85-955-14584

Assessment Report for the Argo Claims Group

Sonora Island, Southwestern B.C.

Mining Division: Nanaimo

Summary

Nature of the Report:	Summary of Exploration Work
Specific Claims:	ARGO I through VI
Claim No's:	1253 to 1258
Recording Date:	September 13, 1982
Notice to Group No.	1424 09/86
Date Notice to Group Recorded	Sept. 9, 1983
NTS:	92 K 6
Latitude/Longitude:	50° 26' N; 125° 16' W.
Owner:	Helmut Krutz, Prospector 1829 W. 2nd. Ave. Vancouver, B.C. V6J 1J1 Phone: (604) 732-7167
Operator:	See owner
Period Work Done:	June 25, 1985 to August 20, 1985
Work Type:	Geochemical exploration
Author:	Helmut Krutz
Date of Report:	November 23, 1984
Date Statement of Exploration and Development Filed	Sept. 10, 1985
Expenditure:	$13,710.00
Claimed for Credit:	$2700.00
Signature:	Helmut Krutz

FILMED

09/86

GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,584

Assessment Report for the Argo Claims Group
Sonora Island, Southwestern B.C.
Mining Division: Nanaimo

CONTENTS

I. INTRODUCTION

1.1: General Description 2

1.2: Property Definition 2

1.3: History of Area 2

1.4: Economic Assessment 3

1.5: Geological Setting 4

1.6: Summary of Work Done 4

1.6.1: Overview 4

1.6.2: Details 5

1.7: Conclusion 7

II. STATMENT OF EXPENSES 8

III. STATEMENT OF QUALIFICATIONS 9

IV. APPENDIX: TABLES AND FIGURES 10

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 V1). Total number of units is 27. (Some units are fractional for they overlap other ARGO claims or Crown Grants.)

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 in August 1982. In

the summer of 1984 a zone some 4km long x 250 m wide was located in metamorphosed sedimentary and volcanic rocks in which geochemical anomalies occur. (See assessment report No. 83-418-11212 and No. 84-1141-13179.)

The survey for this report was conducted between June 25, 1985 and August 20, 1985.

1.4: Economic Assessment

Sheer zones were located in an area 3.5 km long and between 200 m. to 1200 m. wide in metamorphosed sedimentary and volcanic rocks. Quartz, pyrite, and pyrrhotite are common in and near these sheer zones. Many sheer zone samples analysed were over 300 ppm copper and/or zinc with some over 1000 ppm.

As indicated from old workings in the Cordero Channel Gold Camp gold occurs in silisified sheer zones in association with pyrite. At the Sonora Gold Mine, to the west of the Argo claims, 13 tons were mined in 1939-40 with a grade of 69.4 gram/ton gold. (See Minfile 92K, 37.)

8 km. to the northwest, on the other side of Cordero Channel, in direct line, and, on the same strike as the Argo NW sheer zones, and, in similar rock formations, are the Alexandria and the Doratha Morton sheer zones. Both these mines represent major gold occurences of the Cordero Channel Gold Camp and are under active investigation. Falconbridge Ltd. is engaged in a major surface and underground sampling and drilling program on the Alexandria property. Falconbridge conducted a property inspection on the Argo claims on July, 11, 1985 and indicated an interest in the results of further explorations.

1.5: Geological setting:

Sonora Island is situated between the Mainland and Vancouver Island in the "Coastal Trough". Geological reconnaisance mapping was done by Roddick and Hutchison (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 Cordero Channel shoreline of Sonora Island. This belt of rocks extends to the northwest. It is engulfed by the coast plutonic complex, composed predominantly of quartz diorite and granodiorite (late Jurassic to Ecocene).

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 generally following creek beds. 750 soil or sheer zone samples were collected and tested geochemically for Cu and Zn; a field analytical technique was used (described below); 53 rock samples were collected to be analysed for gold.

1.6.2:Details

The unit under investigation is a grey phyllite with a variable carbonate content. It is cut by numerous faults from a few centimeters to more than a meter apart. These faults are in many places widened to accomodate quartz or a grey dike rock

Sheer zones occcur from less than .5 to more than 20 meters wide. They are finely banded, multicoloured from gey to rusty brown to almost black; they contain many flat rock plates and slivers surrounded by a coarse dirt. Quite often they are hidden behind a talus slope of this very distinct dirt and a few strokes with a mattock are needed to expose them. Frequently there is a succession of sheer zones divided by a more competent rock or dikes. These dikes form very distinct bluffs as the less competent sheer zones before them weather away. Different development stages of this weathering proses are very pronounced on the Jason Bight slopes. Sericite, quartz, pyrite, arsenopyrite, chalcopyrite and sphalerite are common in sheer zones faults and wall-rocks.

Quartz occurs (mostly fractured) in the following ways:

1) impregnating wall rock

2) "blobs" in sheer zones or faults smokey with inclusions of wall rock. (N.B. 1 and 2 are generally mineralized.)

3) a white variety with long narrow dark brown vugs

4) big chunks stained transluscent yellow; pyrite is usually present

5) as ledge 1 m. wide on top of the bluff at 58 m. elevation on N Cr.

The main direction of these sheer zones and faults is northwest. Southwest and west sheer zones are also common. There is a considerable deviation from these main directions. All three directions are distinct regional lineations.

Sheer zones were encountered either as outcroppings or were trenched with a mattock in creek beds or banks.

Sheer zones were sampled at random intervals across their face. The finest parts available were collected; in some places they were crushed with a hammer before collecting. Soil samples and sheer zone debris (talus) were also collected at random.

All samples were leached in 3N NHO_3 for 4 hours at 70 degrees C. An aliquot was transferred to a separate test tube and the pH was adusted 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 and dithizone for zinc. The dried spots were compared with prepared standards for assignment of ppm values.

The geochemical background of the rock unit under investigation as determined by earlier surveys is below 75 ppm in copper and zinc. To evaluate the extent of mineralisation in the sheer zones the analytical results were computed as follows: 1) the number of samples taken at one location and 2) the number of these samples falling into a specific group (see tables 2 to 8).

1.7: Conclusion

1) Silisified and mineralized sheer zones or indications thereof are present almost everywhere on the slope above Jason bight. This area presents a well-defined exploration target and a grid survey is planned. (See Figure 2 and Table 1 & 2).

2) Substantial mineralized sheer zones occur in all creeks examined west of Ed's Point and on the slopes southwest of Hall Point. There are indications of sheer zones on Hall Ridge. (See Figure 2 and Tables 1 to 8). A detailed examination of these sheer zones and their lateral extent is planned for 1986.

II. Statement of Expenses

Argo Claims Group

June 25 to August 20, 1984

	Days	Cost/Day	Total
Fieldwork	50	130.00	6500.00
Travel	4	130.00	520.00
Board	54	10.00	540.00
Boat Expenses			4500.00
Technical Supplies			850.00
Report Writing			800.00
TOTAL			$13710.00
Claimed for assessment credit			$2700.00

III. Statement of Qualifications of Helmut Krutz

1) I have been prospecting for 6 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 and I am currently consulting with several authorities in this department as well as the Chemistry Department of U.B.C. with regard to my work and techniques.

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

Phone: (604) 732-7167

IV. APPENDIX

TABLES AND FIGURES

Table 1:N Creek

Widths of Sheer Zones

Slope distance was measured with a hip chain; elevation with a Thommen altimeter with pressure changes noted at the end of the day interpolated according to time elapsed.

The direction of these sheer zones is mostly northwest.

(N.B. Phyll = phyllite with faults and enclosures)

	Dist. (m)	El. (m)
Sheer zone	1	10
Dike	.25	
Rusty rock	1	11
Sheer zone	17.4	
Dike	1.8	
Debris	3.7	
Sheer zone	4.6	
Dike	.3	
Phyll	11	
Sheer zone	4.6	33
Phyll	7.3	
foot of bluff		38
width of exposure	5.9	
top of bluff composed of several grey dikes and sheers		58
Sheer zone	2.1	
Quartz ledge	1	
Phyll	4.6	
Sheer zone (north east)	4.4	
Debris	3.8	
Phyll	9.1	
Sheer zone	1.8	
Dike	2.7	
Debris	12.8	
Phyll	13.7	70
Sheer zone	19	
Debris	2.7	
Dike	1	
Sheer zone	13.7	
Debris	9.1	
Sheer zone	2.7	
Phyll	9.1	
Sheer zone	10	
Phyll	14.6	
quartz		
Sheer zone	1	
Grey Gniss	6.4	
Sheer zone - grey rock		
Sheer zone under logging debris	16.5	
Road	10	133
a fault face occurs on the south side of the road		

Table 2

Geochemistry of Mill Cr.

Elevation (m)	Type (N.B. 1)	# of samples	Parts Per Million 150-300 Cu	150-300 Zn	300-600 Cu	300-600 Zn	600-1000 Cu	600-1000 Zn	1000+ Cu	1000+ Zn
12	f	2			1		1	2		
12	f	3	3			2		1		
38	f	3	1		1			2		
55	f	7	6	1		4		1		
83	f	7	1	1	1			1		
88	f	11	4	4		2	1	3		1
110	f	12	5	2		5		4		
			Jason Creek							
40	f	2	1		1			1		
59	f	4	3	4	1					
	d	2	2					1		1
95	f	8	7	2		3		3		
			Jason Quarry sheer zone at 135 m el.							
Location #										
1	f	3			1				2	3
2	f	8	4	6	1		1	1	1	1
3	f	4	2	1	1		1			3
4	f	4					4	1		3

N.B. 1. Type of sample: d = soil; t = talus; f = sheer zone

Table 3

Geochemistry of Gromer Cleft

Elevation (m)	Type (N.B. 1)	# of samples	Parts Per Million 150-300 Cu	150-300 Zn	300-600 Cu	300-600 Zn	600-1000 Cu	600-1000 Zn	1000+ Cu	1000+ Zn
2	d	3	1		2					3
12	d	1				1				
18	f	2	1			1				
30	f	3	1	2	1	1				
35	d	2	1		1	2				
38	f	4	1	2	1	1				1
42	f	2	2			2				
	f	2	2	1		1				
44	f	2	1							1
	d	3	1		1	1	1			
58	d	2	2			2				
	d	3			2	2				1
65	f	2			1		1	1		1
70	f	8	7			6	1	1		1
75	f	6			6			1		5

N.B. 1. Type of sample: d = soil; t = talus; f = sheer zone

Table 4

Geochemistry of Cliff Creek

Elevation (m)	Type (N.B. 1)	# of samples	Parts Per Million 150-300 Cu	150-300 Zn	300-600 Cu	300-600 Zn	600-1000 Cu	600-1000 Zn	1000+ Cu	1000+ Zn
5	d	2	2			1				
35	d	2	2			2				
50	t	5	4		1					1
	d	2	1		1					
55	f	5	2	2	1			1		
59	f	1		1	1					
65	f	8	7	1	1	2		1		1
70	f	2	1		1	1		1		
	Foot of bluff									
75	f	4	3		1	1	1			
	East fork west bank									
83	f	3	1		2	3				
	East side									
83	f	12	11	4	1	5		1		1
86	f	4	2	2		2				
	f	2	2			1				1
70	f	2			2			1		1
92	f	4	3	1		1		2		
to 120	t	6	3		3	3		3		

N.B. 1. Type of sample: d = soil; t = talus; f = sheer zone

Table 5

Geochemistry of Maple Creek

Elevation (m)	Type (N.B. 1)	# of samples	Parts Per Million 150-300 Cu	150-300 Zn	300-600 Cu	300-600 Zn	600-1000 Cu	600-1000 Zn	1000+ Cu	1000+ Zn
15	f	8	2	2		1				
22	t	2			2	2				
	d	1		1	1					
28	f	2			1	1				
35	f	9	2		6	5		4		
37	f	4	1		1	3	1			
42	t	3	2		1	2				
60	f	2			2	2				
65	d	2	1			2				
70					foot of bluff					
	f	4	1			1				3
88	f	2			2			1		1
98	f	1	1			1				
98-115	t	10	8	1		5		4		
120	f	4	3	1		3				
140	f	2			1			1	1	1

N.B. 1. Type of sample: d = soil; t = talus; f = sheer zone

Table 6

Geochemistry of Isl. Creek

Elevation (m)	Type (N.B. 1)	# of samples	Parts Per Million 150-300 Cu	150-300 Zn	300-600 Cu	300-600 Zn	600-1000 Cu	600-1000 Zn	1000+ Cu	1000+ Zn
2	d	2	2			2				
8	d	2				2				
15	f	4	2		1			3		1
20	f	3	1				1	2	1	1
	d	2	1			2				
29	f	5	2		3	3				2
38	f	3	2			3				
43	f	3	1		2	3				
			East Fork							
48	d	1				1				
50	f	3	2		1					3
53	f	4								
	d	5	5	3		1				
75	f	1			1					1
76	f	2			2					
	t	4	2		2	1				
86	f	3	3			3				
95	f	2		2						
to 110	d	5	2		2	4	1	1		
			WEST FORK							
175	f	3					3			3

N.B. 1. Type of sample: d = soil; t = talus; f = sheer zone

Table 7

Geochemistry of West Creek

West Creek is underlain by a major fault system. Unconformities exist between the east and west sides.

Elevation (m)	Type (N.B. 1)	# of samples	Parts Per Million 150-300 Cu	150-300 Zn	300-600 Cu	300-600 Zn	600-1000 Cu	600-1000 Zn	1000+ Cu	1000+ Zn
20	f	2	1	1						
34	f	2	1		1			1		
45	f	6	3	4	1	1				
52	f	6		3		3				
98	f	4	2	2						
155	f	8	4	5						
165	f	6	1	1						
170	t	2				2				
173	f	4	4					2		2
175	f	5			1	3		2		
200	f	7	3		3	1	1	2		4
206	f	17	14		3	1		9		7
225	f	2	1					2		
238	d	1	1					1		
252	f	4	4			2		2		
260	f	5	1		2	1		2		2
293	f	7	3	1	2	1		1		4
330	f	6	3	2	1			3		1

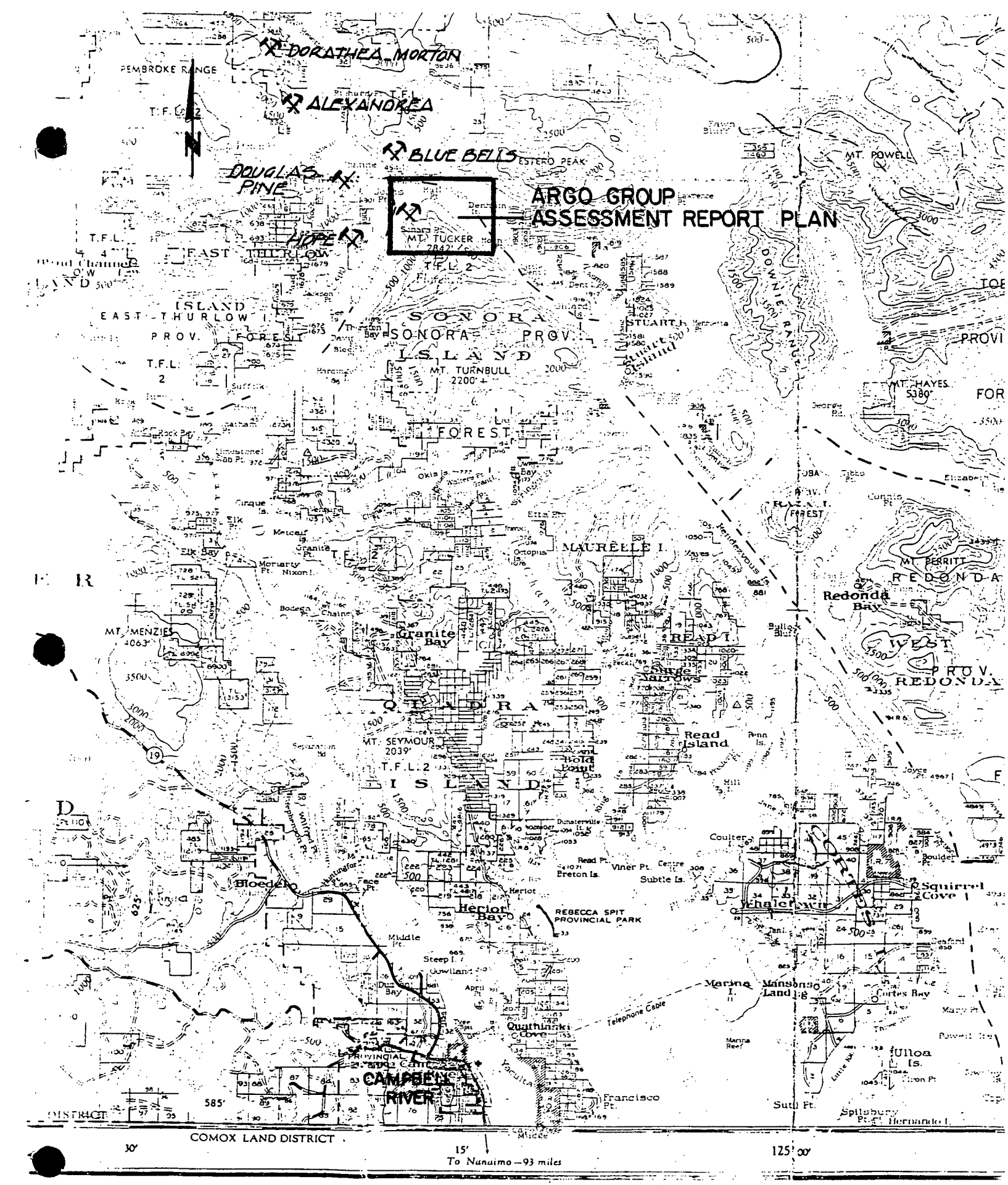
N.B. 1. Type of sample: d = soil; t = talus; f = sheer zone

Table 8

Geochemistry of X Creek

Elevation (m)	Type (N.B. 1)	# of samples	Parts Per Million 150-300 Cu	150-300 Zn	300-600 Cu	300-600 Zn	600-1000 Cu	600-1000 Zn	1000+ Cu	1000+ Zn
1.5	f	2			2		2			
5	f	3		3						
10	f	7		2		2		1		
15	f	5				1				
15	f	2	1			2				
30	f	12	4	1		3				
			X Bluff							
96	f	3	1	1	2	1		1		
	t	4		1	1	1		1		
114	f	3	3					2		
			Hall Pt. Road							
Location #										
1	f	12	2	4	4	2	1	5		1
2	f	5		2	1	1		1		
3	f	3		2		1		2		
4	f	2							2	
5	f	7	5	2	1	2	1	1		2
6	t	5	2	3		1		1		

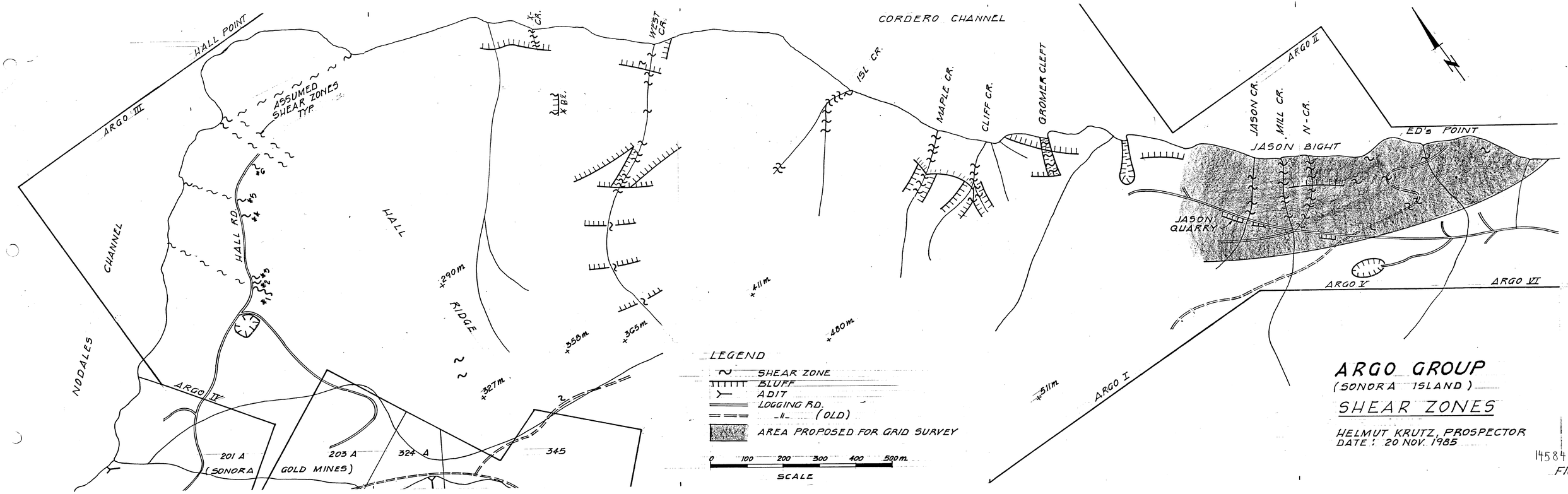
N.B. 1. Type of sample: d = soil; t = talus; f = sheer zone



INDEX MAP 92 K SCALE 1: 250 000

Figure 1

BUTE INLET



ARGO GROUP
(SONORA ISLAND)

SHEAR ZONES

HELMUT KRUTZ, PROSPECTOR
DATE: 20 NOV. 1985

14584
FIG. 2