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Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S) Geological, Geochemical and Geophysical	TOTAL COST \$77,691.85
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 .. J. Thornton .. *J. Thornton*

DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILED .. April .. YEAR OF WORK 1985

PROPERTY NAME(S) .. Eva Property ..

COMMODITIES PRESENT .. Au ..

B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN ..

MINING DIVISION .. Lillooet .. NTS 92-J-15 & 92-0-2

LATITUDE .. 51.00' .. LONGITUDE .. 122.50'

NAMES and NUMBERS of all mineral tenures in good standing (when work was done) that form the property [Examples: TAX 1-4, FIRE 2 (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified Mining Lease ML 12 (claims involved)]:

.. Eva 2-6, 10-26 & Thule 7 (413 units) ..

OWNER(S)

(1) .. Aberford Resources Ltd. .. (2) ..

MAILING ADDRESS

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 .. Calgary, Alberta T2P 2M7 ..

OPERATOR(S) (that is, Company paying for the work)

(1) .. Placer Development Limited .. (2) ..

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.. P.O. Box 49330 ..
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 .. Vancouver, B.C. ..

SUMMARY GEOLOGY (lithology, age, structure, alteration, mineralization, size, and attitude):

Eva Property is underlain by an assemblage of Mesozoic sedimentary and volcanic rocks that are locally disrupted by faulting and folding. These are, in turn, intruded by younger granitic to quartz dioritic stocks and felsic to basaltic dykes. A number of irregularly-shaped to dyke-like serpentized ultramafic bodies is emplaced in the older rock units. Several different styles of gold-bearing mineralization were recognized in older lithologic units. These are alteration and mineralization bordering or proximal to intrusive bodies; quartz-sulphide veins in shears; and calcite vein systems with minor sulphides.

REFERENCES TO PREVIOUS WORK
 Ass Rpt #11671; Ass Geochem Rpts. Filed 27/6/84 & 16/7/84

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	COST APPORTIONED
GEOLOGICAL (scale, area) Ground Photo	1:5,000	Eva 6, 10, 15, 18, 21, 25 & 26	\$ 2,897.13
GEOPHYSICAL (line-kilometres) Ground Magnetic Electromagnetic Induced Polarization Radiometric Seismic Other Airborne	20.1 km 20.1 km	Eva 2., 3., 15., 18. & 26. Eva 2., 3., 15., 18. & 26.	\$ 3,100.00
GEOCHEMICAL (number of samples analysed for) Soil Silt Rock Other	Numerous. Cu., Pb., Zn., Ag., As., Ni., Au., Sb.	Eva. 2., 3., 6., 10., 15., 16., 18. & 21., 25. & 26.	\$71,694.72
DRILLING (total metres; number of holes, size) Core Non-core			
RELATED TECHNICAL Sampling/assaying Petrographic Mineralogic Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL Legal surveys (scale, area) Topographic (scale, area) Photogrammetric (scale, area) Line/grid (kilometres) Road, local access (kilometres) Trench (metres) Underground (metres)			
TOTAL COST			\$77,691.85

FOR MINISTRY USE ONLY	NAME OF PAC ACCOUNT	DEBIT	CREDIT	REMARKS:
Value work done (from report)				
Value of work approved				
Value claimed (from statement)				
Value credited to PAC account				
Value debited to PAC account				
Accepted Date	Rept. No.			Information Class

GEOLOGICAL,
GEOCHEMICAL AND GEOPHYSICAL
REPORT
ON THE
EVA PROPERTY

Eva 2-6, 10-21 and 26 Mineral Claims
(Total 313 units)

Lillooet Mining Division

NTS 92J/15 and 92O/2
Latitude 51°00 Longitude 122°50

Owner of Claims:
Aberford Resources Ltd.

Operator:
Placer Development Limited

E.T. Kimura
J.M. Thornton
B.W. Barde

April, 1985

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,709

Part 1
of 5

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1. INTRODUCTION

Placer Development Limited completed programs of detailed soil and rock sampling, geological mapping, ground magnetometer and VLF-EM surveys over several selected areas on the Eva Mineral Claims. The field work was conducted during the period 17 July to 1 August, 1984. The property is 15 km north of Gold Bridge, B.C.

2. SUMMARY

Several gold-bearing geochemical targets were outlined by previous stream sediment and wide-spaced grid sampling. These were examined in more detail with the objective of identifying the possible source and mode of occurrence of the gold mineralization. Results of detailed sampling and geological interpretation indicate that several detectable gold signatures and their associated elemental anomalies are related to intrusive contacts, in particular, narrow porphyry dykes, small plutons, and local margins of larger stocks. A number of prominent gossanous shear structures were sampled and results from these often show either undetectable or weak gold presence with comparatively strong associated element response.

Cost of the exploration project on the Eva Claims as covered in this report was \$77,691.85.

3. PROPERTY DEFINITIONS

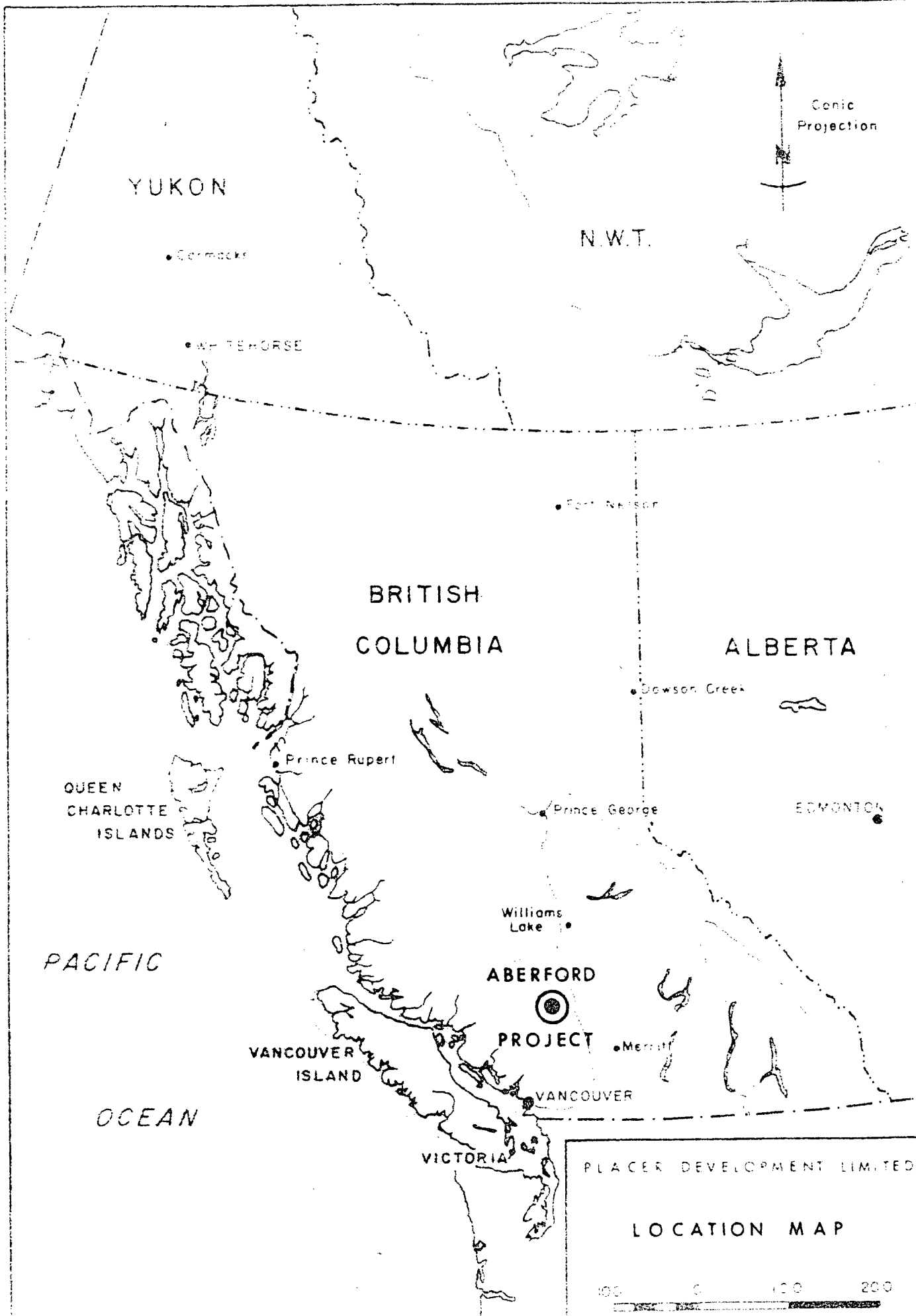
The Eva property is 15 km north of Gold Bridge, B.C. in the Lillooet Mining Division. It is on the rugged flanks of Eldorado Mountain and comprised of 23 mineral claims totalling 413 units. The field work as conducted and claimed for assessment work in this report was performed on 18 of the above 23 claims. The pertinent claims are tabulated below.

<u>Mineral Claim</u>	<u>Units</u>	<u>Record No.</u>	<u>Expiry Date</u>	<u>Grouping</u>
Eva 2-6	77	1458-1462	July 16, 1985	83-4
Eva 10	20	1466	July 16, 1985	83-3
Eva 11	20	1467	July 16, 1985	83-4
Eva 12-16	80	1468-1472	July 16, 1985	83-3
Eva 17-19	60	1473-1475	July 16, 1985	83-2
Eva 20 & 21	36	1476 & 1477	July 16, 1986	83-2
Eva 26	20	2908	June 13, 1985	-

Pan Ocean Oil Ltd. was initially attracted to the Bralorne gold camp in 1979. During that and the following year, selected areas in the region were tested with systematic program of heavy mineral stream sediment samples. This was followed by claim staking during 1980. Geological mapping and rock chip sampling programs were conducted during 1981 in an attempt to evaluate the source of anomalous gold geochemistry. Pan Ocean Oil Ltd. was taken over by Aberford Resources Ltd. during 1982. The property was optioned to Placer Development Limited in 1983.

4. TOPOGRAPHY AND ACCESS

The property is in the rugged and steep mountainous terrain of the Coast Mountains. More specifically the Eva claims are on Eldorado Mountain which is part of the Chilcotin Ranges. This mountain is characterized by a series of cirque-formed ridges and more gently to steeply-sloped flanks that are cut by a system of deeply-incised drainages. Much of the upland regions are above tree-line, and are represented by open alpine meadows. Local relief is approximately 900 meters, but can be up to 1350 meters as the peak of Eldorado Mountain attains an elevation of 2450 meters compared to Tyaughton Creek valley at 1065 to 1200 meters.



A helicopter was utilized to access most of the sampling areas on Eldorado Mountain. A system of recent logging roads was available to access part of the lower reaches. A few old roads and trails that wind over and across Eldorado Mountain were inaccessible by vehicle, but did facilitate walking access to local areas.

5. ECONOMIC ASSESSMENT

There are a number of old mineral properties on and around Eldorado Mountain. These were primarily explored for their gold, mercury and antimony potential. The recent heavy mineral sampling program and the follow-up field work are specifically oriented into exploring for micron gold targets, but are also designed for assessing the potential of other styles of epithermal targets such as bonanza veins and stockwork mineralization.

The heavy mineral sampling of the streams flanking Eldorado Mountain initially identified several anomalous drainage systems. The follow-up bulk sediment sampling was concentrated within these drainages to delineate specific targets. Subsequent detailed sampling was undertaken to identify more restricted targets that may focus into the possible source for gold signatures.

6. GENERAL GEOLOGY

The Eva Mineral Claims are within a sequence of Mesozoic sedimentary and volcanic rocks that are structurally disrupted by faulting and folding. They are, in turn, intruded by younger granitic to quartz dioritic stocks and felsic to basaltic dykes. In and around the Eva property, a number of irregularly-shaped to dyke-like serpentized ultramafic bodies are emplaced in the older Mesozoic rock units. Five ages of rocks ranging from the

Triassic to the Upper Cretaceous are exposed and identified on the Aberford properties. The oldest Triassic Bridge River Group comprises a sequence of greywacke, massive and pillow basalts, thin-bedded chert and minor interbedded limestone and siltstone. The serpentinized ultramafic bodies invariably intrude and/or border these older rocks. The Bridge River Group rocks are overlain or in fault contact with successfully younger Upper Triassic Hurley Formation of interbedded greywacke, sandstone, siltstone, limestone and a distinct boulder conglomerate unit with carbonate matrix; Upper Jurassic Relay Mountain Group of argillite, greywacke, shale, siltstone and minor limestone, all of which are commonly fossiliferous; Lower Cretaceous Taylor Creek Group comprised of chert pebble and boulder conglomerate with interbedded greywacke and sandstone; and Upper Cretaceous Kingsvale Group comprised of generally soft and poorly lithified arkose, shale and pebble conglomerate. Medium to coarse equigranular granite to quartz diorite stocks and plugs intrude most of the above rock formations. Dykes, often occurring as swarms and possibly related to the stocks, intrude the sedimentary and volcanic rocks.

Widespread gossans are developed as prominent crowns, zones and streaks on many of the topographic peaks and their flanks in the Bridge River region. Many of the gossans are accentuated from their actual source as they are spread downslope as scree material. The more widespread gossans normally represent pyritized rock units whereas the more restricted bands and streaks are commonly developed over and around structures, alteration zones and other localized features such as dykes, thin beds, veins and contacts. Iron carbonate, probably in the form of ankerite is a common alteration and vein mineral that surficially alters to a rusty gossan. These gossans are attractive exploration signatures and certain phases of the detailed program were oriented towards assessing these targets.

7. EVA PROPERTY PROJECTS

Six separate exploration targets were examined on the Eva Claims and are being submitted for assessment work in this report. The locations of these targets on the property are shown on an appended map.

Reference is also made to an appended geologic map of the Eva property. This shows the spatial distribution of the rock units and major structures with respect to several important mineral prospects. The oldest and more favourably mineralized Bridge River Group rocks form the north-northwest-trending core to the lithologic assemblage that, in turn, is flanked by younger Hurley Formation to the west and Taylor Creek Group conglomerate to the east. A localized wedge of Kingsvale Group sedimentary rocks overlies part of the Taylor Creek conglomerate in the northeast sector of the property; these rocks were not examined. The irregularly-shaped granodiorite stock truncates the Bridge River Group rocks and forms the focal point of interest on the property as a number of mineral showings are proximal or within these intrusive bodies.

The following are reports on the specific field projects.

7.1 Taylor Creek Grid

The Taylor Creek Grid was established during 1983 to explore an apparent gold anomaly in soil samples along Taylor Creek Road. The grid sampling did not expand the anomaly, but the general consistency of the anomalous samples indicated sufficient promise to warrant further detailed work.

7.1.1 Geology

A monotonous sequence of massive chert pebble and boulder conglomerate underlies the Taylor Creek Grid and the immediate surrounding area. These 20 to 40 meter thick conglomerate beds are separated by thinner greywacke, sandstone and shale interbeds. Majority of the exposures are along the ridge crest at the top of the Taylor Creek Grid; no obvious alteration or structures are noted in the bedded sequence. A consistent $330^{\circ}/50^{\circ}$ SW bedding can be traced and projected northward from the Taylor Creek Grid to the north slope of Taylor Creek, and this prompted plans to conduct more thorough exploration along this trend.

7.1.2 Geochemical Surveys and Results

Additional soil samples were collected to tighten the grid pattern around the original anomaly. Also, the original sample sites on the Taylor Creek Road were re-sampled with profile samples of the B₁, A₀ where available and the overlying volcanic ash layer. The grid soil sampling was extended to the north side of Taylor Creek to test possibilities of a northerly extension to the anomaly.

Soil development on the steep heavily-timbered sidehill in the Taylor Creek Grid area is rather complicated. For most part, the B₁ horizon is developed as a reddish brown silty layer. The accompanying and overlying A₀ horizon is present but it is usually represented as a very thin black streak that is less than one centimeter thick. The more prevalent material that overlies the B₁ horizon is a loosely packed volcanic ash and coarse lithic tuff horizon.

This volcanic layer seems to cover about 90% of the surface area and can vary from a few centimeters to over two meters in thickness. Duplicate soil profiles, indicative of slumping, are also noted on the steep slopes. Rock exposures are common near the ridge crest. At these levels, soil development is poor and consists primarily of immature lithosols where the soil is usually thin and often composed of angular rock fragments and colluviated debris.

Soil samples were collected from holes that were dug with the aid of a mattock to depths varying from 0.10 to 1.5 meters. The deeper holes were required where the volcanic ash layer was abnormally thick. In most cases, samples averaging 150 gm were collected from the B₁ horizon and placed in a number kraft paper envelope. Poor soil development along the ridgecrest resulted in a sample of BC horizon material.

Results of the soil sampling were negative. This included the re-sampling of the original anomalous road samples. In comparing the results of the earlier sampling with those of the re-sampling, it is noted that the gold ranged from undetectable to 0.17 ppm Au for 14 consecutive line samples in the early program, whereas it is completely undetected in the re-samples. The other elements, notably Cu, Pb, Zn and As, are comparable in their levels from the original sample to the re-sample.

7.2 Taylor Creek North Slope

Several of the highest Heavy Mineral gold contents were recorded on tributaries that are draining the north slope of Taylor Creek. The initial 1983 follow-up bulk sediment

sampling during heavy run-off indicated no detectable gold from these streams. Subsequent bulk sediment samples from the same sites were collected under more controlled flow conditions, and these confirmed the gold presence. Two contour soil lines showed low-order gold at the lower level, but none for a line close to base-of-outcrop. The soil sampling results did not satisfactorily explain the possible source of the high gold in stream samples, and therefore additional detail work was conducted in the 1984 program.

7.2.1 Geology

The well-bedded Taylor Creek Group conglomerate and greywacke sequences are the dominant rock types across the north slope of Taylor Creek. These sediments are intruded by the main granodiorite stock near the west boundary of the Eva claims. Near this contact zone, finer greywacke, sandstone and siltstone interbeds are proportionately more abundant than conglomerate beds. A nose of the Kingsvale Group sedimentary rocks are shown to extend onto part of the ridge close to the intrusive contact; these rocks were not observed in the field. Several faults and breccia zones were mapped in the conglomerate and greywacke sequence. These structures are generally marked by prominent rusty gossan zones, probably as a result of ankerite and pyrite oxidation.

A major northwest fault is inferred at the contact between Taylor Creek Group sediments and granodiorite stock. Other than the creek which for some segments, shows sharp downcutting there are no geologic evidences along the North Slope for a fault. The contact at the ridge is notched but not excessively as might be expected for a major fault. At this

contact zone, the granodiorite, ten meters from the conglomerate does not show evidences of chilling so this might be argued as a basis for a faulted contact.

7.2.2 Geochemical Surveys and Results

Taylor Creek North Slope is locally very difficult to systematically sample and map on a controlled grid due to precipitous rock cliffs and very steep ravines. The sampling and mapping programs were therefore confined to several contour soil lines at the lower to intermediate levels on the sidehill. These lines were complemented by collecting soil, rock chips of outcrops and minor talus chip samples along the banks of two major tributary streams. The sampling patterns are shown on appended maps.

Soil and rock chip sampling results were very disappointing for gold content. A few consecutive soils showed low detectable gold in the 0.04 to 0.08 ppm Au range along the banks of a stream approximately 400 meters southeast of Eldorado Mtn. These "anomalous" soils were supported by two rock chip samples from the local area that showed 0.03 and 0.09 ppm Au. All other samples for the 1984 program across the entire North Slope were negative for gold. Samples along the larger drainage directly opposite and northwest of the Taylor Creek Grid indicates a high mercury content; this might be expected as this area is encroaching the mercury halo effect that surrounds the Silverquick and Paul mercury deposits to the north and east respectively.

One anomalously high grade rock sample was collected by Pan Ocean on the south bank of Upper Taylor Creek. The sample assayed 1.57 oz/ton Au, 63.4 oz/ton Ag, 0.12% Pb, 0.10% Zn, 8.83% As and 0.83% Sb. An adjacent gossan zone sample assayed 0.03 oz/ton Au and 0.99 oz/ton Ag. Although the occurrence was seemingly isolated, the grade of the sample presented a potential target warranting investigation. With this in mind, a limited geological examination and prospecting were conducted in the general sample location.

The sample is described as being collected near the top of a talus slope from a 15.0 to 20.0 cm rusty weathered vein of arsenopyrite and stibnite with late calcite filling. This actual showing was not re-discovered. The rock-forming slopes above talus material are comprised of unaltered greywacke and minor volcanoclastic rock that are correlative with the Bridge River Group. Several helicopter passes over the general area failed to identify any tell-tale signs of gossans.

A short line of soil and rock samples were collected in the flatter valley below the talus, and in the general suspected location of the original rock sample. No anomalous assays were indicated. From the information available it is not possible to speculate as to the possible significance of the showing.

7.2.3 Interpretation of Results

The follow-up sampling along the North Slope does not reflect the high order gold anomalies that were detected in the original stream sediment samples. There are subtle gold signatures in soil and rock samples from a drainage southeast of Eldorado Mtn. The gold in this creek is probably related to the nearby contact zone between the granodiorite stock and sedimentary rocks. Several carbonate altered and gossanous faults in this same creek do not appear to be gold-bearing. Carbonate veins such as those sampled by Pan Ocean near Eldorado Mtn. were not encountered in this creek and in other areas across the North Slope terrain. The general opinion is that the intrusive contact zone is a weak gold-bearing source, but it was probably insufficient to account for the significantly higher concentration of gold as collected in the stream samples.

In attempting to interpret the significance and possible source of gold in the heavy mineral samples, there is possibly a field problem in that these samples were collected from sites below the nickpoint in the stream gradient. And if so, the gravels at that point may be part of the valley glaciofluvial deposits. The gold in these deposits may have its source higher up Taylor Creek from such high grade vein systems as the Lucky Strike and Northern Lights. It is noted that the lowest line of soils along Taylor Creek Road showed spotty detectable gold, and this feature may be a reflection of the dispersed gold in the valley gravels.

7.3 South Cirque and Charlotte Grids

An interesting gold anomaly from talus-fines sampling was established in late - 1983 at the headwaters of a tributary that flows northerly into upper part of Taylor Creek. The anomalous samples ranged from 0.07 to 0.18 ppm Au across a 40 meter width. From the limited information the anomaly appeared to be related to a dark massive carbonate veined rock unit in the footwall of a prominent gossan zone. Two soil grids, the South Cirque to the north and the Charlotte to the south were established as part of the 1984 program to explore the extensions of this gold anomaly and gossan zone. The Charlotte Grid was named after an old mercury prospect, the Charlotte Ann, that is one kilometer southeast of the South Cirque anomaly. Results from the Charlotte Grid were covered in an earlier assessment report dated August, 1984.

7.3.1 Geology

A sequence of southwesterly-dipping sedimentary and volcanic rocks correlative with the Bridge River Group is the dominant lithologic units for the area. The lower ribbon chert unit is characterized by thin one to three centimeter thick grey chert bands intercalated with dark chloritic and possibly graphitic schistose layers. These are overlain by very dark greenish grey pillowed and massive basalt. The pillows are locally well-preserved as 10.0 to 40.0 cm crudely elliptical to bun-shaped features with 0.5 to 2.0 cm rims. The basalts are laced with numerous thin to 3.0 cm calcite and lesser amounts of quartz veins and lenses. This unit is in sharp contact and overlain by thin-bedded chert that is carbonate altered with minor pyrite. At the contact, the altered chert is highly

gossanous over widths ranging from 10.0 to 40.0 meters and this prominent gossanous zone extends southeasterly from the South Cirque to the east end of the Charlotte Grid, a distance of 1,300 meters. Small five to ten meter limestone lenses occur as scattered interbeds. The chert exposures on the Charlotte Grid are locally intensely quartz-vein flooded or "silicified" and the rock resembles a quartzite with a craggy weathered surface appearance similar to the Nevada jasperoids. A greywacke unit that might be a volcanoclastic rock overlies the chert. Minor sandstone and carbonate breccia comprise part of this unit.

A small subcircular medium to coarse equigranular textured granodiorite plug intrudes chert on the cirque wall below and northwest of the Charlotte Grid. The surface evidence of "silicified cherts" across part of the Charlotte Grid may suggest that there is a more extensive underlying intrusive body, and the quartzite exposures actually represent the metamorphic effects around these hidden intrusives. Two occurrences of narrow rhyolitic dykes intruding chert were recorded, but their exact relationship to other intrusives or possible mineralization are unknown.

Two serpentized ultrabasic bodies are noted on the grids. With reference to the geology map, the body in the cirque floor appears to be related to a major shear as rocks alongside its contacts are highly shattered. The other body approximately 500 meters northwest of the Charlotte Grid stands out as a rubbly lenticular-shaped mound. The greywacke and basalt

wallrock surrounding this ultrabasic body are altered to a bright orangy gossan. There are no obvious evidences of faults bounding this body.

There are several significant faults that crosscut and offset the lithologic units. The associated gouge and shatter zones range up to one meter in width. Relative lateral offsets up to 100 meters are evident from geologic mapping. These offsets are measurable on altered chert horizon and therefore the last sense of fault movement was definitely post-alteration. Several shears are however very rusty and geochemically anomalous in mercury, and this would suggest earlier premineral breaks.

7.3.2 Geochemical Surveys and Results

The original South Cirque anomaly was detected near the toe of precipitous cirque wall. This anomaly was further examined by soil and talus-fines sampling on the Charlotte Grid to the southeast and the South Cirque Grid to the north. The talus-fines sampling was continued into the adjoining cirque to the east where the southeasterly extension of the gossanous chert horizon partly rims and arcuately traverses the cirque wall. Numerous rock chip samples were collected to complement the soil sampling to identify the possible sources of gold.

Low-order gold was detected for a small group of soil and talus-fines samples. With reference to the gold geochemical results in soils and the accompanying geology map these gold signatures were detected along the ridge immediately upslope from the subcircular granodiorite plug, and from the cirque to the east in a

zone immediately downslope from an area of carbonatized chert. The gold values ranged from 0.05 to 0.15 ppm Au.

Results from rock chip samples were very disappointing. Only one sample contained detectable gold; this sample was taken in the east cirque. A number of the rock chip samples were actually collected from the prominent gossanous carbonate altered chert horizon. None of these indicated any gold. The granodiorite plug is exposed in an almost inaccessible part of the cliff-forming cirque wall, and therefore only one small segment of the plug and its contact zone were sampled. Gold was undetected.

Several indicator elements, namely mercury, arsenic and antimony defined some interesting anomalies and elevated patterns. In particular, mercury in both soil and rock shows a very strong pattern for the east sector of the Charlotte Grid and northwesterly into the headwall of the east cirque. Arsenic is locally anomalous in soil samples and these generally coincide and magnify the subtle gold signatures. Unfortunately these arsenic-bearing soil samples were contained in samples from a single line along the ridge crest, and consequently it is difficult to infer trends. Higher antimony is spotty, but generally the anomalous samples again mirror the gold signature. Nickel is well-elevated to anomalous over segments of two grids. It is obviously higher in areas close to the ultrabasic bodies but the higher and more widespread patterns suggest that these ultrabasic bodies are possibly more extensive than interpreted on the geology maps.

7.3.3 Geophysical Surveys & Results

Ground magnetometer and VLF (EM-16) surveys were conducted over the two grids on lines nominally 100 meters apart. 7.9 km of data was gathered at 10-meter intervals. Magnetic data was corrected for diurnal variation.

Line orientation dictated the use of the Seattle VLF transmitting station since Hawaii and the Eastern seaboard stations are poorly situated for the geologic structure on these grids. VLF in-phase data was "Fraser" filtered in order to reduce the severe topographic contributions to the VLF data.

Magnetic, VLF In-phase, and "Fraser" filter data were plotted as "stacked" profiles at a scale of 1:5,000.

i. Charlotte Grid (3.6 km)

Ground magnetometer data suggests the presence of a narrow dyke extending from line 2+00N to 4+00N. It is most likely a smear of magnetic material (along a shear or fracture) or very thin dyke with a very limited susceptibility contrast. Data from line 4+00N suggests the presence of a small lense of more magnetic rock at a depth of 20 to 30 meters, that may outcrop on the steep scarp beyond the east end of the survey area. The rest of the magnetic data is typical of sedimentary sequences.

VLF data is generally inconclusive. Topographic relief is responsible for the In-phase and Fraser filter anomalies at the East ends of the survey lines. Distinct weak responses were noted on lines 2+00N to 4+00N coincident with the magnetic feature.

ii. South Cirque Grid (4.3 km)

The one strong magnetic feature on line 2+00N lies in a creek bed. Its shape indicates the source to be buried no more than 10 meters. A vertical dyke or lens, 3 to 5 meters wide, buried 10 meters, would produce a 1,000 gamma anomaly if it contained approximately 8% equivalent magnetite. Only peridotites, near massive pyrrhotite or other ultrabasic rocks exhibit this susceptibility. Magnetometer data reflects the more basic rocks that have been mapped in the northwest corner of the property. The approximate boundary inferred from the magnetometer data is shown on appended map. It is highly probable that the anomaly on line 2+00N is caused by an inclusion of these rocks.

Severe topographic relief on the east ends of lines 4+00N to 6+00N contributed significantly to the VLF data. However, one major and several weaker structures are interpreted to traverse the grid. The major conductor at 7+00E is accentuated by the fact that it is at a sharp break in slope. The fact that the VLF and magnetometer anomalies are linear in the steep topography suggests that the structures are vertical or nearly so.

7.3.4 Interpretation of Results

The pattern of gold distribution suggests that it is a very low-grade halo feature related and peripheral to an intrusive granodiorite plug. The carbonatized chert horizon is visually a very prominent and favourable-appearing zone. Main alteration is probably iron carbonate with lesser silicification; minor pyrite and rare chalcopyrite were observed. Other than its general proximity to the granodiorite plug in the South Cirque location, there are no direct evidences to indicate that this alteration and mineralization are related to the intrusion. Majority of rock chip samples from this alteration zone were non-gold-bearing.

Other than the disappointing gold signatures in a geologically favourable environment, the mercury geochemical pattern is interesting. The data suggests that mercury is structurally controlled within and surrounding a partial segment of the carbonatized and silicified chert horizon. The higher mercury distribution pattern over other areas of the grids may also infer that mercury possibly forms a halo, somewhat distal to the granodiorite plug.

7.4 Bruce Creek Grid

The bulk stream sediment sampling results showed a very strong and consistent gold anomaly on Bruce Creek. The pattern indicated that part of the source was at the headwaters of the creek in a large horse-shoe shaped cirque. The persistent and increasing gold content in the lower part of Bruce Creek may partially be attributable to a placering effect, but more importantly, suggestive of

possible gold source somewhere along the drainage course. These inferences were initially explored by sampling part of the cirque walls that showed localized gossans, carbonate alteration and minor pyritization in dominantly Taylor Creek conglomerate and sandstone sequences. This sampling did not identify any significant sources for gold mineralization in the cirque, but bank sampling along Bruce Creek indicated a potential source downstream from the cirque apron. The Bruce Grid sampling was subsequently conducted, and the spotty anomalous gold distribution indicated a possible north-trending structurally-controlled gold source within a broad arsenic anomaly.

7.4.1 Geology

The precipitous cirque walls at the headwaters of Bruce Creek were not mapped. The general geology as observed from a few outcrops and supported by talus examination indicated predominantly conglomerate and greywacke of Taylor Creek Group intruded by leucocratic coarse grained quartz diorite. With reference to the geology map, this intrusive body is inferred as being distributed over a comparatively large area along Bruce Creek. Outcrops over this intrusive rock area are scarce and the general configuration of the intrusive was interpreted from float distribution as noted at soil sample sites. A subsidiary north-draining creek in the center of the Bruce Grid forms a distinct contact between quartz diorite to the west and conglomerate to the east. Considerable amount of intensely silicified and pyritized light to medium grey siltstone float material is seen on the west side of Bruce Grid. These rocks, probably correlative with Hurley Formation, were observed as talus from the rugged slopes to the west of the Grid.

Outcrops are extremely sparse over the heavily-forested north-facing slope on which the Bruce Grid is located. Terrain is uniformly steep for most part and other than the north-trending gullies forming the Bruce Creek and the smaller subsidiary creek drainages, no significant structural features are evident.

7.4.2 Geochemical Surveys and Results

The 1983 Bruce Grid soil sampling was conducted on east-west lines spaced at 200 meters. The 1984 follow-up soil sampling was performed on fill-in 100 meter lines that were only extended approximately half the distance of the original lines. The easterly half of the grid is underlain by unfavourable chert pebble conglomerate and consequently this segment of the grid was not sampled.

Results from this fill-in sampling confirmed the somewhat erratic and narrow north-trending gold distribution. The main trend follows the Bruce Creek drainage to a point where the creek bends northwesterly; several anomalous gold samples north of this bend show that the trend continues due northward. There are indications of two or three northeasterly branching splays from the main trend of gold values.

Arsenic geochemistry shows a very distinct higher coincidence with the gold trend, and a widespread lower-order halo across almost half of the grid area. This halo extends to the west limit of sampling, and to the east, has a definitive cut-off at the small creek (Moose Creek) 1,000 meters east of

Bruce Creek. This cut-off line corresponds to inferred contact between quartz diorite and conglomerate to the east.

Detectable antimony in the range of 2.0 to 59.0 ppm closely follows and sharply defines the gold and higher arsenic trend. Mercury is locally anomalous but no definitive patterns or trends can be inferred. It does not show a preferential relationship to the gold and antimony trend, but more ideally can be interpreted as a vague halo to the east of the gold geochemical anomaly.

Nickel is unexpectedly elevated as a comparatively widespread anomaly at the upslope or southerly end of the gold anomaly. This subcircular nickel pattern tapers to a narrower tail that overprints and trails the gold trend down Bruce Creek drainage. The mushroom shape of the anomaly is possibly suggestive of downslope dispersion that is partly controlled by the drainage pattern. More curiously, the significance and possible source of nickel in the Bruce Creek environment are not understood.

7.4.3 Geophysical Surveys and Results

Ground magnetometer and VLF (EM-16) surveys totalling 10.7 km were conducted on east-west lines nominally 200 meters apart at 10 meter station spacing. VLF signal was provided by the Navy VLF station at Jim Creek (Seattle 24.8 khz).

Profiles of the magnetometer, VLF in-phase and "Fraser" filter data were generated at a map scale of 1:5,000. Magnetic data was also contoured.

Intrepretation of Geophysical Surveys

Magnetometer data reflects the north-northwesterly trend of the underlying rocks; several weak linear anomalies are recognized. In general, the magnetometer data is more typical of sedimentary rocks rather than intrusives, as shown in the geologic mapping. The southwest corner of the survey area is occupied by a more magnetic unit, most probably intrusive or a thick volcanic unit of moderate to low magnetite content (Lines 4 & 6 N).

VLF In-phase data is strongly affected by the severe topographic relief in the vicinity of the baseline on lines 20N, 22N and 24N and also at 8+00E on lines 4N and 6N. "Fraser" filtering has reduced but not entirely eliminated this topographic contribution. As a result, "Fraser" filter anomalies are shown on the lines approaching Moose Creek. These cannot be entirely ignored, since they do form a "linear." In particular, the anomaly on line 4+00N appears to be a real event, not entirely generated by topography.

7.4.4 Interpretation of Results

The gold and its associated pathfinder element geochemistry indicates a possible narrow structure-related type of mineral source in quartz diorite. The Bruce Grid gold geochemical pattern is similar to the anomaly over the Lucky Jem Showing near headwaters of Eldorado Creek. The mineralization at this prospect is gold-bearing quartz vein with associated grains and massive patches of pyrite, arsenopyrite, minor chalcopyrite and stibnite in a well-defined 0.3 to 0.5 meter wide shear in quartz diorite and older siltstone

unit. There are however difficulties in confirming a shear type of structure on the Bruce Grid interpretation as the geophysical response over the geochemical anomaly was essentially flat. Nevertheless the narrow linear trend of the geochemical anomaly strongly suggest a structural association.

The distribution of quartz diorite intrusion across the Bruce Grid area was interpreted from proportion of quartz diorite float boulders at the soil sample sites. Following this interpretation it was noted that the elevated arsenic pattern closely mirrors the inferred quartz diorite body. This complementary correlation adds a degree of reliability to the geological interpretation.

7.5 Eva 26 Grid

The Eva 26 Claim was staked in June 1984 following the lapsing of Golden Rule Resources' Ural 7 Claim. The former owners had conducted a small soil geochemical sampling program on this claim and the results indicated an open-ended gold anomaly. Placer Development's 1983 bulk sediment sampling program confirmed consistent and relatively attractive gold-bearing results in streams shedding the soil anomaly area. Prominent gossans mark the potential target. Examination and further testing seemed warranted to positively identify and assess the possible gold source.

7.5.1 Geology

The Eva 26 Claim is predominantly underlain by intensely fractured cherty shale and siltstone with local intercalations of light grey limestone beds and

lenses. The limestone occurs as isolated and scattered exposures representing narrow beds up to eight meters wide, impure fossiliferous lenses, and larger 30-meter lenses. The shale and siltstone units that are correlative with Upper Triassic Hurley River Group are intruded by an irregularly-shaped serpentized ultrabasic body. A series of steep northeasterly-oriented faults partially bound and dissect the ultrabasic unit.

A rhyolite dyke swarm intrudes the Hurley rocks. These east-northeast-trending feldspar porphyry dykes are 2.0 to 20.0 meters wide, and are bounded by prominent 5.0 to 30.0 meter wide silicified and quartz-vein-flooded alteration zones. Minor pyrite occurs as disseminations on the dykes and alteration zones.

Quartz, carbonate and minor pyrite zones up to 4.0 meters wide occur as sub-parallel lenses at the fault contact between siltstone and ultrabasic units. These mineralized zones are exposed as bright orangy red gossans on a northeast-facing cirque wall. Their northerly to northeast orientation is disrupted by a series of faults to provide the sub-parallel and en echelon pattern.

7.5.2 Geochemical Surveys and Results

Parts of former Golden Rule Resources soil sampling grid were still recognizable. Therefore in attempts to obtain some means of matching the new survey with the original geochemical anomaly, the Eva 26 Grid was oriented in the same directions as the former grid.

The terrain over the sampling area of Eva 26 Claim is essentially comprised of felsenmeer, talus and craggy rock ridges and cliffs. Consequently, majority of grid sampling was talus-fines collected at 50 meter intervals along lines spaced at 100 meters. A series of rock chip samples were collected from rock exposures along and close to the grid lines. Many of these were selectively cut from alteration, mineralized and gossan zones in attempts to pinpoint the gold source.

The talus-fines grid sampling approximately re-established the anomalous gold geochemical trends that were indicated on Golden Rules' grid. The main feature is an easterly-trending 100 to 150 meter wide gold anomaly through the centre of the grid. Gold content in this anomaly ranges from 0.03 to 0.61 ppm; these compare to 0.02 to 2.50 ppm in the original Golden Rule anomaly. The gold anomaly trend is supported by minor elemental features, namely arsenic, antimony, mercury and to a lesser degree by copper.

A separate anomaly can be depicted at the southwest corner of the grid. This anomaly might be related to the main trend as a downslope dispersion train. However if it is representing a separate source it may be considered as being open to the east and for a short distance to the south. It is also supported by arsenic and antimony.

The gossanous quartz-carbonate-pyrite zones at the northeast corner of the grid indicate low-order erratic gold and arsenic anomalies that reflect the narrow fault-disrupted style of occurrence. The nickel geochemistry strongly accentuates the presence of ultrabasic rock unit at the northwest sector of grid.

Results from rock chip sampling were disappointing as they do not correlate and support the soil geochemical pattern. Gold was detected in only three rock samples within the main anomaly trend; these were very low ranging from 0.02 to 0.07 ppm. Arsenic is erratically anomalous within the main anomaly. Other than anomalous nickel at the northerly one third of the grid, the remaining elemental results are at background levels.

7.5.3 Geophysical Surveys and Results

A total of 2.6 km of Ground magnetometer and VLF (EM-16) data was gathered in four lines on a pre-existing grid, using a station interval of 12.5 m. The VLF radio signal was provided by the U.S. Navy station at Cutler (Maine).

"Stacked" profiles of the magnetometer data, VLF In-phase and "Fraser" filter data were plotted at a scale of 1:5000. A contour map of the magnetometer data was generated, also to 1:5000 scale.

The VLF data reveals a series of three north-northeast trending conductors immediately west of a strong magnetic linear. A weaker northeast trending conductor is also evident approximately 200 meters southeast of the magnetic feature.

The rocks to the northwest of the magnetic linear are magnetically "quiet", typical of sediments. The magnetic feature is undoubtedly caused by the ultramafics evident on the ridgetop. Line 11+00N also reveals the presence of a magnetic unit. On this line, it is somewhat deeper and narrower.

7.5.4 Interpretation of Results

The talus-fines sampling indicated a fairly well-defined gold-bearing anomaly across the central part of the grid. This anomaly trend is spatially situated over the feldspar porphyry dyke swarm. Rock sampling results more or less confirm that very weak gold-bearing source is related to the quartz-rich alteration zones bounding the dykes.

The quartz-carbonate-pyrite zones at the siltstone-ultrabasic rock contact appear to be shear-related features. Rock samples across these mineralized zones did not offer any encouragement for follow-up work.

7.6 Bulk Stream Sediment Sampling

A series of bulk stream sediment samples were collected from the upper part of North Cinnabar Creek. This creek drains easterly from the east crest of the South Cirque area. The headwall of the creek was geologically interesting because part of the favourable calcite-veined basalt and rusty-stained chert units of the South Cirque extend into the crest of this headwall. The purpose of bulk sediment sampling was to test for possible gold signatures that may be shedding from the above rock units and their extensions. Sample sites are plotted on attached map.

7.6.1 Bulk Sediment Sampling Procedure

Bulk stream sediment sampling technique is particularly adapted to the search and delineation of heavy resistate mineral targets. Samples are collected essentially in the same procedure as heavy mineral

samples. This involves sieving stream gravels through a -20 mesh screen and collecting approximately 2.0 to 4.0 kg of fine material for a sample. This material is packaged in a numbered plastic bag, and as much water as possible is poured out prior to sealing the bag for shipment to the laboratory.

Sample sites in the streams are carefully selected. Various stream characteristics and conditions are initially observed in order to select the most suitable sample location. Such positions as plunge pools, riffles, point bars, mid-channel bars and toes or base of stream gradient changes are normally considered. Samples were collected at 400 to 600 meter intervals along the stream. One of the requirements of the bulk sediment material is to collect sediment that would be representative of not only one season's deposition but to include several season's stratification in the stream bed; therefore care was exercised in digging deeply in one spot rather than collecting the more easily obtainable gravel or sand from the quiet and slow-flowing segments of the stream.

7.6.2 Results

Bulk stream sediment samples were analyzed for Cu, Zn, Pb, Ni, Ag, Au, As, Hg and Sb. Provided that there is sufficient -150 mesh material in the sieved sample, gold is analyzed in triplicate. Results are tabulated on accompanying table.

**NORTH CINNABAR CREEK BULK STREAM SEDIMENT
SAMPLING ANALYSIS**

<u>Sampling</u>	<u>Cu</u>	<u>Zn</u>	<u>Pb</u>	<u>Ni</u>	<u>Ag</u>	<u>Au</u>	<u>As</u>	<u>Hg</u>	<u>Sb</u>
EVB 1913	33	72	7	113	<0.2	<0.02	<2	>2000	<2
EVB 1913*						<0.02			
EVB 1913*						<0.02			
EVB 1914	47	76	11	98	<0.2	<0.02	<2	>2000	<2
EVB 1914*						<0.02			
EVB 1914*						<0.02			
EVB 1915	68	98	9	151	<0.2	<0.02	<2	1350	<2
EVB 1915*						<0.02			
EVB 1915*						<0.02			
EVB 1916	70	110	12	146	<0.2	<0.02	40	887	<2
EVB 1916*						<0.02			
EVB 1916*						<0.02			
EVB 1917	45	96	13	97	<0.2	<0.02	4	1299	<2
EVB 1917*						<0.02			
EVB 1917*						<0.02			
EVB 1918	30	79	10	64	<0.2	<0.02	<2	717	<2
EVB 1918*						<0.02			
EVB 1918*						<0.02			
EVB 1919	33	86	11	43	<0.2	<0.02	4	27	<2
EVB 1919*						<0.02			
EVB 1919*						<0.02			
EVB 1920	27	84	17	91	<0.2	<0.02	<2	61	<2
EVB 1920*						<0.02			
EVB 1920*						NSS			
EVB 1921	29	80	9	64	<0.2	<0.02	<2	1255	<2
EVB 1921*	29	80	19	60	<0.2	<0.02	<2	1125	<2
EVB 1921*						<0.02			
EVB 1922	26	71	12	68	<0.2	<0.02	<2	>2000	<2
EVB 1922*						<0.02			
EVB 1922*						NSS			
EVB 1923	35	67	5	116	<0.2	<0.02	<2	316	<2
EVB 1923*						<0.02			
EVB 1923*						<0.02			
EVB 1924	37	74	9	94	<0.2	<0.02	12	1843	<2
EVB 1924*						<0.02			
EVB 1924*						<0.02			
EVB 1925	20	81	12	67	<0.2	<0.02	8	75	<2
EVB 1925*						<0.02			
EVB 1925*						NSS			

* denotes duplicate analysis
 NSS denotes not sufficient sample material for analyses
 All element assays are in ppm except Hg in ppb.

With reference to the results, no gold was detected. Other than mercury which is highly anomalous in a number of samples, all other elements are effectively at background levels. The mercury is obviously related to the Charlotte Ann prospect.

8. SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

All samples for this program were prepared and assayed by Placer Development Geochemical Laboratory at Vancouver, B.C.

8.1 Analysis for Cu, Pb, Zn, Ag, As and Ni

All samples are dried in a hot-air dryer. The soils and talus-fines samples are then sifted in -80 mesh nylon sieves. The bulk sediment samples are sieved to -150 mesh size in a mechanical shaker. Rock samples are crushed and pulverized to -150 mesh.

Following the drying and sieving process, a 0.50 gm portion of the -80 mesh fraction of soil and talus-fine or -150 mesh fraction of the bulk sediment or rock is weighed with a precision torsion balance. Samples are digested in hot solution of HNO_3 and HC10_4 for three and a half hours, then cooled, diluted and prepared for analysis on Perkin-Elmer 603 Atomic Absorption Spectrophotometer for Cu, Pb, Zn, Ag, As and Ni.

Detection limits and ranges are listed below:

<u>Metal</u>	<u>Detection Limit & Range</u>
Copper	2 - 4,000 ppm
Lead	2 - 3,000 ppm
Zinc	2 - 3,000 ppm
Silver	0.20 - 20 ppm
Arsenic	2 - 1,000 ppm
Nickel	2 - 2,000 ppm

8.2 Analysis for Au

Following the drying and sieving process, 10 gms of sample material are placed in a crucible and roasted at 600° C for 1-1/2 hours in a muffle furnace to oxidise organic matter and sulphide minerals. On cooling, the sample is transferred to a 150 ml glass beaker. Digestion is achieved using 30 mls of aqua regia (3 parts HCl, 2 parts H₂O, 1 part HNO₃) held at boiling for 2 hours. The solution is allowed to cool, bulked to 110 mls, stirred and left overnight to settle. 50 mls of the sample solution is decanted into a test tube. 7 mls of MIBK is added to the solution which is then shaken vigorously for 3 minutes.

After allowing the solution to settle, gold is determined by aspiration of the MIBK solvent layer into the flame of a Perkin Elmer 4000 atomic absorption spectrophotometer. Detection limit and range are 0.02 to 4.00 ppm.

8.3 Analysis for Sb

Following the drying and sieving process, a 0.50 gm portion of -80 mesh fraction of soil and talus-fine or -150 mesh fraction of the bulk sediment or rock is weighed with a precision torsion balance. Samples are digested in hot solution of HNO_3 and HC104 for two hours, cooled, then solution is bulked up to 10 ml for analysis by Atomic Absorption. Detection limit and range are 2 to 1,000 ppm.

8.4 Analysis for Hg

Following the drying and sieving process, a 0.50 gm portion of -80 mesh fraction of soil and talus-fine or -150 mesh fraction of the bulk sediment or rock is weighed with a precision torsion balance. Samples are digested in dilute HNO_3 for two hours. Stannous sulphate, hydroxyl amine sulphate and sodium chloride are added to liberate the Hg prior to analysis for Hg by flameless atomic absorption. Detection limit and range are 5 to 2,000 ppb.

8.5 Analysis for W

Following the drying and sieving process, a 1.0 gm portion of -80 mesh fraction of soil or talus-fines or -150 fraction of rock is weighed with a precision torsion balance. The 1.0 gm of sample material is first ashed at 600°C in a muffle furnace and then transferred to a teflon beaker. Digestion is achieved using a mixture of 5 ml HNO_3 , 5 ml HC1 and 10 ml HF acids evaporated to dryness at 300°C on a hot plate. The residue is taken back into solution in 1 ml H_2SO_4 with 2 ml HC1 and washed into a test tube with 6 N HC1 . 2 ml of Stannous Chloride is added to the solution which is shaken and warmed in a water bath. 1 ml of 25% Diocyanate and 2 ml N Butyl Acetate are added and the resulting mixture shaken vigorously for 10 minutes.

After allowing the solutions to settle, tungsten is determined by aspiration of the N Butyl Acetate solvent layer with the nitrous oxide flame of a Perkin Elmer 4000 Atomic Absorption spectrophotometer. Detection limit and range are 5.0 to 500.0 ppm.

9. STATEMENT OF EXPENSES

The following expenditures were incurred by Placer Development Limited for conducting the soil and rock geochemical surveys, geological mapping, ground magnetometer and VLF-EM surveys on the Eva property. Field work was undertaken during period 17 July to 1 August, 1984.

i. Personnel Costs

<u>Personnel</u>	<u>Period Employed</u>	<u>Dates & Rate</u>	<u>Cost</u>
B.W. Barde	Jul.17-Aug.1/84	11 days @ \$245	\$ 2,695.00
M.B. Gareau	Jul.19-Aug.1/84	10 days @ 300	3,000.00
E.T. Kimura	Jul.17-Aug.1/84	11 days @ 380	4,180.00
B.S. Ott	Jul.19-Aug.1/84	11 days @ 245	2,695.00
P. Pacor	Jul.24-30/84	5 days @ 275	1,375.00
W. Pentland	Jul.17-20/84	4 days @ 320	1,280.00
C.C. Rennie	Jul.17/84	1 day @ 380	380.00
J. Thornton	Jul.24-30/84	5 days @ 280	<u>1,400.00</u>
			\$ 17,005.00

ii. Helicopter Costs

Pemberton Helicopter Services Ltd.

July 17 invoice #3361	894.00
July 18 invoice #3363	846.00
July 19 invoice #3365	894.00
July 20 invoice #3368	1,034.00
July 21 invoice #3370	846.00

M.F. Air Services Ltd. invoices

Eva property cost portion

No. 567 - 23.5 hrs. @ \$425	9,987.50
plus oil - 23.5 hrs. @ \$3.00	70.50
plus fuel - 23.5 hrs. @ \$50.00	1,175.00
No. 569 - 3.2 hrs. @ \$425	1,360.00
plus oil - 3.2 hrs. @ \$3.00	9.60
plus fuel - 3.2 hrs. @ \$50.00	<u>160.00</u>

17,276.60

iii. Sample Preparation and Assaying Costs

Taylor Creek Grid

29 soils for Cu, Pb, Zn, Ag, As & Au @ \$11.35	\$ 329.15
76 soils for Cu, Pb, Zn, Ag, As, Ni, Au, Sb & Hg @ \$18.25	1,387.00

Taylor Creek North Slope

202 soils for Cu, Pb, Zn, Ag, As, Ni, Au, Sb & Hg @ \$18.25	3,686.50
72 rocks for Cu, Pb, Zn, Ag, As, Ni, Au, Sb & Hg @ \$20.50	1,476.00

Bruce Creek Grid

143 soils for Cu, Pb, Zn, Ag, As, Ni, Au, Sb, Hg & W @ \$22.75	3,253.25
189 soils for Cu, Pb, Zn, Ag, As, Ni, Au, Sb & Hg @ \$20.50	3,874.50
2 rocks for Cu, Pb, Zn, Ag, As, Ni, Au, Sb, Hg & W @ \$25.00	50.00
2 rocks for Cu, Pb, Zn, Ag, As, Ni, Au, Sb & Hg @ \$20.50	41.00

South Cirque and Charlotte Grid

191 soils for Cu, Pb, Zn, Ag, As, Ni, Au, Sb & Hg @ \$18.25	3,485.75
86 rocks for Cu, Pb, Zn, Ag, As, Ni, Au, Sb & Hg @ \$20.50	1,763.00

Eva 26 Grid

116 soils for Cu, Pb, Zn, Ag, As, Ni, Au, Sb & Hg @ \$18.25	2,117.00
54 rocks for Cu, Pb, Zn, Ag, As, Ni, Au, Sb & Hg @ \$20.50	1,107.00

Bulk Sediment

13 sediments for Cu, Pb, Zn, Ag, As, Au, Sb & Hg @ \$37.50	<u>487.50</u>
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\$ 23,057.65

iv. Crew Board and Room Costs

Gold Bridge Hotel charges for 58 man-days @ \$42.00/man-day	2,436.00
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v. Crew Mob and Demob Costs

Vancouver to Gold Bridge and Return

Personnel: 15 days for 5 personnel	\$ 2,220.00	
Vehicle: 2 vehicles, 550 miles @ 40¢	220.00	
Meals: \$5.00/person/day	40.00	
<hr/>		
60% of total costs applicable to Eva Property		\$ 1,488.00

vi. Equipment and Supplies Costs

Vehicles: Lease rate \$250/mo/vehicle		
Two vehicles for 11 days @ \$16.60/day	182.60	
One vehicle for 5 days @ \$16.60/day	83.00	
Sampling supplies and equipment	400.00	
Maps, air photis, etc.	25.00	
<hr/>		
		690.60

vii. Evaluation, Report and Map Preparation Costs

<u>Personnel</u>		<u>Days and Rate</u>	
B.W. Barde	Geologist	10 days @ \$245	2,450.00
M.B. Gareau	Geologist	2 days @ 300	600.00
H.R. Goddard	Technician	3 days @ 250	750.00
A.W. Kemp	Draftsman	10 days @ 225	2,250.00
E.T. Kimura	Geologist	14 days @ 380	5,320.00
M.A. McNab	Technician	6 days @ 200	1,200.00
H. Tamboline	Typist	1.5 days @ 200	300.00
I. Thomson	Geochemist	2 days @ 350	700.00
J. Thornton	Geophysicist	3 days @ 280	840.00
Map reproductions, stationery, etc.			500.00
Computer time			828.00
			<hr/>

15,738.00

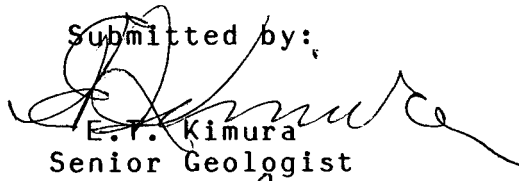
TOTAL EXPENDITURES ON EVA CLAIMS

\$77,691.85

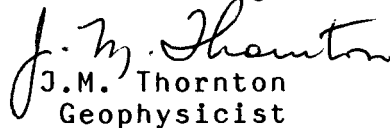
10. CONCLUSION

Detailed field work was focused on several selected targets on the Eva Claims with the main objective of identifying the gold-bearing source. Several different styles of mineralization were recognized. Gold-bearing mineralization related to intrusive contacts is the most prevalent mode of occurrence. Narrow shear and structurally-controlled mineralization are the other more common occurrences. Sampling of these altered and mineralized features essentially indicated only trace amounts to very weak and erratic gold presence in the various targets.

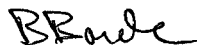
Submitted by:



E.T. Kimura
Senior Geologist



J.M. Thornton
Geophysicist



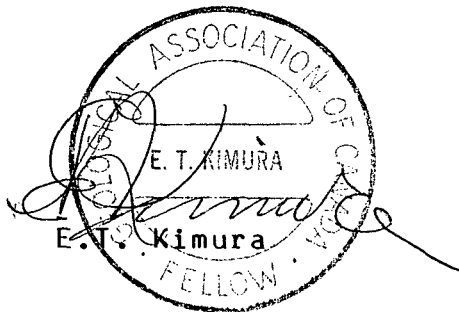
B.W. Barde
Geologist

APPENDIX I

STATEMENT OF QUALIFICATIONS

I, E.T. Kimura, of Placer Development Limited do hereby certify that:

1. I am a geologist.
2. I am a graduate of the University of British Columbia with a BA degree in Geology and Physics in 1955.
3. From 1954 until the present, I have been engaged in mining geology, both in underground and open pit operations, and in exploration geology in British Columbia, Saskatchewan and Yukon Territory.
4. I personally supervised and participated in the field work, and have compiled, reviewed and assessed the data resulting from this work.



ETK/hwt

APPENDIX II

STATEMENT OF QUALIFICATIONS

I, J.M. Thornton, reside at 3393 Fairmont Road, North Vancouver state that:

1. I have gathered, prepared and interpreted the geophysical data presented in this report.
2. I have been practicing as a Geophysical Technician for 15 years.
- 3., I am employed in the above category by Placer Development Limited, 1055 Dunsmuir, Vancouver, B.C.
4. I am a graduate of B.C.I.T. in the field of Electronics (1967).
5. I have no direct or indirect personal interest in this property.



J.M. Thornton

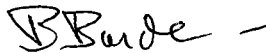
JMT/hwt

APPENDIX III

STATEMENT OF QUALIFICATIONS

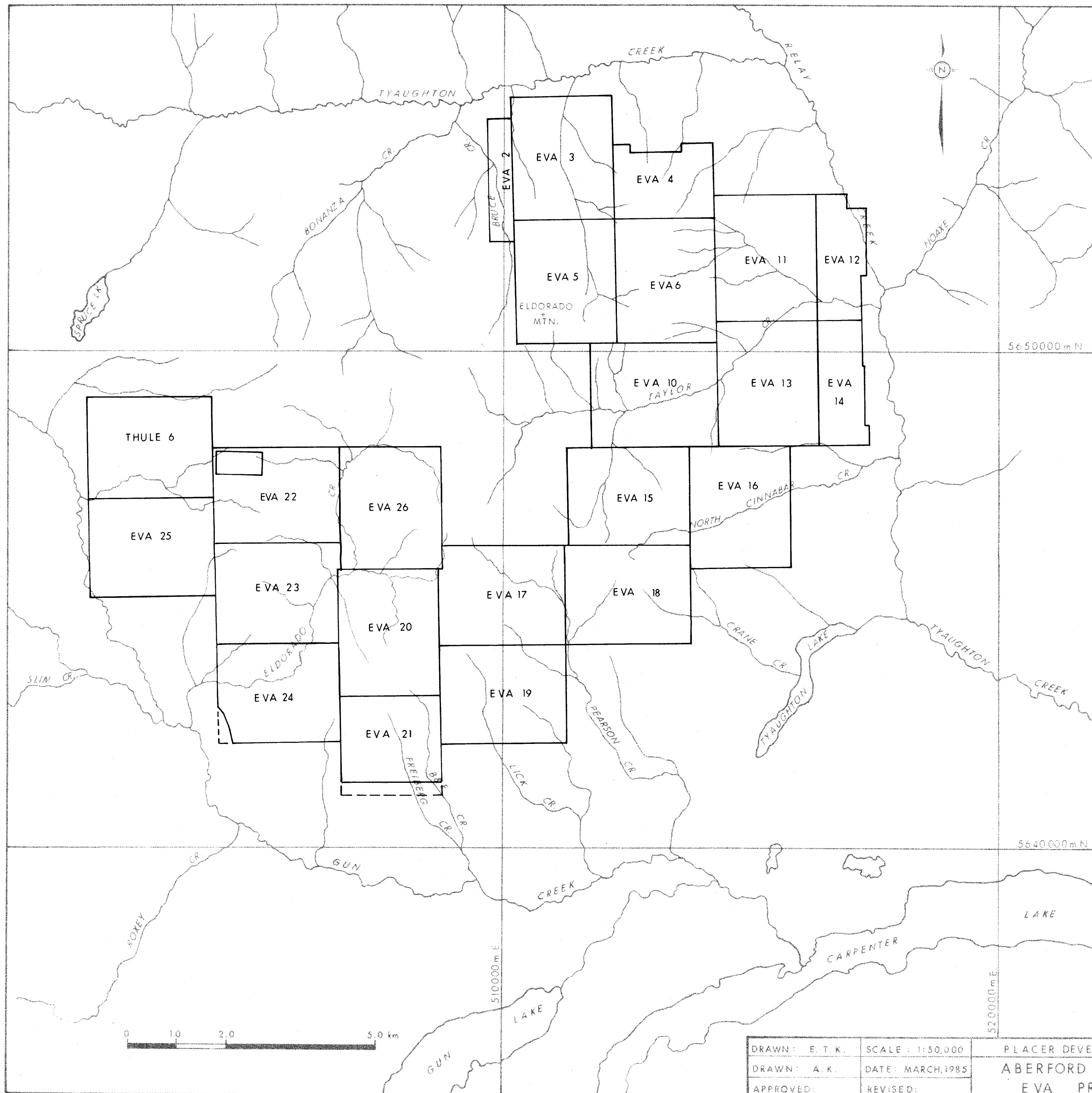
I, B.W. Barde, of Placer Development Limited, do hereby certify that:

1. I am a geologist.
2. I am a graduate of the University of Geneva with a M.Sc. in Geology in 1981.
3. From 1981 until the present, I have been engaged in exploration geology in British Columbia, and Yukon Territory.
4. I personally participated in the field work and have compiled, reviewed and assessed the data resulting from this work.



B.W. Barde

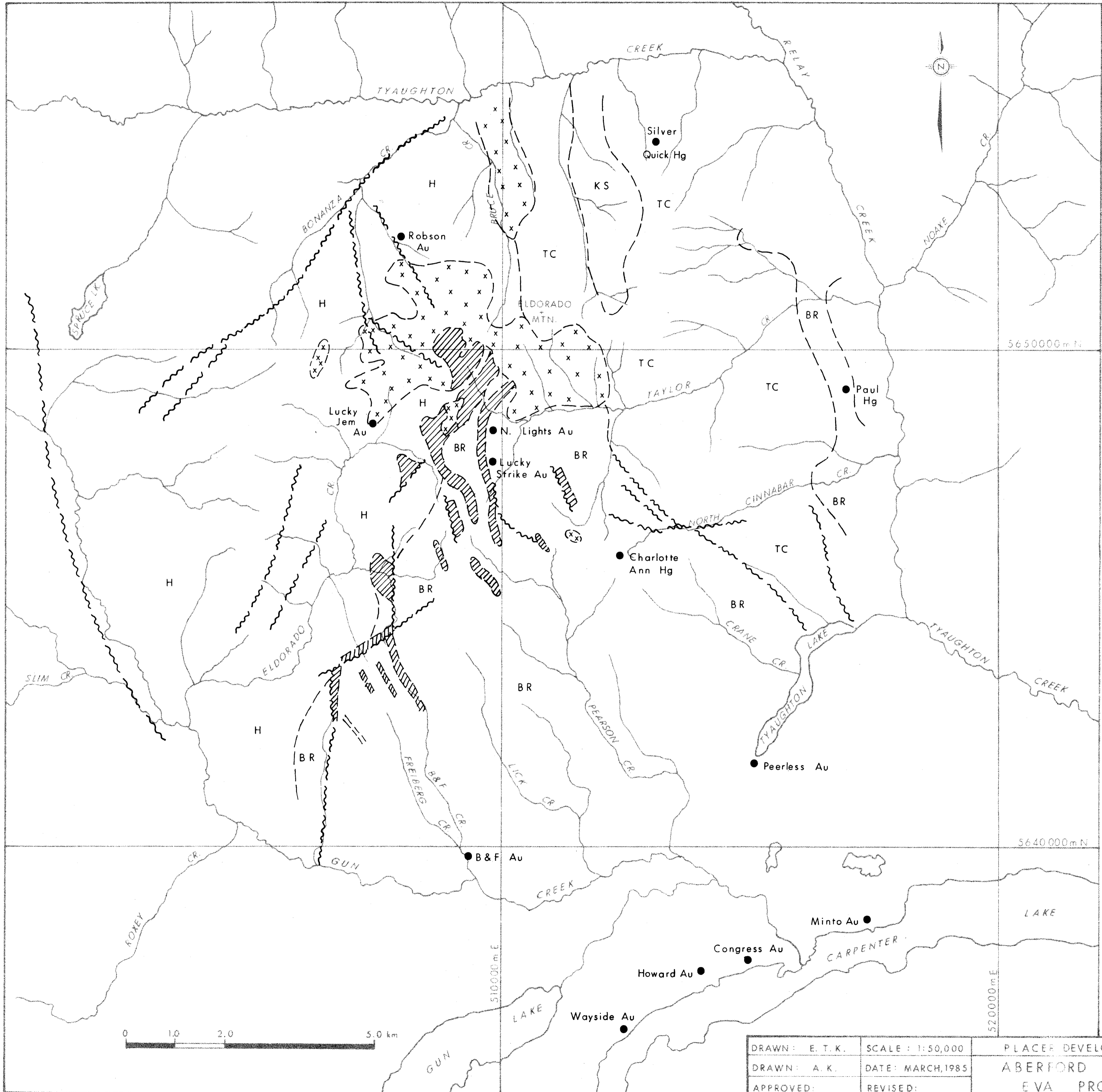
BWB/hwt



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

13,709
PART 1 of 5

DRAWN: E. T. K.	SCALE: 1:50,000	PLACER DEVELOPMENT LIMITED	MINERAL CLAIMS
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LEGEND

SEDIMENTARY AND VOLCANIC ROCKS

KS KINGSVALE GROUP – Upper Cretaceous
Greywacke, conglomerate

TC TAYLOR CREEK GROUP – Lower Cretaceous
Chert pebble and boulder conglomerate, greywacke & shale

H HURLEY FORMATION – Upper Triassic
Greywacke siltstone minor argillite, limestone & conglomerate

BR BRIDGE RIVER GROUP – Lower to Middle Triassic
Greywacke, siltstone, chert, massive and pillow basalt, minor argillite and limestone

INTRUSIVE ROCKS

x x x Quartz Diorite and Granodiorite stocks

[Hatched Box] Serpentinized Ultrabasic bodies

SYMBOLS

[Wavy Line] Fault

[Dashed Line] Rock contacts

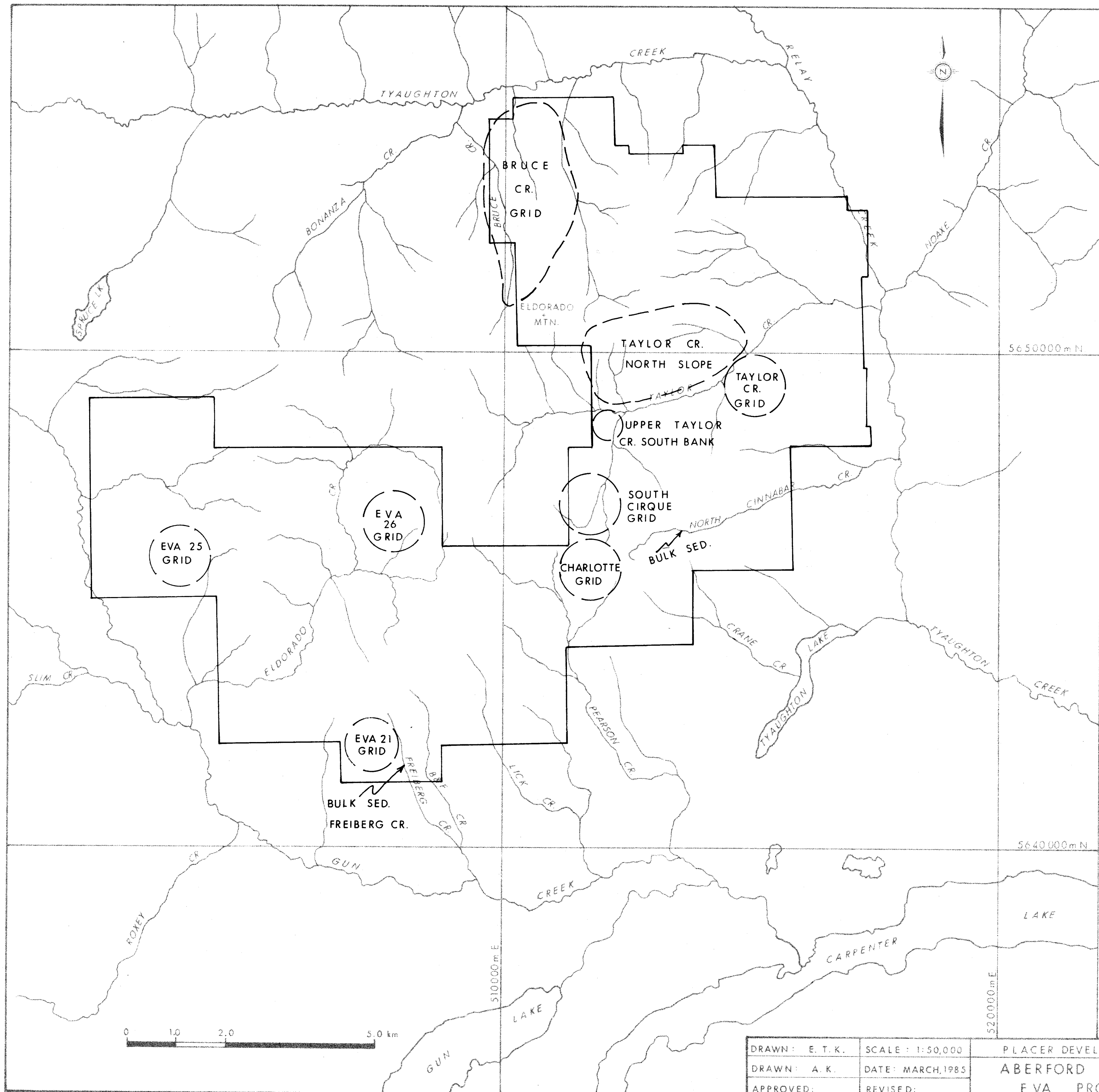
[Dot] Mineral Prospects

**GEOLOGICAL BRANCH
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13,709
PART 1 of 5



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PART 1 of 5

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