

JUNE 28 1979

BC GOLD SYND MONTHLY REPT JUNE 1979

JCS OFFICE

B.C. GOLD SYNDICATE

MONTHLY REPORT

June 1979

671534

B.C. GOLD SYNDICATE

MONTHLY REPORT

by

J.T. SHEARER

June 28, 1979

Crescent Inlet

TABLE OF CONTENTS

	<u>Page</u>
LIST OF ILLUSTRATIONS	ii
INTRODUCTION	1
TIME ALLOCATION	2
EXPENDITURES	3
(a) Helicopter time	
(b) Fixed Wing	
(c) Truck costs (1) Mileage	
(2) Gas (+ boat)	
(d) Boat	
CAMPS AND AREAS PROSPECTED	5
(A) KITSELAS MOUNTAIN (N.T.S. 103 I/9 W)	5
(B) DEENA (final results) (N.T.S. 103 F/1 E + W)	
(C) CRESCENT INLET (a) Geology (103 B/12 + 13 W)	7
(b) Sample Results	12
(c) Wilson Camp	
(D) PACOFI BAY - DANA CAMP (103 B12 W)	14
(E) LYELL ISLAND (103 B/11 W, 12 E)	17
(F) ALDER ISLAND (103 B/6 W)	20
(G) RAMSAY ISLAND (103 B/11 W)	22
(H) MORESBY ISLAND (103 B/11 W)	24
(I) FIPKE SAMPLES	24
CONSLUSIONS AND RECOMMENDATIONS	29
APPENDIX I CAMP REPORTS by B. Atkinson and J. Clarke	
(A) PACOFI BAY CAMP May 24 - 28, 1979	
(B) DANA INLET May 28 - 30, 1979	
(C) LYELL ISLE	
APPENDIX II TIME SHEETS	

LIST OF ILLUSTRATIONS AND TABLES

<u>Figure</u>			<u>Page</u>
1	KITSELAS CLAIMS, Location of overlap	1:50,000	4
2	DEENA CLAIMS, A-79-610 detail soil grid	3:10,000	6
3	LOCATION MAP, CRESCENT CLAIMS	1:50,000	8
4	AIRPHOTO, CRESCENT CLAIMS	1 inch = 1/2 mile	9
5	Preliminary Sampling + Geology Crescent Claims (Figure 9, May Report)	1:12,500	10
6	Detail Soil Grid Locations Crescent One Claims	1:1,000	11
7	PACOFI BAY, sample results	1:50,000	15
8	DANA INLET, sample results	1:50,000	16
9	Central LYELL ISLAND, sample results	1:50,000	18
10	South LYELL ISLAND, Sample Locations	1:1,500	19
11	ALDER ISLAND, geology, sample results	1:10,000	21
12	RAMSAY ISLAND, geology, sample results	1:50,000	23
13	MOSQUITO LAKE, sample locations	1:50,000	25
14	KOO HOO HILL, sample locations	1:50,000	26
15	SKIDEGATE LAKE, sample locations	1:50,000	27
16	HEMMING HEAD AREA, location map	1:50,000	28

TABLES

TABLE 1 TIME ALLOCATION

INTRODUCTION

Several areas of significant gold content in rock and soil have been delineated and follow up work is now in progress. The program is concentrating on defining maximum limits of favourable geology to ensure proper claim coverage. To date; 56 units have been staked on Crescent Inlet, four - 2 post claims on Alder Island and eight 2-post claims as initial protection on Lyell Island. If further encouragement is received on Lyell, the ground will be picked up by Modified Grid claims.

One of the most interesting results is a rock chip sample of silicified argillite that ran 1860 ppb Au. from Alder Island. The geology of Alder Island is exceedingly complex. The east coast is characterized by intense development of garnet-diopside skarn with associated massive pyrrhotite pods carrying Cu, Ni, As, Sb and Mo. These are old showings and have been investigated since the turn of the century. Our sample of gold bearing argillite came from the west shore and, although exhibiting small drusy quartz veinlets, was noticeably barren of sulfides. Only a program geared toward disseminated gold could hope to pick up such a sample. A soil line run east-west from this rock sample shows some anomalous Au and As.

At Crescent Inlet the narrow silicified breccia in the carbonate sequence did not contain any gold, however a large number of soils near the complicated southern contact of the Tertiary gabbro pluton did give anomalous readings. This area is a locus of NE-SW trending block faults. Intense silicification and introduction of up to 30% pyrite and pyrrhotite is widespread. In places, argillic alteration is well developed. Follow up prospecting has indicated minor sphalerite and molybdenite accompanying pyrite and pyrrhotite. Local close spaced soil grids have been completed. Pending results will

indicate the scope of additional property work required in the future. The borders of the claim group are very steep and precipitous and will require special attention.

On Lyell Island, rock samples have revealed two small gold bearing silica-sulphide systems. Initial follow up has been carried out.

To eliminate short camp moves a Zodiac inflatable boat equipped with a 25 h.p. motor was rented for one month. It was particularly useful at Crescent Inlet, Alder Island and will be the only way to examine the Hemming Head claims in any detail.

Before the expected shut down of the preliminary Charlottes phase between July 15th and 25th, camps are planned for Wilson Bay, Dass Point, Bottle Inlet and finishing up Alder Island.

A base camp has been established at Moresby where all duplicate rock samples and excess gear has been stored. The Moresby Camp could be used by any visitors to the program since the Sandspit Hotel burned down in May. A new trailer hotel is scheduled to open near the airport on July 15th.

This report discusses results received to date, some of the preliminary follow up and briefly touches on possible work required to fully assess the showings discovered.

TIME ALLOCATION

From May 28 to June 28 time allocation to various classifications is tabulated below. Individual time sheets are contained in Appendix II.

TABLE I

<u>Item</u>	<u>Man days</u>
Prospecting and Geology	70
Claim Staking	16
Geochemistry (all day)	11
Geophysics (all day)	0
Camp Construction and Moves	14
Travelling	0
Office-Drafting	9
Line Cutting	<u>4</u>
	124 Man days

The Crescent Claim Group makes up the bulk of the staking time. This would have been substantially more if long days were not put in. Steady walking time to 2N 4W or 5S 4W from camp is in the order of 2 hours.

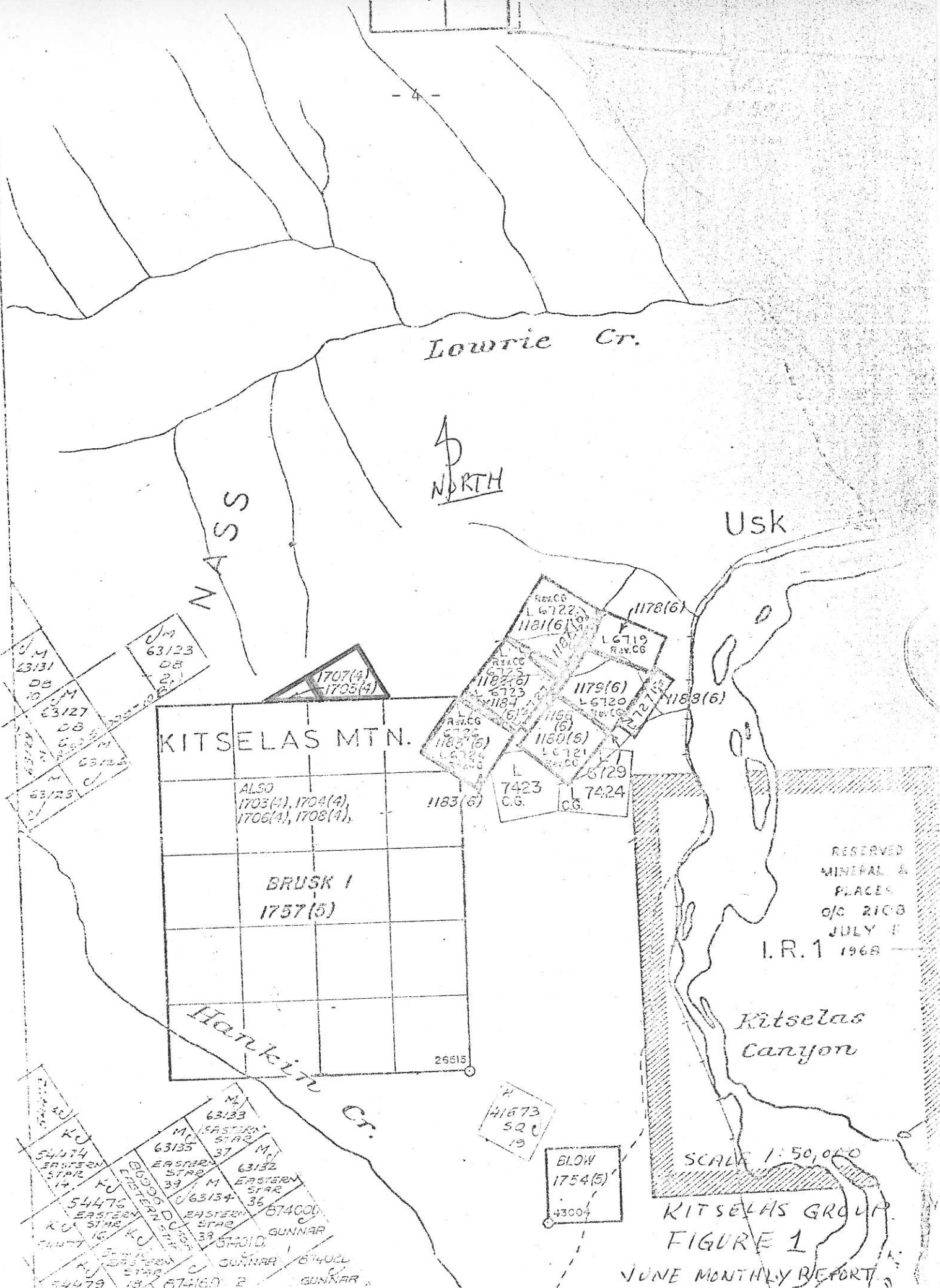
EXPENDITURES

Up to the end of June, the program has spent approximately \$45,000.00. Some geochem has been done in Northern B.C. The larger cost items are:

- (a) Helicopter time 47G 3.4 hours
 206B 1.7 hours
- (b) Fixed wing (Beaver & Otter) \$1,680.00 + June 30 Otter
- (c) Truck Costs (1) mileage - 937.5 miles
 (2) gas (battery & boat) \$178.87
- (d) Boat - monthly rental - \$558.00

Camp moves by Beaver or in some cases both camps moved simultaneously by Otter has proved very efficient and economical. For example a Beaver trip from Sandspit to Crescent Inlet costs \$129.00 which by helicopter would be four to five times more with much less capacity for gear.

TO WEST SEE MAP 103 I/10E



RESERVED
MINERAL &
PLACES
c/o 2103
JULY 1
I.R. 1 1968

Kitselas
Canyon

SCALE 1:50,000

KITSELAS GROUP
FIGURE 1

JUNE MONTHLY REPORT

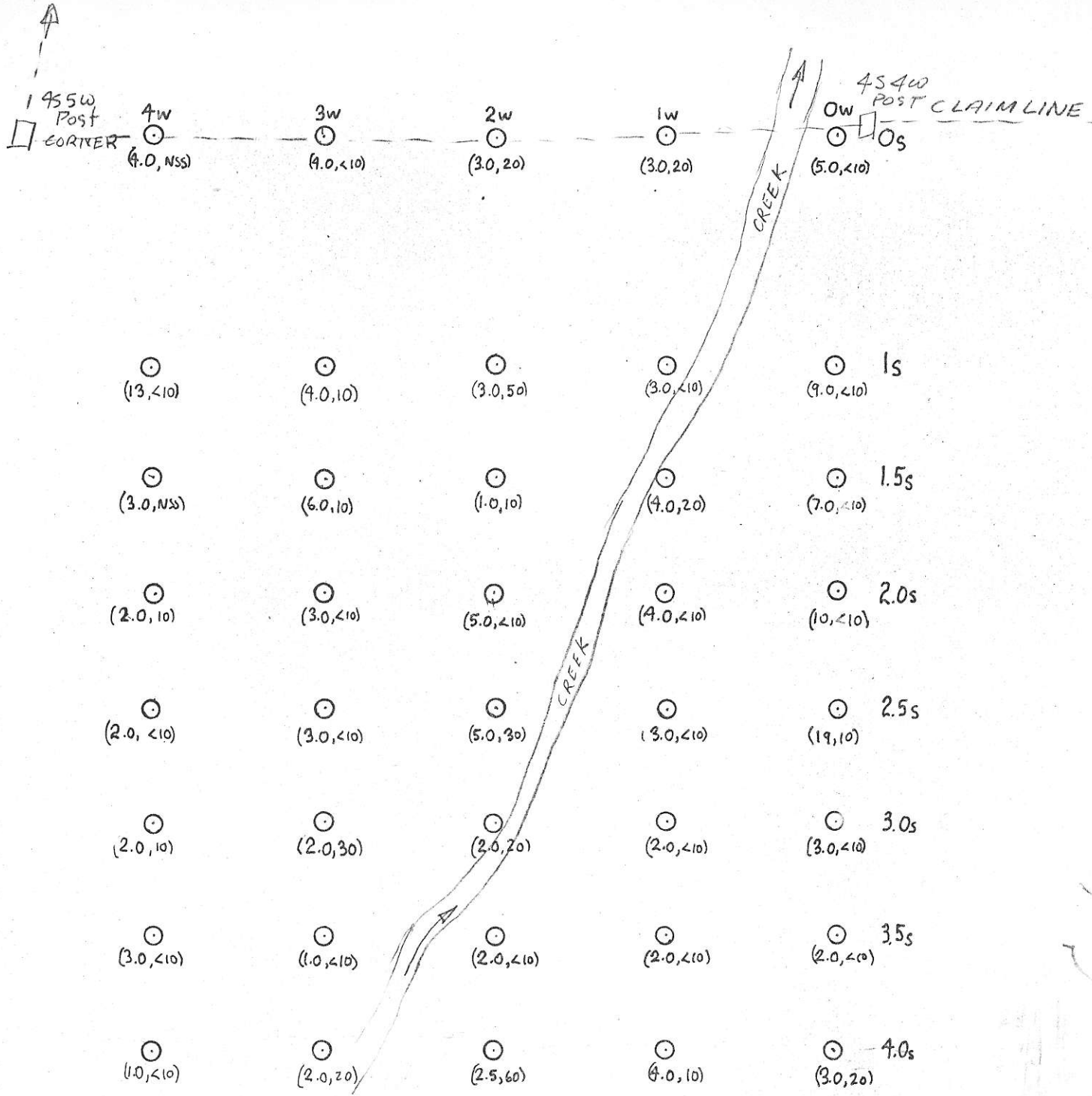
CAMPS AND AREAS PROSPECTED

(A) KITSELAS (N.T.S. - 103 I 9/W)

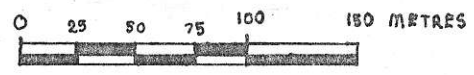
Unfortunately, a letter dated June 7, 1979 has been received from the Smithers Recording Office indicating the Kitselas Group (recorded April 23) is overstaked. Only a fraction of 2 claims plot outside the "BRUSK Claim" as shown in Figure 1. Probably several of the identification posts were not cut due to deep snow but on the other hand the Kitselas claim posts were dropped from the chopper.

(B) DEENA (Final Results) (N.T.S. 103 F/1 E = W)

All results have been received for sampling done on the DEENA claims (not recorded). Refer to Figures 4, 4a and 5 of the May Report for initial sampling. The detail grid near soils A-79-610 and 625 show only a few threshold Au values (Figure 2) and are not considered significant.



SCALE 3:10.000



LEGEND
SOIL SAMPLE
(2.0,20) As. in ppm. Au. in p.p.b.

J.C. STEPHEN EXPLORATIONS LTD.
BC. GOLD SYNDICATE
DETAIL SOIL GRID
DEENA CLAIMS A-79-610 AREA
GEOLOGY AND SAMPLE RESULTS
DATE: MAY 26, 27, 29 1979
WORK BY G.M.
DRAWN BY G.M.
NTS: 103 F 1
FIGURE 2
JUNE REPORT.

(C) CRESCENT INLET (N.T.S. - 103B/12W + 13W)

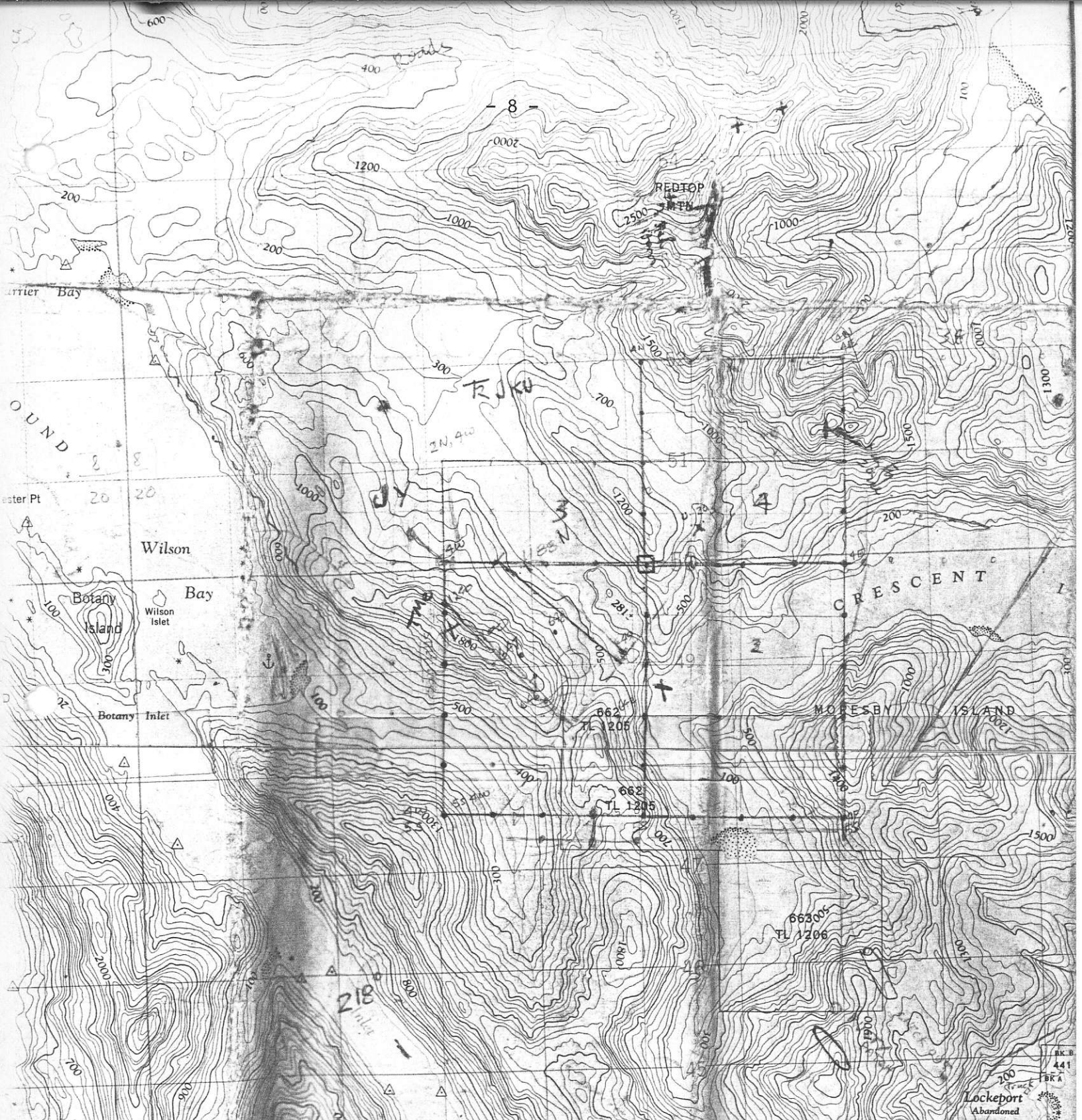
The Crescent Inlet area has been briefly discussed in the May monthly report. Location of 4 claims (56 units) and air photo coverage is shown in Figures 3 and 4.

Rock samples collected on a narrow silicified dyke did not contain gold. The modified grid claims cover a wide pyritized zone adjacent to the southern part of the large gabbro pluton. Over 10 reconnaissance soil samples covering better than a square kilometer are anomalous in gold and arsenic. The highest gold results in soils overlay an intensely pyritized (& pyrrhotite \pm sphalerite and molybdenite) contact between coarse gabbro, andesite and sporadic rhyolite. Characteristically, silicification accompanied by pyrite and argillic alteration has obscured most original rock textures.

(1) Geology

Regionally, the Crescent Group is situated on a strong northeast-southwest cross block fault with south block down or perhaps a large right hand movement. Major fold directions are still northwest but minor folds in rhyolite were noted to trend 030° (similar to cross block faults). A possible domal structure is suggested on the east claim boundary on Brown's (1968) map incorporating Karmutsen volcanics in the core.

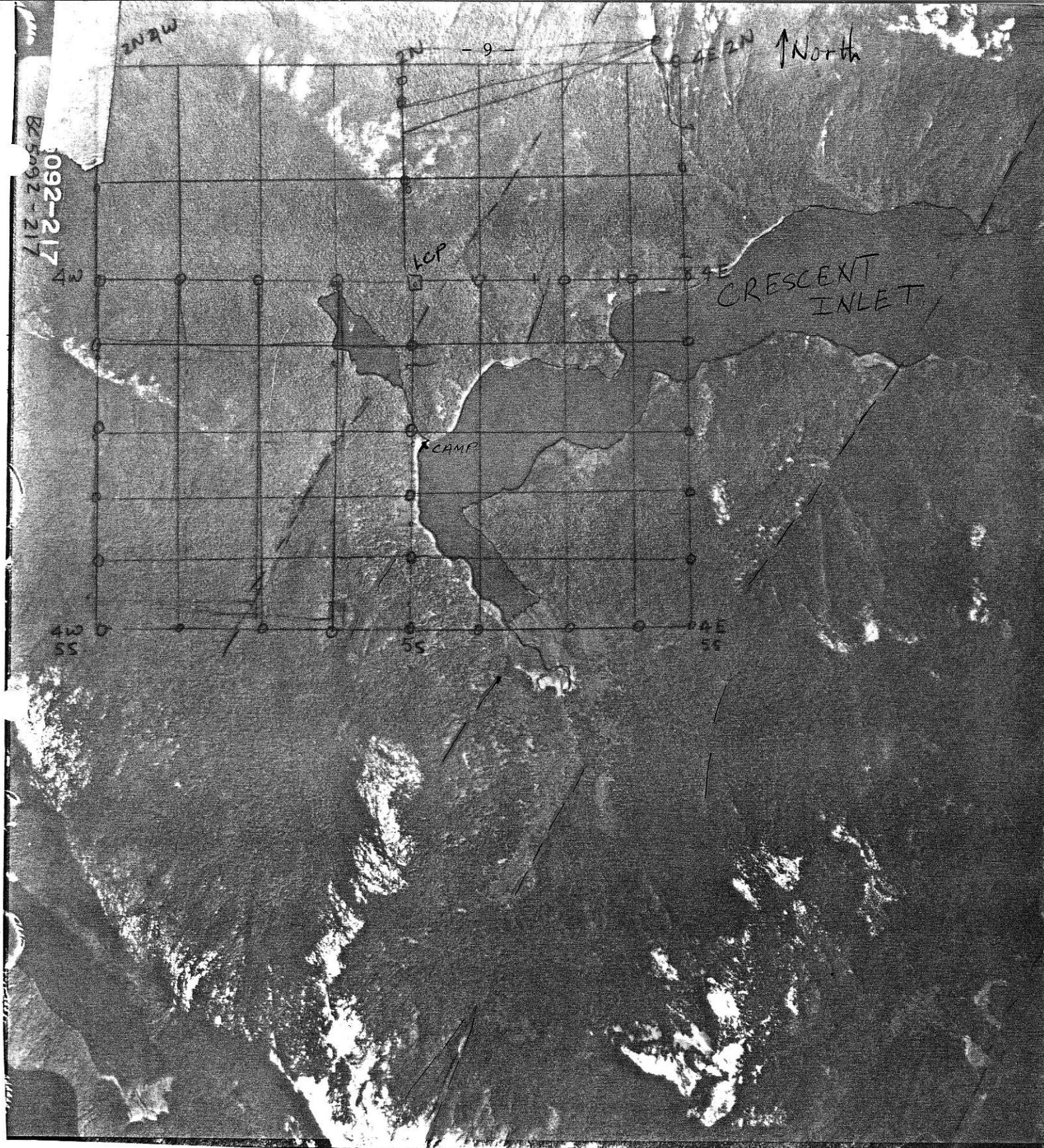
Geology is much more complex than shown on Brown's (1968) map especially off the shoreline. Although the exact nature of the seemingly sporadic rhyolite outcrops is not known, initial impressions indicate a subvolcanic environment. The rhyolite is envisaged as being down dropped along vertical block faults into the upper magma chamber-root zone represented by parts of the gabbro complex. Probably



J.C. STEPHEN EXPLORATIONS LTD.
 B.C. GOLD SYNDICATE
 LOCATION OF CRESCENT
 CLAIMS.

SCALE: 1:50,000
 NTS - 103/12+13W
 DATE: JUNE 28/79

DRAWN BY - JS
 FIGURE 3
 JUNE REPORT



CRESCENT INLET CLAIMS

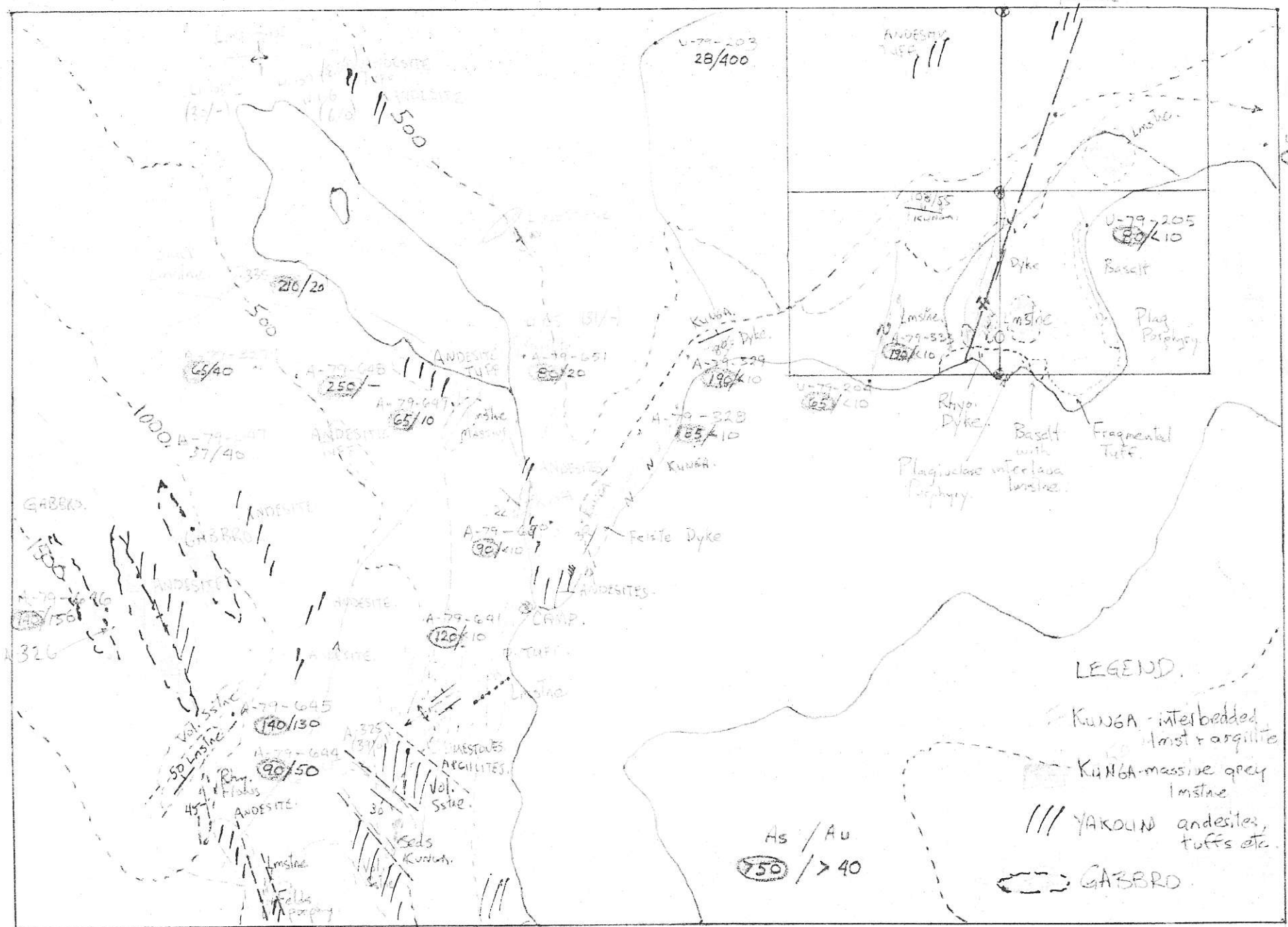
103 B / 12 + 13 W

AIR PHOTO COVERAGE

scale. 1" = 1/2 mile

Figure 4
June Report

GEOLOGY OF CRESCENT INLET AREA INCLUDING CRESCENT CLAIMS LOCATION



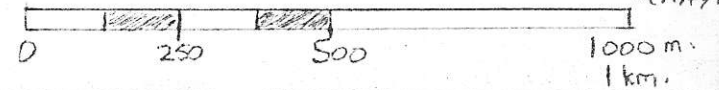
LEGEND.

- KUNGA - interbedded limestone & argillite
- KUNGA - massive grey limestone
- YAKOUN - andesites, tuffs etc.
- GABBRO

As / Au
750 / > 40

GEOLOGY OF CRESCENT INLET AREA

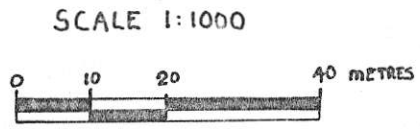
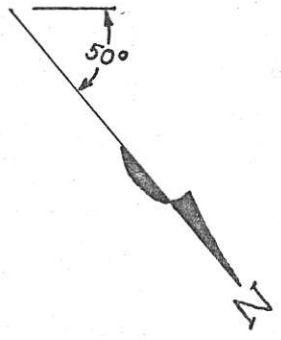
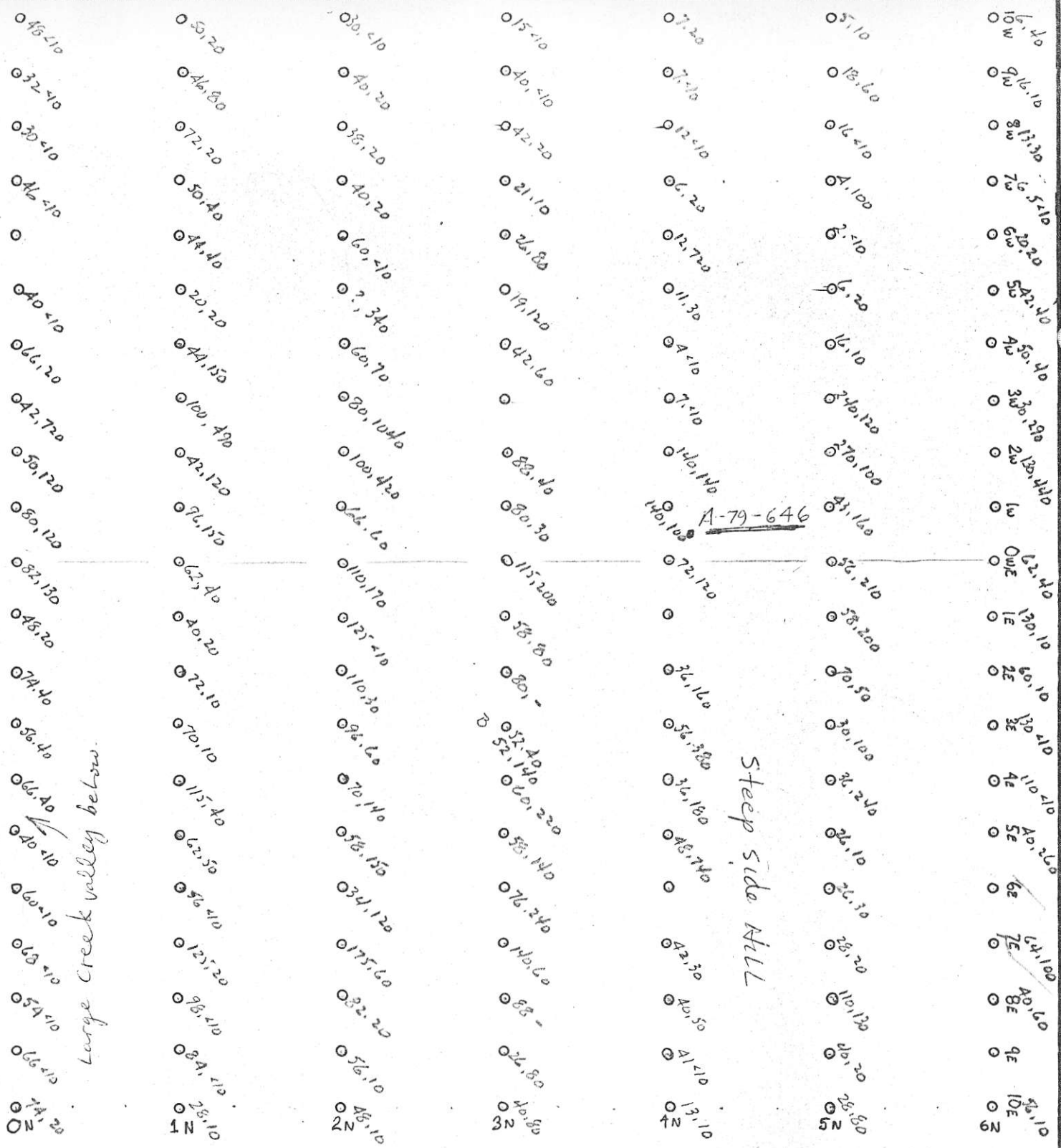
SCALE 1 : 12,500.



KUNGA + Vol. TUFFS
14/30W A336 (15/-)
52/80E

Figure 5
June Report
Figure 9
LMHYREP

North
- 10 -



LEGEND

○ SOIL SAMPLE
(2,20) As in p.p.m. Au in p.p.b.

NOTE: GRID NORTH IS BEARING 310°

J.C. STEPHEN EXPLORATIONS LTD.

B.C. GOLD SYNDICATE

CRESCENT CLAIMS

GEOLOGY AND SAMPLE RESULTS.

DATE: JUNE 1979

WORK BY: J. CLARKE, G. MARCIK

DRAWN BY: G. MARCIK

NTS: 103 B/13W

FIGURE 6
JUNE REPORT

much of what is shown on Brown's (1968) Map as Yakoun Formation volcanics is actually fine grained phases of the Masset age gabbro: a combination of gabbro intruding its related effusive pile and down faulting.

(2) Sample Results

Along with the gold bearing soils on the pyrite-alteration zone a silt sample ran 400 ppb Au situated at an intersection of the cross Linear and NW faults. Figure 9 of the May report is included with results plotted (Figure 5). A detail soil grid has been completed and results are expected by the end of June. Sample locations are plotted on Figure 6 for reference. Detail geological mapping of local areas, reconnaissance prospecting and sampling are well underway. A base map at 1:10,000 has been constructed.

To date, in direct costs, (wages, geochem, transportation and food) there has been approximately \$7,000.00 spent on the Crescent Area. Of this, and including higher wages and equipment rentals about \$6,000.00 is available for government assessment credit on the Crescent Claims. Only the most preliminary work has been completed concentrating on rapid prospecting. If this initial work is favourable a program of

- (1) property grid soil sampling, 400 samples (west of small Lake)
- (2) trenching/stripping on pyritized/sphalerite zone, and
- (3) geological mapping of entire property will be needed. A good base map such as an orthophoto contour map will be essential. September to October may be a good time to get the job done.

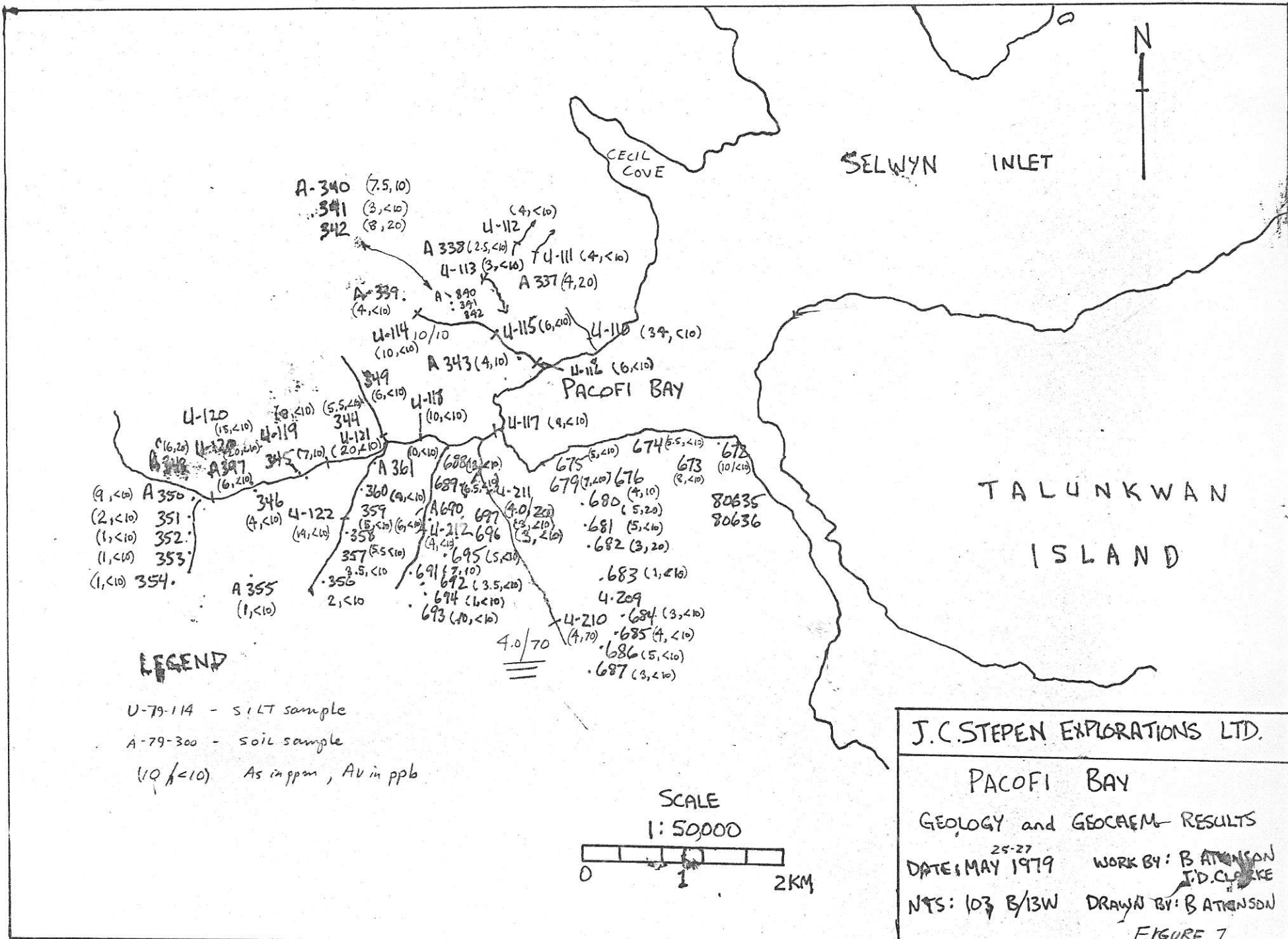
(3) Wilson Camp

A recce camp is planned for Wilson Bay immediately west of the Crescent Claims to check the western boundary for favourable pyritized zones. A similar rusty area was noted while staking the 4W line which appears to be part of a well developed gabbro breccia pipe (possible collapsed vent).

(D) PACOFI BAY - DANA INLET CAMPS (N.T.S. - 103 B/13W)

Geology of the Pacofi Bay - Dana Inlet area is outlined in Appendix I by B. Atkinson and J. Clarke. Results are uniformly low with the exception of silts in a large creek draining the north slopes of Redtop Mountain. Gold reaches 70 ppb and warrants limited follow up. Sample location and arsenic-gold values are plotted on Figures 7 and 8.

An interesting skarn and silicified contact zone found from the Dana campsite did not run significant gold but are considered worthy of a second look if time permits.



A-340 (7.5, 10)
A-341 (3, <10)
A-342 (8, 20)

U-112 (4, <10)
A-338 (2.5, <10)
U-113 (3, <10)
A-337 (4, 20)

A-339 (4, <10)
A-890 (3.9, 8.2)
U-114 (10, 10)
U-115 (6, <10)
U-116 (3.9, <10)

A-343 (4, 10)
U-117 (6, <10)
U-118 (10, <10)
PACOFI BAY

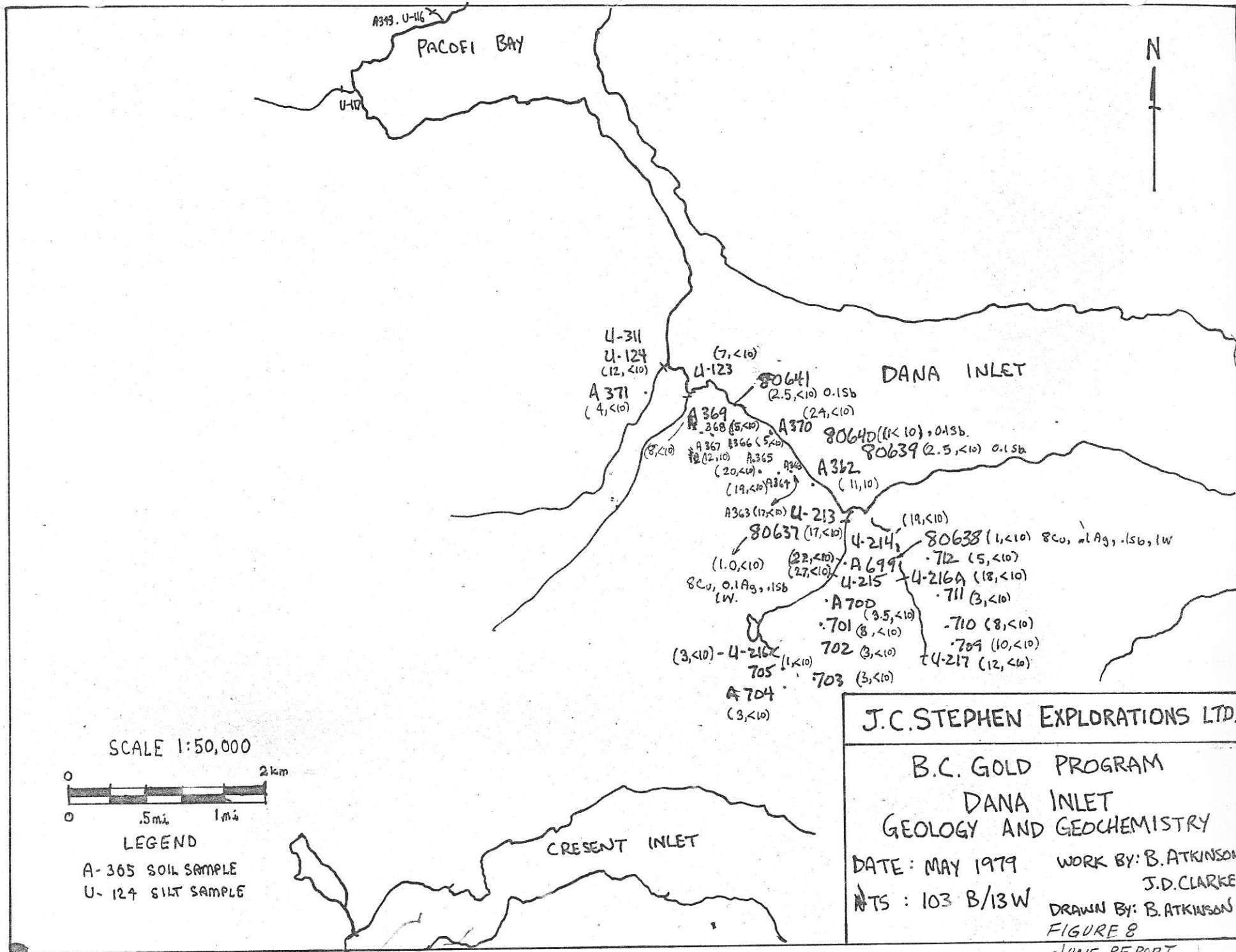
U-120 (15, <10)
U-119 (10, <10)
U-121 (7, 10)
U-122 (4, <10)
A-350 (9, <10)
A-351 (2, <10)
A-352 (1, <10)
A-353 (1, <10)
A-354 (1, <10)
A-355 (1, <10)

344 (5.5, <10)
345 (7, 10)
A-361 (10, <10)
360 (9, <10)
359 (5, <10)
358 (6, <10)
357 (5.5, <10)
356 (3.5, <10)
2, <10

675 (5, <10)
676 (4, 10)
677 (7, <10)
678 (10, <10)
679 (7, <10)
680 (5, 20)
681 (5, <10)
682 (3, 20)
683 (1, <10)
4.209
U-210 (4, 70)
684 (3, <10)
685 (4, <10)
686 (5, <10)
687 (3, <10)

674 (5.5, <10)
673 (8, <10)
80635
80636

4.0/70



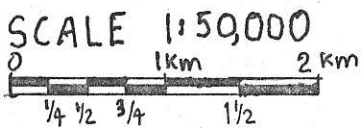
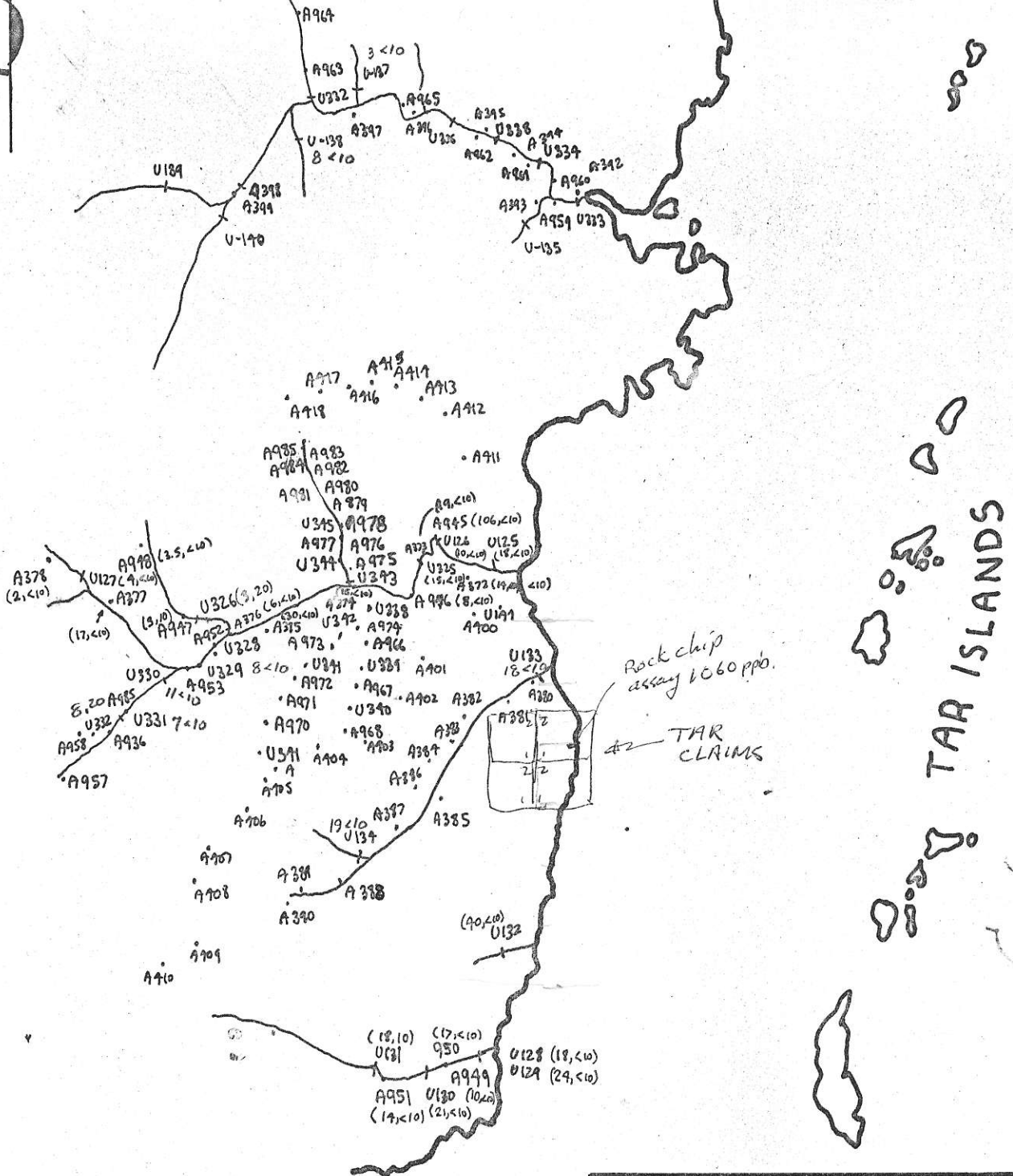
(E) LYELL ISLAND (N.T.S. 103 B/11W,12E)

Two camps were established on Lyell Island; Lyell central (103 B/11W) and Lyell south (103 B/12E). Lyell central is discussed in Appendix I by B. Atkinson and G. Marchak. Locations of geochem coverage and a few results are shown on Figure 9. The only outstanding sample for which results have been received is a rock chip from a narrow quartz vein running (1060 ppb). This sample will be checked and covered by close space soil lines. Four 2-post claims should provide temporary protection until results are in for the remaining soils and silts. The reason why not all results are together will be investigated.

At south Lyell a rock chip sample running 160 ppb Au was checked by a short camp using soil lines and continuous chip samples as indicated in Figure 10. Four 2-post claims were located. The area is underlain by a wide shatter zone between post tectonic intrusives on the west and Masset rocks on the east. The anomalous rock sample contained veinlets of drusy quartz.

N

LYELL ISLE



LEGEND

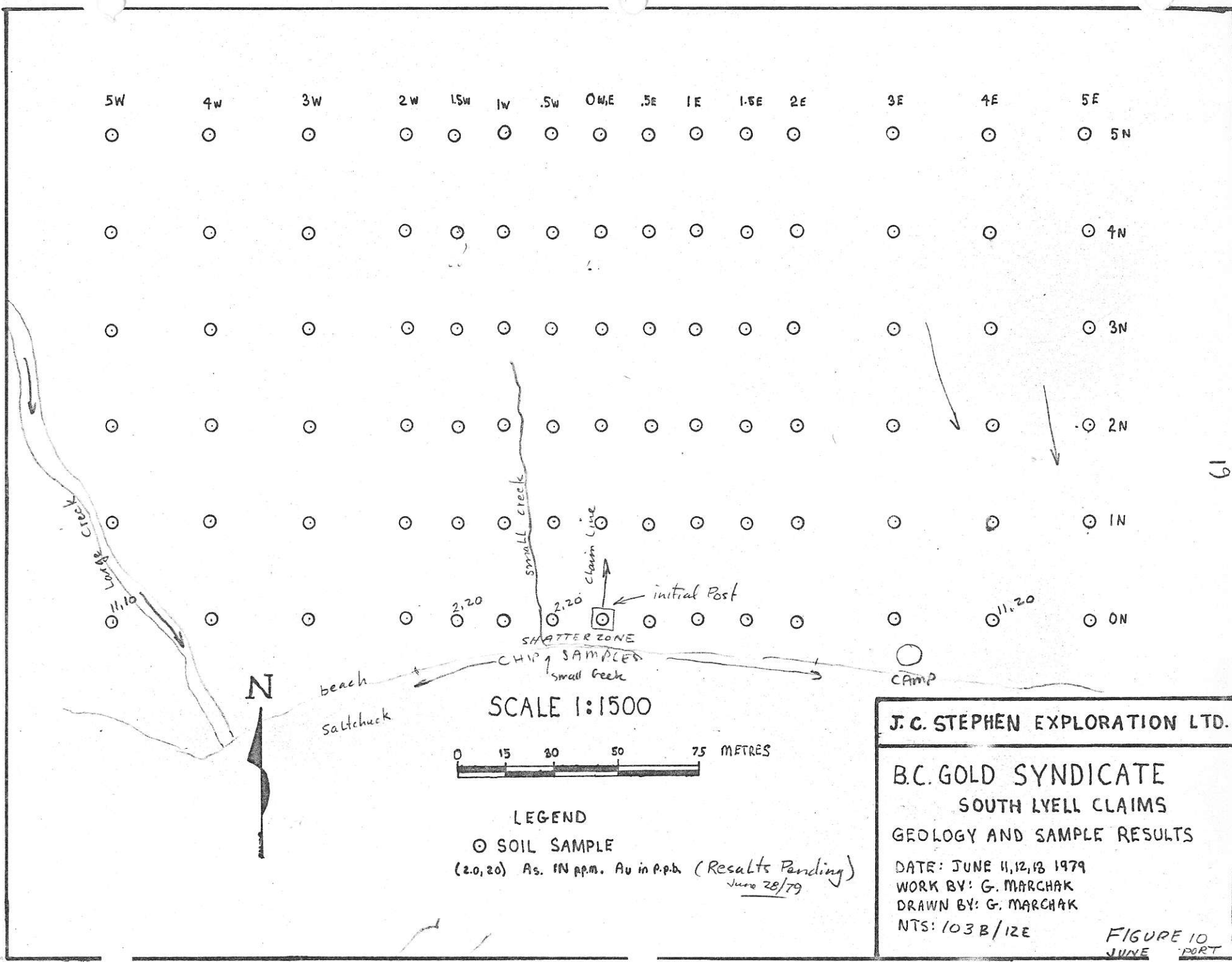
- U-133 SILT SAMPLE
- A-971 SOIL SAMPLE
- (2, 20) As in p.p.m., Au in p.p.b

J.C. STEPHEN EXPLORATIONS LTD.

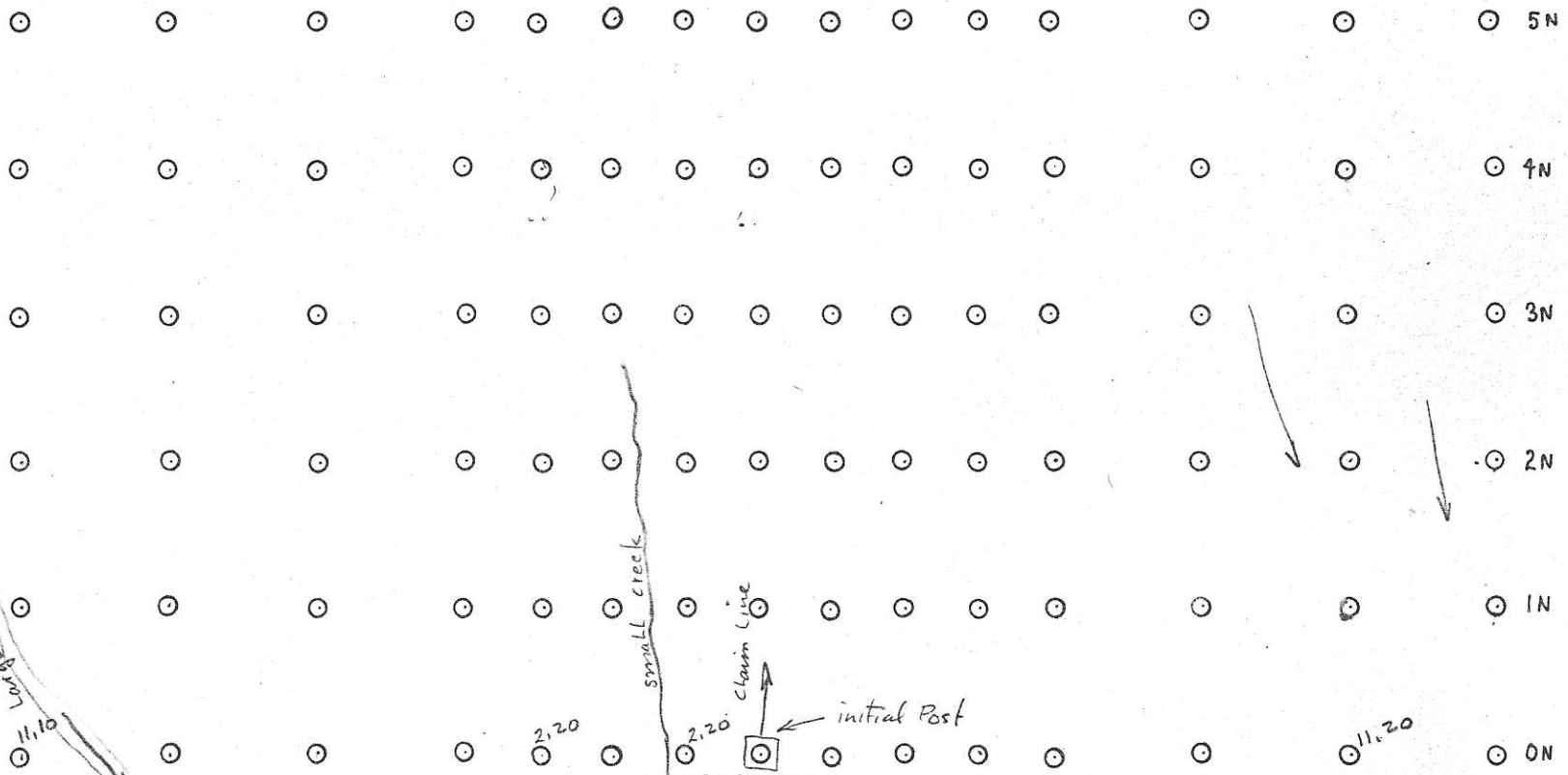
BC. GOLD SYNDICATE
 CENTRAL LYELL ISLAND
 GEOLOGY AND SAMPLE RESULTS

DATE: JUNE 1979
 WORK BY: B. ATKINSON
 G. MARCHAK
 DRAWN BY: G. MARCHAK
 NTS.: 103B/11W

FIGURE 9
 JUNE REPORT



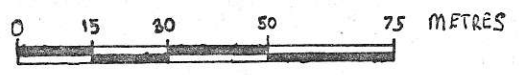
5W 4W 3W 2W 1.5W 1W .5W 0W/E .5E 1E 1.5E 2E 3E 4E 5E



N

beach
Saltchuck

SCALE 1:1500



LEGEND

○ SOIL SAMPLE
(2.0, 20) As. 1N ppm. Au in p.p.b. (Results Pending)
June 28/79

J.C. STEPHEN EXPLORATION LTD.

B.C. GOLD SYNDICATE
SOUTH LYELL CLAIMS
GEOLOGY AND SAMPLE RESULTS

DATE: JUNE 11, 12, 13 1979
WORK BY: G. MARCHAK
DRAWN BY: G. MARCHAK
NTS: 103B/12E

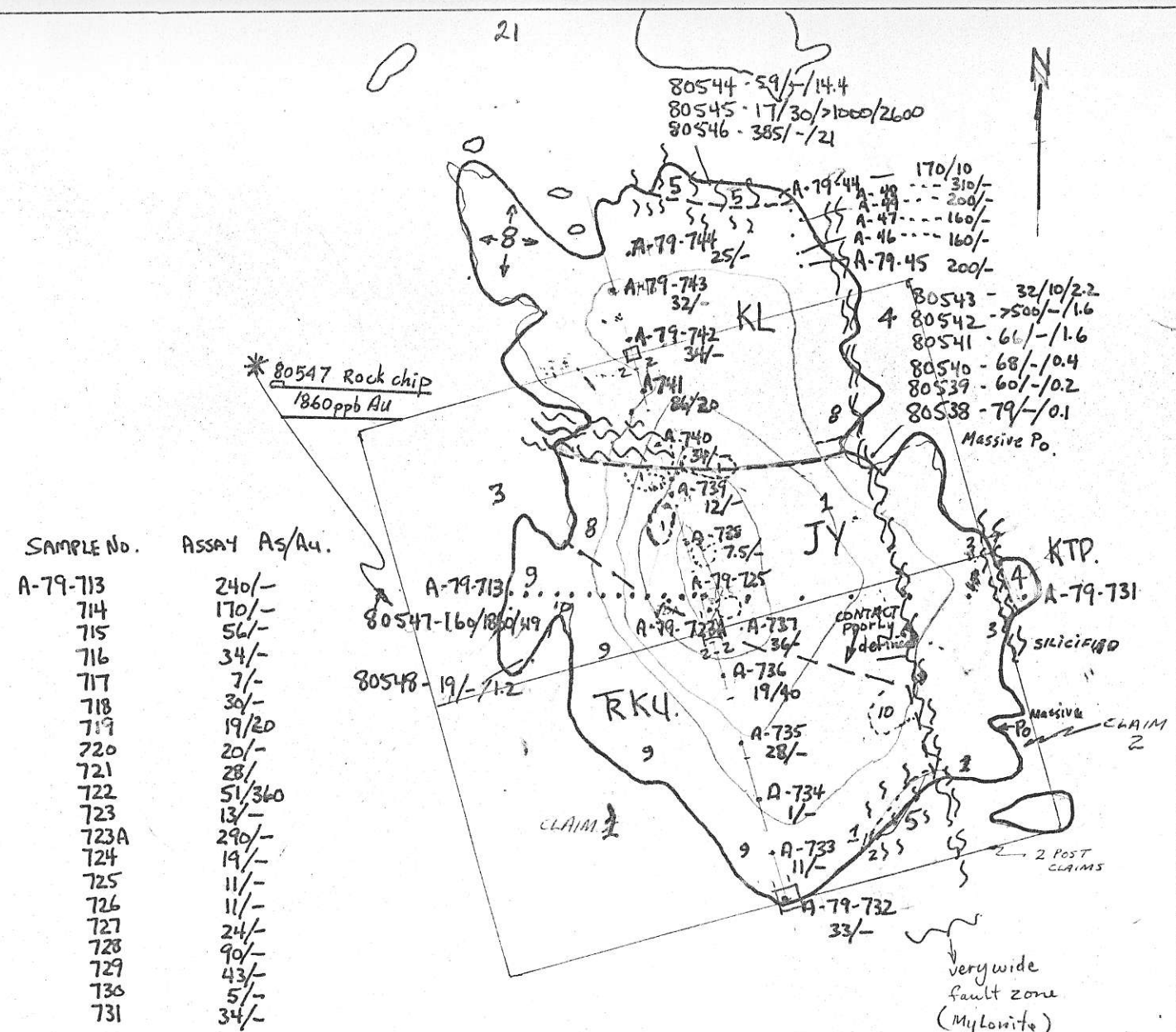
FIGURE 10
JUNE 'PORT

(F) ALDER ISLAND (N.T.S. 103 B/6W)

Attention was drawn to Alder Island because of unique old showings reported to contain Ni-Cu in pyrrhotite rich pyroxene-garnet skarn cut by late calcite veins that carry arsenical alledmontite (a natural Sb-As alloy). The skarn showings are of academic interest in the differing mineralogy and setting as compared to the normal metamorphic copper-magnetite skarns of the Insular Belt. Alder Island is just slightly over 1 km in length but is underlain by some of the most complex rock assemblage in the Charlottes in Sutherland-Brown's (1968) estimation (Page 193).

Geology, preliminary sampling and claim location are shown on Figure 11. The most significant result is a rock chip in silicified thinly bedded, black argillite on the west shoreline. A soil sample directly east of the rock sample ran 51 ppm As and 360 ppb Au. This is the type of sample that could only be taken in a program geared for disseminated gold.

Recording of the Alder Island claims is scheduled for June 29 and follow up work to begin in early July. A camp will be established on northern Burnaby Island because of the lack of drinking water on Alder. The contact between the upper Kunga Formation and the Burnaby Pluton will also receive attention from this campsite.



SAMPLE No.	ASSAY AS/AU.
A-79-713	240/-
714	170/-
715	56/-
716	34/-
717	7/-
718	30/-
719	19/20
720	20/-
721	28/-
722	51/360
723	13/-
723A	290/-
724	19/-
725	11/-
726	11/-
727	24/-
728	90/-
729	43/-
730	5/-
731	34/-

LEGEND - GEOLOGY.

- JY JY YAKOUN - 1 - fault zone skarn, sheared volcanic greenstone.
- 2 - amygdaloidal basaltic dykes
- 3 - silicified chill margin with KTP.
- KTP KTP KTP 4 - granite pluton. (HBL diorite)
- KL KL LONGARM 5 - skarn, mylonite
- 6 - skarned sandstone well bedded.
- 7 - thinly bedded cherty siltstone
- ? 8 - massive to poorly bedded skarn.
- RKU RKU KUNGA 9 - thinly bedded argillite
- 10 - massive grey marble.

Fault zone.
 P0 - pyrrhotite.
 Topo contour.

0 100 200 300 400 METERS
SCALE: 1:110,000

J C STEPHEN EXPLORATIONS LTD.

B.C. GOLD SYNDICATE
ALDER ISLAND

GEOLOGY and SAMPLE RESULTS

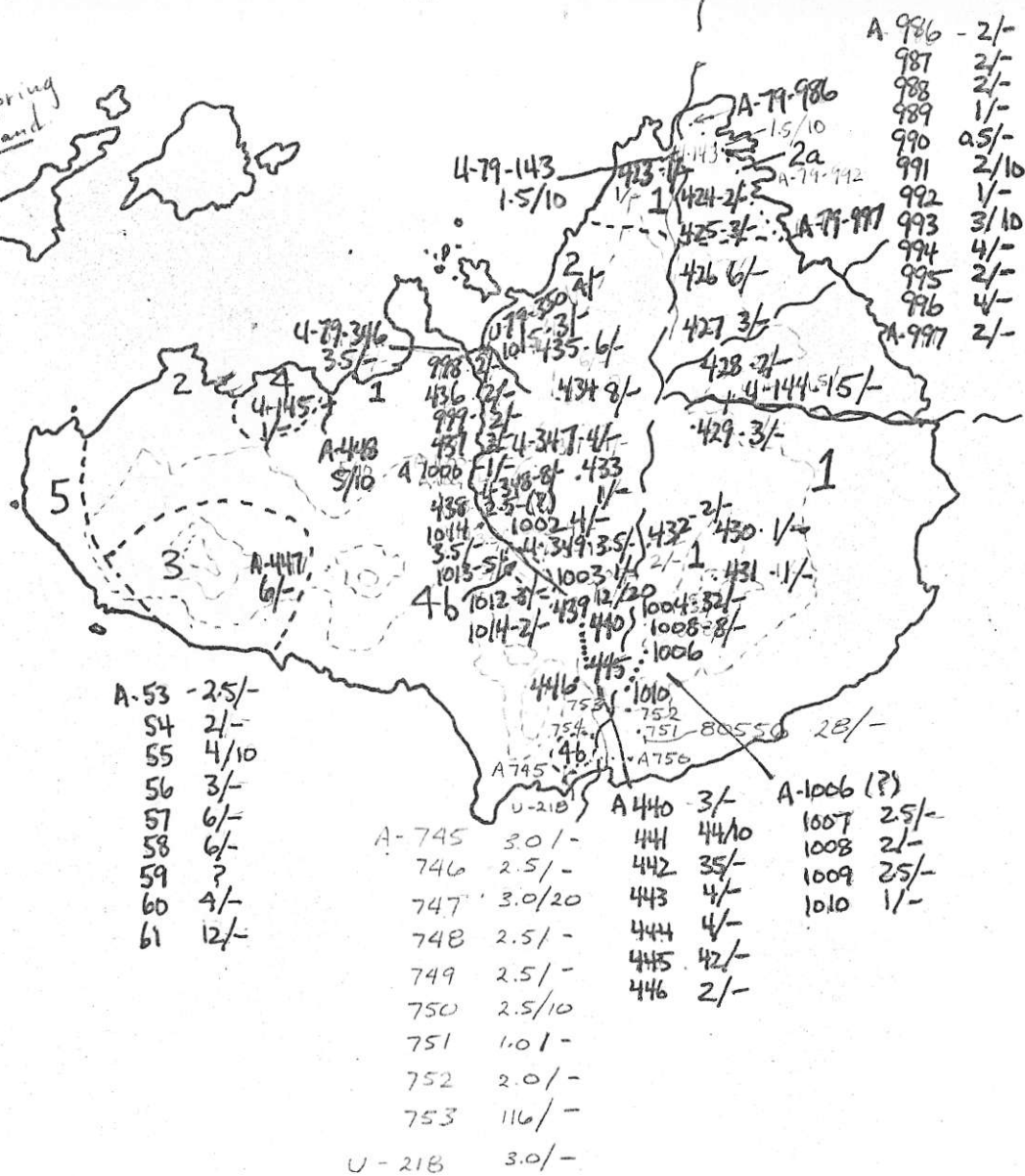
DATE JUNE 1979 WORK BY: J. SHEARER
J. CLARKE

NTS 103 B6W DRAWN BY: B. ATKINSON

FIGURE 71
JUNE REPORT

(G) RAMSAY ISLAND (N.T.S. 103 B/11W)

Ramsay Island is almost completely underlain by Masset age intrusives, flows, pyroclastics and their associated proximal volcanoclastic sediments. Only on the extreme west point is Longarin Formation exposed. From selected spot landings on prominent features, hopes were high that Ramsay would prove to be a focus of Eocene Vulcanism. Abundant faulting with associated pyrite was observed and coupled with an unusual variety of volcanoclastics, the island appeared to hold promise. However on closer inspection, from a camp on the north coast, the sulphide bearing areas are actually fairly localized. Results are plotted on Figure 12 and show very low As and Au values. There is no encouragement for follow up work.



A-986	- 2/-
987	2/-
988	2/-
989	1/-
990	0.5/-
991	2/10
992	1/-
993	3/10
994	4/-
995	2/-
996	4/-
A-997	2/-

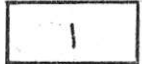
A-53	- 2.5/-
54	2/-
55	4/10
56	3/-
57	6/-
58	6/-
59	?
60	4/-
61	12/-

A-745	3.0/-
746	2.5/-
747	3.0/20
748	2.5/-
749	2.5/-
750	2.5/10
751	1.0/-
752	2.0/-
753	11.6/-
U-218	3.0/-

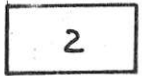
A-440	3/-
441	44/10
442	35/-
443	4/-
444	4/-
445	42/-
446	2/-

A-1006 (?)	
1007	25/-
1008	2/-
1009	25/-
1010	1/-

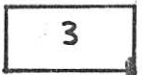
MASSET FORMATION



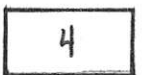
1a Agglomerate - coarse clastic - lahar, poorly developed bedding, occasional hematitic matrix
1b Lapilli tuff - agglomerate



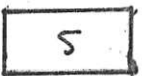
BASALT - amygdaloidal, dark weathering, magnetic
2a basaltic dykes



GABBRO - coarse grained, hornblende
3a gabbroic dykes



Rhyolite 4a white quartz eye, breccia
4b rhyodacite



LONGARM FORMATION
SANDSTONE, SHALE

Shatter Zone, fault

Geological Contact - definite assumed.

SCALE 1: 50,000



Eocene
UPPER CRETACEOUS

J C STEPHEN EXPLORATIONS LTD.

BC GOLD SYNDICATE
RAMSAY ISLAND

GEOLOGY and SAMPLE RESULTS

J. SHEARER
DATE: JUNE 1979 WORK BY: B. ATKINSON
J. MARCIK
NTS: 103 B11W DRAWN BY: B. ATKINSON.

FIGURE 12
JUNE REPORT

(H) MORESBY CAMP AREA (N.T.S. 103 F/1E, 4W)

Several man days were spent on the Rennell Sound-Louscoone Inlet fault system through its' continuation from Upper Deena Creek to Gillatt Arm (Moresby Camp). One notable feature is that Koohoo Hill is composed entirely of Masset age felsite. Locations for samples collected in the Moresby Camp area are plotted on Figures 13, 14 and 15 (Results are pending). Figure 16 shows the location of the proposed Dass camp and the Hemming Head reverted crown grants.

(I) FIPKE SAMPLES

On June 21 a phone call was made to Hart Bickle of Chemex Labs in regard to the Fipke orientation samples. Mr. Bickle was concerned that there was not enough sample in about half the group to obtain a good gold determination and also save a small amount for binocular microscope examination. It was decided that Chemex go ahead and do the best job possible under the circumstances and not worry about setting any sample aside for reference. The orientation samples were shipped to Fipke on May 17th, P.W.A. air freight. Results should be received shortly.

GEOCHEM LOCATIONS FOR MOSQUITO LAKE - Q.C.I.

B.C. GOLD PROGRAM - JUNE 1979.

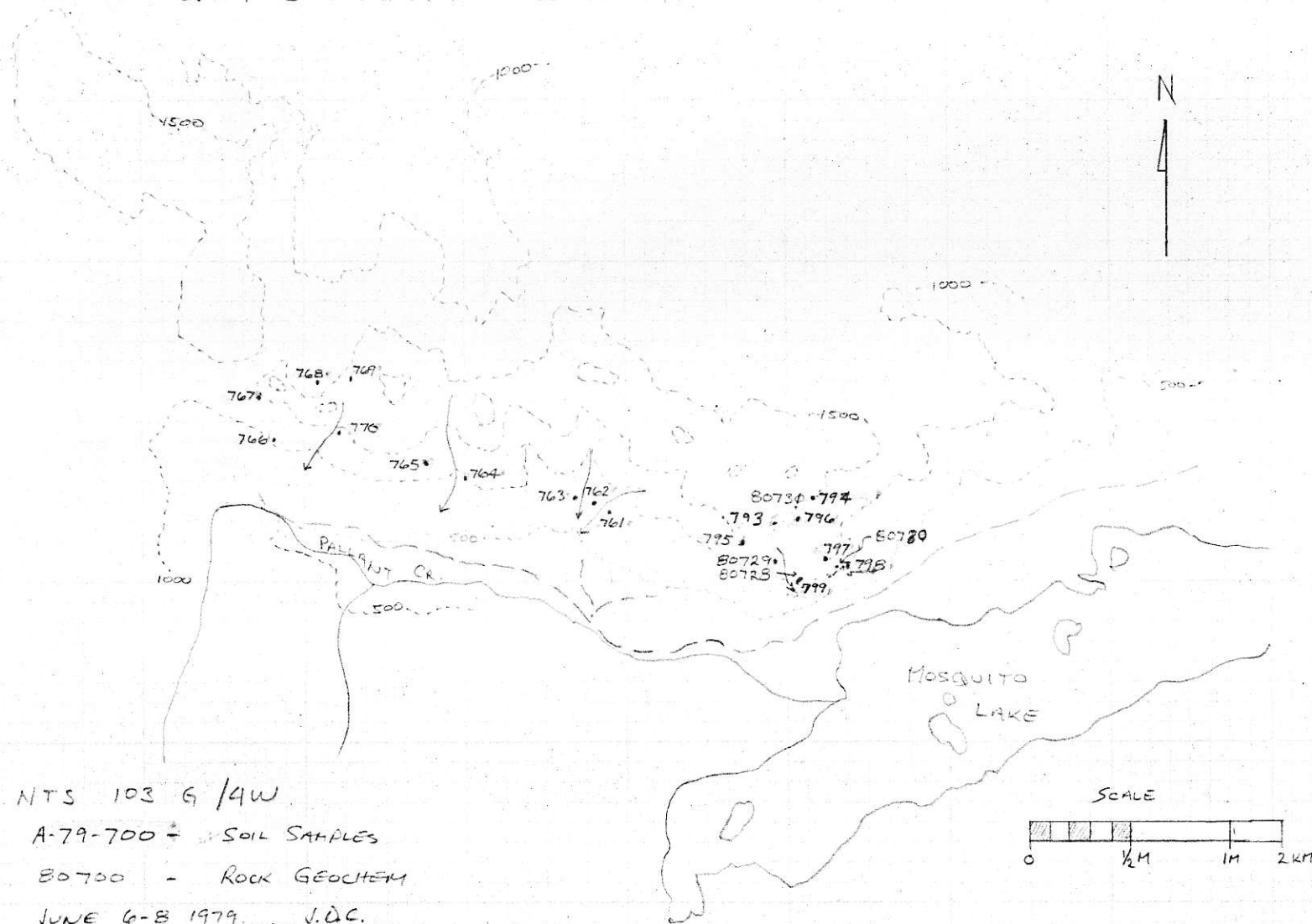
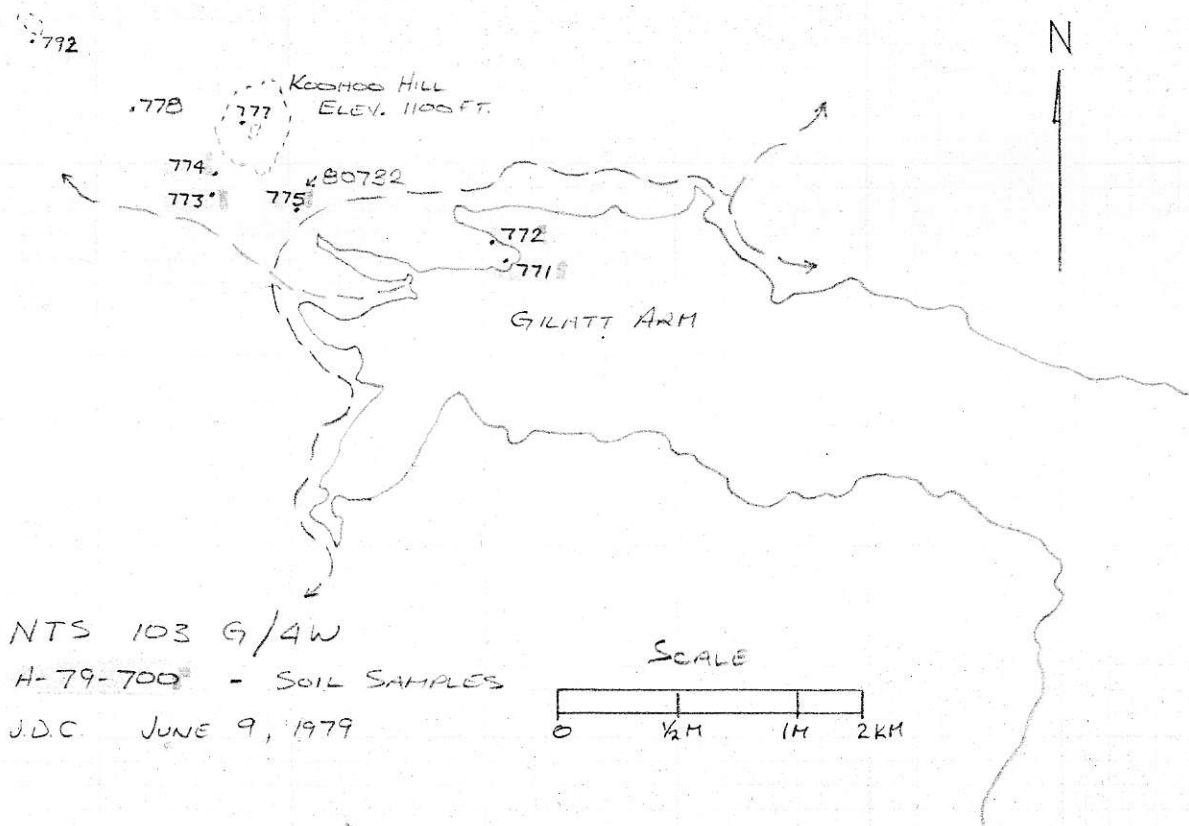


FIGURE 13
JUNE REPORT

GEOCHEM LOCATIONS - KOOHOO HILL - QUEEN CHARLOTTE ISLANDS
BC GOLD PROGRAM - JUNE 1979



NTS 103 G/4W

H-79-700 - SOIL SAMPLES

JDC JUNE 9, 1979

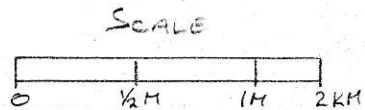
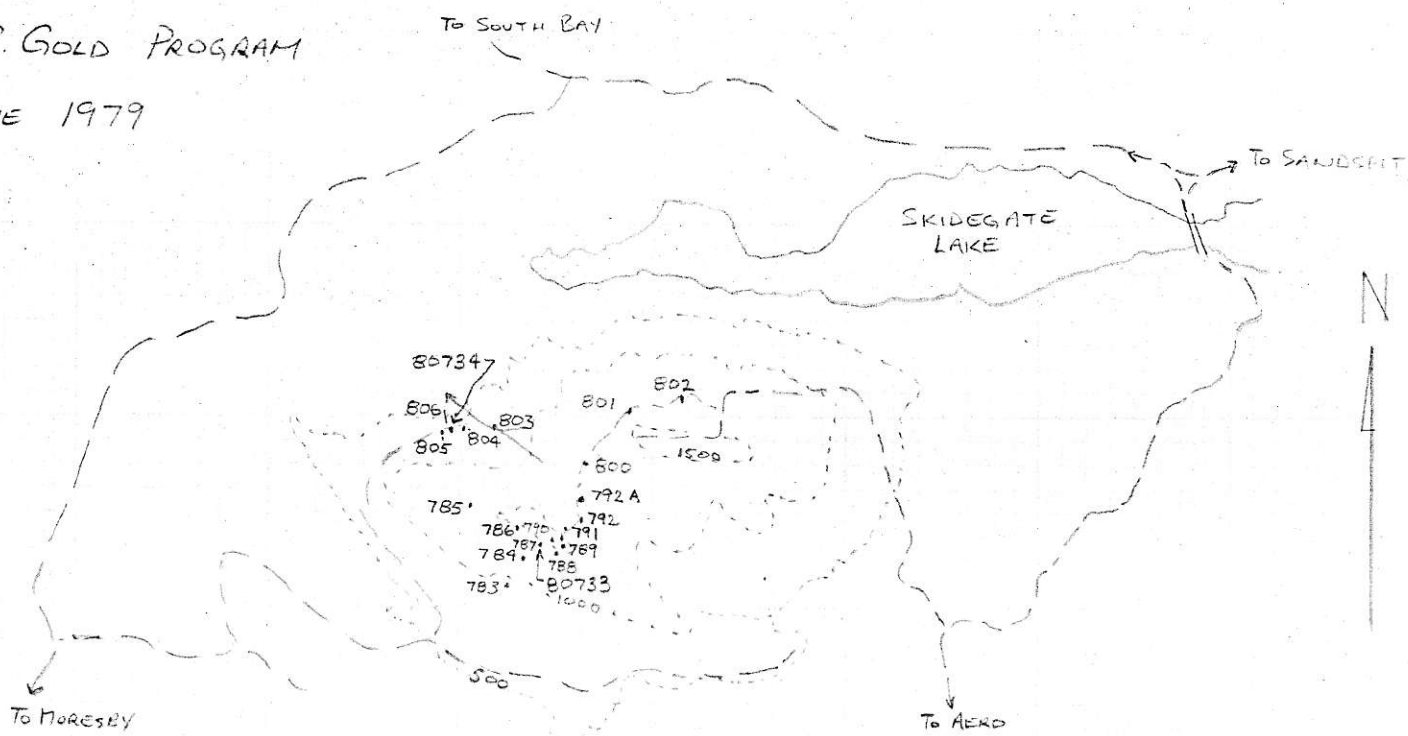


FIGURE 14
JUNE REPORT

GEOCHEM LOCATIONS FOR SKIDEGATE LAKE - QUEEN CHARLOTTE ISLANDS

B.C. GOLD PROGRAM

JUNE 1979



NTS 103 G/4W

A-79-700, 800 - SOIL SAMPLES

80706 - ROCK SAMPLES

J.D.C.

JUNE 12, 1979

KOOHOO HILL

SCALE 1:50,000

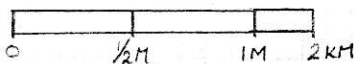


FIGURE 15
JUNE REPORT

ALL Au RESULTS 10ppb OR LESS

JCS July 21/79

I S L A N D

MOUNT CARL

NORTH

Lim

Vertic

QUEE

L 1937
TL 1204

L 1938
TL 1203

DASS
CAMP

Nelson
Point

Breaker
Bay

TO WEST SEE MAP 103B/13W

SELWYN

Dase Pt.

Huswell

Island

*Kingway Rk.

Procter Rocks
Harbridge Point

INLET

TALUNKWAN
ISLAND

Thompson Pt
Harbour

L 2444

CH

TALUNKWAN ISLAND

39236A
L 137
REV. CO.

39236
L 138A

39237
L 136
REV. CO.

39236
L 138
REV. CO.

39240A

Heming Head

SCALE 1:50,000

NTS 103E/13E

FIGURE 16

JUNE REPORT

- 15 -

Helmet
Island

CONCLUSIONS AND RECOMMENDATIONS

Initial results of soil, silt and rock sampling indicate three three areas of high priority for follow up work and good potential for disseminated gold mineralization. All three areas; (1) Crescent Inlet, (2) Alder Island and (3) Central Lyell have been covered by claims. Additional prospecting is underway to define the maximum limits of favourable ground to ensure proper claim protection.

The initial Charlottes phase of the programs is scheduled to wind up toward the latter half of July in preparation for a move to the Greenwood-Franklin area. Consideration should be given immediately to the planning of detail follow up work to fully assess the Charlottes discoveries in the fall of 1979.

Respectfully submitted,

Joe Shearer

JS/ms

APPENDIX I

GEOLOGICAL REPORTS ON:

- (A) PACOFI BAY CAMP May 24 - 28, 1979
- (B) DANA INLET CAMP May 28 - 30, 1979
- (C) LYELL ISLE CAMP MAY 31 - June 7, 1979

by

Brian Atkinson
John Clarke
Geordan Marchak

GEOLOGY REPORT

PACOFI BAY, QUEEN CHARLOTTE ISLANDS

B.C. GOLD SYNDICATE

May 24 - 28, 1979

B Atkinson and J. Clarke

GEOLOGY REPORT
PACOFI BAY
QUEEN CHARLOTTE ISLANDS, B.C.
B.C. GOLD PROJECT
MAY 24 - 28, 1979

INTRODUCTION

Soil and silt samples were collected from the ridges and creeks of the area. Soils include A-79-337-361 and A-79-671 to 697. Silts include U-79-110-122 and U-79-208-212. Rock samples to be analysed are 80635 and 80636.

GEOLOGY

The area is dominated by a thick sequence of interfingered rhyolitic and basaltic breccias and agglomerates. These agglomerates often show flow banding and lineation. Fragments vary in size from <1mm to > 30 mm, the most common size being about 1 - 2 cm. Associated with these agglomerates are interbedded tuffs and lapilli tuffs. Graded bedding may be seen in large outcrops. A feldspar porphyry unit was observed interbedded with flow banded tuffs. This porphyry contained abundant orthoclase phenocrysts upwards. Minor volcanic sanstone, cherty rhyolites, devitrified glass, andesites, and rhyodocites were also observed. Andesite, dactite and diabase occur as cross-cutting dykes. Tiny quartz veins are often associated with dyking.

The occurrence of rhyolites with basaltic fragments, and basalts with rhyolitic fragments, suggests different vent sources for the acid and base members. It is presumed these vents were simultaneously active, producing the intermixing of lavas. A simple magmatic differentiation is unlikely to produce such interfingering of rhyolites and basalts in the cyclic sequence observed.

STRUCTURE

Flow banded tuffs have a predominant S.W. strike with highly variable dips to the North. Most often, however, primary lineations are poorly developed or absent. Several fault bound creeks - 030° - 040° strike, vertical dips, occur on and below ridges. The faults appear to be simple, normal faults of extensional nature with very little displacement.

ECONOMICS

Only an insignificant amount of pyrite was observed. The area merits no further investigation unless geochem results are positive.

GEOLOGY REPORT

DANA INLET CAMP

B.C. GOLD PROJECT

MAY 28 - 30, 1979

Brian Atkinson and John Clarke

GEOLOGY REPORT
DANA CAMP (CHARLIE 3)
B.C. GOLD PROJECT
MAY 28 - 30, 1979

INTRODUCTION

A collection of soils, silts and rocks of the area was made. Soils: A-79-362-371 and A-79-698-712. Silts: U-79-123, 124 and U-79-213, 217. Rocks: 80637 - 80641.

The purpose of this camp was to provide additional information on geology and geochemistry between Crescent and Pacofi Bay camps. A faulted, post tectonic pluton was to be observed.

GEOLOGY

Kunga interbedded limestones and argillites are exposed along beach and in outcrop to the south of camp. They are typical of the sediments exposed at Crescent camp with similar folding, calcite crystallization, etc. The massive grey limestone is not exposed here. Several siltstone beds within the Kunga are well laminated but very poorly consolidated. Maximum exposed thickness of the Kunga is 30m. Where this unit approaches the plutonic intrusion, it is seen to be silicified and brecciated. Actual contact was not seen here.

Overlying the Kunga are Masset formation basalts, tuffs and rhyolites. The contact is slightly unconformable and exposed in several slides and gullies on steep hillsides. The contact between the Masset and an intrusive pluton is well exposed. It is highly silicified and brecciated. "Mill rock" with angular fragments are large as 1m. may be seen. Tiny quartz veins permeate the Masset basalts.

The intrusive pluton has a variable mineralogy from granitic to gabbroic. It is also seen to vary between a simple intrusive to a forceful brecciating injective. The gabbro is observed with partially assimilated wall rock of fine grained gabbro, indicating magmatic pulses and multiple injections. It can also be seen as massive gabbro with pyrite and/or pyrrhotite. It has a textural range between common granitic to feather gabbro.

ECONOMICS

A magnetite skarn was observed to the south of camp. It contains some chalcopyrite (observed by J. Clarke) and will be analysed for Cu, W, Au, Ag, As, Sb. The area is well silicified as compared to previous camps. This silification is undoubtedly related to the plutonic intrusive. Thus such intrusives should be considered for Carlin type and Specogna type gold deposits. Such intrusives may prove to be good exploration targets.

GEOLOGY REPORT

LYELL ISLE

QUEEN CHARLOTTE ISLANDS

B.C. GOLD PROJECT

MAY 31 - JUNE 7, 1979

Brian Atkinson and Geordon Marchak

GEOLOGY REPORT

LYELL ISLE

B.C. GOLD PROJECT

MAY 31 - JUNE 7, 1979

INTRODUCTION

A sampling of soils, silts and rocks was made for the east side of Lyell Island. These were: Soils: A-79-372 to 422 and A-79-945 to 985. Silts: U-79-125 to 142 and U-79-325 to 345. Rocks: 80642 - 80645. Assay for Au, As, Sb.

The area is composed of Masset volcanics and volcanic sediments. Feldspar porphyry with occasional fragments is the dominant rock type. This tends to be very pyritic and often contains pyrrhotite. The sulphides occur as veins, stringers, disseminated and pyrite nodules and fracture fillings. The feldspar porphyry has a variable composition and may contain hornblende phenocrysts as well as rock fragments. The composition of the matrix gives rise to various weathering patterns. The feldspar phenocrysts may be seen altered to clay minerals, in which case the rock takes on a very "crumbly" nature or, as when amphibole is present and the matrix more blueish than the regular green colour, the rock weathers only slightly to a very white colour. The feldspar porphyry is overlain by volcanic agglomerate with a transitional contact. The agglomerate contains sub-angular to rounded fragments from 1 cm. to >10 cm. diameter. A peculiar occurrence is a dyke-like outcrop of agglomerate with a matrix of feldspar-hornblende porphyry with black calcitic fragments (sub-angular) up to 3 cm. diameter. This same feature was also observed on the west hilltop of Pacofi Bay camp in basalts. In the Lyell area, this agglomerate "dyke" is 10 cm. wide x 3 m. long max. observed and crosscut and offset by minor faulting. Both the feldspar porphyry and agglomerate were seen to display flow banding, generally striking SE. The flow banding

emphasizes graded bedding in the agglomerate and cyclic deposition.

Above the agglomerate a lapilli tuff occurs. This tuff has a green to brown red matrix with white to green feldspathic to quartzitic, polygonal to wispy shard-like fragments. In rare occurrences, the fragments may be flow aligned. Due to the highly variable nature of the lapilli tuff in different areas, it may be assumed to be of different origins. The green lapilli tuff grades into a basaltic tuff upwards which in turn is transitional to basalt. The basaltic unit nowhere appears very extensive. A unit of rhyolite, very pyritic, interfingers with feldspar porphyry. This rhyolite unit thickens northwards.

Abundant faulting with associated quartz-calcite vein brecciation affects all units observed. Minor andestite in fault contact with rhyolite was also observed.

ECONOMICS

A large hydrothermal quartz vein intruding along a large fault 014/90 outcrops south of camp on the beach. This has been sampled and will be assayed for gold, As, Sb. In all probability it has been viewed previously but merits consideration. Further, the abundant silting and soil samples should detect any hint of gold mineralization.

APPENDIX II

TIME SHEETS

J.C. STEPHEN EXPLORATION LTD.

1124 WEST 15th STREET
NORTH VANCOUVER, B.C.
V7P 1M9

TELEPHONE (604) 988-1545

NAME J. T. SHEARER

MONTHLY TIME RECORD FOR

~~MAY~~
JUNE

1979

DATE	WORK DONE	CHARGE
1	Alder Island geology + Prospecting	
2	Alder Island staking + prospecting	
3	Ramsay Island, etc P + G	chopper day
4	Move Deena Camp Camp Construction	
5	Finish Mining, Prospecting Moresby Area	
6	Pallant Creek Area Prospecting + Geol.	
7	Ramsay Island Camp Construction	
8	Ramsay Island geol + Prospect	
9	Ramsay Island geol. + CC	
10	Ramsay to Sandspit Yakoun Lake. geology	
11	KooHoo Hill geol + Prospt Moresby	
12	Skidegate Lake	
13	Park Camp - Office DAY drafting	
14	Sandspit - Crescent Inlet initial follow up staking	
15	Crescent Inlet Camp follow up geology staking	
16	Crescent Camp geol. staking	
17	Crescent Camp geology follow up	
18	Crescent Camp Finish Staking	
19	Crescent Camp P + G	
20	Crescent Camp geology	
21	Crescent to Sandspit organization	
22	off day in Moresby organization	
23	Crescent Camp geology	
24	Crescent Camp geology	
25	Crescent Camp geology	
26	Crescent Camp geology	
27	Crescent Camp boat to lookport	
28	Central Lyell geology	
29	in Sandspit Record Alder Claims	
30	Move to Wilson Bay + Alder Island	
31		
TOTAL DAYS WORKED		

#1

#2

Crescent #3

Finish Crescent #2 →

Stake
TAR

J.C. STEPHEN EXPLORATION LTD.

1124 WEST 15th STREET
NORTH VANCOUVER, B.C.
V7P 1M9

TELEPHONE (604) 988-1545

NAME J.D. CLARKE

Box 643,
GARIBALDI HIGHLANDS, B.C.,
VON ITO

MONTHLY TIME RECORD FOR JUNE 1979

DATE	WORK DONE	CHARGE
1	PROSPECT & SAMPLE ALDER ISLAND	
2	STAKE & ✓	
3	RECON. - RAMSAY, HEMMING & SKIDEGATE	
4	MOVED DEENA → MORESBY	
5	SET UP CAMP AT MORESBY	
6	PROSPECT MOSQUITO LK.	
7	✓	
8	✓	
9	PROSPECT KOONOO HILL	
10	RECON. - YAKOUN LAKE	
11	PROSPECT KOONOO HILL	
12	SOUTH SKIDEGATE LK. PROSPECT.	
13	PREP. FOR RETURN TO CRESCENT.	
14	MORESBY TO CRESCENT MOVE. & STAKING.	
15	STAKING CRESCENT ONE	
16	STAKING CRESCENT THREE	
17	LOCATE ANOMALOUS SAMPLES ON CR. I	
18	LOCATE & SAMPLE GRID	
19	✓	
20	GRID LINES OON & BOOE	
21	GRID LINE OOE	
22	PROSPECT & SAMPLE CRESC. ONE	
23	PLOT SAMPLES AND DRY OUT.	
24	PROSPECT & SAMPLE CRESC. 1	
25	PROSPECT & SAMPLE CRESC. 3 WEST.	
26	✓	EAST.
27	PROSPECT AND SAMPLE S.W. CRESC. INLET.	
28	✓	
29	RECORDING CLAIMS AND DRAUGHTING.	
30	MOVE TO WILSON BAY.	
31		
	TOTAL DAYS WORKED	

J.C. STEPHEN EXPLORATION LTD.

1124 WEST 15th STREET
NORTH VANCOUVER, B.C.
V7P 1M9

TELEPHONE (604) 988-1545

NAME BRIAN ATKINSON

MONTHLY TIME RECORD FOR JUNE 1979

DATE	WORK DONE	CHARGE
1	Geology + prospecting	MAIN CREEK - LYELL ISL
2	" " Beach + Creek Sampling	
3	" " 1st creek South of camp	
4	" " 2nd creek North of camp	
5	Sampling, geology of S.W. ridge	
6	Sampling, geology of NW ridge	
7	Moved camp to NE shore RAMSAY IS.	
8	Geology sampling centre island creek to South	
9	Geology, prospecting, sampling NE fault zone	
10	Moved camp to South end LYELL ISLE	
11	STAKING LYELL CLAIMS, geology of N ridge	
12	Chip sample beach o/c prospecting creek	
13	Geology, prospecting, sampling MAIN CREEK	
14	MOVED camp back to CRESENT INLET	
15	STAKING CRESENT CLAIMS	
16	STAKING " "	
17	STAKING " "	
18	STAKING " "	
19	FOLLOW UP SAMPLING OF ANOMALOUS CREEK	
20	DETAIL MAPPING ON SOIL GRID	
21	OUT TO MORESBY CAMP	
22	DRAFTING, PLOTTING, " GEOCHEM.	
23	RETURN TO CRESENT - DRAFTING	
24	DETAIL MAPPING ON SOIL GRID	
25	GEOLOGY, PROSPECTING	W SLOPE GABARO HILL
26	" " " " " "	
27	Geology, prospecting, sampling of SE moraine	
28	Geology, prospecting, sampling of East platon	
29	CENTRAL LYELL ISLAND CLAIM STAKING	
30	MOVE TO WILSON BAY	
	TOTAL DAYS WORKED	

J.C. STEPHEN EXPLORATION LTD.

1124 WEST 15th STREET
NORTH VANCOUVER, B.C.
V7P 1M9

TELEPHONE (604) 988-1545

MONTHLY TIME RECORD FOR JUNE

1979

NAME Geordan Marchak

	DATE	WORK DONE	CHARGE
Fri	1	Up main creek Lyell	
Sat	2	shore traverse to low creek "	
Sun	3	up shore to next creek "	
Mon	4	up main creek farther "	
Tue	5	up main creek trib. to S. "	
Wed	6	up main creek trib. to N "	
Thurs	7	movers to Ramsay from Lyell 1	
Fri	8	Ramsay traverse 1 N. end	
Sat	9	Ramsay traverse 2 middle	
Sun	10	movers from Ramsay to Lyell 2	
Mon	11	Lyell grid 1.	
Tue	12	Lyell grid 2	
Wed	13	Lyell grid 3	
Thurs	14	movers to crescent	
Fri	15	staking behind camp ^{crescent}	
Sat	16	staking North "	
Sun	17	staking East "	
Mon	18	valley grid 00N 00E "	
Tue	19	valley grid 00N 00E "	
Wed	20	cut 00N + 800E ^{CRESCENT}	
Thurs	21	cut 00E "	
Fri	22	sampled 800E line "	
Sat.	23	organization - sample sheet write ups, etc. "	
Sun.	24	sampled 00E, 00N lines ^{CRESCENT}	
Mon	25	finished 00N and 800E lines "	
Tue	26	drafting - Deena, Lyell grids	
	27	^{crescent camp} boat to Crescent Point	
	28	South Crescent Prospecting	
	29	Crescent camp Prospecting	
	30	Move to Alder Island.	
	31		
		TOTAL DAYS WORKED	