

87-516.-16324

8/88

GEOCHEMICAL SURVEYS

ON THE

AMERICAN BOY PROPERTY

(Cindy Lou, Janelle, AB#1-AB#8, AB#13-21,23,24,  
Roosevelt Recovery, Silver Bell,  
Cassiar Swift Water, Cassiar Clear Water, Lucky Jim  
Bunker Hill, FN fr., Mohawk)

Omineca Mining Division

93M / 5E, ~~44~~

55°18'42" 127°34'55"06"

FILMED

OWNER & OPERATOR: Can-Ex Resources Ltd.

AUTHOR: A.M. Homenuke, P. Eng. (Geol.)

SUBMITTED: August 26, 1987

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

16,324

Tri-con Mining Ltd.

VANCOUVER, B C CANADA

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10 Geochemical Survey - Lead	
11 Geochemical Survey - Silver	
12 Geochemical Survey - Zinc	

## I. INTRODUCTORY NOTES

### Location And Access

The American Boy Property is located a few kilometres north of New Hazelton, B.C. (Fig. 1). The claims cover the west to southwest slope of Nine Mile Mountain down to Four Mile Mountain and are bounded on the west by Two Mile Creek Valley.

Two historically active mining sites are present: the "American Boy" workings on the north part of the claims and the "Babine and Mohawk" workings on the southcentral part of the claims.

Access on the west and north is provided by the Nine Mile Mountain microwave road, maintained by B.C. Tel, and on the south by Four Mile Mountain road.

Locally, there are many old mining and logging trails, except in the central portion of the property where access is on foot or by helicopter.

### Physical Features

The area of the claims is characterized by very steep southerly to westerly slopes, in many cases, to the point of forming escarpments. There is a broad, flatter area to the southwest. Two major creeks flow in a general southerly direction across the property, in part through steep-walled canyons.

The area is heavily forested, ranging from interior rain forest, through open spruce groves to subalpine vegetation. The type of vegetation is controlled by topography and elevation. There are a few open, grassy slopes with deciduous trees, and many swampy areas. Much of the timber is over mature and windfalls often impede progress.

### History

The first miners came into the Hazelton area with completion of the railway through that town. The American Boy Property was first staked by D.A. Harris in 1910. From 1911 to 1916, Harris Mines Limited carried out surface trenching and underground development of five veins. Small shipments of high-grade silver ore were made to the Trail Smelter.



In 1917, 254 tons of lower-grade development ore were hauled to the Silver Standard gravity mill on Two Mile Creek.

In 1927, further minor development work was done and G.S.C. Memoir 223 mentions "some work done during 1937", but no details were given.

American Standard Mines acquired the property in 1950 and did considerable stripping, diamond drilling and underground work. A new vein (No. 6) was discovered in the fall of 1951.

In 1952, Pioneer Gold Mines of B.C Limited did some further surface stripping.

In 1955, J. Gallo shipped 21 tons of crude ore from a shoot on the No. 6 vein. Apparently, other operators did some work on the property in the late 1950's, but no records are available.

George Braun re-staked the property in 1967, and the Northwestern Midland Development Co. Ltd. shipped 10.35 tons of Wilfley Table concentrate, stockpiled by previous operators. Minor trenching was done in 1968 and 1971.

Tri-Con Mining Ltd. re-staked the property in 1976, and in 1978 and 1980 carried out backhoe trenching, sampling and limited electromagnetic surveying.

In 1981, the property was expanded. During staking and prospecting, one new vein was found, an old vein was "rediscovered", and mineralized float from a probable third vein was found. In addition, reconnaissance soil sampling was done on many of the claim lines.

In 1982, the property was vended to Can-Ex Resources Ltd. Additional claims were staked covering the old "Babine" property and Mohawk Group was optioned from Cumo Resources. A major program of geochemical and geophysical surveying, mapping, sampling, diamond drilling and trenching was completed by the end of 1984.

Follow-up geochemistry, geophysics, trenching and diamond drilling have been continued since 1984.

### Property Description

The property consists of a total of 154 units. Table I lists the pertinent data from the claims. Table II shows the grouping of the claims for assessment purposes. Can-Ex Resources Ltd. is owner and operator of the property. The claims are shown on Figure 1.

TABLE I  
MINERAL CLAIMS

NAME	UNITS	RECORD #	LOT #	YEAR RECORD	
				LOCATED	DATE
Cindy Lou	4	320	-	1976	June 8
Janelle	2	319	-	1976	June 8
AB-1	10	3785	-	1981	June 4
AB-2	4	3786	-	1981	June 4
AB-3	10	3787	-	1981	June 4
AB-4	12	3788	-	1981	June 4
AB-5	6	4116	-	1981	Aug. 6
AB-6	10	4117	-	1981	Aug. 6
AB-7	15	4118	-	1981	Aug. 6
AB-8	6	4119	-	1981	Aug. 6
AB-13	4	4871	-	1981	Nov. 4
AB-14	10	5694	-	1983	Aug. 19
AB-15 Fr.	1	5695	-	1983	Aug. 19
AB-16	5	5696	-	1983	Aug. 19
AB-17	4	5697	-	1983	Aug. 19
AB-18	6	5698	-	1983	Aug. 19
AB-19	12	5699	-	1983	Aug. 19
AB-20	12	5700	-	1983	Aug. 19
AB-21	4	5701	-	1983	Aug. 19
AB-23	8	5703	-	1983	Aug. 19
AB-24 Fr.	1	5704	-	1983	Aug. 19
Roosevelt Recovery	1	5897	4837	1983	Oct. 19
Silver Bell	1	4952	4836	1983	Dec. 31
Cassiar Swift Water	1	5692	2413	1983	Aug. 19
Cassiar Clear Water	1	5693	2414	1983	Aug. 19
Lucky Jim	1	240	1538	1976	Mar. 10
Bunker Hill	1	241	1542	1976	Mar. 10
FN Fr.	1	242	1548	1976	Mar. 10
Mohawk	1	243	5048	1976	Mar. 10

TABLE II  
CLAIM GROUPING

<u>AB WEST GROUP</u>	<u>AB EAST GROUP</u>
Janelle	Cindy Lou
AB-1,4,5,8,15 Fr., 16, 17, 23	AB-2,3,6,7,13,18-21,24 Fr.
Cassiar Swift Water	Silver Bell
Cassiar Clear Water	Roosevelt Recovery
	Lucky Jim
	Bunker Hill
	FN Fr.
	Mohawk

Economic Assessment

There are at least 15 silver-gold-base metal bearing veins on the property. A few small, but very high grade ore shoots were previously mined. The Silver Standard mine, just to the west of the American Boy, produced over 7 million ounces of silver, and the Sunrise Silver Mine on Nine Mile Mountain, and the Mohawk Mine on Four Mile Mountain also had some production.

Reconnaissance geochemistry has shown many more target areas, increasing the probability of putting together enough ore shoots to make a mine.

Present Work and Distribution

The major portion of the work consisted of detailed soil sampling over areas of interest identified by previous reconnaissance work. 155 samples were taken on the AB-1 claim and 201 samples on the AB-7 claim.

Geological notes were taken on Cindy Lou, Janelle, AB-2, AB-3, AB-7, AB-8 and AB-14 claims in preparation for later programs.

## II. GEOLOGY

On the American Boy main workings area quartz-sulfide veins strike north and northeasterly. The better silver mineralization occurs at structural intersections, and where the veins pass through sandstones rather than argillites. A general examination was made along the Nine Mile Mountain road and areas surrounding known veins to determine if sufficient outcrop was present to allow detailed mapping of lithology for locating future drill targets. Geologic notes were also taken during 1986 and 1987 geochemical surveys elsewhere on the property. The presence of intrusive bodies (Fig. 1) is of particular importance as they generally appear to have higher geochemical values in a halo effect which has to be taken into account in data interpretation.

On the area of the geochemical grid on the AB-1 claim (Fig. 2) quartz float, old workings and cat trenches were noted. The north part of this grid showed sufficient outcrop for detailed mapping, which was undertaken during the second phase of 1987 assessment work, and will be reported on later.

Outcrops of intrusives were noted on the AB-7 geochemical grid and on a survey grid on the AB-8 claim which was part of 1986 work. In this general area a number of veins appear to be related to the hornfelsed halo surrounding the Four Mile Mountain diorite stock. Detailed mapping has also been commenced in this area to enhance interpretation of previous and current geochemical and geophysical surveys.

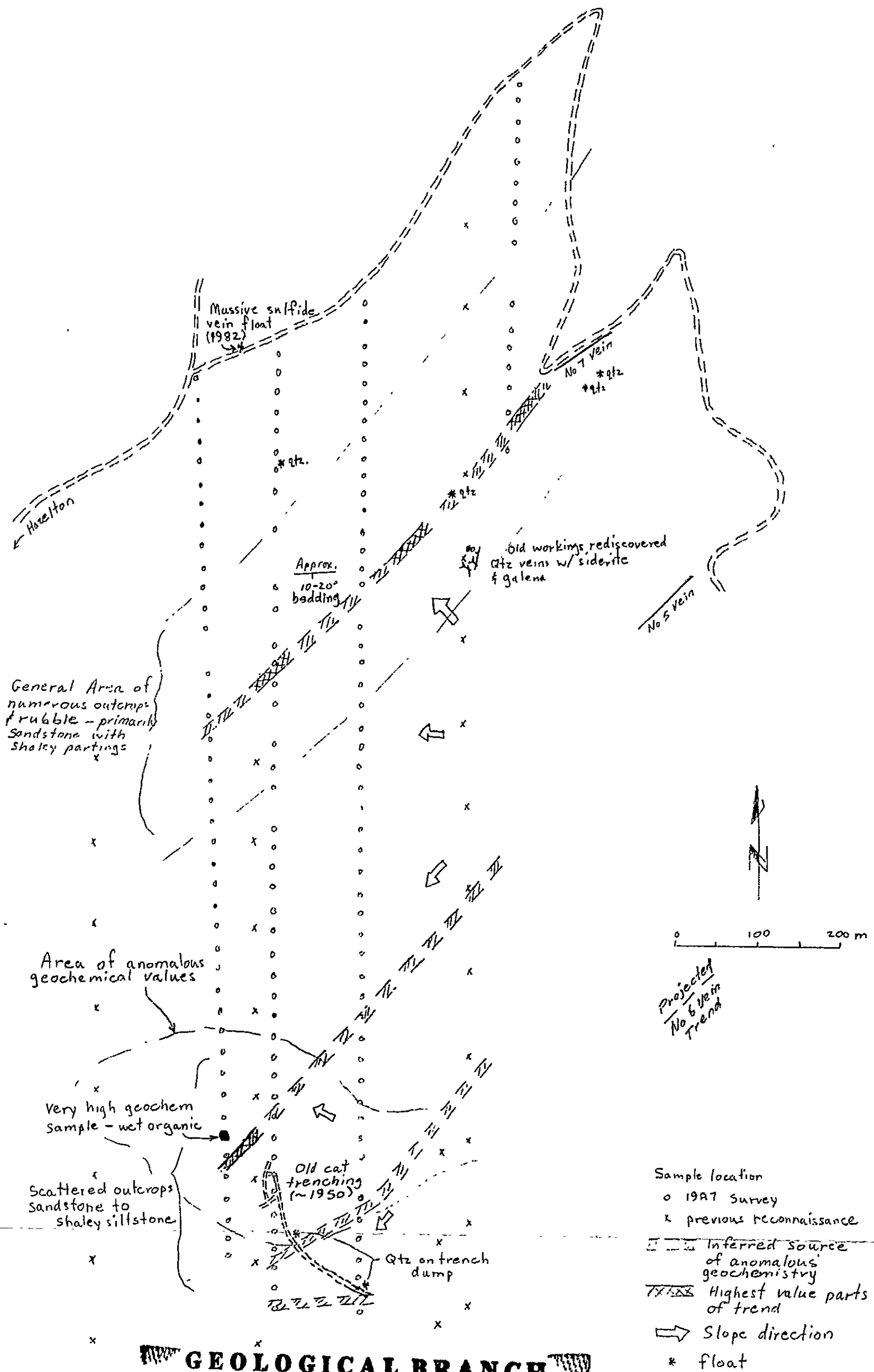
## II. GEOCHEMICAL SURVEYS

### Procedure

155 soil samples were taken at 25-metre intervals on lines 100 metres apart on the AB-1 claim, and 201 samples were taken at 25 metre intervals on lines 50 metres apart on the AB-7 claim. The samples were taken from the "B" horizon and placed into kraft envelopes and marked as to location. The samples were delivered to Acme Labs in Vancouver, B.C., where they were subjected to the following procedures:

1. Preparation - dried at 60°C, pulverized if necessary, and sieved to -80 mesh.





**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**16,324**

Prepared by: A.M. Homenuk, P. Eng  
TRI-CON Mining Ltd.

CAN-EX RESOURCES LTD.  
AMERICAN BOY PROPERTY  
GEOCHEMICAL INTERPRETATION  
GEOLOGICAL NOTES

June 1987

FIG. 2

2. Digestion - 0.5 grams of sample digested with hot aqua regia for one hour, then diluted to 10 ml. with water.

3. Analysis - Solution aspirated and analyzed by inductively coupled argon plasma (IPC) for lead, zinc, silver, arsenic and copper.

The results are shown on Fig. 3 to 7 for the Ab-1 claim, and 8-12 for the AB-7 claim, with contour intervals chosen by experience and data inspection to show trends for follow-up work.

### Discussion of Results

#### AB-1 GRID

An interpretation of the soil sample results is shown on Fig. 2. The area is characterized by steep westerly slopes. Significant anomalies for copper, lead, zinc, arsenic and silver are present on the north and south ends of the grid. Taking the steep slope into account, the source areas are probably strike extensions of known northeasterly trending veins on the Main Workings Area to the east of the grid. On the north part of the grid this inferred source area ties in well with the projection of the No. 7 vein. On the south part of the grid, this type of relationship is more tentative and further work needs to be done. Both areas would lend themselves to followup with a geochemical field kit and hand trenching prior to bringing in larger equipment.

#### AB-7 GRID

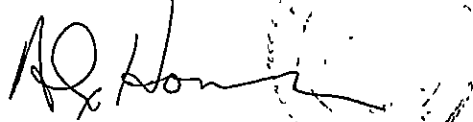
The AB-7 grid is a northerly extension of previous soil sampling. A multi-element anomaly trending northeasterly from 16N/30E indicates a continuation of known vein structures. There is a northwesterly-trending composite anomalous zone from 17N/27E to 23N/23E with more localized apparent northeast trends. Due to complexities of regional faulting and hornfels zones around intrusives, more detailed interpretation will require completion of geological mapping and VLF-EM surveys in this area.

**IV. CONCLUSIONS**

Detailed soil sampling as a followup to previous reconnaissance surveys has shown a number of multi-element anomalous areas, some of which are apparent strike extensions of known veins.

Geological reconnaissance has shown that detailed geological mapping will be feasible on the area surrounding the Main Workings to provide drill targets based on favorable lithology.

Respectfully Submitted,  
TRI-CON MINING LTD.



A.M. Homenuke, P. Eng.

COST STATEMENT

Geologic notes were made during the period Aug. 7-19, 1986 and May 25-June 2, 1987. Geochemical surveys were done during the latter period.

Geochemical sampling by contractor	\$4,000.00
Analysis 356 soil samples for Cu, Pb, Zn, As, Ag @ \$7.00	2,492.00
A.M. Homenuke, P. Eng 1 day field, 2 days maps, report and interpretation Total 3 days @ \$400	1,200.00
Copying, secretarial, misc.	<u>150.00</u>
TOTAL	\$7,842.00 =====

\*Slightly higher than recorded amount of \$4,400.00 as that was partially estimated.

Although more samples were taken on AB East Group than AB West Group, more time was spent on AB West due to terrain, therefore the apportionment of cost is deemed to be 50:50 or

AB West \$3,921.00  
AB East \$3,921.00

REFERENCES

Homenuke, A.M., 1978 - 1986, Various assessment reports.

Kindle, E.D., 1954, Mineral Resources, Hazelton & Smithers areas, Geol. Sur. of Can., Memoir 223.


Smith, Alexander, 1956, Silver Standard Mine, in Structural Geology of Canadian Ore Deposits, CIM Special Volume

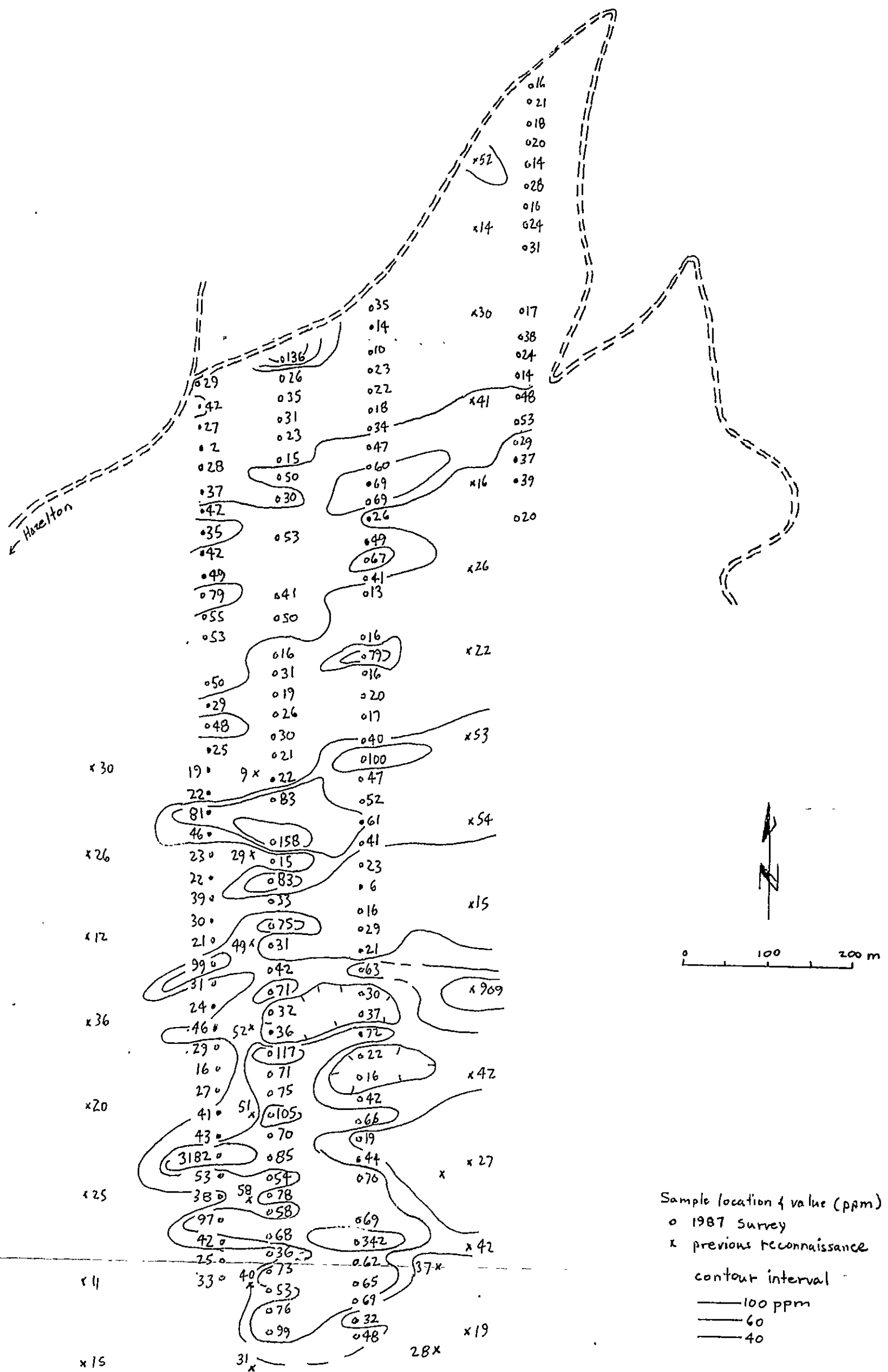
## CERTIFICATE OF QUALIFICATION

I, ALEXANDER M. HOMENUKE, do hereby certify:

1. THAT I am a member in good standing of the Association of Professional Engineers of British Columbia.
2. THAT I received the Degree of Bachelor of Science in Geological Engineering from the Colorado School of Mines in 1974.
3. THAT I received a Diploma of technology in Mining from the B.C. Institute of Technology in 1969.
4. THAT I have been employed in various aspects of mining exploration for 18 years and am presently employed by Tri-Con Mining Ltd., of #2580 - 1066 West Hastings Street, Vancouver, British Columbia.
5. THAT I presently reside at 29825 Harris Road, Mt. Lehman, B.C.
6. THAT this Report is based on work supervised or conducted by myself.

DATED AT VANCOUVER, British Columbia, this 26th day of August, 1987.

  
\_\_\_\_\_  
A.M. Homenuke, P. Eng.  
Geological Engineer



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ASSESSMENT REPORT**

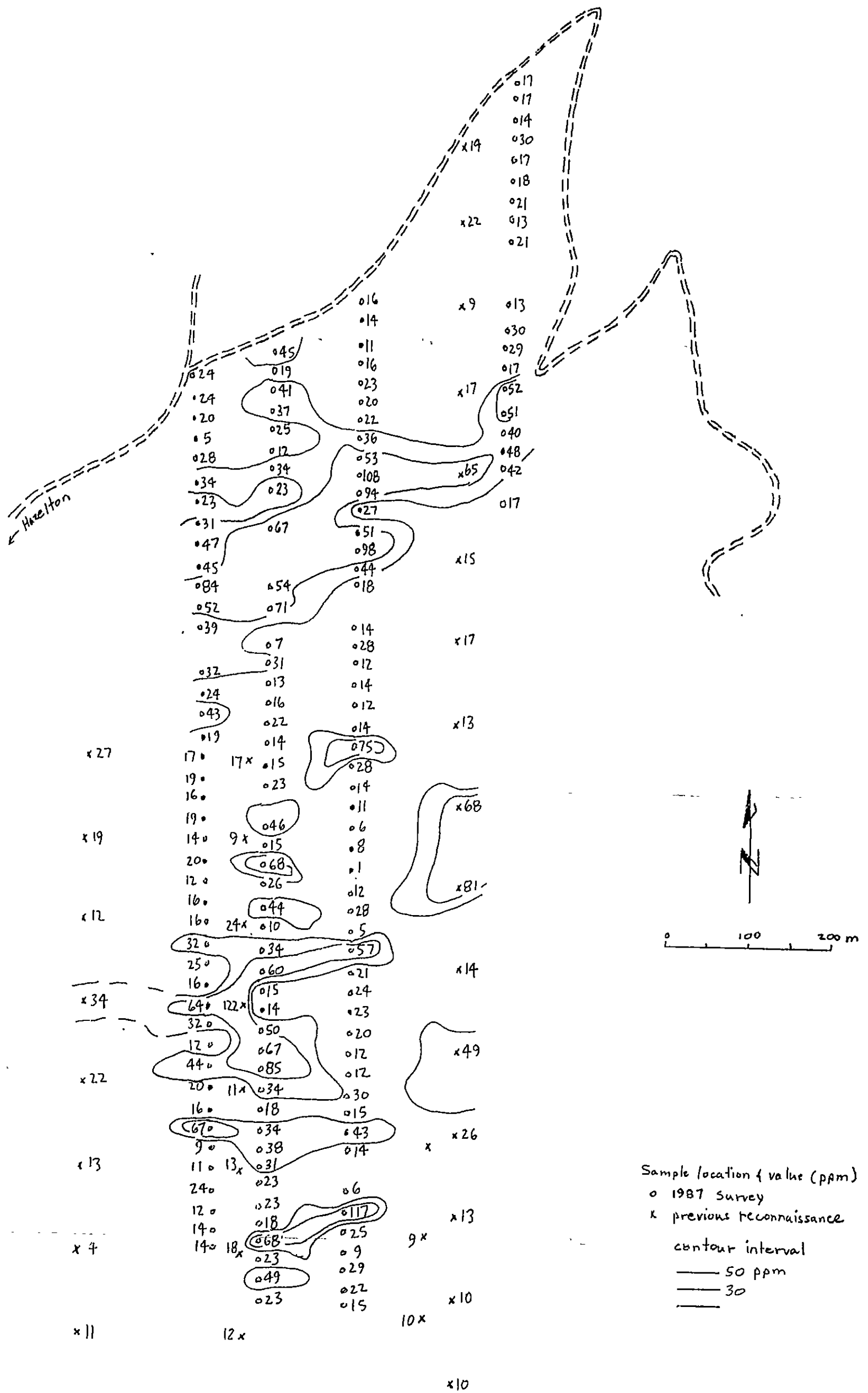
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GEOCHEMICAL SURVEY  
ARSENIC

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FIG. 3



**GEOLOGICAL BRANCH  
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AMERICAN BOY PROPERTY  
GEOCHEMICAL SURVEY  
COPPER

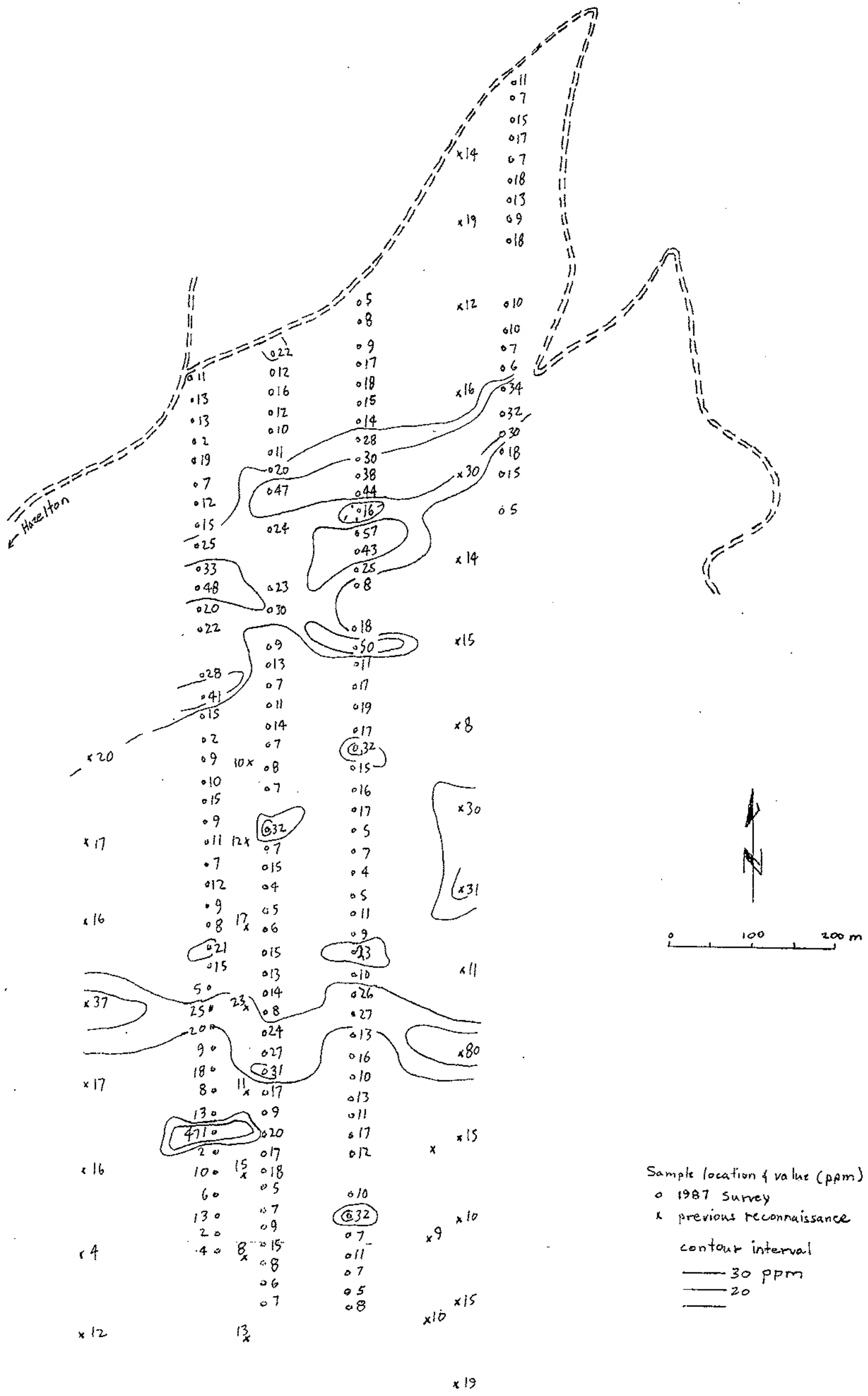
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FIG. 4





**GEOLOGICAL BRANCH  
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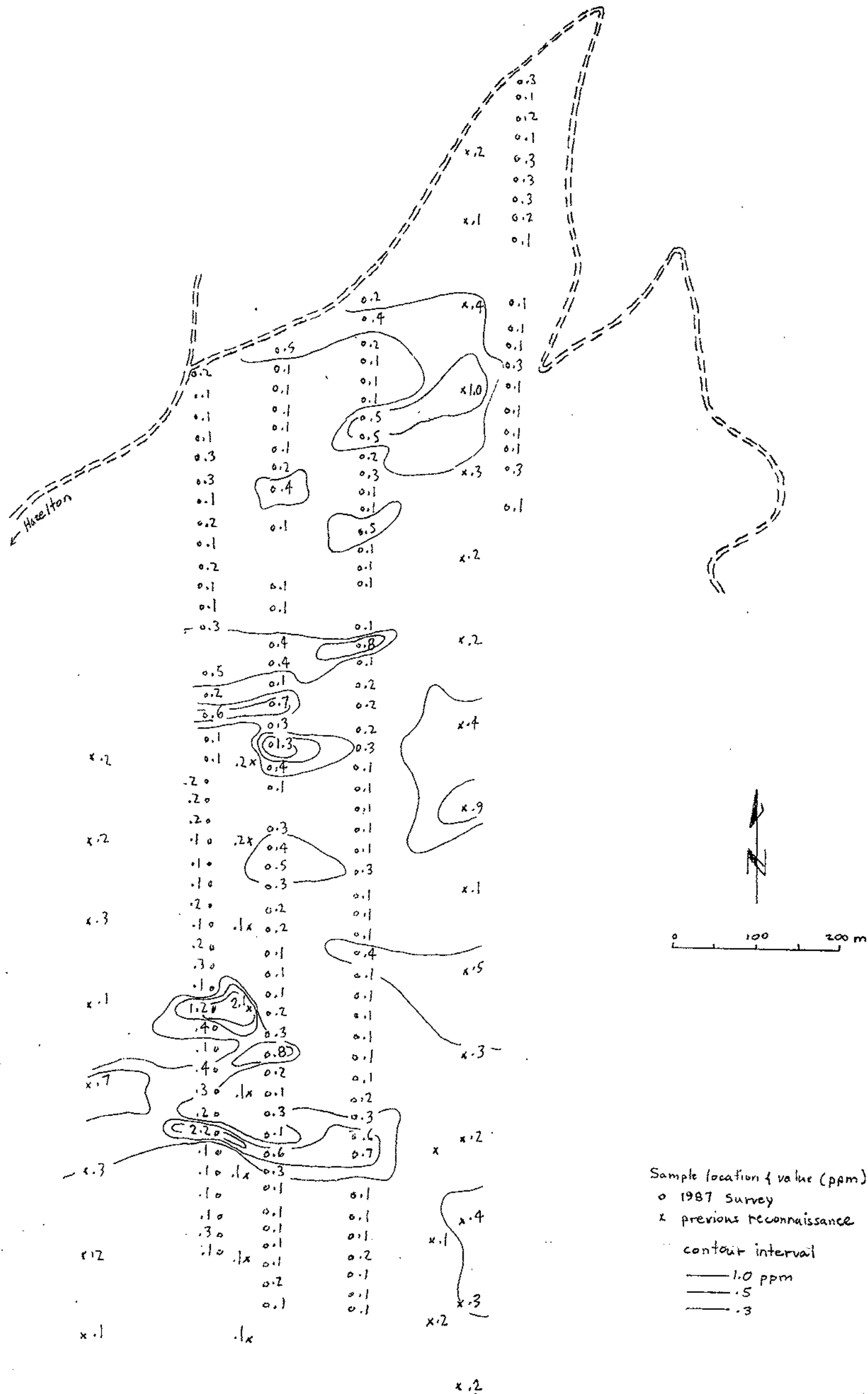
CAN-EX RESOURCES LTD.  
 AMERICAN BOY PROPERTY  
 GEOCHEMICAL SURVEY  
 LEAD

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FIG. 5



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

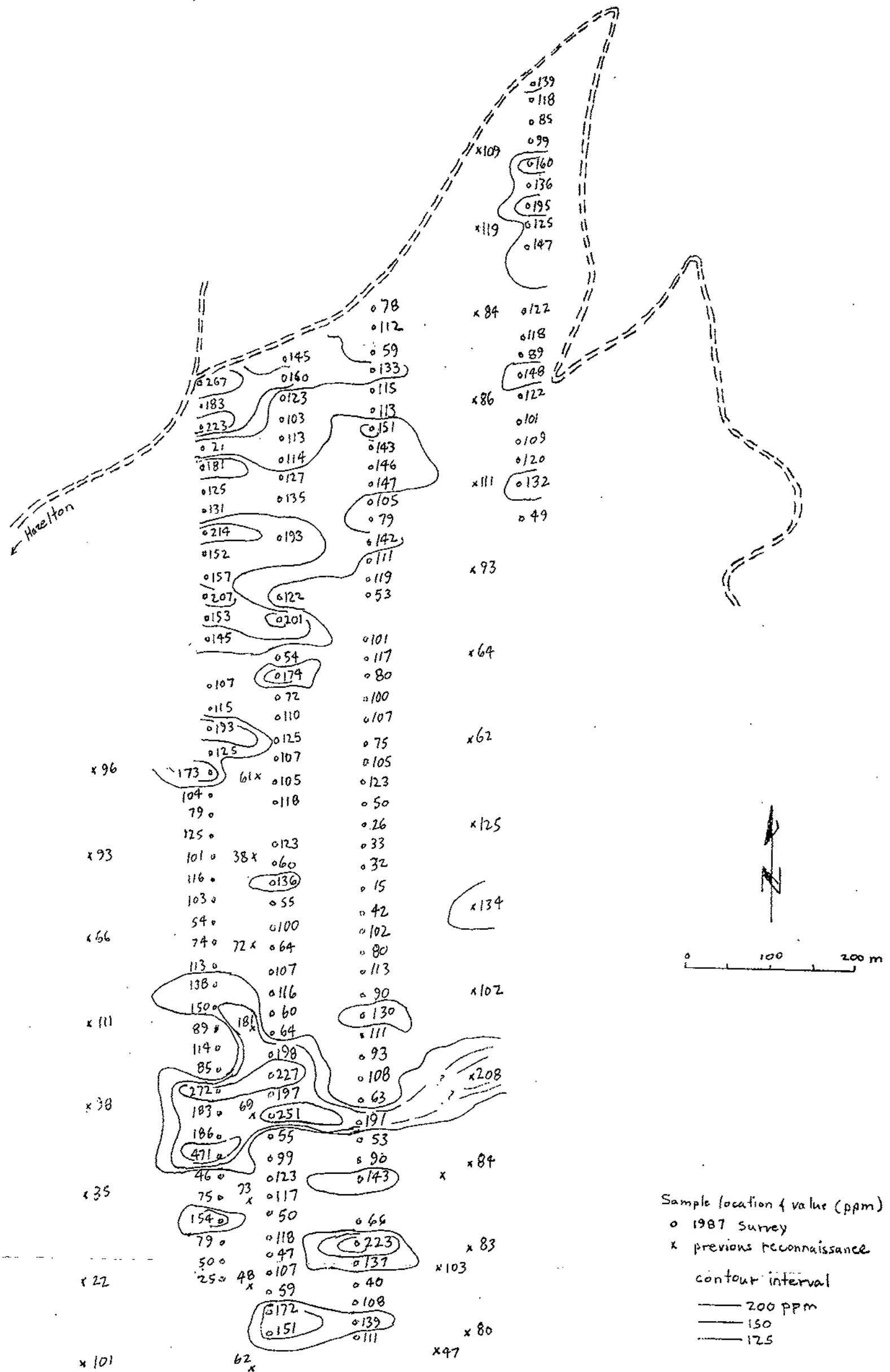
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SILVER

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FIG. 6



**GEOLOGICAL BRANCH  
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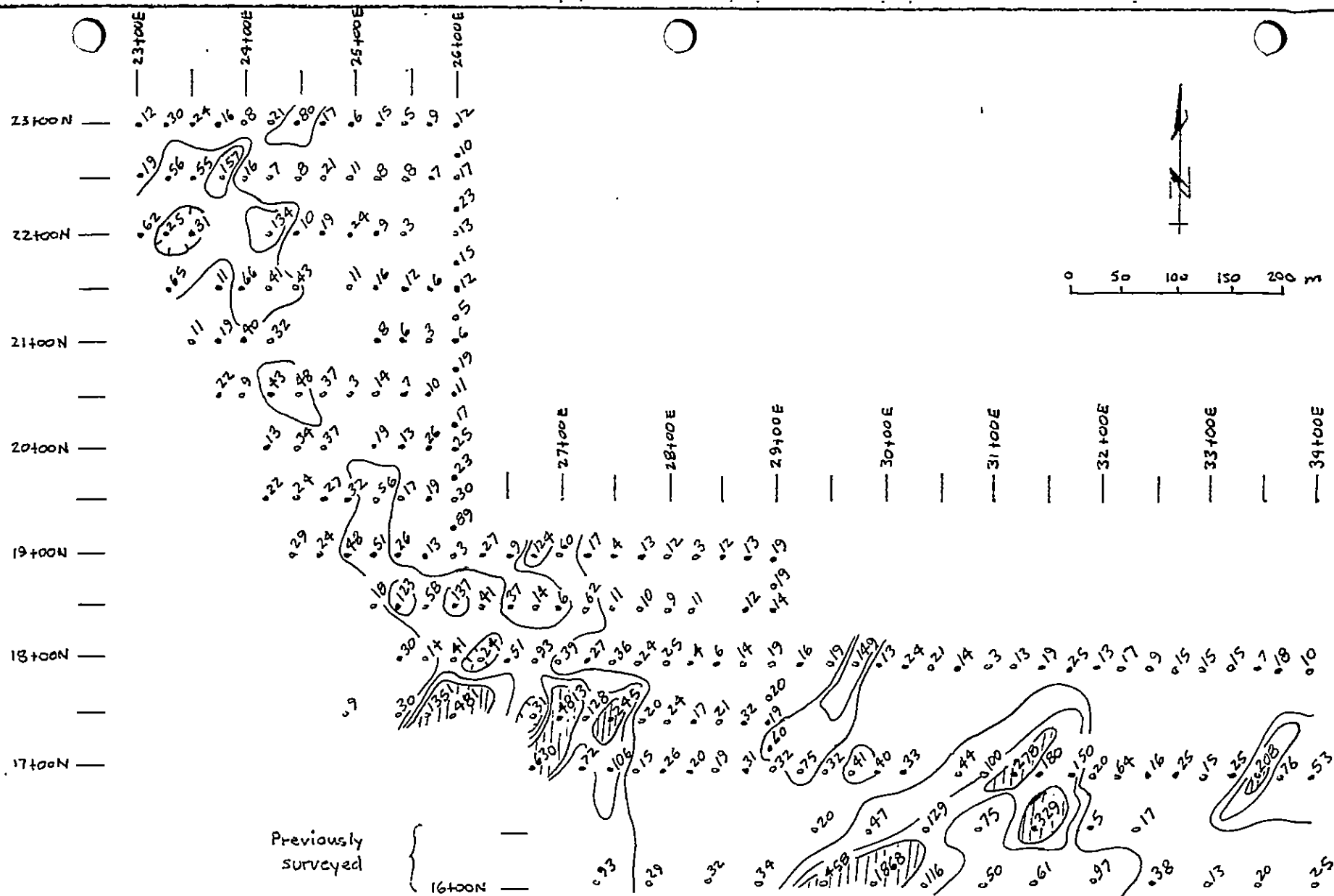
CAN-EX RESOURCES LTD.  
AMERICAN BOY PROPERTY  
GEOCHEMICAL SURVEY  
ZINC

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FIG. 7



Previously surveyed

• Sample location & value (ppm)  
 contour interval

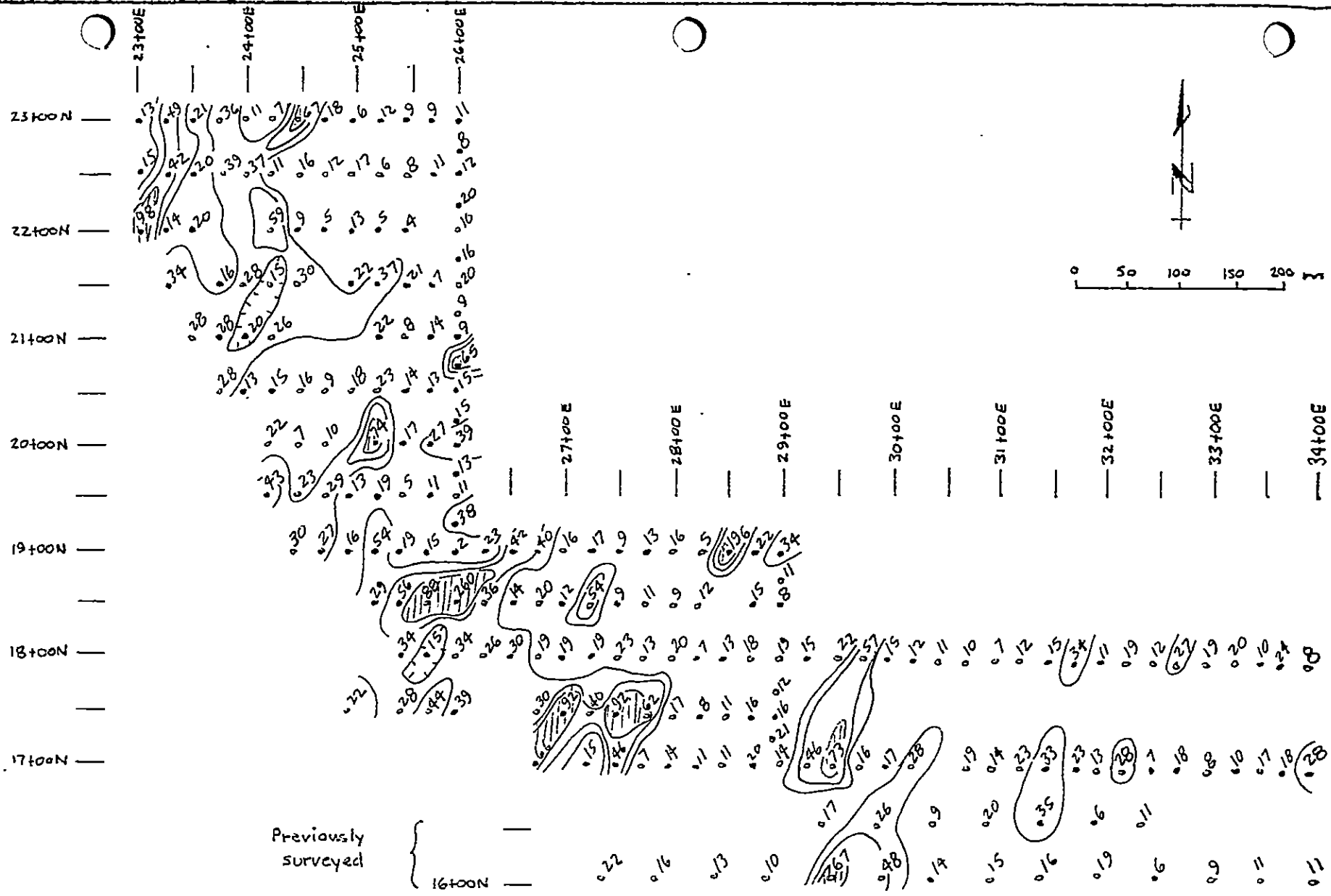
||||| 200 ppm  
 ——— 100  
 ——— 40

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 GEOCHEMICAL SURVEY  
 ARSENIC

June, 1987

FIG. 8

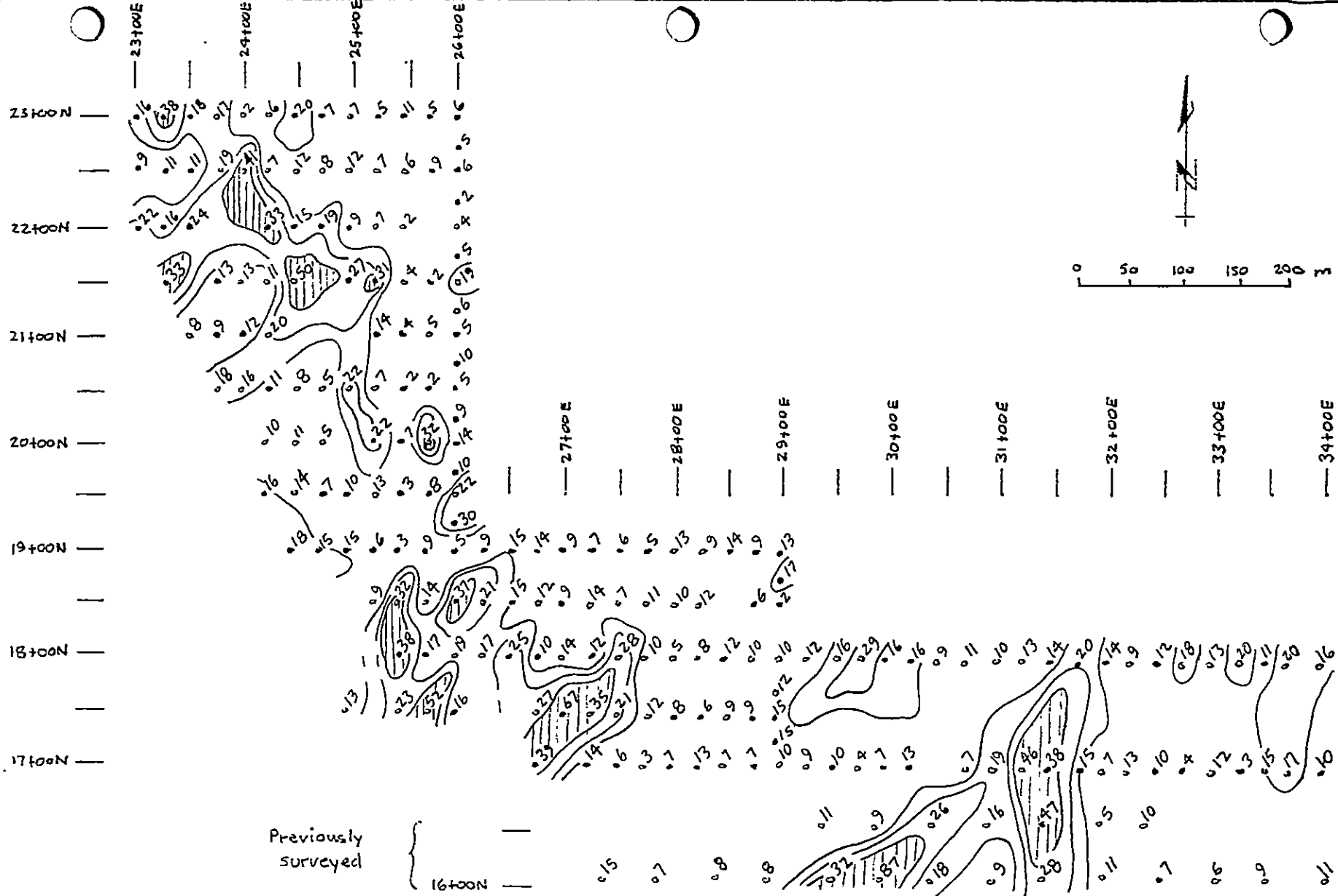


• Sample location & value (ppm)  
 — contour interval  
 ||||| 60 ppm  
 ——— 40  
 ——— 25

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 GEOCHEMICAL SURVEY  
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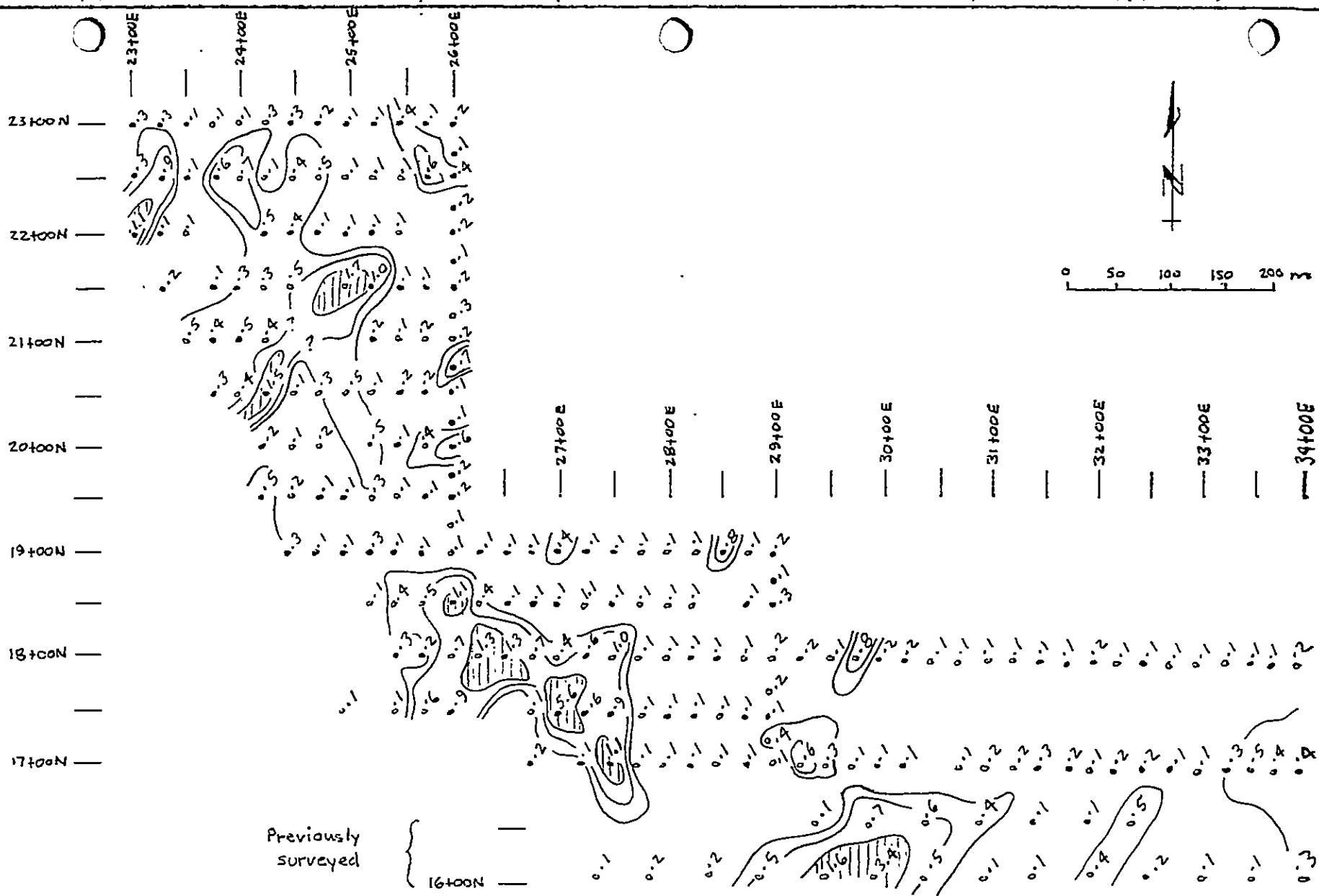
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• Sample location & value (ppm)  
contour interval  
 ||||| 30 ppm  
 ——— 20  
 ——— 15

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LEAD

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FIG. 10



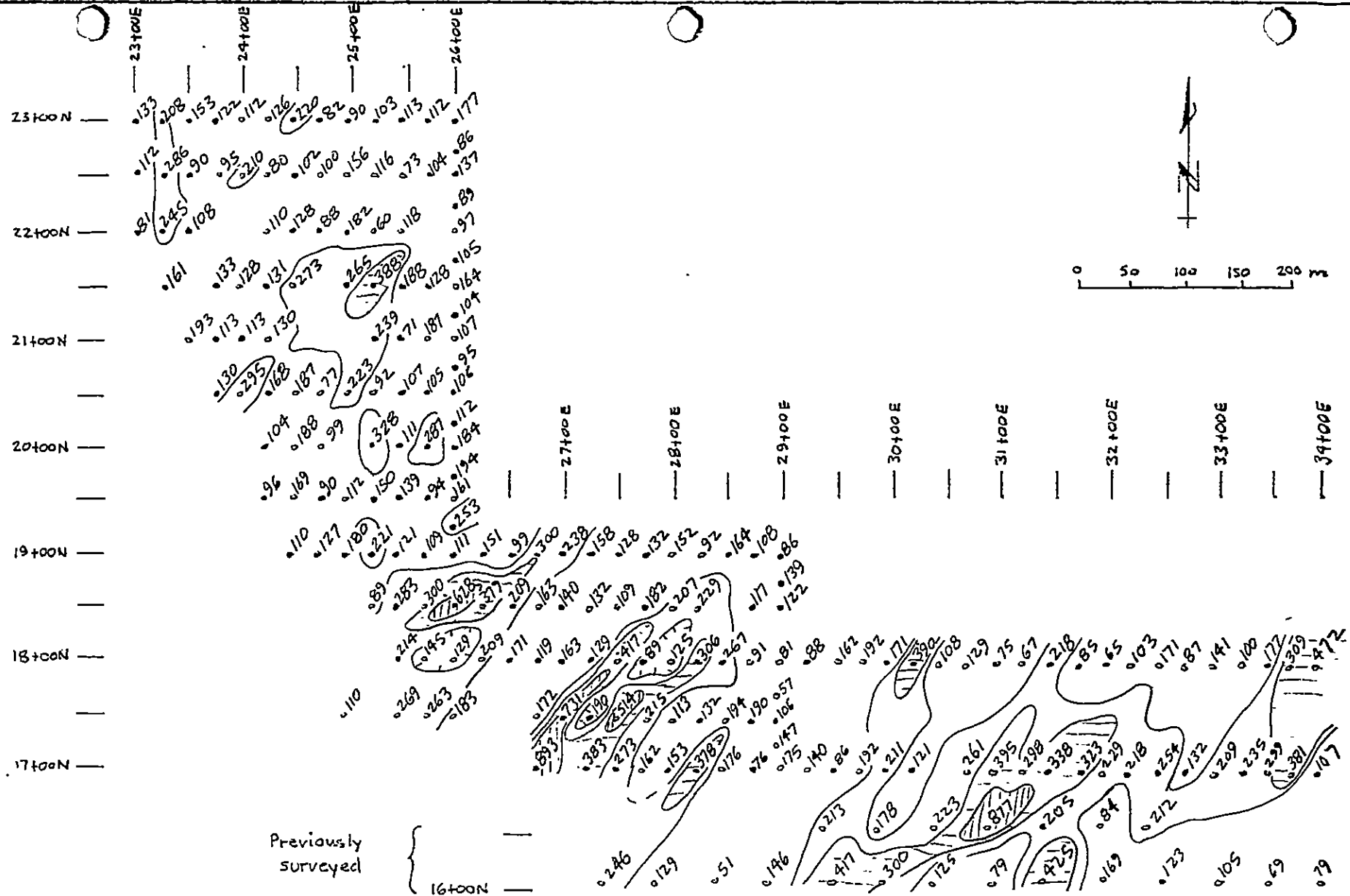
• Sample location & value (ppm)  
 — contour interval  
 — 1.0 ppm  
 — 0.5  
 — 0.3

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 SILVER

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FIG. 11



• Sample location & value (ppm)  
 — Contour interval  
 ||||| 500 ppm  
 |||| 300  
 ——— 200

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