

PROPERTY FILE

103 C 002

103C/16E

Soil Survey of the Kootenay Claims.

017372

Claims: Gill (3763), Swindle #1 to #8, J-1 (4269),
B-1 (4146)

Skeena Mining Division (Prince Rupert)

Location: NTS 103/C 16E

Latitude is 52° 51' North

Longitude is 132° 10' West

Mr. Ken Foote of Sandspit B.C. is the Claims Owner.

Deena Explorations Ltd. of Calgary Alberta is the Operator.

Mr. Robert Lake of Calgary Alberta is the Field Consultant
and Author.

Mr. Ken Foote (claims owner)

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Location: North side of Kootenay Inlet, on the West Coast of Moresby Island, on the Queen Charlotte Islands. NTS reference is 103/C 16E, or approximately 52 degrees 51 minutes north and 132 degrees 10 minutes west.

Access: Present access is by helicopter from the Sandspit airport, 30 miles by air to the north east of the claims. Or by boat to the Sewell Inlet logging camp on the east side of Moresby Island, then travelling on logging roads to the west side of Newcombe Inlet to the end of a spur road. From this point a well marked trail follows a low valley for 7 Kms. to the helicopter pad , located on the claims.

Climate: Very wet, heavy annual rainfall along the west coast of Moresby Island. Snow potential from November to April of each year. Moderate temperatures year round, below the 1,000' level, above this elevation, high winds are common.

Topography: The claims lie between Kootenay Inlet to the south, and a mountain ridge to the north of about 2,500' high. This ridge runs in a east-west direction, changing from a very low slope angle at the inlet, to over 40 degrees slope near the north end of the claims. Trees cover almost the entire claim area, except where wet areas lie, or rock bluffs haven't allowed the trees to grow. The forest is made up of large cedars, spruce and hemlocks. Soils are thin on the higher angle slopes, and better developed on the flat areas on the southern portions of the claims.

History of the Area.

Gold was discovered in Mitchell inlet, 5 miles to the north in 1852 by the Hudson Bay Company and local native people. This was the first quartz gold mine in B.C.

In the 1920's to 1930's the Kootenay claims were worked by hand, as reported in the B.C. Minister of Mines reports.

At Tasu Sound, 7 miles to the south of the claims, an iron mine site was worked and mined up to the early 1980's. Gold and silver was also extracted at the Tasu mine as associated minerals to the iron ore.

On the Kootenay claims, two adits and portals were dug which follow the same quartz vein at different elevations. The upper adit is at approx. 525', while the lower adit intersects the same vein at 200' elevation. Seven diamond core holes have been drilled into this same vein, between the two adits. A soil survey and stream sampling has been carried out on the claims. Old dump sites, rails, pipes, crusher can be found on the claims from the underground working from the 1930's.

Regional Geology

Triassic Karmutsen Volcanic sequence hosts the quartz veins on the claims. They have large scale pillow structures, which with the texture, indicate deep marine environment. These rocks are overlain by the younger Kunga limestone and shale sequences. The contact between the Karmutsen and Kunga appears to be represent a depositional change, rather than a unconformity. The regional fault pattern on Moresby Island trend north-west to south-east direction, with the east side of the faults being the down side. The fault pattern on the Kootenay claims trend east

west-with some evidence of shearing along the quartz veins which have been placed along the faults.

Geology of the Claims.

The gold deposited on the Kootenay claims is found within a parallel fault - shear zone within the Karmutsen volcanic rocks. Quartz has been introduced into these fault patterns, and follow the east-west fault pattern. Breccia evidence of the host Karmutsen occurs along the quartz - volcanic contact. Within the quartz veins minor amounts of sulphide minerals usually less than 5 percent are present. The most common sulphide mineral is pyrite, with some chalco pyrite present. The assay values for gold varies greatly along the veins, as well the gold values vary from vein to vein. This one fact of ore grade, will make this type of deposit difficult to develop. The veins dip 80 to 85 degrees to the south, while the bed within the Karmutsen dip 45 - 55° to the south. The slope angles vary from 45 degrees to flat near the inlet, also to the south. Strike of the veins is 50 to 60° true, which also follows the strike of the hill.

No evidence of the fault pattern continuing into the Kunga has been found, but the strike angle would indicate that this is possible. To-date only very low gold assays values within the Kunga have been found within the claims. But since exposures of the Kunga is poor, it was decided to complete a soil geochemistry survey over this area of the claims.

1988 Field Program.

An eight day visit to the claims from November 24, 1988 to December 1, 1988. The equipment and author travelled by truck from Calgary, Alberta, via ferry to Sandspit. At Sandspit the equipment and supplies were placed aboard a Bell 206 Helicopter, this and the survey crew of two were flown to the helicopter pad at the claims. A compass and chain grid was complete and soil samples taken along these lines. Since the days were short, only 6 hours of light was available to work in. Heavy snow falls and rain falls also slowed the survey down. Seven regional lines were sampled over the Gill, Swindle, J-1 claim blocker. The soils were sampled in the Lower A, or Upper B horizon, just below the organic layer. These samples were then sent to be assayed for gold, silver, zinc, copper, and arsenic.

The results of this program, indicate that gold deposits may be deposited within the limestone and shales of the Kunga. No direct evidence of a quartz vein system was found with the Kunga.

All the samples were sent to Barringer Laboratories in Calgary. Gold was fire assayed, while the silver, arsenic, copper and zinc were tested using multi-element i.c.p. method. The results of this survey are included in the map portion of this report.

1988 Field trip to Kootenay Inlet claims, from Nov. 24 to Dec. 1 1988.

A base line 2,000 m in length was chained off, running east-west direction, 500 m north of the south boundary. Seven north-south lines were run, for a total length of 6,200 m along the seven lines. Samples were taken every 100 m along the seven lines. Sixty-nine samples were taken from the lower A or upper B horizon. These samples were then sent to Barringer Labs in Calgary to be tested for gold, silver, copper, zinc, and arsenic.

The weather at the claims during the field trip was cold, with a mixture of snow and heavy rains. With only 6 to 7 hours of daylight each day, only 6,200 m of the original 10,000 m was completed.

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B.Sc. in the Earth Science Major, 1977, 12 years
experience.

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Expense Statement.

Salary - Geologist - 250 X 8	\$2,000.00
Helper - 150 X 8	1,200.00
Nov 24 to Dec. 1, 1988	
Camp expenses - tent, stoves, fuel -	850.00
Food expenses - 30.00/day -	240.00
Assay costs -	1,135.00
Helicopter costs -	1,561.83
Travelling expenses - Calgary to	
Q.C.I. return -	1,600.00
Equipment -	348.50
Report expense -	500.00
	<hr/>
TOTAL EXPENSES	\$9,435.33

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AUTHORITY: ROBERT LAKE

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PROJECT: Q.C.I. 88

WORK ORDER: 6029D-89

*** FINAL REPORT ***

GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: SOIL

S A M P L E N U M B E R	FIRE ASSAY		FIRE ASSAY	
	AU PPB	AG PPM	AS PPM	CU PPM
L-1:S-1	2.0	0.4	5.0	12.0
L-1:S-2	<2.0	0.66	16.0	36.0
L-1:S-3	<2.0	0.3	2.0	7.0
L-1:S-4	3.0	<0.02	1.0	8.0
L-1:S-5	3.0	1.9	28.0	35.0
L-1:S-6	13.0	0.2	39.0	43.0
L-1:S-7	2.0	3.4	23.0	60.0
L-1:S-8	7.0	0.96	22.0	44.0
L-1:S-9	6.0	0.1	16.0	80.0
L-1:S-10	2.0	0.42	9.0	13.0
L-1:S-11	46.0	0.08	13.0	27.0
L-1:S-12	2.0	3.9	8.0	145.0
L-1:S-13	<2.0	0.2	16.0	79.0
L-2:S-1	2.0	0.82	6.0	20.0
L-2:S-2	3.0	0.42	4.0	15.0
L-2:S-3	IS	IS	9.0	27.0
L-2:S-4	4.0	1.4	3.0	42.0
L-2:S-5	3.0	0.1	2.0	16.0
L-2:S-6	<2.0	1.02	5.0	65.0
L-2:S-7	3.0	0.02	22.0	63.0
L-2:S-8	5.0	0.54	13.0	80.0
L-2:S-9	2.0	0.24	31.0	16.0
L-2:S-10	2.0	0.02	6.0	33.0
L-3:S-1	8.0	0.02	13.0	18.0
L-3:S-3	2.0	0.45	22.0	56.0
L-3:S-4	3.0	0.12	36.0	45.0
L-3:S-7	5.0	2.4	42.0	50.0
L-3:S-8	3.0	0.21	11.0	167.0
L-4:S-1	IS	IS	8.0	31.0
L-4:S-2	<2.0	0.3	5.0	15.0

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SAMPLE TYPE: SOIL

SAMPLE NUMBER	FIRE ASSAY		FIRE ASSAY	
	AU PPB	AG PPM	AS PPM	CU PPM
L-4:S-6	3.0	0.21	34.0	22.0
L-4:S-7	3.0	0.96	42.0	114.0
L-4:S-8	2.0	0.22	10.0	78.0
L-4:S-9	3.0	0.02	<1.0	167.0
L-4:S-10	3.0	0.02	<1.0	209.0
L-6:S-3	2.0	0.02	2.0	13.0
L-6:S-4	<2.0	1.34	48.0	22.0
L-6:S-5	<2.0	0.36	<1.0	4.0
L-6:S-6	2.0	2.76	2.0	21.0
L-6:S-7	<2.0	0.1	1.0	26.0
L-6:S-8	<2.0	<0.02	2.0	59.0
L-6:S-9	<2.0	<0.02	5.0	16.0
L-8:S-1	2.0	<0.02	18.0	35.0
L-8:S-2	<2.0	<0.02	<1.0	<1.0
L-8:S-3	<2.0	0.21	54.0	21.0
L-8:S-4	3.0	<0.02	80.0	9.0
L-8:S-5	2.0	0.11	10.0	16.0
L-8:S-6	2.0	<0.02	26.0	87.0
L-8:S-7	2.0	0.24	6.0	96.0
L-8:S-8	7.0	<0.02	16.0	14.0
L-8:S-9	<2.0	<0.02	2.0	67.0
L-8:S-10	3.0	0.1	3.0	138.0
L-13:S-6	<2.0	<0.02	5.0	54.0
L-13:S-7	5.0	0.1	2.0	62.0
L-13:S-8	40.0	0.54	36.0	132.0
L-13:S-9	4.0	0.78	34.0	150.0
L-13:S-10	3.0	<0.02	2.0	14.0

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GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: SOIL

SAMPLE NUMBER	ZN PPM
L-1:S-1	29.0
L-1:S-2	329.0
L-1:S-3	55.0
L-1:S-4	20.0
L-1:S-5	605.0
L-1:S-6	105.0
L-1:S-7	140.0
L-1:S-8	210.0
L-1:S-9	443.0
L-1:S-10	74.0
L-1:S-11	141.0
L-1:S-12	67.0
L-1:S-13	92.0
L-2:S-1	70.0
L-2:S-2	37.0
L-2:S-3	84.0
L-2:S-4	137.0
L-2:S-5	93.0
L-2:S-6	295.0
L-2:S-7	97.0
L-2:S-8	71.0
L-2:S-9	91.0
L-2:S-10	29.0
L-3:S-1	90.0
L-3:S-3	167.0
L-3:S-4	131.0
L-3:S-7	399.0
L-3:S-8	110.0
L-4:S-1	116.0
L-4:S-2	84.0

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GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: SOIL

SAMPLE NUMBER	ZN PPM
L-4:S-6	82.0
L-4:S-7	611.0
L-4:S-8	669.0
L-4:S-9	137.0
L-4:S-10	143.0
L-6:S-3	28.0
L-6:S-4	69.0
L-6:S-5	46.0
L-6:S-6	55.0
L-6:S-7	92.0
L-6:S-8	29.0
L-6:S-9	20.0
L-8:S-1	73.0
L-8:S-2	14.0
L-8:S-3	106.0
L-8:S-4	42.0
L-8:S-5	224.0
L-8:S-6	75.0
L-8:S-7	51.0
L-8:S-8	27.0
L-8:S-9	80.0
L-8:S-10	71.0
L-13:S-6	54.0
L-13:S-7	79.0
L-13:S-8	135.0
L-13:S-9	134.0
L-13:S-10	35.0

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GEOCHEMICAL LABORATORY REPORT

SIGNED: _____

C. Douglas Read
C. Douglas Read,
LABORATORY MANAGER

FOOTNOTES:

P=QUESTIONABLE PRECISION; * = INTERFERENCE; TR=TRACE; ND=NOT DETECTED;
IS=INSUFFICIENT SAMPLE; NA=NOT ANALYZED; MS=MISSING SAMPLE

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PROJECT: Q.C.I. 88

WORK ORDER: 6018D-89

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GEOCHEMICAL LABORATORY REPORT**SAMPLE TYPE: ROCK**

S A M P L E N U M B E R	FIRE ASSAY		FIRE ASSAY	
	AU PPB	AG PPM	AS PPM	CU PPM
11-88:03006	3.0	0.05	5.0	7.0
11-88:03-009	14.0	<0.02	4.0	53.0
11-88:03010	8.0	<0.02	2.0	66.0
11-88:03011	3.0	<0.02	2.0	104.0
11-88:04003	5.0	<0.02	6.0	9.0
11-88:04004	3.0	<0.02	6.0	11.0
11-88:04005	3.0	0.02	8.0	9.0
11-88:04011	2.0	0.02	4.0	274.0
11-88:06002	5.0	0.02	4.0	8.0
11-88:06008	14.0	0.03	6.0	49.0
11-88:08010	3.0	<0.02	2.0	8.0
11-88:08-010	6.0	0.15	4.0	562.0

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PROJECT: O.C.I. 88

WORK ORDER: 60180-89

*** FINAL REPORT ***

GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK

SAMPLE NUMBER	ZN PPM
11-88:03006	22.0
11-88:03-009	87.0
11-88:03010	109.0
11-88:03011	93.0
11-88:04003	18.0
11-88:04004	30.0
11-88:04005	24.0
11-88:04011	75.0
11-88:06002	15.0
11-88:06008	37.0
11-88:08010	23.0
11-88:08-010	75.0

SIGNED: _____

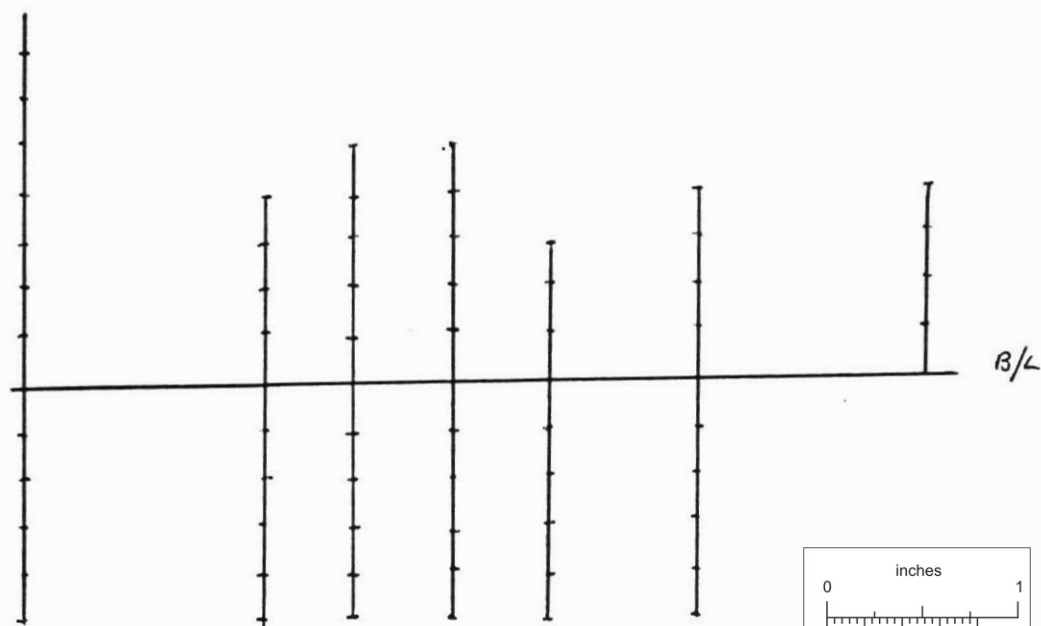
C. Douglas Read
C. Douglas Read,
LABORATORY MANAGER

FOOTNOTES:

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IS=INSUFFICIENT SAMPLE; NA=NOT ANALYZED; MS=MISSING SAMPLE

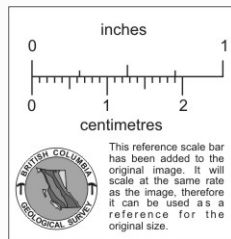
soil sample survey Grid.

★ sample location.

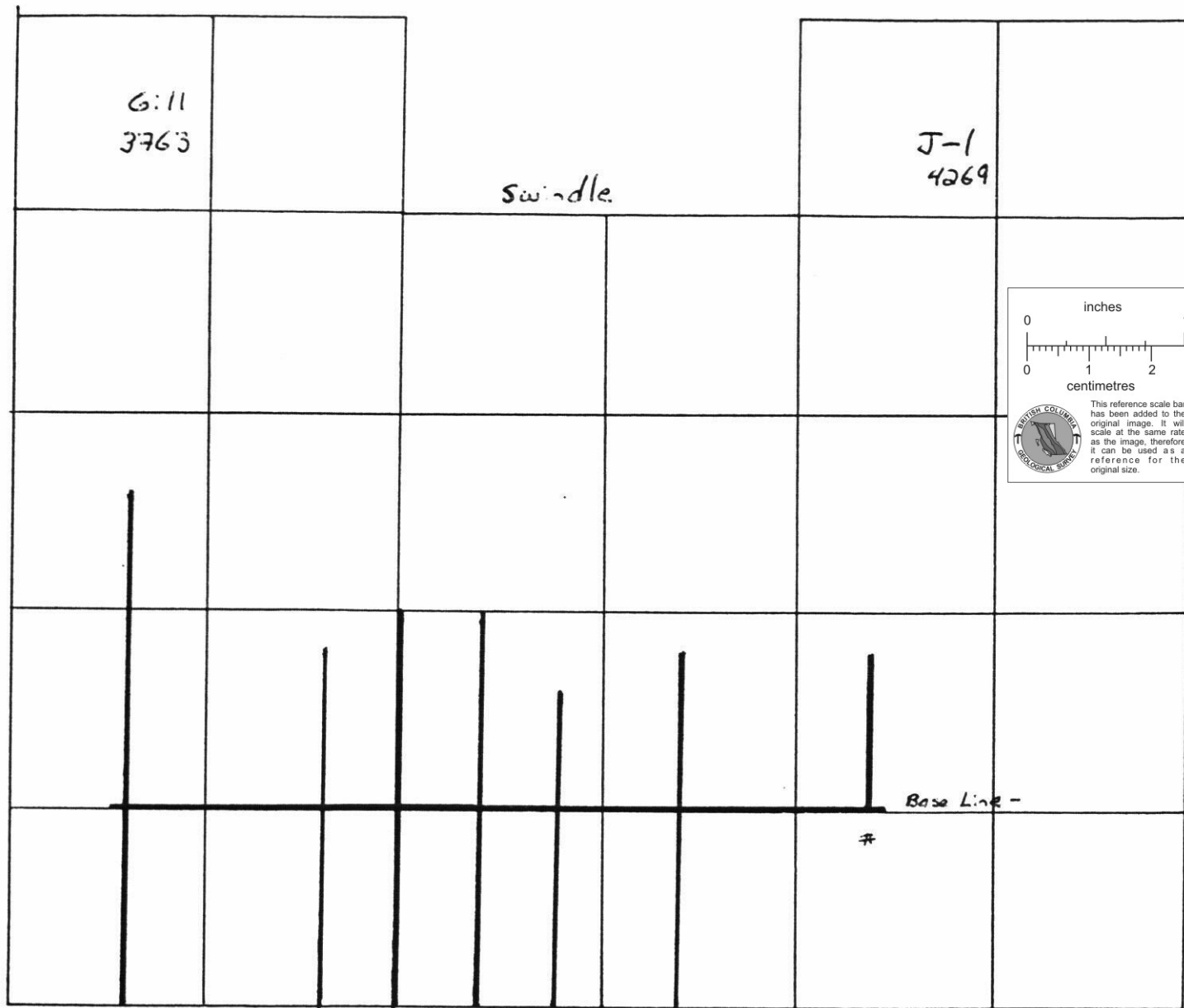


1:15,625

500 m



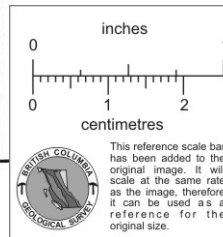
Map #1



G:11
3763

swindle

J-1
4269



Base Line -

#

Line #1

#2

#

#

#

#

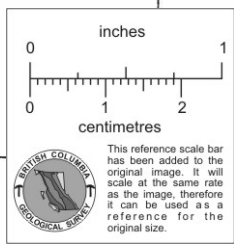
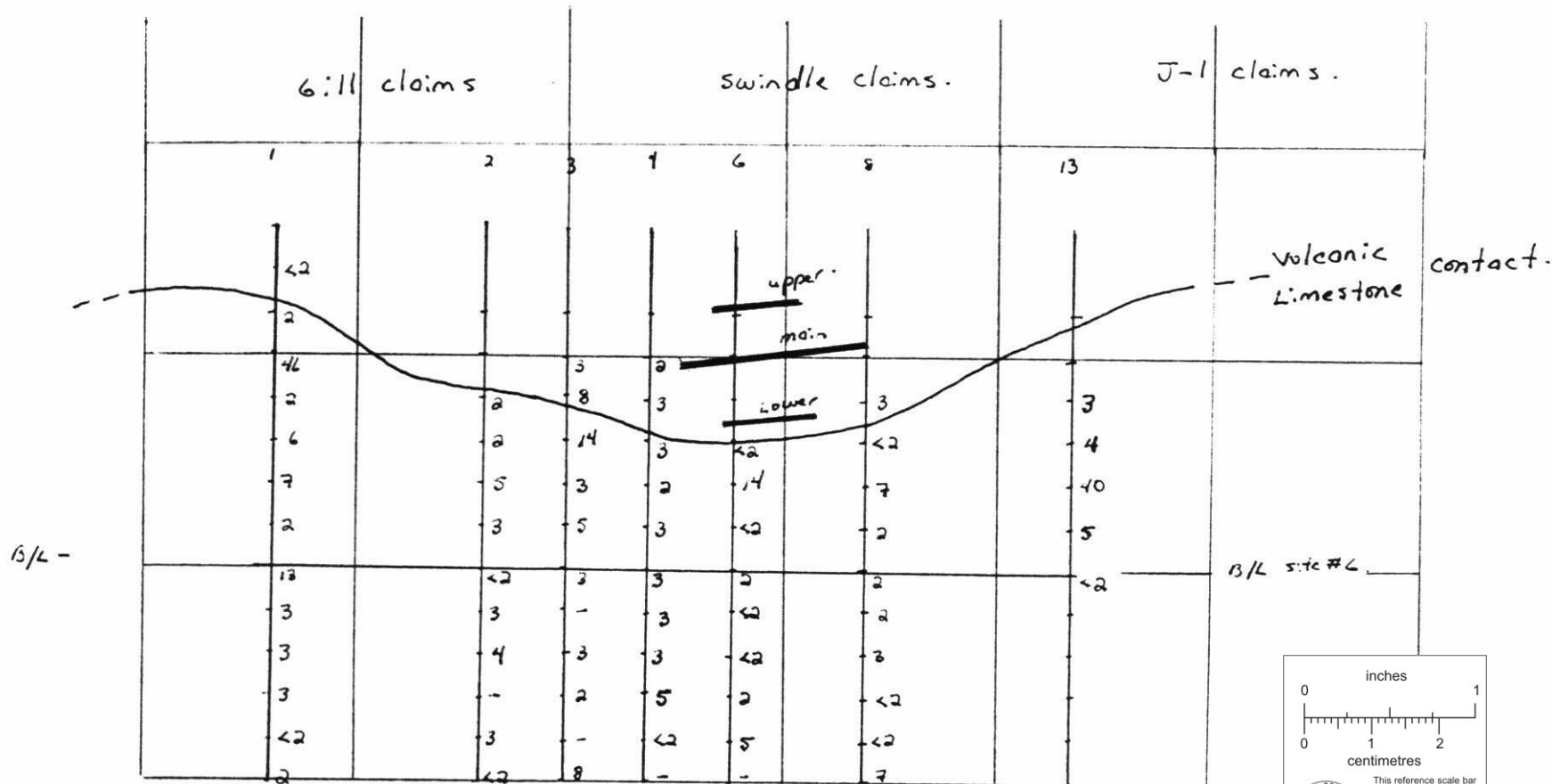
Grid Pattern

500m

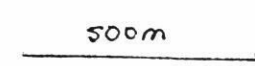
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Map # 1A

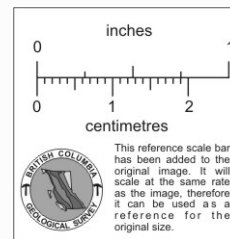
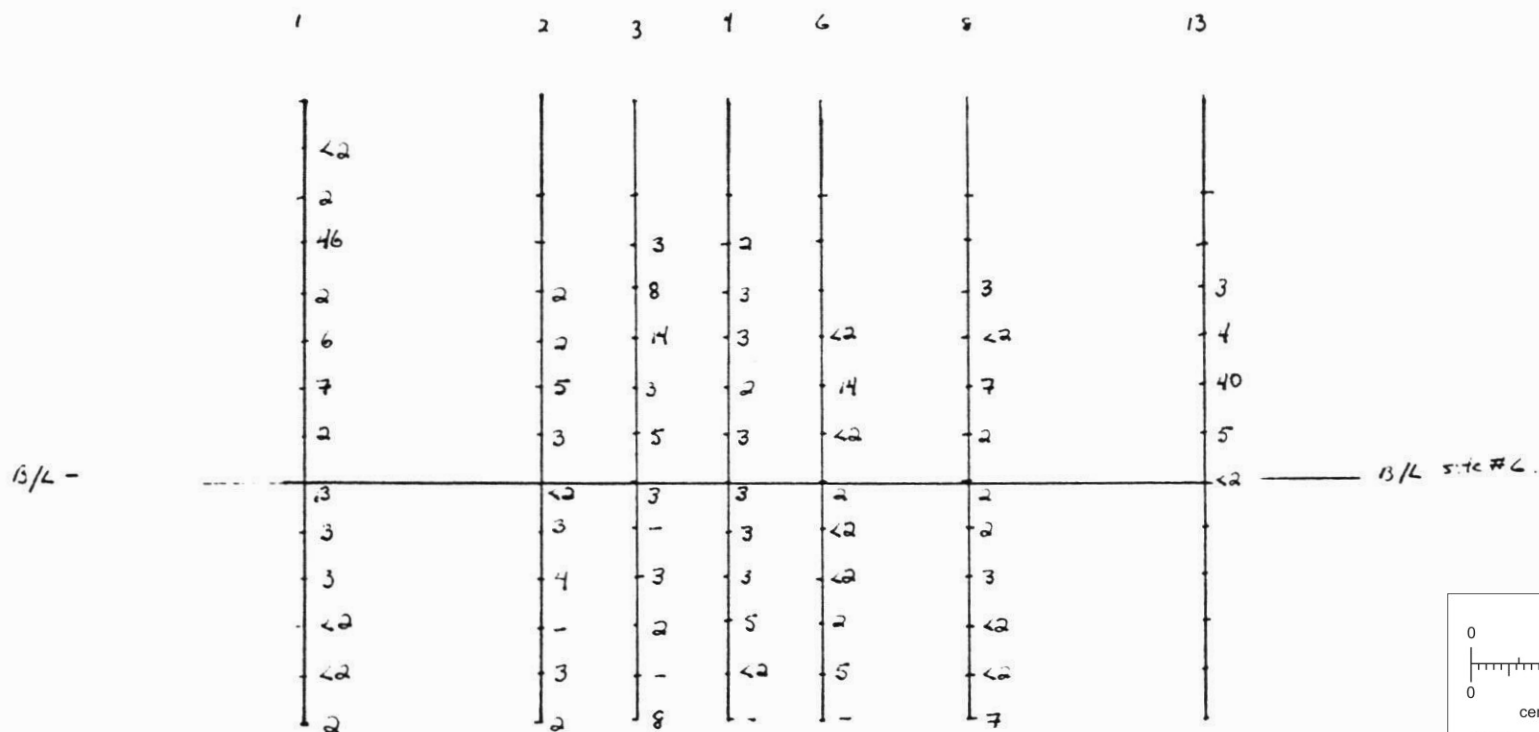




Gold values from
1988 soil survey
scale 1:15,625



Map #2



1988 soil survey.

Scale 1:15,625

500m

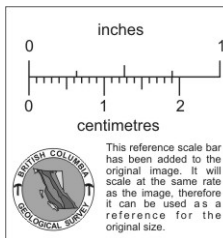
map # 3.

Gold in
PPB.

B/L -

	1	2	3	4	5	6	7	8	9	10	11	12	13
0.2													
3.9													
0.08													
0.42													
0.1													
0.96													
3.4													
0.2													
1.9													
<0.02													
0.3													
0.66													
0.4													

B/L site # 4



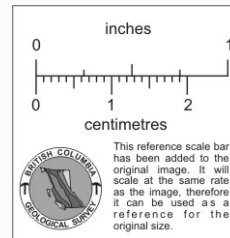
1988 soil survey
 scale 1:15,625
 500m

map # 4
 Silver in
 P.P.M.

13/L -

1	2	3	4	5	6	7	8	9	10	11	12	13
92												
67												
141			93	75								
74	29	109	143			71						35
443	91	87	137	20		80						134
210	71	110	669	29		27						135
140	97	399	111	92		51						79
105	295	22	82	55		75						54
605	93	-	24	46		224						
20	137	131	30	69		42						
55	84	167	18	28		106						
329	37	-	84	15		14						
29	70	90	116	-		73						

13/L site # 6



1988 soil survey

scale 1:15,625

500m

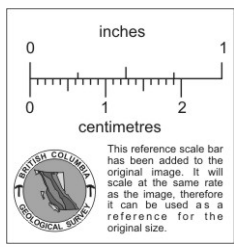
map # 5

Zinc in
ppm

B/L -

	1	2	3	4	6	8	13
	79						
	145						
	27		104	274			
	13	33	66	209		138	14
	80	16	53	167	16	67	150
	44	80	167	78	59	14	132
	80	63	50	114	26	96	62
	13	65	7	22	21	87	54
	35	16		9	4	16	
	8	42	45	11	22	9	
	7	27	56	9	13	21	
	36	15	-	15	8	< 1.0	
	12	20	18	31	-	35	

B/L site # 6

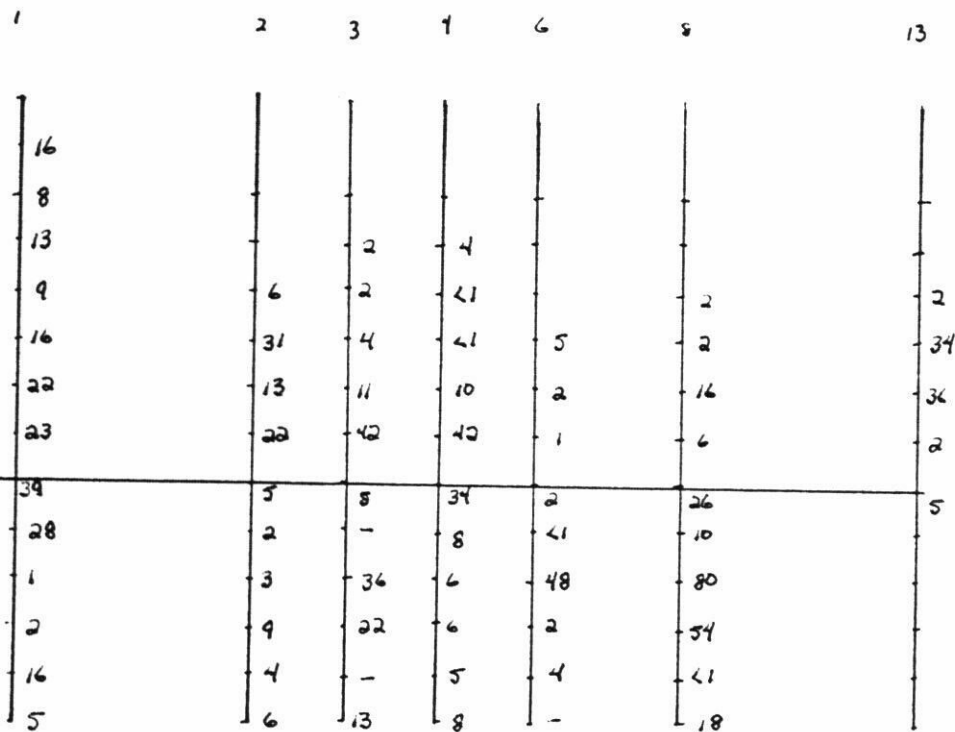


1988 soil survey
 scale is 1:15,625

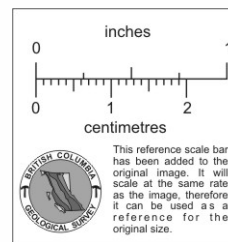
500m

map # 6
 Copper in PPM

B/L -



B/L site # 2



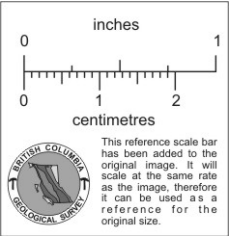
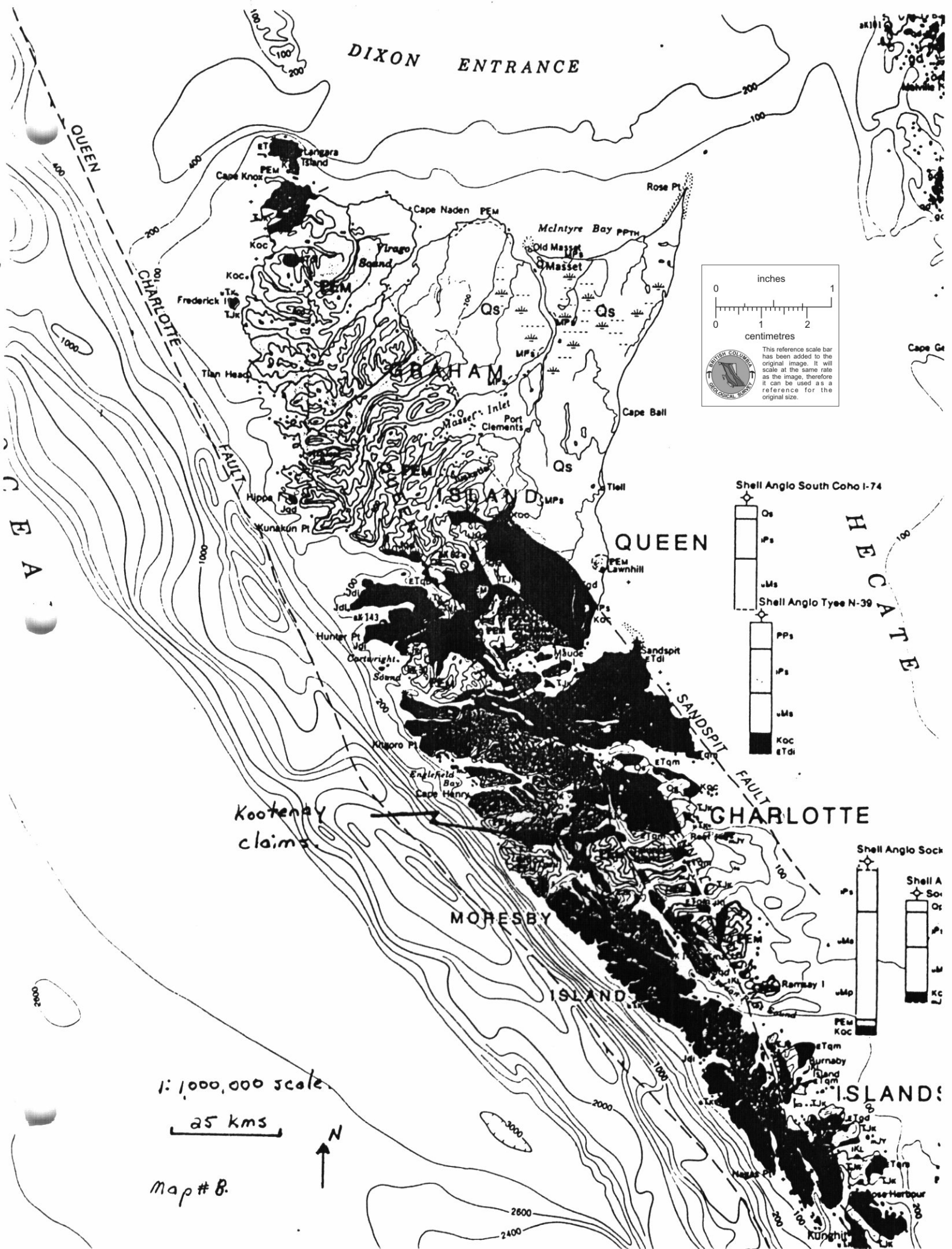
1988 soil survey.

scale 1:15,625

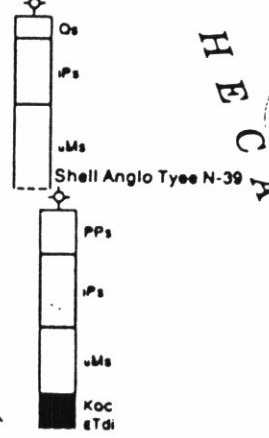
500m.

map # 7

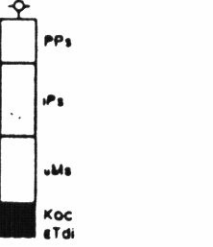
Arsenic
PPM



Shell Anglo South Coho I-74



Shell Anglo Tyee N-39



Shell Anglo Sock



Shell A

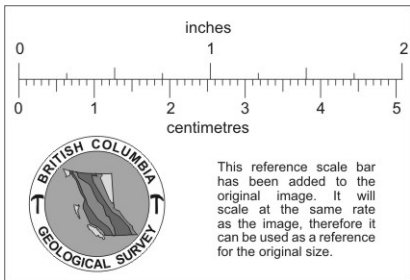


1:1,000,000 scale

25 kms



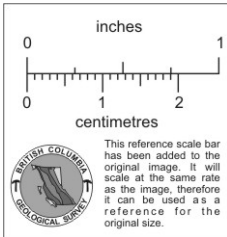
Map # B.



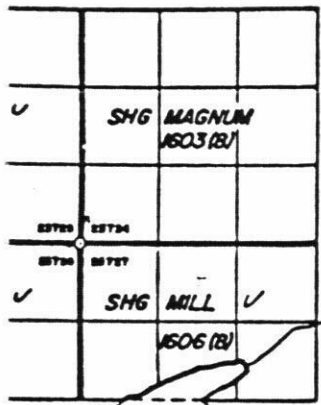
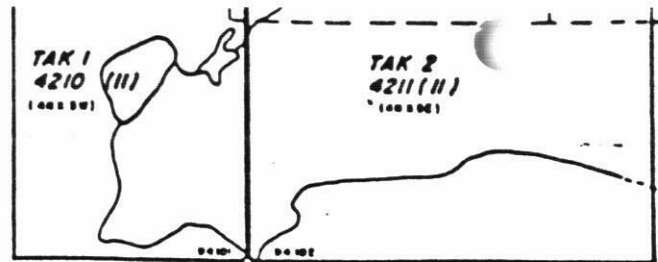
N
↑
scale 1:125,000

1 mile

Map #9



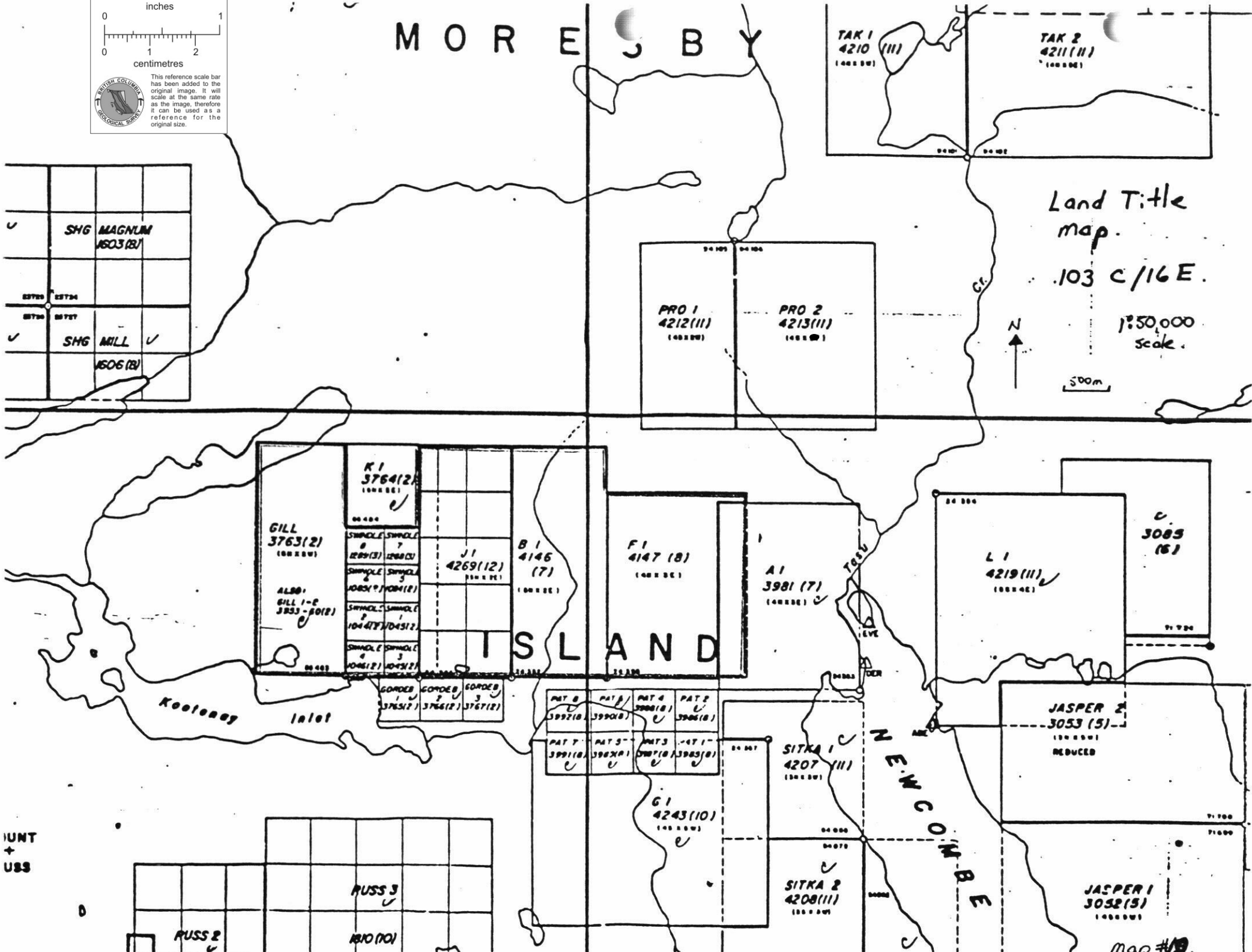
M O R E S B Y



Land Title map.
.103 C/16 E.
1:50,000 scale.

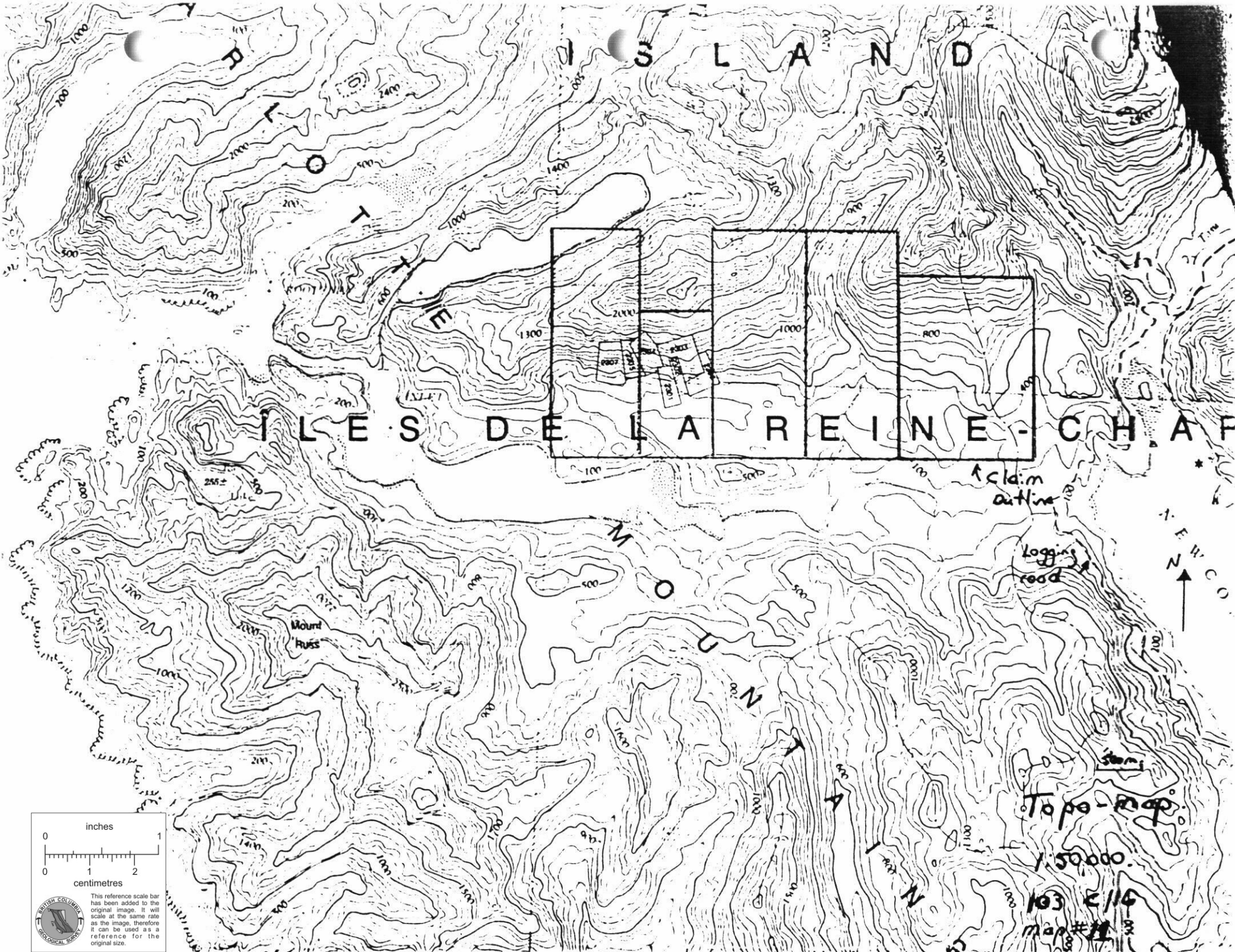


500m



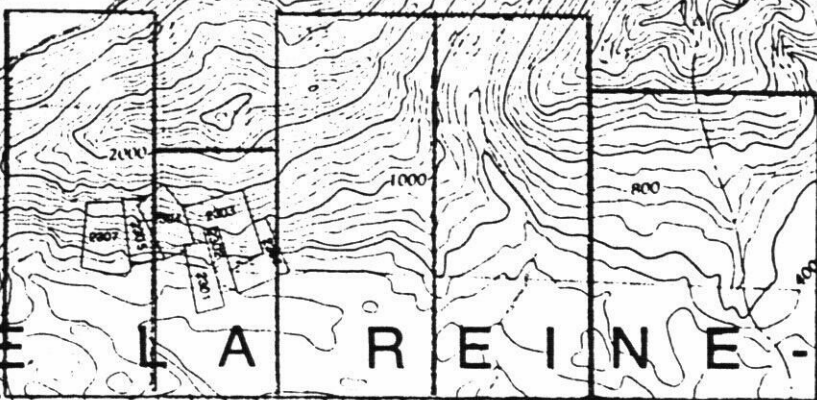
IUNT
+
USS

Map #10



NORTHWEST TERRITORIES

ILES DE LA REINE-CHAPPELLE



claim outline

logging road

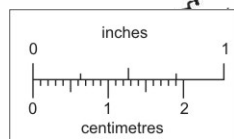
stump

Topo-map

1:50,000

103 E 114

map # 11



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

