

83-#942-12637  
(Assessment) *off*

DRILLING AND  
GEOLOGICAL REPORT  
UPPER QUINSAM LAKE CLAIMS, Jentin and Hibby  
NANAIMO M.D.  
British Columbia

Co-ordinates: 125° 30'W Long., 49° 52'N Lat. 92F/13E  
Owner: Jentin Resources Ltd.  
Operator: George McCall  
Consultant: E. Percy Sheppard, P.Eng.  
Author: E. Percy Sheppard, P.Eng.  
Date: February 6, 1984

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**12,637**

UPPER QUINSAM LAKE CLAIMS  
Nioby 2, Cedar Hill 1,  
Jentin 1 Group

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
Current Owner	1
Operator	1
History	1
Geology	1, 2
WORK DONE	2, 3
CONCLUSIONS	4
CERTIFICATE	5

MAPS

Location Map  
Geology - Fig. 4

APPENDIX

Diamond Drill Logs:  
Hole No. 1, 2, 3, 4, 5

GEOLOGICAL REPORT  
UPPER QUINSAM LAKE CLAIMS  
Nanaimo M.D.

INTRODUCTION

The following report was compiled at the request of Mr. George McCall, to accompany the Assessment Work Costs submitted earlier on the claims.

A detailed Geological Report on the property was prepared by the writer on January 22, 1982. In May 1983 a revision was made in the group of claims and a new map outline was put together. (See Geology Map Fig.4)

The property is located 37 km southwest of Campbell River, on the eastern shore of Upper Quinsam Lake, Vancouver Island. Access is by the Island Highway north of Campbell River.

Current Owner: Jentin Resources Ltd.

Operator: George McCall

History: The principal early production of the area came from the old Iron Hill (Argonaut) Mine where significant tonnages of magnetite iron ore were mined and shipped. This property lies approximately  $1\frac{1}{2}$  km from the Jentin Resources Ltd. claims. There are no old showings on the property. Recent prospecting has located several vein-type occurrences which require additional work. Some geophysical work has been done on nearby claims but no results are recorded.

The Quinsam Coal reserves lie 2 km north of the claims.

Geology: The geology of the claims was projected from an unpublished map by Ronald C. Surdam, 1962-64.

The northwest claims are underlain by granodiorite, hornblende, diorite of Jura-Cretaceous age which intrudes Jurassic volcanic flows and breccias.

Geology - cont.

Large areas of Upper Triassic limestone belonging to the Quatsino group cover the west boundary of the claims; Jurassic volcanic flows and breccias belonging to the Bonanza group cover the north-central portion; carbonaceous and massive limestone of Upper Jurassic age belonging to the Quatsino Formation underlie the eastern part, and Upper Triassic Karmutsen Group consisting of volcanic flows, pillow lavas and aquagene tuff occupy the southeast corner of the claims. Several areas of intrusive granodiorite, granite porphyry or granite were observed.

WORK DONE: Geological mapping had been performed during the summer of 1982 and sufficient data were gathered to lay out "one shot" diamond drill holes on the most obvious targets. Some were already trenched and showing heavy mineralization; others on shallow trenches showed altered volcanics well mineralized with pyrite and chalcopyrite. The program started on August 26th and ended on September 30, 1983. Total footage drilled: 2181 feet. Logs are attached.

Drill Hole No. 1, located near the south boundary of Nioby 2, was drilled vertically for a depth of 270'. Core consisted of volcanics, badly broken, with a band of granite diorite cutting the volcanics. Sparse pyrite was encountered at 52' - 72'.

Drill Hole No. 2, bearing S 20°E, dipping -60°. Extended from the south part of Nioby 2 into the north part of Jentin 1 Group. Core showed pyrite and chalcopyrite mineralization. A considerable footage of chert was encountered; at 228' massive sulphides were noted across 2" of core. Hole ended in chert at 349'.

Drill Hole No. 3, in east part of Nioby 2, to investigate at depth a showing containing zinc. Bearing N 85°E, dipping -45°. Core consisted of dark grey

WORK DONE - cont.

volcanics, fine-grained to medium, with sparse pyrite. Did not intersect any zinc mineralization. Drilled to depth of 703'.

Drill Hole No. 4, bearing N 85°E, dipping -45°. Laid out to investigate at depth sheared pyrite and chalcopyrite zones opened up at edge of road by trenching and shallow pits. Sampling of best looking core gave results shown on Log sheets. Drilled to depth of 334'.

Drill Hole No. 5, bearing N 30°W, dipping 55°, located in Cedar Hill 1. A rock trench 6 m long, 3 m deep, 2 m wide had been driven earlier on a fault zone striking N 40°E and dipping 70°SE. The fault extends up the hill for a distance of 61 metres and contains pyrite, chalcopyrite, azurite and galena. Samples taken from the rock trench assayed as follows:

	Gold oz/st	Silver oz/st	Copper %	Lead %	Zinc %	Molybdenum %
No. 2	0.002	1.73	3.06	3.03	0.04	0.001
No. 3	0.018	4.47	9.88	0.07	0.07	0.001
100-lb	.006	3.34	5.14	.42	17.24	.002

Drill Hole No. 5 was drilled on the eastern extension of the showing to investigate the fault zone at depth. Core showed granodiorite down to 246'.

At 246' to 256' the drill became jammed. The core barrel was removed and the crushed rock removed by washing. This was repeated a second time and all mud was washed away. The core boxes show no evidence of lost core, but conditions point to a sheared zone which corresponds to the nature of the material in the shear observed on surface. The hole remained in granodiorite to the end at 525'.

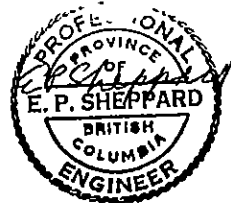
Upon completion of the five drill holes the program was terminated owing to lack of funds. No further work was carried out on the property during the 1983 season.

CONCLUSIONS:

The diamond drill cores recovered gave an excellent description of the types of rock encountered and the amount of mineralization present. However, it is felt that the drill results from Cedar Hill 1 were inconclusive. At least two more slant holes should be put across that structure southwest of Drill Hole No. 5.

*E. P. Sheppard*

E. Percy Sheppard, P.Eng.  
Consulting Geologist



February 6, 1984

C E R T I F I C A T E

I, E. PERCY SHEPPARD, of the City of Vancouver, in the Province of British Columbia, hereby certify THAT:

I am a Consulting Geologist, at #1606-M, 1600 Beach Avenue, Vancouver, B.C., V6G 1Y7;

I am a graduate of Dalhousie University, with a B.Sc. in Geology, and have been active in mining exploration for over forty years;

The accompanying report is compiled from data collected by the writer during visits to the property during 1981-1983, and a study of pertinent Government reports and an unpublished thesis;

I have no direct or indirect interest in the property covered by this report, nor in the securities of Jentin Resources Ltd., and do not expect to receive any such interest as a result of writing this report;

I am a member of the Professional Engineers Association of British Columbia, the American Institute of Mining Engineers, and a Fellow in the Geological Association of Canada.

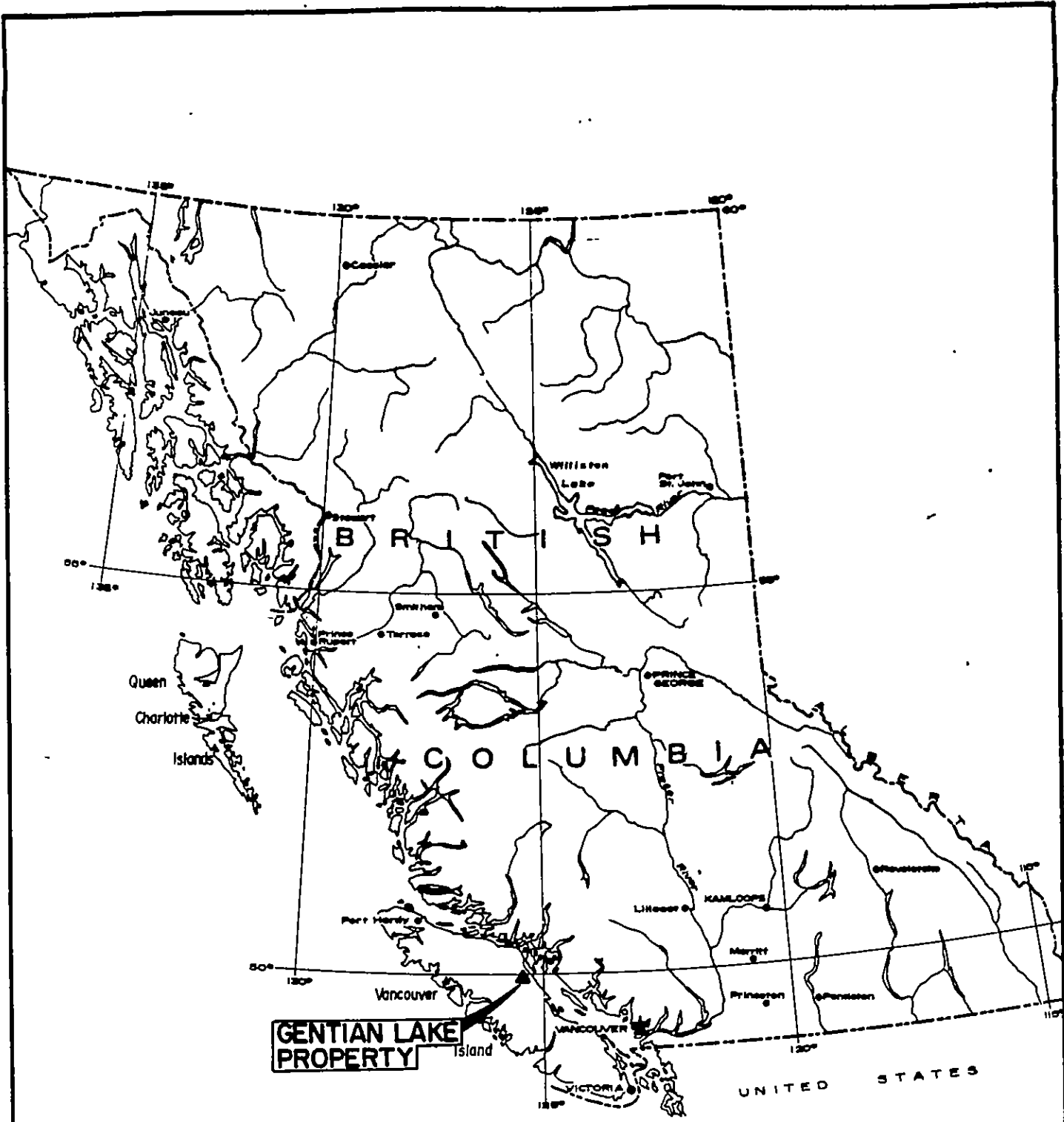
DATED AT VANCOUVER, B.C., this 6th day of February, 1984.

*E. P. Sheppard*

E. Percy Sheppard, P.Eng.



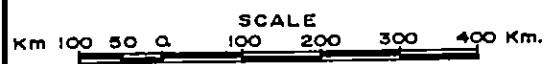
d



**GENTIAN LAKE  
PROPERTY**

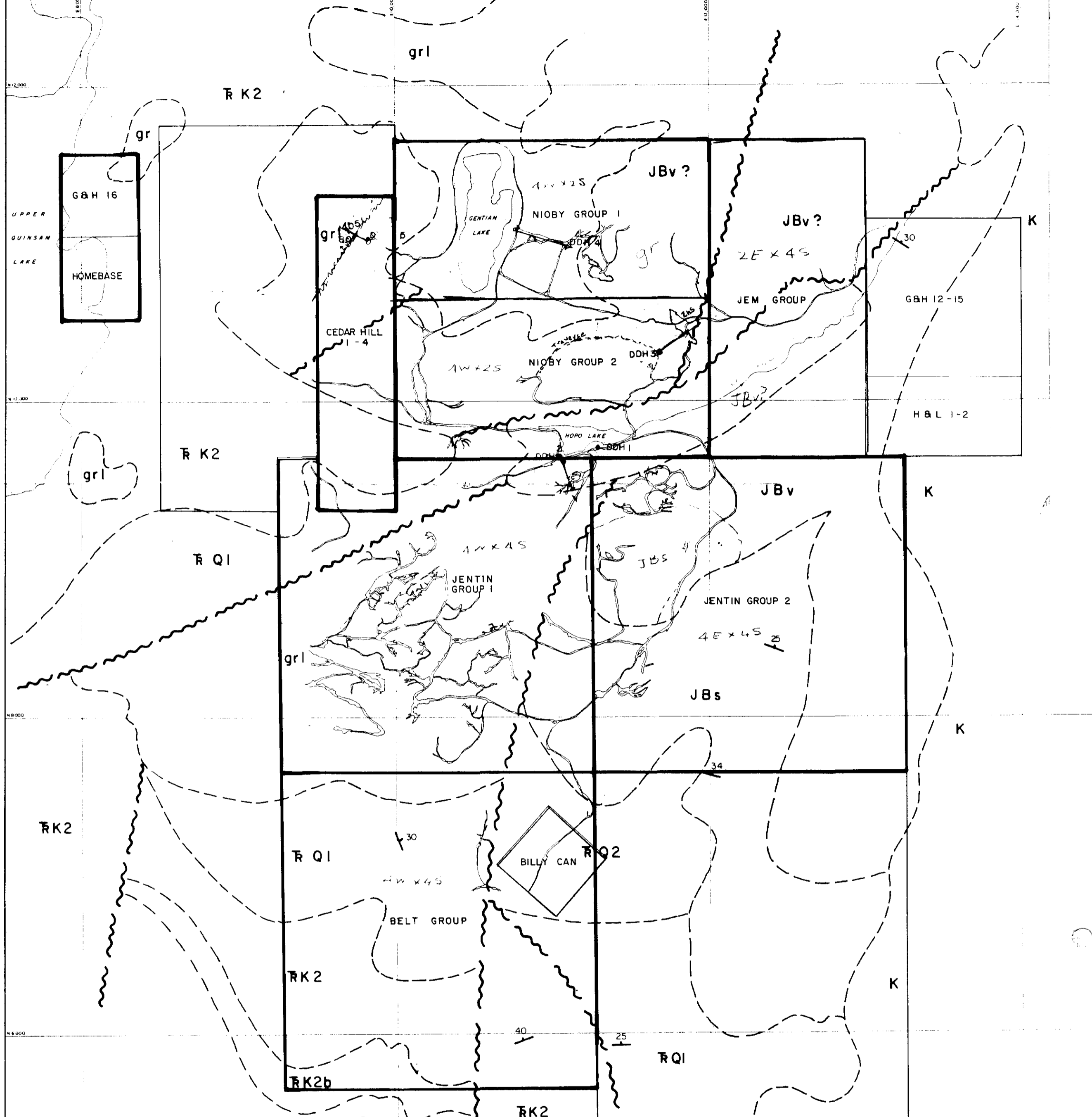
**JENTIN RESOURCES LTD.**  
**GENTIAN LAKE PROPERTY**  
**LOCATION MAP**

UPPER QUINSAM LAKE  
 NANAIMO MD. - NTS 92 F/13E, 14W



Miles 100 50 0 100 200 Miles  
 JAN. 1982 E.P. SHEPPARD FIGURE 1





G&H 16  
 UPPER  
 QUINSAM  
 LAKE  
 HOMEBASE

UPPER  
 QUINSAM  
 LAKE

N 41 300

N 8000

N 6200

- LEGEND**
- NANAIMO GROUP**
  - K** Upper Cretaceous - sandstone & conglomerate
  - QUINSAM GRANODIORITE**
  - gr2** Granophyre
  - gr1** Granodiorite
  - gr** Hornblende granite (Jura. Cretaceous)
  - BONANZA GROUP**
  - JBv** Jurassic volcanic flows & breccias
  - JBs** Lower Jurassic tuff
  - QUATSINO FORMATION**
  - RK2** Upper Triassic carbonaceous limestone - Quatsino Fm
  - RQ1** Upper Triassic massive
  - KARLUTSEN GROUP**
  - RK2b** Upper Triassic Karlutsen Group volcanic flows (RQ2), pillow lava & aquagene tuff (RQ2a & 2b)
- Fault
  - Lithologic contact
  - Bedding & dip
  - Road (logging)
  - Property boundary



12,637

JENTIN RESOURCES LTD.  
**GENTIAN LAKE PROPERTY**  
**GEOLOGY**  
 UPPER QUINSAM LAKE  
 NANAIMO CO., BC - NTS 92 F/13E, 14W  
 SCALE 1:20,000  
 E. P. SHEPPARD  
 JAN. 1982

FIGURE 4



Property JENTIN RESOURCES LTD

# DIAMOND DRILL SAMPLING RECORD

DIP TESTS

Hole No. 1-83

Started Aug - 26 '83

Bearing Vertical - Dip at Collar 0 Hor. Comp. Ver. Comp.

Sheet No. 2

Finished Sept 1 '83

Location Nioby Group 2 Elevation 2500 Lat. 11400 E Dept. 9730 N

Logged by E.P.S

Purpose of Hole To investigate sulfs at depth.

Distance			DESCRIPTION	Sample No.	From	To	L	Analysis	PROGRESSIVE TOTALS					
From	To	Core%							FEET & PER CENT					
137	<del>174</del>	2'	Granodiorite - d. gray m. grain yellow disc at 139-140 occ. Pyrite, occ. bands Vols Fault contact @ 40' to core Vols to 179.5 thin shrd diorite 184. Bx zone @ 35 to core bands of volcanics, @ 19'											
174	205		Vols with 6" and grad. @ 202' Vols to 205. Gr. bands @ 30' to core											
205	228		Gr. f. buff 224 brn f. incl.											
228	251		228. f.g. rhyolitic? only 1' length Vols rem. odd inclusions shrd @ 30' to core											
251	270		Banded Vol'd grey m. rhyolitic? erapitic to end 1' vol. 270											
END OF HOLE														







Property JENTIN RESOURCES LTD

# DIAMOND DRILL SAMPLING RECORD

DIP TESTS

Hole No. 4  
Sheet No. 1

Started Sept 17 - '83

Bearing N 85 E Dip at Collar 45° Hor. Comp. Ver. Comp.

Finished Sept 22

Location Nioby Cr 1 Elevation Lat. 10800 E Dept. 112.00 N

Logged by E.P.S

Purpose of Hole To check mineralized sheared v. ls. Py-Cp.

Distance			DESCRIPTION	Sample No.	From	To	L	Analysis				PROGRESSIVE TOTALS					
From	To	Core%						Agpt	Agpt	Cu%	Pb%	Zn%	FEET & PER CENT				
0-7																	
7-1	15		Casing broken granite to 10'-17' sl. Py scat thru Py. Calc. scat to 17'	2541	3	17											
15	26	35	Basaltic, block sp. mass.							0.01	0.01	0.01					
26			Bx. grey, bxd. occ Py in mass. 36' fine grained zone, py. occ top.	2542	3	40			0.003	0.02							
35	57		4-40' x 1' grey, nice the right.	2543	40	45			0.020	0.52	0.01	0.01	0.01				
57	60		Well min'd Py. Cp? 3m??														
60	64		grey, min var. in ls. & sh. v. w. py.	2545	55	60			0.003	0.14	0.01	0.01	0.01				
64	103		" block intercal. very sparse py.														
103	195		Basalt mass, f.g. inter. grey bxd.														
195	221		as above - few Py. Calc. sh.														
138	140		Basalt intercalated grey bxd.	2546	138	140			0.003	0.02	0.01		0.01				
140	332		Granite - diorite - d. grey. med grain														

**END**

