

GEOPHYSICAL REPORT
on the
Induced Polarization and Magnetometer Surveys
of the
Cowbird (1-6) Mineral Claims
situated in the
Spences Bridge Area
Kamloops Mining Division
Latitude 50° 28' North, Longitude 121° 12' West
N.T.S. 92 I/6 E

Field Work

October 3 to 13, 1970

by

GEO-X SURVEYS LTD.

on behalf of

LARGO MINES LTD.

October 20, 1970

Vancouver, B.C.

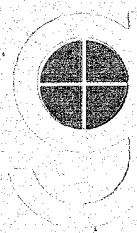
Instrument Operator:

W. Bellamy

Report by:

R. Wolfe, P. Eng.

J. Cerne, M.S.



GEO-X SURVEYS LTD. 627 HORNBY STREET, VANCOUVER 1, B. C.

604-685-0312
TELEX 04-50404

INTRODUCTION

During the period October 3 to October 13, 1970 a Geo-X Surveys Ltd. geophysical crew conducted 3 line miles of reconnaissance induced polarization , 1 line mile of detailed induced polarization and 3 line miles of magnetometer surveying on portions of the Cowbird (1-6) Claim Group, in the Spences Bridge Area, Kamloops Mining Division, Province of British Columbia. The work was conducted on behalf of Largo Mines Ltd. The purpose of the survey was to examine the gridded area (see figures 3 to 6) for magnetic anomalies and overvoltage effects by the induced polarization method, as a guide to future exploration.

This report describes the instrumentation, field procedure, data processing and final results.

SURVEY GRID

A soil sample grid, established by Largo Mines Ltd. previous to the induced polarization and magnetometer survey, was used for ground control. The grid consists of lines cut in an E-W direction, with spacings of 250 and 500 feet. Total line mileage for the induced polarization survey was 4 miles, and for the magnetometer survey 3 miles. The normalized induced polarization, resistivity, self-potential and magnet-

ometer data are shown on figures 3,4,5 and 6 respectively, each figure having a scale of 1"=200'

LOCATION AND ACCESS

The group of claims is located some 18 miles N.E. of Spences Bridge, B.C. Access to the property is by 2 miles of paved highway and 16 miles of gravel road from Spences Bridge.

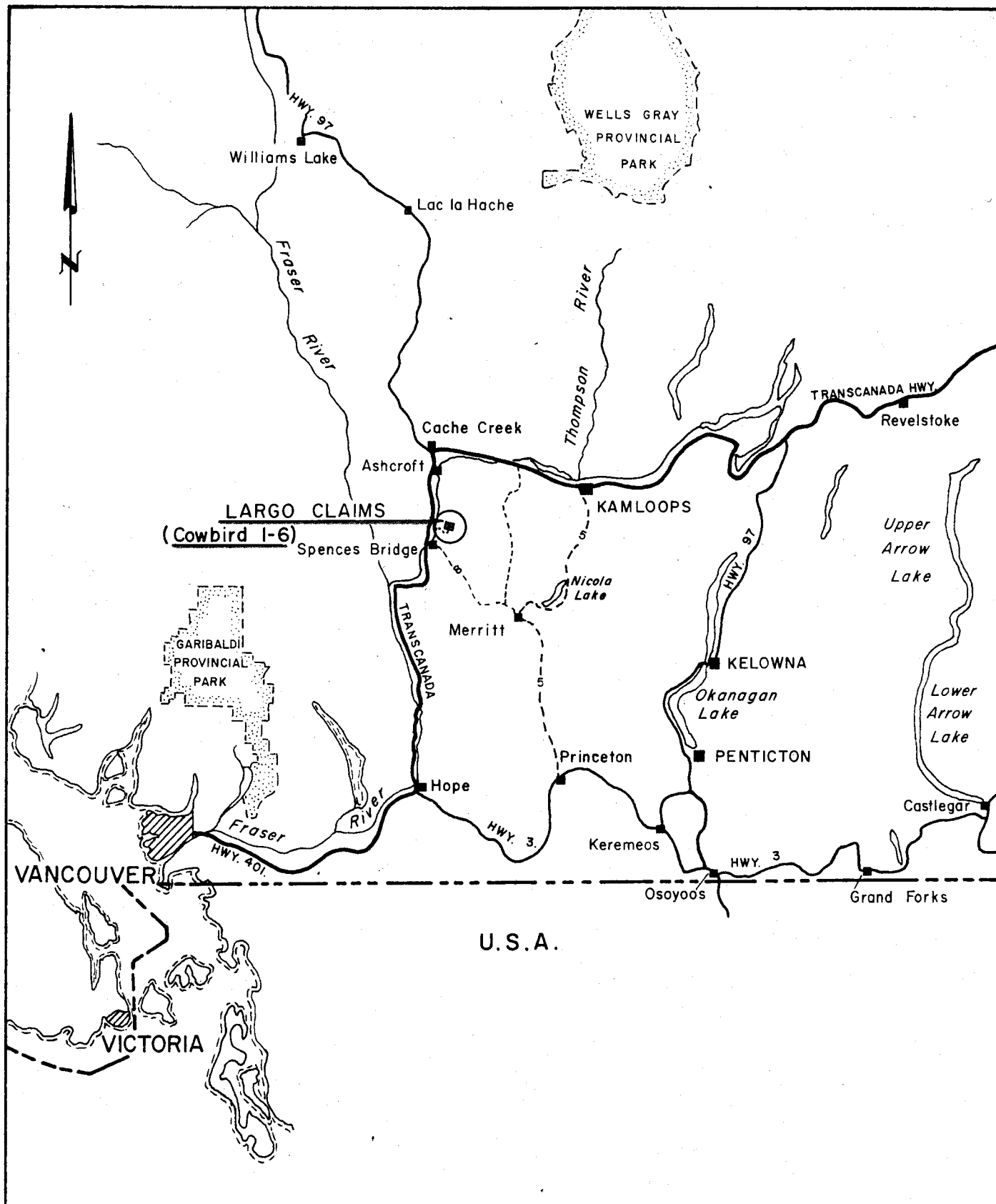
CLAIMS AND OWNERSHIP

The Cowbird Claims surveyed are the following:
Cowbird #1-6 inclusive, Reg. No's. 85648 - 85653 inclusive
Anniversary Date: November 20, 1970

The survey was conducted on behalf of Largo Mines Ltd.;
505 Burrard Street, Vancouver 1, B.C.

GENERAL SETTING

The Cowbird Claim Group is on the western border of the Thompson Plateau, roughly 6 miles northeast of the confluence of the Nicola and Thompson Rivers. The claim group is situated on the northeastern rim of the Pimainus Creek Valley.



LARGO MINES LTD.
 SPENCES BRIDGE AREA - KAMLOOPS M.D., B.C.

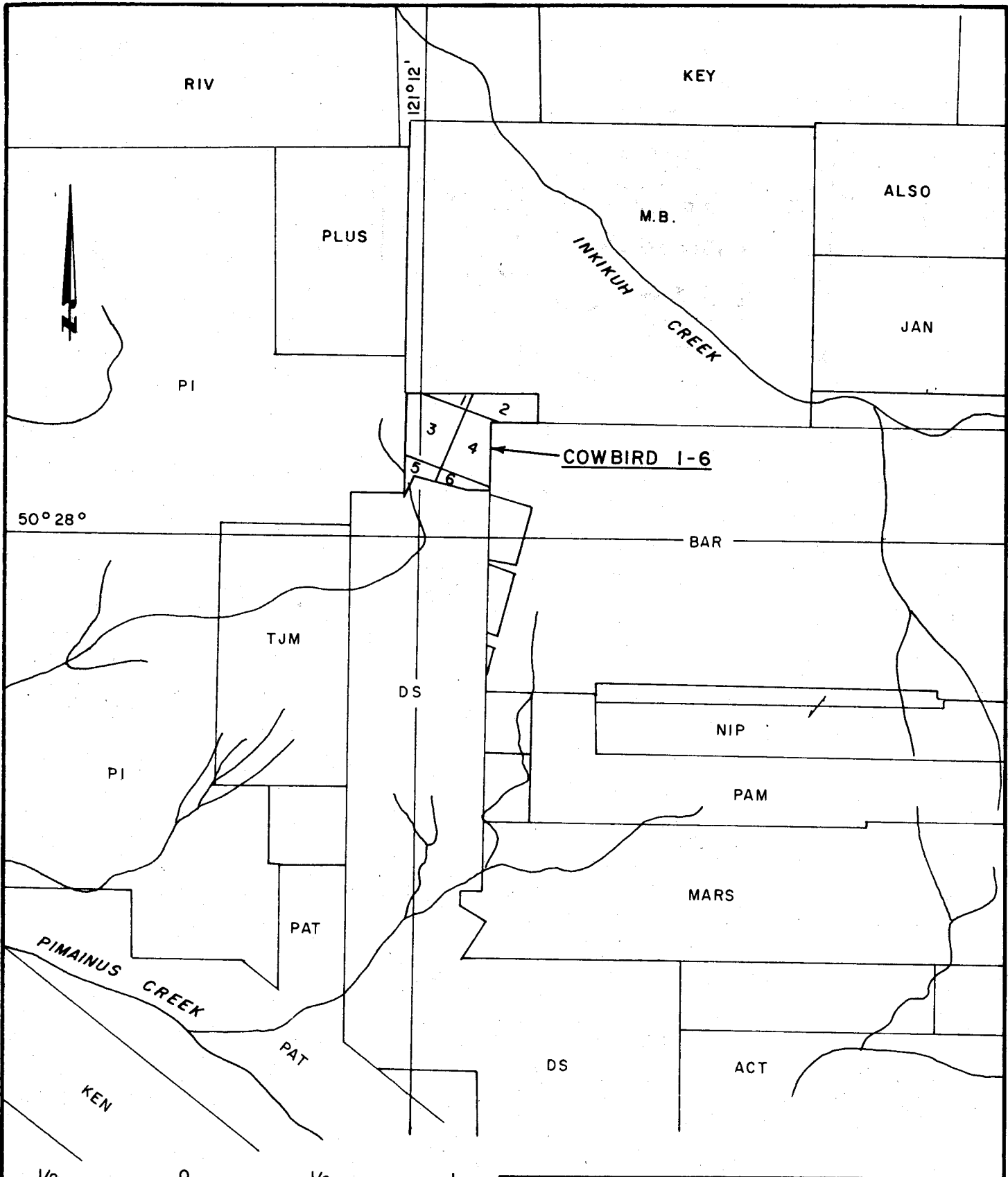
LOCATION MAP

G GEO - X SURVEYS LTD.

DRAWN R.K.
 CHECKED JC

DATED: Oct. 20/70
 JOB NO. 1168

FIG. NO. 1



50° 28'

121° 12'



SCALE : MILES
(APPROX.)

COPIED FROM B.C. MINERAL CLAIM MAP 92-1-6 E

LARGO MINES LTD.
SPENCES BRIDGE AREA - KAMLOOPS M.D., B.C.

CLAIM MAP

Vegetation consists of pines, with little underbrush. Topographic relief is moderate within the claim group, with elevation ranging from 4,600 to 4,900 feet.

PART B - THE INDUCED POLARIZATION SURVEY

Part B-1 - General Considerations of the
Pulse Type Induced Polarization Method

Two varieties of induced polarization surveys are in common use today in mineral exploration. The first is the time domain or pulse type method in which a steady direct current is impressed on the ground for a few seconds and then terminated abruptly. A fraction of a second after cessation of current impulse, the decay voltage, (caused by sub-surface capacitive-like storage) is measured. The second method is the variable (dual) frequency technique or frequency domain. In this method, the percentage difference between the impedance (a.c. resistance) offered at two separate frequencies, is measured.

The Hewitt (HEW 100) I.P. unit is a time domain unit and the exact method of measurement is outlined in the field procedure section.

The reader is referred to Wait, J.R. (1966), for a thorough treatment of frequency domain, and Seigel, H.O. (1966) and/or Brant (1966), for a discussion of time domain.

I.P. effect occurs when a current is passed through a volume of rock containing electronic conductors. Geophysical electronic conductors, or "metallic minerals" include most sulphides, (pyrite, chalcopyrite, bornite, molybdenite) certain oxides, clays, graphite and certain micas.

Empirical methods have shown, however, that sulphides differ from other geophysical electronic conductors in that a charge builds up on them in an exponential manner. In the field, this means that the impressed dV measured by the receiving pots climbs steadily during the current pulse. Also, sulphides sometimes demonstrate an almost unique polarization response, known as metallic polarization. Either type of response is the best test available for distinguishing sulphide response from that of other geophysical electronic conductors. Apart from sulphides, minerals with highly unsatisfied basal lattice surfaces act as leaky condensers and give rise to I.P. effects. All common rocks are responsive to some degree, and this response is designated background. It is often equivalent to one volume percent of scattered pyrite, and probably due to unsatisfied charges at lattice imperfections, mineral and rock boundaries, fractures, and so on.

Background with the HEW-100 I.P. unit is as follows:

<u>Area</u>	<u>Lithology</u>	<u>Background (mv/v)</u>
Highland Valley, B.C.	Guichon Batholith	2.5 to 4.0
Tonasket, Wash.	Granodiorite plug	Approx. 12.0
Aspen Grove, B.C.	Nicola Volcanics	4.0 to 7.5
Princeton, B.C.	Princeton sediments	Approx. 17.0
Cassiar, B.C.	Lower Paleozoic sediments	1.5 to 5.0

Factors other than the amount of metallic conductors which affects I.P. response are grain size, conductivity of minerals, porosity, tortuosity (pore geometry), type of gangue minerals, composition and amount of pore fluid, degree of alteration, and mode of mineralization (disseminated, lode, vein type, etc.)

Apparent resistivity is also measured during the I.P. survey. Rogers (1966), has pointed out that the resistivity of rock is only slightly influenced by changes in the sulphide content at low levels. Much of the change is due to other effects such as moisture content, fracturing, pore space, ground water, extent, degree and type of alteration, type of sulphides and mode of sulphide distribution, etc. However, alteration in combination with increased sulphide content, commonly affects the

resistivity significantly. Unfortunately, there are many additional causes for resistivity variation and rarely can sulphides be recognized or predicted from resistivity data alone.

Background d.c. apparent resistivity with the HEW-100 I.P. unit follows:

<u>Area</u>	<u>Lithology</u>	<u>Background (ohm- feet)</u>
Highland Valley, B.C.	Guichon Batholith	1600
Tonasket, Wash.	Granodiorite plug	3500
Aspen Grove, B.C.	Nicola Volcanics	1000
Princeton, B.C.	Princeton sediments	500
Cassiar, B.C.	Lower Paleozoic sediments	1000 - 2000

Prior to current impression, the receiving pots are balanced, and this, the self-potential value in millivolts is often a useful geophysical tool. When metallic lustered sulphide minerals are situated in a suitable geological-hydrological environment, the sulphides oxidize and a natural or spontaneous "battery effect" occurs. Often the self-potential effect over sulphide bodies is negative and in the order of a few hundred millivolts.

With a Wenner electrode configuration, the self-potential and first derivative of the self-potential are valuable information if the transit interval is equal to, or is one-half the "a" spacing distance. In other cases,

where the "a" spacing and transit interval are not evenly proportional, the self-potential results are of little value.

BIBLIOGRAPHY

Frequency Domain:

Wait, J.R. (1951) Editor, Overvoltage Research and Geophysical Applications. Longon, Pergamon Press.

Time Domain:

Brant, A.A. (1966) Examples of Induced Polarization Field Results in the Time Domain - Society of Exploration Geophysicists' Mining Geophysics, Volume I, Case Histories.

Seigel, H.O. (1966) Three Recent Irish Discovery Case Histories using Pulse Type Induced Polarization - S.E.G. Volume I, Case Histories - p.p. 341.

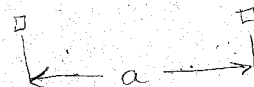
Rogers, G.R. Introduction to the Search for Disseminated Sulphides, S.E.G. Volume I.

B-2 Field Procedure

A Hewitt Enterprises Pulse Type IP was used throughout the survey. Instrument specifications are described in Appendix IV.

The standard Wenner electrode array was employed with an "a" spacing (one-third the distance between the current electrodes) of 400 feet. A brief description of the field procedure follows.

Prior to voltage application, the self-potential is balanced and recorded, between the two receiving pots "a" feet apart. Normally a voltage of 250, 500 or 1000 volts is impressed between the back electrode (one "a" behind the instrument) and front electrode (two "a" in front of the instrument). The electrodes consist of a single (or multiple) steel stake. A four second pulse of d.c. current is applied, during which time the I (current in milliamperes) and dV (impressed EMF in millivolts) is observed and recorded. Three-tenths seconds after cessation of pulse, the residual (decay) voltage is integrated for 0.8 seconds (on integration function #1). From these data, the apparent d.c. resistivity and normalized induced polarization value may be calculated, as described in the data reduction portion of this report.



The transit interval was 400 feet along all the cross lines, and the front electrode positive.

B-3 Induced Polarization Data Reduction

The following information was recorded by Mr. Warren Bellamy, the instrument operator, at each pulse station:

1. The property, operator's initials, job and page number, "a" spacing, transit interval and remarks on topography;
2. The line and station co-ordinates;
3. The self-potential reading in millivolts (S.P. mv);
4. The current in milliamperes (I ma);
5. The impressed EMF in millivolts (dV mv);
6. The induced polarization decay voltage in millivolts (IP mv);
7. The resistor capacitor switch (R.C.) setting;
8. The current electrode voltage switch value;
9. The integration function switch (I.F. setting);
10. The pulse time in seconds.

From this data, the apparent resistivity (Rho) is calculated from the following relation:

$$\text{Rho} = \frac{6.2832 \times a \times dV}{I}$$

Where "a" = 1/3 distance between the current electrodes

The normalized IP value is obtained by utilization of the following relation:

$$\text{IP norm} = \frac{\text{IP (mV)} \times 100 \times k \times \text{R.C.}}{dV \text{ (mV)}}$$

Where: IP norm = normalized IP in millivolt seconds per millivolt or milliseconds

K = a constant depending on the IF setting

R.C. = resistor - capacitor shunt

A specific example from the data collected at 20 East, Line 20 north is tabulated below:

<u>I (ma)</u>	<u>dV</u>	<u>IP (mV)</u>	<u>R.C.</u>	<u>S.P.</u>
170	45	2	1	3

$$\text{Therefore: Rho} = \frac{6.2832 \times 400 \times 45}{170} = 660 \text{ ohm-feet}$$

$$\text{IP norm} = \frac{2 \times 100}{45} = 4.4 \text{ millivolt seconds per volt}$$

The final apparent resistivity, self-potential, and normalized IP values were plotted on the accompanying figures (Scale 1": 200') at a point midway between the receiving pots (i.e. 200 feet in front of the instrument position).

B-4 DISCUSSION OF RESULTS

a) Self-potential

The highest self-potential difference was recorded between stations 18+00 E and 22+00 E on line 10+00 N (127 millivolts). In general, potential differences are less than 50 millivolts.

No anomalous readings which can be attributed to sulphides are noted. It must be remembered however, that the surveyed area is extremely dry, especially at the time of the survey (i.e. early October). Even if sulphides were present, the water table would probably be too deep for oxidation of sulphides and the corresponding "battery" effect to occur.

b) Apparent Resistivities

The resistivity readings, contoured at 500 ohm-feet intervals show a band of low resistivity (480 - 1,000 ohm-feet) trending in a northeasterly direction (i.e., at 22+00 E on line 20+00 N, and 20+00 E on line 15+00 N.) Extremely high resistivity readings of 5020 and 6020 ohm-feet in the northwest and southeast corners of the survey area are probably caused partly by

lithology and partly by lack of moisture in the ground.

c) Induced Polarization

I. P. readings vary between 0.9 and 5 mv/v.

Background can be considered up to 2.5 or 3 mv/v. Two areas with readings over background were checked in detail using an "a" spacing of 200 feet in contrast to the original "a" spacing of 400 feet.

Only background readings were obtained in the detail work. Since the two areas mentioned above show several readings up to 5 mv/v at an "a" spacing of 400 feet, there is a possibility that better results might be obtained at greater depth, (i.e. using an increased "a" spacing of say 800 feet.)

PART C THE MAGNETOMETER SURVEY

C-1 Magnetometer Field Procedure and Data Processing

The ground magnetic survey was completed with a Sharpe MF-1 flux-gate vertical component magnetometer (see Appendix for instrument specifications).

To remove the diurnal time variations of the geomagnetic field from the data, a correction factor T must be determined ($T = \text{Standard Base Response} - \text{Base Reading}$). To determine T, a base station was selected (0+00, line 15+00N)

and a convenient standard base response assigned to it (2000 gammas). The operator traversed the grid area in a series of loops, checking in at the first station on the loop with a series of readings after each loop. The operator checks in at the base station at the start of each survey day and as often as possible during the day. In this manner the survey was completed and the time variation of the geomagnetic field recorded. From a graph of the time variation, and from the loop checks, T was determined for each reading. After adding the appropriate T to each reading, the correlated data was plotted and contoured at intervals of 500 gammas (see figure 6).

C-2 Discussion of Results

Maximum magnetic variation is about 2000 gammas. A weak northwesterly trend can be observed. The variations of the vertical component of the magnetic field in the survey area appear to be normal changes in lithology with corresponding changes in magnetic susceptibility. No significant anomalies were observed.

PART D GEOPHYSICAL COMPILATION, SUMMARY AND CONCLUSIONS

The resistivity and magnetic contours show a definite correlation (i.e. low resistivity and low magnetic readings in a northeasterly trending band). A change in lithology is

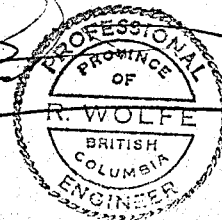
believed to be responsible for this.

The self-potential survey only showed background readings, but these results are inconclusive due to a probable lack of a suitable water-table for any "battery" action to occur.

The induced polarization survey produced 2 areas of over background readings at an "a" spacing of 400 feet. Detail work in these areas at an "a" spacing of 200 feet only produced background readings. It is recommended that these areas are checked at an "a" spacing of 800 feet to test the possibility of anomalous readings occurring at a greater depth. The cost for an extra 3 miles of Induced Polarization at \$400 per line mile is about \$1,200.

Respectfully submitted,

R. Wolfe, P. Eng.
Vancouver, B.C.
October 20, 1970



APPENDIX I

PERSONNEL

NAME: BELLAMY, Norman Warren

EDUCATION: Grade Ten - Fraser Lake Senior
Secondary.

EXPERIENCE: Two and one half years in Underground
Mines.

Five years with various companies doing
field work in mining exploration.

Presently employed by Geo-X Surveys Ltd.
since August 3, 1968 doing various types
of field work under Professional super-
vision.

APPENDIX I

PERSONNEL

NAME: CERNE, James

EDUCATION: B.S. Geology (June 1967)
Case Institute of Technology - Cleveland,
Ohio.

M.S. Geophysics (August 1968)
California Institute of Technology -
Pasadena, California.

EXPERIENCE: July 1965 - June 1967 - Metallurgy Dept.,
Case Institute of Technology - Student Asst.

June - September 1967 - N.A.S.A. Manned
Spacecraft CNT. Lunar and Earth Sciences Div.,
Geophysics Group, Houston, Texas.

September 1967 - August 1968 - California
Institute of Technology, Seismological Labora-
tory, Graduate Research Asst.

September 1968 - present. Employed by
Geo-X Surveys Ltd. as Geophysicist.

APPENDIX I

PERSONNEL

Name: KEY, Robert A.

Education: Grade XII Diploma.

1 year Petroleum Geology at the Institute
of Technology and Arts in Calgary.

Experience: 2 years in Steam Heating Design Drafting.

12 years with Mobil Oil Canada Limited,
Senior Draftsman.

2 years, mining exploration with Geo-X
Surveys Limited as Chief Draftsman.

APPENDIX II

PERSONNEL AND DATES WORKED

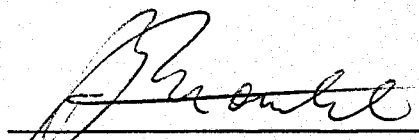
The following Geo-X Surveys Ltd. personnel were engaged on the Largo Mines Ltd. project.

<u>NAME</u>	<u>POSITION</u>	<u>DATES</u>
W. Bellamy	Operator	Oct. 3-13, 1970
K. Klinosky	Helper	Oct. 5-13, 1970
E. Nagy	Helper	Oct. 6-13, 1970
R. Wolfe, P. Eng.	Report Preparation	Oct. 23, 1970
J. Cerne	Report Preparation	Oct. 15,16,1970
R. Key	Drafting	Oct. 14,15,19,20,26,27, 1970

APPENDIX III
COST BREAKDOWN


As per agreement between Largo Mines Ltd. and Geo-X Surveys Ltd. dated October 5, 1970 for an Induced Polarization and Magnetometer Survey over the Cowbird 1-6 claims in the Kamloops Mining District of British Columbia.

3 Miles of survey @ \$375.00 per li. mi.	\$1,125.00
Mobilization	200.00
1 Mile detailing survey @ \$225 per li. mi.	225.00
	<hr/>
TOTAL	\$1,550.00
	<hr/> <hr/>


E. F. Mould,
Controller

Declared before me at the city
of Vancouver, in the
Province of British Columbia, this 2nd
day of November, 1970, A.D.

Don Vallant


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

GENERAL SPECIFICATIONS OF THE HEWITT PULSE TYPE INDUCED POLARIZATION UNIT.

Transmitter Unit

Current pulse period (D.C. Pulse Manual initiated timer)	1 - 10 seconds
Current measuring ranges	0 - 500 0 - 1000 Milliamperes 0 - 5000
Internal voltage converter	
27 volt D.C. 350 watt	250
output with belt back batteries	500 volts D.C. 1000 Nominal

500 watts using 27 volts aircraft batteries.

Transmitter can switch up to 3 amps at 1000 volts from generator or battery supply with resistive load. The switching is done internally in the transmitter unit. Remote control output can switch up to 10 kilowatts of power by using a separate control unit. A remote control cord is supplied with auxiliary equipment.

Receiver Unit

<u>Self Potential Range</u>	0 - 1000 millivolts 1 millivolt resolution
<u>Impressed EMF Ranges</u>	0 - 30 0 - 100 millivolts 0 - 300 0 - 1000

Input Terminals with Three Combinations

P₁ - P₂
P₁ - P₀
P₂ - P₀

Induced Polarization Ranges

0 - 30
0 - 60 millivolt
0 - 90 seconds

Integration Time Periods

.8 seconds
1.6 seconds

Tandem Integration Time Periods

3 ranges plus 4 integration combinations.

Delay Time from Cessation of Current Pulse

.3 seconds

(Combined Photo Electric Coupled Receiver and Transmitter)

Operation Temperature

-25° F - 120° F

POWER SUPPLY

Receiver Unit

4 Eveready E136 Mercury Batteries
2 Eveready E134 Mercury Batteries
2 Eveready E401 Mercury Batteries

Transmitter Unit

Sealed Rechargeable 8 amp. hr. belt pack capable of driving the converter at 350 watts for a minimum of one day's operation before recharge.

Manufactured by Hewitt Enterprises, Box 978A, Sandy, Utah, 84070
Phone: 801 571-0157

APPENDIX IV

Specifications for MF-1 Fluxgate Magnetometer

Maximum Sensitivity: 20 gammas (per scale division)
on 1000 gamma range.

Readability: 5 gammas (1/4 scale division)
on 1000 gamma range.

Ranges: (Full Scale) 1,000 Gammas
3,000 gammas
10,000 gammas
30,000 gammas
100,000 gammas

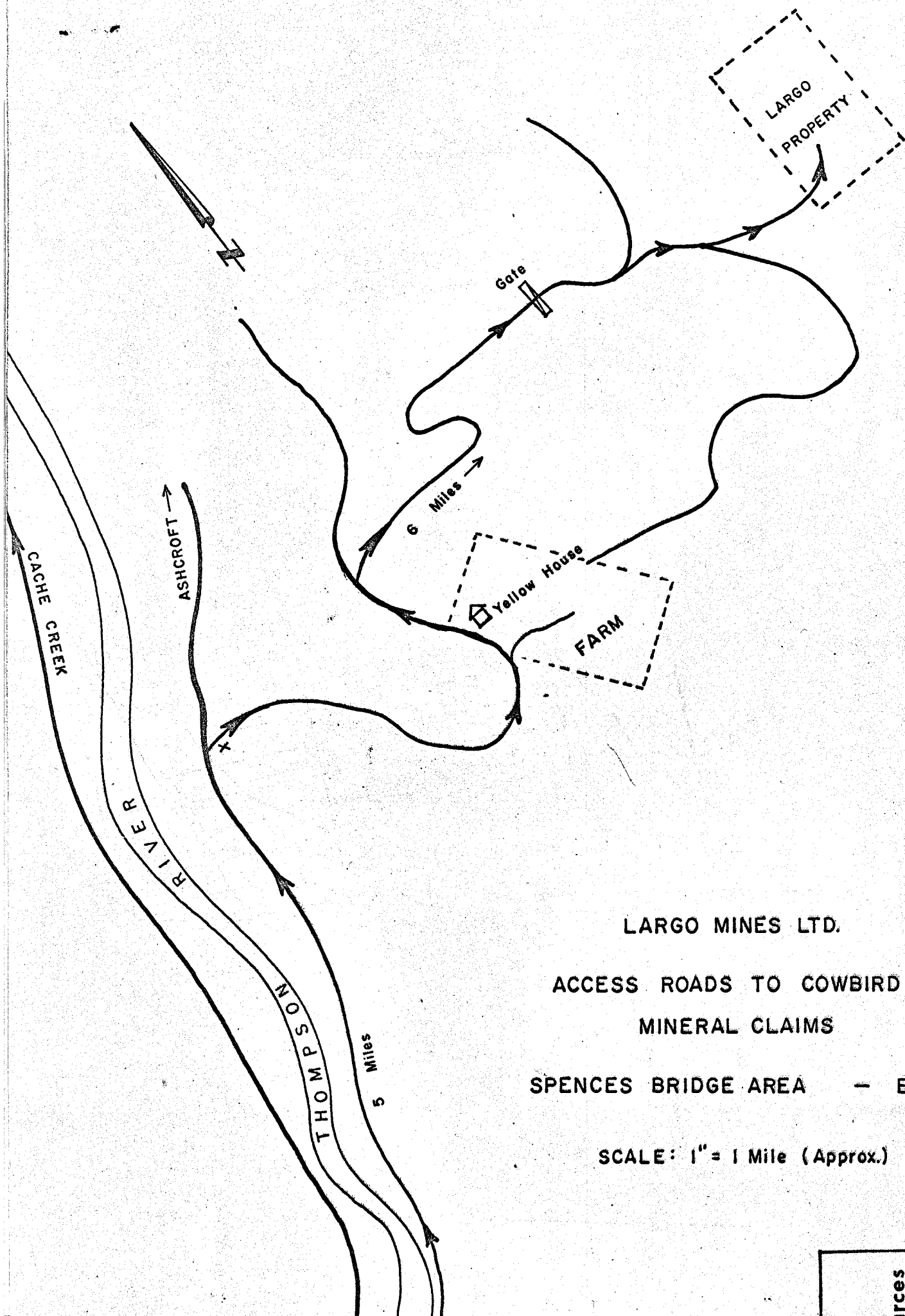
Maximum Range: ± 100,000 gammas

Latitude Adjustment Range: 10,000 to 75,000 gammas, Northern
hemisphere convertible to:
10,000 to 75,000 gammas, Southern
hemisphere or ± 30,000 gammas
equatorial.

Dimensions:
(including Battery Case) 7" x 4" x 16"

Weight: (including
Battery Case) 9 lbs.

Batteries: 12 flashlight batteries ("C" cell)

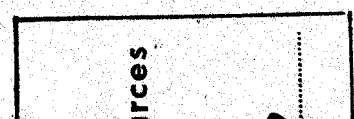


LARGO MINES LTD.

ACCESS ROADS TO COWBIRD I-6
MINERAL CLAIMS

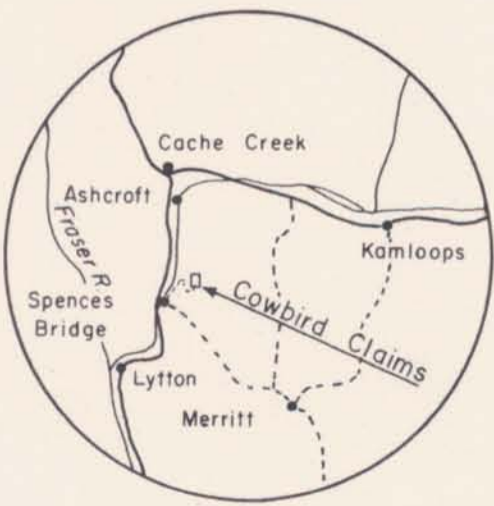
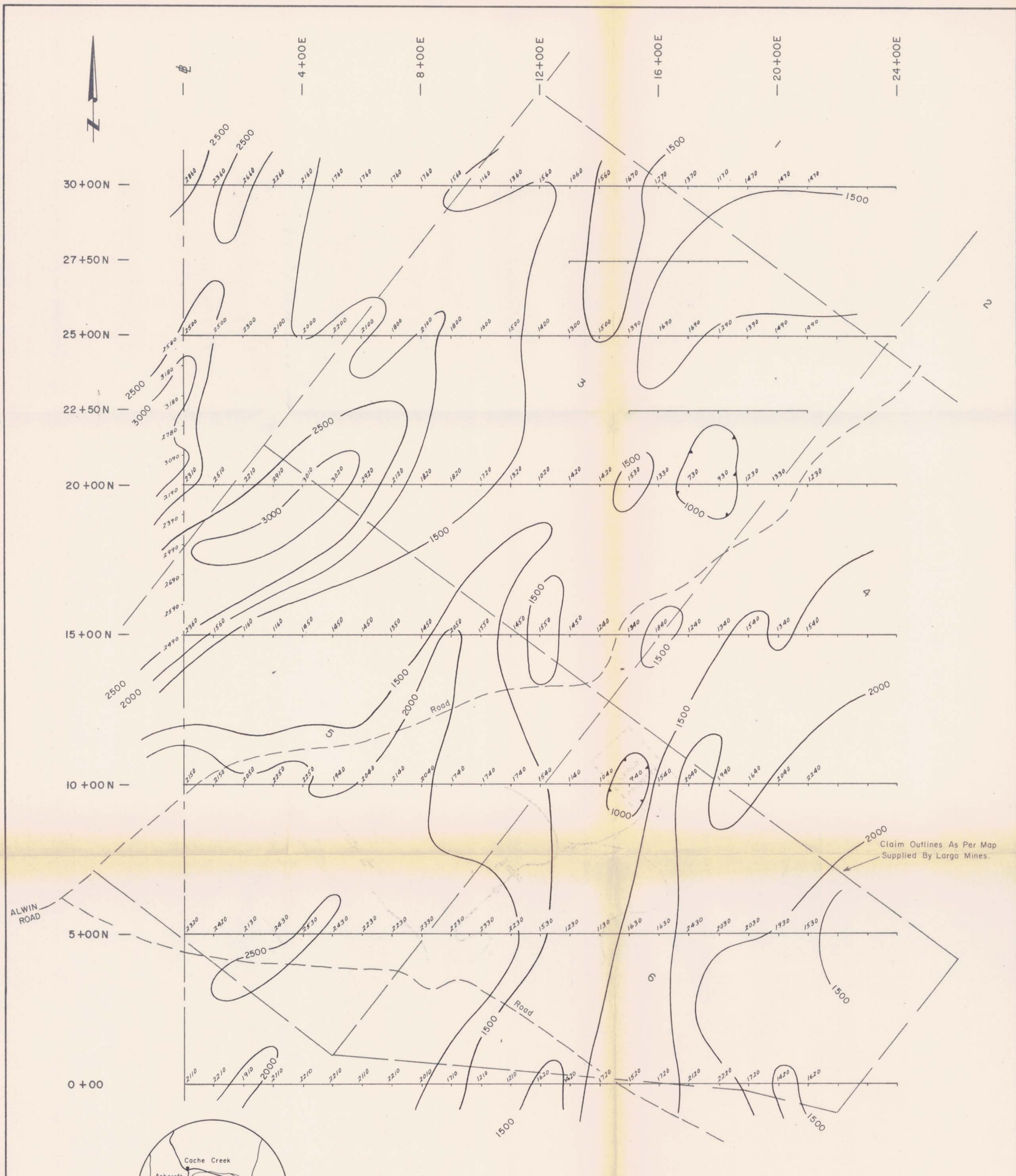
SPENCES BRIDGE AREA — B. C.

SCALE: 1" = 1 Mile (Approx.)



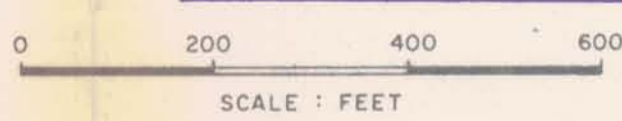
ROAD TO LARGO PROPERTY

From Spences Bridge approximately 2 miles on road to Merritt;
Turn left on gravel road approx. 1/4 mile past bridge. Stay on
gravel road about 5 miles to Fork, turn right. At farm between
corral and yellow house turn left, 1/4 mile turn right; uphill,
keep to right for approximately 6 miles past yellow 4 X 4, at
next Y turn left, tree across road. Turn left at second road.
This is on grid.



INDEX MAP
Scale: 1" = 40 Mi.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2682 MAP # 6

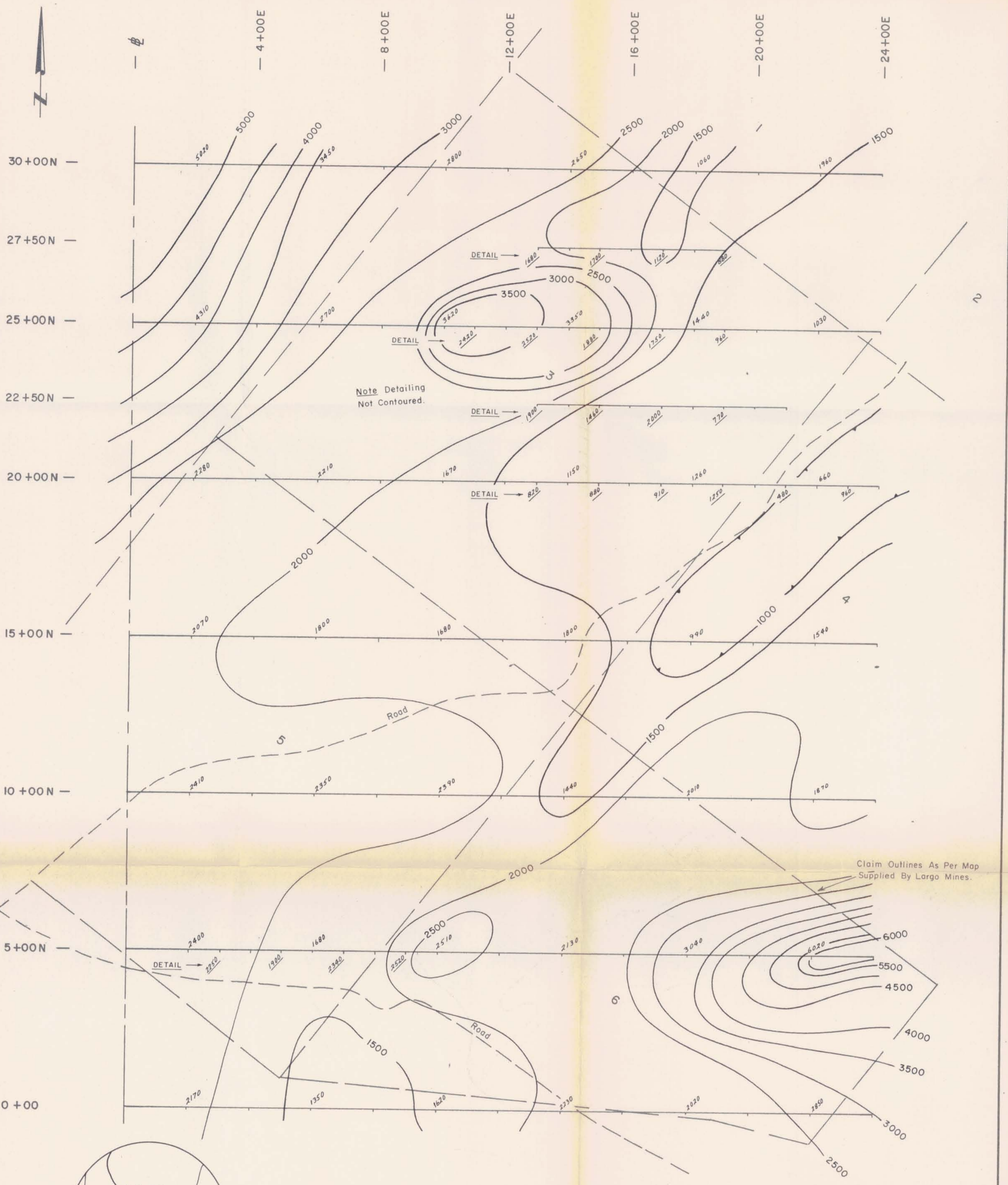


2682

LARGO MINES LTD SPENCES BRIDGE AREA - KAMLOOPS M.D., B.C.			
ISOMAGNETIC PLAN			
CONTOUR INTERVAL: 500 Gammas			
Drawn	R.K.	Dated Oct. 20/70	Fig. No.
Checked	C	Job No. 1168	6

TO ACCOMPANY THE GEOPHYSICAL REPORT ON THE COWBIRD (1-6) CLAIMS OWNED BY LARGO MINES LTD., SITUATED NEAR SPENCES BRIDGE, IN THE KAMLOOPS MINING DIVISION - B.C. BY: R. WOLFE, P. ENG. DATED: OCT. 20, 1970.

GEO - X SURVEYS LTD.



ALWIN ROAD

5+00N

10+00N

15+00N

20+00N

22+50N

25+00N

27+50N

30+00N

4+00E

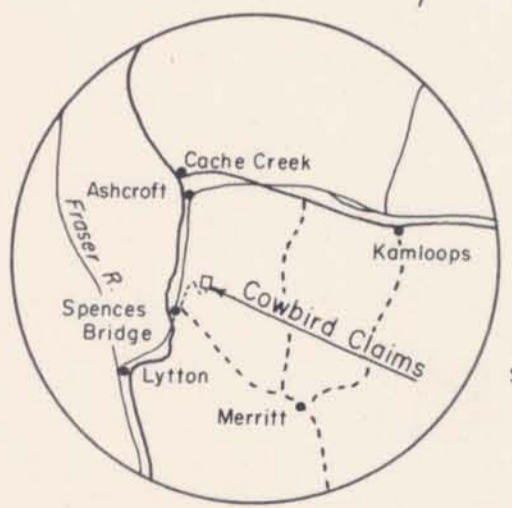
8+00E

12+00E

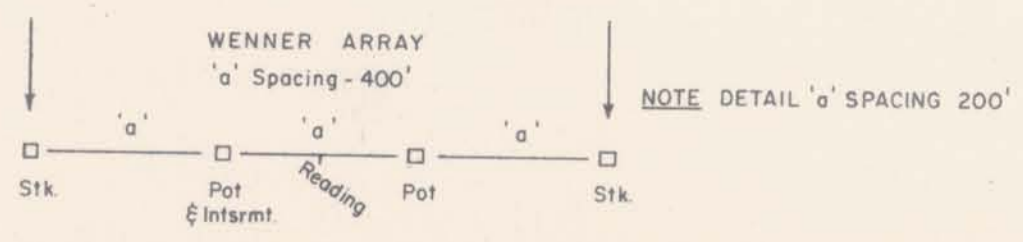
16+00E

20+00E

24+00E



INDEX MAP
Scale: 1" = 40 Mi.

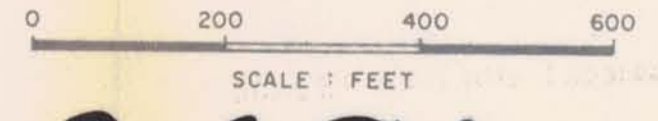


WENNER ARRAY

'a' Spacing - 400'

NOTE DETAIL 'a' SPACING 200'

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2682 MAP # 4

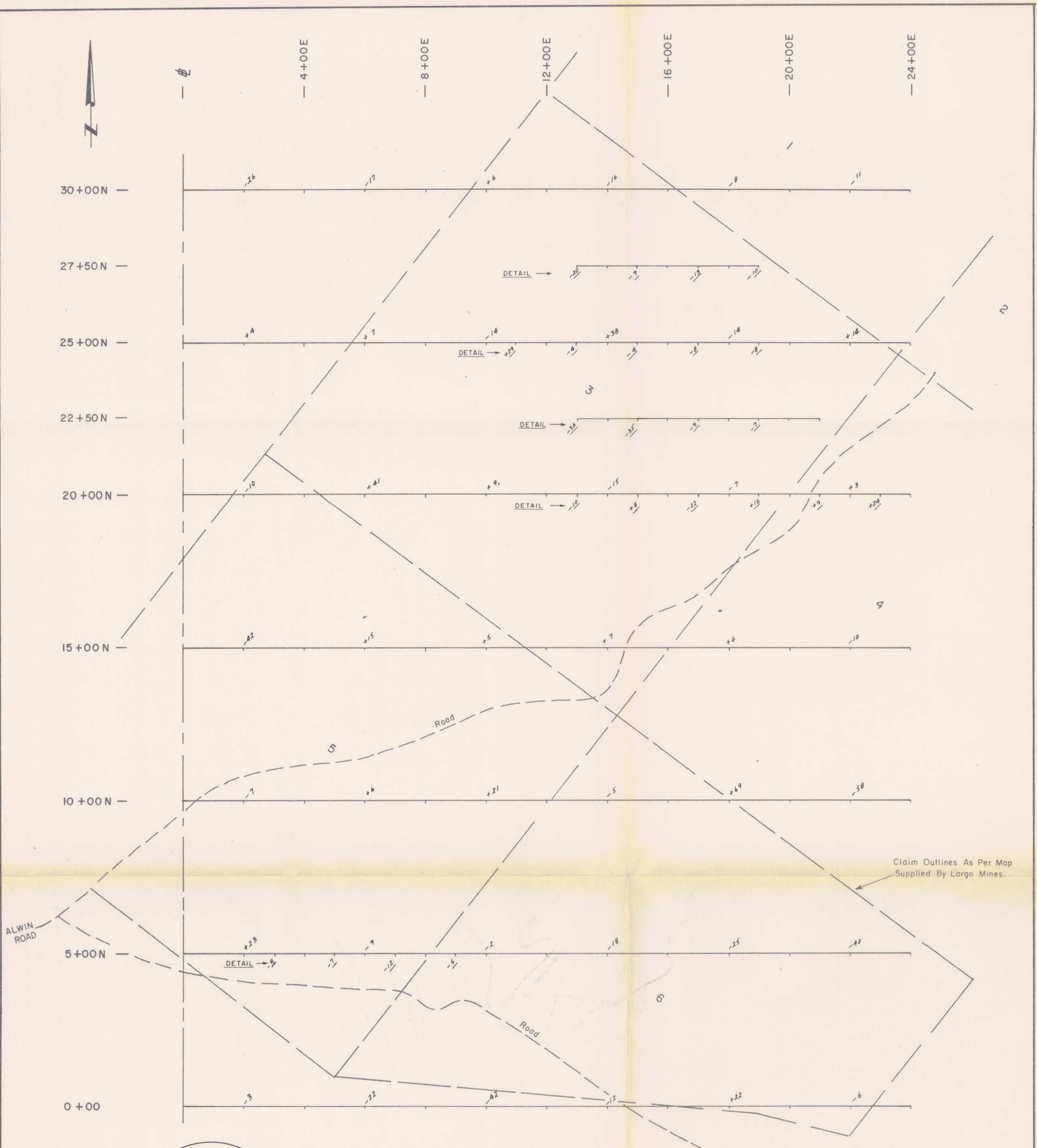


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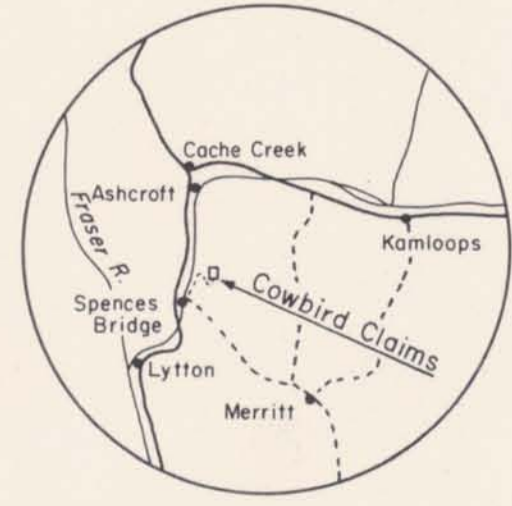
LARGO MINES LTD SPENCES BRIDGE AREA - KAMLOOPS M.D., B.C.			
APPARENT RESISTIVITY CONTOUR INTERVAL: 500 OHM FEET			
Drawn R.K.	Dated Oct. 20/70	Fig. No. 4	
Checked	Job No. 1168		

TO ACCOMPANY THE GEOPHYSICAL REPORT ON THE COWBIRD (1-6) CLAIMS OWNED BY LARGO MINES LTD., SITUATED NEAR SPENCES BRIDGE, IN THE KAMLOOPS MINING DIVISION - B.C. BY: R. WOLFE, P. ENG. DATED: OCT. 20, 1970.

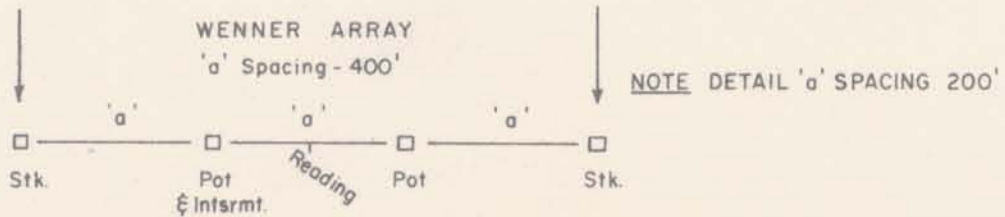
GEO - X SURVEYS LTD.



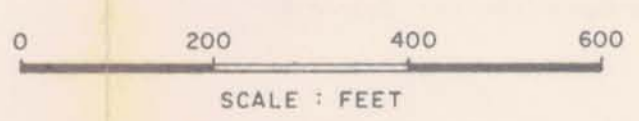
Claim Outlines As Per Map Supplied By Largo Mines.



INDEX MAP
Scale: 1" = 40 Mi.



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ASSESSMENT REPORT
NO. 2682 MAP # 3

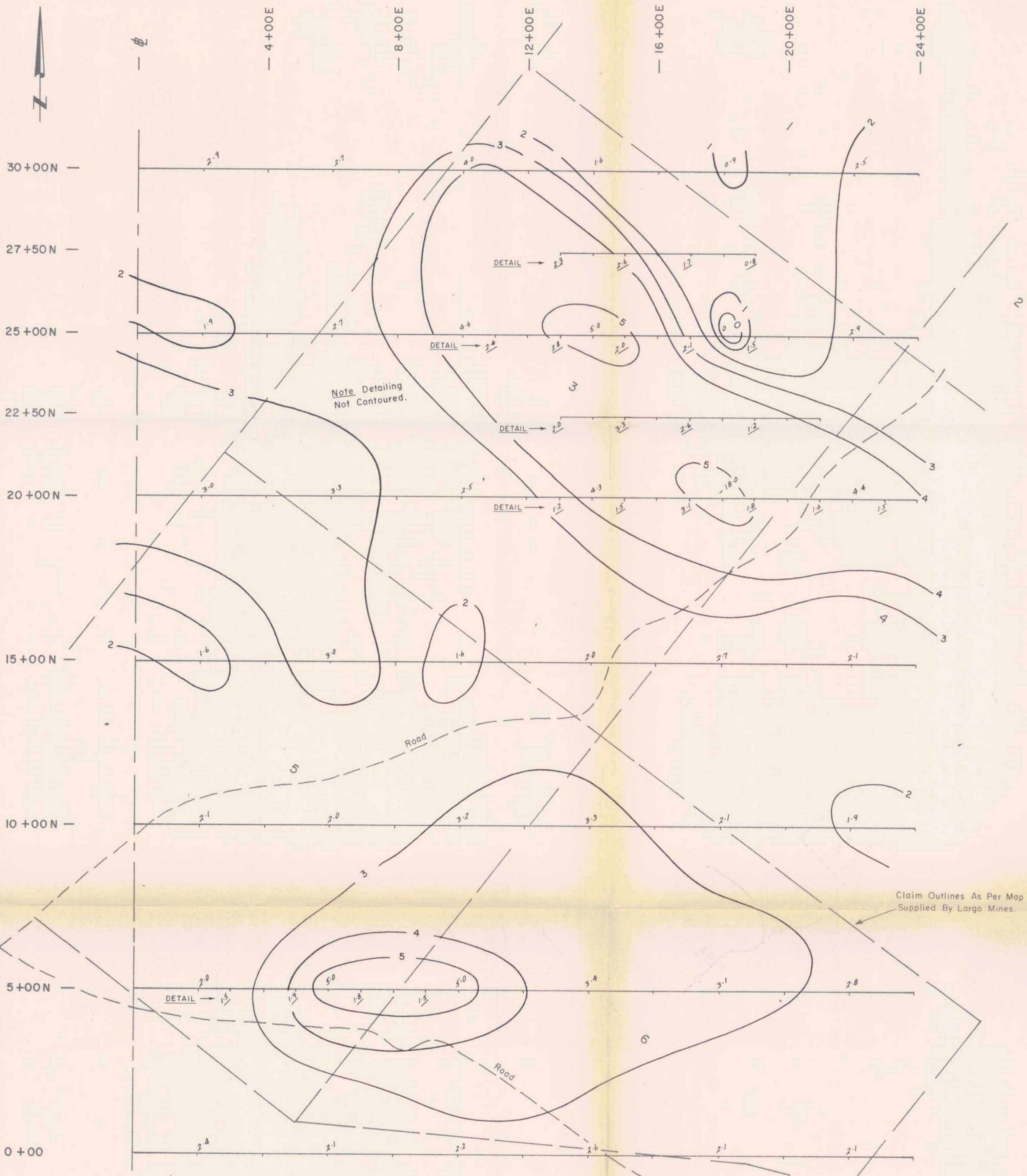


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LARGO MINES LTD SPENCES BRIDGE AREA - KAMLOOPS M.D., B.C.			
SELF POTENTIAL			
Drawn	R.K.	Dated Oct. 20/70	Fig. No.
Checked	J.C.	Job No. 1168	3

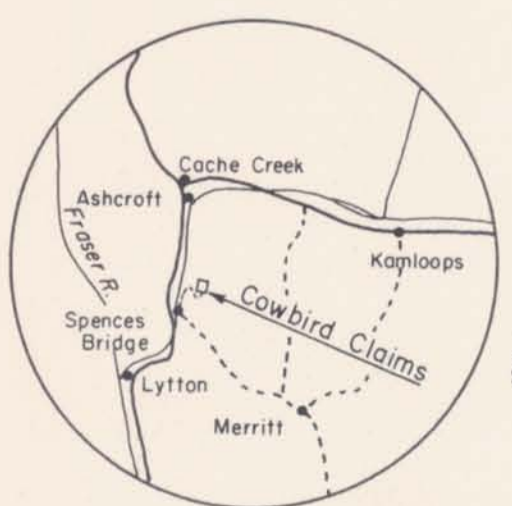
TO ACCOMPANY THE GEOPHYSICAL REPORT ON THE COWBIRD (1-6) CLAIMS OWNED BY LARGO MINES LTD., SITUATED NEAR SPENCES BRIDGE, IN THE KAMLOOPS MINING DIVISION - B.C. BY: R. WOLFE, P. ENG. DATED: OCT. 20, 1970.

GEO - X SURVEYS LTD.



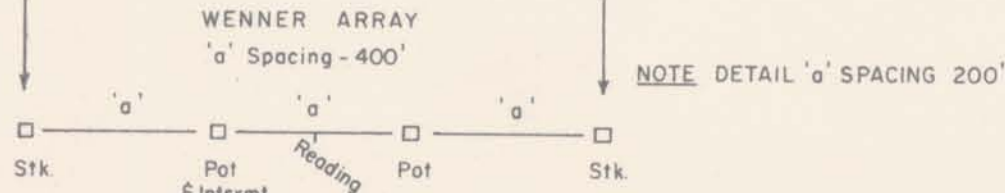
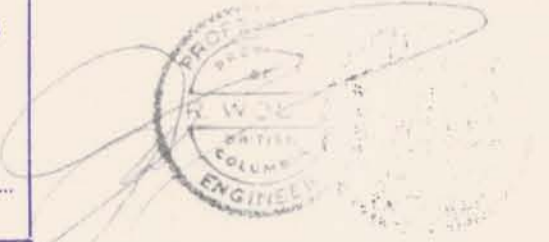
ALWIN ROAD

Claim Outlines As Per Map
Supplied By Largo Mines.



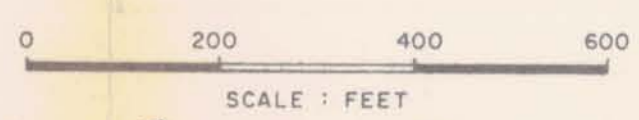
INDEX MAP
Scale: 1" = 40 Mi.

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2682 MAP #5



WENNER ARRAY
'a' Spacing - 400'

NOTE DETAIL 'a' SPACING 200'



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LARGO MINES LTD SPENCES BRIDGE AREA - KAMLOOPS M.D., B.C.			
NORMALIZED INDUCED POLARIZATION CONTOUR INTERVAL: 1 MILLISECOND			
Drawn	R.K.	Dated Oct 20/70	Fig. No.
Checked	J.C.	Job No. 1168	5

TO ACCOMPANY THE GEOPHYSICAL REPORT ON THE COWBIRD (1-6) CLAIMS OWNED BY LARGO MINES LTD., SITUATED NEAR SPENCES BRIDGE, IN THE KAMLOOPS MINING DIVISION - B.C. BY: R. WOLFE, P.ENG. DATED: OCT. 20, 1970.

GEO - X SURVEYS LTD.