KOKANEE	EXPLORATIONS	LTD LOG NO:	01-04	RD.
		ACTION:		
		FILE NO:		

#### REPORT ON A GEOLOGICAL MAPPING AND PROSPECTING PROGRAM

#### LOOK PROPERTY

LOOK 1 - 31, 36 - 43 CLAIMS

FORT STEELE MINING DIVISION

CRANBROOK AREA

N.T.S. 82G/5W + 4E

**LAT:** 49°15'N

LONG: 115°45'W

#### OWNER

KOKANEE EXPLORATIONS LTD.

Suite 104, 135 - 10th Avenue South Cranbrook, B.C. V1C 2N1

Work Performed from September 17, 1989 to October 5, 1990

Report by: L. Stephenson Submitted: December, 1990

> GEOLOGICAL BRANCH ASSESSMENT REPORT

20,753

# TABLE OF CONTENTS

	PI	AGE
1.00	Introduction	1
2.00	Location and Access	1
3.00	Geological Mapping and Prospecting	1
4.00	Conclusions	2
	Appendix I - Trench Grab Sample Assays	3
	Exhibit "A" - Statement of Expenditures	4
	Affidavit	5
	Author's Qualifications	6
	Location Map	7
	Plate 1 - Geology Map	ket

#### KOKANEE EXPLORATIONS LTD.

# REPORT ON A GEOLOGICAL MAPPING AND PROSPECTING PROGRAM

LOOK 1 - 31, 36 - 43 CLAIMS

# FORT STEELE MINING DIVISION

#### L. Stephenson

December, 1990

#### 1.00 Introduction

Kokanee Exploration Ltd. acquired the Look claims in 1989 and under took to evaluate and locate the projected trend of the St. Eugene Mine structure on the property.

Geological prospecting and mapping was completed to trace the extension of the St. Eugene Mine structure onto the Look claims and to investigate the exposures of the structure in the old showings on the property.

#### 2.00 Location and Access

The Look claims are located east southeast of the town of Moyie, B.C. Access is provided to the claims via the natural gas pipeline maintenance road.

### 3.00 <u>Geological Mapping and Prospecting</u>

Geological mapping and prospecting traverses were run across the property perpendicular to the trend of the zones projected extent of the zone.

Visible mineralization was identified in the gossan zone. Siltstones and argillite rocks of the Creston and Upper creston formations were identified in outcrops through the area.

The geology of the claims was mapped in detail in the areas of outcrop (Plate 1). Rocks of the lower and upper Creston intruded by gabbro dykes were observed to underlay most of the property. The Creston rocks consisted mainly of argillite-argillaceous quartzites with a few large quartzite units. The units were striking northsouth with a gentle easterly dip (between  $15-25^{\circ}$ ).

There appears to be a slight anticlinal warp to the units with the axis centred on the centre line of the property. The gossan zone trace appears to parallel this anticlinal axis with a eastwest strike. This trend is slightly off the St. Eugene Society Girl trend (east southeast) but the zone nevertheless parallels the eastwest trend found at the St. Eugene Mine proper.

Two northsouth fault traces were mapped on the property with apparent left lateral movement. These faults are located west of the showing.

Samples of gossan show some traces of base metal (up to 2% lead and silver) associated with the manganese rich gossan zone (Appendix II).

#### 4.00 Conclusions

The Look property hosts a gossan vein that is the projected extension of the St. Eugene trend where it occurs in the Creston rocks which overly the Aldridge rocks (host of the St. Eugene trend). The mineralogy and setting is not unlike that of the upper part of the St. Eugene Mine, where thicker quartzite units host the thicker ore shoots.

There are at least three thicker quartzite units associated with the gossan zone on the Look of the These areas require further investigation to continue the evaluation of this property.

LAURENCE PHENSON, B.Sc., M.B.A.

P. Eng.

# APPENDIX I

# TRENCH GRAB SAMPLE ASSAYS LOOK PROPERTY

SAMPLE#	Mo ppm			160	Zn ppm:				Co pm	Kn ppm	-				Au ppm				Sb	B1 ppm		Ca %		La ppm					ppm B	AL X	Na X	'	W.	Pb %		_	Au oz/t	Au ppb
90LTL-1 90LTL-2 90LTL-3 90LTL-4	9 3 25 1	58 107 442 98	326				. 1	9 :		756 1692 99999 2071	21.2 29.9	7	5 5 26 13	6 9 5 8	ND ND ND	4	1 380	2.4 1.3 7.7 1.0	2	14 9 23 8	13 6	.01	.025 .019 .035	7 10	11 3	.01	11 505	.01	2	. 18 1.56 .35 .18	.01	.01	.1 .1	.01 .01 .04	.01	.01 .42	.001 .001 .001	
65578		400	200	00 1	120	19.	8																											2.0				102

#### EXHIBIT "A"

#### STATEMENT OF EXPENDITURES

# GEOLOGICAL PROSPECTING AND MAPPING PROGRAM

ON LOOK 1 TO 31 AND 36 TO 43 CLAIMS FT. STEELE M.D.

Covering the period of September 17th to October 5th, 1990

#### SALARIES:

G. DePaoli - Geologist - Prospecting/mapping/
plotting data - 11 days @ \$200/day \$2,200.00

L. Stephenson - P.Eng. - Report writing +

interpretation - 3.5 days @ \$400 1,400.00

J. Termuende - Draftsperson - 2 days @ \$125/day 375.00

#### TRANSPORTATION:

1 - 4x4 Truck; 11 days @ \$50/day

550.00

TOTAL = \$4,525.00

LAURENCE SPEPHENSON B/Sq./M/B.A.,P.Eng.

#### IN THE MATTER OF THE

#### B.C. MINERAL ACT

#### AND

# IN THE MATTER OF A GEOLOGICAL PROSPECTING AND MAPPING PROGRAM

CARRIED OUT ON THE LOOK PROPERTY

#### MOYIE AREA

in the Ft. Steele Mining Division of of the Province of British Columbia

More Particularily N.T.S. 82G/5W + 4E

#### 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 geological mapping and prospecting program, on the Look mineral claims;
- 3. That the said expenditures were incurred between the 17th day of September, 1990 and the 5th day of October, 1990 for the purpose of mineral exploration.

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

## AUTHOR'S QUALIFICATIONS

- 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.S.C., M.B.A., P.Eng.



