

GEOCHEMICAL SURVEY  
FOR  
MORRIS BLACK  
ON

THE AT CLAIM GROUP  
Watson Lake Mining Division,  
Yukon Territory  
Claim Map 105 I - 12  
Latitude 62 Degrees, 43 Minutes North  
Longitude 129 Degrees, 33 Minutes West



BY  
Robert W. Nusbaum  
Geologist

September 9th, 1973 - December 20th, 1973

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 \$ 1647.65

*J.B. Craig*  
Resident Mining Engineer

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

*[Signature]*  
Commissioner of Yukon Territory

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### Conclusions

The small areas outlined by zinc values ranging from 400 to 750 parts per million, are commonly found in swampy environment with surrounding shales, which contain abnormally high amounts of zinc. The zinc is leached from the shale, and concentrated in the swampy bogs, thus giving anomalous sample values, but not necessarily indicating the presence of massive zinc sulfide mineralization.

### Recommendations

No further work is recommended on the AT Claim Group.

GEOCHEMICAL SURVEY  
FOR  
MORRIS BLACK  
ON  
THE AT CLAIM GROUP  
Watson Lake Mining Division  
Yukon Territory  
Claim Map 105 I - 12

Introduction

Mr. Morris Black acquired the AT Claim Group in the Spring of 1973, and upon recommendations of a Consulting Engineer, a Geochemical Survey was conducted on the Property, by Newcastle Explorations, Vancouver, B.C., between September 9th, and September 30th, 1973. The results of the survey were plotted, contoured, and evaluated by the author of this Report.

Property

The Property consists of sixteen claims staked by J.D. Poliquin, and were recorded on December 30th, 1972, Claim Map 105 I - 12. The following is a list of the claims with their grant numbers.

<u>Name of Claim</u>	<u>Grant Number</u>
AT 1 - 16	Y 71902 - Y 71917

Location & Access

The Property is located on the headwaters of the Provost River, just west of the Yukon - Northwest Territories Border. Latitude, 62 degrees, 43 minutes north, Longitude, 129 degrees, 33 minutes west, Watson Lake Mining Division, Yukon Territory, Claim Map 105 I - 12.

Access is by float plane to Cominco Lake, which is approximately eleven miles west of the AT group, then by helicopter to the Property, or, by helicopter directly from Ross River, approximately 100 miles to the southwest.

## Personnel

### Newcastle Exploration's Survey Crew:

Larry Sostad	Vancouver, B.C.
Gary Baker	Vancouver, B.C.
Jack Bradley	Vancouver, B.C.
David Munns	Vancouver, B.C.

## Soil Sampling Program

A baseline was cut and measured and a grid pattern was layed out on the claim group with lines at 400 feet spacings, and stations at 200 feet intervals. Soil samples were collected from the top of the "B" soil horizon using a hand auger. The samples were packaged in manilla envelopes, code-marked for identification, and sent to Loring Laboratory, Calgary, Alberta, for lead-zinc analysis. The samples were screened to minus 80 mesh, digested in aqua regia, and analysed for lead and zinc using the Atomic Absorption method.

## Survey Results

Approximately 215 sample results for lead-zinc analysis were received and plotted on maps on a scale of one inch to five hundred feet for contouring and intrepertation. A statisti-cal analysis of the results of the survey shows that there is an average background of about 14 parts per million in lead on the AT Claim Group. The anomalous category is three times background, in this case 42 parts per million lead. There were no samples on the AT group which fell in the anomalous lead category.

The average background value for zinc is about 152 parts per million, making the anomalous category, 456 parts per million, (i.e. three times background). Only seven samples fell in the anomalous zinc category, and five of these are on

line 24W in a swampy area to the west of a small lake. The other two are on the northeast part of the claim grid. Contouring of the zinc values over 400 parts per million outlines an area roughly 800 feet by 400 feet, with values range from 400 to 750 parts per million zinc, located at co-ordinates 8S 28W, 4S, 24W, 8S 24W, 10S 24W, 12S 24W, and 14S 24W.

Another area outlined by contouring zinc values over 400 parts per million, is found at co-ordinates 00S 28W, 2N 28W, 4N 28W, and 6N 28W. These values range from 416 to 500 parts per million zinc.

All of the zinc values which fall in the anomalous category are found in the more swampy areas, which is a common occurrence in this type of environment. The zinc ions are leached from the surrounding shale which contains an abnormally high content of zinc, which is then trapped and concentrated in the swampy bogs, thus giving anomalous zinc values to the soil samples, but not necessarily indicating the presence of massive zinc sulfide mineralization.

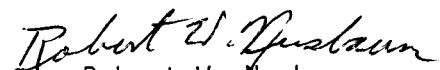
*Robert W. Nusbaum*  
Robert W. Nusbaum  
Consulting Geologist

CERTIFICATE OF QUALIFICATIONS

I, Robert W. Nusbaum, do hereby certify:

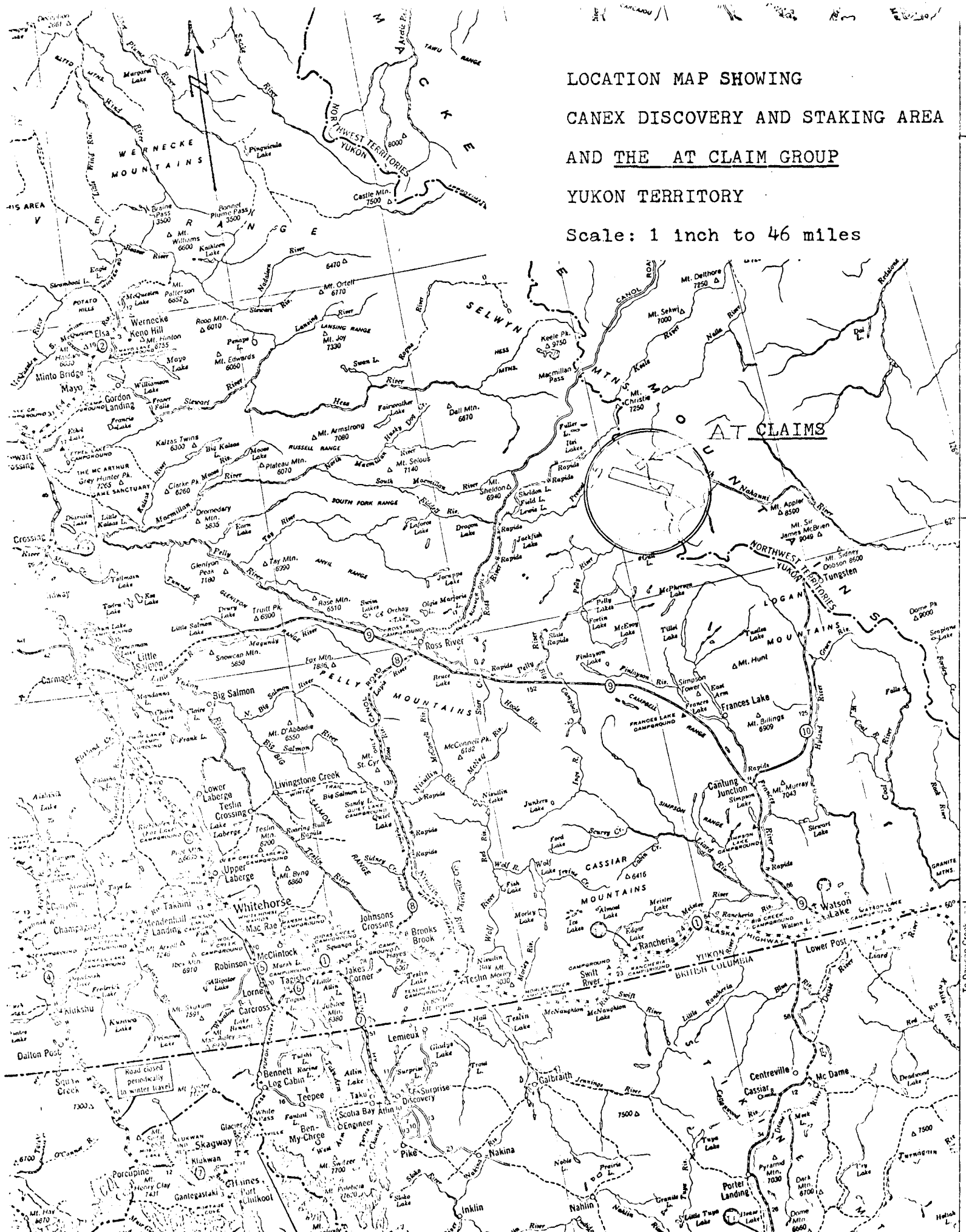
1. I am a practising Consulting Geologist with residence at, 660 Chatsworth Road, Richmond, B.C.
2. I am a graduate of the University of Idaho, with a Bachelor of Science Degree in Geology.
3. I have been practising my profession since 1959.
4. The accompanying Report is based on analytical data received from Loring Laboratory, Calgary, Alberta, personal experience in Yukon Territory and information received from Newcastle Explorations.
5. I have no interest in the Property, nor do I expect to receive any.

January 8th, 1974  
Vancouver, B. C.

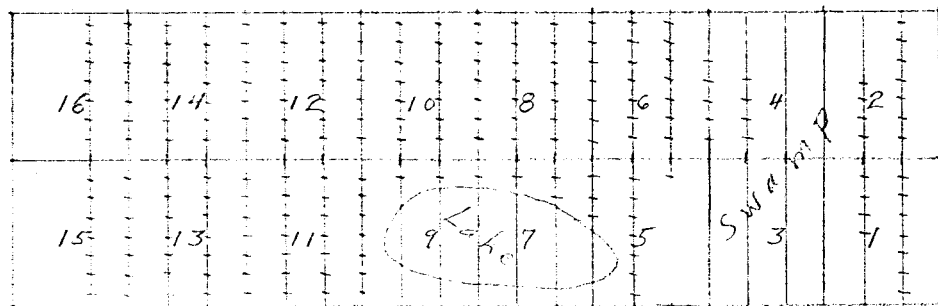
  
Robert W. Nusbaum  
Consulting Geologist

LOCATION MAP SHOWING  
CANEX DISCOVERY AND STAKING AREA  
AND THE AT CLAIM GROUP  
YUKON TERRITORY

Scale: 1 inch to 46 miles







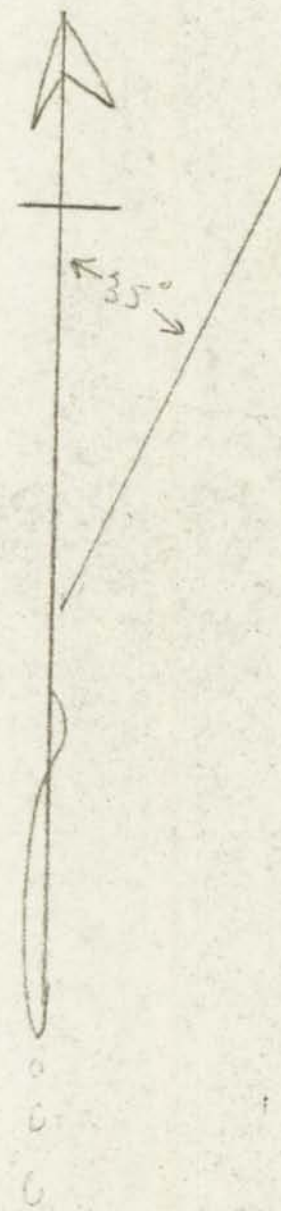
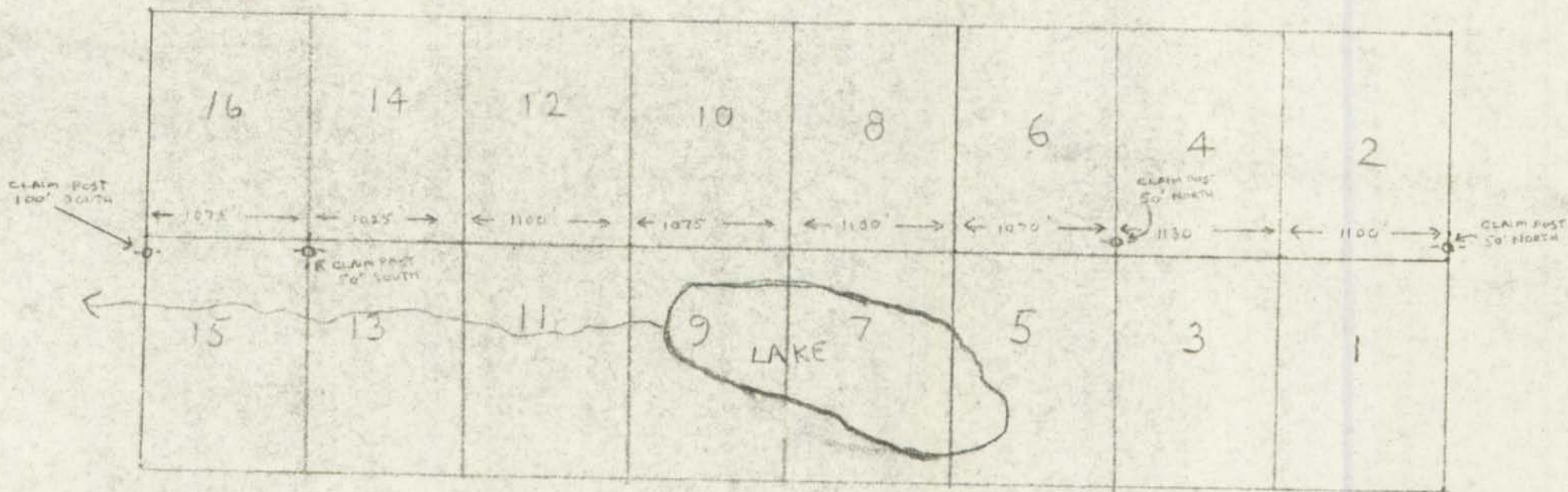
AT 1-16 Claim Group  
Yukon Territory

Claim Sheet 105 I-12  
Geochem Grid 400' line spacing, 200' stations  
Scale 1" to 2000' November, 1973 R.W.N.

# CLAIM SURVEY

AT #1-16

For  
Morris Black



SCALE = 1 inch = 1000 feet.

CLAIM SHEET 105 1-12

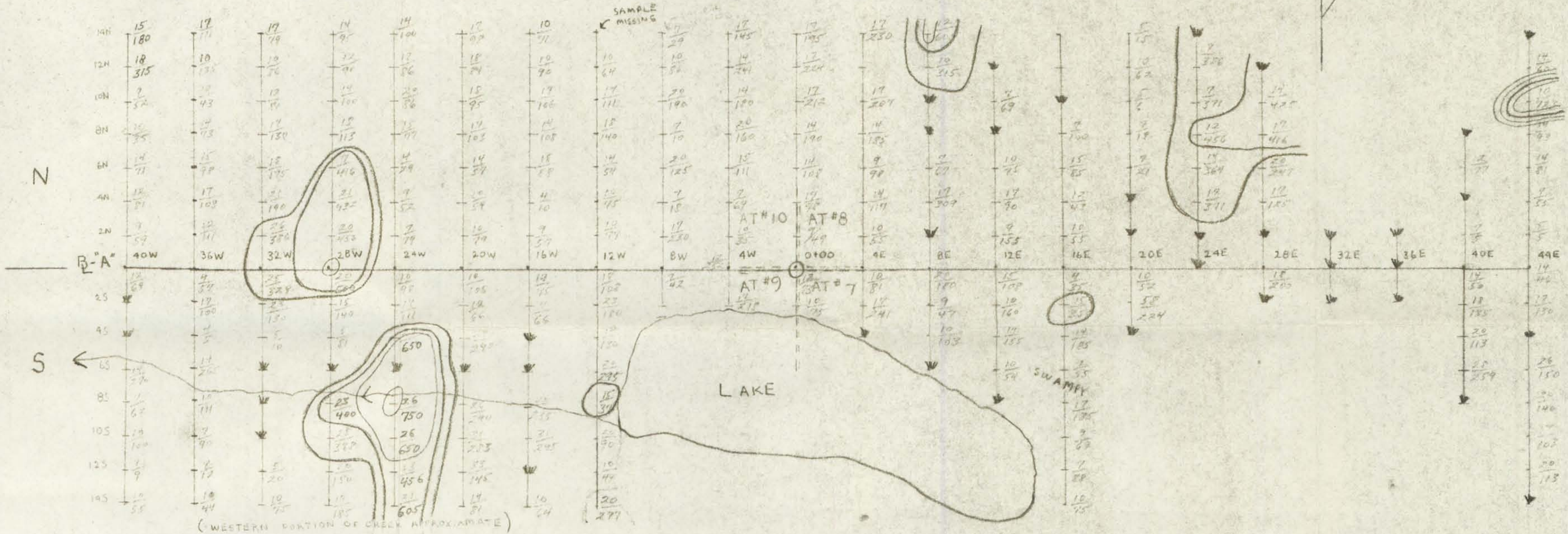
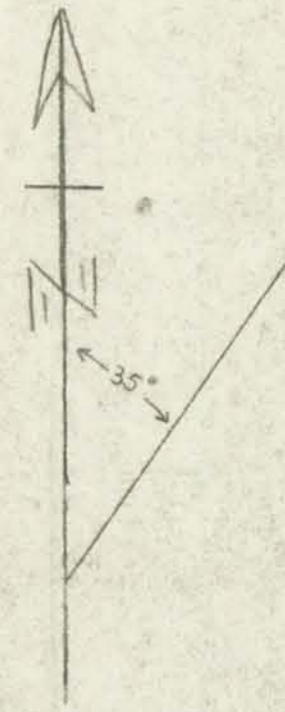
LRWS



# GEO-CHEMICAL SURVEY

## AT #1-16 MINERAL CLAIMS

For  
Morris Black



(WESTERN PORTION OF CREEK APPROXIMATE)

Values in ppm  $\frac{Pb}{Zn}$

Average Background Values 14 ppm lead  
Average Background Values 152 ppm zinc

Data compiled, plotted and  
contoured by R.W. Nusbaum

**LEGEND**

CREEK - - - - - ←

SWAMP - - - - - ↓

SAMPLE STATIONS - +

Contour Intervals 100 ppm  
Values less than 800 ppm not contoured.

SCALE = 1 inch = 500 feet