GEOPHYSICAL REPORT

on the

ELECTROMAGNETIC ORIENTATION SURVEY

on the

Giant No. 1, Bea No. 23 Claims

Near American Creek

Yale District

New Westminster, M.D.

49°20'N.; 121°30'W. N.T.S. 92H W.½ 92H 5/6

and owned by

KELSO EXPLORATIONS LTD.

Work done June 5, 1968.

92H/6W

D.R. Cochrane, P.Eng.

June 7, 1968.

Vancouver, B. C.

1251

GEO-X SURVEYS Ltd.
VANCOUVER, CANADA

1251

TABLE OF CONTENTS

APPENDIX

FIGURES

INTRODUCTION

On June 5, 1968 Mr. N. Wilson of Geo-X Surveys Ltd. conducted a Ronka EM16 test survey on two claims owned by Kelso Explorations Ltd. The purpose of the survey was to check the electromagnetic response of previously located self potential anomalies.

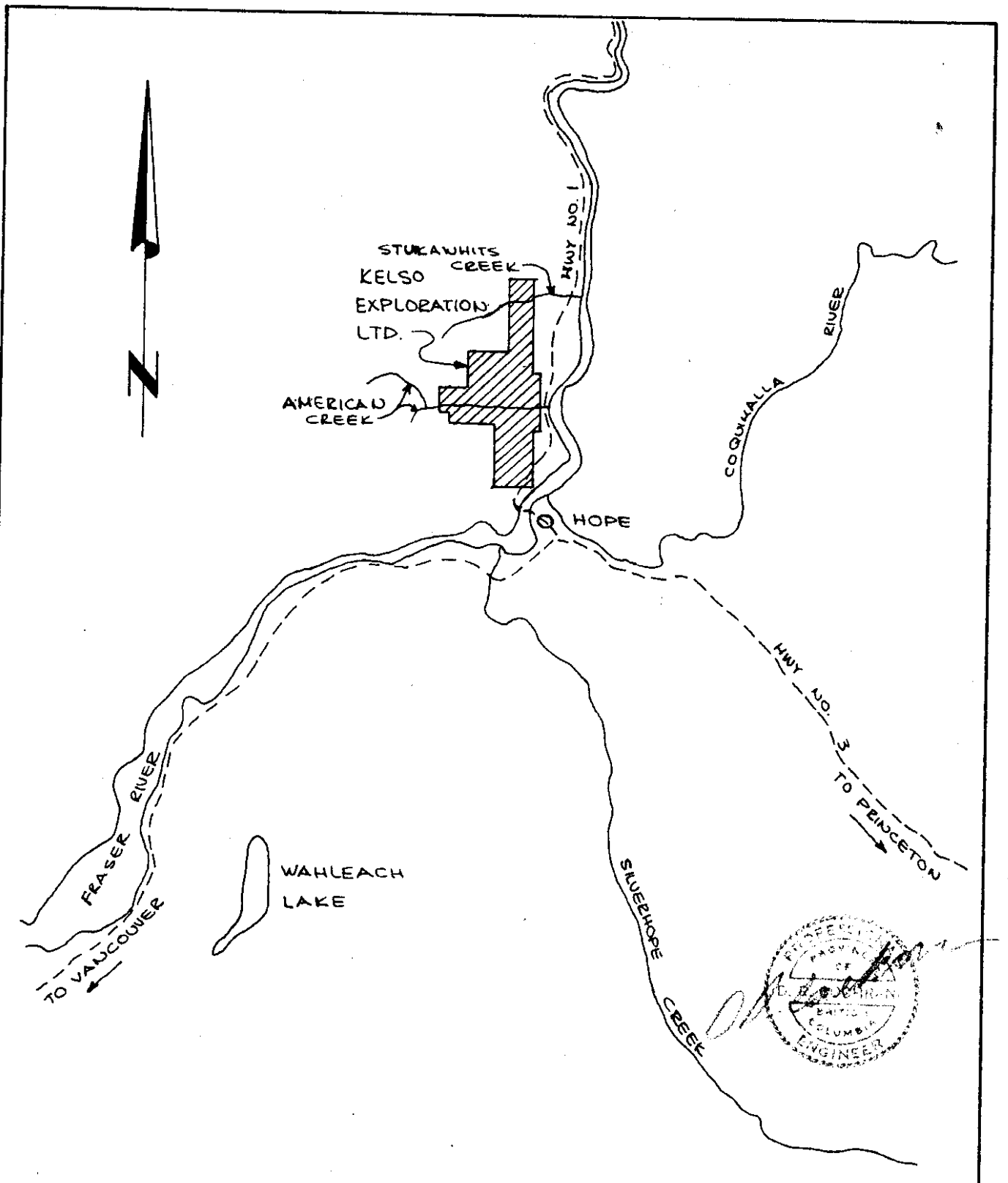
LOCATION AND ACCESS

The claims are situated near American Creek, an easterly flowing tributary of the Fraser River, and located approximately 5 miles north of Hope, B.C. on the Trans Canada Highway (No. 1). Partial road access is provided by old logging roads running west from Highway No. 1, immediately north of American Creek, and following the north side of the creek. The road is washed out in the upper sections but affords easy access on foot.

CLAIMS AND OWNERSHIP

The Giant No. 1, and Bea No. 23 claims are owned by Kelso Explorations Ltd., 470 Granville Street, Vancouver, B.C. The following summarizes claim data:

Claim Name	Record Number	Anniversary Date
Bea 23	14425	June 10
Giant 1	16087	August 8



KELSO EXPLORATIONS LTD.
NEW WESTMINSTER M.D.

GENERAL LOCATION MAP

GEO-X SURVEYS Ltd.

DRAWN D.E.Y	CK'D	FIG. 1
APPR'D	DATE JUNE 19, 68	JOB 1032

FIELD PROCEDURE

Mr. N. Wilson, using the No. 71 Ronka EM16 unit, selected Station NPG for survey purposes. This transmitter operates from Jim Creek, Washington at frequency of 18.6 k.c. and with a power of 250 k.w. The station directive azimuth was 183 degrees, and the operator faced east at all times. Mr. Wilson used a compass and paced 50 foot intervals; flagged and numbered stations. The grid was tied into the existing self potential stations. EM readings were recorded on standard field note forms.

RESULTS

The Ronka EM16 results are presented in profile in Figure 3.

In phase component readings ranged in amplitude from -23% to +3% and quadrature component readings from -16% to +17%.

The results from lines P-4, P-5 and P-6 (grid on Giant No. 1 claim) show very little in phase or quadrature change. In phase response is close to zero, and quadrature response is high (+13% to +17%). The high quadrature effect is sometimes caused by near surface rocks with high magnetic susceptibilities.

The EM profiles on lines P-1 to P-3 inclusive (Bea No. 23 claim) show moderate to strong quadrature and in phase change. Two crossover linears located on the three lines are named conductors A and B. Conductor A is a moderate to moderately strong

amplitude true crossover linear with roughly corresponding quadrature response. It strikes almost north and is flanked on the east and west by reverse crossovers or positive first derivative anomalies.

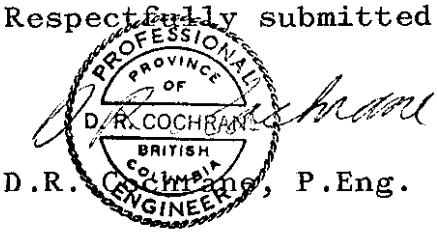
Conductor B is a series of three rapid negative first derivative anomalies in a line striking parallel to Conductor A. The strongest change is between 1 east and 2 east, line P-1 where the in phase component decreased rapidly from -7% to -23% in the 100 foot distance.

Quadrature response on conductor B is roughly coincident and in the same direction.

CONCLUSIONS

Ronka EM16 response on a small portion of the Giant claim was minor. Two conductors, A and B, were located in a second area on the Bea 23 claim. The in phase and quadrature changes are moderate to moderately strong in amplitude and require further investigation. A short geochemical soil sampling survey may be appropriate.

Respectfully submitted,



D.R. Cochrane, P.Eng.

June 7, 1968,
Vancouver, B.C.

APPENDIX I

PERSONNEL

Name:	COCHRANE, Donald Robert
Education:	B.Sc. - University of Toronto M.Sc.(Eng.) - Queen's University
Professional Associations:	Professional Engineer of British Columbia, Ontario and Saskatchewan. Jr. member of C.I.M.M., member of G.A.C., M.A.C. Geological Engineer.
Experience:	Engaged in the profession since 1962 while employed with Noranda Exploration Co. Ltd., Quebec Cartier Mines Ltd., Meridian Exploration Syndicate. Presently employed as Engineer with Geo-X Surveys Ltd. Experience in West Indies, Latin America, South America, United States and Canada.

APPENDIX I

PERSONNEL

Name: WILSON, Norman George Robert

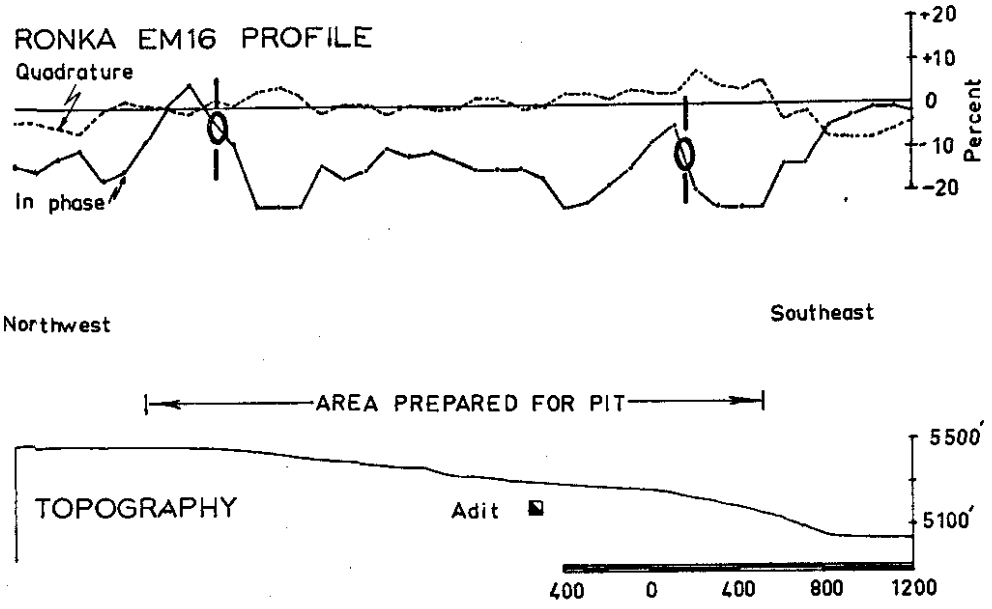
Education: Junior Matriculation equiv., Grade 13 Math.
2nd Year National Electrical Engineering

Experience: 12 years Royal Air Force - Radar Fitter.
6 months British Government Communications - Radio Technician.

Presently employed by Geo-X Surveys Ltd. since October 22, 1967 doing Induced Polarization, Electromagnetic and Magnetometer Surveys under Professional supervision.

SPECIFICATIONS

Primary Field:	Horizontal from any selected VLF transmitting station.
Frequency Range:	Approximately 15-25 kc.
Station Selection:	By plug-in units. Two stations selected by a switch on front panel.
Measured Field:	Vertical field, in-phase and quadrature components.
Accuracy of Readings:	± 1% resolution.
Range of Measurements:	In-Phase ±150% or ±90°, quadrature ±40%
Output Readout:	Null-detection by an earphone, real and quadrature components from mechanical dials.
Batteries:	6, size AA penlight cells. Life about 200 hours.
Size:	16 x 5.5 x 3.5 in. (42 x 14 x 12 cm)
Weight:	2.4 lbs. (1.1 kg)



Brenda Mines Limited.

APPENDIX III

Cost Breakdown

As per Agreement between Geo-X Surveys Ltd. and Kelso Explorations Ltd., dated June 5, 1968.

Electromagnetic orientation survey on the Bea 23 and Giant 1 claims, Yale Area	$178.00

(Cost appropriation for Bea 23 claim - $102.00)

R.L. Pitre

C.N.R.

TRANS CANADA HWY (HWY NO. 1)

C.P.R.

FRASER RIVER

PUCKET CREEK

C.N.R.

SCHKAM L.

HOPE

C.P.R. TO VANCOUVER

STUKWHITS CREEK

GIANT NASCOT

BOAD

AMERICAN CREEK

MILL 7	MILL 5	MILL 3	MILL 1	P 12	P 14	GIANT 20	BEA 64	BEA 62	BEA 60	BEA 58	BEA 56	BEA 19	BEA 18	BEA 5	BEA 4	BEA 3	BEA 2	BEA 1	3 FR		
MILL 8	MILL 6	MILL 4	MILL 2	P 11	P 13	GIANT 19	BEA 63	BEA 61	BEA 59	BEA 57	A 50	BEA 20	BEA 21	BEA 7	BEA 9	BEA 11	BEA 13	BEA 15	BEA 17	2 FR	
P 1	P 3	P 5	P 7	P 9	P P	GIANT 22	GIANT 24	GIANT 26	GIANT 28	GIANT 29	BEA 54	BEA 22	BEA 23	BEA 6	BEA 8	BEA 10	BEA 12	BEA 14	BEA 16	1 FR	BEA 65
P 2	P 4	P 6	P 8	P 10	P 16														BEA 66	BEA 67	
			P 21	P 19	P 17	GIANT 21	GIANT 23	GIANT 25	GIANT 27	GIANT 10	GIANT 9	GIANT 2	GIANT 1								
			P 22	P 20	P 18	BEA 84	BEA 82	BEA 80	BEA 78	GIANT 12	GIANT 11	GIANT 4	GIANT 3								
						BEA 83	BEA 81	BEA 79	BEA 77	GIANT 14	GIANT 13	GIANT 6	GIANT 5	GIANT 30							
						P 5	P 6	P 80	P 31	GIANT 16	GIANT 15	GIANT 8	GIANT 7	GIANT 31							
							P 7	P 32		GIANT 18	GIANT 17	GIANT 35	GIANT 33								
										GIANT 37	GIANT 36	GIANT 34	GIANT 32								
											GIANT 39	GIANT 38									

1257

0 0.5 1.0 1.5

SCALE: MILES

GEO-X SURVEYS Ltd.

KELSO EXPLORATIONS LTD.
NEW WESTMINSTER M. D.

CLAIM MAP

DRAWN DEY.	CKD DEC	FIG 2
APPR'D DEC	DATE JUNE 10, 68	JOB 1032

GIANT 2

BEA 20

BEA 19

ROAD

NOTE:
APPROXIMATE CLAIM BOUNDARIES AS SHOWN ON S.P. PLAN BY D.A. MacDONALD, P. GEOPHYSICIST AND ENCLOSED AS APPENDIX 'A' OF REPORT BY J.P. ELWELL, P.ENG.

GIANT 1

BEA 23

BEA 18

LEGEND

- REVERSE CROSSOVER
- MODERATE TRUE CROSSOVER
- POSITIVE RATE OF CHANGE
- NEGATIVE RATE OF CHANGE
- APPROX. CLAIM BOUNDARIES

TRUE N

22½°

FACED

STA. 4PC.

FOR PROFILES SEE DETAIL 'A'

P-4

P-5

P-6

FOR PROFILES SEE DETAIL 'B'

P-1

P-2

P-3

ROAD

BEA 6

BEA 7

+20%
+10%
0
-10%
-20%

QUADRATURE

IN PHASE

P-4

P-5

P-6

CONDUCTOR 'A'

CONDUCTOR 'B'

P-1

P-2

P-3

DETAIL 'A'
SCALE: 1" = 100 FEET

DETAIL 'B'
SCALE: 1" = 100 FEET

TO ACCOMPANY GEOPHYSICAL SURVEY REPORT ON THE BEA 23 & GIANT 1 CLAIMS OWNED BY KELSO EXPLORATIONS LTD. SITUATED IN THE NEW WESTMINSTER M.D.
BY D.E. COCHRANE, P. ENG., VANCOUVER, B.C.
DATED JUNE '1968.

0 200 400 600
SCALE: FEET

1251

PROFESSIONAL ENGINEER D.R. COCHRANE BRITISH COLUMBIA ENGINEER

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

RONKA EM 16 PROFILES

GEO-X SURVEYS Ltd.

		JOB NO.	FIG NO.
DRAWN	D.E.Y.	1032	3
CKD.	ARE		
APPR'D	ARE		
DATE	June 13/68		