ARIS SUMMARY SHEET

District Geologist, Kamloops Off Confidential: 89.04.27

ASSESSMENT REPORT 17331 MINING DIVISION: Lillooet

PROPERTY: Eva
LOCATION: LAT 51 03 02 LONG 122 55 56
UTM 10 5655230 504750
NTS 092O02W
CLAIM(S): Ave 1-6,Eva 2-6,Eva 11-12
OPERATOR(S): Millennium Res.
AUTHOR(S): Macfarlane, H.S.
REPORT YEAR: 1988, 51 Pages
COMMODITIES
SEARCHED FOR: Gold,Antimony
GEOLOGICAL
SUMMARY: The property lies within a complex sequence of Mesozoic rocks bounded by the Yalakom fault to the northeast and the Tchaikazan fault to the southwest. The centre of the property is bounded by Battlement Ridge Group sediments, flanked and faulted against Lower Cretaceous Taylor Creek Group rocks to the west. The Upper Triassic Hurley Formation is faulted to the west against the Taylor Creek Group. Tyaughton Group sediments of Upper Triassic-Lower Triassic age are present in the northwest of the property. A quartz-calcite-stibnite-gold vein was discovered in the northwest of the property.

WORK
TYPE: Geochemical,Geological
GEOL 28.0 ha
Map(s) - 1; Scale(s) - 1:1000
HMIN 26 sample(s) ;AU,AG
ROCK 9 sample(s) ;AU,AG

RELATED
REPORTS: 16084
MINFILE: 092O

Searchlight Resources Inc.
218-744 West Hastings Street, Vancouver, British Columbia, Canada, V6C 1A5
Phone: (604) 684-2361

GEOCHEMICAL ASSESSMENT REPORT

on the

EVA PROPERTY

(EVA 2 - 6, 11 - 12 and AVE 1 - 6 Claims)

LILLOOET MINING DISTRICT

BRITISH COLUMBIA

Latitude: 51° 02'N
Longitude: 122° 50'W

N.T.S. 92 - O/2

Owner: Abermin Corporation
1500-1075 West Georgia Street
Vancouver, BC
V6E 3C9

Operator: Millennium Resources Inc.
700-625 Howe Street
Vancouver, BC
V6C 2T6

Consultant: H S Macfarlane, MSc, FGAC
Searchlight Resources Inc.
218-744 West Hastings Street
Vancouver, BC
V6C 1A5

April 26, 1983

TABLE OF CONTENTS

LIST OF FIGURES

INTRODUCTION

The Eva property consists of 13 modified grid mineral claims, comprising 205 units, situated in the Chilcotin Ranges of the Coast Mountains. The claims were located in 1980 as a result of a regional exploration programme carried out in the early 1980's. This programme and follow up work performed in the mid to late 1980's outlined an area in the northwest of the property from which samples containing anomalous concentrations of gold were obtained. A reassessment of this area was recently undertaken, the results of which form the basis of this report.

Location and Access

The Eva property is located in south western British Columbia in the Lillooet Mining Division. The property is located at 51° 02' north latitude and 122° 50' west longitude, approximately 20 kilometres north of Gold Bridge, B.C. The topographic map sheet is the Noaxe Creek sheet, NTS 92 - O/2 (1:50,000), (fig. 1).

Access to the property may be obtained from Gold Bridge over the Lillooet - Gold Bridge highway. Twelve kilometres northeast of Gold Bridge a well maintained road; the Tyaughton Creek road, is taken to the north for a distance of 25 kilometres to the Silver Quick Mine road turn off. The property boundary is approximately 3 kilometres to the west along this road. Construction of logging roads has recently opened up the Eva 12 claim on the east side of the property. The total distance from Gold Bridge to the property, by road, is thus 40 kilometres.

Hotel accommodation is available in Gold Bridge. The closest full service town to the property is Pemberton situated on Highway 99, approximately 90 kilometres to the south.

MILLENNIUM RESOURCES INC.		
EVA PROPERTY LILLOOET MINING DIVISION, B. C.		
LOCATION MAP		
SEARCHLIGHT RESOURCES INC.		
DATE: JUNE, 1987	SCALE: 1: 8,000,000	FIGURE No. 1

Physiography and Vegetation

The property lies within the Chilcotin Ranges, on the eastern margin of the Coast Mountains. The property and surrounding area is typified by rugged and mountainous terrain with steep slopes and distinct ridges. The Eva claims are situated on the northern flanks of Eldorado Mountain, a peak rising to over 8,000 feet characterized by cirque basins and aretes. Elevations vary from 3,900 feet (1,190 metres) to 8,000 feet (2,440 metres) giving a relief of 4,100 feet (1,250 metres). The north and central part of the property is drained by the easterly flowing Tyaughton Creek and a number of northerly flowing tributaries: Bonanza, Nea, and Spruce Lake Creeks. Taylor Creek drains the eastern part of the property.

This area of British Columbia experiences a modified coastal climate. The majority of the precipitation falls as snow, accumulating to depths of 1 - 2 metres through the long, cool winter.

Vegetation below 1,500 metres consists of coniferous forest comprising fir, balsam, pine and spruce. Alpine and sub-alpine vegetation is present at higher elevations. Ridge crests are relatively free of vegetation and have little soil cover.

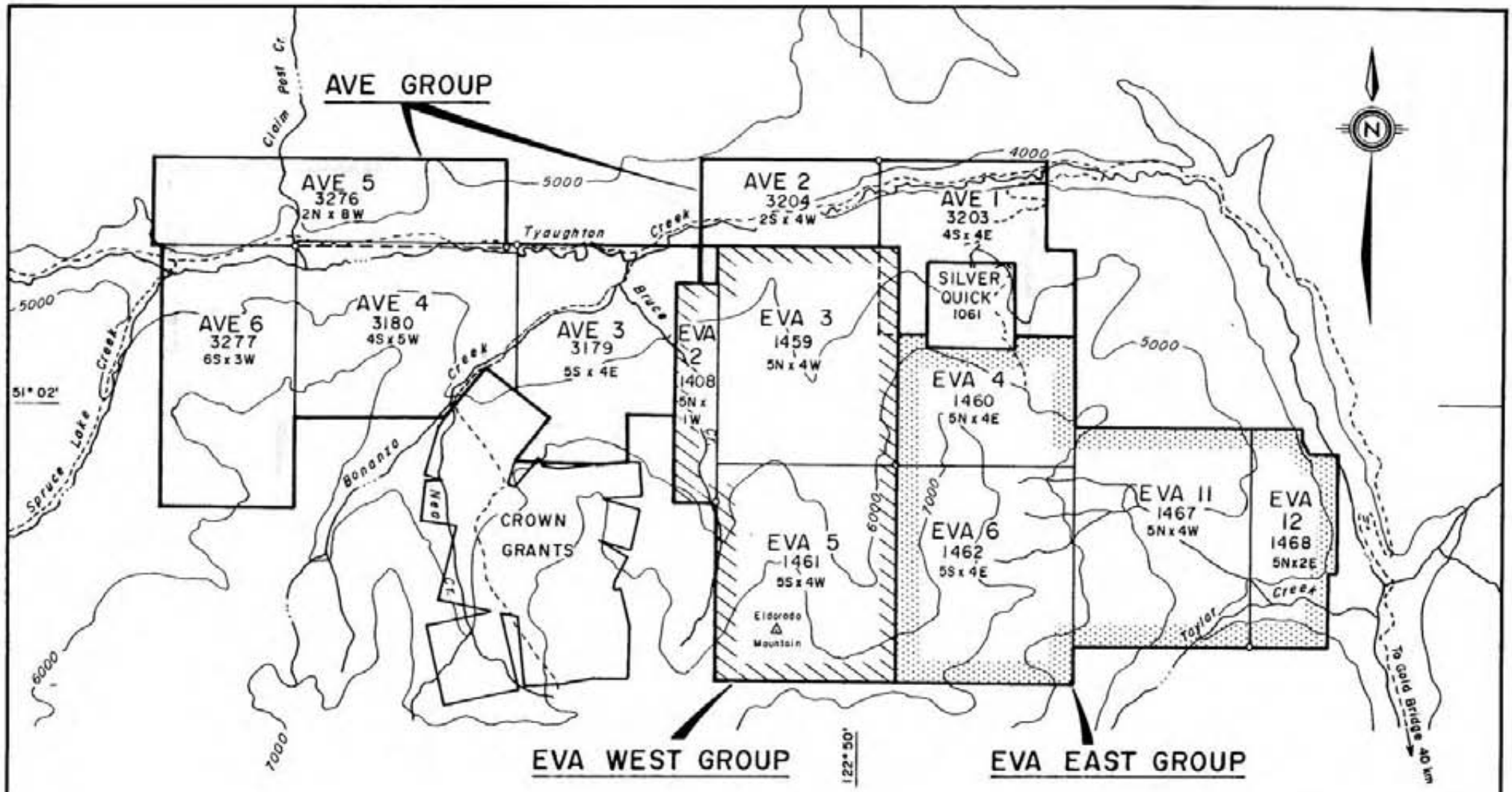
Property and Ownership

The Eva property (fig. 2) consists of the following 13 modified grid mineral claims, comprising 205 units:

Claim	Units	Record Number	Expiry Date
Eva 2	5	1458	16 July 88
Eva 3	20	1459	16 July 88
Eva 4	12	1460	16 July 88
Eva 5	20	1461	16 July 88
Eva 6	20	1462	16 July 88
Eva 11	20	1467	16 July 88
Eva 12	10	1468	16 July 88
Ave 1	16	3203	4 June 88
Ave 2	8	3204	4 June 88
Ave 3	20	3179	23 May 88
Ave 4	20	3180	23 May 88
Ave 5	16	3276	12 July 88
Ave 6	18	3277	12 July 88

The Eva claims were originally staked in 1980 by Pan Ocean Oil Ltd following an investigation of the geological potential of the area. Aberford Resources Ltd (a predecessor of Abermin Corporation) took over Pan Ocean Oil Ltd in 1982. The Eva claims are now owned by Abermin Corporation and are the subject of an option agreement with Millennium Resources Inc., 700-625 Howe Street, Vancouver, B.C., V6C 2T6. The Ave claims were staked by Hillside Energy Corporation in 1985 and have recently been transferred to Abermin Corporation. The Ave claims are also subject to the same option agreement.

The Eva 4, 6 and 11 - 12 claims were recently grouped by Hillside Energy Corporation. The Ave 1 - 6 claims and the Eva 2, 3 and 5 have already been grouped.



MILLENNIUM RESOURCES INC.

EVA PROPERTY

LILLOOET MINING DIVISION, B. C.

CLAIM MAP

SEARCHLIGHT RESOURCES INC.

DATE:	SCALE:	FIGURE No.
MARCH, 1988	As Shown	2

History and Previous Work

Exploration in this area dates back to the turn of the century when gold was discovered in Cadwallader Creek and downstream in Hurley River, immediately south of Gold Bridge. Placer mining was handicapped by boulders, the depth to bedrock and locally the cemented nature of the auriferous gravels. A record of placer production from these creeks is not available, Cairnes (1937).

The Bridge River camp consists of the following former producers: the Bralorne, Pioneer, Wayside and Minto Mines. In excess of 8.0 million tons of ore was milled from this camp between 1900 and 1978 with the recovery of 4,178,363 ounces of gold and 1,002,473 ounces of silver. Recently an ore reserve of approximately 1.0 million tons of ore at 0.25 oz/ton has been developed at the Bralorne Mine by Mascot Gold Mines Ltd.

It is thought that during the early development of the Bridge River camp that many of the known occurrences of mineralization in the area of the Eva property were discovered.

Gold, mercury, antimony and tungsten prospects have been explored in the area of the Eva property. These prospects are:

The Silver Quick deposit, within the Ave 1 claim

The Manitou (Empire Mercury) deposit, 2 kilometres east of the Ave 1 claim at the junction of Mud, Tyaughton and Relay Creeks

The Tungsten Queen Mine and the Tungsten King prospect immediately east of Tyaughton Creek, north of the Eva 12 claim

The Paul Mercury prospect, south of the Eva 12 claim

The Robson gold prospect, 1 kilometre south of the Ave 3 claim.

In 1980 a detailed heavy mineral sampling programme was carried out by Pan Ocean Oil Ltd. The claims were subsequently staked and geological mapping and sampling was performed in 1981. This property, together with additional Eva claims to the south of Eldorado Mountain, was optioned to Placer Development Limited in 1983. Geological mapping and geochemical sampling of soil, talus fines, bulk stream sediments and rocks was carried out in that year. Geophysical investigations consisting of ground magnetometer and VLF-EM surveys were also carried out in 1983.

In 1985 the Eva property together with additional Eva claims to the south were optioned to joint venture partners Hillside Energy Corporation (Nevin Sadlier-Brown Goodbrand Ltd, Geological Consultants) and Claymore Resources Ltd. Geological exploration was performed in that year consisting of geochemical soil and rock sampling and reconnaissance geological mapping. In 1986 geological mapping was carried out together with the drilling of one BQ diamond drill hole to a depth of 182.9 metres on the Ave 5 claim. In 1986 and 1987 a geochemical and magnetometer survey were carried out on the Eva 12 claim.

Summary of Work

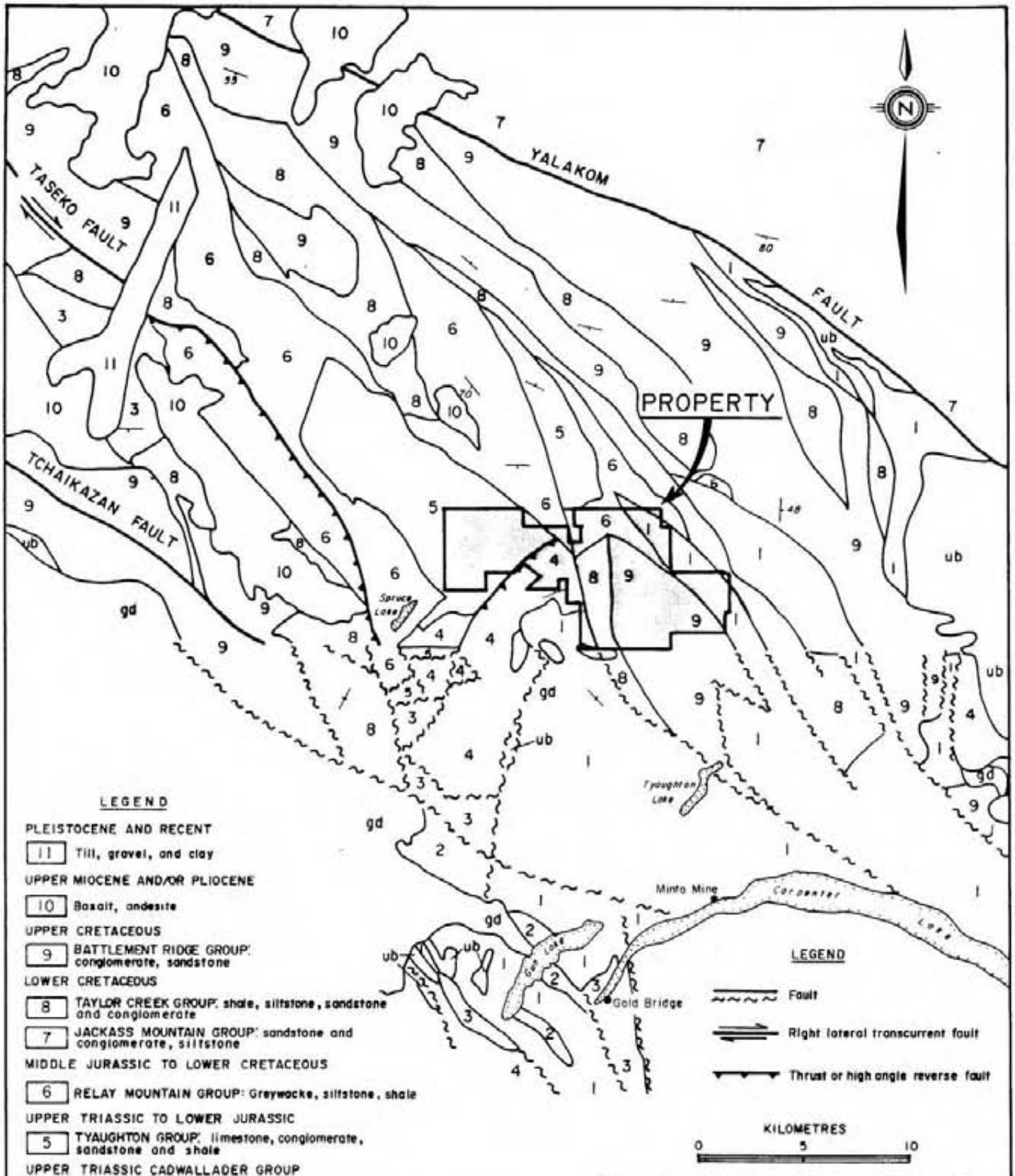
An area of approximately 28 hectares (69 acres) centred upon Tephra Creek, within the Ave 5 and 6 claims, was geologically mapped at a scale of 1:1,000. A total of 26 heavy mineral sediment samples and 9 rock geochemical samples were collected from the Eva property from the 11-30 September, 1987.

GEOLOGY

The Eva property lies within a complex sequence of Mesozoic rocks bounded by the regional northwest to southeast trending Yalakom Fault to the northeast and the Tchaikazan - Taseko Faults to the southwest. This sequence of Middle Triassic to Upper Cretaceous rocks are thought to have been deposited in a long, narrow, northwest trending, subsiding trough which was limited by landmasses to the southwest and northeast, Jeletzky and Tipper (1968).

This trough, named the Tyaughton Trough by Jeletzky and Tipper (1968), has been infilled by the Middle Triassic Bridge River Group chert and argillite with basaltic and andesitic volcanics. The Bridge River Group is succeeded by the Upper Triassic Cadwallader Group argillite and limestone with massive basalt flows and pyroclastics. The Upper Triassic to Lower Jurassic Tyaughton Group consists of shales and greywackes. Faulting separates the Tyaughton Group from the Relay Mountain Group greywackes and siltstones of Middle Jurassic to Lower Cretaceous age. A regional unconformity separates the Relay Mountain Group from the overlying non-marine greywacke, shale and boulder conglomerate of the Jackass Mountain Group. The Jackass Mountain Group grades rapidly to the west into what is thought to be its marine equivalent; the Taylor Creek Group. This group is of Lower Cretaceous age and consists of black shale, conglomerate and tuff. The Battlement Ridge Group, of Upper Cretaceous age, conformably overlies the Taylor Creek Group and consists of conglomerate, greywacke and basaltic to andesitic tuffs.

Small intrusive bodies, probably of Eocene age, of granitic to quartz dioritic composition intrude all of the above sequence. Structurally the Tyaughton Trough appears to have been characterized by graben-horst northwest trending regional faults. These faults are presently evident as high angle thrust, normal and reverse faults. Locally the faulting has been particularly intense.



LEGEND

PLEISTOCENE AND RECENT

11 Till, gravel, and clay

UPPER MIOCENE AND/OR PLIOCENE

10 Basalt, andesite

UPPER CRETACEOUS

9 BATTLEMENT RIDGE GROUP: conglomerate, sandstone

LOWER CRETACEOUS

8 TAYLOR CREEK GROUP: shale, siltstone, sandstone and conglomerate

7 JACKASS MOUNTAIN GROUP: sandstone and conglomerate, siltstone

MIDDLE JURASSIC TO LOWER CRETACEOUS

6 RELAY MOUNTAIN GROUP: Greywacke, siltstone, shale

UPPER TRIASSIC TO LOWER JURASSIC

5 TYAUGHTON GROUP: limestone, conglomerate, sandstone and shale

UPPER TRIASSIC CADWALLADER GROUP

4 HURLEY FORMATION: argillite, limestone, andesite

3 PIONEER FORMATION: andesitic to basaltic flows

2 NOEL FORMATION: argillite, conglomerate and greenstone

MIDDLE TRIASSIC AND OLDER

1 BRIDGE RIVER GROUP: chert, greenstone and argillite, + minor limestone

ub Ultramafic rocks

gd Granodiorite

After G.J. Woodsworth (1977)
After H.W. Tipper (1978)
After J. K. Glover et al. (1988)

MILLENNIUM RESOURCES INC.

EVA PROPERTY

LILLOOET MINING DIVISION, B. C.

REGIONAL GEOLOGY

SEARCHLIGHT RESOURCES INC.

DATE:	SCALE:	FIGURE No.
MARCH, 1988	1:250,000	3

Property Geology

Exploration of the property by Pan Ocean Oil Ltd in 1981, Chabot (1981), and Glover *et. al.,* (1988) has revealed that the central portion of the property, represented by Eldorado Mountain, consists of the Battlement Ridge Group. This group has been informally subdivided into two formations: the Silverquick formation of predominantly non-marine conglomerates with sandstone interbeds and the overlying Powell Creek formation of andesitic to basaltic breccia and tuff. The Battlement Ridge Group is flanked and faulted against Lower Cretaceous Taylor Creek Group rocks to the west. The Taylor Creek Group consists of dominantly marine strata: chert pebble conglomerates with cherty sandstone, siltstone shale and minor tuff (Dash conglomerate) and interbedded shale and muscovite rich arkosic sandstone (Lizard formation). The Upper Triassic Hurley Formation of the Cadwallader Group is faulted to the west against the Taylor Creek Group. The Hurley Formation consists of interbedded siltstones, sandstones and shales with minor limestone and conglomerate. The northwest of the property (Ave 4-6 claims) is underlain by the Tyaughton Group of Upper Triassic to Lower Jurassic age. This group consists of massive limestone; red conglomerate; grit and massive conglomerate interbedded with green sandstone and shale; dark grey to black shale and argillite.

Intrusive plutonic rocks are reported by Glover *et. al.,* (1988) immediately south and west of Eldorado Mountain and north of Eldorado Mountain cutting across Tyaughton Creek. These plutonic rocks consist of equigranular to porphyritic quartz diorite to quartz monzonite.

Minor intrusions, predominantly dykes, of dioritic, monzonitic and felsitic composition, are present in the northwest (Ave 4 - 6) and the east (Eva 12) of the property. These dykes are reported by Chabot, (1981) to follow fault zones or major shears, and appear to be passively emplaced, show limited thermal aureoles and little or no alteration extending from their contacts. A feldspar porphyry dyke swarm has been intruded along a north-northwesterly trend north of Tyaughton Creek (Ave 5). In this area the Tyaughton Group calcareous sandstones, greywackes and pebble conglomerates are reported to have been altered to biotite, cordierite and calc silicate hornfels. Chabot (1981) also reports the presence of basaltic necks or pipes in the northwest part of the property. These vent plugs may be feeder pipes for the Chilcotin Group plateau basalts of Upper Miocene and/or Pliocene age.

The regional faults to the northeast and southwest of the property are reflected on a local scale as northwest trending shears and thrusts. Northeast and east-west trending faults have also developed.

Tephra Creek Geology

An area of approximately 28 hectares (69 acres) of the south facing slopes of Tyaughton Creek, centred upon Tephra Creek, was mapped at a scale of 1:1,000, (fig. 4).

Geological mapping has revealed that the Tyaughton Group (Upper Triassic - Lower Jurassic) in this area consists of sediments: greywacke, conglomerate, sandstone, siltstone and limestone, together with extrusive volcanics: latite and andesite.

The greywacke (Type I) is green-grey in colour, medium grained and is clearly clastic in origin. Weak alteration has resulted in the development of calcite and chlorite.

Conglomerates (Type G & Gi) are dark green-grey to purple where fresh, ranging from a silty matrix to no matrix, containing siltstone, granite, volcanic and granophyric clasts. Alteration has given rise to the development of minor amounts of actinolite and chlorite.

The sandstone unit (Type C) is light grey in colour, medium grained with a pebbly texture and quartz and calcite cement. Rock type B, the quartz-feldspar-rich sandstone is medium grained with a framework supported matrix and a calcite cement.

Tuffaceous siltstone (Type F) is a light greenish grey in colour, is heavily slickensided and iron stained in part. In the field the rock unit tends to form hard ribs which give the appearance of dyke-like intrusions. In thin section the rock is seen to consist of quartz, plagioclase and lithic fragments supported by a very fine grained matrix of mafics: hornblende, biotite, chlorite together with quartz and feldspar. The rock is described as a tuffaceous siltstone. Siltstone (Type J) is grey brown with iron staining on weathered surfaces and green-grey on fresh surfaces which are characterized by sub-conchoidal fracture. This rock unit comprises much of the west central part of the area mapped. The rock consists of plagioclase, quartz and calcite together with up to 4 per cent of finely disseminated pyrite. The thin section report describes the rock as a tuff or a tuffaceous siltstone.

Rock sample type R3 was obtained from the same area as sample type J and is originally thought to have been a limy tuffaceous siltstone. The original host has now been altered to a grey green calcite-quartz-vesuvianite-chlorite skarn. Rock sample type R5 has retained part of its original texture revealing that it was derived from a tuffaceous siltstone. In hand specimen the rock has a purple grey colour, is very fine grained and has clots of pyrite with green "reaction rims" of epidote/chlorite? Large, 20 millimetre, clots and blebs of calcite have also been developed which display the same "reaction rims". In thin section the rock is seen to have a superimposed skarn assemblage of calcite-diopside-epidote-quartz-pyrite. The sample was obtained from talus blocks on the east side of the area mapped, downslope of assay samples R7-9 obtained from the quartz-calcite-stibnite vein.

Limestone, (Type E) is light grey-green in colour, with minor epidote on joint planes and iron staining. The rock has been skarned leading to the development of wollastonite-diopside-andradite-plagioclase, the metamorphic replacement of a silty limestone. This rock unit comprises much of the central part of the area mapped. The silty limestone (Type K) is medium grey in colour and cut by irregular veinlets of white calcite. Silty limestones (Type L and Li) are buff-brown in colour and like Type K are unmetamorphosed. Rock sample (Type M) is a white to light brown medium to coarse grained, sugary textured marble with less than 1 per cent pyrite as disseminations.

The pyritized porphyritic quartz latite (Type D) is light grey to white in colour on fresh surfaces. Phenocrysts of hornblende and plagioclase have been completely altered to carbonate, goethite, chlorite and kaolinite respectively. Weathering of the rock has resulted in the removal of the pseudomorphs and given rise to a vuggy texture. The phenocrysts are supported by a quartz and carbonate matrix. Porphyritic andesite (Type H) is buff brown and iron stained to light green grey on fresh surfaces. The rock consists of plagioclase and hornblende together with quartz and dolomite. These extrusive rocks comprise only small areas of outcrop in the north and east of the area mapped.

The stratigraphic sequence for this series of Tyaughton Group sediments has not been determined.

GEOCHEMISTRY

On the 12th October, 1987, as part of a preliminary assessment of the property, 26 heavy mineral sediment samples and 9 rock samples were collected from the property, (fig.'s 5 & 4).

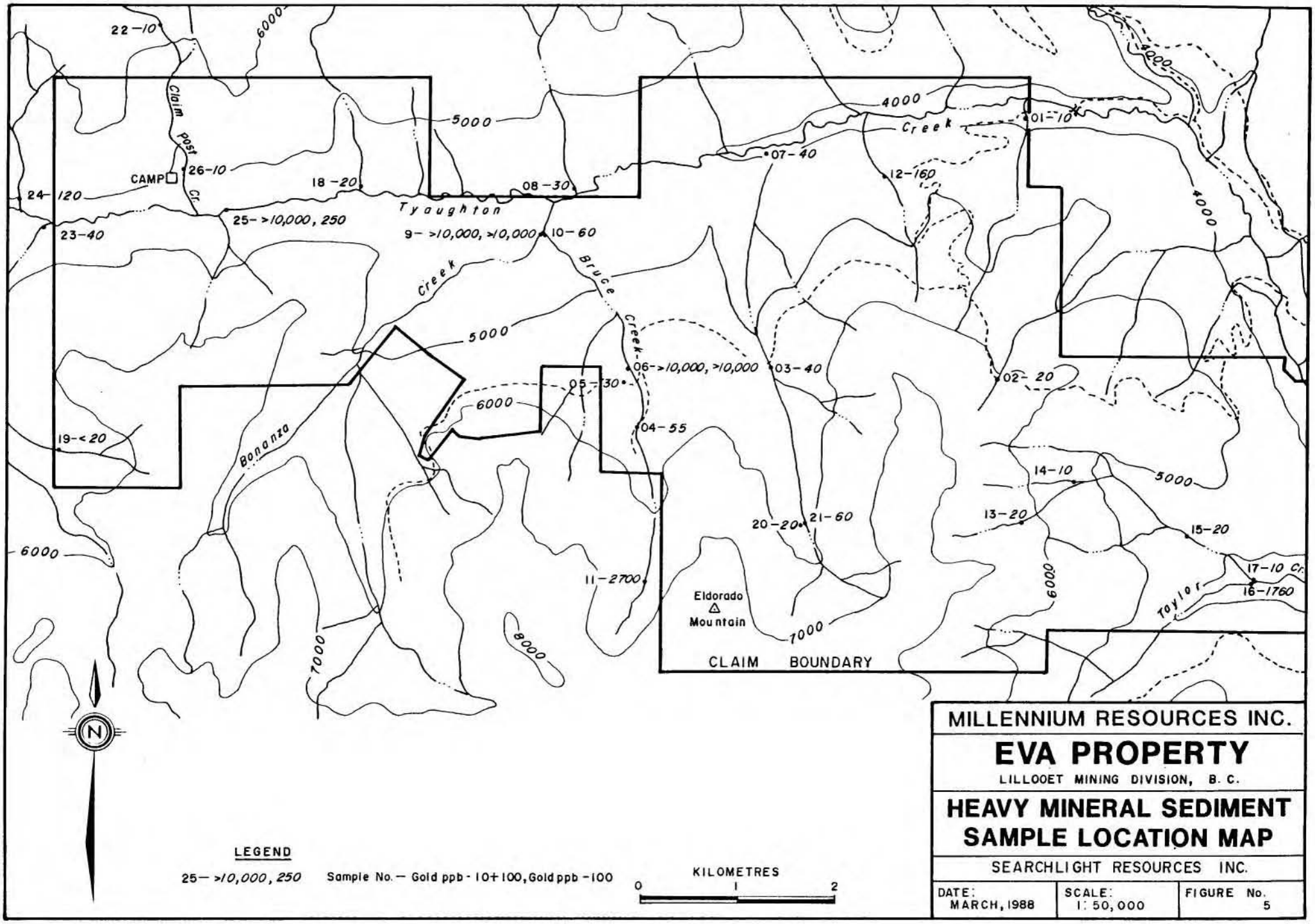
The heavy mineral sediment samples consisted of approximately 5 kg of concentrate derived from between 0.25 - 0.75 m^3 of alluvial material. The sample concentrates were placed in plastic bags, labelled with the appropriate number and shipped to Chemex Labs Ltd, 212 Brooksbank Ave, North Vancouver, B.C., V7J 2C1 for analysis.

The samples were first floated in tetrabromoethane to isolate minerals with a specific gravity greater than 2.95 $\pm$ 0.1 g/cm^3. This fraction was then dried and ring ground to -100 mesh and geochemically analyzed for gold and silver. The samples with high values (> 10,000 ppb Au) were dried and split into -10+100 and -100 mesh fractions. The weight of each fraction was then noted. The -10+100 fraction was then floated in tetrabromoethane to isolate minerals with a specific gravity greater than 2.95 $\pm$ 0.1 g/cm^3. The weight of the heavy fraction was then noted. Subsamples of both this heavy fraction and the -100 fraction were then geochemically analyzed for gold and silver.

Gold analysis required 10 g subsamples to be fused with 10 mg of gold-free silver metal. The fusion was then cupelled and the resulting silver bead parted with dilute nitric acid and treated with aqua regia. The remaining salts were then dissolved in dilute HCl and analyzed for gold via atomic absorption spectrometer with a five parts per billion (ppb) detection limit.

Silver analysis required one gram portions of each sample to be digested in concentrate perchloric-nitric acid for approximately two hours. The digested sample was then cooled and made up to 25 mL with distilled water. The solution was then mixed and solids were allowed to settle. Silver concentration was determined using corrected atomic absorption techniques with a detection limit of 0.1 parts per million (ppm).

Nine rock samples, with an approximate weight of 3 kg, were collected from the property, (fig. 4). These samples were placed in plastic bags, labelled with the appropriate sample number and shipped to Chemex Labs Ltd for geochemical analysis for gold and silver as described above. The samples with high values (> 1000 ppb Au) were subsequently fire assayed for gold and silver.



MILLENNIUM RESOURCES INC.

EVA PROPERTY

LILLOOET MINING DIVISION, B. C.

HEAVY MINERAL SEDIMENT SAMPLE LOCATION MAP

SEARCHLIGHT RESOURCES INC.

DATE:	SCALE:	FIGURE No.
MARCH, 1988	1: 50,000	5

One assay ton sub-samples were fused in litharge, carbonate and siliceous fluxes. The lead button containing the precious metals was then cuppeled. The combined silver and gold was then weighed on a microbalance, parted, annealed and again weighed as gold. The difference in the two weighings being the silver. The silver and gold values are reported in oz/ton with a 0.001 oz/ton detection limit.

Sample Eva-R7 was submitted for a 32 element ICP package. Results from these surveys may be found in Appendix A.

RESULTS AND INTERPRETATIONS

Twenty six samples were taken from creeks draining the property. Three of these samples, 6, 9 and 25 gave highly anomalous values. Samples 6 and 9 were obtained from creeks draining the Eldorado Mountain area and sample 25 was obtained from Tyaughton Creek immediately downstream of the area geologically mapped and sampled centred upon Tephra Creek. The highly anomalous values were resubmitted for analysis to determine whether fine or coarse gold was present in the samples. Samples 6 and 9 returned values of >10,000 ppb for both the fine (-100 mesh) and the coarse (-10+100 mesh) size fractions. Sample 25 returned a fine gold value of 250 ppb and a coarse gold value of >10,000 ppb. The lack of fine gold in sample 25 compared to samples 6 and 9 may indicate that the gold mineralization at Tephra Creek is of a different style, or at a different erosional level to that in the Eldorado Mountain area.

Nine rock geochemical samples were collected from the Tephra Creek area during the course of geological mapping. Three of these samples were considered highly anomalous and were subsequently fire assayed. Samples R1 to R5 are not considered anomalous for either gold or silver. Sample R6 was obtained from an area of talus and returned a value of 0.242 oz/ton gold and 0.001 oz/ton silver. Samples R7, R8 and R9 were taken across a quartz-calcite-stibnite-gold vein, the hangingwall and the footwall of this vein. These three samples returned values of 0.190, 0.046 oz/ton gold and 30 ppb gold respectively. The silver values obtained across this vein are not considered anomalous.

Further assay sampling, an induced polarization/resistivity survey and diamond drilling is required in this area of Tephra Creek. This additional work will be planned to determine the lateral and depth extensions of the gold mineralization discovered during this assessment programme.

COST STATEMENT

Eva West (45 Units) Assessment Programme (10 September - 1 October, 1987).

Mobilization/Demobilization

H. Macfarlane: 10 Sept & 1 Oct. 0.67 man day @ $262.50 ---------- 157.50
B. Callaghan: 10 Sept & 1 Oct. 0.67 man day @ $262.50---------- 157.50
Truck Rental: 10 Sept & 1 Oct. 0.67 day @ $50.00 ---------- 33.50
Gas, oil & parking: ---------- 61.13
Return airfare Kelowna-Vancouver for B. Callaghan---------- 85.28
Room: 10 Sept & 1 October 0.67 day @ $21.00 ---------- 14.00
Board: 10 Sept & 1 October 0.67 day @ $57.59 ---------- 38.59

Field

H. Macfarlane: 11 Sept - 0.33 day, 13 Sept - 1 day, 15 Sept - 0.5 day, 17 Sept - 0.33 day, 20 Sept - 0.5 day, 28 Sept - 0.33 day, 30 Sept - 0.33 day = 3.33 man days @ $262.50 ---------- 874.13
B. Callaghan: 11 Sept - 0.33 day, 13 Sept - 1 day, 15 Sept - 0.5 day, 17 Sept - 0.33 day, 20 Sept - 0.5 day, 28 Sept - 0.33 day, 30 Sept - 0.33 day = 3.33 man days @ $262.50 ---------- 874.13
Truck Rental: 11 Sept - 0.33 day, 13 Sept - 1 day, 15 Sept - 0.5 day, 17 Sept - 0.33 day, 20 Sept - 0.5 day, 28 Sept - 0.33 day, 30 Sept - 0.33 day = 3.33 days @ $40.00---------- 133.20
Room: 11 Sept - 0.33 day, 13 Sept - 1 day, 15 Sept - 0.5 day, 17 Sept - 0.33 day, 20 - 0.5 day, 28 Sept - 0.33 day, 30 Sept - 0.33 day = 3.33 days @ $23.10---------- 69.93
Board: 11 Sept - 0.33 day, 13 Sept - 1 day, 15 Sept - 0.5 day, 17 Sept - 0.33 day, 20 - 0.5 day, 28 Sept - 0.33 day, 30 Sept - 0.33 day = 3.33 days @ $57.59---------- 191.77
Helicopter:
  17 September 0.6 hours @ $627.33/hr---------- 376.40
  20 September 1.5 hours @ $627.20/hr---------- 940.80
  28 September 0.5 hours @ $627.20/hr---------- 313.60
Assays: 4 HM for Au, Ag @ $28.80---------- 115.20
  1 HM for Au, Ag @ $35.40---------- 35.40
Supplies ---------- 60.55
Equipment rental:
  Camp gear---------- 16.65
  Tent ---------- 16.65
  Miscellaneous ---------- 66.60

Office

Report preparation: 3.67 days @ $225.00---------- 825.00
Drafting and maps ---------- 303.08
Computer and copying ---------- 120.00

Total ---------- $5,880.59

Eva East (62 Units) Assessment Programme (10 September - 1 October, 1987).

Mobilization/Demobilization

H. Macfarlane: 10 Sept & 1 Oct. 0.67 man day @ $262.50 ---------- 157.50
B. Callaghan: 10 Sept & 1 Oct. 0.67 man day @ $262.50---------- 157.50
Truck Rental: 10 Sept & 1 Oct. 0.67 day @ $50.00 ---------- 33.50
Gas, oil & parking: ---------- 61.13
Return airfare: Kelowna-Vancouver for B. Callaghan---------- 85.28
Room: 10 Sept & 1 October 0.67 day @ $21.00 ---------- 14.00
Board: 10 Sept & 1 October 0.67 day @ $57.59 ---------- 38.59

Field

H. Macfarlane: 11 Sept - 0.33 day, 12 Sept - 0.67 day, 16 Sept - 1 day, 17 Sept - 0.33 day, 28 Sept - 0.33 day, 29 Sept - 1 day, 30 Sept - 0.33 day = 4.00 man days @ $262.50 ---------- 1050.00
B. Callaghan: 11 Sept - 0.33 day, 12 Sept - 0.67 day, 16 Sept - 1 day, 17 Sept - 0.33 day, 28 Sept - 0.33 day, 29 Sept - 1 day, 30 Sept - 0.33 day = 4.00 man days @ $262.50 ---------- 1050.00
Truck Rental: 11 Sept - 0.33 day, 12 Sept - 0.67 day, 16 Sept - 1 day, 17 Sept - 0.33 day, 28 Sept - 0.33 day, 29 Sept - 1 day, 30 Sept - 0.33 day = 4.00 man days @ $40.00---------- 160.00
Room: 11 Sept - 0.33 day, 12 Sept - 0.67 day, 16 Sept - 1 day, 17 Sept - 0.33 day, 28 Sept - 0.33 day, 29 Sept - 1 day, 30 Sept - 0.33 day = 4.00 days @ $23.10---------- 84.00
Board: 11 Sept - 0.33 day, 12 Sept - 0.67 day, 16 Sept - 1 day, 17 Sept - 0.33 day, 28 Sept - 0.33 day, 29 Sept - 1 day, 30 Sept - 0.33 day = 4.00 days @ $57.59---------- 230.36
Helicopter:
  16 September 1.2 hours @ $627.00/hr---------- 752.40
  17 September 0.6 hours @ $627.33/hr---------- 376.40
  28 September 0.5 hours @ $627.20/hr---------- 313.60
Assays: 9 HM for Au, Ag @ $28.80---------- 259.20
Supplies ---------- 60.55
Equipment rental:
  Camp gear---------- 20.00
  Tent ---------- 20.00
  Miscellaneous ---------- 80.00

Office

Report preparation: 3.66 days @ $225.00---------- 825.00
Drafting and maps ---------- 303.08
Computer and copying ---------- 120.00

Total ---------- $6,252.09

Ave (98 Units) Assessment Programme (10 September - 1 October, 1987).

Mobilization/Demobilization

H. Macfarlane: 10 Sept & 1 Oct 0.67 man day @ $262.50 ---------- 157.50
B. Callaghan: 10 Sept & 1 Oct 0.67 man day @ $262.50 ---------- 157.50
Truck Rental: 10 Sept & 1 Oct 0.67 day @ $50.00 ---------- 33.50
Gas, oil & parking: ---------- 61.13
Return airfare Kelowna-Vancouver for B. Callaghan ---------- 85.28
Room: 10 Sept & 1 October 0.67 day @ $21.00 ---------- 14.00
Board: 10 Sept & 1 October 0.67 day @ $57.59 ---------- 38.59

Field

H. Macfarlane: 11 Sept - 0.33 day, 12 Sept - 0.33 day, 14 Sept - 1 day, 15 Sept - 0.5 day, 17 Sept - 0.33 day, 18-19 Sept - 2 days, 20 Sept - 0.5 day, 21-27 - 7 days, 28 Sept - 0.33 day, 30 Sept - 0.33 day = 12.67 man days @ $262.50 ---------- 3325.88
B. Callaghan: 11 Sept - 0.33 day, 12 Sept - 0.33 day, 14 Sept - 1 day, 15 Sept - 0.5 day, 17 Sept - 0.33 day, 18-19 Sept - 2 days, 20 Sept - 0.5 day, 21-27 7 - days, 28 Sept - 0.33 day, 30 Sept - 0.33 day = 12.67 man days @ $262.50 ---------- 3325.88
Truck Rental: 11 Sept - 0.33 day, 12 Sept - 0.33 day, 14 Sept - 1 day, 15 Sept - 0.5 day, 17 Sept - 0.33 day, 18-19 Sept - 2 days, 20 Sept - 0.5 day, 21-27 - 7 days, 28 Sept - 0.33 day, 30 Sept - 0.33 day = 12.67 days @ $40.00 ---------- 506.80
Room: 11 Sept - 0.33 day, 12 Sept - 0.33 day, 14 Sept - 1 day, 15 Sept - 0.5 day, 17 Sept - 0.33 day, 18-19 Sept - 2 days, 20 - 0.5 day, 21-27 - 7 days, 28 Sept - 0.33 day, 30 Sept - 0.33 day = 12.67 days @ $23.10 --- 266.07
Board: 11 Sept - 0.33 day, 12 Sept - 0.33 day, 14 Sept - 1 day, 15 Sept - 0.5 day, 17 Sept - 0.33 day, 18-19 Sept - 2 days, 20 - 0.5 day, 21-27 - 7 days, 28 Sept - 0.33 day, 30 Sept - 0.33 day = 12.67 days @ $57.59 --- 729.66
Helicopter: 17 September 0.6 hours @ $627.33/hr ---------- 376.40
20 September 1.5 hours @ $627.20/hr ---------- 940.80
28 September 0.5 hours @ $627.20/hr ---------- 313.60
Assays: 13 HM for Au, Ag @ $28.80 ---------- 374.40
2 HM for Au, Ag @ $35.40 ---------- 70.80
9 rock geochem for Au, Ag @ $15.60 ---------- 140.40
3 rock assays for Au, Ag @ $13.20 ---------- 39.60
1 rock 32 element ICP @ $14.70 ---------- 14.70
Supplies: ---------- 60.55
Equipment rental: Camp gear ---------- 63.35
Tent ---------- 63.35
Miscellaneous ---------- 253.40

Office

Report preparation: 3.67 days @ $225.00 ---------- 825.00
Drafting and maps ---------- 303.08
Computer and copying ---------- 120.00
Thin and polished section analysis ---------- 1225.74

Total ---------- $13,886.97

CERTIFICATE

I, H. S. Macfarlane, do hereby certify that:

1. I am a consulting geologist, resident in Vancouver, British Columbia.

2. I am a graduate in geology of the University of London, (B.Sc. Honours, 1976), and of the University of Leicester, (M.Sc., 1981).

3. I am a Member of the Institution of Mining and Metallurgy, London, a Registered Chartered Engineer of the Engineering Council, London, and a Fellow of the Geological Association of Canada.

4. I have practiced my profession as a geologist in Africa and the Cordillera of North America since 1976.

5. The information in the attached report is based on the supervision of the 1987 exploration programme on the Eva property, B.C.

6. I have no interest, direct or indirect, in the property herein described, nor do I expect to receive any such interest.

H S Macfarlane, MSc, FGAC

Dated at Vancouver, BC, this 26th day of April, 1988.

BIBLIOGRAPHY

Cairnes, C.E. 1937: Geology and Mineral Deposits of Bridge River Mining Camp, British Columbia. *Geological Survey of Canada, Memoir 213.*

Chabot, G.E. and Garratt G.L. 1982: Report on a Reconnaissance Geologic Mapping and Geochemical Survey conducted on the Thule and Eva mineral claims, Lillooet M.D., B.C. Private report for Pan Ocean Oil Ltd.

Chabot, G.E. 1982: Summary Report on Geology and Geochemistry of the Disseminated Gold Project, Bralorne, British Columbia. Private report for Pan Ocean Oil Ltd.

Church, B.N., *et.al.* 1988: Geological reconnaissance in the Bridge River Mining Camp. *B.C.E.M.& P.R. Geological Fieldwork 1987.*

Croft, S.A.S. 1986: Report on the Geochemistry and Mineral Occurrences on the Eva-Ave Claim Group, Eldorado Mountain Area, Lillooet M.D., B.C. Private report for Hillside Energy Corporation and Claymore Resources Ltd.

Croft, S.A.S. 1987: A Report on the Geology and Results of a Diamond Drilling Program on the Ave Claims, Lillooet M.D., B.C. Unreleased B.C. Assessment Report

Glover, J.K., Schiarizza, P. and Garver, J.I. 1988: Geology of the Noaxe Creek Map Area (92-0/2). *B.C.E.M.& P.R. Geological Fieldwork 1987.*

Jeletzky, J.A. and Tipper, H.W. 1968: Upper Triassic and Cretaceous rocks of Taseko Lakes map-area and their bearing on the Geological History of Southwestern British Columbia. *Geological Survey of Canada, Paper 67-54.*

Kimura, E.T. and Thornton J.M. 1984: Geochemical and Geophysical Report on the Eva Property, Lillooet M.D. Private report for Aberford Resources Ltd.

Sadlier-Brown, T.L. 1987: A Report on a Geochemical Survey of the Eva 12 Claim, Lillooet Mining Division, B.C. Unreleased B.C. Assessment Report.

Smith, F.M. and Macfarlane, H.S. 1987: Report on the Eva Property, Lillooet Mining Division, B.C. Report for Millennium Resources Inc.

Tipper, H.W. 1978: Taseko Lakes Map Area. *Geological Survey Canada Open File 534.*

Woodsworth, C.J. 1977: Pemberton Map Area. *Geological Survey Canada Open File 482.*

Appendix A: Sample Results

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

: SEARCHLIGHT RESOURCES INC.
218 - 744 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 1A5
Project : EVA
Comments:

Date : 24-MAR-88
Invoice # : I-8812897
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8812897

SAMPLE DESCRIPTION	PREP CODE		Ag ppm Aqua R	Au ppb FA+AA
EVA-01	213	---	0.2	10
EVA-02	213	---	0.1	20
EVA-03	213	---	0.3	40
EVA-04	213	---	8.5	55
EVA-05	213	---	0.3	30
EVA-06	213	---	0.5	>10000
EVA-07	213	---	0.4	40
EVA-08	213	---	0.3	30
EVA-09	213	---	1.7	>10000
EVA-10	213	---	0.6	60
EVA-11	213	---	0.3	2700
EVA-12	213	---	0.1	160
EVA-13	213	---	0.1	20
EVA-14	213	---	0.1	10
EVA-15	213	---	0.1	20
EVA-16	213	---	0.7	1760
EVA-17	213	---	0.1	10
EVA-18	213	---	0.1	20
EVA-19	213	---	0.1	< 20
EVA-20	213	---	0.1	20
EVA-21	213	---	1.0	60
EVA-22	213	---	0.1	10
EVA-23	213	---	0.2	40
EVA-24	213	---	0.4	120
EVA-25	213	---	1.5	>10000
EVA-26	213	---	0.1	10

CERTIFICATION : _____

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE. NORTH VANCOUVER.
BRITISH COLUMBIA. CANADA V7J-2C1
PHONE (604) 984-0221

SEARCHLIGHT RESOURCES INC.
218 - 744 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 1A5
Project : EVA
Comments:

Date :11-APR-88
Invoice # :I-8813821
P.O. # :NONE

CERTIFICATE OF ANALYSIS A8813821

SAMPLE DESCRIPTION	PREP CODE		Au ppb FA+AA
EVA-06 -10+100	213	--	>10000
EVA-06 -100	225	--	>10000
EVA-09 -10+100	213	--	>10000
EVA-09 -100	225	--	>10000
EVA-25 -10+100	213	--	>10000
EVA-25 -100	225	--	250

CERTIFICATION : Stewart Bichler

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

SEARCHLIGHT RESOURCES INC.

218 - 744 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 1A5
Project : EVA
Comments:

Date : 15-MAR-88
Invoice # : I-8812896
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8812896

SAMPLE DESCRIPTION	PREP CODE		Ag ppm Aqua R	Au ppb FA+AA
EVA-R1	212	---	0.7	95
EVA-R2	212	---	0.1	25
EVA-R3	212	---	0.1	10
EVA-R4	212	---	0.1	20
EVA-R5	212	---	0.1	5
EVA-R6	212	---	0.4	7630
EVA-R7	212	---	0.3	5850
EVA-R8	212	---	0.1	1470
EVA-R9	212	---	0.1	30

CERTIFICATION : Ian R. Bidder

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE. NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

SEARCHLIGHT RESOURCES INC.
218 - 744 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 1A5
Project : EVA
Comments:

Date :30-MAR-88
Invoice # :I-8813421
P.O. # :NONE

CERTIFICATE OF ANALYSIS A8813421

SAMPLE DESCRIPTION	PREP CODE		Ag oz/T	Au FA oz/T
EVA-R6	214	--	0.01	0.242
EVA-R7	214	--	0.01	0.190
EVA-R8	214	--	< 0.01	0.046

ALL ASSAY DETERMINATIONS ARE PERFORMED OR SUPERVISED BY B.C. CERTIFIED ASSAYERS

CERTIFICATION : Annie Chistie

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

: SEARCHLIGHT RESOURCES INC.
218 - 744 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 1A5
Project : EVA
Comments:

Date : 5-APR-88
Invoice # : I-8813422
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8813422

SAMPLE DESCRIPTION	PREP CODE	Te ppm	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppm	Mg %	Mn ppm
EVA-R7	214 238	0.05	0.51	< 0.2	>10000	10	< 0.5	< 2	3.89	< 0.5	4	13	9	2.17	< 10	< 1	0.18	< 10	0.08	323

CERTIFICATION :

Chemex Labs Ltd.
Analytical Chemists * Geochemists * Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

: SEARCHLIGHT RESOURCES INC.
218 - 744 W. HASTINGS ST.
VANCOUVER, B.C.
V6C 1A5
Project : EVA
Comments:

Page : 1-B
Tot. Pages: 1
Date : 5-APR-88
Invoice # : I-8813422
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8813422

SAMPLE DESCRIPTION	PREP CODE	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm
EVA-R7	214 238	< 1	< 0.01	4	120	< 2	3700	< 10	123	< 0.01	< 10	< 10	6	10	13

CERTIFICATION : BC

Appendix B: Sample Descriptions

SAMPLE	DESCRIPTION
R 1	Quartz-calcite-stibnite vein from talus slope
R 2	Ankeritic tuffaceous siltstone
R 3	See Petrological Description
R 4	Pebbly sandstone, conglomeratic in part with clots and finely disseminated pyrite
R 5	See Petrological Description
R 6	Iron stained quartz-calcite-stibnite vein from talus slope
R 7	Channel sample across 0.23 metre (9") across quartz-calcite-stibnite vein, also see Petrological Description
R 8	Channel sample across 0.25 metre (10") across Hangingwall of R 7, bleached pyritized tuff or tuffaceous siltstone
R 9	Channel sample across 0.3 metre (1') across Footwall of R 7, pyritized tuff or tuffaceous siltstone

Appendix C: Petrological Descriptions

SUMMARY

SAMPLE	DESCRIPTION
Type B	Quartz-feldspar-rich sandstone
Type C	Pebbly sandstone
Type D	Pyritized porphyritic quartz latite
Type E	Wollastonite skarn (skarn assemblage of wollastonite-diopside-andradite-plagioclase of the pyroxene hornfels facies is a metamorphic replacement of a silty limestone, equivalent to Types K, L and Li.
Type F	Tuffaceous siltstone
Type G	Pyritized quartz-feldspar porphyry and granitic pebble conglomerate
Type Gi	Pebble conglomerate
Type H	Porphyritic andesite
Type I	Greywacke
Type J	Pyritized tuff or tuffaceous siltstone
Type K	Silty limestone (micritic limestone)
Type L	Silty limestone
Type Li	Silty limestone (micritic limestone)
Type M	Marble
Type R3	Calcite, quartz skarn (skarn assemblage of calcite-quartz-vesuvianite?-chlorite superimposed on a limy, tuffaceous siltstone?)
Type R5	Pyritized tuff or tuffaceous siltstone (with a superimposed skarn assemblage of calcite-diopside-epidote-quartz-pyrite)

PETROGRAPHY AND MINERAGRAPHY OF SAMPLES,

TYAUGHTON CREEK AREA, SOUTHERN BRITISH COLUMBIA

Peter B. Read

November 11, 1987

GEOTEX CONSULTANTS LIMITED CONSULTING GEOLOGISTS

PETROGRAPHY AND MINERAGRAPHY OF SAMPLES, TYAUGHTON CREEK AREA, SOUTHERN BRITISH COLUMBIA

1. INTRODUCTION:

Hamish MacFarlane of Searchlight Resources Inc., 218 - 744 West Hastings St., Vancouver, B.C. provided 17 thin sections and 2 polished sections for petrographic and mineragraphic examination respectively. The samples come from a mineralized area of about 100 m^2 in the Hurley Group of the Tyaughton Creek area. Based on petrography, the samples fall into three main rock types: (a) sediments and tuffaceous sedimentary rocks or tuffs, (b) marbles and skarns, and (c) altered porphyries.

2. DESCRIPTION OF THIN SECTIONS:

Sediments and Tuffaceous Sedimentary Rocks or Tuffs:

(a) Sample B:

Buff, unbedded, medium grain (1 mm) quartz-feldspar-rich sandstone with a few per cent of light grey and red lithic fragments,

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

A. Framework:

1. Quartz (52%):

Subangular to angular, 0.8 to 1.0 mm in diameter grains which are mainly monocrystalline.

2. Plagioclase (20%):

Angular, slightly sericitized grains 0.8 mm in diameter. A flat-stage plagioclase composition determination yields An_1.

3. Lithic Fragments (20%):

0.5 to 1.5 mm, subangular to subrounded clasts of siltstone, granophyre and volcanic rocks.

B. Matrix:

1. Calcite (8%):

Shapeless grains 0.1 to 0.5 mm in diameter which are untwinned and effervesce under cold, dilute HCl. It acts as a cement and fills a few thin (1 mm) veinlets.

Remarks: The rock has a clear clastic texture with essentially no matrix among the quartz, plagioclase, and lithic fragments which form the framework. Calcite cements the rock.

(b) Sample C:

Light grey, unbedded, medium grain (1 mm) pebbly sandstone.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

A. Framework:

1. Quartz (53%):

Angular to subrounded grains 0.5 to 1.5 mm in diameter which are dominantly monocrystalline.

2. Plagioclase (25%):

Slightly sericitized, subangular grains which yield 3 flat-stage plagioclase composition determinations of An_3, An_4, and An_4.

3. Lithic Fragments (15%):

Volcanic fragments, probably andesite, siltstone and chert which are subangular to subrounded and 1 to 1.5 mm in diameter.

B. Cement and Replacement Minerals:

1. Calcite (2%):

Shapeless grains 0.2 mm in diameter which fill open spaces and partly replace lithic fragments.

2. Chlorite (1%):

Medium to light green clots of pleochroic flakes up to 0.3 mm in diameter.

3. Quartz (4%):

Open space filling among chlorite-rimmed quartz grains.

Remarks: The rock has a clear clastic texture with essentially no matrix among the quartz, plagioclase, and lithic fragments which form the framework. Calcite and quartz cement the rock.

(c) Sample F:

Medium grey, unbedded, arenaceous tuffaceous siltstone.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

A. Framework:

1. Quartz (20%):

Angular quartz grains 0.3 to 0.6 mm in diameter which are monocrystalline.

2. Plagioclase (10%):

Angular grains 0.3 to 0.6 mm in diameter which are unzoned.

3. Lithic Fragments (2%):

Subangular 0.5 to 0.8 mm in diameter grains of mainly quartzite.

B. Matrix:

1. Biotite (15%):

Fine, less than 0.01 mm long, randomly oriented flakes which are pleochroic from medium to light brown.

2. Chlorite (5%):

Medium to light green, fine 0.02 mm long, randomly oriented flakes.

3. Hornblende (20%):

Pleochroic olive green to olive brown pleochroic, grains sprinkled as fine unoriented prisms 0.2 mm long.

4. Quartz and feldspar (28%):

Fine matrix of 0.01 mm grains.

Remarks: The rock has a clear clastic texture with grains of quartz, plagioclase, and lithic fragments floating in a siltstone matrix. The matrix contains a metamorphic mineral assemblage of biotite-chlorite-hornblende-plagioclase-quartz of the hornblende hornfels facies which exhibits an hornfelsic texture.

(d) Sample G:

Medium-grey, pyritized (1%) quartz-feldspar porphyry and granitic pebble conglomerate with a gritty siltstone matrix.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

A. Framework:

1. Quartz (15%):

Present as subangular to subrounded 0.5 to 2.0 mm monocrystalline and polycrystalline grains.

2. Plagioclase (10%):

Present as monocrystalline grains, as well as granitic and granophyric clasts. A single flat-stage plagioclase composition determination yields An_6.

3. Lithic Fragments (3$%):

Subangular to subrounded clasts 1 to 6 mm in diameter composed of granophyric, volcanic, granitic, and siltstone clasts.

B. Matrix (35%):

Fine, less than 0.1 mm diameter grains of quartz and feldspar which host, quartz, plagioclase and lithic fragments.

C. Alteration Minerals (5%):

1. Actinolite:

Pale green prismatic sprays up to 0.2 mm long.

2. Chlorite:

Pale green clots of flakes with anomalous berlin blue and clove-brown interference tints.

3. Opaque Minerals - Pyrite (1%):

Equant cubes 0.2 mm on edge sparsely disseminated throughout.

Remarks: The rock is a pebbly siltstone containing siltstone, granitic, volcanic and granophyric clasts. Without knowing the field relations of this rock, it seems more likely to be a sediment rather than a volcanic rock.

(e) Sample Gi:

Medium grey-green, angular to subrounded, pebble conglomerate, which, in hand specimen contains a large (3 cm in diameter), pegmatite pebble.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode.

A. Framework:

1. Quartz (25%):

Angular 0.5 to 1.5 mm in diameter in both monocrystalline and polycrystalline grains.

2. Lithic Fragments (65%):

Subangular to subrounded fragments 1 to 4 mm in diameter consisting of quartzite, chert, siliceous phyllite, acid volcanics, and siltstone.

B. Matrix:

1. Calcite (10%):

Shapeless grains 0.1 to 0.5 mm in diameter which are untwinned and in hand specimen effervesce under cold, dilute HCl. It is present as a partial replacement of lithic fragments.

Remarks: The rock has a clear clastic texture with essentially no matrix among the quartz, plagioclase, and lithic fragments which form the framework.

(f) Sample I:

Medium grey-green, medium grain (0.5-1.0 mm) unbedded greywacke.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

A. Framework:

1. Plagioclase (20%):

Subangular, 0.5 to 0.8 mm in diameter grains which are slightly sericitized, unzoned and yield two flat-stage plagioclase determinations of An_0.

2. Quartz (42%):

Angular to subangular 0.5 to 1.0 mm grains with none showing the embayments so typical of quartz phenocrysts which would be expected if this rock were a tuff or flow.

3. Lithic Fragments (20%):

Angular fragments 0.5 to 1.0 mm in diameter composed of siltstone, acid volcanics, chert and siliceous phyllite.

B. Alteration Minerals:

1. Calcite (8%):

Replaces lithic fragments and plagioclase.

2. Sericite (2%):

Fine flakes less than 0.1 mm long as a partial replacement of plagioclase.

3. Chlorite (8%):

Medium to light green pleochroic flakes 0.2 mm long with anomalous berlin blue interference tints forming rims around quartz grains and as a constituent mineral of the lithic fragments.

Remarks: The rock has a clear clastic texture.

(g) Sample J:

Light grey-green pyritized (3%) unbedded tuff or tuffaceous siltstone.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

1. Quartz (25%):

0.1 to 0.3 mm shapeless grains.

2. Calcite (20%):

Shapeless, untwinned grains 0.1 to 0.3 mm in diameter sprinkled throughout the rock.

3. Opaque Minerals - Pyrite (4%):

Shapeless grains 0.1 m in diameter disseminated throughout. In hand specimen the mneral is brass yellow, hard and nonmagnetic.

4. Plagioclase (51%):

0.1 to 0.3 mm long grains, some of which are lath-shaped and rarely twinned. All are lightly sericitized.

Remarks: There is no clear clastic texture, but also no obvious flow textures. In the absence of these textures I have called the rock a tuff, but it could be a tuffaceous siltstone.

(h) Sample K:

Medium grey, silty limestone cut by irregular veinlets of white calcite.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

1. Calcite (99%):

(a) Shapeless grains 0.01 to 0.1 mm in diameter forming a micritic limestone in which oval areas 1 to 3 mm on the long axis are pellets.

(b) Irregular veins composed of shapeless 0.5 mm in diameter grains which are rhombohedrally twinned.

2. Quartz (1%):

Angular and subangular, unaltered, monocrystalline clastic grains 0.05 to 0.15 mm in diameter.

3. Plagioclase (%%):

Rare, polysynthetically twinned, angular clasts 0.05 to 0.15 mm in diameter.

Remarks: Unmetamorphosed micrite limestone.

(h) Sample L:

Medium buff-brown, silty limestone cut by veinlets up to 5 mm thick of white calcite.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

1. Calcite (95%):

(a) Fine, 0.01 mm in diameter micrite and single calcite grains up to 0.4 mm in diameter which may be shell or crinoid ossicle fragments.

(b) Shapeless grains 0.4 mm in diameter which are extensively twinned and form veins up to 5 mm thick.

2. Quartz (5%):

Angular 0.05 to 0.15 mm in diameter clastic, monocrystalline grains.

Remarks: Unmetamorphosed silty limestone.

(i) Sample Li:

Buff-orange, silty limestone cut by irregular vein of white calcite.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

1. Calcite (95%):

(a) Fine 0.01 mm in diameter micrite, and single calcite grains up to 0.4 mm in diameter which may be shell or crinoid ossicle fragments.

(b) Shapeless grains 0.4 mm in diameter which are extensively twinned and form the white calcite veins.

2. Quartz (5%):

Angular clastic grains 0.05 to 0.2 mm in diameter.

Remarks: Unmetamorphosed micritic limestone.

Marbles and Skarns:

(j) Sample E:

Light grey-green wollastonite-diopside-andradite-plagioclase skarn cut by pinching and swelling wollastonite veins.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

1. Wollastonite (30%):

A colourless prismatic mineral with $2V_X = 40^\circ$ with first order interference tints, variable sign of elongation, and a number of cleavages of which none is at 56°. It forms anastomosing monomineralic bands which probably developed from originally pinching and swelling calcite veinlets.

2. Diopside (64%):

Colourless, shapeless grains 0.01 to 0.2 mm in diameter which are sprinkled throughout the rock. The mineral has a high positive relief and an inclined extinction of about 45°.

3. Andradite (4%):

Isotropic grains 0.1 mm in diameter with a reddish brown colour in thin section.

4. Plagioclase (4%):

Polysynthetically twinned to untwinned, fine (0.05 to 0.2 mm), shapeless to lath-shaped grains. No grains are suitably oriented for flat-stage plagioclase composition determinations.

Remarks: The skarn assemblage of wollastonite-diopside-andradite-plagioclase of the pyroxene hornfels facies is a metamorphic replacement of a silty limestone which originally must have had a texture similar to samples K, L and Li.

(k) Sample M:

Medium grain (1-2 mm) crystalline, white marble cut by thin (3 mm) white calcite veinlets.

Thin Section:

The Following minerals are present in amounts given by a visually estimated mode:

1. Calcite (99½%):

Shapeless, untwinned grains 0.1 to 2 mm in diameter.

2. Pyrite (½%):

Equant pyritohedra up to 0.2 mm on edge.

(l) Sample R3:

Light grey-green calcite-quartz-vesuvianite?-chlorite skarn possibly developed from a limy tuffaceous siltstone.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

1. Calcite (60%):

Coarse (1-2 mm), colourless, rhombohedrally twinned grains in lenses from 5 to 15 mm long composed of calcite-quartz-vesuvianite?. The carbonate effervesces under cold, dilute HCl.

2. Quartz (15%):

Shapeless, unaltered grains 0.1-0.4 mm in diameter in calcite-quartz-vesuvianite? lenses and sprinkled throughout.

3. Vesuvianite? (10%):

Refractive index about 1.7, colourless to very pale green-brown with low birefringence of about 0.005. The mineral does not show the sectorial or polysnythetic twinning of grossularite-andradite.

4. Chlorite (15%):

Medium to pale green pleochroic flakes and slightly radiating sheaves of flakes 0.2 mm long. The flakes have anomalous berlin-blue interference tints and are length-slow.

Remarks: The skarn assemblage of chlorite-calcite-vesuvianite?-quartz obliterates the textures of the host rock which could have been a limy, tuffaceous siltstone.

(m) Sample R5:

Light grey-green, pyritized (5%) tuff or tuffaceous siltstone with a skarn assemblage of epidote-diopside-calcite-quartz-pyrite.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

1. Epidote (7%):

Caorse, 1 mm long, sieve-textured, pleochroic yellow-green to pale yellow grains spatially associated with pyrite and calcite..

2. Pyrite (5%):

Equant grains or clots of equant grains up to 5 mm long.

3. Calcite (15%):

Shapeless, untwinned grains 0.2 to 0.5 mm in diameter. In hand specimen, the mineral effervesces under cold, dilute HCl. Much of it is in clots up to 15 mm long.

4. Plagioclase (58%):

Subhedral laths up to 0.2 mm long showing polysynthetic twinning but none suitably oriented for a composition determination.

5. Diopside (10%):

Colourless grains up to 0.2 mm long with inclined extinction of about 40°. It is concentrated in the calcite-rich clots with epidote and pyrite, and disseminated as fine 0.01 m diameter grains throughout the rock.

6. Quartz (5%):

(a) Shapeless grains 0.2 mm in diameter which are spatially related to the diopside-calcite-epidote-pyrite clots.

(b) Angular grains up to 0.2 mm long which are part of the original clastic constituents of the tuff.

Remarks: The original constituents of the rock are plagioclase laths and angular quartz grains of either a tuff or a tuffaceous siltstone. Superimposed on this rock is a skarn assemblage of calcite-diopside-epidote-quartz-pyrite.

(n) Sample GARNET:

Light grey-green tuffaceous siltstone cut by bands composed of red garnet, white calcite, and colourless quartz comprising an andradite-calcite-epidote-quartz skarn.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

1. Garnet-andradite (20%):

Shapeless grains forming solid layers. The margins of the layers show a birefringence with light to dark grey interference tints which outline sectorial polysynthetic twinning.

2. Calcite (30%):

In the skarn assemblage, shapeless grains to 2 mm in diameter which show rhombohedral twinning spatially associated with coarse garnets.

3. Epidote (5%):

Strongly pleochroic deep to pale greenish yellow, shapeless to prismatic grains 0.1 to 0.4 mm long which are in contact with garnet, calcite, and quartz. It is restricted to the skarn assemblage.

4. Quartz (8%):

Shapeless grains 0.05 to 0.4 mm in diameter which are restricted to the skarn assemblage.

5. Hornblende (¼%):

Pleochroic green to green-brown prismatic grains up to 0.2 mm long spatially restricted to the skarn assemblage.

6. Chlorite (½%):

Medium to pale green flakes with grey interference tints which are length-slow.

7. Plagioclase (36%):

As fine 0.05 to 0.1 mm long lath-shaped grains which yield flat-stage composition determinations of An_{39} and An_{42}. They are restricted to the host rock of the skarn assemblage and are part of the original constituents of the rock. A few shapeless, unaltered, moderately polysynthetically twinned grains 0.1 to 0.3 mm in diameter are present in the skarn assemblage. They yield a flat-stage composition determination of An_{34}.

Remarks: A skarn assemblage of calcite-andradite-epidote-hornblende-chlorite--quartz-plagioclase forms lenses and layers in a limy tuff or limy tuffaceous siltstone.

Altered Porphyries:

(n) Sample D:

Rusty weathering, pyritized (2%), white porphyritic (plagioclase - 5%, 4 mm; hornblende - 15%, 2 mm) quartz latite.

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

A. Phenocrysts:

1. Hornblende pseudomorphs (15%):

Carbonate, goethite, chlorite form a mixture which completely pseudomorphs original hornblende phenocrysts.

2. Plagioclase (5%):

Fine mesh of kaolinite completely pseudomorphs subhedral laths up to 2 mm long.

B. Matrix:

1. Quartz (40%):

Shapeless grains 0.05 mm in diameter which are sprinkled with carbonate and have a uniaxial interference figure.

2. Carbonate - dolomite (40%):

Present as very fine grains 0.01 mm in diameter which are disseminated throughout rock, and as coarser grains up to 0.4 mm in diameter in the pseudomorphs. All grains are shapeless and untwinned. In hand specimen, the carbonate weakly effervesces under cold, dilute HCl.

(o) Sample H:

Light grey-green porphyritic (plagioclase - 1-3 mm 25%; hornblende - 2 mm, 5%) andesite

Thin Section:

The following minerals are present in amounts given by a visually estimated mode:

1. Plagioclase (57%):

Euhedral plagioclase phenocrysts which are nearly totally pseudomorphed by a mesh of kaolinite flakes. However, some plagioclase has retained its polysynthetic twinning.

2. Quartz (6%):

Shapeless 0.1 to 0.3 mnm in diameter, unaltered grains mainly in the matrix but about ½% as embayed phenocrysts.

3. Hornblende pseudomorphs (10%):

Opaque-rimmed pseudomorphs composed of carbonate-quartz-chlorite which retain a diamond-shaped cross-section and elongated prismatic sections up to 2 mm long.

4. Ferroan dolomite (25%):

Small 0.1 mm, shapeless, untwinned grains which pseudomorph hornblende phenocrysts with a brown rim on the outside of the grains.

5. Opaque Mineral - Hematite (2%):

Equant grains which have a red streak in hand specimen.

3. DESCRIPTION OF POLISHED SECTIONS:

(a) Sample R5:

1. Pyrite:

Present as equant grain and irregular clots up to 4 mm in length composed of brassy yellow, isotropic grains of hardness F.

(b) Sample R7:

1. Bismuthinite (major opaque mineral):

A stibinite-like mineral in hand sample which is prismatic with one good cleavage. In polished section, the mineral has a bladed habit, is soft with hardness = B, galena-white in colour, has a strong anisotropism from light grey to brown grey to dark grey and has an X-ray diffraction pattern consistent with that of bismuthinite (Appendix A).

2. Unknown mineral - arsenopyrite? (minor component)

Elongate prismatic, tin white mineral which is galena white in polished section. The mineral is present as small well-formed elongate, prismatic crystals of diamond-shaped cross-section, that are less than 0.05 mm on edge suggestive of the crystal habit of arsenopyrite; however, it is apparently isotropic compared with arsenopyrite which shows strong anisotropism. The X-ray diffraction pattern (Appendix A) after removing the peaks for quartz, calcite, and bismuthinite, leaves three unindexed peaks which would best fit arsenoyprite. The prisms are so small that it is not possible to estimated the hardness.

4+ 00 N.

3+ 50 N.

3+ 00 N.

2+ 50 N.

2+ 00 N.

1+ 50 N.

1+ 00 N.

0+ 50 N.

0+ 00

Tephra Creek

AVE 5

PACK TRAIL

I

Sandstone
Conglomerate – calcite

Conglomerate
Epidote
Calcite

TYPE I
greywacke

TYPE H
Kaolinized porphyritic andesite
40

Tuffaceous Siltstone
J
A
Shale
78
Ankerite, Calcite, pyrite

G
Calcite, Epidote
Pyrite, Iron Stain

Purple, green pebble conglomerate

PACK TRAIL

Pyrite, calcite hornblende
TYPE D
Porphyritic quartz latite

A
Shale
conglomerate

B
quartz – feldspar rich sandstone

83
TYPE B
quartz-feldspar rich sandstone

DDH 86-1
(248° -65°)

183 m

Outcrop

R3 – 10 ppb Au
Skarned limy tuffaceous siltstone

Pyrrhotite, pyrite calcite

R2 – 25 ppb Au

pyrrhotite

Pyrrhotite
Calcite

TYPE J
Tuffaceous siltstone

Tuffaceous siltstone
J

TYPE K
Silty limestone

Outcrop

Talus

Wollastonite skarn

40
G

TYPE F
Iron-stained tuffaceous siltstone

E
Wollastonite skarn

TYPE E
Wollastonite skarn (met. silty limestone)

Wollastonite skarn
Epidote, calcite, garnet

60

66
Pyrite, calcite, epidote, Garnet

TYPE G
Purple, green quartz-feldspar porphyry and granite pebble conglomerate

TYPE C
Pebbly sandstone

TYPE M
Marble
Pyrite

R4 – 20 ppb Au

Claim post

Creek

TYPE L
Silty limestone
Calcite, Epidote, Ankerite, Manganese

3+00W

CLAIM BOUNDARY

2+00W

1+00W

0+00

1+00E

2+00E

3+00E

L.C.P.

x R1 – 95 ppb Au

Talus

Talus

49

R8 – 0.046 oz/ton Au

R7 – 0.190 oz/ton Au

R9 – 30 ppb Au

quartz, calcite, bismuthinite / stibnite and arsenopyrite

86
J
Calcite epidote
Tuffaceous siltstone

BASELINE

Tyaughton Creek

AVE 6

AVE 4

Falls

x R6 – 0.242 oz/ton Au

x R5 – 5 ppb Au
Pyritized, skarned, tuffaceous siltstone

LEGEND

- Outcrop
- x R7 — Geochemical or assay sample location
- TYPE A — Petrological sample location
- Steep cliffs

METRES
0 10 20 30 40 50

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,331

MILLENNIUM RESOURCES INC.

EVA PROPERTY

LILLOOET MINING DIVISION, B. C.

GEOLOGY AND ASSAY
SAMPLE LOCATION MAP

SEARCHLIGHT RESOURCES INC.

DATE:	SCALE:	FIGURE No.
MARCH, 1988	1:1000	4