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Cyprus Exploration Corporation, Limited  
Ronka EM-16 and Magnetometer Traverses  
in Areas A, B, and D, Highland Valley

C. Carew McFall      November 5, 1969

## MEMORANDUM

TO: Kenneth Lieber

March 3, 1969

FROM: J. G. Hansen

SUBJECT: Request for Approval to Stake the Murphy Lake and Foster Lake  
Anomalies, Southern and Central British Columbia, Canada

### Summary

It is requested that approval to proceed with the staking of the two subject areas be given so that field contracts may be prepared early in March.

<u>Estimated Costs</u>	<u>Foster Lake (500 Claims)</u>	<u>Murphy Lake (500 Claims)</u>
<u>First Acquisition Costs*</u>	<u>35,000*</u>	<u>35,000*</u>
Outside Contract Services	7,000	7,000
Wages	2,000	2,000
Geophysics	10,000	10,000
Geochemistry	5,000	5,000
Excavation	3,000	3,000
Assaying & Sampling	3,000	3,000
Surveying & Mapping	5,000	5,000
Travel	3,000	3,000
Air Charter	<u>2,000</u>	<u>2,000</u>
Totals	\$75,000	\$75,000

\*The minimum cost to acquire each claim block would be \$35,000 for each block or a total of \$75,000. The balance of the budget request would be for a normal program of continued exploration during the field season.

### Conclusions and Recommendations

It is recommended that we proceed with the planned staking under contract during the month of March in order to protect our land position while conducting our proposed program. It is felt that both of these areas and in particular the Murphy Lake area will attract considerable attention during the summer field season due to striking

similarities to Highland Valley. Since these geophysical data used for the evaluation were released in October and November of 1968, most exploration groups are presently evaluating the same information in a similar manner we have used.

These companies and exploration groups would normally be making their plans to hit these areas heavy when the field season starts.

We feel that Cyprus can get the jump on most organizations by moving fast and making the decision to stake in the winter before others are in the field. We have been staking in the areas A through G by using staking contractors and operating with fixed-wing ski-equipped planes and using snow shoes to get around on the ground. The cost so far has been about \$70 per claim including preliminary magnetometer work to confirm our anomaly locations.

The enclosed budget chart is included to demonstrate the fact that we are well within our planned budget for the Canadian Exploration Program for 1969.

### Introduction

A study of all available geologic, geophysical, geochemical and claim data related to the geologic province in the Highland Valley was initiated in November 1968. This study was extended to the north to encompass published data and included the major producing mines and prospects. As the study progressed obvious trends developed that required immediate staking which was done under our normal exploration program. (See tabulation attached showing Planned and Approved AFE's A through J.)

As a result of the Highland Valley study, it was apparent that a correlation exists between copper-molybdenite mineralization and aeromagnetic lows in the Highland Valley intrusive area. The purpose of this study was to locate similar geological and geophysical features within the Gulchon Batholith and use these yardsticks in other comparable geologic environments. The study embraced a compilation of all airborne magnetic, geologic mapping, mineral occurrences and fracture density data in the focal areas.

The parameters offering a potential for success are considered to be as follows:

- 1) Correlation exists between aeromagnetic lows and copper mineralization at and within the geologic intrusive contact areas of the Gulchon intrusive complex.
- 2) Association exists between aeromagnetic lows and alteration of the intrusive rocks, particularly the Bethsaida phase of the Gulchon intrusive rocks.

- 3) Northeasterly and possible northwesterly trends exhibited by fracture patterns are associated with the mineralization.
- 4) The Craigmont type of copper-magnetite occurrence in Highland Valley differs from the others described above in that the environment is that of magnetic highs. This is explained by the mobilization of iron from the center of each successive intrusive and moved outwards and upwards. The iron is deposited as magnetite and in many cases is accompanied by copper. This offers another parameter of magnetic highs to evaluate for copper.

### Prospect Descriptions

a) Murphy Lake - The Murphy Lake Prospect anomaly is located about 12 miles west of Boss Mountain (Noranda, See Index Map) which is a molybdenite producer. It is an aeromagnetic low of 1,100 gammas intensity and measures about 6 miles by 2 miles in dimension along a northeast trend. Discrete anomaly highs surround this magnetic low on three sides marking it as an extremely sharp, major geophysical feature. The area underlying this anomaly is a granodiorite batholithic complex of Jurassic Age.

This anomaly exhibits characteristics of the Highland Valley focal areas and has the added feature of being larger but similar to the anomalous low over the Boss Mountain orebody nearby.

It is proposed to stake approximately five hundred claims over the Murphy Lake anomaly to protect our land position while conducting a proposed program of outcrop prospecting, geologic mapping, geochemical silt sampling and ground magnetometer work. It is proposed to contract a prospector-geologist team to prospect and geologize the claim group. A camp will be provided with some road work to gain access to the area. The proposed work should evaluate the target area for a second-phase work program the following year. The total cost per claim is estimated at about \$150 per claim with about \$70 per claim estimated for the preliminary field work and staking.

b) Foster Lake - The Foster Lake Prospect anomaly is located about six miles east of the Endako (Placer Development - See Index Map) which is a molybdenite producer. It is an aeromagnetic low of 1,200 gammas intensity and measures about 6 miles by 2-1/2 miles in dimension along an east-west trend. Discrete anomaly highs surround this magnetic low in an accurate pattern. The area underlying this anomaly is a granodiorite batholithic complex of Jurassic Age. Nithi Mountain, which lies on the west flank of the anomaly between Foster Lake and Endako, is staked by others and is quite actively prospected. Reports of some good discoveries in this area have been heard but nothing new announced.



It is proposed to stake approximately five hundred claims over the Foster Lake anomaly to protect our land position while conducting a proposed program of outcrop prospection, geologic mapping, geochemical silt sampling and ground magnetometer work. It is proposed to contract a prospector-geologist team to prospect and geologize the claim group. This proposed work should evaluate the target area for a second-phase work program the following year. The total cost per claim is estimated at about \$150 per claim with about \$70 per claim estimated for the preliminary field work and staking.

J. G. Hansen

JGH/pc

BUDGET CHART

CANADIAN EXPLORATION PROGRAM - 1969

	Approved For 1969	Committed & Presently Planned for 1969
Administration	<u>180,000</u>	<u>180,000</u>
Reconnaissance & Prospect Exploration		
<u>Reconnaissance</u>		
Highland Valley	105,000	105,000
Bulkley Valley	<u>60,000</u>	<u>60,000</u>
Reconnaissance Total	<u>165,000</u>	<u>165,000</u>
<u>Prospects</u>		
Dorchester	25,000	25,000
SPA	69,000	69,000
Roscoe Lake - Anomaly A	2,000	2,000
Skuhum Creek - " B	2,000	2,000
Forge Creek - " D	2,000	2,000
Semlin - " E	8,100	8,100
Willowswamp Ck. " F	19,500	19,500
Gidegingla Lake- " G	16,600	16,600
Murphy Lake - " H	75,000	75,000
Foster Lake - " I	75,000	75,000
Buster Lake - " J	14,000	14,000
Potential (Uncommitted)	<u>27,800</u>	<u>27,800</u>
Prospect Total	<u>336,000</u>	<u>336,000</u>
Total Canada Exploration	<u>681,000</u>	<u>681,000</u>

## MINERAL EXPLORATION DIVISION

A.F.E. No. 28-68

TITLE: HIGHLAND VALLEY MINERAL TARGET STUDY,  
BRITISH COLUMBIA

ESTIMATED  
COSTS:

Engineering	\$2,500
Outside Contract Services	2,800
Assaying & Sampling	500
Travel	2,500
Miscellaneous	500
TOTAL	<u>\$8,800</u>

*Targets A, B, D*

PROSPECT  
DESCRIPTION:

Copper mineralization has been discovered in medium-sized orebodies with remarkable frequency in the Highland Valley-Merritt area of British Columbia. Craigmont Mines was discovered in 1957. Since that time Lornex (Rio Algom) and more recently Valley Copper (Cominco) have been discovered. Brenda Mines is expected to begin production of copper and molybdenum disulphide concentrates in 1970. Bethlehem Copper has been in production since 1962. The focal area lies south of Kamloops and extends south beyond Merritt.

Structural control of the known chalcopyrite and associated bornite and molybdenite mineralization is related to several geological features. The Guichon batholith is a complex of the Skeena, Bethsaida, Bethlehem and several minor pluton masses of related granodiorite, quartz monzonite grading to diorite. Although deep overburden is widespread, published aeromagnetic maps tend to correlate with the known intrusive rock exposures. Potash feldspathization has occurred in conjunction with intrusive contact areas and north-south lineament features. Fracture patterns in the north-south, northwest and northeast quadrants are recognizable from air photos. The intersection of these fracture patterns occur at each of the known orebodies.

## PROGRAM:

In the first phase it is proposed to prepare an air photo mosaic base map covering the area between Kamloops and Merritt, outline the fracture patterns thereon, and prepare geologic, aeromagnetic and topographic transparency overlays. From

*\$2000 each for A, B & D.*

this data geologic structure, rock type and aeromagnetic profile sections can be prepared through the known orebodies and projected to untested areas.

TITLE

ESTIMATE  
COSTS

In the second follow-up phase it is proposed to search the available ground geologic, geochemical and magnetometer data on assessment file to check previous work and then make ground examinations. Target areas for specific study and proposed test should result from this study. Lockwood Survey Corporation can prepare the necessary airphoto mosaics, geologic, airborne magnetic and topographic overlays. Outside consultants will be used when necessary.

PROSPECT  
DESCRIPTION

A third phase in conjunction with this study of the Highland Valley is the proposal to extend any yardsticks developed from this study to specific areas in southern British Columbia and neighbouring areas in the states of Washington and Idaho in collaboration with the C.M.C. Spokane office. The area under consideration embraces the several batholithic areas varying in age from pre-Jurassic to Tertiary time, namely, the Idaho-Nelson, Colville-Okanagan-Olalla, Guichon, and Lytton batholiths.

JUSTIFICATION:

Orebodies already found in the proposed study area strongly suggest others may be found in this geologic environment. We believe the area chosen is most promising and a compilation and analysis of all available data should be undertaken to provide a basis for target selection and evaluation.

RECOMMENDATION:

We recommend the expenditure of \$8,800 to implement the proposed target selection program.

published aeromagnetic maps of intrusive rock exposures. Part in conjunction with intrusive lineament features. Federal northwest and northeast quadrants past. The project is at each of the above mentioned

R. N. Allen  
for D. W. Tully

C. A. Mark

APPROVED:

J. G. Hansen  
J. G. Hansen

110-028  
Date

1  
INTER OFFICE MEMO

CYPRUS EXPLORATION CORPORATION LTD.  
VANCOUVER OFFICE

TO	REPLY	
	COMMENT	
RETURN TO		
NOV 13 1969		
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3		7
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Date: November 11, 1969

To: T. S. Melancon  
From: J.B.P. Sawyer  
Subject: HIGHLAND VALLEY WORK BY CAREW MCFALL

Enclosed please find a copy of the report by Carew McFall on the EM and magnetometer work he recently completed on our Areas "A", "B", and "D" in the Highland Valley. We received this report last Friday, November 7th. We have today received from McFall a second plan showing the geochemical results for total copper. A copy of his letter and plan are also enclosed.

As a follow-up to this initial work, I am proposing that we go ahead and attempt to get some initial I.P. work done this Fall. As you can see, McFall has suggested only two I.P. lines, one across each of his two prospect areas, Able and Baker. It is difficult to make any meaningful evaluation of single line I.P. results and since these two areas are approximately 3,000 feet apart, I would prefer to see at least a couple of lines over each. I think we might be able to combine this work with the present I.P. work at Spa.

I plan to send Carl Langlois and a couple of helpers to Skuhun Creek (Area "B") as soon as I can get him back from Princeton, to establish control for the I.P. work there. With reference to Areas "A" and "D", I would agree with McFall that we should not make any further expenditures on these. He recommends filing the assessment work, but if the claims are not worth any further expenditure, there seems little point in spending any further time or money fulfilling assessment requirements. I suppose we could hang on to these claims for nuisance value, as you suggested on the telephone, but I wonder if Cyprus is really interested in retaining ground solely for these reasons?



JBPS/jel

Encls.

c.c. Mr. C.A. Mark

C. CAREW MCFALL  
GEOLOGIST

1327 SARATOGA AVENUE  
SAN JOSE, CALIFORNIA 95129  
TEL. 408 252-7411

November 8, 1969

Mr. J. B. P. Sawyer  
Manager, Canadian Exploration  
Cyprus Exploration Corporation, Ltd.  
510 West Hastings Street  
Vancouver 2, British Columbia

Dear Mr. Sawyer:

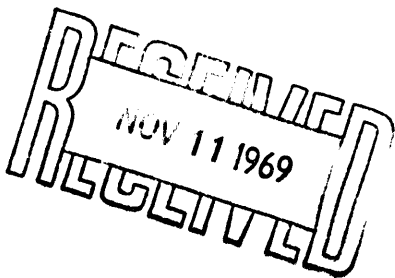
Thank you for sending the results of the soil sampling I did recently in Highland Valley, British Columbia. These results are plotted on the accompanying map of Area B.

The anomalous samples are dark, wet, clayey loam, rich in organic material, whereas, almost all of the samples taken were light-colored granitic silt and sand. I suggest that these geochem anomalies are valid and that the lack of anomalous samples over most of the prospective areas of Area B is due to the lack of clay in those samples to adsorb copper.

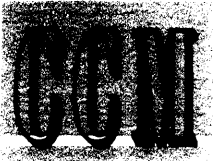
Most of the soil samples taken near the end of Line 2 in Area D were accidentally destroyed. One of the two survivors, D-2 2500, showed 174 ppm copper. This is probably about background considering that this sample was a clay-rich loam from a creek bed. It was taken, however, essentially over a fairly good Ronka EM-16 anomaly. I believe this anomaly is too small in area to be of interest to Cyprus, but if you decide to put an IP line across it, it should be east-west, center at the main road about 2625 along line D-2, and have 200-foot electrode spacings.

Yours truly,

*Carew McFall*







C. CAREW MCFALL  
GEOLOGIST

1327 SARATOGA AVENUE  
SAN JOSE, CALIFORNIA 95129  
TEL. 408 252-7411

November 5, 1969

Mr. J. B. P. Sawyer  
Manager, Canadian Exploration  
Cyprus Exploration Corporation, Ltd.  
510 West Hastings Street  
Vancouver, 2, British Columbia

Dear Mr. Sawyer:

As you requested, Ronka FM-16 and magnetometer traverses were run across Cyprus' three blocks of claims in the Highland Valley district, Areas A, B, and D. This work was carried out with the considerable help of your Mr. Langlois, October 9-19 and then I returned to the field alone October 21-22.

It is hoped that the accompanying report fulfills your requirements and that I shall have the opportunity to be of service to you in the future.

Regards,

A R E P O R T

RONKA EM-16 AND MAGNETOMETER TRAVERSES IN

AREAS A, B, AND D

HIGHLAND VALLEY, BRITISH COLUMBIA

FOR

C Y P R U S   E X P L O R A T I O N   C O R P O R A T I O N ,   L T D .

By

C. Carew McFall

Consulting Geologist

November 5, 1969

## SUMMARY

Traverses were made October 9-19 and 21-22, 1969 across Areas A, B, and D in Highland Valley district, British Columbia using a Ronka EM-16 device and a Scintrex magnetometer. Two prospective areas, called here Able and Baker Prospects, were found in Area B. Both areas are covered by glacial till, but bedrock near the Able Prospect shows traces of copper minerals. IP lines are suggested over both to evaluate them further.

A regional attraction on the Ronka EM-16 device by a large, low-grade, disseminated copper ore body such as Lornex was demonstrated but is so subtle as to be easily masked by terrain effects in hilly country.

## INTRODUCTION

The consulting mining engineer, Ross Kidd, of Vancouver pointed out in a November 22, 1968 report to Cyprus Exploration Corporation, Ltd. that the known copper ore bodies of the Highland Valley district have essentially the same geologic-magnetic settings. Ultimately, Mr. Kidd selected three areas in this district having this same setting and ranked their prospectiveness in this order: A, B, and D. Claims were staked on any open ground near these targets in the winter of 1968-1969 under adverse conditions.

The present project was designed to explore these three blocks of claims for copper. As the claims are about 95 percent covered by glacial till, a Ronka EM-16 device and a portable Scintrex magnetometer were used. These instruments were walked over 25 traverses during the period October 9-19 and 21-22, 1969. Readings were taken at stations generally 25 yards apart, marked by flagging which is identified every

Sharpe ME-1

100 yards. The traverses were generally run either northeast or southwest but are plotted on the accompanying diagrams as though all were traversed from left to right.

#### Ronka FM-16

Reading the EM (electromagnetic) diagrams is simple. Ordinarily, the "in phase" reading is zero. As a conductor is approached, these readings become increasingly positive and reach a maximum beside the conductor. Over the conductor the readings pass through zero to a minimum and then become decreasingly negative going away from the conductor. Under ideal conditions, the vertical distance between the maximum and the minimum is proportional to the size and conductivity of the conductor and the horizontal distance is equal to the depth to the conductor. High-grade copper veins in the Highland Valley district give an amplitude of from  $20^{\circ}$  to  $60^{\circ}$ .

The quadrature curve is generally just opposite of the "in phase" curve. In the Highland Valley district the quadrature curve appears to be damped by the glacial till.

Terrain effects on the Ronka FM-16 are serious; approaching or leaving a hill gives the effect of approaching or leaving a large conductor. In Area B, where the ground slopes steeply south, the zero on the "in phase" curve is shifted about 15 degrees by the attraction of the hill.

### Magnetometer

The magnetometer, being affected almost entirely by what is directly beneath, helps pinpoint faults, contacts, and EM anomalies. The magnetometer readings were plotted in the field at 1" equals 100 gammas and replotted on the accompanying diagrams at 1" equals 500 gammas.

### LORNEX

Previous work by the writer in the Highland Valley district suggested that there was a subtle regional attraction on the Ronka EM-16 by large, low-grade, disseminated copper ore bodies. A traverse October 12, 1969 confirmed this. As shown on the accompanying Lornex diagram, the traverse started at the east edge of the large, low-grade, disseminated Lornex deposit and went northeastward. A regional attraction on the Ronka by this ore body caused the "in phase" readings to be negative for over three-fourths of a mile, although the terrain was essentially flat. Rugged terrain could easily mask this effect, but otherwise, it offers, in areas like Highland Valley, an inexpensive way to reconnoiter for such deposits. This may apply to the recently developed airborne version of the Ronka EM-16 device.

### AREA A

The Cyprus claims in Area A do not show promise according to the appended diagrams. A mildly prospective area, near the southwest end of Traverse A-1 and southward across Traverses A-2 and A-8, has been extensively examined by dozer cuts, induced polarization (IP) surveys, and drilling. It seems unlikely that anything large enough to be of interest to Cyprus was missed.

## AREA B

Two prospective areas, labelled Able and Baker Prospects, are stippled on the accompanying 1" equals 300' map of Area B. Able Prospect, which seems by far the more promising, is apparently at the junction of a northwest-trending fracture, an east-trending fracture, and the northeast-trending contact between the Bethlehem and the Bethsaida Phases of the "granites" making up the Guichon batholith. There are no outcrops within the prospective area but minor shows of bornite, chalcopryite, and malachite were found in the bedrock just to the north. Selected pieces of float collected downhill from the prospect assayed 0.04 percent copper. Reportedly, a silt sample from the gulch at about B8-600 contained 1000 ppm copper,

The 500-600 feet of horizontal distance between the maximum and the minimum "in phase" readings at the Able Prospect could mean 500-600 feet depth to the conductor or a broad, somewhat disseminated conductor.

A 3200-foot IP line is recommended to further evaluate the Able Prospect. This line should center at about B5-900 and trend N. 40° E. (essentially along B-5). A 200-foot electrode spacing would not miss something fairly narrow, but should have sufficient penetration so as not to miss a deep ore body. Given sufficient encouragement, parallel I. P. lines should be run 400 feet apart.

The Baker Prospect, which is along a WNW-trending fracture, in Area B, does have nearby outcrops of very highly fractured granite, but shows no copper mineralization at the surface. The "in phase" curve suggests a depth of 250 feet to mineralization. A 3200-foot IP line is recommended to further evaluate the Baker Prospect, centering about B3-1450 and trending N. 40° E. Parallel lines 400 feet apart could be run given encouragement. A 200-foot electrode spacing is recommended.



The Cyprus ground at the B Area is not as extensive as its KU Claims; being overlapped essentially one claim width on the south by the BIN and SKU Claims and an undetermined portion of a claim width on the west by the BIN Claims. However, this leaves most of the Able and all of the Baker Prospects on Cyprus ground, unless there are other valid, predating claims.

During the past summer, Cominco did considerable IP work and drilled 12 holes to about 300 feet adjacent to the KU Claims on the BIN Claims to the south and west. Of course, some of the IP lines traversed the Able Prospect. Their dipole spacing was 400 feet.

#### AREA D

Outstanding anomalies were not found in Area D and essentially all of the ground is held by either Alwin or Noranda. The anomalies found are ranked as follows: (1) D-1 1500-1600. This is the best anomaly found along the northwest-trending shear zone shown on the accompanying map of Area D. (2) D-2 2400-2500. This anomaly, which may be on Cyprus ground, coincides essentially with a north-south stream but did not show up anomalous on nearby Traverses D-1 and D-3. It is apparently rather small in area. (3) D-5 400-500. (4) D-1 1900-1950, and (5) D-1 2100.

Noranda is winding up a program involving considerable IP work and some drilling in the areas west and south of the Alwin Claims. Noranda's Dan Pegg said they got only "teasers".

The plotting of the Alwin Claim Block on the accompanying map of Area D is of questionable accuracy. A corner post for their RM 3, 4,

5, and 6 Claims was found 200 feet south of D-1 1800. The block as it appears on the recorder's map was then shifted onto this point.

#### RECOMMENDATIONS

- (1) Run IP lines over the Able and the Baker Prospects in Area B.
- (2) Record work done on all claims but do not invest further in keeping the claims in Areas A and D.
- (3) Explore widely in Highland Valley and similar areas with ground and airborne Ronka devices looking for the regional attraction of a large, disseminated deposit.

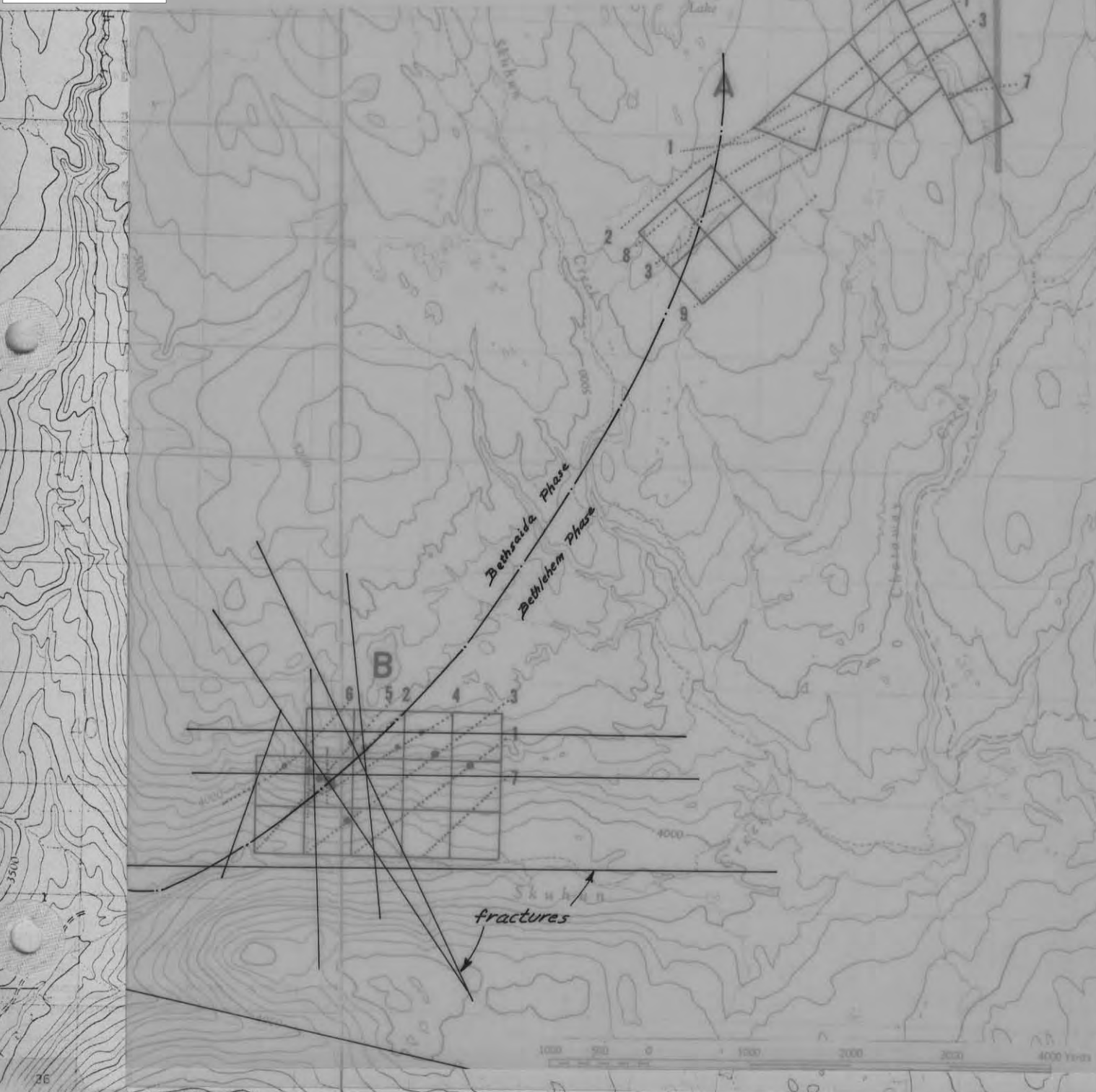
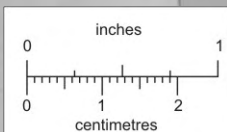
RONKA EM-15 and MAGNETOMETER TRAVERSES

IN AREAS A AND B

HIGHLAND VALLEY DISTRICT, BRITISH COLUMBIA

Scale: 1:50,000

Showing Ronka anomalies as  
small dots (up to  $17^\circ$ )  
larger dots (  $17^\circ$  or more)



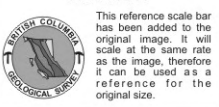
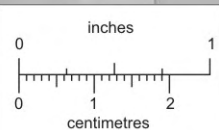
# RONKA 15-15 and MAGNETOMETER TRAVERSES

IN AREAS A AND B

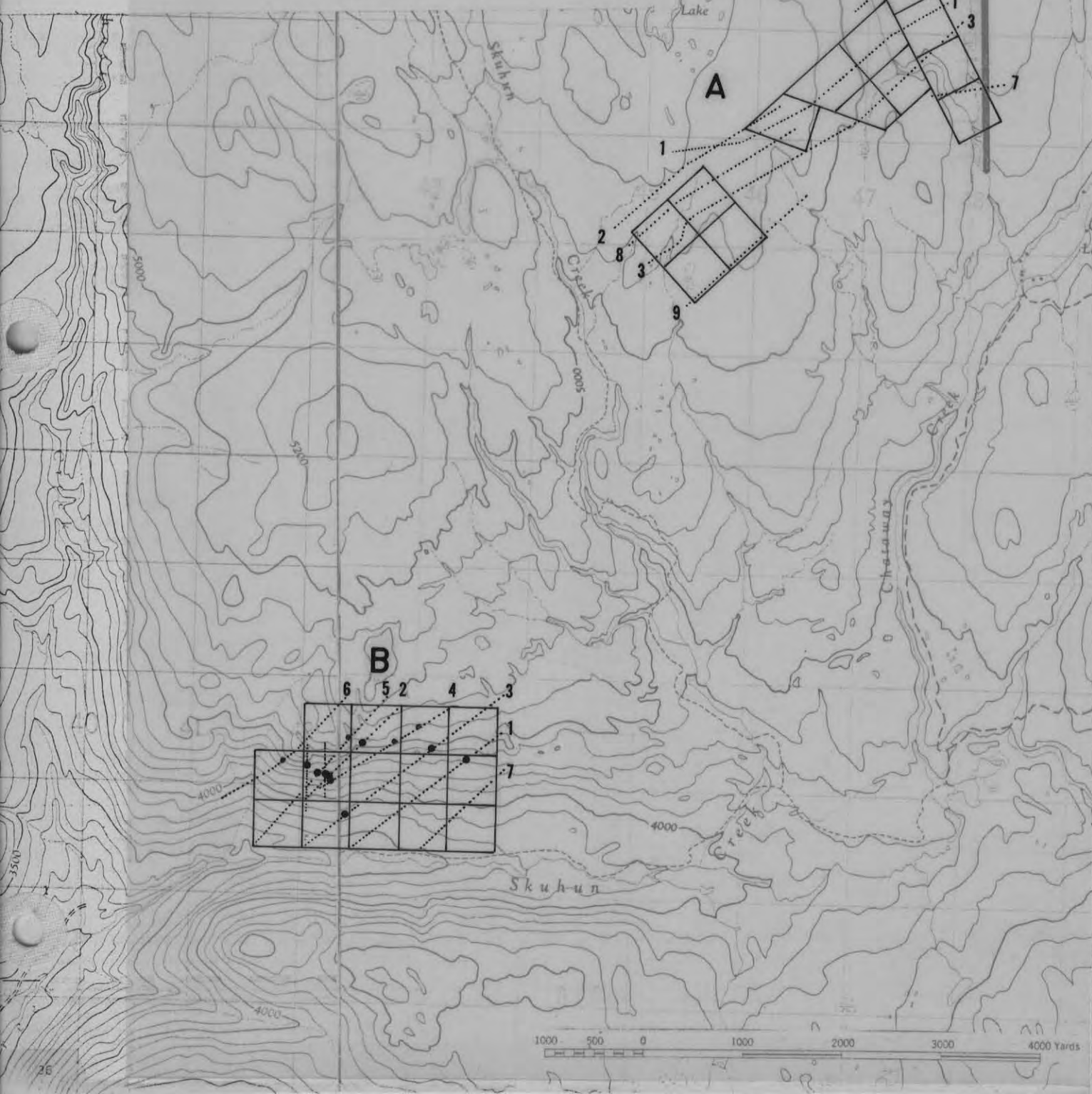
HIGHLAND VALLEY DISTRICT, BRITISH COLUMBIA

Scale: 1:50,000

Showing Ronka anomalies as  
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larger dots ( $17^\circ$  or more)



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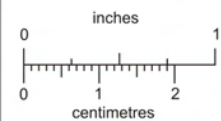


# RONKA EM-16 and MAGNETOMETER TRAVERSES

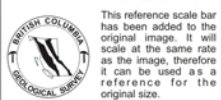
IN AREAS A AND B

HIGHLAND VALLEY DISTRICT, BRITISH COLUMBIA

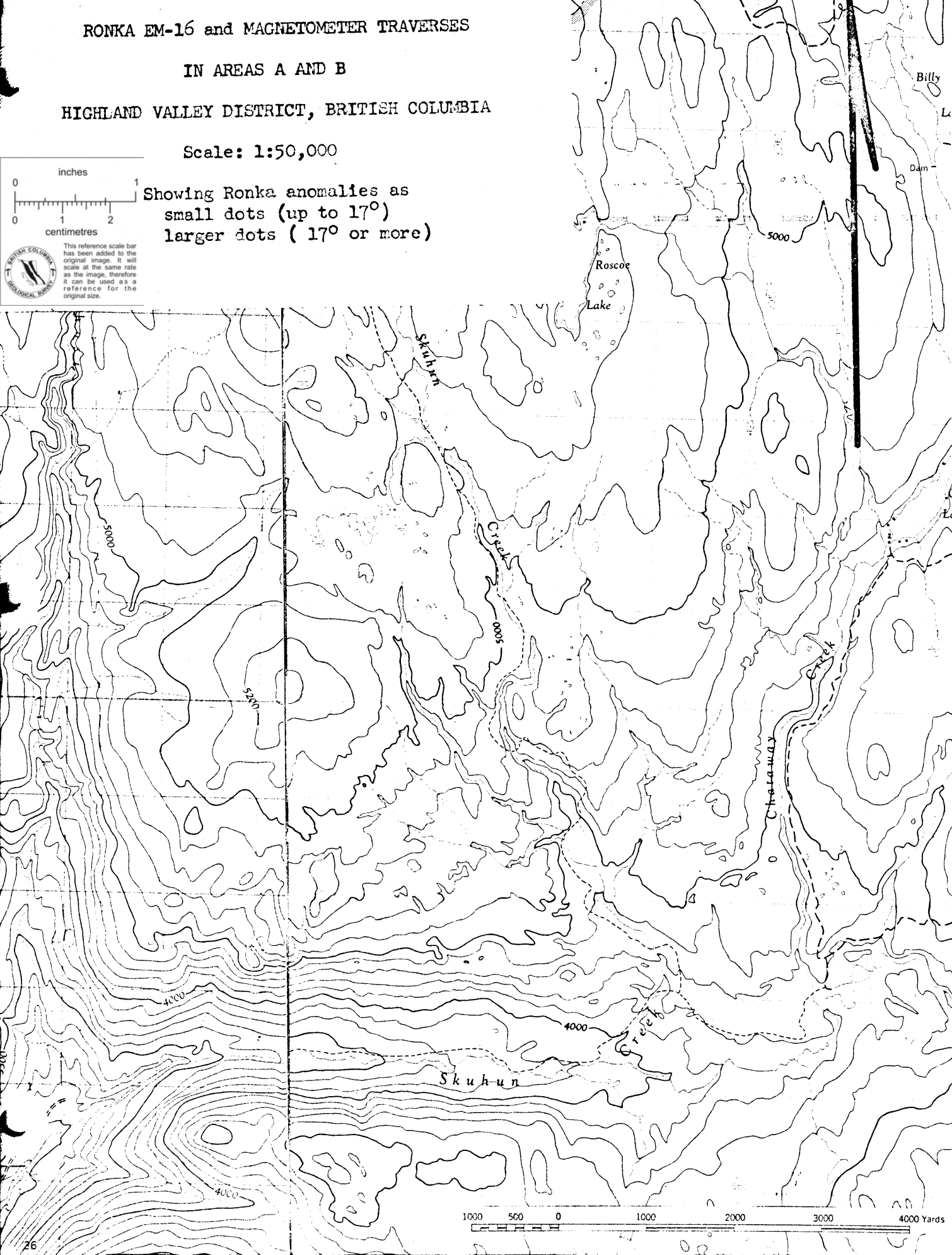
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small dots (up to  $17^\circ$ )  
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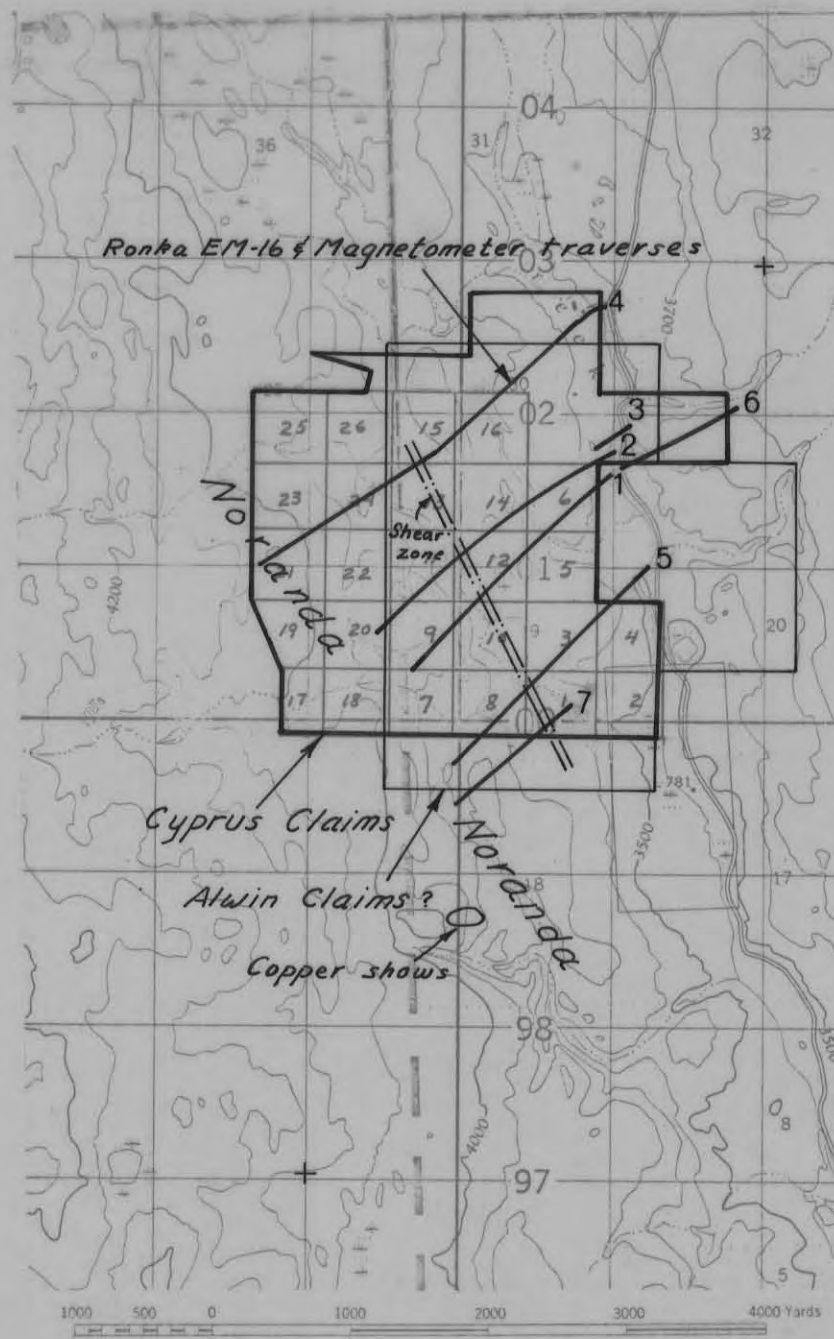
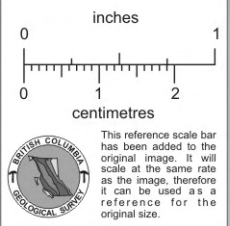


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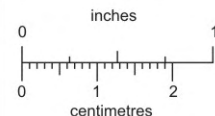




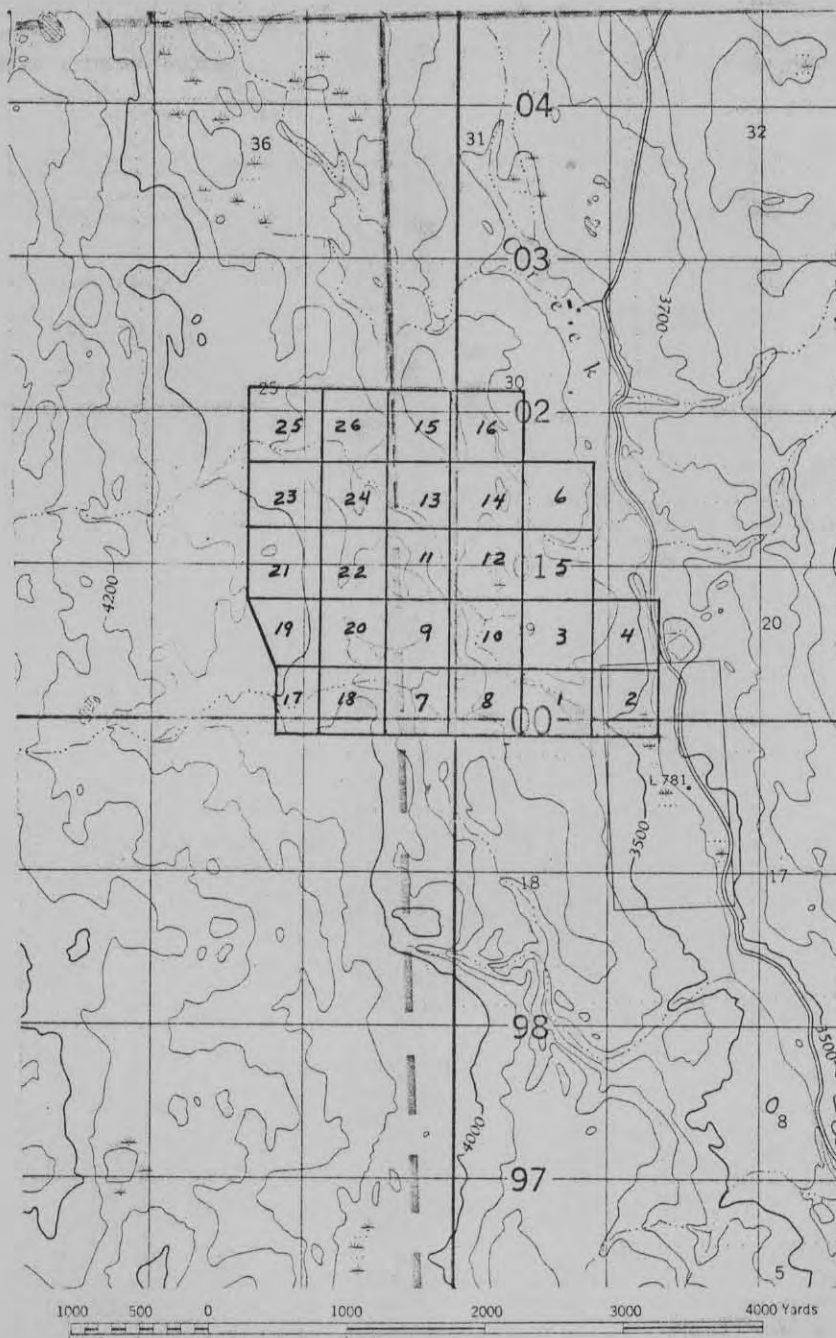
# Area D







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B-8

WAVELSE 8-8

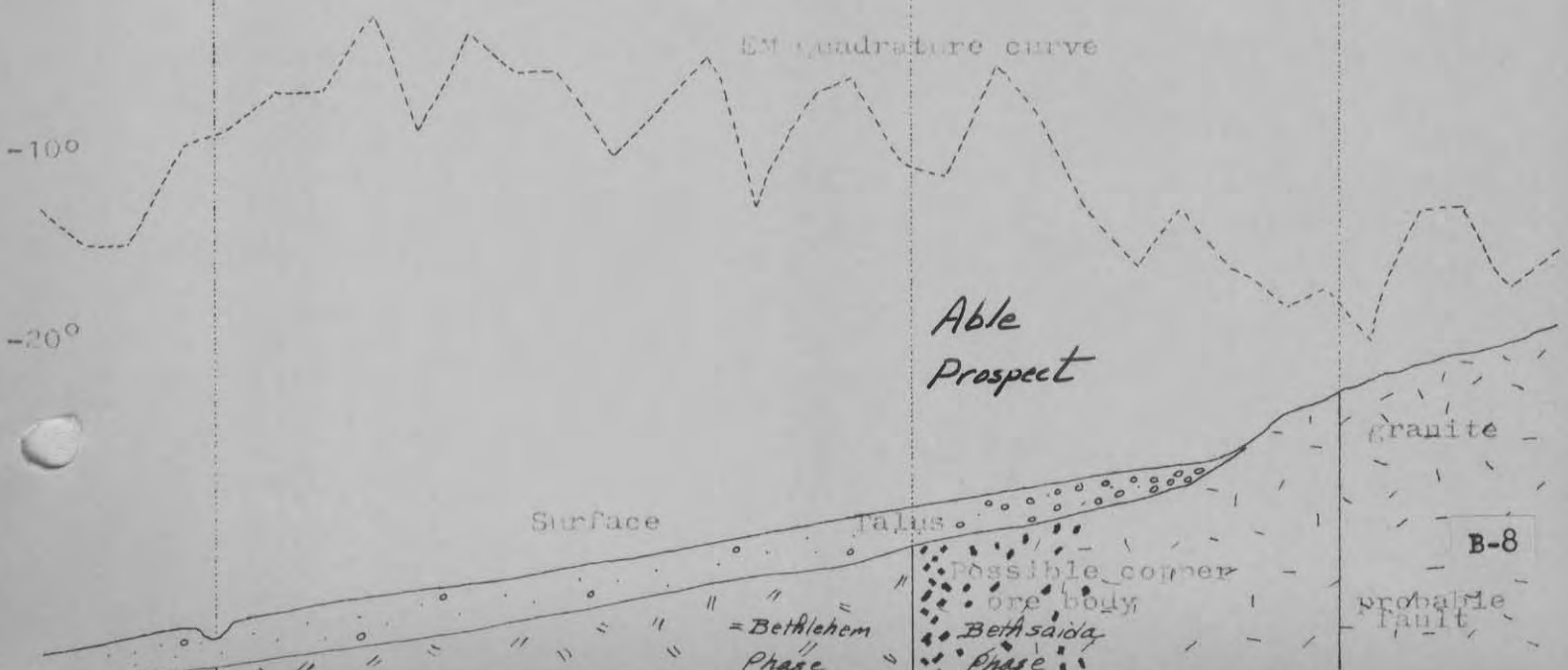
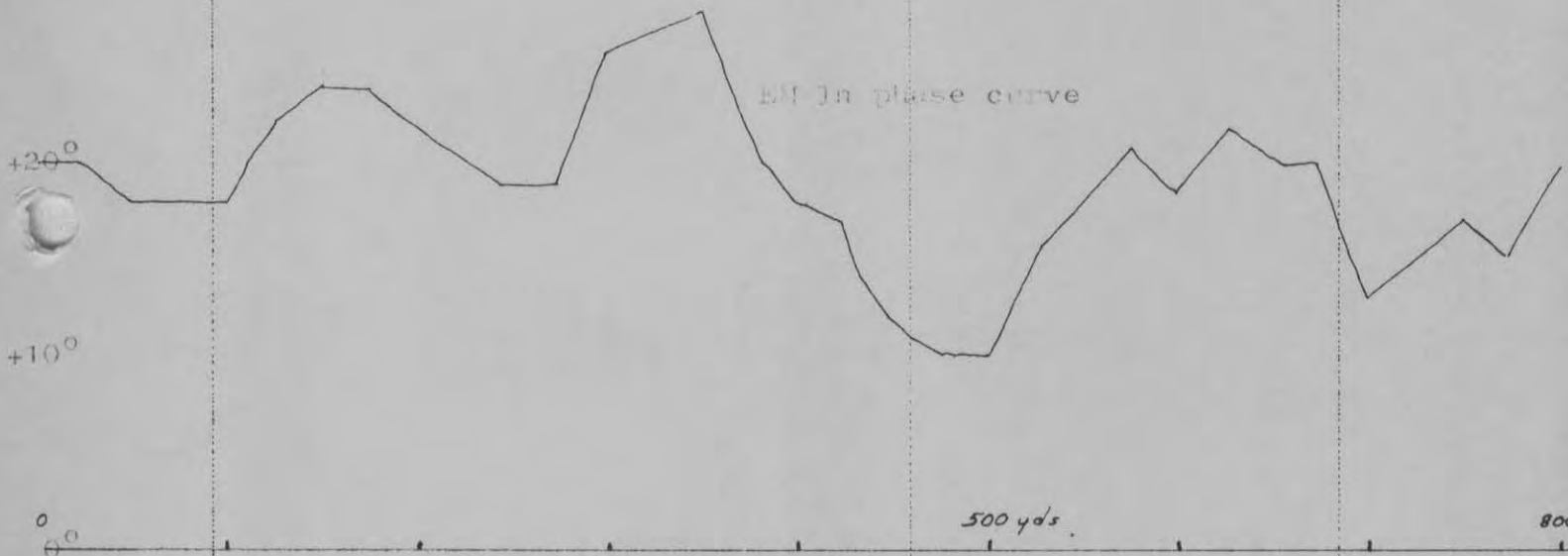
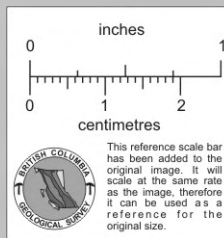
# Rock EM-16 and Magnetometer Survey Area P, Highland Valley

South

North



Scale: 1 inch = 100 yards



B-8

S

N

B-9

+200 gammas

Magnetometer

+100

500

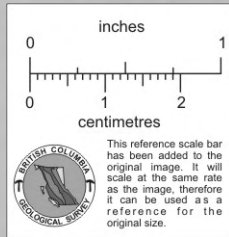
Ronka EM-16

+20°

+10°

500 yds

+10



in phase

quadrature

Able Prospect

minor copper shows in float

Surface

Talus

Bethlehem Phase

Bethsaida Phase

Possible Copper Min.

B-9



# BARRINGER RESEARCH

Geochemical

Laboratory  
Report

BARRINGER RESEARCH LIMITED  
304 CARLINGVIEW DRIVE  
METROPOLITAN TORONTO  
REXDALE, ONTARIO, CANADA  
PHONE: 416-677-2491  
CABLE: BARESEARCH

DATE November 4, 1969.

Cyprus Exploration Co. Ltd.,  
822-510 West Hastings St.,  
VANCOUVER 1, B.C.  
ATT: P. Sawyer.

REPORT NUMBER 365

*ym Hazeldene*

SAMPLE NUMBER		Total Cu ppm		Sample Number	Total Cu ppm		Sample Number	Total Cu ppm		Sample Number	Total Cu ppm
Line B-2	1200	11		1100	19		1250	22		200	5
	1300	64		1250	433		1300	16		300	101
	1400	16		1300	17		1325	18		400	765
B-3	0	25		1400	73		1350	27		500	1250
	100	17		1450	18		1400	13		600	1460
	200	72		1500	21	B-5	0	15	B-9	25	24
	300	14		1515	428		100	15		100	153
	400	18		1525	55		200	18		150	41
	425	15		1600	20		300	14		175	21
	450	13		1700	16		350	20		225	16
	475	14	B-4	400	15		450	19		425	15
	500	21		500	46	B-6	1000	19		500	15
	525	9		600	32		1050	16	D-2	2500	174
	550	22		700	12		1100	23		2625	35
	575	25		800	14		1125	13	Y	274	439
	600	74		825	22		1200	15			
	700	16		900	23		1300	14			
	740	167		1000	20		1400	12			
	800	15		1100	1580	B-8	0	22			
	1000	17		1200	32		100	16			

Note: 4274 is the pulp from the chip sample  
from Skuhun Creek originally sent for assay to  
J R Williams and Sons, Vancouver. This result  
(439 ppm) agrees well with Williams assay of 0.04 %



# Area B Highland Valley, British Columbia

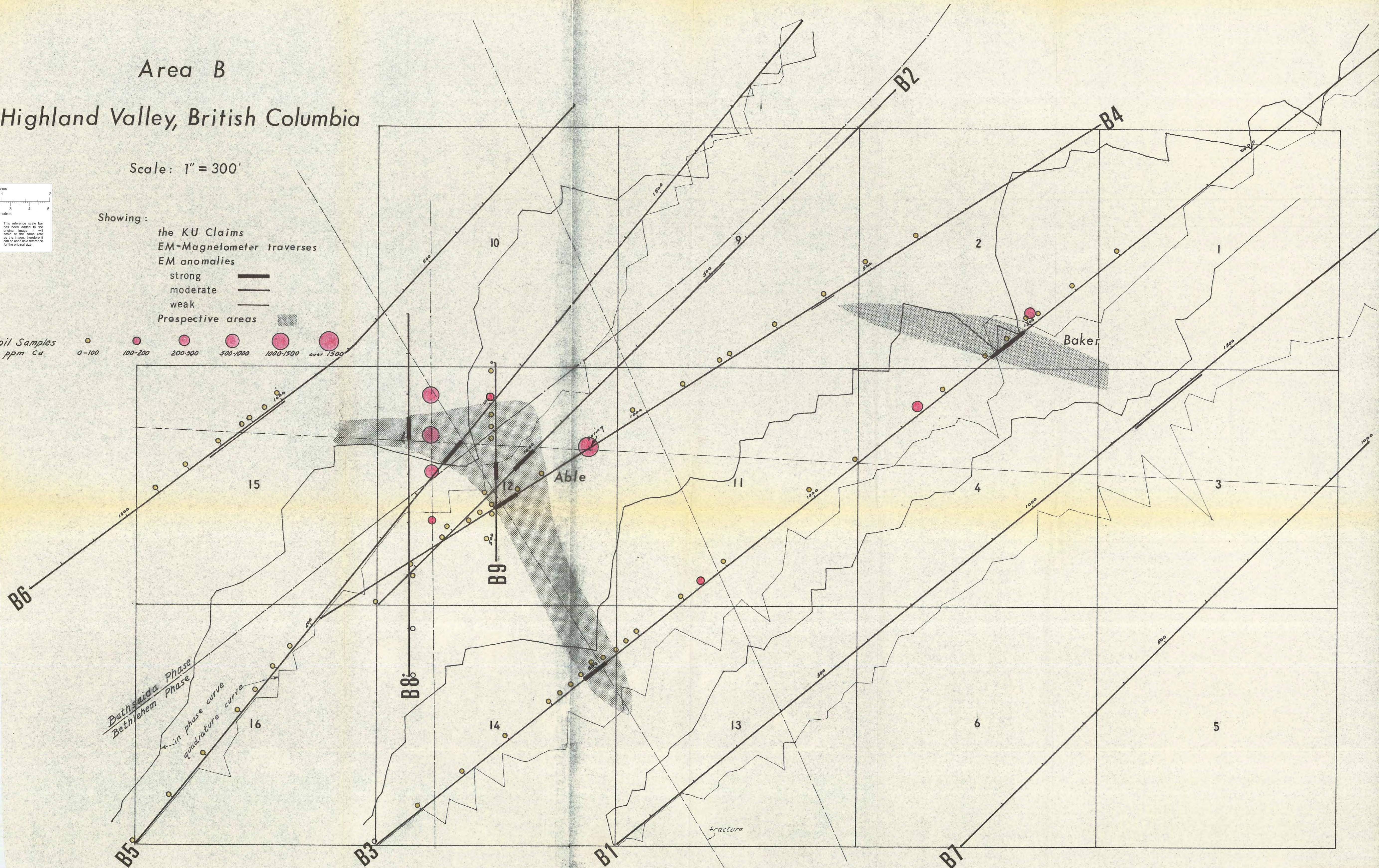
Scale: 1" = 300'

Showing:

the KU Claims  
EM-Magnetometer traverses  
EM anomalies  
strong  
moderate  
weak  
Prospective areas

Soil Samples  
ppm Cu

0-100	100-200	200-500	500-1000	1000-1500	over 1500
○	●	●	●	●	●





+400 gammas  
Magnetometer

B-5

SWAVE 51 10-5  
+300 gammas  
Southwest

Northeast

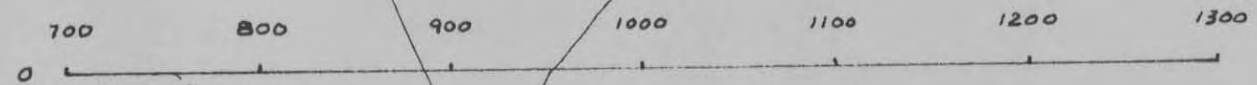
+200 gammas

+20°

Ronka EM-16  
+10°

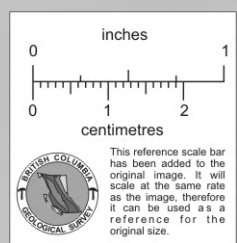
in phase curve

quadrature curve

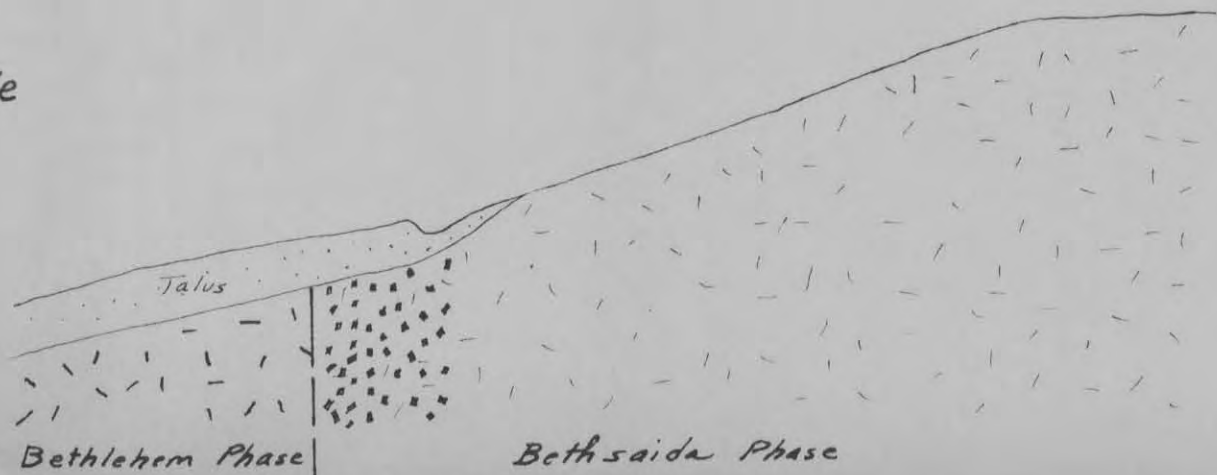


-10°

-20°



Profile





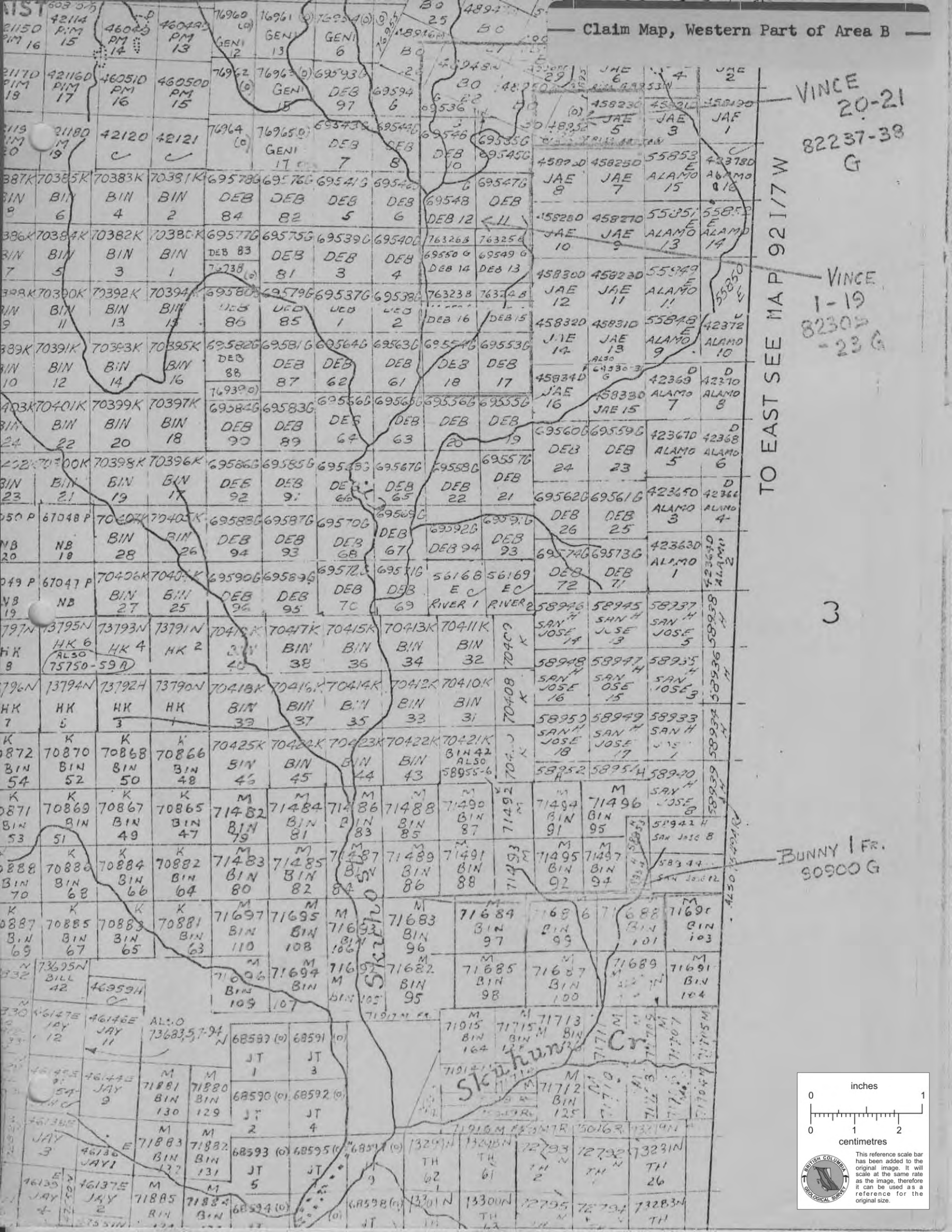
## Area A and the Eastern Part of Area B



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.



— Claim Map, Western Part of Area B —



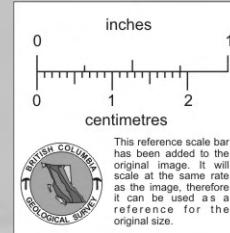
VINCE  
20-21  
82237-38  
G

VINCE  
1-19  
82302  
-23 G

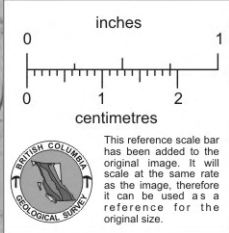
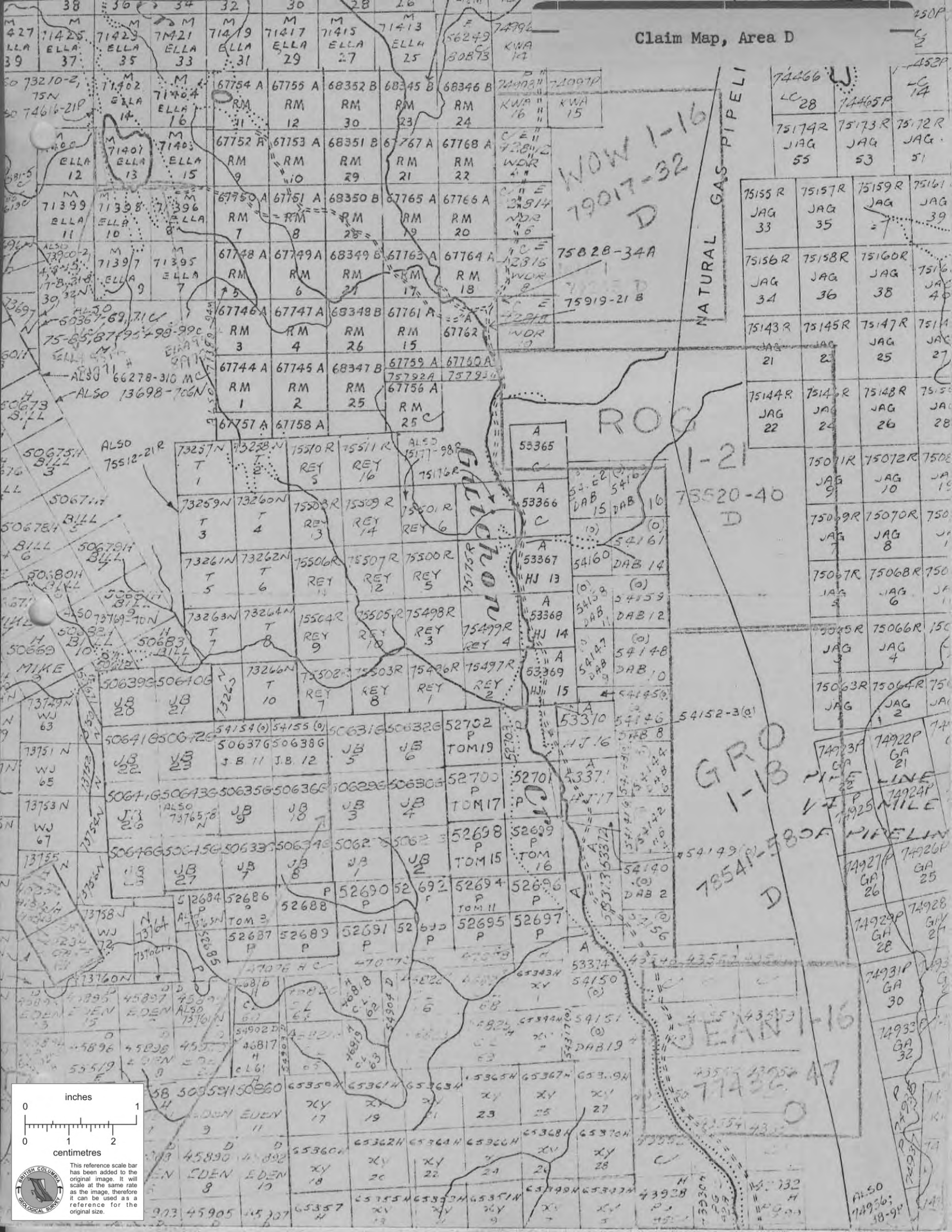
3

BUNNY 1 FR.  
30900 G

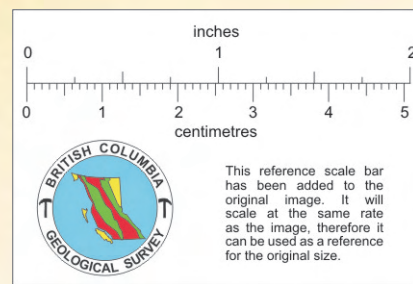
TO EAST SEE MAP 921/7W



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.







## Area B

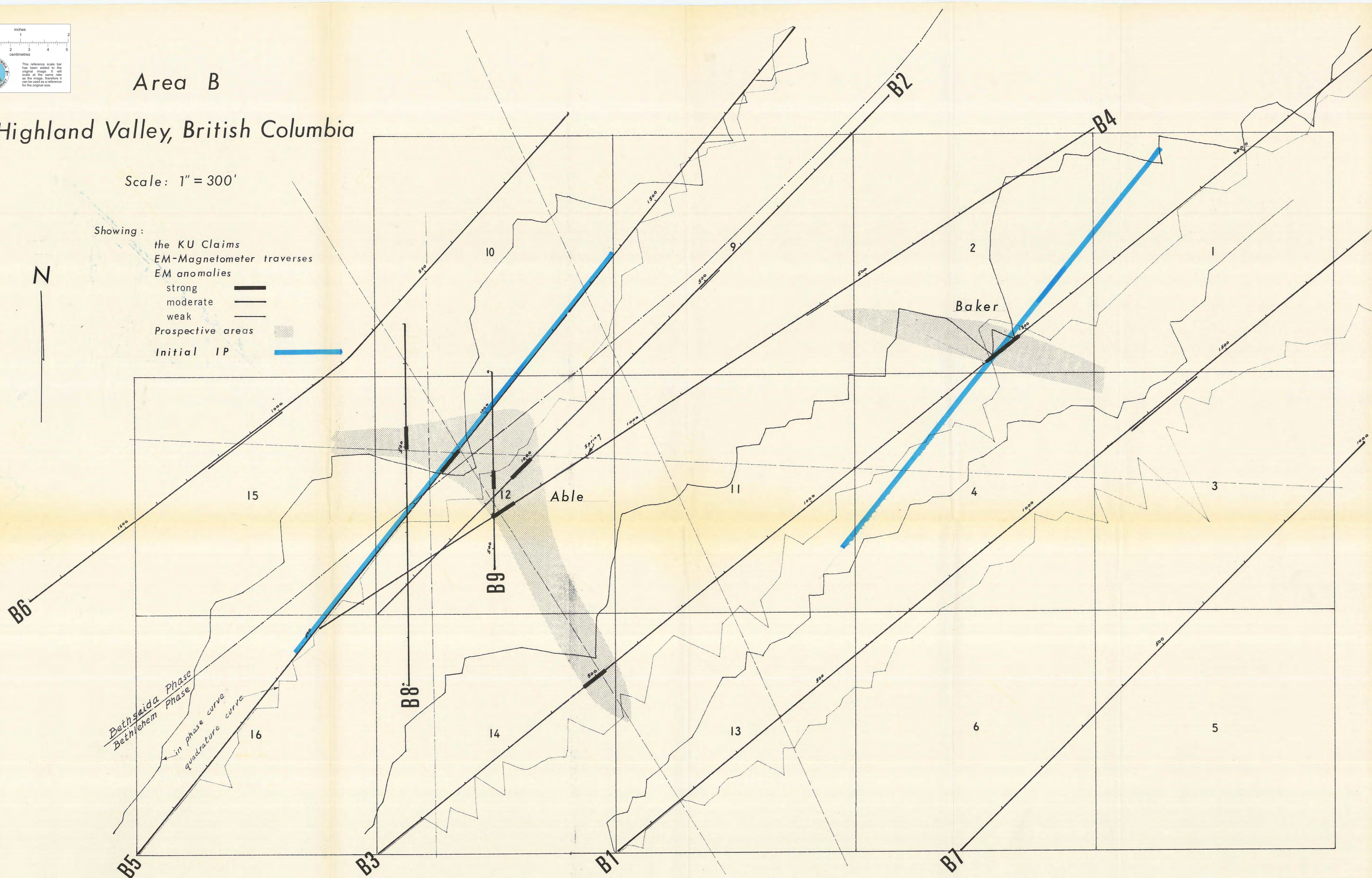
### Highland Valley, British Columbia

Scale: 1" = 300'

Showing:

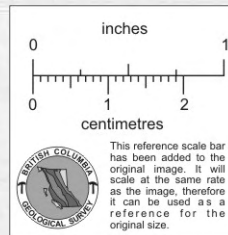
- the KU Claims
- EM-Magnetometer traverses
- EM anomalies
  - strong
  - moderate
  - weak
- Prospective areas
- Initial IP

N





SW



till  $\leftrightarrow$  bedrock

NE

B-1

B-1

Profile

Magnetometer

+500 gammas

+20° Ronka EM-16

+10°

in phase

quadrature

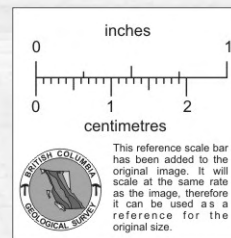
500

1000

1500

-10°

Scale: 1" = approx. 300' (100 yds.)

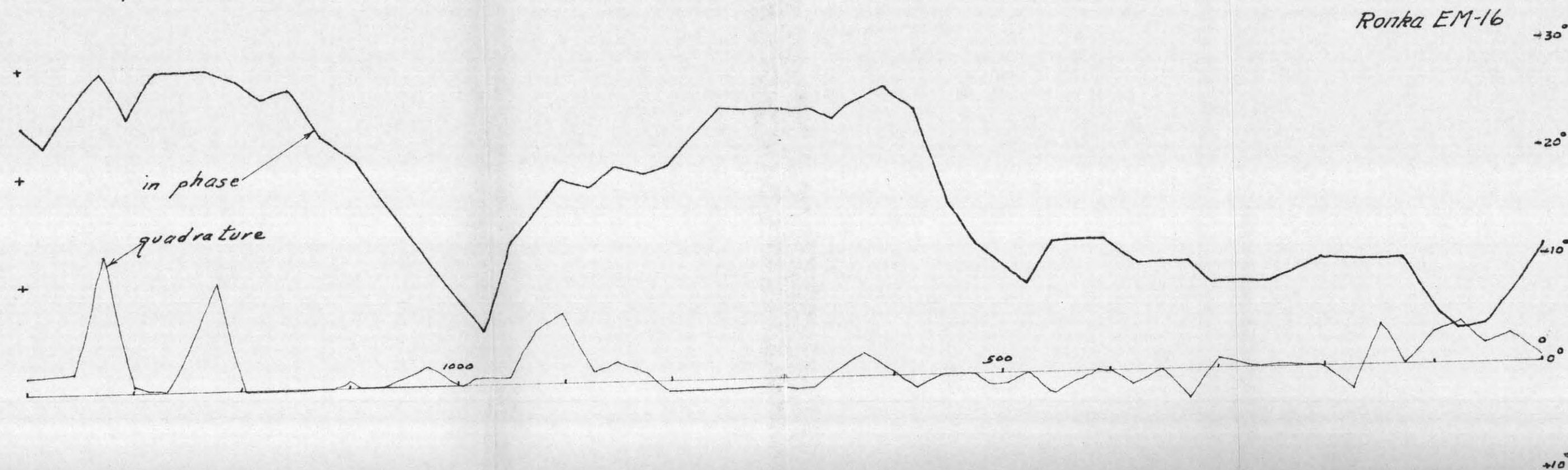
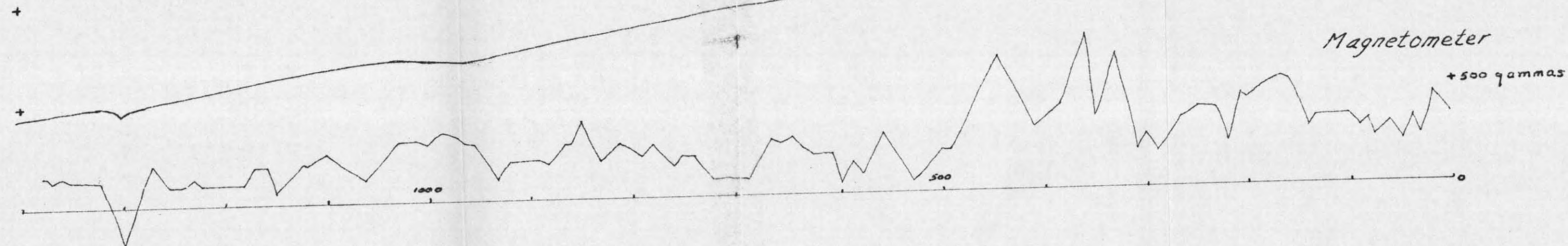


Till  $\leftrightarrow$  Scattered Bedrock

Profile

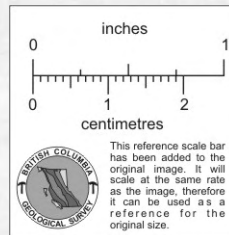
NE

B-2





SW



B-3

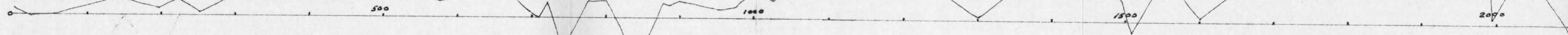
Profile

B-3

NE

+500 gammas

Magnetometer



+20°

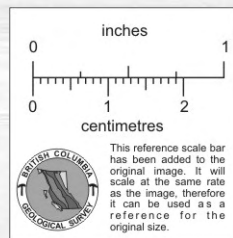
Ronka EM-16

+10°

in phase  
quadrature



-10°



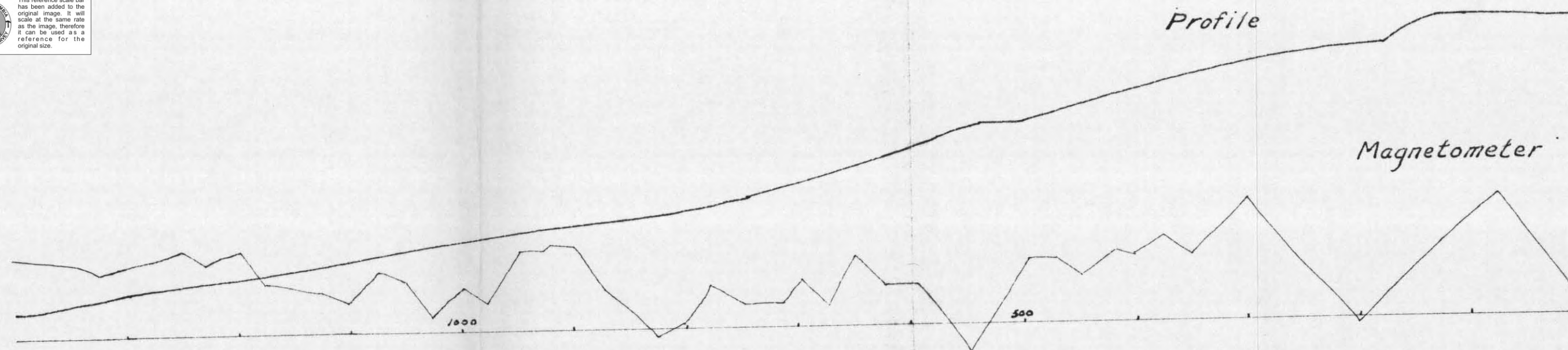
NE

B-4

B-4

Profile

Magnetometer

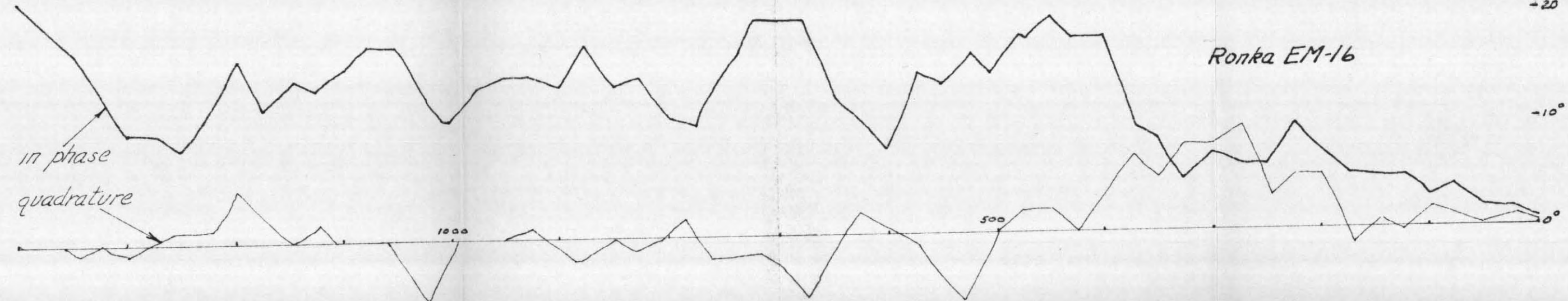


Ronka EM-16

+20°

+10°

in phase  
quadrature



Scale: 1" = 100 yds (approx.)



A-7

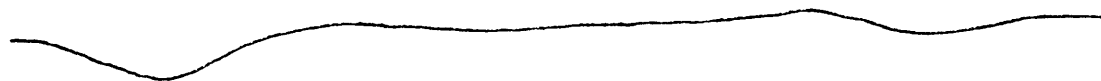
SW

NE

# Profile

small creek

big marsh



+500 gammas

## Magnetometer

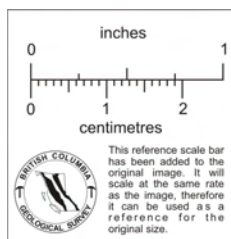


+10°

## Ronka EM-16

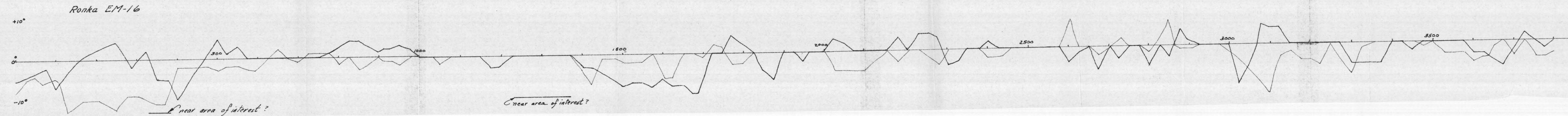
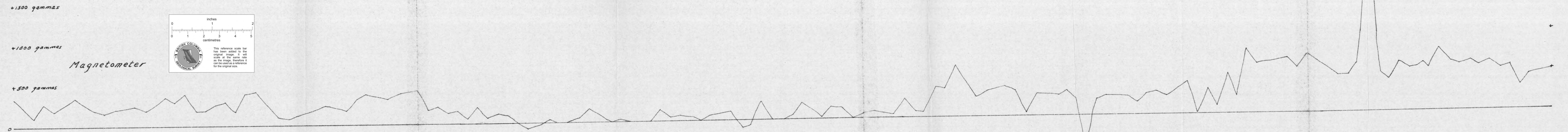
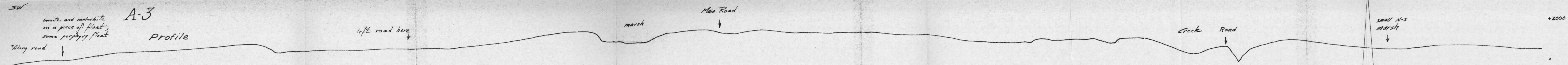


-10°



Scale: 1" = 100 yds







A-4

SW

NE

Profile



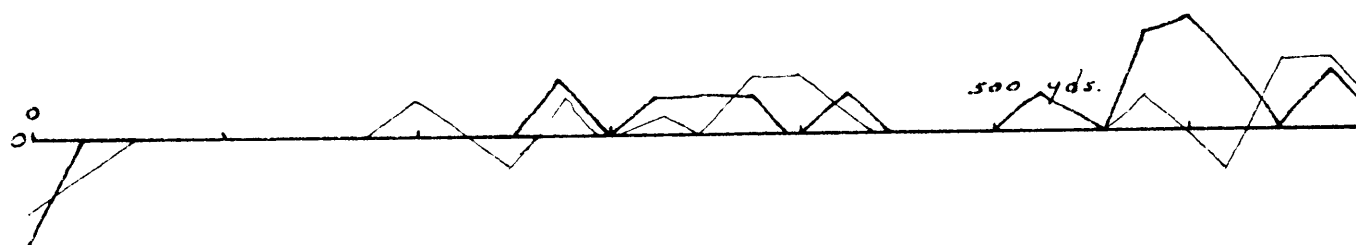
Magnetometer

+1000 gammas

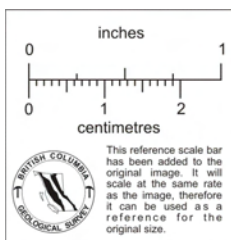


Ronka EM-16

+10°



-10°



A-5

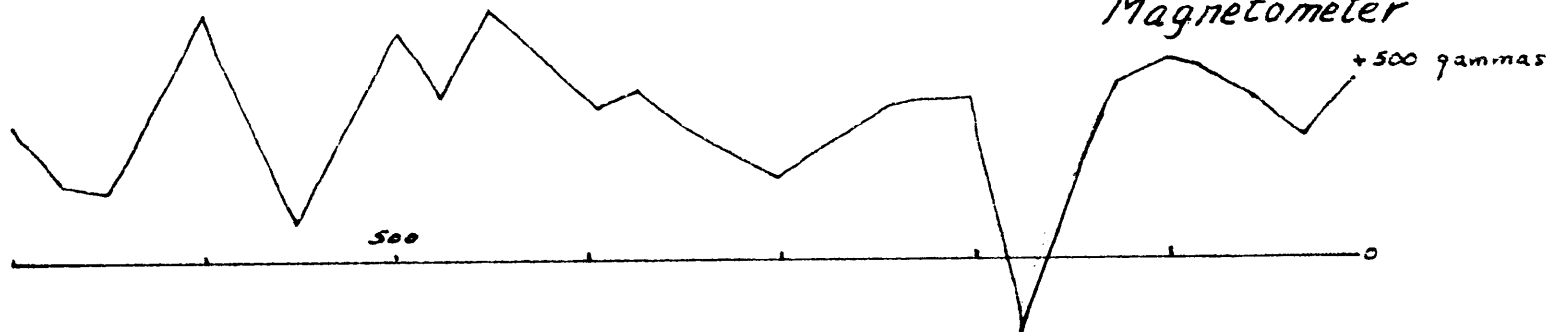
SW

NE

Profile



Magnetometer



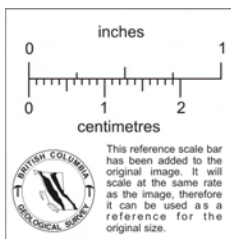
-10°

Ronka EM-16



+10°

Scale: 1" = 100 yds.



A-6 SW

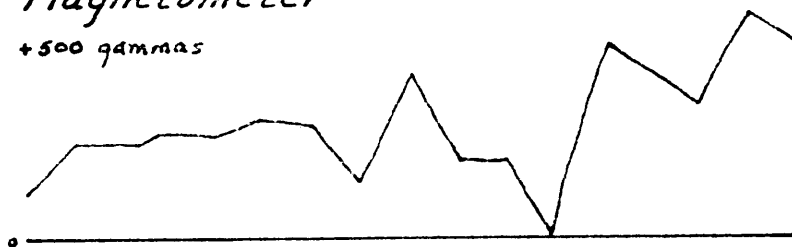
NE

Profile



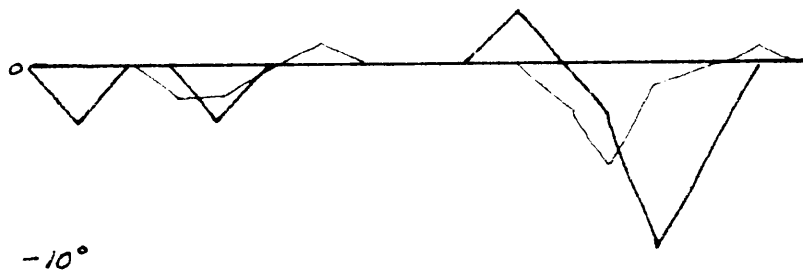
Magnetometer

+500 gammas

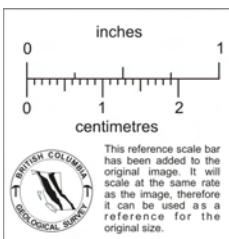


+10°

Ronka EM-16



-10°



Scale 1" = 100 yds.

SW

quartz float w/  
some copper shows  
↓

small marsh  
↓

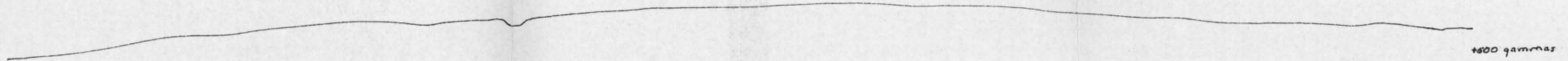
drill site to NW  
↓

diamond drill hole  
July 1968  
↓

A-8 NE

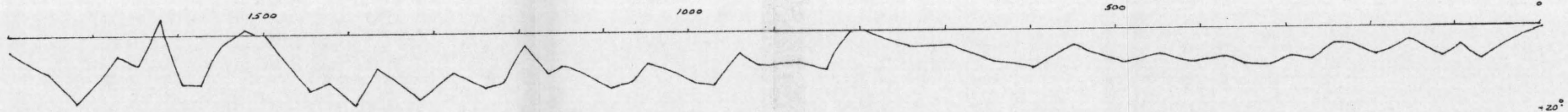
A-8

Profile



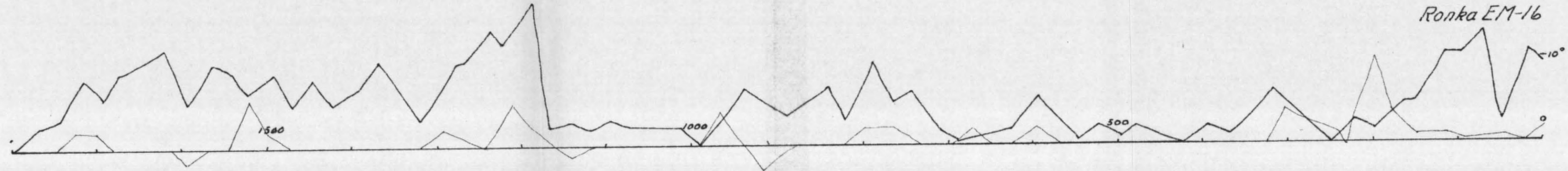
+500 gammas

Magnetometer



+20°

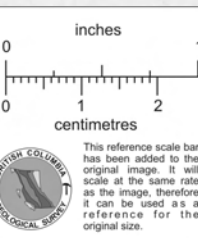
Ronka EM-16



+10°

area of interest

+10°



SW

NE

A-9

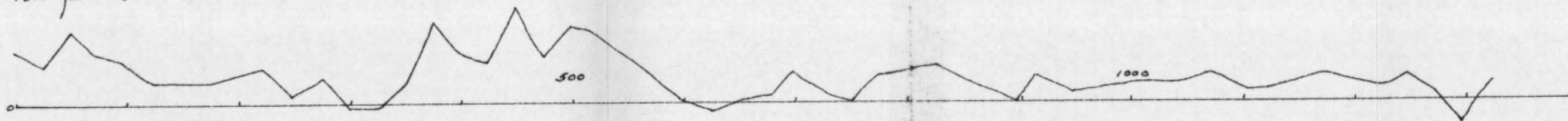
A-9

Profile

Main Road

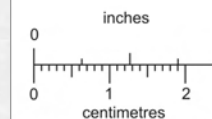
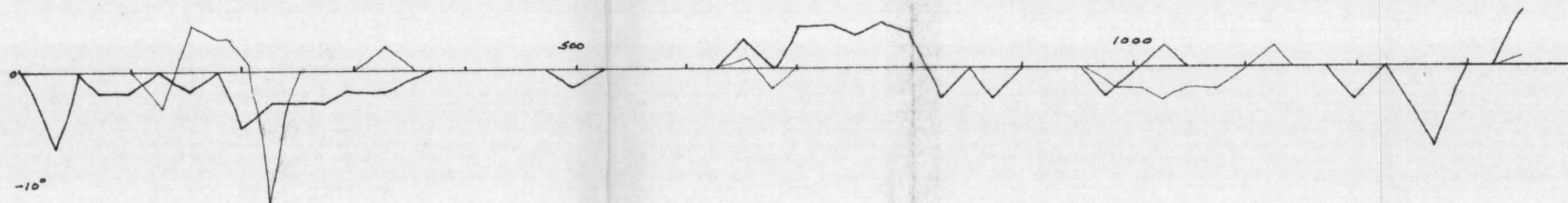
Magnetometer

+500 gammas



Ronka EM-16

+10°



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.



SW  
Profile

Traverse northeastward from Lornex

NE

Road

Magnetometer

+500 gammas

0

Ronka EM-16

0

in phase

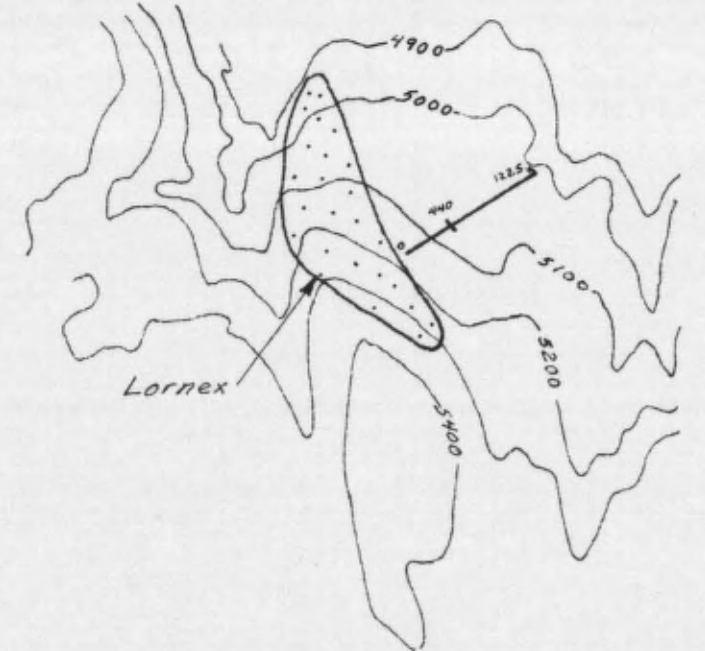
quadrature

area of interest

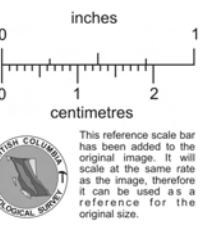
-10°

Scale: 1" = 100 yds (approx.)

Lornex Area  
Map



1000 0 1000 2000 3000 yds.





SW  
Profile

Traverse northeastward from Lornex

NE

Road

Magnetometer

+500 gammas

0

Ronka EM-16

0

in phase

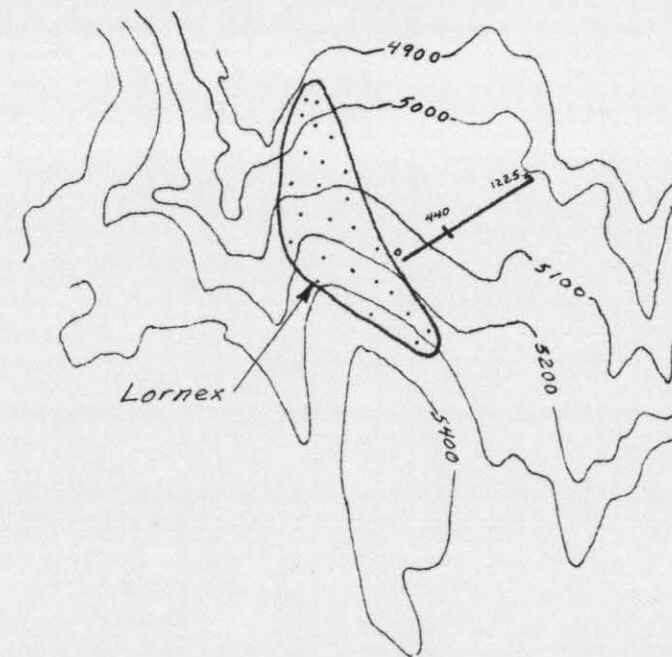
quadrature

-10°

area of interest

Scale: 1" = 100 yds (approx.)

Lornex Area  
Map



N

SW

NE

A-2

A-2

On Rody Fraction  
↓  
veingtz.  
float  
in float

nuggets  
of borate  
in float

S.W. end  
dozer cuts  
↓

malachite  
shows in  
felsite dikes  
↓

very small  
lake on northwest  
↓  
diamond  
drill hole  
↓

Profile

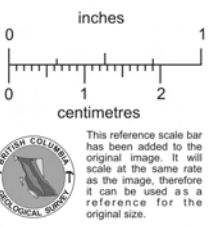
Main Road

Magnetometer  
+500 gammas

Ronka EM-16  
+10°

area of interest

Scale: 1" = 100 yds.





SW

B-5

NE

B-5

Profile

+500 gammas

Magnetometer

500

1000

1500

+20°

Ronka EM-16

+10°

in phase

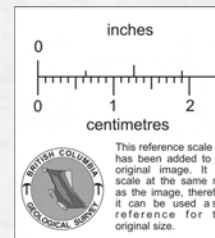
quadrature

500

1000

1500

-10



NE

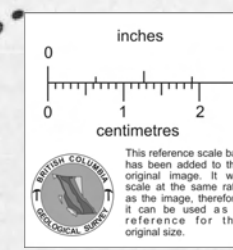
B-6

+500 gammas

-500 gammas

-20°

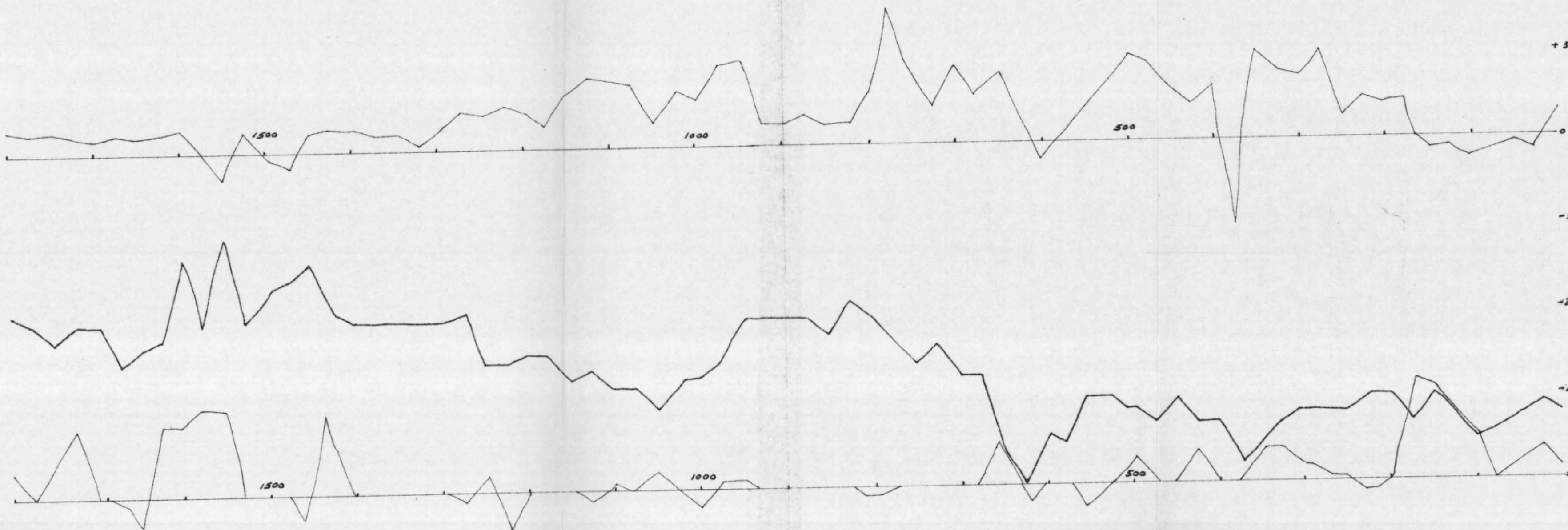
+10°



B-6

+10

SW





NE  
D-1

+1500 gammas

+1000

+500

Magnetometer

+10°

Ronka EM-16

-10°

-20°

Profile

500

1000

1500

2000

2500

500

1000

1500

2000

2500

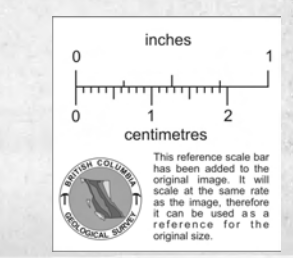
Scale: 1" = 100 yds.

topographic (false anomaly)

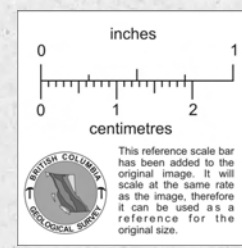
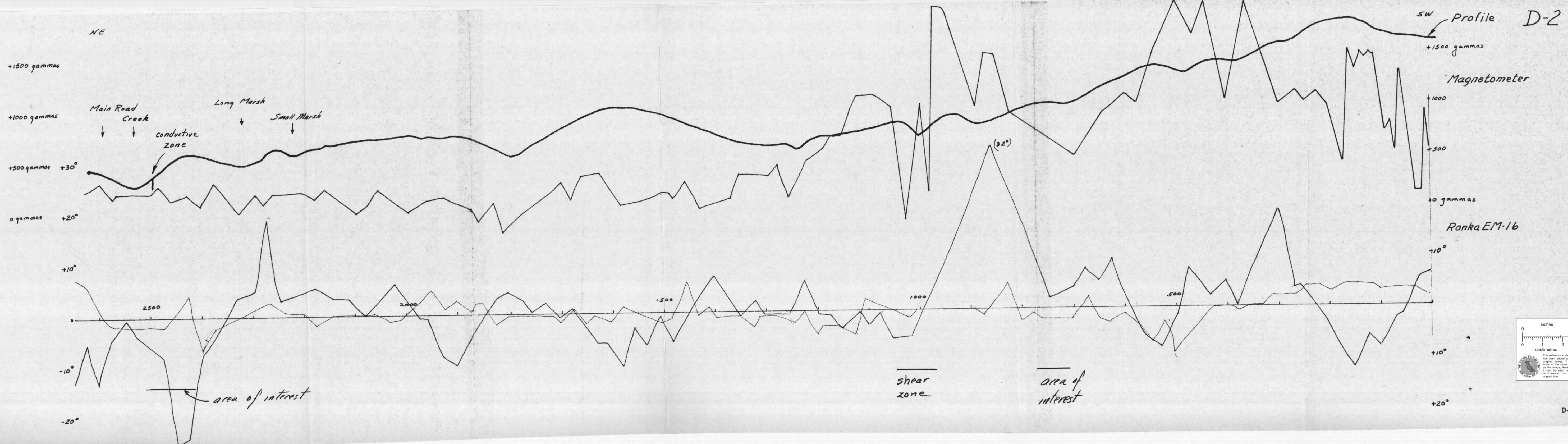
two mineralized  
N-W trending faults

anomalies

partly  
topographic







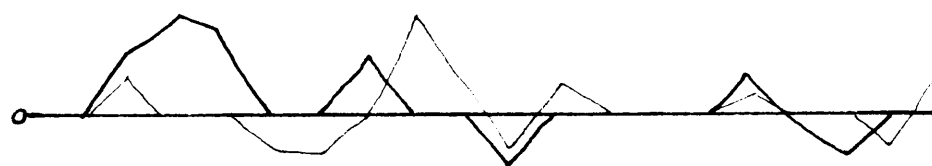
D-3



+500 gammas

Ronka EM-16

+10°



-10°



D-4

+2000 gammas

Main Road

+1500

bridge

small marsh  
on south

Cyprus Claim  
Post 50 yds SE  
Pot ↓ 1A41B

along creek

NW-SE  
road  
↓  
marsh

small lake  
↓  
marsh

stream  
↓  
marsh

+1000

Profile

+500 gammas

Magnetometer

+10° Ronka EM-16

500

1000

1500

2000

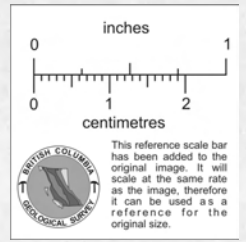
2500

-10°

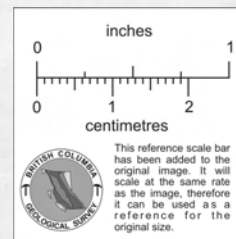
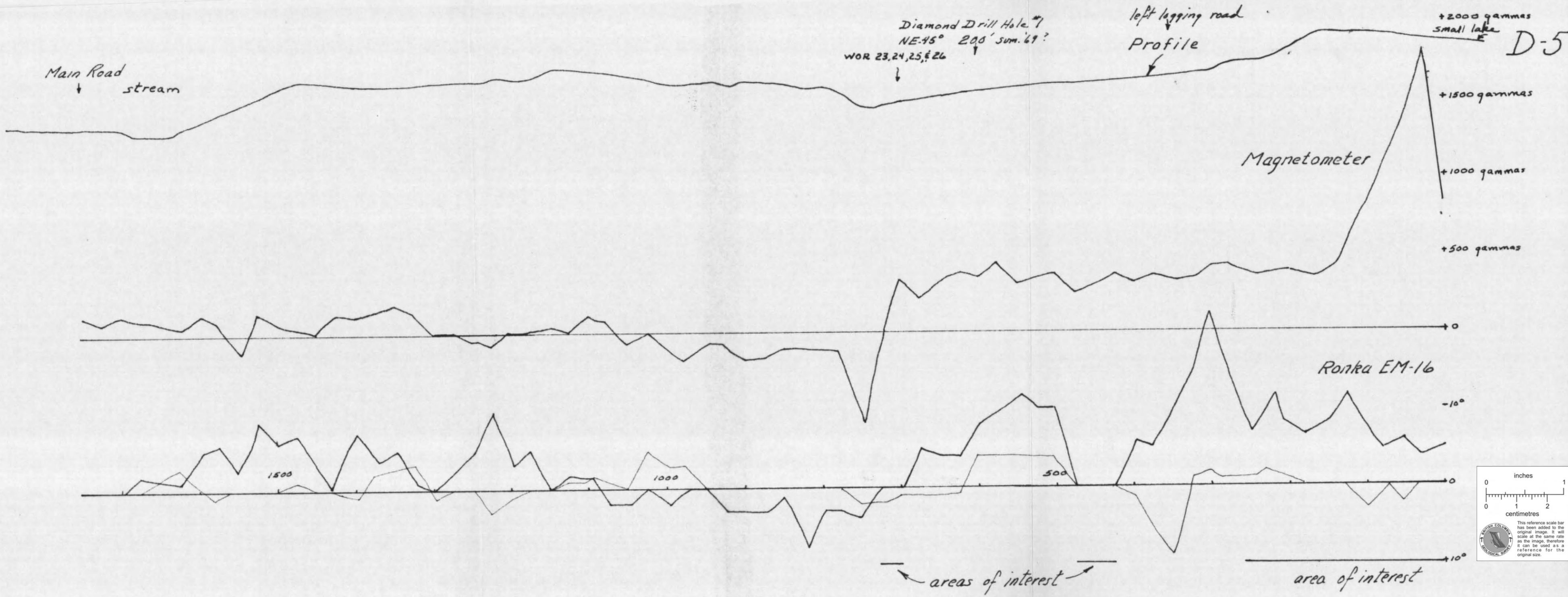
Scale: 1"=100 yds.

area of interest

area of interest







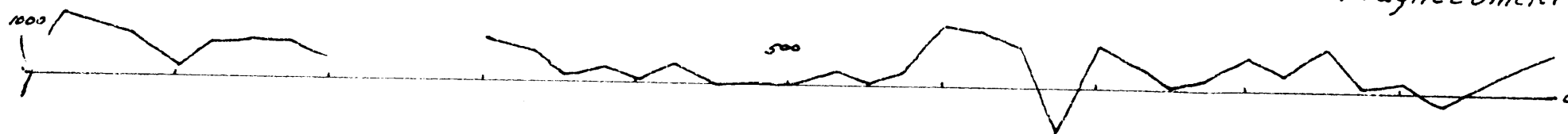
skirted along s. side of ravine

D-6

Profile

+500 gamma

Magnetometer

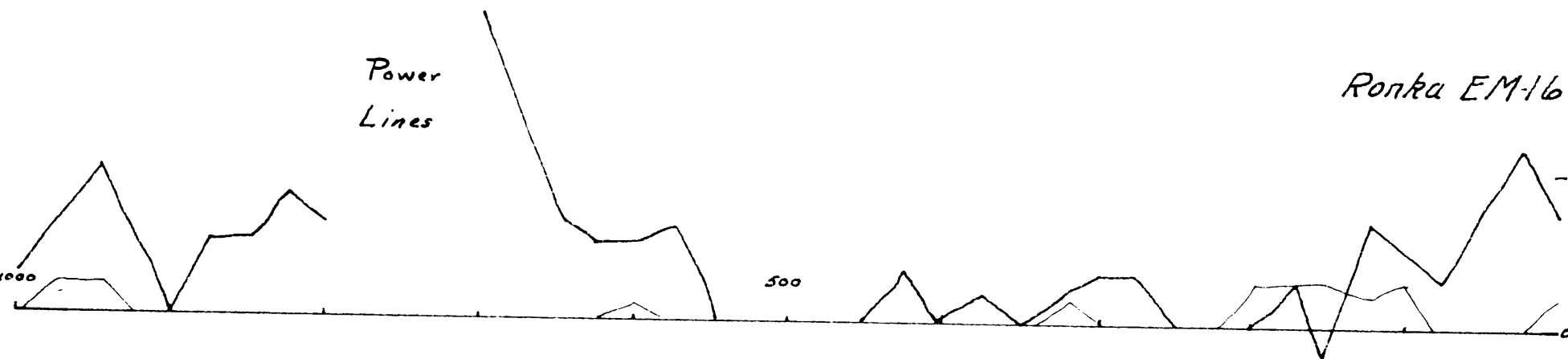


Power  
Lines

Ronka EM-16

-10°

+10°



NE

SW

D-7

Profile

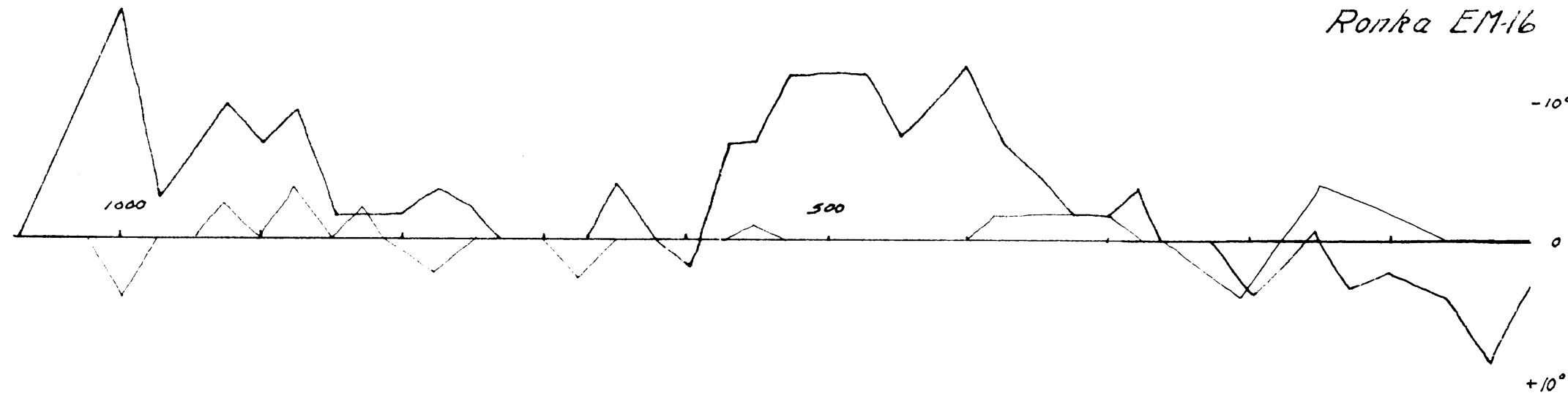
Road



-20°

Ronka EM-16

-10°



D-7