

GEOCHEMICAL REPORT

on LAKE CLAIM GROUP
(62° 10' N, 133° 10' W)

AT BLIND CREEK, YUKON

FOR

ANVIL MINING CORP. LTD

Report By: R.S. Adamson, P.Eng
Chief of Exploration for
ANVIL MINING CORP LTD



June 13th to 23rd, 1966

.....

WHITEHORSE TEL.: 667-4343, 667-7114
AREA CODE: 403, TELEX: 049-834
CABLE ADDRESS: ANVLMINE

VANCOUVER TEL.: 683-9304
AREA CODE: 604, TELEX: 04-50237
CABLE ADDRESS: ANVLZINC

ANVIL MINING CORPORATION LIMITED

P.O. BOX 2470
103 POLARIS BLOCK
WHITEHORSE, YUKON TERRITORY
CANADA

VANCOUVER OFFICE:
510 WEST HASTINGS STREET
VANCOUVER 2, B.C.
CANADA

October 11, 1966

**Mr. G. McIntyre
Chief Mining Recorder
Federal Building
Whitehorse, Yukon Territory**

Dear Mr. McIntyre:

**The accompanying report is submitted to apply
as assessment work on the LAKE Group.**

**The area covered is on claim map sheet
105 K/3.**

Yours truly,



**R.S. Adanson, P. Eng.,
Chief of Exploration for
ANVIL MINING CORP LTD**

GEOCHEMICAL SURVEY

LAKE CLAIM GROUP

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Geochemical Results

INTRODUCTION

A geochemical survey was carried out from June 13 to June 23, 1966, on the following LAKE mineral claims : DY 183 to 186 inclusive; 144; LAKE 20 to 27 inclusive and LAKE 32 to 40 inclusive. These claims are owned by ANVIL MINING CORP. LTD. and the work was done by company personnel for this company.

The object of the survey was to establish relatively large and generally defined areas of possible valuable metal content (Cu, Pb, Zn) with a view to following up on geochemically anomalous areas with geophysical techniques. Any geophysical anomalies located within a larger general geochemical anomaly would provide the necessary finer definition for diamond drilling.

Further, the geochemical survey is a method to establish whether airborne magnetic and electromagnetic anomalies, which often in the Vangorda area are caused by basic flows and intrusives and graphitic sediments respectively, could be massive sulphides carrying copper, lead, or zinc.

SOIL SAMPLING SURVEY TECHNIQUES

Control was established for the soil sampling survey by chain and compass, done by the samplers while in the process of sampling. No lines were cut. Survey flagging with the station names was left on a tree or bush at each station. The sampling was done on 400 foot centres.

Where possible the B horizon was sampled. However no time was wasted obtaining the B horizon in the event permafrost prevailed or an organic soil was thicker than one foot. In the latter case the organic soil would be analyzed in the lab when possible. In that the target was a large near surface sulphide deposit it was felt that a generally defined as opposed to a well defined geochemical anomaly was sufficient.

LABORATORY ANALYSIS

Test methods used involved a hot aqua regia extraction of heavy metal ions from the soil sample, followed by reaction with dithizone or biquinoline to give coloured products. The coloured reaction products were then matched with solutions of known metal content, which had been reacted with dithizone or biquinoline, to determine the metal content of the soil sample.

Separate and specific tests for each of the three metals, copper, lead and zinc were carried out on each soil sample.

RESULTS and INTERPRETATION

Of the three metals analyzed for, only copper values above 60 parts per million might be considered anomalous. No significant lead and very minor anomalous zinc was revealed.

In general, the copper values are erratic to the extent that contouring of the results is not considered justified. However, two areas of anomalous copper conditions are revealed in a general ill defined ^sense; a southern area on LAKE mineral claims 27, 32, 33, 35 and a northern area on LAKE 21, 39, and DY 183, 144.

Of significant interest is that both these areas would appear to be related to airborne anomalies. The northern geochemical area lies in close proximity to a northwest trending airborne electromagnetic anomaly. The southern geochemical area lies in relatively close proximity to north-eastern airborne electromagnetic trend with some airborne magnetic coincidence.

Of 386 samples taken in the field, only 315 were run in the lab, usually because of the exceptionally high organic content of the sample. This condition is especially prevalent around the northern area of anomalous geochemistry. It is possible that in this area if satisfactory soil samples could have been acquired that a firm and substantial geochemical anomaly could be established.

CONCLUSIONS and RECOMMENDATIONS

Float of massive pyrite with chalcopyrite has been encountered while building a road across the LAKE claim group. In view of this float, appreciable airborne electromagnetic anomalies, and areas of general geochemical response, it is possible that an ore body lies within these claims.

On this basis further work is considered to be fully justified and warranted on the LAKE group of mineral claims.

A program of tighter geochemistry, 200 foot centres is recommended for the northern area. Effort should be made

to recover satisfactory samples on those sites designated taken but not analyzed around the northern geochemical area. Further, this zone should be extended and ultimately closed to the west.

Related to this a ground followup of the airborne electromagnetic anomalies is in order. Both the geochemical followup and the airborne electromagnetic followup should be supplemented by a gravity survey.



R.S. Adamson, B.A.Sc., P.Eng.
Chief of Exploration for
ANVIL MINING CORP LTD.

APPENDIX I (1)

STATEMENT OF COSTS

Geochemical Survey LAKE Group

| | | | |
|-----|-----------------------------------|---------------|---------------|
| (A) | Soil Sampling (386 samples) | | \$1,006.00 |
| | Wages 22 man days @ \$15 | \$ 330.00 | |
| | Maintenance 22 man days @ \$8 | 176.00 | |
| | Camp erection | 200.00 | |
| | Transportation, helicopter | <u>300.00</u> | |
| | | 1,006.00 | |
| (B) | Laboratory Analysis (315 samples) | | 522.90 |
| | 315 samples @ \$1.66 per sample | 522.90 | |
| (C) | Compilation of Report | | 200.00 |
| (D) | Supervision | | <u>150.00</u> |
| | | Total: | \$ 1,878.00 |

APPENDIX I (11)

PERSONNEL

(A) Soil Sampling

| | | | | |
|-------------|----------------|----------|------------|----|
| R. Raaflaub | Sampler | Box 2470 | Whitehorse | YT |
| R. Beaumont | Sampler | " | " | " |
| F. Foran | Field Exeditor | " | " | " |
| N. McCreech | Labourer | " | " | " |

(B) Laboratory Analysis

| | | | | |
|-------------|--------------|---|---|---|
| J. Kirkland | Geochemist | " | " | " |
| R. Pringle | Lab Asst | " | " | " |
| L. Olsen | Lab Asst | " | " | " |
| W. Rundle | Sample Prep. | " | " | " |

(C) Compilation of Report

| | | | | |
|--------------|-------------------|---|---|---|
| R.S. Adamson | Exploration Chief | " | " | " |
| P. Byers | Draughtsman | " | " | " |

(D) Supervision

| | | | | |
|--------------|-------------------|---|---|---|
| R.S. Adamson | Exploration Chief | " | " | " |
| D. Mayes | Geologist | " | " | " |
| P. Byers | Lead Soil Sampler | " | " | " |

APPENDIX I (iii)

A F F I D A V I T

Supporting Statement of Costs
Geochemical Survey

June 13 - 23, 1966

I, Robert S. Adamson, Chief of Exploration for ANVIL MINING CORPORATION, Limited, have compiled the statement of costs as presented in this report "Geochemical Survey of LAKE Claim Group", DO MAKE OATH AND SAY AS FOLLOWS:

That to the best of my knowledge and belief, the statement of costs as presented is true and an accurate representation of expenditures to be applied as representative work on the DY 183 - 186 inclusive, 144; LAKE 20 - 27 inclusive and LAKE 32 - 40 inclusive.

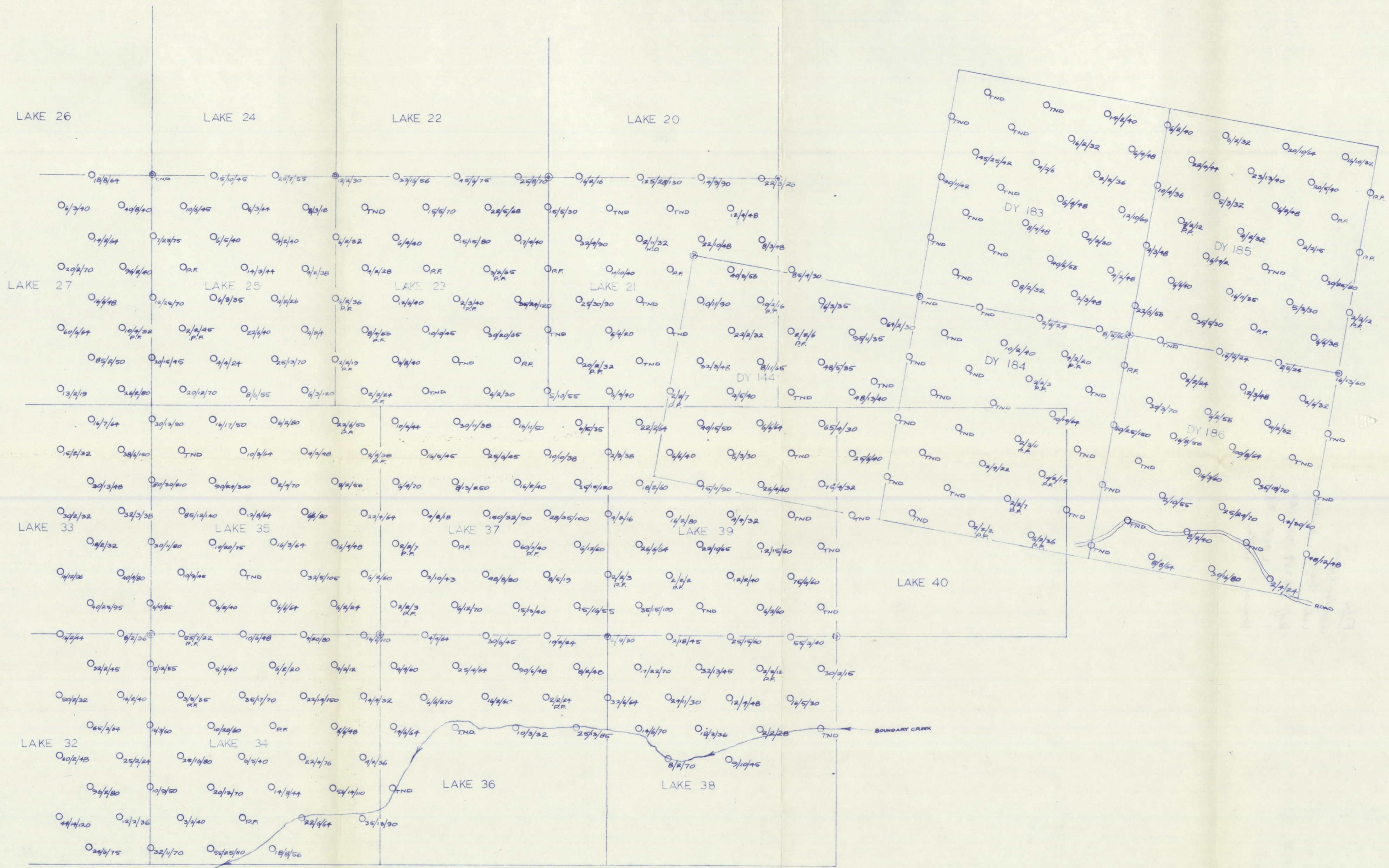
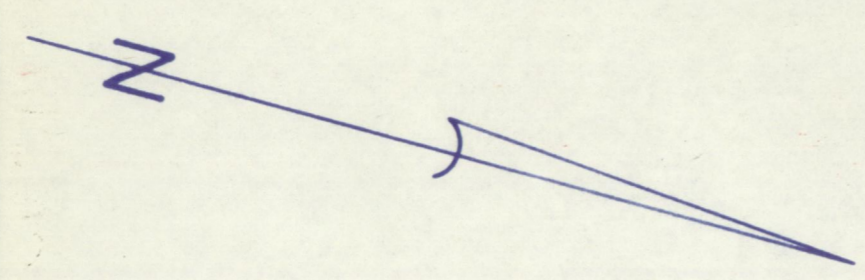


R. S. Adamson

Robert S. Adamson, B.A.Sc., P.Eng.
Chief of Exploration for
ANVIL MINING CORP LTD

DATED this.....*10th*.....day of.....*October*....., 1966, in
the City of Whitehorse in the Yukon Territory.

[Signature]
A Commissioner for taking Affidavits
in and for the Yukon Territory.



LEGEND
 O SAMPLE LOCATION
 1/2/3 SAMPLE ANALYSIS, CU/PB/ZN
 TND TAKEN, NOT ANALYSED
 H.O. HIGH ORGANIC
 P.F. PERMAFROST
 ⊙ CLAIM POST

| |
|--------------------------------|
| ANVIL MINING CORP. |
| FARO |
| LAKE GEOCHEMISTRY |
| SCALE: 1" = 400' |
| SAMPLES TAKEN: 386 |
| SAMPLES ANALYSED: 315 |
| SAMPLED BY: RAAFLAUB-BEAUMONT |
| DATE SAMPLED: JUNE 13-23, 1966 |
| DRAWN BY: PLB |