

22 10

A GEOPHYSICAL REPORT ON

THE P.C. CLAIM GROUP

KAMLOOPS MINING DISTRICT, BRITISH COLUMBIA

Property: P.C. Claim Group

Location: 14 miles WNW of Little Fort, B.C.
51° 120° NE

Report by: Rod Macrae, P. Eng.,
Thomas A. Conto, B. Sc.

Claim Owner: Anaconda American Brass Limited

Date of Work: 19 August - 2 September 1969

CONTENTS

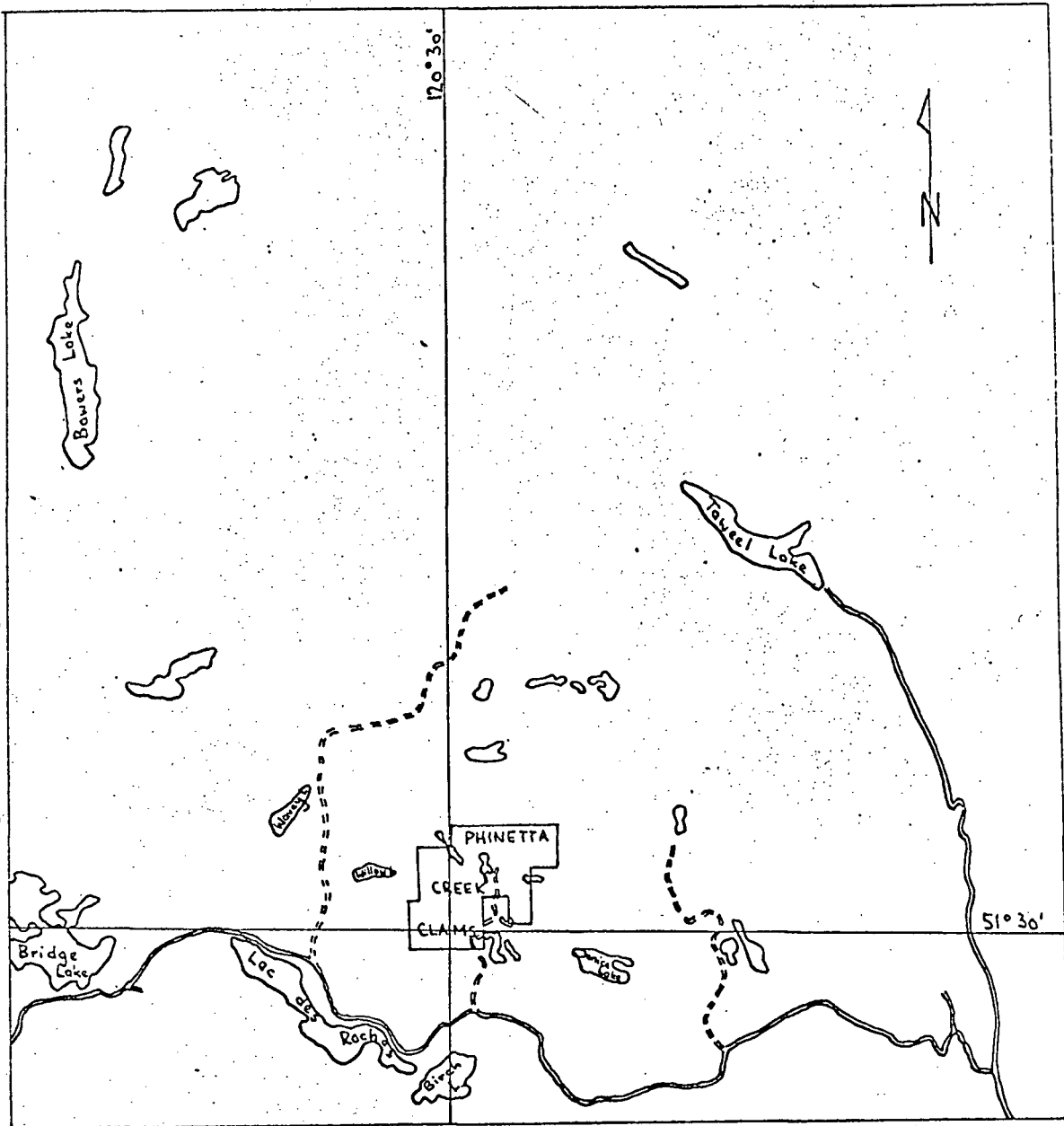
	Page
Introduction	1
Location and Accessibility	1
Survey Equipment and Field Procedure	1 & 2
Details of Survey	2
Results of the Induced Polarization Survey..	2
APPENDIX I - Assessment Details.....	3
APPENDIX II - Statement of Costs	4
CERTIFICATE	5
STATEMENT OF OPERATOR'S QUALIFICATIONS.....	6

MAPS

#1 Location Map	In Front
#2 Claim and Line Location Map	In Pocket
#3 Induced Polarization Map	In Pocket

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 2210 MAP



Scale : 1" = 4 miles

LOCATION MAP

PHINETTA CREEK CLAIMS

WILLOW CREEK AREA

KAMLOOPS M.D. B.C.

FIGURE 1.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT

NO. 2210 MAP #1

Introduction

Anaconda American Brass Limited staked a group of claims in the Willow Creek area of British Columbia during the 1967 field season. The P.C. claim group consists of the following claims:

PC 2, PC 4, PC 6, PC 19, PC 20, PC 21, PC 22, PC 23, PC 24,
PC 37, PC 38, PC 39, PC 40, PC 41, PC 42, PC 43, PC 44, PC 45
and PC 46.

An induced polarization survey was conducted on the property under the general supervision of Rod Macrae, P. Eng., and Thomas A. Conto, during the 1969 field season. The crew chief for the survey was David Broswick.

Location and Accessibility

The PC claims are located at latitude $51^{\circ}30'$ and longitude $120^{\circ}30'$, approximately 14 miles WNW of Little Fort, British Columbia (see Fig. 1). They are approximately three miles north of the gravel road that connects Bridge Lake and Little Fort, B. C. A logging road leads from this road to the center of the claim group.

Survey Equipment and Field Procedure

The geophysical concept of Induced Polarization (I.P.) is thought to be the electro-chemical phenomenon that occurs at a solution - "metallic" mineral interface when the mode of conduction changes from ionic to electronic. When a D.C. current is transmitted through a "grounded" dipole, the measured voltage in a nearby dipole will not drop instantly to the S.P. voltage, but will decay with time. This voltage decay is the measurable I.P. effect which results from various types of polarization or blocking. The most predominant type is the solution - "metallic" mineral interface.

This effect is measured in various ways and is reported as the I.P. parameter. The variation in instrumentation and mathematical treatment of the method results in such terms as "percent frequency effect", "chargeability", phase angle and "metal factor". The parameter used in our equipment is the concept of phase angle. The phase angle is the angle whose tangent is the area under the voltage decay curve of the receiver dipole when the current is off divided by the area when the current is on, assuming the current on and off times are equal.

The equipment used for the survey was manufactured by Anaconda. The transmitter uses a pulse time of five (5) seconds. The receiver responds to the current on and off voltages and from this information, a phase angle is calculated. The measurements are made along a surveyed line using a pole-dipole electrode configuration with a variable spacing between current and near leg of the receiver dipole. Normally, at least two "a" spacings are used for each traverse. The plotting point is midway between the current electrode and the near potential electrode. The phase angle is reported in minutes of phase shift.

Purpose of the Induced Polarization Survey

The survey was designed as a follow up of previous reconnaissance geophysical, geological and geochemical work in the area. Suitable locations were to be established for physical testing of anomalous I.P. responses.

Details of the Survey

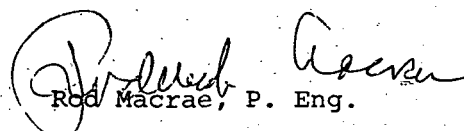
Chain and compass lines were used for ground control. Stations were marked at 100 foot intervals along each line. Induced polarization readings were taken at 200 foot intervals with electrode spreads of 400 ft, 200 ft, 100 ft, 50 ft, and 25 ft. The smaller spreads were run in areas of detail surveying.

Results of the Geophysical Survey

Anomalous readings were recorded over a considerable part of the lines surveyed with induced polarization. Graphitic argillite is thought to be responsible for the strong response, however there is no obvious exposure of outcrop in this immediate area to verify this assumption.

Detailed separations of 50 and 100 feet were traversed on lines 28, 36, and 64 north. The results of the detail indicated several areas of near surface responsive material. Additional spreads of smaller dimensions were recorded in several of these areas to verify this condition. Further work on the property will be based on economic appraisal.


Thomas A. Conto


Rod Macrae, P. Eng.

APPENDIX I

ASSESSMENT DETAILS

Property: P.C. Claim Group
 Owner: Anaconda American Brass Limited, British Columbia
 Mining Division: Kamloops Mining Division
 Province: British Columbia
 Date of Work: 20 August - 2 September 1969
 Type of Survey: Geophysical (Induced Polarization)
 Operating Man Days: 51
 Operating Crew Days: 14
 Supervisory Days: 1
 Data Processing Days: 1
 Report Preparation:
 (accounting, drafting,
 typing, map compilation) 2

Personnel Employed on Survey

Supervision and Interpretation: Rod Macrae, Thomas A. Conto
 Data Processing: D. Broswick
 Accounting, drafting, map comp.: J. Vinnell
 Typing: Ruth Broderick

Field Technicians:

<u>Name</u>	<u>Category</u>	<u>Monthly Rate</u>	<u>Days Worked</u>	<u>Period</u>	<u>Wage & Fringe</u>
D. Broswick	Operator	\$ 550	10	20 Aug.- 2 Sept. 69	\$ 234.75
H. Holm	Helper	450	14	" "	268.85
P. Bruce	"	450	13	" "	249.65
M. Woolridge	"	425	14	" "	<u>254.05</u>

Declared before me at the

City

\$1,007.30

of *Vancouver*

, in the

Rod Macrae

Province of British Columbia, this

"

Thomas A. Conto

Thomas A. Conto

day of *February*, 1970, A.D.

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

SUB-MINING RECORDER

Rod Macrae, P. Eng.

Rod Macrae

APPENDIX II

STATEMENT OF COSTS

Salaries (as per appendix I)	\$ 1,007.30
Room & Board @ \$12/man/day	612.00
Transportation @ \$23/crew/day	322.00
Communication (radio telephone)	15.00
Equipment Depreciation	100.00
Supervision \$35 + 11% (fringe)	38.85
Data Processing \$30 + 11% (fringe)	33.30
Report Preparation - 2(\$30 + 11%)	<u>66.60</u>
	2,195.05

Total Line Feet = 23,600
 Line feet on Claims = 16,800
 Percentage on Claims = 71.2

Total Assessment Applicable = \$ 1,552.87

Declared before me at the City of Vancouver, in the Province of British Columbia, this day of February, 1970, A.D.

[Signature]
 Thomas A. Conto

[Signature]
 A Commissioner for taking Affidavits within British Columbia
 A Notary Public in and for the Province of British Columbia

SUB-MINING RECORDER

Rod Macrae, P. Eng.
[Signature]

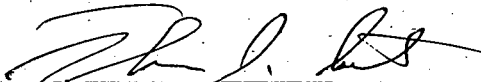
CERTIFICATE

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 Britannia Beach, British Columbia.
2. I am a graduate of the University of Utah with a B. Sc. degree (1960) in Geophysics.
3. I am an active member of the Society of Exploration Geophysicists.
4. I have been practising my profession for seven years.
5. 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.
6. The statements made in this report are based on a study of published literature and unpublished private reports and geophysical data.

Dated at Britannia Beach

this 9th day of February 1970



Thomas A. Conto, B.Sc. Geophysics

STATEMENT OF OPERATOR'S QUALIFICATIONS

I, Thomas A. Conto, do make the following statement:

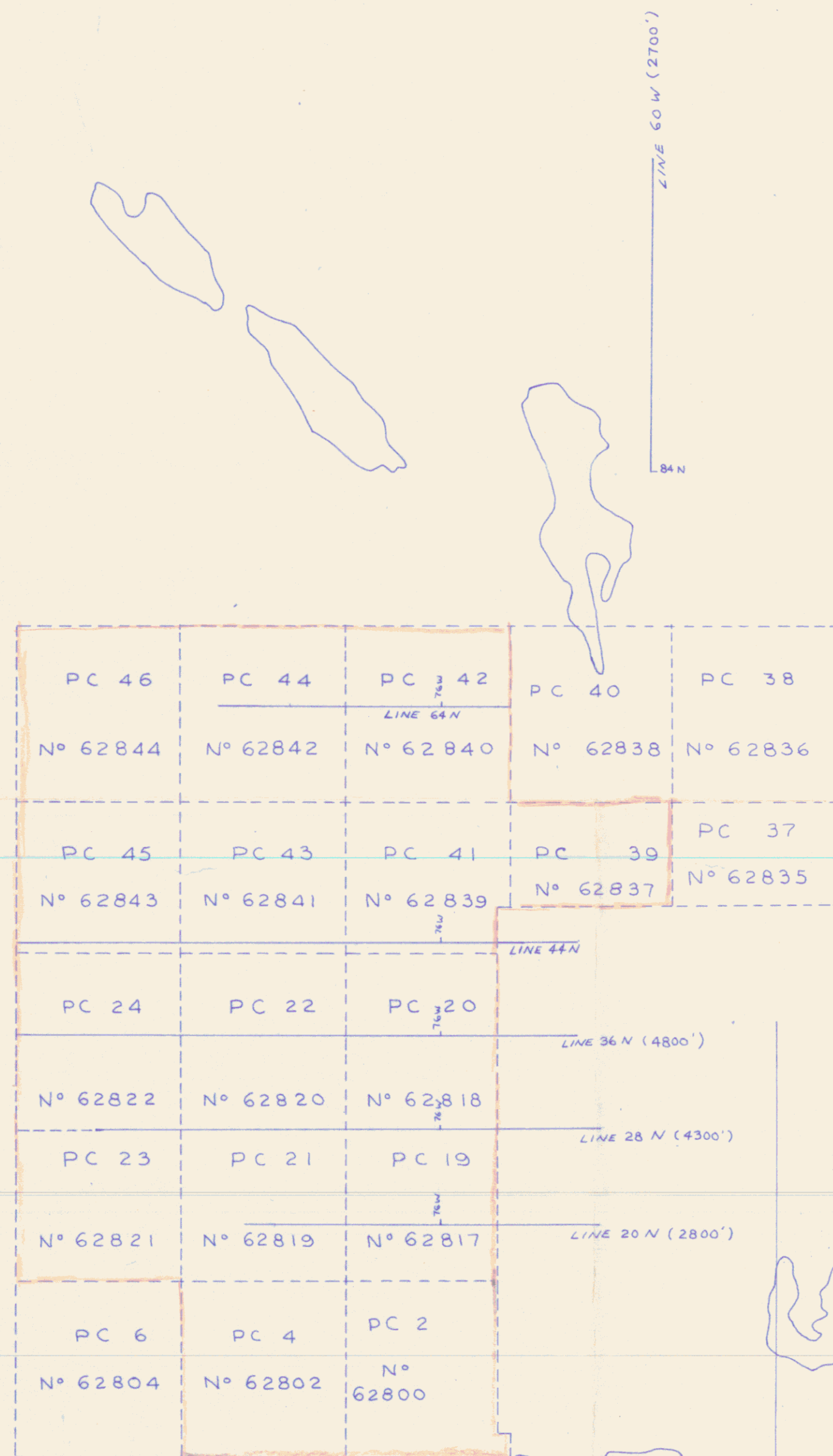
1. David Broswick was the instrument operator for the Geophysical Induced Polarization conducted on P.C. claims in 19 August - 2 September 1969.
2. David Broswick had been working as an Induced Polarization Crew Chief for over two years prior to the start of this survey.
3. David Broswick has been trained by Anaconda personnel to be an instrument operator and I consider him fully qualified.



Thomas A. Conto

EXPLANATION

THE MINERAL CLAIM BOUNDARIES ARE SHOWN AS DASHED LINES. SOLID LINES DENOTE PICKETED LINES. THE I.P. SURVEY WAS CONDUCTED ALONG THESE PICKET LINES.



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. **2210** MAP **#2**



2210

D. Macrae

T. Conto

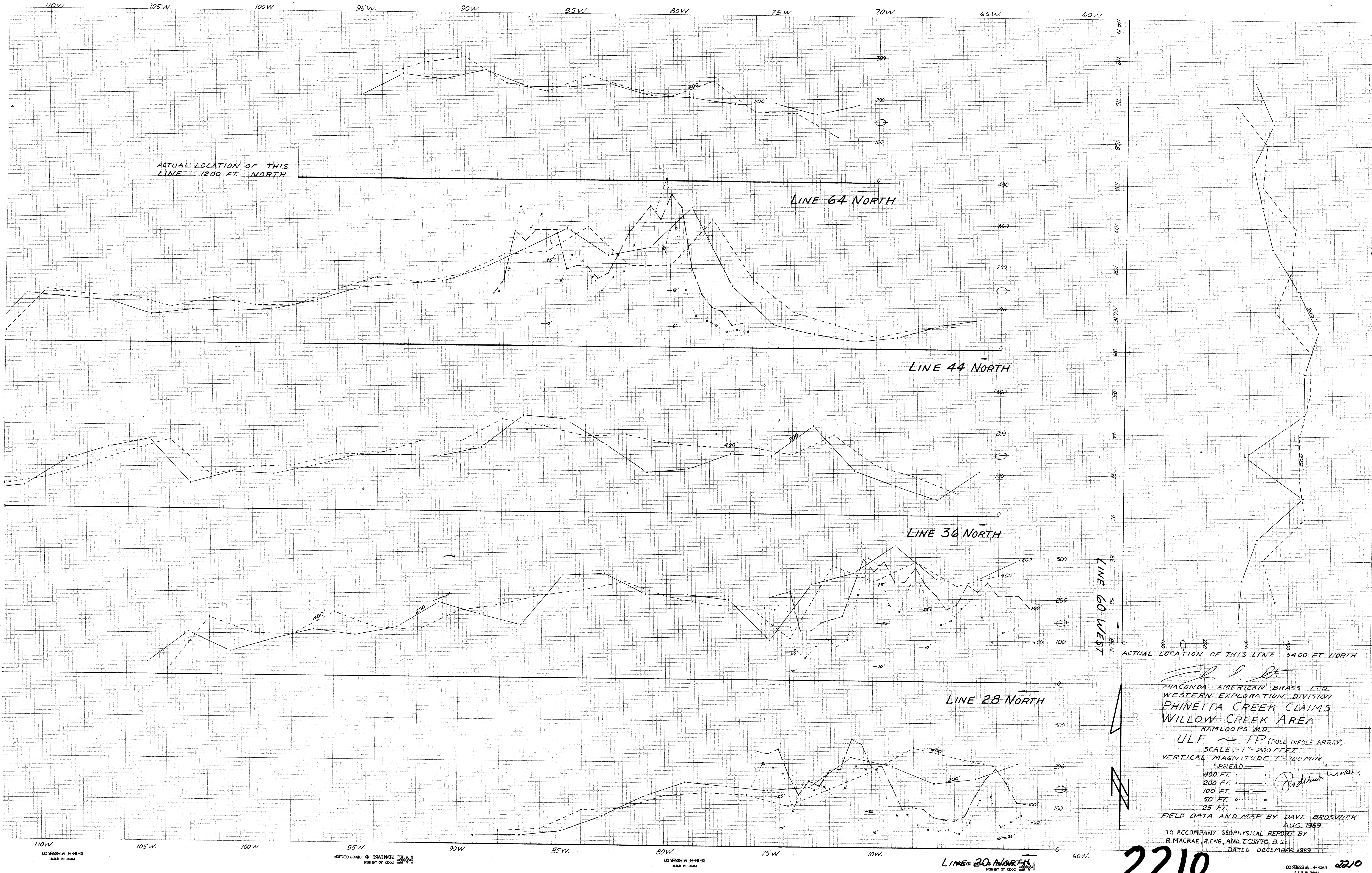
ANACONDA AMERICAN BRASS LTD. WESTERN EXPLORATION DIVISION

WILLOW CREEK AREA

KAMLOOPS MINING DIVISION, B.C.

SCALE: 1" = 1000'

SEPTEMBER, 1969



R. L. D.
 ANACONDA AMERICAN BRASS LTD.
 WESTERN EXPLORATION DIVISION
 PHINETTA CREEK CLAIMS
 WILLOW CREEK AREA
 KAMLOOPS B.C.
 ULF ~ IP (POLE-DIPOLE ARRAY)
 SCALE - 1" = 200 FEET
 VERTICAL MAGNITUDE 1" = 100 MIN
 SPREAD
 400 FT. - - - - -
 200 FT. - - - - -
 100 FT. - - - - -
 50 FT. - - - - -
 25 FT. - - - - -
 FIELD DATA AND MAP BY DAVE BROSWICK
 AUG. 1969
 TO ACCOMPANY GEOPHYSICAL REPORT BY
 R. MACRAE, P. ENG. AND T. CONTO, B.Sc.
 DATED DECEMBER 1969

2210

2210