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GEOPHYSICAL
ASSESSMENT REPORT

on the

GOLD KEY CLAIM GROUP
KAMLOOPS LAKE AREA
KAMLOOPS MINING DIVISION

by

MURRAY S. MORRISON, B.Sc.

CLAIMS: 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 13, 1999

DATE COMPLETED: March 17, 1999

GEOLOGICAL SURVEY BRANCH
KAMLOOPS

Kelowna, B.C.

June 10, 1999

25.978

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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, litho-geochemical 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.

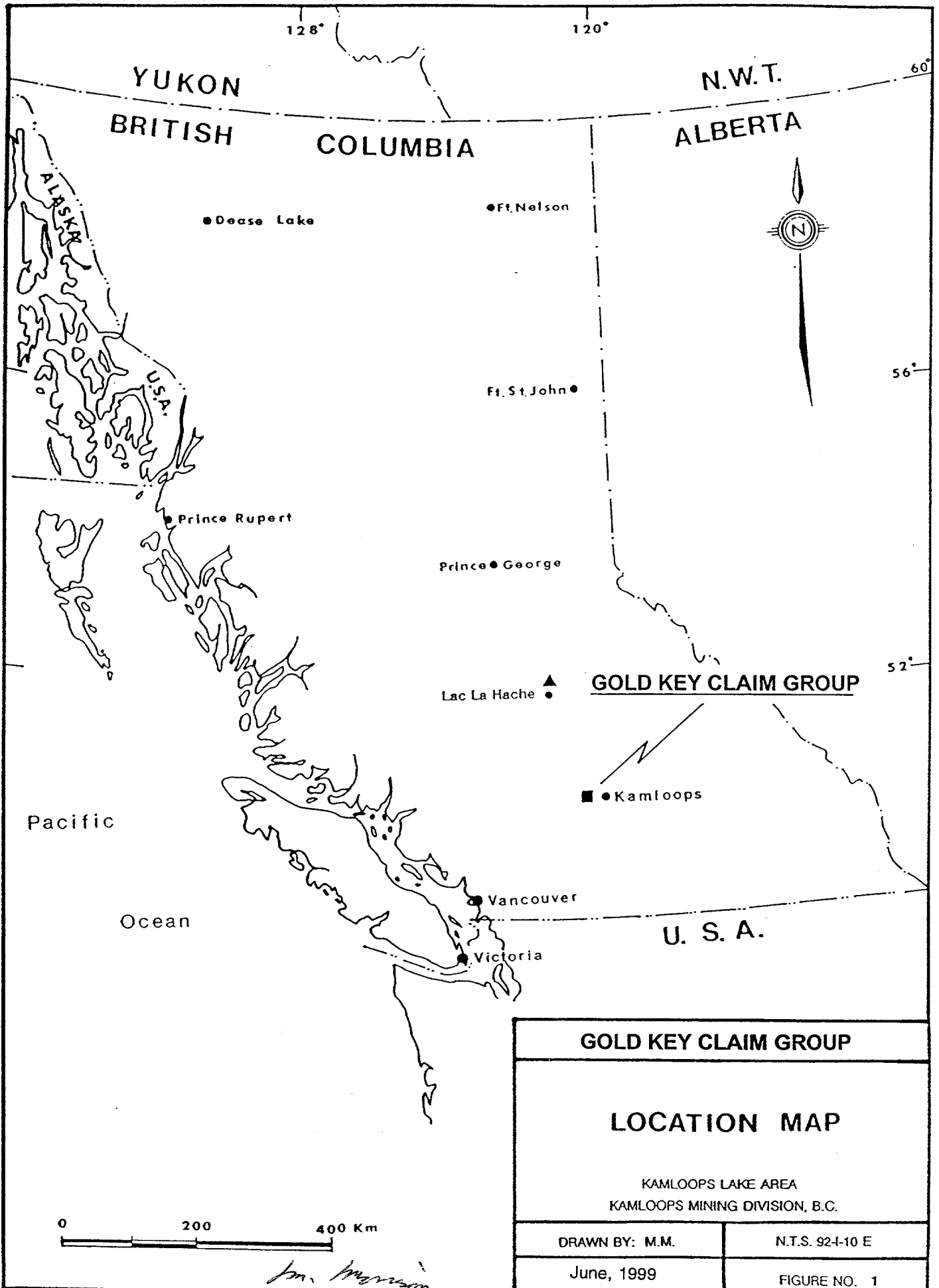
SUMMARY continued

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 two of these, the Golden Lime and Brussels Lake Replacement Zones, have been recommended for a drilling program. The drill is to test for precious metal-bearing siliceous stockwork "feeder" zones that may occur below the carbonate/silica replacement zones.

This year's ground magnetometer survey conducted over portions of the Gold Key 9-12 mineral claims was intended to outline hidden carbonate/silica replacement zones on a drift covered portion of the property lying midway between the Golden Lime and Brussels Lake Replacement Zones. No new replacement zones were confirmed by the survey, and it is recommended that future exploration work on the Gold Key Claim Group be concentrated on the known replacement zones.



INTRODUCTION

This report, written for government assessment work requirements, discusses the results of a ground magnetometer survey conducted over portions of the Gold Key 9-12 mineral claims by the writer during March, 1999.

The mineral claims on which the survey was conducted are located in the centre 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 precious 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 metres 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

Ground magnetometer surveys which have been conducted over several of the known replacement zones on the property have shown a good contrast between the unaltered andesitic conglomerates and those that have been replaced by carbonate and silica (at the expense of magnetite).

The magnetic contrast has proven to be great enough to penetrate some areas of overburden and it was hoped that this year's magnetometer survey might outline additional replacement zones hidden under the cover of drift on the previously unsurveyed Gold Key 9-12 mineral claims.

The magnetic values obtained during this year's survey are displayed and contoured on Map GK-99-1 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 Map GK-95-1.

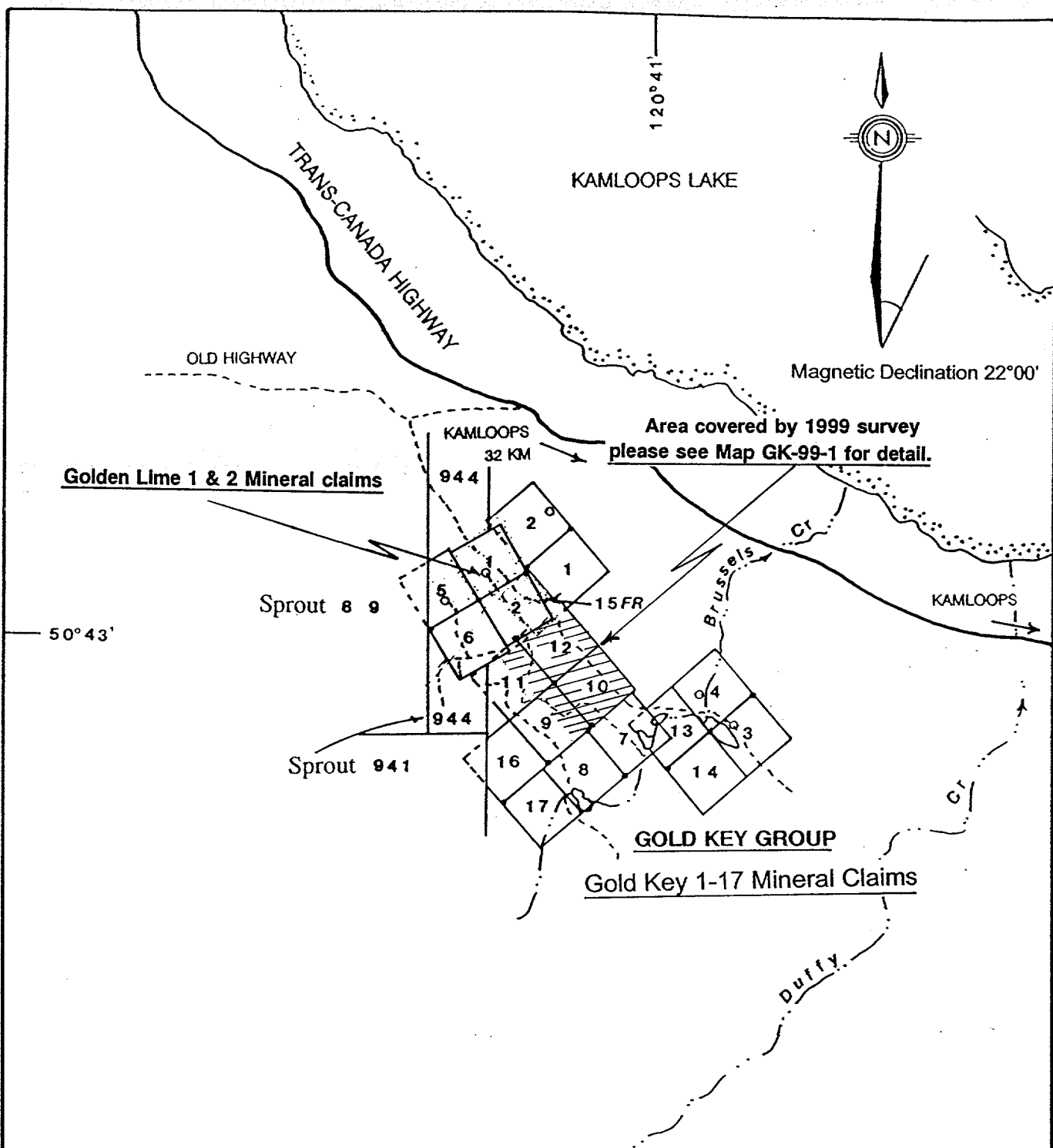
PHYSICAL FEATURES AND CLIMATE

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.



Golden Lime 1 & 2 Mineral claims

Area covered by 1999 survey
please see Map GK-99-1 for detail.

GOLD KEY GROUP

Gold Key 1-17 Mineral Claims

LEGEND

- ACCESS ROADS, DIRT
- INTERMITTENT CREEKS
- LAKES
- REVERSE CIRCULATION DRILL HOLES (1985)
- LEGAL CORNER POSTS

M. Morrison

GOLD KEY CLAIM GROUP	
CLAIMS AND ACCESS	
Kamloops Lake Area Kamloops Mining Division, B.C.	
Drawn by: M.M.	N.T.S. 92-10E
June, 1999	Figure No. 2

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:

<u>CLAIM NAME</u>	<u>UNITS</u>	<u>DATE OF RECORD</u>	<u>TENURE NUMBER</u>	<u>MINING DIVISION</u>	<u>EXPIRY* DATE</u>
GoldenLime 1	1	Mar. 16/81	216982	Kamloops	Mar. 16/2001
Golden Lime 2	1	Mar. 16/81	216983	Kamloops	Mar. 16/2001
Gold Key 1	1	May 15/94	325691	Kamloops	May 15/2000
Gold Key 2	1	May 15/94	325692	Kamloops	May 15/2000
Gold Key 3	1	May 15/94	325693	Kamloops	May 15/2000
Gold Key 4	1	May 15/94	325694	Kainloops	May 15/2000
Gold Key 5	1	May 15/94	325695	Kamloops	May 15/2001
Gold Key 6	1	May 15/94	325696	Kamloops	May 15/2001
Gold Key 7	1	May 15/94	325697	Kamloops	May 15/2000
Gold Key 8	1	May 15/94	325698	Kamloops	May 15/2000
Gold Key 9	1	Mar. 22/95	334413	Kamloops	Mar. 22/2000
Gold Key 10	1	Mar. 22/95	334414	Kamloops	Mar. 22/2000
Gold Key 11	1	Mar. 22/95	334415	Kamloops	Mar. 22/2000
Gold Key 12	1	Mar. 22/95	334416	Kamloops	Mar. 22/2000
Gold Key 13	1	Mar. 22/95	334417	Kamloops	Mar. 22/2000
Gold Key 14	1	Mar. 22/95	334418	Kamloops	Mar. 22/2000
Gold Key 15 FR.	1	Mar. 24/95	334805	Kamloops	Mar. 24/2000
Gold Key 16	1	May 7/95	335438	Kamloops	May 7/2000
Gold Key 17	1	May 7/95	335439	Kamloops	May 7/2000

* 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).

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.

HISTORY 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 ground magnetometer surveys were conducted over portions of the Gold Key 3, 4, 7, 8, 13 & 14 mineral claims in 1996 & 98 (Morrison, 1995, 96 & 98). 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.

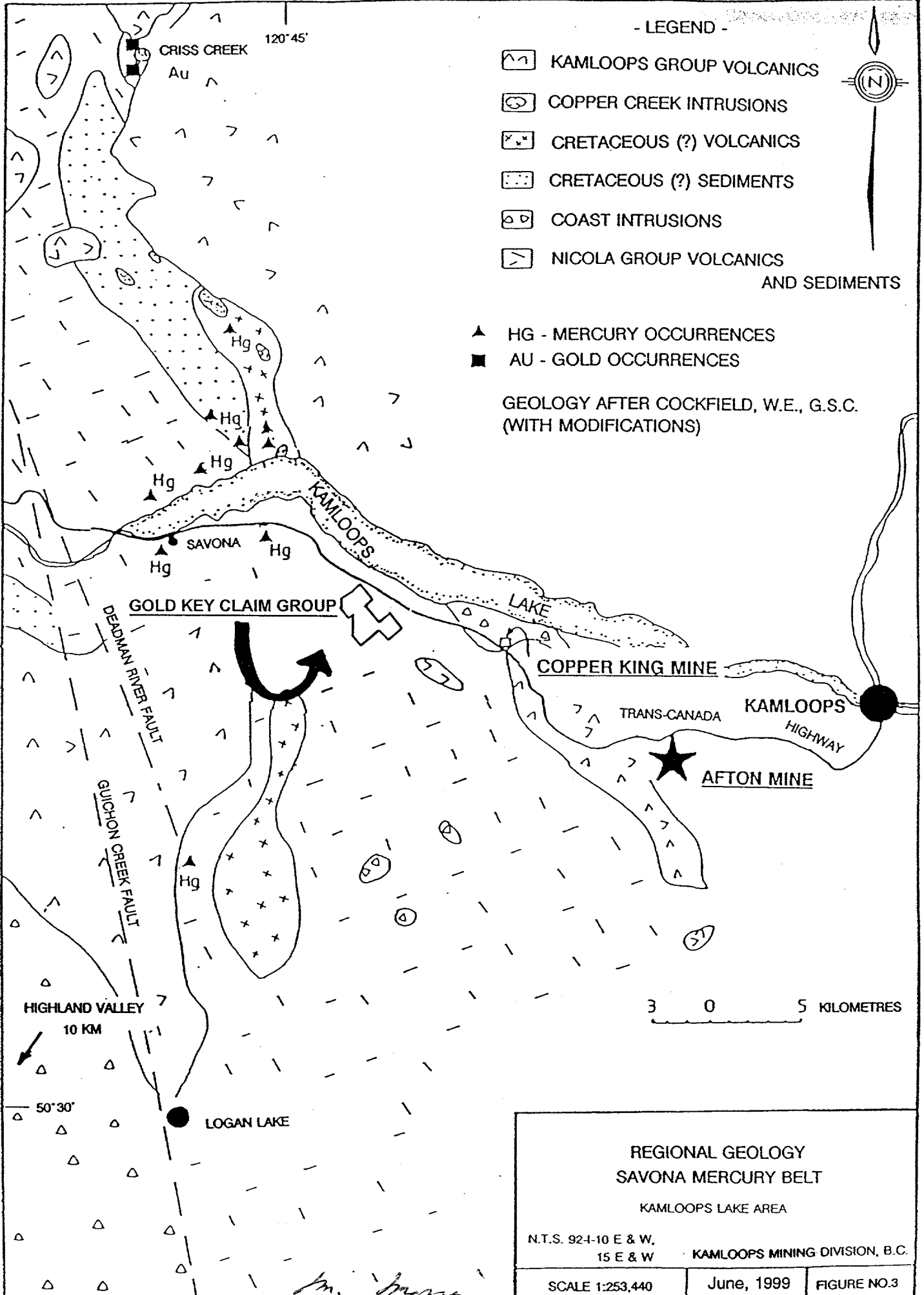
Another occurrence of anomalous gold (1755 ppb) and arsenic (400 ppm) values which are associated with a carbonate replacement zone is located on the Gold Key 2 mineral claim on a steep bluff above RCDH 85-5 (Map GK-95-1).

- LEGEND -

-  KAMLOOPS GROUP VOLCANICS
-  COPPER CREEK INTRUSIONS
-  CRETACEOUS (?) VOLCANICS
-  CRETACEOUS (?) SEDIMENTS
-  COAST INTRUSIONS
-  NICOLA GROUP VOLCANICS AND SEDIMENTS

-  HG - MERCURY OCCURRENCES
-  AU - GOLD OCCURRENCES

GEOLOGY AFTER COCKFIELD, W.E., G.S.C. (WITH MODIFICATIONS)



**REGIONAL GEOLOGY
SAVONA MERCURY BELT
KAMLOOPS LAKE AREA**

N.T.S. 924-10 E & W,
15 E & W KAMLOOPS MINING DIVISION, B.C.

SCALE 1:253,440	June, 1999	FIGURE NO.3
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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 monoclinial 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.

Golden Lime Replacement Zone

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.

The Brussels Lake Replacement Zone

The Brussels Lake Replacement Zone 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.

PROPERTY GEOLOGY AND MINERALIZATION continued**The Brussels Lake Replacement Zone** continued

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.

Further details with regard to specific rock types, structural geology, faulting, alteration and mineralization with regard to both of the above replacement zones may be found within the 1995 & 98 Assessment Reports (Morrison, 1995 & 98).

Map GK-95-1 illustrates that the Golden Lime Replacement Zone lies 1 km northwest of this year's survey area, while the Brussels Lake Replacement Zone lies 1 km to the southeast.

GROUND MAGNETOMETER SURVEY - 1999**Grid**

A 900 metre Baseline was measured along the Location Line of the Gold Key 9-12 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 500 metres to the northeast and 200 metres to the southwest from the Baseline as illustrated on Map GK-99-1. Stations were flagged at each 25 metre measure along grid lines. A Toplite belt chain and Silva Ranger compass were used to establish the 7 km of grid which was laid-out in conjunction with the ground magnetometer survey.

GROUND MAGNETOMETER SURVEY - 1999 continued**Grid** continued

The Initial and Final claim posts of the Gold Key 9-12 mineral claims were tied in to the grid during the survey.

Program

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 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 with 1 to 1½ 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-99-1, accompanying this report. A constant value of 50,000 gammas has been subtracted from all of the values on the maps for ease of plotting and clarity.

GROUND MAGNETOMETER SURVEY - 1999 continued**Results**

Note: The following discussion refers to the magnetic values plotted on Map GK-99-1. 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-99-1 demonstrate a wide range (-430 to +3570 gammas). This wide range of values is consistent with other surveys that have been conducted elsewhere on the property. The predominant rock underlying the property is believed to be an andesitic lahar and conglomerate. This rock has a highly variable magnetite content (if it has not been altered by hydrothermal solutions) and this results in complex contour patterns with high magnetic gradients.

Ridges underlain by unaltered andesitic lahars and conglomerates occur along the northeastern side of the Gold Key 10 & 12 mineral claims and at the southwestern corner of the survey area on the Gold Key 9 mineral claim. These rocks are clearly defined by the regions of complex contour patterns and high magnetic gradients on Map GK-99-1.

The effects of the highly variable magnetite content of the andesitic rocks are further amplified by the depth of overburden at each survey station. For example, readings of 2500 to 3500 gammas were recorded directly over outcrop at L5N, 7+25W, while readings of 1500 to 2000 gammas were recorded just 25 metres away at L5N, 7+50W, where there is possibly 2 to 3 metres of overburden. As this example indicates, single station readings are not as useful for geological interpretation as the contour patterns as a whole.

Although much (if not all) of the survey area may be underlain by the same unaltered andesitic lahars and conglomerates, there are regions where the contour lines are more widely

GROUND MAGNETOMETER SURVEY - 1999 continued**Results** continued

spaced and the contour patterns are less complex. These regions include the drift-filled Main Valley which runs through the centre of the Gold Key 10 & 12 mineral claims and the drift-covered zone at the northwest corner of the survey area. In each case, the depth of drift may have "masked" the magnetic effects of the bedrock geology resulting in the subdued contour patterns.

An area of generally high magnetics (greater than 1000 gammas) extends southeast and northwest from the ridge of andesitic rocks at the southwest corner of the survey area. This area of elevated magnetics, which crosses the property from L6N, 3+00W to L14N, 5+00W, is believed to be underlain by the same andesitic rocks. Some of the andesitic rock is exposed between L7N and 8N at 4+50W where magnetic values reach 2450 gammas.

Some of the magnetic "lows" within the general magnetic high are thought to be coincident with areas covered by deep drift. There is a general cover of drift at the northwest corner of the survey area, but in spite of the drift, the magnetic readings in the area are in excess of 1000 gammas. It is thought that the drift may be shallow in this region and that the bedrock geology is most probably comprised of the same unaltered andesitic lahars and conglomerates as elsewhere.

A broad magnetic low (less than 800 gammas) occurs within the general magnetic high (described in the preceding paragraphs) between L10N & 12N from 4+50W to 5+75W. It is not known if this low represents a zone of carbonate/silica replacement in the andesitic rocks, or if it represents an area of particularly deep overburden. The magnetic low is interesting in that it aligns with a series of lows (560 gammas on L10N at 4+50W; 550 gammas on L9N at 3+75W; and 350 gammas on L7N at 2+90W) which fringe the general magnetic high.

GROUND MAGNETOMETER SURVEY - 1999 continuedResults continued

Unfortunately, there is no bedrock exposed in the vicinity of any of the magnetic lows, and therefore, no evidence of carbonate/silica replacement zones.

The bottom of the Main Valley which extends the length of the survey area from L5N to L14N between 1+50W and 3+00W has magnetic values in the range of 400 to 800 gammas (with the exception of erratic low and high values associated with local topographic depressions or ridges). There is nothing distinct about the contour patterns in the Valley and the lower than average magnetic values may simply represent the effects caused by deeper overburden lying in the Valley bottom.

In addition to the broader magnetic features on Map GK-99-1, which have just been described, there are several smaller features which are related to local topographical conditions. Ridges and hummocks generally yield elevated magnetic values, while depressions such as kettles, small valleys and ravines yield low magnetic values. There are several examples of the effects of both high and low topographic features in the survey area.

Some examples of local magnetic "highs" which are coincident with topographic highs are listed below:

L5N at 1+90W, 1050 gammas coincident with a mid-valley morainal ridge

L9N at 2+25W, 820 gammas coincident with a low ridge

L14N at 2+10W, 1100 gammas coincident with a low morainal ridge.

GROUND MAGNETOMETER SURVEY - 1999 continued**Results** continued

Some examples of topographic depressions with coincident magnetic "lows" are given in the following list:

L12N at 4+60W, 220 gammas coincident with a small creek in a steep-sided ravine

L13N at 3+30W to 4+30W, 310 to 450 gammas coincident with a small creek in a
steep-sided ravine

L8N at 7+00W, 480 gammas coincident with a small ravine.

There are notable magnetic lows of -160 gammas (L8N, 6+25W) -60 gammas (L7N, 6+00W) and -430 gammas (L5N, 6+50W) which occur at the base of steep (20 to 30 degree) slopes that lie immediately to the northeast of the andesitic ridge on the Gold Key 9 mineral claim. These lows could be the result of the steep topography, or they may represent the dipole lows associated with the strong magnetic highs measured on top of the ridge.

DISCUSSION

This year's survey was conducted over a drift covered portion of the Gold Key Claim Group in an attempt to outline any sizeable carbonate/silica replacement zones that might occur within the andesitic volcanoclastics which are thought to underlie this portion of the property.

The results of the survey described in the foregoing section of this report suggest that large areas of the survey region are underlain by unaltered andesitic volcanoclastics. An exception may be represented by a 50 to 100 metres wide belt of low magnetic readings which extends 500 metres from L11N at 5+50W to L7N at 2+90W. This belt could be underlain by a carbonate/silica replacement zone, or it may simply represent a region with deeper drift than elsewhere. It is known that the drift is generally deep in this region, and a drill test of this zone should be considered a low priority.

There are other high priority drill targets on the property and these should be pursued when the price of gold is more favourable. These targets include the Golden Lime and Brussels Lake Replacement Zones which have been described in detail in previous reports (Morrison, 1986-97).

It is thought that each of these replacement zones have a feeder system of stockwork quartz veins and that economic concentrations of precious metals may be associated with these veins.

CONCLUSIONS & RECOMMENDATIONS

This year's ground magnetometer survey conducted over portions of the Gold Key 9-12 mineral claims failed to clearly outline any sizeable carbonate/silica replacement zones. In fact, the survey data suggests that much of the survey area is underlain by unaltered andesitic volcanoclastics of the Upper Triassic Nicola Group.

One belt of low magnetics measuring 50 to 100 metres by 500 metres was outlined in the centre of the survey area, but this belt occurs in a region of deep drift. It is thought that the deep drift may account for the low magnetic values as opposed to carbonate/silica replacement of the bedrock geology.

It is recommended that further work on the property be concentrated on the known carbonate/silica replacement zones. These zones have been described in several Assessment Reports by the writer (Morrison 1986-97) and they are illustrated on Map GK-95-1 which accompanies this report.

Two of the largest and most intense replacement zones are recommended for testing with a drill. These are the Golden Lime and Brussels Lake Replacement Zones which both lie adjacent dirt access roads. These zones should be tested to a depth of 100 metres with inclined drill holes in an attempt to discover precious metal-bearing siliceous stockwork "feeder" zones that may lie below these carbonate/silica replacement zones.

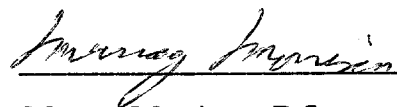
All drill intercepts that are strongly replaced with carbonate and/or silica should be analyzed for typical epithermal indicator elements (i.e. mercury, arsenic and antimony) as well as for gold and silver.

CONCLUSIONS & RECOMMENDATIONS continued

Samples collected from the Newmont Showing (see Regional Geology and Mineralization) and random surface samples taken from the Gold Key property indicate that the epithermal systems in the area are auriferous.

June 10, 1999

Kelowna, B.C.



Murray Morrison, B.Sc.

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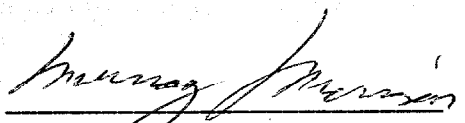
* Assessment Reports filed with the Ministry of Employment and Investment of British Columbia.

APPENDIX A**STATEMENT OF QUALIFICATIONS**

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

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 thirty years.
3. During the past thirty 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 thirty years.
5. I conducted the Ground Magnetometer Survey outlined in this report.
6. I own a 90% interest in the Golden Lime 1-2, Gold Key 1-14, 16&17 and 15 FR mineral claims.

June 10, 1999
Kelowna, B.C.


Murray Morrison, B.Sc.

APPENDIX BSTATEMENT 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 1999.

GROUND MAGNETOMETER SURVEY (7.0 km)

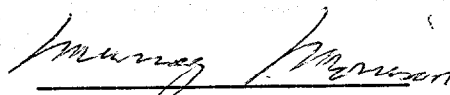
M. Morrison, geologist	5 days @ \$300.00/day	\$1,500.
Truck, 4 x 4 (including gasoline and insurance)	5 days @ \$75.00/day	375.
Meals and Lodging	5 days @ \$82.00/day	410.
Flagging and belt chain thread		35.
Magnetometer	5 days @ \$25.00/day	<u>125.</u>
	Sub-total:	\$2,445.

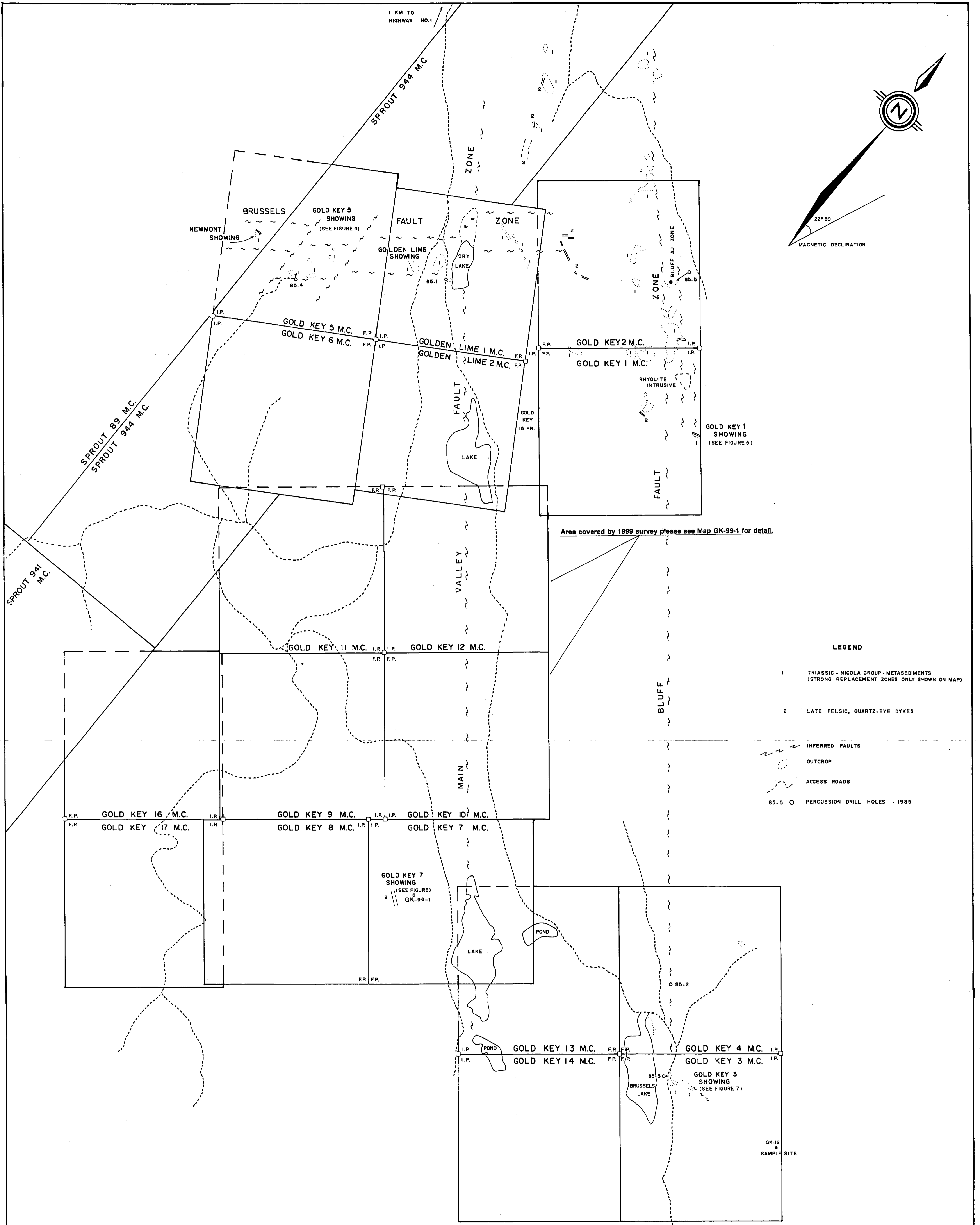
REPORT PREPARATION COSTS

M. Morrison, geologist	1½ days @ \$300.00/day	\$450.
Drafting		63.
Typing		107.
Copying Reports		<u>20.</u>
	Sub-total:	\$640.
	Grand Total:	<u>\$3,085.</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 13-17, 1999.

June 10, 1999
Kelowna, B.C.


Murray Morrison, Geologist



Area covered by 1999 survey please see Map GK-99-1 for detail.

LEGEND

- 1 TRIASSIC - NICOLA GROUP - METASEDIMENTS (STRONG REPLACEMENT ZONES ONLY SHOWN ON MAP)
- 2 LATE FELSIC, QUARTZ-EYE DYKES
- INFERRED FAULTS
- OUTCROP
- - - ACCESS ROADS
- 85-5 ○ PERCUSSION DRILL HOLES - 1985

To accompany a 1999 geophysical report by M.S. Morrison

This map accompanied a 1995 Assessment Report by M.S. Morrison and it has been included with this report for reference. The figure numbers refer to figures illustrated in the 1995 report.

25,928

0 50 100 200 300 METRES

TO ACCOMPANY A GEOLOGICAL REPORT BY M. MORRISON

GOLD KEY CLAIM GROUP
KAMLOOPS LAKE AREA KAMLOOPS MINING DIVISION B.C.

MINERAL CLAIMS, ACCESS, FAULTING and REPLACEMENT ZONES

GEOLOGY BY: M.M.	AUGUST 1995	N.T.S. 92-1-10E
DRAWN BY: M.M.	SCALE 1:5000	MAP GK-55-1

M.S. Morrison

