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GEOLOGICAL ANA DIAMOND DRILLING REPORT  
ON THE QUATSE LAKE PROPERTY  
NANAIMO MINING DIVISION  
PORT HARDY AREA, VANCOUVER ISLAND, B.C.

LOCATION

N.T.S.: 92L/12E  
LATITUDE: 50°39'N.  
LONGITUDE: 127°35'W.

CLAIMS

CALEDONIA (LOT 1294), CASCADE (LOT 1295), BLUEBELL (LOT 1296),  
PICK 7 (# 774), PICK 9 (# 776), PICK 10 (# 1004), PICK 11 (# 1031),  
TOM (# 251), PAM (# 168), CHRIS (#1023) & CHRIS 1 TO 7 (#1024 TO 1030)

OWNER & OPERATOR


HISWAY RESOURCES CORP.  
827 FORT STREET  
VICTORIA, B.C. V8W 1H6

PREPARED BY

Peter A. Christopher Ph.D., P.Eng.  
PETER CHRISTOPHER & ASSOCIATES INC.  
3707 WEST 34th AVENUE  
VANCOUVER, B.C. V6N 2K9

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

NOVEMBER 5, 1989

*Peter*  19,417

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## SUMMARY

The Quatse Lake Property, located north of Holberg Inlet in the northern part of Vancouver Island (NTS 92 L/12E) and consisting of the Caledonia, Cascade and Bluebell crown granted mineral claims, eight 2 post claims, and six metric mineral claims, covers about 2350 ha. (5807 acres) in the Nanaimo Mining Division, British Columbia. The claims are located west of the Port Hardy-Holberg Road about 4 miles south-southwest of Port Hardy. A number of partly overgrown logging roads provide access to most of the property.

Rocks in the claim area are mapped by Muller et al. (1974) as part of the Vancouver Group consisting of Lower Jurassic Bonanza Volcanics, Quatsino Limestone, Upper Triassic Parsons Bay Formation sedimentary rocks, and Karmutsen Formation basalts. They are cut by numerous regional and local faults and intruded by Jurassic age, stocks and dykes of Island Intrusives. Limestone bodies are often skarnified and mineralized near intrusive contacts. Porphyry type mineralization is generally associated with Jurassic intrusive rocks.

The property contains three named mineral occurrences which include the Caledonia mineral deposit and Scissor and Hill 140 North copper occurrences. The Caledonia, a skarn type mineral deposit, is reported in B.C. Mineral Inventory to have indicated reserves of 75,000 tons grading 6.09% copper, 7.45% zinc, 0.6% lead, 20.54 oz Ag/ton and 0.01 oz Au/ton. The deposit has been developed by the Caledonia Mines Company, Limited, Cominco, North Island Mines Ltd., Energex Minerals Ltd., and others by over 1000 feet of underground workings, at least 20 diamond drill holes, and numerous trenches and percussion drill holes. Previous exploration of the Caledonia deposit and surrounding claims is poorly documented.

A success contingent, staged exploration program is outlined by the writer for further evaluation of the mineral potential of the Quatse Lake Property. A recommended Stage 1 program of data compilation, road and underground workings rehabilitation, grid establishment and diamond drilling is estimated to cost \$ 200,000. Further Stage 2 diamond drilling is contingent on the success of Stage 1 and is estimated to cost \$300,000.

## INTRODUCTION

The Quatse Lake Property consisting of 3 crown grants, 8 two-post claims and 88 metric units is situated north of Holberg Inlet in the Nanaimo Mining Division and northern part of Vancouver Island. The property covers about 2350 ha. (5807 acres) and includes numerous old workings that were mainly constructed during the 1920's. The writer was retained by the management of Hisway Resources Corp. to evaluate the exploration potential of the Quatse Lake Property, and recommend a program of further exploration, if warranted. The writer examined the property with company prospector Steve Oakley on October 31 and November 1, 1989. The writer sampled Hill 160 (250 meters west-northwest of Hill 140 copper occurrence) and the Caledonia dump and logged diamond drill hole 89-1 during his examination.

This report summarizes exploration conducted on the Quatse Lake Property by Hisway Resources Corp. between September 15 and November 3, 1989. A recommendation for further success contingent, staged exploration is based on the results of current program and on previous company and exploration work in the area.

## LOCATION AND ACCESS (Figures 1, 2, & 3)

The Quatse Lake Property is located about 8 kilometers southwest of Port Hardy and 3 kilometers north of Coal Harbour on Holberg Inlet. The claims are centered at geographic coordinates 50°39'N. latitude and 127°35'W. longitude in map sheet (NTS 92L/12E) and in the Quatsino Provincial Forest and the Nanaimo Mining Division in the northern part of Vancouver Island, British Columbia (Figure 1). The claims cover and lie north of Quatse Lake (Figures 2 & 3).

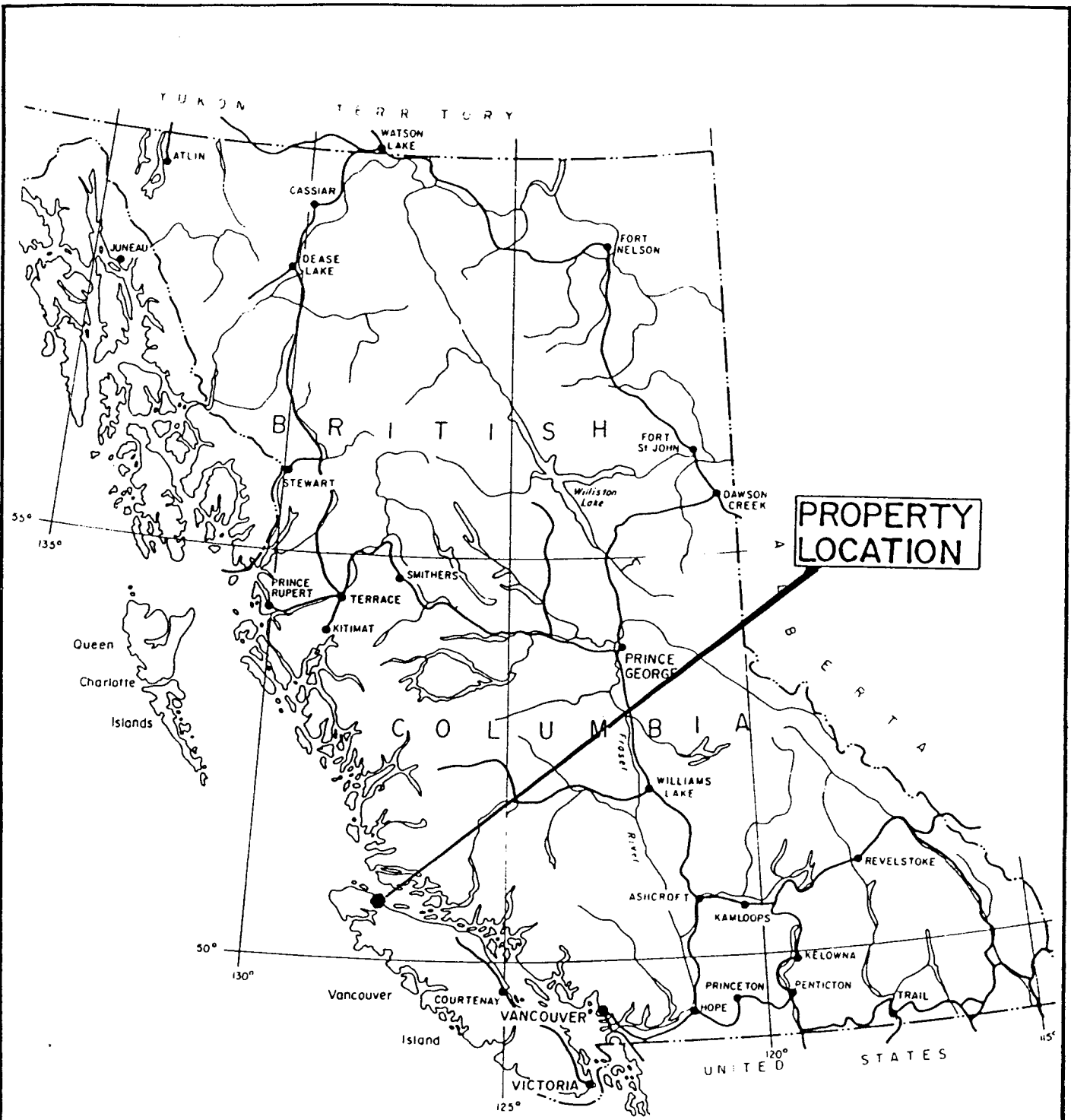
Property access is presently via the Coal Harbour-Port Hardy road and a 6.5 kilometer (4 mile) tractor road built by North Island Mines. A number of overgrown logging roads could be upgrade to provide drive in access to most of the property. The 1989 drill program was helicopter supported with daily walk in via an old road and trail.

The claims cover a gently rising slope with Quatse Lake, at elevation 70 meters (230 feet) to the south and an east trending ridge, at elevations of 305 meters (1000 feet) to 427 meters (1400 feet) in the central part of the claim area.

Vegetation is typical of west coast rain forest with commercial spruce, fir and cedar and scrub alder swamps.

## PROPERTY DEFINITION

The Quatse Lake Property, consisting of the Cris and Cris 1 through Chris 7 two-post claims, and Pick 7, Pick 9, Pick 10, Pick 11, Tom, and Pam metric claims (totalling 88 units) and Caledonia, Cascade, and Bluebell crown grants covers about 2350 hectares (5807 acres) in the Nanaimo Mining Division near Port Hardy, British Columbia. The recorded claims were staked between July 22, 1977 and October 26, 1981 with a bill of sale to Hisway Resources Corp. registered on June 29, 1989.



**PROPERTY  
LOCATION**

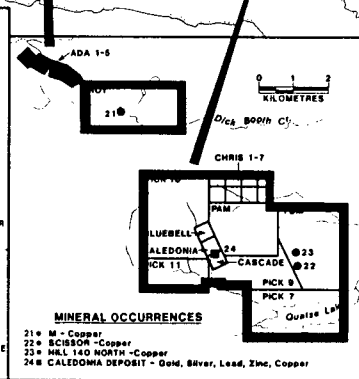
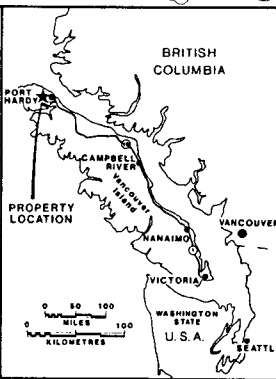
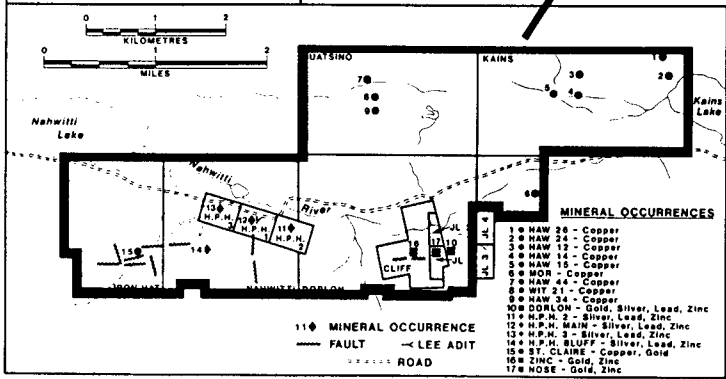
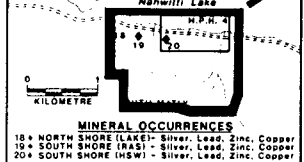
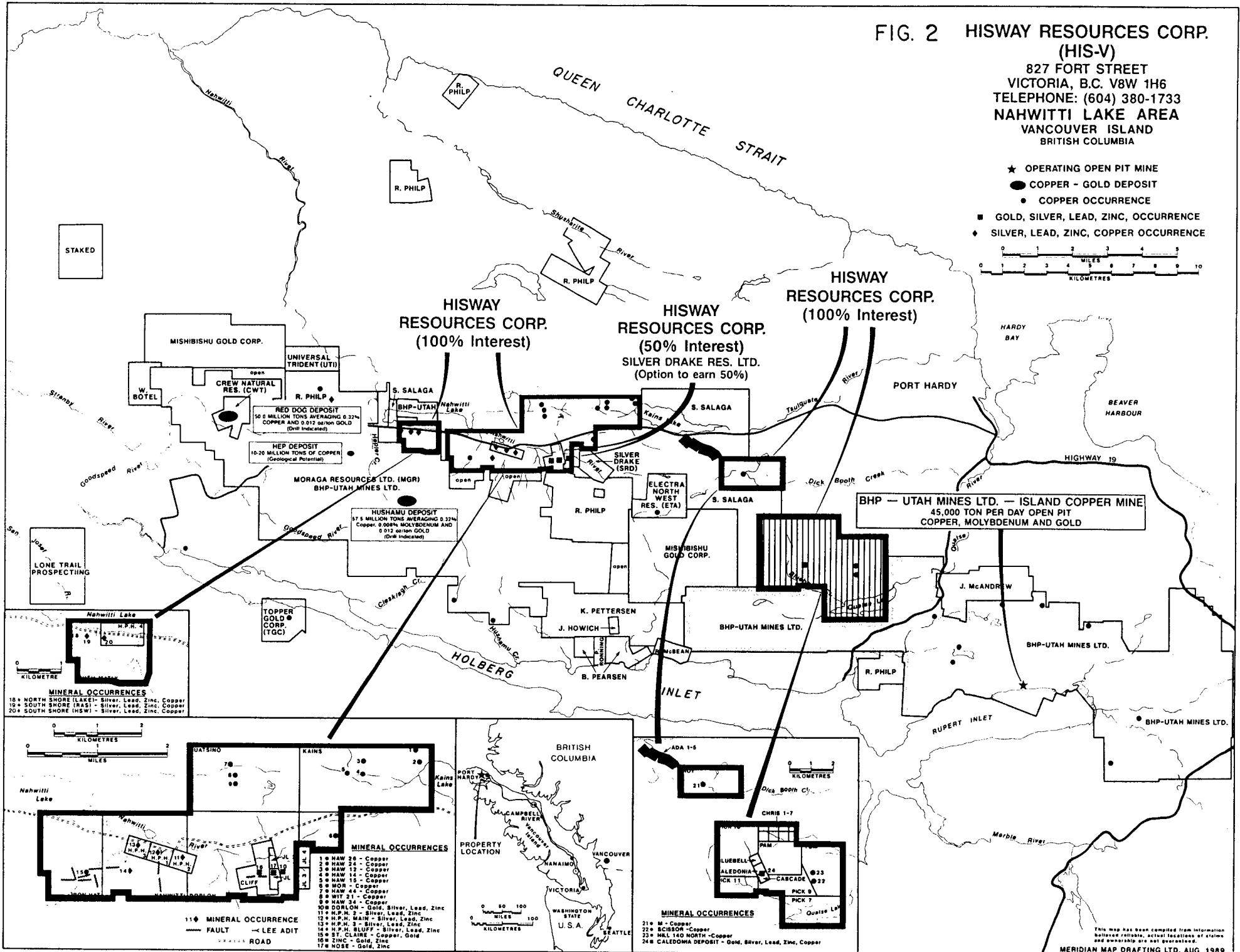


<b>HISWAY RESOURCES CORP.</b>	
<b>QUATSE LAKE PROPERTY LOCATION MAP</b>	
NT.S. 92L-12E	NANAIMO M.D., B.C.
0 100 200 400 KM.	
<b>P.A. CHRISTOPHER &amp; ASSOCIATES INC.</b>	
SCALE AS SHOWN	NOV. 1989
FIGURE 1	

**FIG. 2 HISWAY RESOURCES CORP. (HIS-V)**

827 FORT STREET  
 VICTORIA, B.C. V8W 1H6  
 TELEPHONE: (604) 380-1733  
**NAHWITTI LAKE AREA**  
 VANCOUVER ISLAND  
 BRITISH COLUMBIA

- ★ OPERATING OPEN PIT MINE
- COPPER - GOLD DEPOSIT
- COPPER OCCURRENCE
- GOLD, SILVER, LEAD, ZINC, OCCURRENCE
- ◆ SILVER, LEAD, ZINC, COPPER OCCURRENCE



This map has been compiled from information believed reliable, actual locations of claims and ownership are not guaranteed.  
 MERIDIAN MAP DRAFTING LTD. AUG. 1989

127° 35'

50° 40'

LAKE 10  
3374 (6)  
3N X 2E

QUATSE  
LAKE  
PROPERTY

110708  
94724

CRIS 1 1024 (10)	CRIS 3 1026 (10)	CRIS 5 1028 (10)	CRIS 7 1030 (10)
CRIS 1023 (10)	CRIS 2 1025 (10)	CRIS 4 1027 (10)	CRIS 6 1029 (10)

LAKE 11  
3375 (6)  
7S X 2E

PICK 10  
1004 (9)  
3N X 4W

PAM  
168 (7)

Caledonia Cr.

L 1296  
C.G.  
L 1295  
L 1294  
89111-1  
32781

TOM  
DORR-1 251 (6)

OL-1  
2478 (10)  
3N X 2E

PICK 11  
1031 (10)  
3N X 4W

PICK 9  
776 (2)  
(6W X 2E), FIG. 5

Quatse

APPLE 2  
1705 (4)  
1S X 6E

APPLE 5  
1708 (4)  
5N X 1E

Quatse Lake

OL-2  
2476 (9)  
3E X 3E

APPLE 4  
1707 (4)  
1S X 6E

JUNO  
1224 (7)  
3N X 3W

MIMAS  
1223 (7)  
3N X 4E

Nuknimish Cr.

76387  
76388  
APPLE 6  
1709 (4)  
1S X 1E

CLIFF-  
WOOD  
58 (12)  
100839

Coal Harbour  
Coal Harbour

CH 1 3493 (6)	CH 2 3494 (6)	CH 7 3498 (6)	CH 8 3499 (6)	CH 10 3500 (6)
CH 3 3495 (6)	CH 4 3496 (6)	CH 9 3501 (6)	CH 11 3502 (6)	CH 12 3503 (6)
CH 5 3497 (6)	CH 6 3498 (6)			

17849 COVE 2	17850 BAY 2	17851 BAY 2	17852 BAY 2	17853 BAY 2	17854 BAY 2	17855 BAY 2	17856 BAY 2	17857 BAY 2	17858 BAY 2	17859 BAY 2	17860 BAY 2	17861 BAY 2	17862 BAY 2	17863 BAY 2	17864 BAY 2	17865 BAY 2	17866 BAY 2	17867 BAY 2	17868 BAY 2	17869 BAY 2	17870 BAY 2	17871 BAY 2	17872 BAY 2	17873 BAY 2	17874 BAY 2	17875 BAY 2	17876 BAY 2	17877 BAY 2	17878 BAY 2	17879 BAY 2	17880 BAY 2	17881 BAY 2	17882 BAY 2	17883 BAY 2	17884 BAY 2	17885 BAY 2	17886 BAY 2	17887 BAY 2	17888 BAY 2	17889 BAY 2	17890 BAY 2	17891 BAY 2	17892 BAY 2	17893 BAY 2	17894 BAY 2	17895 BAY 2	17896 BAY 2	17897 BAY 2	17898 BAY 2	17899 BAY 2	17900 BAY 2	17901 BAY 2	17902 BAY 2	17903 BAY 2	17904 BAY 2	17905 BAY 2	17906 BAY 2	17907 BAY 2	17908 BAY 2	17909 BAY 2	17910 BAY 2	17911 BAY 2	17912 BAY 2	17913 BAY 2	17914 BAY 2	17915 BAY 2	17916 BAY 2	17917 BAY 2	17918 BAY 2	17919 BAY 2	17920 BAY 2	17921 BAY 2	17922 BAY 2	17923 BAY 2	17924 BAY 2	17925 BAY 2	17926 BAY 2	17927 BAY 2	17928 BAY 2	17929 BAY 2	17930 BAY 2	17931 BAY 2	17932 BAY 2	17933 BAY 2	17934 BAY 2	17935 BAY 2	17936 BAY 2	17937 BAY 2	17938 BAY 2	17939 BAY 2	17940 BAY 2	17941 BAY 2	17942 BAY 2	17943 BAY 2	17944 BAY 2	17945 BAY 2	17946 BAY 2	17947 BAY 2	17948 BAY 2	17949 BAY 2	17950 BAY 2	17951 BAY 2	17952 BAY 2	17953 BAY 2	17954 BAY 2	17955 BAY 2	17956 BAY 2	17957 BAY 2	17958 BAY 2	17959 BAY 2	17960 BAY 2	17961 BAY 2	17962 BAY 2	17963 BAY 2	17964 BAY 2	17965 BAY 2	17966 BAY 2	17967 BAY 2	17968 BAY 2	17969 BAY 2	17970 BAY 2	17971 BAY 2	17972 BAY 2	17973 BAY 2	17974 BAY 2	17975 BAY 2	17976 BAY 2	17977 BAY 2	17978 BAY 2	17979 BAY 2	17980 BAY 2	17981 BAY 2	17982 BAY 2	17983 BAY 2	17984 BAY 2	17985 BAY 2	17986 BAY 2	17987 BAY 2	17988 BAY 2	17989 BAY 2	17990 BAY 2	17991 BAY 2	17992 BAY 2	17993 BAY 2	17994 BAY 2	17995 BAY 2	17996 BAY 2	17997 BAY 2	17998 BAY 2	17999 BAY 2	18000 BAY 2	18001 BAY 2	18002 BAY 2	18003 BAY 2	18004 BAY 2	18005 BAY 2	18006 BAY 2	18007 BAY 2	18008 BAY 2	18009 BAY 2	18010 BAY 2	18011 BAY 2	18012 BAY 2	18013 BAY 2	18014 BAY 2	18015 BAY 2	18016 BAY 2	18017 BAY 2	18018 BAY 2	18019 BAY 2	18020 BAY 2	18021 BAY 2	18022 BAY 2	18023 BAY 2	18024 BAY 2	18025 BAY 2	18026 BAY 2	18027 BAY 2	18028 BAY 2	18029 BAY 2	18030 BAY 2	18031 BAY 2	18032 BAY 2	18033 BAY 2	18034 BAY 2	18035 BAY 2	18036 BAY 2	18037 BAY 2	18038 BAY 2	18039 BAY 2	18040 BAY 2	18041 BAY 2	18042 BAY 2	18043 BAY 2	18044 BAY 2	18045 BAY 2	18046 BAY 2	18047 BAY 2	18048 BAY 2	18049 BAY 2	18050 BAY 2	18051 BAY 2	18052 BAY 2	18053 BAY 2	18054 BAY 2	18055 BAY 2	18056 BAY 2	18057 BAY 2	18058 BAY 2	18059 BAY 2	18060 BAY 2	18061 BAY 2	18062 BAY 2	18063 BAY 2	18064 BAY 2	18065 BAY 2	18066 BAY 2	18067 BAY 2	18068 BAY 2	18069 BAY 2	18070 BAY 2	18071 BAY 2	18072 BAY 2	18073 BAY 2	18074 BAY 2	18075 BAY 2	18076 BAY 2	18077 BAY 2	18078 BAY 2	18079 BAY 2	18080 BAY 2	18081 BAY 2	18082 BAY 2	18083 BAY 2	18084 BAY 2	18085 BAY 2	18086 BAY 2	18087 BAY 2	18088 BAY 2	18089 BAY 2	18090 BAY 2	18091 BAY 2	18092 BAY 2	18093 BAY 2	18094 BAY 2	18095 BAY 2	18096 BAY 2	18097 BAY 2	18098 BAY 2	18099 BAY 2	18100 BAY 2	18101 BAY 2	18102 BAY 2	18103 BAY 2	18104 BAY 2	18105 BAY 2	18106 BAY 2	18107 BAY 2	18108 BAY 2	18109 BAY 2	18110 BAY 2	18111 BAY 2	18112 BAY 2	18113 BAY 2	18114 BAY 2	18115 BAY 2	18116 BAY 2	18117 BAY 2	18118 BAY 2	18119 BAY 2	18120 BAY 2	18121 BAY 2	18122 BAY 2	18123 BAY 2	18124 BAY 2	18125 BAY 2	18126 BAY 2	18127 BAY 2	18128 BAY 2	18129 BAY 2	18130 BAY 2	18131 BAY 2	18132 BAY 2	18133 BAY 2	18134 BAY 2	18135 BAY 2	18136 BAY 2	18137 BAY 2	18138 BAY 2	18139 BAY 2	18140 BAY 2	18141 BAY 2	18142 BAY 2	18143 BAY 2	18144 BAY 2	18145 BAY 2	18146 BAY 2	18147 BAY 2	18148 BAY 2	18149 BAY 2	18150 BAY 2	18151 BAY 2	18152 BAY 2	18153 BAY 2	18154 BAY 2	18155 BAY 2	18156 BAY 2	18157 BAY 2	18158 BAY 2	18159 BAY 2	18160 BAY 2	18161 BAY 2	18162 BAY 2	18163 BAY 2	18164 BAY 2	18165 BAY 2	18166 BAY 2	18167 BAY 2	18168 BAY 2	18169 BAY 2	18170 BAY 2	18171 BAY 2	18172 BAY 2	18173 BAY 2	18174 BAY 2	18175 BAY 2	18176 BAY 2	18177 BAY 2	18178 BAY 2	18179 BAY 2	18180 BAY 2	18181 BAY 2	18182 BAY 2	18183 BAY 2	18184 BAY 2	18185 BAY 2	18186 BAY 2	18187 BAY 2	18188 BAY 2	18189 BAY 2	18190 BAY 2	18191 BAY 2	18192 BAY 2	18193 BAY 2	18194 BAY 2	18195 BAY 2	18196 BAY 2	18197 BAY 2	18198 BAY 2	18199 BAY 2	18200 BAY 2
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Steward Pt.

THO 1 3399 (6)	THO 2 3401 (6)	
THO 5 3398 (6)	THO 7 3400 (6)	
THO 17 3406 (6)	THO 19 3408 (6)	THO 21 3410 (6)



HISWAY RESOURCES CORP.  
QUATSE LAKE PROPERTY  
CLAIM MAP

N.T.S. 92L-12E NANAIMO M.D., B.C.

0 1 2 3 KM.

P.A. CHRISTOPHER & ASSOCIATES INC.

SCALE 1:50,000 NOV. 1989 FIGURE 3

Figure 3 shows claim locations as shown on British Columbia Government claim map 92 L/12E. Pertinent claim data is presented in Table 1.

TABLE 1. Pertinent Claim Data (Quatse Lake Property).

<u>RECORDED CLAIMS</u>						
<u>NAME</u>	<u>UNITS/SHAPE</u>	<u>REC.#</u>	<u>TAG #</u>	<u>RECORDED</u>	<u>EXPIRY*</u>	<u>OWNER</u>
PICK 7	18/6Wx3S	774	67387	FEB 13/81	1990	HISWAY RES. CORP.
PICK 9	10/5Wx2N	776	67389	"	"	"
PICK 10	20/4Wx5N	1004	52763	SEP 11/81	"	"
PICK 11	8/4Wx2N	1031	52764	OCT 26/81	"	"
TOM	20/4Ex5N	251	45519	JUN 22/78	"	"
PAM	12/4Wx3N	168	41182	JUL 22/77	"	"
CRIS	1-2 POST	1023	510812M	OCT 26/81	"	"
CRIS 1	" "	1024	510813M	"	"	"
CRIS 2	" "	1025	510814M	"	"	"
CRIS 3	" "	1026	510815M	"	"	"
CRIS 4	" "	1027	510816M	"	"	"
CRIS 5	" "	1028	510817M	"	"	"
CRIS 6	" "	1029	510818M	"	"	"
CRIS 7	" "	1030	510819M	"	"	"

\* Before recording 1989 work program.

CROWN GRANTS

<u>NAME</u>	<u>LOT NUMBER</u>	<u>ACRES</u>	<u>GRANTEE</u>	<u>ISSUE DATE</u>
CALEDONIA	LOT 1294	47.48	T.B. HARRIS	APRIL 27/1927
CASCADE	LOT 1293	49.33	L.E. POTTS	" "
BLUEBELL	LOT 1296	51.63	R.A. GRIERSON	" "

HISTORY

The Quatse Lake Property covers the Caledonia mineral deposit (MI92L-61 & 209) and Hill 140 and Scissor copper occurrences. The Caledonia mineral deposits occur on the Caledonia, Bluebell and Cascade crown granded mineral claims which were located in the early 1920's with crown grants issued on April 27, 1927. B.C. Government mineral inventory shows indicated reserves for the Caledonia mineral deposits to be 75,000 tons grading 0.01 oz Au/ton, 20.54 oz Ag/ton, 6.09% copper, 7.45% zinc and 0.60% lead. An August 16, 1972 North Island Mines Ltd. new release in the George Cross News Letter refers to the above reserves as a tonnage estimate based on 20 diamond drill holes completed in 1972 and on previous underground exploration in the 1920's by Cominco (Consolidated Mining and Smelting Company) and Caledonia Mines, Ltd.

Exploration of the Quatse Lake Property started prior to 1923 when T.D. Harris and Robert A. Grierson, of Port Hardy and Mr. and Mrs. Murray C. Potts, of Alert Bay acquired the Bluebell, Caledonia, Cascade and other claims. Early exploration consisted mainly of



prospecting, stripping, open cuts and a 50 foot adit to explore 30 feet of mineralization in Caledonia Creek. Further exploration, consisting of open cuts in the following two years, demonstrated continuity of the mineralization in excess of 300 feet in a N 60°W (magnetic) direction. In 1926, the owners organized the Caledonia Mines Company, Limited and active development was started. By 1929 over 400 feet of underground drifting had been completed when the property was bonded to Cominco.

In 1929, Cominco completed at least 400 feet of drifting eastward and westward from the crosscut and another 50 foot drift westward. A raise was driven to intersect the mineralized band in open cut 3A. The work in 1929 demonstrated that a well mineralized band was shallow dipping at the contact of granodiorite and limestone and the contact was irregular and mineralized with widths of 5 to 25 feet of copper-zinc-lead mineralization "which looked very promising" (BCMM Annual Report 1929).

Following Cominco's work, the property appears to have remained relatively idle until interest in the area was reactivated by discovery of the Island Copper Mine by Utah Mines Ltd. in 1967. The Caledonia and surrounding ground was acquired by North Island Mines Ltd. with 15 diamond drill holes totalling 2,300 feet, a geochemical survey, bulldozer trenching, road building and camp construction completed in 1968. Following the diamond drilling, a tonnage calculation was made for the Caledonia mineral deposit by D.C. Malcolm, P.Eng. The estimate was 75,000 tons averaging 6.09% copper, 7.45% zinc, 0.6% lead, 20.54 oz Ag/ton and 0.01 oz Au/ton.

In 1971, North Island Mines Ltd. collected 220 soil samples and constructed 2,500 feet of trenches. In 1972 the company completed a program of trenching and percussion drilling and in 1973 reported that diamond drill hole 1-73 was in porphyry type mineralization at 202 feet.

Recorded claims were allowed to lapse after 1973 and in 1977, Mr. Thomas E. Kirk began acquiring the ground for Ronald Welch. In December 1981, the property was consolidated under the ownership of Thomas E. Kirk with the bulk of the property sold to Energex Minerals Ltd.

Energex Minerals worked the property from 1982 till 1985 when the property was sold back to Mr. Kirk by Energex Minerals. Energex Minerals completed considerable work on the property but the data is held in private files.

In June 1989, the Quatse Lake Property was sold to Hisway Resources Corp. and in September 1989, a prospecting program and 501.5 foot diamond drill hole were completed. On October 31, 1989 and November 1, 1989, the writer and Mr. Steve Okley examined the Quatse Lake Property and logged available core.

## WORK PROGRAM

The 1989 field program consisted of clearing of about 8 kilometers of overgrown roads and trails, construction of a drill site and drilling a 501.5 foot (152.9 meter) AW size diamond drill hole. Prospecting was conducted to locate or relocate a number of showings (Figure 5). The drilling started on October 18, 1989 and completed on November 2, 1989 by drill contractor Neill's Mining. The drill was mobilized by helicopter from Port Hardy. The prospecting and drill supervision was conducted by company prospectors Steve Oakley and Ron Welch. The writer examined the property and logged (Appendix B) the initial 465 feet of diamond drill core on October 31 and November 1, 1989. Two core samples were assayed by Utah Mines Ltd. Seven samples were submitted to Chemex Labs Ltd. for gold fire assay and 9 element ICP. Three samples were submitted to Acme Analytical Laboratories Ltd. for 30 element ICP and gold by acid leach/AA on 10 gram sample. Copper, zinc, silver and arsenic required follow-up assay work (Appendix A). Cost statements are presented as Appendix C.

## REGIONAL GEOLOGY (Figure 4)

The Quatse Lake Property is situated in the Insular Tectonic Belt of the Canadian Cordillera. The general geology of the area has been mapped by Muller et al. (1974) and Northcotte (1971). The geology in the area of the Quatse Lake Property is shown on Figure 4 which is mainly from Northcotte's published map.

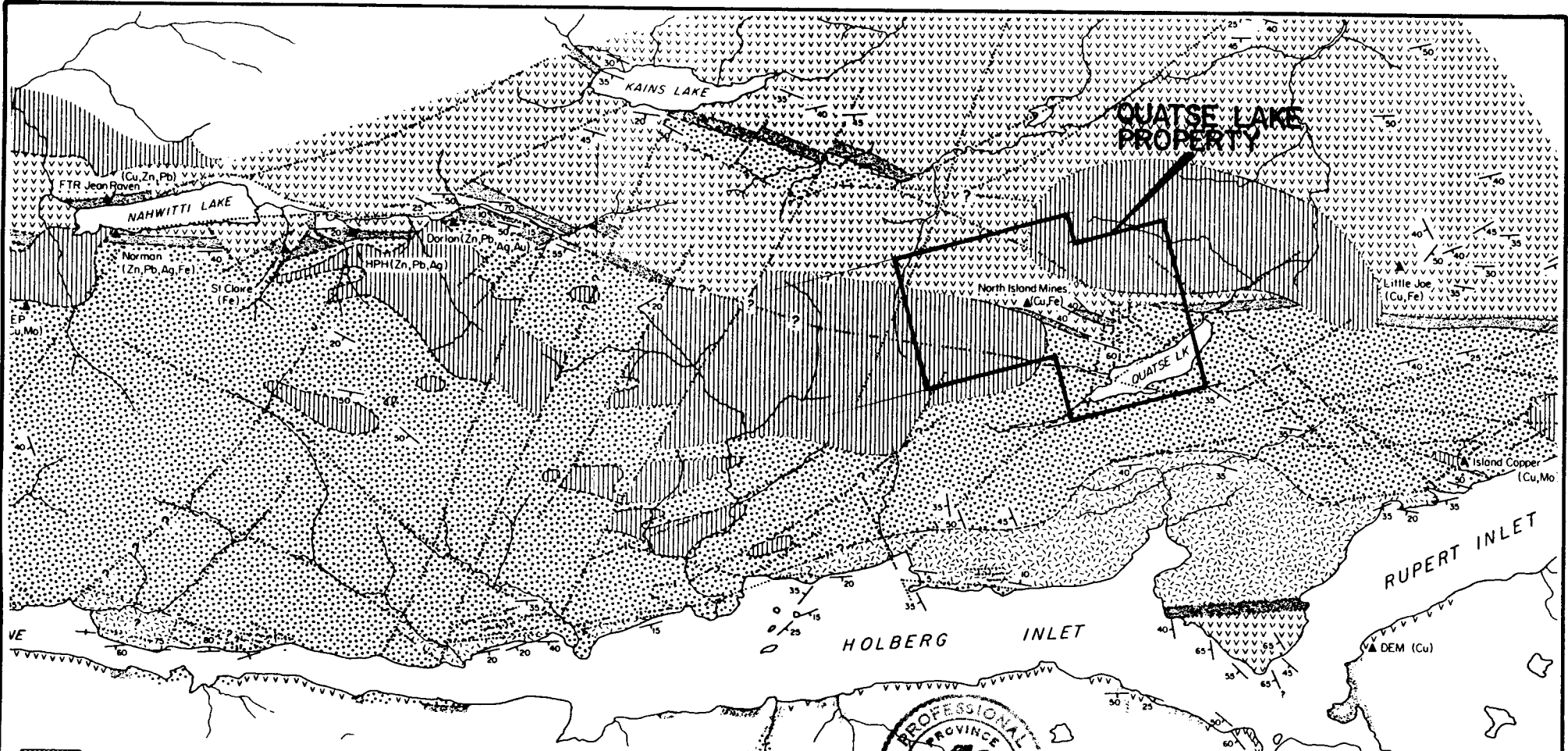
The claim area is underlain by Triassic and Jurassic sedimentary and volcanic rocks of the Vancouver Group which are intruded by quartz diorite, granodiorite, quartz monzonite and quartz feldspar porphyry of the Jurassic Island Intrusions. Northcotte (1970) separated the Vancouver Group into the Karmutsen Formation, Quatsino Formation, and Bonanza Subgroup with Muller et al. (1974) divided the lower Bonanza sedimentary unit into the Jurassic Harbledown Formation and the Upper Jurassic Parson Bay Formation. Figure 4a presents a stratigraphic section of the Vancouver Group after Dr. Donald Carlisle (Muller et al., 1974).




A number of skarn zones have developed where intrusive rocks have come in contact with limy volcanic rocks or limestone of the Quatsino Formation. Porphyry copper deposits occur in Bonanza Volcanics that have been intruded by quartz feldspar porphyry bodies.








A number of northerly, northwesterly and northeasterly trending fault zone have been mapped within the area of the Quatse Lake Property. The regional northwesterly trend of the Vancouver Group rocks is shifted westerly in the area of the Quatse Lake Property.

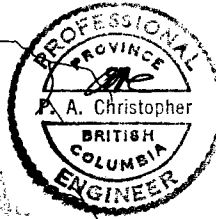
## PROPERTY GEOLOGY

The northwest part of the claim block is underlain by Karmutsen basalts and minor siliceous tuffs. The Cascade, Bluebell and Caledonia crown granted claims cover the contact area between siliceous Island intrusions to the south and Quatsino Limestone or Karmutsen volcanics to the north. In the northern part of the claim block, Karmutsen volcanics are cut by quartz diorite with bornite replacing some siliceous tuffaceous beds in the upper part of the Karmutsen Formation (eg. Hill 160 Figure 5 samples 891031-1&2).



-  **INTRUSIVE ROCKS**  
 VARIED COMPOSITION FROM DIORITE TO GRANITE AND INCLUDES PORPHYRITIC PHASES
-  **LOWER CRETACEOUS SEDIMENTARY ROCKS**  
 CONGLOMERATE, SANDSTONE, SILTSTONE, SHALE, CARBONACEOUS HORIZONS.
-  **BONANZA SUBGROUP**  
 UPPER VOLCANIC UNIT ; LARGELY PYROCLASTIC TUFF, LAPILLI TUFF AND TUFF BRECCIA OF ANDESITE AND BASALT COMPOSITION WITH SOME BASALT AND RHYODACITE FLOWS AT THE TOP OF THE UNIT.  
 LOWER SEDIMENTARY UNIT ; THIN BEDDED ARGILLACEOUS AND CARBONACEOUS LIMESTONE, CALCAREOUS SHALE AND SILTSTONE AND GREYWACKE.

-  **QUATSINO FORMATION**  
 LIMESTONE, MEDIUM TO THICK BEDDED
-  **KARMUTSEN FORMATION**  
 BASALTIC AMYGDALOIDAL AND MASSIVE FLOWS, INTERBEDDED TUFF, SOME PILLOW BRECCIA AND POORLY DEVELOPED PILLOWS. THIN LIMESTONE BEDS NEAR TOP OF FORMATION
- CONTACTS:**  
 KNOWN  APPROXIMATE  ASSUMED
-  LINEAMENTS FROM AIR PHOTOGRAPHS. SOME OF THESE ARE KNOWN TO REPRESENT FAULTS
-  **BEDDING**
-  **MINERAL DEPOSITS**



**HISWAY RESOURCES CORP.**

**QUATSE LAKE PROPERTY**

**REGIONAL GEOLOGY**

N.T.S. 92L-12E      NANAIMO M.D., B.C.

0      2      4      6 KM.

**P.A. CHRISTOPHER & ASSOCIATES INC.**

SCALE AS SHOWN    NOV. 1989    FIGURE 4

AFTER K.E. NORTHCOTE

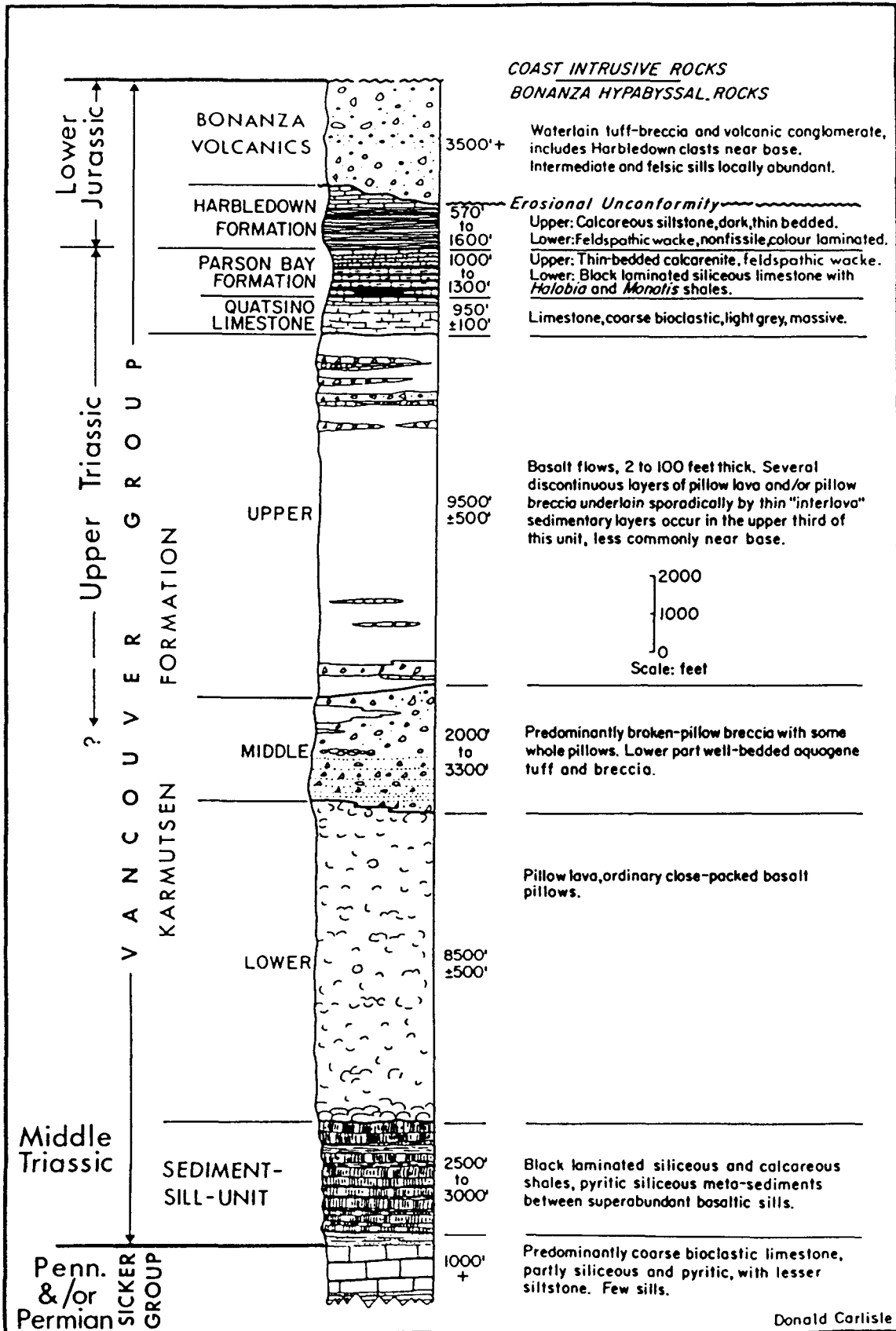


Figure 4a. Stratigraphy of Sicker and Vancouver groups.

## MINERALIZATION

Mineralization at the Caledonia deposit consists of an irregular replacement of sphalerite, chalcopyrite, magnetite, specularite, bornite, galena and pyrite with a gangue of epidote, garnet and minor quartz. Amethystine quartz is reported to be present in silicified limestone areas in the Caledonia drift. Select sample 891111-1, from the Caledonia dump contained 25.42% copper, 4.27% zinc, 77.33 oz Ag/ton, and 1.84% arsenic. The high arsenic content suggests the presence of either a silver sulphosalt or arsenopyrite

Mineralization at the Hill 160 North showing consists of bornite and chalcopyrite replacement of silicified sediments and tuffs. A 2 meter chip sample collected by the writer from Hill 160 contained 2.81% copper and 10.6 ppm silver. A select sample from the Hill 160 showing contained 2.46% copper and 8.0 ppm silver. Select sample 149970 collected by prospector Steve Okley from Hill 140 contained >10000 ppm copper and 2.5 ppm silver.

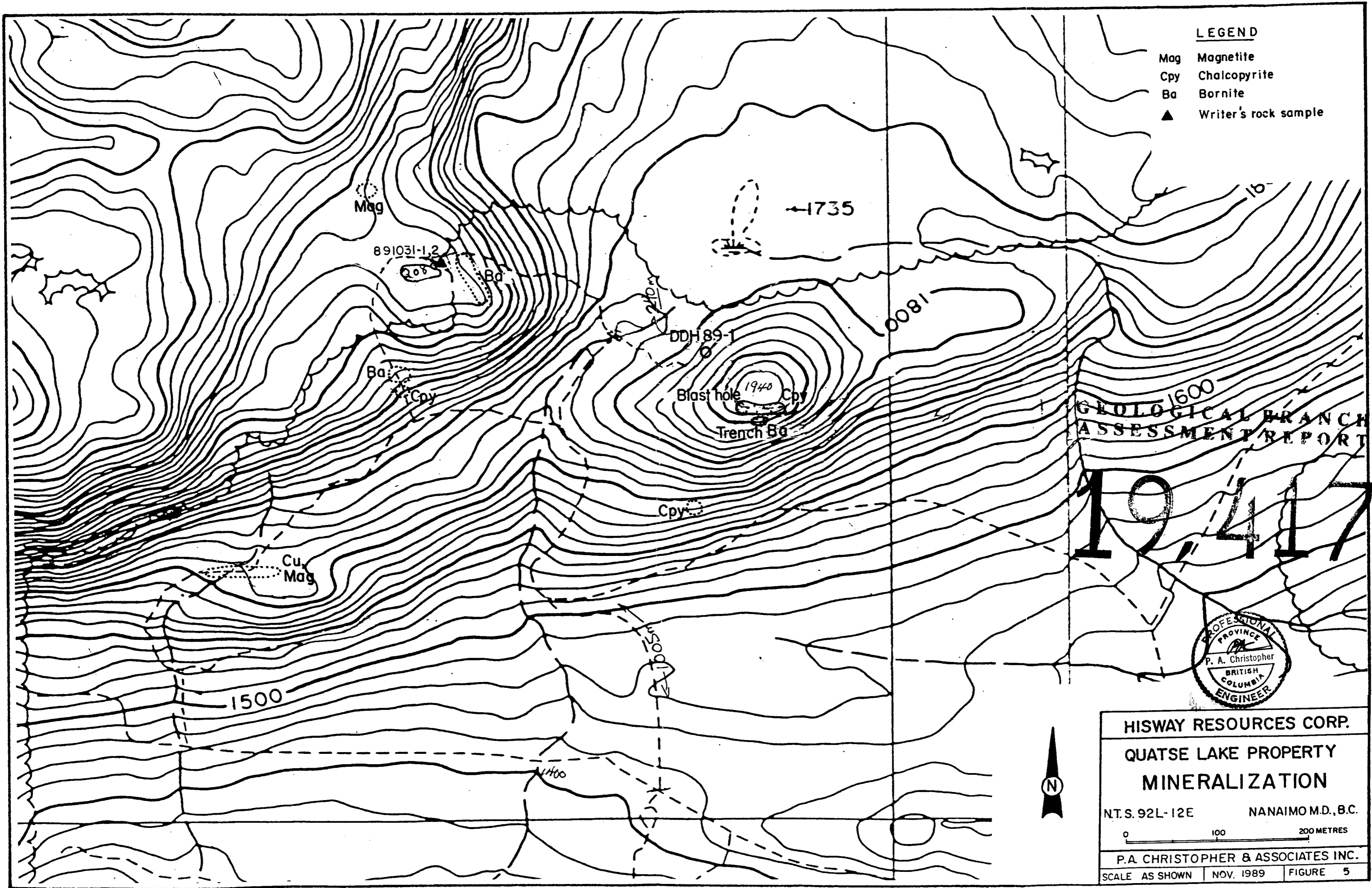
Drill hole Q89-1 was drilled between Hill 140 and Hill 160 (Figures 3 & 5) in an area of Karmutsen basaltic volcanics. The hole was in basalt throughout as indicated in drill logs (Appendix B). The best copper grade was 3600 ppm (0.36%) from 349.5 to 352.5 feet and the best silver value was 6.5 ppm from 387.5 to 399 feet. Bornite was observed in epidote-quartz vesicles between 500' and 501'5". Pyrite, as fracture fillings, fine disseminations, and fine pyrite cubes, occurs throughout the hole but generally represents less than 3% of the rock.

## DISCUSSION

The Quatse Lake Property covers a large area of Vancouver Group rocks which contain a number of porphyry copper and skarn type mineral occurrences. The Caledonia deposit has been explored by drilling and underground workings with reported reserves of 75,000 tons containing 6.09% copper, 7.45% zinc, 0.6% lead, 20.54 oz Ag/ton and 0.01 oz Au/ton. The Caledonia deposits is one of many skarn occurrences along a 20 kilometer belt of Quatsino Limestone.

The Quatse Lake Property is about 6 kilometers west-northwest of Island Copper Mine owned by Utah Mines Ltd. The Island Copper deposit occurs in Bonanza volcanics that are cut by quartz feldspar porphyry intrusions. The southeastern part of the Quatse Lake property is underlain by Bonanza volcanic rock which should be evaluated for Island Copper type porphyry mineralization.

Although considerable surface drilling and underground working have been completed on the Quatse Lake Property, most of the data is no longer available. The Caledonia deposit should be further evaluated by rehabilitation and sampling of the underground workings, and diamond drilling from surface. Contingent on the success of the initial sampling, further underground or surface drilling should be considered. A magnetic survey should be conducted along the trend of the Caledonia deposit to evaluate the potential of extending the zone.



**LEGEND**

- Mag Magnetite
- Cpy Chalcopyrite
- Ba Bornite
- ▲ Writer's rock sample

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

19417



HISWAY RESOURCES CORP.		
QUATSE LAKE PROPERTY		
MINERALIZATION		
N.T.S. 92L-12E	NANAIMO M.D., B.C.	
P.A. CHRISTOPHER & ASSOCIATES INC.		
SCALE AS SHOWN	NOV. 1989	FIGURE 5

Further trenching and drill should be considered for the Hill 140 and Hill 160 occurrences to evaluate the extent of the high grade copper mineralization.

#### CONCLUSIONS AND RECOMMENDATIONS

The Quatse Lake Property of Hisway Resources Corp. contains a large area of Vancouver Group rocks with excellent potential for high grade, precious metal enhanced, copper-lead-zinc skarn deposits and bulk tonnage copper deposits of the Island Copper type.

Previous work requires confirmation by further underground sampling and surface diamond drilling of the Caledonia Deposit. Further geophysical surveys are recommended to evaluate projections of the Caledonia Deposit. Trenching and drilling is recommended for further testing of the Hill 160 and Hill 140 copper occurrences.

Geochemical prospecting is recommended for the southeastern area of the claim block which is underlain by Bonanza volcanics. Prospectors should visit Island Copper to become familiar with the pyrophyllite-dumortierite alteration which typify porphyry deposits in the area.

A success contingent, staged exploration program is outlined by the writer for further evaluation of the mineral potential of the Quatse Lake Property. A recommended Stage 1 program of data compilation, road and underground workings rehabilitation, grid establishment and diamond drilling is estimated to cost \$ 200,000. Further Stage 2 diamond drilling is contingent on the success of Stage 1 and is estimated to cost \$300,000.

CORE STORED IN RACKS ON NAHWITTI CLAIMS

COST ESTIMATES

STAGE 1. GEOCHEMICAL, GEOPHYSICAL, SAMPLING, ACCESS, DIAMOND DRILLING

Project Preparation & Mobilization .....	\$ 5,000
Road Construction & Reclamation .....	25,000
Grid Preparation .....	5,000
Field Supervision & Logging .....	15,000
Field Assistance .....	10,000
Transportation & Accommodation .....	10,000
Geophysical Surveys .....	5,000
Diamond Drilling 600 meters @ \$85/meter .....	51,000
Underground Rehabilitation & Sampling .....	30,000
Chemical Analyses.....	5,000
Consumables .....	4,000
Report Preparation and Engineering .....	10,000
Contingency .....	25,000


Stage 1 Total \$200,000

STAGE 2. DIAMOND DRILLING, ACCESS AND UNDERGROUND (CONTINGENT)

Project Preparation & Mobilization .....	\$ 5,000
Road Construction & Reclamation .....	25,000
Field Supervision & Logging .....	20,000
Field Assistance .....	15,000
Transportation & Accommodation .....	15,000
Diamond Drilling 1,300 meters @ \$80/meter .....	104,000
Underground Extensions .....	50,000
Chemical Analyses.....	10,000
Consumables .....	10,000
Report Preparation and Engineering .....	16,000
Contingency .....	30,000

Stage 2 Total \$300,000

*Peter A. Christopher*  
 Peter A. Christopher, P.Eng.  
 November 26, 1980





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CERTIFICATE

I, Peter A. Christopher, with business address at 3707 West 34th Avenue, Vancouver, British Columbia, do hereby certify that:

- 1) I am a consulting geological engineer registered with the Association of Professional Engineers of British Columbia since 1976.
- 2) I am a Fellow of the Geological Association of Canada and a member of the Society of Economic Geologists.
- 3) I hold a B.Sc. (1966) from the State University of New York at Fredonia, a M.A. (1968) from Dartmouth College and a Ph.D. (1973) from the University of British Columbia.
- 4) I have been practising my profession as a Geologist for over 20 years.
- 5) I have no direct or indirect interest, nor do I expect to receive any interest directly or indirectly in the property or securities of Hisway Resources Corp. or a related company.
- 6) I have based this report on a 1989 field program conducted by Hisway Resources Corp., on a field examination of the property and drill core on October 31 and November 1, 1989, a review of available geological data on the area, and a review of company exploration reports.
- 7) I consent to the use of this report by Hisway Resources Corp. in any Filing Statement, Statement of Material Facts or for assessment work.

  
PETER A. CHRISTOPHER, PH.D., P.ENG.  
NOVEMBER 26, 1989



**Peter Christopher & Associates Inc.**  
GEOLOGICAL & EXPLORATION SERVICES  
3707 West 34th Ave., Vancouver, B.C. V6N 2K9

Office/Res: 263-6152


November 26, 1989

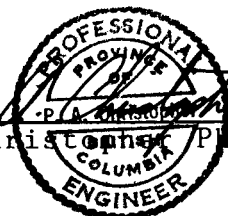
Hisway Resources Corp.  
827 Fort Street  
Victoria, B.C. V8W 1H6

Dear Sirs:

I, Peter A. Christopher, Ph.D., P.Eng., hereby consent to the use of my name and my report dated November 26, 1989 on the Quatse Lake Property, Nanaimo Mining District, British Columbia in any Filing Statement, Statement of Material Facts, or support document by Hisway Resources Corp.

DATED at Vancouver, British Columbia, this 26th day of November, 1989.

  
Peter A. Christopher Ph.D., P.Eng.



The seal is circular with the text "PROFESSIONAL ENGINEER" around the perimeter and "PROVINCE OF BRITISH COLUMBIA" in the center. A signature is written across the seal.

APPENDIX A  
CERTIFICATES OF ANALYSIS

ACME ANALYTICAL LABORATORIES LTD.

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: ROCK AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: NOV 7 1989 DATE REPORT MAILED: Nov 7/89, SIGNED BY: [Signature] D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Peter A. Christopher PROJECT HISWAY #2 File # 89-4665

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	%	%	%	%	PPM	PPB
H 89111 #1	16	99999/1426	32889/299.7/	9	98	4770	5.47	15685 ✓	5	ND	5	29	296	2	534	7	.50	.001	2	1	1.36	1	.01	2	1.23	.01	.01	1	390		
HILL 160 2M CHIP B.S.	2	28632/	7	259	10.6	57	28	759	5.03	48	5	ND	1	17	2	2	181	.69	.033	2	71	2.61	1	.38	2	2.72	.02	.01	1	50	
160 HILL B.S. SELECT	3	23661/	6	97	8.0	15	3	131	1.12	23	5	ND	1	35	1	2	141	.69	.007	2	18	.16	2	.18	3	.40	.01	.01	1	24	

✓ ASSAY RECOMMENDED (In Progress)

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: NOV 15 1989

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158

FAX(604)253-1716

DATE REPORT MAILED:

Nov. 20/89

### ASSAY CERTIFICATE

- SAMPLE TYPE: ROCK PULP

SIGNED BY..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Peter A. Christopher PROJECT HISWAY #2 FILE # 89-4665R

SAMPLE#	Cu %	Zn %	Ag OZ/T	As %
H 89111 #1	25.42	4.27	77.33	1.84
HILL 160 2M CHIP B.S.	2.81	-	-	-
160 HILL B.S. SELECT	2.46	-	-	-



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers  
 112 BROOKS BANK AVENUE, NORTH VANCOUVER,  
 BRITISH COLUMBIA, CANADA V7J-1C1  
 PHONE (604) 984-8221

To: HISWAY RESOURCES CORPORATION

827 FORT ST.  
 VICTORIA, BC  
 V8W 1H6

Project: HPH/QUATSE  
 Comments:

\*\*Page No. : 1  
 Tot. Pages: 1  
 Date : 24-NOV-89  
 Invoice # : 1-8930322  
 P.O. # :

## CERTIFICATE OF ANALYSIS A8930322

SAMPLE DESCRIPTION	PREP CODE	Au oz/T	WO3 NAA %	Ag ppm	Co ppm	Cu ppm	Fe %	Mn ppm	Mb ppm	Ni ppm	Pb ppm	Zn ppm			
149964 H	208	298	< 0.002	=====	< 0.5	34	5950	7.98	1770	< 1	6	15	930	DORLON	89-1 (184-188)
149966 H	208	298	< 0.002	=====	< 0.5	15	268	6.54	410	< 1	33	< 5	40	QUATSE	89-1 346/6-349/6
149967 H	208	298	< 0.002	=====	< 0.5	25	272	5.48	360	< 1	38	< 5	34	QUATSE	89-1 339/0-340/6
149968 H	208	298	0.002	=====	2.0	17	3600	3.68	285	< 1	29	< 5	26	QUATSE	89-1 349/6-352/6
149970 H	208	298	< 0.002	=====	2.5	16	>10000	3.62	265	< 1	30	< 5	94	QUATSE	Blast Hole Hill 140
149971 H	208	---	---	delay	---	---	---	---	---	---	---	---	---	(HPH - Scheelite)	---
149972 H	208	298	< 0.002	=====	< 0.5	21	931	5.66	510	< 1	49	20	86	QUATSE	89-1 380/0-387/5
149973 H	208	298	< 0.002	=====	6.5	14	427	5.21	435	< 1	30	795	2240	QUATSE	89-1 387/5-379/0

APPENDIX B

CORE LOGS DDH Q89-1



# DRILL HOLE EVALUATION SUMMARY

Company *Asiway Resources Corp.*

Property *Caledonia (Quartzite Jk. Property)  
Tom Claim*

Section No. *1/6*

Hole No. *DDH 89-1*

Started <i>Oct. 18/89</i>	Bearing	Lot.	Collar El.	Logged by <i>PAC Oct. 31/89</i>
Completed <i>Nov. 2/89</i>	Angle <i>90°</i>	Dep.	Bottom El.	
Driller <i>Reel's Mining</i>	Length <i>501'5"</i>	Location	Level	

Remarks *AW Core*

INTERVAL		CORE RECOVERED			DESCRIPTION	Sample No.	Interval	ASSAY		
From	To	Wt.	Ft.	%				Cu	Mo	
0	5'		4'9"	95	<i>Coarse Basalt FR @ 45°/c Rusty or Pyritic 20% - carb-py TR/Py</i>					
5'	9'6"		4	87	<i>Amygd. Basalt 12'-47': with epidote</i>					
9'6"	14'6"		4'10"	96	<i>7'8"-8'6": 7-10% py mainly @ 35°/c;</i>					
14'6"	24'3"	<i>@24'3" 8px2</i>	9'5"	97	<i>@14': 10cm. 1% CPY + 1% PY: Veinlets ep + mag + chl. 19' 2cm 2% - EP - FELD - HEM - PY - CPY 18'3": 3cm EB - FELD - Qtz - PY @ 30°/c.</i>					
24'3"	32'6"		0'3"	100						
32'6"	34'		1'2"	78	<i>22'8": 3cm EP-PY-CPY @ 70°/c; 31': 3cm Ep+CPY</i>	<i>#149965</i>	<i>32'6"-34'</i>			
34'	37'10"		3'6"	85	<i>Less mag. @ 41'</i>					
37'10"	46'8"		8'6"	96	<i>32'6"-34': TR CPY, FR PY + ASPY(?) 45°/c</i>					
46'8"	47'	<i>@47' 8px3</i>	3"	75	<i>24'-59' FR PY @ 30-50°/c From 3 to 10/ft.</i>					
47'	50'		2'8"	95	<i>47'4"-47'7": 2-3% CPY; 1-2% PY 30°/c; 58:1mm py</i>		<i>47'-58'6"</i>	<i>0.04</i>	<i>0.001</i>	
50'	58'6"		8'0"	94	<i>59'-60': 7 py + calc veinlets @ 70-80°/c</i>					
58'6"	66'6"		8'0"	100	<i>68-69': Coarse Amygd</i>					
66'6"	75'6"		8'2"	90	<i>70-70'6": Qtz - EP @ 25°/c 1cm.</i>					
75'6"	80'0"		4'6"	100	<i>80': mag - ep - chl - cpy bleb 3cm.</i>					
80'0"	85'2"		4'8"	94	<i>80-81': .5% CPY. 84-86': strongly magnetic</i>					
85'2"	93'6"		8'3"	99	<i>92-93': py @ 45°/c several fractures.</i>					
93'6"	95'0"		11"	60	<i>93'6"-95": Strongly mag. EP + CPY.</i>					
95'	104'9"		9'9"	100	<i>112'6"-117': TR CPY 115'-117': 30-45°/c EP-PY-CPY</i>					
104'9"	108'0"		2'10"	85	<i>106-107': CPY + MAG + EP IN AMYGD.; 105-110' large Amygd.</i>					
108'	117'		8'4"	97						





# DRILL HOLE EVALUATION SUMMARY

Company *Hussey Resources Corp.*

Property *Tom Claine (Quartz Lake Property)*

Section No. *4/L* Hole No. *QAT-1*

Started <i>Oct. 18/89</i>	Bearing	Lat.	Collar El.	Logged by <i>PKC Oct 31/89</i>
Completed <i>Nov 2/89</i>	Angle <i>90°</i>	Dep.	Bottom El.	Remarks
Driller <i>Reid's Mining</i>	Length <i>501'5"</i>	Location	Level	<i>AW Core 1 3/8"</i>

INTERVAL		CORE RECOVERED			DESCRIPTION	Sample No.	Interval	ASSAY		
From	To	Wt.	Ft.	%				Cu ppm	Mg ppm	
					<i>Fin. Basaltic or Andesitic</i>					
					<i>TO 278'2" Broken with 1mm carb. vein 280' 2mm mag + Py.</i>					
	<i>278'2"</i>	<i>@2762 Box 13</i>			<i>289' 2cm epidote alt. 281'6" ep + mag + carb</i>					
<i>278'2"</i>	<i>283'</i>		<i>4'10"</i>	<i>100</i>	<i>301-303, epidote alt + carb veinlets</i>					
<i>283'</i>	<i>287'1"</i>		<i>4'</i>	<i>98</i>	<i>292': slab 2cm epidote + cry with olivine</i>					
<i>287'1"</i>	<i>294'9"</i>		<i>7'8"</i>	<i>100</i>	<i>287'5" minor cry</i>					
<i>294'9"</i>	<i>303'1"</i>	<i>@2971 Box 14</i>	<i>8'9"</i>	<i>99</i>	<i>289'5" Py + carb @ 45% 2mm; 289'6"; 4cm Py-Qtz-EP @ 45%</i>					
<i>303'1"</i>	<i>307'5"</i>		<i>3'10"</i>	<i>85%</i>	<i>310': 3-4 cm calc + mag + chl @ 25%</i>					
<i>307'5"</i>	<i>314'11"</i>		<i>7'6"</i>	<i>100%</i>	<i>312':</i>					
<i>314'11"</i>	<i>320'4"</i>	<i>@3171 Box 15</i>	<i>5'4"</i>	<i>91%</i>	<i>314'11" - 318" Strong Epidote Altered; Broken - altered</i>					
<i>320'4"</i>	<i>323'11"</i>		<i>3'</i>	<i>94%</i>						
<i>323'11"</i>	<i>325'9"</i>		<i>1'</i>	<i>50%</i>						
<i>325'9"</i>	<i>332'5"</i>		<i>5'4"</i>	<i>87%</i>	<i>331'5" - 332'5"; epidote alt. with &lt;1% py.</i>					
<i>332'5"</i>	<i>339'4"</i>	<i>@3376 Box 16</i>	<i>6'11"</i>	<i>100%</i>	<i>338 - 339'4": sheared with carb coated fl</i>		<i>339-346/c</i>	<i>272</i>	<i>&lt;1</i>	
<i>339'4"</i>	<i>346'10"</i>		<i>1'3"</i>	<i>80%</i>						
<i>346'10"</i>	<i>350'</i>		<i>9'2"</i>	<i>100%</i>	<i>341'6": 1cm mag @ 25/c 345'6": Epidote ilmenite + mag</i>		<i>346/c 349/c</i>	<i>268 ppm</i>	<i>&lt;1</i>	
<i>350'</i>	<i>356'3"</i>		<i>6'0"</i>	<i>95%</i>	<i>350 - 352' strong epidote 1-2% cry</i>					
		<i>@3593 Box 17</i>			<i>353 - 354' Fault Breccia 356 - 357'</i>					

# DRILL HOLE EVALUATION SUMMARY

Company HISWAY RESOURCES CORP

Property TOM CLAIMS (QUATSE PROPERTY)

Section No. 5/6

Hole No. Q89-1

Started <u>Oct 18/89</u>	Bearing	Lat.	Collar El.	Logged by <u>PAE Oct. 31/89</u> <u>AW Core</u>
Completed <u>Nov 2/89</u>	Angle <u>90°</u>	Dep.	Bottom El.	
Driller <u>Neill's Mining</u>	Length <u>501'5"</u>	Location	Level	

INTERVAL		CORE RECOVERED			DESCRIPTION	Sample No.	Interval	ASSAY		
From	To	Wt.	Ft.	%				Cu ppm	Mg ppm	Ag ppm
					<i>frag ground &amp; fresh micaceous basalt.</i>					
356'3"	359'11"	@357'3" Box 7	3'6"	96	358-360: Fractured basalt					
359'11"	367'6"		7'6"	98+	362: 2mm pyg + epy @ 30/c					
367'6"	373'		5'6"	100	372-376': Broken & partly, pyrite, and hematite					
373'	379'6"		6'	92	381-386': Pyrite fracture filling; 383': 6" hematite + gangue					
379'6"	385'2"	@379'6" Box 12	4'	76	385'2": recovered 1" mud.	380-387/6	931	<1	<0.5	
385'2"	387'5"		2'	89						
387'5"	394'5"		6'	86	388':	387/6-399	427	<1	6.5	
394'5"	400'6"		5'1"	92%						
					396': 5cm @ 30/c chlorite shal.					
<del>399</del>	400'6"	@399' Box 19	<del>4'6"</del>							
400'6"	406'8"		5'6"	87%	404-410': several mag stringers & ribs to 4cm					
406'8"	413'0"		6'	95	409-410': cracked br py + calc hemat 15%					
413'	421'6"		4'3"	50	413'-421'6": Strongly broken <sup>also</sup> 422-429'6"					
421'6"	427'5"	422'2" Box 20	4'10"	96	422'6": Hbls mag. 425';					
427'5"	434'		6'2"	93	431' TRACE epy. 432': black micaceous filling					
434'	440'		5'8"	95	< 5cm. 436 ST. FR @ 30/c					
440'	446'3"	@442'2" Box 21	2'2" 3'6"	90	436': TR epy on FR @ 40/c; 435': FR Pt. epy					

# DRILL HOLE EVALUATION SUMMARY

Company HISWAY RESOURCES CORP

Property QUATSE PROPERTY

Section No. 6/6

Hole No. Q89-1

Started <u>OCT. 18TH/89</u>	Bearing	Lat.	Collar El.	Logged by <u>S. OAKLEY</u>
Completed <u>NOV 2ND/89</u>	Angle <u>90°</u>	Dep.	Bottom El.	
Driller <u>NEILL'S MINING</u>	Length <u>501' 5"</u>	Location	Level	

INTERVAL		CORE RECOVERED			DESCRIPTION	Sample No.	Interval	ASSAY			
From	To	Wt.	Fr.	%							
<u>Box 22</u>											
<u>464/8</u>	<u>465/5</u>	<u>9"</u>	<u>100%</u>		<u>464/8 to 472/0 - Basaltic (pyroxene)</u>						
<u>465/5</u>	<u>473/2</u>	<u>7'3"</u>	<u>83%</u>		<u>w/ calcite fractures @ 30° to core</u>						
<u>473/2</u>	<u>478/0</u>	<u>4'10"</u>	<u>100%</u>		<u>472/0 to 493/0 - Basaltic (pyroxene)</u>						
<u>478/0</u>	<u>485/6</u>	<u>7'</u>	<u>93%</u>		<u>w/ vesicules of epidote &amp; K-spar?</u> <u>- also calcite blebs and hematite</u> <u>in fractures w/ calcite</u>						
<u>Box 23</u>											
<u>485/6</u>	<u>487/8"</u>	<u>2'2"</u>	<u>100%</u>		<u>493/0 - 501/5 - Basalt (pyroxene) w/</u>						
<u>487/8</u>	<u>497/5</u>	<u>4'6"</u>	<u>97%</u>		<u>calcite stringers @ 30° to core</u>						
<u>497/5</u>	<u>501/5</u>	<u>3'8"</u>	<u>92%</u>		<u>NOTABLE ITEMS:</u>						
					<u>473/6 - 6 cm epidote band 60° to core</u>						
					<u>476/6 - 10 cm " " w/ chalcopyrite in fractures @ 60° to core</u>						
					<u>479/6 to 480/6 - fracture filling w/ chalc &amp; pyrite @ 30° + 60° to core</u>						
					<u>482/0 - fracture filling w/ pyrite @ 45° core in 5cm epidote band</u>						
					<u>496/6 - 497/6 - fracture filling w/ chalc &amp; pyrite, very fine @ 30° to core</u>						
					<u>500/0 - 501/5 - finely filled fractures of chalc &amp; pyrite @ 30° to core</u> <u>- also bornite in amygdule @ 501/3</u>						

APPENDIX C

COST STATEMENTS

## Quatse Project Cost Summary - Sept. 15 to Nov. 5, 1989

A.	Diamond Drilling (Neill's Mining)	
	Equipment - Hydra Core Prospector 89 AW Lightwall	
	Costs - 300 feet @ \$20/foot	6,000.00
	201.5 feet @ \$24/foot	4,836.00
	60 feet Aluminum Drill Rod (Boyles)	919.02
	Fuel	<u>230.86</u>
		11,985.88
B.	Labour	
	R. Welch 27 days @ \$125.00 per day	3,375.00
	S. Oakley 30 days @ \$ 75.00 per day	2,250.00
	T. Knowles 11 days @ \$125.00 per day	<u>1,375.00</u>
		7,000.00
C.	Food & Accomodation	
	Accomodation (Pioneer Inn - Port Hardy)	1,044.68
	Food & Domestic Supplies	<u>592.35</u>
		1,637.03
D.	Supplies & Services	
	Fuel (Gas, Oil & Fluids)	683.02
	Equipment - Husqvarna chainsaw (Rental)	110.00
	Homelite Bladed Brushcutter (Purchase)	398.97
	Helicopter - Vancouver Island Helicopters	
	2.6 hours @ \$650.75 per hour	1,691.95
	Misc. Parts, Tools, Maps & Repairs	472.53
	Telephone Charges	<u>238.00</u>
		3,594.47
<hr/>		
	TOTAL COSTS (Sections A through D)	<b>\$ 24,237.38</b>

\* Assaying costs have yet to be received



Appendix C (Cost Statement cont.)

Invoice 1989-41

November 26, 1989

HISWAY RESOURCES CORP.  
827 FORT STREET  
VICTORIA, B.C. V8W 1H6

For: October 31 and November 1, 1989 Field Examination and Engineering  
on Quatse Lake Project.

Peter A. Christopher	Oct. 31; Nov. 1/89 @ \$400/day	\$ 800.00
Report Writing		1600.00
Binding, Copies, Word Processing		150.00
Drafting		100.00

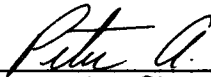
Disbursements @ Cost +10%

Airport Parking	Oct. 31-Nov1/89	\$ 14.00	
Airfare		283.40	
Maps		6.92	
Phone		10.00	
Geochemical Analyses		71.75	
		<u>\$386.07</u> + 10%=	<u>424.68</u>

Invoice Total \$ 3074.68

Other Costs (Previous Pg.) 24237.38

Total Program Costs \$27312.06

  
Peter A. Christopher B. Eng.  
November 26, 1989

