1988
GEOPHYSICAL REPORT
SLUICE BOX PROPERTY
BOND GOLD CANADA INC



ARIS SUMMARY SHEET

District Geologist, Prince George

Off Confidential: 90.05.05

ASSESSMENT REPORT 18715

MINING DIVISION: Clinton

123 12 00

PROPERTY:

Sluice Box

LOCATION:

LAT 51 06 00 LONG

UTM 10 5660745 485995

NTS 092003E

CAMP:

035 Taseko - Blackdome Area

CLAIM(S): Slu OPERATOR(S): Bon

Sluice 1-5 Bond Gold Can.

AUTHOR(S):

Kennedy, D.R.; Vogt, A.H.

REPORT YEAR:

1989, 16 Pages

COMMODITIES

SEARCHED FOR: Gold, Silver, Copper, Molybdenum/Molybdenite

KEYWORDS:

Cretaceous, Kingsvale Group, Relay Mountain Group, Tuff, Dacite

Andesite

WORK

DONE:

Geophysical, Physical

EMGR 62.9 km; VLF

Map(s) - 2; Scale(s) - 1:2500

LINE 68.9 km

MAGG 62.9 km

Map(s) - 2; Scale(s) - 1:2500

LOG NO: OSIO RD.
ACTION:

GEOPHYSICAL REPORT FILE NO:

ON THE

SLUICE BOX PROPERTY

OF
BOND GOLD CANADA Inc.

SLUICE 1-8 MINERAL CLAIMS

CLINTON MINING DIVISION, BRITISH COLUMBIA

NTS 920/3E

Latitude 51 06' Longitude 123 12'

BY
Andreas VOGT
David KENNEDY

FILMED

The Sluice Box Property is located approximately 200 kilometres north of Vancouver in the Chilcotin Range of southern British Columbia. The area is underlain by Mesozoic strata of the Tyaughton Trough that are intruded by Early Tertiary dikes and stocks.

The property was staked on behalf of Bond Gold Canada Inc. in May of 1988. It consists of 142 claim units in 8 contiguous mineral claims (Sluice # 1 to 8) located within the Clinton Mining Division.

Bond Gold's interest in the area was generated by extensive gossanous alteration zones and ferricretes associated with geochemical signatures typical for epithermal gold mineralizations. The alteration zones covered by the Sluice claims constitutes the continuation of the environment of the gold mineralization at Taylor-Windfall Mine 7 kilometres to the west, a former gold producer presently under active exploration by Westmin Resources Limited.

A combined magnetic/VLF-EM survey was conducted on the Sluice Box property during the 1988 field season.

The interpretation of the geophysical survey is still preliminary because a geological and geochemical database has not yet been established for correlation. However, several zones of medium to strong VLF-EM conductors in association with magnetic breaks can be defined as initial targets (Targets A to H).

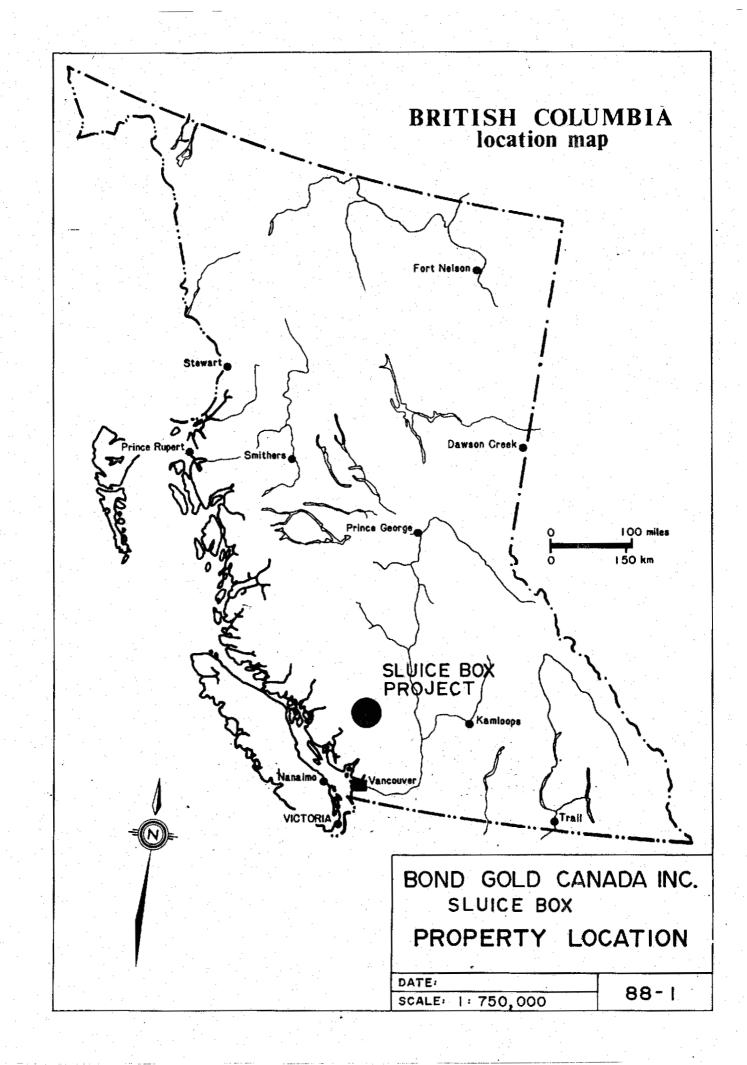
The geological and geochemical information available from previous exploration work conducted by other companies and from geological mapping/mineral potential evaluation by the provincal government define three additional, very promising targets (Warner Pass Zone, LCP Zone, T Zone).

The results of the 1988 survey in conjunction with other available information indicate a very good potential for this property to host epithermal-type gold mineralization and/or porphyry copper/gold mineralization. Further exploration work is clearly warranted.

A program of detailed geological mapping and lithogeochemical sampling is proposed to tie-in the geophysical information obtained during this program and refine the target selection. The three mineralized and/or geochemically anomalous zones established by previous work warrant further evaluation of their gold mineralization potential. The geophysical coverage should be extended to cover the Warner Pass Zone.

TABLE OF CONTENT

					PAGE
SUMMARY					1
INTRODUCTION					4
PROPERTY					4
LOCATION AND ACC	ESS				6
EXPLORATION HISTO	ORY				6
REGIONAL AND PRO					
MINERALIZATION					7
1988 GEOPHYSICAL					
CONCLUSIONS AND I					
COST STATEMENT					
STATEMENTS OF QUA					
REFERENCES					
MAPS AND FIGURES					
FIGURE 88-01	LOCATION MAP				3
FIGURE 88-02					5
FIGURE 88-03		•			HALF (IN POCKET)
FIGURE 88-04	TOTAL FIELD	MAGNETIC	CONTOUR MA	AP - EAST I	HALF (IN POCKET)
FIGURE 88-05	VLF PROFILES	- WEST	IALF		(IN POCKET)
FIGURE 88-06	VLF PROFILES	- EAST I	IALF		(IN POCKET)



In early 1988 Bond Gold Canada investigated the environment of the Tchaikazan Fault in the Warner Pass area (920/3) for possible ground acquisitions. The Tchaikazan Fault is a major break northwest and on strike with the ore controlling structures of the Bridge River Gold Camp.

New information for this area (920/3) was made available as a result of the regional geological mapping program conducted in 1986 by the provincial government as part of the Canada/British Columbia Mineral Development Agreement.

An extensive alteration zone trending east from the Taylor Windfall Gold Mine towards the Lorna Lake Stock, partly associated with a geochemical signature indicative of epithermal gold mineralization, caught the interest of Bond Gold Canada and was staked in May of 1988 as the Sluice Box Property.

The principal exploration targets for this property are epithermal gold/silver (Bonanza-type and bulk tonnage disseminated type) mineralization and/or porphyry copper/gold mineralization.

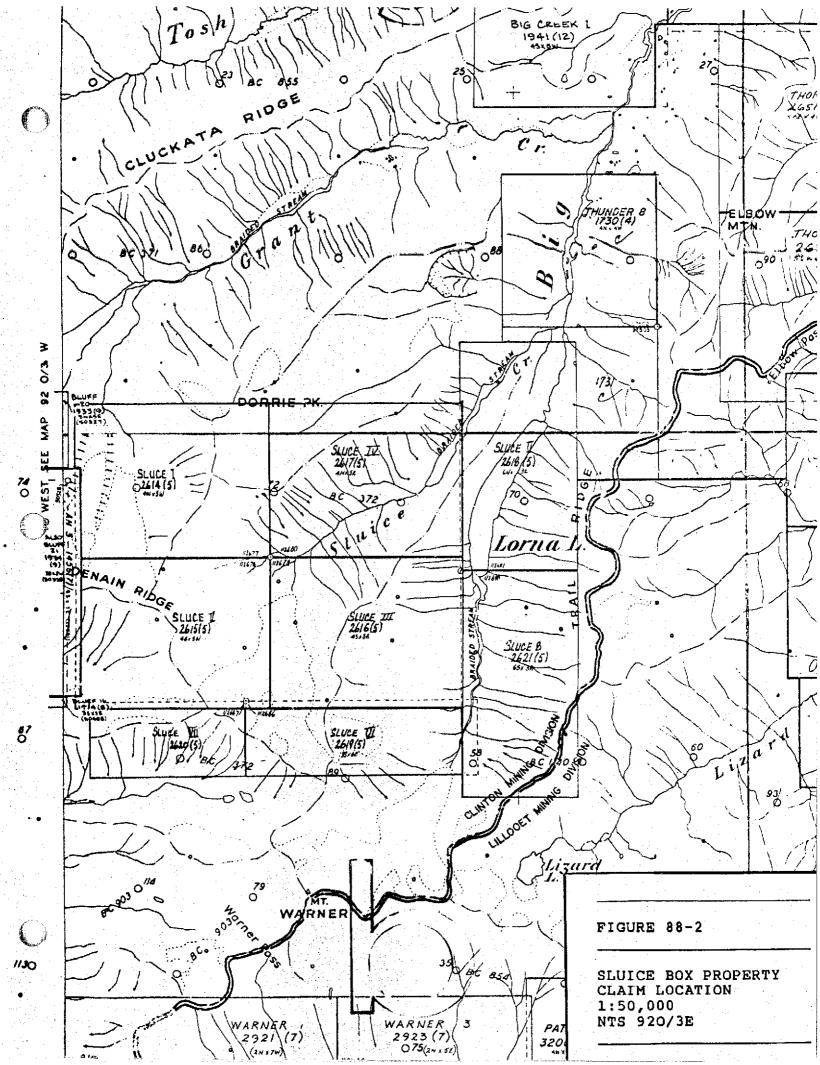
An exploration grid with 6 kilometres of baseline and 62.9 line kilometres was established in July of 1988. The grid was subsequently surveyed with a combined magnetic/VLF-EM survey.

PROPERTY

The Sluice Box Property consists of 142 claim units (3500ha) in 8 mineral claims (Sluice # 1 to 8) located in the Clinton Mining Divison of British Columbia. Relevant data for the claims are given in Table 1. The location of the claims is shown in Figure 88-2.

Claim Name	Record #	Units	Date of Record
Sluice 1	2614	20	May 12,1988
Sluice 2	2615	20	May 12,1988
Sluice 3	2616	20	May 12,1988
Sluice 4	2617	20	May 12,1988
Sluice 5	2618	18	May 12,1988
Sluice 6	2619	18	May 12,1988
Sluice 7	2620	8	May 12,1988
Sluice 8	2621	18	May 12,1988

Table 1: Sluice Box Property Claim Data



The Sluice Box property is locacted in the Chilcotin Range of south-central British Columbia about 40 kilometres northwest of Goldbridge and approximately 200 kilometres north of Vancouver (NTS map sheet 920/3E; 51 06', 123 12', Figure 88-1).

Elevation on the property ranges from 1800 metres to 2725 metres above MSL with Dorrie Peak at the northern claim boundary of the Sluice # 1 claim being the highest point. The entire property area is essentialy above treeline.

Access to the property is presently by helicopter from Lillooet or Goldbridge.

EXPLORATION HISTORY

1971-1974

Lorn and Jim claims; porphyry copper exploration by Cominco; the claims covered the area of what is now the eastern portion of the Sluice Box property; the exploration concentrated on copper and molybdenum mineralization at the contact of the Lorna Lake Stock; geological mapping and diamond drilling (1490' in 5 holes); no assays reported

1981/82

Sluice claims; geochemical survey (208 talus fines on contour traverses, analysed for gold and silver; 5 rock samples) conducted by Barrier Reef Resources Ltd; the two claims covered the area of Bond Gold's Sluice #1 and 4 claims.

A 1400m x 400m zone of anomalous gold (up to 140 ppb) and silver (up to 9.7 ppm) values and a second anomalous zone (1500m x 500m) with gold up to 80 ppb and silver up to 5.5 ppm was outlined along a northeasterly trend.

1986

Regional mapping and mineral potential evaluation by the B.C. Ministry of Energy, Mines and Petroleum Resources as a contribution to the Canada/British Columbia Mineral Development Agreement

1988

The Sluice Box property is staked on behalf of Bond Gold Canada. The geophysical program that is the subject of this report is conducted.

The geology of the area is summarized from assessment reports and the recent regional mapping of the B.C. Ministry of Energy, Mines and Petroleum Resources Geological Survey Branch (Open File 1987/3). The property area lies within the Tyaughton Trough, a continuous northwest trending belt of Mesoizoic (Sinemurian to Coniacian) strata along the northeastern margin of the Coast Plutonic Complex. Upper Cretaceous terrestrial sediments and volcanic-arc related rocks (Kingsvale Group) unconformably overly the sequences of the Tyaughton Trough. This unconformity appears to be related to the uplift of the Coast Plutonic Complex to the west.

The Mesozoic volcano-sedimentary strata are intruded by several stages of Mid-Creataceous to Early Tertiary stocks.

In the area of the Taylor-Windfall Mine the volcaniclastic sequences trend east-west and have gentle dips to the north. The dominant structural trend in the area is northwesterly, reflected by the Tchaikazan Fault and smaller subparallel faults as well as by the margin of the Coast Plutonic Belt in general. On a smaler scale northeast trending structures appear to be instrumental in the localization of gold mineralization.

Mid to Late Cretaceous volcanic, volcaniclastic, and clastic sedimentary rocks of the Upper Cretaceous Kingsvale Group underlie the largest portion of the property. At its northeastern corner these rocks are in fault contact with sedimentary rocks equivalent to the Middle Jurassic rocks of the basal Relay Mountain Group.

Two main stocks have intruded the stratified sequences: the Dorrie Peak Stock (hornblende plagioclase porphyry to eqigranular, medium-grained diorite) and the younger, Lorna Lake Stock (equigranular quartz monzonite to granodiorite). The Lorna Lake

Stock appears to be emplaced along a north-northeast trending normal fault which occupies the Big Creek valley. The composition of the Dorrie Peak Stock is similar to that of the spatially associated andesitic volcanic rocks of the Kingsvale Group.

Both intrusions have been age dated with the 40 Ar/39 Ar method by Archibald et al (1989). Hornblende from the Dorrie Peak Stock has yielded an age date of 64.7 + /-2.1 Ma; biotite from the Lorna Lake stock yielded an age of 43.9 + /-0.6 Ma.

MINERALIZATION

A discontinuous belt of siliceous and argillic alteration zones that appears to be stratabound and hosted by pyroclastic rocks of the Kingsvale Group extends from the Taylor Windfall Mine in the West to the northern margin of the Lorna Lake Stock in the east. The alteration is concentrated in a sequence of dacitic to andesitic tuffs, lithic tuffs and feldspar crystal tuffs that is surrounded by layers of weakly altered andesitic dust tuff.

The Taylor Windfall Mine is an epithermal gold deposit associated with low pH alteration zones. Eluvial gold was originally discovered 1920 by E.J. Taylor. Limited bedrock production has been derived types of mineralization. Production came from a two northeast-striking (NO60E, with a dip of 75 degrees to the southeast vertical) fracture zone in the 1930s. This zone contained pyrite, tennantite, chalcopyrite, and minor sphalerite in a chlorite-sericite In 1952/53 70 tons with a grade of 0.6 oz/t gold were mined from a mineralized and silicified pyroclastic layer within the Kingsvale Group. The extension of this siliceous zones with associated argillic and phyllic alteration is presently the focus of the exploration done by Westmin Resources Ltd. at Taylor Windfall. Similar alteration zones occur further East at Battlement Creek and Palisade Bluff.

An alumite sample from the Taylor-Windfall property yielded an 40 Ar/39 Ar age of 73.7 +/-0.5 Ma (Archibald et al 1989). The mineralization event may, therefore, be related to the final stages of crystallization and cooling of the Coast Plutonic Complex.

The eastern extension of the mineralized and altered horizon hosting the Taylor Windfall Mine and the Battlement Creek-Palisade Bluff showings contains the Warner Ridge Zone on the Sluice Box Property. Limited sampling (10 rock samples) of this variably argillic altered and silicified zone has yielded anomalous gold (up to 306 ppb), mercury (up to 2120 ppb) and arsenic (up to 60 ppm) values (Open File 1987/3).

The LCP Zone, close to the common legal claim post for the Sluice # 1 to 4 claims and spatially associated with the main alteration zone, was defined by Barrier Resources 1982 program. It is a northeast trending area, 1,400 metres by 400 metres in size, with anomalous silver and gold values in talus samples. A similar anomalous zone (T Zone) of slightly larger extend was defined by the same survey along strike further to the northeast. The talus fines were sampled as a substitute for soils which are not developed on these slopes.

Minor chalcopyrite and molybdenite mineralization has been reported by Cominco in the early 1970s from the contact area of the Lorna Lake stock. No assays have been reported from this work.

The numerous rhyolitic dykes mentioned in Cominco's drill logs that are spatially associated with the Eocene Lorna Lake Stock and the emplacment of this stock along a north-northeast trending fault structure indicate a mineralization environment similar to that of the epithermal Blackdome deposit. The north-northeast structural trend that controlls mineralization at the Blackdome Mine can be related to extensional faulting associated with dextral displacement along the Fraser Creek Fault.

A magnetic/VLF-EM survey was conducted in July of 1988 by MPH Consulting Limited on behalf of Bond Gold Canada. The data were processed and interpreted by the Bond Gold Exploration Geophysical Department in Denver, Colorado.

A six kilometres long baseline, trending N058E, was established parallel to the main alteration zone in the northern half of the property. The origin of the grid coincides with the common legal claim post of the Sluice # 1 to 4 claims. Crosslines were run at 100 metre intervals and extend from 300SE to 1200NW where terraine and snow conditions permitted. A total of 62.9 line kilometres were established and surveyed.

A Scintrex IGS-2/MP-4/VLF-4 integrated total-field proton magnetometer plus VLF was used for the survey. Diurnal drift corections were made through the use of a recording base station. The VLF-EM receiver was tuned to the transmitter station in Cutler, Maine. All readings were taken at 12.5 metre intervals.

Data are presented at a 1:2,500 scale (FIGURES 88-03 to 88-06).

The magnetic contour maps were prepared by first gridding the drift-corrected data on a 6.25-metre square mesh with a minimum-curvature algorithm, than upward continuing 6.25 metres to reduce some of the noisy character of the data. These filtered data were then contoured on a 100-gamma interval.

The VLF data are presented as stacked profile.

Interpretation of the data is prelimary as no correlating geological and geochemical information is available. The following comments were provided by C.Ludwig, Chief Geophysicist, Bond Gold Exploration (Ludwig 1989).

A fairly well-defined NE-SW trend of magnetic and VLF-EM axes appear to reflect the general stratigraphy of the area.

A broad zone of high magnetic response is seen in the central third of the area, generally north of 750N. This high is breached by a more-or-less N-S trending low running north from L600E/500N. Three rather strong magnetic breaks also trend through this area, making it of some interest as a general target area.

The large, irregular-shaped magnetic low in the central portion of the grid area, mostly south of 500N, may be an area of alteration and/or variably polarized volcanics. A higher concentration of magnetic breaks are present in this vicinity, suggesting increased structural complexity.

The VLF-EM survey results in many axes, many apparently contact effects between rocks of differing conductivity rather than discrete conductors.

Those axes with characteristics suggesting discrete conductors, particularly where strong or near magnetic breaks or other features of interest, can be selected as initial targets.

Target A is a pair of strong-to-moderate VLF conductors near the baseline between lines 800W and 100E, within or on the periphery of the large magnetic low. Several magnetic breaks, and proximity to localized magnetic highs, particularly on lines 300 and 400W, add further interest to this area. The magnetic linear trending from L300W/300S to L600W/500N corresponds to a fault on the regional

geological map (Open File 1987-3).

Target B is a strong VLF conductor near 50S on line 300E within the large magnetic low. It may be the eastern continuation of the northern conductor of target ${\bf A}$.

Targets C,D,E,F,G,and I (L1000E/020N, L1600E/200S, L1800E/120S, L2200/170S to L2600E/160S, L1900E/390E, and L300E/570N respectively) are short-strike-length, moderate to strong VLF conductors, mostly in areas of considerable magnetic complexity. Targets C,E,G, andI show some correlation with local magnetic highs and are close to prominent breaks. Target D, and to a lesser degree target F, are

apparently related to local magnetic lows.

Target H is a generalized area of magnetic complexity centred near 500N on line 600E. The target is primarily a strong high at the approximate confluence of several magnetic breaks on the NW margin of the major magnetic low. A poorly defined cluster of moderate to weak VLF axes are present in the vicinity.

The 1988 geophysical survey has resulted in the definition of several initial targets. The interpretation of the data is, however, still prelimary as a correlation with geological and geochemical information was not possible.

Hydrothermal alteration is wide-spread on the property and crosses it as a wide belt in a SW-NE direction. There is the potential for mineralization styles associated with environments ranging from

porphyry-copper to a high-level epithermal.

Recently published age dates for the Lorna Lake Stock (Archibald et al 1989) in the eastern portion of the property show an Eocene age for this intrusion. This age in conjunction with the structural setting of the intrusion indicates similarities with the environment of the Blackdome deposit and, therefore, the potential for Bonanza style epithermal gold mineralization.

The Taylor-Windfall mineralization appears to be Upper Cretaceous in age (Archibald et al 1989). The same geological environment as that of this mine has been identified in the western portion of the Sluice Box property.

A detailed geological and geochemical data base must be established to further evaluate the results of the geophysical survey and to refine the target selections as well as to determine the mineralization environment.

A program of detailed mapping and extensive lithogeochemical sampling is proposed. The geophysical survey should be extended in order to cover the Warner Ridge Zone. As the northeast trending structures appear to be important in controlling one style of mineralization at the Taylor Windfall Mine and are also known to controll Eccene epithermal gold mineralization regionally a second VLF-EM survey with a transmitter station better suited for defining structures of that orientation should be conducted.

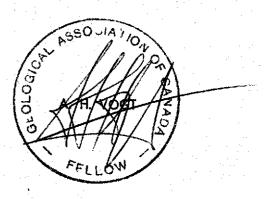
If an association of gold with disseminated sulfide mineralization can be established, an IP survey could be considered to prioritize the geophysical targets defined by this survey.

1988 EXPLORATION PROGRAM

Geophysical Survey	39,757,40
(MPH Consulting Limited)	÷
Helicopter Charter	6,966.40
Field Equipment	57.79
Office supplies, printing, computer	2,000.00
time, report preparation (estimate)	
	48 781 59

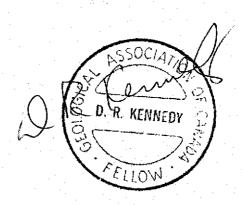
- I, ANDREAS HANS VOGT, of 3342 West 7th Avenue, Vancouver B.C. do hereby certify:
- 1) That I have studied Geology/Palaeontology at the Universities of Muenchen and Goettingen (both West Germany) and Mining Geology at the Austrian Mining University in Leoben; I have received a M.Sc equivalent (Magister rer.nat.) in Mining Geology from the Austrian Mining University in December of 1982
- 2) That I have continuously practiced my profession since my graduation in Canada, Spain, West Germany, Austria, and Chile
- 3) That I am A Fellow in good standing of the Geological Association of Canada
- 4) That I am employed by Bond Gold Canada Inc.
- 5) That the statements in this report are based on office compilation on the Sluice Box Property

Dated this 5th day of May 1989 at Vancouver, British Columbia



- I, DAVID ROY KENNEDY, of 5596 Nuthatch Place, North Vancouver, B.C. do hereby certify that:
- 1) I am a geologist, having obatained the degree of B.Sc. (Major Geology) from Acadia University in Wolfsville, Nova Scotia in 1970
- 2) I am a member in good standing of the Canadian Institute of Mining and Metallurgy
- 3) I am a fellow in good standing of the Geological Association of Canada
- 4) I have continuously practised my profession in Canada since graduation in 1970
- 5) The statements in this report are based on office compilation on the Sluice Box Property. I have personally supervised the work documented in this report.

Dated this 5th day of May 1989 at Vancouver, British Columbia



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