

*BC GOLD SYND*

*SECOND QTR REPT.*

*APR - JUNE 1979*  
*JULY 5, 1979*

*JCS OFFICE*

B.C. GOLD SYNDICATE

SECOND QUARTER REPORT

APRIL - JUNE 1979

671535

by J.T. SHEARER

B.C. GOLD SYNDICATE  
SECOND QUARTER REPORT  
APRIL - JUNE 1979

J.C. STEPHEN EXPLORATIONS LTD.  
1124 West 15th Street,  
North Vancouver, B.C.

JUNE 1979

CAMPS AND AREAS PROSPECTED

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

The Kitselas Mountain Area is located 11 km east of Terrace, and is underlain by cataclasites and highly metamorphosed acid volcanics. Although the most recent exploration in 1971 was mainly for disseminated copper, from available short reports there appears to be a good case for volcanogenic mineralization typical of the acid volcanic setting. An area somewhat analogous is KUTCHO CREEK in the Cassiar-Stikine country. There are several small gold showings known around the lower elevations of Kitselas Mountain.

Prior to staking, all useful assessment reports were obtained. These should be a guide to initial work on the claims.

Whoever does the work should make a point of rock piling the claim posts and marking the location line as shown in Figure 1 and 2. All posts are located in open alpine by the two post system.

(B) DEENA CLAIMS

The Deena Area as shown on Figure 3 was given detailed attention by following up the single sample anomaly taken in 1978 and prospecting the favourable structures and lithologice. A 40 unit claim block was staked to cover a complete cross section of diverse geology.

Over 200 rocks, and soil samples were taken. Major drainages were silt sampled. Results of initial samples reveal sporadic highs in arsenic and antimony but very low gold. Because no definable trends of any metal was apparent, the claims were not recorded.

Geology:

The geological framework of the claim group is shown in reconnaissance fashion on Figure 4 (in Pocket). This is a first draft map and could be considerably refined from field notes if time permits.

A pluton ranging from biotite-feldspar porphyry to gabbro together with the carbonate unit exposed on BR 121 were the center of the prospecting effort. A detail soil grid and partial magnetometer survey were carried out on the BR 121 limestone-greenstone contact. The major rock types are shown on Figure 5. All contacts proved to be major faults accentuated by narrow rusty weathering soil filled gullies.

The intrusives are mainly exposed in the northwest corner. Soil and rock sampling around the pyritic, hornfelsed border of the porphyry failed to locate any Au or As anomalies.

One glimmer of hope came when sample A-79-610 returned a value of 500 ppb Au associated with A-79-625 which ran 50 ppb. The # 610 area is in the southwest corner of Deena One claim underlain by well developed pillow basalt. The interpillow areas are often slightly brecciated and filled with distinctive white milky quartz and minor chlorite, epidote, dolomite and pyrite. This rock was originally very porous before the introduction of the quartz. Large outcrop areas are estimated to contain 20 - 30% milky quartz patches 30 - 40 cm in length. Pillows average about 1m x 0.5m. Sample 610 was rerun on May 29th with the final result being 10 ppb. Previous to this a 100m x 50m soil grid was established between A-79-610 + 625.

Results:

High arsenic was recorded around a rusty, silicified fault zone in the BR 121 area. This was probably due to arsenopyrite.

Soil in areas draining the pyritic hornfels border of the porphyry ran up to 60 ppm Sb. although generally much lower.

One anomalous sample at 850 S + 750 W on the BR 121 grid gave 340 ppm As, 60 ppb Au and 16 ppm Sb. No logical explanation is apparent as is the case for the 350 ppb Au result from the 1978 program. (# E-78-237)

In summary the Deena Area proved, with results so far, to be disappointing from a stand point of defining any sort of high Au geochemistry.

(C) CRESCENT INLET 103B/13W

The Crescent Inlet area (refer to Figure 6 to 9 in Appendix I) was chosen because of the large body of Tertiary gabbro lying to the northwest. Samples were taken around this pluton, however the most interesting find was a silicified andesite dyke and its surrounding carbonate country rock. Assays have not been received. If favourable, more claims should be staked and the fault system traced toward the south across Crescent Inlet.

A report by B. Atkinson is included as Appendix I and fully discusses the Crescent Inlet camp and geology.

(D) PACOFI BAY

A camp was established in Pacofi Bay to examine the variety of volcanic and high level intrusive phases, pyritic zones and silicified areas noted on Red Top Mountain. General sampling was carried out although there was not enough interest to keep the camp for a full week. Results are pending. A report from B. Atkinson is expected at the end of the Dana Inlet camp.

(E) SOUTH DANA INLET

South Dana Inlet is an area of intense metamorphisms bounded by two major faults. Although a small post tectonic granitic pluton is exposed in the north there is supposedly an extension of the pluton under the metamorphosed sequence. A good section of Masset Volcanics is also present and some traverses will reach to the limits of work done in the Crescent Inlet camp.

(F) HEMMING HEAD

Six reverted crown grants were obtained on Hemming Head on the extreme eastern tip of Talunkwan Island. Original work was done around 1909 consisting of several short adits and one inclined shaft. The property was briefly visited and a suite of rock samples collected. Results have not been received. Of the two soil samples taken one gave 90 ppb Au. If there is any more encouragement from the rocks it is considered worth while doing some follow up. At the one locality viewed, a short adit had been driven on a shatter zone contained in Karmutsen basalts. Tension gash veins are common and many are filled with calcite-quartz-epidote plus minor magnetite, pyrite and chalcopyrite. Some K-spar envelopes are well developed.

(G) DEENA WEST, BR 84, South Skidegate Lake.

Several isolated areas were investigated in a reconnaissance fashion. Attention was mainly drawn to prominent red stain soil areas. In all cases, the stain appears related to major NW faults and are now covered by soil sampling. On BR 84 (Deena West Mainline) another gabbro sill, probably similar to the one exposed on the Deena claims, was prospected without noting any obvious sulphide systema.

(H) LYELL ISLAND, DAWSON HARBOUR - TROUNCE INLET

A camp is proposed for the east coast of Lyell Island. Particularly well exposed pyritic, Masset age, volcanics with complex dyke relationships are the primary target. Pyrrhotite was noted for the first time in Masset rock in this locality. The Dawson Harbour - Trounce Inlet area, just north of the Deena Claims was examined as a possible camp site, however there appears little evidence of any hydrothermal activity. There is a fair amount of agate in veins and vesicles. A camp will not be needed in the Trounce Inlet area. Part of the region can be reached via roads near Yakoun Lake.

(I) ORIENTATION Stream Sediment Samples - Fipke Method

In conjunction with a very informative visit to Cinola, three orientation samples were taken using the Fipke Method of sieving to -40 mesh. The verbal and written instructions of A.O. Birkeland were strictly followed. Each sample took well over an hour to collect. Since P.W.A. has a flight to Kelowna the samples were sent directly to Fipke on May 17.

In a short telephone conversation with Fipke, he mentioned that it was very hard to make sure that the material sampled was truly stream sediment but I assured him that in this case there was no doubt. Two samples were located in the Yakoun River some distance downstream from the Specogna deposit and the third sample on the lower Canoe Creek.



APPENDIX I

CRESCENT INLET CAMP

REPORT

by

B. ATKINSON

## CRESENT INLET FLY CAMP

### GEOLOGY REPORT

#### INTRODUCTION

A fly camp was set up on the north shore of Crescent Inlet on May 17, 1979 to May 23, 1979 with John Clarke and Brian Atkinson. The main purpose of the camp was to examine and prospect around a large gabbroic intrusion known to outcrop west of camp. A representative selection of silts, soil samples and rock samples was collected from the area. Geologic observations were recorded and plotted on the accompanying map. The work done is in attempt to turn up gold prospects. Due to the nature of the project, the need for further work on this area is dependent on favourable geochemical results of the soils, silts and rocks. In the meantime we have located four (4) mineral claims (units) on an interesting quartz vein in the hope it carries gold.

#### GENERAL GEOLOGY

The area consists of KARMUTSEN basalts, (TRIASSIC), KUNGA sediments (JURASSIC-TRIASSIC), YAKOUN andesites (JURASSIC) and MASSET basalt and gabbro (EOCEME).

KARMUTSEN formation is exposed at the tip of the point on the north shore of the inlet east of camp. It is easily confused with MASSET formation which is seen close by. As viewed, the KARMUTSEN is a dark green chloritized basalt, related agglomerates and "crystal" tuffs of plagioclase porphyry. A thin horizontal band (1m) of limestone is seen on a cliff face on the point where the claims are located,

Sutherland-Brown's (S.B.) interlava limestone. Maximum viewed thickness is 50m.

KUNGA FORMATION is readily recognized and subdivided into  
i) a massive grey recrystallized unit with no observed primary features  
ii) an overlying interbedded unit of black and grey-buff limestone, often pyritic, and black argillites with minor white-brown siltstones. Cross-bedding, rip up marks, flame structures and load casts were seen. This subunit readily reveals intense deformation and folding the rocks of the area have experienced. It is widely exposed in the area covered by this camp.

YAKOUN FORMATION consists of andesites, andesitic tuffs, sandstones and fragmental agglomerates. This unit is seen interfingering with the MASSET gabbro as well as being in fault? contact with KUNGA (ii)

MASSET FORMATION seen here includes interfingered basalts, andesites and agglomerates. These are widely exposed between camp and claim group, overlying KUNGA (ii) sediments. The gabbroic unit is a coarse grained typical gabbro as seen on the DEENA CLAIM GROUP. It has intruded and altered porphyritic andesite. Xenoliths of andesite with sharp unaltered boundaries are seen within the gabbro. At the top most section, gabbro shows signs of shearing and minor alteration.

Numerous dykes of rhyolite, diabase, and andesite cross-cut all units except the gabbro. These are usually thin ( $\leq 1$  m) dykes which predate folding and faulting. Often, the andesite dykes are fault related while the rhyolite and diabase dykes occur randomly. Contacts with country rock are generally sharp and unaltered, though brecciation of the country rock is seen in some rhyolite dykes penetrating KUNGA (ii) sediments. A noteworthy feature is the occurrence of "two phase dyking". A rhyolite dyke, cored with andesite represents a possible secondary pulse of intrusion along the initial dyke trace.

## STRUCTURAL GEOLOGY

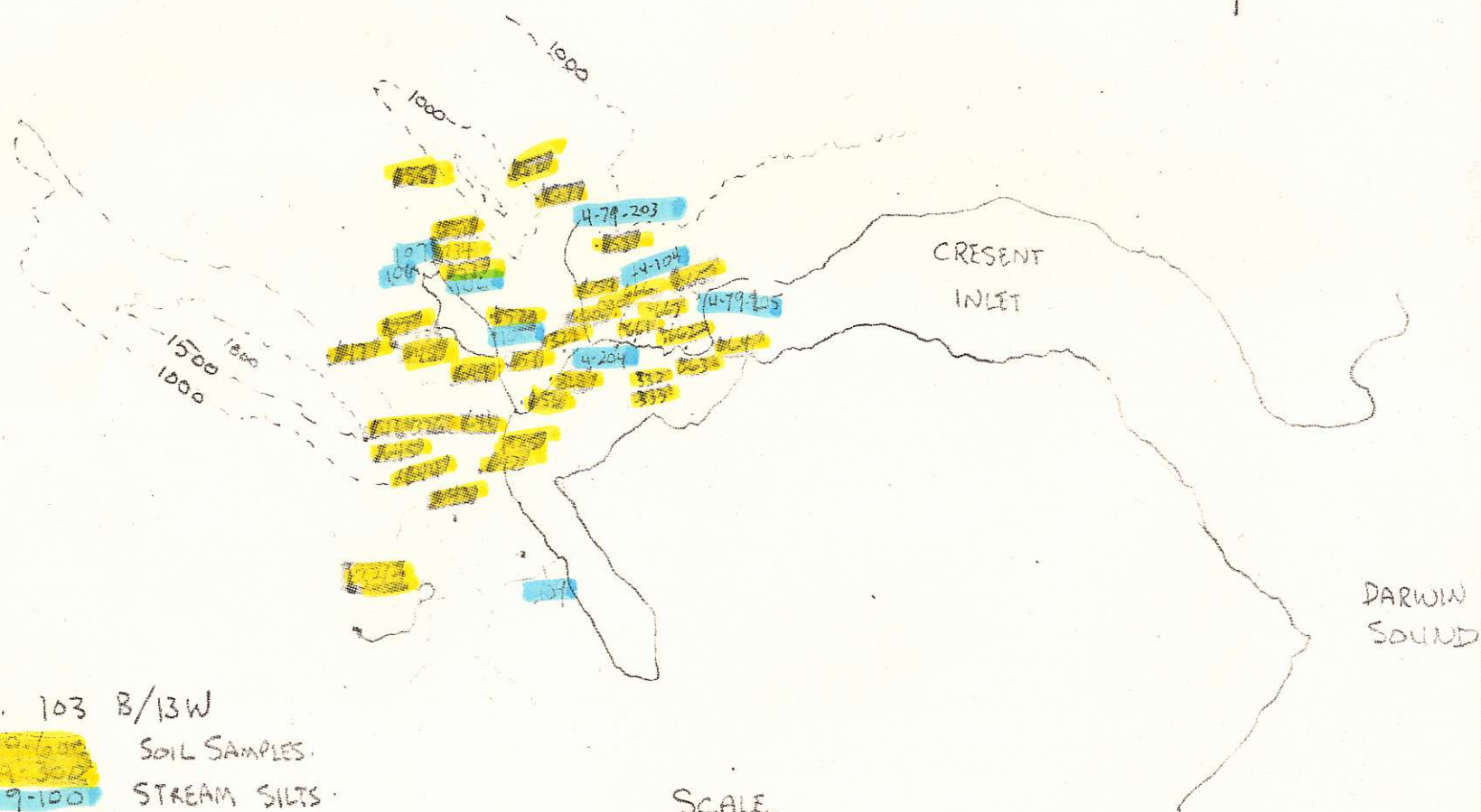
Many small faults are seen throughout the area, often separating differing units, and/or having creeks flowing through them. A main fault system, traceable over approximately 5 km trends at  $28^{\circ}$ . This fault may be a transform fault related to the major faults traceable over the Islands - e.g. - SANDSPIT FAULT, QUEEN CHARLOTTE FAULT. It is of interest in that its trend has a notable bearing on dyke emplacement - dykes often aligned in this direction. No movement was noted on this main fault, though smaller faults often show minor - (several metres) offsettings. The main folding has produced a large anticline exposing both the massive grey KUNGA (i) limestone and KARMUTSEN (?) basalts, on the claim area point. Drag folds on either side of the anticline limbs are seen in the creeks. Smaller scale foldings produce numerous, gentle crested, anticline - syncline series observable throughout the KUNGA (ii). Typical jointing patterns were observed in all formations, but orientations were seldom measured.

## ECONOMIC GEOLOGY

Minor chalcopyrite was seen in a quartz vein in KARMUTSEN (?) basalts - nothing to get excited about but suggestive of mineralization. A most impressive quartz (Hydrothermal) veining has intruded along the main fault system in the area. Prior to this injection, an andesitic dyke had intruded along the same fault. The dyke is now well brecciated by quartz as well as the massive limestone country rock, though to a lesser degree. The maximum observed dimensions of this breccia zone are 100m x 2m x 1m. It is offset 1 - 2 m by small right angle faults. Despite the quartz being milky, we hope this zone will carry trace gold. In this event, a disseminated gold deposit is not expected for this claim group, as silicification is confined within the described narrow zone. However, it may indicate this type of system has the potential for being a source for CARLAND type gold deposits

elsewhere. It is recommended the rock chip samples be run for 30 elements due to the observable size of this quartz veining system. Favourable geochem will obviously require follow-up work, both here, elsewhere along this fault and other faults, as well as immediate enlargement of claim group. Negative geochem results should terminate this claim group before they are recorded.

GEOCHEM LOCATIONS FOR CRESENT INLET  
B.C. GOLD PROGRAM - QUEEN CHARLOTTE ISLANDS  
MAY - 1979.



NTS. 103 B/13W

 SOIL SAMPLES.

 STREAM SILTS.

 4-79-200

J.D. CLARKE, B.A.

MAY 18-24, 1979.

SCALE.

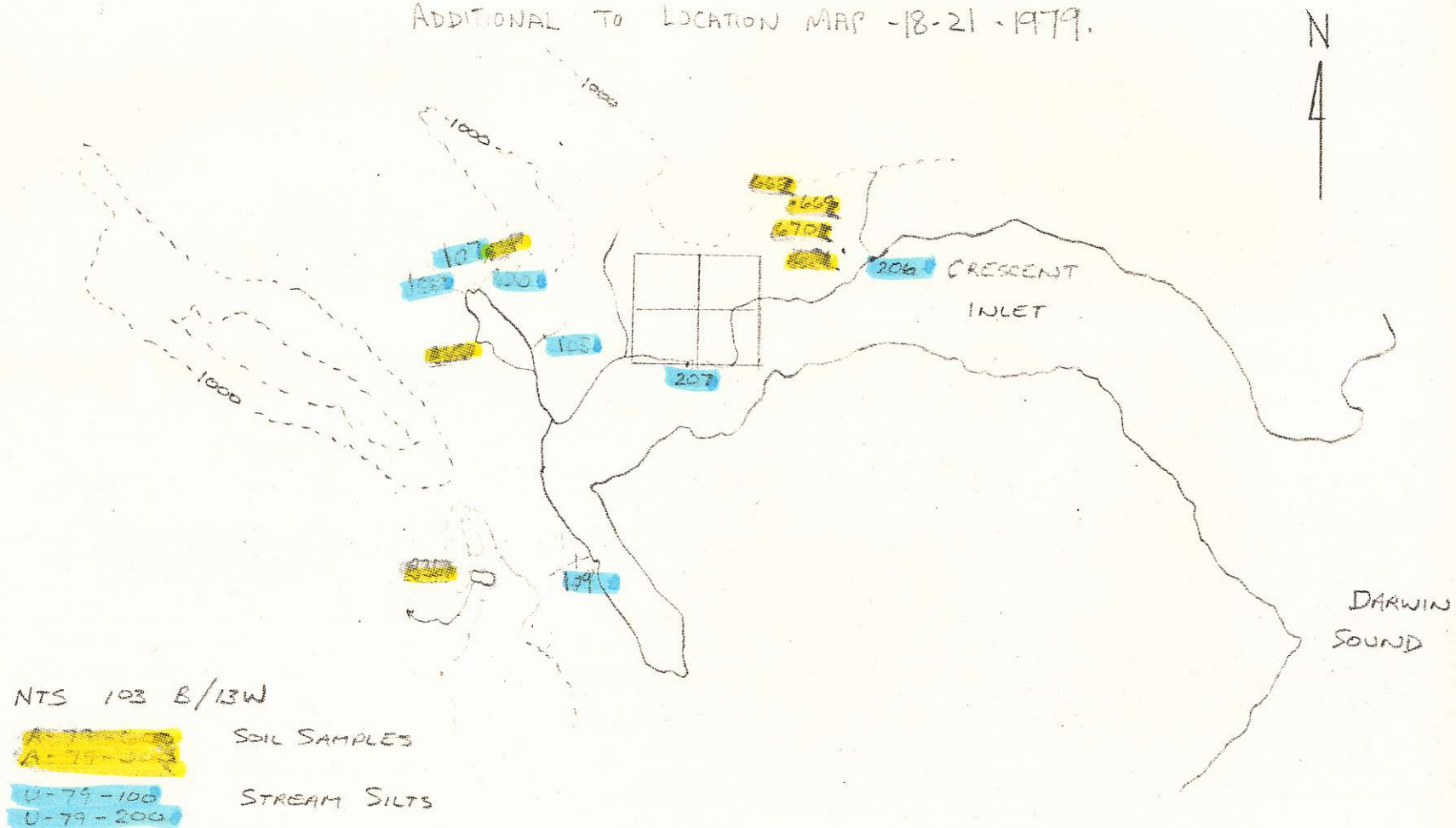
1: 50,000



GEOCHEM LOCATIONS FOR CRESCENT INLET  
B.C. GOLD PROGRAM - QUEEN CHARLOTTE ISLANDS

MAY 1979

ADDITIONAL TO LOCATION MAP -18-21-1979.



NTS 103 E/13W



SOIL SAMPLES



STREAM SILTS

JDC, BA.

MAY 23, 1979

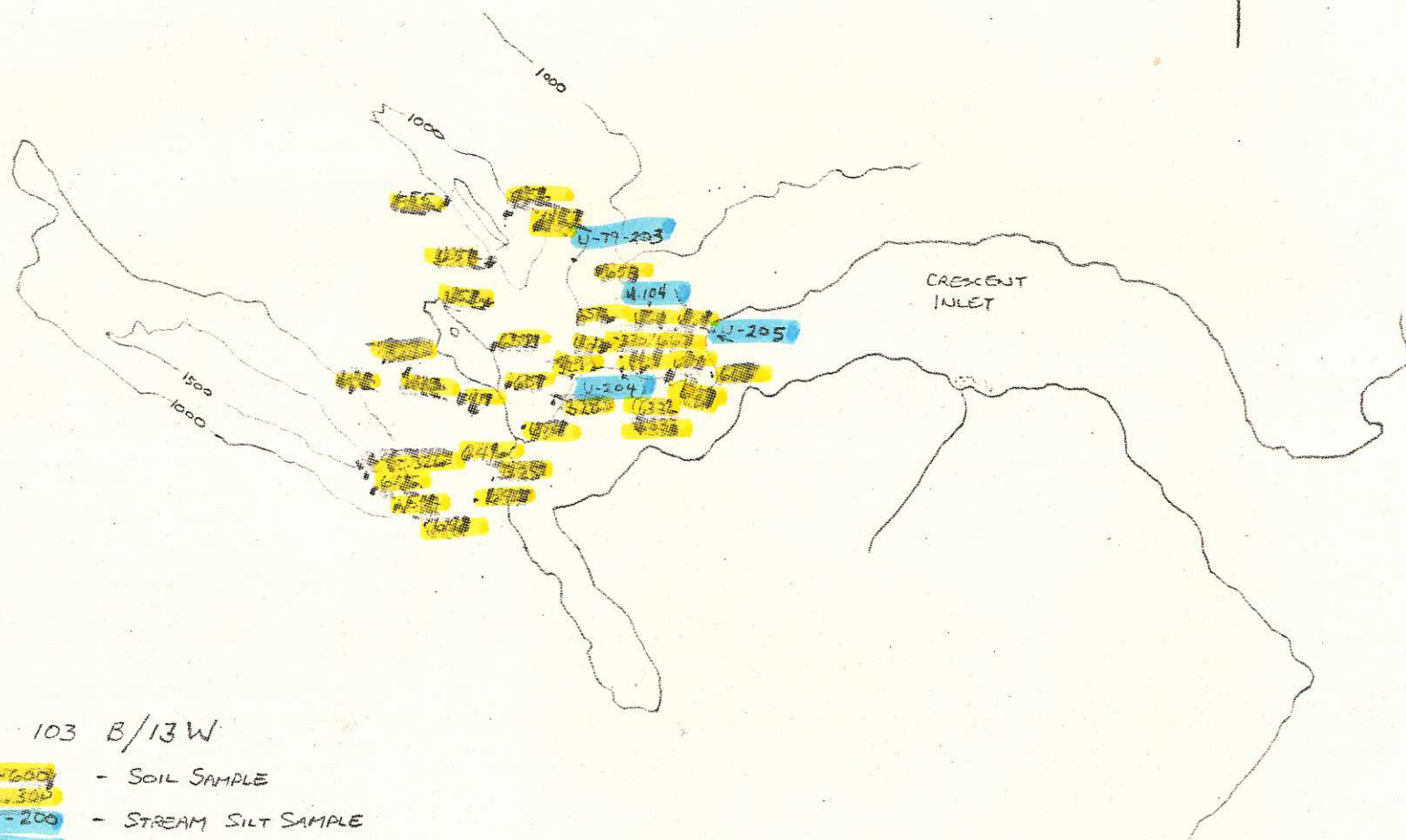


FIGURE 7

GEOCHEM LOCATIONS FOR CRESENT IWLET

B.C. GOLD PROGRAM - Queen Charlotte Islands.

MAY - 1979.



NTS 103 B/13W

- LA-79-1000 - SOIL SAMPLE
- LA-79-300
- U-79-200 - STREAM SILT SAMPLE
- U-79-100

J.D. CLARKE, B.A.

CRESCENT INLET.

MAY 13-21, 1979

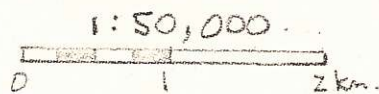
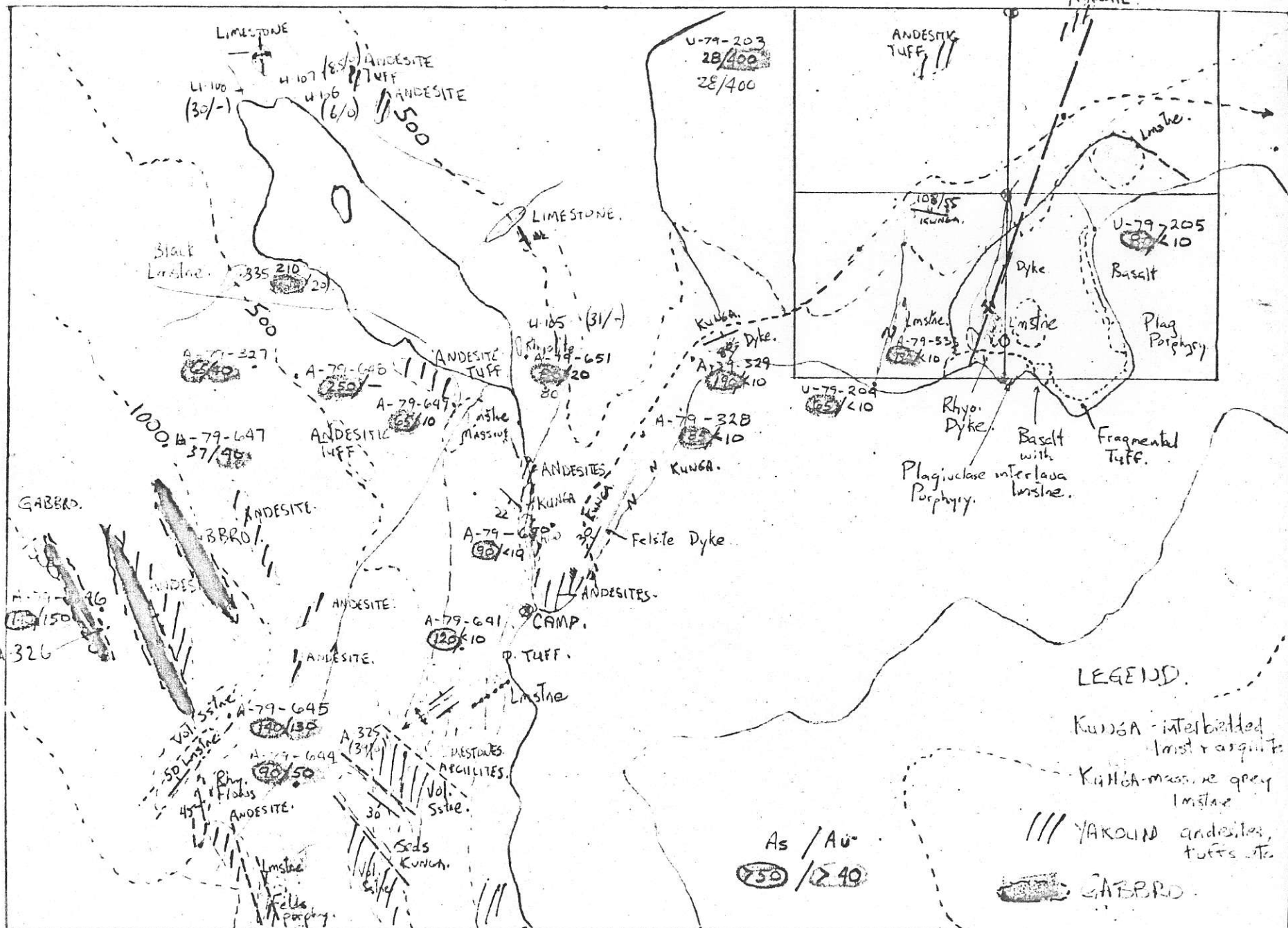


Figure 8



# GEOLOGY OF CRESENT INLET AREA INCLUDING CRESENT CLAIMS LOCATION

Fault on Red Top Mountain  
ANDESITE

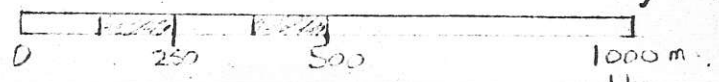


### LEGEND

- KUNGA - interbedded  
lms. & argillite
- KUNGA - massive grey  
lms. & argillite
- YAKOUND andesites,  
tuffs, etc.
- GABRO

As / Au  
50 / 240

SCALE 1 : 12,500. Figure 9



U-79-204  
17/300  
A-336 (15/-)

B.C. GOLD SYNDICATE

FINANCIAL REPORT

JUNE 30, 1979

	<u>April 1 - June 30</u>	<u>Year to date</u>
Advances-Expenses		500.00
Machinery & Equipment		1,610.40
Automotive Equipment	147.56	2,457.56
Food	2,090.68	2,090.68
Maps, Photos, Publications Etc.	214.39	214.39
Claim Recording	57.00	57.00
Geochemistry	5,231.48	5,231.48
Salaries & Benefits	14,601.58	18,039.34
Worker's Compensation	478.04	478.04
Tools & Supplies	1,928.43	2,283.16
Blueprinting, Drafting & Supplies	142.17	148.17
Equipment Rental & Repairs	345.64	345.64
Aircraft Rental	4,211.36	4,211.36
Truck Rental	132.00	132.00
Vehicle Operating Costs	612.61	624.83
Public Relations & Symposiums	13.50	55.25
Travel Expense	936.03	936.03
Telephone, Postage	165.85	168.18
Express, Cartage	137.14	137.14
Insurance		498.00
J.C. Stephen Expl'n Services	1,415.63	2,159.38
Overhead	2,075.40	2,591.06
License Fees	7.00	7.00
Interest & Bank Charges	<u>4.32</u>	<u>4.32</u>
TOTAL EXPENDITURE	34,947.81	44,980.41
TOTAL CONTRIBUTIONS		<u>51,000.00</u>
BALANCE PER BANK		\$ 6,019.59

**J.C. STEPHEN EXPLORATION LTD.**

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

TELEPHONE (604) 988-1545

July 5, 1979

TO: THE PARTICIPANTS - B.C. GOLD DYNDICATE  
NEWMONT EXPLORATION OF CANADA LTD.  
McINTYRE MINES LTD.  
CANADA TUNGSTEN MINING CORP. LTD.

I N V O I C E

Request is made for funds to operate the program  
in the following amounts:-

<u>Newmont Exploration of Canada Ltd.</u>	\$25,000.00
Canada Tungsten Mining Corp. Ltd.	25,000.00
McIntyre Mines Ltd.	5,000.00

J.C. Stephen, Manager

July 5, 1979

TO: The Members B.C. GOLD SYNDICATE

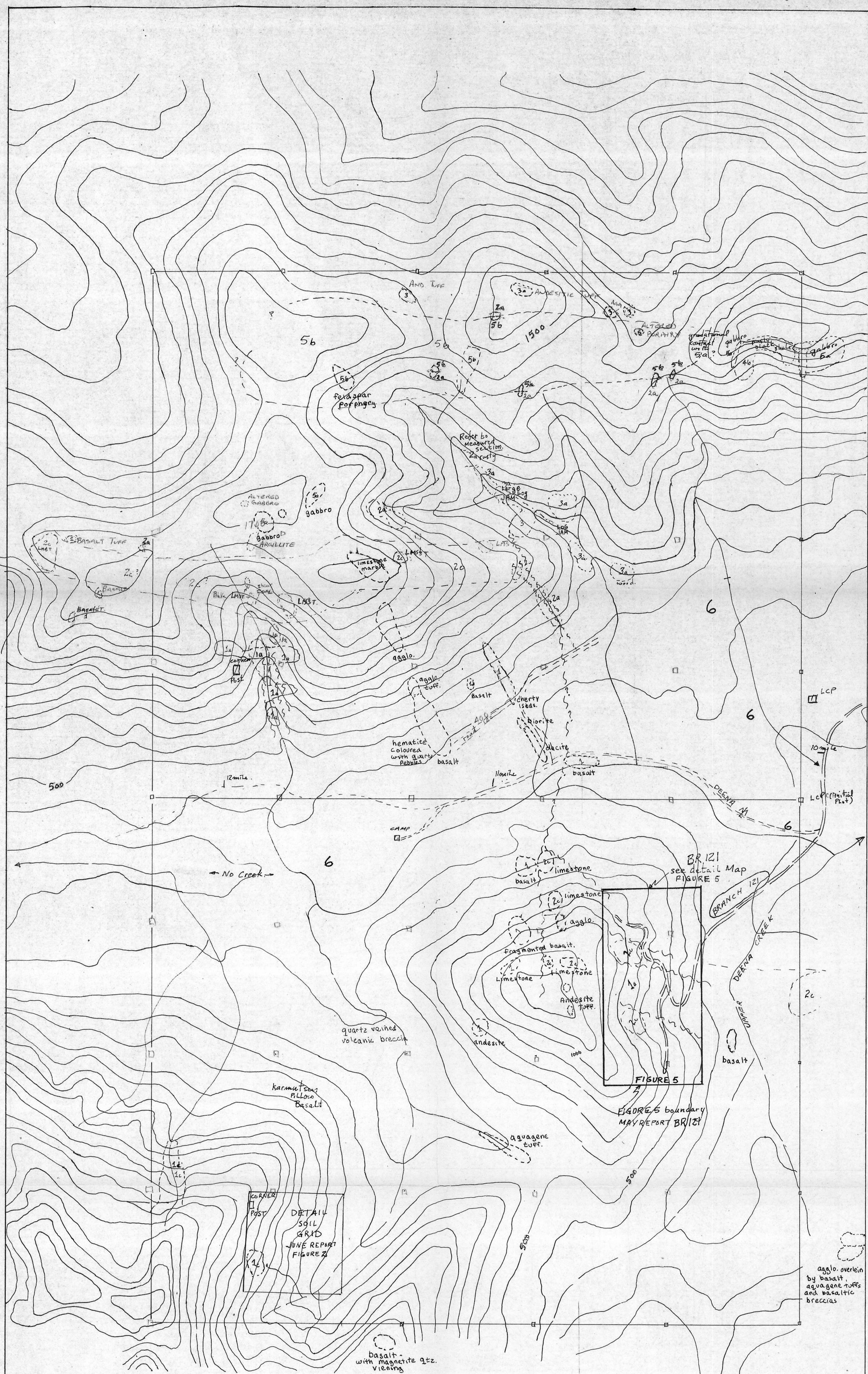
The Second Quarter Report together with a Financial Report and an invoice for further funds are forwarded with this letter.

J.T. Shearers crew went to the Queen Charlotte Islands on April 26. Work primarily centered on follow up of anomalies there. Three orientation samples were taken by C. Fipke in the region of the Cinola deposit, Graham Island. Initial analyses indicates only one fracture is anomalous for gold. We have not yet received a report from C. Fipke. Some reconnaissance exploration was done south of Dease Lake. No gold anomalies were obtained, some streams anomalous for copper and arsenic will be checked out later in the season.

A report covering operation on Queen Charlotte Islands has been submitted by J.T. Shearer. Relevant parts are included as part of the quarterly report.

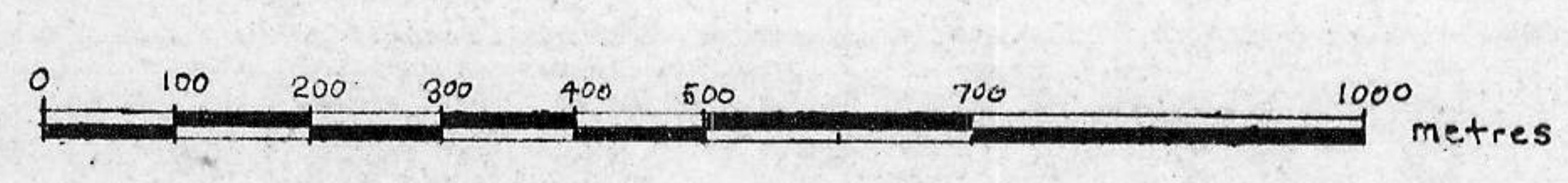
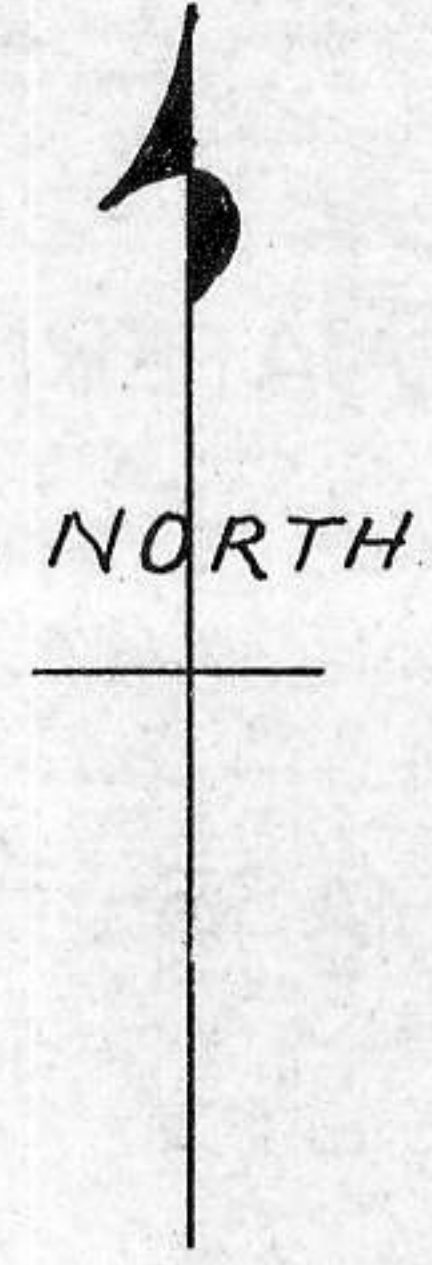
Yours very truly,  
J.C. Stephen Explorations Ltd.

J.C. Stephen



LEGEND

- 6 QUATERNARY — unconsolidated Recent to Pleistocene alluvium, till, and marine drift
- 5 MASSET FORMATION — 5a gabbro  
5b porphyry
- 4 LONGARM FORMATION — 4a sandstone, blueish grey,  
4b shale, black, thinly bedded, rusty
- 3 YAKOUN FORMATION — 3a agglomerate, charred wood fragments, rounded clasts  
3b volcanic sandstone
- 2 KUNGA FORMATION — 2a argillite, black, pyritic, minor siltstone  
2b limestone, black, thinly bedded, fossiliferous  
2c limestone, massive, grey weathering, brown to mottled black, calcite stringers, karst, chert nodules
- 1 KARMUTSEN FORMATION 1a basalt, green, chloritic, amygdaloidal to massive, often sheared, slickensides, magnetic, pyritic  
1b breccia, aquagene tuff  
1c quartz-chlorite-basalt-breccia



SCALE 1:10,000

J.C. STEPHEN EXPLORATIONS LTD.

B.C. GOLD SYNDICATE  
DEENA CLAIMS

GEOLOGY AND SAMPLE RESULTS

FIGURE 4

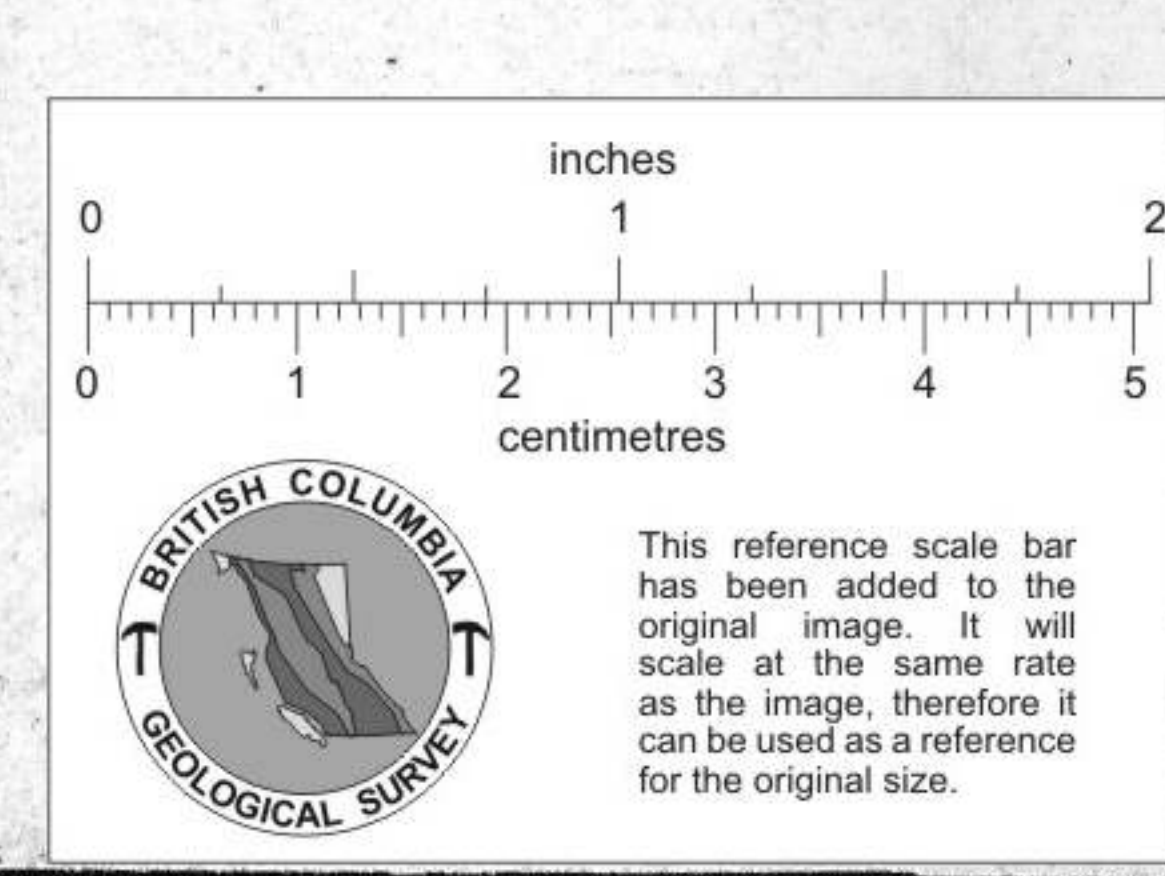
refer to overlay 4a for Sample Locations + Results

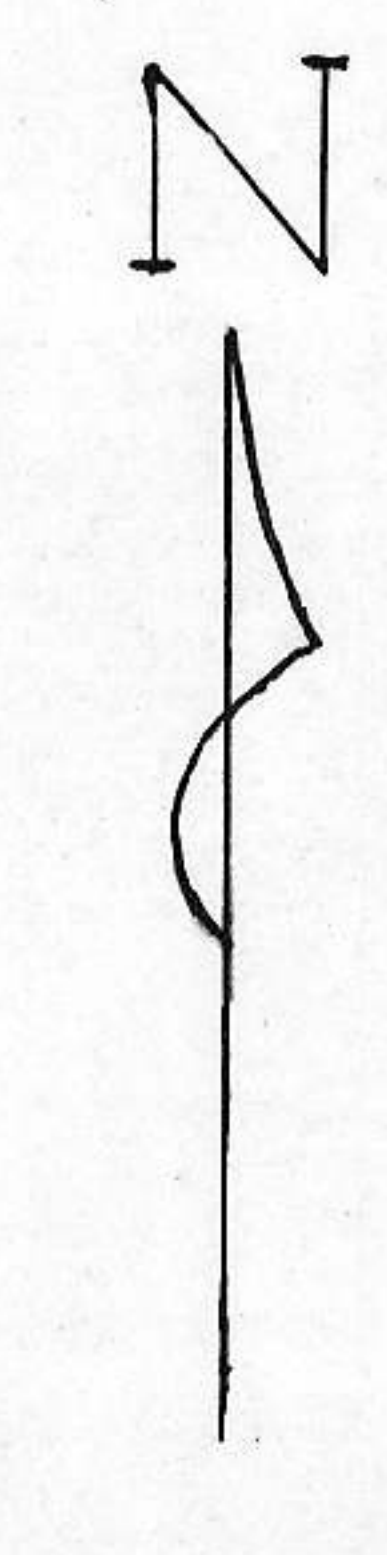
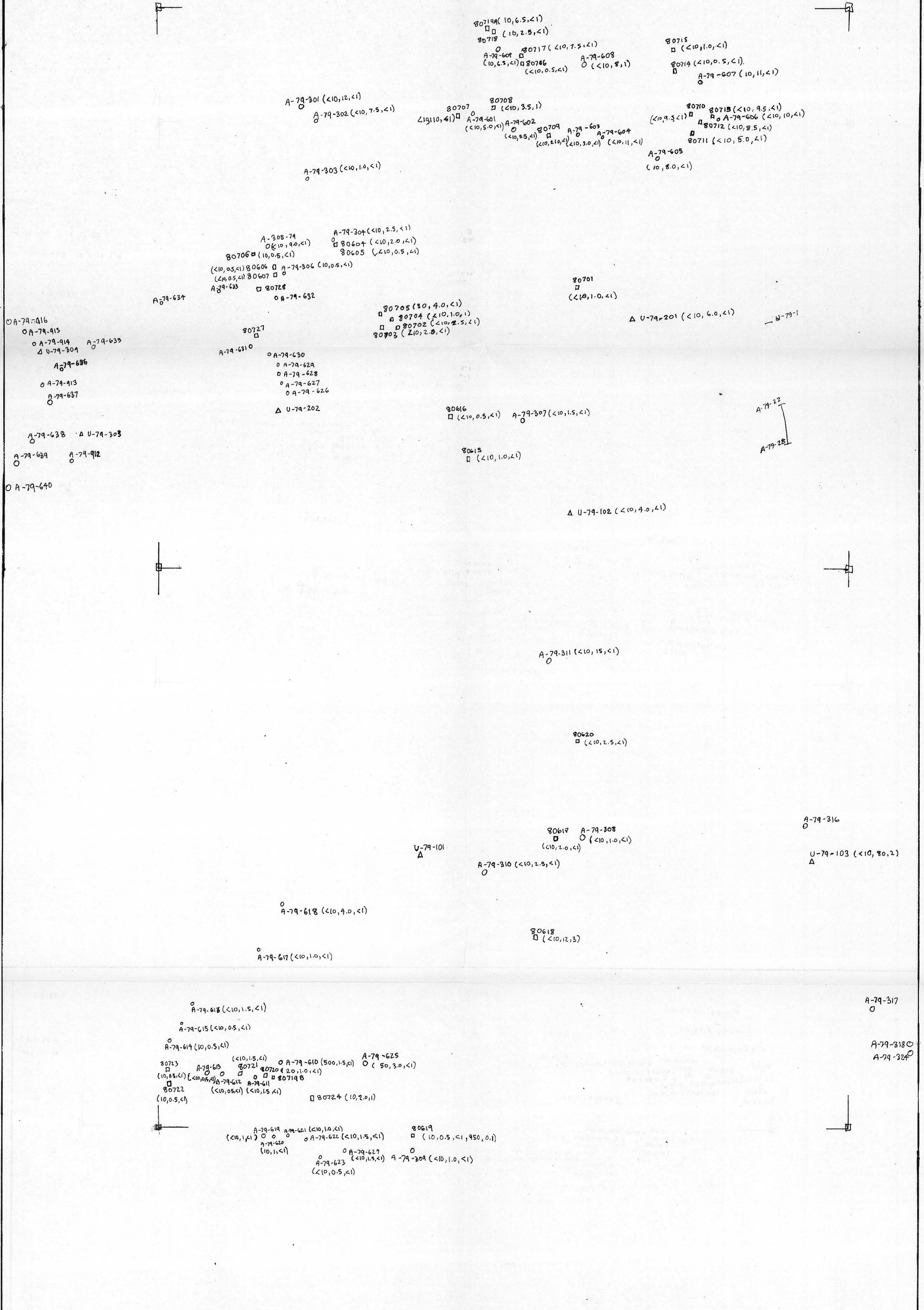
DATE: MAY 14, 1979

NTS: 103 F I W E

WORK BY: J.S., B.A., J.C.

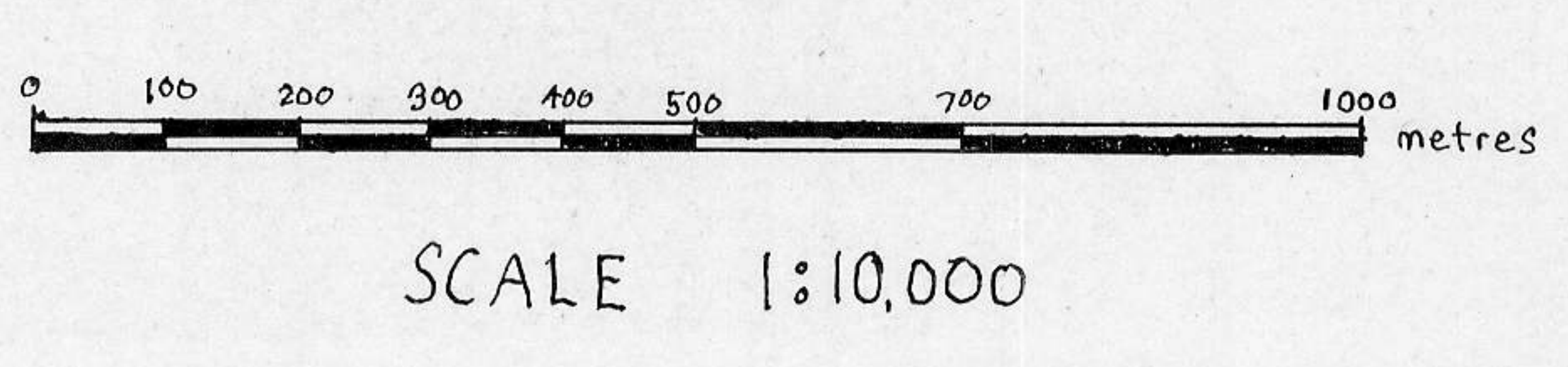
DRAWN BY: J.S., B.A.



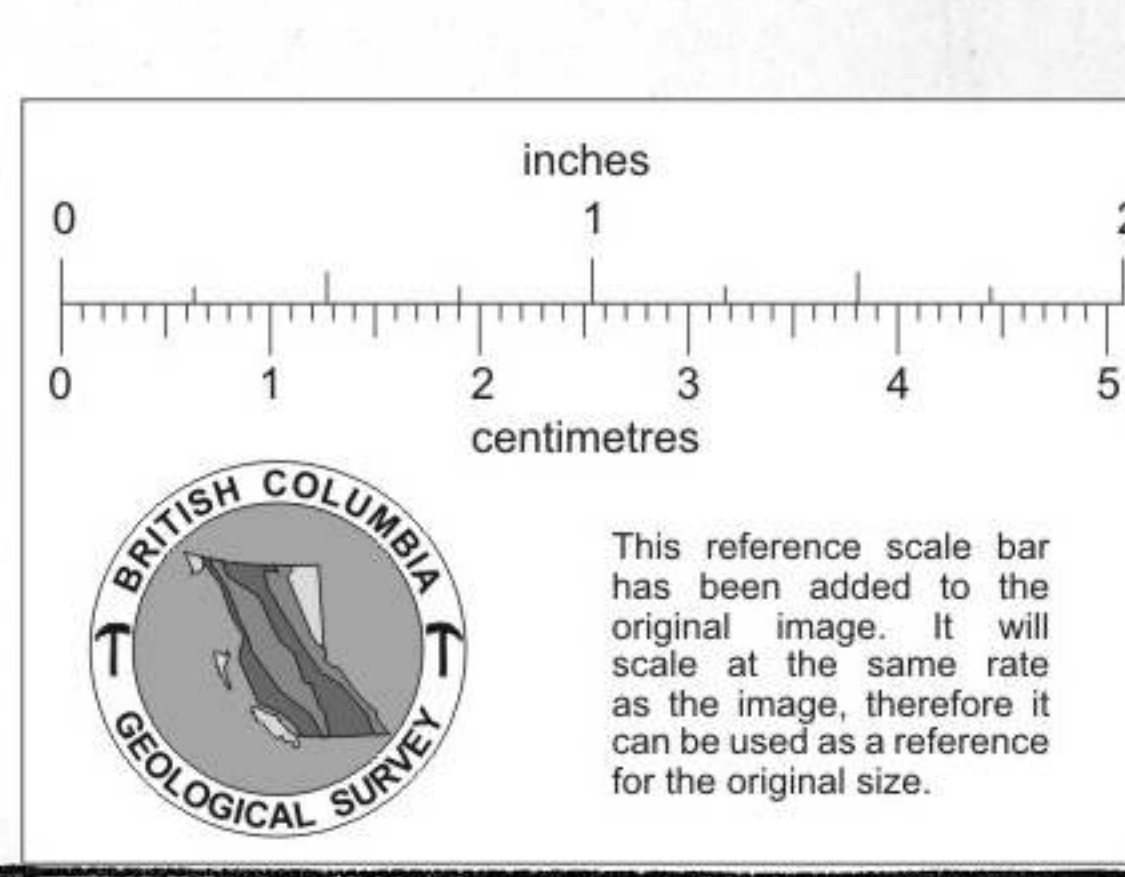


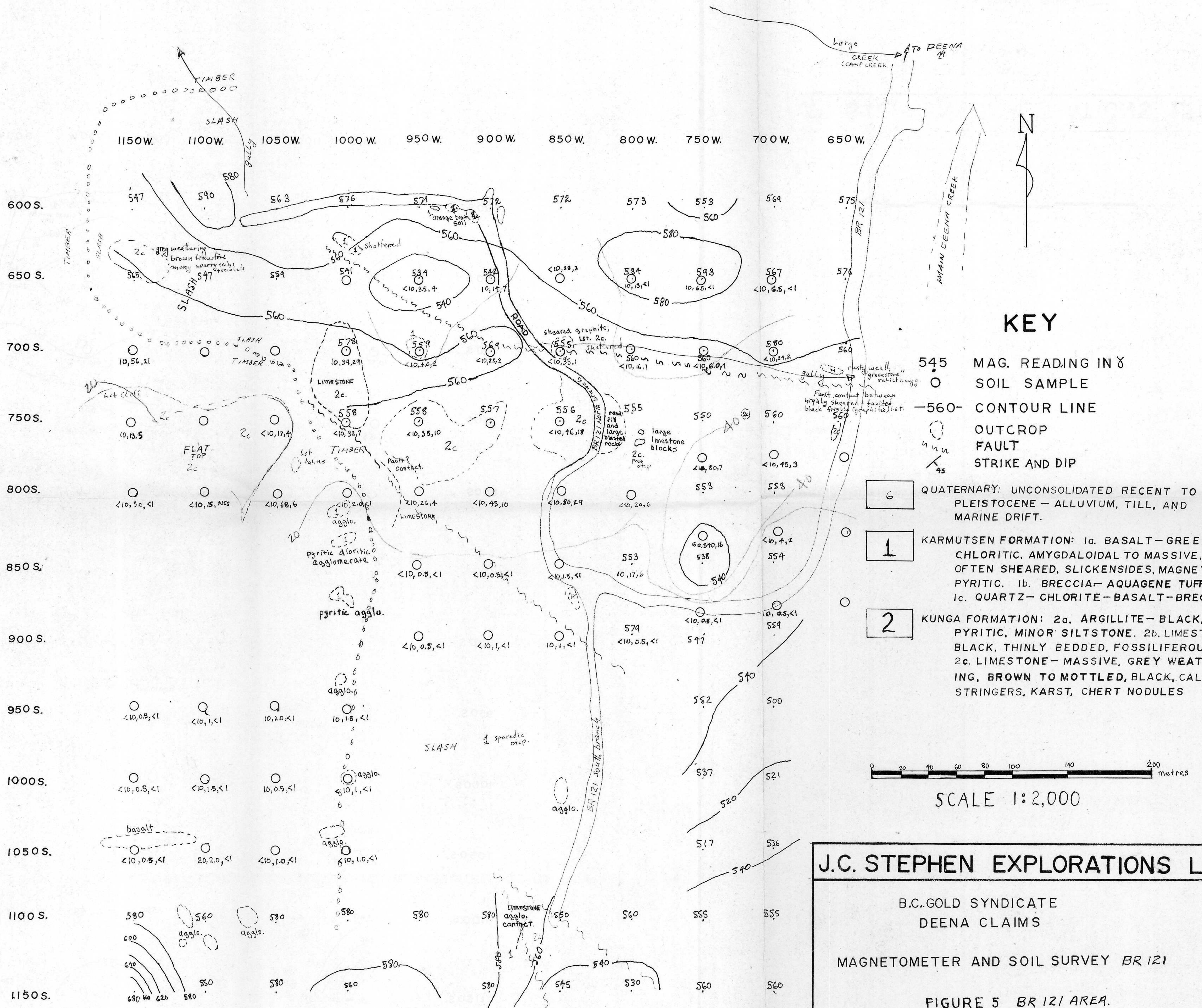
**KEY**

- SOIL SAMPLES A-79----
  - △ SILT SAMPLES U-79----
  - ROCK SAMPLES 80----
- RESULTS: ( gold ppb, arsenic ppm, antimony p.p.m.)  
 more than three numbers: above plus (copper ppm, silver ppm)



<b>J.C. STEPHEN EXPLORATIONS LTD.</b>	
BC, GOLD SYNDICATE DEENA CLAIMS	
GEOLOGY AND SAMPLE RESULTS <small>refer to Figure 4 for Geology</small> FIGURE 4a	
DATE: MAY 14, 1979	NTS: 103 FI WE
WORK BY: J.S., B.A., J.C.	DRAWN BY: J.S., B.A.





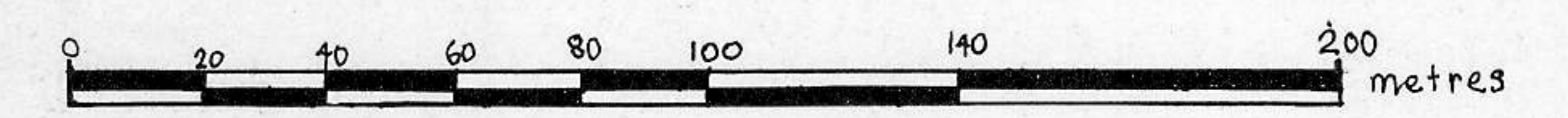
### KEY

- 545 MAG. READING IN  $\gamma$
- SOIL SAMPLE
- 560- CONTOUR LINE
- OUTCROP
- FAULT
- ↗ STRIKE AND DIP

6 QUATERNARY: UNCONSOLIDATED RECENT TO PLEISTOCENE - ALLUVIUM, TILL, AND MARINE DRIFT.

1 KARMUTSEN FORMATION: 1a. BASALT - GREEN, CHLORITIC, AMYGDALOIDAL TO MASSIVE, OFTEN SHEARED, SLICKENSIDES, MAGNETIC, PYRITIC. 1b. BRECCIA - AQUAGENE TUFF. 1c. QUARTZ - CHLORITE - BASALT - BRECCIA

2 KUNGA FORMATION: 2a. ARGILLITE - BLACK, PYRITIC, MINOR SILTSTONE. 2b. LIMESTONE - BLACK, THINLY BEDDED, FOSSILIFEROUS. 2c. LIMESTONE - MASSIVE, GREY WEATHERING, BROWN TO MOTTLED, BLACK, CALCITE STRINGERS, KARST, CHERT NODULES



SCALE 1:2,000

## J.C. STEPHEN EXPLORATIONS LTD

B.C. GOLD SYNDICATE  
DEENA CLAIMS

MAGNETOMETER AND SOIL SURVEY BR 121

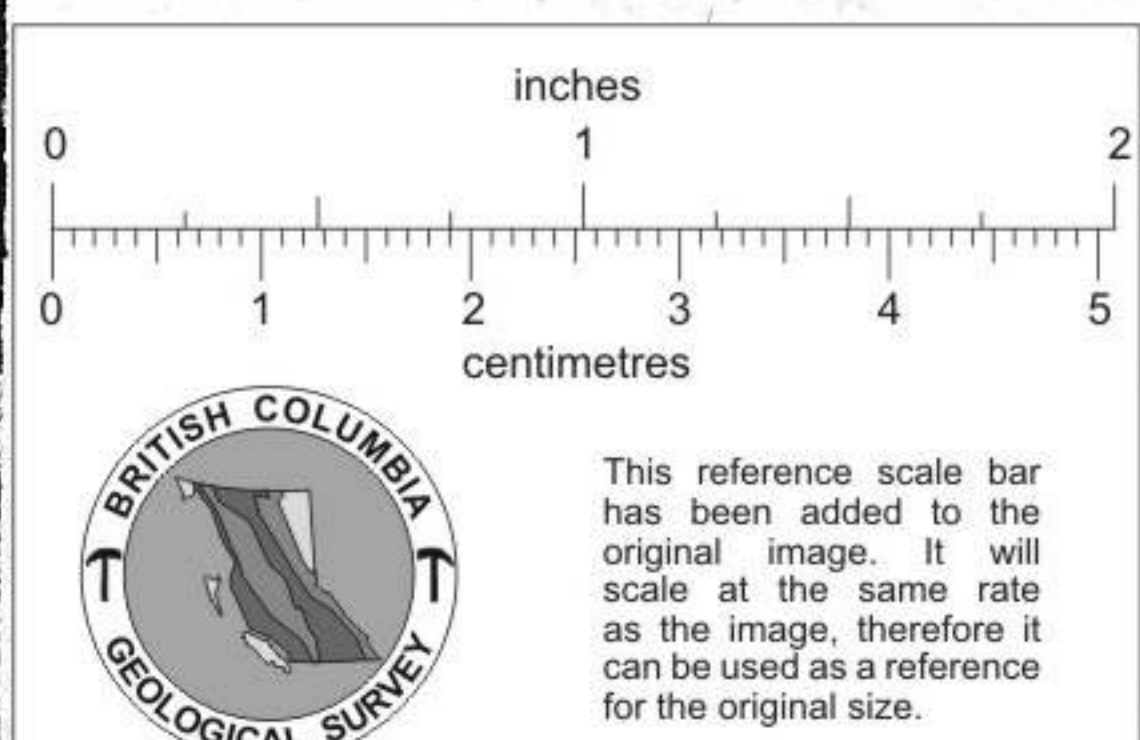
FIGURE 5 BR 121 AREA.

DATE MAY 7, 1979

NTS 103 F/1 W+E

WORK BY J.S., J.C., B.A.

DRAWN BY J.S.



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.