

BC Gold Synd Monthly Rept. July 1979 July 28 1979

JCS OFFICE

B.C. GOLD SYNDICATE

MONTHLY REPORT

by

J.T. SHEARER

671537

July 28, 1979
Section Cove

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MONTHLY REPORT

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(Burnaby Island)

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SUMMARY

- (1) A geological tour of the Crescent and Alder Claim group was held for B.C. Gold Syndicate Committee members on July 25 and a meeting in Vancouver on July 27 to consider a budget proposal.
- (2) Geochem results have been received for the Crescent Group and show a very large (>2 square km) area of anomalous gold in both rock and soil. One rock sample assayed 0.424 oz/ton Au.
- (3) VISIBLE GOLD was discovered on Alder Island in a drusy quartz breccia zone in silicified black limestone. 96 units were staked on the north end of Burnaby and Huxley Islands to cover similar drusy quartz zones in silicified Kunga limestone.
- (4) Preliminary results on Alder Island show relatively restricted distribution of gold and low Au in soils except in one area remote from the V.G. showing.
- (5) Channel samples on Central Lyell gave anomalous gold in a fault bound silicified zone hosted by Masset Formation intermediate volcanics. Four 2 post claims have been recorded.
- (6) Soil and rock geochem on South Lyell are uniformly low. No further work is planned.

INTRODUCTION

During July, results were received for initial sampling on the Crescent Claims. A very large zone, greater than two square km, is anomalous in rock and soils. One rock chip of drusy quartz with an interesting second generation of micro quartz needles growing on larger crystals ran 0.424 oz/ton gold. A variety of rock types from pyritic rhyolite to altered, sphalerite bearing gabbro carry gold in the 500 to 1000 ppb Au range. The highest soil anomaly is located on the relatively flat sub-alpine top of "Gabbro Hill", north of the detail grid along 00 baseline.

VISIBLE GOLD was discovered on Alder Island while following up samples taken in June along a drusy quartz breccia zone in silicified Kunga black limestone. A total of 96 units were added beside the 4 two-post claims to cover the abundance of similar drusy quartz found in silicified limestone and argillite on adjacent Huxley and Burnaby Islands.

A B.C. Gold Syndicate Committee meeting was held on July 27 to consider a budget proposal for the Crescent Claims. Previously, on July 25 T. Macauley, A. Birkeland and B. Lennan were given a tour of both Crescent and Alder Groups. Since all available data was presented on the tour and meeting with lengthy discussion, this report will only summarize the main features. A program outline and budget for the Crescent Claims is included as Appendix III. The Alder Group proposal is also shown in Appendix III, however implementation is largely dependent of pending results. A decision by the Committee on the Crescent proposal is expected by August 15, 1979.

Anomalous rock samples were taken on central Lyell Island and are covered by 4 two-post claims. Soil sample results on South

Lyell are uniformly low and no further work is warranted.

A brief trip to Cinola was arranged on July 26. Considerable progress has been made by Norman Champione toward unraveling and correlating the complex geology. Surprisingly his work indicated no correlation between pyrite and gold.

Throughout July, a main camp was established at Section Cove on Burnaby Island. This camp was taken down on July 26 and moved to Sandspit in preparation for moving down to Franklin Camp. Because RIVTOW only have a 2 day service some work will be possible on the Yakoun Lake porphyry. An examination is planned for the Chilcotin River gossan on the way to Franklin.

TIME ALLOCATION

From June 28 to July 28 time allocation to various classifications is tabulated below.

TABLE I

<u>Item</u>	<u>Man days</u>
Prospecting and Geology	47
Claim Staking	19
Geochemistry (all day)	12
Camp Construction and Moves	15
Travelling	2
Office-Drafting	8
Injured-drafting (Brian Atkinson)	14
Meetings-tours	2
Days off	<u>1</u>
Total	120 Man days

Individual time sheets are contained in Appendix II. The Alder Group required most of the staking time with 4 man days on Crescent Five. Unfortunately Brian Atkinson fractured his knee cap and was confined to drafting in Sandspit for two weeks. Otherwise time allocations are similar to June.

EXPENDITURES

Up to the end of July, the program has spent approximately \$66,000.00. The larger cost items are:

- | | |
|-----------------------------------|---|
| (a) Helicopter time | 47G - 0
206B - 7.2 hours |
| (b) Fixed Wing (Beaver and Otter) | 1438 + July 26 Otter |
| (c) Truck costs | (1) Mileage - 650.01
(2) Gas (+boat) 42.14 |
| (d) Boat Costs | \$700. deposit. 5 weeks rental |

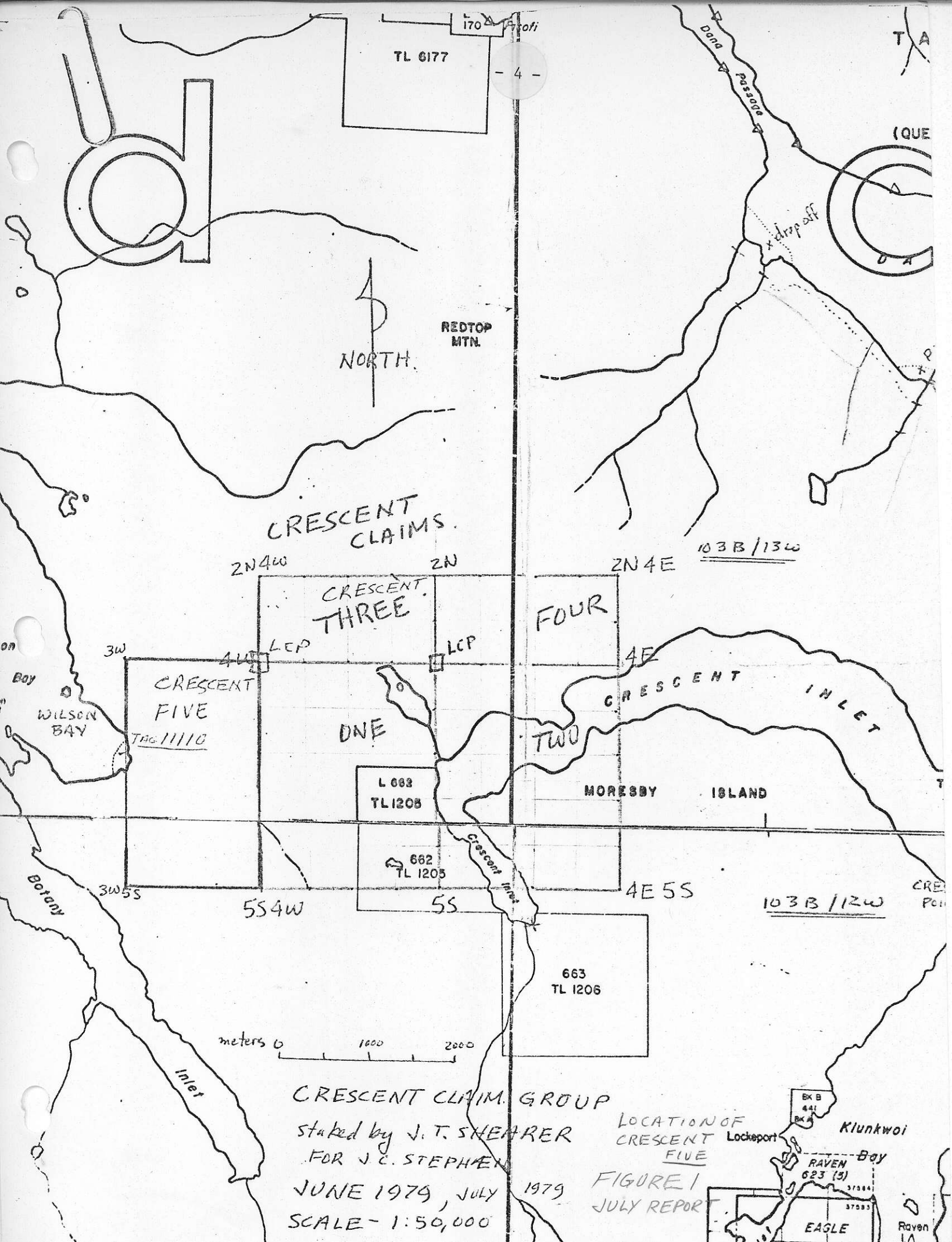
Estimate of costs applicable to Crescent Claims is \$10,234. and to Alder Group is \$11,020. The high 206B hours are directly attributable to staking Crescent Five and limited follow up work on Crescent Claims from Section Cove.

CAMPS AND AREAS PROSPECTED

(A) CRESCENT GROUP (103B/12,13 W)

(a) Introduction

Results of sampling done in late June have been received. They show anomalous results over an area greater than two square km in both soils and rock. Crescent Five was staked to cover high values in samples along the west boundary of Crescent One as shown on Figure I. A rock sample taken near 800E ran 0.424 oz/ton Au and several rocks at both sphalerite showings of pyritic rhyolite and altered pyrrhotite rich



170 ofi

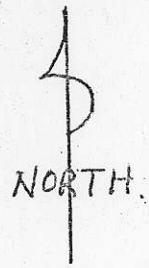
TL 6177

- 4 -

T A

(QUE

D A



REDTOP
MTN.

CRESCENT
CLAIMS.

2N4W

2N

2N4E

103B/13W

CRESCENT
THREE

FOUR

3W

4W

LCP

LCP

4E

CRESCENT
FIVE

TAG 11110

DNE

TWO

CRESCENT
INLET

Wilson
BAY

MORESBY
ISLAND

L 682
TL 1208

662
TL 1205

4E 5S

103B/12W

3W 5S

5S 4W

5S

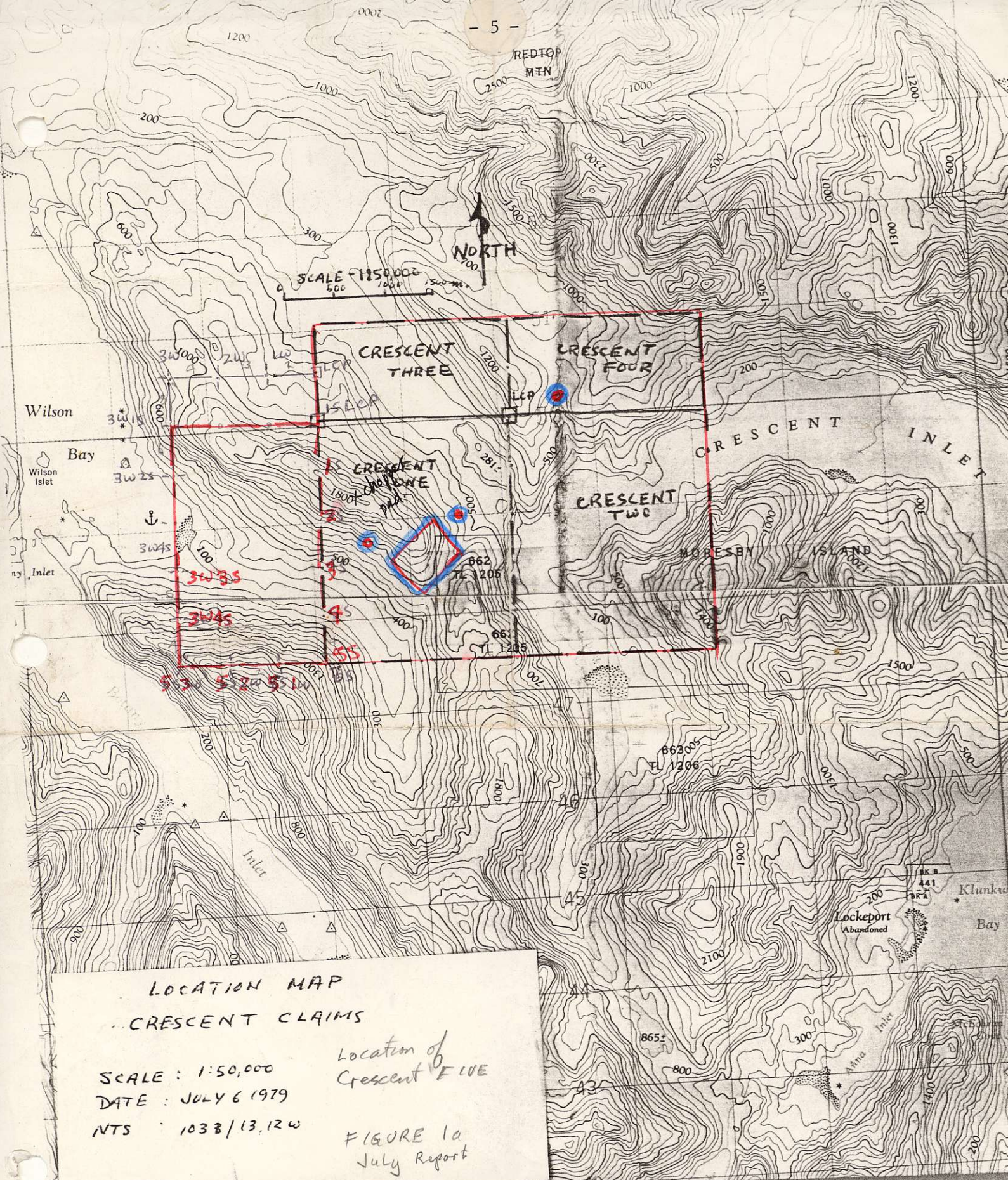
663
TL 1206

meters 0 1000 2000

CRESCENT CLAIM GROUP
staked by J. T. SHEARER
FOR J. C. STEPHENSON
JUNE 1979, JULY 1979
SCALE - 1:50,000

LOCATION OF
CRESCENT
FIVE
FIGURE 1
JULY REPORT





LOCATION MAP
 CRESCENT CLAIMS

SCALE : 1:50,000
 DATE : JULY 6 1979
 NTS : 1038/13,12W

Location of
 Crescent FIVE

FIGURE 1a
 July Report

gabbro range between 500 and 1000 ppb Au.

These results are considered very significant and warrant a comprehensive property program as proposed in the budget presented at the July 27 meeting (Appendix III). Any piecemeal approach can only lead to the type of sporadic development that characterized the initial work on the Specogna deposit.

(b) Geology

An outline of basic geological features on the Crescent Claims was presented in the June report. Figure 2 (in pocket) shows a preliminary version of rock type distribution, however much more data is available but its usefulness is limited by the lack of topography control in such a steep and heavily timbered terrain. Some major corrections are also needed on the layout of claim and grid lines on Figure 2. An account of geology on the west boundary and #2 sphalerite showing by Brian Atkinson is contained in Appendix I. The concept of block faulting of the rhyolite down into the gabbro as outlined in the June report is also illustrated in Appendix I.

Lithological complexities on a detail scale are shown in Figure 3 (in pocket) in a preliminary fashion, other information will be added later.

(c) Geochemistry

Results for rock, soil and silt geochemistry are plotted on Figure 2 and 6 (in pocket). A detail soil grid (figure 6) was established as follow up to initial samples. Two baselines, 00 and 800E were cut, slope chained and soiled. Anomalous results extend along the 00 base line for 700 m with the highest results substantially north of



SP-24 MARINO 2 / <10
 SHOWING 300 / 1000
 SP-23
 SP-22 30 / 20
 SP-21 8 / <10
 SP-20 18 / <10
 QUINTANA DRILLING SP-19 25 / <10
 SP-18 25 / 20

SP-17 10 / <10

D 20 / 30

SP-16 COMINCO #1

SP-15 98 / 30

SP-14 18 / <10

SP-13 45 / 40

SP-12 20 / 20

SP-11 20 / 20

D 0 → 0 0 0 0

1978 Cape Roca SP-10 25 / 40

D 0 0 0 0 0

SP-9 40 / 50

SP-8 50 / 20

SP-7 45 / 60

SP-6 12 / <10

1979 Cape Shack SP-5 25 / 40

SP-4 80 / 200

SP-3 18 / 20

SP-2 95 / 180

*SP-1 1 / <10

CLIFF SHOWING
(trenched by Kenneco)

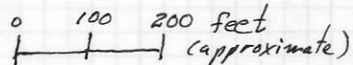
1978 Detail grid

Drill roads

QUINTANA DRILLING

1979 drilling

1978 Hole #6 (High grade)



LEGEND

SP-1 • 1 / <10 soil sample
 Refer to Assay Cert. As / Au
 for Cu, Pb, Zn, Ag, Hg+5b ppm / ppb.

○ → diamond drill hole

J.C. STEPHEN EXPLORATIONS LTD

B.C. GOLD SYNDICATE
 ORIENTATION SOIL LINE
 SPECOGMA DEPOSIT (CINOLA)

DATE: August 1978
 NTS: 103F/BE

WORK BY: AEA+JS
 DRAWN BY: JS



LEGEND

- Soil Sample
- Silt Sample
- Anomalous - Gold
- Weakly Anomalous
- Diamond Drill Hole
- DDH 1 MISP
- TRUE POSITIVE

All Metal Values in P.P.M.

KENNCO EXPLORATIONS

Port Cleve
 Skeena M.D.
 Babe & Ric C
 Gold in Soil

DATA BY R.S.K.G.	
DRAWN BY J.O.L.	DATE 2/5/71
TRACED BY:	DATE:
REVISIONS: F.N.Y.	

SCALE:
 1" = 1000 ft.
 Au in ppm

FIGURE 5 JULY REPORT

(175, 60)

↑
2.0

↑
240, 120

n = 139

Arsenic ppm

Gold ppb.

(420) → (490)

(80, 1040)

(76, 240)

(60, 220)

56, 380

(47, 710)

(720)

40, 260

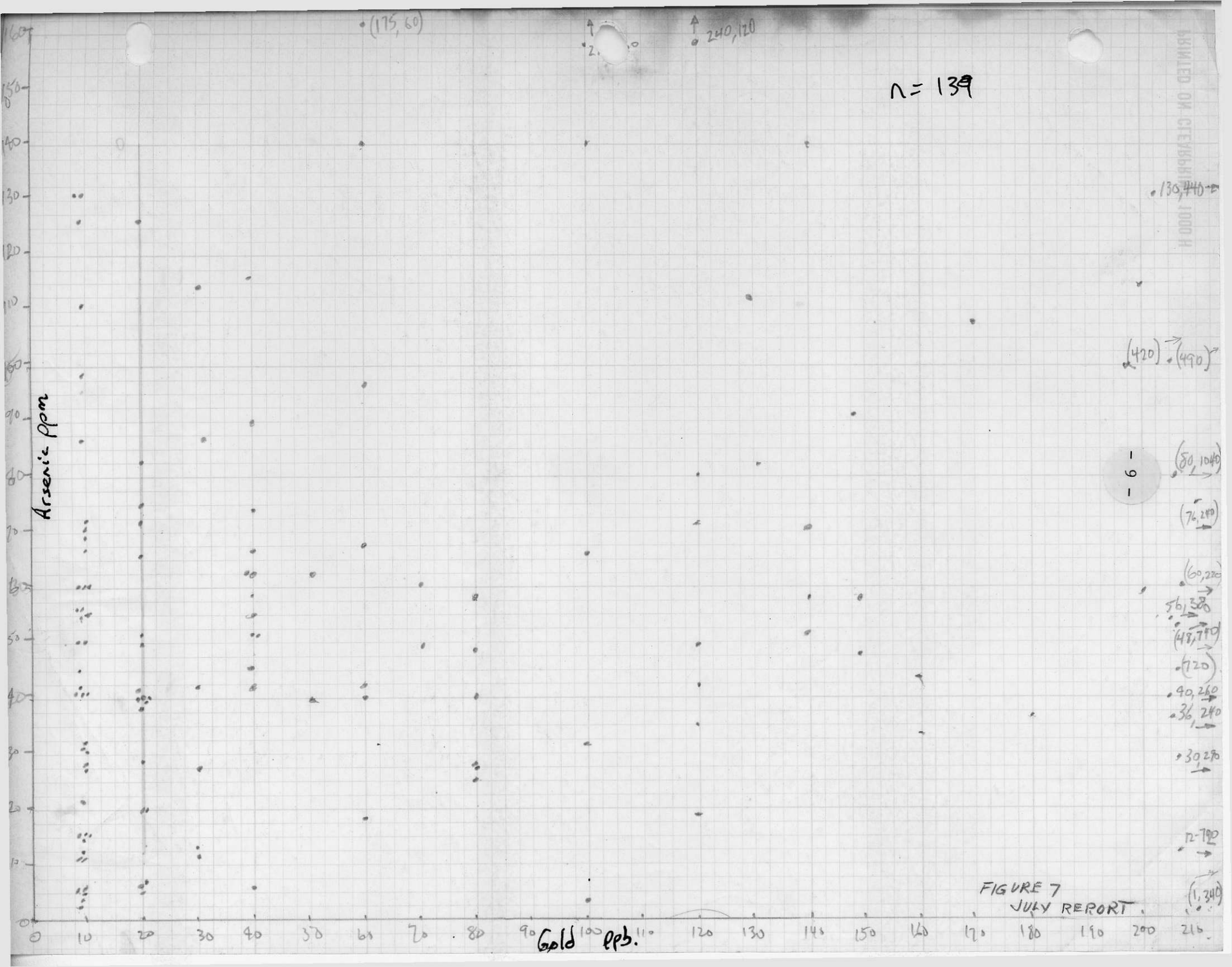
36, 240

30, 280

12, 700

(1, 340)

FIGURE 7
JULY REPORT



CRESCENT GROUP

It is proposed that a program consisting of tape and compass grid lines, soil sampling, rock geochemistry and geological mapping and prospecting be conducted during September - October 1979 to explore and assess these claims. If results are encouraging consideration could then be given to a more advanced exploration program during summer 1980.

Costs for the proposed program are estimated to be:-

1	Preparation of base maps and photos	\$ 1,200.00
2	50km Tape and Compass Grid, blazed and flagged	2,700.00
3	Soil Sampling approximately 700 samples	2,100.00
4	700 Soil Sample analysis for Au, As @ \$6.25	3,750.00
5	150 Rock geochem @ \$8.00	1,200.00
6	Prospecting and mapping (2 men)	3,500.00
7	Aircraft - fixed wing and helicopter	1,800.00
8	Groceries and camp supplies	900.00
9	Travel and meals, etc.	900.00
10	Zodiac boat and motor rental	650.00
11	Magnetometer rental	300.00
12	Compilation and printing etc.	<u>2,000.00</u>
		21,000.00
	J.C. Stephen Explorations Ltd. Services and Overhead	<u>1,500.00</u>
		\$ 22,500.00
	Contingencies etc.	<u>2,500.00</u>
		\$ 25,000.00

TENTATIVE ALDER PROGRAM

Results to date warrant further prospecting and, should additional anomalous values be obtained from samples presently being run, the following program should be instituted.

1	Preparation of base maps and photos	\$ 300.00
2	Soil sampling - approximately 500 samples	1,500.00
3	Soil sample analysis 500 samples @ \$ 6.25	3,125.00
4	Rock geochem 150 @ \$ 8.00	1,200.00
5	Prospecting and mapping	3,500.00
6	Aircraft	1,500.00
7	Groceries and Camp supplies	900.00
8	Travel and meals, etc.	\$ 700.00
9	Zodiac boat and motor rental	700.00
10	Trenching, drill, steel, powder	600.00
11	Compilation, printing etc.	<u>2,000.00</u>
		\$ 16,025.00
	J.C. Stephen Explorations Ltd. Services and Overhead	<u>1,600.00</u>
		\$ 17,625.00
	Contingencies etc.	<u>2,375.00</u>
		\$ 20,000.00

The Alder claims lie at low elevations and, from past experience, it is possible to conduct exploration here during the winter months. Work could be done in October-November 1979 or between January and March 1980.

the detail grid. Figure 6 is mainly on a steep south facing slope whereas north of 400N the slope is relatively flat ridge top. The area between #1 (Figure 6) and #2 sphalerite showings is highly anomalous in Au soils. Sample A-79-469 ran 1160 ppb Au with other surrounding highs. Soils along the 800E baseline are low in gold with anomalous As. The "Rusty Seam" area, just west of 800E is also characterized by low gold with high As. The Rusty seam area is where the rock chip assaying 0.424 oz/ton Au was found.

Figures 4 and 5 give an instructive insight into the soil development above the Specogna deposit. It is interesting to note that although most of the samples are slightly anomalous there is actually very few high kicks. This is very similar to initial results on the Crescent Group. Figure 7 shows a plot of As versus Au for Crescent samples and indicates negligible correlation.

The extremely erratic occurrence of gold in the fluvial environment is well shown by silt samples taken on the main creek in Crescent Four. One sample (U-203) was taken from several spots within a 10 m radius and ran 400 ppb Au. Follow up samples all ran <10 ppb Au except for U-9 that gave 4700 ppb Au. U-10 which was an equally good silt as U-9 and only 2 m away ran 10 ppb Au.

ROCK GEOCHEMISTRY

A number of rock chips were sent for analysis. The highest result (80737) was 0.424 oz/ton Au for a quartz rich sample from the Rusty Seam Area. This sample was memorable because of the distinctive micro quartz needles growing on an early generation of drusy quartz. Other interesting rock samples include (as shown on Figure 2):

80667 - 500 ppb Au - 10 ft chip across #2 sphalerite in rhyolite showing
80738 - 720 ppb Au - very pyritic rhyolite, Lineated py seams.
80672 - 240 ppb Au - Mylonite rusty seam area.
80673 - 340 ppb Au - narrow quartz rich silicified andesite
80736 - 360 ppb Au - rusty seam area, silicified andesite
80566 - 140 ppb Au - very leached, ferrungous material #1 grid
80576 -1320 ppb Au - quartz bx. with MoS₂

(B) ALDER CLAIMS (103B/6W)

(a) Introduction

Follow up work on the rock chip sample that ran 1860 ppb Au resulted in the discovery of a VISIBLE GOLD showing hosted by a drusy quartz breccia zone in Kunga Formation, silicified, black limestone. Reconnaissance prospecting on the adjacent Huxley and Burnaby Island delineated several similar silicified zones and 96 units were tied on to the Alder Island Claims as shown in Figure 8. Most sample results are pending so that final conclusions can not be made until all results are tabulated. However some points are already apparent:

- (1) at least one drusy quartz breccia zone in silicified black limestone member is gold bearing,
- (2) there are several more similar silicified zones throughout the Alder Claims,
- (3) the area is characterized by wide lowlands between subalpine rounded ridges with very heavy timber and organic cover and
- (4) the Kunga Formation section is contained within major fault strands which localizeds small plutons and complex fold patterns.

More prospecting and a comprehensive geological basemap are definately warrented. A tentative proposed budget to include trenching on Alder Island is contained in Appendix III.

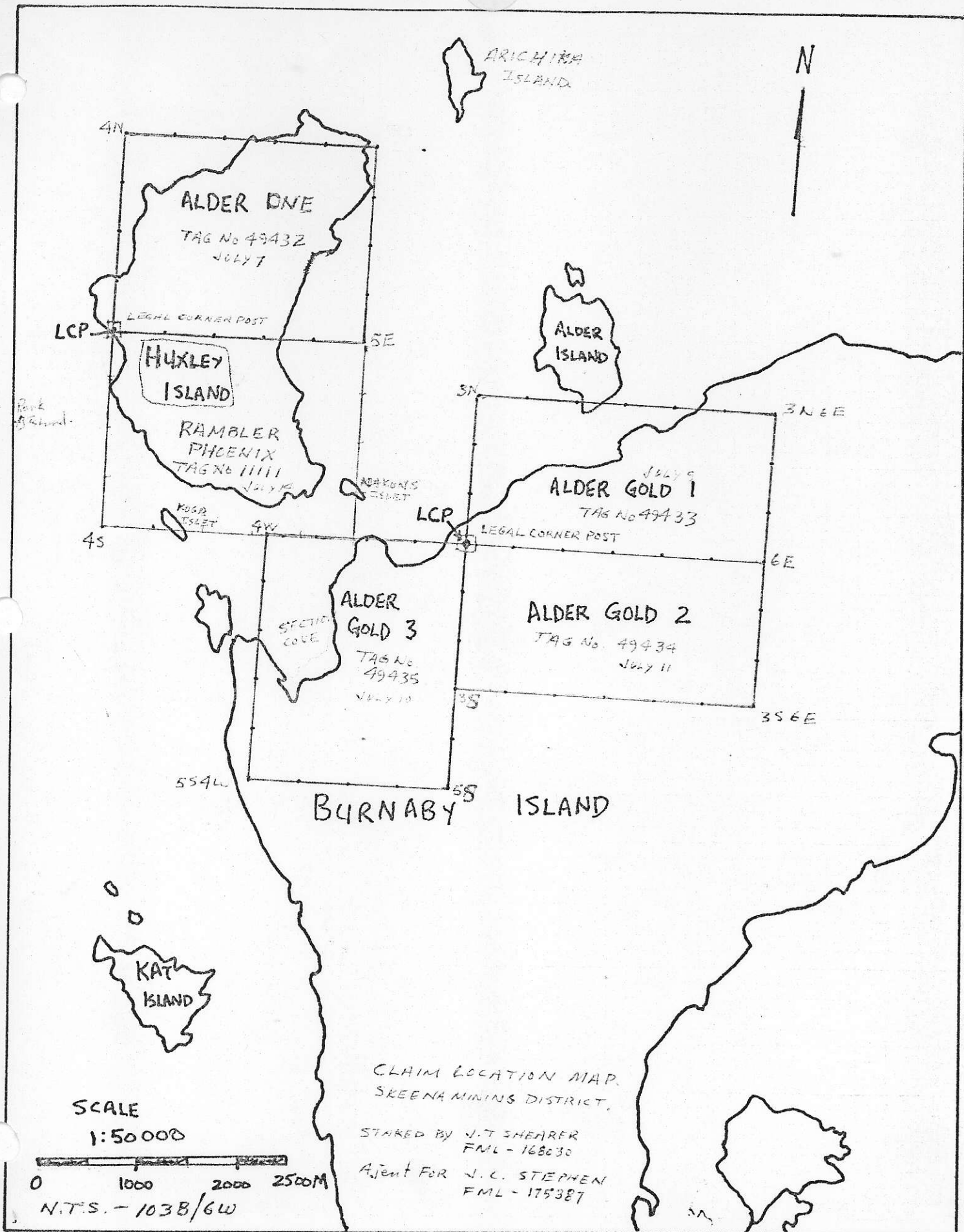


FIGURE 8
JULY REPORT

(b) Geology

The Alder Claims are underlain by two major fault slices of Incompetent Kunga Formation, black limestone and black argillite members. These two slices are separated by a wedge of Karmutsen Formation volcanics that forms a resistant topographic ridge. On the east the Kunga section is bounded by the "Burnaby Batholith", a post tectonic intrusive. Figure 9 shows these general features in a general manner according to mapping done by Brown (1968). In contrast the Crescent Group, Brown's (1968) work is fairly accurate on the Alder Claims. The only exception being near the major intrusive contact where several large roof pendants (?) were noted near 6E claim post. The complexities of Alder Island have been discussed in the June report.

Previous recent work includes:

- (1) packsack holes on the Johnson Nickel showing in 1964 and
- (2) drilling on the MAC magnetite deposit in the southeast corner. Work in the 1906 era was confined to: Nicks Cu-Ni showing on the east of Alder Gold 1, (b) Nickel showings on east Alder Island and Cu-Au showings on Huxley Island.

The complexities of faulting and folding are well developed on the south shore of Alder Island. There appears to be only 30-40 m of section including mainly argillite member along several hundred meters of beach. Any future mapping project must use careful measurement of the many small discontinuous stratigraphic sections to enable correlation throughout the property. Despite a superficial resemblance between black limestone and argillite members, a very useful distinction can be made even with reconnaissance work.

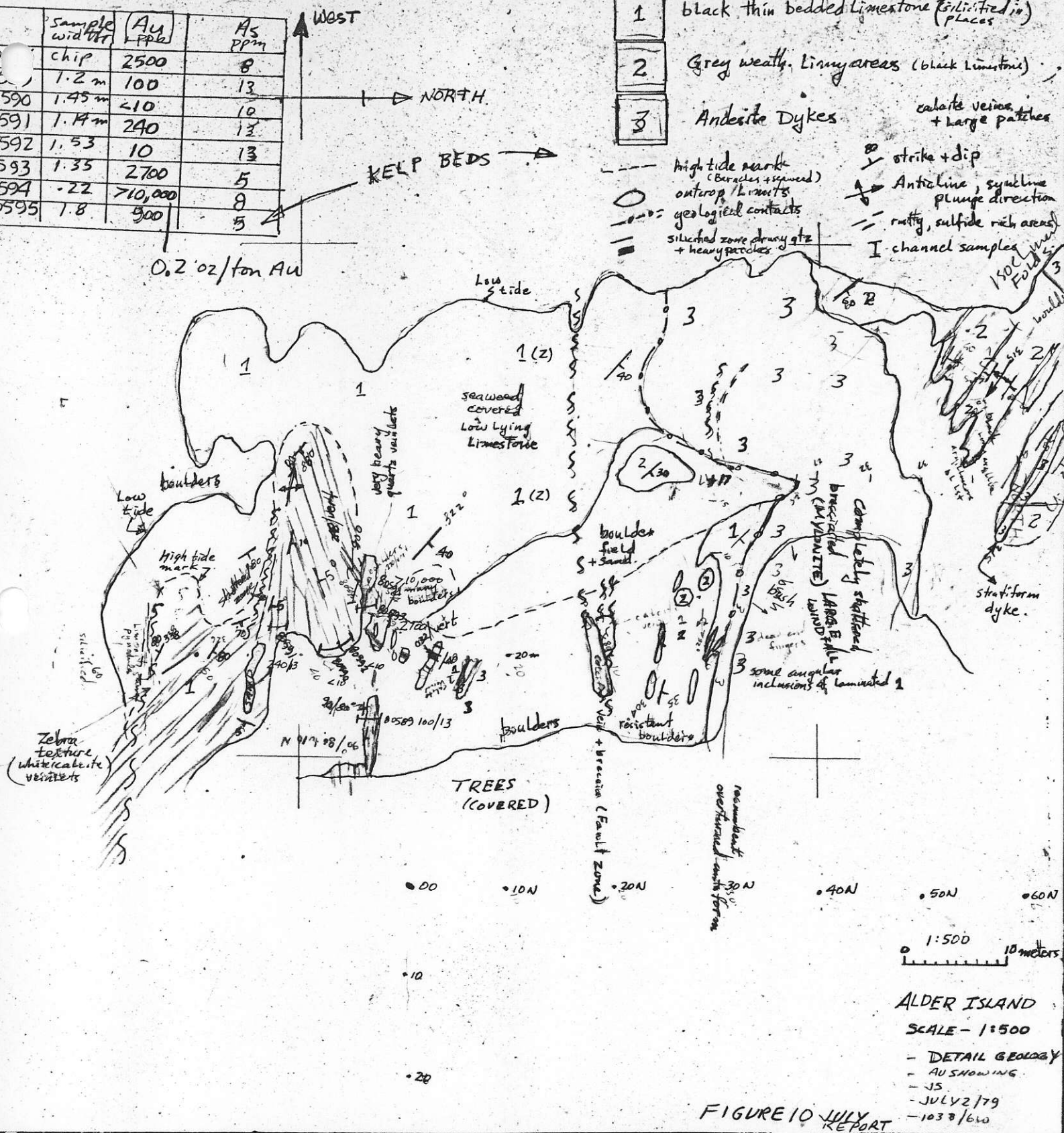
Figures 10 and 11 show the drusy quartz breccia zones in relation to silicified black limestone. Results for the Alder Island

	sample width	Au Ppb	As ppm
80	chip	2500	8
80590	1.2 m	100	13
80590	1.45 m	<10	10
80591	1.4 m	240	13
80592	1.53	10	13
80593	1.35	2700	5
80594	.22	710,000	8
80595	1.8	500	5

0.202/ton Au

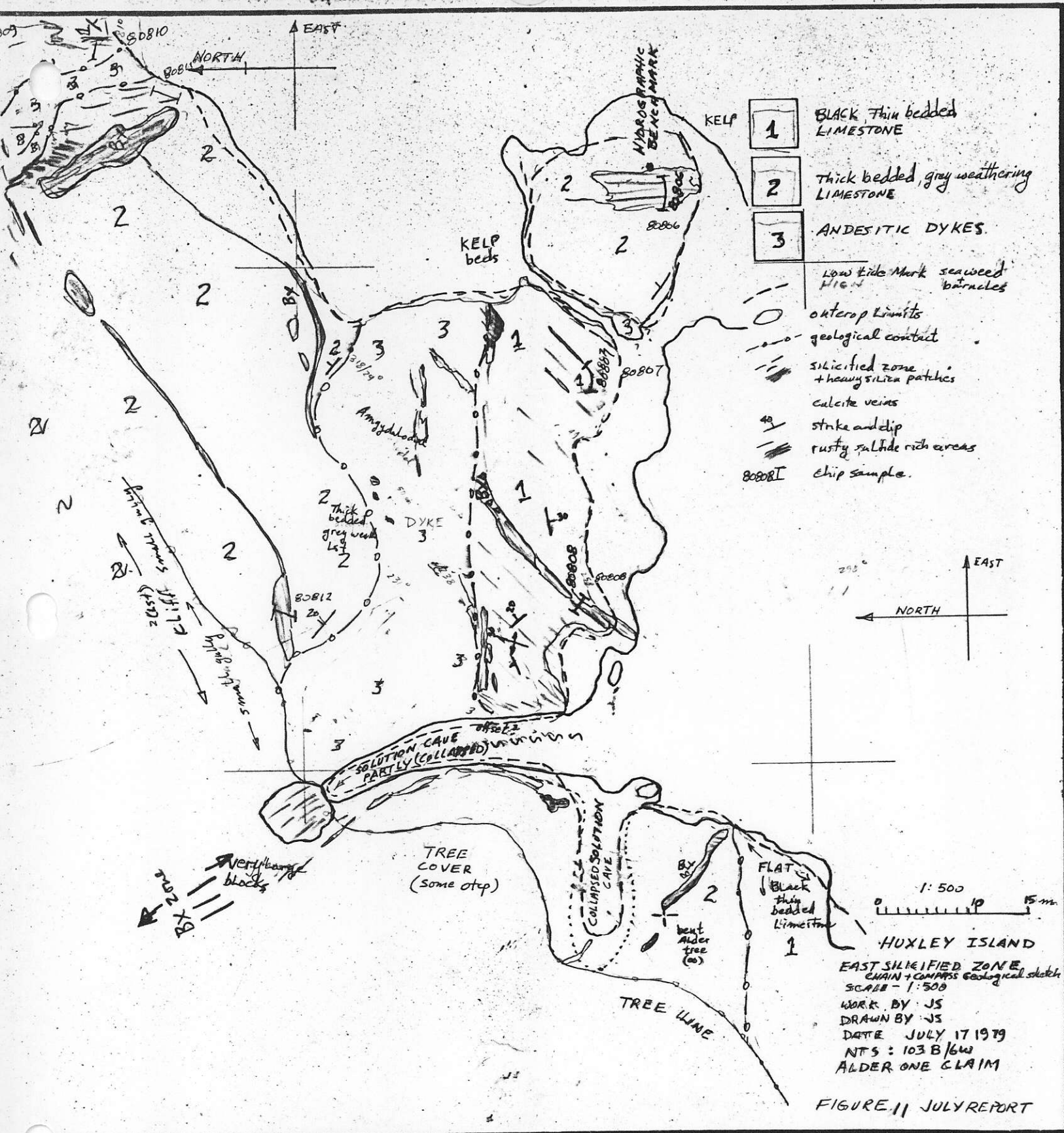
- 1 black thin bedded Limestone (silicified in places)
- 2 Grey weath. Limy areas (black limestone)
- 3 Andesite Dykes

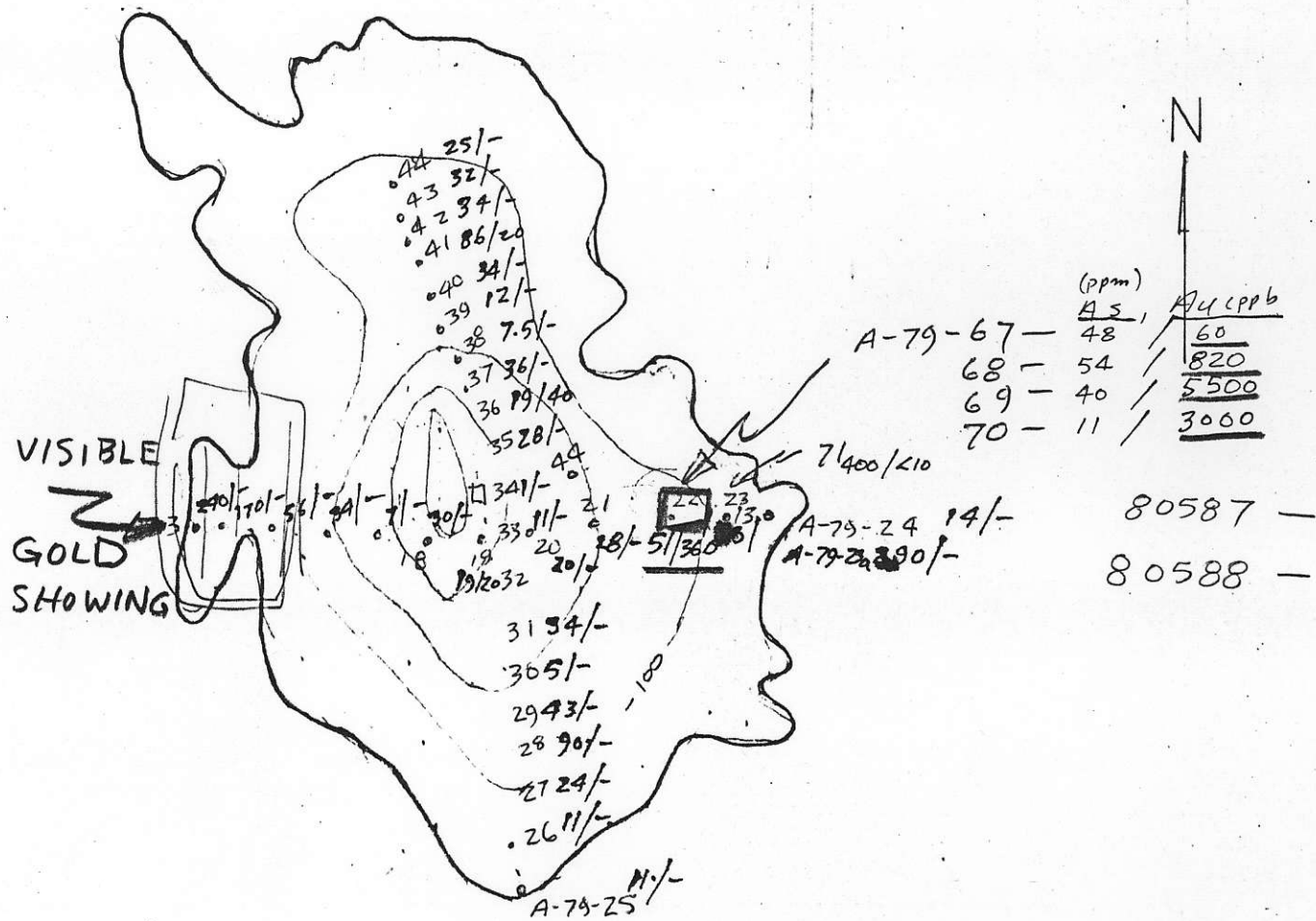
- high tide mark (Beracles + seaweed)
- outcrop / contacts
- geological contacts
- silicified zone drusy qtz + heavy patches
- strike + dip
- Anticline, syncline
- plunge direction
- ratty, sulfide rich areas
- I channel samples



ALDER ISLAND
 SCALE - 1:500
 - DETAIL GEOLOGY
 - Au SHOWING
 - JS
 - JULY 2/79
 - 1038/610

FIGURE 10 JULY REPORT





CORRECT PLOT OF SOIL SAMPLES.

ALDER ISLAND

SCALE 1:10,000 APPROX.

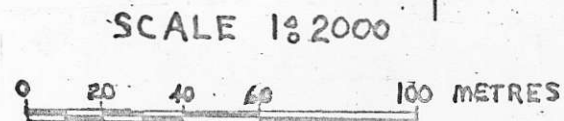
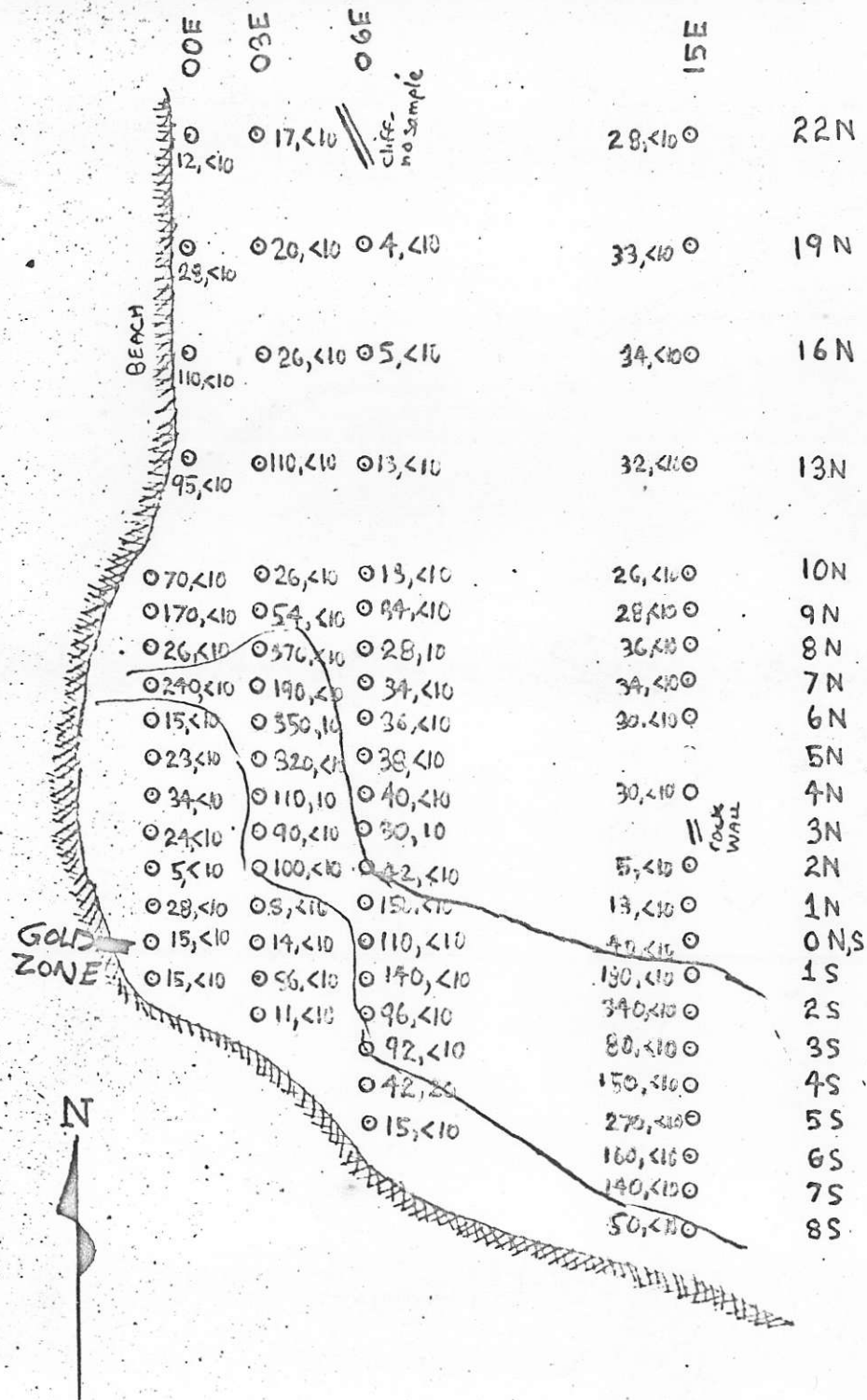
DATE - JULY 24/79

NTS - 103B/6W

WORK BY - JS + JC

DRAWN BY - JS.

FIGURE 12
JULY REPORT



J.C. STEPHEN EXPLORATION LTD.

ALDER GRID

B.C. GOLD SYNDICATE
GEOCHEM SURVEY

DATE: JUNE 1979

NTS: 103B-6W

WORK BY: G. MARCHAK

DRAWN BY: G. MARCHAK

FIGURE 13 JULY REPORT

gold showing (figure 10) are plotted. Trenching is recommended to expose the zone to determine gold distribution. It should be noted that the visible gold was found in a relatively recessive section beside the main mass of resistant brecciated, silicified limestone. Some areas of silicified limestone ran 10 ppb Au (#80590, 80592).

(c) Geochemistry

Only results for the initial follow up work on Alder have been received and the majority of the reconnaissance samples are presently being analyzed.

Locations for the preliminary soil samples on Alder Island were misplotted in the June report and Figure 12 shows their true position. The one anomalous sample A-722 is actually on the east side of the island. Check samples around this location were very high in gold:

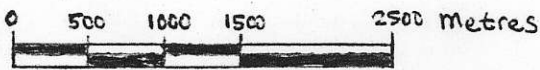
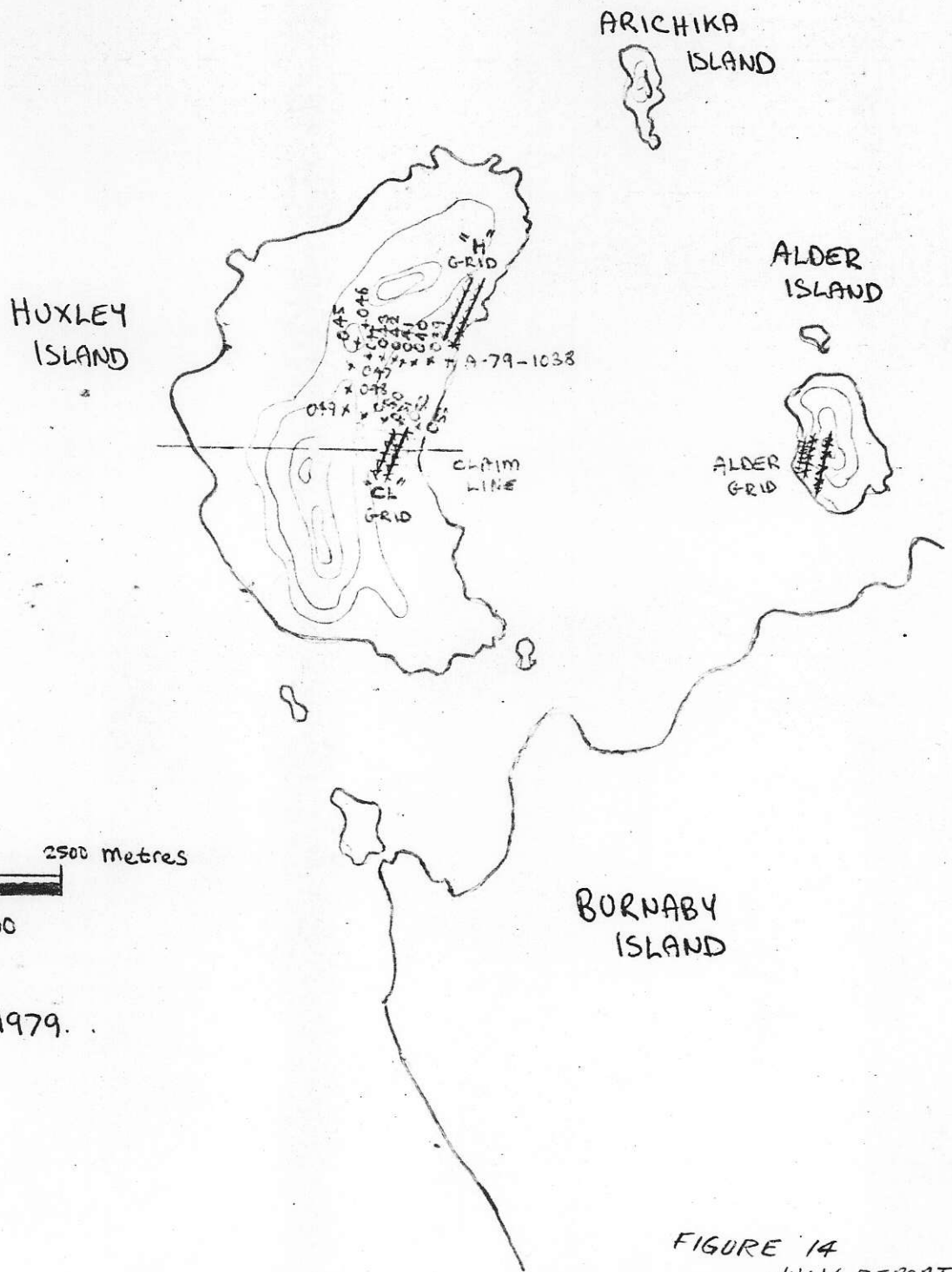
A-79-68 - 820 ppb Au

A-79-69 - 5500 ppb Au

A-79-70 - 3000 ppb Au

but the underlying skarn assayed low. A detail soil grid was run immediately east of the gold showing as illustrated on Figure 13. An attempt was made to take only the best samples and to this end all samples average about 0.7 m in depth using an auger. All gold results are very low, however there are strong arsenic values along the level ground which probably corresponds to Kunga subcrop. Many angular boulders of silicified drusy quartz located at the Alder Island campsite may be weathering out of a continuation of the gold zone structure.

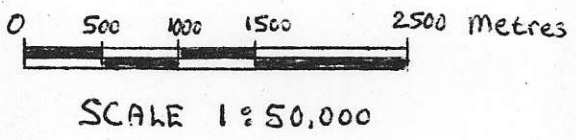
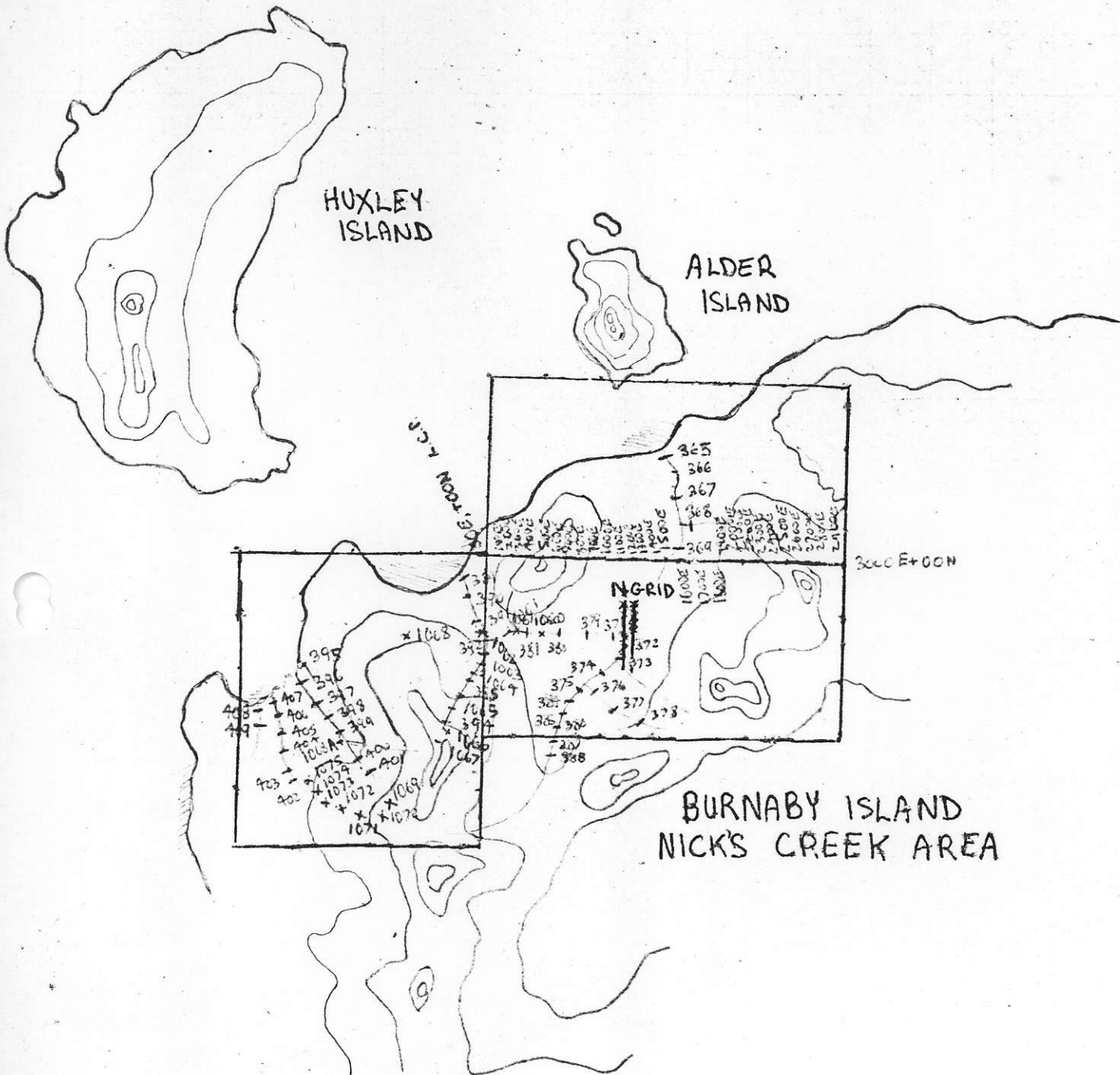
Silt and small soil grid locations on Huxley and Burnaby Island are shown on Figures 14 and 15.



SCALE 1:50,000

G. MARCHAK
JUNE, JULY 1979.

FIGURE 14
JULY REPORT



JULY 1979
G. MARCHAK

FIGURE 15 JULY REPORT

(C) LYELL ISLAND (103B/11W,12E)

(a) LYELL SOUTH

As follow up to an anomalous rock chip sample in shattered intrusive on south Lyell Island (as discussed in the June report). A three day camp was established to carry out further rock and soil sampling. A short report by B. Atkinson on the South Lyell Camp is contained in Appendix I. Results of soil sampling, shown on Figure 16, are uniformly low in gold. Rock chip samples are also uniformly low attaining a high of 100 ppb on the east end. No further work is planned for South Lyell.

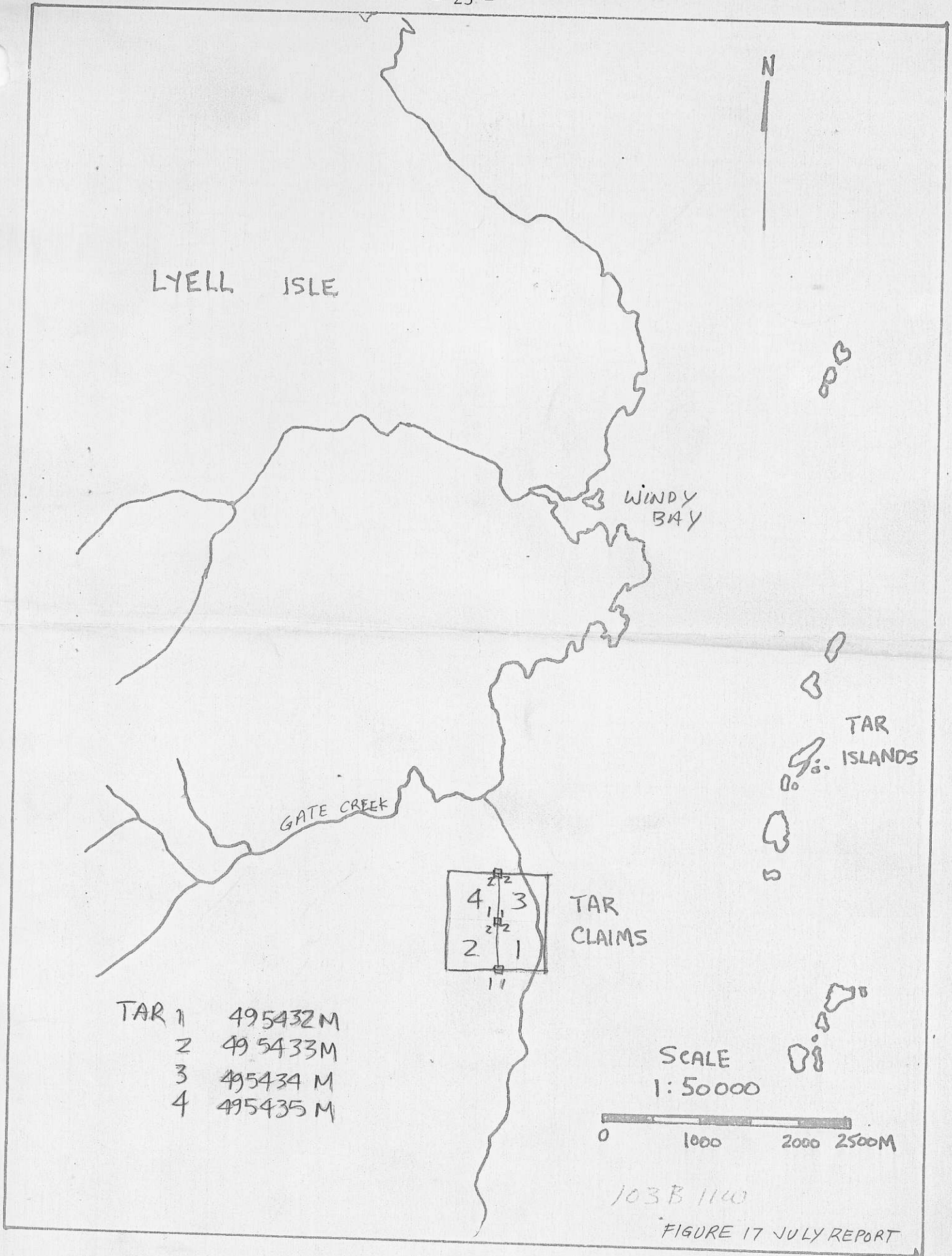
(b) LYELL CENTRAL

On June 28, 4-two post claims (TAR CLAIMS) were staked to cover anomalous rock chip samples as shown on Figure 17. These claims were recorded in B. Atkinsons name on July 26, 1979.

Rock samples taken on the showing are listed below:

	Au(ppb)	As(ppm)	Sb(ppm)
80580	10	54	0.1
80581	160	500	27
80582	120	500	7.4
80583	340	500	12.6
80584	640	500	18.0
80585	10	78	1.4

All geochem samples taken from Central Lyell camp are uniformly low in both Au and As.



103B 1140

FIGURE 17 JULY REPORT

This area is considered significant due to the presence of a gold bearing silicified zone in Masset Volcanics with complex dyke intrusions. Sulphides are also more abundant in this locality than elsewhere in the Masset Formation. Airphoto coverage should be obtained to give a reasonable base for recce mapping.

CONCLUSIONS AND RECOMMENDATIONS

Highly significant gold bearing soil and rock samples have been located on the Crescent Claims. Gold values are found in a variety of rock types reminiscent of Specogna type mineralization. The geological complexities of the Crescent Claims warrant a comprehensive property program as outlined in Appendix III. Any attempt to carry the work out in smaller successive stages runs the risk of becoming bogged down in one particular area and not give the entire anomalous area the attention it deserves.

Until initial sample results are received for the Alder Group only tentative conclusions can be formulated. However the reality of at least one gold bearing zone is clear. Any entirely new showing of visible gold deserves detail follow up to determine its' true significance. Trenching on Alder Island is warranted together with limited soil grids on other silicified zones. Ideally work on both Crescent and Alder should be completed prior to the 1980 season so that concepts can be formulated to guide selection of priority areas.

Additional work is planned for Central Lyell Island. A petrographic study may be helpful in classifying rock types.

The advantages of keeping a crew together to do follow up work on properties in which they have a prospecting interest can not be overemphasized, in order to facilitate this property work should commence in September 79 on Crescent Claims.

Respectfully submitted,

J.T. Shearer

APPENDIX I

CAMP REPORTS

by

B. ATKINSON, J. CLARKE and G. MARCHAK

- | | |
|----------------------|--------------------|
| (a) South Lyell Isle | June 10 - 19, 1979 |
| (b) Wilson Bay | July 1 - 6, 1979 |

GEOLOGY REPORT

SOUTH LYELL ISLE

June 10 - 13, 1979

Brian Atkinson
Geordan Marchak

INTRODUCTION

A three day camp was located on South Lyell Isle (North of Faraday Island) to examine an anomalous gold area. An earlier reconnaissance rock sample (#80544) contained 160 ppb Au.

Four 2 post claims were staked to hold the area. These "LYELL" claims 1,2,3 and 4 are numbered as follows:

LYELL 1	498637 M
LYELL 2	498636 M
LYELL 3	498639 M
LYELL 4	498638 M

The claim line runs north starting from the beach edge. A grid soil sample was made across the major fault zone which contained the original anomalous rock sample. The grid consisted of 6 lines at 100 ft spacings with E.W. trend. Soils were collected every 50 ft in the fault zone and 100 ft on the other edges for a total of 15 samples per line and 90 samples total.

In addition to the detailed soil sampling, a continuous chip sample across 110 m of beach outcrop was made. Fourteen chip samples were collected for assay.

GEOLOGY

As indicated on the geology map by Sutherland-Brown the area includes a major N.W. trending fault which transects LYELL ISLE and extends through Burnaby Island to the South and Moresby to the North. The fault puts MASSET feldspar porphyry rocks against a fault related intrusive pluton.

The MASSET feldspar porphyry is a continuation of that seen on the EAST LYELL ISLE camp (May 31st, 1979). The fault zone includes highly sheared greenstones which are silicified and brecciated by numerous quartz and albite veins. Minor sulphide pods - (pyritic) are also seen. The exposed fault zone measures 110 m. Between these upstanding, resistant greenstones are soft grey highly sheared zones. This gives contrasting relief on a 1 - 5 m scale.

Only a small section of monzonitic intrusive rock is exposed a short way up the main creek West of camp. Above this white rhyolite - felsites outcrop as cliffs on the West side of the creek. These rhyolites grade into greenstones and are highly pyritic on fracture surfaces.

The fault shear zone outcrops abundantly up the creek. Outcrop of F.G., well jointed, blocky grey siltstone argillite may be seen on a small branch creek bank. This is again exposed near the source of the main creek alternating with green sandstone units. This is believed to be the MAUDE FORMATION. It has an Easterly strike with variable dips to the North.

ECONOMICS

The intensive geochem sampling of the area should indicate the potential of the area as a host for economical gold. If favourable results are returned, an enlarged staking program should be used to cover the area using modified grid system.

GEOLOGY REPORT

WILSON BAY

July 1979

Brian Atkinson

John D. Clarke

INTRODUCTION

A fly camp was located on the East end of Wilson Bay for four working days July 1 - 4, 1979 to examine the N.W. end of the gabbroic hill outcropping on the Crescent claim group. Soils and rocks were collected for assay. These are:

Soils: A - 79 - 498 - 535
A - 79 - 858 - 899
A - 79 -1601 -1603

Silts: U - 79 - 234 - 239

GEOLOGY

The YAKOUN formation was positively identified on the S.W. side of the gabbroic hill, where it outcrops extensively. It occurs as repeating units of rounded angular agglomerate flows overlain by lapilli tuffs - often calcite cemented. Contacts of agglomerate to lapilli tuff are gradational, merely representing a size change and good sorting of fragments. The dominant unit - the lapilli tuff, is easily recognized by its distinctive weathering pattern. The cementing calcite weathers out, leaving polygonal shaped greenstone fragments (now chloritized) in high relief. The rock crumbles easily. Volcanic sandstones, interbedded with the tuffs are probably the fine grained equivalents of the tuffs. These sedimentary units of the YAKOUN may be seen in sharp contact with hornblende and/or feldspar porphyry. Several cycles of deposition within one outcrop may be viewed, representing cyclic

volcanic activity.

The YAKOUN also includes a conglomerate unit exposed in good cliff sections at the 500 ~~A~~ contour lake to the N.W. of gabbro hill. This conglomerate includes KUNGA fragments up to 20 cm blocks, the average being 1 cm. These matrix supported fragments are cemented with a green to black microcrystalline groundmass. KUNGA and KARMUTSEN units have been described in previous report.

Contacts between the YAKOUN overlying the KUNGA vary from conformable to brecciated, angular unconformable as seen in creek sections. The contact on the S.W. slope of gabbro hill is always below the 1000 ft contour. YAKOUN-MASSETT contacts are all fault related.

The MASSETT formation includes the gabbro exposed on the top of the Hill, a basaltic unit and rhyolitic to felsitic rocks. The gabbro and basalts have been described previously. The MASSETT rhyolites appear as thinly bedded, white weathering rocks with white cherty units up to 20 cm thick within blue-grey rhyolites. These rhyolites are often pyritic, with pyrrhotite and sphalerite occurrences. Rhyolites are best exposed on the S.W. side of the gabbroic hill within CRESCENT 1 claim boundaries. Maximum thickness is 200 ft.

Felsites are pale green to calcareous grey rocks with zeolite and pyrrhotite filled cavities. These rocks, related to the rhyolites, may be a transitional phase from basalts.

STRUCTURE

A stratigraphic section is depicted in Figure 1. This may require revisions with more detailed investigation. The S.W. slope of the gabbroic hill is intensely block faulted. These faults trend N.S.

This faulting, highlighted by small, steep sided creeks and waterfalls, abutts bedded cherty rhyolites against volcanic greenstones, hornblende porphyries, and agglomerates. The easily detected rhyolites, serving as marker horizons suggest steep tilting and block rotation continually to the west. Dips vary between 30 - 60° with strikes N.S. ± 03°. An idealized block fault interpretation for the area is shown in Figure 2. Block tilting, rotation and topographic levels complicate the geology much more than is shown.

ECONOMICS

A sphalerite showing in highly altered rocks discovered from the CRESCENT CAMP is further enhanced by a second showing on the S.W. slope of gabbro hill. This second showing, outcropping at 3 W. + 2.5 S. on CRESCENT 1 was thoroughly examined and sampled. Approximately 500 m away from the first showing, the sphalerite occurs in bedded rhyolites, associated with pyrite and pyrrhotite. A small amount of lime green to yellow (arsenic?) stain was noted. The sulphides are stratabound, becoming nearly massive within specific cherty beds. The rhyolites do not show significant alteration and the sulphides appear primary. Abundant sulphide association elsewhere (pyrite, pyrrhotite) with bedded rhyolites indicate these rocks to be important for sulphide deposition. The anomalous gold values may be linked to the sulphides. This should be determined on return of rock assays.

The YAKOUN lapilli tuff appears to have been a very porous rock which would be a favourable host to mineralizing fluids. The initial sphalerite showing appears to be in highly altered equivalents of these tuffs. Similar alteration (with pyrite pyrrhotite only) within recognizable lapilli tuffs can be viewed in the western claim boundary creek (CRESCENT 1).

CONCLUSIONS

The geology of the S.W. slope of the gabbroic hill is complex and interesting. Detailed investigation is required here to aid in understanding the entire geologic history of this area.

In the event the anomalous gold values continue along the gabbroic hill off the claim group, an additional block of 20 claims must be staked to cover the entire hill. Wilson Bay camp provides good working access to the western most claims.

APPENDIX II

TIME SHEETS JULY 1979

J. Shearer
B. Atkinson
J. Clarke
G. Marchak

J.C. STEPHEN EXPLORATION LTD.

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

TELEPHONE (604) 988-1545

MONTHLY TIME RECORD FOR

JULY

19 79

NAME

J. T. SHEARER

SUNDAY

DATE	WORK DONE	CHARGE
1	Geology Alder Island.	
2	Geology Alder Island Stake "Albion FR."	
3	Geology Alder Island.	
4	Geology HUXLEY Island	
5	Camp move with Sandspit Record Crescent	
6	Staking Alder ONE ^{Reel} Record Crescent ^{Island}	
7	Staking Alder ONE HUXLEY Island	
8	Geology Johnson Nickel	
9	Geology Alder Gold 1	
10	Staking Alder Gold 3	
11	Staking Alder Gold 2	
12	Property work on Crescent Geology	
13	Phone Cam. office work	
14	Staking Rambler Phoenix geology Archilka	
15	geology Huxley Island (ALDER ONE)	
16	geology South Burnaby Jessie Mine	
17	geology HUXLEY silicified zone	
18	geology NICKS CREEK Prospecting	
19	geology + prospecting NICKS CREEK	
20	geology Alder Island.	
21	STAKING CRESCENT FIVE.	
22	Geology Alder Gold 1	
23	geol. tour with JCS Alder, office work class	
24	COOKS TOOK office Alder - Crescent drafting	
25	COOKS TOOK Alder - Crescent	
26	Sandspit → Vancouver cinola in AM	
27	QUARTERLY Meeting Vancouver	
28	Vancouver	
29	Vancouver	
30	Record Alder Group → Crescent Five	
31	Vancouver to Prince George.	
	TOTAL DAYS WORKED	

Crescent
5

J.C. STEPHEN EXPLORATION LTD.

1124 WEST 15th STREET
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TELEPHONE (604) 988-1545

NAME B. ATKINSON

MONTHLY TIME RECORD FOR July 1-31 1979

DATE	WORK DONE	CHARGE
1	TRaverse of GABRO Hill from WILSON BAY	
2	Geology prospecting location of GABRO HILL	
3	Geology prospecting at Ziar th showing	
4	Geology, prospecting NW from Crescent claims	
5	Moved to Section Cove, saw Alder Gold	
6	Prospecting Broadway Is. broke knee	
7	Cruise around Hurley Island	
8	Stayed in camp	
9	" " "	
10	Flew to Sandspit	
11	Went to QCC hospital - leg in cast	
12	Drafting	
13	Drafting	
14	Drafting	
15	Drafting	
16	Drafting	
17	Went to hospital - cast removed	
18	Hospital, Moresby Camp check, drafting	
19	Hospital, drafting	
20	Moresby camp, drafting	
21	Staking additional CP ^{SECTION} CLAIMS	
22	Prospecting, geology up Nick's Creek Broadway	
23	Prospecting geology Johnsons Nickel showing	
24	Prospecting on Hurley Island	
25	Prospecting geology Alder Gold - Broadway Is.	
26	^{Section Cove} Broke camp, moved to SANDSPIT, returned boat	
27	Broke MORESBY CAMP	
28	WIP UP OF GEAR FOR FOODS	
29	Prospecting geology ARDUN Is - RENNELL SOUND	
30	Prospecting geology ARDUN Is. area	
31	Broke ARDUN CAMP, TRUCK + US TO PRINCE ROBERT	
	TOTAL DAYS WORKED	

J.C. STEPHEN EXPLORATION LTD.

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

TELEPHONE (604) 988-1545

NAME JOHN D. CLARKE

B.C. GOLD - Q.C.I.

MONTHLY TIME RECORD FOR July 19 79

DATE	WORK DONE	CHARGE
1	PROSPECT & SAMPLE WILSON BAY	
2	✓	
3	✓	
4	✓	
5	MOVED TO SECTION COVE, BURNABY ISLAND	
6	PROSPECT & SAMPLE BURNABY	
7	STAKING - ALDER ONE (HUXLEY)	
8	STAKING - ALDER GOLD ONE AND TWO	
9	STAKING - ALDER GOLD ONE	
10	STAKING - ALDER GOLD TWO AND THREE	
11	STAKING - ALDER GOLD TWO	
12	CRESCENT CLAIMS - PROPERTY	
13	PROSPECT ALDER GOLD ONE	
14	STAKING RAMBLER PHOENIX	
15	PROSPECT ALDER 1 - (HUXLEY)	
16	PROSPECT S.W. BURNABY ISLAND	
17	PROSPECT ALDER GOLD 3	
18	PROSPECT ALDER GOLD 2	
19	PROSPECT ALDER GOLD 1	
20	PROSPECT ALDER GOLD 2	
21	STAKING CRESCENT 5	
22	PROSPECT ALDER GOLD 1 1/2	
23	PROSPECT ALDER GOLD 3.	
24	PROSPECT RAMBLER - PHOENIX	
25	PROSPECT ALDER GOLD 1	
26	MOVE TO SANDSPIT	
27	FLY TO VANCOUVER	
28	VANCOUVER	
29	✓	
30	✓	
31	VANCOUVER → PRINCE GEORGE	
	TOTAL DAYS WORKED	

J.C. STEPHEN EXPLORATION LTD.

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

TELEPHONE (604) 988-1545

NAME Geordan Marchak

MONTHLY TIME RECORD FOR

July 1 - ~~20~~³¹

1979

DATE	WORK DONE	CHARGE
Sun 1	Alder Is. chain and samples (grid)	
mon 2	Alder Is. grid	
Tue 3	Alder Is. grid	
Wed 4	Huxley Is. traverse	
Thurs 5	Moving - Alder 1-2 then Sandspit (Food water)	
Fri 6	Sandspit; Q.C.C.: hardware, chains.	
Sat 7	Huxley Alder 1 claim lines	
Sun 8	Barnaby Alder gold 1-2 claim lines	
mon 9	Barnaby Alder gold 2 claim lines	
Tue 10	Barnaby Alder gold 2+3 claim lines	
Wed 11	Barnaby Alder gold 2 claim lines	
Thurs 12	Crescent property work (trails, pads)	
Fri 13	Barnaby creek traverse (S.H.)	
Sat 14	Huxley claim lines (Pambler - Phoenix)	
Sun 15	Huxley grid "H"	
mon 16	Boat traverse around Barnaby - Dewey	
Tue 17	Huxley Is. grid lines	
Wed 18	Barnaby Is. creek traverse: Nick's creek.	
Thurs 19	Barnaby Is. creek traverse: Nick's creek.	
Fri 20	Section creek traverse Barnaby Is.	
Sat 21	Crescent claim lines (Wilson Bay)	
Sun 22	Alder Gold Grid Line: "AG"	
mon 23	Johnson's creeks Barnaby Island traverse	
Tue 24	Huxley Is. "Z" Grid.	
Wed 25	Alder Gold Grid Line: "AG"	
Thurs 26	Moving: Barnaby Island → Sandspit	
Fri 27	Sandspit: Moreby Camp cleared samples sorted and shipped	
Sat 28	Sandspit: loading truck + boat to Q.C.C. moving out to R.C.C. museum.	
Sun 29	Q.C.C. to Yakon lake Camp. road traverse.	
mon 30	Yakon lake traverse.	
Tue 31	Moving: Yakon lake - musset. back to P.R. Ruston.	
	TOTAL DAYS WORKED	

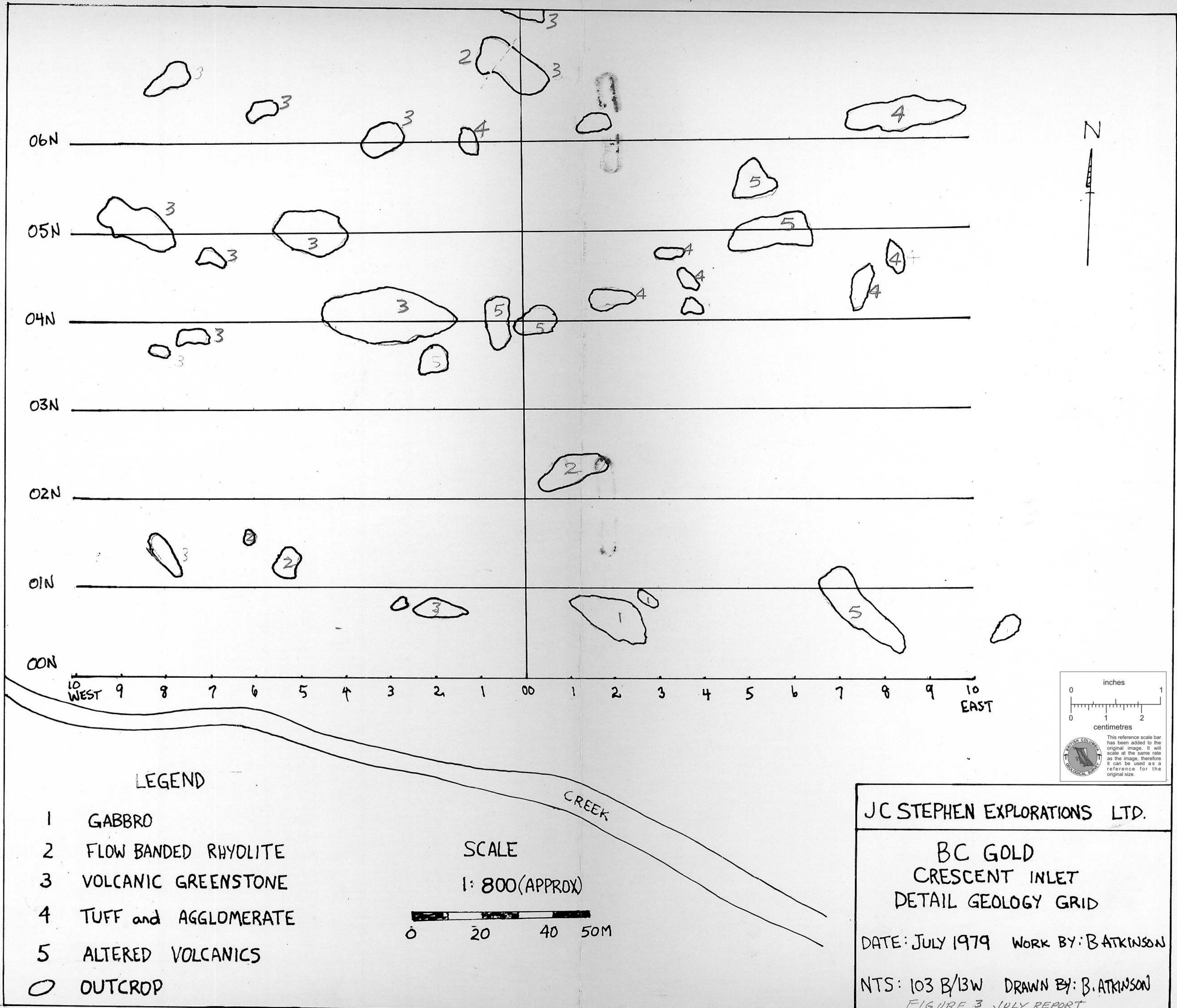
APPENDIX III

PROPOSED PROGRAM AND BUDGET

ON

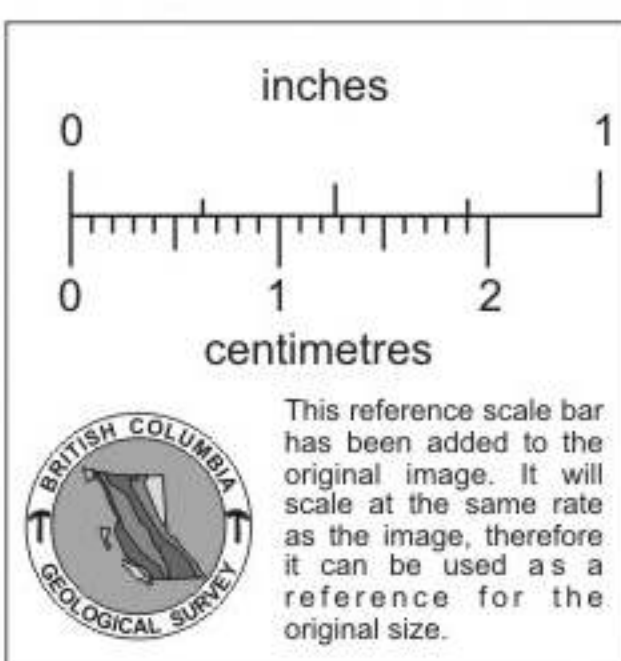
CRESCENT GROUP

and tentative proposal on Alder Claims
(pending results)



06N
05N
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03N
02N
01N
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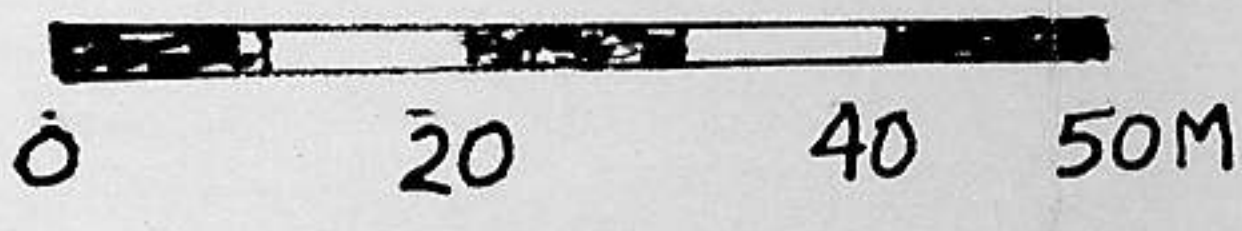
10 WEST 9 8 7 6 5 4 3 2 1 00 1 2 3 4 5 6 7 8 9 10 EAST



LEGEND

- 1 GABBRO
- 2 FLOW BANDED RHYOLITE
- 3 VOLCANIC GREENSTONE
- 4 TUFF and AGGLOMERATE
- 5 ALTERED VOLCANICS
- OUTCROP

SCALE
1: 800 (APPROX)



CREEK

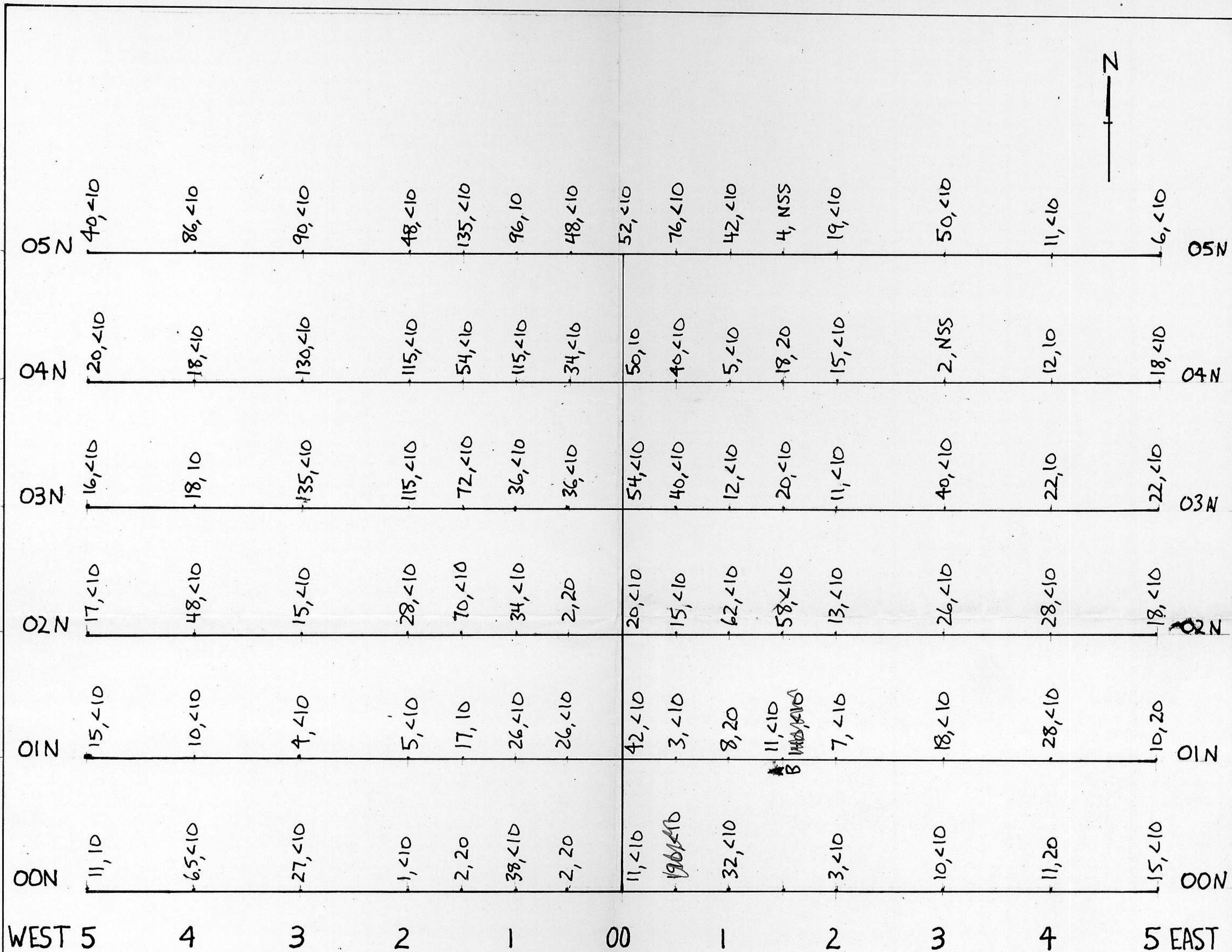
JC STEPHEN EXPLORATIONS LTD.

BC GOLD
CRESCENT INLET
DETAIL GEOLOGY GRID

DATE: JULY 1979 WORK BY: B. ATKINSON

NTS: 103 B/13W DRAWN BY: B. ATKINSON

FIGURE 3 JULY REPORT

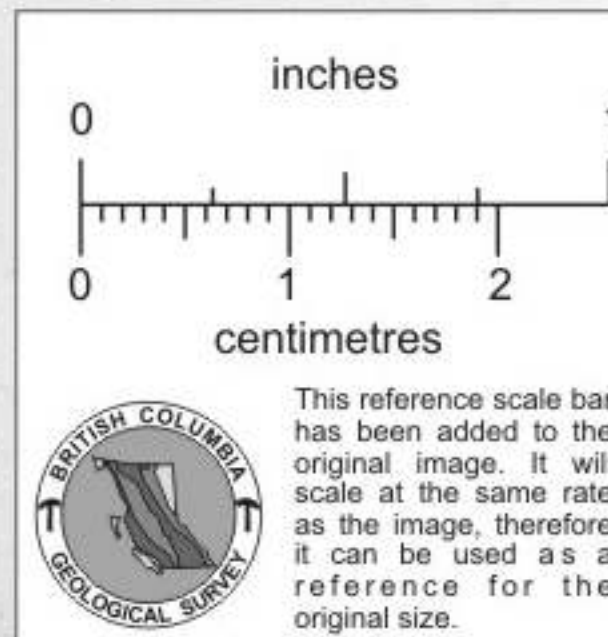
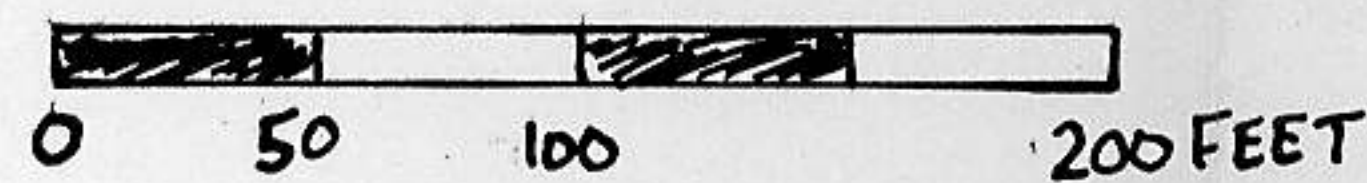


LEGEND

As, Au
ppm, ppb
11, 10

SCALE

1:1200



JC STEPHEN EXPLORATION LTD

BC GOLD
SOUTH LYELL ISLE
SOIL GRID GEOCHEM

DATE: JUNE 1979 WORK BY G. MARCHAK

NTS: 103 B/11W DRAWN BY: B ATKINSON

FIGURE 16 JULY REPORT