

ARIS SUMMARY SHEET

District Geologist, Kamloops

Off Confidential: 90.02.23

ASSESSMENT REPORT 18832

MINING DIVISION: Kamloops

PROPERTY: Golden Lime

LOCATION: LAT 50 43 00 LONG 120 42 00
UTM 10 5620622 662367
NTS 092I10E

CAMP: 017 Copper Creek Area

CLAIM(S): Golden Lime 1-2

OPERATOR(S): Morrison, M.S.

AUTHOR(S): Morrison, M.S.

REPORT YEAR: 1989, 17 Pages

COMMODITIES

SEARCHED FOR: Gold, Silver

KEYWORDS: Triassic, Nicola Group, Andesites, Basalts, Silicification
Carbonatization, Quartz Veins

WORK

DONE: Geophysical

MAGG 4.8 km

Map(s) - 1; Scale(s) - 1:2500

RELATED

REPORTS: 10187

LOG NO: 0615 RD.

ACTION:

FILE NO:

GEOPHYSICAL
ASSESSMENT REPORT

on the

GOLDEN LIME 1&2 MINERAL CLAIMS

FILMED

KAMLOOPS LAKE AREA

KAMLOOPS MINING DIVISION

by

MURRAY MORRISON, B.Sc.

Claims:

Golden Lime 1&2 (2 units)

Location:

The Golden Lime Mineral Claims are situated 2 km south of Kamloops Lake, 25 km due west of Kamloops, B.C.

Lat. 50°43'; Long. 120°42';

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

Owner:

Murray Morrison

Operator:

Murray Morrison

Date Started:

February 21, 1989

Date Completed:

February 22, 1989

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

Kelowna, B.C.

May 31, 1989

18,832

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MAP GL-89-1	GROUND MAGNETOMETER SURVEY GOLDEN LIME 1&2 MINERAL CLAIMS	in pocket

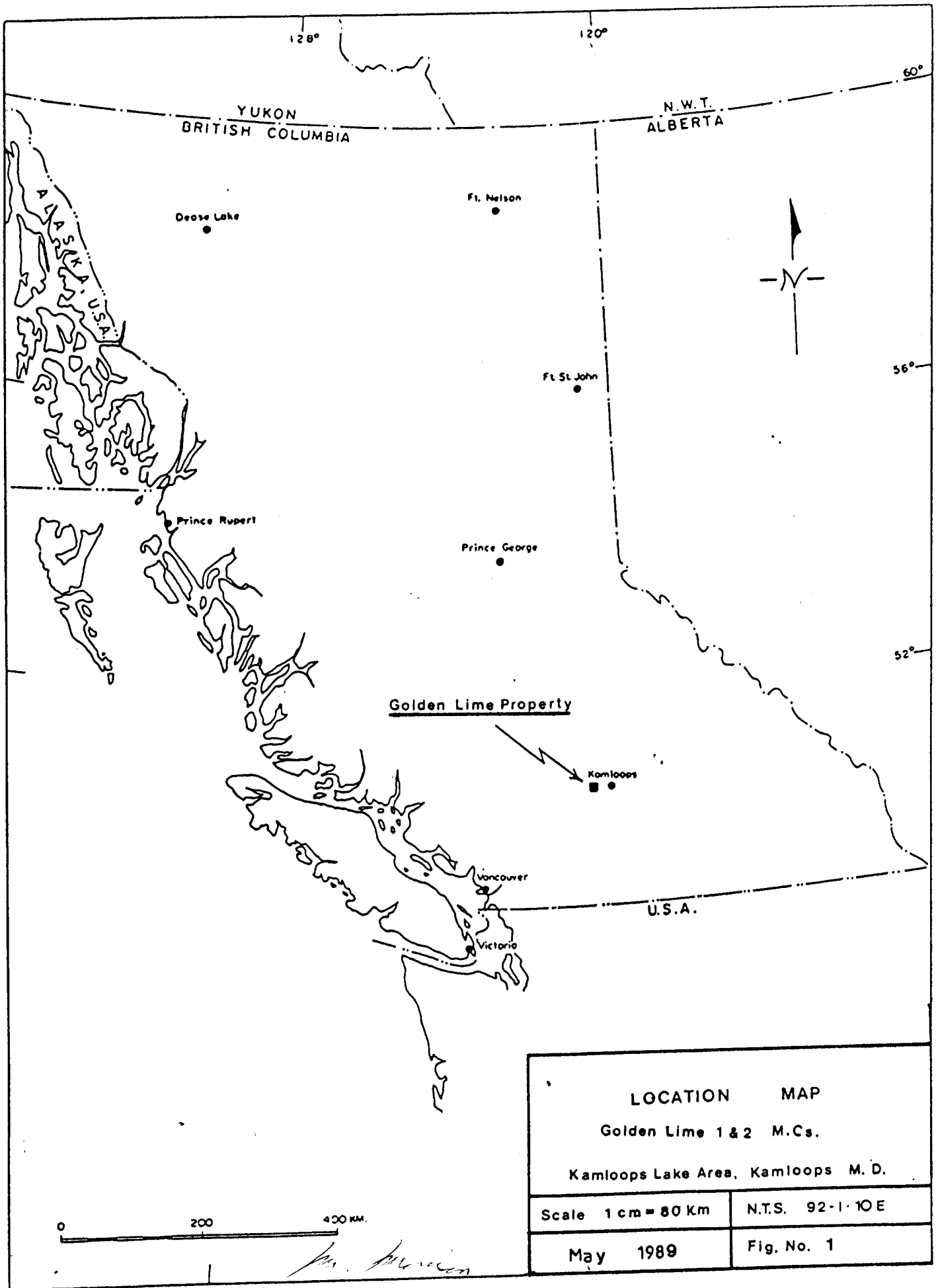
SUMMARY

The Golden Lime Property located 2 km south of Kamloops Lake, or 25 km due west of Kamloops hosts a large carbonate/silica replacement zone which is believed to represent the upper (low temperature) horizon of a strong epithermal system that may contain precious metal values at depth.

The property, staked by the writer in March, 1981, has been optioned to Placer Development (1981-1984) and to Goldstone Exploration Ltd. (1984-1988), both of Vancouver. Placer Development conducted a widely-spaced soil geochemical survey over the property in 1981, and in 1984 allowed their option to lapse. Goldstone Exploration Ltd. drilled one vertical reverse circulation drill hole into the main replacement zone on the Golden Lime #1 mineral claim, and proved that the zone extends to 80 metres in depth. However, the precious metal content of the replacement zone was low and Goldstone Exploration allowed their option to lapse.

During February of this year (1989) a ground magnetometer survey was conducted over the Golden Lime 1&2 mineral claims in an attempt to outline the full extent of the replacement zone beyond its outcrop expression. To this end, the magnetic data suggests that the replacement zone, represented by a magnetic low, may extend as much as 200 metres southeast of the carbonate (ankeritic) outcropping. The data also indicates that the replacement zone may be coincident with a fault defining the western side of the main valley and crossing the property at 325 degrees.

It is recommended that further magnetometer readings be conducted across the newly defined 325 degree fault to reinforce the present data. It is also recommended that further reverse circulation drilling be conducted on the main replacement zone on the Golden Lime #1 mineral claim, because the single vertical hole drilled in 1985 is not considered adequate to properly test the very strong and sizeable carbonate/silica replacement zone as represented in outcrop or as inferred from this year's magnetometer survey.



INTRODUCTION

This report, written for government assessment work requirements, discusses the results of a ground magnetometer survey conducted on the Golden Lime 1&2 mineral claims by the writer during February, 1989.

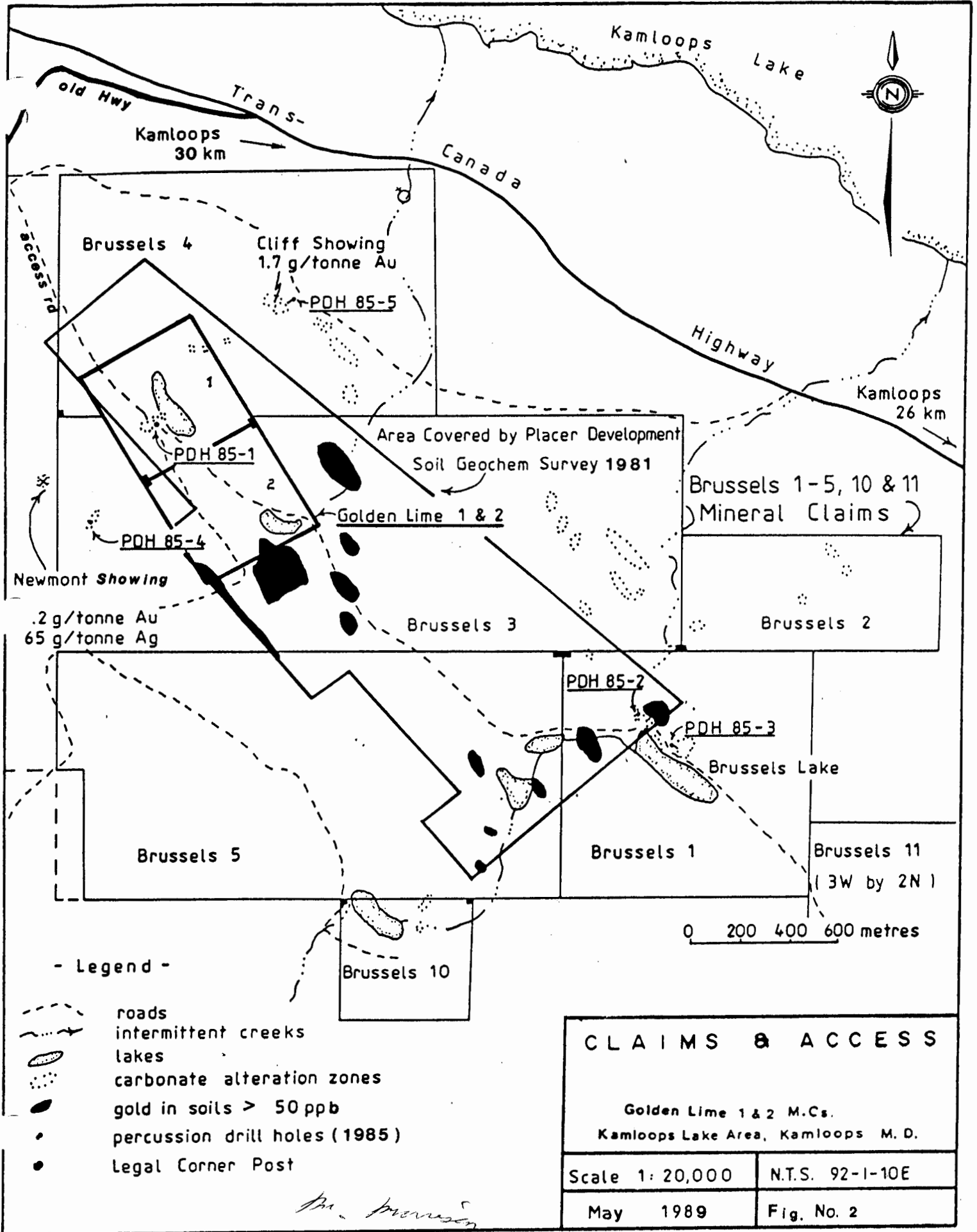
The Golden Lime 1&2, two-post mineral claims, owned by the writer, fall within the boundaries of a larger claim group, "the Brussels Claim Group," also owned by the writer. The Brussels Claim Group is comprised of 7, four-post mineral claims (37 units), located 2 km south of Kamloops Lake, 25 km due west of Kamloops, B.C.

The large claim group was staked by the writer in 1981 to cover a system of highly faulted and carbonate altered zones occurring within metasedimentary and metavolcanic rocks of the Upper Triassic Nicola Group. The Golden Lime 1&2 mineral claims, in particular, cover a zone of intensely faulted and altered rock measuring at least 30x70 metres in surface dimensions and extending 80 metres in depth (Morrison, 1986).

Drilling in 1985 proved that some of the carbonate alteration zones cap strong silica replacement zones that are believed to represent the upper (low temperature) horizons of large epithermal systems. The property was originally staked with the belief that some of the epithermal systems could host precious metals at depth.

This year's magnetometer survey was conducted to differentiate carbonate-silica alteration zones from unaltered Nicola metasediments and metavolcanics. The alteration zones were expected to have a low magnetic content when compared with the high magnetite content of the Nicola Group basalts and andesites and related metasediments.

The results of the magnetometer survey are discussed within this report, while the values obtained during the survey are displayed on Map GL-89-1 accompanying this report.



- Legend -

- roads
- intermittent creeks
- lakes
- carbonate alteration zones
- gold in soils > 50 ppb
- percussion drill holes (1985)
- Legal Corner Post

CLAIMS & ACCESS

Golden Lime 1 & 2 M.C.s.
Kamloops Lake Area, Kamloops M.D.

Scale 1: 20,000	N.T.S. 92-1-10E
May 1989	Fig. No. 2

Dr. Morrison

LOCATION AND ACCESS

The Golden Lime 1&2 mineral claims lie 2 km south of Kamloops Lake, or 1 km south of the Trans-Canada Highway, 25 km due west of Kamloops, B.C. (Lat. 50°43'; Long. 120°42'; N.T.S. Map 92-I-10E). Access to the property is via a segment of old highway which leaves the Trans-Canada Highway at a point 30 km west of Kamloops, or 3 km southeast of the Savona Highway Lookout. An access road runs south 1 km from the old highway to the Golden Lime mineral claims as illustrated on Figure 2.

PHYSICAL FEATURES AND CLIMATE

The Golden Lime mineral claims straddle a shallow, drift-filled, northwesterly trending valley at the 600 metre elevation, 2 km south of Kamloops Lake (at 350 m elv.). Vegetation on the property is typical of that at low elevations near Kamloops Lake with sagebrush being dominant, Ponderosa pine being widely spaced, and thick groves of Douglas fir being restricted to northeastern slopes. The region adjacent Kamloops lake is semi-arid with precipitation equalling less than 30 cm per year.

Winter snow rarely accumulates to more than 30 cm on the property and covers the ground from late November until early March.

The land supports grazing cattle throughout the summer season with the lake near the southeastern corner of the Golden Lime 2 mineral claim providing drinking water.

CLAIM STATUS

The Golden Lime 1&2 mineral claims are 2-post mineral claims which were staked by the writer on March 16, 1981. They were recorded in the Kamloops Mining Division March 16, 1981 and were given record numbers 3328 and 3329 respectively. The claims are presently owned 100% by the writer, M. Morrison of Kelowna, B.C.

Continued . . .

CLAIM STATUS - Continued

The position of the Initial Post for the Golden Lime 1&2 was verified by a government Claims Inspector in 1981.

The Golden Lime 1&2, two-post, mineral claims have been entirely overstaked by the Brussels 3&4 modified grid mineral claims, also owned by the writer.

HISTORY

The Golden Lime 1&2 mineral claims were staked by the writer March 16, 1981 to cover a large rusty carbonate alteration zone found within Nicola Group rocks during routine prospecting. The mineral claims (as part of the larger Brussels Group of Claims) were optioned to Placer Development Ltd. soon after staking.

During 1981 crews from Placer Development Ltd. conducted a widely spaced (25x100 to 250 metre) soil geochemical survey over the property. Elements typical of epithermal systems (mercury, antimony, and arsenic) were found in moderate concentrations on and near the Golden Lime mineral claims, but no follow-up programs were conducted by Placer Development Ltd. and the mineral claims were returned to the writer in April, 1984.

The property was next optioned to Goldstone Exploration Ltd. of Vancouver in May 1984, and during May 1985 Goldstone Exploration conducted a reverse circulation percussion drill program on their Brussels property with one drill hole of 86.0 metres being drilled into the carbonate alteration zone on the Golden Lime 1 mineral claim. The drill hole intercepted 79.9 metres of intensely carbonate and/or silica replaced Nicola metavolcanics before passing into a quartz monzonite intrusive. No significant precious metals were encountered in the drill hole. Goldstone Exploration allowed their option to lapse in 1988.

No further work was conducted on the property until this year's (1989) magnetometer survey.

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.

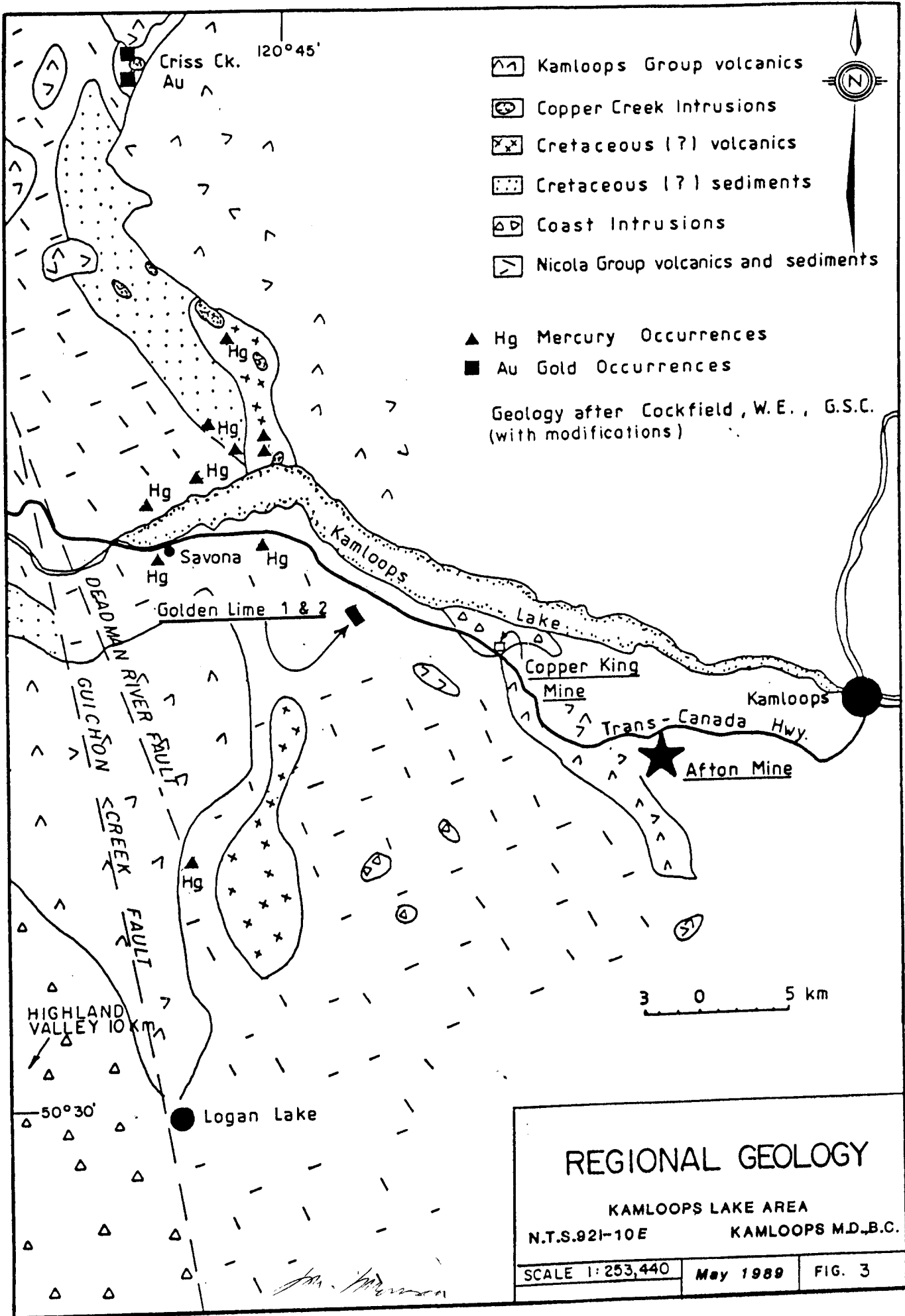
Precious metals and base metals have been found within chalcedony and quartz veins associated with the alteration zones which are believed to represent strong Late Cretaceous or Early Tertiary epithermal systems. Gold has been found at Criss Creek as illustrated on Figure 3.

In 1982 Newmont Exploration of Vancouver discovered a silicified zone carrying pyrite, galena, and stibnite, with values in gold and silver, associated with a carbonate alteration zone within Nicola Group volcanics. The Newmont showing, illustrated on Figure 2, is located just 100 metres west of the west boundary of the Brussels 4 mineral claim. Another zone of anomalous gold (1755 ppb) and arsenic (400 ppm) mineralization occurs within carbonate altered Nicola Group volcanics on a steep bluff on the Brussels 4 mineral claim.

PROPERTY GEOLOGY

The geology of the Golden Lime mineral claims has never been mapped in detail, but it appears that the property is underlain by metasediments and metavolcanics of the Upper Triassic Nicola Group that trend northwesterly across the property.

Continued . . .



PROPERTY GEOLOGY - Continued

Wide (100 to 200 metre) sequences of volcanic derived conglomerates and sandstones are believed to cross the property. Some sequences are made up primarily of clasts of olivine basalt, while others are made up predominantly of clasts of amygdaloidal andesite. Both rock types are cut by late faulting, and are locally intensely altered or replaced by carbonate (ankerite and dolomite) and/or silica. Late veining of ankerite or dolomite equals up to 5% of the alteration zones. Quartz veining or silicification are rare on surface, but in the 1985 R.C.D.H. #1 were found to equal up to 5% and 50% respectively below surface (Morrison, 1986).

The main faulted and carbonate/silica replaced occurrence on the Golden Lime 1 mineral claim measures at least 30 by 70 metres on surface and was found to occur to a depth of 79.9 metres in R.C.D.H. #1. Although precious metal values and indicator elements (antimony and arsenic) values were very low in R.C.D.H. #1 the hole did encounter intense carbonate and silica replacement and some quartz veining. It is the writer's opinion that the vertical drill hole may have been drilled parallel to an epithermal stockwork system that should be tested with additional drilling.

GROUND MAGNETOMETER SURVEY - 1989

A grid was established across the Golden Lime mineral claim as outlined on Map GL-89-1. A baseline of 900 metres was flagged along the centre of the shallow valley passing through the claims at 320 degrees. The grid lines, totalling 4.8 km, were then flagged at 100 metre intervals at right angles to the baseline. Stations were identified at each 25 metre measure along the grid lines. A Topolite belt chain and a Silva Ranger compass were used to establish the grid which was laid-out in conjunction with the ground magnetometer survey.

Continued . . .

GROUND MAGNETOMETER SURVEY - 1989 - Continued

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.

Baseline station values were established by making a double traverse along the baseline on a day of slight diurnal variation. The baseline stations were 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 30 to 60 minutes), and corrections were made to all values for diurnal variation. 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, GL-89-1, accompanying this report. A constant 50,000 gammas has been subtracted from all of the values on the map for ease of plotting and clarity.

DISCUSSION - MAGNETOMETER SURVEY

As mentioned earlier within this report it was hoped that the magnetometer survey would prove to be useful in distinguishing carbonate/silica replacement zones (such as the RCDH 8 5-1 zone) from magnetite-rich country rock. In theory, the magnetite content of the replacement zones should be substantially reduced, whereas the magnetite content of unaltered basaltic and andesitic derived sediments should remain high. The importance of the magnetic survey in outlining the replacement zones lies in the belief that the replacement zones represent the upper horizons of strong epithermal systems that could contain precious metals at depth. The success of the survey in defining replacement zones will be discussed after a few comments on the survey in general.

It was noted during the survey that the depth of overburden has a great effect on the magnetometer readings across the property.

Continued . . .

DISCUSSION - MAGNETOMETER SURVEY - Continued

Most values in excess of 2000 gammas are coincident with outcrop of basaltic or andesitic derived sediments, while values in excess of 1500 gammas correlate with ridges that are believed to represent bedrock at shallow depth.

Regions of relatively low magnetic relief, such as the northwestern and northeastern corners of the Golden Lime 1 mineral claim, the southwestern corner of the Golden Lime 2 mineral claim, and the main valley running subparallel to the baseline, across both mineral claims, are all coincident with areas of deep overburden.

In detail, a narrow zone crossing the eastern side of the grid from L9S to L16S with values greater than 2000 gammas (see Map GL-89-1) appears to represent a basaltic-rich sedimentary bed of the Nicola Group that has a strike of 315 degrees, and which may be offset by 30 metres east-west just north of L12S.

West of the baseline the magnetic data suggests that the Nicola Group rocks strike at 320 to 325 degrees.

The distinct steepening of the magnetic gradient west of the baseline coincides with the western edge of the main valley crossing the property, and it is believed that a fault may occur at this location. Low magnetic values extend along the western edge of the valley from L16S to L9S and include a magnetic "low" coincident with the RCDH 85-1 replacement zone.

The RCDH 85-1 replacement zone shows up as a magnetic low (205 gammas) on L10S. The magnetic low extends 200 metres southeast to L12S (85 gammas), and it is believed that it may represent a continuation of the replacement zone below the drift covered western side of the main valley. Unfortunately, the main valley itself displays low magnetic values and low magnetic relief, and it may be dangerous to try to interpret too much from the results of the magnetic survey at this point in time.

A series of magnetic lows extending 400 metres from L9S to L14S possibly represent a second fault striking at 300 degrees across the property.

CONCLUSIONS AND RECOMMENDATIONS

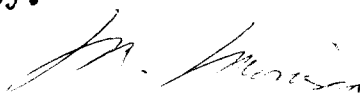
This year's magnetometer survey on the Golden Lime 1&2 mineral claims has yielded data useful for the interpretation of the property geology, although the geology has not yet been mapped in detail.

First of all, the magnetometer readings appear to give some indication as to the depth of glacial drift covering large portions of the property. Secondly, the magnetic data suggests that the Nicola Group metasediments underlying the property strike at 315 to 325 degrees across the property. Thirdly, two faults have been inferred from the magnetic data (see Discussion). Finally, the RCDH 85-1 replacement zone is represented by a magnetic low that extends southeasterly well beyond the site of reverse circulation drill hole 85-1, suggesting that the replacement zone may be much larger than that indicated by outcrop. The zone may coincide with a fault extending 600 metres southeast to L16S (see Discussion), and thus represent a vastly expanded epithermal target zone for drilling.

Further magnetometer readings should be measured on intermediate grid lines west of the baseline from L9S to L16S in an attempt to document the existence of the fault on the western side of the main valley.

The RCDH 85-1 replacement zone is worthy of further drilling in that it represents a very strong and sizeable zone of carbonate and silica replacement that was not adequately tested with the single vertical drill hole in 1985. Precious metal values found 500 metres to the southwest and 700 metres to the northeast of RCDH 85-1 (see Figure 2) within similarly replaced Nicola Group rocks indicate a high potential for the discovery of precious metals on the Golden Lime property.

May 31, 1989
Kelowna, B.C.



M. Morrison, B.Sc.

REFERENCES

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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 nineteen years.
3. During the past nineteen 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 nineteen years.
5. I conducted the Magnetometer Survey outlined in this report.
6. I own a 100% interest in the Golden Lime 1&2 mineral claims.

May 31, 1989
Kelowna, B.C .


Murray Morrison - B.Sc.

APPENDIX "B"

STATEMENT OF EXPENDITURES - ON THE GOLDEN LIME 1&2 MINERAL CLAIMS

Statement of Expenditures in connection with the Magnetometer Survey carried out on the Golden Lime 1&2 mineral claims, located at Kamloops Lake, 25 km west of Kamloops, B.C. (N.T.S. Map 92-I-10E) for the year, 1989.

FIELDWORK - MAGNETOMETER SURVEY (4.8 km)


M. Morrison, geologist	2 days @ \$225.00/day	\$ 450.
Truck, 4x4 (incl. gasoline)	2 days @ \$ 70.00/day	140.
Meals and Lodging	2 days @ \$ 50.00/day	100.
Magnetometer Rental	2 days @ \$ 25.00/day	50.
	Sub-total:	<u>\$ 740.</u>

REPORT PREPARATION COSTS

M. Morrison, geologist	1 day @ \$225.00/day	\$ 225.
(correcting magnetometer readings for diurnal variations, plotting and contouring values, and writing report).		
Drafting		00.
Typing		00.
Copying reports		20.
	Sub-total:	<u>\$ 245.</u>
	<u>GRAND TOTAL:</u>	<u><u>\$ 985.</u></u>

I hereby certify that the preceding statement is a true statement of monies expended in connection with the Magnetometer Survey carried out February 21-22, 1989.

May 31, 1989

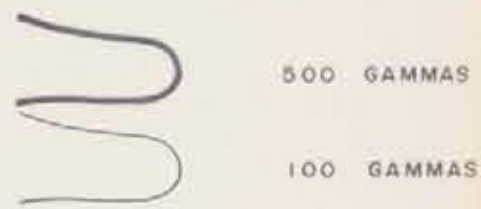

Murray Morrison
Murray Morrison - Geologist



MAGNETIC DECLINATION 22° 30'



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



INSTRUMENT - SCINTREX MF-2-100 PORTABLE FLUXGATE MAGNETOMETER

CLAIM POSTS WERE TIED-IN TO GRID WITH COMPASS AND BELT CHAIN

ACCESS ROADS
GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,832
0 50 100 200 METRES

TO ACCOMPANY A GEOPHYSICAL REPORT BY M. MORRISON
GOLDEN LIME PROPERTY
KAMLOOPS LAKE AREA, KAMLOOPS M.D., B.C.

GROUND MAGNETOMETER SURVEY
GOLDEN LIME 1&2 MINERAL CLAIMS

SURVEY BY M.M.	MAY 1989	N.T.S. 92-I-10E
DRAWN BY M.M.	SCALE 1:2500	MAP GL-89-1