GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,778

GEOLOGICAL AND GEOCHEMICAL REPORT ON THE APRIL MINERAL CLAIMS, SKEENA MINING DIVISION LYELL ISLAND, QUEEN CHARLOTTE ISLANDS, B.C.

Lat. 52°42'N
Long. 131° 36'W

N.T.S. 103-B-12

Owner & Operator - PLACER DEVELOPMENT LIMITED
By: W.S. Pentland and B. Barde
November, 1982

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Maps (in pockets)

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C&D	Fig. 25		Fig. 25-2/3	Fig. 25-2/3
E	Fig. 25		Fig. 26-2	Fig. 26-3
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I	Fig. 28		Fig. 28-2	Fig. 28-3
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Statement of Expenditures:

The expenditures listed below were incurred for a geological mapping and soil sampling program on Lyell Island in the Queen Charlotte Islands during the period May 3-31, 1982. The expenditures are to be applied to 84 units of the April claims; specifically the April 33-38 inclusive.

1.	Labour*	$13,200
2.	Room and Board (Beban Logging) 93 man days x $35/day	3,255
3.	Transportation	
	a) PWA-Vancouver to Sandspit return - 5x$265	1,325
	b) TPA-Sandspit to Lyell Island return	747
	c) Truck rental (Beban Logging) 29 days x $30/day	870
4.	Assaying**	
	a) Soil samples - 848x$7.05	5,978
	b) Stream samples 23x$7.05	162
5.	Shipping charges - Equipment, Samples, etc.	850
6.	Drafting Maps - 19 days x $125/day	2,375
7.	Report Preparation - 11 day 2x$225/day	2,475
	TOTAL	$31,237

* W. Pentland - Senior Geologist - 24 days@$225/day 5,400
B. Barde - Geologist - 24 days @$125/day 3,000
P. Pacor - Geologist - 13 days @$150/day 1,950
B. Hodgson - Fieldman - 17 days @$150/day 2,500
B. Ott - Fieldman - 2 days @$150/day 300

** Assay Charges
Au - $4.50
As - $1.90
Preparation - .65

Introduction:

During the period May 3 to June 2, 1982 a program of geological mapping and soil sampling was carried out on several areas of the April claims located on Lyell Island in the Queen Charlotte Islands. The claims are in the Skeena Mining Division.

Access to Lyell Island is by helicopter or fixed wing aircraft which are available in Sandspit, approximately 65 kms to the north. A 14' aluminum boat provided local transportation to the several localities where work was conducted.

The topography on Lyell Island generally consists of steep hillsides rising from the sea to rounded ridge tops with a maximum elevation of 500 metres. The slopes are often further complicated by vertical cliffs several meters in height. Small valleys occasionally extend inland for up to 2 kms.

Most of the near shore hillsides support a fairly heavy stand of second growth cedar, hemlock and spruce with local patches of heavy salal.

Placer Development Limited, owner of the claims, became interested in the area in 1979 following a stream sampling program conducted by J.M.T. Services Corp. Several claims were staked to the south of Richardson Passage on the basis of gold values in silt samples and the finding of gold bearing pyritic rhyolite.

Further exploration in 1980 outlined a pyritic rhyolite zone and resulted in the diamond drilling of 5 holes. Several intersections with interesting gold values were found. This led to the staking of several hundred units covering large sections of Lyell Island early in 1981.

In 1981 an additional 13 holes were drilled and reconnaissance mapping and sampling was done on many of the claims. The 1982 program is a follow-up on some of the areas indicated to be of interest by the 1981 reconnaissance work.

In general the areas of interest are located along the western side of Lyell Island. Several lie near the Beresford fault mapped by A. Sutherland - Brown (Bulletin 54 - B.C. Dept. of Mines) and cover portions of the peninsula lying between Sedgwick Bay and Darwin Sound. The underlying rocks are Karmutsen greenstones intruded by diorite.

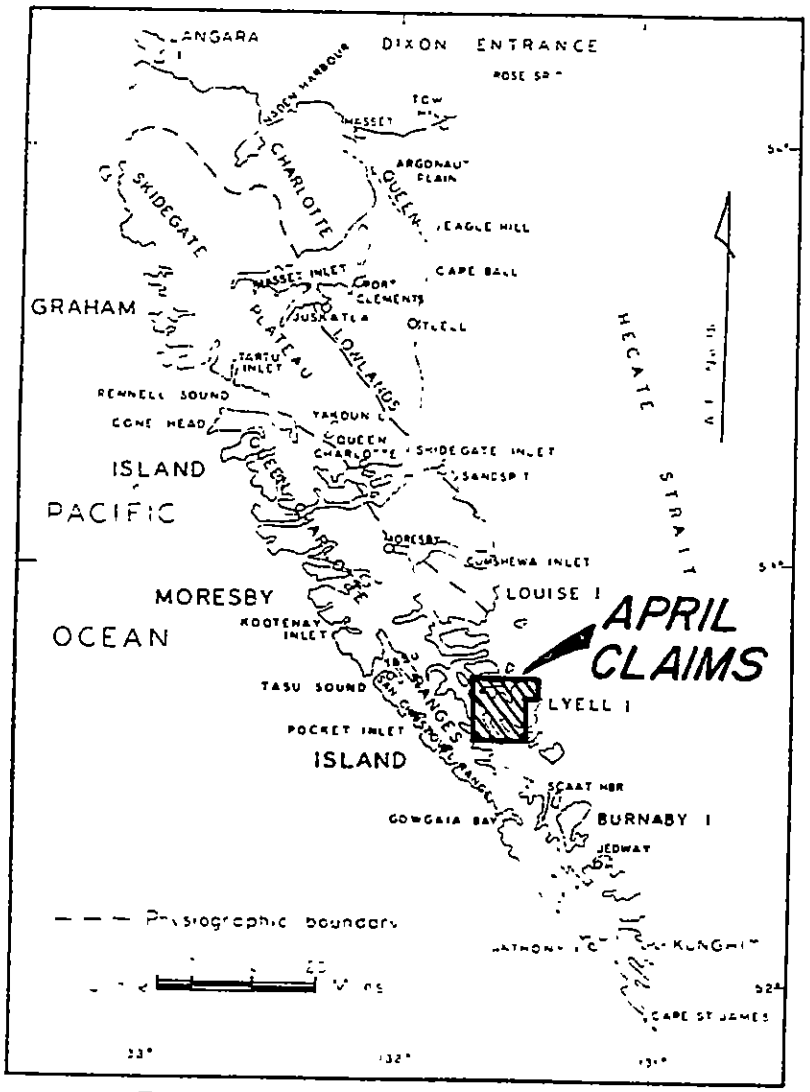
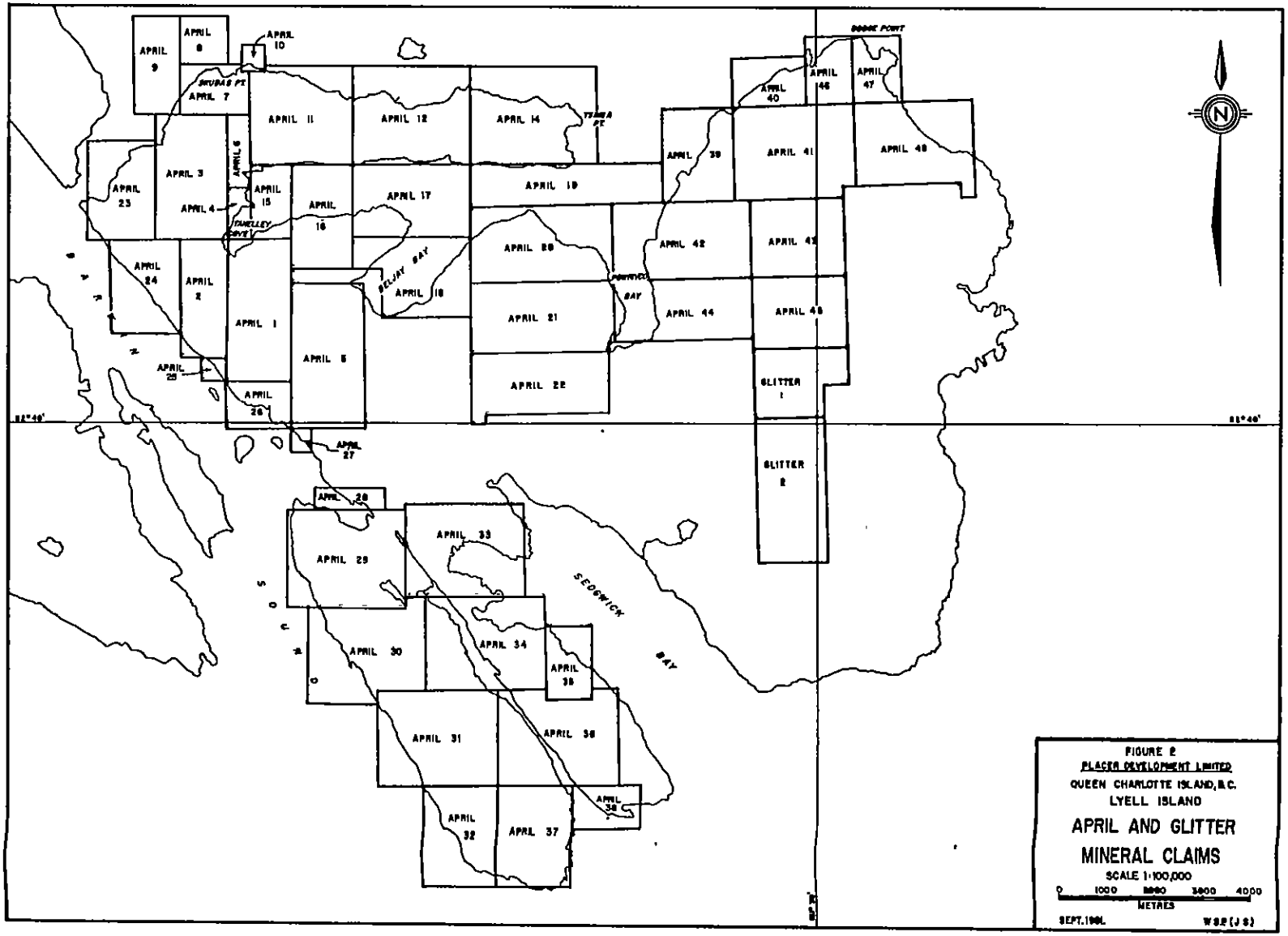


Fig. 1 Index map of the Queen Charlotte Islands.


APRIL 9
APRIL 8
APRIL 10
SHUBAS PT.
APRIL 7
APRIL 11
APRIL 12
APRIL 14
TRIMEA PT.
APRIL 40
APRIL 46
APRIL 47
DOGFISH POINT
APRIL 3
APRIL 6
APRIL 23
APRIL 4
APRIL 15
APRIL 16
APRIL 17
APRIL 19
APRIL 39
APRIL 41
APRIL 45
STANLEY COVE
APRIL 24
APRIL 2
APRIL 1
APRIL 5
BELIEF BAY
APRIL 18
APRIL 20
APRIL 42
APRIL 43
PROVIDENCE BAY
APRIL 21
APRIL 44
APRIL 48
APRIL 22
GLITTER 1
GLITTER 2
APRIL 25
APRIL 26
APRIL 27
APRIL 28
APRIL 29
APRIL 33
APRIL 30
APRIL 34
APRIL 35
APRIL 31
APRIL 36
APRIL 32
APRIL 37
APRIL 38
SEDGWICK BAY
SOUTH
N
FIGURE 2
PLACER DEVELOPMENT LIMITED
QUEEN CHARLOTTE ISLAND, B.C.
LYELL ISLAND
APRIL AND GLITTER
MINERAL CLAIMS
SCALE 1:100,000
0 1000 2000 3000 4000
METRES
SEPT. 1980.
W.S.E. (J.S.)

The remaining anomalies lie to the north and are east of the Beresford fault in primarily rhyolitic rocks of the Masset formation.

The areas which have received work in 1982 are labeled "A" to "J" inclusive with the exception of "H". (see Figure 13) All were selected on the basis of weak to modest gold values found in reconnaissance soil and stream sampling done earlier. The present work consisted mainly of collecting soil samples from the "B" soil horizon.

General Geology (see Figure 3)

Reference: - Bulletin 54, B.C. Dept. of Mines by A. Sutherland-Brown, 1968

The western side of Lyell Island, which includes all of the areas worked on in May, 1982 is basically composed of two formations; the Triassic age Karmutsen and the Tertiary Masset. These two formations are in contact in the northwest corner of the island with the Masset lying to the northeast and the Karmutsen to the southwest. The latter continues to the southeastward underlying most of the western side of the island.

The contact between the Karmutsen and the Masset is formed by the Beresford fault; a northwest-southeast striking branch of the Rennell Sound-Louscoone Inlet fault which is one of the major lineaments in the Queen Charlotte Islands. To the south of Takelley Cove the Beresford fault is completely in the Karmutsen formation. It is marked in part by the Beresford Inlet.

The Karmutsen has been mapped primarily as greenstone on Lyell Island,. The rocks are variably chloritic and apparently formed from massive flows Quartz lenses are fairly common and metamorphic in origin. Most of the Karmutsen seen in the present program is highly fractured; particularly so in proximity to the Beresford fault.

The Masset formation is mapped as Paleocene-Eocene in age and on Lyell Island is mainly andesitic to rhyolitic tuffs and flows.

Both the Masset and the Karmutsen have been intruded by diorites. In the Karmutsen these plutons have been mapped as syntectonic, possibly of Jurassic age, while those in the Masset are of post-tectonic Tertiary age. A fairly large elongate intrusive or series of small intrusives has been roughly outlined in the Karmutsen extending south from the vicinity of Richardson Inlet to Lyell Bay. Diorite has also been noted in outcrop and drill core in the main showing on the April 3 claim. This is in the Masset formation and indicates that the intrusive in the Karmutsen may also be of Tertiary age.

Occasional small outcrops of limestone have been noted in the Karmutsen. These are thought to be part of the formation rather than the younger, overlying Kunga formation which has been mapped further to the east on Lyell Island.

Andesite and feldspar porphyry dikes are common in both the Karmutsen and Masset Formations.

Work Program and Results:

Area "A" (see figures 23)

Location (see Figure 13)

The 50mx50m grid lies on the April 7 claims along Richardson Inlet between the campsite and Skudas Bay to the northeast.

The area is roughly bisected by a north-south ridge up to 300 meters high with steep slopes to the east and west.

Geology

The area is underlain by the Masset formation volcanics of Paleocene-Eocene age. Rhyolite, tuff breccia and some andesite appear in the grid area.

The pyritic rhyolite is composed mainly of tuffs varying from very fine grained to lapilli. Large angular fragments to one half meter composed of fine grained well banded tuffs were noted in several locations. Pyrite varies from trace to several percent in the breccia and fragmental zone. The fragmental and lapilli rhyolite tuffs show variability both in the clasts and in the degree of alteration. In this examination of drill core M. Monnier-Williams (see Diamond Drilling Report - Pentland 1982) suggested that the rocks are pyroclastic ranging from andesitic to rhyolitic. The fragmental rhyolites are often silica flooded.

Results

Reconnaissance stream and soil sampling was done in this area in 1980 by JMT Services Corp. and by Placer Development in 1981. On both occasions several creeks were marginally anomalous for gold with values up to 40 ppb Au. Soils were similarly low with three exceptions which ran up to 605 ppb Au.

A few weakly anomalous arsenic values occurred in the same general area although not in the same samples. The present work found three anomalous soils located on lines 16+50S and 17-00S in the immediate vicinity of a north flowing creek

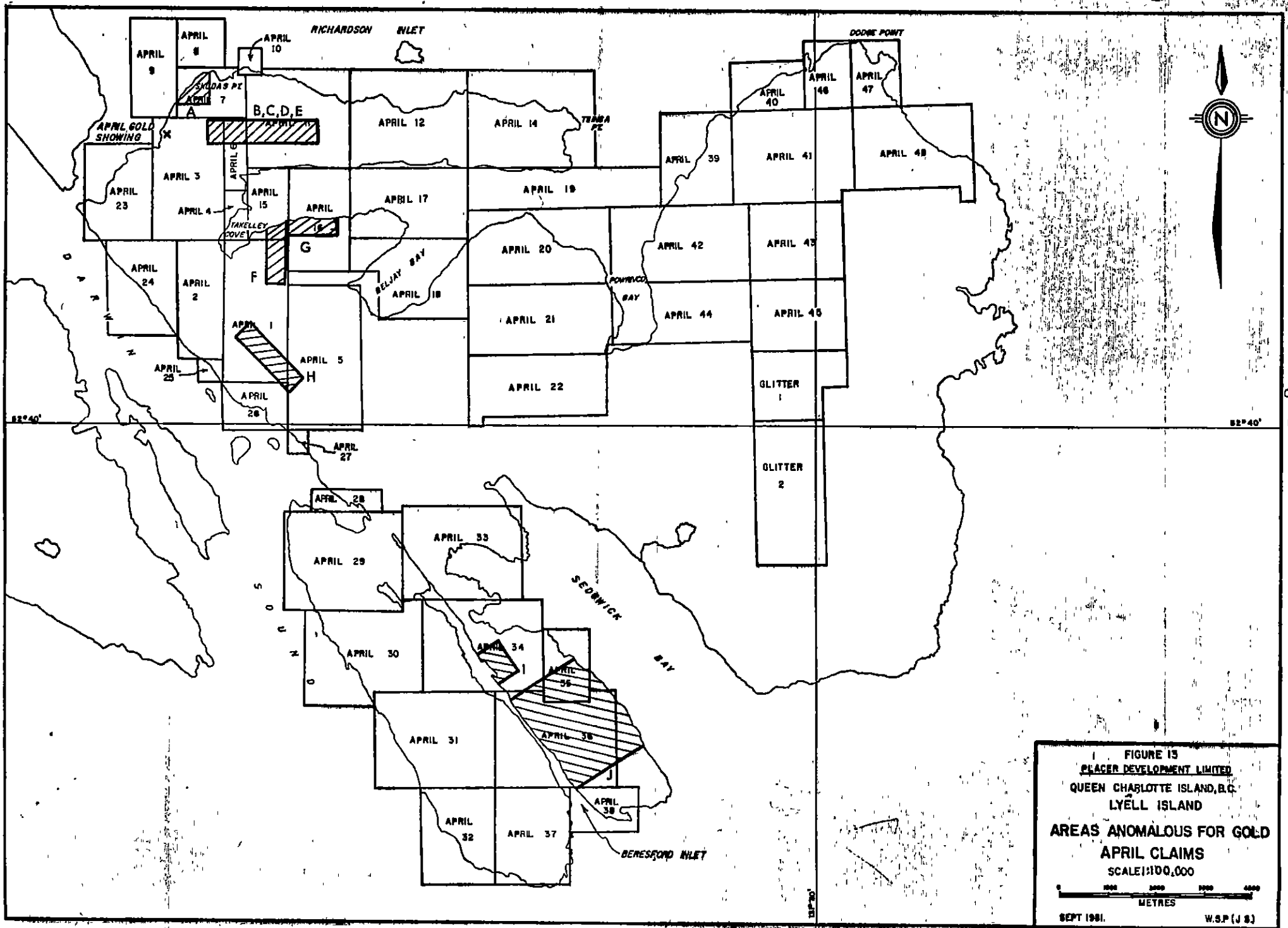


FIGURE 15

PLACER DEVELOPMENT LIMITED

QUEEN CHARLOTTE ISLAND, B.C.

LYELL ISLAND

AREAS ANOMALOUS FOR GOLD

APRIL CLAIMS

SCALE 1:100,000

0 1000 2000 3000 4000

METRES

SEPT 1981. W.S.P (J.S.)

lying approximately 650 meters northeast of the campsite. This appears to be the only locality of interest on the grid and that only marginally.

Areas "B", "C", "D" and "E" (See Figures 24, 25 and 26)

Location (See figure 13)

The four areas "B" to "E" are spotted over 2800 meters along a west to east line located in the center of the peninsula bounded by Richardson Inlet to the north and Atli Inlet to the south. They are covered by the April 6 and April 11 claims.

Geology

The areas are underlain by a wide variety of Masset formation rocks including andesite to rhyolite tuffs and flows, basalts, tuff breccias and thin bedded arkose to argillite.

Results

Interest in these areas was aroused by anomalous silt samples ranging from 20 ppb to a high of 190 ppb Au. Numerous soils were collected in the vicinities of the anomalous creeks with negative results.

Areas "F" and "G" (see Figures 27)

Location (see Figure 13)

These two areas are located on the peninsula in Atli Inlet lying between Takelley Cove and Beljay Bay. They are within the April 1, 15 and 16 mineral claims.

Geology

The area is largely underlain by Masset Formation rhyolite tuffs with minor tuff breccia.

Results

Sampling in 1981 found approximately one dozen widely scattered soils and three creeks which were considered anomalous. Two soils carried 170 ppb and 250 ppb Au respectively while the remainder were generaly marginally anomalous with 20 ppb to 40 ppb Au. A half dozen arsenic values of similar caliber were noted.

A total of 72 soil samples were collected from the two areas in 1982 with the results indicating only low gold values.

Area "I" (see Figures 28)

Location: (See Figure 13)

Area "I" is located in the April 34 claim on the eastern shore of Beresford Inlet in the southwestern sector of Lyell Island. It is covered with second growth, hemlock, cedar and spruce and is in part underlain by swamps.

Geology

The area has been mapped as Karmutsen greenstone and outcrop along the shore of Beresford Inlet is confirmative. The rocks are highly fractured probably due to the proximity of the Beresford fault along the western boundary. Chlorite content varies from medium to heavy. Patches of epidote were noted in one outcrop.

Results

A small grid of 61 soil samples was done on the area. The maximum value obtained was a low 30 ppb Au.

Area "J" (See Figures 29)

Location (See Figure 13)

The area covers portions of the April 35 and 36 claims on the peninsula lying between Sedgwick Bay and Beresford Inlet in the southwestern corner of Lyell Island. A 100mx50m chain and compass grid was established over the area and 470 soil samples collected from the "B" horizon in an effort to define the indicated anomalous reconnaissance results,

Topography

The steep hillsides rising to 1400 feet are covered in spruce, hemlock and cedar forest patches. Dense salal undergrowth occur up to 500 feet elevation but above this level undergrowth is sparse. Some cliffs complicated the locating of the grid lines.

Geology

The grid is located on a sheared and weakly pyritic Triassic Karmutsen Formation greenstone intruded by a syntectonic pluton composed of medium to coarse grained quartz-hornblende diorite. (Bulletin 54, A. Sutherland-Brown) The diorite is surrounded by migmatites composed of regularly layered fine amphibolite in a coarser dioritic matrix. The Karmutzen greenstone is composed of variably chloritized basic volcanic rocks. Quartz veins and lenses up to one meter in

size appear within the greenstone and appear to be "sweated" from it.

Beresford Inlet masks the location of the southeasterly striking Beresford fault along the western boundary of the grid. Greenstones along the inlet shoreline appear highly fractured.

A fine metamorphic banding was frequently noted over much of the area; particularly on weathered surfaces. The general strike is north to northeast.

Results

A few widely scattered and quite erratic values were found over much of the property. The only area containing what could be interpreted as a group of anomalous values was in the diorite intrusive on the west side of Sedgwick Bay in the northeastern corner of the grid.

A total of 11 samples containing up to 170 ppb Au are located from L30+00N to L34+00N and 20+00E to 22+50E. The arsenic content was very low.

Conclusions:

Areas "A" to "G" inclusive are all located in the Masset Formation and largely in rhyolitic rocks. The reconnaissance results which instigated the 1982 programs were generally only marginally anomalous for gold. The 1982 results have provided no encouragement on any of the areas except for a small zone on area "A" as previously noted.

Areas "I" and "J" are in the Karmutsen Formation greenstones. The initial comparison of results for gold in the areas from sampling in 1981 and 1982 was not encouraging. A limited program of check sampling and assaying on Karmutsen soils was done with the results indicating problems in duplicating results for gold.

A fairly extensive program of check assaying and laboratory procedures using 145 soil samples collected in 1981 by JMT Services Corp. was then carried out using the two laboratories involved. The 1981 samples were assayed by Chemex Laboratories Ltd. while those collected in 1982 were run in the Placer Development Laboratory. The eventual conclusions reached were that there is a profound "nugget effect" resulting from the erratic distribution of particulate gold and that there is a low probability of duplicating the results from any individual sample.

Areas of interest are those where there is a grouping or clustering of above background gold values.

The results from areas "I" and "J" are disappointing. The only zone of any interest is in the northeastern corner of area "J" where 11 weak to moderately anomalous soils form a very rough grouping.

B. Barde

W.S. Pentland

WSP/cs
Attachment

APPENDIX

GEOCHEM METHOD FOR Au

1. Weight 3 g sample into porcelin crucible and heat at 600° for 1 -1/2 hours.

2. Cool and transfer to a 16 x 125 mm test tube.

3. Add 3 ml HBr solution (1/2% Br_2 in conc. HBr 48%) and allow to stand overnight.

4. Add 3 ml H_2O and 3 ml MIBK (methylisobutylketone) and shake in shaker for 10 minutes.

5. Centifuge and transfer only the top organic layer to a clean 16 x 125 mm test tube.

6. Add 5 ml. 1% HBr in H_2O and shake by hand for 20 to 30 sec.

7. Read top layer on A.A. (detection limit 0.02 ppm). Standards for Au are made by adding 30 ml HBr solution, 30 ml H_2O 0.03 ml for 100 Ng, Ay sol. and 30 ml MIBK in sep, funnel and shaking by hand for 4 min. (=1 ppm standard).

APPENDIX

GEOCHEM METHOD FOR As

1 g of sample is weighed into test tube and digested with perchloric and nitric acid for 3 hrs. solution is diluted to 10 ml.

An aliquote of this solution is taken and to that aliquot is added a solution of KI (potassium iodide) to reduce the arsenic to As^{3+}.

This solution is put into the reaction vessel of a hydride generation system for Atomic Absorption analysis. This procedure involves adding a measured amount of $NaBH_4$ (sodium borohydride) solution containing a small amount of NaOH (sodium hydroxide) to the raction vessel. This liberates the arsenic gas and it is swept into a quartz absoption cell which is electrically heated. Maximum absoption is obtained for each sample. Results are standardized against known amounts of arsenic.

This method briefly described is done by A.A. analysis using a hydride generation system.

RICHARDSON INLET

2+00 W BASE LINE

0+00 BASE LINE

10+00 S.
10+50 S.
11+00 S.
11+50 S.
12+00 S.
12+50 S.
13+00 S.
15+00 S.
15+50 S.
16+00 S.
16+50 S.
17+00 S.
17+50 S.
18+00 S.
18+50 S.

0+50 W.
1+00 W.
1+50 W.
2+00 W.
3+00 W.
4+50 W.
6+00 W.
7+00 W.
7+50 W.
8+00 W.
5+00 W.

0+50 E.
1+00 E.
1+50 E.
2+00 E.
2+50 E.
3+00 E.
3+50 E.
4+00 E.

12+00 S.
12+50 S.
13+00 S.
13+50 S.
14+00 S.
14+50 S.

500
1000

62174
57370
70374

N

GEOLOGY LEGEND

Volcanics

- 1a - RHYOLITE – Flow
- 1d - " – Tuff
- 1f - " – Fragmental
- 2b - DACITE – Dike
- 2d - " – Tuff
- 3a - ANDESITE – Flow
- 3b - " – Dike
- 3c - " – Porphyry
- 3d - " – Tuff
- 5 - TUFF BRECCIA

o – Soil Sample

0 40 80 120 160 200
METERS

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FIGURE 23

DRAWN: B.W.B.	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREA "A" OUTCROP MAP
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROPERTY – V-168 QUEEN CHARLOTTE ISLANDS, B.C.	FILE REF. No.: 82-10-V-168
APPROVED:	REVISED:		

ATLI INLET

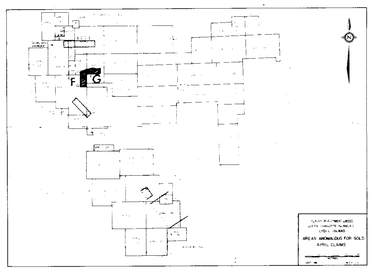
N

F39 F38 F37 F29 F30 F31 F32 F33 F34 F35 F36 F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12 F13 F14 F15 F16 F17 F18 F19 F20 F21 F22 F23 F24 F25 F26 F27 F28

G126 G121 G120 G119 G202 G118 G125 G117 G116 G115 G124 G114 G113 G112 G111 G110 G122 G204 G123 G109 G108 G201 G107 A87 G106 G200 G105 G100 G104 G101 G103 G102

500 1000 500 1000 1000

Claim Post



0 40 80 120 160 200
METERS

GEOLOGY LEGEND

Volcanics

1 - Rhyolite - undivided
1a - " - flow
1b - " - dike
1c - " - porphyry
1d - " - tuff
2d - Dacite - tuff
3a - Andesite - flow
3b - " - dike
3d - " - tuff
5 - Tuff Breccia

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O SOIL SAMPLE
X STREAM SAMPLE

FIGURE 27

DRAWN: B.W.B	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREAS "F","G". OUTCROP MAP
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROPERTY	
APPROVED:	REVISED:	QUEEN CHARLOTTE ISLANDS, B.C.	FILE REF. No.: 82-6-V-168

ATLI INLET

N

F39 90/<20
F38 <2/<20
F37 <2/<20
F29 <2/<20
F30 <2/<20
F31 <2/<20
F32 <2/<20
F33 2/<20
F34 <2/<20
F35 <2/<20
F36 <2/<20
F1 <2/<20
F2 2/<20
F3 2/<20
F4 <2/<20
F5 2/<20
F6 <2/<20
F7 <2/<20
F8 <2/<20
F9 4/<20
F10 20/<20
F11 20/<20
F12 2/<20
F13 2/<20
F14 <2/<20
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F19 2/<20
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F23 <2/<20
F24 <2/<20
F25 <2/<20
F26 <2/<20
F27 <2/<20
F28 <2/<20

G126 12/<20
G202 8/<20
G121 20/<20
G120 <2/<20
G119 22/<20
G118 10/<20
G117 8/<20
G116 no assay ?
G115 48/<20
G114 178/<20
G113 74/<20
G112 480/<20
G111 4/<20
G110 <2/<20
G109 <2/<20
G108 4/<20
G107 4/<20
G106 <2/<20
G105 12/<20
G104 <2/<20
G103 6/<20
G102 156/<20
G101 2/<20
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G204 2/<20
G122 10/<20
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G201 74/<20
G200 28/<20
A87 <2/<20

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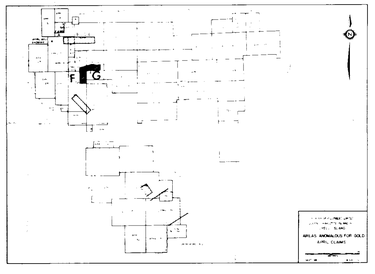
1000
500
1000
1000
Claim Post



0 40 80 120 160 200
METERS

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LEGEND Au
○ - < 20 ppb
◑ - 20 - 49
● - > 49

○ SOIL SAMPLE
X STREAM SAMPLE

ppm ppb
As Au
< 2 / < 20

FIGURE 27-2

DRAWN: B.W.B	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREAS "F","G". GOLD GEOCHEMISTRY
DRAFTING: A.K	DATE: JUNE, 1982	APRIL PROPERTY	
APPROVED:	REVISED:	QUEEN CHARLOTTE ISLANDS, B.C.	FILE REF No:

ATLI INLET

N

F39 90/<20
F38 <2/<20
F37 <2/<20
F29 2/<20
F30 <2/<20
F31 <2/<20
F32 <2/<20
F33 2/<20
F34 <2/<20
F35 <2/<20
F36 <2/<20
F1 <2/<20
F2 2/<20
F3 <2/<20
F4 <2/<20
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F6 <2/<20
F7 <2/<20
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F9 4/<20
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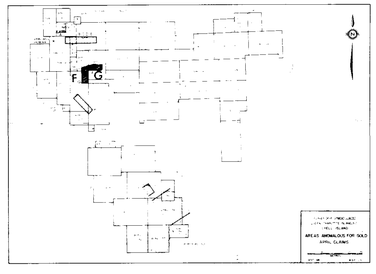
F11 20/<20
F12 2/<20
F13 2/<20
F14 2/<20
F15 <2/<20
F16 <2/<20
F17 <2/<20
F18 <2/<20
F19 <2/<20
F20 <2/<20
F21 <2/<20
F22 <2/<20
F23 <2/<20
F24 <2/<20
F25 <2/<20
F26 <2/<20
F27 <2/<20
F28 <2/<20

G126 12/<20
G121 20/<20
G120 <2/<20
G119 22/<20
G202 8/<20
G118 10/<20
G117 8/<20
G125 50/<20
G116 no assay ?
G115 48/<20
G124 8/<20
G203 18/<20
G114 178/<20
G204 2/<20
G113 74/<20
G122 10/<20
G112 480/<20
G123 2/<20
G111 4/<20
G110 2/<20
G109 <2/<20
G201 74/<20
G108 4/<20
G107 4/<20
A87 <2/<20
G106 <2/<20
G200 28/<20
G105 12/<20
G100 6/<20
G104 <2/<20
G101 2/<20
G103 6/<20
G102 156/<20

500
1000
500
1000
1000
Claim Post



0 40 80 120 160 200
METERS

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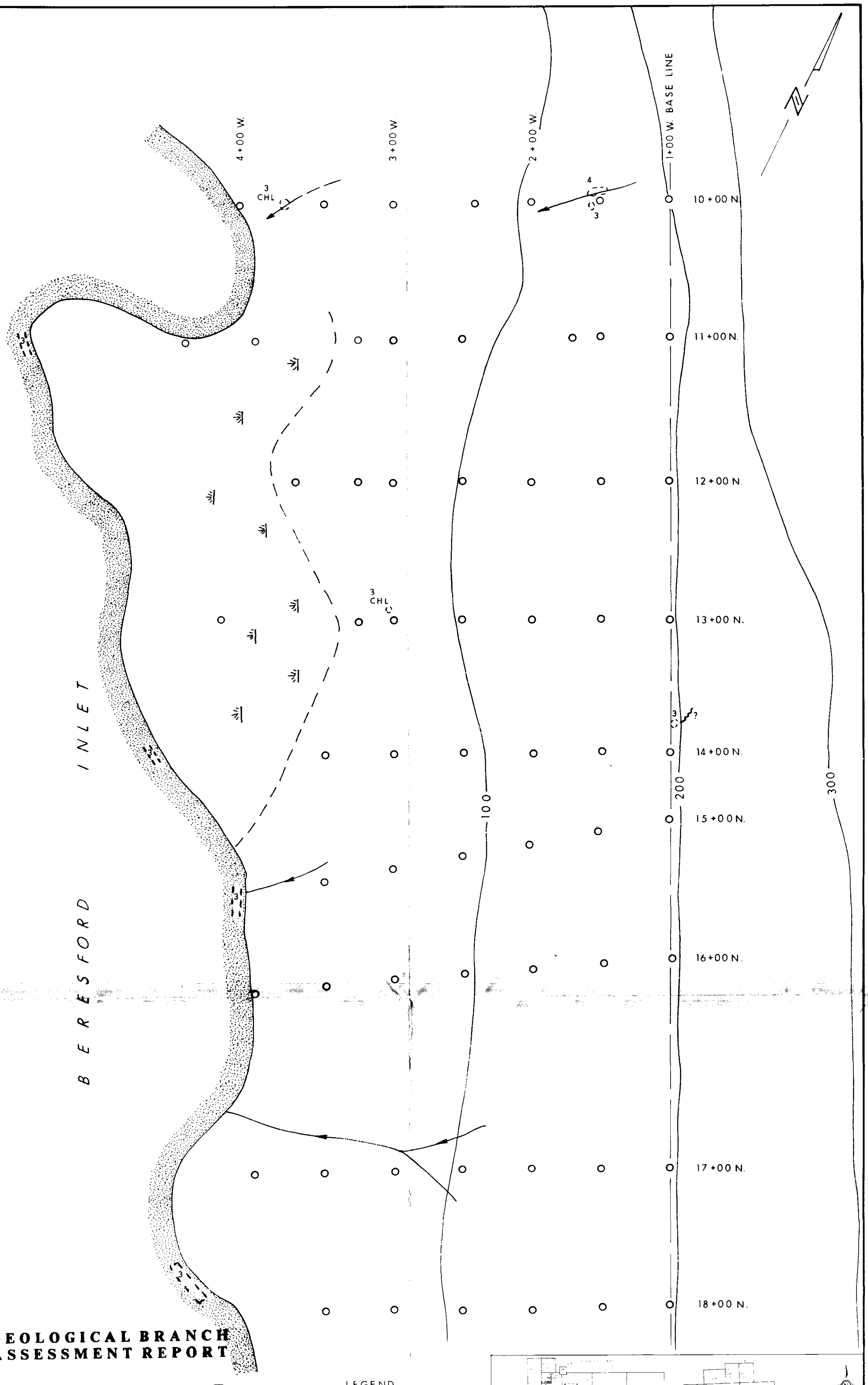
LEGEND As
O - < 15 ppm
◑ - 15 - 49
● - > 49

O SOIL SAMPLE
X STREAM SAMPLE

ppm As / ppb Au
< 2 / < 20

FIGURE 27-3

DRAWN: B.W.B	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREAS "F","G". ARSENIC GEOCHEMISTRY
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROPERTY	
APPROVED:	REVISED:	QUEEN CHARLOTTE ISLANDS, B.C.	FILE REF. No.:



GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,778

LEGEND

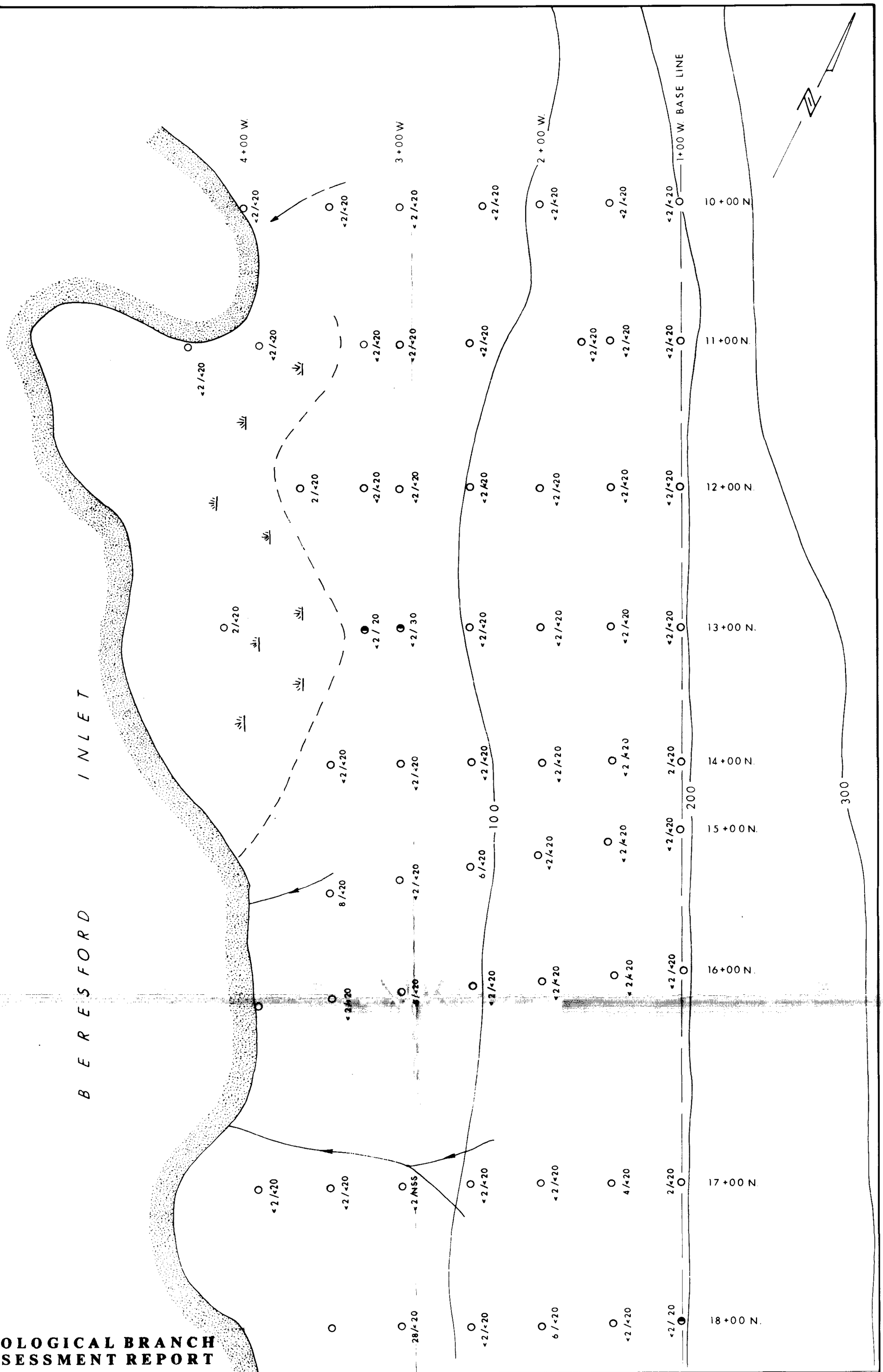
1 - Hornblende Diorite
2 - Andesite Dyke
3 - Greenstone
4 - Amphibolite ?
5 - Intermediate - Diorite to Greenstone
6 - Rhyolite

- Banding
- Joint
- Joint + Vein
- Dyke
- Vein
- Cliff
- Shear Zone

O — Soil Sample

0 40 80 120 160 200
METERS

DRAWN: B.W.B.	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREA "I" FIGURE 28
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROPERTY—V-168	OUTCROP MAP
APPROVED:	REVISED:	QUEEN CHARLOTTE ISLANDS	FILE REF. No.: 82-6-V-168



GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,778

O – Soil Sample

ppm As / ppb Au
< 2 / < 20

0 40 80 120 160 200
METERS

LEGEND Au
O - < 20 ppb
◑ - 20 - 49
● - > 49

FIGURE 28-2

DRAWN: B.W.B	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREA "I" GOLD GEOCHEMISTRY
DRAFTING: A.K	DATE: JUNE, 1982	APRIL PROPERTY—V-168 QUEEN CHARLOTTE ISLANDS	
APPROVED:	REVISED:		FILE REF. No.:

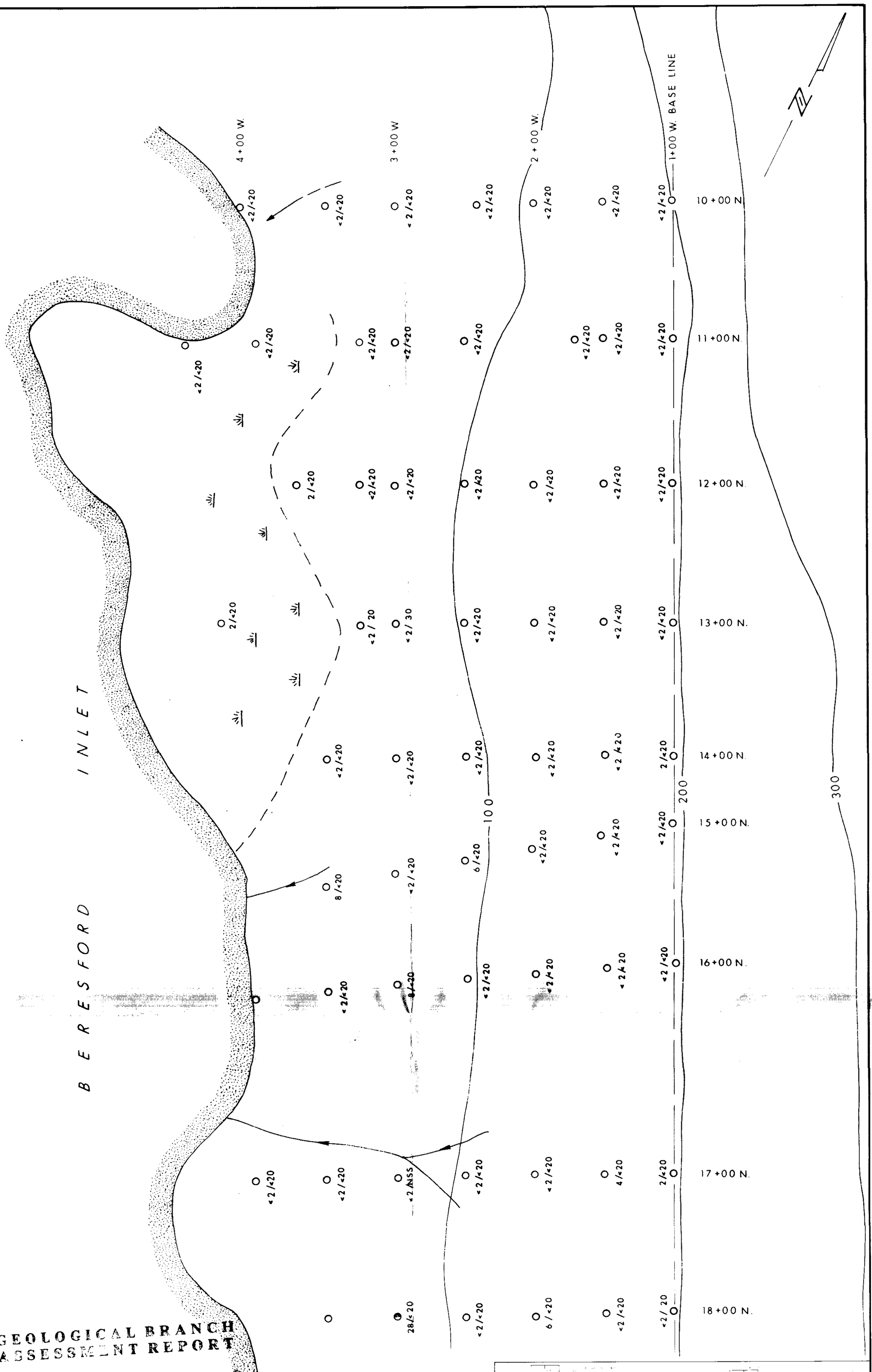


FIGURE 28-3

DRAWN: B.W.B	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREA "I" ARSENIC GEOCHEMISTRY
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROPERTY—V-168 QUEEN CHARLOTTE ISLANDS	
APPROVED:	REVISED:		FILE REF. No.:

RICHARDSON INLET

10+00 S.
10+50 S.
11+00 S.
11+50 S.
12+00 S.
12+50 S.
13+00 S.
15+00 S.
15+50 S.
16+00 S.
16+50 S.
17+00 S.
17+50 S.
18+00 S.
18+50 S.

0+00 BASE LINE
0+50 E
1+00 E
1+50 E
2+00 E
2+50 E
3+00 E
3+50 E
4+00 E

2+00 W BASE LINE
0+50 W
1+00 W
1+50 W
2+00 W
2+50 W
3+00 W
3+50 W
4+00 W
5+00 W
6+00 W
7+00 W
7+50 W
8+00 W

500
1000

O - Soil Sample

ppm As / ppb Au
< 2 / < 20

0 40 80 120 160 200
METERS

LEGEND Au
O - <20 ppb
◑ - 20-49
● - >49

GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,778

FIGURE 23-2

DRAWN: B.W.B	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREA "A" GOLD GEOCHEMISTRY
DRAFTING: A.K	DATE: JUNE, 1982	APRIL PROPERTY - V-168 QUEEN CHARLOTTE ISLANDS, B.C.	
APPROVED:	REVISED:		FILE REF. No.:

RICHARDSON INLET

10+00 S.
10+50 S.
11+00 S
11+50 S
12+00 S
12+50 S
13+00 S.
13+50 S.
14+00 S.
14+50 S.
15+00 S.
15+50 S.
16+00 S.
16+50 S.
17+00 S.
17+50 S.
18+00 S.
18+50 S

2+00 W BASE LINE

0+00 BASE LINE

0+50 E
1+00 E
1+50 E
2+00 E
2+50 E
3+00 E
3+50 E
4+00 E

500

1000

O - Soil Sample

ppm As	ppb Au
< 2	/ < 20

0 40 80 120 160 200

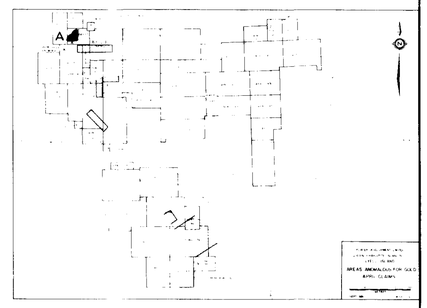
METERS

LEGEND As

O - <15 ppm

◑ - 15-49

● - >49



GEOLOGICAL BRANCH
ASSESSMENT REPORT

10,778

FIGURE 23-3

DRAWN: B.W.B	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREA "A" ARSENIC GEOCHEMISTRY
DRAFTING: A.K	DATE: JUNE, 1982	APRIL PROPERTY - V-168 QUEEN CHARLOTTE ISLANDS, B.C.	
APPROVED:	REVISED:		FILE REF. No.:

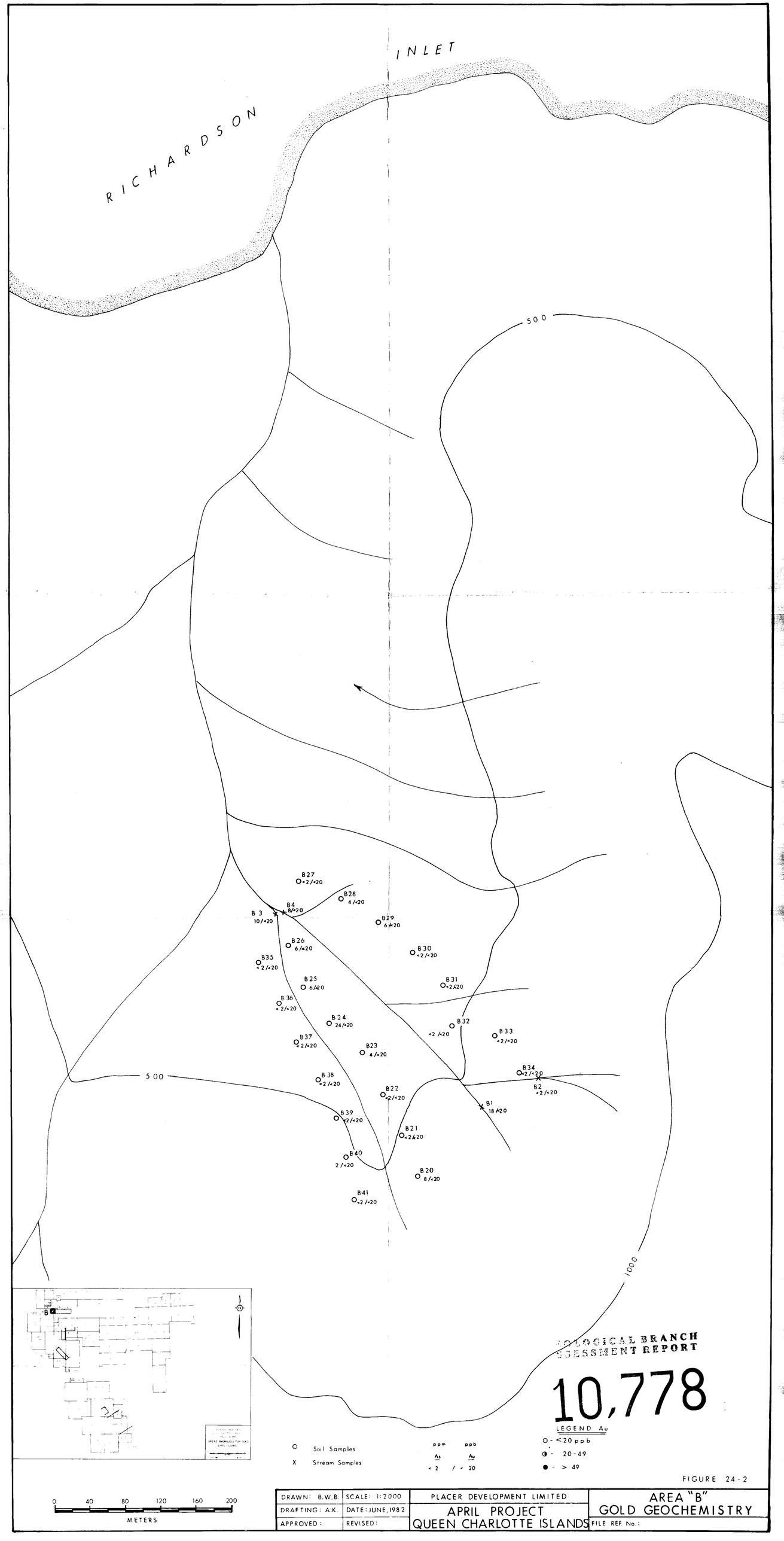
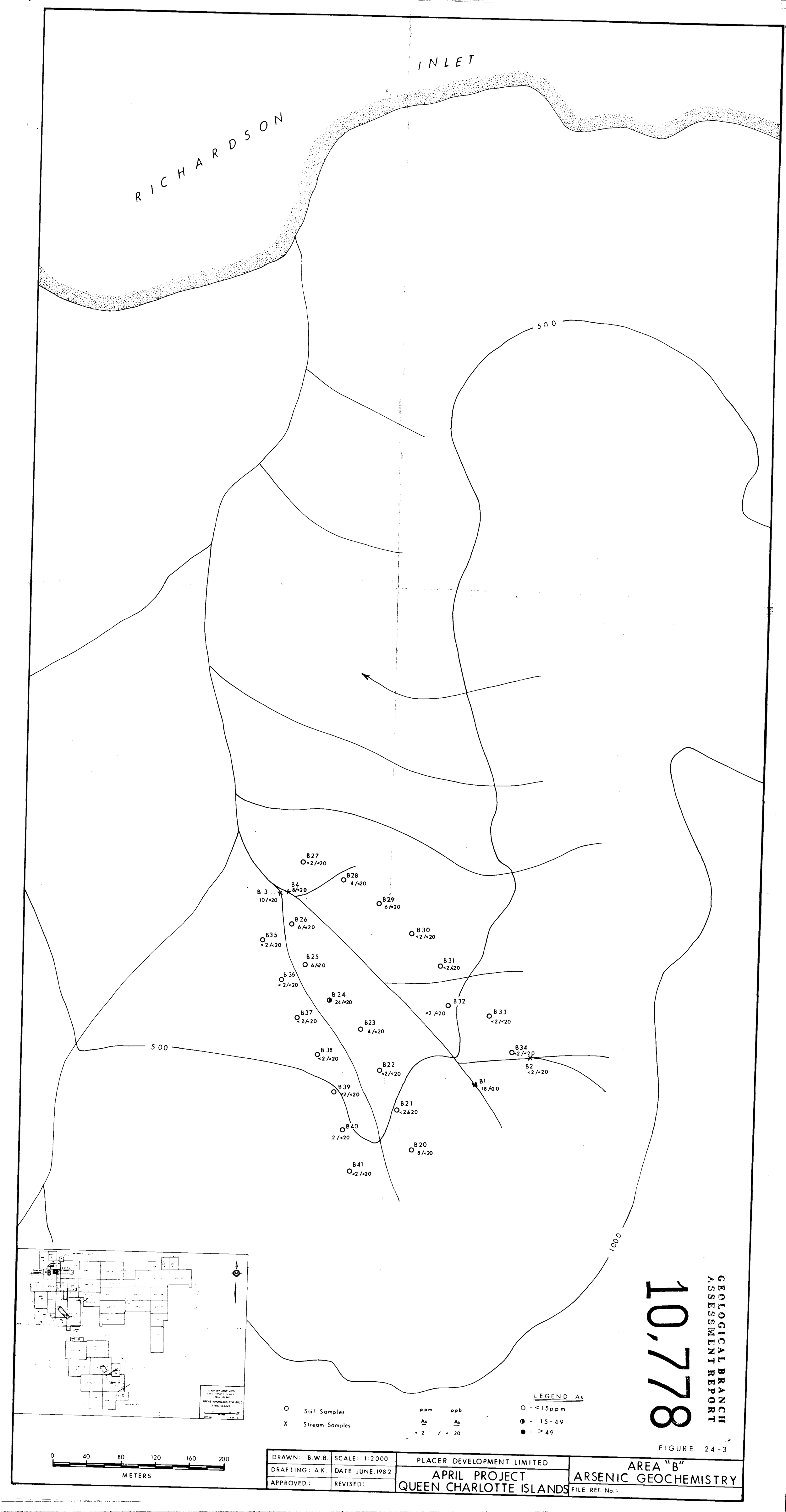


FIGURE 24-2

DRAWN: B.W.B.	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREA "B" GOLD GEOCHEMISTRY
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROJECT QUEEN CHARLOTTE ISLANDS	FILE REF. No.:
APPROVED:	REVISED:		



DRAWN: B.W.B.	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREA "B" ARSENIC GEOCHEMISTRY
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROJECT QUEEN CHARLOTTE ISLANDS	FILE REF. No.:
APPROVED:	REVISED:		

FIGURE 24-3

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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RICHARDSON INLET

N

500

1000

500

CD4
CD3
CD2
CD1
1a

C300
C8
C7
C6
C5
C200
C4
C3
C2
C100
C1
1016
1a
3
5
9d

D8
D7
D6
D30
D5
D4
D3
D2
D1
D20
D10
1013
3d
3a
1b

GEOLOGY LEGEND

Volcanics
- 1a - Rhyolite flow
- 1b - " dike
- 3a - Adesite flow
- 3d - " tuff
- 5 - Tuff Breccia

Sediments
- 9d - Siltstone

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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O SOIL SAMPLE
X STREAM SAMPLE

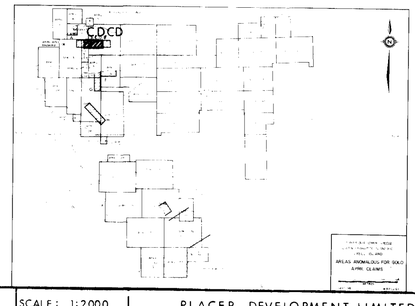


FIGURE 25

0 40 80 120 160 200
METERS

DRAWN: B.W.B.	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREAS "C", "D", "CD" OUTCROP MAP
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROPERTY	
APPROVED:	REVISED:	QUEEN CHARLOTTE ISLANDS, B.C.	FILE REF. No.: 82-6-V-168

RICHARDSON INLET

N

500

1000

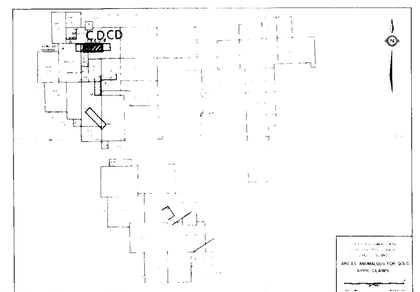
500

CD 4 <2/<20
CD 3 4/<20
CD 2 6/<20
CD 1 2/<20

C 300 <2/<20
C8 <2/<20
C7 <2/<20
C6 <2/<20
C5 <2/<20
C200
4/<20
C4 <2/<20
C3 <2/<20
C2 <2/<20
C1 <2/<20
<2/<20
C100
1016

D8 <2/<20
D7 <2/<20
D6 <2/<20
D30 <2/<20
D5 <2/<20
D4 2/<20
D3 <2/<20
D2 <2/<20
1013
D1 <2/<20
D20 <2/<20
D10 <2/<20

0 40 80 120 160 200
METERS



GEOLOGICAL BRANCH
ASSESSMENT REPORT

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O SOIL SAMPLE
X STREAM SAMPLE

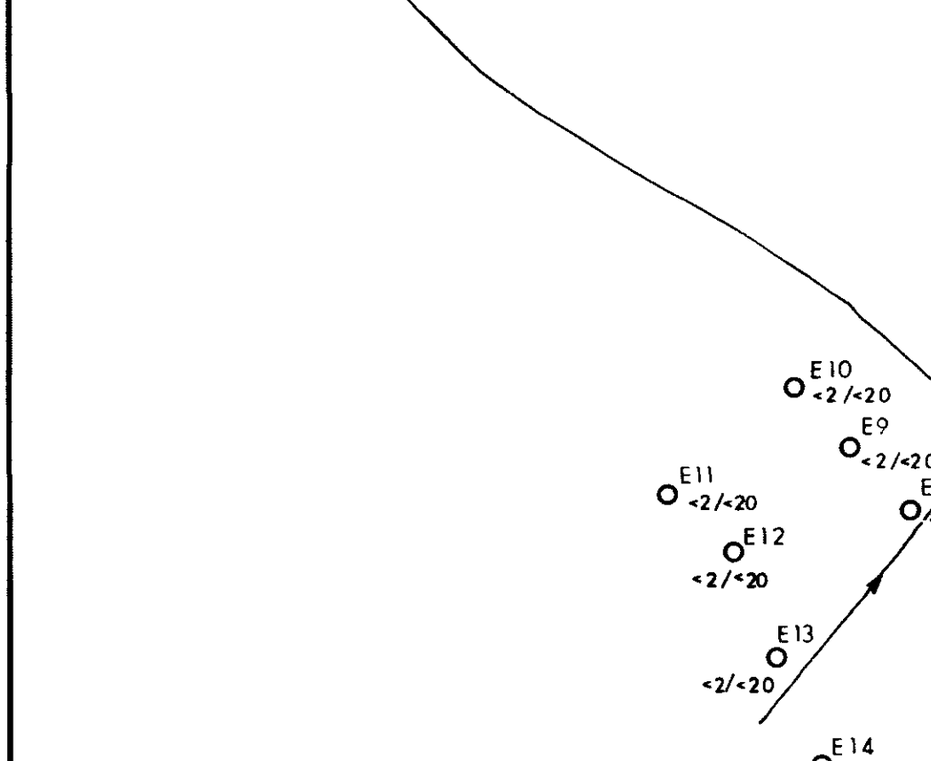
ppm As / ppb Au
< 2 / < 20

FIGURE 25-2/3

DRAWN: B.W.B.	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREAS "C","D","CD."
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROPERTY	ARSENIC / GOLD GEOCHEMISTRY
APPROVED:	REVISED:	QUEEN CHARLOTTE ISLANDS, B.C.	FILE REF. No: 82-6-V-168

RICHARDSON INLET

1026
1027A
1023A
1029A
E1 <2/<20
E2 <2/<20
E3 <2/<20
E4 <2/<20
E5 <2/<20
E6 <2/<20
E7 <2/<20
E8 <2/<20
E9 <2/<20
E10 <2/<20
E11 <2/<20
E12 <2/<20
E13 <2/<20
E14 <2/<20
E15 <2/<20
E16 <2/<20
E17 <2/<20
E18 <2/<20
E19 <2/<20
E20 <2/<20
E21 <2/<20
E22 <2/<20
E23 <2/<20
E24 <2/<20
E25 <2/<20
E26 <2/<20
E27 <2/<20
E28 <2/<20
22/<20
<2/<20
<2/<20
500
1000



10778

LEGEND As
O - <15 ppm
◐ - 15-49
● - >49

O Soil Samples
X Stream Samples

ppm	ppb
As	Au
< 2	/ < 20

FIGURE 26-3

0 40 80 120 160
METERS

DRAWN: B.W.B.	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREA "E" ARSENIC GEOCHEMISTRY
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROJECT QUEEN CHARLOTTE ISLAND	FILE REF. No.:
APPROVED:	REVISED:		

RICHARDSON INLET

1026
1027A
1023A
1029A
22/<20

E1 <2/<20
E2 <2/<20
E3 <2/<20
E4 <2/<20
E5 <2/<20
E6 <2/<20
E7 <2/<20
E8 <2/<20
E9 <2/<20
E10 <2/<20
E11 <2/<20
E12 <2/<20
E13 <2/<20
E14 <2/<20
E15 <2/<20
E16 <2/<20
E17 <2/<20
E18 <2/<20
E19 <2/<20
E20 <2/<20
E21 <2/<20
E22 <2/<20
E23 <2/<20
E24 <2/<20
E25 <2/<20
E26 <2/<20
E27 <2/<20
E28 <2/<20

500
1000

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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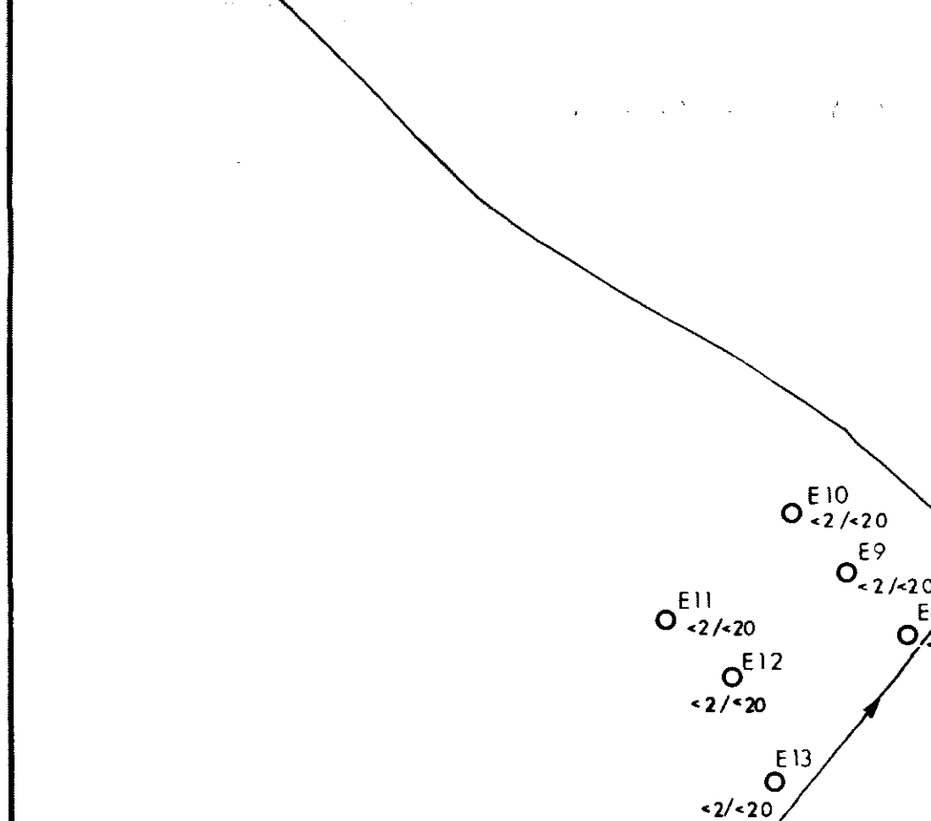

O Soil Samples
X Stream Samples

ppm As / ppb Au
< 2 / < 20

LEGEND Au
O - < 20 ppb
◑ - 20 - 49
● - > 49

FIGURE 26-2

0 40 80 120 160
METERS

DRAWN: B.W.B.	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREA "E" GOLD GEOCHEMISTRY
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROJECT QUEEN CHARLOTTE ISLAND	
APPROVED:	REVISED:		FILE REF. No.:

BERESFORD INLET

SEDGWICK BAY

L.34+00N
L.33+00N
L.32+00N
L.31+00N
L.30+00N
L.29+00N
L.28+00N
L.27+00N
L.26+00N
L.25+00N
L.24+00N
L.23+00N
L.22+00N
L.21+00N
L.20+00N
L.19+00N
L.18+00N
L.17+00N
L.16+00N
L.15+00N
L.14+00N
L.13+00N
L.12+00N
L.11+00N
L.10+00N

500
1000

O - Soil Sample
ppm As / ppb Au
<2 / <20

LEGEND Au
O - <20 ppb
◑ - 20-49
● - >49

0 40 80 120 160 200
METERS

DRAWN: B.W.B.	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREA "J" GOLD GEOCHEMISTRY
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROPERTY – V-168 QUEEN CHARLOTTE ISLANDS, B.C.	FILE REF. No.:
APPROVED:	REVISED:		

FIGURE 29-2

BERESFORD INLET

SEDGWICK BAY

L.34+00N
L.33+00N
L.32+00N
L.31+00N
L.30+00N
L.29+00N
L.28+00N
L.27+00N
L.26+00N
L.25+00N
L.24+00N
L.23+00N
L.22+00N
L.21+00N
L.20+00N
L.19+00N
L.18+00N
L.17+00N
L.16+00N
L.15+00N
L.14+00N
L.13+00N
L.12+00N
L.11+00N
L.10+00N

500
1000

O - Soil Sample
ppm As / ppb Au
<2 / <20

0 40 80 120 160 200
METERS

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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LEGEND As
O - <15 ppm
◑ - 15-49
● - >49

FIGURE 29-3

DRAWN: B.W.B.	SCALE: 1:2000	PLACER DEVELOPMENT LIMITED	AREA "J" ARSENIC GEOCHEMISTRY
DRAFTING: A.K.	DATE: JUNE, 1982	APRIL PROPERTY - V-168 QUEEN CHARLOTTE ISLANDS, B.C.	FILE REF No.:
APPROVED:	REVISED:		

BERESFORD INLET

SEDGWICK BAY

L. 34+00 N

L. 33+00N.

L. 32+00N.

L. 31+00N.

L. 30+00N.

L. 29+00N.

L. 28+00N.

L. 27+00N.

L. 26+00N.

L. 25+00N.

L. 24+00N

L. 23+00N.

L. 22+00N.

L. 21+00N.

L. 20+00N.

L. 19+00N.

L. 18+00N.

L. 17+00N.

L. 16+00N.

L. 15+00N.

L. 14+00N.

L. 13+00N.

L. 12+00N.

L. 11+00N.

L. 10+00N.

210-260/STEEP ON E SLOPE

500

1000

O - Soil Sample

0 40 80 120 160 200

METERS

GEOLOGY LEGEND

1 - Hornblende Diorite
2 - Andesite Dyke
3 - Greenstone
4 - Amphibolite ?
5 - Intermediate - Diorite to Greenstone
6 - Rhyolite
- Banding
- Joint
- Joint + Vein
- Dyke
- Vein
- Cliff
- Shear Zone

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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FIGURE 29-1

DRAWN : B.W.B.	SCALE : 1 : 2000	PLACER DEVELOPMENT LIMITED	AREA "J" GEOLOGY
DRAFTING : A.K.	DATE : JUNE, 1982	APRIL PROPERTY - V-168 QUEEN CHARLOTTE ISLANDS, B.C.	
APPROVED :	REVISED :		FILE REF. No. :

SEDGWICK BAY

BERESFORD INLET

GEOLOGY LEGEND
1 - Hornblende Diorite
2 - Andesite Dike
3 - Greenstone
4 - Amphibolite ?
5 - Sheared Greenstone to Greenstone
6 - Rhyolite
—≈— Banding
—/— Joint
—/— Joint Vein
— Dike
— Vein
— Cliff
—≈— Shear Zone

GEOLOGICAL BRANCH
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FIGURE 29

AREA "J"
OUTCROP MAP

PLACER DEVELOPMENT LIMITED
APRIL PROPERTY – V-168
QUEEN CHARLOTTE ISLANDS, B.C.

FILE REF. No. :

DRAWN : B.W.B.
DRAFTING : A.K.
APPROVED :

SCALE : 1:2000
DATE : JUNE, 1982
REVISED :

METERS 0 40 80 120 160 200

O - Soil Sample