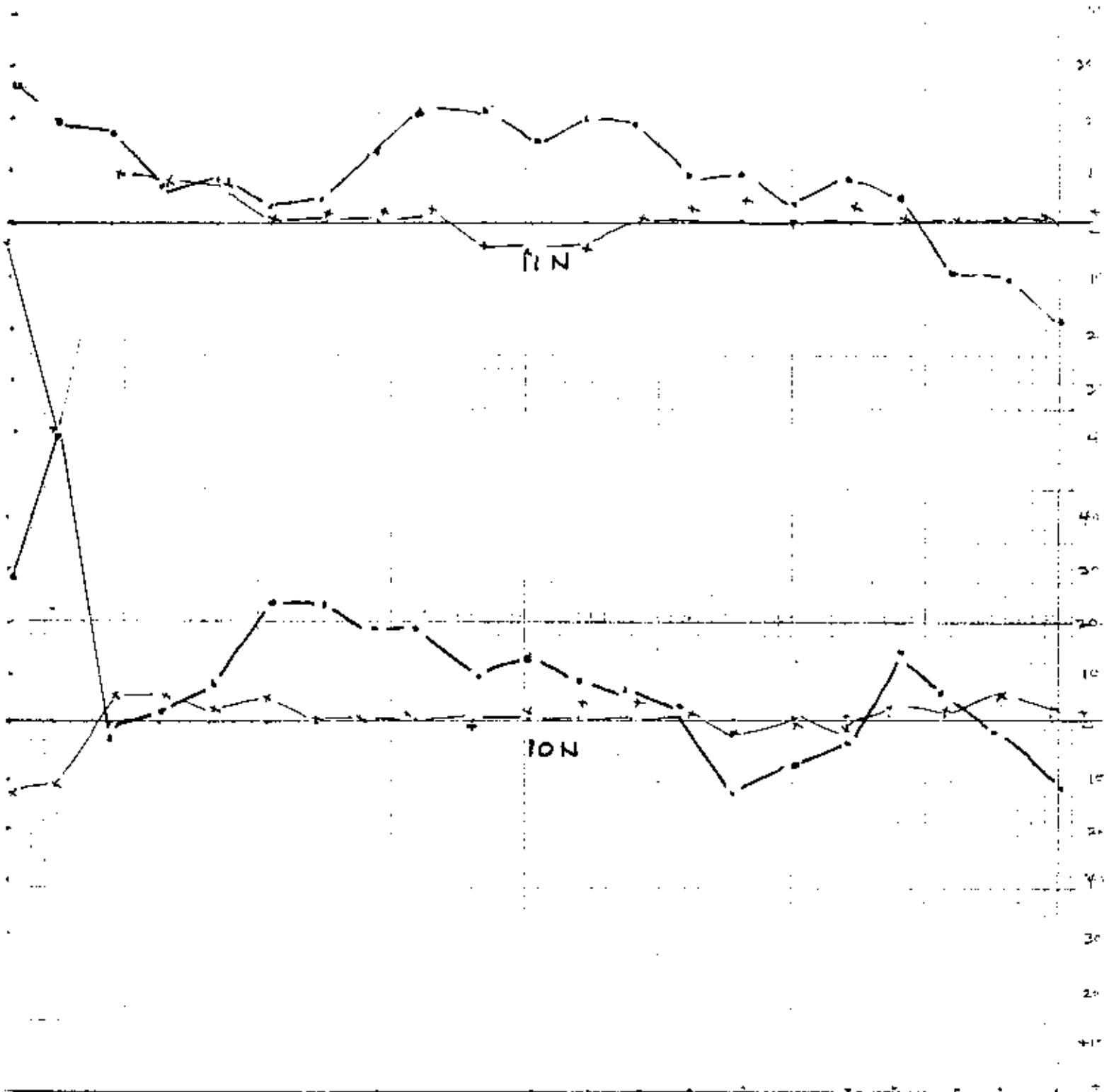
June 1978 Alfred R. Allen, P.Eng.

In Phase : 

Quadrature: 

— Degrees

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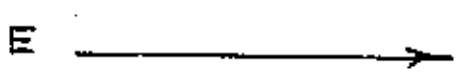
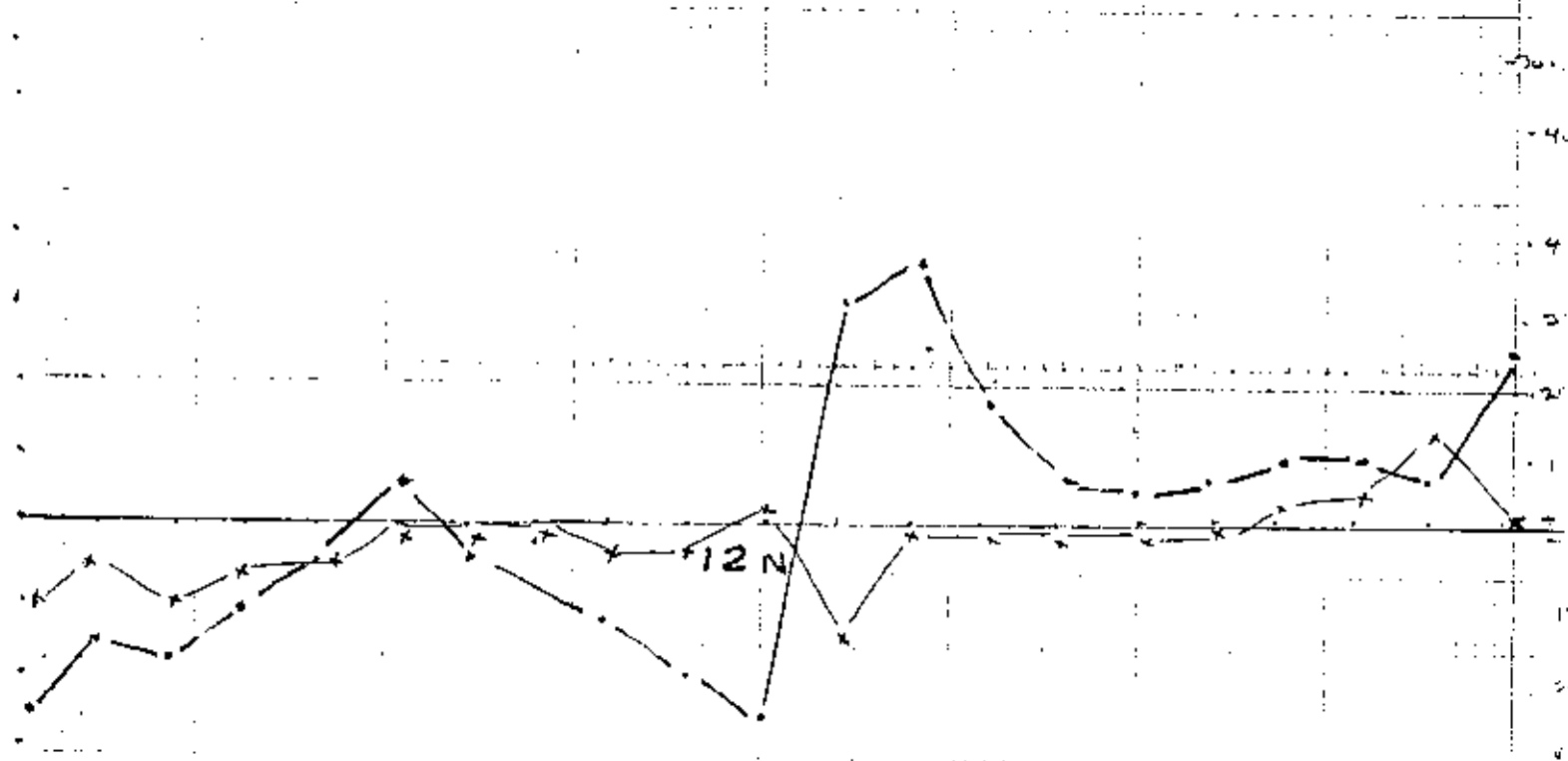
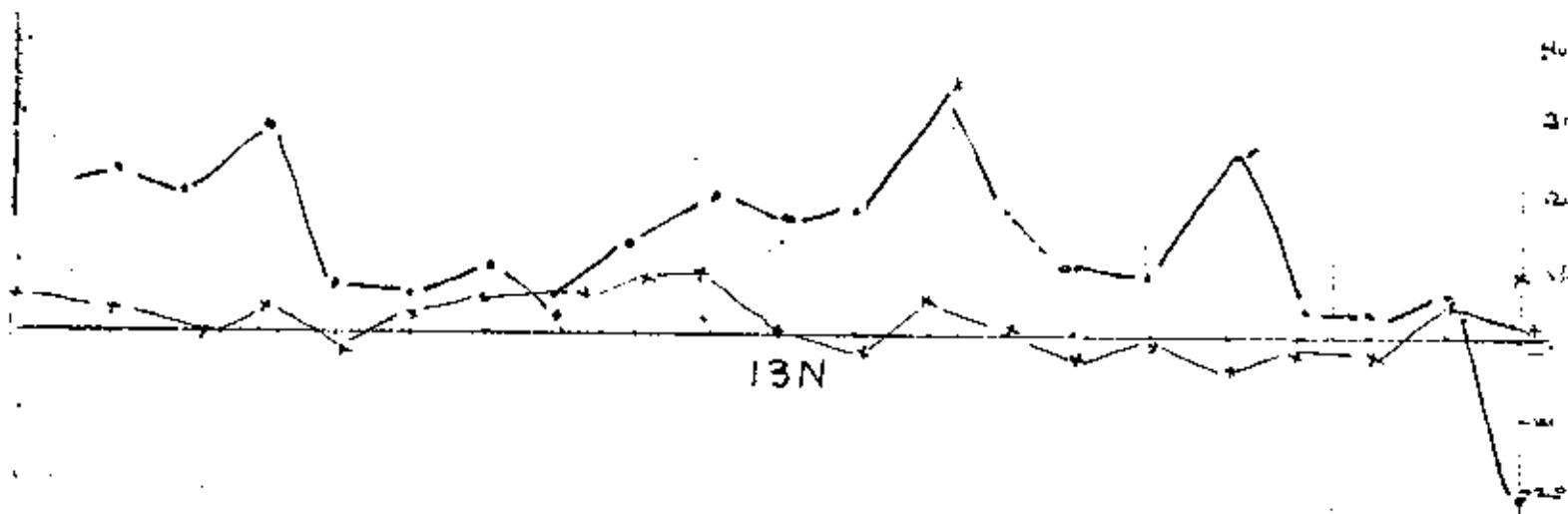


III →

ADRIANA #346
E.M. PROFILES

June 1978 after R. Allen, R. Eng. 9.

- In Phase : 4.
- Quadrature : 4.
- Degrees
- Meters



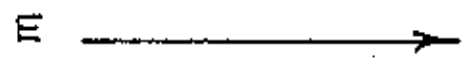
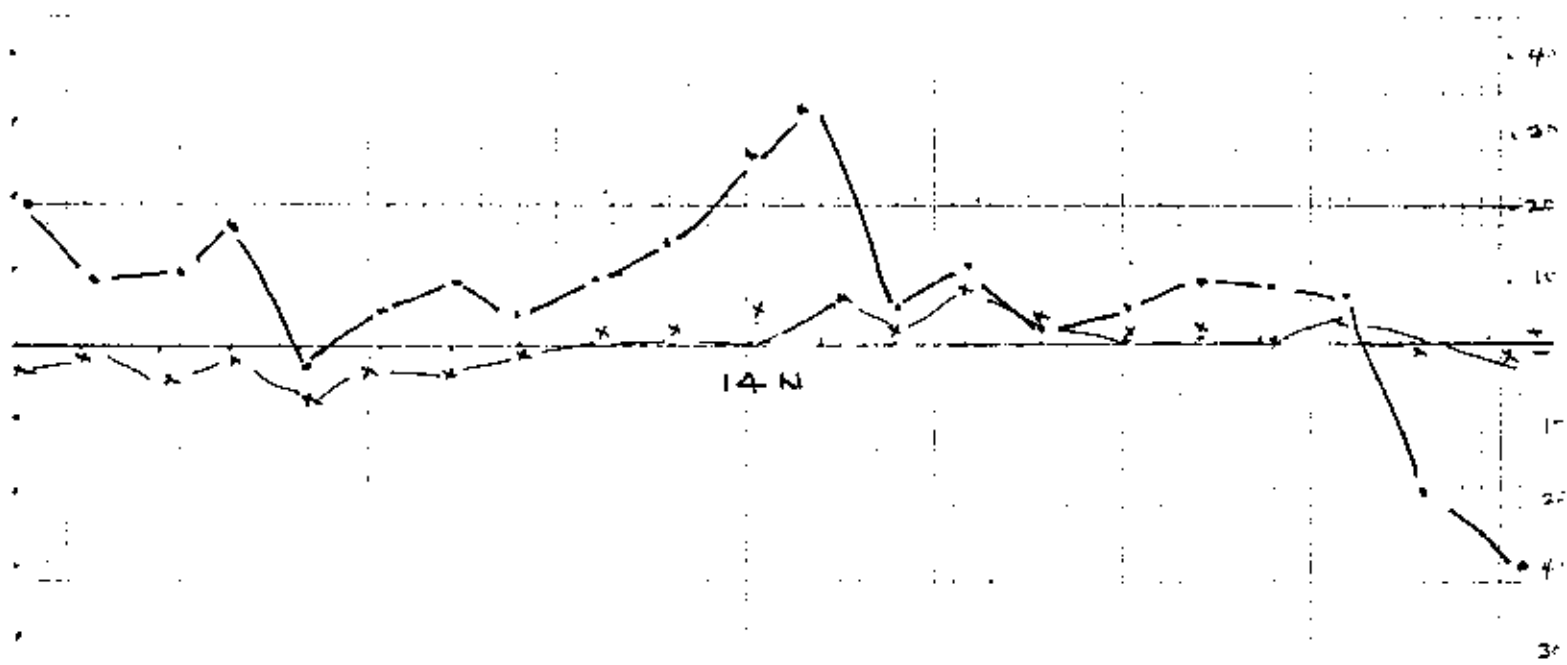
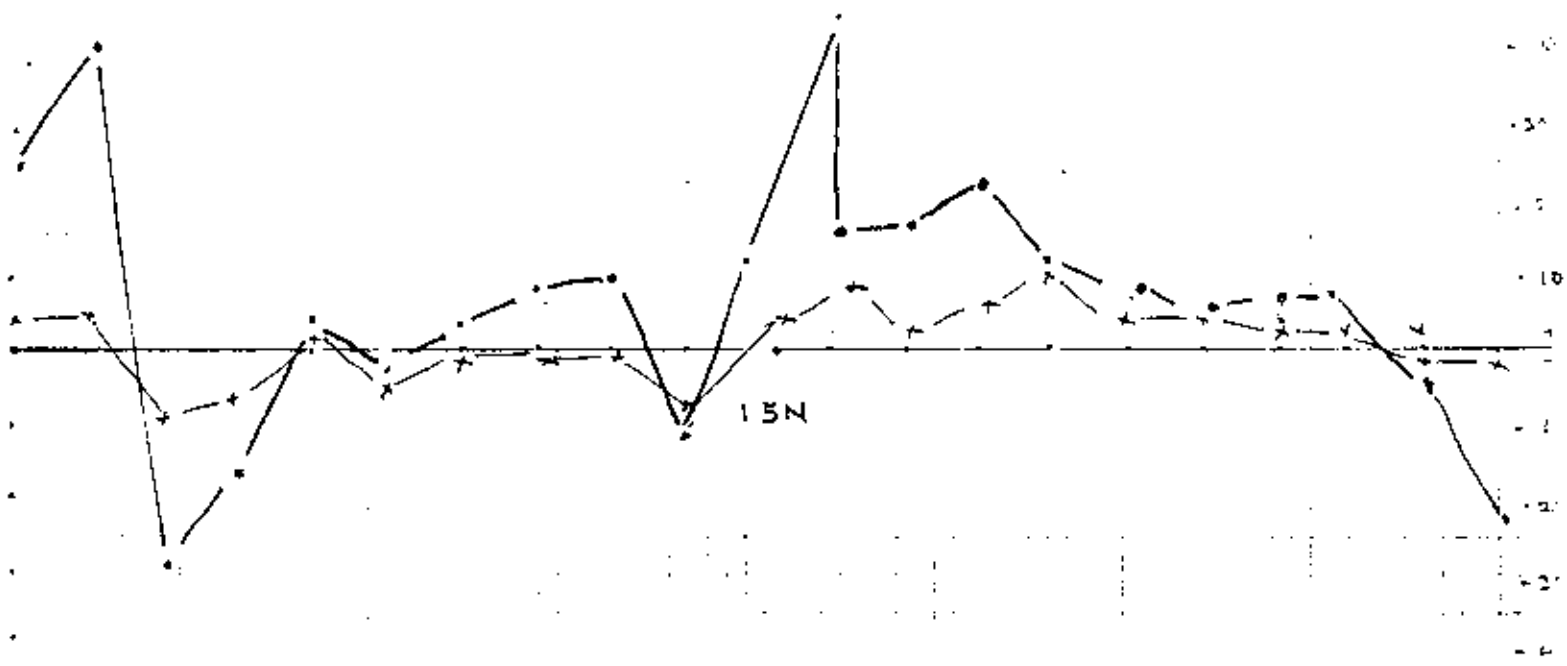
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E.M. PROFILES

June 1978 after R. Allen, P. Eng.

In Phase : 4

Quadrature: 4

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E.M. PROFILES

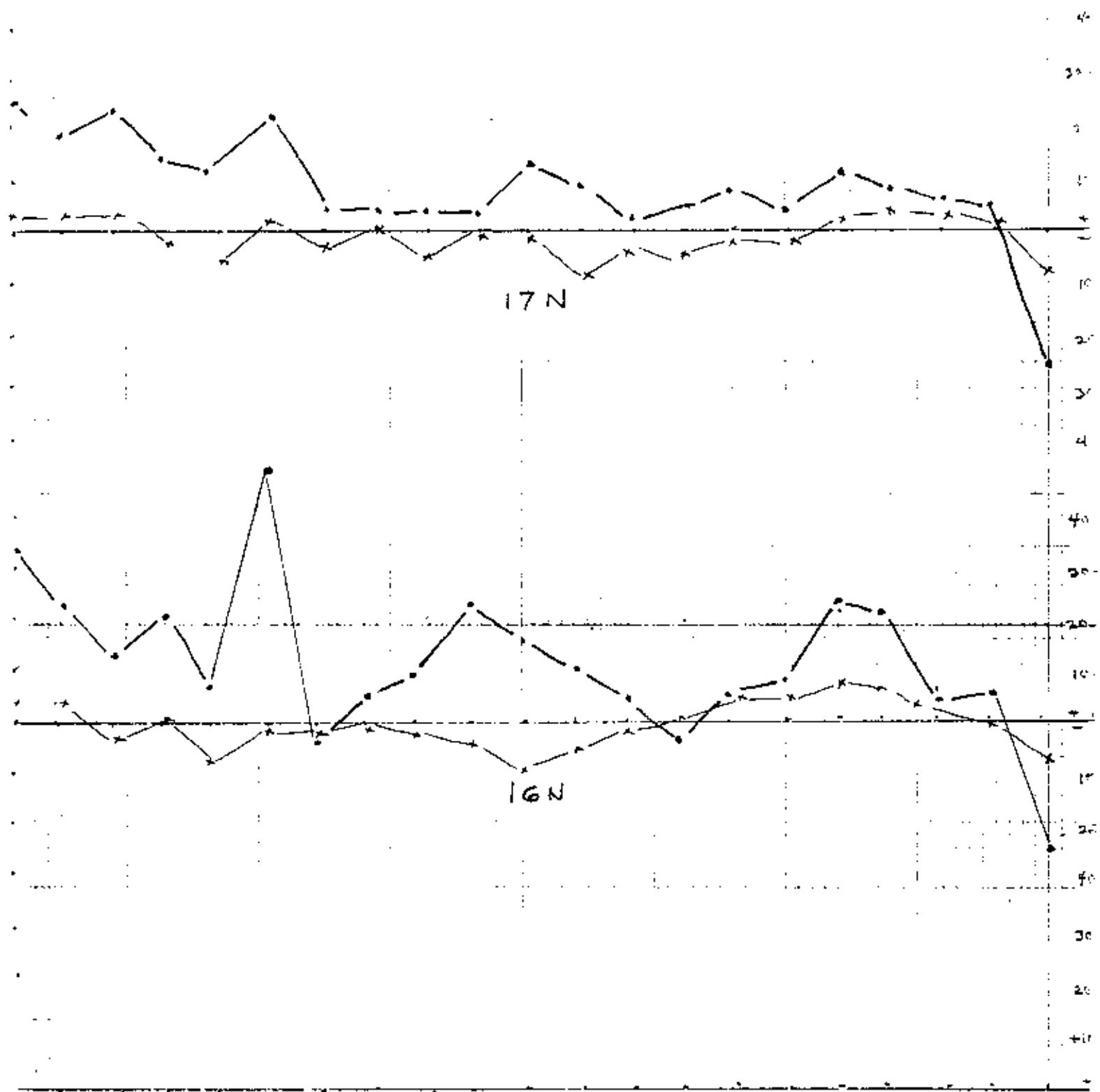
June 1978 Alfred R. Allen, P.Eng.

In Phase: 4.

Quadrature:

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III →

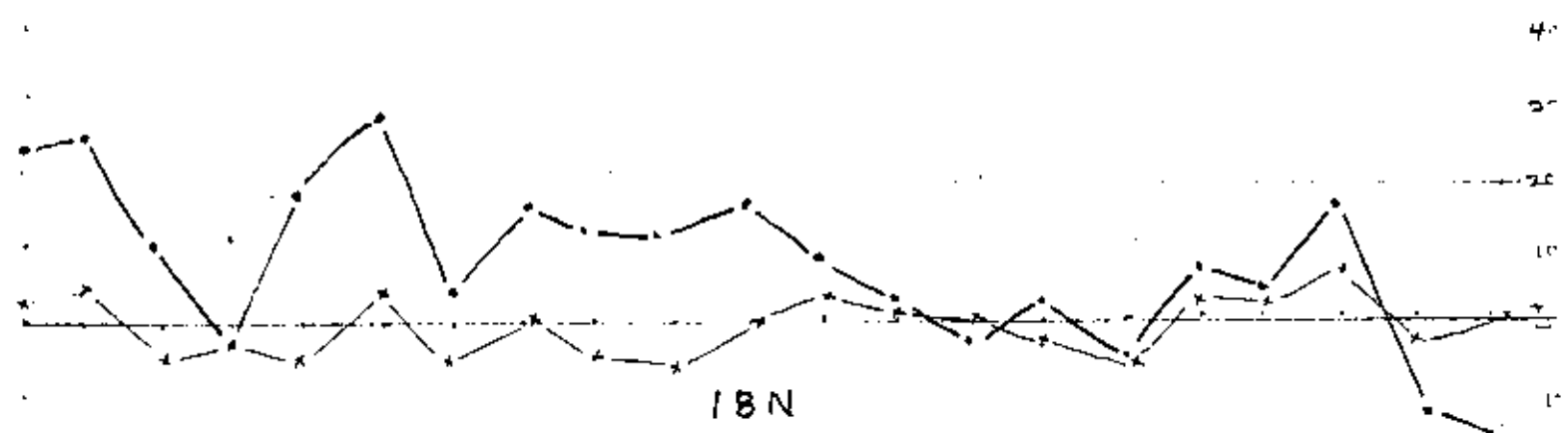
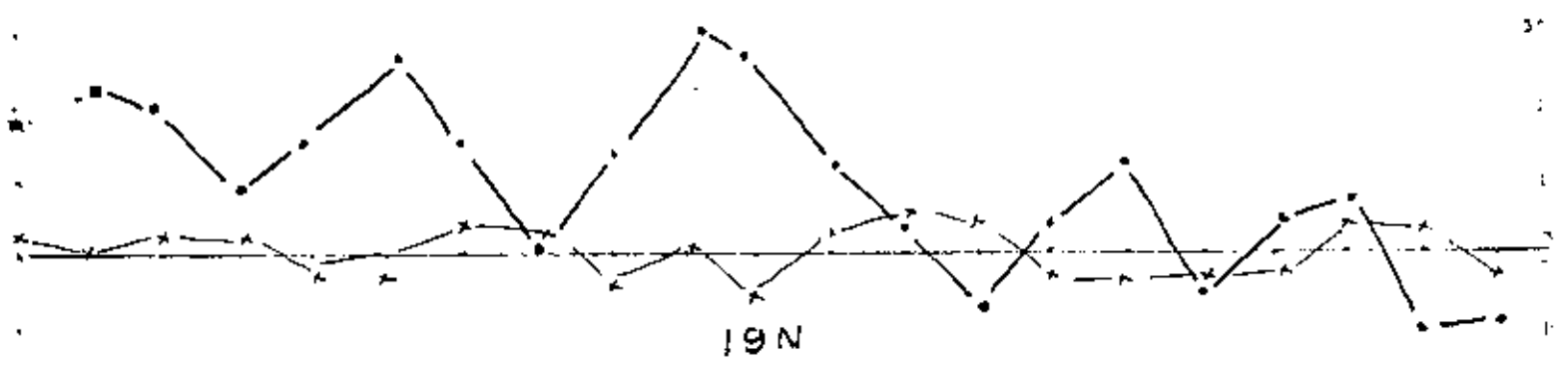
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E.M. PROFILES

June 1978 by R. Allen, P. Eng.

In Phase:  4.

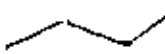
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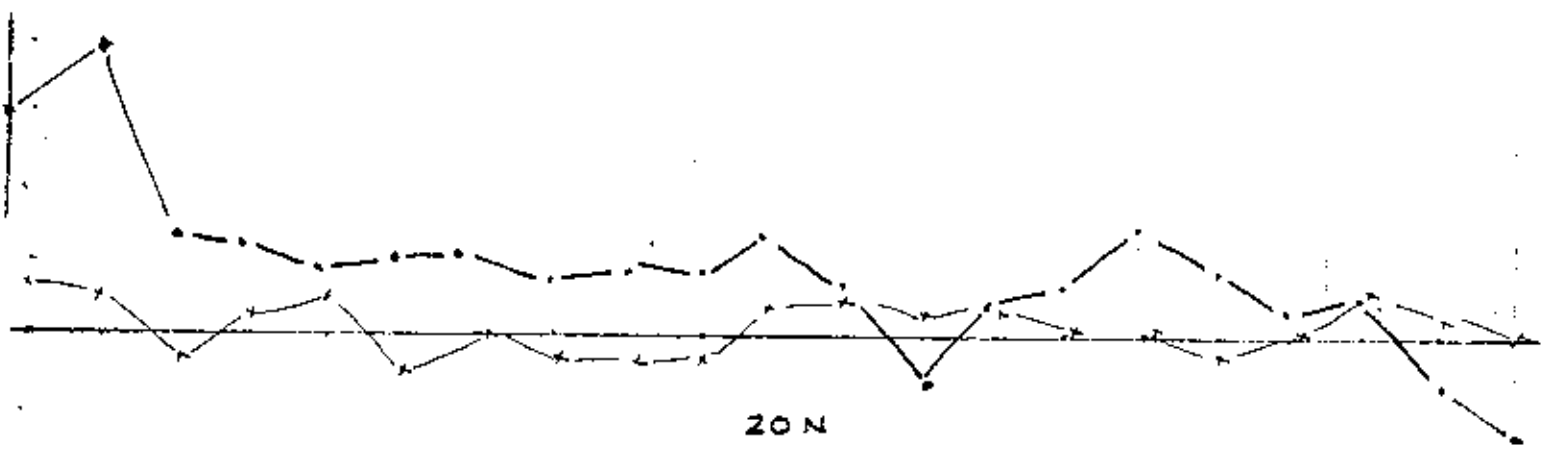
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E.M. PROFILES

June 1978 after R. Allen, P. Eng. 31

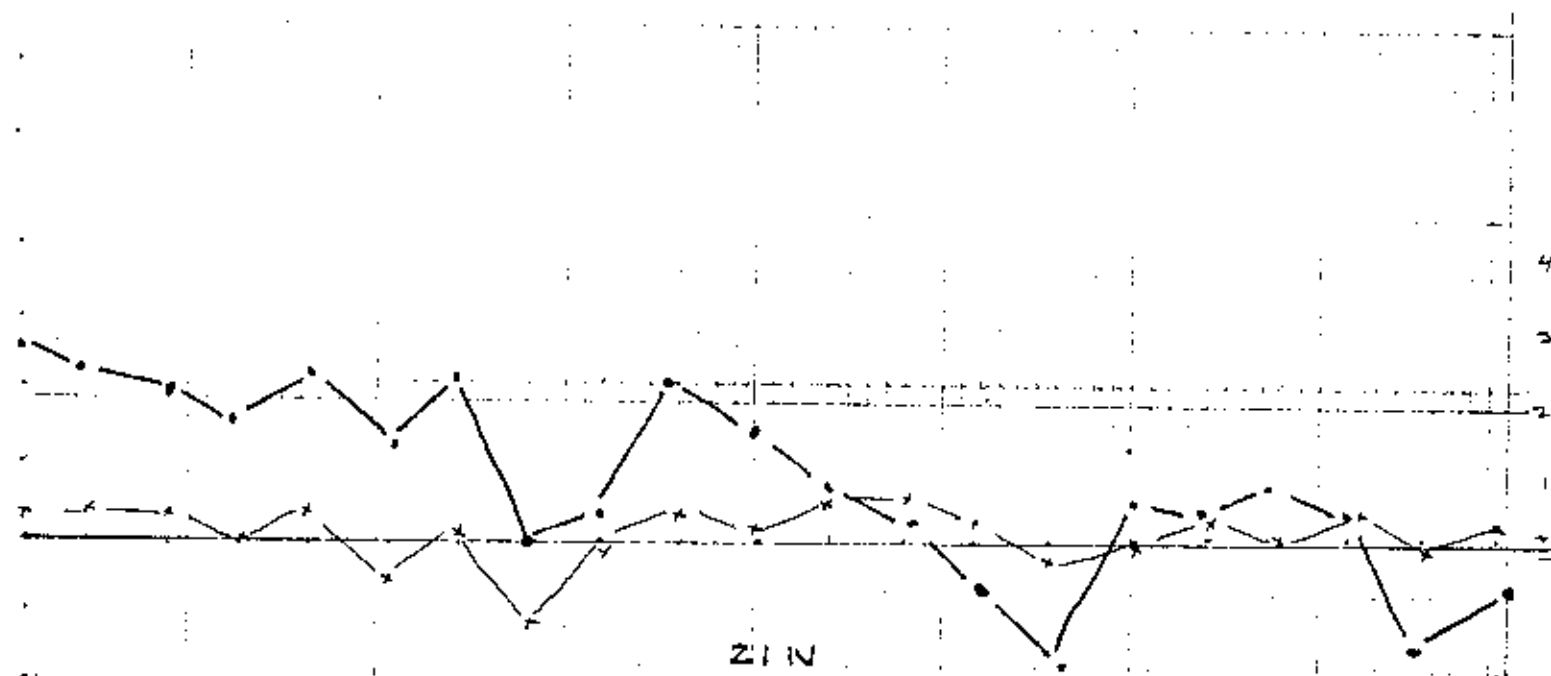
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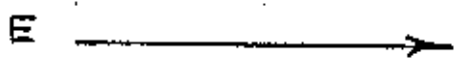
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20 N



21 N

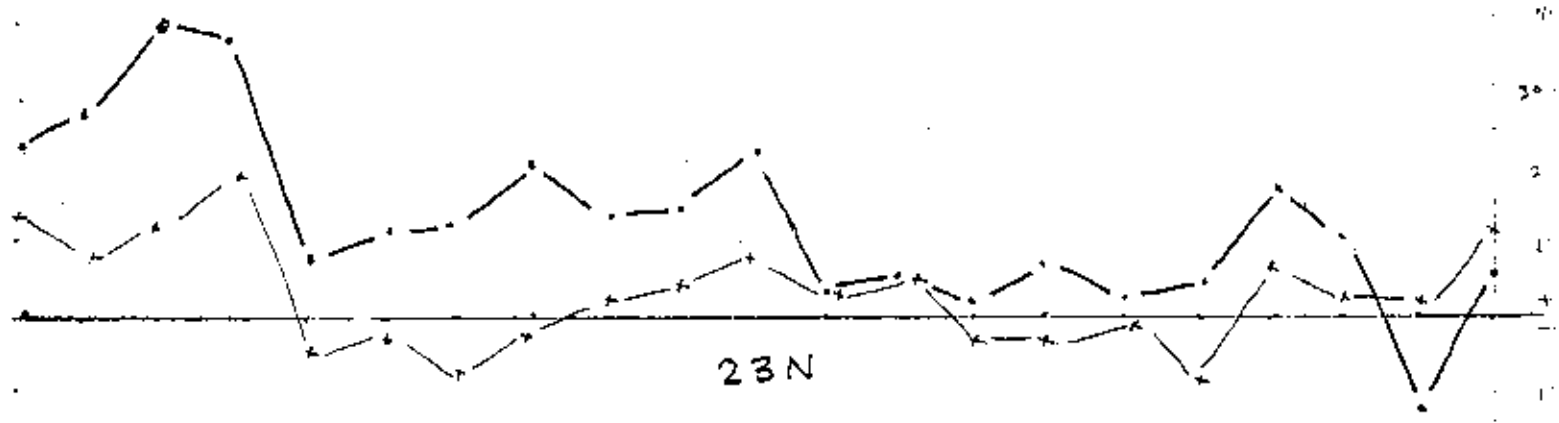


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E.M. PROFILES

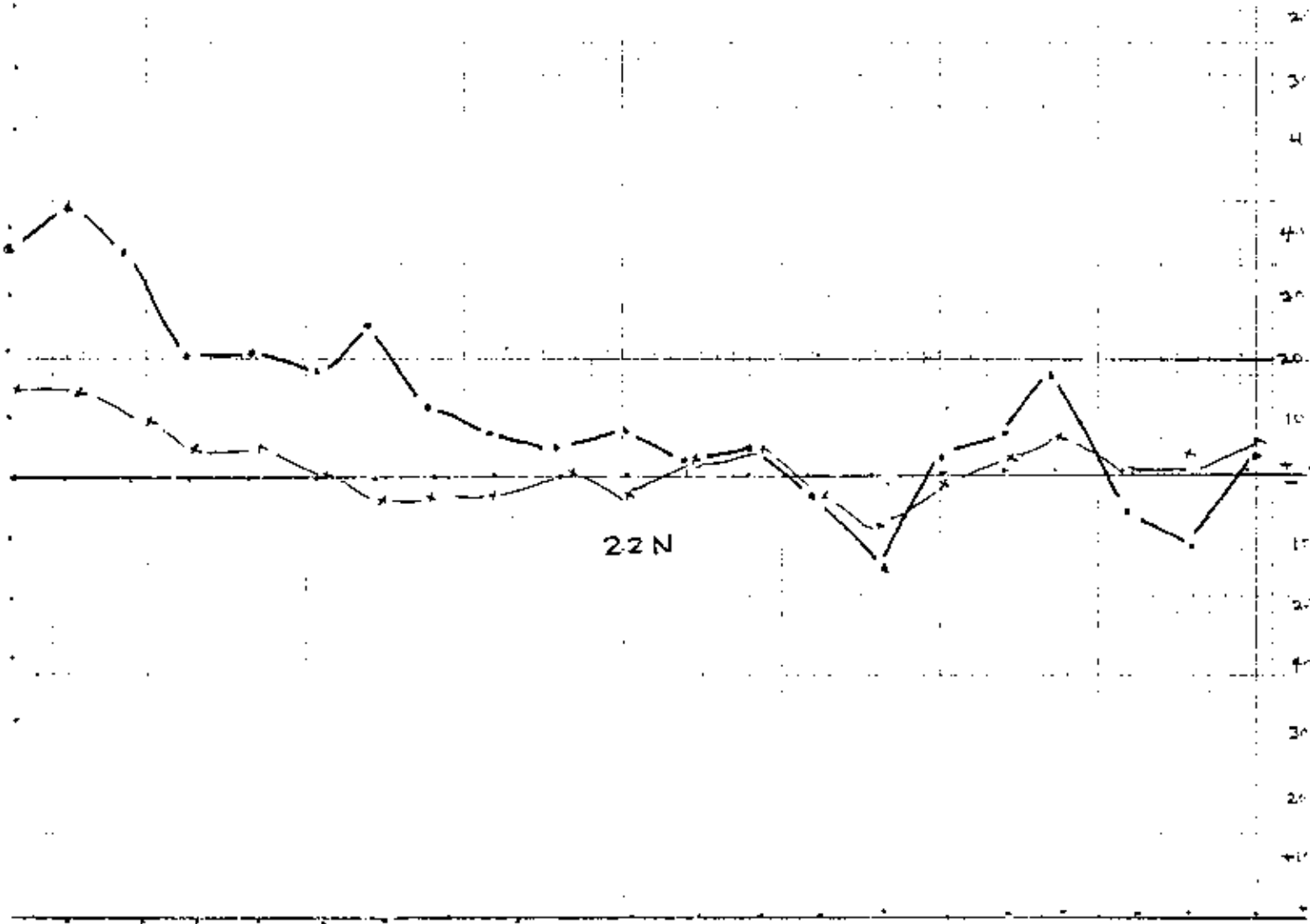
June 1978 *Alfred R. Allen, P. Eng.*

In Phase : 4
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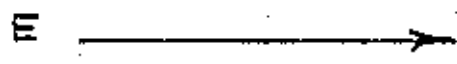
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23 N



22 N

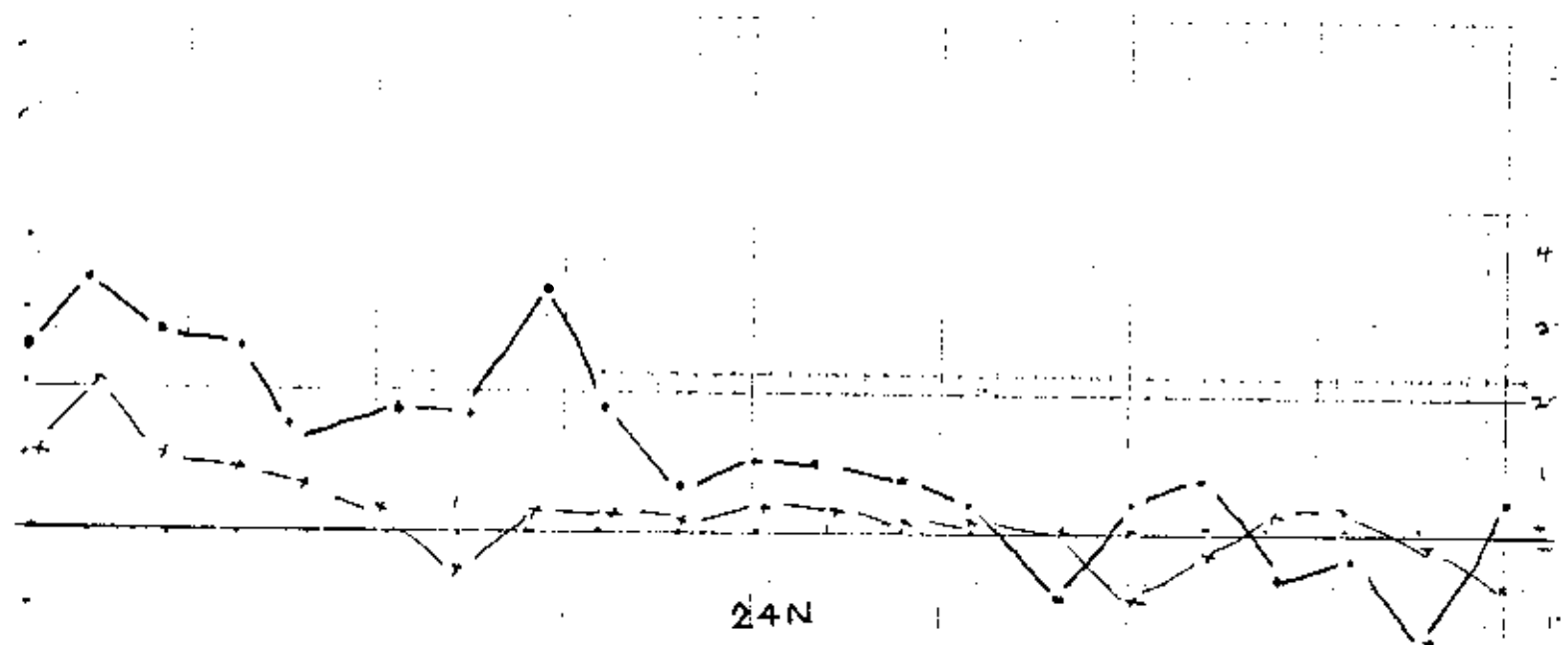
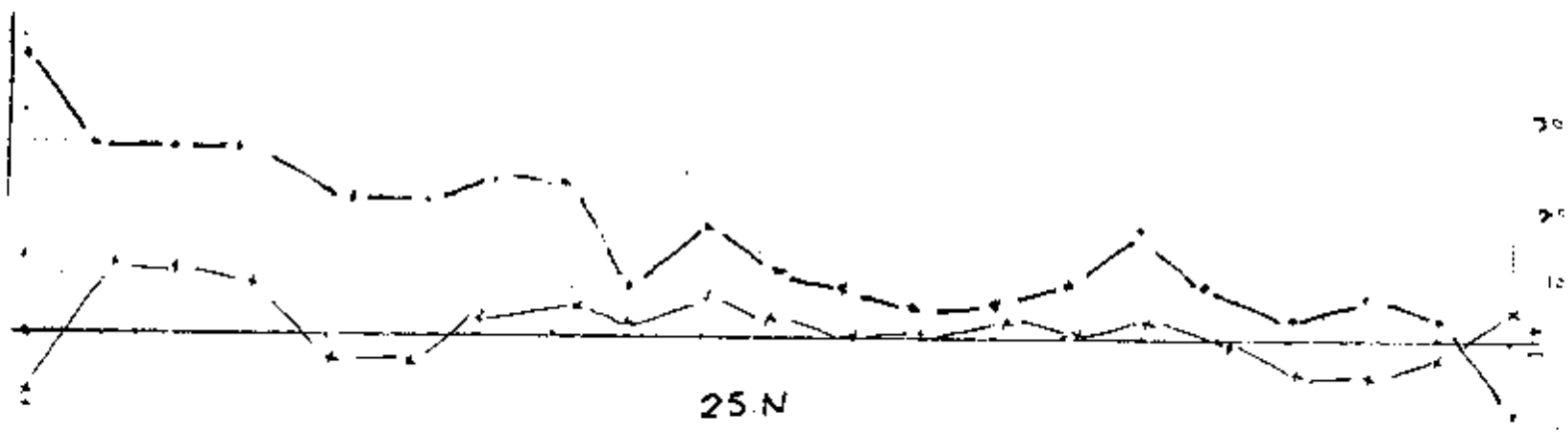


ADRIANA #346
E.M. PROFILES

June 1978 Alfred R. Allen, P. Eng.

In Phase :
 Quadrature:

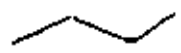
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ADRIANA #346
E.M. PROFILES

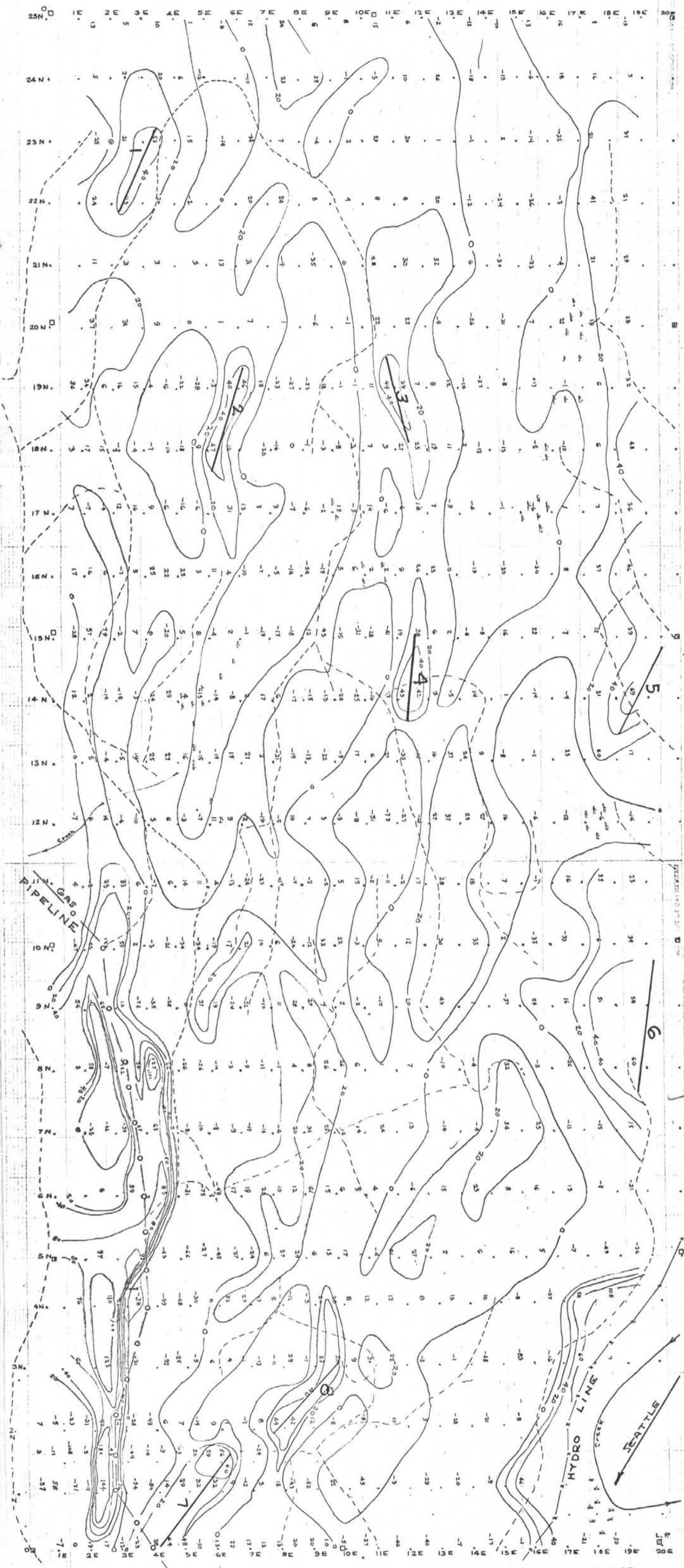
June 1978 Alfred R. Allen, P. Eng. 2

In Phase:  4

Quadrature:  4

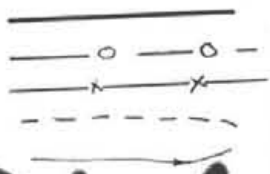
— Degrees

△ Meters



LEGEND

- Conductor zones
- Gas Pipeline
- Hydro line
- Roads
- Creeks
- Claim posts



BUTE RESOURCES INC.

**ADRIANA PROPERTY
SIMILKAMEEN M.D., B.C.**

ELECTROMAGNETIC SURVEY

VLF-EM FILTERED

Scale 1cm=50m

No.
Date:

Allen Geological Engineering Ltd.
Per *Alfred B. Allen* P.Eng.

PART 2 OF 2 #7066