

84-1045-13062

GEOCHEMICAL REPORT
ON THE
TOPPER PROPERTY
NTS 93A/7
CARIBOO MINING DIVISION
LATITUDE 52° 17'
LONGITUDE 120° 44'

FOR

Grand National Resources Inc.

915 - 470 Granville St.

Vancouver, B.C.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,062

November 10, 1984

Box 63

Westbridge, B.C.

Roy Kregosky

BSc. Geology

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BRITISH COLUMBIA

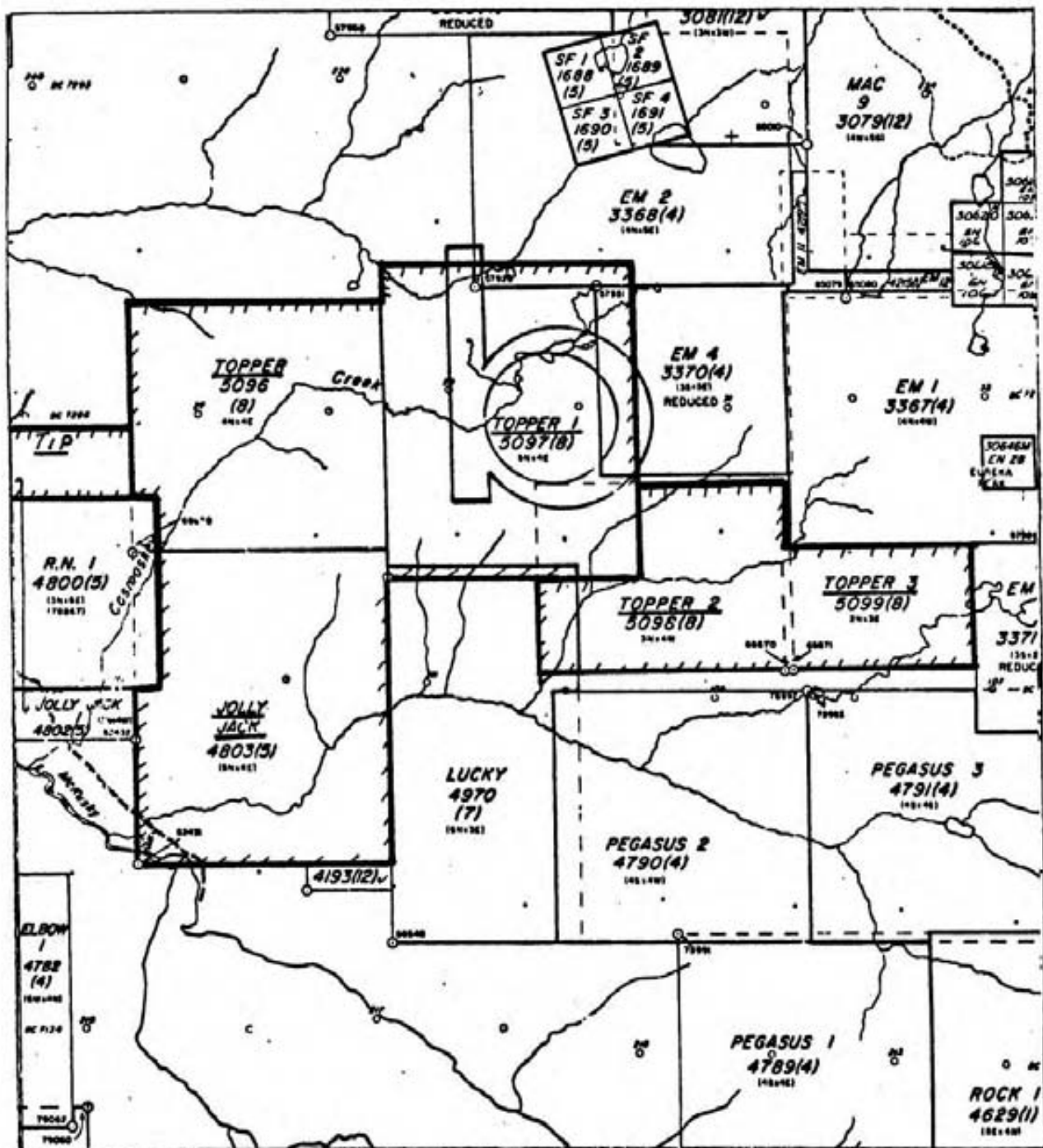
LOCATION MAP



Monashee
Geological
Services

Grand National Resources Inc
Topper Group

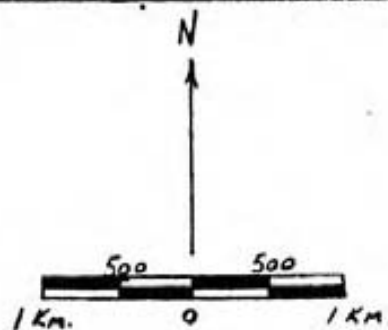
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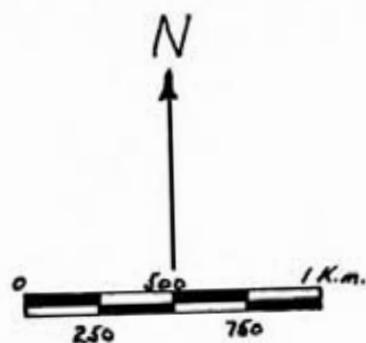
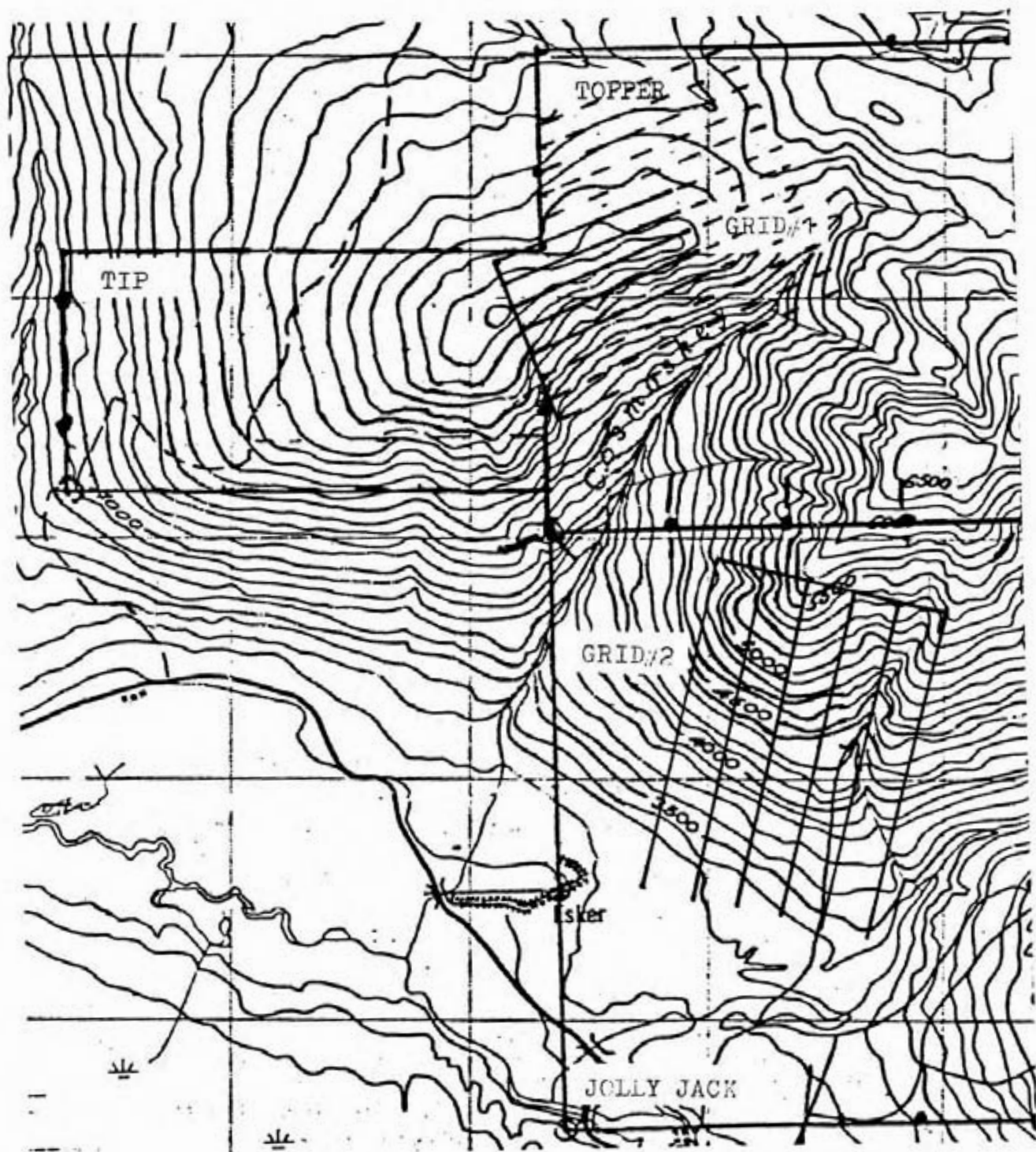
claim location map

nts 93A/7

Topper Group



SCALE 1: 50,000



SCALE 1:25000

Topper Group
Survey Location

--- GRID EXTENSION

fig. 3

INTRODUCTION

The Topper claim group is located approximately 95 kilometers northeast of 100 Mile House, B.C. (fig.1) at the Northern end of Crooked Lake. Access is from B.C. Highway 97 to the Canim Lake/Hendrix Lake Road and further to the McKusky Creek Road at Crooked Lake.

The property (fig.2) is located on southwesterly trending ridges which form part of Eureka Peak at an elevation of 2427 meters. Exposures are either southerly or northerly with elevations ranging from 933 meters at Crooked Lake to over 2000 meters in some of the eastern sectors. The majority of the claims occupy an old forest fire burn area and is covered in dense growths of coniferous and deciduous trees. Central and eastern portions of the Topper claims extend above the tree line. Access on the property is poor due to dense secondary growth and steep relief. An old logging road gives limited access to the Tip and northern portions of the Topper claims. There is sufficient water and timber resources available for exploration and development purposes.

PROPERTY HISTORY

The Topper Group (fig.2) is comprised of 6 contiguous claims totalling 82 units as outlined in the following chart:

<u>CLAIM</u>	<u>RECORD NUMBER</u>	<u>RECORD DATE</u>	<u>UNITS</u>
Jolly Jack	4803	May 3/83	20
Topper	5096	Aug. 22/83	16
Topper 1	5097	Aug. 22/83	20
Topper 2	5098	Aug. 22/83	12
Topper 3	5099	Aug. 22/83	6
Tip	6001	Apr. 19/84	8

Except for the Tip claim which is owned by World Cement Industries Inc. of Vancouver, B.C., all of the claims are currently registered to Grand National Resources Inc. of 915-470 Granville St., Vancouver, B.C.

Previous development in the area was mainly carried out in the vicinity of Eureka Peak. Exploration centered on intrusive diorites for porphyry copper deposits. Frasergold Creek was reported by the annual Ministry of Mines Report for 1902 to have placer gold occurrences. A brief examination of assessment reports failed to find any record of mining or exploration work within the claim area.

PROPERTY GEOLOGY

According to R.B. Campbell's 1978 geological map of the Quesnel Lake area (93-A), the Topper claims are located in the Quesnel Belt of the Omineca Crystalline Belt of the Intermontane region. This belt is underlain by Triassic basic volcanics and tuffs which are overlain by upper Triassic phyllites, quartzites and argillites of the Quesnel River Group. The property is situated along the southwestern limb of a northwesterly trending syncline. The axis of the syncline parallels the McKusky and MacKay River valleys. Geological examinations on the claim observed numerous small scale structures, lineations and foliations in the phyllite units which are associated with the syncline. The Topper Group is staked over possible extensions of the stratigraphically and structurally controlled gold bearing phyllites as reported by Eureka Resources/Amoco Canada and their Frasergold property.

GEOCHEMICAL SURVEY

This survey (fig.4-9) on the Topper Group was conducted from October 9 to October 14, 1984. The work was carried out by the author, plus a prospector; Mr. M. Schram of Ollala, B.C. and one field assistant Mr. R. Schram of Nanaimo, B.C.

The geochemical survey conducted on the Topper claim consisted of extending a grid that was established in July, 1984 (fig.3). The results from which have been documented and registered in the appropriate assessment report. The continuation of the grid consisted of extending the existing lines further to the east, as well as the addition of lines in a northerly and southerly direction. The original bearing of the crosslines (160°) and baseline (70°) and station interval (50 meters) were maintained. In all, an additional 11 line kilometers were established with 228 soil samples being collected.

The majority of the soil samples were collected from the 'B' soil horizon (5-20 cm deep), hand sorted for rock and organic material and placed on numbered Kraft paper envelopes. The samples were analyzed for Cu, Pb, Zn, Ag and Au after being dried and sieved to -80 mesh. Copper, lead, zinc and silver values in p.p.m. are determined from a 0.50 gram sample which is digested by hot Aqua Regia and analyzed by Inductively Coupled Argon Plasma (I.C.P.). Gold values in p.p.b. are obtained from a 10 gram sample which has the hot Aqua Regia digests analyzed by Atomic Absorption.

Due to the considerable amount of additional information obtained, the Cu, Pb, Zn and Ag results from the two survey periods were combined and re-analyzed statistically resulting in a new set of parameters. The gold values were treated subjectively. Threshold values for each element were taken to be the mean plus two standard deviations. The results are outlined in the following table:

	<u>CU</u>	<u>PB</u>	<u>ZN</u>	<u>AG</u>	<u>AU</u>
Population	308	313	298	302	313
Mean	45.7	12.7	124.3	1.2	
Standard Deviation(S.D)	29.4	7.3	96.7	.8	
Background	≤46	≤13	≤124	≤1.2	5-14
High Background(1S.D.)	75-104	20-26	221-317	2-2.7	15-19
Anomalous(2S.D.)	105-133	27-34	317-413	2.8-3.5	20-39
Highly Anomalous(3S.D.)	≥134	≥35	≥414	≥3.6	>40

Values of greater than 150 p.p.m. copper (5), 500 p.p.m. zinc (15) and 4.0 p.p.m. silver (11) were omitted from the calculations to avoid erroneous geochemical levels.

TECHNICAL DATA AND INTERPRETATION

The geochemical survey conducted during October on the Topper claim gave a better outline and definition to the anomalous zones which were first encountered during the summer.

As can be noted from figures 4-9 a northerly trending regional anomaly is outlined which extends from L5+00S to L6+00N (1.1 kilometers) and has a maximum width of approximately 700 meters. This regionally distributed zone (fig.9) is superimposed by a number of smaller anomalies which, for the most part, consist of multi-element occurrences. These smaller, scattered anomalies (fig.4-9) are mainly located in the south central portion of the grid. Their occurrence is related to their residual soil development resulting from a sharp break in slope parallel to L0+00. This slope break consists of moderately high cliffs of black phyllites which drop onto an open, southerly exposed, steep (30-45°) slope with scattered outcroppings of the phyllite. This is in sharp contrast to the largely over-burdened, forested nature of the moderate (15°), northerly exposed slopes which extend to

L7+00N. This difference in soil development and geobiochemistry results in the two distinct northerly and southerly anomaly definitions which are observed for all five elements (fig.4-8).

These smaller anomalies suggest two geochemical linears which trend in a more northwesterly direction. The first linear (fig.9) is centered on station L2+00S 5+00E and extends northward past the two gold anomalies at L1+00N 4+00E and 5+00E to the two element (Cu and Ag) occurrences at L4+00N 3+50E. A distance varying from 75 meters to 200 meters separates this linear from a larger second linear which is centered on station L3+00S 8+50E. It continues northward including the 400 meter long gold anomaly centered at L3+00N 7+50E and extends to the cluster of anomalies at L5+00N 5+50E and L6+00N 6+00E. The anomalous to highly anomalous values (plus the high background (fig.5) Pb value ie. 26 p.p.m.) obtained in this area suggest a continuation of the stronger, southern anomalies to the northern less resolved and scattered anomalies.

In each case, the anomaly contrast with background values is significant with both silver and zinc, obtaining values of seven times that of the background. One gold sample, L3+00N 7+50E (fig.8), gave a highly anomalous value of 275 p.p.b. The copper and lead values reach levels which are four times and three times that of the background level. With reference to the statistical analysis, the silver and zinc values show a considerable array for standard deviations of 0.8 and 96.7, respectively.

CONCLUSION

The geochemical survey conducted on the Topper Group was successful in extending and defining the anomalies that were located during the summer, 1984.

A large, 1,100 X 700 meter regionally anomalous zone is apparent which has a northerly trend across the length of the grid. This major zone is composed of two, somewhat separate geochemical linears which suggest a stratiform nature to the underlying mineralized geology. These linears have two distinct expressions in different parts of the grid. Less resolved, scattered, and mainly single station anomalies in the northern overburdened sectors and broad, multi-element, multi-station anomalies in the southern portions. In all cases, the elements are strongly anomalous with zinc and silver showing the greatest variance and contrast to background values. The anomalies are open to the south with possibly a new linear being developed along the eastern portions of the survey.

Due to the positive results obtained from the fall, 1984 geochemical survey, it is recommended that the Topper Group undergo additional geochemical sampling to laterally trace out the known anomalous zones. Detailed sampling should also be undertaken to better define the anomalies as well as detailed geological mapping to aid in anomaly interpretation.

ITEMIZED COST STATEMENT

1. R. Kregosky; 6 days @ \$200.00/day.....	\$1,200.00
2. M. Schram, Prospector; 6 days @ \$100.00/day.....	\$ 600.00
3. R. Schram, Field Assist.; 6 days @ \$100.00/day.....	\$ 600.00
4. I. Schram, Camp Cook; 6 days @ \$50.00/day.....	\$ 300.00
5. Food and Accommodation.....	\$1,100.00
6. Total Transportation.....	\$ 852.00
7. 228 Soil Samples; Cu, Pb, Zn & Ag @ \$4.00.....	\$ 912.00
Acme Labs. Au @ \$4.00.....	\$ 912.00
Preparation @ \$.60.....	\$ 136.80
8. Map and Report Reproduction.....	\$ 75.00
9. 2 Days report preparation @ \$200.00/day.....	\$ 400.00
TOTAL	\$7,087.80

AUTHOR'S QUALIFICATIONS

I declare, that I, Roy D. Kregosky am a practising Geologist having graduated from the University of Calgary in 1971 with a Bachelor of Science degree in Geology.

November 10, 1984

MONASHEE GEOLOGICAL SERVICES

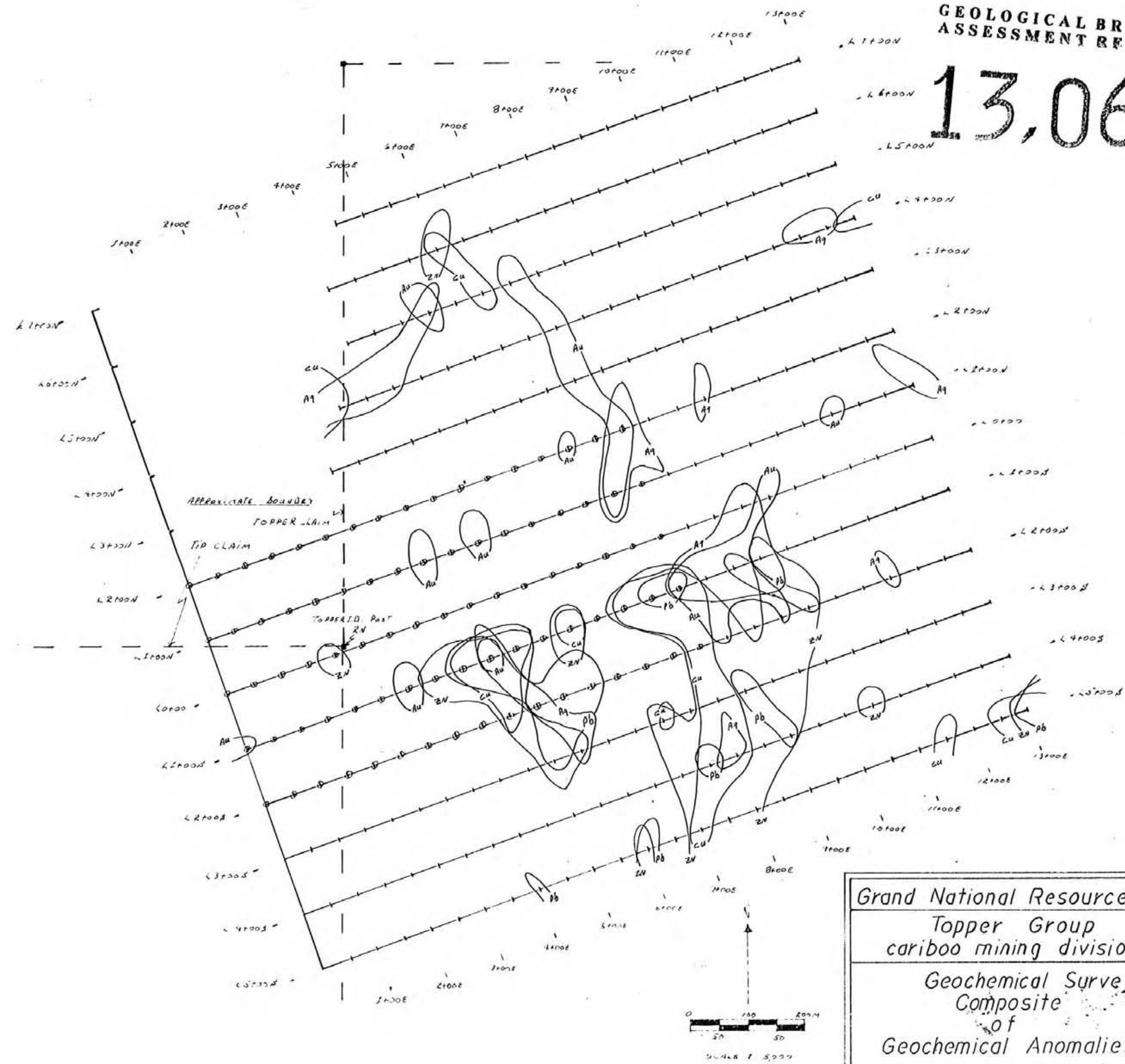


Roy Kregosky

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Grand National Resources Inc.
Topper Group
cariboo mining division
Geochemical Survey
Composite
of
Geochemical Anomalies

nov. 10,
1984

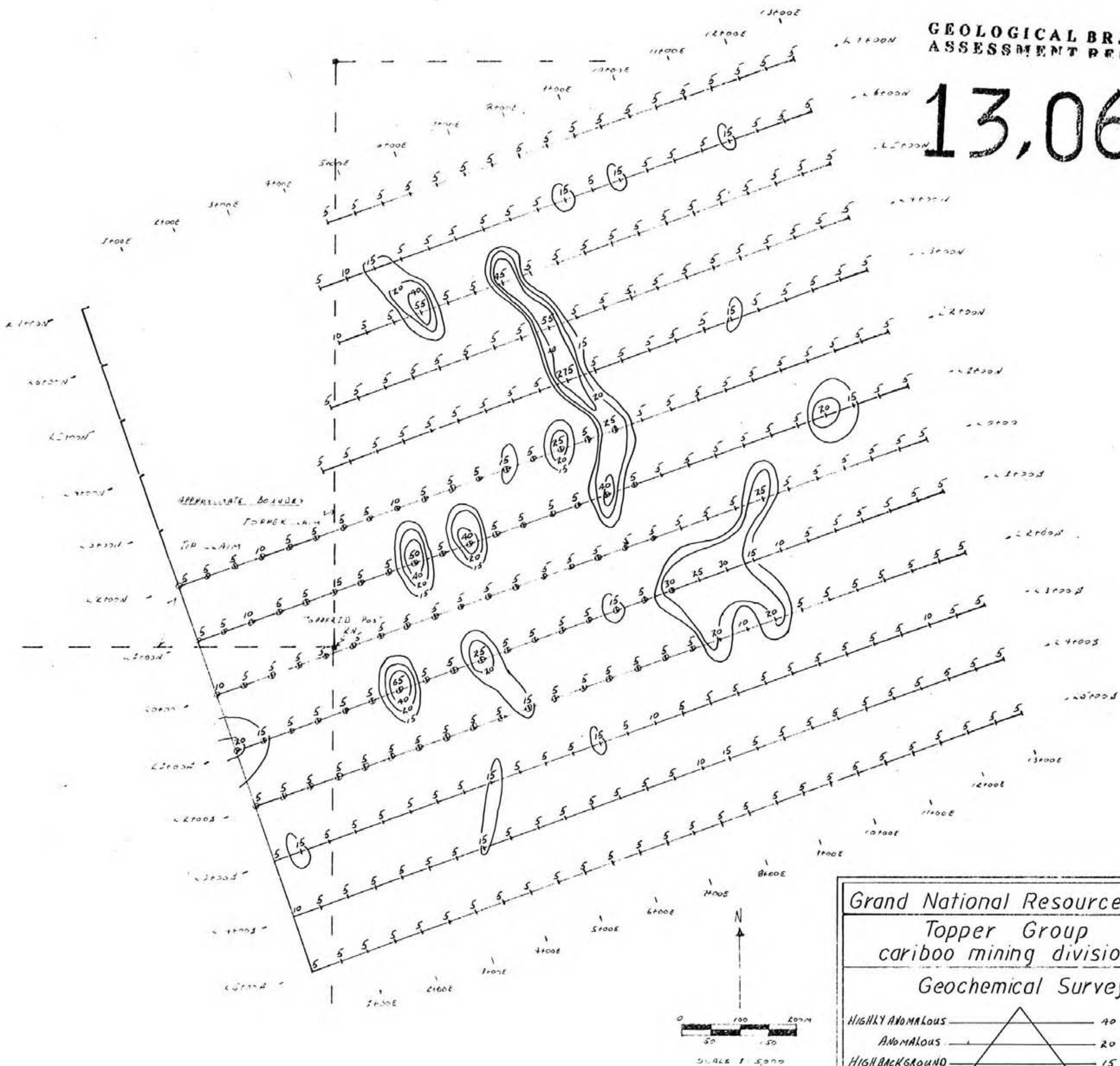
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fig.9

JULY 1984

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Grand National Resources Inc.

Topper Group
cariboo mining division

Geochemical Survey

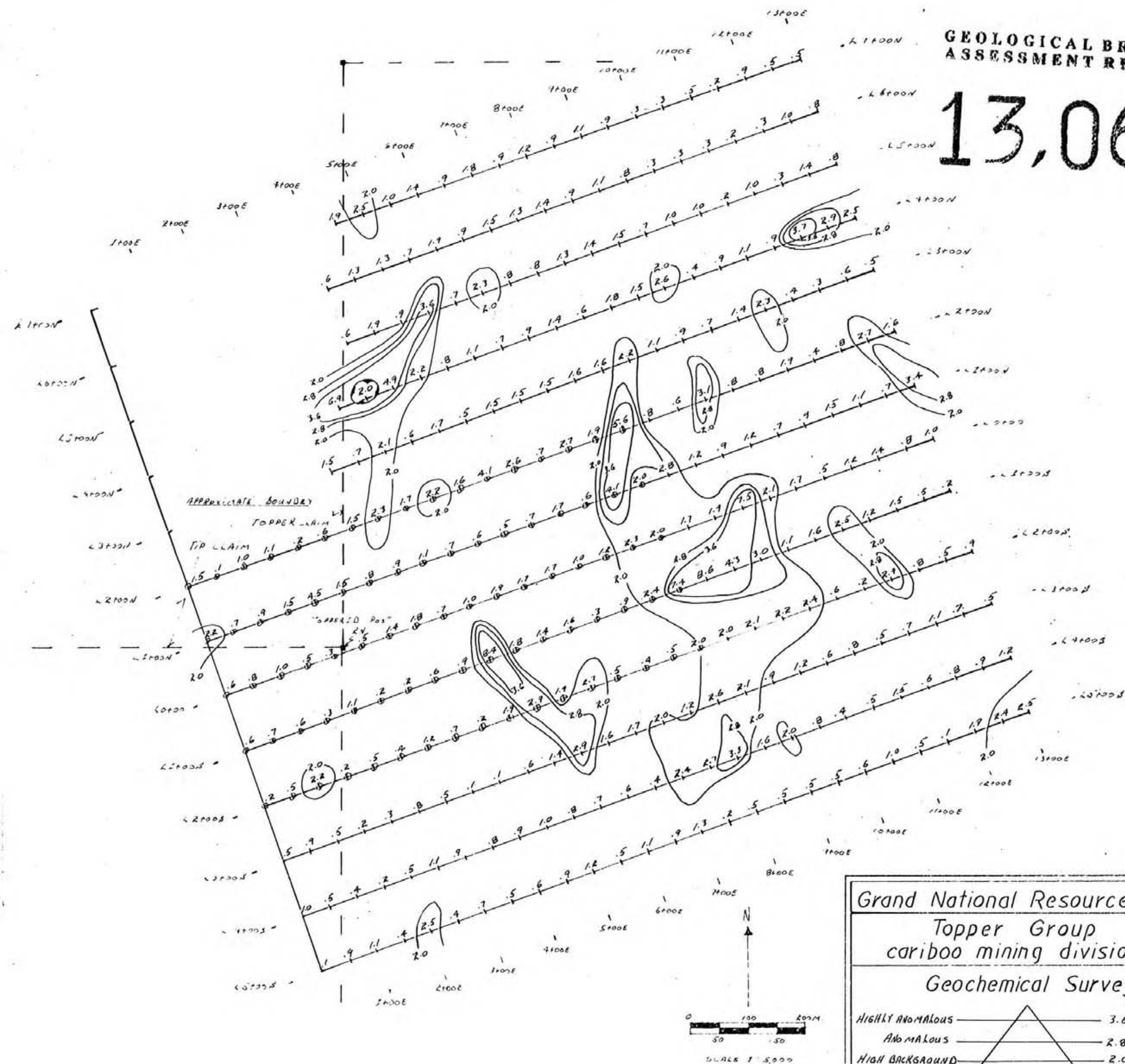
HIGHLY ANOMALOUS ——— 40 Au.
ANOMALOUS ——— 20 ppb.
HIGH BACKGROUND ——— 15

nov. 10, 1984 Monashee Geological Services fig.8

JULY, 1984

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Grand National Resources Inc.

Topper Group
cariboo mining division

Geochemical Survey

Highly Anomalous — 3.6 Ag
 Anomalous — 2.8 ppm
 High Background — 2.0

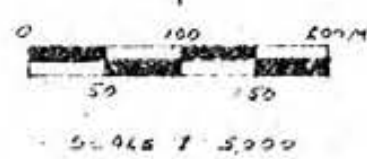
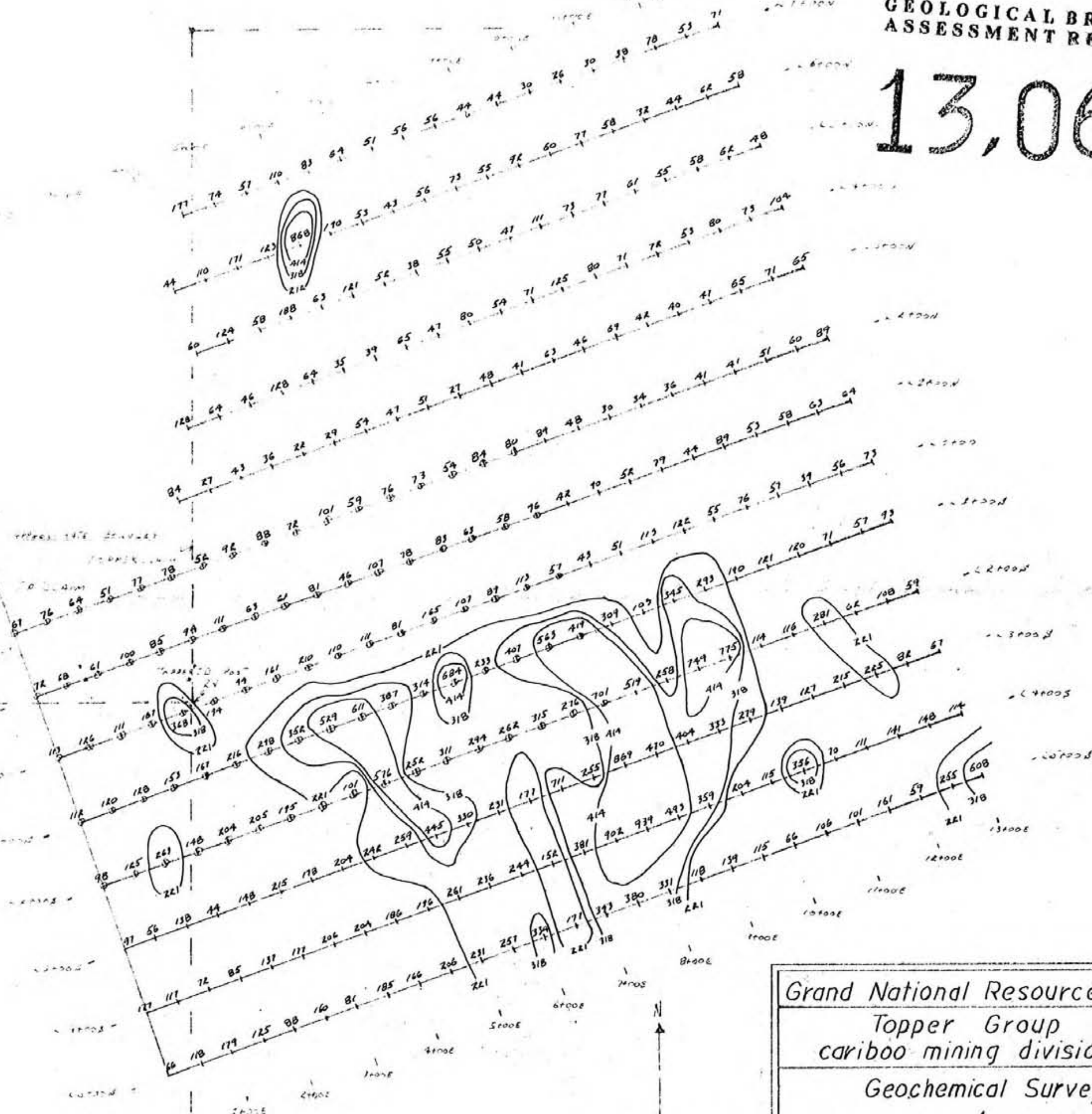
nov. 10,
1984

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fig.7

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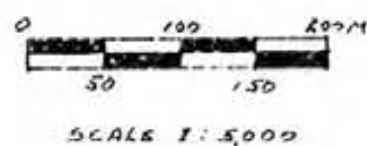
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Grand National Resources Inc.		
Topper Group		
cariboo mining division		
Geochemical Survey		
HIGHLY ANOMALOUS	414	Zn.
ANOMALOUS	318	p.p.m.
HIGH BACKGROUND	221	
NOV. 10, 1984	Monashee Geological Services	fig.6

GEOCHEMICAL
SURVEY
JULY 1984

13,062



HIGHLY ABOLISHED ————— 35 Pb.
 ABOLISHED ————— 27 p.p.m.
 HIGH BACKGROUND ————— 20

fig.5

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