



GAR CLAIMS GEOCHEMICAL SURVEY

FOR



HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

SEPTEMBER 6 - 9, 1979

WHITEHORSE, Y. T.

090 622

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ 2400.00

Resident Geologist or
Resident Mining Engineer

Considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.

B. R. BAXTER
Supervising Mining Recorder

Commissioner of Yukon Territory

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Lake
Laberge



GAR Claims

▲ Whitehorse

Alaska Highway

Marsh
Lake

HUDSON BAY EXPLORATION & DEVELOPMENT
WHITEHORSE COMPANY LIMITED OFFICE

GAR Claims
Location Map

SCALE
1:253,440

DATE
May 1980

DRAWN BY

LIST OF CLAIMS - CLAIM OWNERSHIP

GAR No. 1 - GAR No. 24 YA 24515 - YA 24538

All the GAR mineral claims, 1-24, are registered in the name of Hudson Bay Exploration and Development Company Limited.

The location of the claims is illustrated on Plate 1 with the details of the claims recorded on Plate 2.

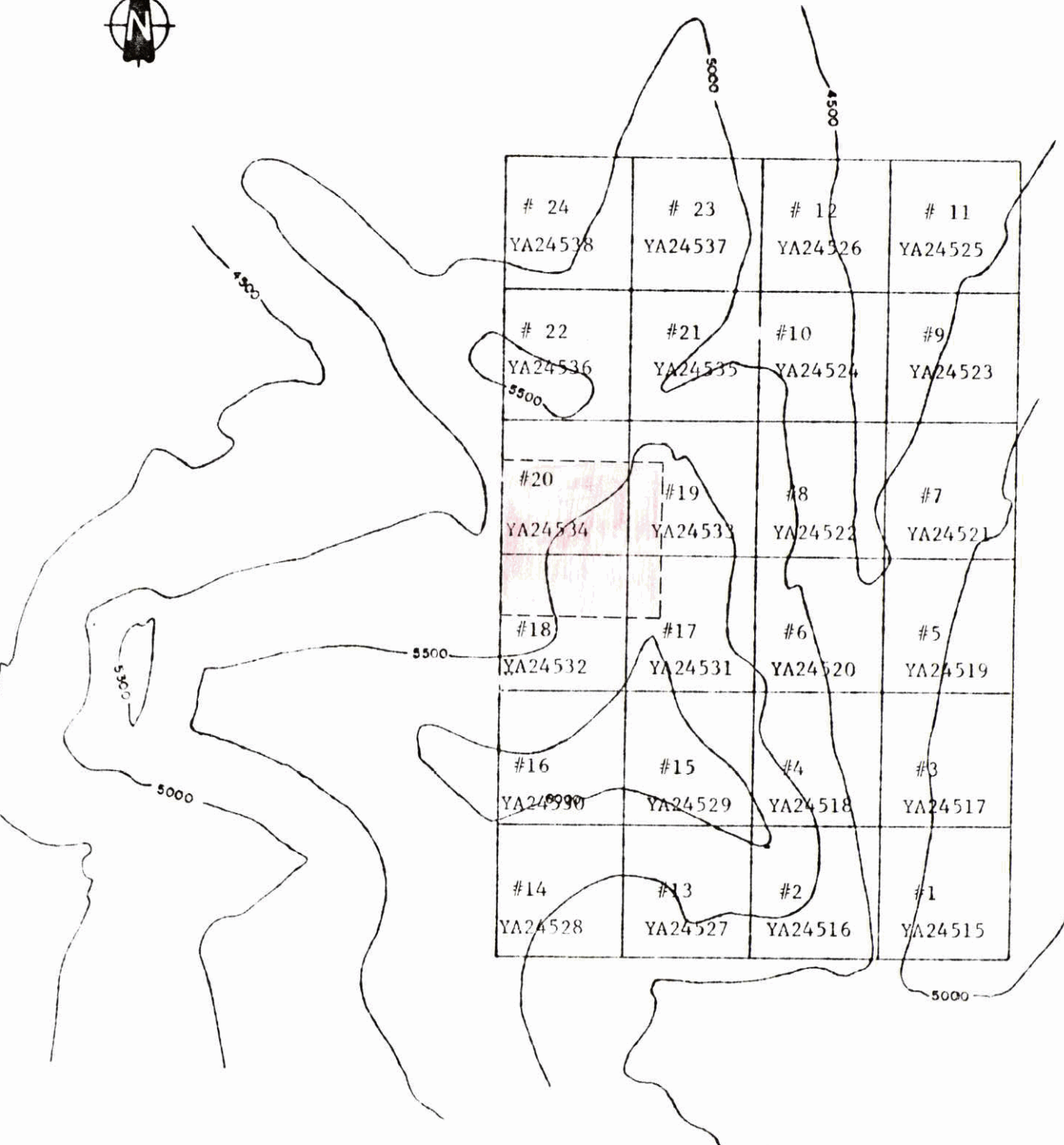


PLATE 2



GEOCHEMICAL SOIL SURVEY

HUDSON BAY EXPLORATION & DEVELOPMENT
WHITEHORSE COMPANY LIMITED OFFICE

GAR CLAIMS

SCALE: 1cm. = 200m.

DATE: May 1980

DRAWN BY:

GEOCHEMICAL SURVEY EXPENDITURES

Wages.....G. Bidshop - September 6 - 9.....	\$ 180.00
S. Tufford - September 6 - 9.....	140.00
W. Kobetitch - September 6 - 9.....	140.00
D. Downing - September 6 - 9.....	200.00
Camp Costs @ \$15.00/day x 4 men x 4 days.....	240.00
Helicopter Transport - 2.1 hours.....	842.49
Report Preparation - D. Downing - 5.5 days.....	275.00
Assaying Costs - 81 samples @ \$5.00/sample.....	<u>405.00</u>
Total -	\$ 2,422.49

- G. Bishop - 100-10 Burns Rd.,
Whitehorse, Y. T.
Y1A 4Y9
- S. Tufford - 100-10 Burns Rd.,
Whitehorse, Y. T.
Y1A 4Y9
- W. Kobetitch - 100-10 Burns Rd.
Whitehorse, Y. T.
Y1A 4Y9

INTRODUCTION

On September 6-9, 1979 a geochemical soil survey was run over the GAR claims. The claims cover an area with garnet-diopside-apatite skarn developed in Lewes River group sediments near an intrusive contact. The terrain is extremely rugged.

A fly camp was set up on the claims with personnel and equipment being mobilized by helicopter from Whitehorse. A grid was run on the claims with stations every 50 meters on lines spaced every 100 meters along a north-south base line. The base line coincides with the claim line for claims GAR 17-20. Eighty one soil samples were collected over the 7.5 kilometers of grid line run using a hand held compass and a belt chain. The area of geochemical survey is shaded red on Plate 2.

LOCATION AND ACCESS

The claims are located over a rugged peak 25 km. northeast of, and within site of Whitehorse. They are found on N. T. S. map sheet 105-D-15 at the head of Cap and Joe Creeks. Access to the claims is only by helicopter out of Whitehorse.

GEOCHEMICAL SURVEY

The geochemical soil sampling survey was conducted over an area of shallow soil covering a steep talus slope. The area covered by the survey was defined by the extent of the soil covering.

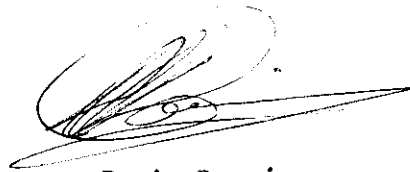
The samples were obtained from a poorly developed B soil horizon at a 10-15 cm. depth using mattocks. Soil material was placed in brown kraft paper bags numbered with the grid coordinates.

The dried samples were sent to Whitehorse Assayers for determination of the trace element concentrations of copper, lead, silver, molybdenum and tungsten. The copper, silver, lead and molybdenum were analysed via hot acid extraction determined by Atomic Absorption methods. The tungsten content was found using standard spectro-chemical methods.

The results are graphically illustrated on Plate 3 found in the folder at the end of this report. There were not enough samples collected to provide a data-base for detailed statistical analysis, however, an attempt has been made at interpretation. Each element's population was broken into five levels of significance based on a logarithmic scale. The populations were assumed to be of log normal distribution. The copper, lead and silver levels were found to have coincident highs. The contouring on Plate 3 is based on combined levels of copper, lead and silver. It reveals that the north quarter of the grid returns high readings. The two additional definitely anomalous areas are one sample anomalies and it is unlikely that they represent bedrock mineralization.

CONCLUSIONS AND RECOMMENDATIONS

Anomalous levels are found in the soils particularly in copper and tungsten. The north quarter of the grid deserves further work and talus prospecting should be conducted to the north of the grid. The definitely anomalous areas should be hand trenched in an attempt to locate the source of the anomalies. Geophysical surveys are also recommended for the area in an attempt to locate massive sulphides and/or magnetite.

A handwritten signature in black ink, appearing to read 'D. A. Downing', with a long horizontal flourish extending to the right.

D. A. Downing,
Geological Engineer.

CERTIFICATION

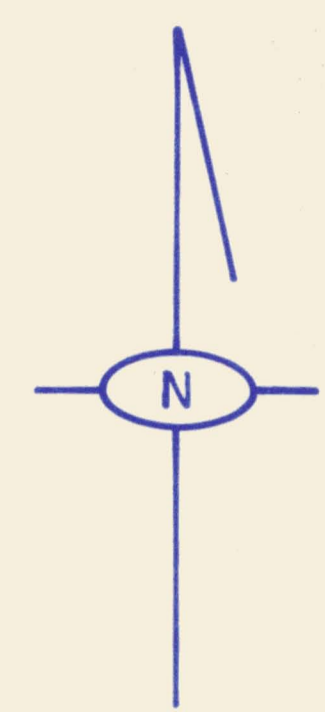
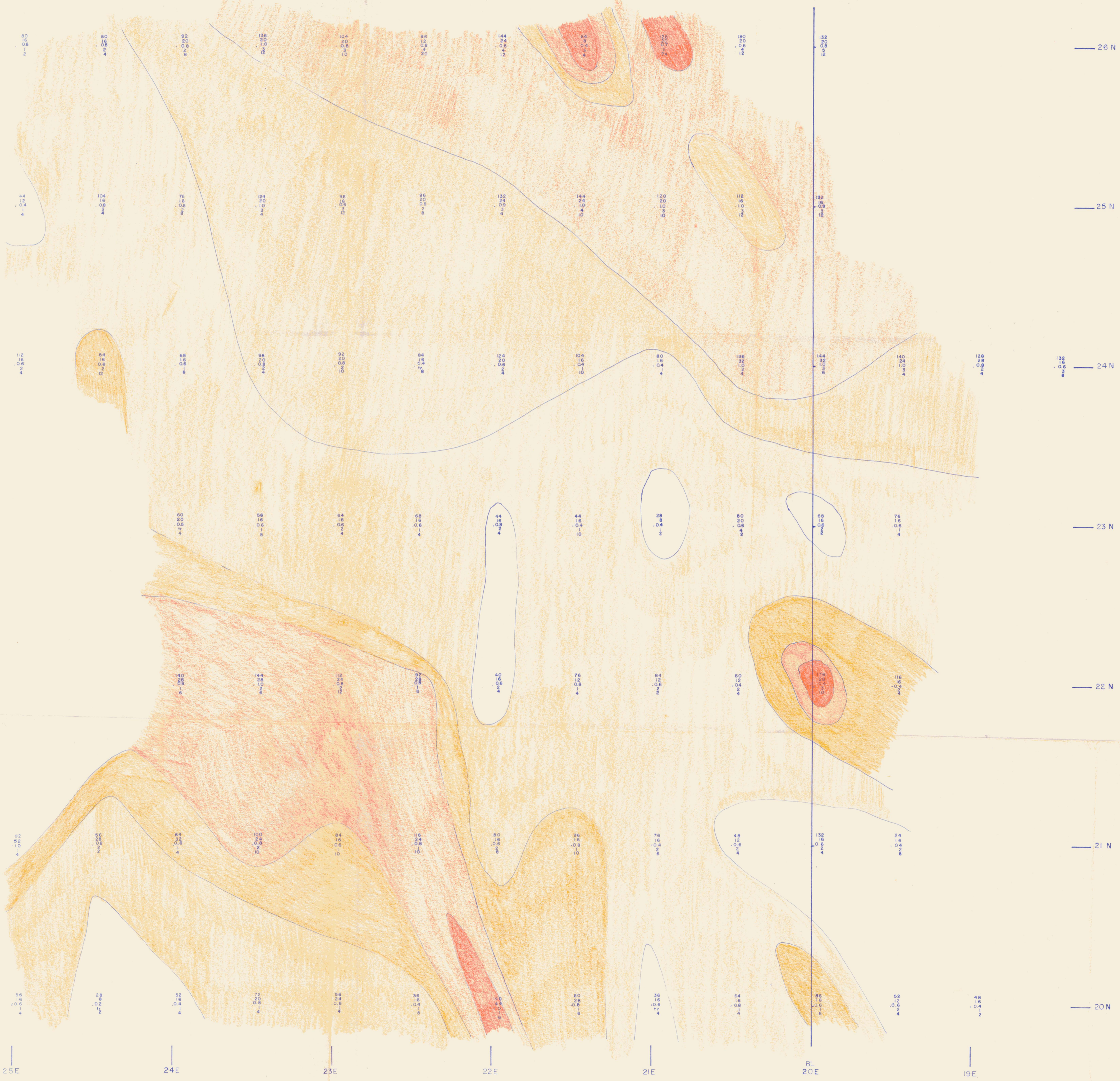
I, David A. Downing of Whitehorse, Y. T. do hereby certify that:

1. I am an exploration geologist residing at 101-21 Roundel Rd, Whitehorse, Y. T.
2. I am a graduate of Queen's University at Kingston in Geological Engineering.
3. I have practiced as an exploration geologist in the Yukon for two years.
4. Information contained in this report is based upon work performed by myself or by personnel under my direction.

D. A. Downing, B.Sc.(Eng.)

9 May 1980

Whitehorse, Y. T.



LEGEND

80
12
0.8
2
4
Sample Site with assays of
Copper
Lead
Silver
Molybdenum
Tungsten
in ppm

Contouring Based on Combined Values of Cu-Pb-Zn

- Definitely Anomalous
- Probably Anomalous
- Possibly Anomalous
- High Background
- Low Background

HUDSON BAY EXPLORATION & DEVELOPMENT COMPANY LIMITED		
WHITEHORSE	OFFICE	
GAR CLAIMS SOIL GEOCHEMISTRY		
DRAWN BY: <i>ST</i>	DATE: <i>Feb 80</i>	PLATE No.: 3
FIELD WORK BY: <i>ST</i>	REVISED BY:	SCALE: 2 cm = 25 m