

1698

GEOPHYSICAL AND GEOCHEMICAL REPORT *PART 2*

on the

Bea and Giant Claims

owned by

KELSO EXPLORATIONS LTD.

Situated in the Hope, B.C. Area

New Westminster M.D.

Latitude 49°27'N.; Longitude 121°28'W.

92 11-6

On behalf of

KELSO EXPLORATIONS LTD.

By

W.K. Lee, P.Eng.,

May 7, 1968.

Vancouver, B.C.



GEO-X SURVEYS

VANCOUVER, CANADA

Ltd.

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INTRODUCTION

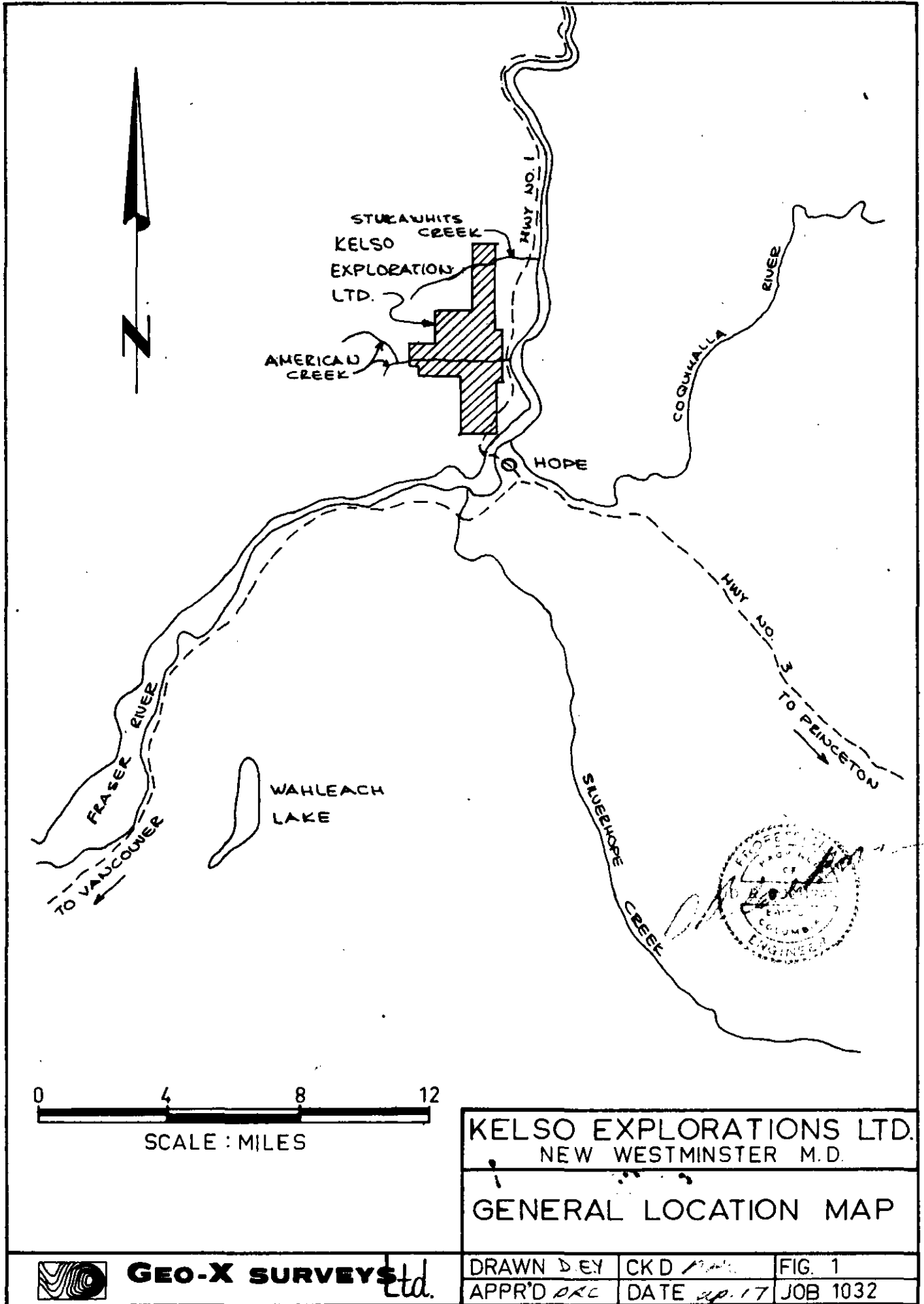
Field crews of Geo-X Surveys Ltd. completed reconnaissance magnetometer and geochemical surveys between April 2 and April 11, 1968 on the Bea and Giant claims situated north of Hope, B.C. The above surveys represent a program of follow-up work on the ground over some of the anomalous areas indicated by previous airborne magnetometer surveys. The results of the airborne surveys have been discussed previously by D.R. Cochrane in reports dated August 18, 26, 1967 and April 11, 1968.

This report describes the field procedure and results of the follow-up surveys, and is based on field supervision of the project by the author.

LOCATION

The property consists of a contiguous block of claims lying north of the town of Hope, west of the Fraser River and south and east of the Giant Mascot Mine.

Trans Canada Highway (No. 1) crosses the southeast corner of the property and access to much of the area is provided by logging and secondary roads proceeding westerly (see Location Map, Figure 1).



KELSO EXPLORATIONS LTD.
NEW WESTMINSTER M.D.

GENERAL LOCATION MAP



GEO-X SURVEYS Ltd.

DRAWN BY CKD

DATE 20.17

FIG. 1

APPR'D ORC

DATE 20.17

JOB 1032

CLAIMS AND OWNERSHIP

The entire property consists of 127 located mineral claims and fractions in the New Westminster M.D. They are owned outright by Kelso Explorations Ltd. (N.P.L.), 414 - 470 Granville Street, Vancouver 2, B.C.

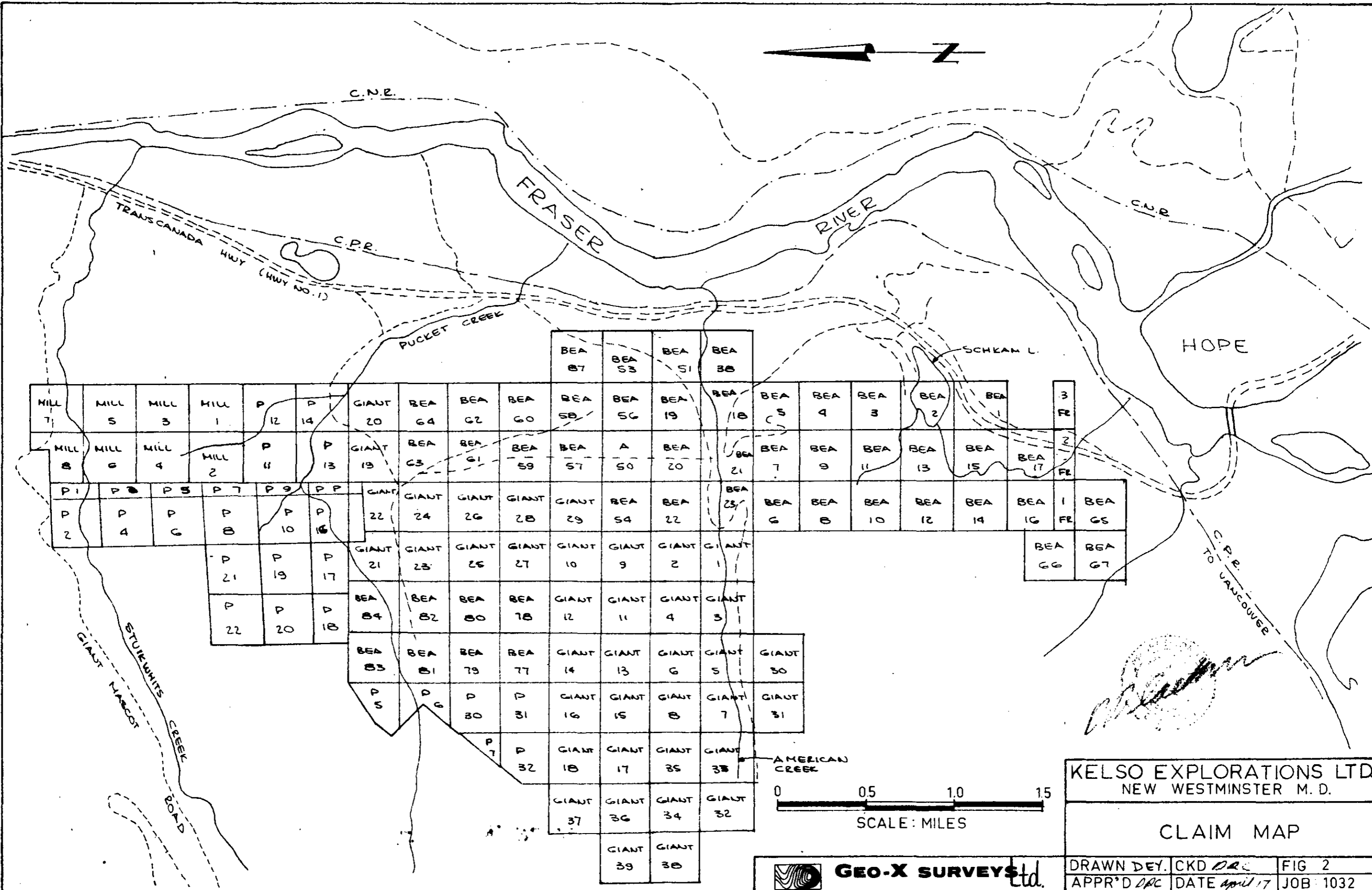
<u>CLAIM NAME</u>	<u>RECORD NUMBER</u>
Bea 1 to 4, incl.	13160 to 13163, incl.
Bea 5 to 17, incl.	14243 to 14255, incl.
Bea 18 to 23, incl.	14420 to 14425, incl.
Bea 38	14569
Bea 50A	14570
Bea 51	14571
Bea 53	14572
Bea 54	14598
Bea 56	14573
Giant 1 to 17, incl.	16087 to 16103, incl.
Fraction 1, 2, and 3	
Giant 30 to 36, incl.	19731 to 19737, incl.
Bea 65 to 67	19759 to 19761

Claims covered by surveys described in the report are as follows:

Giant 1, 2, 4, 5, 6, 13.

Bea 4, 8, 9, 10, 38, 51.

(See Claim Map, Figure 2).



GEO-X SURVEYS Ltd.

GROUND CONTROL

Reference points in the areas surveyed were located on the ground from aerial photographs. Grid lines were established from the reference points via chain and compass surveys. Stations were flagged at 100 foot intervals.

MAGNETOMETER SURVEY FIELD PROCEDURE

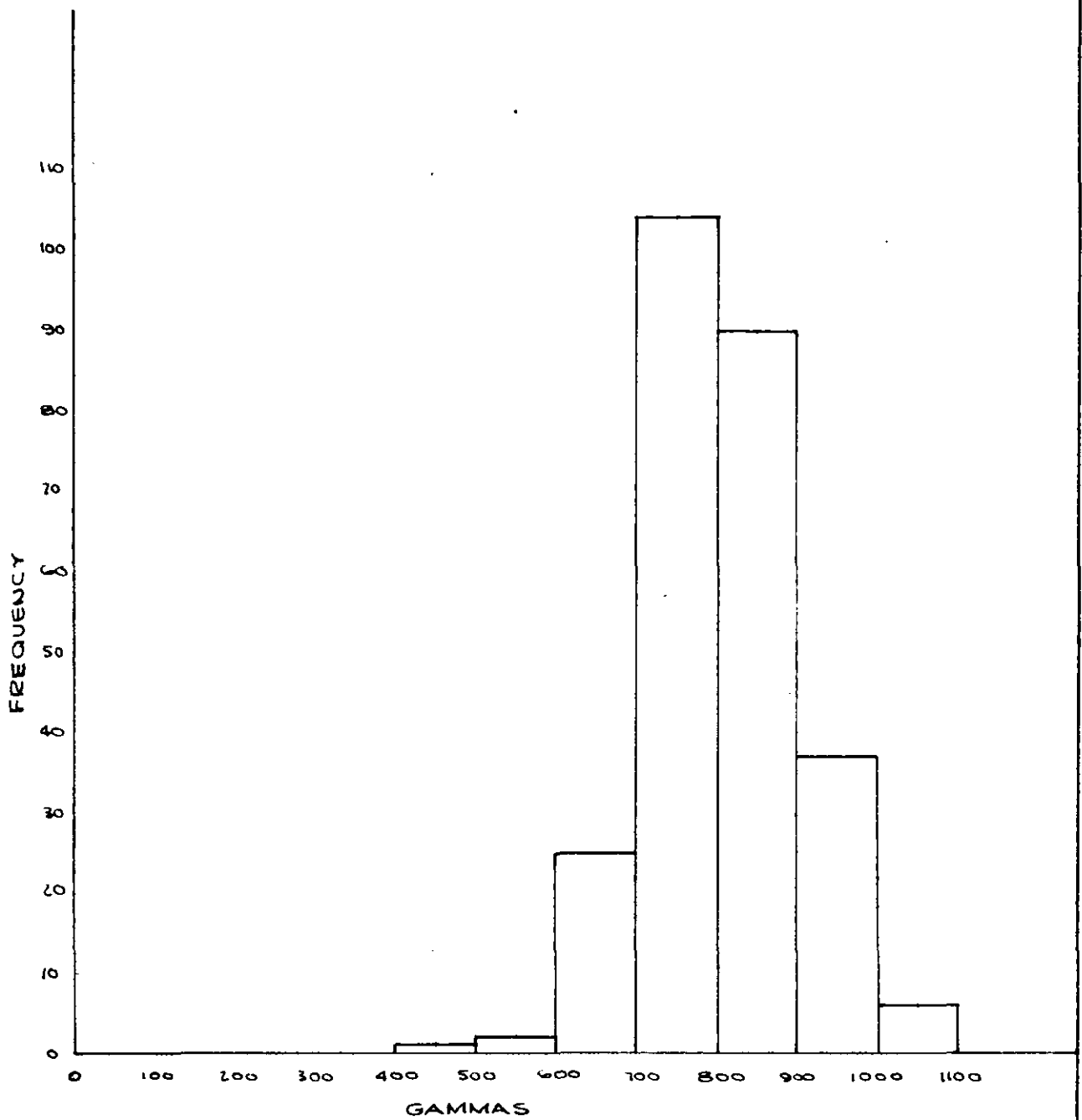
A Sabre Electronics two-component magnetometer was utilized on the Giant and Bea Group surveys. Specifications are presented in Appendix I. Both vertical and horizontal magnetic components were measured and recorded by operator A. Scott. Readings were normally recorded at 100 foot intervals facing north. The magnetometer surveys were run in loops with the instrument operator checking into established base stations every two to three hours. Magnetic fluctuations during the survey were strong and line drift corrections were applied to all readings.

MAGNETOMETER RESULTS

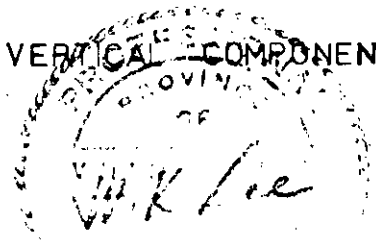
The results of the magnetometer survey are presented on Figures 6 and 7 (Map Pocket).

Vertical Component

Background for the vertical component survey ranges from 700 to 900 gammas - see frequency distribution histogram Figure 3.



VERTICAL COMPONENT



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HOPE B.C. NEW WESTMINSTER M.D.

FREQUENCY DISTRIBUTION
HISTOGRAM OF
MAGNETOMETER READINGS

GEO-X SURVEYS LTD.

DRAWN DEY	CKD WKL	FIG. 3
APPR'D WKL	DATE 7-5-62	JOB 1032

The highest value encountered was 1,080 gammas and the lowest 560 gammas. Maximum variation then is 520 gammas and the arithmetic mean of 279 readings is 800 gammas.

Three small isolated magnetic highs were delineated from the vertical component magnetic readings (see Figure 6 - Map Pocket). No economic significance is attached to these anomalies due to their isolated nature and limited size.

Horizontal Component

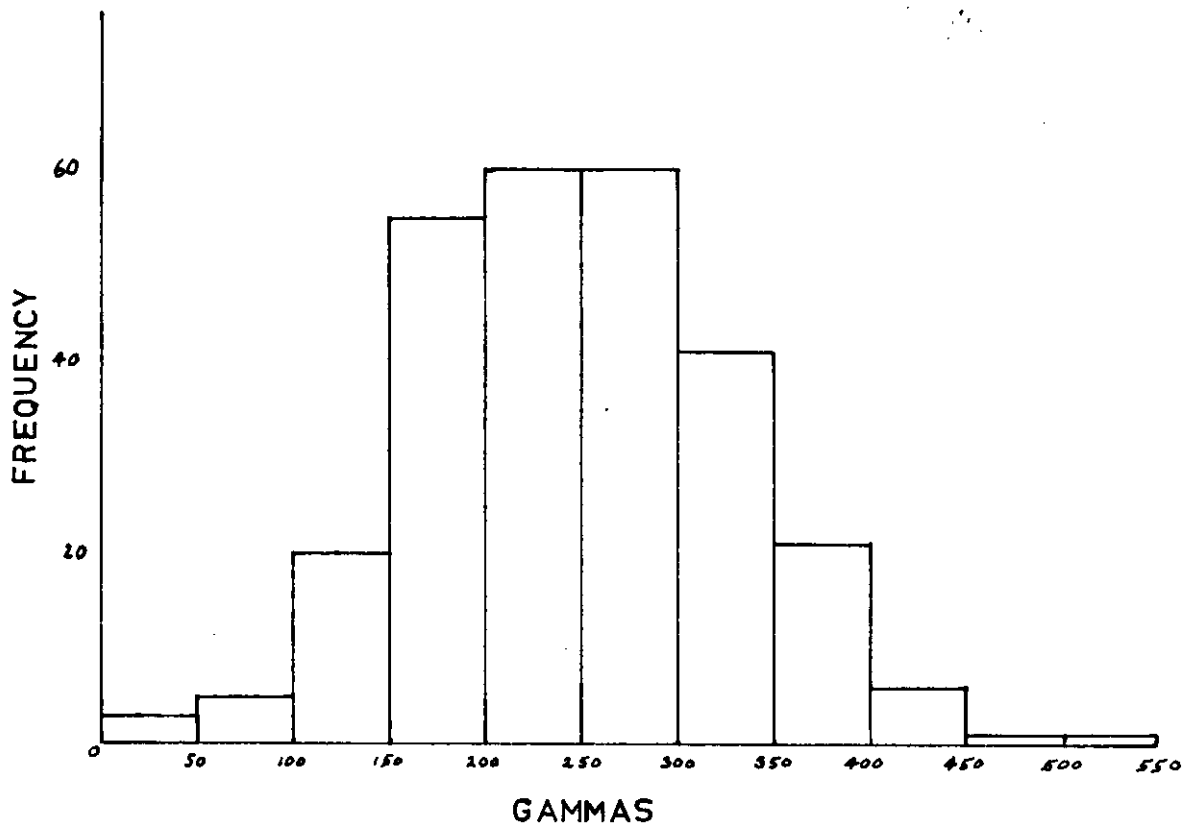
The arithmetic mean of 272 horizontal component readings is 243 gammas. The highest value encountered was 540 gammas and the lowest 20 gammas. Maximum variation then is 520 gammas. Background for the horizontal component readings range from 150 to 350 gammas as determined from the frequency distribution histogram of 272 readings (see Figure 4).

Two magnetic trends are discernible from the horizontal component readings (see Figure 7 - Map Pocket).

Areas A-1, A-7, A-3 - the magnetic trends are approximately north-south, while Areas A-4 and B-5 exhibit an east-west trend. These trends appear to reflect underlying geological trends.

Seven small amplitude magnetic highs and two small amplitude magnetic lows have been delineated on Figure 7. No economic importance is attached to these anomalies due to their isolated nature and limited size.

W.K. Lee



HORIZONTAL COMPONENT

KELSO EXPLORATIONS LTD. HOPE B.C. NEW WESTMINSTER M.D.		
FREQUENCY DISTRIBUTION HISTOGRAM OF MAGNETOMETER READINGS		
DRAWN A.S.	CKD WKL	FIG. 4
APPR'D WKL	DATE 7-5-69	JOB 1032

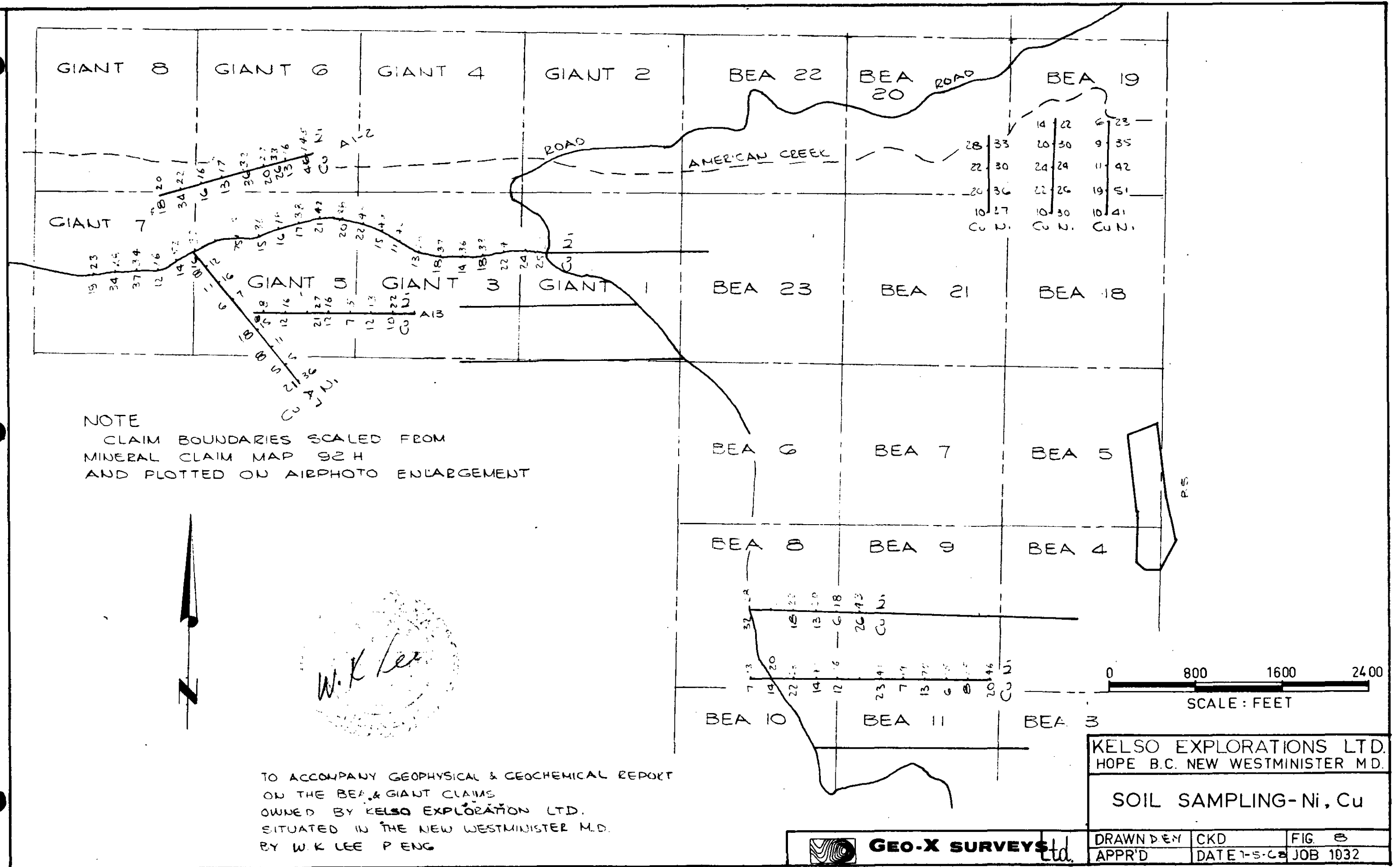
GEO-X SURVEYS LTD.

GEOCHEMICAL SOIL AND STREAM SILT SURVEY

71 soil samples and 13 stream silt samples were analyzed for copper and nickel. The results of the geochemical analysis are presented in parts per million (ppm) copper and nickel on Figure 8 (Map Pocket).

The arithmetic mean for 71 copper analysis is 18 ppm and background as determined from the frequency distribution histogram (Figure 5) ranges from 0 to 30 ppm. Copper values of 30 - 80 ppm are considered weakly anomalous. The arithmetic mean for 71 nickel analysis is 31 ppm and background as determined from the frequency distribution histogram ranges from 0 to 40 ppm. Nickel values of 40 - 60 ppm are considered weakly anomalous and values of 140 - 150 ppm strongly anomalous.

No strongly anomalous copper values and only one strongly anomalous nickel value were obtained from the geochemical soil and stream sediment survey. The soil sample containing the high nickel value is an isolated sample and does not appear to represent any nickel bearing zone in the underlying bed rock.



NOTE
 CLAIM BOUNDARIES SCALED FROM
 MINERAL CLAIM MAP 92 H
 AND PLOTTED ON AIRPHOTO ENLARGEMENT



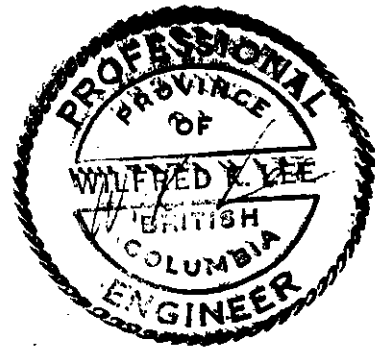
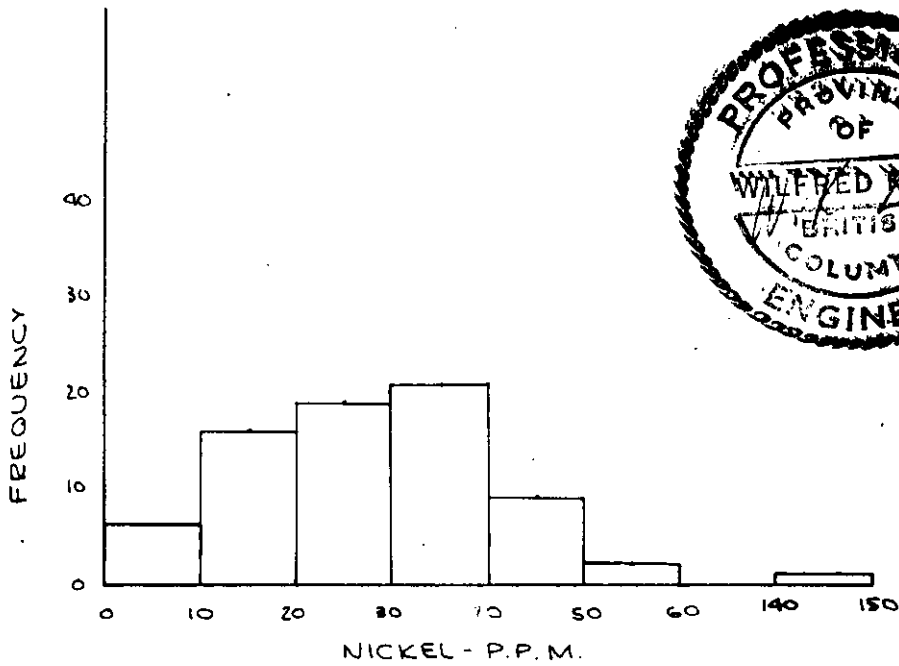
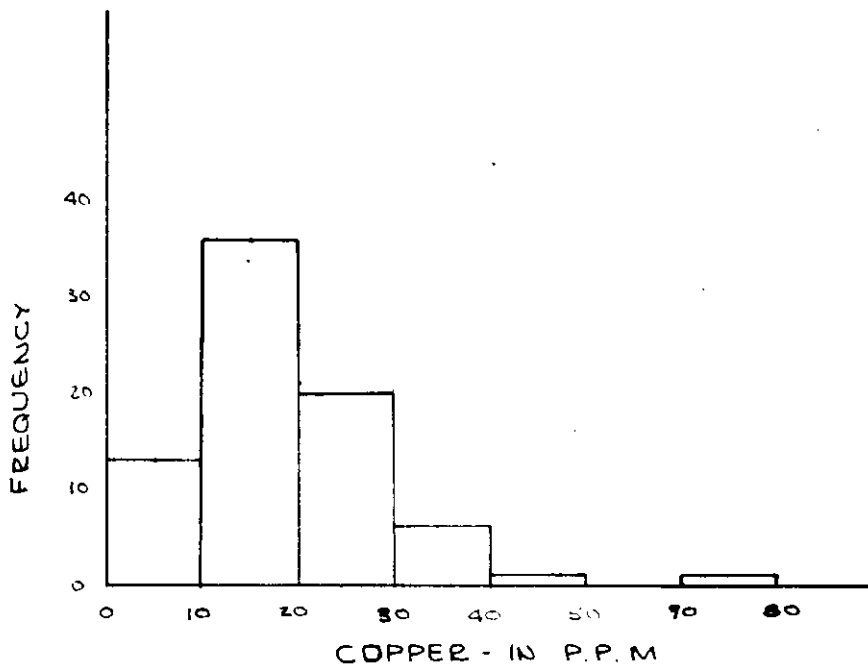
W.K. Lee

TO ACCOMPANY GEOPHYSICAL & GEOCHEMICAL REPORT
 ON THE BEA & GIANT CLAIMS
 OWNED BY KELSO EXPLORATION LTD.
 SITUATED IN THE NEW WESTMINSTER M.D.
 BY W.K. LEE P. ENG.

KELSO EXPLORATIONS LTD.
 HOPE B.C. NEW WESTMINSTER M.D.

SOIL SAMPLING - Ni, Cu

	DRAWN BY	CKD	FIG. 8
	APPR'D	DATE 7-5-62	JOB 1032



KELSO EXPLORATIONS LTD.
HOPE B.C., NEW WESTMINSTER M.D.

FREQUENCY DISTRIBUTION
HISTOGRAM OF
SOILS

GEO-X SURVEYS LTD.

DRAWN DEY

CKD WK4

FIG. 5

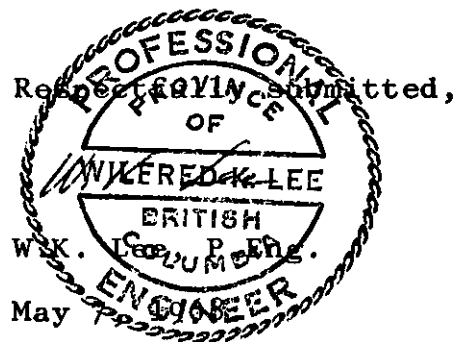
APPR'D WK4

DATE 7-5-68

JOB 1032

SUMMARY AND CONCLUSIONS

Geo-X Surveys Ltd. field crews completed reconnaissance magnetometer and geochemical surveys on the Bea and Giant claims owned by Kelso Explorations Ltd., Vancouver, B.C. This work was an attempt to trace down anomalous zones outlined by previous airborne magnetic surveys. No anomalies of economic significance were found.



APPENDIX I

SPECIFICATIONS

Sensitivity: Vertical - 20 gammas per dial division.
Horizontal - 30 gammas per dial division.

Range: Vertical - 0 - 100,000 gammas
Horizontal - 0 - 30,000 gammas
(These ranges can be increased or decreased for specific applications)

Latitude Adjustment: None required in northern magnetic latitudes.

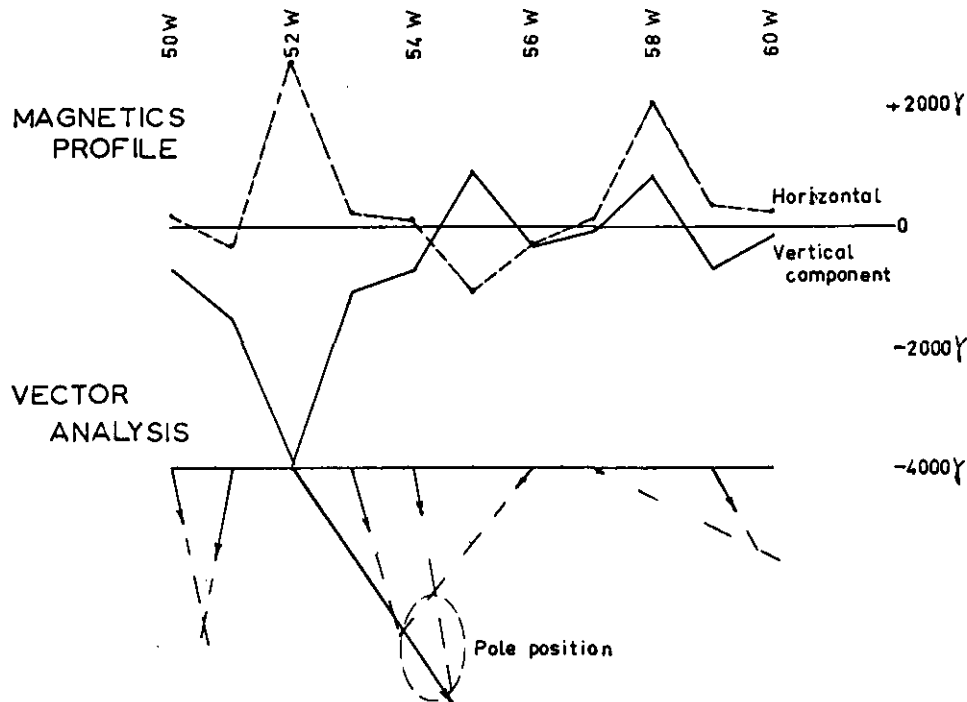
Type of Readout: Meter to indicate null plus two digital counting dials to indicate magnetic field intensity at null.

Orientation: No levels or bubbles required. Vertical reading is non-directional, horizontal reading requires orientation to magnetic north direction.

Weight: 10 pounds.

Dimensions: 4" x 7" x 11".

Power Pack: Four 9-volt Everready #246 dry cells, or equivalent.



The Diagram shows a profile along line 41 south, on the Oro Denoro Property of West Coast Resources Ltd., near Greenwood, B.C. Mineralization consists essentially of magnetic and chalcopyrite in and near a garnet skarn and quartz diorite contact.

APPENDIX II

Personnel and Dates Worked

The following Geo-X Surveys Ltd. personnel were employed on the project.


<u>Name</u>	<u>Occupation</u>	<u>Dates Worked</u>
W.K. Lee	B.Sc., M.Sc. Geology P.Eng. Field Supervision, Report preparation	April 2,3 - 1968 May 7 - 1968
A. Scott	Instrument operator Data processing	April 2-7 - 1968 April 9-11 - 1968
R. Burns	Field Assistant Data processing	April 2-7 - 1968 April 9-11 - 1968
D. Yip	Drafting, report preparation	May 5-6 - 1968

APPENDIX III

Cost Breakdown

The following is a cost breakdown of work done on the Bea and Giant Claims situated in the area of Hope, B.C., and owned by Kelso Explorations Ltd.

2-component Magnetometer Survey 4.6 line miles @ \$185/line mile	\$ 851.00
71 Soil Samples @ \$4.60 each	\$ 326.60
13 Stream Samples @ \$4.60 each	<u>\$ 59.80</u>
Total	<u>\$1,237.40</u>


S.L. Sandner,
President,
GEO-X SURVEYS LTD.

AMMENDMENTS TO THE
GEOPHYSICAL AND GEOCHEMICAL REPORT

on the
Bea and Giant Claims
owned by

KELSO EXPLORATIONS LTD.

Situated in the Hope, B.C. Area
New Westminster M.D.

Latitude 49°27'N.; Longitude 121°28'W.

On behalf of

KELSO EXPLORATIONS LTD.

By

D.R. Cochrane, P. Eng.
November 7, 1968.
Vancouver, B. C.

As Requested by: R. H. McCrimmin
Chief Gold Commissioner
Victoria, B.C.

INTRODUCTION

A field crew of Geo-X Surveys Ltd. completed reconnaissance magnetometer and geochemical surveys between April 2 and April 11, 1968, on the Bea and Giant claims situated north of Hope, B.C. The work was discussed in a report by the field supervisor, Mr. W. K. Lee, P. Eng. on May 7, 1968. The "Geochemical Survey Field Procedure" section of the report was unfortunately omitted, and is herein described.

GEOCHEMICAL SURVEY FIELD PROCEDURE

A total of 71 soil samples and 13 stream sediment samples were collected from portions of the Bea and Giant claims, by Mr. W. K. Lee and field assistant R. Burns.

Geochemical soil samples were collected by excavating a small pit with a grub hoe, and examining and describing the soil horizon. The information was recorded on standard field note forms, and a sample description follows:

<u>Line</u>	<u>Station</u>	<u>Horizon</u>	<u>Depth</u>
R	10W	B	6"
<u>Remarks</u>		<u>Soil Description</u>	
transported		redish-brown-grey, sandy-clay	

Samples were collected from the Upper B soil horizon, which ranged in depth from 2 to 9 inches below the A horizon. An average sample depth of 6 inches was noted.

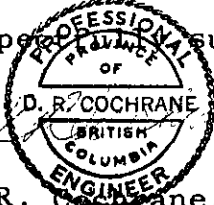
A sample of 100 to 200 grams of soil was placed in a standard water resistant paper geochemical bag, sealed and numbered (front and back) with the station and line number. Collected soil samples were placed in ore sacks, shipped to the Vancouver office of Geo-X Surveys, where they were strung up in the warehouse to air dry.

Geochemical stream sediment samples were collected from the center of the stream, from fine stream sediment, and placed in standard water resistant geochemical bags with a plastic tablespoon. Normally 3 or 4 tablespoonfull of silt is collected. Each silt site is flagged and numbered, and the number is recorded by felt pen on the sample bag (both the front and back). A description of the sample, sample site and water course is recorded on standard field note forms, as follows:

<u>Job</u>	<u>Date</u>	<u>Sampler</u>	<u>Area</u>	<u>Sample No.</u>
#1032	April 3/68	W.K.L.	Hope	A
<u>Location</u>	<u>Drainage</u>	<u>Remarks</u>		
Stulkawhits Cr.	Frazer	Large boulders, fairly rapid		

The collected samples were stored in ore sacks, shipped to Vancouver and air dried in the warehouse of Geo-X Surveys Ltd.

An inventory of dried samples was made, then they were crated and shipped to T.S.L. Laboratories Limited, 325 Howe Street, Vancouver 1, B.C. The results in p.p.m. were reported for Cu and Ni in T.S.L. report #V3573-1 on April 22, 1968.

Respectfully submitted,

D. R. Cochrane, P. Eng.

November 7, 1968
Vancouver, B.C.

APPENDIX

Methods of Determination of Copper, Lead, Zinc, Silver, Nickel and Cobalt in Geochemical Samples, As described by T.S.L. Laboratories Limited in a Communication with Geo-X Surveys, June 21st, 1968.

The fines are separated to minus 80 mesh through a nylon mesh.

1 gram sample is digested with Nitric Acid, and the volume brought to 10 mils.

This solution is submitted to the Atomic Absorption Spectrophotometer and the elements are read and compared against appropriate standards. The analytical lines used are:

Copper	3274
Lead	2833
Silver	3280
Nickel	2320
Cobalt	2407

PERSONNEL

Name: SCOTT, Alan Richard

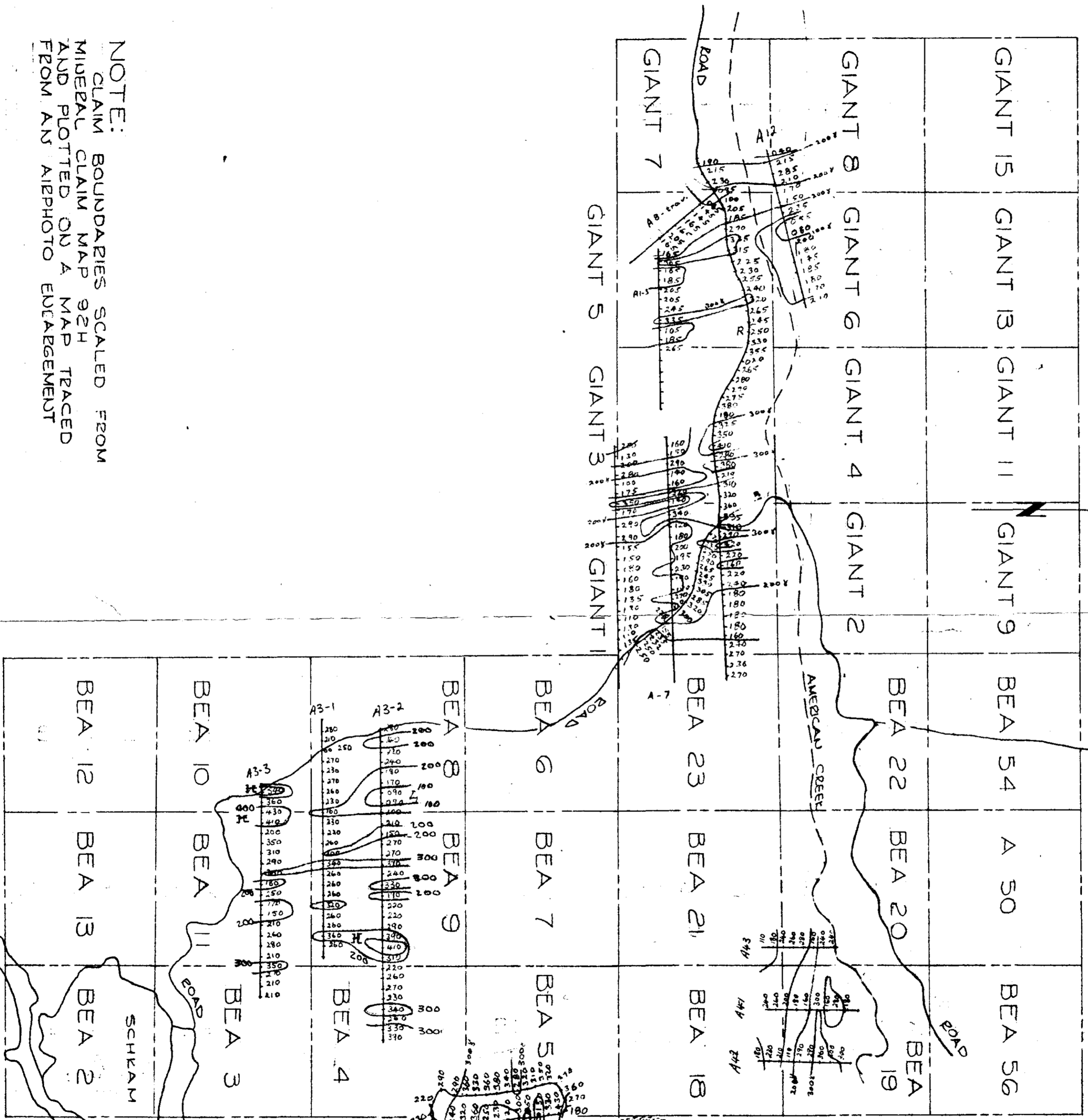
Education: Senior Matriculation - Southern Okanagan
Secondary School, Oliver, B.C.

3rd Year Science - Mathematics Major at
University of British Columbia.

Experience: Department of Water Resources, Southern
Okanagan Lands Project, Oliver, B.C. -
Instrument Operator (Transit - 5 months):

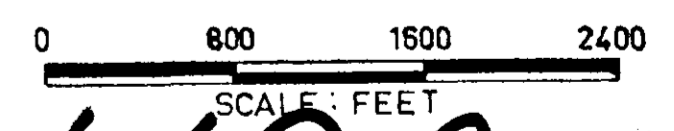
Presently employed by Geo-X Surveys Ltd.
since March 5, 1968 doing Induced Polariza-
tion, Electromagnetic and Magnetometer
Surveys, all under professional supervision.

NOTE:
CLAIM BOUNDARIES SCALED FROM
MINERAL CLAIM MAP 92H
AND PLOTTED ON A MAP TRACED
FROM AN AIRPHOTO ENLARGEMENT



TO ACCOMPANY GEOPHYSICAL &
GEOCHEMICAL REPORT ON THE
BEA & GIANT CLAIMS OWNED BY
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SITUATED IN THE TWP.
NEW WESTMINSTER M.D.
BY W. K. LEE, P. ENG.
DATED MAY 7, 1968.

NOTE: CONTOUR INTERVAL
100 GAMMAS



1698

KELSO EXPLORATIONS LTD.
NEW WESTMINSTER M.D.

ISOMAGNETIC MAP
HORIZONTAL COMPONENT ①

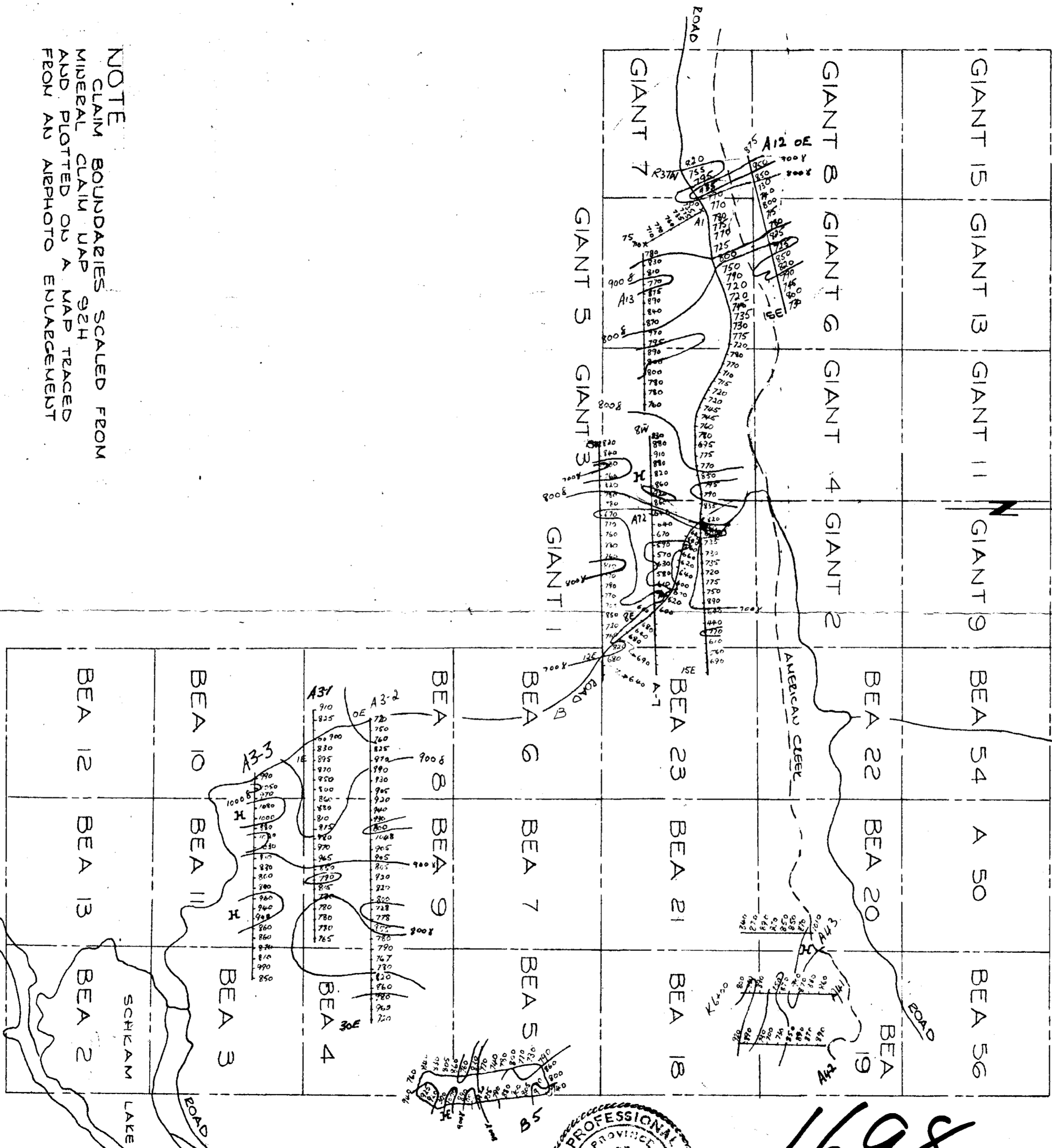
DRAWN	A.S.	JOB NO.	FIG. NO.
DATE	7-5-68	1032	7
APPR'D.			
CKD.			



TRANS CANADA
HIGHWAY
TO HOPE

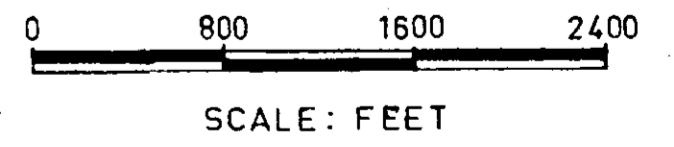
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
FIG. 1688B MAP 5

NOTE
 CLAIM BOUNDARIES SCALED FROM
 MINERAL CLAIM MAP 92H
 AND PLOTTED ON A MAP TRACED
 FROM AN AIRPHOTO ENLARGEMENT

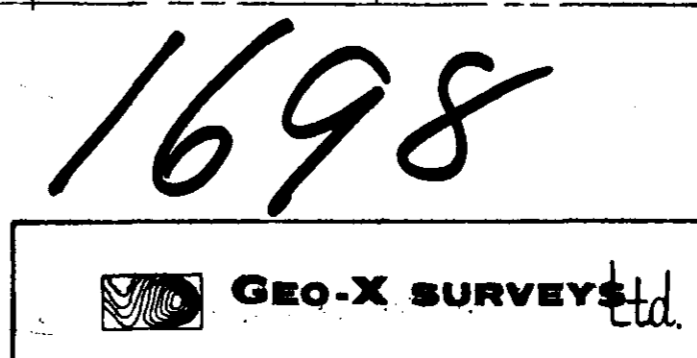


TO ACCOMPANY GEOPHYSICAL &
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 NEW WESTMINSTER M. D.
 BY W. K. LEE, P. EUG.
 DATED MAY 7, 1968.

NOTE: CONTOUR INTERVAL:
 100 GAMMAS



KELSO EXPLORATIONS LTD. NEW WESTMINSTER M.D.			
ISOMAGNETIC CONTOUR MAP (2) VERTICAL COMPONENT			
DRAWN	N.W.	JOB NO.	FIG. NO.
DATE	7-5-68	1032	6
APPR'D.	WKL		
CKD.	WKL		



TRANS CANADA
 HIGHWAY
 TO HOPE

Department of
 Mineral and Petroleum Resources
 CURRENT REPORT
 No. 1698B MAP 4

SCHIKAM LAKE

1698