GEOPHYSICAL ASSESSMENT REPORT

on the

GOLD KEY CLAIM GROUP KAMLOOPS LAKE AREA KAMLOOPS MINING DIVISION

by

MURRAY S. MORRISON, B.Sc.

<u>CLAIMS</u> :	Golden Lime 1&2, Gold Key 1-14, 16, 17 and Gold Key 15 FR
	(19 units).
LOCATION:	The Gold Key Claim Group is situated 2 km south of Kamloops
	Lake, 25 km due west of Kamloops, B.C.
	Lat. 50°43'; Long. 120°41';
	N.T.S.: 92-I-10E
OWNER:	Murray Morrison
OPERATOR:	Murray Morrison
DATE STARTED:	March 8, 1998
DATE COMPLETED:	March 11, 1998
	GEOLOGICAL SURVEY BRANCH

ASSESSMENT REPORT

Kelowna, B.C.

June 1, 1998

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SUMMARY

The Gold Key Claim Group located 2 to 3 km south of Kamloops Lake, or 25 km due west of Kamloops hosts several carbonate/silica replacement zones within Upper Triassic Nicola Group volcano-clastic metasediments. The zones are believed to represent the upper (low temperature) horizons of strong late Cretaceous(?), or Early Tertiary(?) epithermal systems that could contain precious metal values at depth.

The property, owned by the writer, overlies ground previously covered by the Brussels Claim Group. The Brussels Claim Group was explored over a period of eleven years by Placer Development (1981-84), Goldstone Explorations Ltd. (1984-88) and the writer, (1989-92).

Placer Development conducted a widely-spaced soil geochemical survey in 1981, and discovered several areas across the property with elevated mercury, arsenic, antimony and gold values. Placer Development carried out limited follow-up work and allowed their option to lapse in 1984. During 1984, lithogeochemical samples collected by Goldstone Explorations Ltd. yielded elevated values for the same elements that were discovered by Placer Development. In 1985 a Reverse Circulation Percussion drilling program carried out by Goldstone Explorations tested five widely separated targets across the property with one drill hole each. Two strong zones of carbonate/silica replacement were drilled over lengths of 80 metres, proving the size and strength of the zones, but precious metal values were found to be negligible and Goldstone Explorations abandoned the property in 1988.

A series of geochemical, geophysical (magnetometer) and geological surveys were conducted over the property by the writer from 1989 until 1992, and five key areas considered worthy of detailed exploration were identified.

A detailed geological mapping and sampling program was conducted over the Golden Lime 1 replacement zone in 1993 and in 1995 four more zones were mapped and sampled in detail.

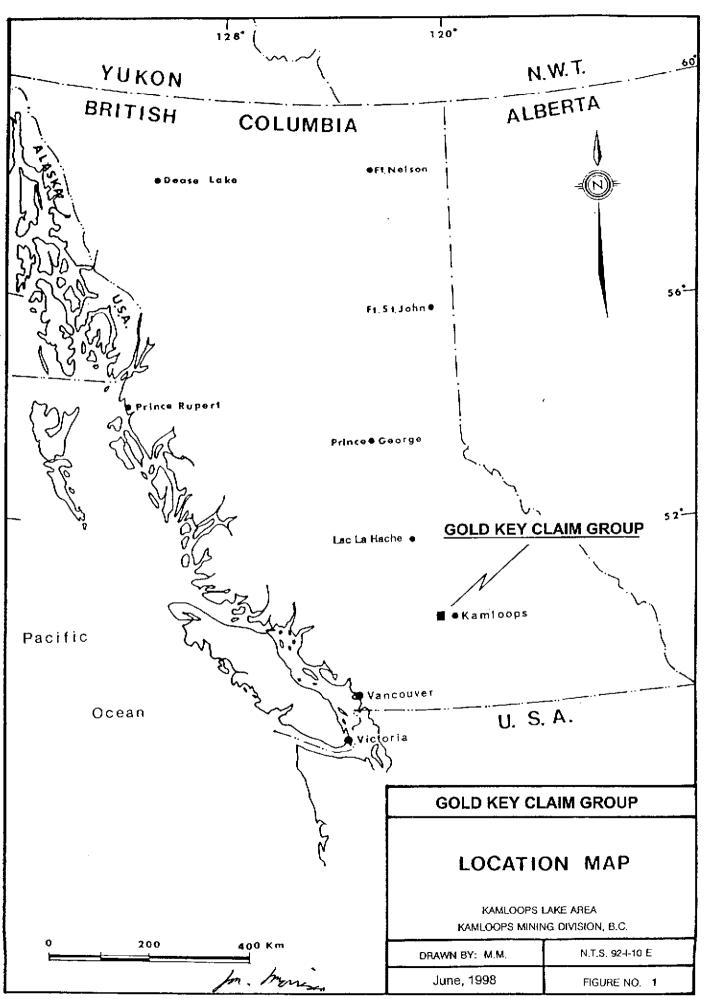
SUMMARY continued

The 1995 lithogeochemical sampling proved that only the uppermost horizons of the replacement zones (epithermal systems) have been exposed by erosion and that drilling will be required to test the zones for possible economic precious metal values at moderate depths.

The Newmont Showing, located immediately west of the Gold Key 5 mineral claim, is an example of a precious metal deposit that is associated with a relatively small carbonate replacement zone. A 1 metre wide shear zone at the Newmont Showing has been infilled with late quartz and chalcedony veins which contain 3 g/tonne gold and up to 180 g/tonne silver.

Several of the carbonate/silica replacement zones on the Gold Key Claim Group are much larger than that at the Newmont Showing and four have been selected for a Reverse Circulation Percussion drilling program to test for precious-metal-bearing siliceous stockwork "feeder" zones that could occur below the carbonate replacement zones.

One of the four main carbonate/silica replacement zones, the Brussels Lake Zone, was selected for this year's detailed ground magnetometer survey. The survey has outlined the zone as a distinct magnetic "low" which lies at the intersection of four inferred faults. The new survey confirms previous data which suggests that the Brussels Lake replacement zone is a high priority drill target.



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INTRODUCTION

This report, written for government assessment work requirements, discusses the results of a ground magnetometer survey conducted over portions of the Gold Key 3, 4, 13 & 14 mineral claims by the writer during March, 1998.

The mineral claims on which the survey was conducted are located on the southeastern portion of the Gold Key Claim Group that is comprised of a total of 19 contiguous 2-post mineral claims. The claim group is located 2 to 3 km south of Kamloops Lake, 25 km due west of Kamloops, B.C., and is owned by the writer, M. Morrison, of Kelowna, B.C.

Several zones of carbonate/silica replacement occur within faulted metasediments of the Upper Triassic Nicola Group on the property. These replacement zones have been the focus of attempts to locate epithermal previous metal deposits on the property over a period of years. Exploration has included geological, geochemical (soil and rock) and geophysical (magnetometer and VLF-EM) surveys (see References).

In 1985, five percussion drill holes were drilled at five widely separated sites to test the carbonate/silica replacement zones to depths of 80 metres for precious metals. To date, only moderately elevated concentrations of gold, silver, mercury, arsenic and antimony have been found on the property, although just a few tens of meters to the west of the property a shear zone located within similar geology contains 3 g/tonne gold and up to 180 g/tonne silver at the old Newmont Showing (see section on Regional Geology).

Geological mapping of the property by the writer during 1991 & 92 yielded evidence suggesting that several northwest, northeast and east-west trending faults cross the property and that these faults played a major role in the development of the carbonate/silica replacement zones.

INTRODUCTION continued

This year's ground magnetometer survey was centered over the Brussels Lake carbonate/silica replacement zone in an attempt to trace the zone into regions covered by overburden. There is good magnetic contrast between unaltered "andesitic" conglomerates and those that have been carbonate and/or silica replaced on the property, and it was hoped that this contrast would project through the overburden.

The magnetic values obtained during this year's survey are displayed and contoured on Map GK-98-1 which accompanies this report.

Map GK-95-1 which accompanied a 1995 Assessment Report has also been reproduced for this report, because it clearly illustrates the relationship between faulting and the replacement zones on the Gold Key Claim Group.

LOCATION AND ACCESS

The Gold Key Claim Group lies 2 to 3 km south of Kamloops Lake, or 1 to 2 km south of the Trans-Canada Highway, 25 km due west of Kamloops, B.C. (Lat. 50°43'; Long. 120°41'; 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 32 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 Gold Key Claim Group and several dirt roads give access to most areas of the Claim Group as illustrated on the Map GK-95-1.

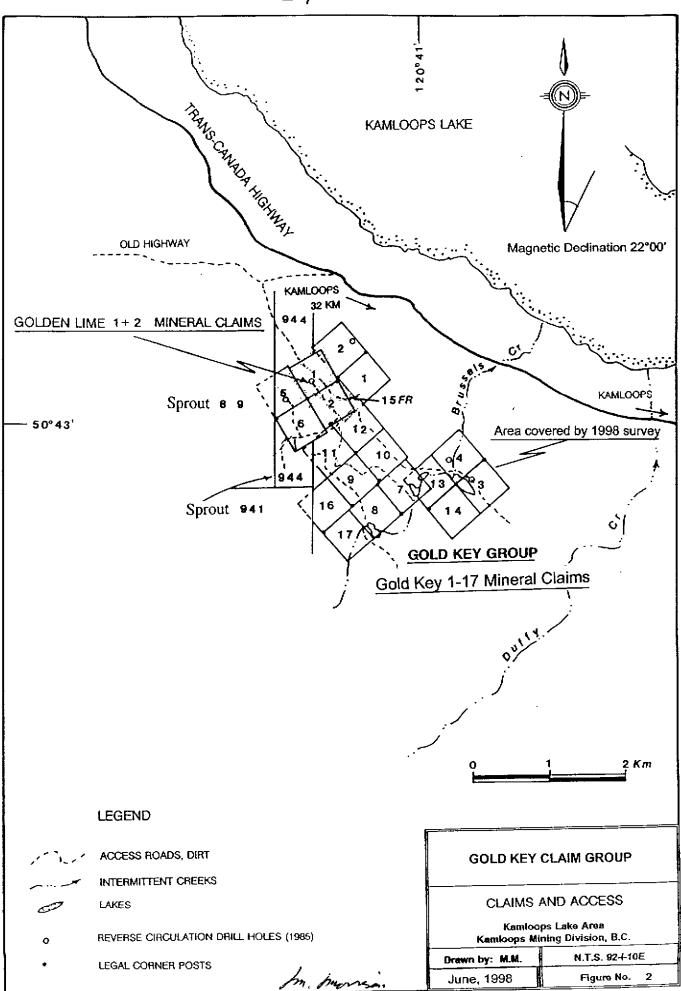
PHYSICAL FEATURES AND CLIMATE

The Gold Key Claim Group with an average elevation of 600 metres above sea level lies 2 to 3 km south of Kamloops Lake (350m elv.). The property features low relief with rounded rocky ridges and shallow, gravel-filled valleys. An exception to the rolling topography is a 150 metre bluff which crosses the eastern side of the property from northwest to southeast.

Vegetation on the property is typical of that of the bunch grass and sagebrush-covered hills that surround Kamloops Lake. Large Ponderosa pine also dot the landscape, while Douglas fir are restricted to thick groves on northeastern slopes where moisture is better retained.

The climate immediately adjacent Kamloops Lake is semi-arid. Precipitation equals less than 30 cm per year; much of it falling as late spring rain. The winter snow pack rarely exceeds 25 cm, and generally covers the property from late November until early March.

Several small lakes, deepened by the building of earthen dams, supply water for grazing cattle during summer months. One of the larger lakes is Brussels Lake, located on the Gold Key 3 & 4 mineral claims.



CLAIM STATUS

The Gold Key Claim Group is comprised of 18 contiguous 2-post mineral claims and one fractional mineral claim all staked and owned by the writer, M. Morrison of Kelowna, B.C. The mineral claims are located near Savona, B.C. in the Kamloops Mining Division and are listed in the Table that follows:

CLAIM <u>NAME</u>	<u>UNITS</u>	DATE OF <u>RECORD</u>	TENURE <u>NUMBER</u>	MINING <u>DIVISION</u>	EXPIRY* DATE
Golden Lime 1	1	Mar. 16/81	216982	Kamloops	Mar. 16/01
Golden Lime 2	1	Mar. 16/81	216983	Kamloops	Mar. 16/01
Gold Key 1	I	May 15/94	325691	Kamloops	May 15/99
Gold Key 2	1	May 15/94	325692	Kamloops	May 15/99
Gold Key 3	1	May 15/94	325693	Kamloops	May 15/00
Gold Key 4	1	May 15/94	325694	Kamloops	May 15/00
Gold Key 5	1	May 15/94	325695	Kamloops	May 15/00
Gold Key 6	1	May 15/94	325696	Kamloops	May 15/00
Gold Key 7	1	May 15/94	325697	Kamloops	May 15/99
Gold Key 8	1	May 15/94	325698	Kamloops	May 15/99
Gold Key 9	1	Mar. 22/95	334413	Kamloops	Mar. 22/99
Gold Key 10	1	Mar. 22/95	334414	Kamloops	Mar, 22/99
Gold Key 11	1	Mar. 22/95	334415	Kamloops	Mar. 22/99
Gold Key 12	1	Mar. 22/95	334416	Kamloops	Mar. 22/99
Gold Key 13	1	Mar. 22/95	334417	Kamloops	Mar. 22/99
Gold Key 14	1	Mar. 22/95	334418	Kamloops	Mar. 22/99
Gold Key 15 F	R. 1	Mar. 24/95	334805	Kamloops	Mar. 24/99
Gold Key 16	1	May 7/95	335438	Kamloops	May 7/99
Gold Key 17	1	May 7/95	335439	Kamloops	May 7/99

Note: the new Expiry Dates are based on the acceptance of this report for Assessment Work Credits.

CLAIM STATUS continued

It should be recognized that the northwest corner of the Gold Key 5 mineral claim overlaps ground covered by the pre-existing Sprout 89 mineral claim; that the northwest corner of the Gold Key 11 mineral claim overlaps a portion of the Sprout 944 mineral claim; and that the northwest corner of the Gold Key 16 mineral claim overlaps a portion of the Sprout 941 mineral claim (see Map GK-95-1).

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The Sprout mineral claims are not owned by the writer.

HISTORY

The Golden Lime 1 & 2 and Brussels 1-11 mineral claims (now partially covered by the Gold Key 1-17 mineral claims) were staked by the writer in March and April 1981 to cover several large rusty carbonate/silica replacement zones found within Nicola Group rocks during routine prospecting.

The ground was transferred to Placer Development Ltd. soon after staking and during 1981 crews from Placer Development Ltd. conducted a widely spaced (25 x 100 to 250 metre) soil geochemical survey over the central portion of the property. Elements typical of epithermal systems (mercury, antimony and arsenic) were found to occur in moderate concentrations on the Brussels 3 & 4 mineral claims, and gold was found on the Brussels 1 & 3 mineral claims, but no drilling was done 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 widely spaced reverse circulation percussion drill program across the Brussels property (see drill hole locations on Map GK-95-1). Drill holes 85-1 and 85-4 encountered up to 80 metres of intensely carbonate and/or silica replaced Nicola metasediments, but no significant precious metal values were encountered during the drill program and in 1988 Goldstone Exploration allowed their option to lapse.

Since 1989 the writer has conducted a series of geochemical, geophysical (magnetometer) and geological surveys over portions of the Golden Lime 1 & 2 and Brussels 1-11 mineral claims in an attempt to develop drill targets on the property (see References).

The Brussels Claim Group was allowed to lapse in 1992, and portions of the ground have subsequently been restaked as the Gold Key 1-17 mineral claims by the writer in 1994 & 95.

<u>HISTORY</u> continued

Detailed geological mapping and lithogeochemical sampling was conducted over some of the larger replacement zones on the Gold Key 1, 3, 5 & 7 mineral claims by the writer in 1995, and a ground magnetometer survey was conducted over portions of the Gold Key 7 & 8 mineral claims in 1996 (Morrison, 1995 & 96). In 1997 a VLF-EM survey was conducted over portions of the Golden Lime 1 & 2 and Gold Key 2, 5, 12 & 15 FR mineral claims (Morrison, 1997).

REGIONAL GEOLOGY AND MINERALIZATION

The Savona Mercury Belt, illustrated on Figure 3 accompanying this report, extends 50 km from Criss Creek on the North, to Tunkwa Lake on the South. Several of the historic mercury occurrences are located within a 15 km radius of Savona near the western end of Kamloops Lake.

The map indicates that the mercury prospects occur within either Upper Triassic Nicola Group or Cretaceous(?) metavolcanics and metasediments that lie in close proximity to the Copper Creek Intrusions.

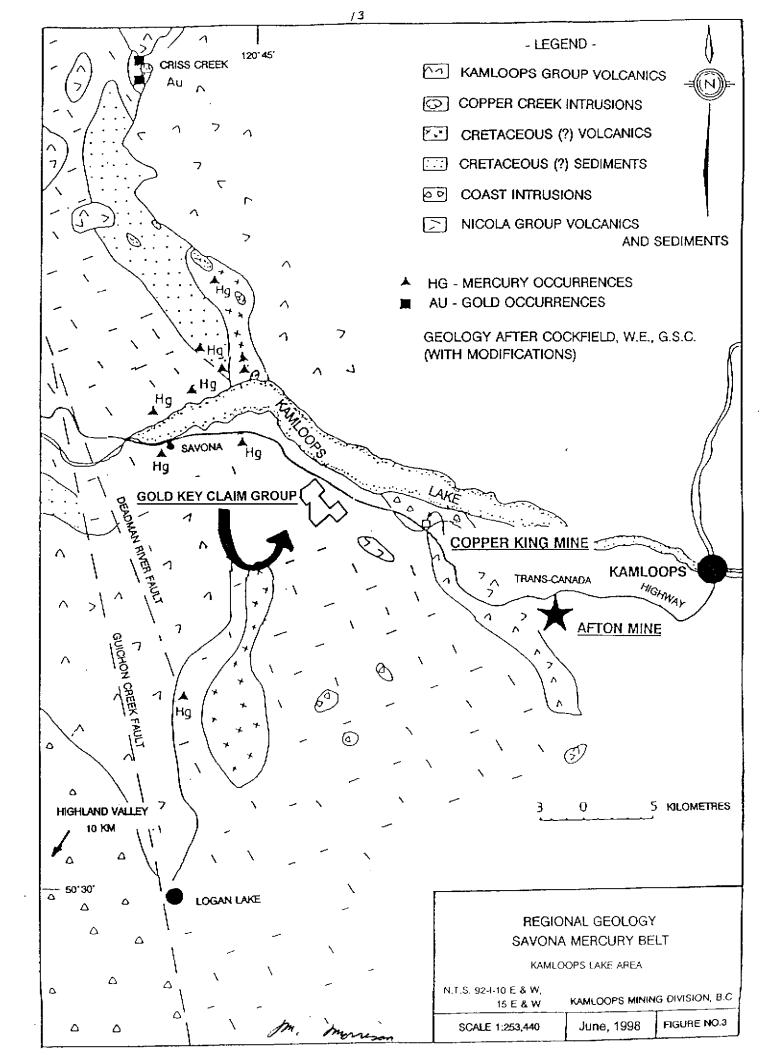
The mercury showings are all associated with carbonate replacement zones within highly faulted country rock. The mercury content at the Savona mercury prospects is generally much less than 0.1%, and non-economic. However, it is the large size of some of the carbonate replacement zones and the intensity of repeated faulting that suggests that the mercury prospects could represent the upper horizons of strong epithermal systems which could host precious metal deposits at depth.

Precious metals and base metals have been found within chalcedony and quartz veins cutting some of the replacement zones in the region, suggesting that at least some of the replacement zones do represent strong Late Cretaceous or Early Tertiary mineralized epithermal systems. Gold, in particular, has been found within quartz veins at Criss Creek (see Figure 3).

REGIONAL GEOLOGY AND MINERALIZATION continued

The Newmont Showing, discovered by Newmont Exploration geologists in 1982, immediately west of the Gold Key 5 mineral claim, represents another example of precious metal and base metal mineralization that occurs within sheared chalcedony and quartz veins associated with a carbonate replacement zone within Nicola Group metasediments. Sulphide minerals at the Newmont Showing include pyrite, galena, stibnite, sphalerite, arsenopyrite and tetrahedrite, while gold equals 3 g/tonne and silver equals up to 180 g/tonne.

Another occurrence of anomalous gold (1755 ppb) and arsenic (400 ppm) values which are associated with a carbonate replacement zone is located on the Gold Key 2 mineral claim on a steep bluff above RCDH 85-5 (Map GK-95-1).



PROPERTY GEOLOGY AND MINERALIZATION

Introduction

The Gold Key Claim Group overlies portions of ground previously covered by the Brussels Claim Group as mentioned earlier in this report. During 1991 and 1992 the geology of the Brussels Claim Group was mapped at a scale of 1:2500 by the writer (Morrison, 1991 & 92) and much of the geological data outlined in the summary that follows was obtained during the earlier mapping programs.

Summary

The Gold Key Claim Group is underlain by Upper Triassic Nicola Group metasediments comprised of volcano-clastic conglomerates with minor sandstone and siltstone interbeds. The metasediments (metamorphosed to the green-schist facies) appear to occur as a monoclinal sequence which crosses the property at an average 145 degrees. The metasediments dip vertically to steeply east, east of the Main Valley Fault, and moderately southwest, west of the Main Valley Fault. A broad drift-filled valley crossing the property in a northwesterly direction is believed to define the Main Valley Fault which separates the easterly dipping metasediments from the westerly dipping metasediments (see Map GK-95-1).

Late Cretaceous(?) or Early Tertiary(?), discordant, felsic dykes, with or without quartz-eye phenocrysts, intrude the metasediments at many locations across the property. Moderate to strong carbonate and/or silica replacement of the conglomerates and sandstones occurs adjacent the felsic dykes. Both the country rocks and the felsic dykes are often faulted and cut by 1 to 5%, banded, ankerite, dolomite, chalcedony and quartz veins. The felsic dykes are also often altered to pink carbonates, clay minerals and 10% pore space.

PROPERTY GEOLOGY AND MINERALIZATION continued

Summary continued

A light green, highly siliceous, amorphous rock (possibly rhyolite) occurs as late dykes or irregular zones within the most intensely faulted replacement zones.

The most intensely faulted replacement zone on the property is located on the Golden Lime 1 mineral claim. This zone (the subject of a 1993 detailed study) falls within a northeast-striking fault zone which has been called the "Brussels Fault Zone" in earlier reports by the writer (Morrison, 1990, 1991). It is expected that the Brussels Fault Zone has allowed for the intrusion of felsic dykes, and that it has also served as a conduit for the hydrothermal solutions believed to have been responsible for the intense replacement of the metasediments on the Golden Lime 1 mineral claim.

The Brussels Fault Zone has been projected 550 metres southwest of the Main Golden Lime Replacement Zone by the writer (Morrison, 1990) to include the Newmont Showing where precious metal values are associated with base metals in a narrow quartz/chalcedony breccia zone which cuts through carbonate-replaced Nicola Group metasediments.

Further detail with regard to specific rock types, structural geology, faulting, alteration and mineralization may be found within the 1995 Assessment Report (Morrison, 1995).

The Brussels Lake Replacement Zone

The Main Brussels Lake replacement zone, over which this year's ground magnetometer survey is centered, was called the Gold Key 3 replacement zone in the 1995 report. It features an east-west/near vertical, 4 metre wide breccia zone which crosses the northern portion of the Gold Key

3 mineral claim for at least 80 metres, 50 metres to the east of Brussels Lake. Rock lying immediately to the south of the breccia zone is made up of both carbonate-replaced Nicola Group metasediments and felsic quartz-eye dyke material. There is no well-exposed rock on the north side of the breccia zone.

The material of the breccia zone represents several phases of veining and brecciation and it is composed entirely of ankerite (70 to 95%) and quartz (5 to 30%).

Five lithogeochemical samples collected from the breccia zone in 1995 yielded less than 5 ppb gold, 5 to 130 ppm arsenic, and 15 - 30 ppm antimony. A sixth sample collected from a poorly exposed silica replacement zone located 350 metres due east of the Brussels Lake Zone yielded 175 ppb gold, 415 ppm arsenic and 25 ppm antimony.

GROUND MAGNETOMETER SURVEY - 1998

<u>Grid</u>

A 900 metre Baseline was measured across the Gold Key 3 & 4 mineral claims in a direction of 320 degrees (parallel with the strike of the geology). Ten flagged grid lines at 100 metre intervals were then measured perpendicular to the Baseline for distances of 325 metres to the northeast and 300 metres to the southwest from the Baseline as illustrated on Map GK-98-1. Stations were flagged at each 25 metre measure along grid lines. A Topolite belt chain and Silva Ranger compass were used to establish the 6 Km of grid which was laid-out in conjunction with the ground magnetometer survey.

The Initial and Final claim posts of the Gold Key 3, 4, 13 & 14 mineral claims were tied in to the grid during the survey.

GROUND MAGNETOMETER SURVEY - 1998

Program

A Scintrix 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 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 1 to 1 ½ 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, Map GK-98-1, accompanying this report. A constant value of 50,000 gammas has been subtracted from all of the values on the maps of ease of plotting and clarity.

<u>Results</u>

Note: The following discussion refers to the magnetic values plotted on Map GK-98-1. As mentioned earlier, a constant value of 50,000 gammas has been subtracted from all field readings for easier plotting on the maps.

The magnetic values plotted on Map GK-98-1 range from -510 to +4000 gammas. The survey area has a general background of 0 to 500 gammas against which several magnetic "highs" of greater than 1000 gammas and many magnetic "lows" of less than 0 gammas stand out.

GROUND MAGNETOMETER SURVEY – 1998 (continued)

<u>Results</u> (continued)

The magnetic highs (1000 to 4000 gammas) usually display complex contour patterns and high magnetic gradients (e.g. 1250 to 4000 gammas over a distance of 25 metres). These are features that are often characteristic of magnetic data obtained from surveys over volcanic rocks that have a high magnetite content. In the case of the present survey the readings have been obtained over unaltered conglomerates that are comprised predominantly of andesitic clasts.

Examples of magnetic highs that are coincident with topographic ridges underlain with unaltered "andesitic" conglomerate are centred on:

L 5N at 1+85W, L 7N at 6+75W, L 8N at 2+25W and 2+90W, L 9N at 2+25W and 7+65W, L 10N at 3+35W and 7+15W, L 11N at 7+50W, L13N at 6+25W, and L14N at 6+50W.

There are other areas where topographic ridges are not a factor and yet magnetic values of greater than 1000 gammas are recorded. Often the same unaltered "andesitic" conglomerate is located nearby or is believed to be buried under shallow overburden. Examples of this situation occur on:

L 6N at 4+65W, L 11N at 4+50W, and L 14N at 2+90W and 8+00W.

A study of Map GK-98-1 suggests that all magnetic values of greater than 500 gammas could represent areas that are underlain with unaltered "andesitic" conglomerate.

Some of the magnetic "lows", on the other hand, represent strong carbonate/silica replacement of the conglomerate. The well-exposed Main Brussels Lake replacement zone on L 9N at 5+00W is

GROUND MAGNETOMETER SURVEY - 1998 (continued)

Results (continued)

coincident with a distinct magnetic low (-120 to +160 gammas). A second large low centered on L 12N at 2 + 50W with magnetic values of 0 to -220 gammas is associated with a carbonate replacement zone that is poorly exposed over a large area.

The two strong magnetic lows (-40 to -470 gammas) centered on L 6N at 2+50W and at grid 8+50N, 6+75W are thought to be dipole "lows" associated with adjacent "highs", and they are not believed to represent carbonate/silica replacement of the underlying conglomerates.

The magnetic low (-70 gammas) on L 7N at 1+90W is coincident with a localized zone of carbonate replacement.

The magnetic low (-540 gammas) on L 10N at 2+75W occurs at the bottom of a small steepsided ravine.

The magnetic low (-310 gammas) on L 12N at 7+25W is coincident with a rhyolite dyke.

There are several examples in the survey area where low and high magnetic values occur only 10 to 25 metres apart. The low values are associated with small valleys, while the high values are coincident with bedrock ridges adjacent the valleys. The rock underlying the ridges is unaltered conglomerate in all cases.

Examples occur on:

L 5N at 5+35W (-180 gammas, small valley); L 5N at 5+50W (1100 gammas, outcrop) L 5N at 7+00W (20 gammas, small valley); L 5N at 7+25W (1250 gammas, outcrop) L 7N at 5+25W (-170 gammas, small valley); L 7N at 5+15W (1290 gammas, outcrop)

GROUND MAGNETOMETER SURVEY - 1998 (continued)

<u>**Results**</u> (continued)

L 12N at 4+15W (310 gammas, small valley); L 12N at 4+00W (1040 gammas, outcrop) In general the main northwesterly valley occupied by Brussels Lake is displayed as a magnetic low on Map GK-98-1. Moderate carbonate alteration of the conglomerate occurs coincident with the valley wherever rock is exposed, and of course, the Main Brussels Lake carbonate/silica replacement zone lies adjacent Brussels Lake.

Another valley extends north from the Main Brussels Lake Zone (at L 9N, 5+00W) to L 14N, 2+00W, and this valley also shows up as a general magnetic low on the Map. There is considerable evidence of carbonate replacement of the conglomerate in this valley.

Yet another broad magnetic low extends east of the Main Brussels Lake Zone to L 7N, 3+50W. There is, however, deep glacial overburden in this area and as a consequence nothing is known about the bedrock geology.

A fourth zone of low magnetics projects northwest from the Main Brussels Lake Zone to L 12N, 7+25W where a rhyolite dyke intrudes conglomerate.

The Main Brussels Lake Zone, in fact, lies at the point of intersection of all four of the linear magnetic lows just mentioned. All four linear magnetic lows may represent fault structures along which hydrothermal solutions have traveled to bring about the carbonate/silica replacement of the mineral constituents of the Nicola Group conglomerates. It seems apparent that magnetite has been destroyed in the process.

The field evidence also suggests that all of the regions of the survey area with values of greater than 500 gammas represent areas underlain with unaltered conglomerate and that these areas should be avoided during future exploration programs.

DISCUSSION

This year's ground magnetometer survey outlines the Main Brussels Lake carbonate/silica replacement zone as a magnetic "low" on Map GK-98-1. This result was expected as it is known that the "andesitic" conglomerate at this location is almost entirely replaced with ankerite and silica.

Less is known about the region that is coincident with a second large magnetic low which is centred on L 12N at 2+50W. The bedrock exposure in the area is poor, but where exposed the rock exhibits a good degree of carbonate replacement and much of the soil in the area is limonitic (after ankerite?). The area is considered worthy of further exploration.

This year's survey also indicates that the Main Brussels Lake replacement zone lies near the intersection of four elongate magnetic lows which are thought to represent faults with associated carbonate replacement. Earlier studies on the Gold Key Claim Group have all shown a close association of faulting with carbonate/silica replacement of the Nicola Group volcanoclastic conglomerates. The four inferred faults all give extra size potential to the Main Brussels Lake replacement zone.

The original recommendation (Morrison, 1995) to test the Main Brussels Lake replacement zone with two inclined drill holes to a depth of 60 metres from the north is still valid.

Arsenic (up to 130 parts per million) and antimony (up to 30 ppm) values were obtained from surface samples at the Brussels Lake Zone in 1995, and gold (175 parts per billion) and arsenic (415 ppm) values were obtained from a small silicified replacement zone located 350 metres east of the Brussels Lake Zone. These values indicate that the upper horizons of epithermal systems are represented by the surface replacement zones, and that siliceous stockwork "feeder" zones

may lie at some moderate depth below surface. Economic gold and silver values might be expected to be associated with the siliceous stockworks in a manner similar to that exhibited at the nearby Newmont Showing (see Regional Geology and Mineralization).

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CONCLUSIONS AND RECOMMENDATIONS

This year's ground magnetometer survey conducted over the Gold Key 3 & 4 mineral claims and portions of the Gold Key 13 & 14 mineral claims was successful at outlining strong carbonate/silica replacement zones on this portion of the Gold Key Claim Group. The replacement zones show up as magnetic "lows" whereas much of the unaltered volcanoclastic conglomerate that underlies the property yields high magnetic values.

The Main Brussels Lake carbonate/silica replaceetn zone is coincident with a distinct magnetic "low" on Map GK-98-1 and a second large low is located 400 metres to the north where scattered outcrop indicate another replacement zone.

Previous surveys (see References) have indicated a correlation between faulting, carbonate/silica replacement and precious metal mineralization on the property. The success of this year's magnetometer survey at outlining replacement zones, therefore, has application in ultimately finding precious metal deposits on the property at large.

In addition to the obvious magnetic "lows", the survey results also suggest that the Main Brussels Lake Zone lies at the intersection of four elongate "lows" that are interpreted to represent faults with associated mineral replacement. It is believed that precious metal values could have been introduced into the Nicola Group conglomerates at Brussels Lake along any of these inferred faults.

It is recommended that two inclined Reverse Circulation drill holes be drilled into the north side of the Brussels Lake replacement zone to test the breccia zone for precious metal values at a depth of sixty metrcs.

The drill target is readily accessible and it could be drilled in conjunction with other targets on the Gold Key Claim Group (see References, 1995 Assessment Report).

CONCLUSIONS AND RECOMMENDATIONS (continued)

All drill intercepts that are strongly replaced with carbonate and/or silica should be analyzed for typical epithermal indicator elements (i.e. mercury, arsenic and antimony) as well as for gold and silver.

June 1, 1998 Kelowna, B.C.

Murray Morrison, B.Sc.

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	Kamloops Lake Area, Kamloops Mining Division.*	
1990:	Geochemical Assessment Report, Brussels Claim Group, Kamloops Lake	
	Area, Kamloops Mining Division.*	

<u>REFERENCES</u> continued

Morrison, M.S.

1991:	Geological Assessment Report, Golden Lime 1 & 2 Mineral Claims,
	Kamloops Lake Area, Kamloops Mining Division.*
1993:	Geological Assessment Report, Golden Lime 1 & 2 Mineral Claims,
	Kamloops Lake Area, Kamloops Mining Division.*
1995:	Geological Assessment Report, Gold Key Claim Group,
	Kamloops Lake Area, Kamloops Mining Division.*
1996:	Geophysical Assessment Report, Gold Key Claim Group, Kamloops Lake
	Area, Kamloops Mining Division.*
1997	Geophysical Assessment Report, Gold Key Claim Group, Kamloops Lake
	Area, Kamloops Mining Division.*

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).
- * Assessment Reports filed with the Ministry of Employment and Investment 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:

- 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 twentynine years.
- 3. During the past twenty-nine years, I have intermittently held responsible positions as a geologist with various mineral exploration companies in Canada.
- 4. I have conducted several geological, geochemical, and geophysical surveys on mineral properties in Southern British Columbia during the past twenty-nine years.
- 5. I conducted the Ground Magnetometer Survey outlined in this report.
- I own a 100% interest in the Golden Lime 1-2, Gold Key 1-14, 16&17 and 15 FR mineral claims.

Murray Morrison - B.Sc

June 1, 1998 Kelowna, B.C.

<u>APPENDIX B</u>

STATEMENT OF EXPENDITURES - ON THE GOLD KEY CLAIM GROUP

Statement of Expenditures in connection with a Ground Magnetometer Survey carried out on the Gold Key Claim Group, located 25 km west of Kamloops, B.C. (N.T.S. Map 92-I-10E) for the year 1998.

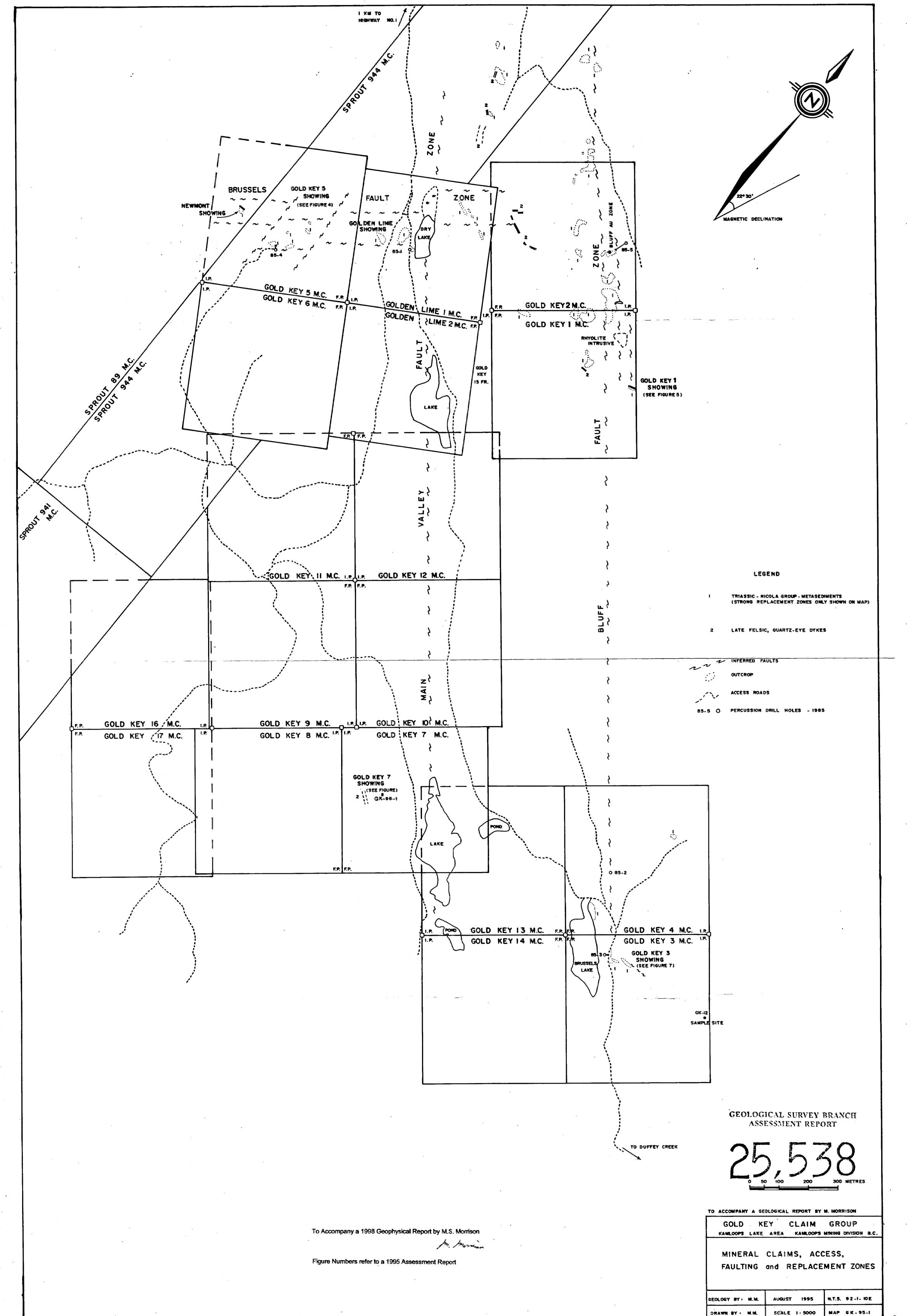
GROUND MAGNETOMETER SURVEY (6.0 km)

M. Morrison, geologist	4 days @ \$300.00/day	\$ 1,200
Truck, 4 x 4 (including gasoline and insurance)	4 days @ \$75.00/day	300
Meals and Lodging	4 days @ \$80.00/day	320
Flagging and belt chain thread		30
Magnetometer rental	4 days @ \$25.00/day	_100
	Sub-total:	\$1,950
REPORT PREPARATION COSTS		
M. Morrison, geologist	1 1/2 days @ \$300.00/day	\$ 450
Drafting		53
Typing		107
Copying reports		20
	Sub-total:	\$ 630
	Grand Total:	\$ <u>2,580</u>

I hereby certify that the preceding statement is a true statement of monies expended in connection with the Ground Magnetometer Survey carried out March 8-11, 1998.

Murray Morrison - Geologist menner

June 1, 1998 Kelowna, B.C.



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