PROSPECTING

ASSESSMENT REPORT

on the

BRITISH 1-5 MINERAL CLAIMS

KAMLOOPS LAKE AREA

KAMLOOPS MINING DIVISION

bу

MURRAY MORRISON, B.Sc.

Claims:

British 1-5 (8 units)

Location:

The British property is situated immediately

north of Duffy Creek, 25 km due west of

Kamloops, B.C.

Lat. 50°41'; Long. 120°41';

N. T. S. 92-I-10E.

Owner:

Murray Morrison

Operator:

Murray Morrison

Date Started:

May 4, 1985

Date Completed:

May 6, 1985

GEOLOGICAL BRANCH ASSESSMENT REPORT

Kelowna, B.C. May 1

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SUMMARY

The British property situated 6 km south of Kamloops Lake, 25 km west of Kamloops, B.C., lies within the Savona Mercury Belt. The Mercury Belt has received the attention of several large exploration companies in recent years as a potential epithermal gold environment. Companies such as Placer Development, Newmont, Selco, Inco and Asarco have concentrated exploration efforts on mercury-bearing carbonate alteration zones within Upper Triassic Nicola Group rocks. It is believed that these alteration zones represent the upper levels of epithermal systems that may be gold and silver bearing at depth.

The British property covers several large, faulted, intensely carbonate altered zones of Nicola rocks lying just to the north-west of Duffy Creek. Zones of similar material occur on Newmont Exploration's Sprout property, and Goldstone Exploration's Brussels property to the north of the British property. Newmont has discovered gold, silver, lead and antimony mineralization associated with silica and pyrite near the centre of one such carbonate alteration zone 4.5 km to the northwest of the British property, while Goldstone has discovered gold, silver, and lead mineralization associated with pyrite within a carbonate alteration zone 5 km north of the British property.

It is believed that Early Tertiary (?) quartz porphyry intrusives, some of which occur on the British property, are responsible for the intense alteration zones.

Lithogeochemical samples collected from the British property in May, 1985 indicate that pyritic quartz-eye porphyries on the property contain weakly anomalous silver, and strongly anomalous arsenic. It is suggested that gold values may occur within a kaolinite altered zone of the porphyritic rock on the British 3 mineral claim, and further lithogeochemical sampling is recommended in this area. Samples are to be analyzed for gold, silver

SUMMARY - Continued

and arsenic. Geological mapping of the entire British property is also recommended.

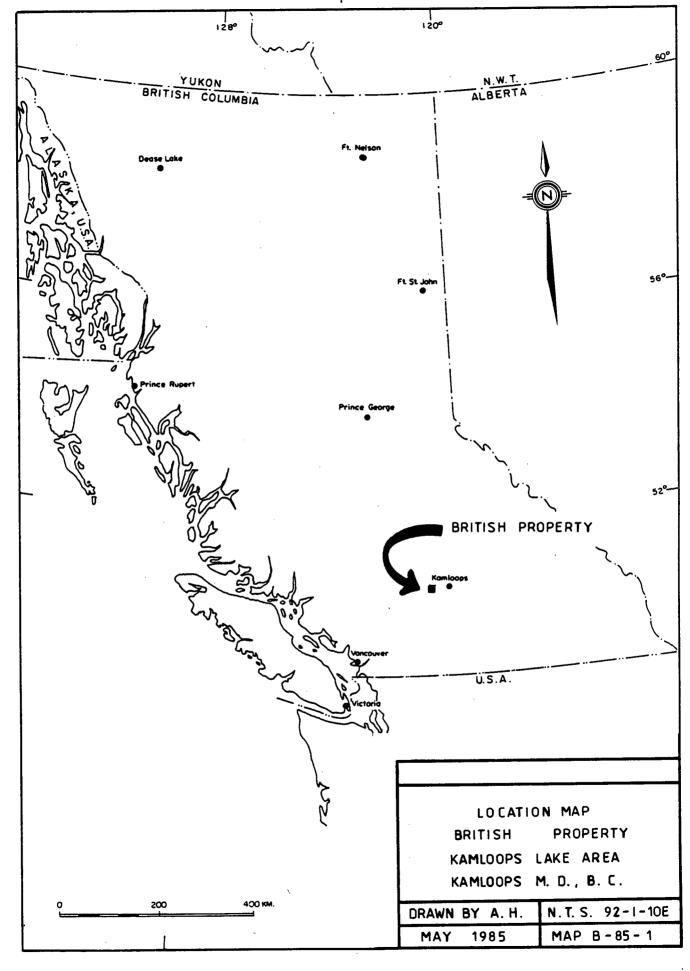
It is believed that the geochemical survey conducted over the western portion of the property by Placer Development in 1981 was inadequate to properly appraise the gold bearing potential of the British property.

INTRODUCTION

The British property, comprised of the British 1, 4-post mineral claim of 4 units, and the British 2-5, 2-post, mineral claims, is situated immediately northwest of Duffy Creek, 25 km due west of Kamloops, B.C. (Lat. 50°41'; Long. 120°41'; N.T.S. 92-I-10E). The claims were staked by the writer in 1984 to cover several zones of highly carbonate altered Upper Triassic Nicola volcanic rocks. It was felt that the carbonate alteration zones might represent the Upper horizons of epithermal systems which may be gold-bearing at shallow depth.

The British 1-5 mineral claims cover ground formerly covered by the Brussels 6-9 mineral claims owned by Placer Development Limited of Vancouver from 1981 until 1984. During 1981 Placer Development conducted a widely spaced soil geochem program over the western portion of the property. The company decided that the geochemical values obtained during the survey were not of sufficient merit to warrant continued exploration, and they allowed the property to lapse.

During May of this year (1985) the writer spent three days prospecting and sampling the main carbonate alteration zones on the property. Samples collected were analyzed for gold, silver, arsenic, copper and zinc. A discussion of the results of the prospecting and sampling is given within this report, while Map B-85-3, accompanying this report, shows the sample locations and lists the values obtained. A description of each sample is also given in Appendix "A".



LOCATION AND ACCESS

Map B-85-2, on the following page, shows the location of the British property immediately northwest of Duffy Creek, or 25 km due west of Kamloops, B.C. (Lat. 50°41'; Long. 120°41'; N.T.S. 92-I-10E). Access to the property is via the gravel and dirt logging roads, as illustrated on Map B-85-2, a total distance of 7 km from the Trans Canada Highway.

It should be noted that the dirt portions of the access road can become very slippery and rutted during heavy rains.

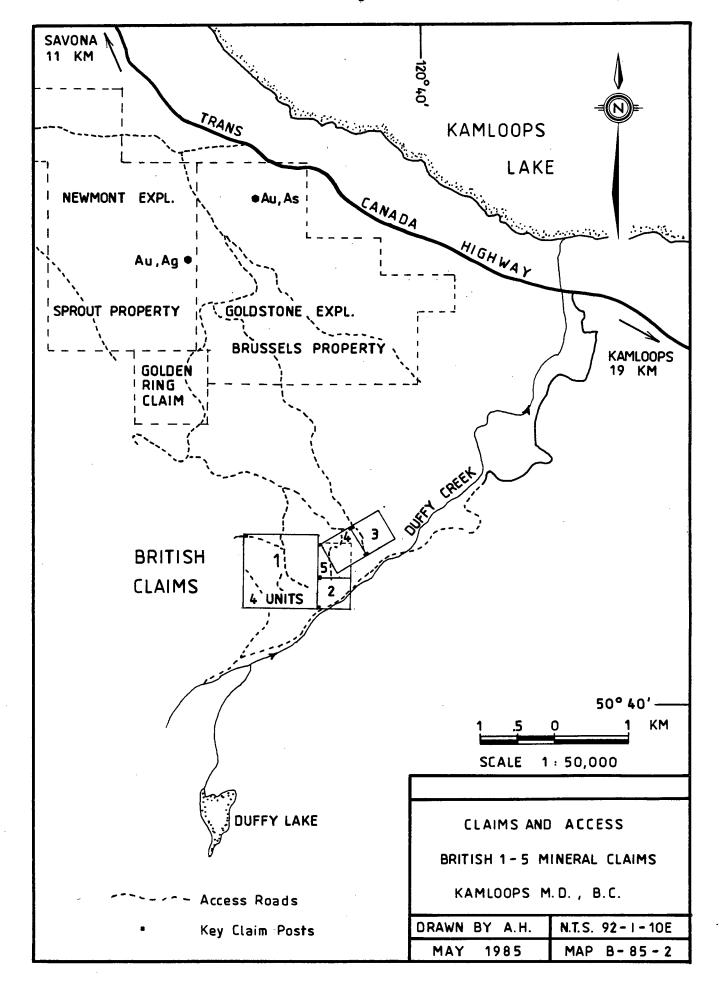
Alternate access to the British property is via the Duffy Creek road, although this route has not been driven by the writer to date.

PHYSICAL FEATURES AND CLIMATE

The British property with an average elevation of 1000 metres above sea level lies 6 km south of Kamloops Lake (350 m elv.). The property features moderate relief with local hummocks rising 30 to 60 metres above the surrounding countryside, and a large ridge rising to an elevation of 1300 metres on the southwestern corner of the property. Rock exposures scattered across the property are often restricted to some of the steeper-sided hummocks.

The Kamloops Lake region is semi-arid at lower elevations with precipitation equalling less than 30 cm per year. An increase in precipitation from the lake, upwards, into the hills is marked by successive changes in vegetation from sagebrush, to Ponderosa pine, to Douglas fir. The dominant forest species on the British property is Douglas fir which forms thick groves locally, and which has been selectively logged in recent years.

Small man-made lakes provide drinking water for grazing cattle during summer months on the property.



PHYSICAL FEATURES AND CLIMATE - Continued

Winter snow reaches depths of up to 70 cm and covers the property from November until April.

CLAIM STATUS

The British property is made up of the British 1, 4-post mineral claim, and the British 2-5, 2-post, mineral claims, all staked and owned 100% by the writer, M. Morrison, of Kelowna, B.C. The British 1 mineral claim is a restaking of the former Brussels 6 mineral claim, while the British 2-4 mineral claims are restakings of the Brussels 7-9 mineral claims. The Brussels 6-9 mineral claims were formerly owned by Placer Development Limited of Vancouver. Particulars on the British claims are given below:

CLAIM NAME		UNITS	DATE OF RECORDING	RECORD NO.	MINING <u>DIVISION</u>	EXPIRY DATE *
British	1	4	May 10/84	5619	Kamloops	May 10/86
British	2	1	May 10/84	5620	Ħ	May 10/86
British	3	1	May 10/84	5621	tt	May 10/86
British	4	1	May 10/84	5622	51	May 10/86
British	5	1	May 10/84	5623	τι	May 10/86

^{*} New Expiry Date based on the acceptance of this report for Assessment Work requirements.

HISTORY

The historic Savona Mercury Belt, running 20 km north and south of the west end of Kamloops Lake, has, during the past four years, received the renewed attention of major exploration companies as a potential epithermal gold belt. Companies such as Placer Development, Asarco, Inco, Newmont and Selco have all acquired large properties within the belt. The British property,

HISTORY -Continued

covering ankeritic alteration zones similar to others along the belt, was first staked (Brussels 6-9 mineral claims) for Placer Development in 1981 as a potential gold prospect.

Placer Development conducted a widely spaced (25x250m) soil geochem program on the western side of their Brussels 6-9 mineral claim property in 1981 and had the samples analyzed for gold, silver, arsenic, mercury, antimony, copper, zinc and molybdenum. Placer Development considered the results of the survey to be of little interest and they allowed the property to lapse in April, 1984.

The ground covered by the Brussels 6-9 mineral claims was restaked as the British property by the writer in May, 1984.

REGIONAL GEOLOGY

Map 886A entitled "Nicola" by W.E. Cockfield of the Geological Survey of Canada illustrates the 12 km wide belt of Upper Triassic Nicola Group rocks that extends for 20 km north and south of Savona, B.C., at the western end of Kamloops Lake. The map shows numerous old mercury prospects that occur within the Nicola Group rocks and other mercury prospects that occur within later Cretaceous sedimentary and volcanic rocks.

The mercury showings at Carabine Creek are believed to be related to Tertiary Copper Creek Intrusions shown on the "Nicola" map. Quartz veins bearing gold mineralization have been found near the north end of the mercury belt at Criss Creek where Copper Creek Intrusions have also been mapped. It is, therefore, suspected that hydrothermal solutions emanating from high level intrusives related to the Copper Creek Intrusions underlie many of the mercury bearing carbonate alteration zones within the mercury belt, and that these zones may represent the upper levels of potential epithermal gold-bearing systems.

REGIONAL GEOLOGY- Continued

Newmont Exploration of Vancouver has recently discovered a silicified zone carrying pyrite, galena and stibnite, with values in gold and silver, associated with a carbonate alteration zone within Nicola Group volcanic zones. The Newmont showing, illustrated in Map B-85-2, is located 4.5 km north of the British property. Another zone of anomalous gold (1755 ppb) and arsenic (400 ppm) mineralization has been discovered within carbonate altered Nicola Group volcanics on the Goldstone Exploration Brussels property 5.0 km north of the British property.

The British property lies 14 km west of the well-known Afton Copper (gold and silver) mine, and only 7 km southwest of the old Copper King Mine (copper, gold and silver). Late Triassic Cherry Creek Intrusives, thought by some geologists to be coeval with the Nicola Group volcanics, played a role in the mineralization at both copper mines. Although there is a large age difference between the intrusives of the Mercury Belt and the intrusives of the Copper Mines the gold and silver production at the mines does at least prove that the Nicola Group rocks south of Kamloops Lake have an apparent high genetic potential for carrying gold and silver values.

The regional strike of the geology in the west Kamloops Lake region is northwest with probable major faults aligning with Deadman River, Sabiston Creek, Carabine Creek and Durand Creek. Open File Map 980 of the Ashcroft area by J.W.H. Monger et al. of the Geological Survey of Canada shows the Carabine Creek fault to continue south of Kamloops Lake and to cut diagonally through the British property. Several northwest and northeast striking lineaments of lesser order of magnitude also cross the countryside. Such lineaments cross the Sprout claims of Newmont Exploration, and the Brussels claims of Goldstone Exploration to the north of the British property. Early Tertiary (?) intru-

REGIONAL GEOLOGY - Continued

sives with related carbonate and siliceous alteration zones appear to align with some of these lesser order lineaments.

PROSPECTING AND SAMPLING PROGRAM - 1985

Map B-85-3, accompanying this report, shows the location of several large carbonate alteration zones within Nicola Group rocks that were discovered and sampled during this year's prospecting of the British property. The zones were outlined and "tied-in" to the nearest claim posts by compass and belt chain traverses.

A total of 14 lithogeochemical samples were collected from carbonate alteration zones on the British 1-3 mineral claims. The Table on Map B-85-3 shows that sample intervals ranged from 3 to 25 metres. Sampling involved the collecting of several 2 cm chips of rock from surface exposures and an old cat trench to make up samples weighing 2.5 kg. The samples were then submitted to the Kamloops Research and Assay Laboratory, where they were analyzed for gold, silver, arsenic, copper and zinc. The values obtained are shown on Map B-85-3, and are listed in Appendix "B", along withthe procedures for analysis.

DISCUSSION OF THE RESULTS OF THE 1985 PROSPECTING AND SAMPLING PROGRAM

It was decided early in the program that the key prospecting targets on the British property are the large carbonate alteration zones within Nicola Group rocks, and the kaolinite altered quartz-eye intrusive rocks lying immediately below the carbonate zones. The carbonate zones form limonite stained ridges that on close inspection are found to be made up of highly faulted rocks which have been pervasively replaced by carbonate (ankerite 20 to 80%). The replaced rock has been fractured and faulted repeatedly with 1-10% ankerite filling fractures. Quartz equalling up to 1%, fills fractures late, forming the core of the multiphase veins.

Pyrite is rare within the carbonate altered zones, but it is commonly disseminated throughout the quartz-eye porphyries, where locally it equals up to 3% of the rock. Strong kaolinite alteration is associated with the quartz eye porphyry locally on the British 3 mineral claim.

The quartz porphyries directly underlie some of the carbonate alteration zones on the British 3 mineral claim, and they are thought to underlie the carbonate alteration zones on the British 1 mineral claim at some depth.

Arsenic proved to be the element with the greatest variation in samples collected from the property. Eight of the 14 samples contained anomalous arsenic (10 ppm arsenic is considered to be the threshold value for arsenic in rocks of the Kamloops Lake region). Six (B-01 to B-06) of the eight anomalous samples were collected from the quartz-eye porphyry on the British 3 mineral claim, and samples B-03 and B-05, containing noteable pyrite, yielded particularly high values of 552 and 843 ppm arsenic respectively.

Continued . . .

DISCUSSION OF THE RESULTS OF THE 1985 PROSPECTING AND SAMPLING PROGRAM - Continued.

The only silver of note (0.1 to 0.3 ppm) also came from three quartz-eye porphyry samples, B-01 to B-03, collected from the old cat trench on the British 3 mineral claim. Gold proved to be negligible in all samples, while copper was predictably anomalous in two malachite stained samples, B-13 (345 ppm copper), and B-14 (146 ppm copper). The zinc content in samples was consistently low, or normal for Nicola Group volcanics.

CONCLUSIONS AND RECOMMENDATIONS

Several strong carbonate alteration zones have been outlined on the British property, some of which directly overlie Early Tertiary (?) quartz-eye porphyry intrusives. No appreciable amounts of precious metals, or precious metal indicator elements, were found in the carbonate alteration zones, but minor amounts of silver and anomalous amounts of arsenic were discovered in the quartz-eye porphyry rocks. Some of the intrusive rocks on the British 3 mineral claim were also noted to be highly kaolinite altered and pyritic.

Work by the writer on Goldstone Exploration's Brussels property, 2 to 5 km north of the British property, established a correlation between gold, silver and arsenic in lithogeochemical samples collected from carbonate altered zones in Nicola Group rocks. The work showed that arsenic was the element most widely dispersed in an epithermal system, while silver was much less dispersed, and gold was even more localized and erratic.

It is felt that the good arsenic values and slightly anomalous silver values showing up in rocks on the British property are positive indicators that gold mineralization may be near at hand. Further lithogeochemcial sampling should be conducted

CONCLUSIONS AND RECOMMENDATIONS - Continued

across the kaolinized zone on the northeast flank of quartzeye porphyry ridge on the British 3 mineral claim. The samples
should be analyzed for gold (fire assay), silver, and arsenic.
Percussion drilling of the kaolinized zone could be considered
if anomalous gold or silver values occur in surface samples.

The entire British property should be geologically mapped at a scale of at least 1:2500 to gain a better understanding of the potential of the property.

The 1981 soil geochem survey conducted by Placer Development over the western portion of the property is not considered by the writer to be an adequate test of the property. The widely spaced survey grid missed all of the known carbonate alteration zones and was, in part, conducted across areas of deep glacial drift.

May 10, 1985

M. S. Morrison, B.Sc.

REFERENCES

Boyce, R.A.

1982: Geochemical Report Brussels Group (Brussels, Golden Ring and Golden Lime), Kamloops Mining Division, Placer Development Limited (Filed as an Assessment Report with the Ministry of Mines and Petroleum Resources, B.C.).

Cockfield, W.E.

1948: Geology and Mineral Deposits of Nicola Map-Area, British Columbia, Geological Survey of Canada, Memoir 249.

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1947: Map 886A, Nicola, Kamloops and Yale Districts, British Columbia, Geological Survey of Canada.

Monger, J.W.H. and MacMillan, W.J.

1984: Bedrock Geology of Ashcroft (921) Map Area, British Columbia, Geological Survey of Canada, Open File 980.

Wilmot, A.D. and Morrison, M.S.

1984: Report on the Brussels Group of Mineral Claims,
Kamloops Mining Division (Filed with a Goldstone
Exploration Limited Prospectus for the Vancouver
Stock Exchange).

APPENDIX "A" SAMPLE DESCRIPTIONS

(Please see Map B-85-3 for Sample Sites)

G 7 N	
Sample No. B-01	Description Chip sample collected over a length of 11 metres at the south end of an old "cat" trench on the British 3 mineral claim; well faulted, and limonite stained quartz-eye granite porphyry with 1% quartz and chalcedony veining, 1-3 mm, and 1% ankerite veining 1-3 mm.
B - 02	Chip sample collected over a length of 14 metres immediately northwest of sample B-01 in cat trench; same quartz-eye porphyry as in sample B-01 with quartz eyes up to 1 cm; 2% pyrite with late quartz veining.
B - 03	Chip sample collected over a length of 5 metres immediately northwest of B-O2 in cat trench; same quartz-eye porphyry; well fractured and well silicified with 1% very fine grained disseminated pyrite, minor local brecciation.
B - 04	Chip sample collected over 23 metres along west end of old cat trench immediately west of sample B-03; well altered and weathered rock, ankerite increasing to 10% at west end of trench.
B - 05	Selected chip sample collected from angular float on quartz porphyry ridge 55 metres southeast of old cat trench at site B-O1; silicified rock with 1 to 2% disseminated pyrite.
B - 06	Chip sample collected from faulted and limonite stained quartz-eye porphyry dyke material 100 metres northwest of old cat trench at sample site B-04; 20% silica and 20% ankerite replacement.
B - 07	Chip sample collected from well faulted and carbonate altered volcanic (?) rock exposure 120 metres east of Identification Post IE 2S on the British 1 mineral claim; 20 to 40% ankerite replacement with trace to 1% late quartz veinlets.
B - 08	Chip sample collected over a length of 25 metres across a highly carbonate altered volcanic (?) rock exposure located near thesoutheast corner of the British 1 mineral claim; 40 to 80% ankerite replacement, trace to 1% late quartz veinlets, trace of disseminated pyrite.

Continued . . .

APPENDIX "A" SAMPLE DESCRIPTIONS - Continued

- B-09 Chip sample collected over a length of 15 metres across a faulted, highly carbonate altered volcanic (?) rock exposure located 100 metres east of site B-08; 20 to 80% ankerite replacement, trace of quartz veinlets.

 B-10 Chip sample collected over a length of 25 metres
 - B-10 Chip sample collected over a length of 25 metres across a highly faulted, carbonate altered volcanic (?) rock exposure located near the southwest corner of the British 2 mineral claim; 60-80% ankerite replacement; several phases of open space vein filling by ankerite, and later phase quartz equalling 1%.
 - B-11 Chip sample collected over a length of 15 metres immediately southwest of site B-10 and composed of the same material.
 - B-12 Chip sample collected over 20 metres immediately north of the east end of sample site B-10. The material is similar to sample B-10 at south end of sampled area, but becomes less carbonate altered to the north; 20% ankerite replacement of andesite (?).
 - B-13 Chip sample collected from 3 metre area of well faulted, carbonate altered, malachite stained, andesite (?) breccia 70 metres northwest of sample site B-10; 30-50% ankerite replacement.
 - B-14 Chip sample collected across 3 metres of a faulted carbonate altered Nicola andesite outcrop 70 metres northwest of sample site B-13; 5-20% ankerite replacement, 3% quartz veinlets filling multiphase open spaces, trace of malachite.

KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

APPENDIX "B"

B.C. CERTIFIED ASSAYERS

912 LAVAL CRESCENT — KAMLOOPS, B.C. V2C 5P5 PHONE: (604) 372-2784 — TELEX: 048-8320

GEOCHEMICAL LAB REPORT

Mr. M. Morrison 684 Balsam Rd., Kelowna, B.C. V1W 1B9

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FILE NO. _____..

DATE May 9, 1985	
ANALYST	
FILE NO. G 1285	

KRAL NO.	IDENTIFICATION	ppb Au	ppm Cu	ppm Zn	ppm Ag	ppm As		
1	B 01	L5	9	143	.3	47		
2	B 02	L5	83	92	.2	30		
3	B 03	L5	45	34	.1	552		
4	B 04	L5	55	71	L.1	88		
5	B 05	L5	37	33	L.1	843		
6	B 06	L5	5	67	L.1	17		
	B 07	L5	15	72	L.1	2		
8	B 08	L5	104	73	L.1	30		
9	B 09	L5	· 41	88	L.1	3		
10	B 10	Ļ5	23	87	Li1	5		
11	B 11	L5	16	79	L.1	6		
12	B 12	L5	47	73	L.1	10		
13	B 13	L5	345	79	L.1	4		
. 14	B 14	L5	146	80	.1	46		
						ı		!
	L means "less tha	n"						
	Sample preparatio	n: Crus	h, pulv	erise to	-100 mest			
	Au Method: Fire a	issay_						<u> </u>
	Cu, Zn, Ag Method	absorp : Not a	cid ext	raction				: •
	Atomic As Method: Nitric	absorp hydroc	tion					
		metric.						

APPENDIX "C"

STATEMENT OF QUALIFICATIONS

- I, Murray Morrison, of the City of Kelowna, in the Province of British Columbia, do hereby state that:
- I graduated from the University of British Columbia in 1969 with a B.Sc. Degree in Geology.
- I have been working in all phases of mining exploration 2. in Canada for the past fifteen years.
- 3. During the past fifteen years, I have intermittently held responsible positions as a geologist with various mineral exploration companies in Canada.
- I have examined many mineral properties in Southern British Columbia during the past fifteen years.
- 5. I personally carried out the prospecting and sampling program outlined in this report.
- 6. I own full title to the British 1-5 mineral claims described in this report.

May 10, 1985 Kelowna, B.C.

Murray Morrison, B.Sc.

APPENDIX "D"

STATEMENT OF EXPENDITURES - ON THE BRITISH 1-5 MINERAL CLAIMS

Statement of Expenditures in connection with the Prospecting and Sampling Program carried out on the British 1-5 mineral claims, N.T.S. 92-I-10E, Kamloops Lake Area, B.C., for the year 1985.

FIELDWORK - PROSPECTING AND SAMPLING

M. Morrison, Prospector	2 1 days @ \$100/day	\$ 250.
Meals and Lodging	2 1 days @ \$ 40/day	100.
Truck (4x4, incl. gasoline)	2 1 days @ \$ 60/day	150.
	Sub-total:	\$ 500.

ASSAYING COSTS

14 rock chip samples analyzed gold, silver, arsenic, copper zinc at \$15.45/samples	14 x	x \$15•45 =	\$ 216.
		Sub-total:	\$ 216.

REPORT PREPARATION COSTS

Writing report	½ day	@ \$100/day	\$ 50.
Drafting			25.
Typing			25.
Copying			 14.
		Sub-total:	\$ 114.
	•	GRAND TOTAL:	\$ 830.

I hereby certify that the preceding statement is a true statement of monies expended in connection with the Prospecting and Sampling Program carried out May 4-6, 1985.

May 10, 1985

Murray Morrison - Geologist

