JCS OFFICE

SUMMARY REPORT

on

PRELIMINARY RECONNAISSANCE

in the

QUEEN CHARLOTTE ISLANDS

by

J.T. SHEARER, M.Sc.

for

McINTYRE MINES LIMITED

Vancouver, B.C. 671530 December 20,1978

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TABLE OF CONTENTS

LIST OF ILLUSTRATIONS AND TABLES

SUMMARY

1) Phase I of the Exploration Proposal for bulk tonnage gold in the QUEEN CHARLOTTE ISLANDS (J. Shearer, August 20, 1978) was completed between September 6 and 21, 1978.

2) A total of 232 rock specimens were collected and analysed for 12 elements; Cu, Mo, Pb, Zn, Ag, Au, Sb, Ba, Sr, Ca, Hg and As. Results show anomalous gold values in the Yakoun Formation and Tartu Facies of the Masset Formation. Other elements show scattered highs without appreciable relationship to gold. Several elements can be dropped from future analyses.

3) A total of 427 soil and silt samples were collected and run for 8 elements; Cu, Pb, Zn, Ag, Au, As, Sb and Hg. A prominent gold soil anomaly in the Upper Deena Creek Area is indicated along with several other "high background" areas that warrant detail follow up.

4) Priority areas which could not be evaluated due to poor weather conditions are briefly discussed.

5) Field expenditures total $25,306.21 compared to an estimated cost of $23,108.00 (without wages).

6) A follow up program estimated at $40,000 (without wages) is outlined to operate between June 15 and September 15. Rock, silt and soil anomalies should be checked and additional samples taken. Remaining priority areas should be evaluated. The Deena soil anomaly should be staked if follow up samples confirm the high gold values.

INTRODUCTION

OVERVIEW AND OBJECTIVES

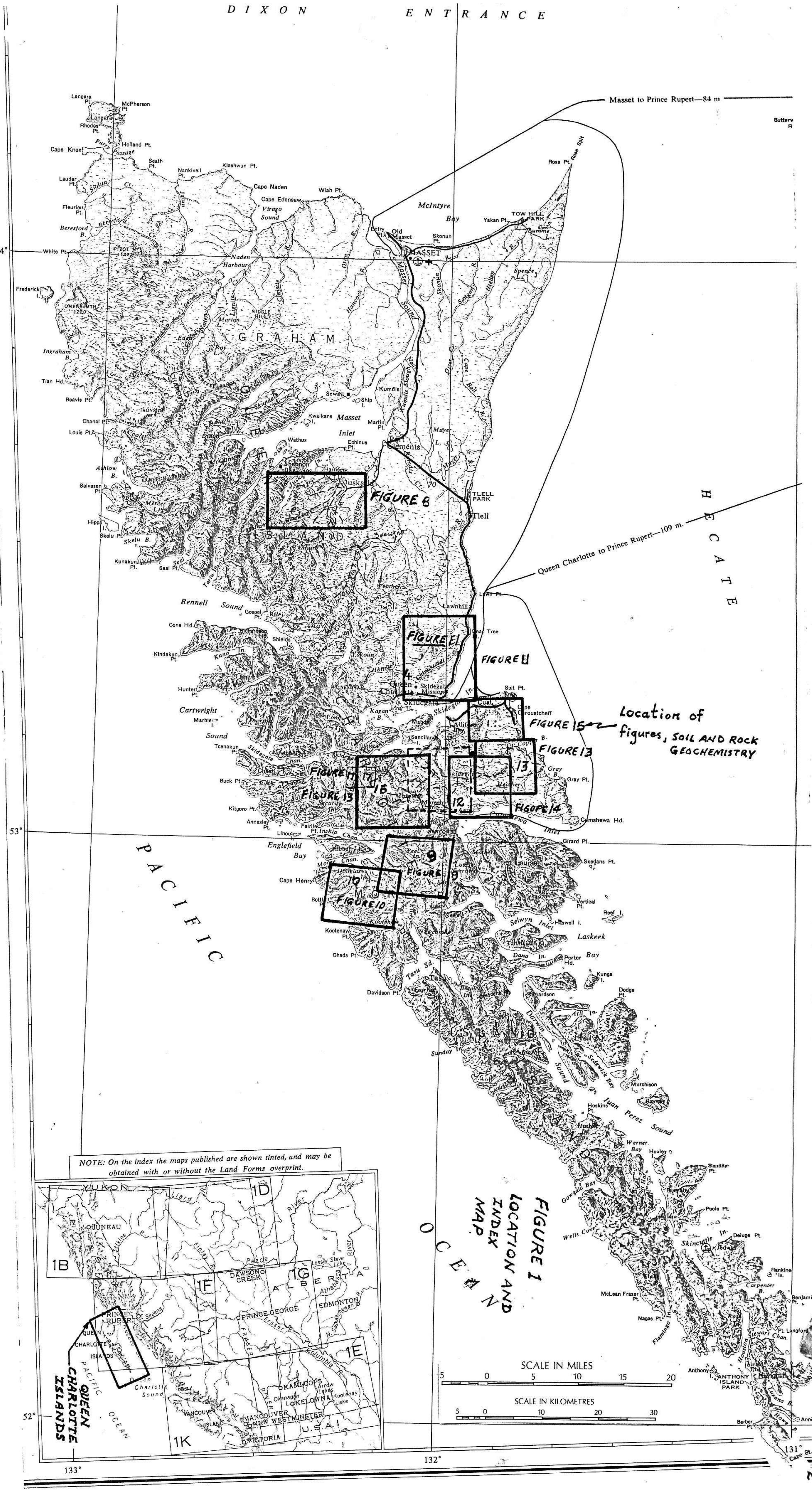
The intial phase of an exploration proposal for bulk tonnage gold in the Queen Charlotte Islands was carried out between September 5 and 21, 1978 by a four man crew. Figure 1 shows the areas where work was concentrated. Orientation field work leading to this proposal was completed between August 3 to 9, 1978. This report summarizes results obtained from sampling during both periods. The prospecting rational for the program is outlined in a report entitled:

> Exploration Proposal for Gold in the Queen Charlotte Islands and Boundary District, by J.T. Shearer, Dated August 20, 1978. (30 pp).

Essentially, four diverse lithological environments are identified as possibly favourable to bulk tonnage- disseminated gold mineralization. The objectives of the initial phase (Phase I) was to evaluate these four environments in detail and select areas of particular interest. Initial attention focused on favourable units juxtaposed with strong fault or linear structures. Geochemical and detail geological criteria as discussed in this report, form the basis for further definition of the target areas.

One area of strongly anomalous gold content in soils (300 ppb) and several areas of "high background" gold soils are indicated. Rock geochemistry reveals five areas of anomalous gold concentration

Several initial priority areas earmarked for prospecting in Phase I could not be evaluated due to poor weather conditions. Field expenditures in Phase I and orientation work total $25,306.21 (Appendix I) as compared to an estimated cost of Phase I of $23,108.00 (without wages).


DIXON ENTRANCE
HECATE
PACIFIC OCEAN
GRAHAM ISLAND
MORESBY ISLAND
QUEEN CHARLOTTE ISLANDS
Masset to Prince Rupert—84 m
Queen Charlotte to Prince Rupert—109 m.
Langara Pt.
McPherson Pt
Langara I.
Rhodes Pt.
Parry Passage
Holland Pt.
Cape Knox
Seath Pt.
Nankivell Pt.
Klashwun Pt.
Lauder Pt.
Cape Naden
Wiah Pt.
Cape Edensaw
Virago Sound
Fleurieu Pt.
Beresford B.
White Pt.
PIVOT MTN 1922
Naden Harbour
Frederick I.
OMEGA MTN 1220
MIDDLE HILLS
Ingraham B.
Tian Hd.
Beavis Pt.
IRONSIDE MTN
Chanal Pt.
Louis Pt.
Ashlow B.
CAMERON RANGE
Selvesen Pt.
Mercer L.
Hippa I.
Skelu Pt.
Skelu B.
Kunakun Pt.
Seal Pt.
Seal In.
Rennell Sound
Gospel Pt.
Cone Hd.
Shields I.
Kindakun Pt.
Kano In.
Hunter Pt.
Cartwright Sound
Marble I.
Tcenakun Pt.
Skidegate Chan.
Buck Pt.
Kitgoro Pt.
Annesley Pt.
Fairlie Pt.
Inskip Chan.
Lihou I.
Englefield Bay
Cape Henry
Kootenay Pt.
Chads Pt.
Davidson Pt.
Tasu Sd.
Sunday In.
McIntyre Bay
Rose Pt.
Rose Spit
TOW HILL PARK
Yakan Pt.
Entry Pt.
Old Masset
Skonun Pt.
MASSET
Masset Sound
Spence L.
Kumdis
Sewall
Ship I.
Kwaikans I.
Masset Inlet
Martin Pt.
Wathus I.
Echinus Pt.
Port Clements
Mayer L.
TLELL PARK
Tlell
Lawn Pt.
Lawnhill
Dead Tree
Queen Charlotte
Skidegate Mission
Skidegate In.
Spit Pt.
Cape Chroustcheff
Kagan B.
Sandilands I.
Gray B.
Gray Pt.
Cumshewa Inlet
Cumshewa Hd.
Girard Pt.
Skedans Pt.
Louise I.
Vertical Pt.
Reef I.
Selwyn Inlet
Haswell I.
Laskeek Bay
Dana In.
Porter Hd.
Kunga I.
Dodge Pt.
Richardson
Atli In.
Darwin Sound
Lyell I.
Sedgwick Bay
Murchison I.
Hoskins Pt.
Juan Perez Sound
Werner Bay
Huxley I.
Gowgaia Bay
Poole Pt.
Wells Cove
Skincuttle In.
Deluge Pt.
Jedway
Rankine Is.
Carpenter B.
McLean Fraser Pt.
Benjamin Pt.
Nagas Pt.
Flamingo In.
Pt. Langford
Stewart Chan.
Houston
Anthony I.
ANTHONY ISLAND PARK
Luxana B.
Barber Pt.
Annis
Howe B.
Cape St. J
54°
53°
52°
133°
132°
131°
FIGURE 8
FIGURE 11
FIGURE 4
FIGURE 15
Location of figures, SOIL AND ROCK GEOCHEMISTRY
FIGURE 13
FIGURE 14
FIGURE 17
FIGURE 13
18
12
13
FIGURE 9
FIGURE 10
FIGURE 1
LOCATION AND INDEX MAP.
SCALE IN MILES
5 0 5 10 15 20
SCALE IN KILOMETRES
5 0 10 20 30
NOTE: On the index the maps published are shown tinted, and may be obtained with or without the Land Forms overprint.
YUKON
1B
1D
1F
1G
1E
1K
JUNEAU
PRINCE RUPERT
QUEEN CHARLOTTE ISLANDS
DAWSON CREEK
PRINCE GEORGE
EDMONTON
ALBERTA
KAMLOOPS
KELOWNA
VANCOUVER
NEW WESTMINSTER
VICTORIA
VANCOUVER ISLAND
U.S.A.
Queen Charlotte Sound
PACIFIC OCEAN
QUEEN CHARLOTTE ISLANDS

The ongoing 1979 program should include follow up of anomalous samples and continued reconnaissance of priority areas with a shifted emphasis to the Masset environment. Since much of the helicopter orientation work has been completed the per day cost of the 1979 program should be lower than Phase I.

An exciting announcement was made in early December by Consolidated Cinola Mines Ltd. concerning drill hole 78-6, an 800 foot step out on the Specogna deposit. The grades as published in the Goerge Cross Newsletter December 8, 1978 are shown below:

	From	To	Core Length	Gold Grade
78-6	0	178 m	178 m(586 ft)	0.148 oz/ton
This includes	152	176 m	24 m(79 ft)	0.86 oz/ton

An independent check by the Vancouver Stock Exchange substantiates these values. This greatly enhances the economic possibilities of the Specogna deposit.

PROGRAM LOGISTICS

The Sea Raven Motel in Queen Charlotte City served as a base of operations. To take full advantage of the unpredictable good weather days, a routine was established with Vancouver Island Helicopters whereby a decision to use the helicopter was made early in the morning by telephone. Helicopter support was on a casual basis out of Sandspit approximately 5 minutes flying time from Q.C. City. On poor weather days a rented van was used for access along the complex logging road network. A regular government ferry connects Skidegate with Alliford Bay.

An ongoing program would benefit from some kind of water transportation such as a portable rubber Canova-type boat. Alternatively, boat rentals are available in Masset. Mobile camps using truck-

camper units supplemented by tents would provide the most flexible mode of land operation. A list of local suppliers are listed in Appendix II of the Exploration Proposal.

Table I shows the dates worked with correspondingly lithological environments and sampling numbers.

GEOLOGY

GENERAL

The general geological parameters of the Queen Charlotte Islands and in particular the four target lithological environments are outlined in the Exploration Proposal (August 30, 1978) on pages 4 to 9 and 12 to 22.

The four target environments considered favourable for bulk tonnage gold mineralization are:

1) Silicified breccia zones in Skonun (and older?) sediments along deep rooted structures.
2) Eocene acidic volcanics (Masset Formation), vent and subsidence zones, pyroclastic accumulations.
3) Sulfide systems in the Yakoun Formation intermediate volcanoclastics.
4) Replacement zones in argillaceous Kunga Formation carbonates.

The stratigraphic range of each environment is shown on Figure 3 (from J. Shearer August 30, 1978).

A duplicate specimen was retained for each rock sample sent for assay. This collection can be used for detail petrographic examination of anomalous samples (winter project) and incorporation into lithotoque plates.

Table I lists the following man days allocated to each lithological environment:

Environment	Man Days
1) Skonun (Specogna)	10
2) Masset Fm.	18
3) Yakoun Fm.	20
4) Kunga-Karmutsen	16
Total	64

Each of these target settings are discussed in the Exploration Proposal and the following comments include only new data obtained during Phase I.

1) SKONUN (Specogna) ENVIRONMENT

The type section of the Skonun Formation on Skonun Point was briefly examined and character samples collected. No prospecting other than orientation studies were directed toward the Skonun Formation in Phase I because of previous work by Kennco, Cominco, Quintana and others immediately adjacent to the Specogna deposit and Sandspit fault. As stated in the Exploration Proposal, the Specogna style mineralization forms an important consideration in any prospecting rational directed toward bulk tonnage gold in the Queen Charlotte Islands.

In light of recent announcements by Consolidated Cinola a re-evaluation of Skonun - Masset Formation priorities is in order.

FIGURE 3
IDEALIZED STRATIGRAPHIC SECTION
QUEEN CHARLOTTE ISLANDS

AGE	THICKNESS	NAME	LITHOLOGY
PLEISTOCENE			
MIO-PLIOCENE	6,000'	SKONUN FM	Sandstone, shale, minor conglomerate, lignite
		Lignite	
PALEOCENE-EOCENE	18,000'	MIXED	
		unconformity	
		MASSET FM.	Acid to basic flows & pyroclastics
		ACID	
		BASIC	
		unconformity	
L. CRETACEOUS	2,000'	SKIDEGATE FM	Siltstone and sandstone
	1,300' to 4,000'	HONNA FM	Conglomerate, shale sandstone
MID CRETACEOUS	1,000'	HAIDA FM (2 separate members)	Shale member, underlain by sandstone
	2,700'	unconformity	
LOWER CRETACEOUS	4,000'+	LONGARM FM	Siltstone, minor conglomerate and volcanic
		unconformity	
	4,500' variable	YAKOUN FM	Intermediate pyroclastics sandstone, shale
LOWER JURASSIC	600'	MAUDE FM	Shale, minor sandstone
	2,000'	KUNGA FM	(argillite member)
UPPER TRIASSIC		KUNGA FM	(carbonate member)
	1,200'		
MID TRIASSIC	14,000'	KARMUTSEN FM	Basalt, Pillow lavas, breccias aquagene tuffs.

Vancouver Group

Figure 3
Idealized Stratigraphic Section
QUEEN CHARLOTTE ISLANDS
Drawn by: JS Date Aug.30,197

TABLE I

QUEEN CHARLOTTE RECONNAISSANCE

DATE	MAN DAYS	AREA	LITHOLOGY	RELEVANT SAMPLES
Aug. 3-6	8	Specogna	Skonun - Sandspit Fault	58451-58457, 58472-58474, 58330-58335, 58451-58459, SP 1-24 .
Aug. 7,9	4	Rumplestiltskin King Creek	Faulted Yakoun Fm., Rennell Sound Linear Honna Fm. - Kunga	JMT 1 to 6, KG 1 & 2, 58450-58469, 58471, SPEC 1&2, 58326-58329.
Aug. 8	2	Bateau Kitgoro Inlet	Kunga-Karmutsen, Inskip Channel Linear	Bat 1 -10, 58461-58469 .
Sept. 6,7	8	Juskatla Bottle Inlet	Masset volcanics Kootenay & Tartu facies	Jus 1 - 22, E 1 - E 13, 57076-57083, 57083-57090, B 1-14, B 14-25, 58101-58108, 58051-58058, 58059-58065
Sept. 8	4	Peel Inlet Takakia Lake	Faulted, Kunga Karmutsen Haida	E 14 - E 30, 58109-58114, 57091-57096,58066-58069, B 26 - B 45 , J 1 - J 4.
Sept. 9	4	Skidegate and Sandspit	Sandspit Fault, Yakoun Fm	E 31 - E 51, 58116-58118, 47097-47099, 58026 , B 46-B 54 .
Sept. 10	4	Copper Creek Skidegate Lake	Yakoun, Honna, Kunga, "RSLI" Fault System	E 52 - E 70, 58119, 58027-58033, 58070-58071 , B 55-B 67 .
Sept. 11	2	Skidegate Chinukundl Creek	Sandspit fault, Yakoun Fm. Intrusives	E 71 - E 89, B 68 - B 85 .
Sept. 12	2	Masset - Specogna	Skonun Fm. Orientation	
Sept. 13	3	Beresford Inlet Lyell Island	Karmutsen, Kunga "RSLI" Fault System, Masset (Dana Facies)	E 90- W 102, A-78 1 & w, 58034-58040, 58120-58134, E 103 - E 111.
Sept. 14	3	Talunkwan Island.	Masset Fm. (Dana Facies)	E 112 - E 139, 58135-58148, 58041-58046, J 5.
Sept. 15	3	Blackwater Creek	Masset Fm. (Tartu Facies)	E 140- E 160, 58149=58151, 58047-58049, 58002-58005 , J 6 - J 9.

TABLE I

QUEEN CHARLOTTE RECONNAISSANCE

DATE	MAN DAYS	AREA	LITHOLOGY	RELEVANT SAMPLES
Sept. 16	3	Copper Creek - Sandspit	Sandspit Fault, Yakoun Fm.	E 161 - E 177, 58152-58154, 58006-58007
Sept. 17	3	Skidegate Lake Moresby cutoff	Kunga, Yakoun, "RSLI" Fault System	E 178 - E 201, 58155-58159, 58008-58009
Sept. 18	3	North Graham Black Water	Masset Fm, Yakoun, Intrusive	E 202 - E 219, 58160-58177, 58010-58017
Sept. 19-20	6	Deena Creek	Kunga-Karmutsen, "RSLI" Fault System	E 220 - E 233, E 234 - E 241, 58183-58188, 581778.
Sept. 21	2	Southeaster	Sandspit Fault Yakoun Volcanics	58189-58192, J 10 - J 13.

Three days were spent on the Specogna Property which allowed time for examination of all core and some cursory geological observations. Prior to this a file of available reports was assembled from K. Sanders. Many individuals from various mining companies have visited the property, usually for a very short time, and have commented on initial impressions. A Mr. Al McKillop, an experienced prospector in charge of core handling was most helpful in providing access to the property and discussing the many varied viewpoints. Unfortunately a current geological synthesis is a minor consideration in the Consolidated Cinola exploration philosophy.

Some pertinent features of the Specogna deposit can be summarized as follows:

1) Spatially associated with the Sandspit fault, a structure with major vertical and horizontal movement.

2) Bounded by an east dipping fault at shallow depth, (Specogna Fault).

3) Extensive crudely concentric pervasive alteration zoning - silicification, vertical fissure filling plus pervasive, phyllic alteration,(seritization).

4) Host rocks are; near Specogna fault - flow banded rhyolite breccia plus coarse to fine clastic stratigraphy outward of the fault (to the east).

5) Distinct trace element assemblage, As, Sb, Ba, Hg, Te, low silver, high As, Sb, Hg, (Mo, Ag? W? in core.)

6) Extremely large hydrothermal system. 100 - 150 million tons of 0.02 oz/ton, estimates of 50 million tons of 0.06.

7) Zoning of Au: Structure - outward from Specogna Fault.
Stratigraphy - preferentially in certain beds.
Higher grade sections at depth.

A Stratigraphic column for the Specogna area is illustrated in Figure 4. All previous workers tend to regard the rhyolite member as related to the Upper Masset Formation (or Eocene in age). However there is considerable confusion as to the age of the sediments. There are 3 major viewpoints:

1) Honna equivalents.
2) Volcanoclastics of the Masset Formation
3) Skonun age (Pliocene).

From observations in 1978 I would concur with Quintana findings (Richards, 1975 and Wolfhard, 1976) that at least some of the gold bearing coarse clastic material is of Skonun age. Plant fossils similar to those dated as middle Tertiary in the Princeton Coal Basin were noted adjacent to highly silicified and mercury rich conglomerate creek exposures approximately 1 km southeast of the main mineralized zone. This suggests a Skonun age for silcification or at least introduction of silica in Pliocene time related to vertical movement on the Sandspit Fault.

A highly diagramatic sequence of events are shown on Figure 5a to c.

There are several similarities between the Specogna deposit and Carlin-type mineralization as discussed by Wolfhard et al (1976). Similarities are:

1) Pervasive gold mineralization
2) Structural and stratigraphic emplacement of metals (permeable host, vertical faults, channel ways).
3) Trace element assemblage.
4) Large size.

Stratigraphic Column
(After G. Richards 1975)

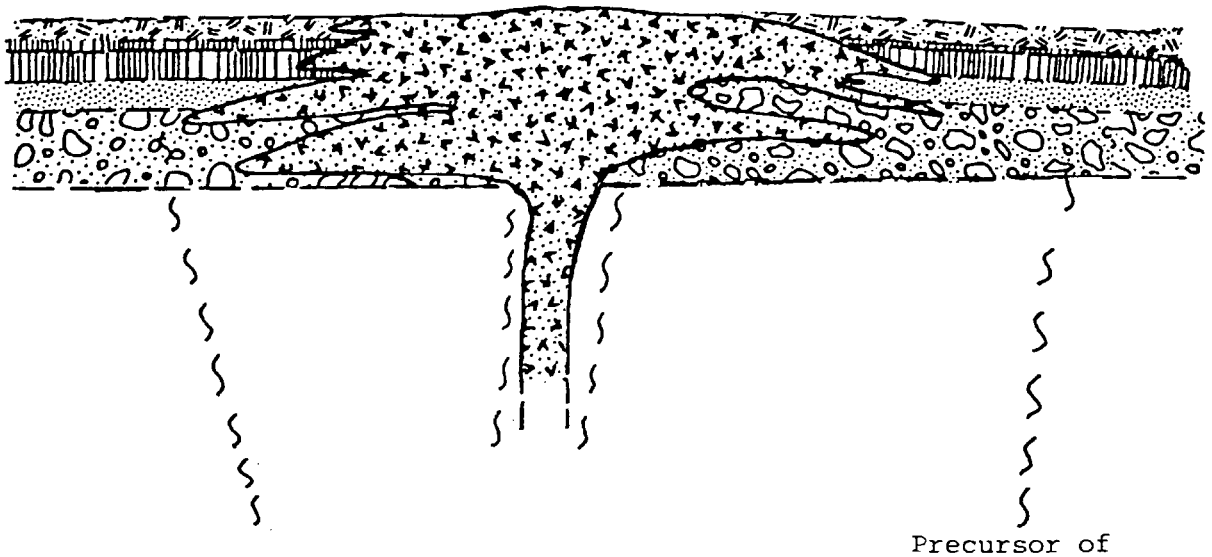
FIGURE 4

GOLD Content	Thickness		Lithology
			SILTSTONE, finely laminated, chocolate brown, few pebble layers
Good gold	(upper 50' pebble rich)		
Poor gold			
Possibly SKONUN Sediments			
Upper 50' good gold			CONGLOMERATE: (abundant porphyritic andesite pebbles)
			Numerous 1-5 ft siltstone-sandstone 5-20% of section, beds
Lower 100' poor gold			Many Wood Fragments
	Unconformable (now thought to be conformable by G. Richards)		CONGLOMERATE: (Many porphyry pebbles)
Good gold	0 - 50'		DARK GREY SHALE
			FELSIC SANDSTONE (intense bx & silicification)
Poor gold	10'-30'		
Poor gold	30'		DARK GREY SILTSTONE
MASSET Dominately Acid Volcanics		Intercalacted Quartz Porphyry Flow Dome +/or Ash Flows	
Good gold	60'		PEBBLE CONGLOMERATE
	Base not seen		

Entire section disrupted by vertical fissure filling drusy & chalcedonic quartz breccia

Drawn by J.S., Dec. 1978)

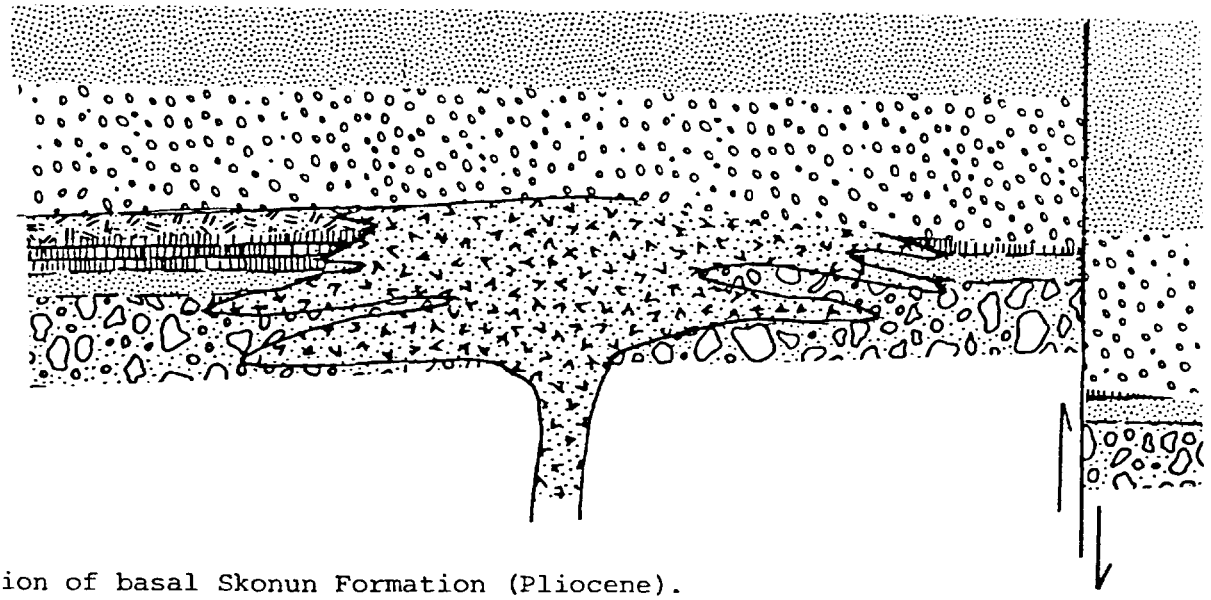
WEST EAST



1) Development of rhyolite flowdome interdigitating with coarse volcanic clastic sediments (ignimbrites, tuff breccias) perhaps collapse breccias associated with subsidence of vent area?

FIGURE 5a

2) Tilting and minor erosion - Oligocene.



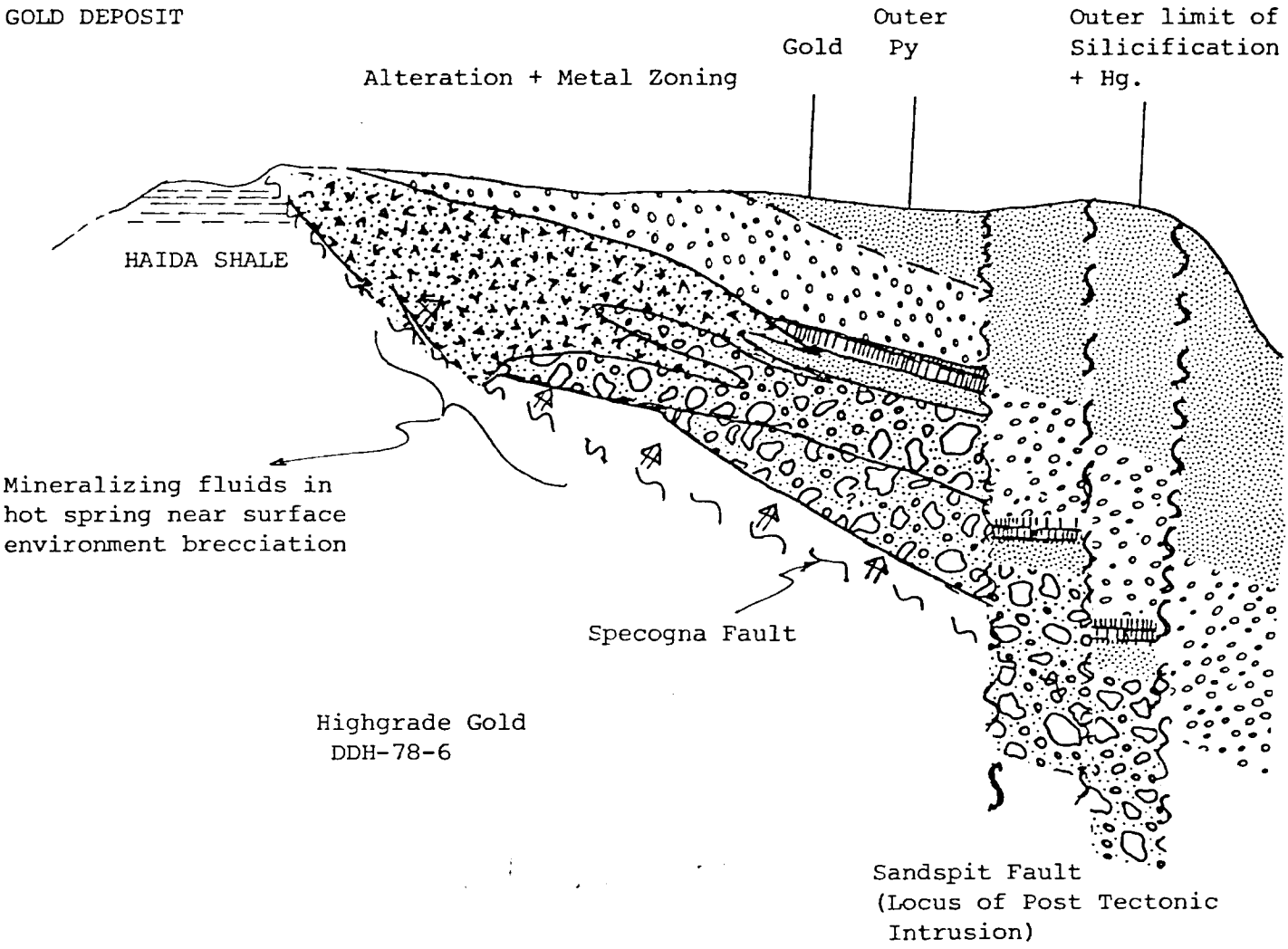
3) Deposition of basal Skonun Formation (Pliocene).

FIGURE 5b

4) Downdrop on Sandspit Fault intrusion of Post Tectonic plutons associated with fumerolic activity.

Note: Key for lithologies corresponds to stratigraphic section.

WEST EAST



5) Introduction of Gold, As, Sb, Hg, Silica, phyllic alteration, pyrite.

Note: Masset volcanics are known to be intruded and metamorphosed by post tectonic plutons.

Key for lithologies corresponds to stratigraphic section.

FIGURE 5c.

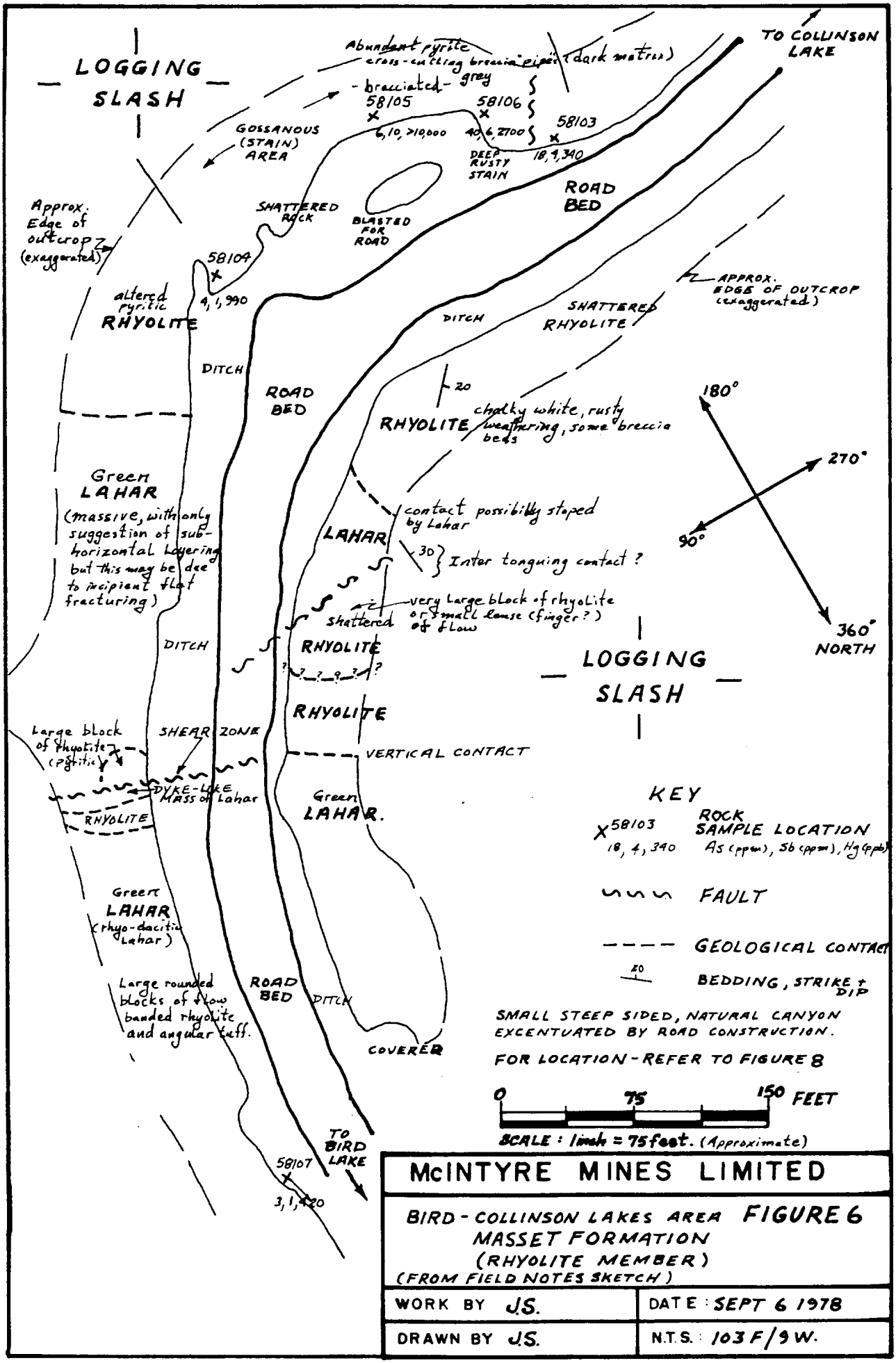
However there are also several notable differences in degree of silica introduction and host lithologies. From the limited preliminary studies at Specogna the acid volcanic component appears to have considerable genetic significance. The Specogna deposit could perhaps be more closely comparable to the precious metal - acid volcanic epithermal environment.

2) MASSET FORMATION

The complexities of the Masset Formation are outlined on pages 20 - 21 of the Exploration Proposal. A good cross-section was made through the Tartu facies in both the Rhyolite and Mixed members on Graham Island and the Kootenay and Dana facies on Moresby and adjacent Islands.

Figure 4 illustrates a small road cut-canyon in Rhyolite member near Bird Lake (see figure 8 for location). At this locaility a chalky white weathering, crudely banded, pyritized rhyolite interfingers with a green lahar. Locally the rhyolite shows steep almost vertical contacts. Cross-cutting breccia "pipes" are common in the Bird-Collinson Lakes area. Rock geochemistry of rhyolite breccia at Townstasin Hill (Datlamen Creek) assayed 50 and 70 ppb Au. An extremely well exposed, gently dipping section of Rhyolite member occurs at Port Chanal.

The Basalt member was examined on the northwest coast of Graham Island where two specimens of"garden variety"basalt ran 20 ppb Au. Brecciated basic volcanics of the Mixed member assayed 40 ppb Au. Intrusive rocks related to Masset Formation flows and pyroclastics were seen in Lepas Bay. A sample of biotite feldspar porphyry assayed 20 and 40 ppb Au. Kunga argillaceous limestone in contact with a columnar basalt dyke, just south of Lepas Bay ran 20 ppb Au. This phenomenon of "high background" to anomalous gold values in the basic and intrusive portions of the Masset Formation was not expected. The question of exhalite concentrations associated with



McINTYRE MINES LIMITED

BIRD - COLLINSON LAKES AREA FIGURE 6
MASSET FORMATION
(RHYOLITE MEMBER)
(FROM FIELD NOTES SKETCH)

WORK BY J.S.	DATE : SEPT 6 1978
DRAWN BY J.S.	N.T.S. : 103 F/9 W.

FIGURE 6

the gold bearing volcanics becomes a distinct possibility Further documentation of gold content in the lower Masset and definition of anomalous areas, if present, should be a future priority. The diverse Masset-type intrusives ranging from gabbro to biotite feldspar porphyry, should also receive close scrutiny for gold content as a possible hydrothermal source. In connection with these observations it is useful to point out that some workers suggest the rhyolitic breccia bodies found intimately associated with and hosting gold values at the Specogna deposit are related to a Masset age flow dome or high level intrusive.

Similar features, such as spherulitic flowbanded rhyolite, rhyolite agglutinate, etc., were noted in the Kootenay facies type section on Mount Russ and the Rhyolite member (Tartu facies) at Port Chanal. Volcanic breccias of the Dana Facies were examined on Talunkwan Island.

3) YAKOUN FORMATION

The Yakoun Formation received detail attention in part due to the existence of gold bearing quartz veins within silicified, sulfide systems along fault-shatter zones and also to some degree beacause of the dense concentration of logging roads coincident with the Queen Charlotte Group of rocks.

The Yakoun environment, since it occurs in fault bounded slices, includes some parts of the Haida Formation shales and Honna Formation coarse clastics. In any event the distal sedimentary component of the Yakoun Formation is usually difficult to differentiate from Honna or Haida Formations.

Several days were spent near the old Southeaster gold showing near Skidegate. Although the showing is only a mile from the highway, access is difficult owing to thick second growth in very old slash. The original gold showing is hosted by shattered Yakoun andesite. Rock geochem shows anomalous values in Pb, Zn, Ag and Au near the showing. Quartz vein material of ore grade was not found on the dump. Limited further work is warranted.

A reported small showing near the Sandspit dump in highly sheared Yakoun agglomerate was sampled with little encouragement. Interesting arsenic-antimony-mercury (minor gold) mineralization occurs near Heather Lake. Work by Umex-Falconbridge on claims owned by E. Specogna in 1974 and Kennco on adjacent ground between Cumshewa Inlet and Heather Lake are included in the Yakoun data base. Mineralization on these claims is reported as low gold associated with stibnite in quartz-calcite stringers hosted by silicified andesite or possibly rhyolite. Road construction and current logging by Crown Zellerbach has only recently entered the area. Numerous outcrops along the new road are characterized by a red mineral,resembling realgar, coating fractures and infilling shear zones. However rock analyses give very low arsenic results and the mineral appears to be hematite stained selenite.

The Courte antimony trend (including the Rumpestiltskin Claims) near Rennell Sound may have some similarities to the Heather Lake mineralization. Figure 5 shows gold values and geology at the main Courte Property showing. It is interesting to note that possible Masset age intrusives are present.

The faulted block of Yakoun Formation between Mosquito and Skidegate Lakes received only one day prospecting and requires more work. This large area lies within the main strands of the Rennell Sound-Louscoone Inlet (RSLI) fault system.

4) KUNGA-KARMUTSEN ASSEMBLAGE

In Phase I, the Kunga Formation was observed in three main areas: a) Deena Creek, b) Peel Inlet and c) Skidegate Lake. On Sutherland-Brown's (1968) map, many areas shown as Karmutsen in reality include significant thin to moderately thick horizons of Kunga Formation. Examples are on the Bateaux claims, Kitgoro Inlet and in Upper

Deena Creek. The recessive, flaggy argillite member was sampled in the Takakia Lake area. Here the argillite has been altered and crushed by many faults. Although gossanous stain zones are common, no anomalous samples were collected. The resistant lower, grey weathering, massive limestone forms prominent cliffs south of Skidegate Lake and Peel Inlet.

A very interesting Au, Mo, As and Sb soil-rock anomaly was found in upper Deena Creek underlain by blocky weathering limestone in contact with Karmutsen basalts (Figure 17). A severely contorted thin bedded limy argillite was noted in the valley floor adjacent to the anomalous soil samples, suggesing the presence of a major fault. A Masset-age gabbro-diabase stock occurs on the north side of Deena Creek along a possible continuation of this major fault.

GEOCHEMISTRY

A) Rock Geochemistry

Rock geochemistry is a valuable tool in the search for disseminated gold mineralization. Its importance is accentuated by: (1) the subtle, commonly micron size gold particles, (2) usually poorly developed macroscopic, diagnostic alteration patterns and (3) general low gold mobility in the hydromorphic environment. Also, high gold background lithologies are becoming an important criteria in many current conceptual models of disseminated, bulk tonnage gold deposits.

A total of 232 rock specimens were sent for 12 element analysis. The large number of elements were chosen to evaluate the usefulness of a possible gold associated suite in a full scale reconnaissance program. Duplicate specimens were retained for almost all analysed samples and are presently being examined in detail.

The basic data obtained from the rock geochemistry results are summarized in Table II. Threshold is taken at approximately $\bar{x} + 2\sigma_n$. Where $\sigma_n = \frac{\sqrt{\Sigma x^2 - (\Sigma x)^2/n}}{n}$. Rock sample sheets were filled out and provide a convenient record of sample type and location together with assay values. Location and results of rock sampling is plotted on Figure 8 to 17.

The very high As,Sb,Au,Hg in the Skonun suite is largely due to orientation work over the Specogna deposit and more accurately reflects the element associations of the gold mineralization.

Although the sample population is small some interesting features concerning different Masset Formation facies are apparent. High values characterize arsenic in Dana Facies and Hg in rhyolite member. High gold content in the limited suite of Basalt and Mixed members has been discussed previously.

The Yakoun Environment is surprisingly similar to the Kunga-Karmutsen assemblage except for molybdenum and silver. Molybdenum appears to indicate fault activity in the Kunga, for example the 72 ppm in central Deena Creek and the 50 ppm at Peel Inlet. A pronounced fault zone at Beresford Inlet on Lyell Island was investigated on the suggestion of B. Abraham regarding reported gold showings but no encouraging signs were found.

From Table II it is apparent that several elements do not contribute a great deal of valuable information. Elements that could be eliminated in Phase II are Cu, Ba, Sr, Zn, Pb, Ag and Mo. A routine analysis for Au, As, Sb could be supplemented on selected samples by Hg, Mo and perhaps Ba.

Follow up work warranted from rock geochemistry is as follows: High priority (1) Deena Creek (Figure 17) high Au in carbonate. Low priority (2) Datlamen Creek (Figure 8) anomalous Au in rhyolite, (3) Sandspit dump (figure 15) one isolated 50 ppb Au.

B) Soil Geochemistry

Statistical parameters for soil sampling divided into each lithological group are tabulated in Table III. The distribution of soil samples are shown in Figures 8 to 17. Again, the Skonun Formation data is from an orientation line through the center of the Specogna deposit. High values are indicated for Au, As, Sb, Ag and Hg whereas Cu, Pb, Zn are background.

Notable differences between Masset Formation facies are shown for Hg, in contrast to general similar values for Zn, Pb, Cu, Ag, Sb, As and Au. The higher arsenic theshold for the Dana facies area is largely due to one 500 ppm sample.

The soil content of As, Ag, Cu, Zn and Hg for the areas underlain by Yakoun Formation is very close to the results obtained for the Kunga-Karmutsen environment. Antimony is sharply higher in the Kunga soils and lead has the reverse relationship.

The most significant soil anomaly was found on upper-Deena Creek as shown on Figure 17. One sample ran 200 ppb Au with 210 ppm As, 230 ppm Sb, and 10 ppm Hg. Other soils in the immediate vicinity also were anomalous in Au/As. These soil results together with anomalous rock geochemistry for Au, As and Hg warrant systematic follow up soil lines in conjunction with detail geological mapping and rock sampling.

Low priority follow-up is indicated in the following areas: (1) upper Blackwater (Fig. 8) - As anomaly, 3 samples, (2) Southeaster Area (Fig.11) scattered Au-As.

Surprisingly, soil sampling was found to be a more versatile tool than stream sediment geochem largely because of the relatively irregular drainage on much of the Sidegate Plateau. The access provided by the logging road is ideal for soil and rock geochemical coverage.

TABLE II

ROCK GEOCHEMISTRY

LITHOLOGICAL ENVIRONMENT	NUMBER OF SAMPLES ABOVE 10 ppb GOLD	AVERAGE As ppm	Threshold As	AVERAGE Sb ppm	Threshold Sb	AVERAGE Ag ppm	Threshold Ag	AVERAGE Pb ppm	Threshold Pb	AVERAGE Zn ppm	Threshold Zn	AVERAGE Cu ppm	Threshold Cu	AVERAGE Ba ppm	Threshold Ba	AVERAGE Sr ppm	Threshold Sr	AVERAGE Hg ppm	Threshold Hg	AVERAGE Mo ppm	Threshold Mo
1) SKONUN FORMATION (Specogna Deposit Orientation)	4+/15	96.2	275.0	15.8	52.3	0.42	1.42	4.0	10.0	23.2	58.0	22.5	41.0	966	2095	69.1	148	5533	20	1.8	3.7
2) MASSET FORMATION																					
a) Tartu Facies																					
1) Mixed Member	1/3	4.5	6.2	2.0	4.4	0.18	0.44	2.0	4.5	56.5	113.0	20.5	60.6	394	812	124	278	65	160	1.25	2.1
2) Rhyolite Member	2/45	6.3	19.7	3.0	7.5	0.124	0.21	6.0	14.3	58	111.0	13.2	46	559	1016	142	446	497	3476	2.2	5.4
3) Basalt Member	2/2	5.5	6.5	1.0	-	0.1	-	2.0	-	75	165.0	34	70	300	600	300	460	115	265	10	-
4) Intrusive	2/2	5.5	6.5	1.0	-	0.15	0.25	4.0	8.0	50	66.0	15	29	425	975	425	775	35	45	3.0	5.0
b) Kootenay Facies	0/17	4.4	10.3	2.1	6.6	0.11	0.18	8.0	19.0	74	124.0	28.4	73	605	1158	229	409	55	142	1.9	5.0
c) Dana Facies	0/20	37.2	251.0	2.1	4.5	0.13	0.21	4.2	9.5	51.8	101.0	24.6	62.0	526	989	176.3	426	85	364	2.2	4.4
d) Total Masset Fm	7/94																				
3) YAKOUN FORMATION	3/40	8.1	31.0	1.6	5.3	0.26	1.07	5.0	15.8	77.0	152.0	61.0	189	518	1145	288	668	234	1084	1.8	3.0
4) KUNGA (KARMUTSEN) FM (includes Haida, Hanna, etc.)	3/66	8.0	32.2	2.1	7.4	2.65	4.6	3.6	11.4	81.2	239.0	63.0	207	379	955	228	526	199	1185	5.1	27.4
5) TOTAL	17/215																				

TABLE III

SOIL GEOCHEMISTRY

LITHOLOGICAL ENVIRONMENT	NUMBER OF SAMPLES ABOVE 10 ppb	AVERAGE As ppm	Thres-hold	AVERAGE Sb ppm	Thres-hold	AVERAGE Ag ppm	Thres-hold	AVERAGE Cu ppm	Thres-hold	AVERAGE Pb ppm	Thres-hold	AVERAGE Zn ppm	Thres-hold	AVERAGE Hg ppb	Thres-hold
1) SKONUN FORMATION (Specogna Deposit orientation)	13/26	39.6	156.6	4.5	20.2	0.5	1.35	12.2	2.5	5.5	11.0	51	96	407	1008
2) MASSET FORMATION															
a) Tartu Facies															
1) Mixed Member	0/7	3.6	7.4	2	4.6	0.1	-	7	12.6	8.2	10.8	32.6	48	114	174
2) Rhyolite Member	3/50	4.4	11.5	1.3	3.0	0.11	0.21	17.8	39.0	4.4	9.6	61	106	284	661
b) Kootenay Facies	2/28	5.1	14.7	3.3	8.6	0.16	0.32	23	83	6.4	17	31.6	90	409	3032
c) Dana Facies	5/24	10.7	34.6	1.25	2.1	0.11	0.17	18.5	35	6.9	16.9	44	89	173	336
d) Total Masset Fm															
3) YAKOUN FORMATION	3/77	17.5	68	1.08	1.62	0.15	0.37	42	149	6.9	29	77	126	415	1416
4) KUNGA (KARMUTSEN) FM	4/43	13.9	77	7.1	74.6	0.16	0.4	86	209.3	2.7	7.1	97	320	460	2223
TOTAL															

TABLE IV

STREAM SEDIMENT GEOCHEMISTRY

LITHOLOGICAL ENVIRONMENT	NO OF SAMPLES ABOVE 10 ppb GOLD	As Average	As Thres-hold	Sb Average	Sb Thres-hold	Ag Average	Ag Thres-hold	Cu Average	Cu Thes-hold	Pb Average	Pb Thres-hold	Zn Average	Zn Thres-hold	Hg Average	Hg Thres-hold
1) SKONUN FORMATION (Specogna Deposit Orientation)	7/23	ND	50	ND	-	0.6	0.97	13	38	12	19	54	143	214	550
2) MASSET FORMATION															
a) Tartu Facies															
2) Rhyolite Member	1/27	9.2	37	1.4	3.1	0.14	0.3	17.7	34	4.2	13.3	93	130	581	1734
c) Dana Facies	0/4	5	-	1	-	0.6	2.0	25	40	4.3	12	93	113	157	430
d) Total Masset Fm.															
3) YAKOUN FORMATION	2/35	8.8	21	1.14	1.84	0.106	0.15	26	66	2.6	9.5	81	139	254	462
4) KUNGA (KARMUTSEN) FM	1/39	12.6	34	1.05	1.5	0.12	0.28	56	132	2.7	7.6	121	221	156	390
TOTAL															

C) Stream Sediment Geochemistry

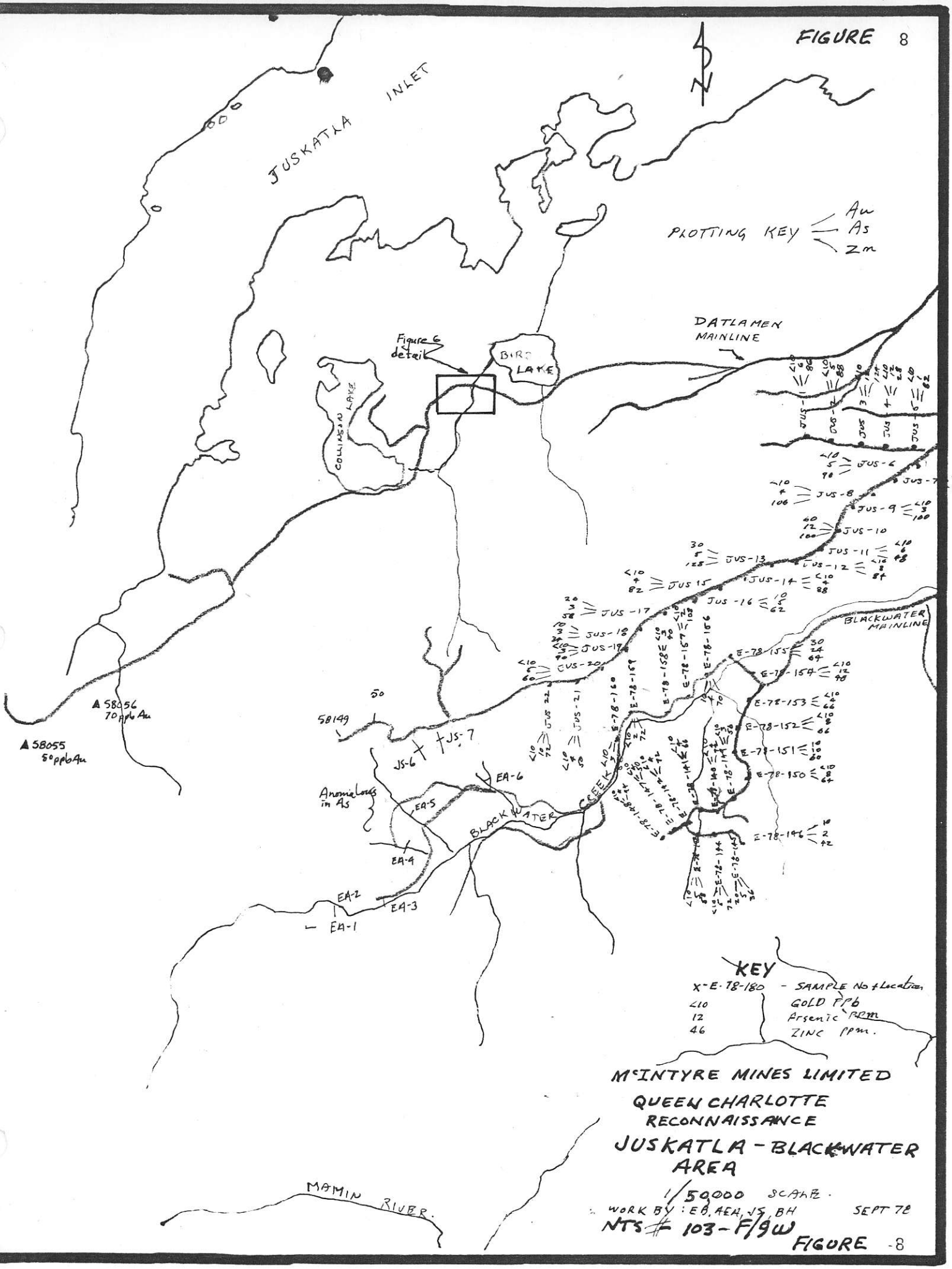
The effectiveness of stream sediment sampling is somewhat limited because of a relatively immature drainage system. An abundance of peculiar upland swamps which at times cover areas of considerable relief tend to block ordinary dispersion. The drainage pattern is also strongly dependent on topographic orientation, for example the Bird-Collinson Lake Area (Figure 8) has many, small well developed creeks but on the south-side, north of Blackwater Creek surface drainage is almost non-existent.

Another consideration is the limitation on analytical techniques caused by the inhomogenies of coarse silt samples and the irregularities of heavy metal distribution, such as Au or W, in the fluvial environment.

Statistical parameter for silt samples classified by lithological environment are shown in Table III. The Skonun results are taken from Kennco data on the creeks draining the Specogna deposit. High levels are apparent for Au and Ag. As and Sb are also probably high but were not run by Kennco. For the Masset Formation, Yakoun Formation and Kunga-Karmutsen assemblage environments the elements Au, As, Sb, Cu, Pb, and Zn have no significant differences. Only Hg for the Rhyolite Member and Ag for the Dana facies are higher.

Silt anomalies coincident with soil or rock anomalies warrant limited follow up work. These are 1) Datlamen mainline (Figure 8), 2)Chinukundl Creek - Southeaster (Figure 11). Areas with only silt response such as upper Copper Creek should be checked on a lower priority in conjunction with continued reconnaissance.

FIGURE 8



McINTYRE MINES LIMITED

QUEEN CHARLOTTE RECONNAISSANCE

JUSKATLA - BLACKWATER AREA

1/50000 SCALE.

WORK BY: EB, AEA, JS, BH SEPT 78

NTS # 103-F/9W

FIGURE 8

FIGURE 9

McINTYRE MINES LIMITED

QUEEN CHARLOTTE RECONNAISSANCE

PEEL INLET AREA

NTS: 103 G/16E

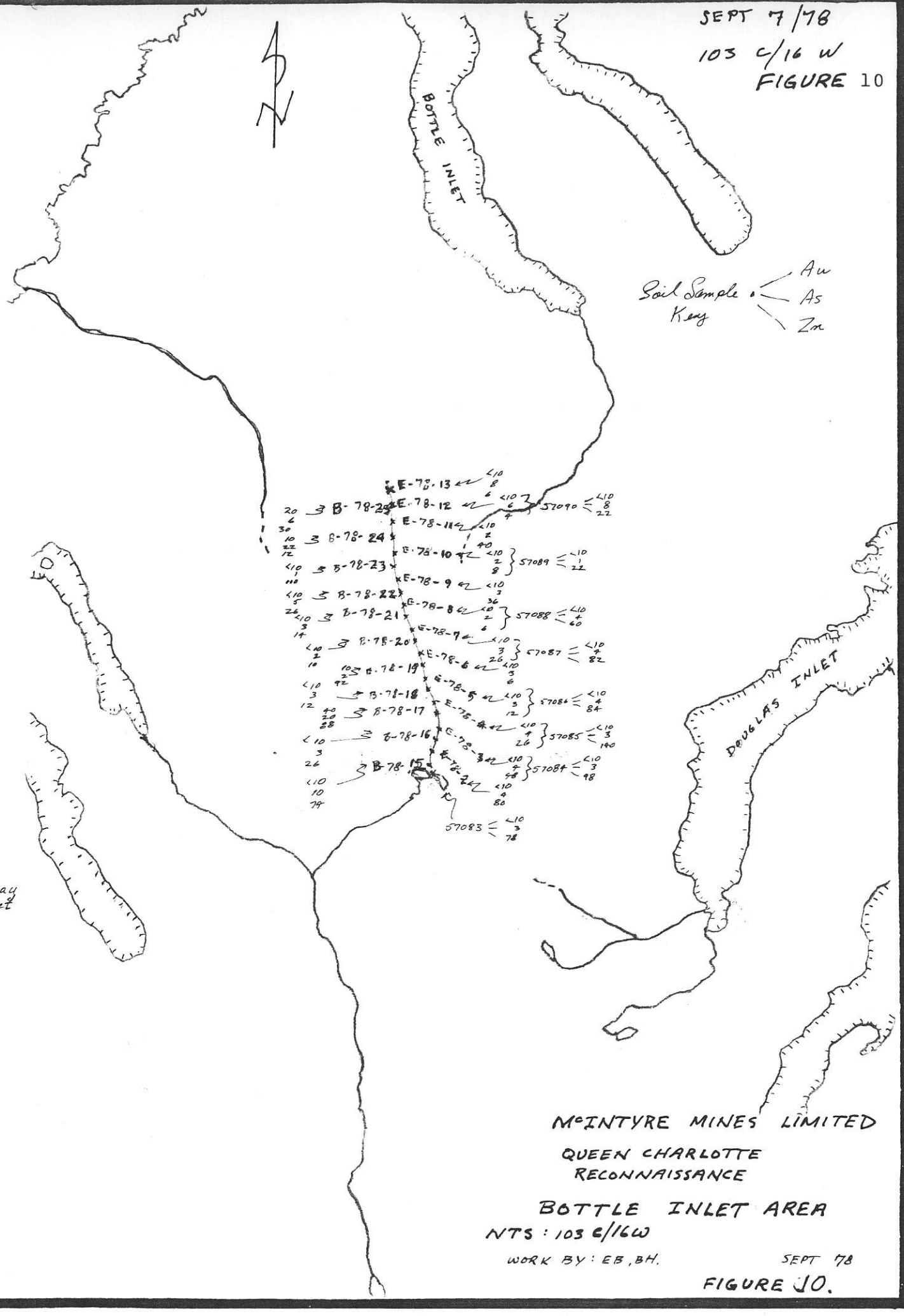
WORK BY: JS, AEA, EB, BH SEPT 78

FIGURE 9

SEPT 7/78

103 C/16 W

FIGURE 10



McINTYRE MINES LIMITED

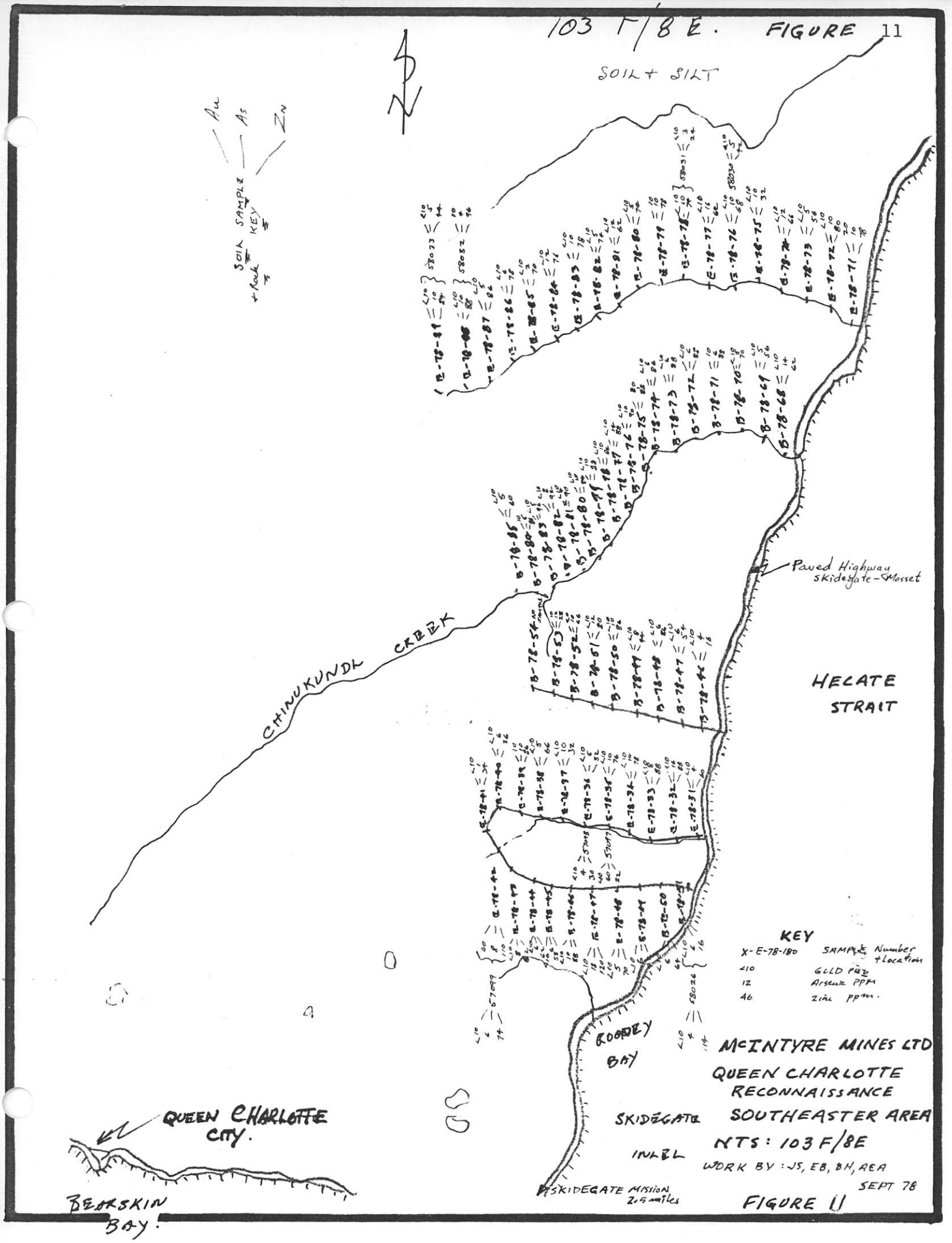
QUEEN CHARLOTTE RECONNAISSANCE

BOTTLE INLET AREA

NTS: 103 C/16W

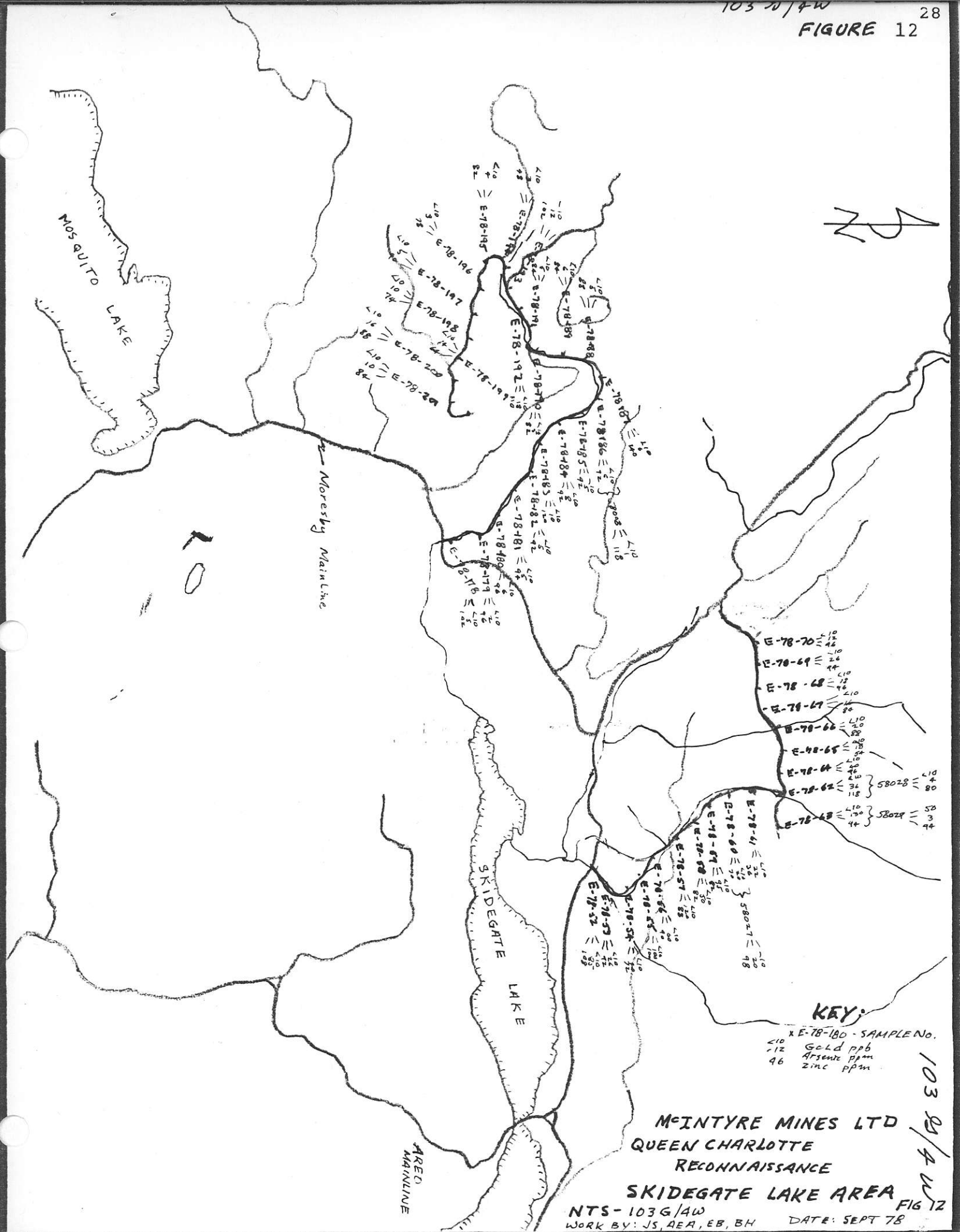
WORK BY: EB, BH. SEPT 78

FIGURE 10.


103 F/8E. FIGURE 11
SOIL + SILT
Au
As
Zn
SOIL SAMPLE + Rock KEY
CHINUKUNDL CREEK
Paved Highway Skidegate - Masset
HECATE STRAIT
KEY
X-E-78-180 SAMPLE Number + Location
<10 GOLD PPB
12 Arsenic PPM
46 zinc ppm.
ROOPEY BAY
McINTYRE MINES LTD
QUEEN CHARLOTTE RECONNAISSANCE
SOUTHEASTER AREA
NTS: 103 F/8E
WORK BY: JS, EB, BH, AEA
SEPT 78
FIGURE 11
SKIDEGATE INLET
SKIDEGATE MISSION 2.5 miles
QUEEN CHARLOTTE CITY.
BEARSKIN BAY.

103 G/4W

FIGURE 12



McINTYRE MINES LTD
QUEEN CHARLOTTE
RECONNAISSANCE
SKIDEGATE LAKE AREA FIG 12
NTS - 103 G/4W
WORK BY: JS, AEA, EB, BH DATE: SEPT 78

103 G/4 W

FIGURE 13

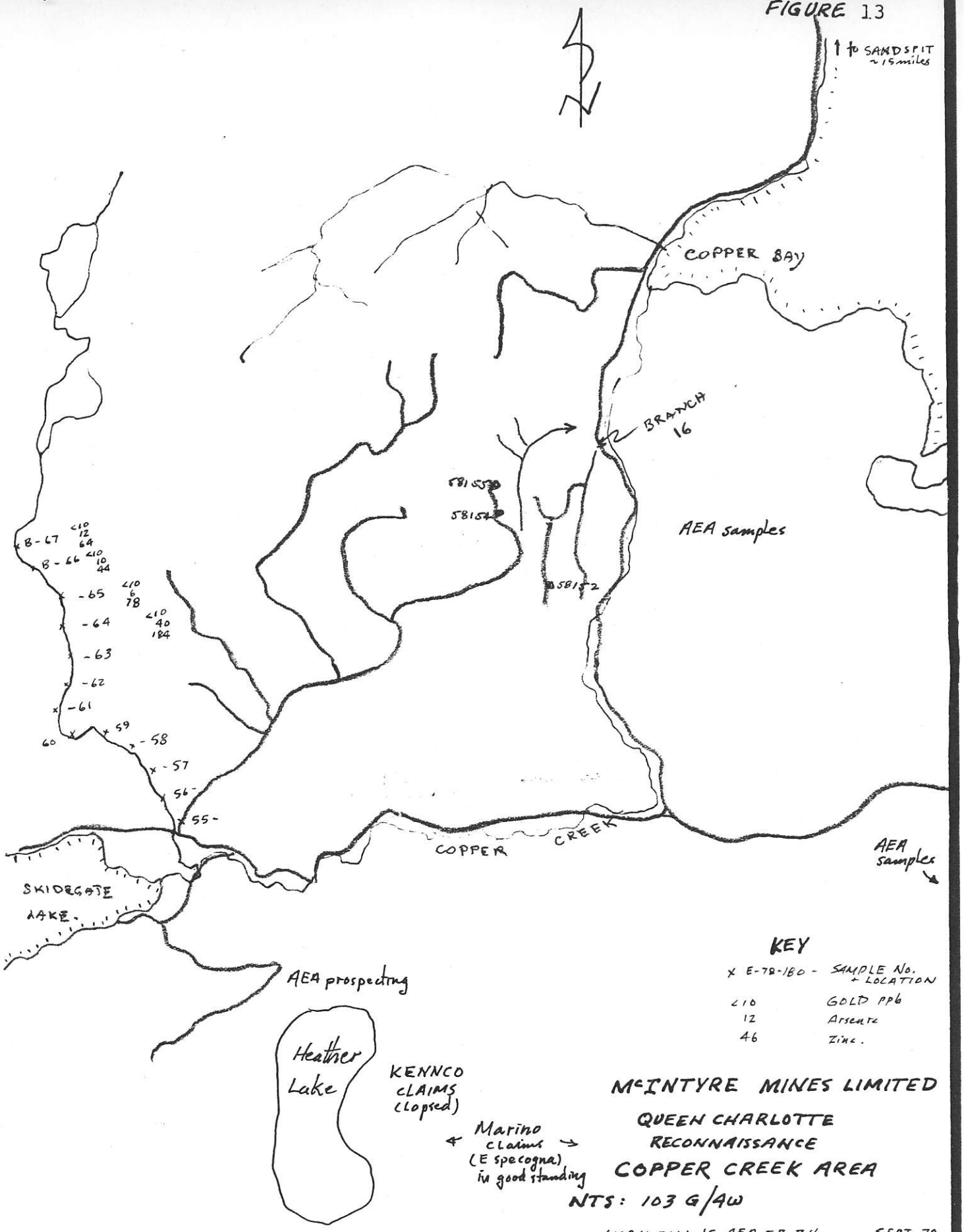


FIGURE 13

103 G/4W
FIGURE 14

KEY:

XE-78-180	SAMPLE Number
<10	GOLD PPB
12	Arsenic ppm
46	Zinc ppm.

McINTYRE MINES LIMITED
QUEEN CHARLOTTE
RECONNAISSANCE

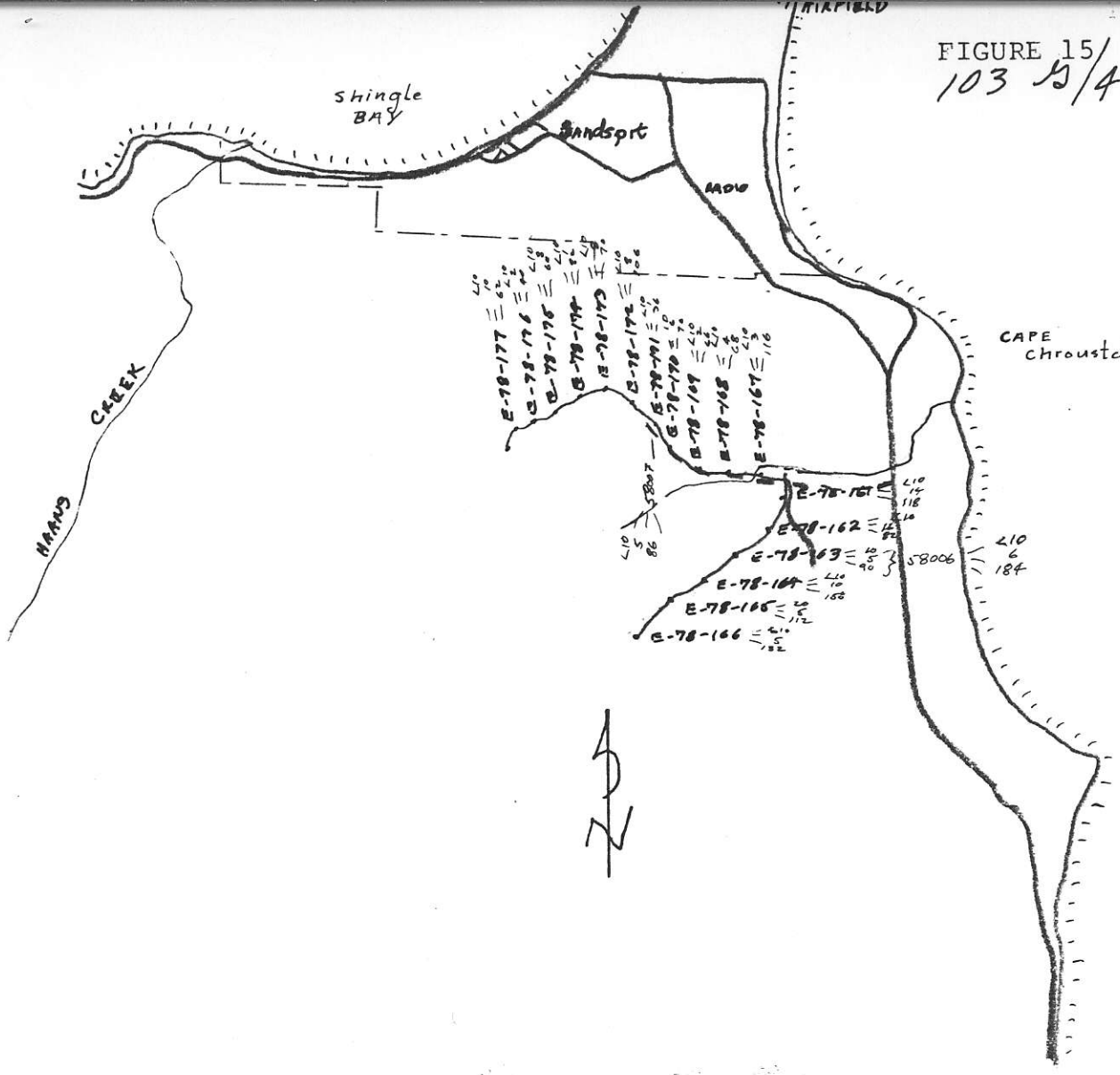
CUMSHEWA INLET
SKIDEGATE LAKE AREA

NTS : 103 G/4W

WORK BY : BH, EB, JS, AEA Sept 78

FIGURE 14

FIGURE 15
103 G/4W



KEY

x E-78-180 - SAMPLE NO.
<10 GOLD ppb
12 Arsenic ppm
41 Zinc ppm.

McINTYRE MINES LIMITED

QUEEN CHARLOTTE
RECONNAISSANCE

SANDSPIT DUMP AREA

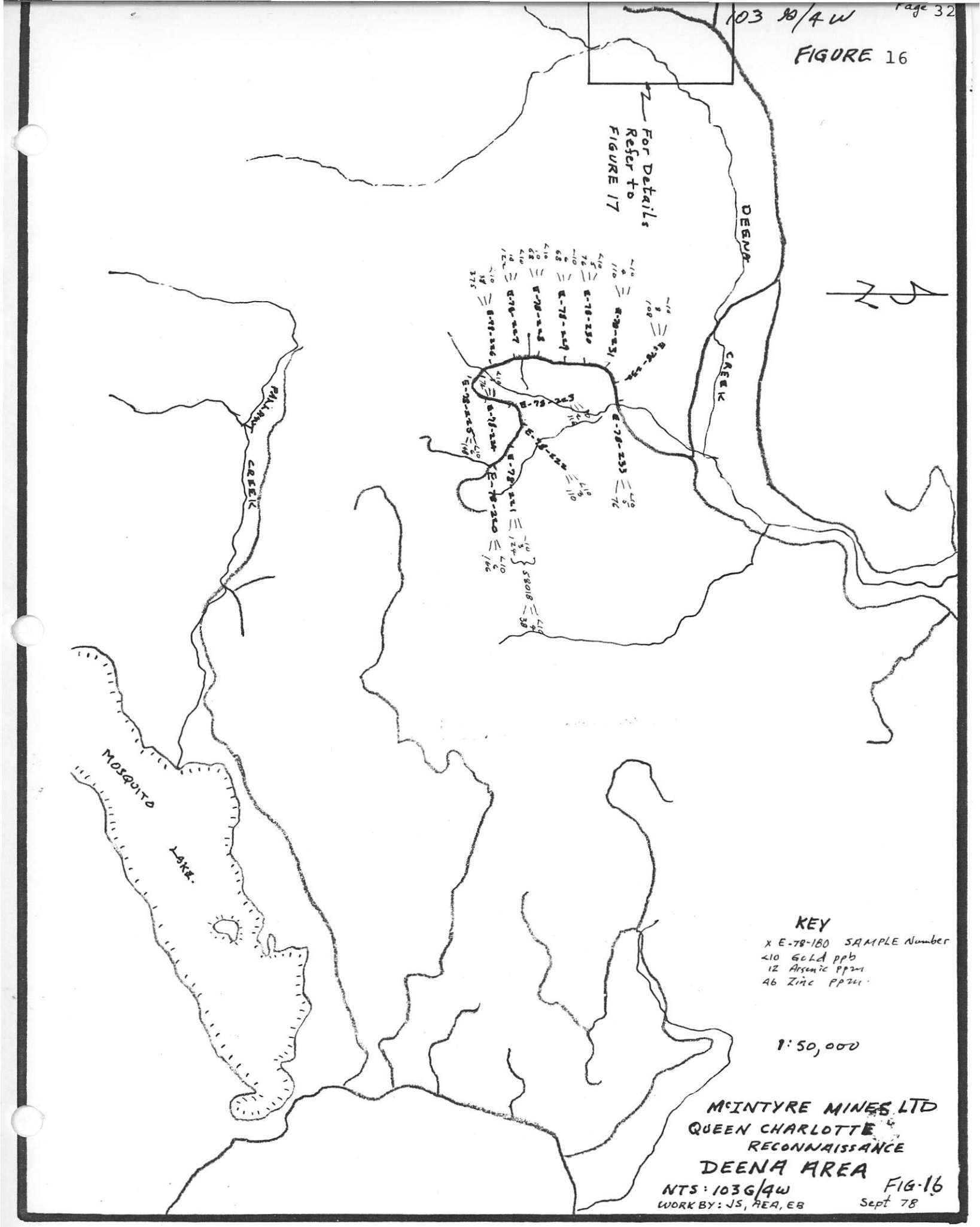
NTS: 103 G/4W

work by: JS, AEA, EB Sept 78

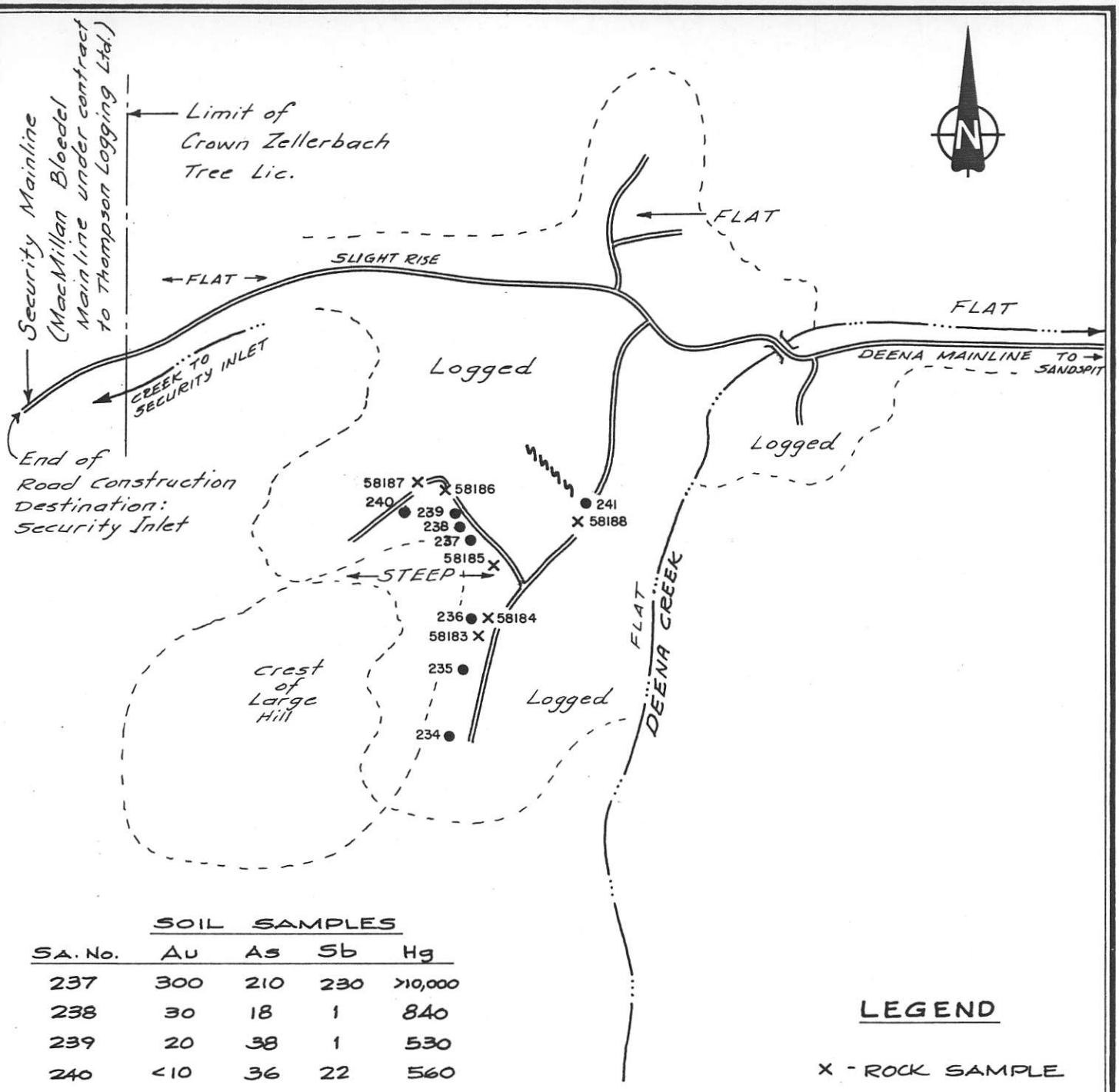
FIGURE. 15

103 B/4W

FIGURE 16



McINTYRE MINES LTD
QUEEN CHARLOTTE
RECONNAISSANCE
DEENA AREA
NTS: 103G/4W
WORK BY: JS, AEA, EB
FIG-16
Sept 78



SOIL SAMPLES

SA. No.	Au	As	Sb	Hg
237	300	210	230	>10,000
238	30	18	1	840
239	20	38	1	530
240	<10	36	22	560

ROCK SAMPLES

SA. No.	Au	As	Sb	Hg
58183 brn. Lst.	20	8	4	420
58184 black Lst. (Sheared)	<10	26	4	2700
58185 black Lst.	30	2	8	190
58186 black carbonate	<10	24	8	2100
58187 pyritic Andesite	<10	80	2	210
58188 folded black limy argillite	<10	24	18	600

LEGEND

X - ROCK SAMPLE

● - SOIL SAMPLE

0 1000 2000 3000 FT.

SCALE IN FEET

FIG. 17

McINTYRE MINES LIMITED

QUEEN CHARLOTTE RECONNAISSANCE

DEENA CREEK ANOMALY

WORK BY:	DATE	N.T.S.
J.S., E.B., A.E.A.	SEPT. 20/78	103F1/E

PRIORITY AREAS NOT PROSPECTED IN PHASE I

The priority areas that did not recieve at least brief reconnaissance coverage in Phase I due to lack of time and poor weather conditions are listed below:

1) Dawson Harbour to Trounce Inlet - Masset Acid Volcanics.
2) Choatl Narrows to "Security Creek" - Karmutsen Hornfels plus intrusives.
3) Van Inlet to Ellis Point - Masset Acid Volcanics.
4) Upper Tasu Creek - Post tectonic intrusives plus Masset Volcanics.
5) Portland Bay to Lomgon Bay (Bottle Point) - Kootenay facies pyroclastics.
6) Pallant Creek - Mosquito Lake - Yakoun (Kunga) fault slices.
7) Coates Creek Area - Mixed Member on N.E. Linear.
8) Naden River - Otard Creek - Rhyolite and Mixed Member Volcanics.

These areas together with follow up of Phase I data could form the basis of the 1979 program.

CONCLUSIONS AND RECOMMENDATIONS

The four lithological-structural environments identified in the exploration proposal have been evaluated by an initial preliminary program from Sept. 5 to 21, 1978. A significant Au-As, Sb, soil and rock anomaly has been located in thick bedded, altered Kunga limestone within an area mapped as Karmutsen volcanics. This anomalous area requires systematic follow-up soil sampling in conjunction with detail geological mapping. The area should be protected by staking while sampling is in progres.. These claims can be filed if results are sufficiently encouraging.

The very complex volcanic stratigraphy of the Masset Formation has been investigated by an examination of all members and facies. Preliminary rock geochemistry indicates several target environments.

Some of the rhyolite, basalt and related intrusive bodies (gabbro to feldspar porphyry) have anomalous gold content. This fact coupled with favourable physiochemical conditions of Au transport to sites of deposition analogous to the Specogna setting are the major ingredient needed in concentrating Au to economic levels. The Masset Formation volcanoclastics associated with the flows and high level intrusives could provide favourable host rocks for pervasive type Au mineralization along the many linears apparent on Northwestern Graham Island. Very little attention has been given by any previous exploration programs, Quintana included, toward the large area underlain by Masset Formation between Yakoun Lake to Beresford Creek (an area of 750 square miles). All reported Masset-type intrusives and adjacent areas should be carefully prospected and sampled.

Priority areas that were not prospected in Phase I should be checked in light of the new data. These areas together with follow up work on delineated anomalies form the basis of the proposed 1979 program with an estimated all inclusive budget of $64,000.

Respectfully submitted,

J.T. Shearer

REFERENCES

Carlisle, D., 1963 Pillow breccias and their aquagene tuffs, Quadra Island, B.C. J. Geol. Vol 71 pp 48-71

Drysdale, C.W., 1915 Geology of Franklin Mining Camp, B.C. G.S.C. Memoir 56

Full, R.P. and Grantham, R.M. 1968 Ore deposits of the Republic Mining District, Ferry County, Washington in Ridge (editor), ore deposits of the United States 1933/1967. A.I.M.E. 1968

Little, W.H. 1965 Greenwood Map Area in Report of Activities G.S.C. Paper 65-1 pg 59

Monger, J.W.H. 1968 Early Tertiary Stratified rocks, Greenwood Map Area. G.S.C. Paper 67-42

Monger, J.W.H., Souther, J.G., Gabrielse, H., 1972 Evolution of the Canadian Cordillera Am. J. Sc. Vol 272, p 577-602

Muessig, S., 1962 Tertiary Volcanic and related rocks of the Republic Area, Ferry County, Washington U.S.G.S. in Geological Survey Research 1962 pp D56-D58

Seraphim, R.H. 1956 Geology and copper depsoits of the Boundary District, British Columbia Trans C.I.M. Vol 80 pp 384-394

Sutherland-Brown, A., 1966 Tectonic History of the Insular Belt of B.C C.I.M. Spec. Vole 8 pp 83-100

Sutherland-Brown, A. 1968 Geology of the Queen Charlotte Islands, Bull 54, B.C. Dept. of Mines 226 pp

Also refer to data file of 15 references on Specogna deposit - Listed in Inter office Correspondence J. Shearer, Dec. 29, 1977.

APPENDIX I

LIST OF FIELD EXPENDITURES

STATEMENT OF COSTS

4) QUEEN CHARLOTTE ISLANDS

ACCOMODATION		
Room and board		$ 1,963.43
TRANSPORTATION		
Helicopter		5,310.13
Trans Provincial Air		675.14
P.W.A. - G. Richards Fare		144.00
- Sample shipments		75.21
Truck rental & gas		837.39
ANALYTICAL (CHEMEX LABS)		
Invoice No. 27640		310.08
Invoice No. 27673		144.50
Invoice No. 27622		606.47
Invoice No. 27638		380.80
Invoice No. 28334		4,780.70
Invoice No. 27640		310.08
Invoice No. 28306		1,520.23
Invoice No. 28441		2,603.12
CASUAL LABOUR		
E. Birkeland - Sept. 5 to 22, 1978	29 days @ $55/day	1,595.00
Brian Howard - Sept. 4 to 11, 1978	8 days @ $55/day	440.00
MAPS		129.93
	TOTAL	$ 21,826.21

WAGES		
J.T. Shearer	August 1 to 11,1978, Sept. 5-22, 1978 29 days @$60.00/day	1,740.00
A.E. Angus	August 1 to 11, 1978 Sept 5 - 22, 1978 29 days @$60.00/day	1,740.00
	TOTAL	$ 3,480.00
	GRAND TOTAL	$ 25,306.21

APPENDIX II

ASSAY CERTIFICATES

CHEMEX LABS LTD.

NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 985-0648
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 45170

INVOICE NO. 27640

RECEIVED Aug. 15/78

ANALYSED Aug. 21/78

TO: McIntyre Mines Ltd.
1003 - 409 Granville Street
Vancouver, B.C.

ATTN: J. Shearer cc: Wells, B.C. B.C. GOLD

SAMPLE NO. :	PPM Cu	PPM Pb	PPM Zn	PPM Ag	PPM As	PPB Au	PPB Hg	PPM Sb
SP 1	1	1	6	0.1	1	< 10	90	6
2	24	10	82	0.4	95	180	1700	38
3	4	2	36	0.1	18	20	130	10
4	12	6	38	1.0	80	200	370	16
5	14	1	66	0.1	25	10	330	4
6	12	6	48	0.2	12	< 10	270	1
7	6	8	24	0.8	45	60	600	4
8	8	6	36	0.8	50	20	480	8
9	6	4	30	0.4	40	50	530	4
10	12	8	44	1.6	25	40	450	2
11	6	4	34	1.4	20	20	410	2
12	14	4	44	0.6	20	20	380	1
13	14	4	52	0.4	45	40	430	1
14	18	10	74	0.1	18	< 10	380	2
15	12	6	52	0.2	18	30	440	1
16	12	4	58	0.6	20	30	540	2
17	14	6	64	0.2	10	< 10	320	1
18	18	8	52	1.2	25	20	440	1
19	16	8	72	0.6	25	< 10	240	1
20	14	4	66	0.2	18	< 10	240	1
21	26	10	106	0.1	8	< 10	140	1
22	22	8	84	0.1	30	20	170	1
23	4	1	32	0.4	300	1000	280	1
SP 24	4	4	18	0.4	2	< 10	410	1

SOILS

Note: Silver values below detection limit of 0.2 ppm reported as 0.1 ppm.

CTA MEMBER CANADIAN TESTING ASSOCIATION

CERTIFIED BY: Hans Riedle

CHEMEX LABS LTD.

NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 985-0648
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 45147

TO: McIntyre Mines Ltd.,
1003 - 409 Granville St.,
Vancouver, B.C.
V6C 1T8

SOILS

INVOICE NO. 27638

RECEIVED August 14, 1978

ATTN: B.C. GOLD
c.c. J. Shearer

ANALYSED August 22, 1978

SAMPLE NO. :		PPM Cu	PPM Pb	PPM Zn	PPM Ag	PPB Au	PPB Hg	PPM Sb	PPM As
BAT	1	16	1	94	0.1	<10	160	1	>500
	2	8	1	76	0.1	<10	70	1	45
	3	34	1	194	0.1	<10	850	1	18
	4	20	1	116	0.1	<10	160	1	20
	5	34	1	154	0.1	50	230	1	125
	6	270	1	188	0.1	<10	4000	56	225
SILTS +SOILS	7	94	1	126	0.1	20	910	1	45
	8	132	2	152	0.1	20	1400	1	55
	9	58	2	215	0.2	<10	800	2	45
BAT	10	44	4	138	0.1	<10	280	NSS	NSS
KG	1	30	12	74	0.1	<10	22,000	2	100
KG	2	46	18	102	0.1	<10	4400	NSS	125
SPEC	1	4	1	44	0.1	<10	1300	4	7
SPEC	2	14	6	42	0.1	<10	4000	6	45
UX	1	8	4	14	0.1	10	100	1	15
	2	16	4	54	0.1	<10	120	1	5
	3	16	4	74	0.1	<10	150	1	5
	4	24	6	70	0.1	<10	200	1	10
Yak Haida	5	22	2	92	0.1	<10	160	2	3
	6	28	6	102	0.1	<10	220	1	10
	7	24	4	78	0.1	<10	370	1	10
	8	48	6	96	0.1	<10	350	1	7
	9	22	8	42	0.1	<10	640	1	5
UX	10	42	8	76	0.1	10	460	1	6
JMT	1	26	6	80	0.1	<10	340	1	12
	2	30	8	88	0.1	<10	340	1	15
Yak	3	26	1	86	0.1	10	220	1	8
	4	10	2	78	0.1	10	240	1	250
	5	4	2	20	0.1	<10	130	1	1
JMT	6	36	4	82	0.1	<10	270	1	20

NOTE: Silver values below detection limit of 0.2 ppm are reported as 0.1 ppm.

CTA MEMBER CANADIAN TESTING ASSOCIATION

CERTIFIED BY: .....

NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 985-0648
AREA CODE: 604
TELEX: 043-52597

CHEMEX LABS LTD.

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ASSAY

CERTIFICATE NO. 34161
INVOICE NO. 27673
RECEIVED August 14, 1978
ANALYSED August 23, 1978

TO: McIntyre Mines Ltd.,
1003 - 409 Granville St.,
Vancouver, B.C.
V6C 1T8

ATTN:

B.C. GOLD

SAMPLE NO. :	oz/ton Gold
58326	<0.003
58327	<0.003
58328	<0.003
58329	<0.003
58330	<0.003
58331	<0.003
58332	<0.003
58333	<0.003
58334	<0.003
58335	<0.003
58451	0.042
58452	0.012
58453	<0.003
58454	0.024
58455	<0.003
58456	0.010
58457	<0.003
58458	<0.003
58459	0.056
58460	<0.003
58461	0.036
58462	<0.003
58463	<0.003
58464	<0.003
58465	<0.003
58466	0.010
58467	<0.003
58468	<0.003
58469	<0.003
58470	<0.003
58471	<0.003
58472	<0.003
58473	<0.003
58474	<0.003

MEMBER
CANADIAN TESTING
ASSOCIATION

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

CHEMEX LABS LTD.

NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 985-0648
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 45148

TO: McIntyre Mines Ltd.,
1003 - 409 Granville St.,
Vancouver, B.C.
V6C 1T8

ATTN:

INVOICE NO. 27622

RECEIVED August 14, 1978

ANALYSED August 22, 1978

ROCKS
B.C. GOLD

SAMPLE NO. :	PPM Cu	PPM Mo	PPM Pb	PPM Zn	PPM Ag	PPM Ni
58326	64	1	16	130	0.1	
58327	48	2	4	94	0.1	
58328	32	2	2	74	0.1	
58329	44	1	10	102	0.1	
58330	24	4	12	44	0.2	20
58331	30	1	6	32	0.1	4
58332	8	1	6	36	0.2	8
58333	16	1	4	42	0.4	8
58334	46	1	2	58	0.1	
58335	2	3	1	4	0.1	
58451	18	1	2	4	0.2	
58452	32	1	1	34	1.8	
58453	16	2	4	8	0.2	
58454	22	2	4	6	0.2	
58455	18	2	2	1	0.2	
58456	20	3	2	2	1.0	
58457	44	2	1	46	0.1	
58458	30	1	4	38	0.1	
58459	72	1	2	72	0.1	
58460	28	2	1	32	0.1	
58461	20	2	2	4	0.6	
58462	12	1	2	44	0.1	
58463	6	3	1	4	0.1	
58464	12	3	1	22	0.1	
58465	10	1	1	60	0.1	
58466	74	1	1	82	0.1	
58467	46	2	1	28	0.1	
58468	345	2	1	94	0.1	
58469	12	3	1	6	0.1	
58470	18	3	6	30	0.1	
58471	46	1	2	66	0.1	
58472	10	1	8	20	0.1	
58473	20	1	4	40	0.1	
58474	18	5	2	12	0.1	
STD.	70	5	16	156	0.1	

NOTE: Silver values below the detection limit of 0.2 ppm are reported as 0.1 ppm.

CERTIFIED BY: .....

CHEMEX LABS LTD.

NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 985-0648
AREA CODE: 604
TELEX: 043-52597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 45148

TO: McIntyre Mines Ltd.,
1003 - 409 Granville St.,
Vancouver, B.C.
V6C 1T8

INVOICE NO. 27622

RECEIVED August 14, 1978

ATTN:

ROCKS
B.C. GOLD

ANALYSED August 22, 1978

SAMPLE NO. :	PPM Sb	PPM As	PPM Ba	PPM Ca	PPM Sr	PPB Hg
58326	1	60	200	>10,000	345	2850
58327	1	25	1150	>10,000	505	1950
58328	1	18	275	>10,000	605	2950
58329	1	15	700	4900	120	220
58330	32	125	650	2600	65	20,500
58331	1	5	750	900	75	1800
58332	1	5	925	4100	130	1150
58333	4	3	850	4300	130	2400
58334	1	10	425	5600	115	80
58335	2	2	100	>10,000	400	70
58451	6	1	950	2100	20	320
58452	4	125	950	1200	45	1100
58453	1	250	350	300	45	1100
58454	52	20	450	500	25	21,000
58455	40	200	1100	350	60	5900
58456	32	200	1050	450	40	5450
58457	1	125	2600	1000	125	140
58458	1	40	350	>10,000	115	110
58459	1	6	400	7200	90	160
58460	1	15	700	>10,000	230	50
58461	24	1	100	700	20	
58462	1	>500	150	9400	135	
58463	1	35	75	>10,000	265	
58464	2	12	125	>10,000	575	
58465	1	15	50	3500	50	
58466	1	20	100	>10,000	70	
58467	2	>500	1250	>10,000	240	560
58468	1	175	175	>10,000	160	1050
58469	1	3	75	>10,000	940	70
58470	1	35	250	3100	65	50
58471	1	4	200	>10,000	210	250
58472	1	1	850	750	20	370
58473	1	30	150	1150	40	280
58474	1	2	650	8000	45	50

1	7	

MEMBER
CANADIAN TESTING
ASSOCIATION

CERTIFIED BY: [signature]