

MACDONALD CONSULTANTS LTD.  
SUITE 12-425 HOWE STREET, VANCOUVER 1, B.C.

83D/104E

Report on a  
Geochemical Survey  
Sept. 26 - Oct. 10, 1970  
on the  
BEND 17-26 Mineral Claims  
Located in the  
Golden Mining Division, B.C.  
Near the Junction of the Columbia  
and Cummins Rivers  
(52°03'N, 118°13'W)  
held by  
Cominco Ltd.  
by  
MacDonald Consultants Ltd.  
E. D. Dodson, P. Eng.

Vancouver, B.C.

April 28, 1971

29992

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## INTRODUCTION

During the period September 26 to October 10, 1970, a geochemical soil survey was completed on the BEND 17-26 mineral claims located in the Golden Mining Division, B.C.

The work was done under the guidance of the writer with field supervision provided by Mr. J. E. Stockwell of MacDonald Consultants Ltd.

## LOCATION AND ACCESS

The claims are located approximately 100 miles north of Revelstoke, B.C. The major dam construction site at Mica Creek lies approximately fifteen miles to the west of the claims. A paved highway runs from Revelstoke to the dam site. The claims lie approximately 2.5 miles north of the junction of the Cummins River with the Columbia River and approximately one mile <sup>3/4</sup> west of the Big Bend Highway. Local access is provided by gravel roads from the Big Bend Highway.

## TOPOGRAPHY

The claim block lies near the junction of the Cummins and Columbia River Valleys, which have average slope gradients of 45° and 30° respectively. Elevations range from 2200 feet to 7500 feet in the Cummins Range to the north.

The entire property lies between 2100 feet and 5200 feet above sea level with an average relief of 3100 feet.

PROPERTY

All the claims lie in the Golden Mining Division. Details of the claims are as follows:

| <u>Claim Name</u> | <u>Record Number</u> | <u>Expiry Date</u> |
|-------------------|----------------------|--------------------|
| BEND 17-18        | 11752 - 11753        | September 9, 1971  |
| BEND 19-20        | 11754 - 11755        | September 22, 1971 |
| BEND 21-26        | 13199 - 13204        | June 22, 1971      |

The claims currently are held under option agreement from Cominco Ltd. by Laura Mines Ltd. (N.P.L.).

HISTORY

Mineralization was first found during construction of the Big Bend Highway in the 1940's. In 1966 Cominco Ltd. located 45 mineral claims in the area and performed a program of geological mapping over the entire claim group. Shallow x-ray drilling in the same year totalled 786 feet from thirteen holes (maximum 104 feet).

In 1970 Laura Mines Ltd. (N.P.L.) took an option on the BEND claims held by Cominco.

GENERAL GEOLOGY

The claims area is underlain by a series of Cambrian sediments which consist of quartzites, limey quartzites, argillaceous limestones, dolomite, argillite, and garnetiferous schists. The rock units tend to be tightly folded with the axial planes of the folds generally striking northwesterly and with dips steep to the southwest.

Syenite and nepheline syenite dykes are reported to occur several miles to the south of the property.

GEOCHEMICAL SURVEY

Soil sampling was performed on a line grid established over the entire claim group. The grid was established using compass and chain with stations flagged and marked at every 200 feet. Slope chainage was used whenever necessary. Soil samples were taken at every station along the grid lines, which were spaced 400 feet apart. Samples were collected whenever possible from the "B" soil horizon by using mattocks. The samples were packed in pre-numbered, high wet-strength paper bags supplied by the assay office.

All samples were assayed for lead and zinc by Bondar-Clegg & Co. Ltd., 1500 Pemberton Avenue, North Vancouver, B.C. The -80 mesh fraction was digested using hot aqua regia and assayed by atomic absorption. A total of 368 soil samples were collected and assayed.

Assay results are shown on the geochemical maps included in the pocket at the back of this report.

Background values for lead were estimated to lie in the 25-50 ppm. range. Values in excess of 100 ppm. might therefore be considered to be significantly anomalous.

Background values for zinc were estimated to lie in the 50-150 ppm. range. Values in excess of 400 ppm. might be considered to be significantly anomalous.

A coincident geochemical anomaly for lead and zinc occurs on the BEND 17, 19, and 24 mineral claims. The anomaly coincides with a known showing that consists of local irregular pods of massive sphalerite with minor galena and pyrite.

A small lead and zinc geochemical anomaly occurs on the southern edge of the BEND 25 and 26 mineral claims. Mineralized float was found in the area. No determination of the source of this float has been made.

No significant extension of the known zone of mineralization was outlined by the geochemical survey.

SUMMARY AND CONCLUSIONS

- 1.) From September 26 to October 10, 1970, a geochemical soil survey was performed over the BEND 17-26 mineral claims. A total of 368 soil samples were collected and assayed for lead and zinc.
- 2.) A coincident, lead-zinc anomaly was outlined on the BEND 17, 19, and 24 mineral claims coincident with an area of known mineralized showings.
- 3.) No extension of the known area of mineralization was suggested, nor were any new possible targets outlined.

Respectfully submitted,  
MACDONALD CONSULTANTS LTD.



E. D. Dodson, P. Eng.

EDD/mb

STATEMENT OF EXPENDITURES

September - October 1970:

|          |                  |
|----------|------------------|
| Salaries | \$ 683.50        |
| Expenses | 1063.06          |
| Total    | <u>\$1746.56</u> |

SALARIES - September-October 1970:

|             |                      |                  |
|-------------|----------------------|------------------|
| N. Basok    | 9 days @ \$37.50/day | \$ 337.50        |
| W. Buckley  | 5 days @ \$40.00/day | 200.00           |
| D. Hallwood | 4 days @ \$36.50/day | 146.00           |
| Total       |                      | <u>\$ 683.50</u> |

EXPENSES - September-October 1970:

|  |                  |
|--|------------------|
| Bondar-Clegg & Co. Ltd. - 368 soil samples @ \$1.60/sample | \$625.60         |
| Red & White Supermarket                                    | 50.00            |
| Equipment rental   | 19.27            |
| Jones Tent & Awning Ltd.                                   | 2.31             |
| R. H. Hamelin, Esso Service                                | 115.99           |
| Marshall Wells   | 24.06            |
| Marshall Wells - 1/3 of \$178.16                           | 59.39            |
| Truck rentals - 12 miles @ 12¢/mile                        | 1.44             |
| Truck rental - 9 days @ \$15.00/day                        | 135.00           |
| Camp equipment rental - approximately 1/2 x \$120.00       | 30.00            |
| Total  | <u>\$1063.06</u> |

MACDONALD CONSULTANTS LTD.  
SUITE 12 - 425 HOWE STREET, VANCOUVER 1, B.C.

April 28, 1971

CERTIFICATE

I, Earl D. Dodson, do hereby declare that:

- 1.) I reside at 2990 St. Kilda Avenue, North Vancouver, B.C., and have business address at 12 - 425 Howe Street, Vancouver 1, B.C.
- 2.) I am a graduate in geology of the University of British Columbia, 1954.
- 3.) Since 1954 I have been employed in various phases of mineral exploration; in the latter years in posts of considerable responsibility.
- 4.) I am a professional engineer registered in the Associations of Professional Engineers of the Province of British Columbia and the Yukon Territory.

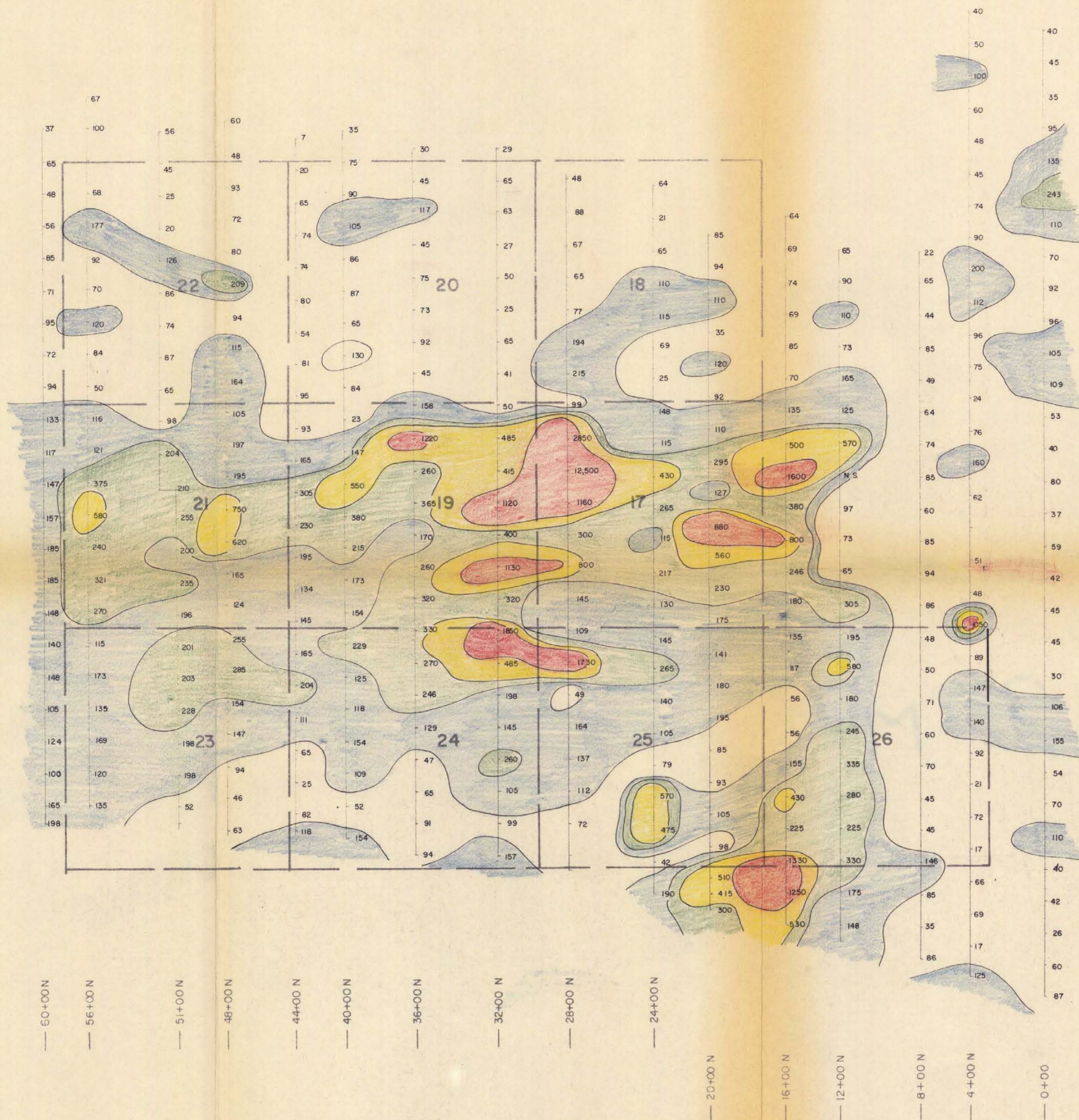
Respectfully submitted,  
MACDONALD CONSULTANTS LTD.



E. D. Dodson, P. Eng.

EDD/mb





LEGEND

- < 100 ppm Zn
- 100 - 200
- 201 - 400
- 401 - 800
- > 800

2992 M-1

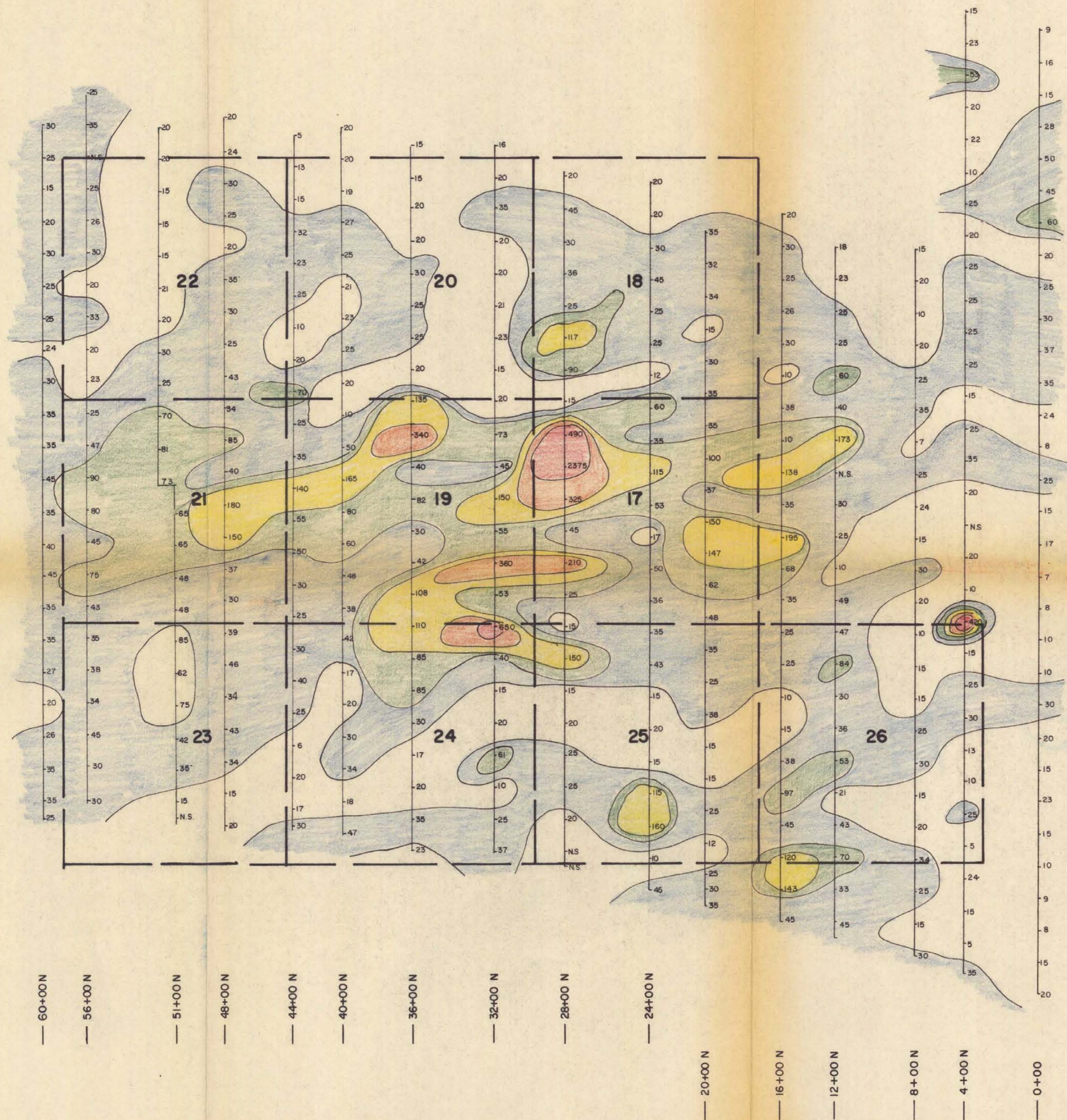
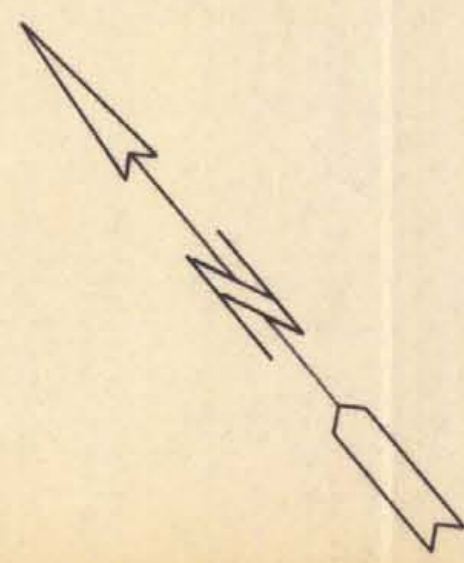
Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 2992 MAP #1

To accompany geochemical report by  
E. D. Dodson, P. Eng., on the Bend Group  
on the Cummins River in the Golden Mining  
Division.

*E. D. Dodson*

|   |      |
|---|------|
| LAURA MINES LTD. (N.P.L.)   |      |
| MacDONALD CONSULTANTS LIMITED<br><small>12 - 425 HURVE ST VANCOUVER, B.C.</small> |      |
| GEOCHEMICAL SURVEY<br>BEND GROUP — NORTH GRID                                     |      |
| SCALE 1" = 400'   | ZINC |
| DRAWN JPH   |      |
| DATE NOV. 1970  |      |
| NUMBER 228-6-28   |      |





**LEGEND**

- < 25 ppm Pb
- 25 - 50
- 51 - 100
- 101 - 200
- 201 - 400
- >400

2992 M-2

Department of  
 Mines and Petroleum Resources  
 ASSESSMENT REPORT  
 NO. 2992 MAP #2

To accompany geochemical report by  
 F. D. Dodson, P. Eng., on the Bend Group  
 on the Cummins River in the Golden Mining  
 Division.

*F. D. Dodson*

|                                      |                   |
|--------------------------------------|-------------------|
| <b>LAURA MINES LTD. (N.P.L.)</b>     |                   |
| <b>MacDONALD CONSULTANTS LIMITED</b> |                   |
| 12 - 425 HOWE ST.                    | VANCOUVER 1, B.C. |
| <b>GEOCHEMICAL SURVEY</b>            |                   |
| <b>BEND GROUP — NORTH GRID</b>       |                   |
| SCALE 1" = 400'                      | <b>LEAD</b>       |
| DRAWN JPH                            |                   |
| DATE NOV. 1970                       |                   |
| NUMBER 228-6-27                      |                   |