# KOKANEE EXPLORATIONS LTD.

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# REPORT ON A VLF GEOPHYSICAL SURVEY, STREAM GEOCHEMICAL AND GEOLOGICAL MAPPING PROGRAM

GLEN PROPERTY

GLEN 1 AND 2 CLAIMS

FORT STEELE MINING DIVISION

CRANBROOK AREA

N.T.S. 82G/5W

LAT: 49<sup>0</sup>16'N

LONG: 115<sup>0</sup>47'W

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OWNER

KOKANEE EXPLORATIONS LTD.

Suite 104, 135 - 10th Ave. S., Cranbrook, B.C. VIC 2N1

Work Performed From November 25, 1989 to December 72 1990

Report by: L. Stephenson Submitted: April, 1990

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# KOKANEE EXPLORATIONS LTD.

### REPORT ON A VLF GEOPHYSICAL SURVEY, STREAM GEOCHEMICAL AND GEOLOGICAL PROSPECTING PROGRAM

### GLEN 1 AND 2 CLAIMS

# FORT STEELE MINING DIVISION

# L. Stephenson April, 1990

#### 1.00 INTRODUCTION

Kokanee Explorations Ltd. acquired the Glen claims in 1989 and undertook to evaluate and locate the projected trend of the St. Eugene Mine structure on the property.

Two VLF geophysical lines were run in the course of geological prospecting to locate the trend. As well, stream geochemical samples were taken to attempt to identify the St. Eugene trend, where it crossed Farrell creek. Geological prospecting was also used to attempt to trace the extension of the St. Eugene Mine structure onto the Glen claims.

### 2.00 LOCATION AND ACCESS

The Glen 1 and 2 claims are located east southeast of the town of Moyie, B.C. Access is provided to the southern part of the claims via the natural gas pipeline maintenance road and to the northern part of the claims by the Farrell Creek bush road.

### 3.00 GEOLOGICAL PROSPECTING

Two geological prospecting traverses coincident with the VLF surveying were run through the centre of the property and traverses up Farrell Creek coincident with the stream geochem sampling were undertaken.

No visible mineralization was identified. Siltstones and argillite rocks of the Creston and Upper Creston formation were identified in outcrops along the traverse lines and in the streams. The thin argillite and quartzitic argillite rocks of the Upper Creston associated with the Society Girl zone on the St. Eugene Mine trend were not seen on the property.

### 4.00 VLF GEOPHYSICAL SURVEY

Don R. Carriere assisted in outlining the area to traverse and in interpreting the data. His comments form Appendix I of this report.

Minor response was encountered and further utilization of the VLF surveying to locate the trend of the St. Eugene Mine structure is not apparently valid at this time.

### 5.00 STREAM GEOCHEMICAL SURVEY

Four stream samples were taken at the confluence of the headwaters of Farrell Creek. These samples were taken to identify any mineralization in the area drained by these streams, where it apparently cuts the St. Eugene Mine structure.

Some elevated gold and zinc values from the samples coincide with the suggested trend (Appendix II).

### 6.00 CONCLUSIONS

The VLF-EM survey was inconclusive in defining the trend of the St. Eugene Mine structure. The stream geochemistry suggests that it and soil geochemistry might be the most effective exploration tool to define the trace of the structure.

A thorough geological prospecting and sampling project would also be effective in outline favourable stratigraphy to host St. Eugene type ore shoots.

Signed AURENCE STEPHENSON 7 B. Sc. 7 M. B. **Président** P.Eng

LS/rs

# APPENDIX I

COMMENTS ON THE VLF-EM SURVEY

ON THE GLENN CLAIMS

D.R. Carriere

The VLF survey was carried out with an EM-16 employing Seattle as the transmitter station. This provides excellent coupling for east/west trending conductors.

Typically of mountainous terrain the topography has had a strong influence on data. This is seen by the cross over on the at 1300 at the peak of the hill and the reverse cross over at 550 at the bottom of the valley. It can also be seen on the western line with the cross over at 325.

On the east line the most significant response is at 780. Here the sharp inflection of the inphase is 15% and there is a slight inflection of the quadrature.

Another weak possible response is at 1190.

On the west line the only possible conductive response is at 725. This line crosses the Farrell Creek fault. The fault has no VLF response.

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# APPENDIX II

# Steam Sample Assays

<u>Sample Name</u>	Au ppb	Ag <u>ppm</u>	Cu ppm	Pb ppm	Zn ppm
Farr l	66	0.09	16	30	86
Farr 2	22	0.24	24	26	116
Farr 3	8	0.09	22	31	85
Farr 4	10	0.01	19	26	78
Farr 1 Farr 2 Farr 3 Farr 4					

ADDIT SAMPLES:

Sample Name	Au ppb	Ag <u>ppm</u>	Cu ppm	Pb ppm	Zn ppm
84035	6	0.05	142	10	350
84036	8	0.03	43	20	70

# EXHIBIT "A"

## STATEMENT OF EXPENDITURES

### VLF GEOPHYSICAL SURVEY, STEAM GEOCHEMICAL AND GEOLOGICAL PROSPECTING PROGRAM

# ON GLEN 1 AND 2 CLAIMS FORT STEELE M.D.

Covering the period from November 25, 1989 to December 7, 1989

GEOPHYSICAL SURVEYING AND INTERPRETATION: SALARIES: Geophysicist D. Carriere \$ 600.00 1.5 days @ \$400/day 350.00 Assistant; 2 days @ \$175/day M. Smedstad G. DePaoli Geologist; plotting 300.00 1 day @ \$300/day \$1,250.00 GEOLOGICAL PROSPECTING: SALARIES: L. Stephenson Project manager; \$ 450.00 1 day @ \$450/day G. DePaoli Geologist; 3 days @ \$300/day \_\_\_\_\_900.00 1,350.00 STREAM GEOCHEMICAL SURVEY: SALARIES: G. DePaoli Sampling + plotting; \$ 300.00 1 day @ \$300/day ASSAYS: Terramin Research Labs Ltd., Calgary, Alta. 60.00 4 stream samples @ \$15/sample 360.00 **TRANSPORTATION:** 1 - 4x4 Vehicle 3 days @ \$50/day 150.00 **REPORT PREPARATION:** 450.00 L. Stephenson 1 day @ \$450/day TOTAL = \$<u>3,560.00</u> AURENCE STEPHENSON M.B.A., P.Eng.

# IN THE MATTER OF THE

### B.C. MINERAL ACT

#### AND

### IN THE MATTER OF A VLF GEOPHYSICAL SURVEY, STREAM GEOCHEMCIAL AND GEOLOGICAL PROSPECTING PROGRAM

### CARRIED OUT ON THE GLEN 1 AND 2 CLAIMS

### CRANBROOK AREA

in the Fort Steele Mining Division of the Province of British Columbia

More Particularly N.T.S. 82G/5W

### AFFIDAVIT

I. L. Stephenson, of the City of Cranbrook, in the Province of British Columbia, make Oath and say:

- 1. That I am employed as a Geologist by Kokanee Explorations Ltd. and as such, have a personal knowledge of the facts to which I hereinafter depose:
- 2. That annexed hereto and marked as Exhibit "A" to this my Affidavit is a true copy of expenditures incurred on a VLF geophysical survey, stream geochemical and geological prospecting program, on the Glen 1 and 2 Mineral Claims.
- 3. That the said expenditures were incurred between the 25th day of November, 1989 and the 7th day of December, 1989 for the purpose of mineral exploration.

B.SC, M.B.A./P.Eng.

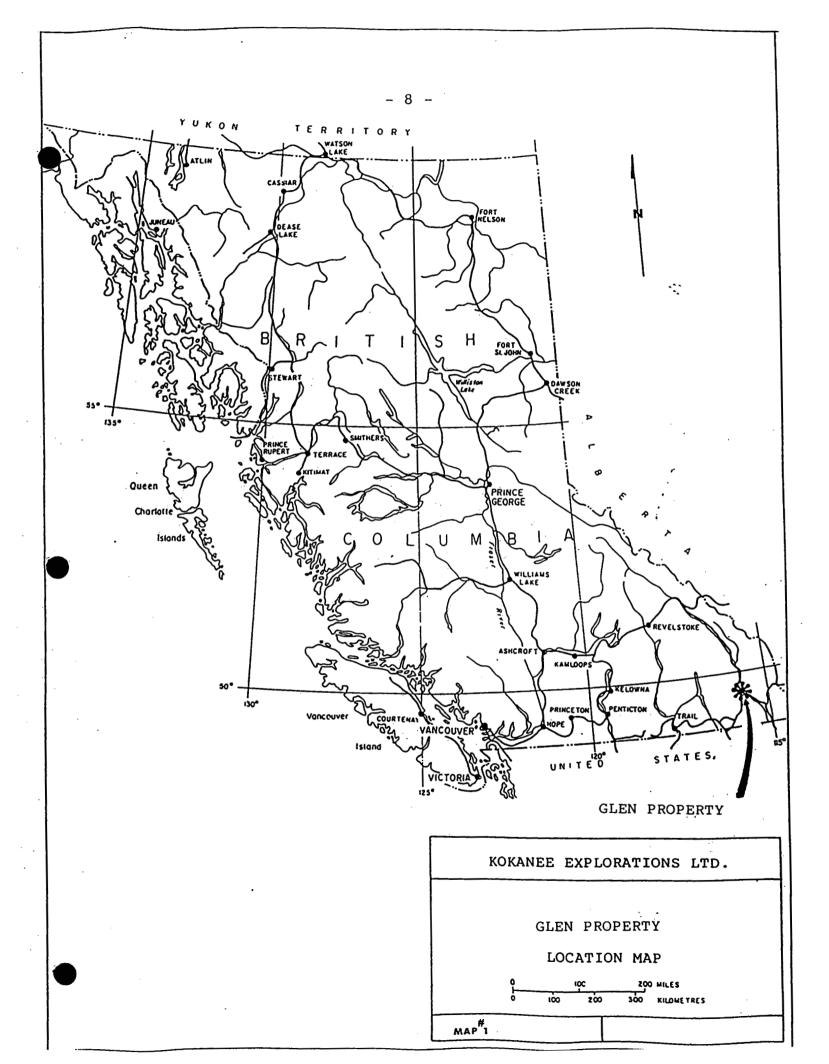
LAURENCE\_STEPHENSON

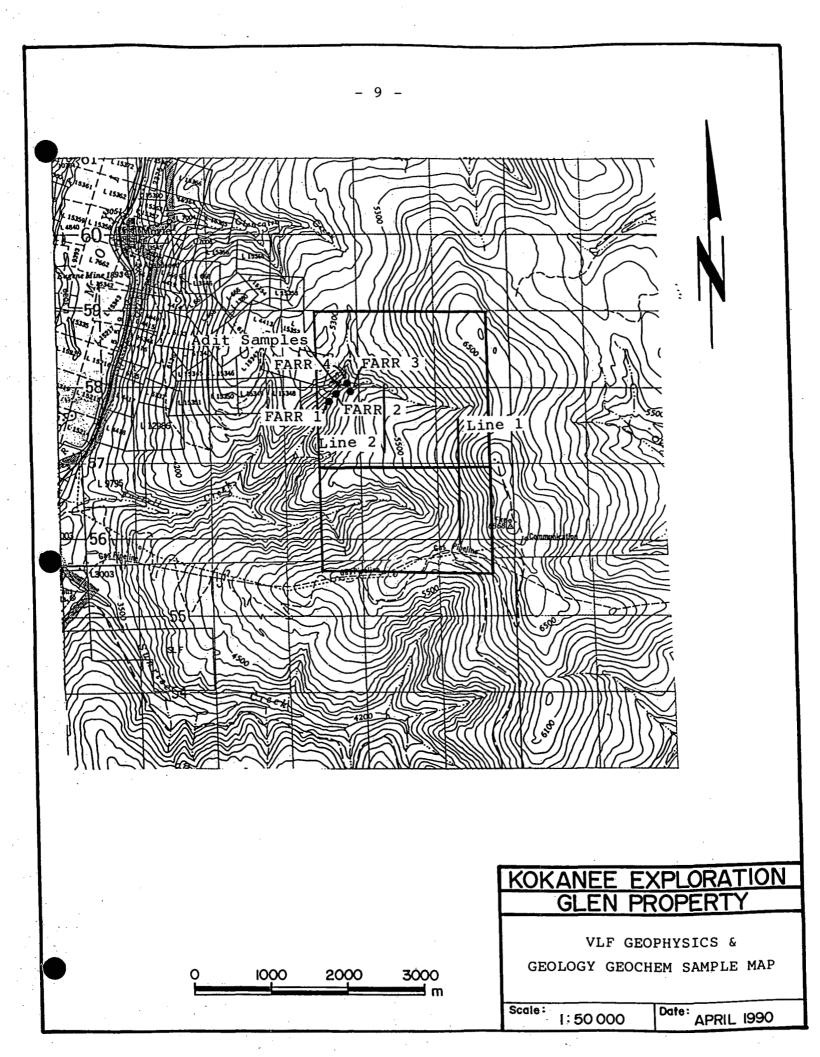
### AUTHORS QUALIFICATION'S

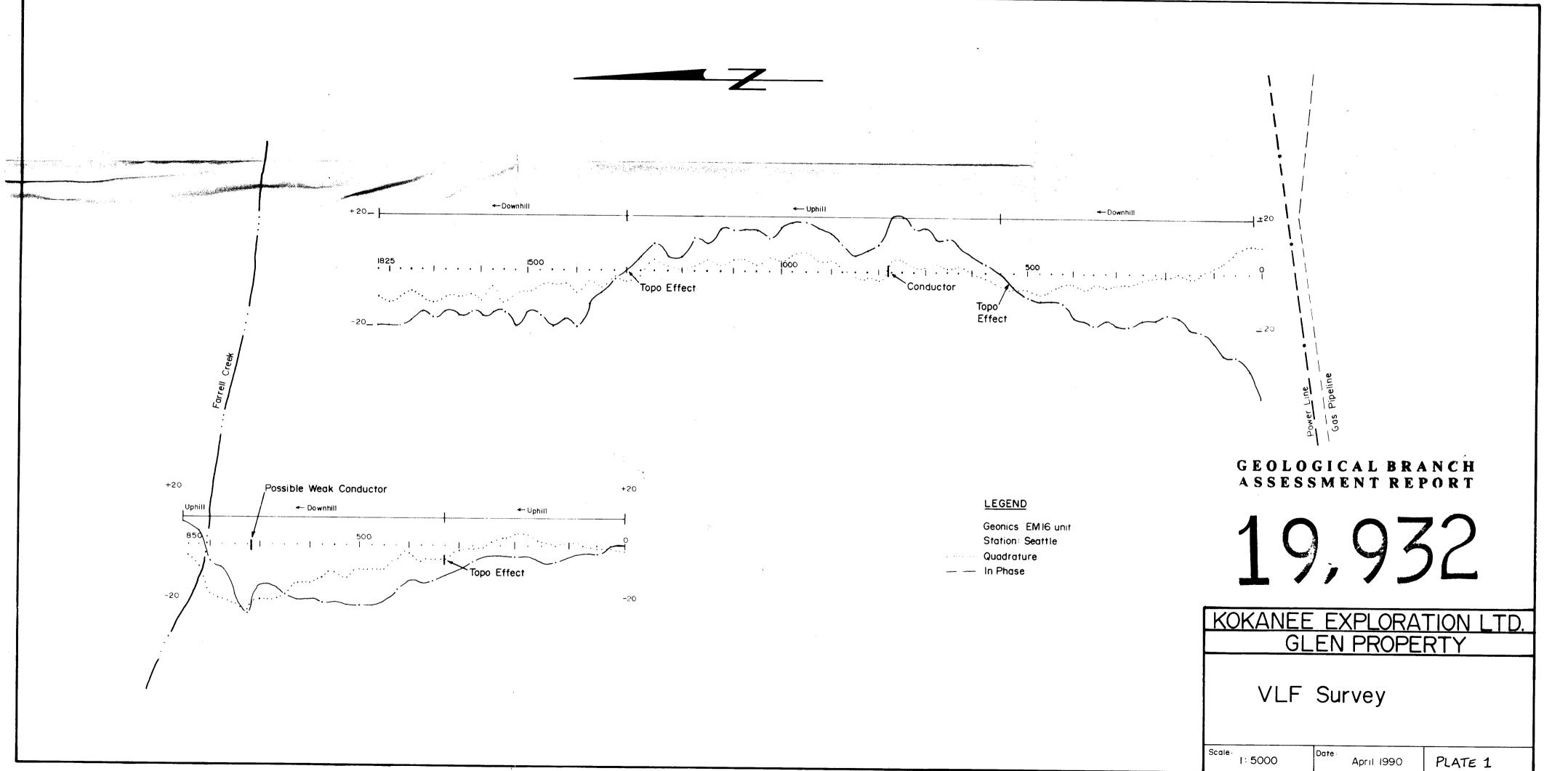
I, Laurence Stephenson, of Cranbrook, B.C., in the Province of British Columbia, do hereby certify that:

- 1. I graduated from Carleton University in 1975 with a Bachelor of Science degree in Geology then, in 1985, graduated from York University with a Masters of Business Administration.
- 2. I am registered as a Professional Engineer for the Province of Ontario (1981) and currently a member in good standing.
- 3. I have had over 23 years experience in the field of mining exploration.

LAURENCE STEPHENSON B.Sc., M.B.A., P.Eng







Date

PLATE 1

April 1990