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with notations*

ATLAS EXPLORATIONS LIMITED
(N.P.L.)

330 MARINE BUILDING
355 BARRARD STREET
VANCOUVER 1, B.C.

File

105-5-12

Assessment Report on the Merry Mountain Area

May Claim Group

Box Claim Group

The Period May 30 to June 13, 1969.

Donald Francis

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W. J. ...
1312 329-4852

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Introduction

Interest in the Merry Mountain Area (Peak 5267) began in 1968 with the discovery of a lead-zinc showing and a copper showing by Hugo Brodell and Robert Etzel. In the period May 30 to June 13 of the year these two showings were staked and then soil sample and magnetometer surveys were run on them. In addition, the entire area west of Merry Mountain was prospected and geologically mapped on a quarter mile scale. Myself, an assistant, two prospectors, and two samplers were employed in this operation.

General Geology

The area consists of a sequence of sedimentary rocks, ranging from Precambrian to Lower Mississippian in age, cut by numerous Mesozoic to Tertiary acidic intrusive bodies.

The Precambrian members of this sequence consist of friable green to purple-red slates and argillites overlying a light grey, poorly bedded quartzite probably belonging to the Yukon Group. Unconformably above the Precambrian is a sequence of argillaceous cherty rocks which eventually go to massive fragmental cherts, bedded cherts, and finally the chert pebble conglomerates of the Crystal Peak Formation (Lower Mississippian). Above these black cherts is a black

Geologic Map

- scale?
- N arrow
- where are Box Claims?

Area of granodiorite deserves follow-up for Cu,
recommend large scale program,

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micritic limestone, often recrystallized, which belongs to the Kalsas Formation (Lower Mississippian). This limestone are devoid of fossils.

Several quartz monzonite to quartz diorite dykes cut the above rocks. These dykes average about 100 feet in width and have a uniform north-north east trend. The attitude of two major faults in the area suggest that these dykes represent tensional fractures parallel to the axis of maximum stress in the area. In addition, there are three coarse grained granodiorite stock like bodies, the largest of which forms the northeast slope of Merry Mountain.

Apart from the two staked showings, numerous small showings were found on the western border of the large granodiorite plug in a banded cherty zone and also in the quartzite further west. These showings consist of appreciable arsenopyrite, some pyrite and pyrrhotite, plus occasionally some minor chalcopyrite. Actinolite and gypsum are usually associated with these showings. A few minor lead-zinc showings were found around the intrusive dyke shown in outcrop number 127.

The structure of the area trends west-northwest and consists of an en echelon syncline-anticline couple. The syncline has a definite west-northwest plunge. Both folds are of a broad open nature.

Geochemistry of MAY GROUP

	Cu	Pb	Zn	Mn	MAG
<p>Pb Zn Mn <u>A</u> <u>COINC</u></p>		<p>A 800N 400W 150 PPM +</p>	<p>A. 800N, 400W 2000 PPM +</p>	<p>A 800N 400W 10,000 PPM +</p>	<p>area of EW? trending may low</p>
<p><u>B</u></p>					

Comments 1) high Zn coincides with high Mn

To Do

- 1) GRID CO-ORDINATES ON Mn MAPS
- 2) CLAIM LOCATIONS ON GEOCHEM & GEOL. MAPS
NORTH ARROW
- 3) COMPIL MAP - GEOL, SHOWINGS, ANOMALY LOC. ?
- 4) RE CONTOUR Zinc - especially 800W anomaly

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The May Claim Group

Eight claims were staked to cover the two lead-zinc showings. One showing consists of to 35% combined galena and sphalerite as stringers and blebs in a very fine grained dark green calcareous, crystalline rock. This showing was blasted to bedrock. However the bedrock is a black, friable and rotten, carbonaceous slate devoid of mineralization.

The second showing, 500 feet north of the first, consists of minor galena and sphalerite in quartz-calcite veins in a highly altered diorite. This dyke runs within 50 feet of the first showing.

A 3200 foot baseline was cut with 1500 foot crosslines having a 400 foot separation. This grid was sampled at 100 foot intervals and tested for copper, lead, zinc, and manganese. The manganese contours outlined the swampy areas. Some good zinc values were obtained, but they seem to follow the manganese values. The copper and lead values are negligible. One or two pin point values of lead seem to be related to isolated float locations found by the prospectors.

Magnetometer readings were recorded at 50 foot intervals on this grid. The dyke failed to show in the results. A 1400 gamma anomaly is found at the western end of the grid and probably corresponds to the aeromagnetic anomaly in the area. There is a correlation between a high zinc anomaly with a peak of 840 ppm and the magnetic anomaly. As yet no geological explanation for this anomaly has been found.

- 1) Where is location of claims with reference to geology map -
- 2) Where are showings on May Grid
- 3) Where is grid?
- 4) Where are claims on grid map.

Box Claims

- 1) Copper anomaly could have coincidence with magnetic low areas
- 2) Cu anomaly & mag survey should definitely be extended.

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The Box Claim Group

The Box Claim Group comprises four claims staked over a chalcopyrite showing. This showing consists of to 20% disseminated, fine grained sulphides in silicious lenses in a finely laminated, black, argillaceous chert. Chalcopyrite makes up to 5% of the sulphides with the remainder being chiefly pyrite. The showing is 50 feet south of a contact to a dark grey, friable slate. A 30 to 40 foot monzonite to granodiorite dyke running north-northeast cuts the sediments 50 feet to the east of the showing. The laminations in the chert are perpendicular to the dyke. Despite the abundance of outcrop, no mineralization, besides a little pyrite, was found in the surrounding area.

A small grid was set over this showing. Of the geochemical sample results, lead and zinc gave negligible readings while copper values produced a small localized anomaly.

The magnetometer survey failed to detect the intrusive dyke, but an unexplained 300 gamma anomaly was revealed.

Conclusions

On the whole, results from the Box and May Claim Groups are discouraging. The lack of additional mineralization and significant geochemical and geophysical anomalies can not be ignored. In addition, several of the geochemical anomalies

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The float that originally caused interest in the May Claim Group is of definite economic interest. The general direction of glacial transport is from the southeast. Three to four geological-geochemical (soil sample) north-south traverses to the East of Merry Mountain would be advantageous. These lines would be spaced every mile and would begin one mile east of the mountain. The purpose would be to discover the source rock of the mineralization. Due to the wide spacing of the lines and to the desire to make the lines as long as possible this operation should be run on a daily helicopter put out basis.

*Agreed
run from
1 camp*

Costs: (assuming La force Lake or the Lad Group as a base.)

- 12 hrs. helicopter support at \$130/hr.	\$1560
- 4 man days support at \$10/man day	\$40
- 4 man days wages at \$30/man day	\$120
Total:	\$1720

Total cost of the proposed follow up work:	\$1720
	<u>\$720</u>
	\$2440

Total man days involved in the proposed follow up work: 10

Donald Lewis

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Work Report and Cost Breakdown

I Wages:

Don Francis	-15 days geological mapping	\$431.25
Bill Thomas	-10 days assisting - 3 days linecutting - 2 days magnetometer survey	\$258.75
Hugo Brodell	-12 days prospecting	\$260.00
Robert Etzel	-15 days prospecting	\$300.00
John Aklack	- 2 days linecutting -10 days prospecting	\$240.00
Greig haineault	-12 days soil sampling - 2 days line cutting	\$214.67
<hr/>		
Sub-Total		<u>\$1704.67</u>

II Helicopter Support:

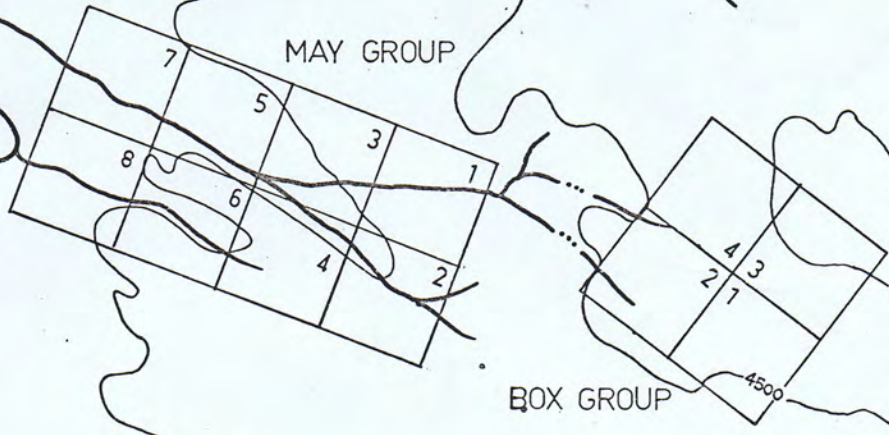
6.1 hours for a total of: \$1085.40

III Camp Support:

83 man days at \$10/man day for a total of: \$830.00

Total \$3620.07

Donald Francis



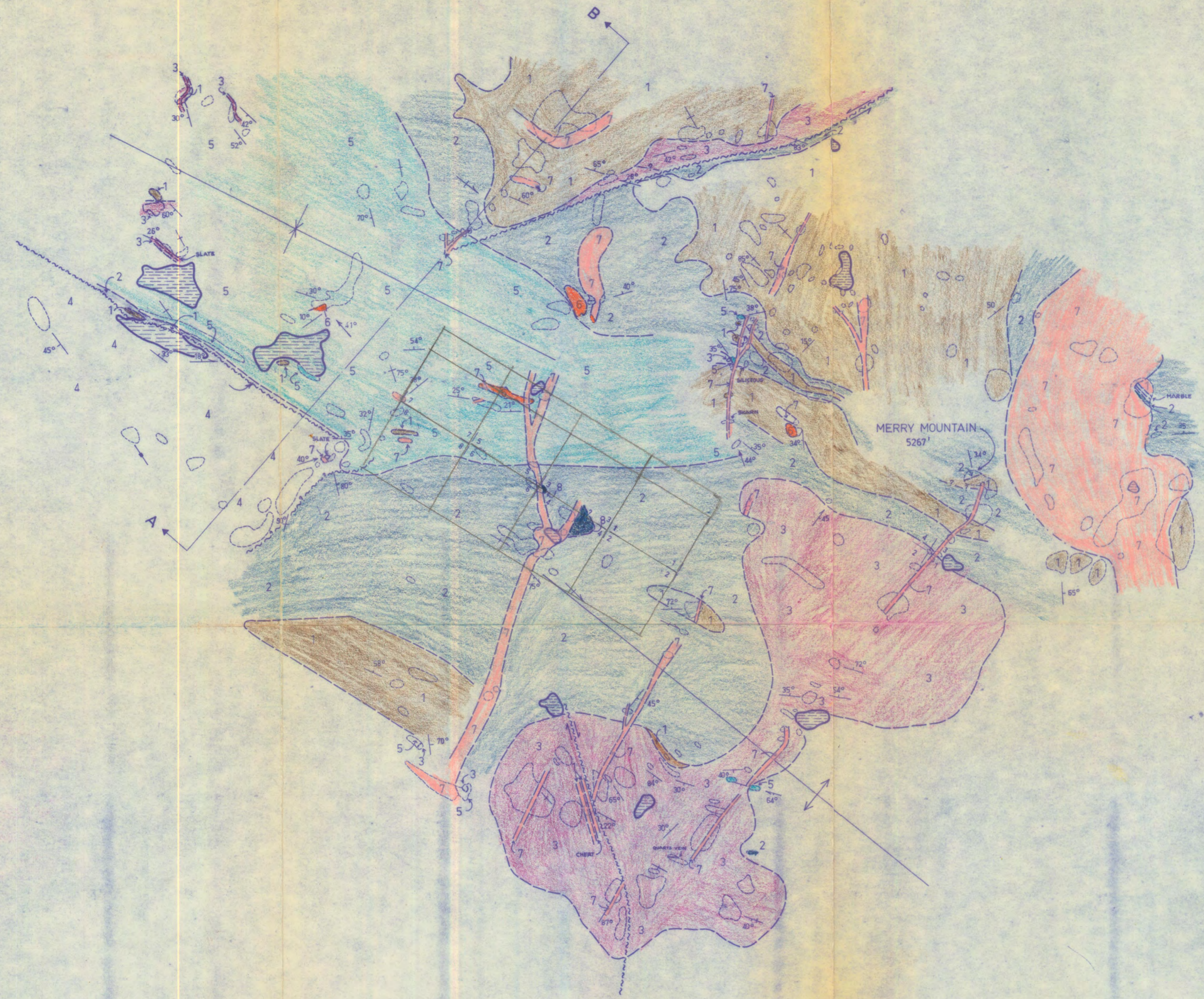
BOX 1-4 JUNE 11-1969 HUGO BRODELL
 MAY 1-8 JUNE 1-1969 ROBERT ETZEL

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 HESS PROJECT
 HESS OEX
 KEY MAP OF MAY AND BOX CLAIMS
 N.T.S. 105-J-12
 SCALE 1" = 1/2 mi

LAKE

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 GEOLOGY OF MERRY MOUNTAIN AREA

GEOLOGY BY: D. FRANCIS
 DATE: JUNE '69



SYMBOLS

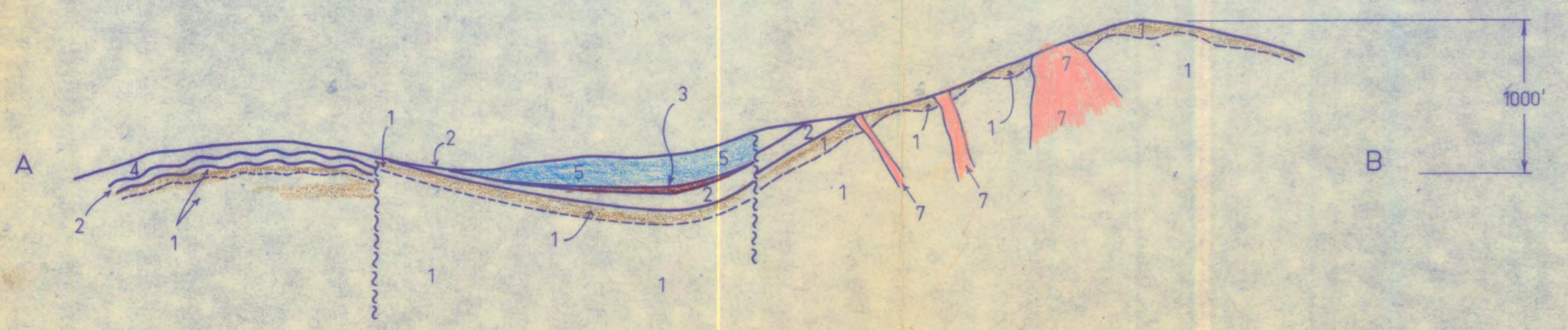
- OUTCROP AREA
- GEOLOGICAL BOUNDARY
- FAULT
- FOLD AXIS, SYNCLINE - ANTICLINE
- BEDDING
- LINEATION
- FRACTURING OR PARTING
- LAKE

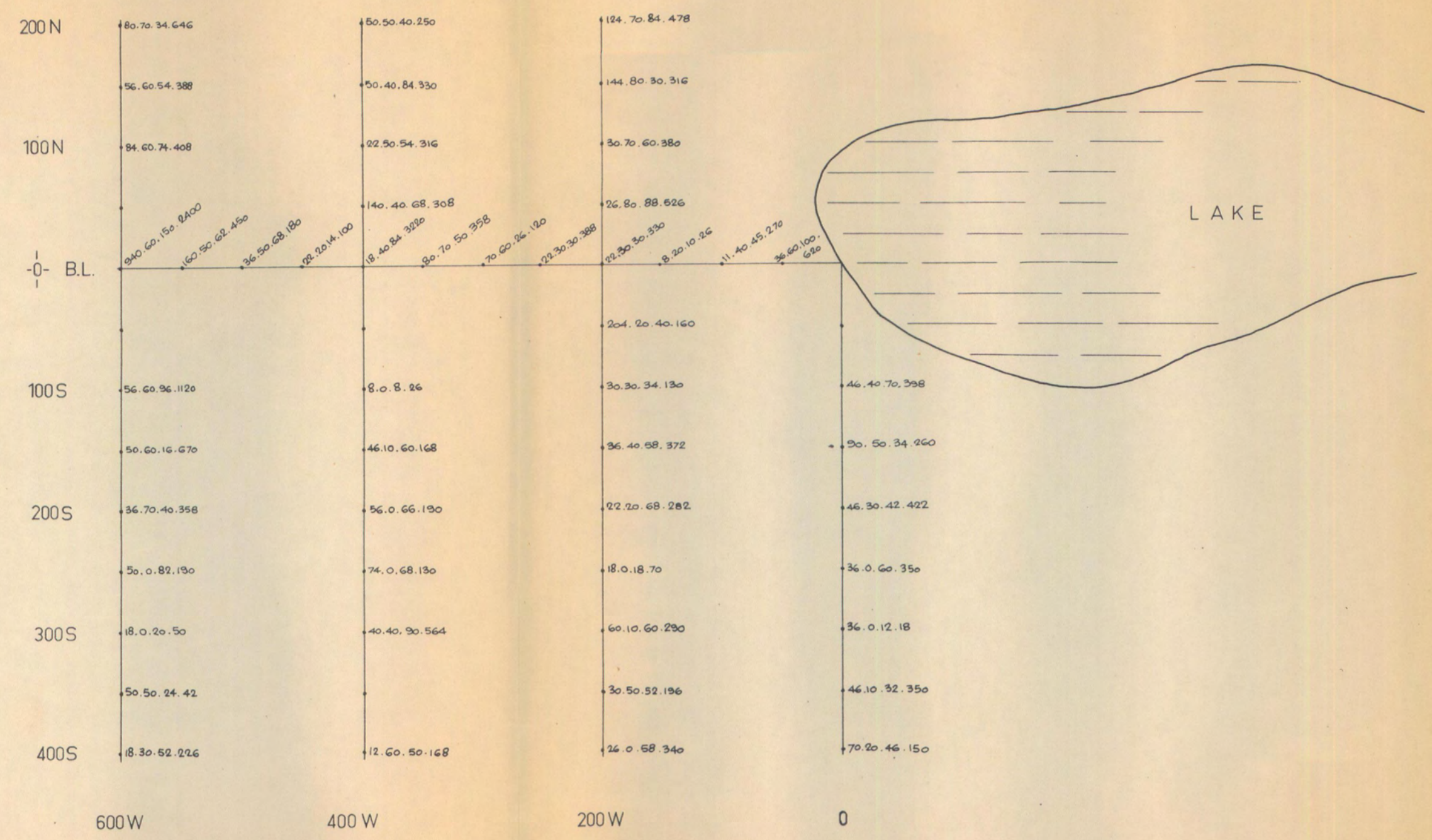
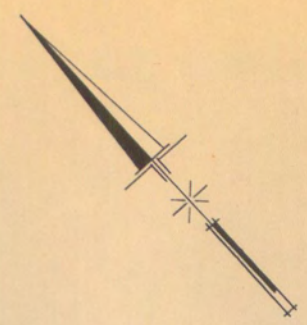
LEGEND

- JURASSIC TO TERTIARY
 - HORNFELS
 - QUARTZ MONZONITE, GRANODIORITE, DIORITE, DIABASIC
 - PROPYLITIZED ANDESITIC VOLCANIC.
- TERTIARY
 - KALZAS FORMATION:
 - BLACK MICRITIC RECRYSTALIZED LIMESTONE
 - LOWER MISSISSIPPIAN TO EARLIER
 - CRYSTAL PEAK FORMATION:
 - BEDDED CHERT, MASSIVE CHERT, ARGILLACIOUS CHERTY ROCK
 - SLATE ARGILLITE: GREEN TO PURPLE
 - QUARTZITE
 - PROTEROZOIC, PRECAMBRIAN
 - SLATE ARGILLITE: GREEN TO PURPLE
 - QUARTZITE

*Scale?
 most arrow*

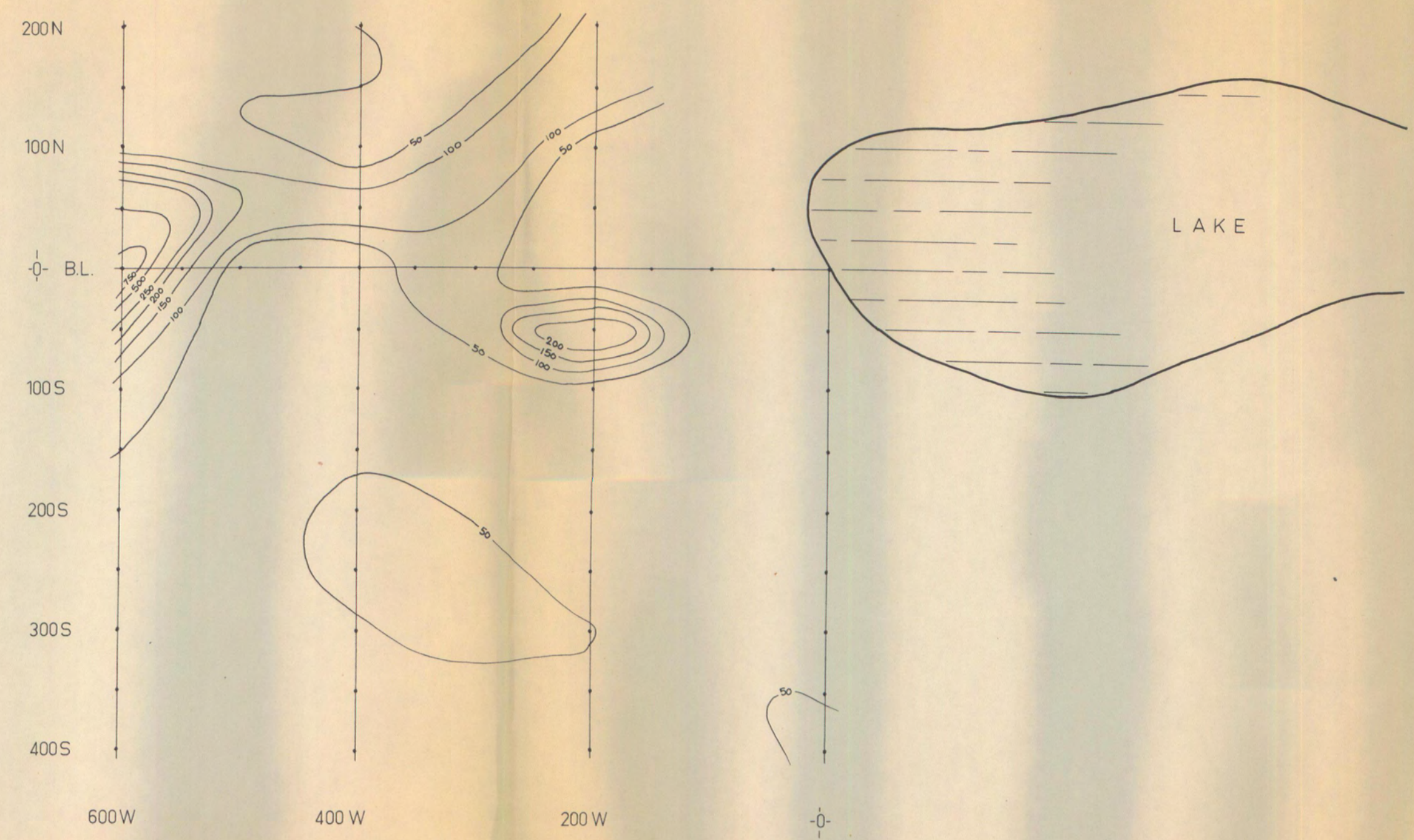
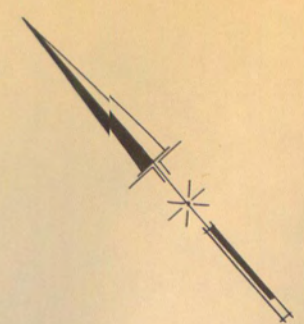
SCHMATIC CROSS-SECTION





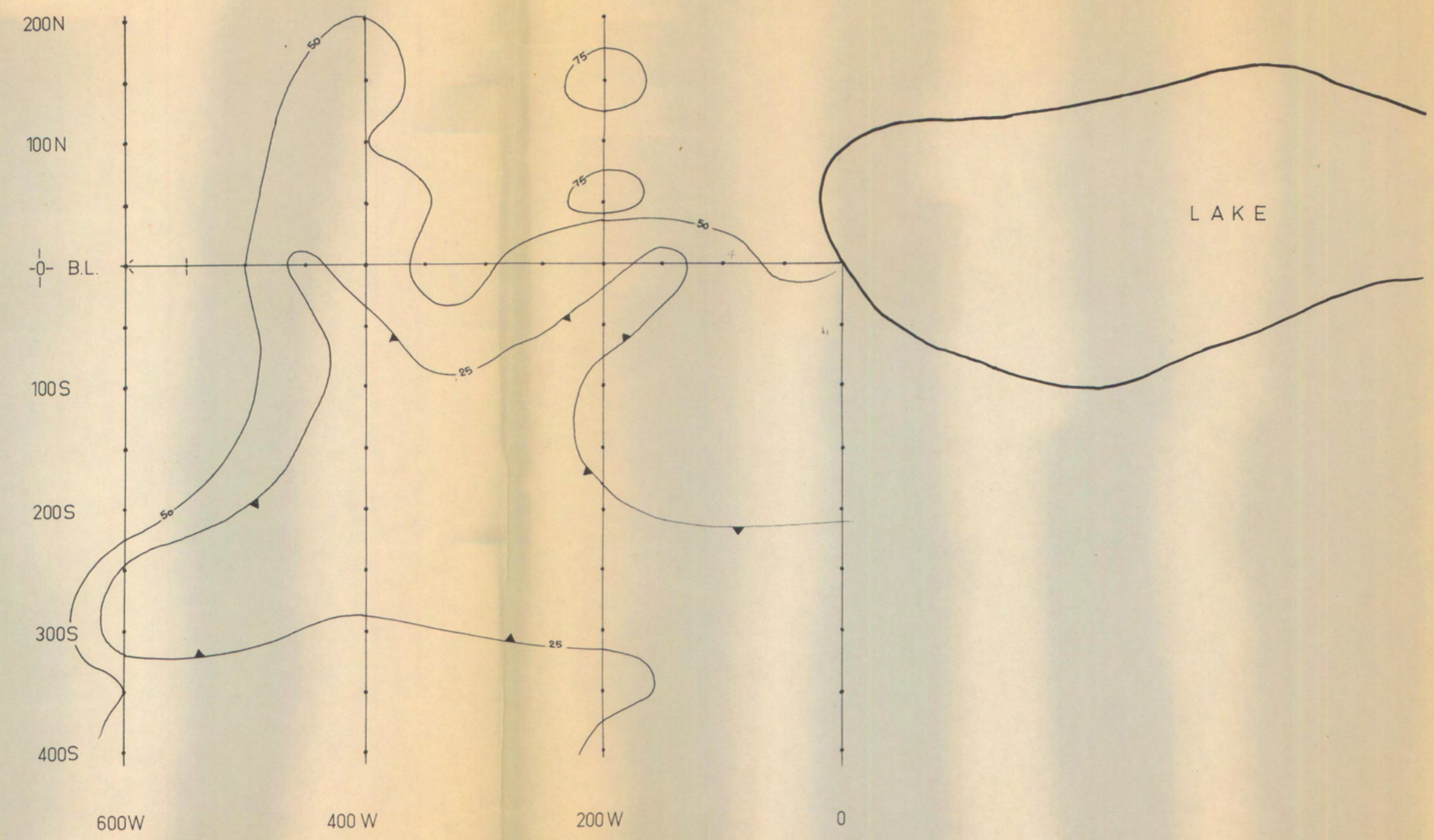
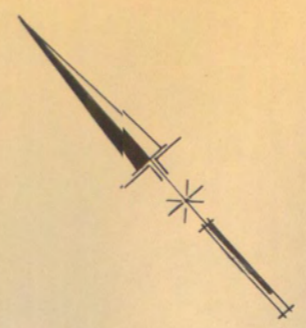
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 ROSS RIVER Y.T.
 HESS REGION
 BOX MINERAL CLAIM GROUP
 GEOCHEMICAL RESULTS BY ATOMIC ABSORPTION
 SPECTROPHOTOMETER ANALYSIS

Sampler: G.HAINAULT
 Drawn by: P.J.F. VLASVELD
 Date: July 1969
 100 0 100
 scale in feet

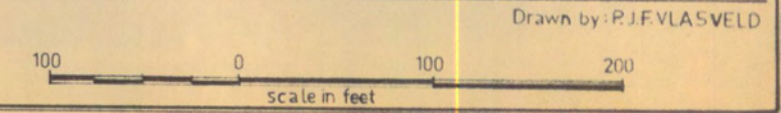


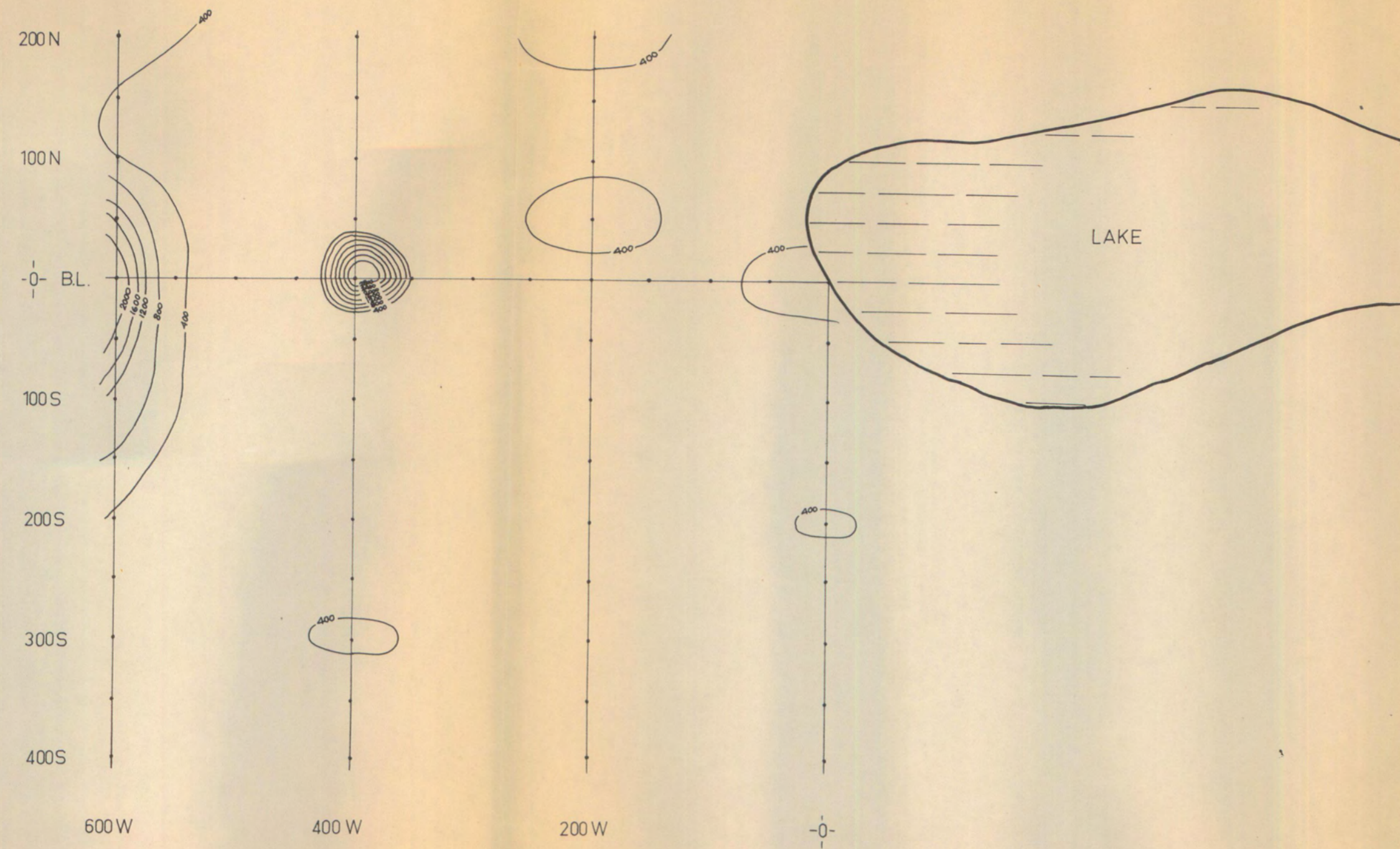
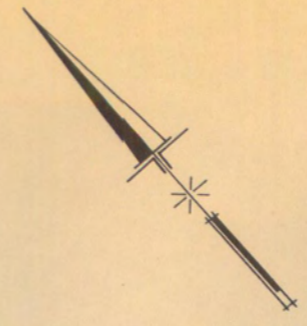
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ROSS RIVER Y.T.
HESS REGION
BOX MINERAL CLAIM GROUP
COPPER CONTOURS

100 0 100
Scale in feet
Drawn by: P.J.F. VLASVELD
Date: July 1969
200



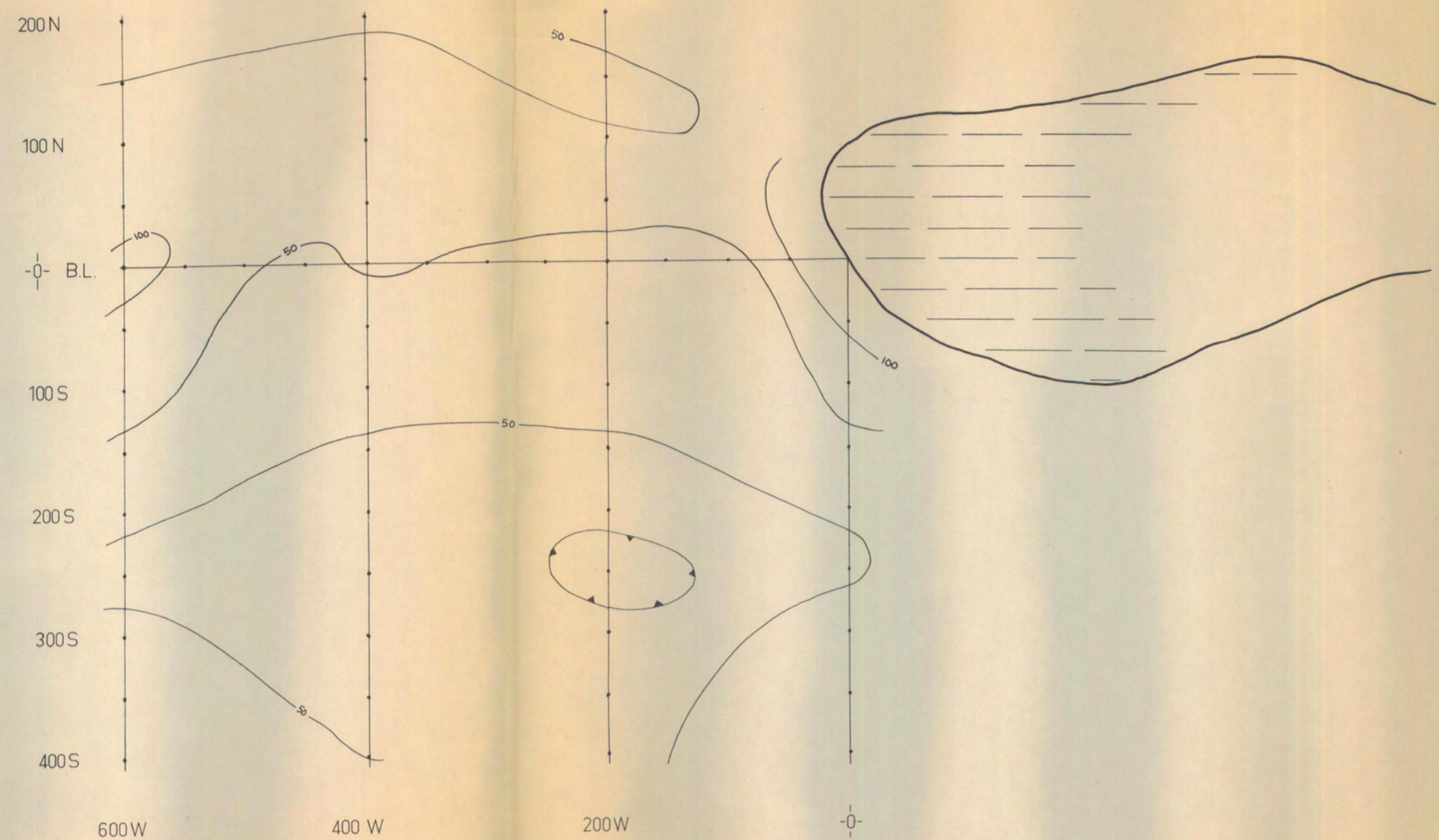
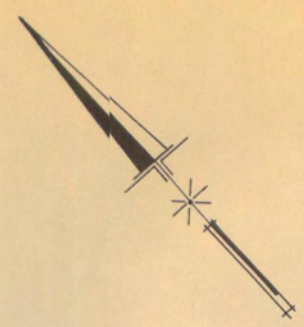
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HESS REGION
BOX MINERAL CLAIM GROUP
LEAD CONTOURS





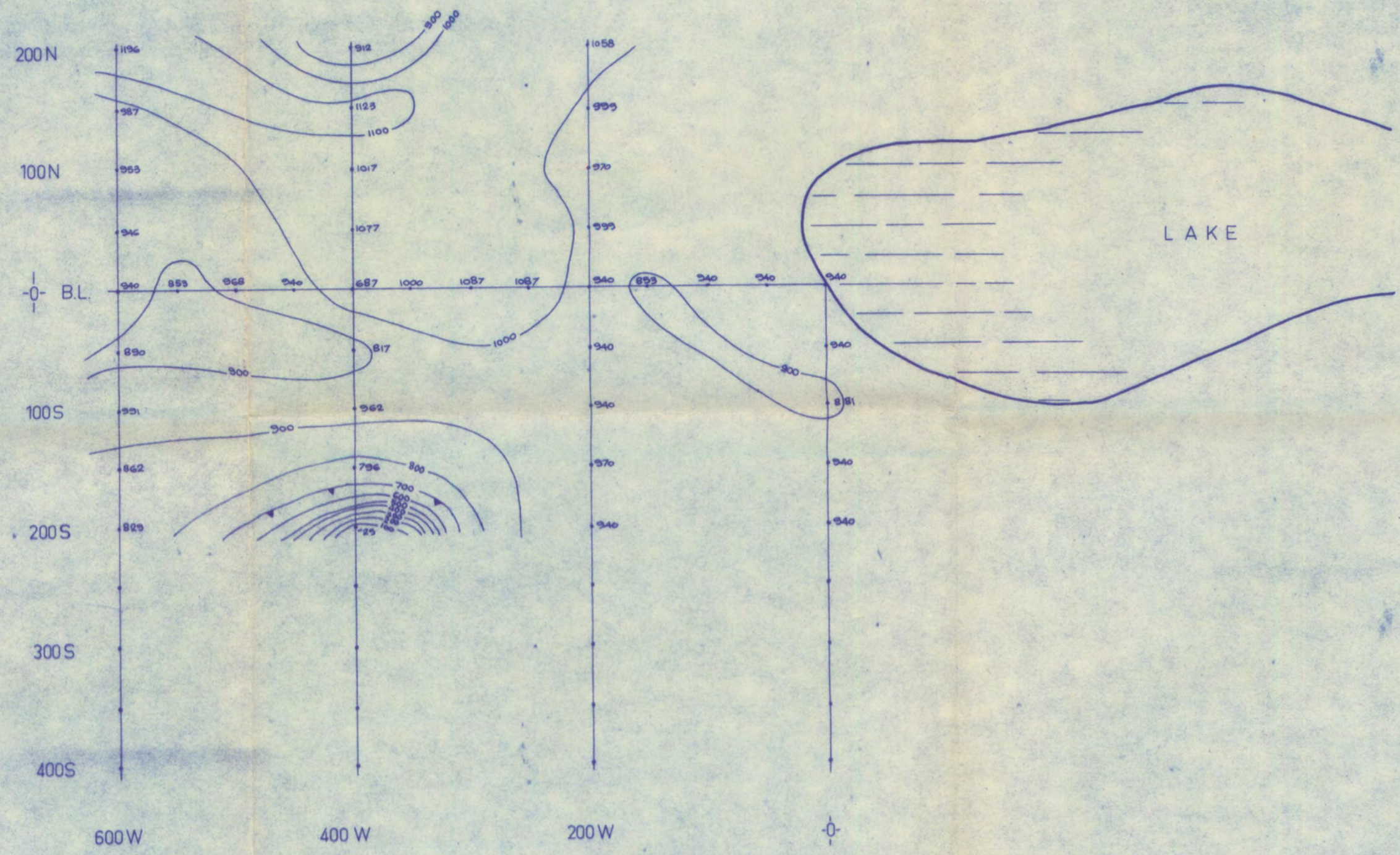
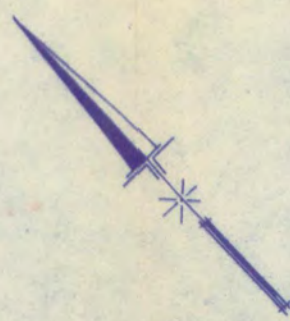
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ROSS RIVER Y.T.
HESS REGION
BOX MINERAL CLAIM GROUP
MANGANESE CONTOURS

Drawn by: P.J.F. VLASVELD
Date: July 1969
100 0 100 200
scale in feet



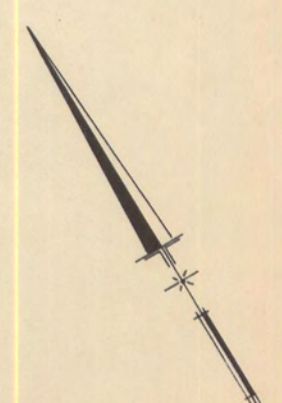
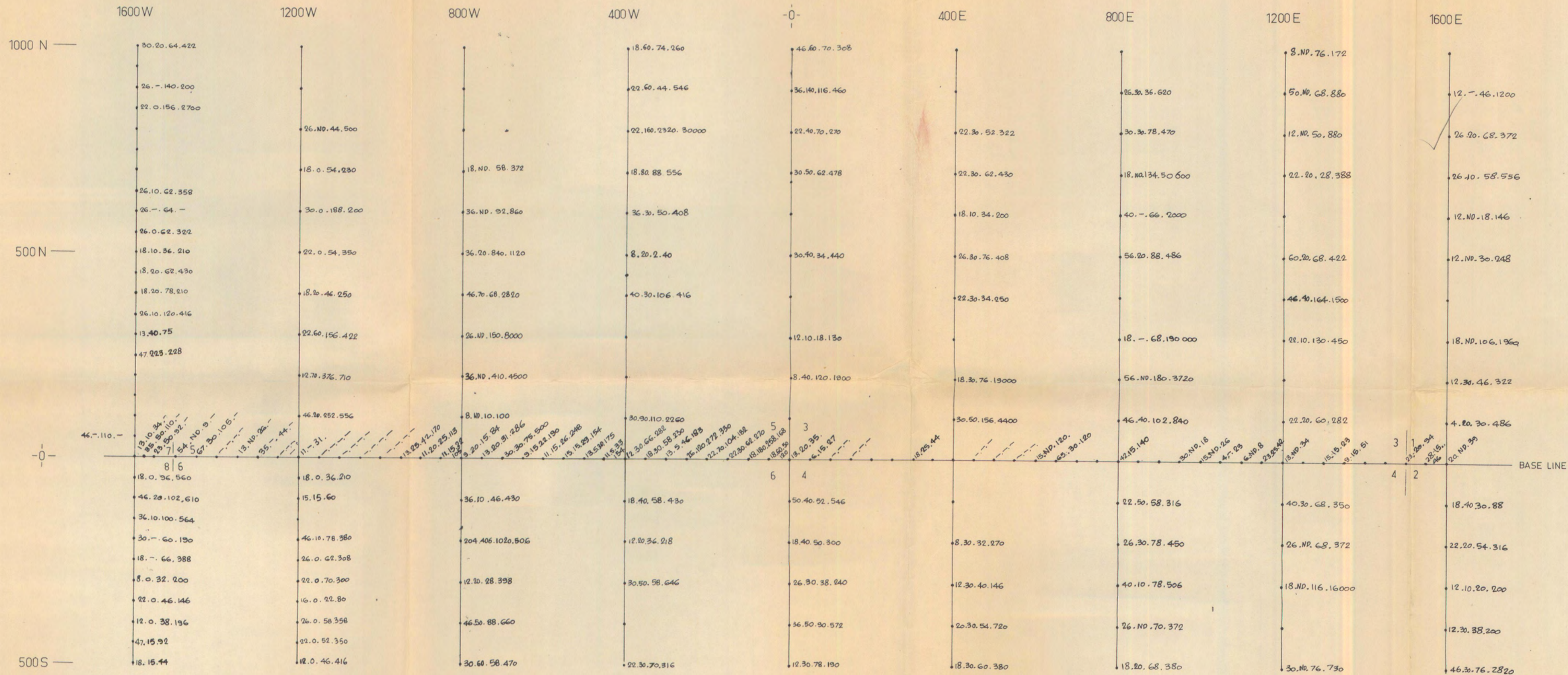
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HESS REGION
BOX MINERAL CLAIM GROUP
ZINC CONTOURS

Drawn by: P.J.FVLASVELD
Date: July 1969
100 0 100 200
scale in feet



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HESS REGION
BOX MINERAL CLAIM GROUP
GROUND MAGNETOMETER SURVEY
VALUES AND CONTOURS

Instrument: JALANDER W505 Contour interval 100 gamma's Drawn by: P.J.F. VLASVELD
Operator: W. THOMAS Date: June 1969
100 0 100 200
scale in feet



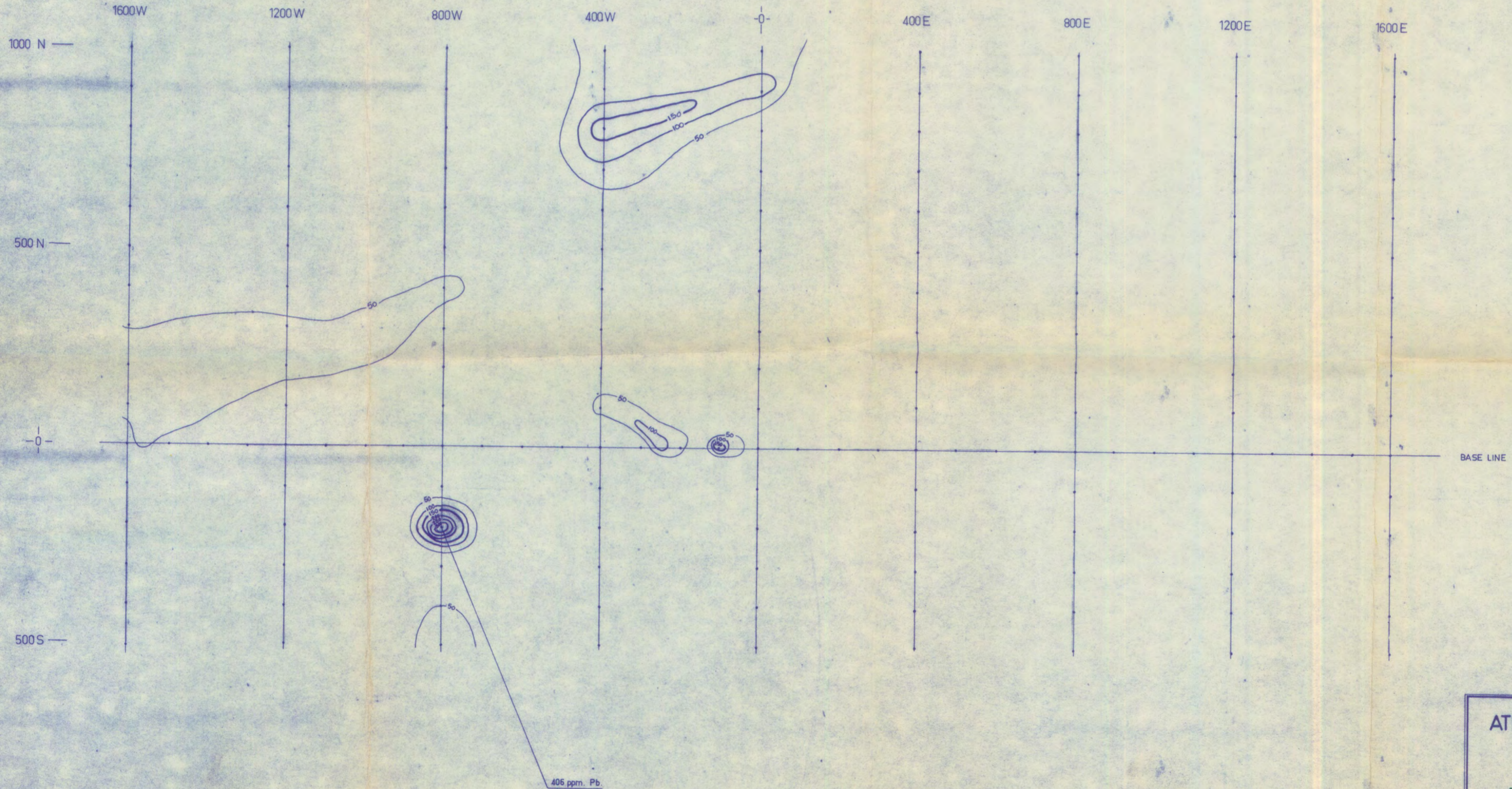
Cu,Pb,Zn,Mn.

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 HESS REGION
 MAY MINERAL CLAIM GROUP

GEOCHEMICAL RESULTS BY ATOMIC ABSORPTION
 SPECTROPHOTOMETER ANALYSIS

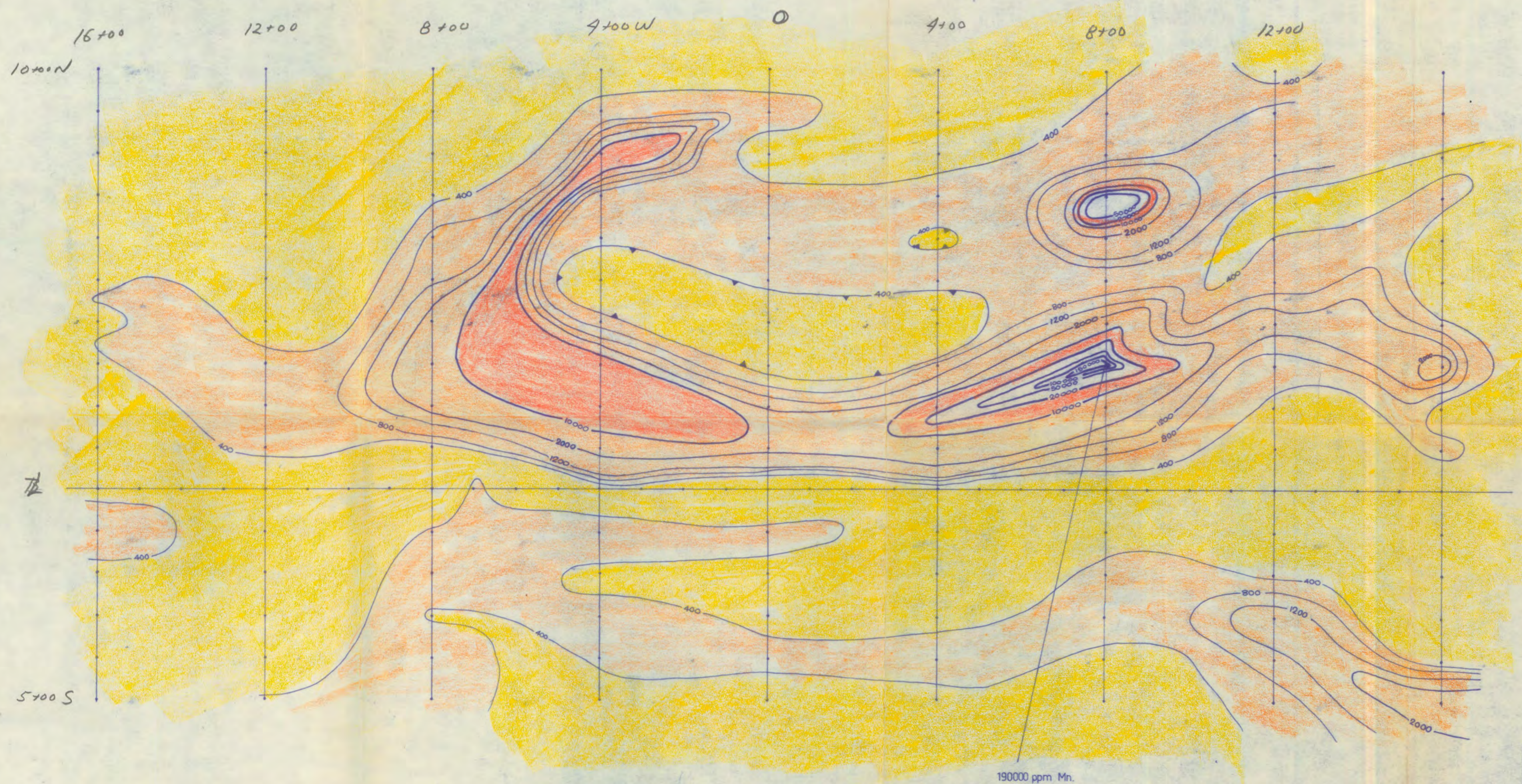
Sampler: G.HAINEAULT Drawn by: P.J.F.VLASVELD
 Date: June 16/69

200 0 200
 scale in feet



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 MAY MINERAL CLAIM GROUP
 LEAD CONTOURS

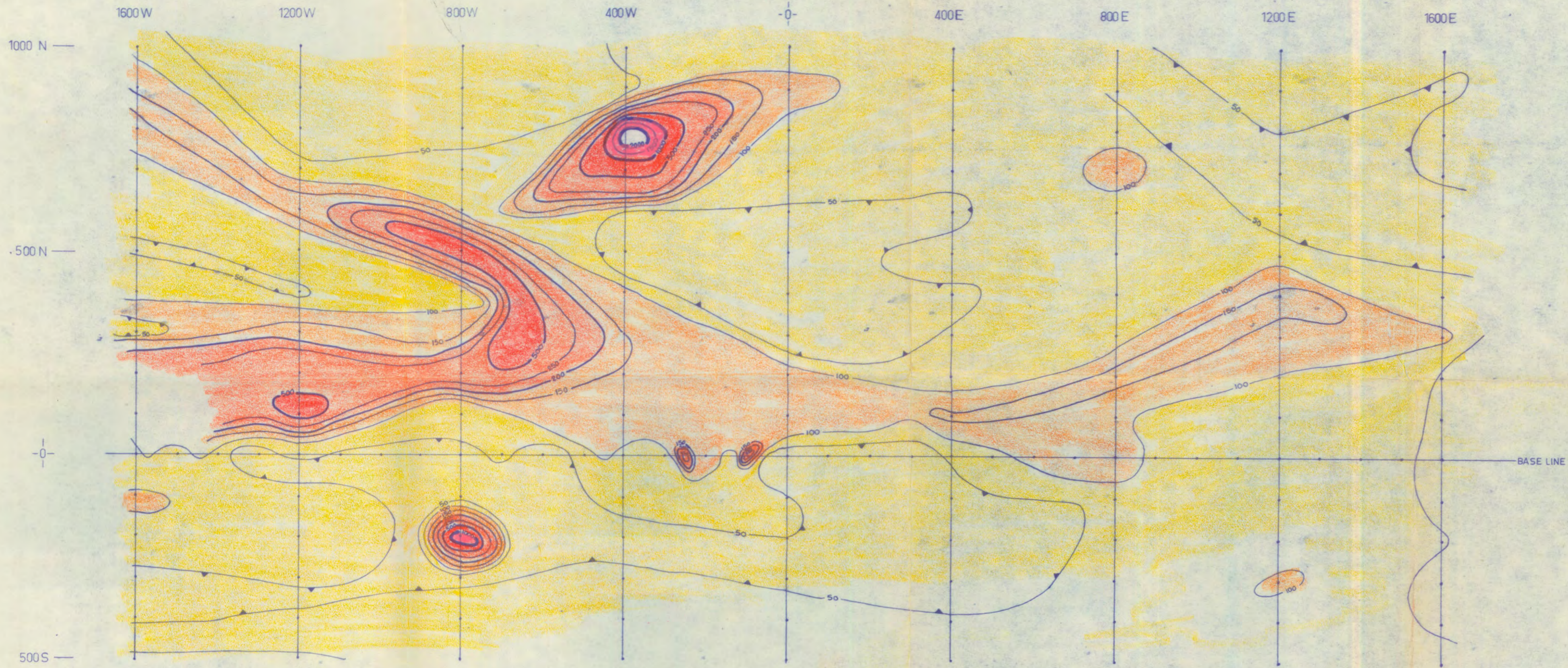
Contour interval 50 ppm. Drawn by: P.J.F. VLASVELD
 200 0 200 400
 Scale in feet



190000 ppm Mn.

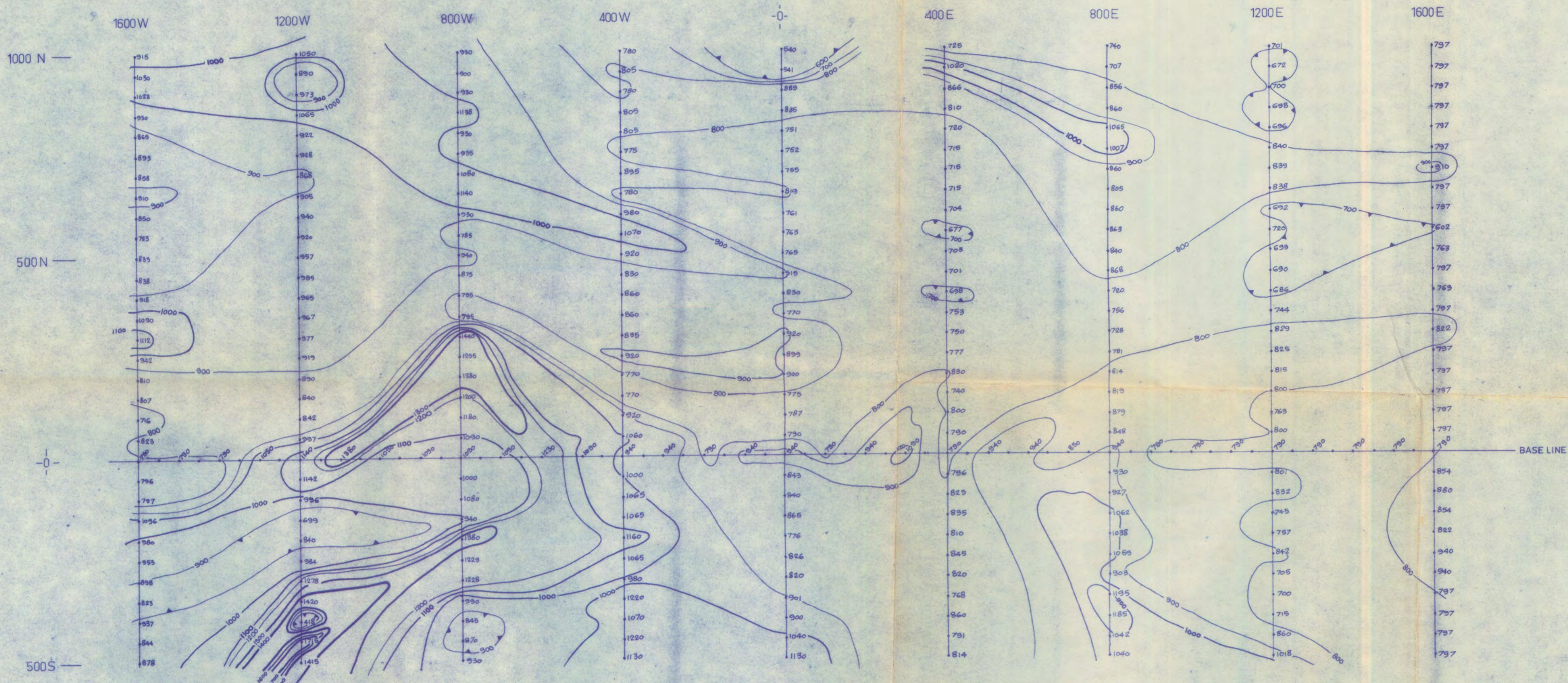
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 MAY MINERAL CLAIM GROUP
 MANGANESE CONTOURS

DRAWN BY: P.J.F. VLASVELD
 Date: July 1969
 200 0 200 400 ft.



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 ZINC CONTOURS

Contour interval: 50ppm. 0 → 250 500ppm. 500 → Drawn by: P.J.FVLASVELD
 200 0 200 400
 Scale



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 MAY MINERAL CLAIM GROUP
 GROUND MAGNETOMETER SURVEY

Instrument: JALANDER W505 Contour interval 100 gam. Drawn by: P.J.F. VLASVELD
 Date: July 16, 1969

200 0 200
 scale in feet