84-1141-13179

Assessment Report for Argo Claim Groups,
Senora Island, Southwestern B.C.
Mining Division: Nanaimo

0: Summary

Nature of the Report:	Summary of Exploration Workd
Specific Claims:	ARGO I through VI
Recording Date:	September 13, 1982
NTS:	92 K 6
Latitude/Longitude:	50°26' N; 125°17' W
Owner:	Helmut Krutz, Prospector 1829 W. 2nd Ave. Vancouver, B.C. V6J 1J1
Operator:	See Owner
Work Done:	July 10, 1984 to August 15, 1984
Work Type:	Geochemical exploration
Consultant:	Dr. Colin I. Godwin, Associate Professor, U.B.C., Vancouver, B.C. V6T 2B4
Author:	Helmut Krutz
Date of Report:	November 13, 1984
Expenditure:	$12,560
Claimed for Credit:	$2700
Signature:	Helmut Krutz Helmut Krutz

Assessment Report for Argo Claim Groups
Senora Island, Southwestern B.C.
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1: Introduction

1.1: General Description

Geographic Position:	Northwest corner of Sonora Island, approximately 50 km north of Campbell River (Fig. 1).
Access:	Water only.
Map:	See Figure 2.

1.2: Property Definition

The Argo claims in Figure 2 consist of four 4-post claims (Argo I to IV of 25 units), plus two 2-post claims (Argo V and VI). Total number of units is 27.

To the west of the Argo claims group a number of old Crown Grants occur. The claims are located on Crown Land which is under Tree Farm License.

1.3: History of Area

Investigation in the summers of 1980, 1981 and 1982 by the author led to the staking of the Argo Claims between August 13, 1982 and August 26, 1982. A report on this activity was filed September, 1983. The survey for this report was conducted between July 10, 1984 and August 15, 1984.

1.4: Economic Assessment

A zone some 4 km long x 250 m wide was delineated in metamorphosed sedimentary and volcanic rocks in which geochemical anomalies occur. There are indications from old workings that a gold deposit may be connected with these anomalies.

1.5: Geological setting

Senora Island is situated between the Mainland and Vancouver Island in the "Coastal Trough". Geological reconnaissance mapping was done by Roddick and Hutchinson (Geological Survey Canada, Open File No. 480).

The area under investigation is underlain by a "Roof Pendant" of Paleozoic and/or Triassic age trending northwesterly along the Cardero Channel shoreline of Sonora Island. This belt of rocks extends to the north-east corner of east Thurlow Island, to the peninsula formed by Fredrics and Phillips Arms, and to the Mainland around Fanny Bay on Fredrics Arm.

This "stratified belt" is engulfed by the coast plutonic complex, composed dominantly of quartz diorite and granodiorite (late Jurassic to Eocene).

Throughout this "Roof Pendant" and adjacent to it are situated a number of small Gold Mines and Prospects, some of them dating back as far as 1897. Most notable are: (1) the Alexandria-Dorothea-Morton shear zone Phillips Arm, (2) the Douglas Pine and Hope deposits on East Thurlow Island, and (3) the Blue Bells deposits on Fredrics Arm.

All favourable ground in this area is currently staked and is being actively explored by various companies.

Five crown grants occur to the west of and adjacent to the Argo Claims; they represent the remainder of 21 claims of the former Sonora Gold Mines Ltd. described in the B.C. Minister of Mines Annual Report 1929. Gold was found in pyrite in small quartz veins or lenses. Possible values up to $200 to the tone (in 1928) in samples are mentioned. Careful surface prospecting was recommended.

Some production figures from mines of the Cordero Channel Area as taken and compiled from minfile of the B.C. Ministry of Mines follow.

92k-37: Sonora-Nodale

	tons	gold grams	silver grams	copper kg.	gold ppm
1939	2	156	249	-	76
1940	11	746	1182	28	68

total production of the Cordero Channel Gold Camp

tons 11703, gold ozs 5646, oz silver 12451, kg copper 4583,

ppm gold	tons
2-6	415
10-23	11222
62-125	65
249	1

Au/Ag ratio is between 1/1 to 1/2

Copper, where reported, was slightly above 1000 ppm.

1.6: Summary of Work Done

1.6.1: Overview

The work to date has been of a general exploratory and investigative nature. All work has been carried out by Helmut Krutz, prospector, author of this report.

Access to the property is via shoreline or limited logging roads in the area.

Approximately 8 line km were prospected; contour lines, roads or other prominent features were followed as available or appropriate. 300 soil samples were collected and tested geochemically for Cu, Zn and As; a field analytical technique was used. Various rock samples were collected.

1.6.2: Details

A 10 meter long boat provided transportation to the site and accommodation. Protected anchorage was found at Portland Creek, though mooring was somewhat difficult due to the great depth close to shore and swift tidal currents. A 4 meter long dingy was also used. A trail bike facilitated access along some logging roads.

The terrain in the area of the claims is moderate to extremely steep; upper slopes are covered by heavy brush. There are many unmapped cliffs and creeks throughout the area. Although there are some logging roads on the east and west sides, there is no road connecting the east and west sides of the property. The major part of the property has no roads at all.

The area under investigation is underlayen by a foliated and banded metamorphic rock, which is locally tightly folded. The strike of foliation and banding is parallel to the Cardero Channel shoreline. The metamorphic rocks are altered by silicification and sericitization. Pyrrhotite, pyrite, chalcopyrite, and garnet are common.

Soil over the Argo Group is undeveloped. It is full of bolders, some of them large enough to give the impression of outcrops. Soil thickness ranges from 20 cm to 2 m.

In many places large rotting trees form an organic barrier; often several attempts in sampling were made in a radius of several meters in order to obtain good samples. A matock was used to collect samples.

Possible Geochemical interferences include:

1) Granitic debris which covered an area underlaih by phyllite on the slopes above Nodales Channel. The soil found in this aria does not represent the underlying rock units.
2) Clay layers 10 to 30 cm thick that are randomly distributed but exposed in some creeks could prevent surface expression from underlying mineralization.

Early exploration along the Cardero Channel shoreline revealed geochemical soil anomalies. My objective this year was to determine the lateral extent of these anomalies.

The 1984 sampling was along contour lines. Soil samples were collected close to the survace (.3 to .6 m depth) at approximately 25 m intervals. Residual, c-horizon soil was sampled. The finest portion of the soil was analysed.

All samples were leached in 3N NHO_3 for 4 hours at 70°C. An aliquot was transferred to a separate test tube, and the pH was adjusted with NH_3 until a basic pH was obtained. Spot tests on prepared paper were used to determine the amounts of copper and zinc present in the unknown soil samples. These papers were prepared with: rubeanic acid for copper, dithizone for zinc, and a Gutzeit-type test for arsenic. For the latter, mercuric chloride paper is the arsine indicator. Dried spots were compared with prepared standards for assignment of ppm values. Copper, found to be the most reliable was grouped as follows for this project area:

Background 30 to 75 ppm
Possible anomaly more than 75 ppm
Definite anomaly more than 150 ppm

1.7: Conclusion

The 300 m contour, almost completed except for 500 m of cliffs and heavy brush, contains only a few isolated above background values.

The two lines parallel to the Cardero Channel shoreline along the 40 m and 100 m contours, and the two lines crossing Hall Ridge along the 180 m and 250 m contours, show above background values with a number of definite anomalies (see Fig. 2).

Gold may occur in this area in shear zones, silicified zones, or quartz veins and lenses. A skarn-type deposit is also possible.

Possible Ore Guides:

Descriptions of producing deposits inthe Cordero Channel area indicate that gold is associated with pyrite. Arsenopyrite however is reported at the Alexandria Mine.

Silver above 1 ppm may indicate significant mineralisation. 1000 ppm cooper was recovered in most ores but some contained only 440 ppm.

The following program is planned for 1985:

1) Geochemical soil sampling across the strike of the rock formation, but at an angle to the slope with a spacing of 5 m or less, starting in the most promising location, as indicated by geochemical sampling to date (Fig. 2).
2) Detailed mapping, and rock sampling, where warranted, of all "natural trenches" as exposed by creeks, cliffs and roads.

2: Statement of Expenses

Argo Claims Group

July 10, 1984 to August 15, 1984

	Days	Cost per Day	Total Cost
Fieldwork	34	$120	$4080
Travel	4	120	480
Board	40	10	400
Boat Expenses			4500
Technical Supplies			800
Consulting Dr. C. Godwin	3	500	1500
		Subtotal	11760
Report Writing			800
		Total	$12,560
Claimed for assessment credit			$2700

3: Statement of Qualifications of Helmut Krutz

1) I have been prospecting for 5 years and have completed the B.C. and Yukon Chamber of Mines "Prospecting School".

2) I have audited several geological courses in the Department of Geological Sciences, The University of British Columbia.

3) I research geological literature and design analytical tests useful for field analyses for prospectors.

4) I currently work full time in my prospecting profession.

Respectfully submitted

Helmut Krutz

Helmut Krutz, Prospector
1829 W. 2nd Avenue
Vancouver, B.C.
V6J 1J1

Phone: (604) 732-7167

ARGO CLAIM GROUP

NORTHERN SENORA ISLAND

Nanaimo Mining Division

NTS: 092/K/06; 50° 26' north, 125° 17' west

by

Colin I. Godwin, PhD, P.Eng.(B.C.)

29 November 1984

INTRODUCTION

This brief note outlines:

1. investigations undertaken by myself for prospector Helmut Krutz on the Argo Claims of northern Senora Island,
2. comments on the work of Krutz on the above claims, and
3. comments on Krutz's report dated 13 November 1984 on the Argo Claims.

My qualifications are outlined in Appendix 1.

INVESTIGATIONS BY SELF

I observed the general geology and a number of altered and mineralized areas on August 6th and 7th 1984. Five samples were obtained for gold analyses (assay sheet is in Appendix 2). The following describe the mineralogy and analyses of samples taken.

G84SON1M: Quartz pegmatite from quarry beside logging road above Sonora Point. Au 0.01 g/tonne, Ag 0.1 g/tonne.

G84SON2M: Quartz-rich sample from zone of quartz veins that parallel bedding. Veined section is beside a good logging road. The section exposed is 20 m long by 4 m wide. Quartz veins are 2 to 10 cm wide and constitute about 10% of the 4 m true width exposed. Host rock is sericitic phyllite interbedded with very thinly bedded graphitic and chloritic quartzose phyllite. Au 0.01 g/tonne, Ag 0.1 g/tonne.

G84SON3M: Float from road. Quartz-sulfide vein material in muscovitic phyllite. Au 0.01 g/tonne, Ag 0.1 g/tonne.

G84SON4M: Pyrite-rich (50%) pods in graphitic schist in small road quarry on south side of the road. Au 0.01 g/tonne, Ag 2.3 g/tonne.

G84SON5M: Quartz-veined muscovitic phyllite in creek cut at bridge in road. Sample width is 0.5 m. Au 0.01 g/tonne, Ag 0.1 g/tonne.

The assays are not encouraging but only a small percentage of the area was examined.

COMMENTS ON KRUTZ'S WORK ON THE CLAIMS

Krutz has sytematically prospected most of the shoreline and logging roads on the Argo claims. He has paid particular attention to geochemical sampling which he undertakes competently. His analytical method for copper uses spot tests on rubeanic acid impregnated paper. These tests tend to be quantitative because of their application under field conditions. Nevertheless they have been proven to be effective generally and are an excellent prospecting guide. I have not examined the spot tests for other elements used by Krutz but they appear to useful. He does not report results of these tests in his report of 13 November 1984.

COMMENTS ON KRUTZ'S REPORT, DATED 13 NOVEMBER 1984, ON THE ARGO CLAIMS

This report adequately describes the geology of the Argo calims and the activities of Krutz on same. Several areas appear to be anomalous in geochemically analysed soil-copper and require follow-up prospecting. The work should be acceptable for assessment credit in the amount requested.

Respectfully submitted

Colin I. Godwin, PhD, PEng(BC)

APPENDIX 1
DECLARATION OF DR. COLIN I. GODWIN, P.ENG. (B.C.)

I, Colin I. Godwin of 3010 Aries Place, Burnaby, B.C., Canada V3J 7E9, declare:

1. I am a Geological Engineer, residing at the above address.

2. I am a graduate of Geological Engineering from The University of British Columbia, in 1962 with a Bachelor of Applied Science (B.A.Sc.) degree and in 1975 with a doctorate (Ph.D.) degree; I am a registered member of the Association of Professional Engineers of British Columbia.

3. I have practiced my profession since graduation in 1962 and have held permanent positions with the following companies:
   Atlas Explorations Ltd. (now Cima Resources Ltd.)
   Dynasty Explorations Ltd. (now Cyprus Anvil Mining Cp.)

4. I am an Associate Professor in the Department of Geological Sciences, The University of British Columbia, where I teach courses on mineral deposit geology. I am also a director of International Geosystems Corporation, Vancouver, B.C.

5. I am a Fellow of The Geological Association of Canada and a Member of The Canadian Institute of Mining and Metallurgy.

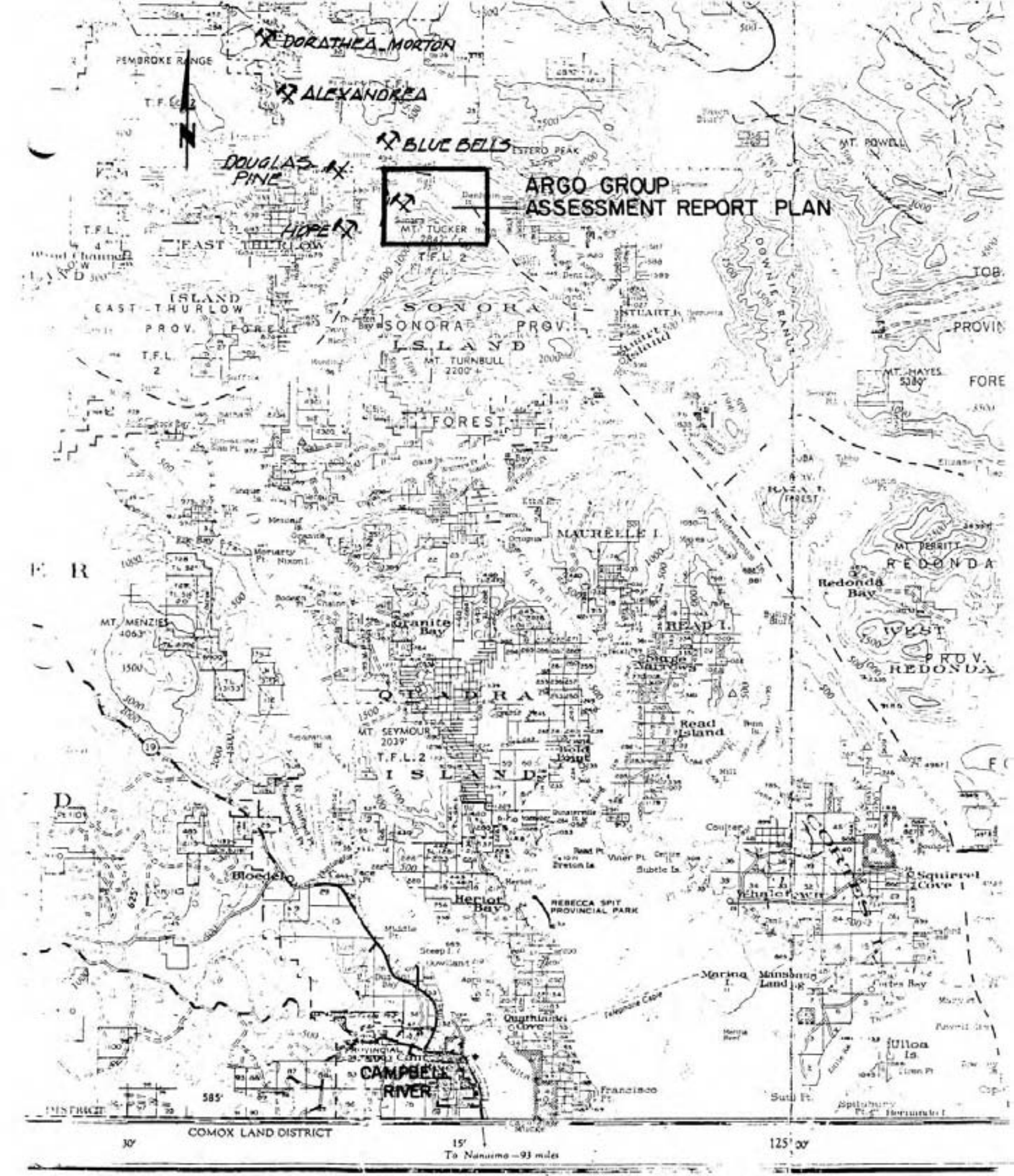
6. I have no financial interest, directly or indirectly, in properties held or optioned by HELMUT KRUTZ, prospector, Vancouver, B.C., or in the properties described in this report. I do not expect to receive or acquire any interest.

7. This report is based on a two day field examination of the Argo Claim Group, Northern Senora Island, B.C. The claims were visited on the 7th and 8th of August 1984. CUG

8. I consent to the use of this report in connection with the raising of funds for the project described in this report.

Respectfully submitted,

Colin I. Godwin, Ph.D., P.Eng.(B.C.)
29 November 1984

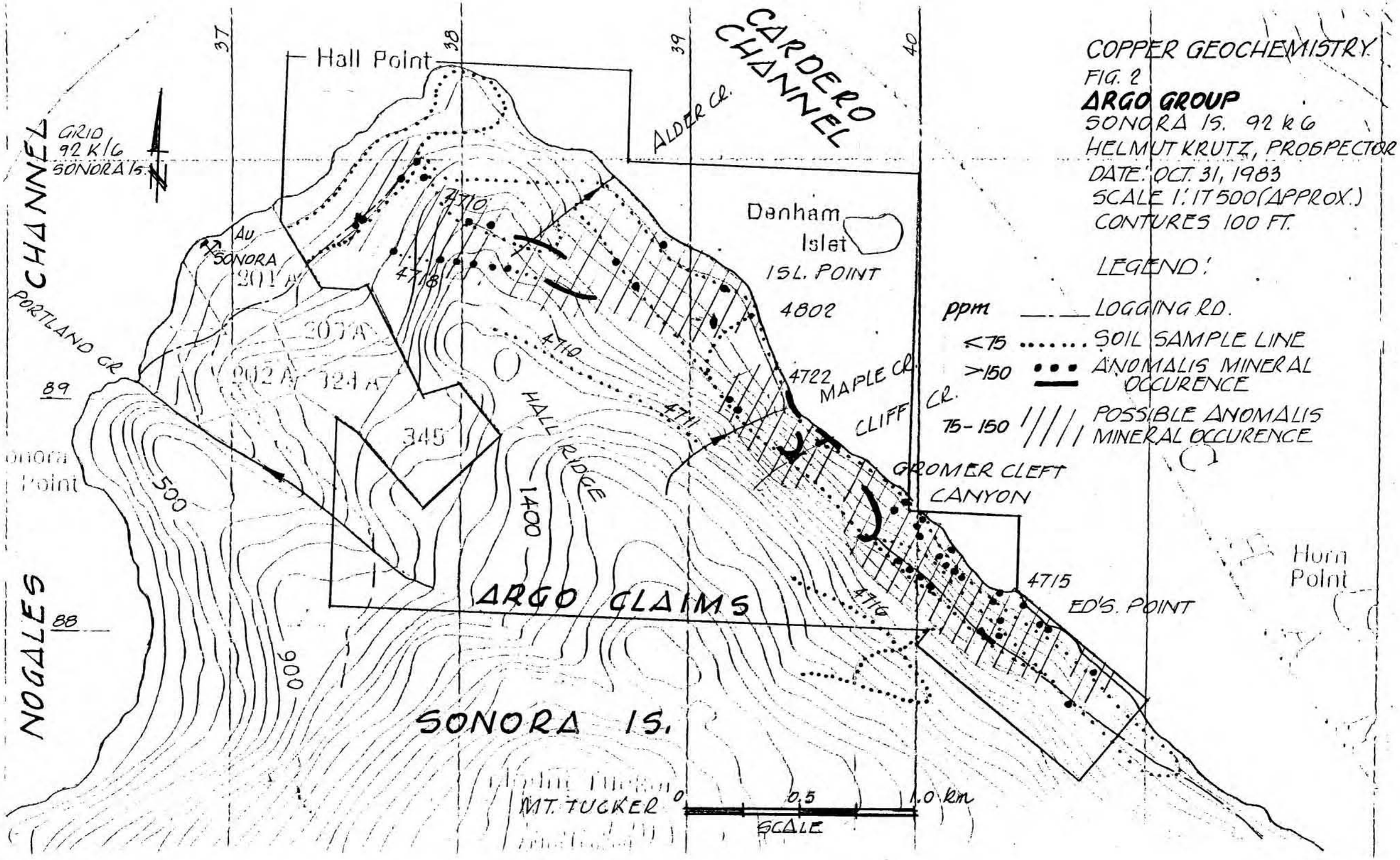


INDEX MAP 92 K SCALE 1: 250 000

Figure 1

BUTE INLET

BRITISH COLUMBIA


COPPER GEOCHEMISTRY
FIG. 2
ARGO GROUP
SONORA IS. 92 K 6
HELMUT KRUTZ, PROSPECTOR
DATE: OCT. 31, 1983
SCALE 1": 1T 500 (APPROX.)
CONTURES 100 FT.
LEGEND:
ppm
<75 SOIL SAMPLE LINE
>150 ANOMALIS MINERAL OCCURENCE
LOGGING RD.
75-150 POSSIBLE ANOMALIS MINERAL OCCURENCE
GRID
92 K/6
SONORA Is.
Hall Point
CARDERO CHANNEL
ALDER CR.
Denham Islet
ISL. POINT
4802
4722
MAPLE CR.
CLIFF CR.
GROMER CLEFT CANYON
4715
ED'S. POINT
Horn Point
PORTLAND CR.
CHANNEL
NOGALES
Point
HALL RIDGE
4710
4711
4716
4718
4710
Au
SONORA
201 A
207 A
902 A
124 A
345
500
900
1400
ARGO CLAIMS
SONORA IS.
MT. TUCKER
0
0.5
1.0 Km
SCALE
37
38
39
40
89
88