

FILE NTS.
105-J-15.

IVOR GROUP PRELIMINARY REPORT

The Hess Properties crew spent from June 10 to June 20 evaluating the Ivor Group. The crew consisted of a geologist, two soil samplers, two line cutters and a cook. The purpose was to investigate an area of high zinc values obtained from reconnaissance soil and gossan sampling.

The area was geologically mapped. A grid was cut over the most promising area on the basis of the reconnaissance soil geochem. Soil sampling and rock geochem sampling were carried out over this grid. Silt samples were taken from all drainages on and in the vicinity of the claim group.

Geology

All rock units (sedimentary) in the Ivor Group area are Ord.-Dev. in age.

Unit 3a is the most abundant. It is composed mainly of black graphitic chert. This chert varies from massive to quite well bedded. In many locations the chert is quite fractured. Weathered surfaces vary from bluish-grey to rusty in colour. Another important component of unit 3a is finely bedded, very fissile, black graphitic shale and slate. Also found in 3a, but in only very minor quantities are grey to black argillite and rusty medium grained greywacke.

Unit 3d is found in the northeast and northwest of the claim group. This is a chert-black slate fragment conglomerate (grading into a breccia on the basis of angularity of fragments). It is generally a very tough, hard, compact rock, but in some

locations, especially near the contact with 3a, it is quite porous, poorly cemented, and rusty.

The only other sedimentary unit noted in the area was unit 3f which is a light to medium grey, well bedded chert.

The stratigraphic relationship between the above units is not known.

The rocks are all moderately to steeply dipping, and striking approximately northwest to the southeast of the group, and swinging over to about 100° in the claim group area.

No major fault or fold structures were noted.

No sulfide mineralization of any description was seen in the map area.

Geochemistry

Soil samples were taken at 200' intervals on the grid. Where possible, rock geochem samples were taken at the same locations. Because of a general lack of outcrop in the grid area, in many cases the rock samples are from rubble in the soil sample hole. However, every attempt was made to only collect rock samples that appeared to be very close to in situ.

A zinc geochemical anomaly in soils was outlined in the south central part of the grid. This anomaly is about 3600' long, varies from 400 - 1000' wide, and has a peak value of 4600 ppm Zn. Two much smaller lower valued anomalous zones are located to the northeast of the major zone.

It was hoped to be able to relate the high zinc values in the soil to high background values in the graphitic material of unit 3a. However, it appears that there is no noticeable difference in zinc background between units 3a and 3f, and that the

relatively uncarboniferous unit 3d has a higher Zn background.

Only one rock geochem sample could be obtained from the area of the main soil anomaly and this was on the extreme northern boundary of the anomaly. At this point, the soil values were (110, 450) and the rock, a graphitic black chert had values of (36,94), definitely not anomalous. This lack of correlation between zinc values in the rocks and soil is also seen in the small anomaly immediately northeast of the main anomaly. Zinc in the soil is up to 1620 ppm, while the rock value is only 64 ppm. The next small anomalous zone to the northeast is the only place where high values in the soil and rocks coincide (soil 70, 460; rock 1400, 1240). The rock was a rusty weathering black chert with a number of small quartz veinlets. No sulphide mineralization was seen.

Silt samples were taken from all drainages in the claim group vicinity. Erratic high zinc values were obtained from the entire area. However, some locations deserve special mention. Two small drainages off the southeast end of the main soil geochem anomaly gave high zinc values.

Silts from the headwaters of the creek west of the claim group gave very anomalous zinc results (peak 4500 ppm). No other work has been done in this area.

Silts surrounding the gossan $2\frac{1}{2}$ miles south-southeast of camp also gave very high values. This area has been prospected but there is little outcrop. Only units 3a and 3f were noted.

Conclusions and Recommendations

No sulfide mineralization was seen in the map area.

A large, and as yet, unexplained zinc anomaly was outlined in the south central grid area.

The graphitic unit 3d, as seen in the rock geochem samples taken, does not have a noteable high zinc background.

High zinc silt values were obtained from two areas that have not received extensive work.

I feel the following additional work should be done over the main soil geochem anomaly:

- additional lines cut (400' spacing)
- mag.
- E. M.
- test pits down to bedrock over main target area

The high silt values in the gossan area southeast of the claim group would seem to justify more work in this area - possibly a small cut grid over which soils and a magnetic survey could be run.

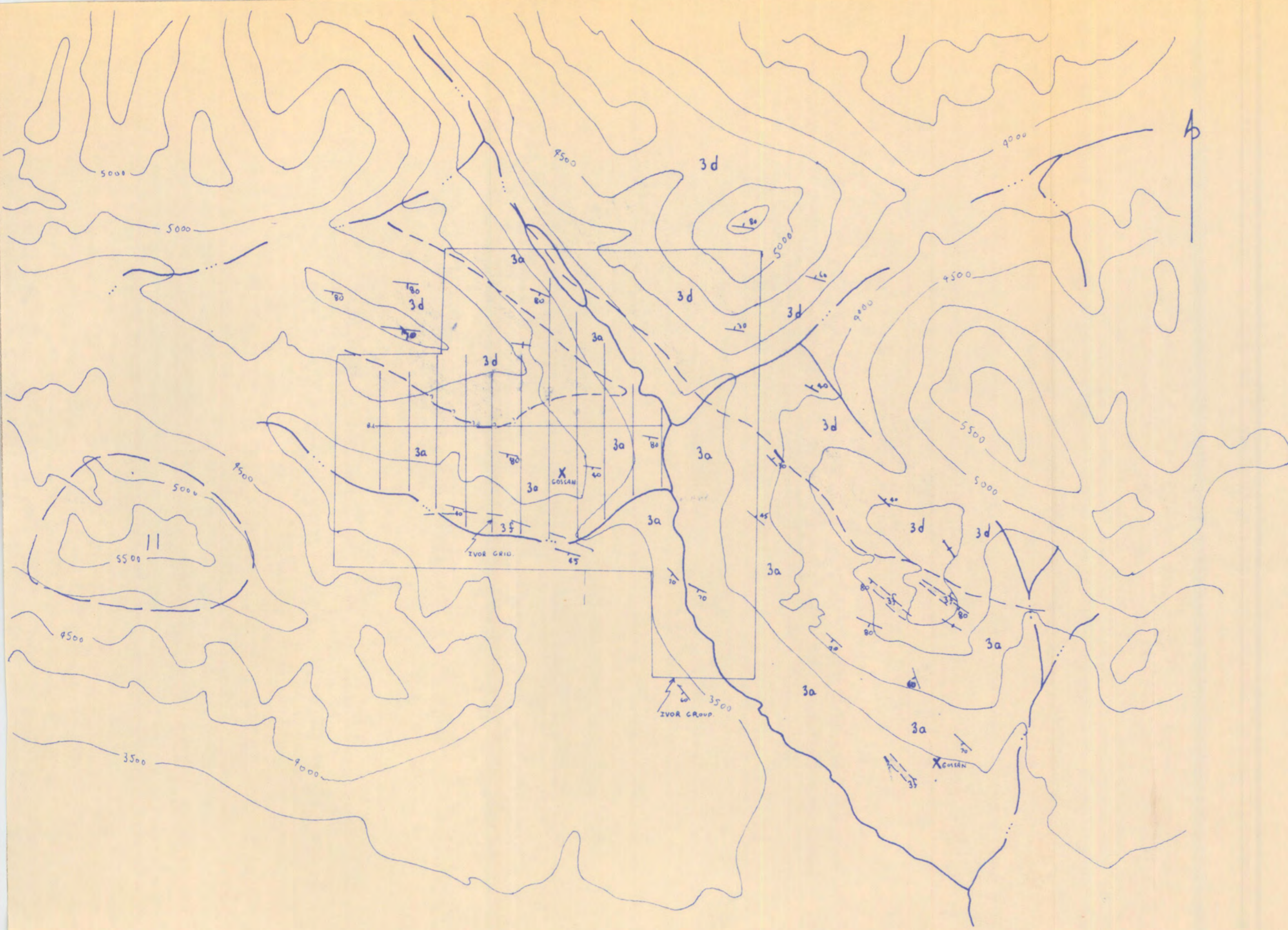


IVOR GROUP KEY MAP CLAIMS & GRID

Scale: 1" = 1/2 Mile

Claim Sheet 105-J-15





ATLAS EXPLORATIONS LTD.
ROSS R., Y.T.

IVOR GROUP
GEOLOGY.

SCALE : 1" = 1/2 MILE
GEOLOGIST : T. ADAMSON
DATE : JUNE, 1968.

LEGEND

- 11 GRANITIC INTRUSIVE
- 3f GREY BEDDED CHERT
- 3d CHERT PEBBLE CONGLOMERATE
- 3a BLACK CHERT, BLACK SLATE, ARGILLITE, GREYWACKE.

SYMBOLS

- CONTACT
- ┐ BEDDING ATTITUDE.



LEGEND

- CRETACEOUS { 11 GRANITIC INTRUSIVE
- { 3f GREY BEDDED CHERT
- ORDOVICIAN { 3d CHERT PEBBLE CONGLOMERATE
- DEVONIAN { 3a BLACK CHERT, BLACK SLATE
 ARGILLITE, GREYWACHE

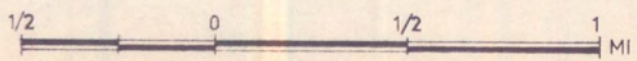
SYMBOLS

- CONTACT
- ∨ BEDDING ATTITUDE

ATLAS EXPLORATIONS LIMITED
 ROSS RIVER (Y.T.)
 HESS REGION
 IVOR MINERAL CLAIM GROUP
 GEOLOGY

GEOLOGY BY: T. ADAMSON

DRAWN BY: T. ADAMSON
 DATE: JUNE 1968



DARBY CAMP COAL SHEET AREA

SHEET 105 J-15

LATITUDE 62° 45' TO 63° 00'
LONGITUDE 130° 30' TO 131° 00'

(1967)

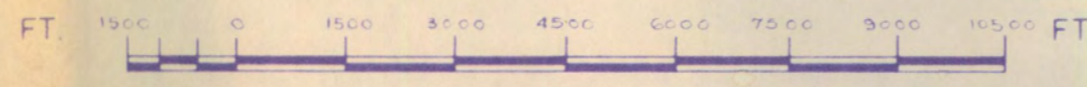
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NOTICE

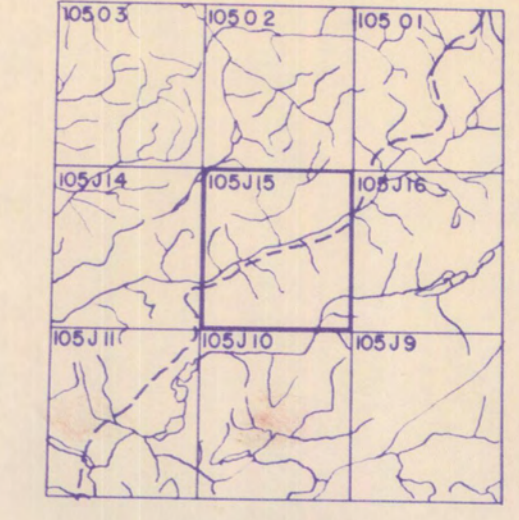
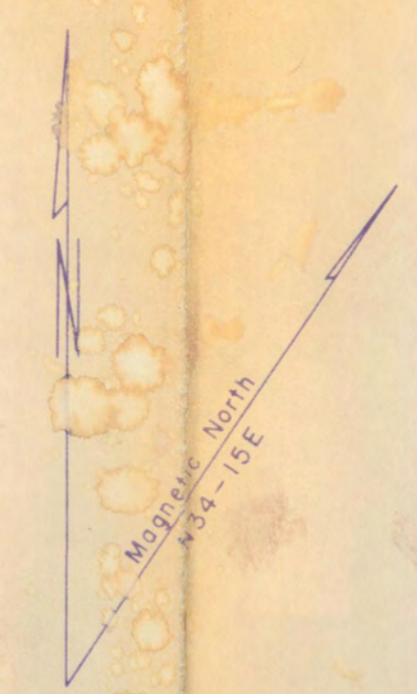
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NORTHERN ADMINISTRATION AND LANDS BRANCH
LANDS DIVISION

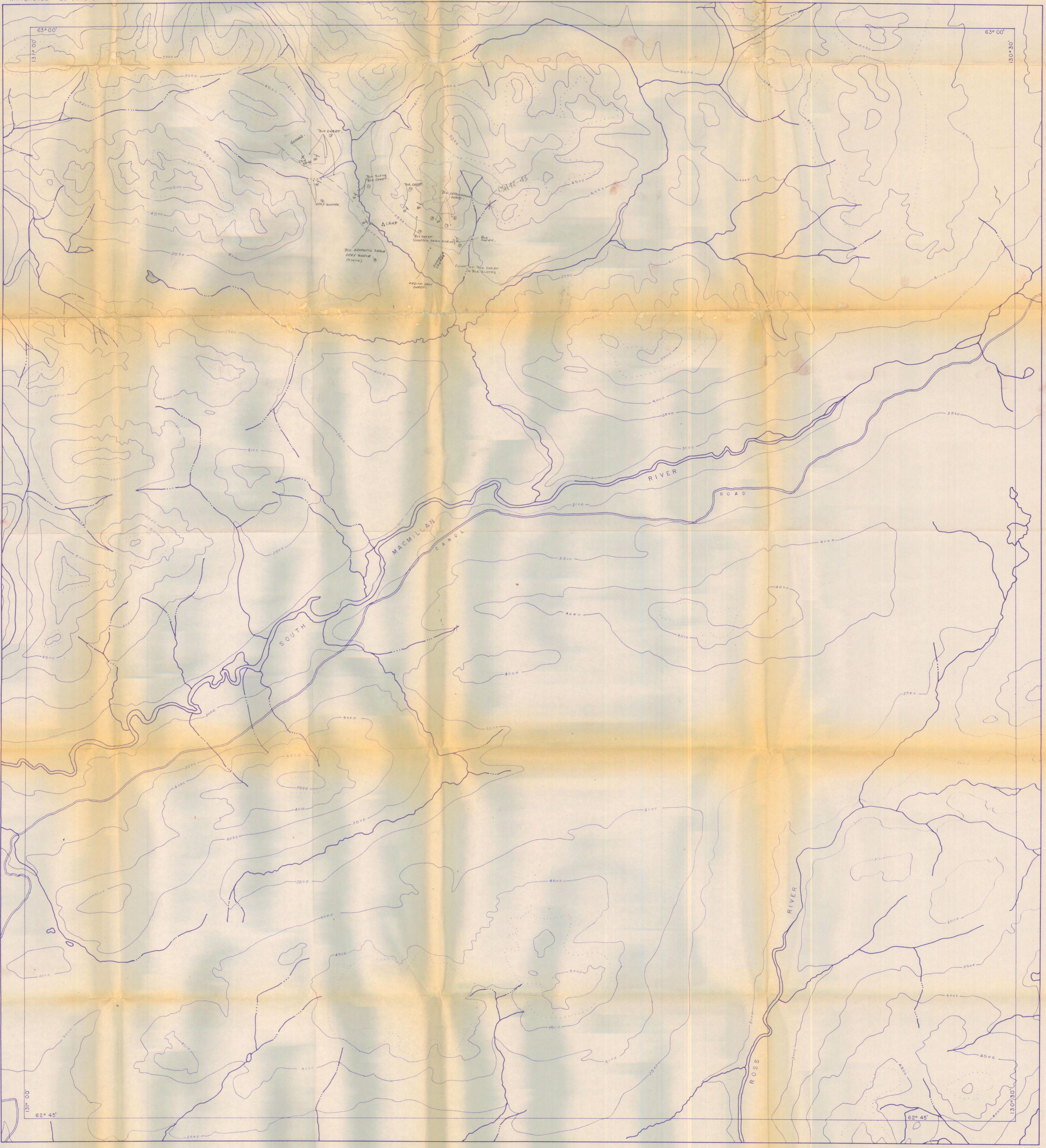
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WHITEHORSE 26 JUNE 57



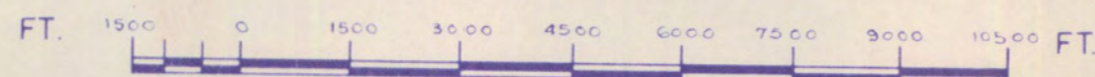
Geological Field Sheet
Original Work
1967

SHEET 105 J-15

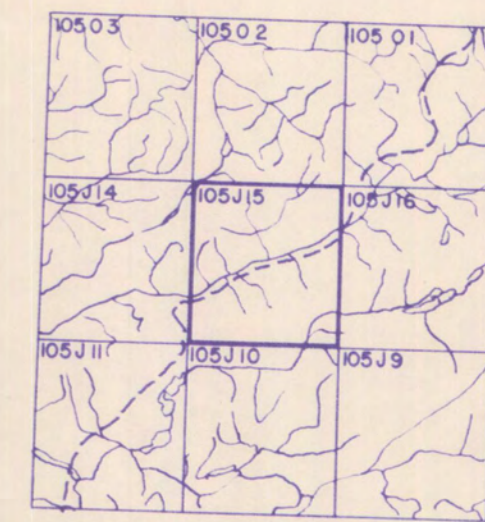
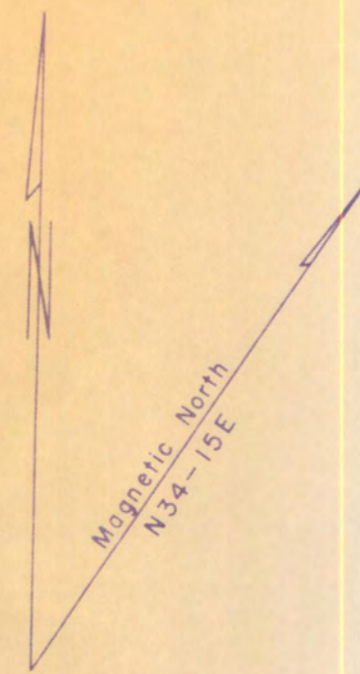
LATITUDE 62°45' To 63°00'
LONGITUDE 130°30' To 131°00'

CANADA
DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
NORTHERN ADMINISTRATION AND LANDS BRANCH
LANDS DIVISION

SCALE: 1/2 MILE TO 1 INCH

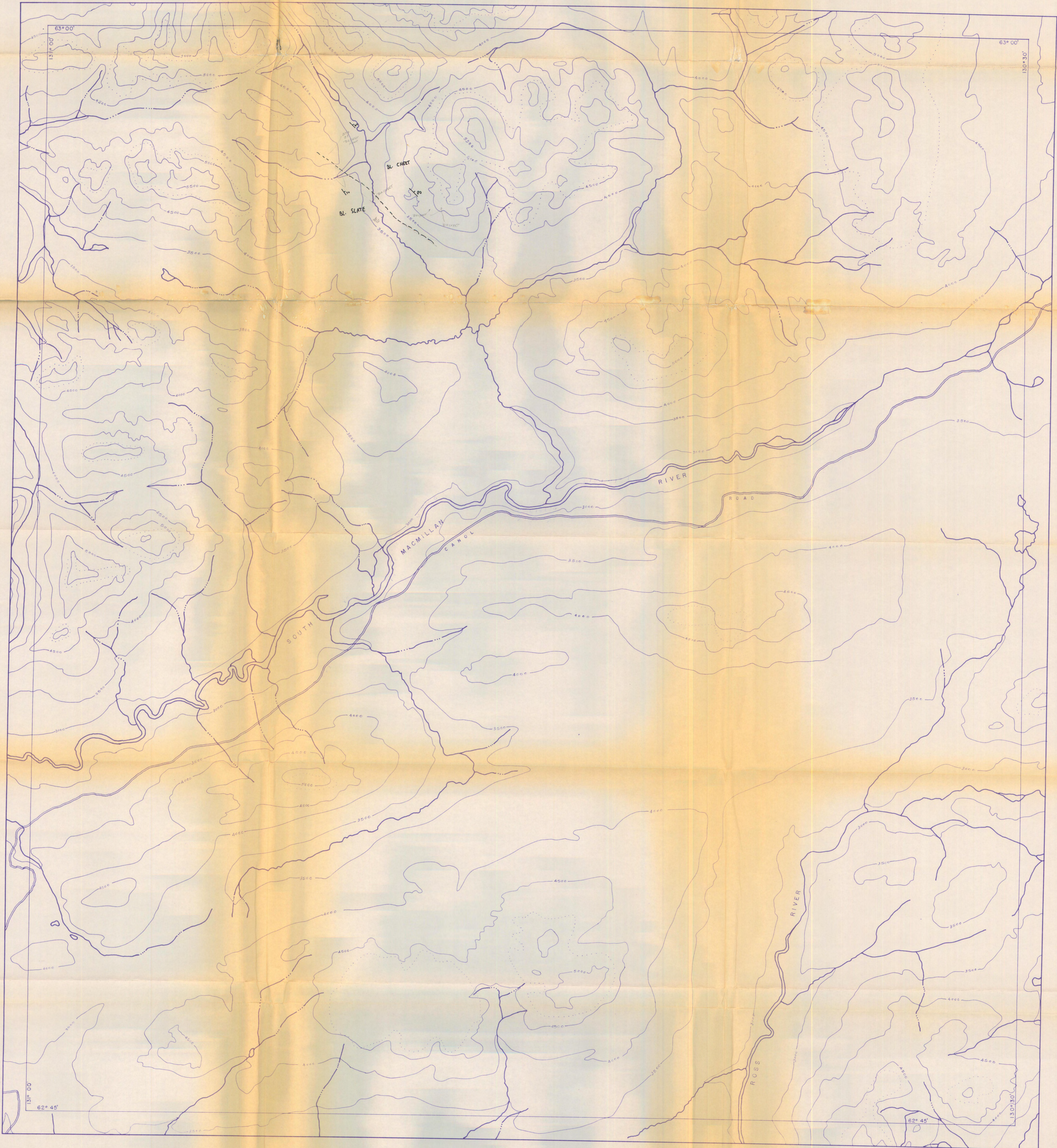


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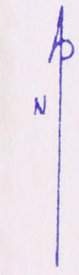


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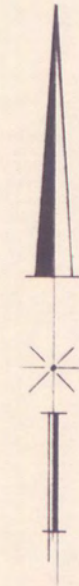
ATLAS EXPLORATIONS LTD
ROSS RIVER, Y.T.



IVOR GROUP AREA
GEOCHEMICAL VALUES (SILTS)
(Cu, Zn ppm)

SCALE : 1" = 1/2 MILE
SAMPLERS : M. SIMPSON
 T. BROCK
PARTY CHIEF : T. ADAMSON
DATE : JUNE, 1968.





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HESS REGION
IVOR MINERAL CLAIM GROUP
 GEOCHEMICAL RESULTS BY ATOMIC ABSORPTION COPPER, LEAD,
 AND ZINC. SPECTROPHOTOMETER ANALYSIS.
 -SILT SAMPLE VALUES-

PARTY CHIEF: T. ADAMSON
 SAMPLERS: M. SIMPSON
 T. BROCK

DRAWN BY: T. ADAMSON
 DATE: JUNE 1968

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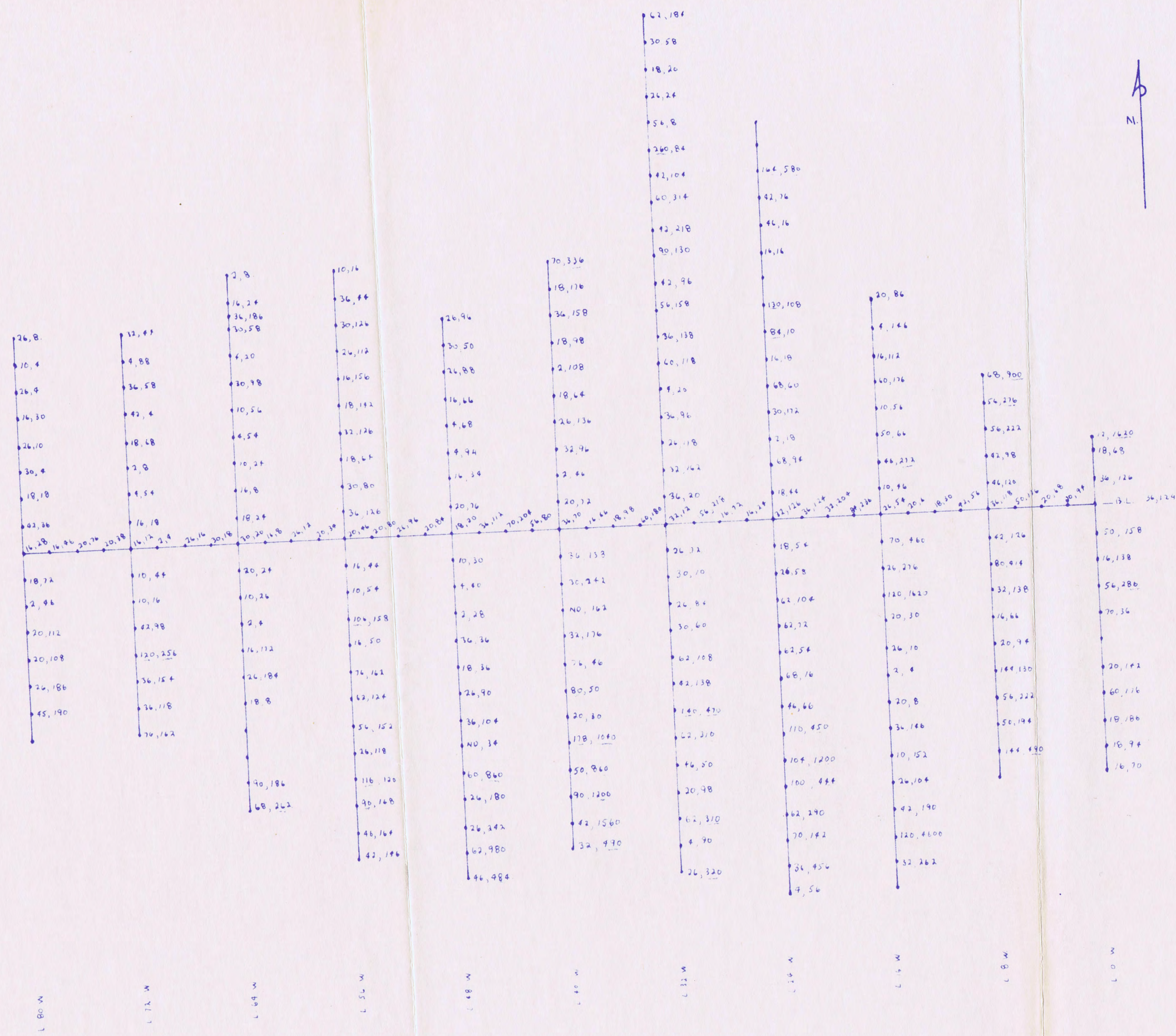
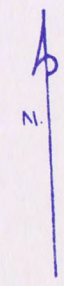
IVOR GROUP GRID
GEOCHEMICAL VALUES (Soils).
(Cu, Zn ppm)

SCALE 1" = 800'

SAMPLERS : M. SIMPSON
 : T. BROCK

PARTY CHIEF: T. ADAMSON

DATE : JUNE, 1968.

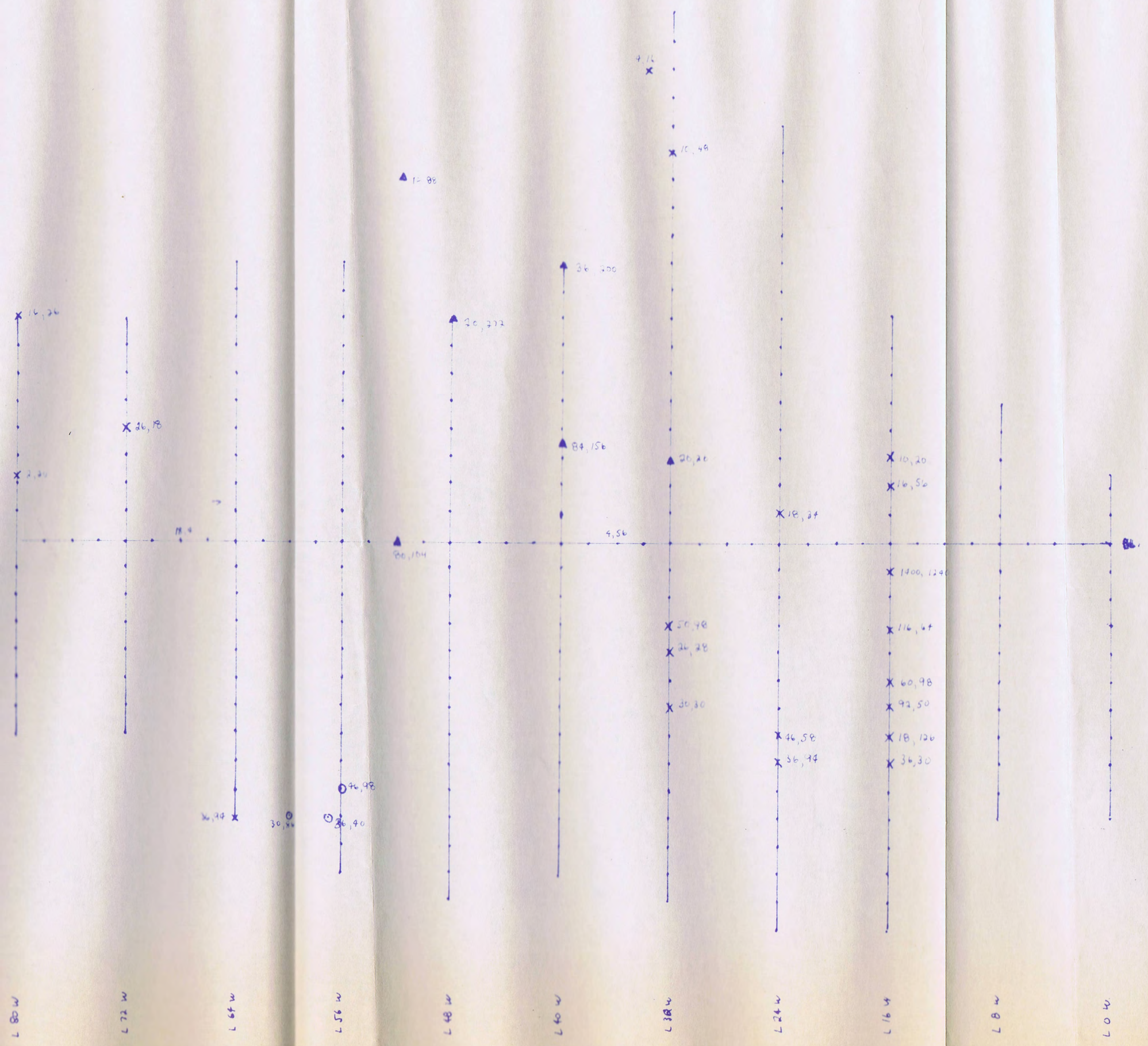


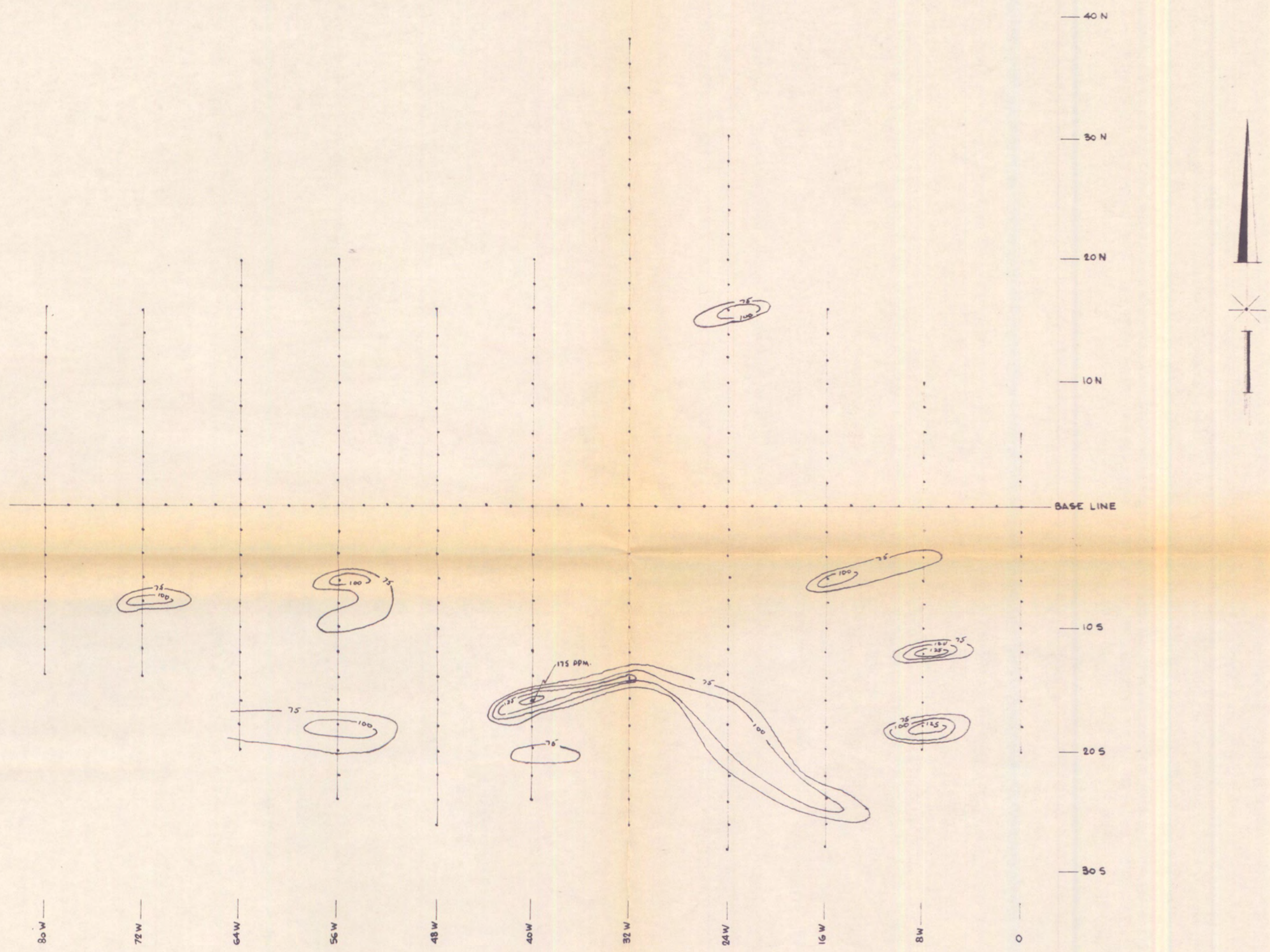
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IVOR GROUP GRID
GEOCHEMICAL VALUES (ROCKS
(Cu, Zn ppm)

SCALE 1" = 800'
 SAMPLERS M SIMPSON
 T BROCA
 PARTY CHIEF T. ADAMSON
 DATE JUNE, 1968

ROCK GEOCHEM SAMPLES
 X 3a, BLK CHERT, BLK SLATE
 ▲ 3b, CHERT PEBBLE CONGLOM
 ○ 3c, GREY BEDDED CHERT



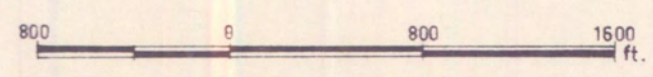


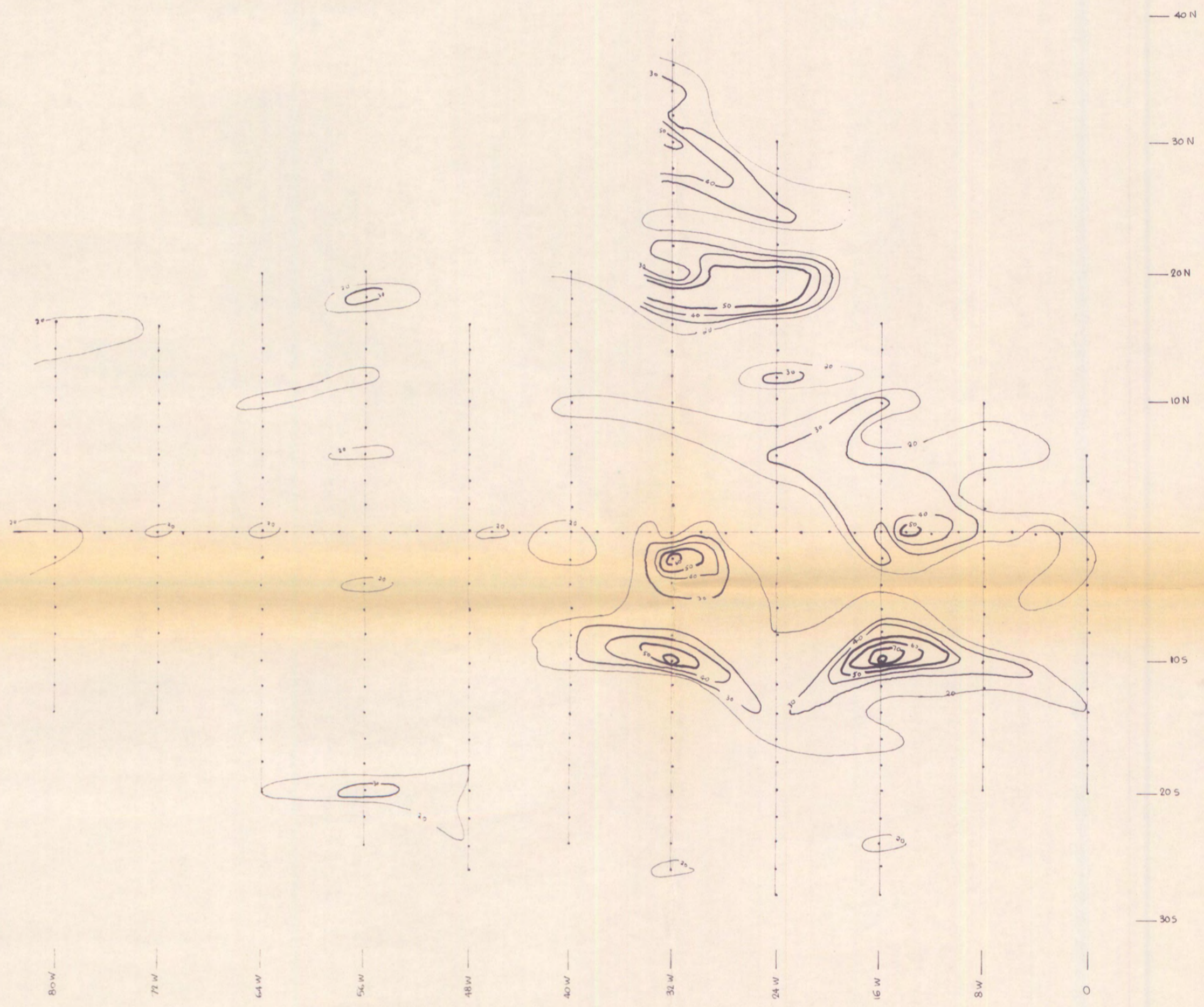
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 HESS REGION
 IVOR MINERAL CLAIM GROUP

Cu CONTOUR MAP

PARTY CHIEF: T. ADAMSON
 SAMPLERS: M. SIMPSON

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 DATE: JUNE 1968

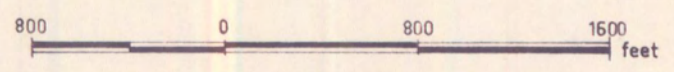


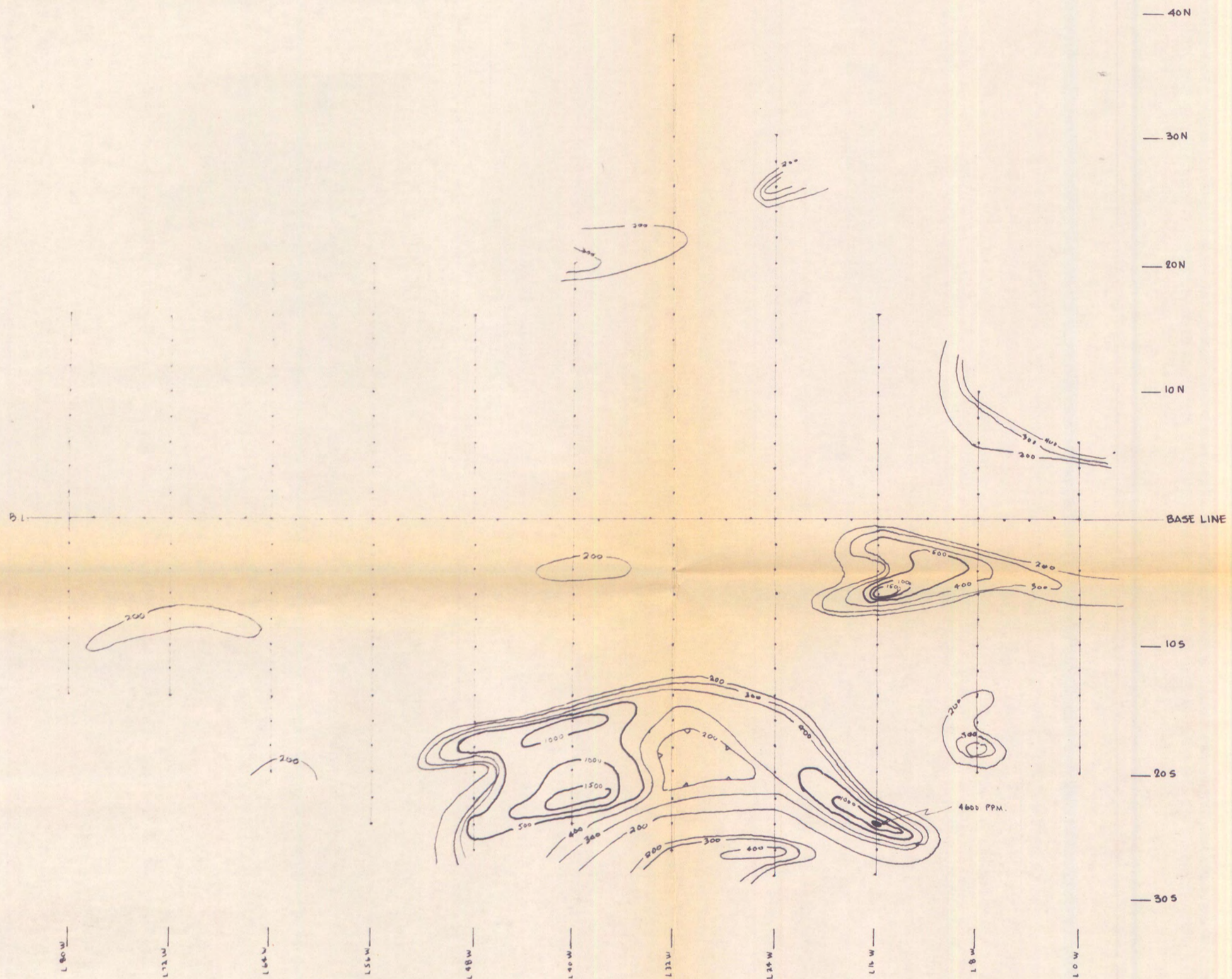


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 IVOR MINERAL CLAIM GROUP
Pb CONTOUR MAP

PARTY CHIEF : T. ADAMSON
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 T. BROCK

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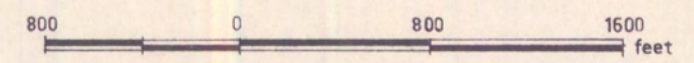




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 Zn CONTOUR MAP

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 T. BROCK

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ROSS RIVER, Y.T.

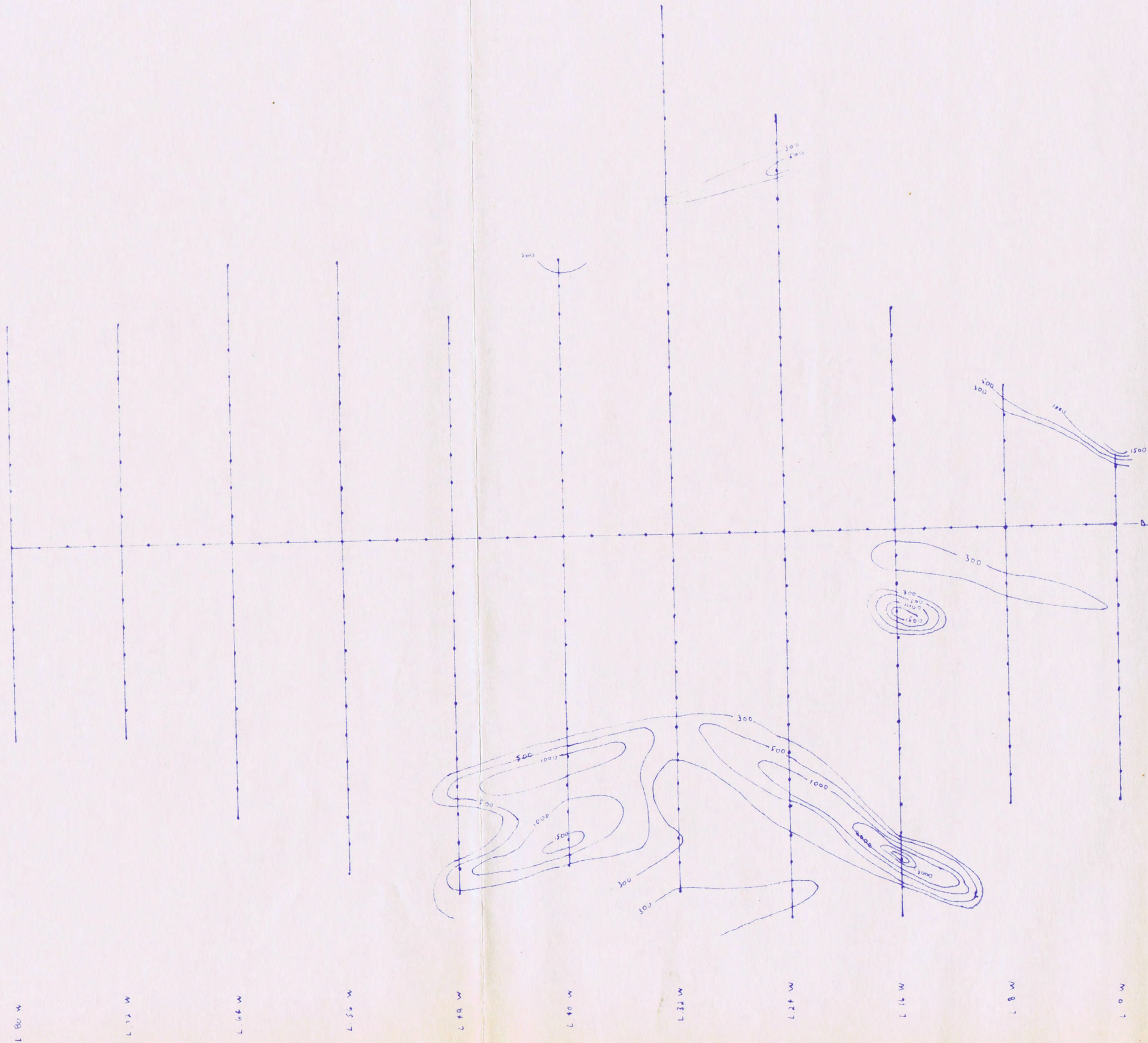
IVOR GROUP GRID
Zn. CONTOURS. (SOILS)
ppm

SCALE 1" = 800'

SAMPLERS : M SIMPSON
 : T. BROCK

PARTY CHIEF: T. ADAMSON

DATE : JUNE, 1968.





PLOTTED ON GEOCHEM MAP
JULY 30/68 ϕ

105-J-15

COATES
& ARTEAGA