

GEOPHYSICAL
ASSESSMENT REPORT

LOG NO: 515 K
ACTION:
FILE NO:

on the

LONDON CLAIM GROUP
KAMLOOPS LAKE AREA
KAMLOOPS MINING DIVISION

by

MURRAY S. MORRISON, B.Sc.

CLAIMS: London 2 - 5 mineral claims (9 units)
LOCATION: The London property is situated at Pat
Lake, 2km south of Kamloops Lake, 35
km west of Kamloops, B.C.
Lat. 50°44'; Long. 120°44';
N.T.S. 92-I-10E & W.
OWNER: F. Hunt
OPERATOR: F. Hunt
DATE STARTED: April 29, 1991
DATE COMPLETED: May 2, 1991

Kelowna, B.C.

GEOLOGICAL BRANCH
ASSESSMENT REPORT June 28, 1991

21,499

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SUMMARY

The London property, centred over Pat Lake, 2 km south of Kamloops Lake, or 25 km west of Kamloops, B.C., hosts at least two small antimony-bearing, silica replacement zones in Upper Triassic Nicola Group metasediments. The replacement zones are thought to represent the upper (low temperature) horizons of fault-controlled epithermal systems that could contain precious metal values at depth.

The property was first staked by Newmont Exploration of Canada Ltd. in 1982 as the Sprout 3 mineral claim. Newmont crews re-discovered the old Pat Lake stibnite occurrence, but lost interest in the showing following low precious metal assay results. The London 2 mineral claim was subsequently staked to cover the Pat Lake stibnite occurrence in 1988, and the London 3-5 mineral claims were added to the property in 1990.

A limited soil geochemical survey was conducted over the southwestern corner of the London 2 mineral claim in 1989. This year (1991) a ground magnetometer survey was conducted over the same southwestern area of the London 2 mineral claim and over portions of the new London 3-5 mineral claims to the west.

The magnetic data indicates that a fault may strike north across the property, and that a felsic intrusion of unknown extent occurs at the southeast corner of the survey area.

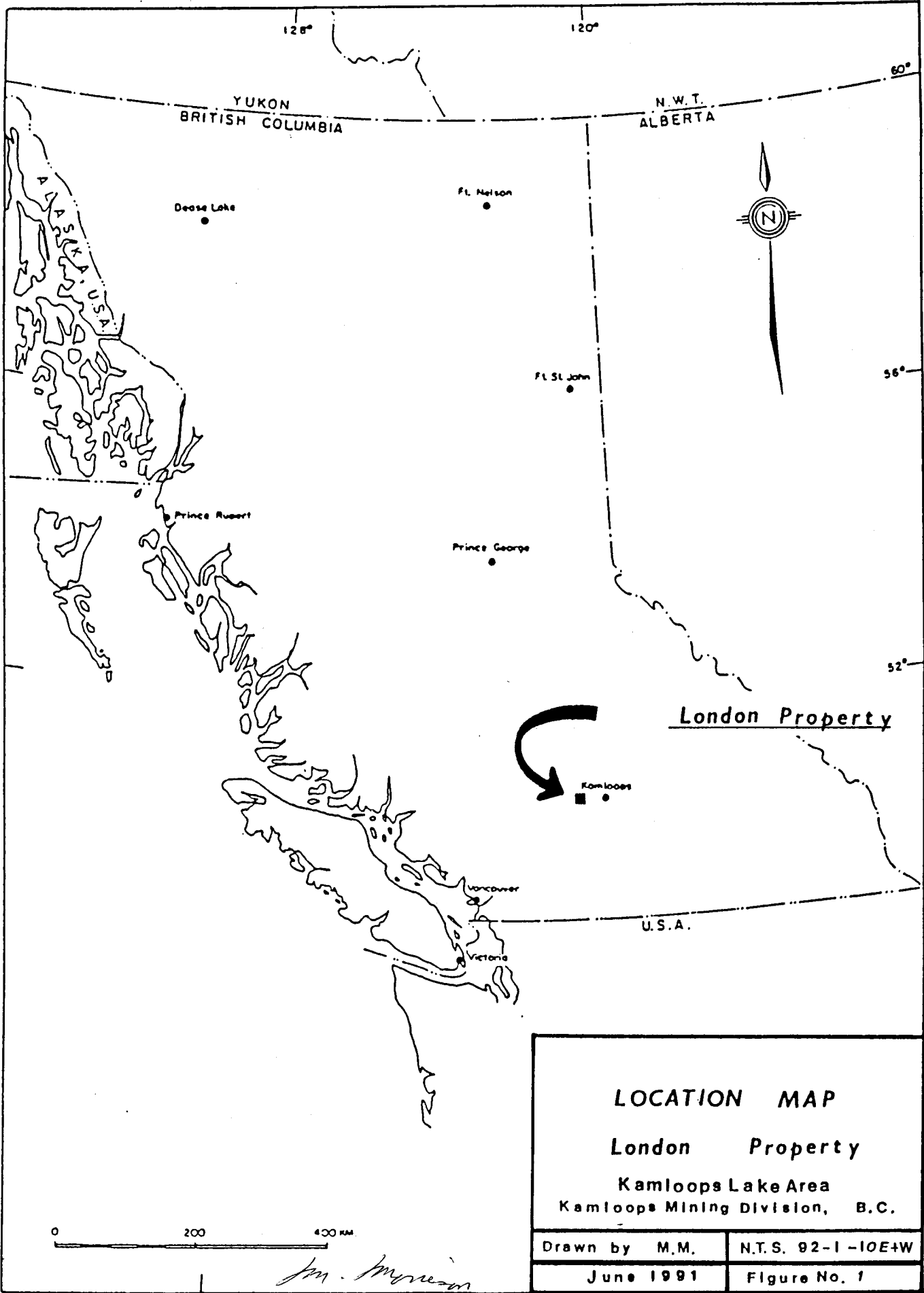
A recommendation has been made to extend the magnetic survey to the boundaries of the property to trace out the fault, and to expand the survey to the east to delineate the felsic intrusion.

Backhoe trenching of both stibnite occurrences is also recommended with follow-up drilling of each occurrence if warranted.

Continued . . .

SUMMARY - Continued

The ultimate target of exploration on the property is precious metal mineralization at shallow depth below the stibnite mineralization within the silicified shear zones. A similar shear zone at the "Newmont Showing", 2 km southeast of the London property, yields average gold values of 3.2 g/tonne and silver values of 65 g/tonne.



LOCATION MAP

London Property

**Kamloops Lake Area
Kamloops Mining Division, B.C.**

Drawn by M.M.

N.T.S. 92-1-10E+W

June 1991

Figure No. 1

Jan. Morrison

INTRODUCTION

This report, written for government assessment work requirements, discusses the results of a ground magnetometer survey conducted over portions of the London 2-4 mineral claims by the writer during April-May, 1991.

The London Claim Group, comprised of 4 mineral claims (9 units), all owned by F. Hunt of Kelowna, B.C., covers ground in the immediate vicinity of Pat Lake, a small fishing lake located 2 km south of Kamloops Lake, 35 km west of Kamloops, B.C.

Several small carbonate/silica replacement zones occur within volcanic derived metasediments of the Upper Triassic Nicola Group which underlie much of the property. At least two silica replacement zones contain stibnite mineralization in amounts of up to 10% over four square metres.

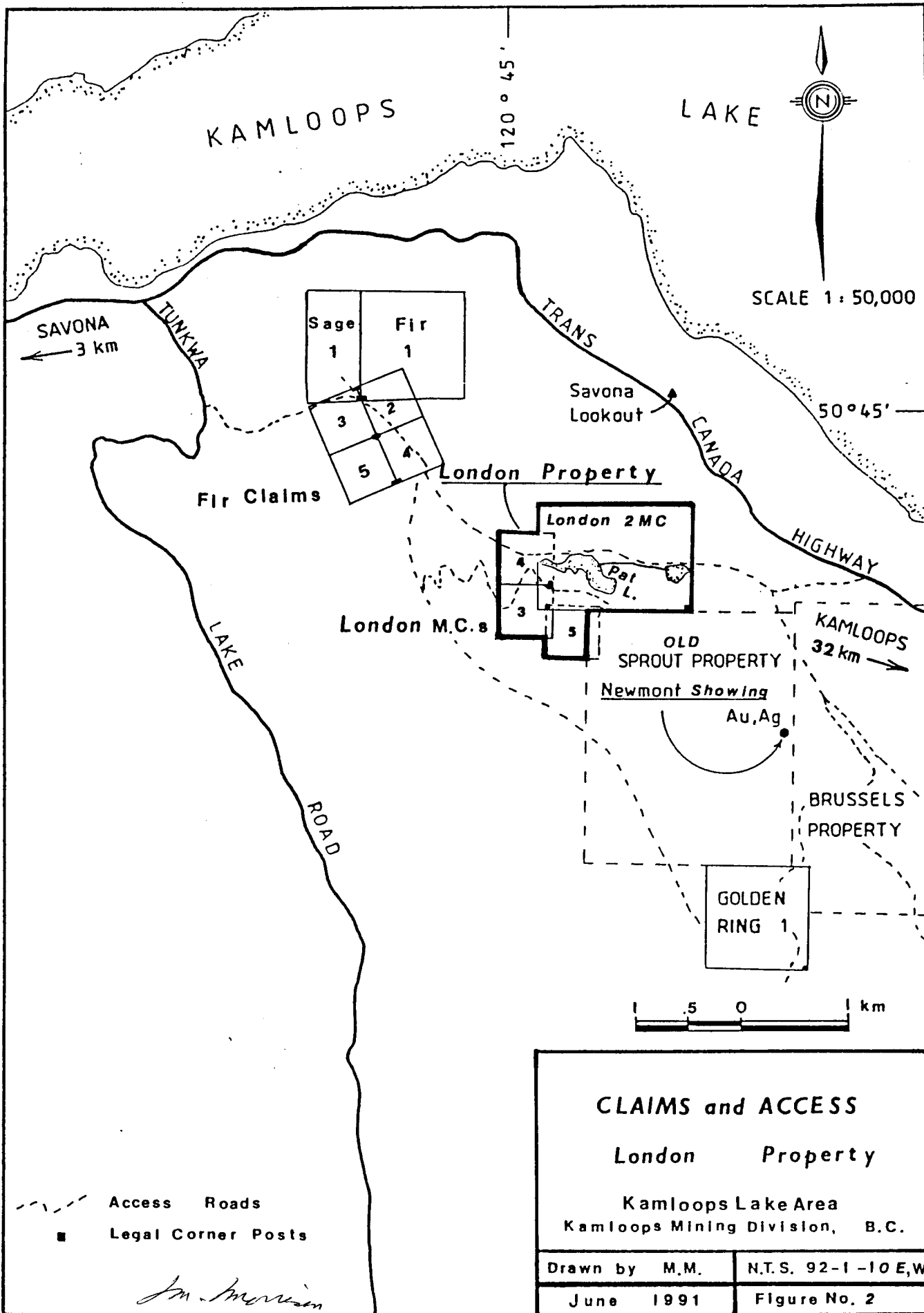
Although the property has not been mapped geologically it is believed that the silicification and stibnite mineralization are related to quartz-eye porphyry felsic intrusives that have been seen to intrude the metasediments at scattered locations across the property. It is considered that the stibnite occurrences may represent the upper (low temperature) mineralization of epithermal vein systems that could host precious metals at depth.

This year's (1991) ground magnetometer survey was conducted over the known mineralized zones and surrounding territory in an attempt to magnetically identify the zones and project them into drift covered regions. The values obtained during the survey are displayed and contoured on Map L-91-1 accompanying this report.

LOCATION AND ACCESS

The London property is located at Pat Lake, 2 km south of Kamloops Lake, or 35 km west of Kamloops, B.C. (Lat. 50°44'; Long.

Continued . . .



CLAIMS and ACCESS

London Property

Kamloops Lake Area
Kamloops Mining Division, B.C.

Drawn by M.M.

N.T.S. 92-1-10 E,W

June 1991

Figure No. 2

J.M. Morrison

LOCATION AND ACCESS - Continued

120° 44'; N.T.S. Map 92-IOE&W). Access to the property is via the Pat Lake Road which leaves the Trans Canada Highway 32 km west of Kamloops as illustrated on Figure 2. An old logging road gives access to the portion of the property south of Pat Lake.

PHYSICAL FEATURES AND CLIMATE

The London property overlies a shallow valley occupied with two small lakes - the largest of which is Pat Lake (800 m in length). The valley at the 600 metre elevation lies just 2 km south of Kamloops Lake (350 metre elevation).

A light forest of Ponderosa pine, and Douglas fir covers the slopes of the main valley. Sagebrush is widespread across the property.

Low ridges and hummocks with exposed bedrock are common, while drift cover is generally light over the property.

The property falls within the desert climate typical of the lower elevation benches surrounding Kamloops Lake. Precipitation equals less than 30 cm annually and includes an average winter snow pack of 20 cm. The snow-cover lasts only from late November until early March.

CLAIM STATUS

The London 2-5 mineral claims, making up the London Claim Group, are 100% owned by Mrs. F. Hunt of Kelowna, B.C.. Particulars on the mineral claims, located within the Kamloops Mining Division are given on the following page:

Continued . . .

CLAIM STATUS - Continued

<u>CLAIM NAME</u>	<u>UNITS</u>	<u>DATE OF RECORD</u>	<u>RECORD NO.</u>	<u>EXPIRY * DATE</u>
London 2	6	Aug 3/88	7940	Aug 3/93
London 3	1	May 7/90	9288	May 7/92
London 4	1	May 7/90	9289	May 7/92
London 5	1	May 7/90	9290	May 7/92

* (New Expiry Date based on the acceptance of this report for Assessment Work Credits).

HISTORY

The London 2 mineral claim covers ground formerly covered by the Sprout 3 mineral claim owned by Newmont Exploration of Canada Ltd. During 1982 & 1983 crews of Newmont conducted reconnaissance geological mapping and widely spaced (25x100m) geochemical soil surveys over the Sprout 3 mineral claim. During the course of their work the crews rediscovered the Pat Lake stibnite occurrence in open sagebrush country just 50 metres from the shoreline of Pat Lake. Several years ago the showing had been exposed by shallow blasting over an area of 2 metres square by "the oldtimers". Newmont lost interest in the showing, and in the property generally, following negative gold assays from the stibnite mineralization. The London 2 mineral claim was subsequently staked in 1988 to cover the old stibnite showing.

During 1989 a small (58 sample) soil geochemical survey was conducted over the southwestern corner of the London 2 mineral claim by the writer. The survey covered the Pat Lake stibnite showing and involved the ICP testing of samples for 30 elements, plus mercury analysis by flameless Atomic Absorbtion.

In 1990, the London 3-5, 2-post, mineral claims were staked to adjoin the southwest corner of the London 2 mineral claim.

REGIONAL GEOLOGY AND MINERALIZATION

The regional geology of the Savona area is outlined on Figure 3 accompanying this report. The Savona Mercury Belt shows up as a series of mercury prospects that occur within Upper Triassic Nicola Group or Cretaceous (?) metavolcanics and metasediments in close proximity to Copper Creek Intrusions. The mercury showings are often associated with replacement zones within faulted country rock. The mercury content at the Savona mercury prospects is generally much less than 0.1% and non-economic, but the mercury is an indicator of strong epithermal systems.

Precious metals and base metals have been found within chalcody and quartz veins associated with the replacement zones which are believed to represent strong Late Cretaceous or Early Tertiary epithermal systems. Gold has been found at Criss Creek as illustrated on Figure 3.

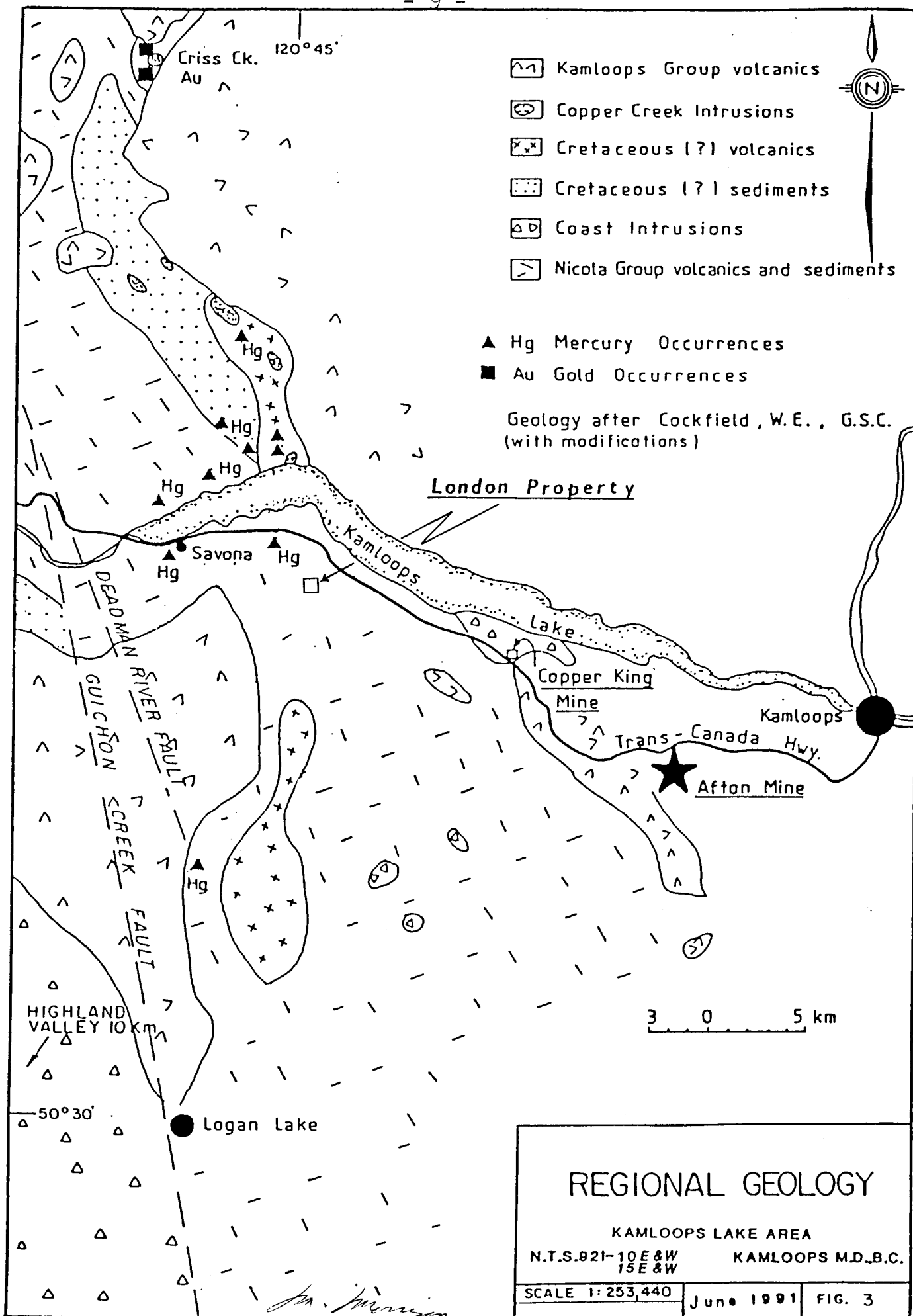
In 1982 Newmont Exploration of Vancouver discovered a silicified shear zone carrying pyrite, galena, and stibnite, with values in gold and silver, associated with a carbonate replacement zone within Nicola Group metasediments. The showing, titled the "Newmont Showing", on Figure 2 is located just 2 km southeast of the London property.

PROPERTY GEOLOGY

The London property has never been mapped in detail, but the writer has mapped the geology 1 to 2 km to the west and 2 to 4 km to the east and it is expected that the geology of the London property is similar. In general the region is underlain by metasediments of the Upper Triassic Nicola Group which on the London property strike slightly west of north.

The Nicola Group rocks are often cut by late faulting, and replacement of the rocks by carbonate (ankerite/dolomite) and/or

Continued . . .



REGIONAL GEOLOGY

KAMLOOPS LAKE AREA

N.T.S.921-10E&W
15E&W

KAMLOOPS M.D.,B.C.

SCALE 1:253,440	June 1991
FIG. 3	

PROPERTY GEOLOGY - Continued

silica occurs within fault zones. Quartz-eye-porphyry felsic intrusives of Late Cretaceous(?), or Early Tertiary(?) age are known to intrude the Nicola Group rocks on the London property, and are known to have a close association with replacement zones mapped by the writer on neighbouring properties (Morrison, 1991).

Two zones of strong silicification with associated stibnite mineralization occur on the London property. The Pat Lake stibnite occurrence at grid 12+50N, 4+00E is a 2.5 m wide highly silicified, brecciated, shear zone(070/88NW) that has been exposed for 3 m along strike by hand-trenching. The shear probably cuts and-estic derived metasediments of the Nicola Group. Stibnite mineralization equals 1-2% throughout the shear zone.

The second stibnite showing at grid 11+28N, 0+75W is represented by large (30 cm) angular pieces of float comprised of highly silicified rock containing 2 to 10% stibnite. The rock looks much like that at the Pat Lake showing. The rock is believed to represent a local occurrence that could be easily examined by trenching.

GROUND MAGNETOMETER SURVEY - 1991

A grid was established across the London 3&4 mineral claims and the southwestern corner of the London 2 mineral claim as outlined on Map L-91-1. The Baseline was established in a due north direction and flagged grid lines were then run perpendicular to the Baseline at 100 metre intervals. Stations were marked at each 25 metre measure along the grid lines. A Topolite belt chain and a Silva Ranger compass were used to establish the 700 metres of Baseline and 6.2 km of grid line. The grid was laid-out in conjunction with the ground magnetometer survey.

A Scintrex MF-2 Portable Fluxgate Magnetometer was used to survey the property. The magnetometer with a resolution of 5 gammas was considered suitable for the survey.

Continued . . .

GROUND MAGNETOMETER SURVEY - 1991 - Continued

Baseline station values were established by making a double traverse along the baseline on a day of slight diurnal variation. The baseline stations were then corrected for diurnal variations, and the corrected values were used during the survey.

Looped traverses were made along pairs of grid lines, starting and ending at baseline stations (usually within 2 to 3 hours), and corrections were made to all values for diurnal variations. During this year's survey intermediate readings were taken midway between all flagged grid stations in addition to the grid station readings to increase the detail of the survey. All of the corrected readings are plotted on the contoured magnetometer map, L-91-1, accompanying this report. A constant value of 50,000 gammas has been subtracted from all of the values on the map for ease of plotting and clarity.

DISCUSSION

Note: the following discussion refers to magnetic values plotted on Map L-91-1 and allows for the subtraction of 50,000 gammas from all values recorded during the survey.

The geology of the London Claim Group has never been mapped in detail, but some geological notes were made during the course of this year's magnetometer survey, and these notes, used in conjunction with the survey data illustrated on Map L-91-1, allow for some interpretation of the property geology.

The magnetic "texture" of Map L-91-1 suggests that the underlying Nicola Group metasediments probably strike slightly west of north.

Continued . . .

DISCUSSION - Continued

The magnetic features on Map L-91-1 can be correlated with geological, topographical or glacial features on the property. The following general observations have been made from west to east across the survey area:

1. the general magnetic low (to -380 gammas) near the western ends of grid lines 10N, 11N and 12N is associated with a valley in which the drift is believed to be deep, and therefore masks the true magnetics of the underlying geology;
2. the broad bands of high relief magnetics and complex contour patterns extending across the survey area from grid L12 to L17N from grid 4+00 to 6+00W, and also from grid L10 to L17N from grid 1+00 to 3+00W are associated with outcrop ridges made up of andesitic derived metasediments of the Nicola Group;
3. the band of lower relief magnetics between the two bands of high relief magnetics represents an area with deeper drift cover;
4. a second, wider, band of low magnetic relief crossing the property from grid 0+50W to 2+75E represents both an area of deeper drift cover, and one that is believed to be underlain with conglomerates and sandstones of mixed composition;
5. and finally, the magnetic "low" from grid 4+75E to 6+00E on L11N is believed to be coincident with an underlying felsic intrusion.

A distinct magnetic "low", which could represent a fault, crosses the entire survey area from L17N, 1+50W (-10 gammas) to L14N, 0+90W (-220 gammas), to L10N, 0+90W (-620 gammas). The magnetic "low" is interrupted from L13N, 0+80W (470 gammas) to L11N, 0+75W (330 gammas) with a narrow, linear magnetic "high".

Continued . . .

DISCUSSION - Continued

The narrow magnetic "high" within the linear magnetic low could represent a segment of dyke intruding the fault zone. A stibnite occurrence (see Property Geology) is located at grid 11+28N, 0+75W coincident with the southern end of the linear magnetic "high".

The Pat Lake stibnite occurrence at grid 12+50N, 4+00E (see Property Geology) lies within an area of high magnetic relief that is correlative with underlying andesitic derived meta-sediments. The 100x25 metre grid spacing of the survey does not define the silicified shear zone. However, an informal experimental survey over a 1x1 metre grid across the silicified shear zone did show a 300 gamma low compared with the surrounding country rock.

CONCLUSIONS AND RECOMMENDATIONS

The 1991 ground magnetic survey conducted over portions of the London 2-4 mineral claims indicates that the underlying geology is made up of both high relief and low relief magnetic metasediment units that probably strike slightly west of north.

The survey indicates that a fault may cross the property from L17N, 1+50W to L10N, 0+90W, and that a stibnite occurrence at grid 11+28N, 0+75W lies along the inferred fault.

An experimental magnetometer survey over the Pat Lake stibnite showing suggests that a 1x1 metre grid spacing is required to identify and delineate the occurrence. The survey showed that the silica replacement within the shear zone does show a 300 gamma low compared with the andesitic derived metasediments that make up the country rock.

Continued . . .

CONCLUSIONS AND RECOMMENDATIONS - Continued

It is recommended that a formal 1x1 metre grid be measured out in the vicinity of the Pat Lake stibnite occurrence, and that a magnetometer survey be conducted over the grid to trace the extent of the silicified shear zone below the thin cover of drift.

The magnetic survey should be expanded at a grid spacing of 25x100 metres in the vicinity of L11S at the southeast end of Pat Lake to delineate the extent of the felsic intrusion that is coincident with a magnetic "low". The survey should also be extended to the limits of the property north of L17N, 1+50W and south of L10N, 0+90W to define the limits of the fault inferred from this year's data.

A Backhoe trenching program should be conducted at each stibnite occurrence to trace the extent of the mineralization. Once the zones have been delineated, drilling should be considered to test for precious metal values below the stibnite horizon of the silicified shear zones.

Each of the stibnite occurrences is very accessible for trenching or drilling purposes.

June 28, 1991
Kelowna, B.C.


Murray S. Morrison - B.Sc.

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Division.**

Turner, J.A.

1984& Newmont Exploration of Canada Limited, geologist,
1985 (personal communication).

* G.S.C. = Geological Survey of Canada

** Assessment Reports filed with the Ministry of Energy, Mines
and Petroleum Resources of British Columbia.

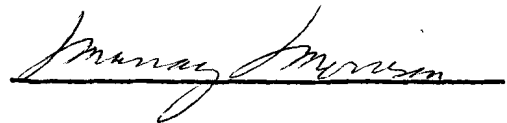
APPENDIX A

STATEMENT OF QUALIFICATIONS

I, Murray Morrison, of the City of Kelowna, in the Province of British Columbia, do hereby state that:

1. I graduated from the University of British Columbia in 1969 with a B.Sc. Degree in Geology.
2. I have been working in all phases of mining exploration in Canada for the past twenty-one years.
3. During the past twenty-one years, I have intermittently held responsible positions as a geologist with various mineral exploration companies in Canada.
4. I have examined many mineral properties in Southern British Columbia during the past twenty-one years.
5. I conducted the geophysical survey outlined in this report.

June 28, 1991
Kelowna, B.C.



Murray Morrison - B.Sc.

APPENDIX B

STATEMENT OF EXPENDITURES - ON THE LONDON CLAIM GROUP

Statement of Expenditures in connection with a Magnetometer Survey carried out on the London Claim Group, located 2 km south of Kamloops Lake, 35 km west of Kamloops, B.C. (N.T.S. Map 92-I-10E&W) for the year 1991.

Magnetometer Survey (6.2 km)


M. Morrison, geologist	4 days @ \$250.00/day	\$ 1000.
Truck, 4x4 (including gasoline and insurance)	4 days @ \$ 75.00/day	300.
Meals and Lodging	4 days @ \$ 55.00/day	220.
Flagging and belt chain thread		20.
Magnetometer Rental	4 days @ \$ 25.00/day	100.
	sub-total:	<u>\$ 1640.</u>

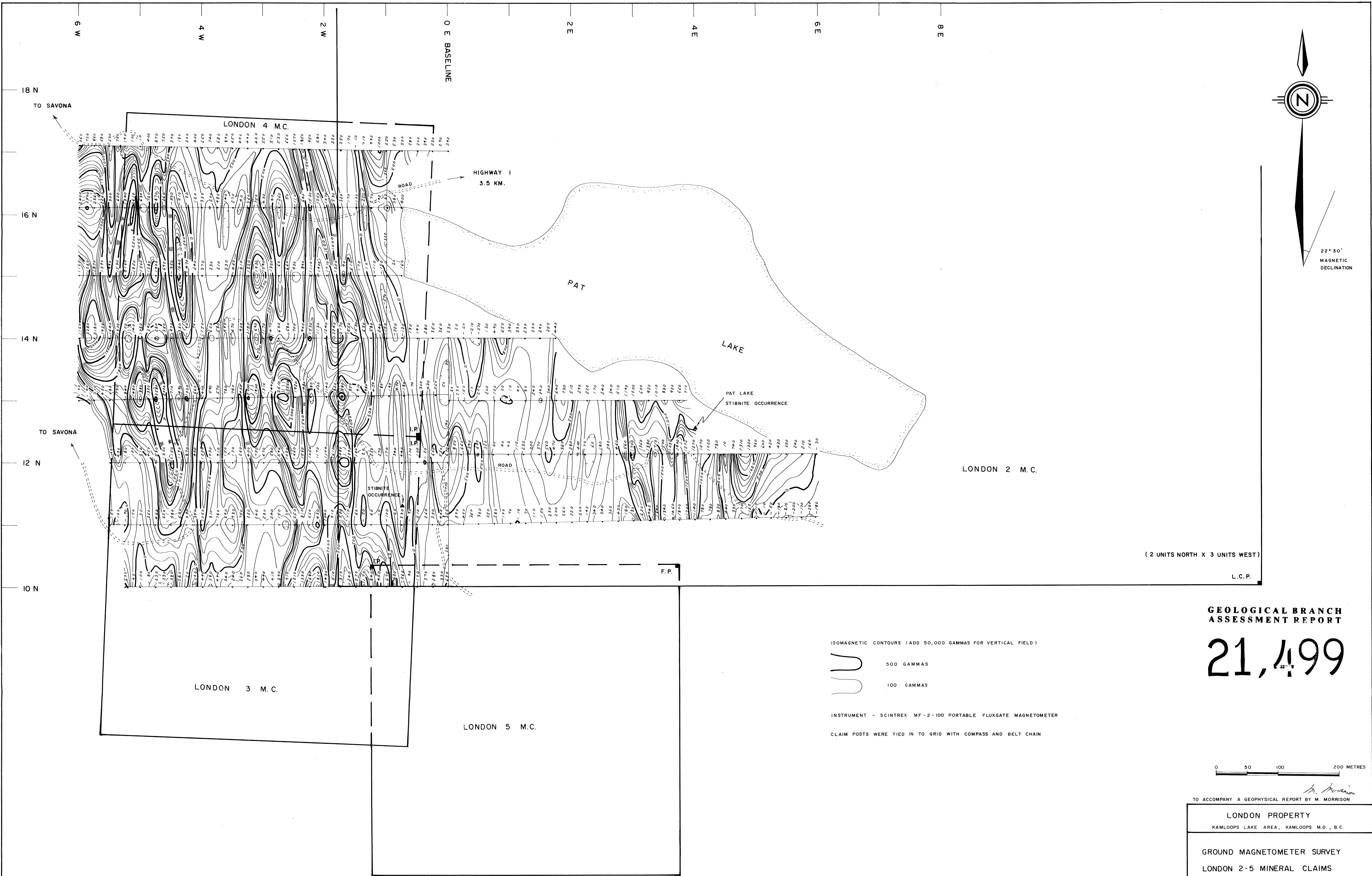
Report Preparation Costs

M. Morrison, geologist	1½ days @ \$250.00/day	\$ 375.
(correcting magnetometer readings for diurnal variation; plotting and contouring magnetometer readings; analyzing material and writing report)		
Drafting		35.
Typing		50.
Copying reports		20.
	sub-total:	<u>\$ 480.</u>
	<u>GRAND TOTAL:</u>	<u>\$ 2120.</u>

I hereby certify that the preceding statement is a true statement of monies expended in connection with the magnetometer survey carried out April 29 - May 2, 1991.

June 28, 1991


Murray Morrison - Geologist



(2 UNITS NORTH X 3 UNITS WEST)
L.C.P.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,499

ISOMAGNETIC CONTOURS (ADD 50,000 GAMMAS FOR VERTICAL FIELD)
 U 500 GAMMAS
 U 100 GAMMAS

INSTRUMENT - SCINTREX MF-2-100 PORTABLE FLUXGATE MAGNETOMETER
 CLAIM POSTS WERE TIED IN TO GRID WITH COMPASS AND BELT CHAIN

0 50 100 200 METRES

TO ACCOMPANY A GEOPHYSICAL REPORT BY M. MORRISON

LONDON PROPERTY KAMLOOPS LAKE AREA, KAMLOOPS M.D., B.C.		
GROUND MAGNETOMETER SURVEY LONDON 2-5 MINERAL CLAIMS		
SURVEY BY: M.M.	JUNE 1991	N.T.S. 92-1-10EBW
DRAWN BY: M.M.	SCALE 1:2500	MAP L-91-1