

1229

93L/2W

A GEOPHYSICAL REPORT ON AN INDUCED POLARIZATION SURVEY

CODE CLAIM GROUP, HOUSTON, B.C.

OMINECA MINING DIVISION, BRITISH COLUMBIA

PROPERTY: CODE GROUP

LOCATION: 20 MILES SW OF HOUSTON, B.C.

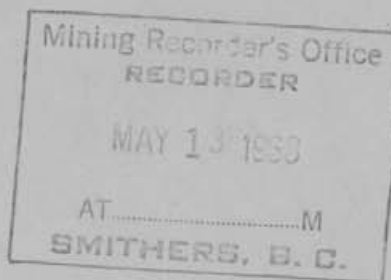
54° 126° SW

REPORT BY: Thomas A. Conto, B.Sc.

CLAIM OWNER: Anaconda American Brass Ltd.

DATE OF WORK: December 15, 1967 to February 14, 1968

May 1, 1968



RPT. 1229

L/2W

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M A P S

FIGURE 1 # 1	(After Contents)
PLATE NO. 1 # 2	(In Pocket)
PLATE NO. 2 # 3	(In Pocket)

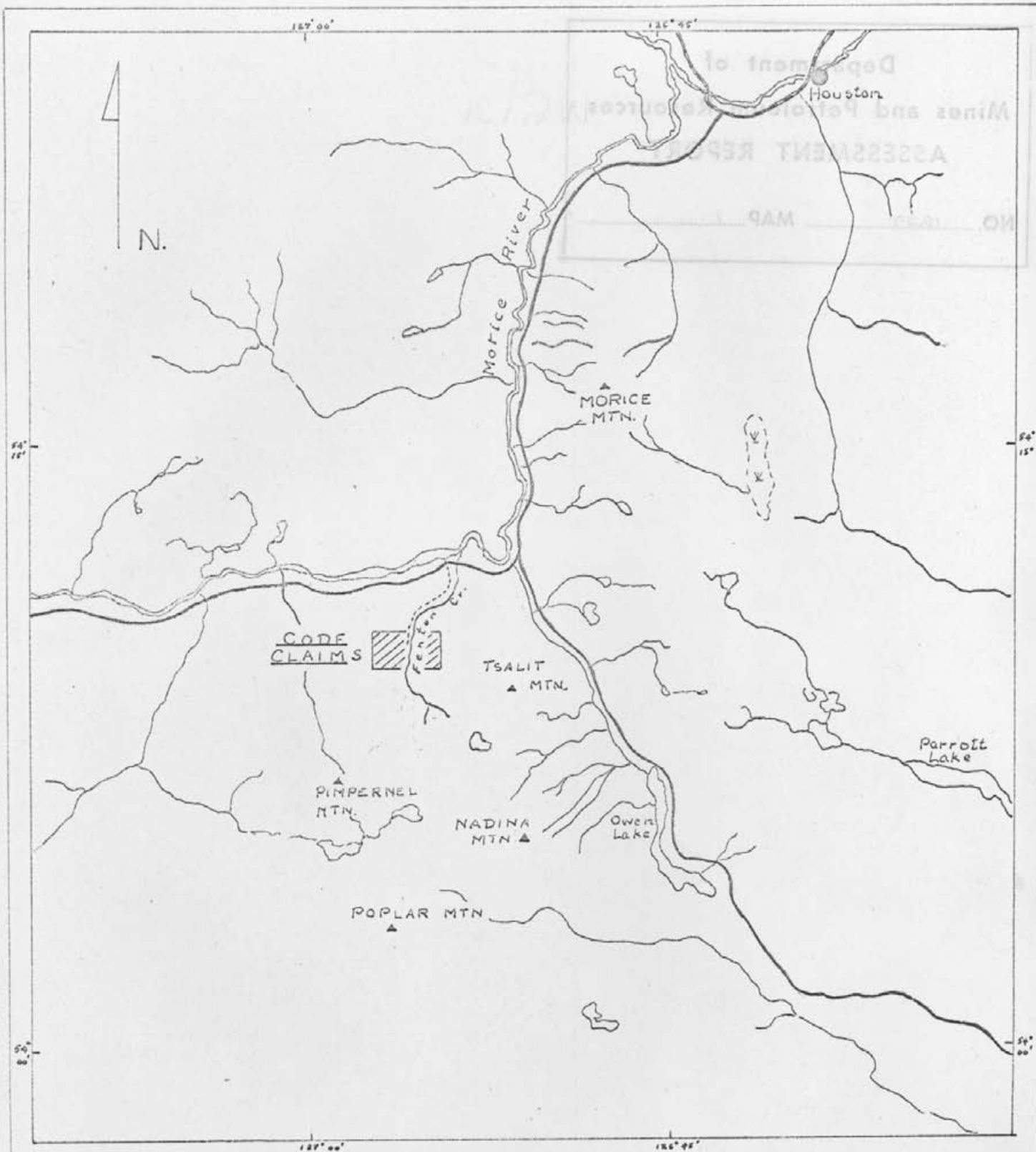





FIGURE 1
 LOCATION MAP
 CODE MINERAL CLAIMS
 OMINECA MINING DISTRICT B.C.

-  paved highway
-  2-lane gravel road
-  single lane dirt road

Scale 1 inch = 4 miles

Introduction

Anaconda American Brass Ltd. holds a group of claims near Houston, British Columbia. The Code claim group as re-grouped will consist of the following 25 claims:

Code 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
Code 11, 12, 13, 14, 15, 21, 22, 23, 24, 25
Code 26, 27, 28, 29, 30

A geophysical induced polarization survey was made over portions of the Code Claim Group during the period December 15, 1967 to February 14, 1968. A two-man crew spent 7 days in December cutting lines. A four-man crew spent 37 days in January and February conducting the survey. The field work was under the general supervision of Thomas A. Conto and the instrument operator was David Broswick.

Location and Accessibility

The Code claims are located 20 miles SW of the town of Houston, British Columbia (see Fig. 1). Access to the property is by the Morice River Road then by a single lane dirt road up the Fenton Creek valley to the north side of the property.

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 5 seconds. The receiver responds to the current on and off voltages and from this

Survey Equipment and Field Procedure (cont.)

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 Geophysical Survey

Geochemical reconnaissance in the Code Group area produced some anomalous results. A large percent of the area is covered with glacial drift with few bedrock exposures. Induced polarization was used to indicate areas of concentrated "metallic" mineralization. These areas in turn will be evaluated in terms of economic mineralization.


Details of Survey

Chain and compass lines were surveyed to provide control for the induced polarization survey. Readings were taken along the line at 200-foot intervals with pole-dipole spreads of 200 and 400 feet. The plotting point of each reading is located midway between the near potential electrode and the current electrode. Plate No. 1 indicates line locations relative to the claims.

Results of the Induced Polarization Survey

The readings are plotted in profile form for each line traversed. The line number indicates the west coordinate and the station number indicates the north-south position along each line. The horizontal scale is one inch to 400 feet. The vertical scale is one inch to 50 minutes phase shift. The orientation of the pole-dipole array is indicated by an arrow pointing towards the dipole. Readings in excess of 30 minutes are normally considered anomalous.

There is a relatively strong anomalous area coincident with the 200 North base line (see Plate No. 2). This zone would indicate a concentration of "metallic" mineralization. The economic evaluation of the "metallic" mineralization is not determined as yet since the area is completely drift covered.


Thomas A. Conto

APPENDIX I

ASSESSMENT DETAILS

Property:	Code Claims	Mining Division:	Omineca
Owner:	Anaconda American Brass Ltd.	Province:	British Columbia
Location:	20 miles SW of Houston, B.C.	Date Started:	15 December 1967
		Date Finished:	14 February 1968

Type of Survey:	Geophysical (Induced Polarization)
Operating Man Days:	162
Operating Crew Days:	14 (2-man) 37 (4-man)
Supervisory Man Days:	8
Drafting and Typing:	2

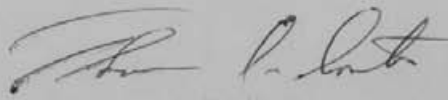
Personnel Employed on Survey

Supervision and Interpretation:
Thomas A. Conto

Drafting and Typing:
Phil Emery
Betty Saunders

Field Technicians:

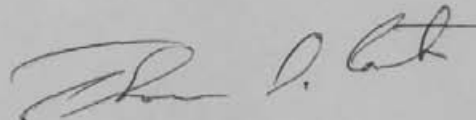
<u>NAME</u>	<u>CATEGORY</u>	<u>RATE</u>	<u>DAYS WORKED</u>	<u>PERIOD</u>	<u>WAGE</u>
David Broswick	Instrument Operator	425/mo	44	Dec. 15 to 21 Jan. 6 to 24 Jan. 27, 28, Jan. 30, 31 Feb. 1 to 14	722.00
Harold Rusk	Helper	400/mo	7	Dec. 15 to 21	107.00
Frank Skelton	Helper	475/mo	37	Jan. 6 to 24 Jan. 27, 28, Jan. 30, 31 Feb. 1 to 14	683.50
Jack Lucke	Helper	400/mo	37	Same	574.00
Terry Eastwood	Helper	425/mo	37	Same	<u>608.00</u>
Total					\$2,694.50


Thomas A. Conto

APPENDIX II

STATEMENT OF COSTS

Field Crew:	
Salaries (as per Appendix I)	2,694.50
Transportation @ \$15.00/crew day	765.00
Room & Board @ \$12.00/man/day	1,944.00
Drafting and Typing	50.00
Supervision	<u>200.00</u>
Total	\$5,653.50


 Thomas A. Conto

Declared before me at the city
 of Vancouver, in the
 Province of British Columbia, this 7
 day of May, 1968, A.D. } P. S. Hiest

J. Paul Sub-mining Recorder
 A Commissioner for taking Affidavits within British Columbia or
 A Notary Public in and for the Province of British Columbia.

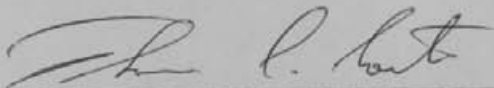
C E R T I F I C A T E

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 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 associate member of the Society of Exploration
Geophysicists.
- 4) I have been practising my profession for five 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 Ltd.
- 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 1st day of May 1968

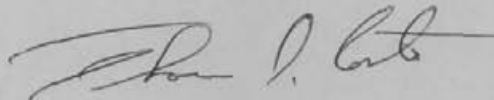


Thomas A. Conto, B.Sc. Geophysics

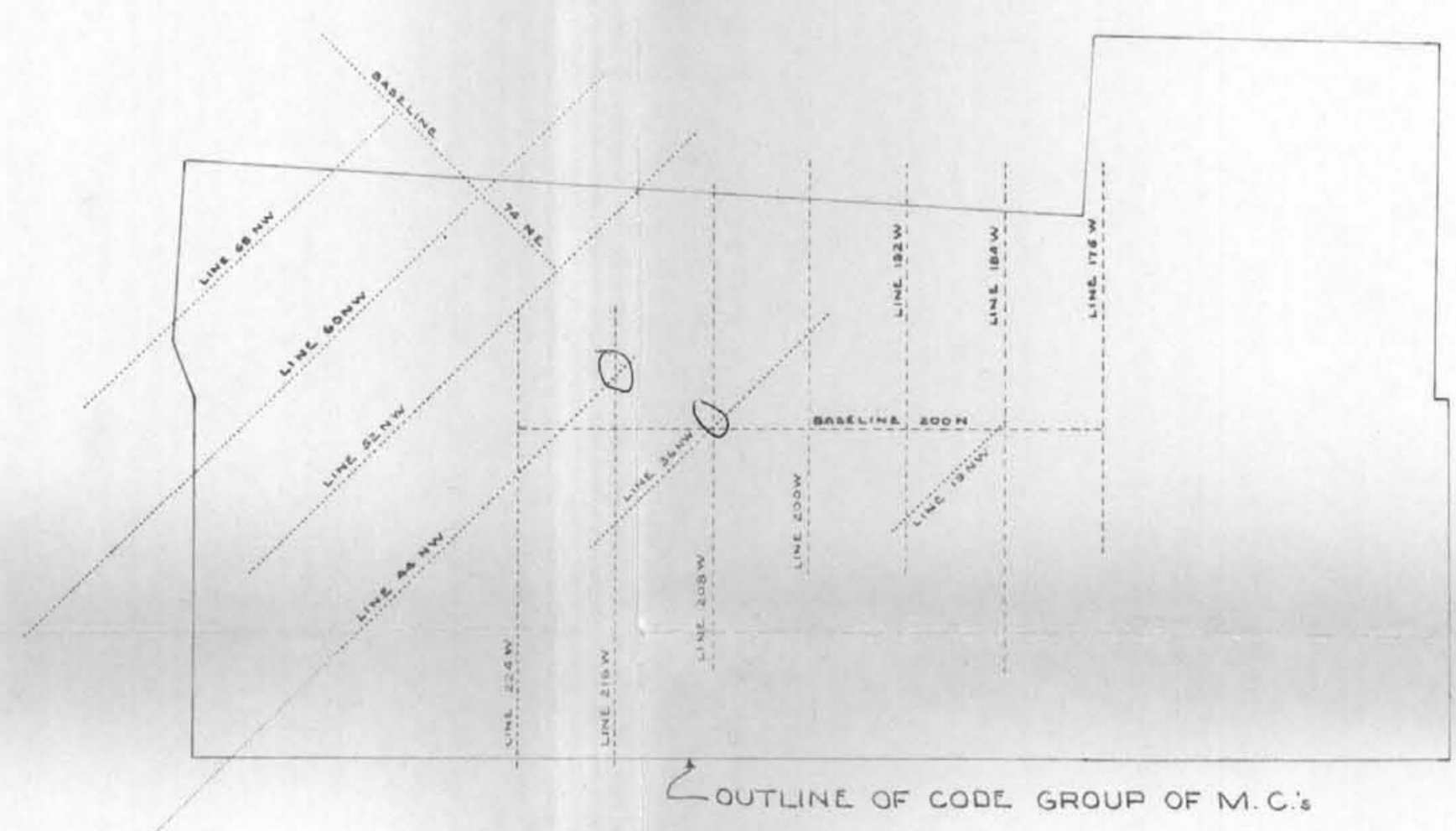
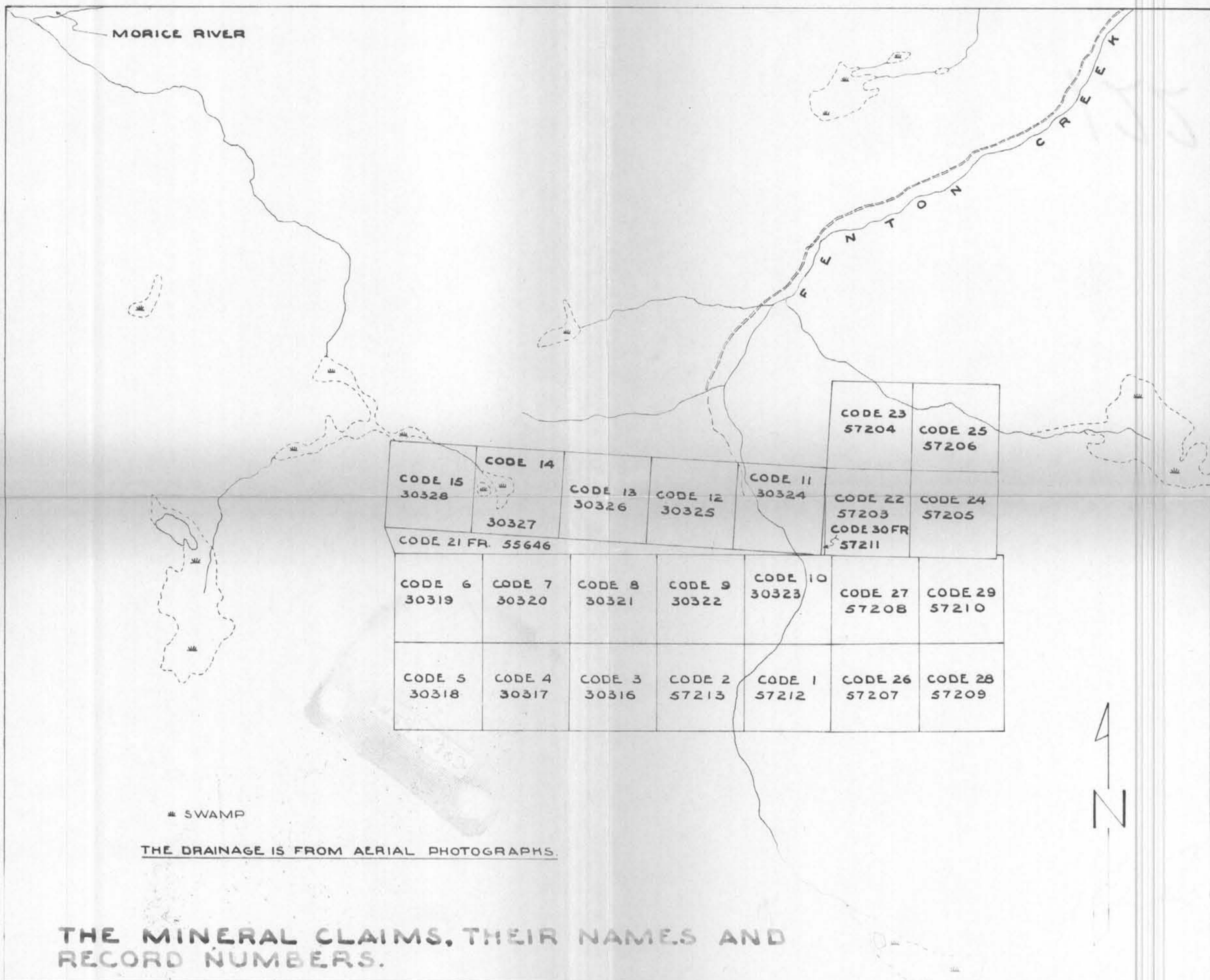
STATEMENT OF OPERATOR'S QUALIFICATIONS

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

- 1) David Broswick was the instrument operator for the Geophysical Survey conducted by Anaconda American Brass Ltd. on the Code Claim Group.
- 2) David Broswick had been working on an Induced Polarization Crew for four months 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



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 1229 MAP 2

THE MINERAL CLAIM BLOCK AND I.P. LINES

ANACONDA AMERICAN BRASS LTD WESTERN EXPLORATION DIVISION

CODE CLAIMS

HOUSTON, OMINACA M.D., B.C.

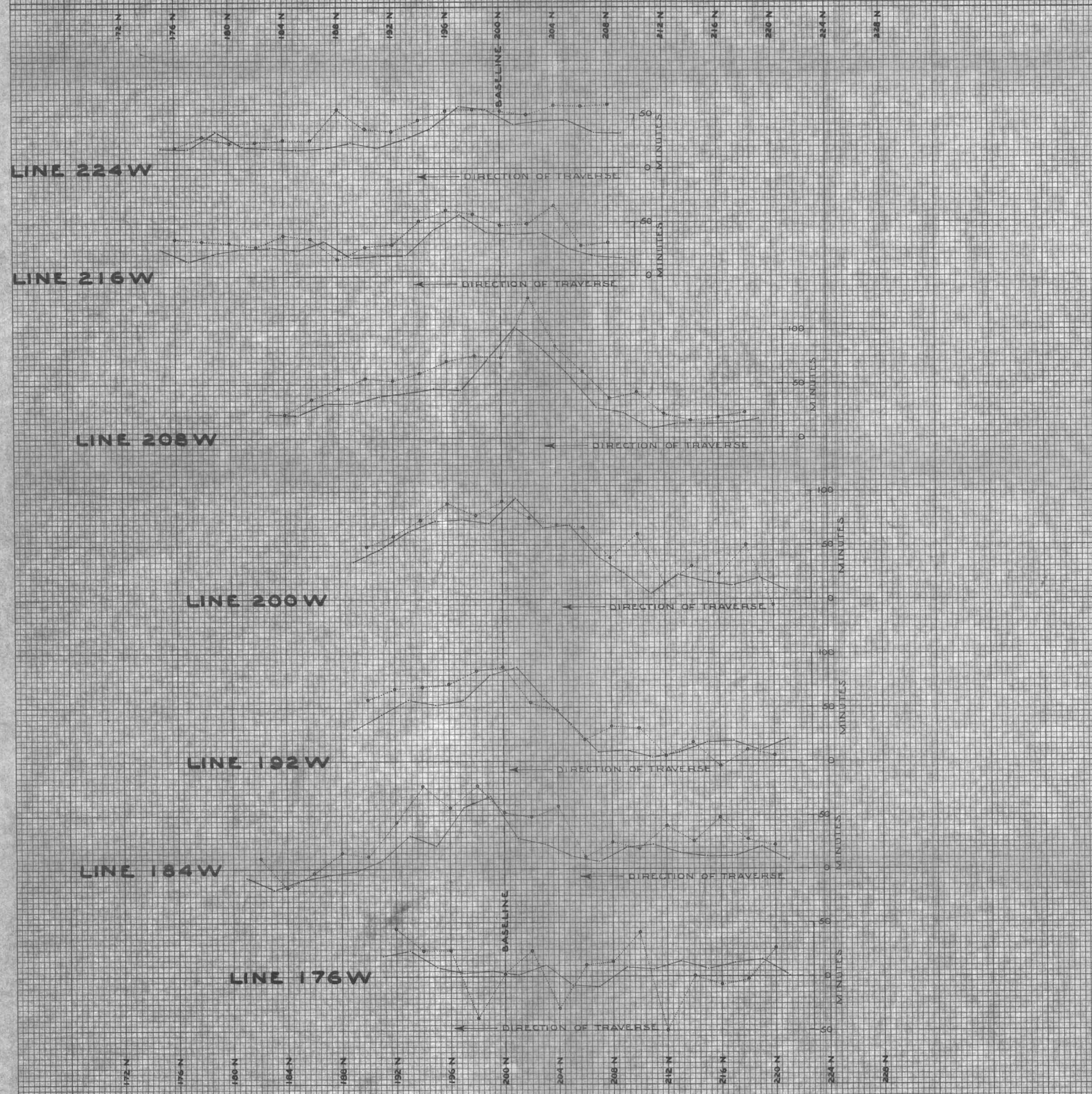
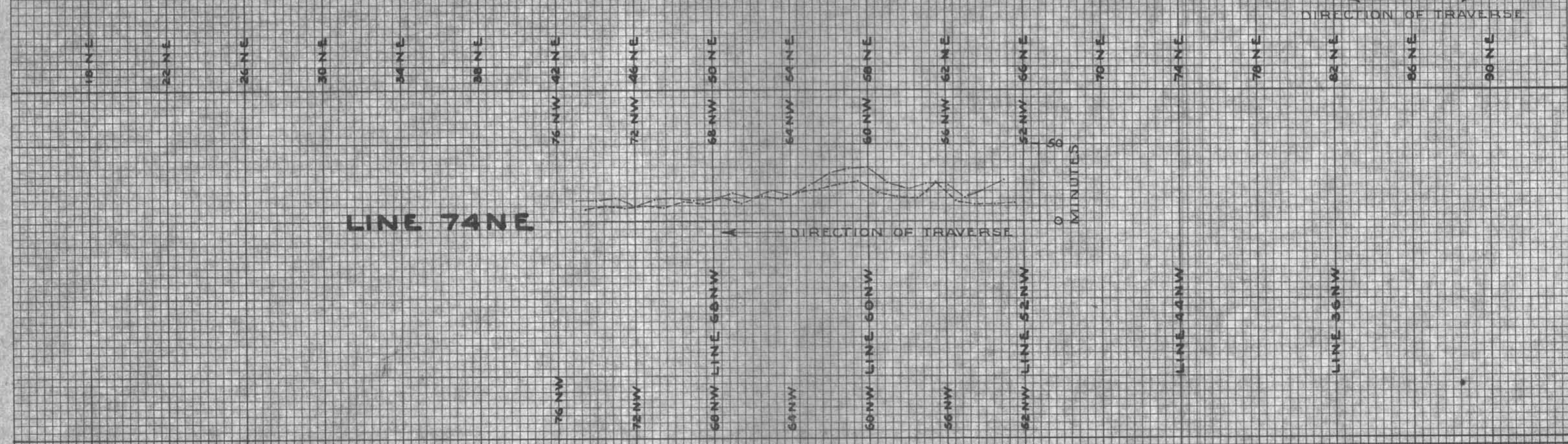
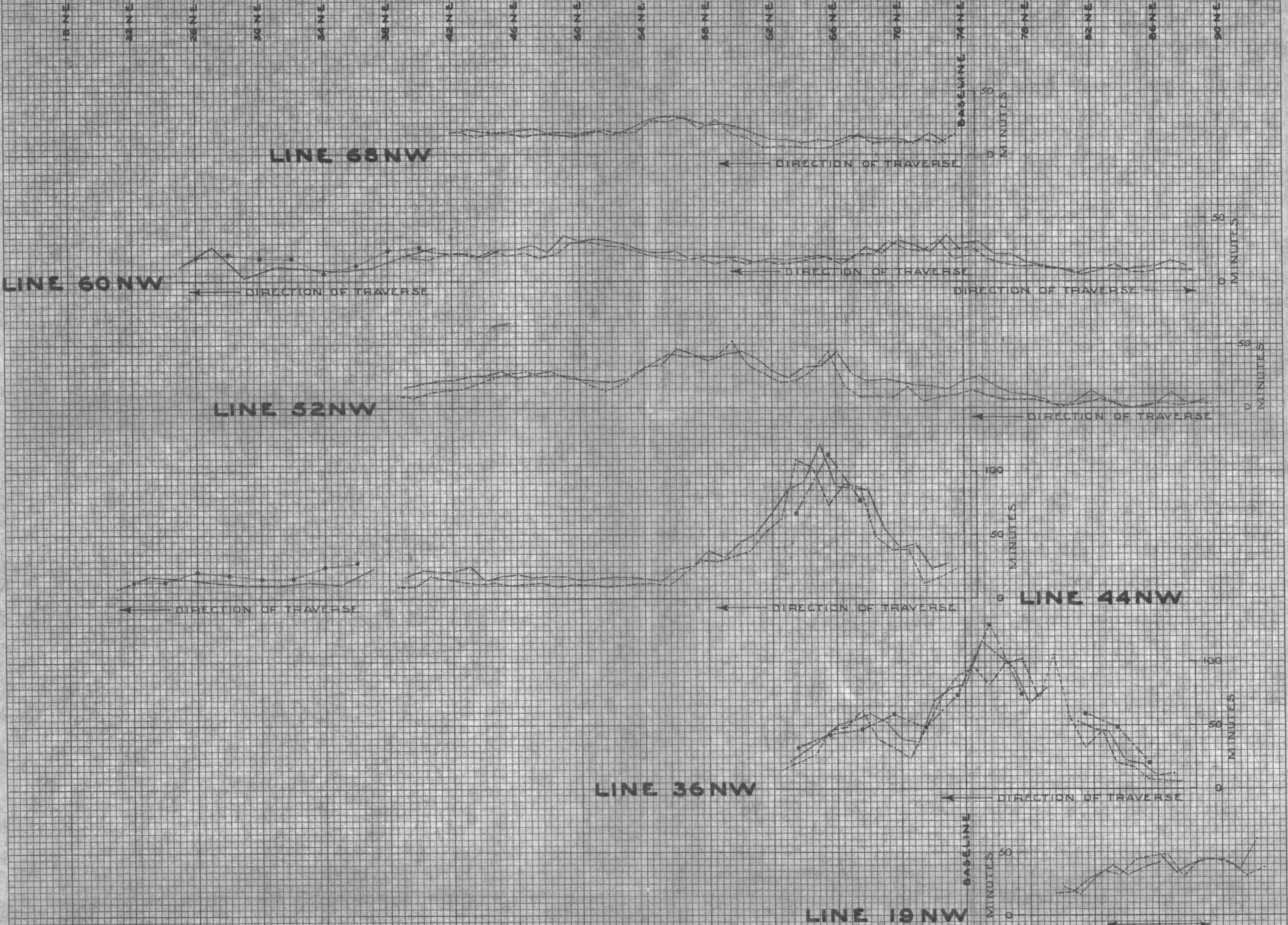
SCALE: 4 INCHES = 1 MILE (APPROXIMATELY)

PLATE NO 1

TO ACCOMPANY GEOPHYSICAL REPORT BY T.A. CONTO DATED MAY 1, 1968.

1229

T.A. Conto



U.L.F. - I.P. PROFILES

VERTICAL SCALE: 1 INCH = 50 MINUTES
 SPREADS:
 - - - - - 100'
 - - - - - 200'
 - - - - - 300'
 - - - - - 400'

ANACONDA AMERICAN BRASS LTD WESTERN EXPLORATION DIVISION

CODE CLAIMS
 HOUSTON, OMINCA M.D., B.C.

HORIZONTAL SCALE: 1" = 400'

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PLATE NO 2

TO ACCOMPANY GEOPHYSICAL REPORT BY T.A. CONTO DATED MAY 1, 1968.