

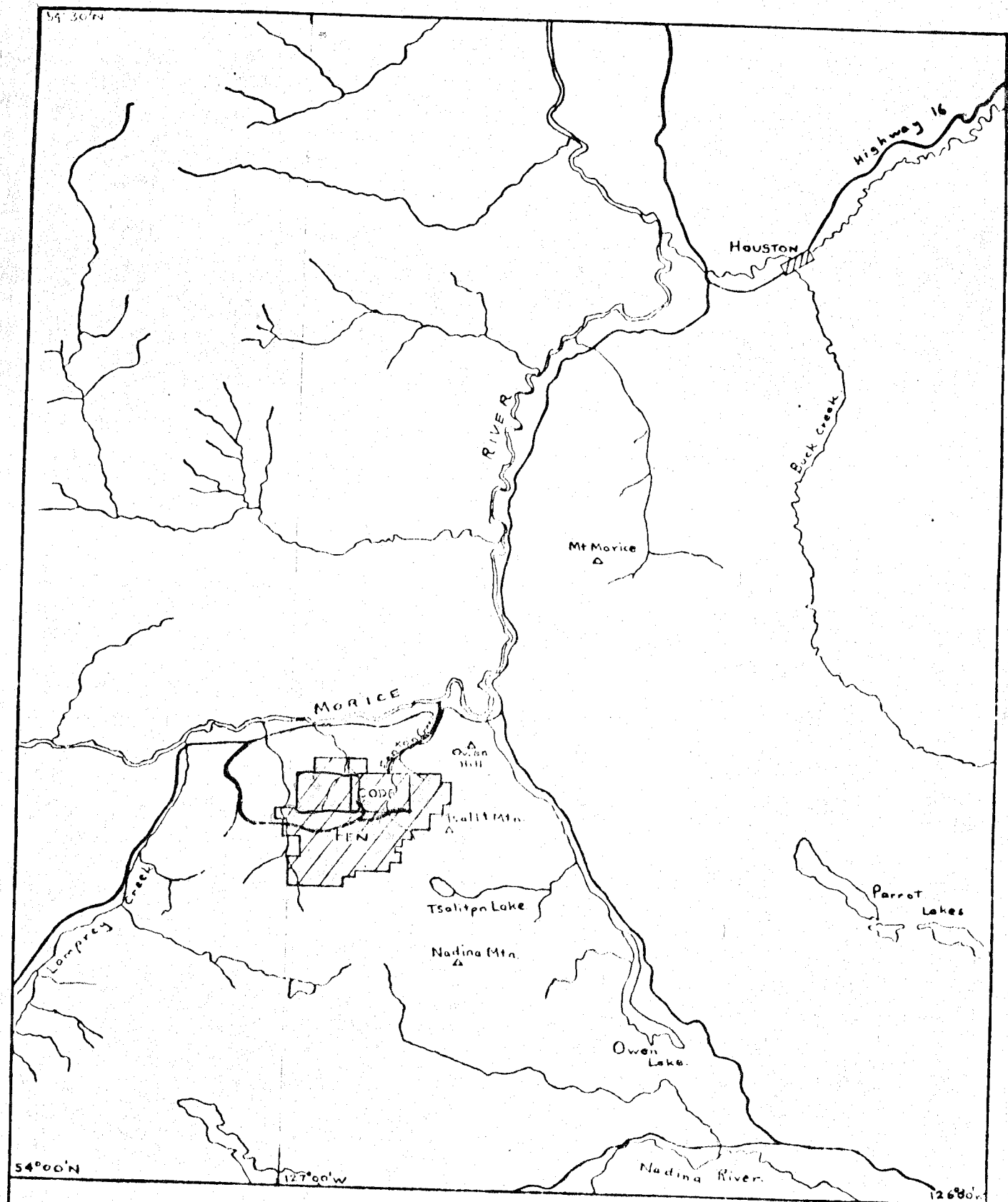
# 3257

A GEOPHYSICAL REPORT ON  
AN ELECTROMAGNETIC SURVEY

Property: Code & Fen Claims  
Location: 21 miles SW of Houston, B.C.  
Lat. 54°10'N-Long. 126°50'W  
Mining Div.: Omineca  
Province: British Columbia  
Claim Owner: Anaconda American Brass Limited  
Date-Work: July 22-30, 1971  
Date-Report: Sept. 15, 1971 *93/100*  
Report by: T. A. Conto, P. Eng.

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT

NO. *3257* MAP



CODE AND FEN CLAIMS  
 OMEGA M.D., B.C.  
 LOCATION MAP  
 SCALE 1 INCH = 4 MILES.

NOV. 1970

FIG. 1.

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## INTRODUCTION

The Code-Fen property consists of 201 claims which have been consolidated into six groups. During the period July 22 - July 30, 1971, an electromagnetic survey was carried out over parts of these claims as shown in Plate I, the major part of the work being done on Group 70-3. The field work was under the supervision of Thomas A. Conto, P. Eng.

## LOCATION & ACCESSIBILITY

The Code-Fen claims are located at the headwaters of Fenton Creek, approximately 21 miles southwest of the town of Houston in the Omineca Mining Division, B. C. (see Fig. I). Access to the property is generally provided by two logging roads leading off the Maurice River Road, but due to the heavy spring runoff, these roads were washed out, necessitating use of a helicopter for access and supply.

## SURVEY EQUIPMENT & FIELD PROCEDURE

The equipment used for the survey was the Crone JEM standard unit which operates at 480 or 1800 cps. The method is commonly referred to as the Crone "shootback" method. The reader is referred to page 448 of "Interpretation Theory in Applied Geophysics" by F. S. Grant and G. R. West, McGraw-Hill Book Co. 1965, for a brief summary of the method.

In the "shootback" system two nearly identical coils are used to alternately transmit and receive. The method minimizes noise introduced in most two-coil ground systems by rough terrain. These errors are introduced by variable separation of coils, misalignment of the coils, and elevation differences between coils.

The field operation involves moving both coils at a constant separation in tandem along a line. This separation is usually about 200 feet at 1800 cps with a maximum possible separation of 300 feet in most British Columbia environments. At each station each coil alternately transmits and receives, producing two tilt angles which are summed algebraically. The resultant tilt angle, due to consideration of field symmetry, is near zero if no conductors are present, even in very rough terrain. Interpretation procedures for thin conductors dipping greater than 30° usually allow a reasonable estimation of strike, lateral position, dip, depth and conductivity-thickness produced. However, as the depth relative to coil separation increases, definitive character in the resultant curves tends to diminish.

## PURPOSE OF THE SURVEY

Geological, geochemical and geophysical investigation on the Code-Fen property suggested the possibility of vein-type conductive mineralization. The survey was designed to detect near-surface conductors striking east-west with a strike length of at least 800 feet in the area of the survey. Such conductors could be economically significant in the Code-Fen geological environment.

DETAILS OF SURVEY

The survey was run on eight north-south lines named 216 east to 272 east, inclusive. One additional line, 200 east, located 1600 feet west of the grid, was also traversed. The reading interval was 100 feet with a coil separation of 200 feet. Readings were normally taken at 1800 cps with additional readings at 480 cps taken at the operator's discretion. Plate I shows the grid relative to the claim boundaries at a scale of one inch to one thousand feet. Plate II shows the readings in profile form along each line at a scale of 1"=400 feet. The open circles indicate the low frequency readings. The north coordinate of the profiles correspond to the north coordinates indicated on Plate I. The profile scale is one inch equals 20 degrees.

RESULTS OF THE SURVEY

The survey results failed to indicate the presence of conductors in areas of dry ground. Flat lying poor conductors were indicated in and adjacent to most wet and/or swampy areas. The flat lying poor conductors are thought to be indicating conductivity contrasts between wet and dry sub-surface conditions, rather than mineralization.



T. A. Conto

APPENDIX I  
ASSESSMENT DETAIL

Property: Code-Fen claims  
 Owner: Anaconda American Brass Limited  
 Mining Division: Omineca  
 Province: British Columbia  
 Date of Work: July 22-30, 1971  
 Location: 21 miles SW of Houston, B.C. 54°10'N-126°50'W  
 Type of Survey: Geophysical (Electromagnetic)  
 Operating Field Shifts: 9  
 Operating Man Shifts: 27  
 Data Processing & Drafting: 2  
 Accounting & Typing: 2

Personnel Employed on Survey

Supervision: Thomas A. Conto, B. Sc., P. Eng.  
 Data Processing: "  
 Drafting: P. C. Emery  
 Accounting: J. Vinnell, B. Pullen  
 Typing: R. Broderick

Field Technicians

<u>Name</u>	<u>Category</u>	<u>Rate (day)</u>	<u>Days Worked</u>	<u>Period</u>	<u>Wage</u>
T. A. Conto	Super. & Oper.	\$40	9	July 22-30	\$360
D. E. James	Helper	30	9	"	270
R. Morehouse	Helper	30	9	"	270
					\$900

Declared before me at the City  
 of Vancouver, in the  
 Province of British Columbia, this 23  
 day of September, 1971, A.D.

*Thomas A. Conto*

*S. G. ...*  
 A Commissioner for taking Affidavits within British Columbia  
 A Notary Public in and for the Province of British Columbia

*Thomas A. Conto*

Sub-mining Recorder

APPENDIX II  
STATEMENT OF COSTS

Field Crew:

Salaries (as per Appendix I)	\$ 900
Camp Supplies	155
Transportation (Helicopter)	<u>550</u>
	1,605

Interpretation & Report Preparation:

Drafting & Typing	30
Data Processing & Map Compilation	40
Accounting	<u>25</u>
	95
Total	\$ 1,700

Total Line Feet =	34,600	
Total Line Feet on 70-3 Group	28,900	
Total Sum Applicable to Fen 70-3 Group = 84% =		\$ 1,428
Total Line Feet on 70-4 Group	5,400	
Total Sum Applicable to Fen 70-4 Group = 15% =		\$ 255

Declared before me at the City  
of Vancouver, in the  
Province of British Columbia, this 23  
day of September, 1971, A.D.

*John S. Carter P. Eng*

*S. J. Bennett*  
A Commissioner for taking Affidavits within British Columbia  
A Notary Public in and for the Province of British Columbia

*[Signature]*


Sub-mining Recorder

C E R T I F I C A T E

I, Thomas A. Conto, of the town of Britannia Beach, Province of British Columbia, do hereby certify that:

- 1) I am a geophysicist residing at Lions Bay, British Columbia.
- 2) I am a graduate of the University of Utah with a B.Sc. Degree (1960) in Geophysics.
- 3) I am an associate member of the Society of Exploration Geophysicists.
- 4) I have been practising my profession for eight years.
- 5) I am a member of the B. C. Association of Professional Engineers.
- 6) I have no direct or indirect interest, nor do I expect to receive any interest, direct or indirect, in the property of Anaconda American Brass Limited.
- 7) The statements made in this report are based on a study of published and unpublished private reports and geophysical data.

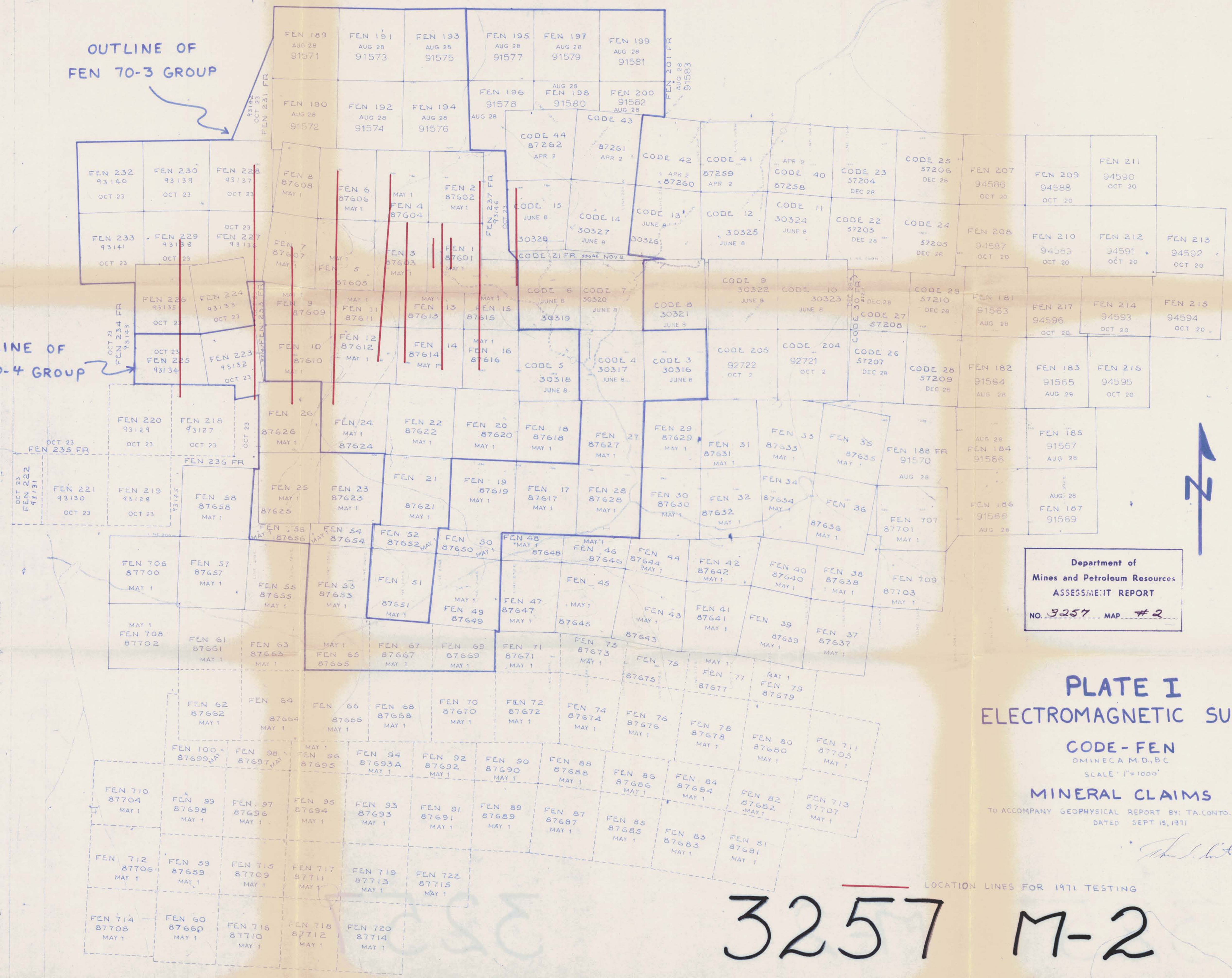
Dated at Britannia Beach  
this 15 day of September 1971

  
.....  
Thomas A. Conto, B.Sc. Geophysics  
and P. Eng.



OUTLINE OF  
FEN 70-3 GROUP

OUTLINE OF  
FEN 70-4 GROUP



Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 3257 MAP #2

PLATE I  
ELECTROMAGNETIC SURVEY

CODE-FEN  
OMINECA M.D., B.C.  
SCALE: 1"=1000'

MINERAL CLAIMS

TO ACCOMPANY GEOPHYSICAL REPORT BY: TA. CONTO, B.Sc., P.Eng.  
DATED: SEPT 15, 1971

*Handwritten signature*

LOCATION LINES FOR 1971 TESTING

3257 M-2



CRONE - "SHOOTBACK"  
200 FOOT SEPARATION.  
— 1800 C.P.S.  
••• 480 C.P.S.

POSITIVE RESULTS NORTHWEST OR WEST OF LINE.  
NEGATIVE RESULTS SOUTHEAST OR EAST OF LINE.

LINE 200E

2400

2400

LINE 216E

LINE 224E

LINE 232E

LINE 240E

LINE 248E

LINE 256E

LINE 264E

LINE 272E

LINE 254E

LINE 258E

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 3257 MAP #3

PLATE II

ANALONDA AMERICAN BRASS LTD. WESTERN EXPLORATION DIVISION

CODE - FEN  
OMINECA M.D., B.C.

SCALE: 1" = 400'

E.M. SURVEY

TO ACCOMPANY GEOPHYSICAL REPORT BY T.A. CONTO, P.ENG.  
PROFILE SCALE: 1" = 20'

*T.A. Conto*  
T.A. CONTO JULY, 1971