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FILE NO:

1989 Assessment Report
on a
Diamond Drill Program
on the
Alice L - Berlin Claim Group
for
Boundary Gold Corp.

FILMED

Trail Creek Mining Division

NTS 82 E/1 E

49' A^{12' N} S^{118' 04' W} GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,020

August 28, 1989
Vancouver, B.C.

Sookochoff Consultants Inc.
Laurence Sookochoff, P.Eng.

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1989
Assessment Report
on a
Diamond Drilling Program
on the
Alice L - Berlin Claim Group

INTRODUCTION

A diamond drilling program was carried out during May and June, 1989 on the Alice L - Berlin claim Group (Granville Mountain Property) owned by Boundary Gold Corporation. The purpose of the program was to test the indicated anomalous zones as detailed from a localized Ronka EM surveys completed by Steve Presunka in 1987.

Information for this report was obtained from pertinent publications as cited under Bibliography and from the supervision of part of the diamond drill program.

A comprehensive geological report by F. Marshall Smith, P.Eng. entitled "Report on the Albion Group of Crown Granted Claims" dated December 1983 was referred to by the writer with portions summarized or quoted in this report. Reference was also made to a report which includes the property, entitled "Geological, Geochemical and Geophysical Report on the Granville Mountain Property" by Gregory G. Crowe and Joanna R. Forbes. For greater detail on the property, the reader is referred to the aforesaid reports.

PROPERTY

The property consists of a total of 58 claim units that are comprised of metric claim units, 2-post claims, and crown grants. All are contiguous and have been grouped into the Big Sheep Creek Claim Group. Particulars are as follows:

<u>Name of Claim</u>	<u>No. of Units or 2-post Claims</u>	<u>Record# or Lot#</u>	<u>Expiry* Date</u>
Empire 1-5	5	726-30	June 03/91
Iron	Unit Claim (6)	731	June 03/91
Saw	Unit Claim (12)	744(6)	June 16/91
Glendale Fr.	1	444	July 26/92
Perky 1-8	Two post claims	411-418	June 26/91
Hans Fractions	Two post claim	419	June 26/91
Nugget 1-8	Two post claims	420-427	June 26/91
Lucky 1-5	Two post claims	428-432	June 26/91
Den 1-8	Two post claims	433-440	June 26/91
Hidden Hand	1	408	June 26/92
Berlin		11157	Crown Grant
Alice L		4331	Crown Grant
A & G Fraction		14469	Crown Grant

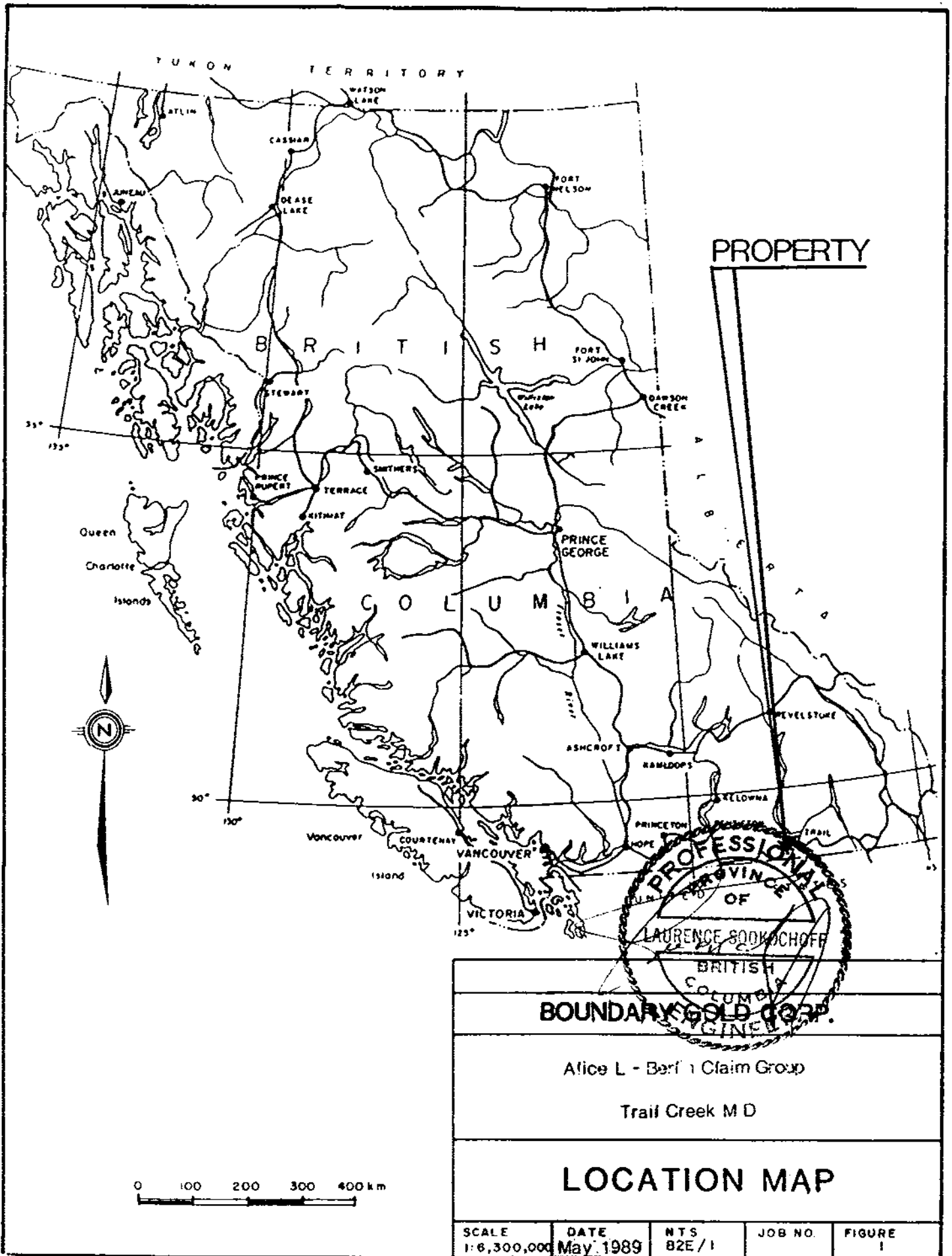
LOCATION AND ACCESS

The Alice L - Berlin Claim Group is located 16 km due east of the northern end of Christina Lake on Granville Mountain. The property is situated between two major southerly-flowing creeks; McRae Creek to the west and Big Sheep Creek to the east. The town of Christina Lake is located 19 km S35-W of the property with the town of Grand Forks 32 km at S55'W.

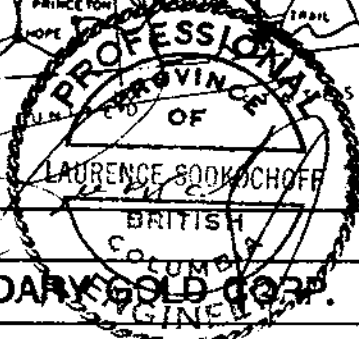
The geographical coordinates are 49'11'N latitude and 118'04'W longitude.

Access is gained from the town of Christina Lake eastward for 30 km on Highway #3 to a junction with a secondary road. The workings are two to three km south of the highway.

Logging roads provide access to the property with parts of the property only accessible by four wheel drive vehicles.



PROPERTY



BOUNDARY GOLD CORP.

Alice L - Berlin Claim Group
Trail Creek M D

LOCATION MAP

SCALE 1:6,300,000	DATE May 1989	NTS BZE/1	JOB NO.	FIGURE 1
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PHYSIOGRAPHY

The property is located within the Rossland Range of the Monashee Mountains which are a physiographic division of the Columbia Mountains. The terrain varies from gentle to steep with elevations varying from 1,250 meters (4,100 feet) a.s.l. at the southern end of the claim group to 1,780 meters (5,838 feet) a.s.l. on top of Granville Mountain, the peak of which occurs on the Alice L. Crown Grant.

Forest cover consists of jack pine and black spruce with scrub and secondary growth of softwoods and pines. The underbrush is minimal except in wetter areas around swamps and creeks.

WATER AND POWER

Sufficient water for all phases of the exploration program would be available from the headwaters of Bonanza Creek and Iron Creek - two easterly flowing tributaries of Big Sheep Creek which extend into the property.

HISTORY OF PREVIOUS WORK

The property in several different locations has been mined intermittently since the turn of the century with more recent work performed by E & B Explorations Ltd. (1980) which consisted of soil geochemical and geophysical surveys, geological mapping, and trenching. The geophysics consisted of a VLF-EM survey, the results of which were inconclusive, and a ground magnetic survey. In the geochemical survey the soil samples were tested for gold, silver, lead, and zinc.

In 1983 localized IP-resistivity surveys were performed on the Albion claim by Geotronic Surveys of Vancouver for Prominent Resources Corporation.

GEOLOGY

Detailed descriptions of the geology are given in E & B's report on the property by E.R. Kruchkowski (1981) and Smith's reports (Dec.'83 and Mar.'84). A summary is given below.

The most common rock types underlying the property are medium and coarse grained syenites of the Tertiary Coryell Batholith. In places the syenites grade into a quartz diorite. Rare basic dykes and quartz veins intrude the syenites. A series of north-south biotite-feldspar porphyry dykes have also been noted.

Thin bedded andesitic tuffs with minor sandstone of the Rossland Group occur on or near the Iron Claim. Also limestone cut by biotite-feldspar porphyry dykes occurs in the same area.

The occurrence of quartz on the property is described by Kruckowski (1981) as follows:

"Quartz, usually fractured and brecciated often rusty, occurs as discontinuous lenses and stringers in north-south fissure zones. The lenses ranges from several centimeters to 3 meters (report) and contain varying amounts of cubic pyrite crystals, pyrrhotite, galena, chalcopyrite, malachite, azurite and sphalerite. Significant gold and silver values may be associated with the sulphides."

A general description of the mineralization is taken from Smith's March, 1984 report.

"The mineralization in the camp appears to be of two different types. The true veins in syenites like the Cascade-Bonanza, Albion and Dubrovnik have typical low pH alteration' associated with solution boiling on an epithermal vein deposit as defined in a paper by Dr. L.J. Buchanan describing epithermal deposits in the southwest United States. The writer has worked on several major epithermal deposits in various "camps" in the United States and can attest to the similarities between the Albion to these deposits.

The mineralization at the Alice L.-Berlin and Inland Empire is clearly not related to an epithermal event. These latter deposits appear to be a type of gold porphyrite where there is no alteration similar to the Albion and the zone is hosted in volcanics or in conformable contact with sedimentary rocks.

The similarity of the Inland Empire to the gold porphyrite model is based in part upon examining the old reports for the Enterprise and U.S. properties. The Enterprise was worked by adits and pits in the early 1900's and a description in 1936 (MMR. p. E22) states: -

"... The sheared wall-rock in places is mineralized. With the sulphide mineralization gold and silver values may occur. In the Enterprise claim at one point some work was done on irregular mixed sulphide mineralization apparently representing replacement of the greenstone or possibly of included sediments, along fractures."

A description of the Dubrovnik and Albion veins is taken from E & B's report (Kruckowski 1981).

"Dubrovnik Vein

This vein is present on the Albion fracture and Dubrovnik Crown grants. Previous work on this vein consisted of a winze 12 feet deep plus numerous rock cuts or pits. At the time that trenching was conducted the winze was full of water and no sampling was possible. All of the old pits were cleaned out as well as new trenches excavated in the area.

The vein as outlined in trenches 1 to 9f consists of quartz lenses and stringer, sparsely mineralized with pyrite occurring within a fissure zone in syenitic rocks. The individual lenses and stringers occur in an echelon fashion with a maximum length of 15 meters for any one lense. The lenses vary in width from 0.15 to 2 meters in the area of the winze. The overall strike of the veins are north to 10 degrees west of north with steep dips to the east.

Trench 8 and 9 indicated that the fissure zone consists of clay, chlorite and kaolin bands or granulated syenite in excess of 2 meters.

The vein appeared to completely pinch out to the north of trench 2 and pinch into a series of discontinuous quartz stringers in the vicinity of trenches 9a to 9f. Information from the B.C. Minister of Mines report indicates that the vein pinches out at the bottom of the winze.

Assays from the trenches yielded significant gold values from trench 4 to 6 located immediately north of the winze. The values appear to be both in the quartz and altered wall rocks in association with the pyrite. Significant values are tabulated below:

Trench 4	69 cm	0.404 oz Au/t
Trench 5	28 cm	0.410 oz Au/t
Trench 6	41 cm	0.190 oz Au/t

"Albion Vein

This vein is present in the Albion No.2 and Alice L. Crown grants and appears to have extensive underground workings. There appears to have been a shaft and at least two adits which are inaccessible due to caving. The vein is exposed in the walls of a stope to surface and a large bulldozer trench north of the stoped area.

The vein consists of quartz lenses and stringers with inclusions of syenite. The maximum width observed is 2.2 meters above the stoped area on the vein. The vein pinches out to the north on the Alice L. Crown grant and pinches to less than 1 meter (1974 and 1979 drill results) toward the lower adit. Sparse pyrite was the only sulphide observed within quartz in the cuts but material on the dumps indicates some chalcopyrite, galena and sphalerite mineralization.

The quartz vein lies in a shear zone striking north 10 degrees west and dipping 65 degrees to the east. Several short discontinuous quartz stringers are present immediately west of the vein. These stringers are well mineralized with galena, sphalerite and pyrite but were not sampled due to the small nature of the occurrences.

Information from B.C. Minister's of Mines reports indicates that the vein pinches to a narrow seam approximately 40 feet below surface.

No production records are available but fairly large dumps are present near the caved portals. Vein material near the ore bin for the upper adit indicates that the quartz was sorted prior to shipping.

Assays from the trenches are all low except for trench 13 which contained 66 cm grading 0.25 oz. Au. Reported assays from the underground workings are in the 0.40 oz. Au/t range.

Drill hole intersections in 1974 drilling near the lower adit yielded assays of up to 0.6 oz. Au/t over narrow intervals (<1 meter)."

DIAMOND DRILL PROGRAM - 1989

The 1989 diamond drill program consisted of the drilling of two holes on the Berlin Crown Granted mineral claim. The total footage was 606 feet of NQ core size. The core is stored on the property.

The purpose of the drilling was to test the northern extension of the Alice L - Berlin vein system which is surficially exposed in pits and trenches on the southwest corner of the Berlin claim. The Alice L - Berlin vein originates at the north central portion of the Alice claim 100 meters south of the Berlin exposure. The drilling was also initiated to test a Ronka EM anomaly correlating with the indicated Alice L - Berlin structure.

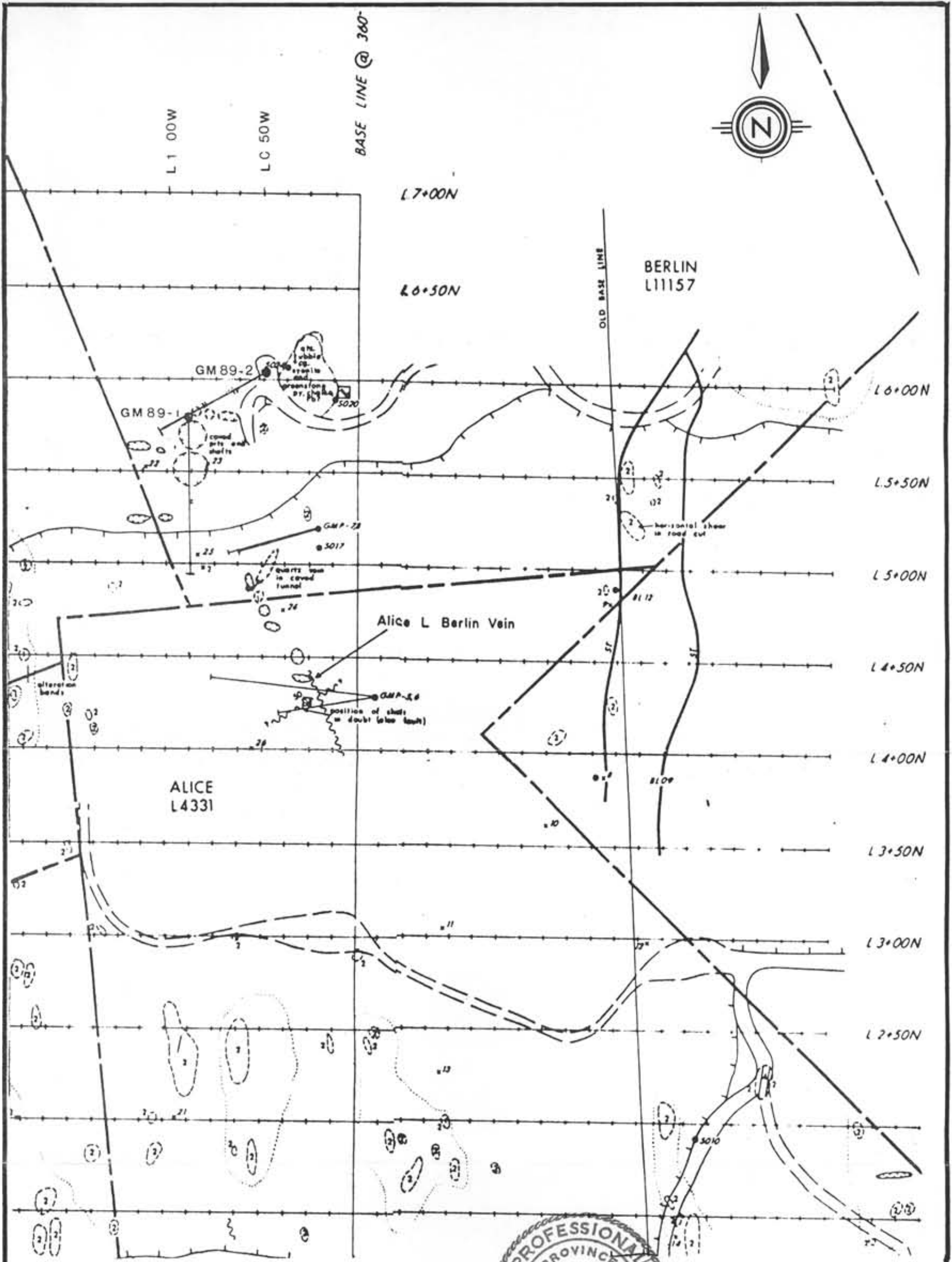
A summary of the drill holes with results is as follows:

DDH GM 88-1 (Figure 3)

Location: 0+83W 5+78N
Azimuth: 180°
Dip: -55°
Depth: 147.5 m (484 ft)

Purpose: To test a Ronka VLF-EM anomaly along the projected extension of the Alice L - Berlin vein.

Results: Altered zones within an andesite and incorporated dioritic material with associated granite indicate the potential epithermal associated vein deposits. The Alice L - Berlin vein was not intersected however structures exhibiting significant alteration were intersected. Any one of these structures could be the Alice L - Berlin vein host. A bleached zone with quartz carbonate stringers and fragments and containing occasional pods of pyrite assayed 0.18 oz Ag/ton and 0.017 oz Au/ton.



Base Map after Kruchkowski



BOUNDARY GOLD CORP.
Alice L - Berlin Claim Group

Scale 1:2,000



DRILL HOLE LOCATION

GM 89-1 & GM 89-2

May 1989

Figure 3

DDH GM 88-2 (Fig. 3)

Location: 0+50W 6+06N
Azimuth: 240°
Dip: -55°
Depth: 111 m (365 ft)

Purpose: To test the indicated Alice L - Berlin structure expressed by a Ronka EM anomaly and quartz vein material in pits

Results: Predominantly altered andesitic material with rare sections of granitic veins and veinlets. Two narrow sulphide zones, one of which returned an assay of 0.04 oz Ag/ton and 0.001 oz Au/ton, may indicate the Alice L - Berlin structure.

CONCLUSIONS

The diamond drilling program were successful in the determination of the causative source for the Ronka EM anomaly however was not successful in the location of economic zones of mineralization.

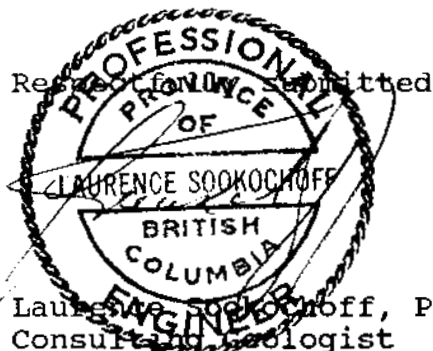
The Ronka EM anomaly was the expression of structural zones and possibly volcanic-intrusive contacts with rare to occasional sulphides. The intersected structures could be the extension of the Alice L - Berlin structure to the south which hosts economic gold values.

The light mineralization within the andesitic hosted structures could be an expression of deeper seated, more significant gold mineralization within the underlying intrusive. Location of underlying structures and degree of hydrothermal alteration could lead to prime exploration targets for testing by additional diamond drilling.

RECOMMENDATIONS

It is recommended that an IP survey be carried out over the Alice L - Berlin vein system to locate zones of indicated gold mineralization. Resistivity lows resulting from the IP program would indicate areas of hydrothermal alteration which may reflect to the direct degree of sulphide content and potentially associated gold values.

The prime resistivity lows would be subsequently tested by diamond drill holes.



August 28, 1989
Vancouver, B.C.

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STATEMENT OF COSTS

The diamond drill program on the Granville Mountain Property was carried out from May 8, 1989 to June 2, 1989 to the value of the following:

Road & drill site preparation	\$ 2,040.00
Truck rental	960.00
Mob & demob	1,260.00
Diamond drilling (NQ) 606 feet @ \$25	<u>15,150.00</u>
	\$ 19,410.00
	<u>-----</u>

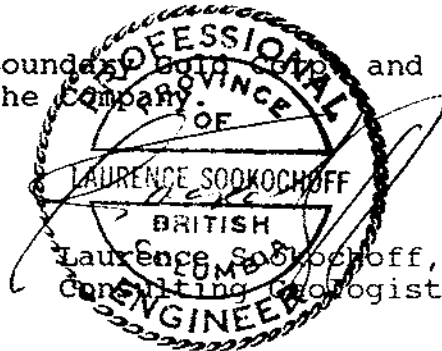
CERTIFICATE

I, Laurence Sookochoff, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geologist and principal of Sookochoff Consultants Inc. with offices at 602-510 West Hastings Street, Vancouver, B.C., V6B 1L8.

I further certify that:

1. I am a graduate of the University of British Columbia (1966) and hold a B.Sc. degree in Geology
2. I have been practising my profession for the past twenty three years.
3. I am registered with the Association of Professional Engineers of British Columbia.
4. The information for this report was obtained from sources as cited under Bibliography and from the supervision of the diamond drill program reported on herein.
5. I am a director of Boundary Gold and own more than 10,000 shares of the Company.



August 28, 1989
Vancouver, B.C.

Appendix I

ASSAY CERTIFICATES

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED: JUL 18 1989
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED: *Aug. 8/89*

ASSAY CERTIFICATE

- SAMPLE TYPE: ROCK/CORE

SIGNED BY *C. Long* D. TOYE, C. LEONG, J. WANG: CERTIFIED B.C. ASSAYERS

SOOKOCHOFF CONSULTANTS INC. PROJECT GRANVILLE FILE # 89-2238A

SAMPLE#	Cu %	Ag OZ/T	Au OZ/T
81103 R	.01	.18	.017
81104 R	.01	.04	.001

Appendix II

DIAMOND DRILL LOGS

