85-983-14187

Linecutting and HLEM (Max Min I) Report

Bar and Chu Chua Properties

SC and CH Claims

Kamloops Mining Division

NTS 92P/8E

51° 15'; 120° 00'

GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,187
PART 2 OF 2

Owner & Operator
Corporation Falconbridge Copper
6415 - 64th Street
Delta, B. C. V4K 4E2

Ian D. Pirie
December, 1985

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LIST OF MAPS (in pocket)

INTRODUCTION

General

The Bar and Chu Chua properties contain 690 claim units covering some 17,000 hectares of the Barriere area, Kamloops Mining Division. Corporation Falconbridge Copper is owner and operator. For the purpose of administration this large area is divided into 10 claim groups. This report covers a linecutting/HLEM survey carried out over parts of 2 of these groups (South Gp on the Chu Chua property, SC Gp on the Bar property) during October 1985.

Location and Access (Figure 1)

The claims are located on the Adams Plateau between Adams Lake and the North Thompson River and are bounded by latitude 51°00'N and 51°25'N and longitude 119°45'W and 120°10'W.

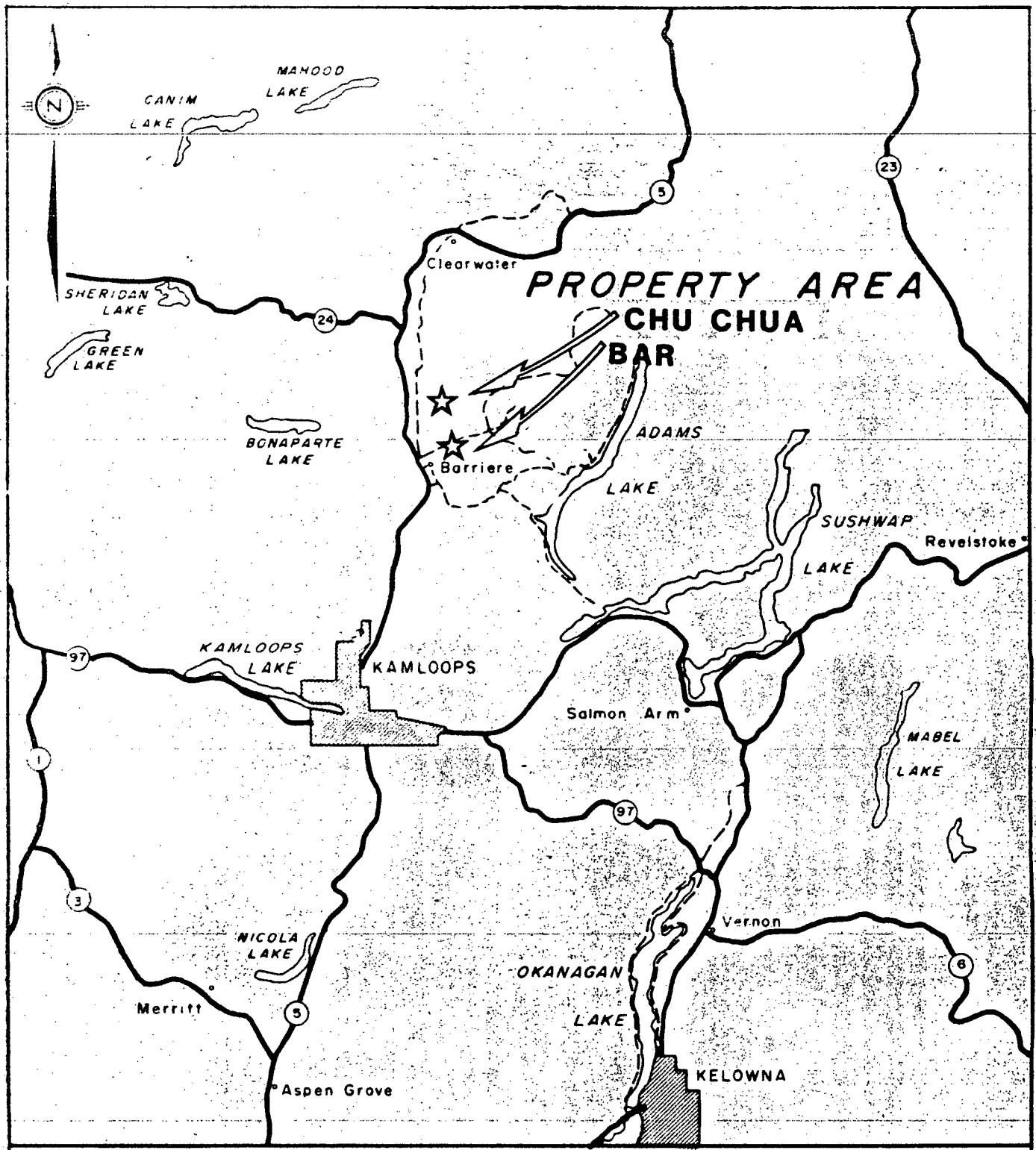
Access is readily available from Highway 5 in the Barriere area by the Barriere Lakes road and thence by various logging roads.

Physiography

The western edge of the Adams Plateau consists of high rolling plateau country incised by locally steep, drift filled valleys. Elevations range from less than 500m in the Sinmax Valley, at the south end of the area to over 2000m on the Chu Chua property at the north end.

Fairly dense forest cover occurs across most of the area giving way to sub-alpine vegetation above 1900m. Active logging operations are present.

The climate is moderate with temperatures ranging from -35°C in the winter to 30°+ in the summer. Precipitation is extremely variable ranging from semi-arid in the south to moderately wet in the north. The snow free period runs from May to November in the south, but lasts only from July to October in the north.



LOCATION MAP

- BAR PROJECT AND CHU CHUA OPTION -

Fig 1.

Property and Ownership

Figure 2 shows the configuration of the claim groups on the two properties. Table 1 summarizes the pertinent data on claims reported upon herein. All are registered to CFC.

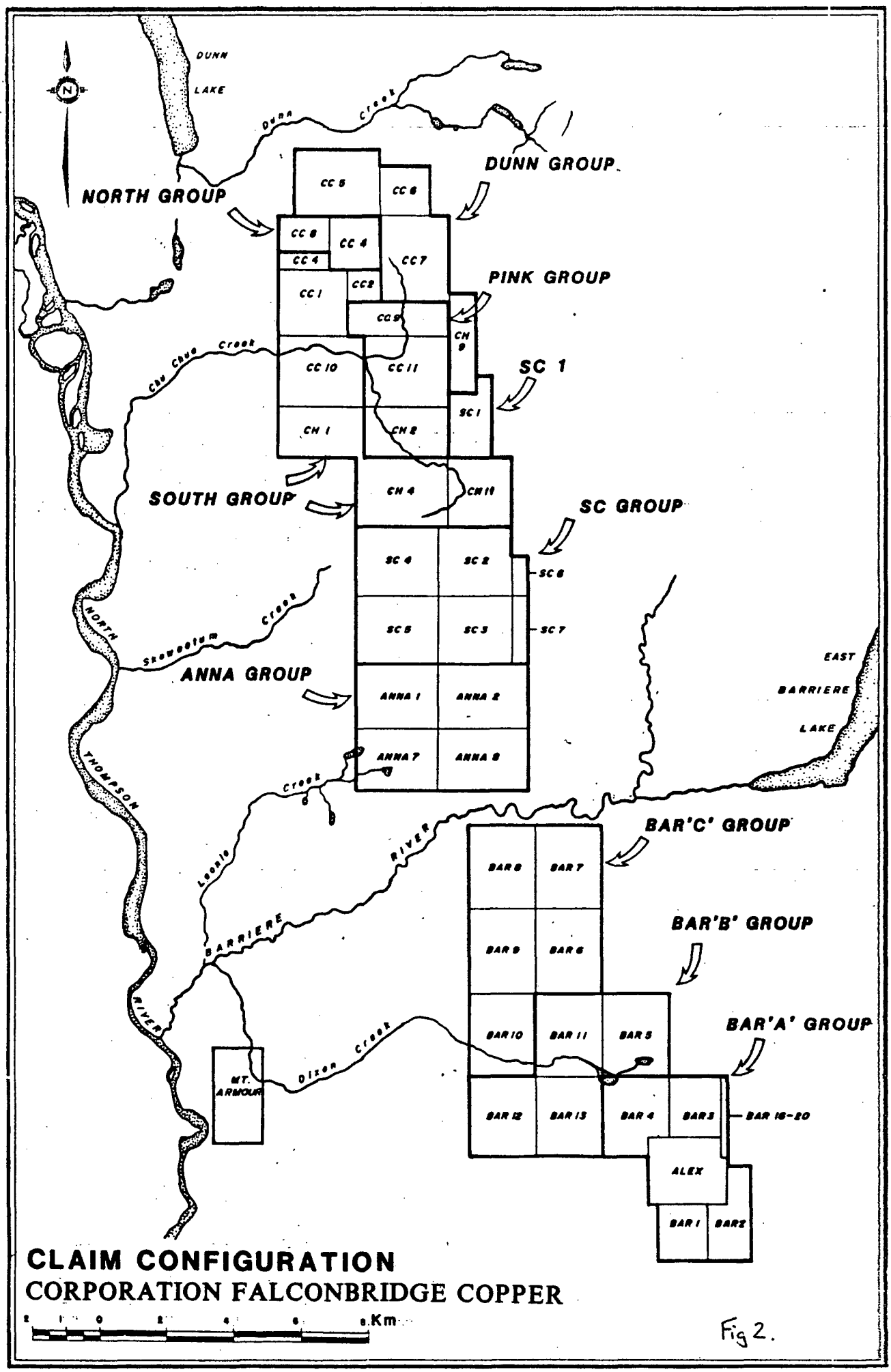
Table 1

Name	Record No.	Units	Month	Group
SC 2	5561	20	March	SC
SC 3	5562	20	March	SC
SC 4	5640	20	May	SC
SC 5	5641	20	May	SC
SC 6	5906	3	October	SC
SC 7	5907	6	October	SC
CC 1	1154	16	March	South
CC 2	1373	4	August	South
CC 3	1374	3	August	South
CC 10	1459	20	October	South
CH 1	1461	20	October	South
CH 4	1464	20	October	South

History

The claims in question cover some 30km of stratigraphy considered favourable for volcanogenic massive sulphides. The Bar Claims were staked following the discovery of the Rea Gold massive sulphide showings in late 1983, which are located 5km to the southeast. The Chu Chua claims were optioned in 1985. They include a massive sulphide body estimated to contain 2M tonnes grading 2% copper.

Apart from around the known sulphides on the Chu Chua claims, almost no work has been carried out on the entire property. In 1984, CFC initiated a program of reconnaissance scale mapping and lithogeochemical sampling designed to isolate specific areas favourable for volcanogenic massive sulphides. This



CLAIM CONFIGURATION

CORPORATION FALCONBRIDGE COPPER

Fig 2.

work, combined with an AEM (Dighem) survey carried out by Craigmont in 1979, led to the choice of areas for the linecutting and HLEM described herein.

Work Done

During the period October 18 to October 23, 1985 a total of 21.5km of linecutting and 19.5km of HLEM was carried out on the SC/CH grid. Of this 54% was on CH 11, 46% on SC 2.

LOGISTICS

Survey Specifications and Instrumentation

The surveys were conducted using an Apex MaxMin I electromagnetic system in the max-coupled (horizontal loop) mode. Survey parameters were selected based on an analysis of airborne electromagnetic anomalies.

The following survey parameters were employed:

Coil spacing : 150 m
Station spacing: 25m
Frequencies: 444 Hz and 1777 Hz

The line spacing was 100 meters.

Survey Personnel and Data Acquisition

To perform the survey work, MPH Consulting Ltd. provided a 2 man crew led by P. Gledhill - geophysicist.

At each station, secant measurements were taken to correct for nominal coil spacing irregularities induced by the rough terrain encountered. The in-phase and quadrature values, read as percentage of primary field strength, were manually recorded for each of the two frequencies used.

Where bush conditions permitted the acquisition of reliable data, survey coverage was extended to include anomalies not defined by the existing grids.

Data Processing

Data was manually recorded in the field and keyed into a HP-85 computer on a daily basis. Data is then automatically corrected for the coil spacing variations which occur in rough terrain, stored on magnetic tape and plotted in profile format using software developed by MPH Consulting Ltd. The computer profiles were then individually pasted onto plan maps to create a series of stacked profiles for each frequency at a scale of 1:2,500.

Following completion of the project the data was transferred to a mainframe computer for the final data presentation.

Final data is presented in the form of computer plotted stacked profiles. Scales used were:

Horizontal: 1:2,500

Vertical: 1 cm = 10%

the in-phase and quadrature values for each frequency are plotted on separate plan maps (in pocket).

INTERPRETATION

A total of 9 conductors have been picked as a results of this survey. These are labelled A-I on Map 1. Some may simply be faulted or folded offsets of others, but in the absence of geological data this cannot be confirmed.

Of the conductors, the northern ones (A-E) are much stronger than the others with good response on 444 HZ as well as on the higher frequency. C, D and E are extremely strong conductors and are hard to separate because of their proximity to each other. Graphite is strongly suspected as the cause of these.

All of the others are genuine anomalies which will require further attention.

CONCLUSIONS AND RECOMMENDATIONS

Nine anomalies have been identified on the property. Of these, three are probably the result of graphite although a sulphide component cannot be

ruled out. All will require mapping and geochemical sampling during the next field season.

ITEMIZED COST STATEMENT

Linecutting (contractor: Spirex Geoservices Ltd.)	
21.5km @ $300/km	6,450.00
MaxMin (MPH Consulting Ltd.)	4,348.53
Orientation and Supervision	
L. D. Pirie 1 day @ $300/day	300.00
Report Preparation and Interpretation	
L. D. Pirie 2 days @ $300/day	600.00
Miscellaneous	
(drafting, typing, field and office supplies)	150.00
TOTAL	$11,848.53

Apportionment

Chu Chua (CH 11)	11.60km = 54%	= $6,398.21
Bar (SC 2)	9.9km = 46%	= $5,450.32

CERTIFICATE OF QUALIFICATIONS

I, Ian D. Pirie certify that:

1. I am an Exploration Geologist residing at 307 - 2145 York Avenue, Vancouver, B. C.

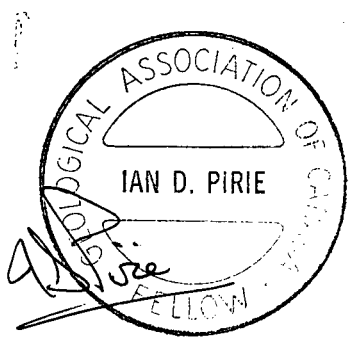
2. I have a BSc (Hons) in Applied Geology from the University of Strathclyde, Glasgow, Scotland (1977) and a MSc (Geology/Geochemistry) from Queen's University at Kingston, Ontario (1980).

3. I have practised my profession since 1977.

4. I personally carried out or supervised the work reported herein.

Date

Ian D. Pirie



CERTIFICATE

I, Peter Gledhill of Toronto, Ontario hereby certify that:

1) I hold a Bachelor of Science (Honours) degree in Engineering Physics from Queen's University, Kingston, Ontario.

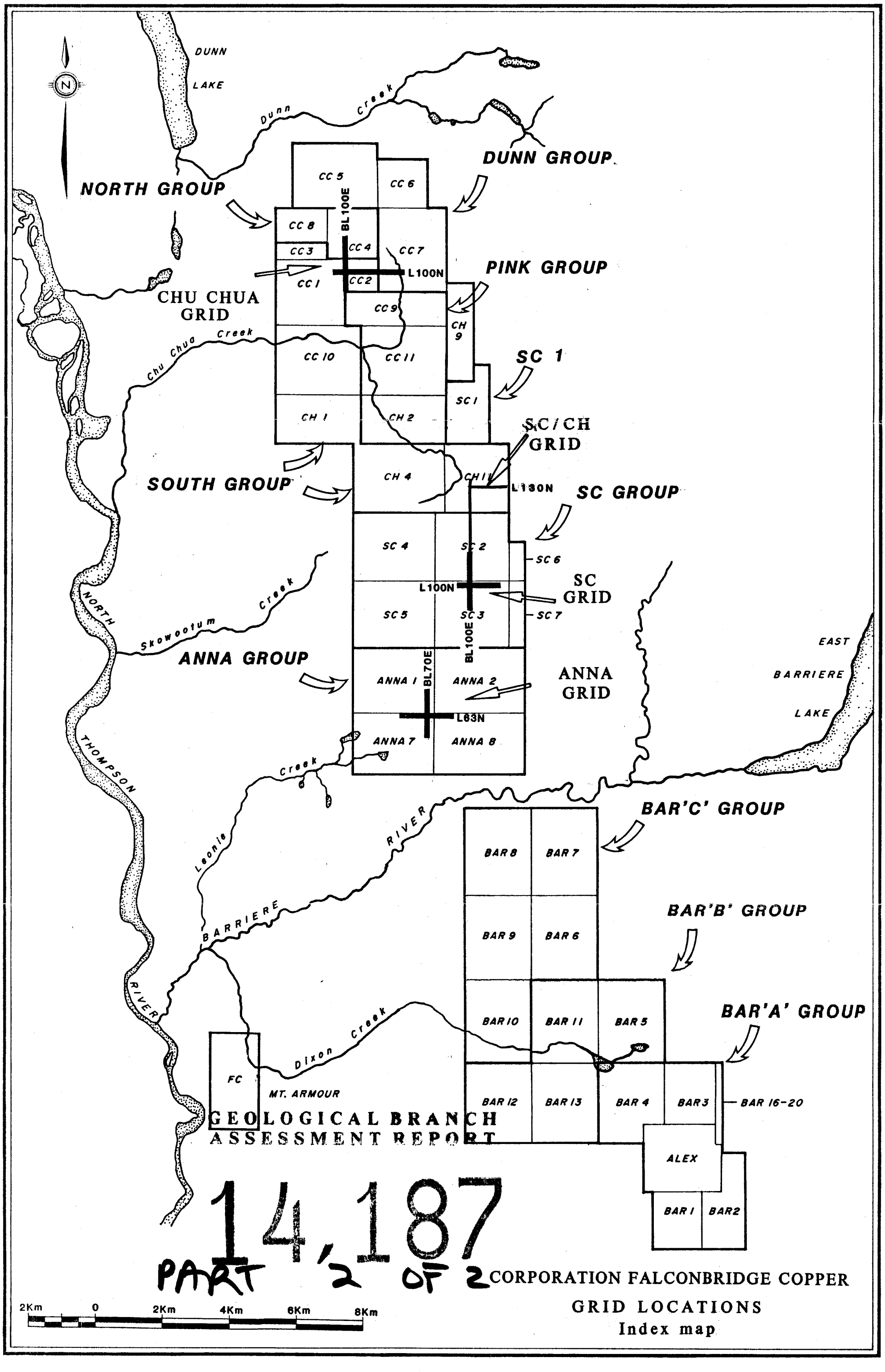
2) I have practised my profession in exploration continuously since graduation.

3) I have based conclusions and recommendations contained in this report on knowledge of this area, my previous experience and on the results of the field work conducted on the property, under the supervision of David Jones during 1985.

4) I hold no interest, directly or indirectly in this property other than professional fees, nor do I expect to receive any interest in the property or in Falconbridge Limited or in any of its subsidiary companies.

Toronto, Ontario, Canada
December, 1985

Peter Gledhill, B.Sc.
MPH CONSULTING LIMITED



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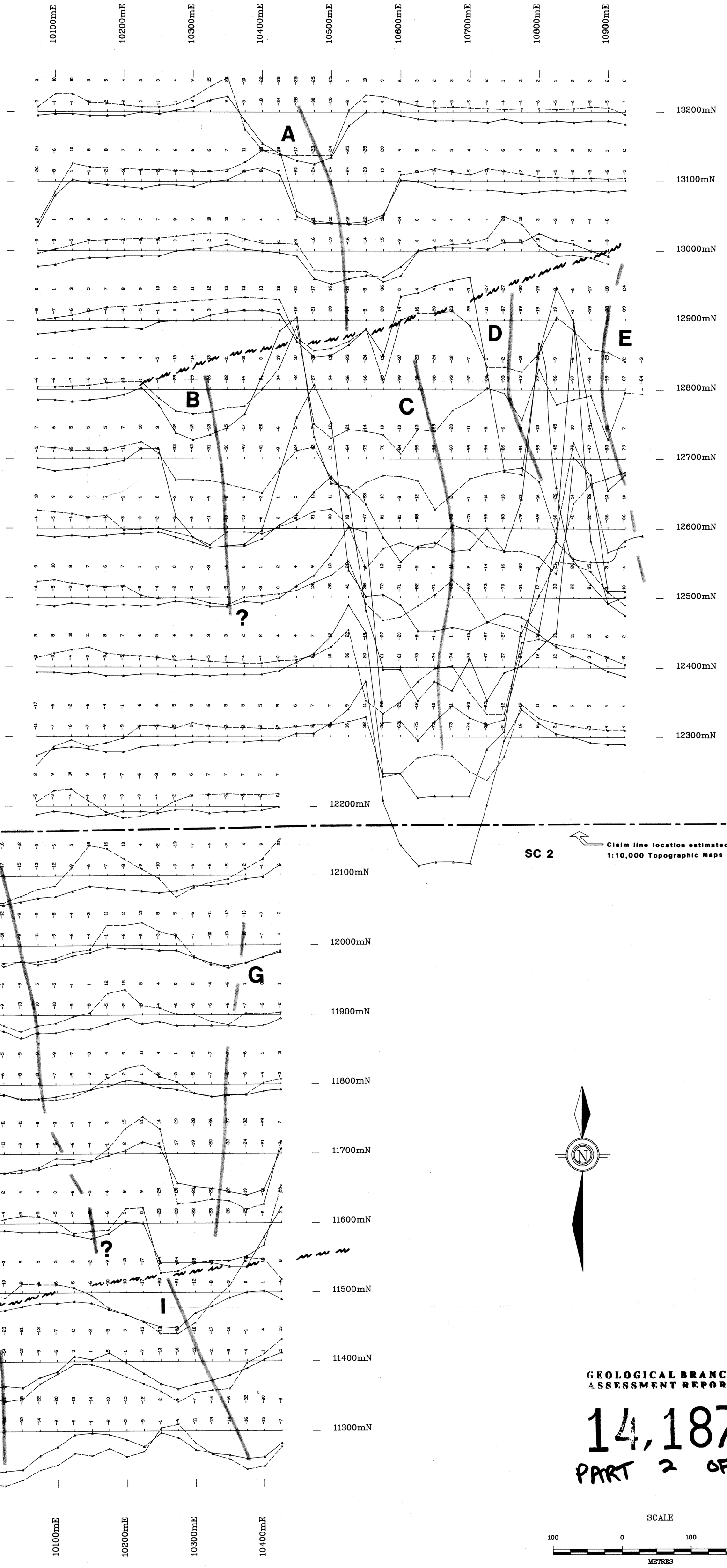
GRID LOCATIONS

Index map



CH 11

SC 2

Claim line location estimated from 1:10,000 Topographic Maps

1777 Hz

LEGEND

INSTRUMENT: Apex Parametrics Max Min 1

FREQUENCY: 1777 Hz, 444 Hz

CABLE LENGTH: 150m

Inphase Profile

Quadrature Profile

Plotting Designation

10%

Profile Scale

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SCALE

100 0 100 200

METRES

CORPORATION FALCONBRIDGE
COPPER EXPLORATION

BAR PROJECT
SC/CH GRID
MAX MIN 1 SURVEY

Project No: V-186	By: P. GLEDHILL
Scale: 1:2500	Drawn: GEO-COMP SYSTEMS
Drawing No:	Date: OCTOBER, 1985

MPH Consulting Limited

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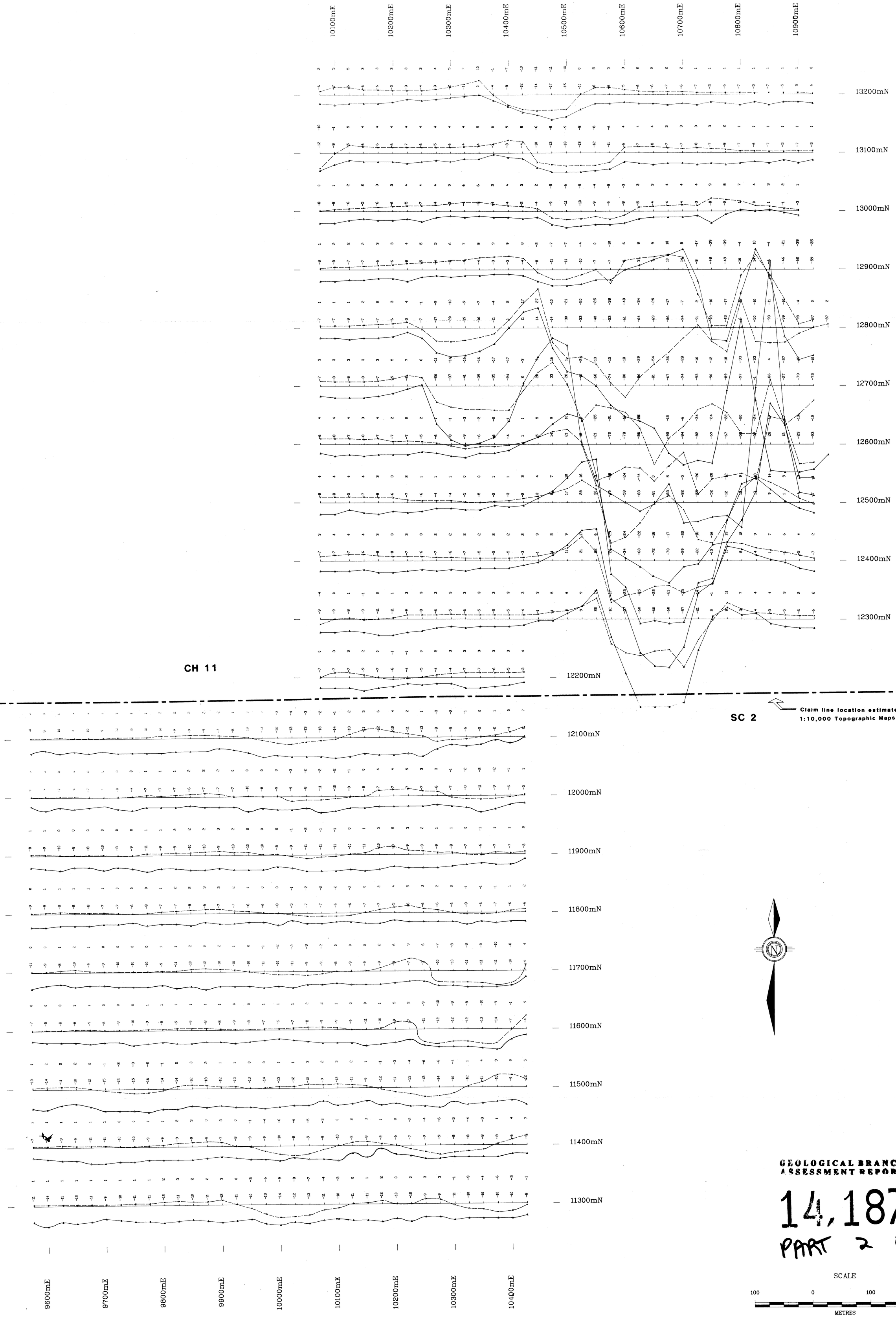

CH 11

SC 2

Claim line location estimated from 1:10,000 Topographic Maps

444 Hz

LEGEND

INSTRUMENT: Apex Parametrics Max Min 1

FREQUENCY: 1777 Hz, 444 Hz

CABLE LENGTH: 150m

Inphase Profile

Quadrature Profile

Plotting Designation

10% 10% Profile Scale

SCALE

100 0 100 200

METRES

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CORPORATION FALCONBRIDGE
COPPER EXPLORATION

BAR PROJECT
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