

Box 7

~~W. J. Burns~~
see

20th Century Energy Corp.
Copper-Molybdenum Prospect
Gambier Island, B. C.
N.T.S. 92G-11/W

Vancouver
April 24, 1979

P. J. Burns

GAMBIER ISLAND Copper-Molybdenum Prospect: 92-G-11
20th Century Energy Corp. P.J. Burns April 24, 1979 B.C.

REFERENCE MEMORANDUM

DATE _____ 19 _____

TO DWH/ Jfc

FROM SVC EXT. No. _____

- | | |
|---|---|
| <input type="checkbox"/> Work Order | <input type="checkbox"/> For Approval |
| <input type="checkbox"/> Tax | <input type="checkbox"/> Your Comments |
| <input type="checkbox"/> Need More Detail | <input type="checkbox"/> Please Retain |
| <input type="checkbox"/> Please Code | <input type="checkbox"/> Please Return |
| <input type="checkbox"/> Please Expedite | <input type="checkbox"/> Please Photocopy |
| <input type="checkbox"/> Please See Me | <input type="checkbox"/> Please File |
| <input type="checkbox"/> For Your Information | <input type="checkbox"/> Please Handle |

Remarks This property was optioned & drilled more extensively by placer. They have since dropped their option
DM

RECEIVED

JUL 26 1979

GEOLOGY DEPT.

20th Century Energy Corporation

Copper-Molybdenum Prospect

Gambier Island, B. C.

N.T.S. 92G-11/W

Latitude: $49^{\circ}31'30''$ Longitude $125^{\circ}22'00''$

Vancouver, B. C.

P. J. Burns

April 24, 1979

TABLE OF CONTENTS

	<u>Page</u>
Summary	1
Geology	
Regional	1
Property	4
History	5
Geochemistry	5
Conclusions	6
References and Bibliography	7

APPENDICES

Analytical Results	
20th Century Energy Corp. Advertisement . . .	8

FIGURES

Preliminary Sketch Map 103-79-1	3
Location Map 103-79-2	2

SUMMARY

The Gambier Island Copper - Molybdenum occurrence belonging to 20th Century Energy Corporation was visited on March 6, 1979 by J. J. McDougall, B. Downing and the author.

Drilling on the property, located 25 miles N.W. of Vancouver, encountered disseminated chalcopyrite, molybdenite and pyrite in a host rock tentatively identified as a diorite to quartz diorite in composition.

The prospect is an interesting exploration bet for a possible low grade copper - molybdenum porphyry deposit.

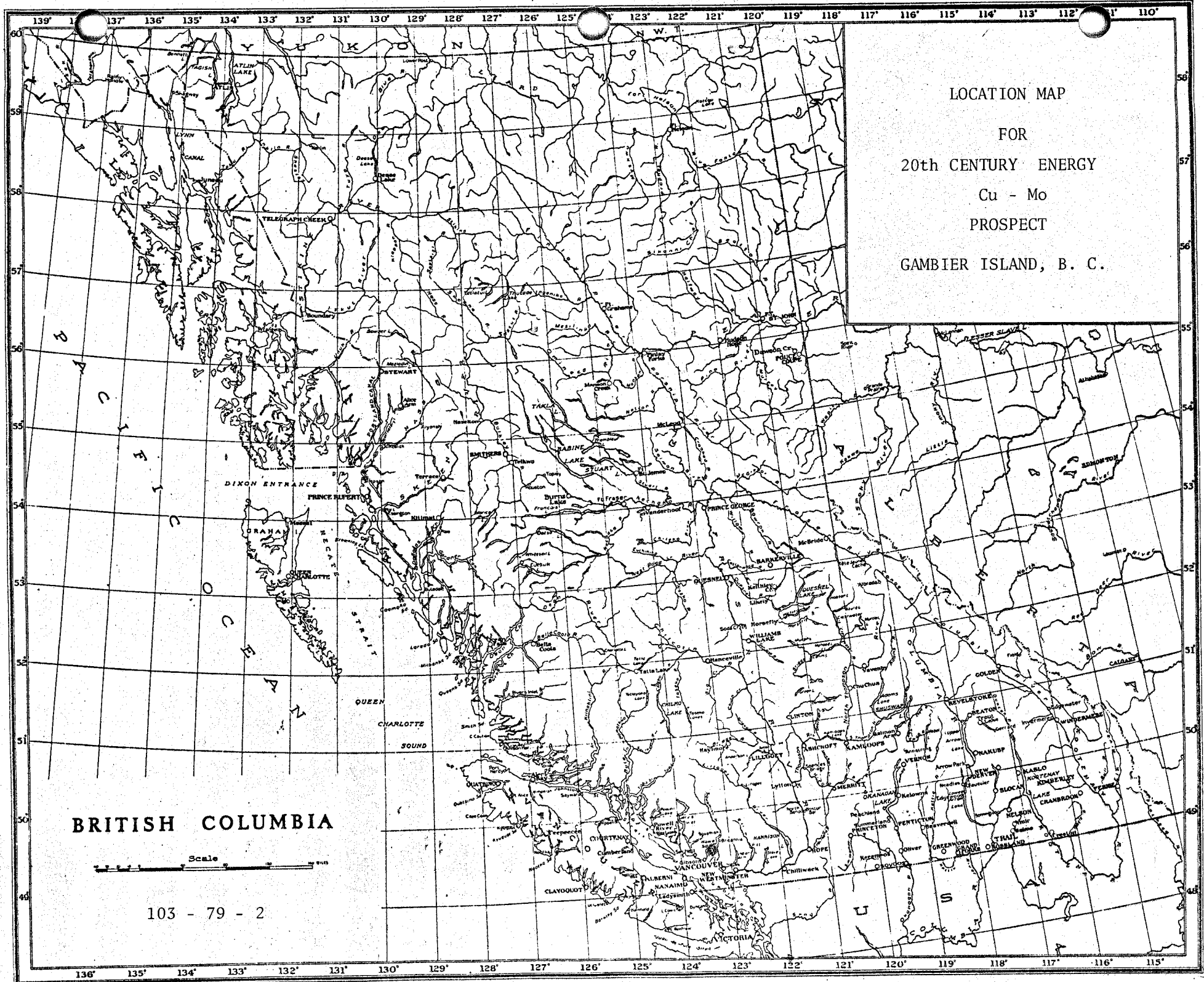
GEOLOGY

Regional

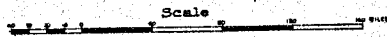
Gambier Island can be subdivided into two distinct areas on the basis of geology. The northern half of the island is comprised predominantly of Upper Jurassic - Lower Cretaceous andesitic pyroclastics, flows, their derivative sediments and minor skarn (Roddock, 1965). Collectively, these units are known as the Gambier Group.

The southern half of the island reportedly consists of intrusives of dioritic composition and these are considered to be Cretaceous or earlier in age.

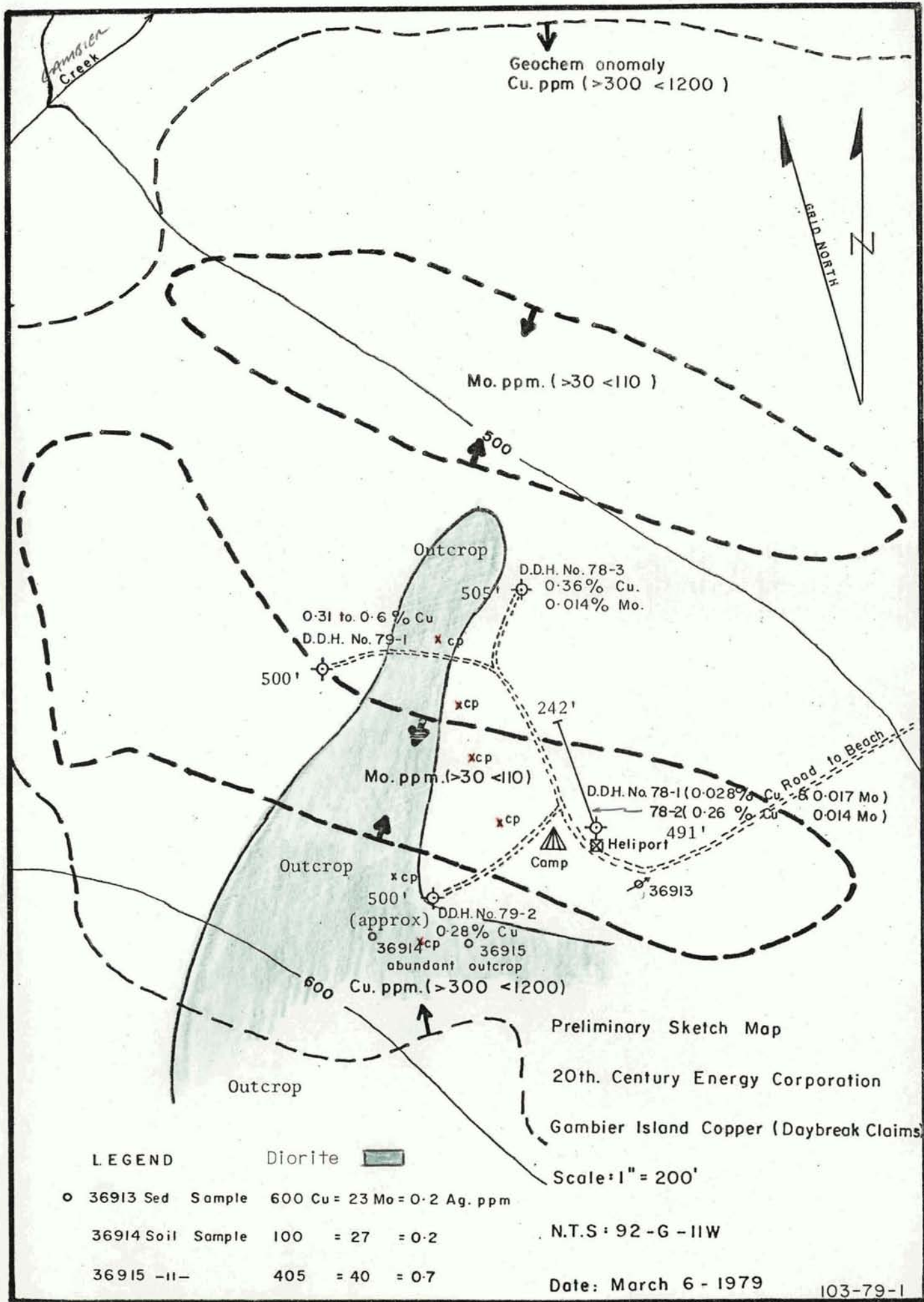
LOCATION MAP
FOR
20th CENTURY ENERGY
Cu - Mo
PROSPECT
GAMBIER ISLAND, B. C.



BRITISH COLUMBIA



103 - 79 - 2



Geochem anomaly
Cu. ppm (>300 <1200)

Mo. ppm. (>30 <110)

GRID NORTH

Outcrop

505'

D.D.H. No. 78-3
0.36% Cu.
0.014% Mo.

0.31 to 0.6% Cu

D.D.H. No. 79-1 x cp

500'

x cp

x cp

Mo. ppm. (>30 <110)

x cp

x cp

D.D.H. No. 78-1 (0.028% Cu. & 0.017 Mo)
78-2 (0.26% Cu. 0.014 Mo)

491'

Camp

36913

Outcrop

D.D.H. No. 79-2

(approx) 0.28% Cu

36914 cp

36915

abundant outcrop

600 Cu. ppm. (>300 <1200)

600'

Outcrop

Preliminary Sketch Map

20th. Century Energy Corporation

Gambier Island Copper (Daybreak Claims)

Scale: 1" = 200'

LEGEND

Diorite

○ 36913 Sed Sample	600 Cu = 23	Mo = 0.2	Ag. ppm
36914 Soil Sample	100 = 27	= 0.2	
36915 -II-	405 = 40	= 0.7	

N.T.S: 92-G-IIW

Date: March 6 - 1979

103-79-1

Property

Relief on the property itself is moderate, with the camp at the 500' elevation on a NE facing slope. An elongate ridge west of camp is probably a structural feature.

Several small creeks cut the immediate area.

Overburden appears to form a relatively thin cover (± 5 m?) judging by the amount of rock exposure and drilling data.

The property occurs in an altered grey-green, coarse-grained rock. Field evidence and one thin section analysis of a representative core sample suggest the unit to be an intrusive of diorite to quartz diorite composition, and not an andesitic flow, as previously mapped (Bostock, 1963; Roddick, 1965).

Typically, the rock consists of 30% to 40% mafics up to 1 cm. in diameter and extensively altered to chlorite, 25% to 50% interstitial fine-grained quartz and 20% to 40% white, subhedral feldspar crystals of andesine composition. Extensive zoning is characteristic of many of the feldspars.

Trace amounts of epidote, potassium feldspar, carbonate and sericite also occur.

The uniformity of this unit both laterally on surface and vertically with depth, in conjunction with the aforementioned data, make it unreasonable to assume the rock to be the coarse-grained centre of a volcanic flow. Similarly, it is unlikely that

the unit in question is a 'dioritized' volcanic flow.

In any case, the important fact to remember is that if indeed the unit is an intrusive, the potential of the property is much greater.

HISTORY

Previous geochemical surveys outlined areas of anomalous copper and molybdenum. These were drilled during the winter of 1978 - 79. Each of the five diamond drill holes, totalling 2200', encountered disseminated mineralization consisting of chalcopyrite, pyrite and molybdenite. Minor gold and silver values are also present sporadically.

Assay results obtained from drill core are listed in George Cross Newsletter releases accompanying McDougall's memo of March 1, 1979.

No assay results on hole No. 5 are available at the time of writing.

Virtually all of Gambier Island has been staked.

GEOCHEMISTRY

During our visit, numerous rock, core, silt and sediment samples were collected and analyzed.

Results, accompanying this report, confirm previous copper values but the moly was only 10% of that reported by 20th Century. These reportedly die out to the North as per map.

CONCLUSIONS

In view of the widespread although low grade presence of copper and molybdenum mineralization and the fact that evidence suggests it is in an intrusive host rock rather than an andesitic flow, the 20th Century Energy property is an interesting exploration bet for a possible low grade copper - molybdenum porphyry deposit.

REFERENCES AND BIBLIOGRAPHY

Bostock, H. H. (1963): Geology - Squamish (Vancouver, West Half)
B. C.; G.S.C. Map 42-1963, 1" = 4 mi.

Claim Maps: M 92G/11W and M 92G/6W

Huber, D. (1979): 20th Century's Preliminary Explorations Indicate
Possible Mammoth Orebody; Prospector, January,
1979, pp. 12 - 13. (Advertisement).

McDougall, J. J. (March 1, 1979): Memo to S. N. Charteris,
W. D. Harrison. Includes George Cross Newsletter
releases; office file. Memo to B. Downing
(March 5, 1979); office file.

Roddick, J. A. (1965): Vancouver North, Coquitlam, and Pitt Lake
Map Areas, British Columbia; G.S.C. Memoir 335
276 pp.

APPENDICES

ANALYTICAL RESULTS

20th Century Energy Corporation Advertisement

To: Falbridge Nickel Mines Ltd.

PAGE No. 1

700 - 1112 West Pender Street
Vancouver, B.C. V6E 2S1

MAR 26 1979

BONDAR-CLEGG & COMPANY LTD.

REPORT No. 9 - 120

DATE: March 22, 1979

Samples submitted: March 19, 1979
Results completed: March 22, 1979

CERTIFICATE OF ASSAY

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	GOLD		SILVER	Cu	MoS ₂						TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
19851	0.010		0.17	0.36	0.003	Gambier Island "highgrade" core from DDH 79-2 149 m. depth, Diorite.					

-10

Registered Assayer, Province of British Columbia

To: Fairbridge Nickel Mines Ltd.

REPORT No. 140

PAGE No. 1

BONDAR-CLEGG & COMPANY LTD.

DATE: April 3, 1979

700 - 1112 West Pender Street
Vancouver, B.C.
V6E 2S1

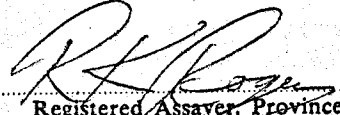
CERTIFICATE OF ASSAY

Samples submitted: March 27, 1979
Results completed: April 3, 1979

I hereby certify that the following are the results of assays made by us upon the herein described ore samples.

MARKED	GOLD		SILVER	Cu	MoS ₂						TOTAL VALUE PER TON (2000 LBS.)
	Ounces per Ton	Value per Ton	Ounces per Ton	Percent	Percent	Percent	Percent	Percent	Percent	Percent	
19852			0.13	0.29	0.003	Diorite 140 m. depth	DDH 79-2.	Minor	cp.		
19853			0.04	0.23	0.007	Diorite 147m. depth	DDH 78-2.	Trace	py.		
19854			0.07	0.11	0.008	Grab sample, 200' upslope of	DDH 79-2.	Altered diorite,	Trace py.		

-11-


Registered Assayer, Province of British Columbia

PAD APPROX 1 MILE

WEST OF MOUTH OF GAMBIER CB

20th Century's Prelim

Indicate Possible M

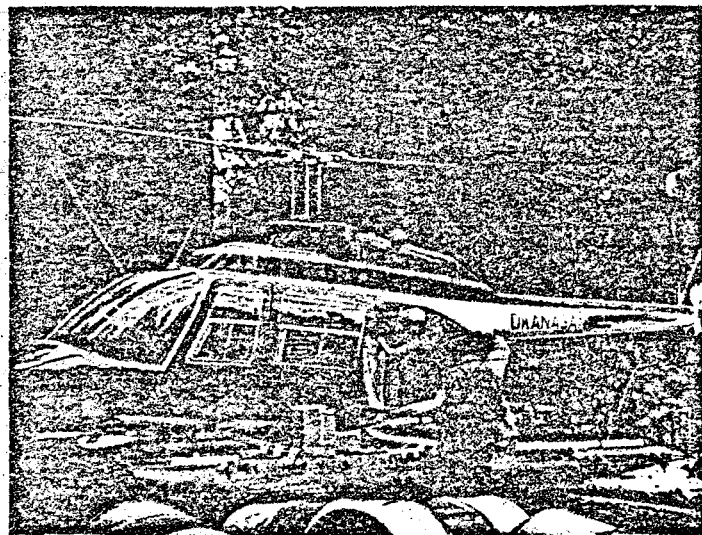
by Doug



Gambier Island seen from approaching helicopter. 20th Century's camp and drill sites show in clearing at lower middle, while most of island lies shrouded in January mists.



Helicopter pilot, (right) visitor and drill crew at 20th Century's campsite beneath which moly, copper, silver and gold lie more than 500 feet thick. !



20th Century's weekly supplies being unloaded from Okanagan Helicopter which provides transport, mail and passenger service to the Gambier explorations.

Officials at 20th Century Energy Corporation, a Vancouver company originally organised to develop oil, and gas interests, were agreeably surprised recently when they learned the company's first field explorations had discovered a mammoth multi-mineralized anomaly.

Results from two vertical diamond drill holes assayed commercially in copper, moly, silver and gold almost from surface to below 500 feet and 20th Century has intensified explorations on Gambier Island, six miles west of Britannia Beach, B.C.

The company's startling find, which has already caught the attention of several major mining companies, was revealed in the second and third drill holes of a preliminary exploration program and assessment work commenced in December 1978.

In his year-end report to the company, independent mining consultant and professional engineer A.F. "Roy" Roberts stated in his conclusions, "The consistent rock type, the holes stopped in mineralization, and only a very small part of the anomaly tested, developing large tonnages, can only be interpreted as being very encouraging toward the development of a large open pit mine."

Engineer Roberts described the anomaly as measuring 550 metres by 550 metres and still open on one side. At the same time he pointed out that the anomaly's "strongest part" (by electro-magnetic test) has yet to be tested. To do so he recommended the drill program now in progress—four more vertical holes of 150 metres minimum depth on a 100 metre grid pattern.

In an immediate response to these highly favourable results, further financing in the amount of \$95,000 has been provided, through private placement, mainly by company insiders.

The entire \$95,000 is reserved for the purpose of additional drilling and exploration.

Since drilling to date has always terminated with the

20TH CENTURY ENER

POLY-SILVER-GOLD ANOMALY

VANCOUVER

Primary Explorations Wolfehampton Orebody

er

drill still in mineralization and in improving grades, new work will include drill testing as far beyond the 500 foot level as Engineer Roberts may recommend.

Although the company's day to day progress continues to hold the interest of the 'majors' company officials have stated no outside participation offers will be entertained until the second phase of exploration work, as recommended by consultant Roberts, has been completed.

Phase two of the program calls for an additional four 170 metre (525 feet) vertical diamond drill holes on a 100 m grid. The Beaupre Diamond Drilling Company of Princeton, B.C. has the new work underway.

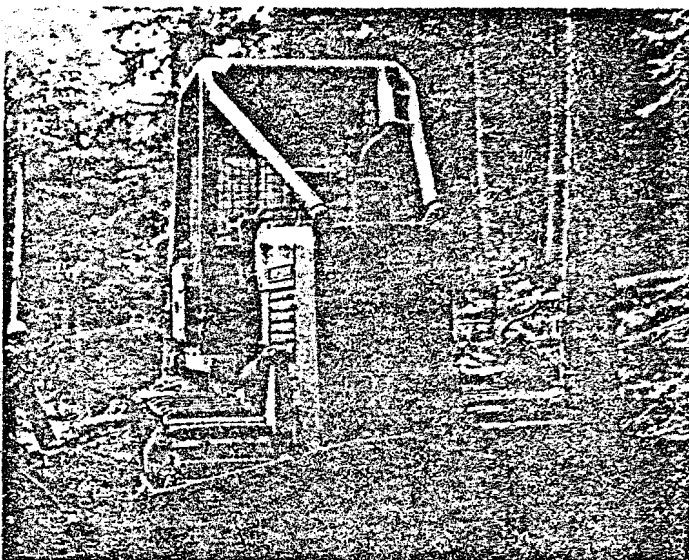
To expedite the field crews' operation the company has retained the services of Okanagan Helicopters on a daily basis. In a late report from "Roy" Roberts the Beaupre drill crew was obtaining better than 99% core recovery.

Acting on further recommendation by Engineer Roberts, who has extensive knowledge and previous experience with the ground, the company has acquired all adjacent property of apparent geologic merit. 20th Century's holdings now extend over 222 registered claims, and cover more than two-thirds of the island. Mr. Roberts has identified the mineralized formation as part of the same structure from which the great Britannia Mine produced for more than 50 years.

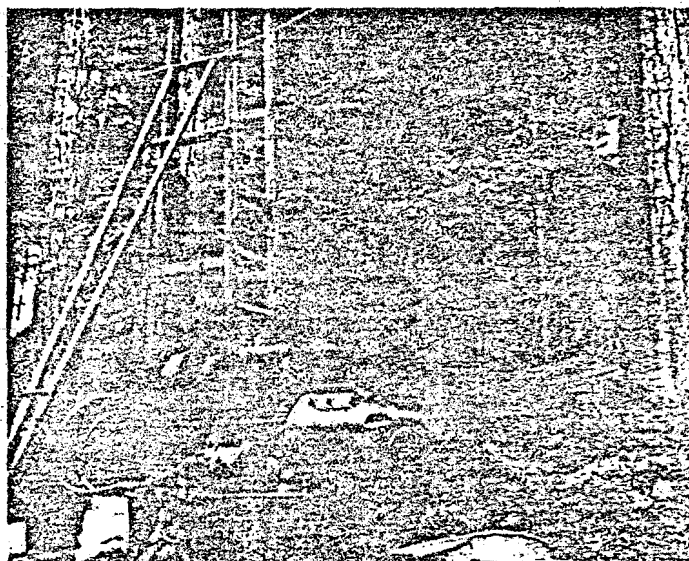
20th Century Energy Corporation commenced trading on the Vancouver Stock Exchange on November 13, 1978, using the trader symbol TCE. The company's offices are at Suite 729, The Marine Building, 355 Burrard Street, Vancouver, B.C. Postal code V6C 2G8, the telephone number is 669-1918. Registered office is with the company's solicitors, Clarke, Wilson and Company, 1700-750 W. Pender Street, Vancouver B.C., postal code V6C 2B8. Auditor is John Oswald, C.A. Transfer agents are Guaranty Trust Co. of Canada. Authorized capital is 5 million shares. Issued capital is 1,200,001 shares. (S)

20th CENTURY ENERGY CORPORATION

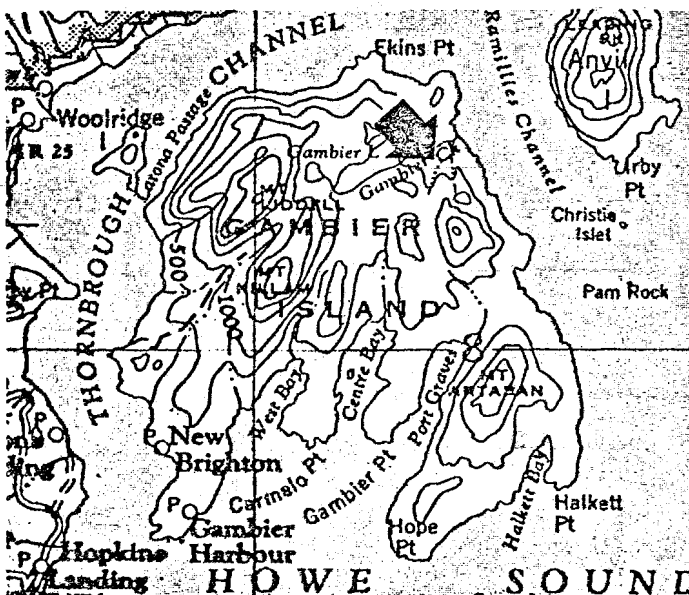
MINING INSPECTOR JANUARY 1979



Bulldozer Cat at work trailmaking to tide water for 20th Century's coming marine requirements.



Beaupre's drill rig moved to a further stepout site as drilling of the 4th hole was started on the giant 20th Century anomaly.



Easily accessible Gambier Island, only a few minutes flight from Okanagan Helicopters' Vancouver airport base.

ONTARIO LAND SURVEYORS
MINING CLAIM SURVEYS

147 West St.
St. Marie, Ontario
Telephone: (705) 253-2471
253-2408

KINGSTON LEE WATSON 14
CO. LTD.
Tel: 472-8100 North Bay - 264-4293 Timmins
Electrical Distributors

T. E. RODY LIMITED
ONTARIO LAND SURVEYORS
ON LAND SURVEYORS
Suite 103, 273 Third Avenue
264-0762 TIMMINS, ONT. P4N 1E2

36-B Third Street P.O. Box 398
272-4558 COCHRANE, ONT. P0L 1C0

GEOCHEMICAL and ENVIRONMENTAL

M.E.M. RESEARCH

Analysis Biochemical Chemical Geochemical Radiochemical
Studies Biological Environmental Geological Nuclear Wastes

475 Bronson Ave. Telephone:
Ottawa, Ontario Office (613) 234-1703
K1R 6J7 Laboratory 234-1727

SUTCLIFFE LIMITED
ONTARIO LAND SURVEYORS
CONSULTING ENGINEERS

/ LISKEARD ONTARIO
647-4311 Box 1208
WINS ONTARIO
267-4697 160 Toke Str.

St. Lawrence Geochemical Laboratory

D. Salmon
OPERATIONS MANAGER

R.R. 1 South Mountain
(Ottawa South) Ont. K0E 1W0
1-613-989-5344

GYRO SERVICES
DERGROUND and SURFACE CONTROL
BOUNDARY and LEGAL SURVEYS

RAINOR SURVEYS (1974) LTD.
Registered New Brunswick Land Surveyors

MAPLE STREET TELEPHONE:
DERICTON, N.B. (506) 472-3391

CARGO SURVEYORS

SUPERINTENDENCE COMPANY (CANADA) LTD.

General Testing
Laboratories Division
Samplers—Weighers—Analysts
Marine Surveyors—Inspectors

SGS
Vancouver—Thunder Bay—Toronto
Montreal—Quebec City—St. John (N.B.)

ACCOUNTING

ARTHUR ANDERSEN & CO.
CHARTERED ACCOUNTANTS

VANCOUVER CALGARY WINNIPEG
-688-8111 403-265-9290 204-942-6541

TORONTO OTTAWA MONTREAL
1-366-613-238-8917 514-861-1641

PROFESSIONAL CARD ADVERTISING

For only \$7.75 per issue you can carry a one-inch Professional Card in the largest mining Professional Directory in Canada. Its day-by-day use throughout the mining industry offers you a continuous reference of your consulting services for 52 issues of the year. (Sold on an annual basis.) Include your card advertisement. Write or call,

The Northern Miner
Advertising Department
7 Labatt Ave.,
Toronto, Ontario M5A 3P2
Tel.: (416) 368-3481

COOPERS & LYBRAND
CHARTERED ACCOUNTANTS

Montreal • Saint John • Sept Iles • Quebec
Montreal • Ottawa • Toronto • North York
Hamilton • Kitchener • London • Windsor
Winnipeg • Regina • Saskatoon • Calgary
Edmonton • Vancouver
and in principal areas of the world

ARDNER, McDONALD & CO.
CHARTERED ACCOUNTANTS
Toronto
Montreal
Calgary
Edmonton
Vancouver
Prince George

INTERNATIONALLY
CLARK, GARDNER, WOLF & CO.

DAVID A. HUNTLEY
Chartered Accountant

641 Davis Dr., Newmarket

Toronto Line Newmarket
384-8902 895-9457

building up its asset base in recent years, and it's management's intention to build the company into a still stronger entity.

"If we were in a static position... if we were not developing new mines... if we were not exploring for oil and gas, we would be paying a dividend," he continued with thinly-veiled exasperation.

Dissidents mumbled something like "democracy seems to stop with the board of directors of this company...".

All of the Lac companies approved a bylaw enabling them to buy their own shares. Mr. Allen said management has no intention of exercising this right in the near future... "maybe if the stocks go down...".

Still, it's no secret that management would like to consolidate and simplify the still-complex inter-relationships of the Lac companies. However, as Mr. Allen explained, it's not as easy as it sounds.

It's pretty difficult to merge a Quebec company with one incorporated in Ontario. There would have to be a tender offer or stock could be bought in the marketplace from time to time. Mr. Allen pointed out that Lake Shore has been buying Willroy shares — as is reported every month in the Ontario Securities Commission's report on insider trading.

20th Century seeking funds for B.C. work ***

VANCOUVER — Twentieth Century Energy is seeking \$323,750 in a best efforts offering for a recommended program on its Daybreak prospect at Gambier Island, 30 km northwest of Vancouver.

The program is searching for copper, molybdenum, silver and gold on the prospect and is estimated to cost \$300,000. Work will consist of grid preparation, geophysical surveying, further prospecting along the Gambier Valley, an environmental impact study, reclamation and diamond drilling.

The company is currently negotiating with several major mining companies for the continued exploration and development of the prospect.

Working capital at Jan. 30, 1978, was \$28,637.

of Cons. Durham. Interest there stems from uranium discoveries made by that company and now coming under full scale investigation by Eldorado Nuclear.

Ronrico is planning its own program for its New Brunswick properties. It is having preliminary discussions with "major" companies as to their possible joint participation in this exploration program. But no agreements have yet been con-

Subscriber

PLEASE ATTACH LABEL HERE to ensure service whenever you write about your subscription

mail to: The Northern Miner,
Circulation Sales Department
7 Labatt Avenue, Toronto

to subscribe or renew subscription your payment and indicate:

New subscription Renewal

Canada and United States

1 year — \$25.00 2 years — \$45.00

All other countries

1 year — \$30.00 2 years — \$55.00

— preferential postal delivery rates on all foreign subscriptions

If you are actively engaged in or have been engaged in resource industries will you please tell us:

Mining Executive or Head Office Personnel

Operating Management

Mining

Processing

Plant

Other mine/mill employee

Other (please specify)

IF CHANGING YOUR ADDRESS, please indicate last issue and print new address

name _____ (Please print)

address _____

city _____ province _____

title/company _____

*** At the time of writing it is understood that Getty Oil has optioned the property for \$200,000 down and this May 3 Northern Miner clip may be out of date??