# REPORT ON A

# BIOGEOCHEMICAL SURVEY ON

# THE PLUM #1, PEACH #1, GRAPE #1

# AND CUT 1-4 MINERAL CLAIMS

OMINECA MINING DIVISION

NTS: 93N9

LAT: 55o 36', LONG: 124o 21'

owner, operator, author: Robert Wolfe, P.Eng.

May 15, 1985

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## FIGURES

# 1.0 INTRODUCTION

## 1.1 LOCATION AND ACCESS

The claims are located on the SW side of the Manson Lakes on the Manson Creek road, 154 km north of Fort St. James, B.C.

NTS: 93N9, LAT: 55° 36', LONG: 124° 21'

Elevations range from 900m to 1500m a.s.l. The small community of Manson Creek is located about 12 km by road north of the claims. Modest accommodation and food is available.

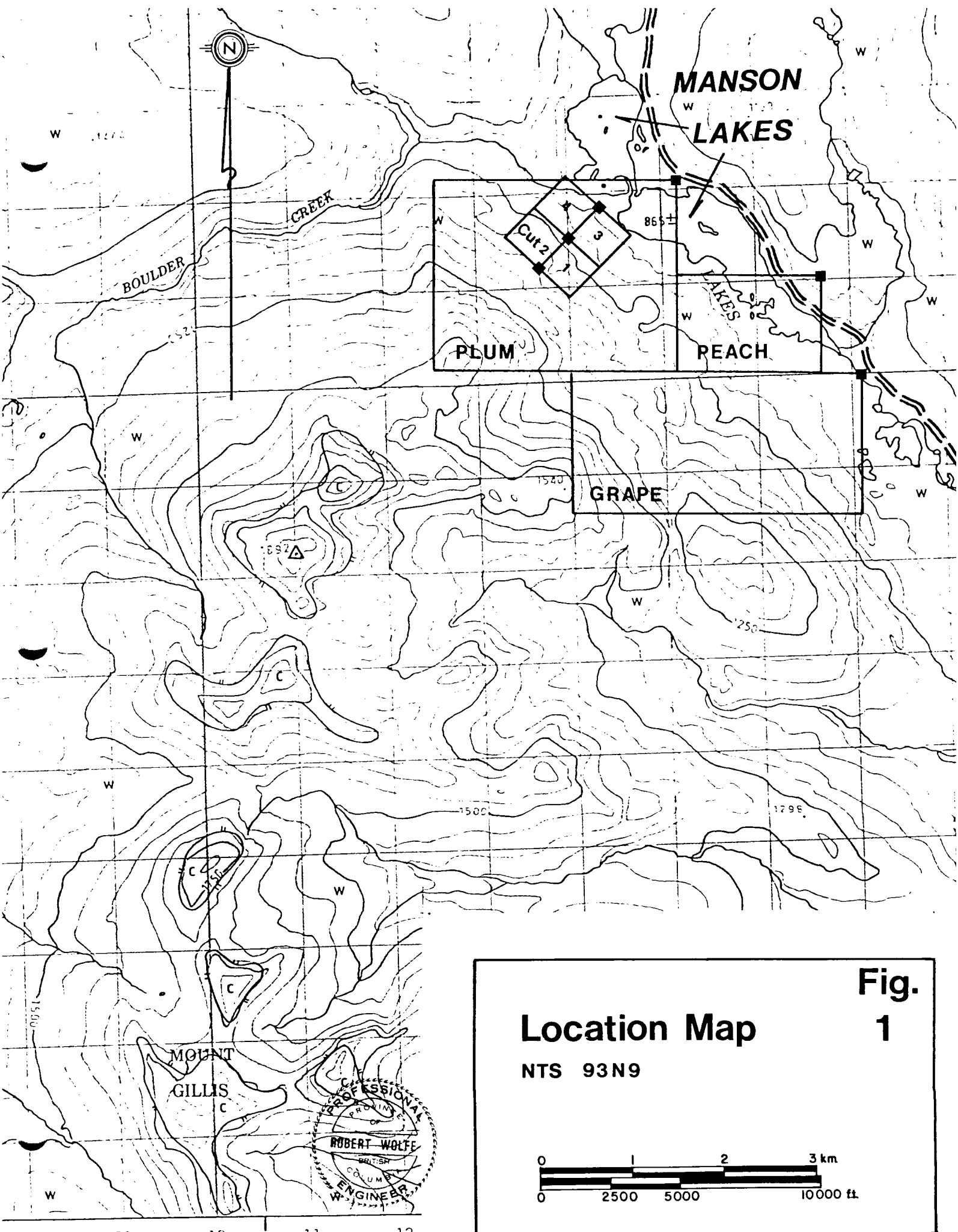
## 1.2 HISTORY

Azure Resources conducted a limited geochemical survey on the Northern part of the Plum claim in 1979 (then called the ELSIE claim) 56 rock samples indicated gold values ranging from 0.01 to .43 ppm Au and 1.6 to 82 ppm Ag. 37 soil samples ranged from 0.01 to 0.18 ppm Au and 1.9 to 8.2 ppm Ag. (Giroux 1984).

The property is favourably situated along the Manson Fault, which is known to be associated with gold mineralization (Armstrong 1965).

The claims could also be a source area for the placer gold reported in Boulder Creek, which flows through the Northern part of the Plum claim. The author worked immediately North of the claims in 1972 for Northern Tungsten Mines. This ground was subsequently explored by Imperial Oil in 1978 (the Bold claims).

Present owner and operator is Robert Wolfe




# Fig. 1

## Location Map

NTS 93N9

## 1.3 SUMMARY OF WORK DONE

60 tree samples were collected from the Plum and Cut claims on a reconnaissance basis, covering the area of known geochemical soil and rock anomalies as well as virgin ground.

## 1.4 CLAIMS

| NAME | #UNITS | RECORD DATE | RECORD NO |
|---|---|---|---|
| PLUM #1 | 20 | April 30/84 | 6164 |
| PEACH #1 | 6 | April 30/84 | 6165 |
| GRAPE #1 | 18 | April 30/84 | 6166 |
| CUT 1-4 | (2 post claims) | April 26/85 | - |

Note: The CUT 1-4 claims will revert to the Plum claims on the expiry date, being April 26, 1986, according to section 17 to the Mineral Act.

## 2.0 DETAILED TECHNICAL DATA AND INTERPRETATION

### 2.1 PURPOSE

In glacial terrain, where the depth of overburden can vary widely, Biogeochemistry can often produce reliable indications of subsurface mineralization. It was therefore decided to conduct an orientation survey over that small area, known to contain anomalous gold and silver values in the soils as well as test other areas over which no previous information had been collected.

### 2.2 SAMPLING PROCEDURE

Trees were sampled by cutting the last 3 years growth from the twigs, that is 1982, 83, 84 growth, and filling up a marked 8x13" plastic bag, to ensure enough material for analysis. Sampled trees were flagged and marked for later indentification. Notes were kept regarding location, species (mostly fir, some spruce and pine) and height of tree.

## 2.3 ANALYTICAL PROCEDURE

All samples were processed by Min-En Labs Ltd. of 705 West 15th St. North Vancouver, B.C.

Lab procedure of plants is as follows:

Assessment Report for Cu, Pb, Zn, Ag, Au
Analysis of Plants

3.00 to 5.00 grams of ground minus 40 msh plant material wet ashed with Nitric-sulphuric and Perchloric acid.

After wet ashing is complete sample residue is taken up by one normal perchloric acid solution.

Solutions are then analyzed by atomic absorption instrumentation along with an appropriate set of standards.

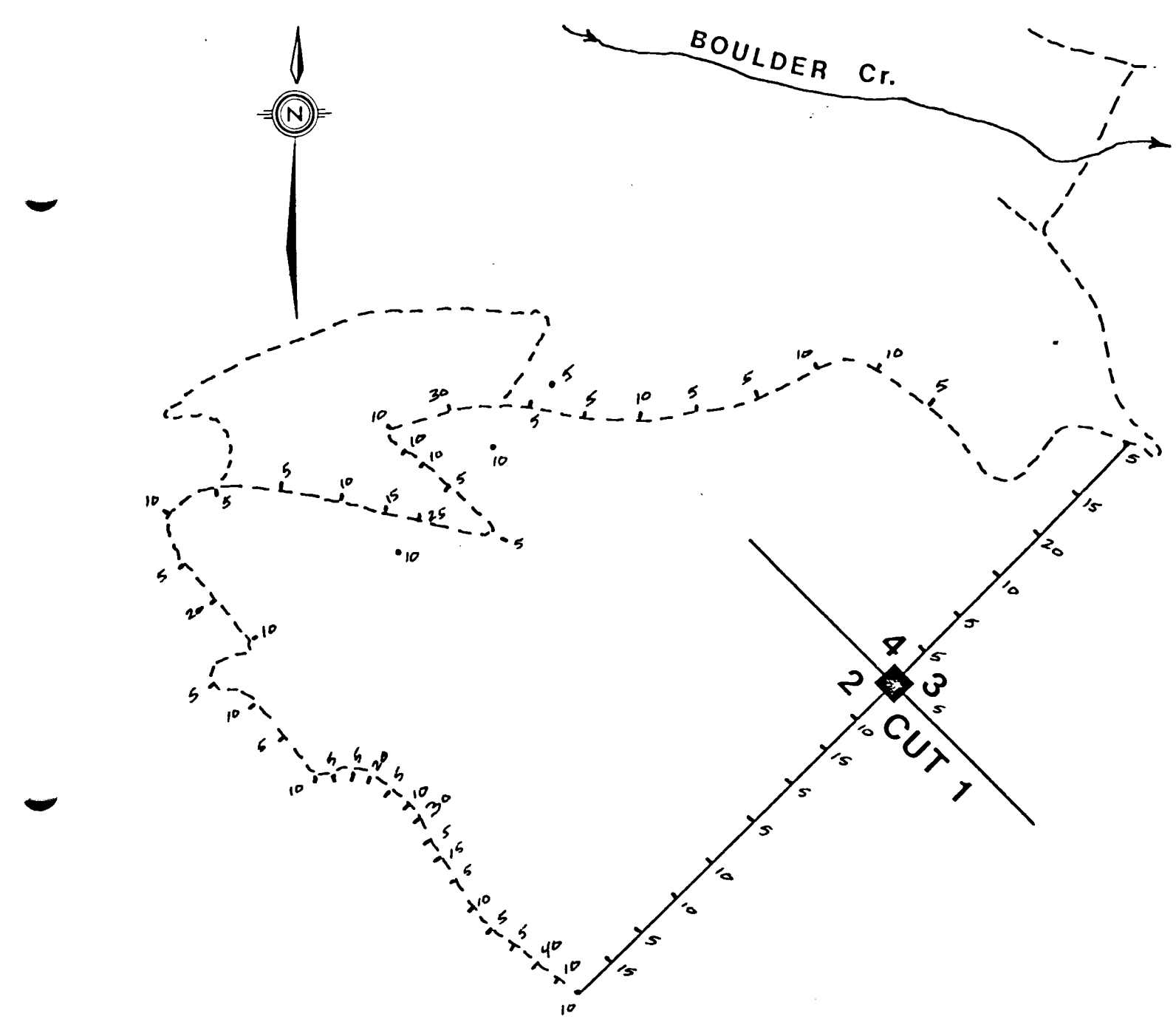
One gram of sample ashed along from each sample at 560 $^{o}$C and ash weight percentage obtained for calculation.

## 2.4 RESULTS

Sixty plant samples were analyzed for Cu, Pb, Zn, Ag and Au.

Cu ranged from a low 161 ppm to 445 ppm. Pb from a low of 62 ppm to 118 ppm. Zn from a low of 685 ppm to 3040 ppm. Ag from a low of 3.7 ppm to 7.0 ppm. Au from a low of 5 ppb to 40 ppb.

For all results see Appendix 3.



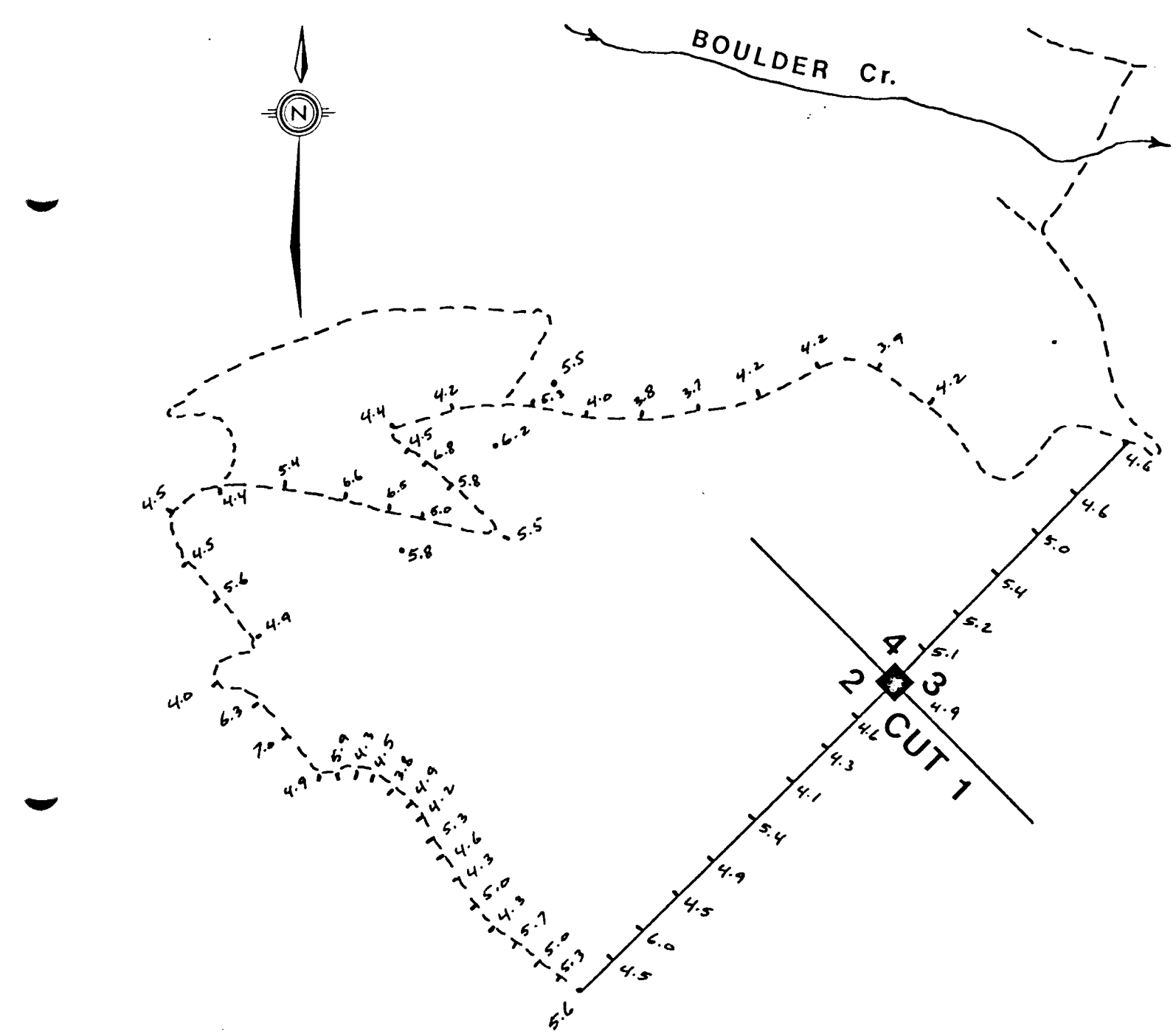

0 100 m 200 m 300 m 400 m

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
ROBERT WOLFE

# BIO-GEOCHEM. SURVEY

**Au** ppb

Fig. 2




0 100 m 200 m 300 m 400 m

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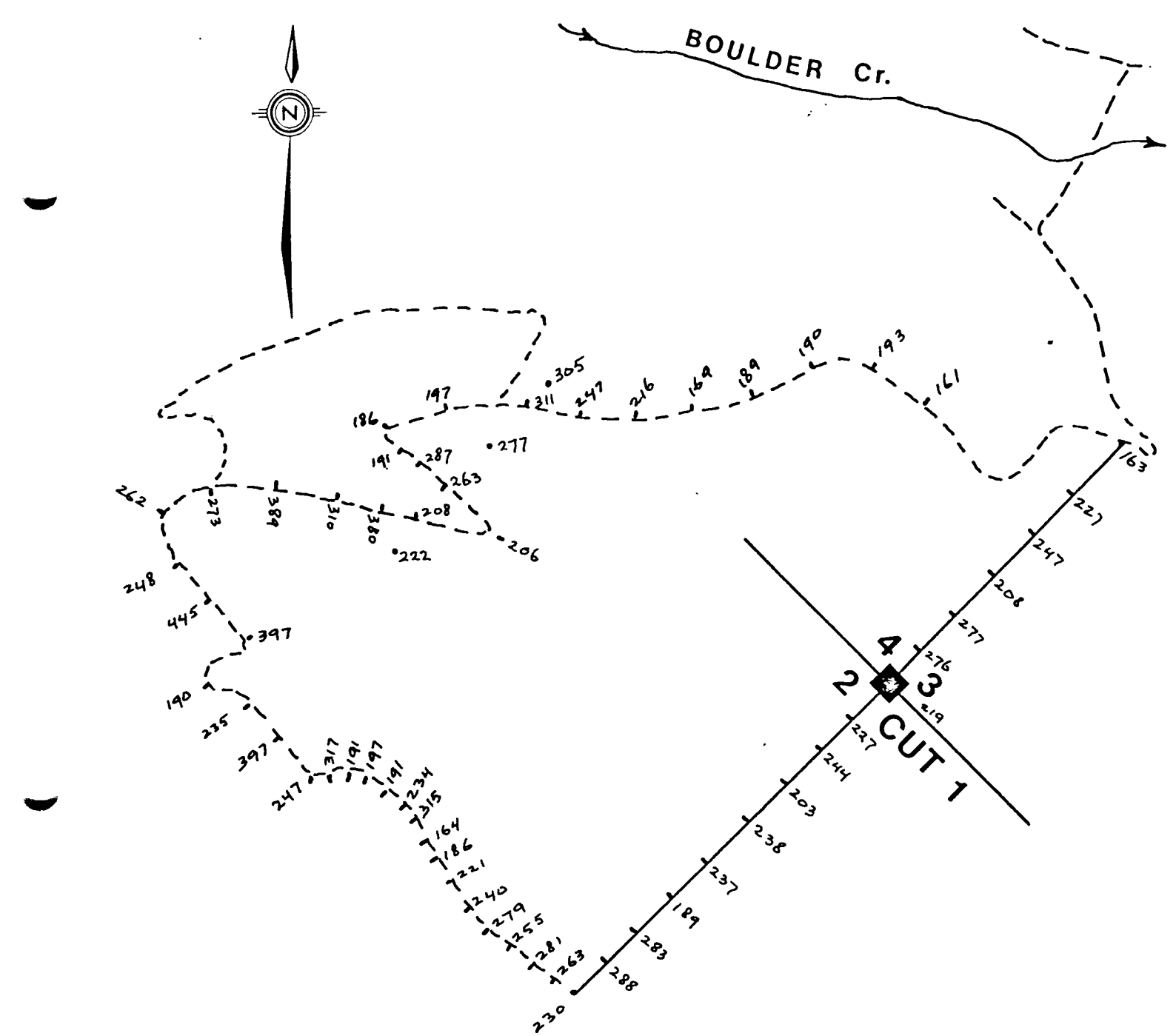
**BIO-GEOCHEM. SURVEY**

**Ag** ppm

Fig. 3




0 100 m 200 m 300 m 400 m

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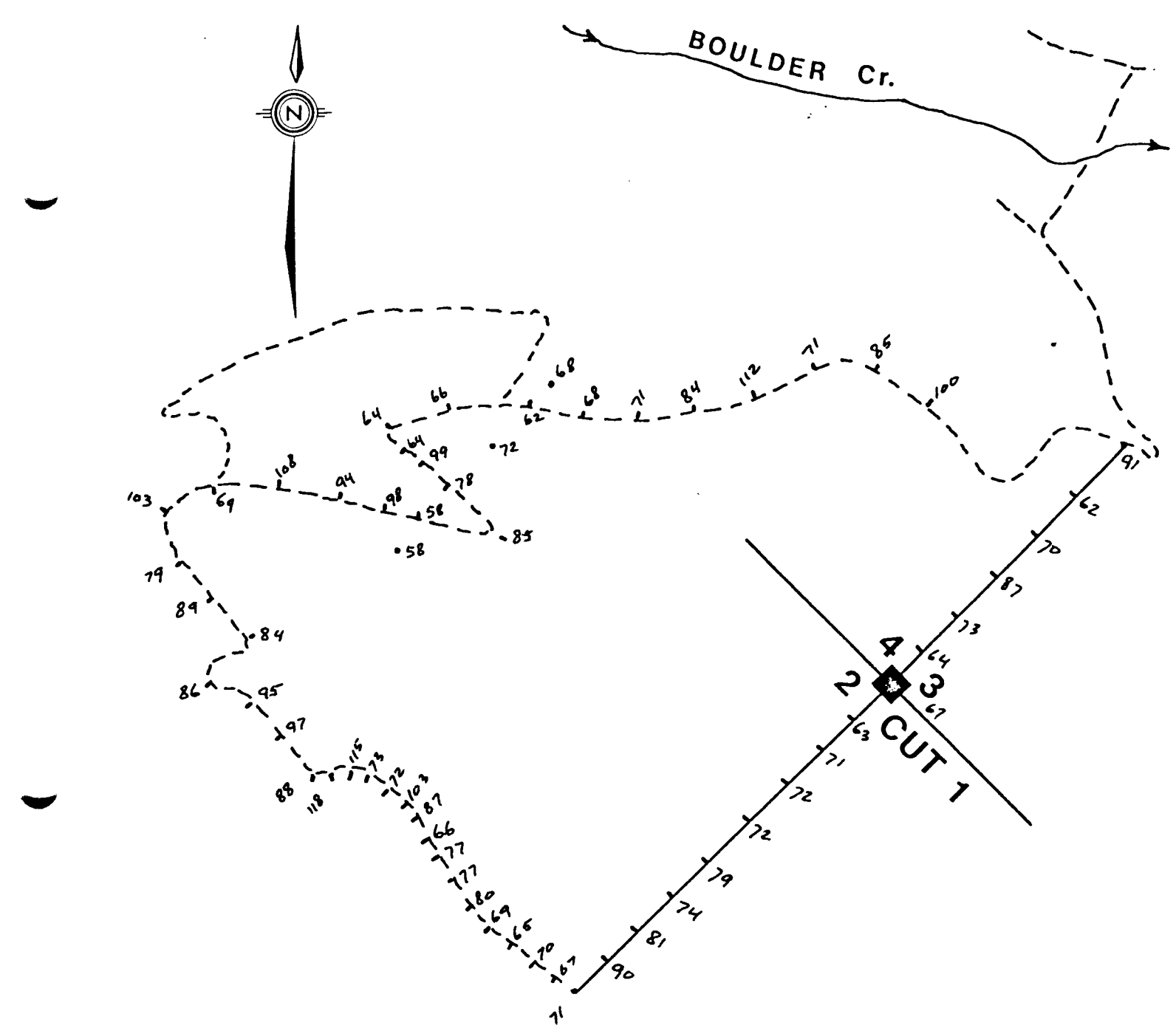
**BIO-GEOCHEM. SURVEY**

**Cu ppm**

Fig. 4

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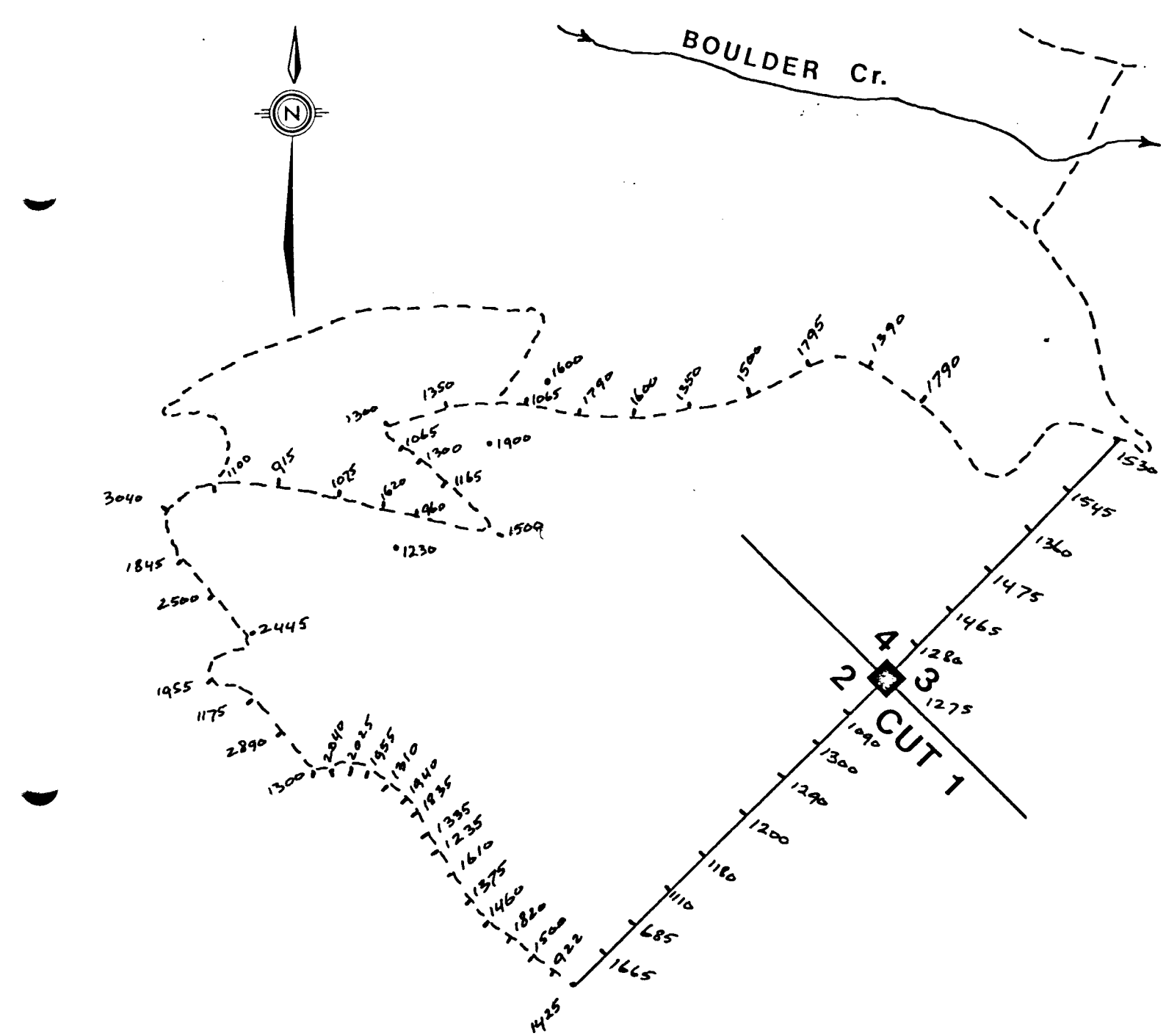
# BIO-GEOCHEM. SURVEY

**Pb** ppm

Fig. 5




0 100 m 200 m 300 m 400 m

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
ROBERT WOLFE

# BIO-GEOCHEM. SURVEY

**Zn ppm**

Fig. 6

## 2.5 INTERPRETATION

A visual examination of the analytical results shows no obvious deviations from a normal distribution. It was therefore not considered worthwhile to draw up frequency distributions. Also, there is no correlation between the high values of any of the 5 metals analyzed.

## 2.6 SUMMARY AND CONCLUSIONS

A biogeochemical survey was conducted over the Plum and Cut claims near Manson Lakes in the Omineca Mining Division in B.C.

Sixty tree samples were collected over an area where some gold and silver anomalies were discovered in the soil in the late seventies.

The purpose of the survey was to explore whether biogeochemical sampling would yield better and/or more consistent results than soil sampling for the discovery of possible ore deposits.

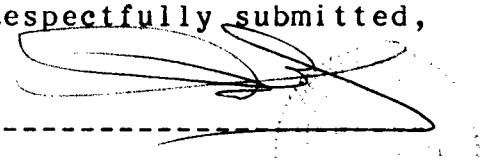
Analylitical results showed no significant anomalies. No correlation exists between any of the metals and none of the high values correspond with any of the previously discovered soil anomalies.

Consequently, the biogeochemical orientation survey was not effective in this area and no further tree sampling is recommended.

## 3.0 ITEMIZED COST STATEMENT

| | | |
|---|---|---|
| **FIELD PERSONNEL** | | |
| (April 17-21/85 including travel from Vancouver) | | |
| 1 Sampler | 5 days @ $200/day | 1,000.00 |
| 1 Sampler & Supervisor | 5 days @ $300/day | 1,500.00 |
| **FOOD AND ACCOMMODATION** | | |
| Food | 10 days @ $20/day | 200.00 |
| Accommodation | 5 days @ $40/day | 200.00 |
| **VEHICLE RENTAL** | | |
| 1 Truck 4W.D. | 5 days @ $ 50/day | 250.00 |
| | 2000 km @ $0.15/km | 300.00 |
| **GAS** | | 195.00 |
| **EQUIPMENT AND SUPPLIES** | | |
| Snowshoe Rental | | 30.00 |
| Sample bags, Flagging, Clippers, etc. | | 45.00 |
| **ANALYSES** | | |
| 60 samples @ $15.70/sample | | 942.00 |
| **REPORT PREPARATION** | | |
| R. Wolfe, P.Eng | 2 days @ $300/day | 600.00 |
| Drafting, typing, copies, etc. | | 260.00 |
| | **TOTAL:** | $5,522.00 |

Respectfully submitted,



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R. Wolfe, P.Eng.

## APPENDIX 1

### CERTIFICATE

I, Robert Wolfe of Vancouver, B.C., do hereby certify that:

1) I am a consulting geological engineer with an office at 3919 West 31st Ave., Vancouver, B.C.

2) I am a graduate of the University of Alberta (B.Sc. 1963) in Physics and Geology and studied another year of geology at the University of British Columbia in 1963-1964.

3) I have practiced my profession since graduation while being employed by such companies as Kennco (Western) Exploration Ltd., Meridian Syndicate (Canex, Noranda, Home Oil) and Orequest Syndicate (Home Oil, Asbestos Corp.). I have been in private indendent practice since 1969.

4) I am a member in good standing of the Association of Professional Engineers in the Province of British Columbia and also in Yukon Territory.

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R. Wolfe, P.Eng.

## APPENDIX 2

### REFERENCES

1. **ARMSTRONG, J.E. (1965)** G.S.C. MEMOIR 252

2. **GIROUX, G.H. (1984)** Report on the PEACH, PLUM AND GRAPE Mineral Claims on behalf of Polestar Exploration Inc. (Private Report).

3. **MONTGOMERY, J.H. (1979)** Report on the ELSIE GROUP of Mineral Claims on behalf of Azure Resources (Private Report).

4. **WOLFE, R. (1972)** Geochemical Report on the Reynolds, Spaner, Stroh, Leslie, Wright, Doyle, and Pattenden Claims Assessment Report 3864

# APPENDIX 3

GEOCHEM ANALYSES

MIN-EN Laboratories Ltd.
*Specialists in Mineral Environments*
705 WEST 15th STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

PHONE: (604) 980-5814 OR (604) 988-4524 TELEX: 04-352828

# GEOCHEMICAL ANALYSIS CERTIFICATE

COMPANY:
PROJECT: MANSON
ATTENTION: R.Wolfe

FILE: 5-126
DATE: MAY 3, 1985
TYPE: PLANT BIOGEOCHEM

*We hereby certify* that the following are the results of the geochemical analysis made on 30 samples submitted.

| SAMPLE NUMBER | CU PPM | PB PPM | ZN PPM | AG PPM | AU PPB |
|---|---|---|---|---|---|
| 1 | 305 | 68 | 1600 | 5.5 | 5 |
| 2 | 311 | 62 | 1065 | 5.3 | 5 |
| 3 | 277 | 72 | 1900 | 6.2 | 10 |
| 4 | 263 | 78 | 1165 | 5.8 | 5 |
| 5 | 208 | 58 | 960 | 5.0 | 25 |
| 6 | 222 | 56 | 1230 | 5.8 | 10 |
| 7 | 164 | 66 | 1335 | 5.3 | 5 |
| 8 | 186 | 77 | 1235 | 4.6 | 15 |
| 9 | 221 | 77 | 1610 | 4.3 | 5 |
| 10 | 240 | 80 | 1375 | 5.0 | 10 |
| 11 | 279 | 69 | 1460 | 4.3 | 5 |
| 12 | 255 | 65 | 1820 | 5.7 | 5 |
| 13 | 281 | 70 | 1500 | 5.0 | 40 |
| 14 | 263 | 67 | 722 | 5.3 | 10 |
| 15 | 230 | 71 | 1425 | 5.6 | 10 |
| 16 | 288 | 90 | 1665 | 4.5 | 15 |
| 17 | 283 | 81 | 685 | 6.0 | 5 |
| 18 | 189 | 74 | 1110 | 4.5 | 10 |
| 19 | 237 | 79 | 1180 | 4.9 | 10 |
| 20 | 238 | 72 | 1200 | 5.4 | 5 |
| 21 | 203 | 72 | 1290 | 4.1 | 5 |
| 22 | 244 | 71 | 1300 | 4.3 | 15 |
| 23 | 227 | 63 | 1090 | 4.6 | 10 |
| 24 | 219 | 67 | 1275 | 4.9 | 5 |
| 25 | 276 | 64 | 1280 | 5.1 | 5 |
| 26 | 277 | 73 | 1465 | 5.2 | 5 |
| 27 | 208 | 87 | 1475 | 5.4 | 10 |
| 28 | 247 | 70 | 1360 | 5.0 | 20 |
| 29 | 227 | 62 | 1545 | 4.6 | 15 |
| 30 | 163 | 91 | 1530 | 4.6 | 5 |

*Certified by* Ken Smith

MIN-EN Laboratories Ltd.
*Specialists in Mineral Environments*
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| SAMPLE NUMBER | CU PPM | PB PPM | ZN PPM | AG PPM | AU PPB |
|---|---|---|---|---|---|
| 31 | 287 | 99 | 1300 | 6.8 | 10 |
| 32 | 206 | 85 | 1500 | 5.5 | 5 |
| 33 | 380 | 98 | 1620 | 6.5 | 15 |
| 34 | 310 | 94 | 1025 | 6.6 | 10 |
| 35 | 389 | 108 | 915 | 5.4 | 5 |
| 36 | 273 | 69 | 1100 | 4.4 | 5 |
| 37 | 262 | 103 | +3040 | 4.5 | 10 |
| 38 | 248 | 79 | 1845 | 4.5 | 5 |
| 39 | +445 | 89 | 2500 | 5.6 | 20 |
| 40 | 397 | 84 | 2445 | 4.9 | 10 |
| [illegible] | 190 | 86 | 1755 | 4.0 | 5 |
| 42 | 235 | 95 | 1175 | 6.3 | 10 |
| 43 | 397 | 97 | 2890 | +7.0 | 5 |
| 44 | 247 | 88 | 1300 | 4.9 | 10 |
| 45 | 317 | +118 | 2040 | 5.9 | 5 |
| 46 | 191 | 115 | 2025 | 4.3 | 5 |
| 47 | 197 | 73 | 1955 | 4.5 | 20 |
| 48 | 191 | 72 | 1310 | 3.8 | 5 |
| 49 | 234 | 103 | 1940 | 4.9 | 10 |
| 50 | 315 | 87 | 1835 | 4.2 | 30 |
| 51 | 191 | 64 | 1065 | 4.5 | 10 |
| 52 | 186 | 64 | 1300 | 4.4 | 10 |
| 53 | 197 | 66 | 1350 | 4.2 | 30 |
| 54 | 247 | 68 | 1790 | 4.0 | 5 |
| 55 | 216 | 71 | 1600 | 3.8 | 10 |
| 56 | 169 | 84 | 1350 | —3.7 | 5 |
| 57 | 189 | 112 | 1500 | 4.2 | 5 |
| 58 | 190 | 71 | 1795 | 4.2 | 10 |
| 59 | 193 | 85 | 1390 | 3.9 | 10 |
| 60 | — 161 | 100 | 1790 | 4.2 | 5 |

*Certified by* [signature]