



DURFELD  
GEOLOGICAL  
MANAGEMENT LTD.

LOG NO:	<i>April 9/91</i>	RD.
ACTION:		
FILE NO:		

REPORT ON THE GAMBIER PROPERTY

VANCOUVER MINING DIVISION, BRITISH COLUMBIA

**SUB-RECORDER  
RECEIVED**  
**APR 2 1991**  
M.R. # \_\_\_\_\_ \$ \_\_\_\_\_  
VANCOUVER, B.C. DOUGLAS BAY RESOURCES INC.

For

NTS 92G/11

49°30' north latitude

123°21' west longitude

By

D.F. Dunlop, B.Sc.  
R.M. Durfeld, B.Sc.

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

March 1991

**21,185**

## TABLE OF CONTENTS

	Page
A.) INTRODUCTION	1
1) Location	1
2) Access and Physiography	1
3) Ownership	2
4) History and Previous Work	3
5) Work Program	4
B.) GEOCHEMICAL SURVEYS	5
1) Geochemical Sample Collection and Analysis	5
2) Geochemical Results	6
C.) GEOPHYSICAL SURVEYS	9
D.) GEOLOGY	9
1) Regional Geology	9
2) Copper Cove Geology	10
E.) DISCUSSION	13

### ILLUSTRATIONS

Figure 1	Location Map (1:250,000)	
Figure 2	Claim Map (1:50,000)	
Figure 3	Geological Plan	
Figure 4	Rock Geochemical Plan - Copper - Molybdenum	
Figure 5	" " - Silver - Gold	
Figure 6	Soil Geochemical Plan - Contoured Copper	
Figure 7	" " - Contoured Molybdenum	
Figure 8	" " - Contoured Gold	
Figure 9	" " - Contoured Lead	
Figure 10	" " - Contoured Zinc	
Figure 11	" " - Contoured Silver	
Figure 12	" " - Contoured Manganese	
Figure 13	" " - Contoured Cadmium	
Figure 14	Geophysical Plan - Contoured Magnetic Data	

### APPENDICES

Appendix I	Itemized Cost Statement
Appendix II	Statements of Qualifications
Appendix III	Geochemical Analyses
Appendix IV	Statistical Analysis

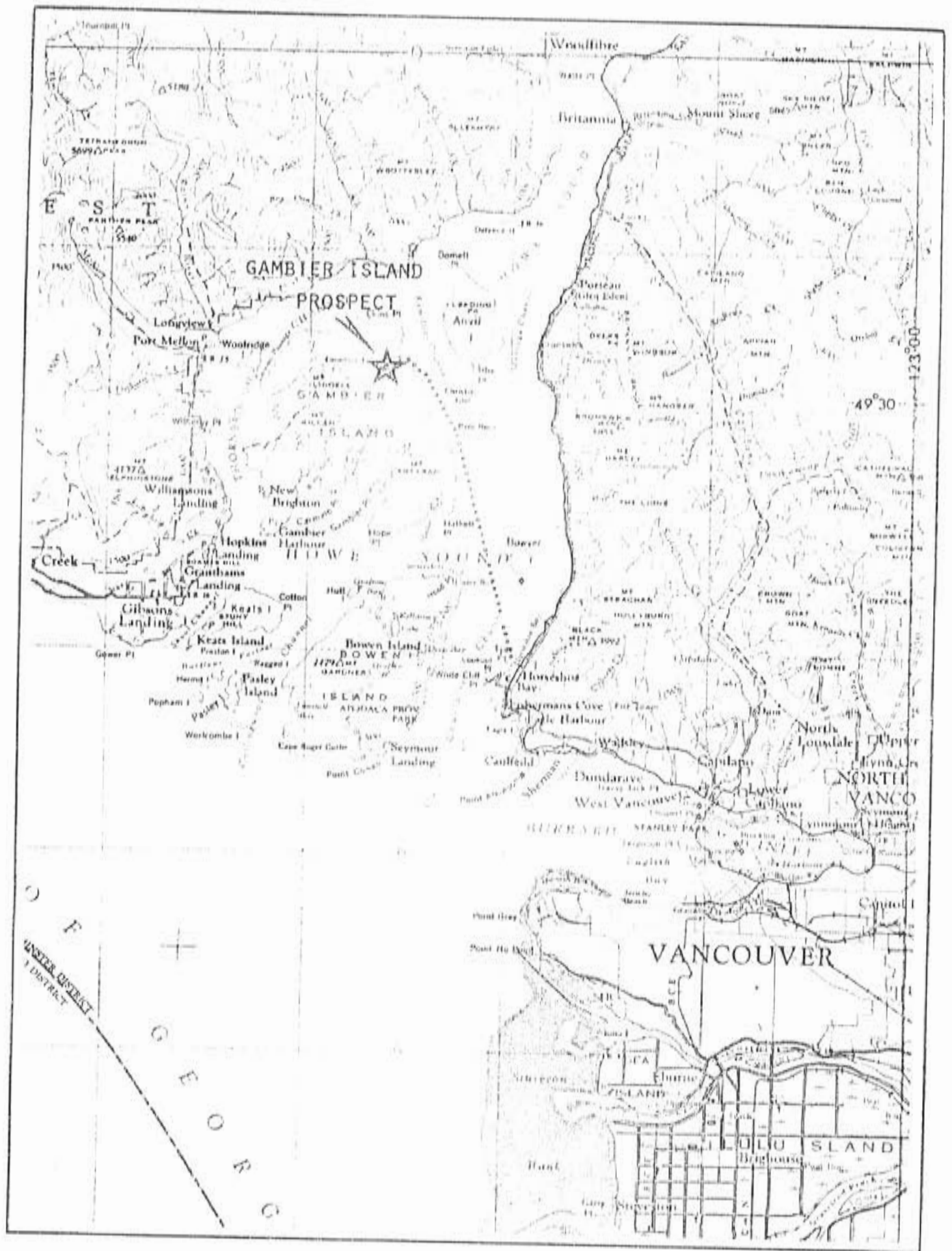


Figure 1. Location plan for the Gambier Island Copper Prospect. 250 000 NTS 92G

## A.) INTRODUCTION

### 1) Location

The Gambier Property, comprised of the MB mineral claim group in the Vancouver Mining Division, is located on the northeast side of Gambier Island, 30 kilometres northwest of the city of Vancouver (Figure 1). More precisely, it is located at 49 degrees and 30 minutes north latitude and 123 degrees and 21 minutes west longitude. (National Topographic System Map 92G/11)

### 2) Access and Physiography

Access to the property is best achieved from Horseshoe Bay by Water Taxi. Copper Cove, between Brigade Bay and Douglas Bay on the east side of Gambier Island where this program was centred is 14 kilometres north of Horseshoe Bay. Old skid trails originating from the beach in the Copper Cove area provide good walking access to areas of the grid.

The terrain of the property is characterized by precipitous slopes that range from sea level on the coast to 450 metres (1500 feet) in the western claim area. The work discussed in this report was at Copper Cove in the southeast corner of the property in an area that ranged from sea level to 200 metres (700 feet) within 400 meters of the shoreline.

The vegetation in the grid area is characterized as second growth

coastal forest of cedar, spruce and fir, with overmature cottonwoods and alders in the poorly drained valley bottoms. Undergrowth consists of variable salal, devils' club, alder and abundant moss.

### 3) Ownership

The Gambier property, as the MB mineral claim group, consists of four modified grid mineral claims, totalling 37 units and covering 925 hectares. The status of these claims is summarized below and the relative claim locations are plotted on figure 1.

CLAIM NAME	NUMBER OF UNITS	RECORD NUMBER	RECORD DATE	YEAR OF EXPIRY
MB 1	8	1749	January 3rd	1992
MB 10	8	1789	March 29th	1992
MB 11	9	1790	March 29th	1992
MB 18	12	1791	March 29th	1992

The year of expiry in the above summary reflects the filing of the work on January 3rd, 1991 and March 21nd, 1991 that is documented in this report.

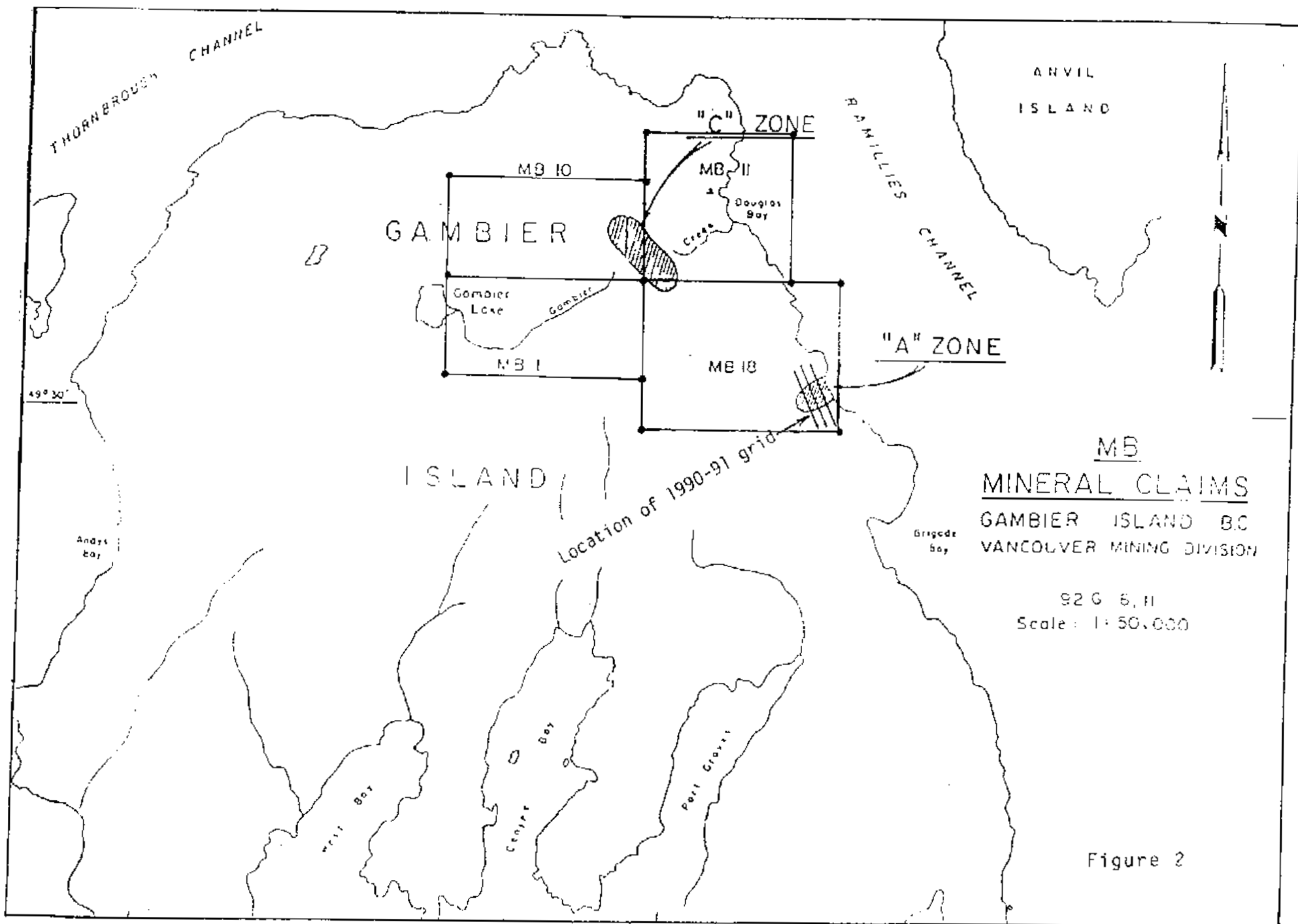


Figure 2

Messrs. J.P. McGoran and R.M. Durfeld are the registered owners of the MB mineral claims.

#### 4) History and Previous Work

The first claim staking on Gambier Island in 1905 would have coincided with the exploration and development of the Britannia Mine. The location for this staking is not given.

The next documented work was in the early 1970's, by Gaylord Mines who staked the northeast section of Gambier Island to cover old known copper showings. Gaylord Mines conducted soil sampling, EM 16 and magnetometer surveys over the northeast section of Gambier Island. This work defined anomalies "A", which is centred in the area of Copper Cove and "C", which is just south of Gambier Creek at a point approximately 1 kilometre inland from Douglas Bay. Anomaly "A" was tested by a single diamond drill hole that was cored at  $-45\frac{1}{2}$  for 815 feet (248 metres) and was reported to have assayed 0.117% copper over its entire length. Anomaly "C" was not tested by diamond drilling at that time. Gaylord Mines permitted the property to lapse.

The property was again staked in February 1978 by 20th Century Energy Corporation. During the period 1978 to 1981, 20th Century conducted extensive exploration in the area of anomaly "C" that was comprised of a geochemical soil sampling and induced polarization

surveys followed by 5,558 metres of diamond drilling. This work defined a 'Porphyry Copper-Molybdenum Deposit' with estimated reserves of:

- 198 million tonnes .24% Cu and .015% MoS<sub>2</sub>, with a .20% copper equivalent cutoff.

or - 56 million tonnes .36% Cu and .021% MoS<sub>2</sub>, with a .40% copper equivalent cutoff.

In December 1984 and March 1985 the MB 1, MB 10, MB 11 and MB 18 mineral claims were forfeited and relocated by Messrs. J.P. McGoran and R.M. Durfeld.

Work conducted since 1985 on behalf of Durfeld and McGoran has consisted of geochemical (soil silt and rock sampling) and geological mapping surveys peripheral to anomaly "C" and covering much of the present claim group.

#### 5) Work Program

The purpose of this program was to evaluate the area around Copper Cove (Gaylord Mines' Anomaly A). The preliminary geochemical soil survey in 1987 showed strongly anomalous copper, gold, silver, zinc and arsenic values over 240 metres in this area.

This report reviews the geological, geochemical and geophysical



(magnetometer) surveys in the Copper Cove area by Durfeld Geological Management Ltd between December 13, 1990 and March 13, 1991. The objective of this survey was to evaluate the economic copper potential area and define targets warranting diamond drilling.

During this survey 2.4 kilometres of compass grid were established consisting of a 250 metre baseline to 065 degrees and 2150 metres of grid line to 335 degrees. Survey stations were established at 25 metre intervals on all lines. A total of 86 soil samples were collected at the 25 metre stations on the grid lines. Geological mapping was conducted over the entire grid and along the beach at a scale of 1:2500. A total of 32 rock samples were collected while mapping.

To evaluate the magnetic response in this area the 2.0 kilometres of grid were read at the 25 metre stations.

## B.) GEOCHEMICAL SURVEYS

### 1) Geochemical Sample Collection and Analysis

Soil samples were collected at 25 metre intervals with the aid of a grub-hoe from the top of the B-horizon (4 to 15 centimetres in depth) and placed in Kraft sample bags marked with the relative grid coordinates.

The soils are generally coarse and well drained and as such would be classed as Dystric Brunisols. Some steep areas of outcrop lacked well developed soil horizons necessitating deviation from lines and resulting in occasional missed samples.

Rock chip samples consisted of random chips of outcrop.

The soil and rock samples were shipped to Acme Analytical Laboratories Ltd. at 852 East Hastings Street in Vancouver for analysis.

At the Acme laboratory, the soil samples were dried and sieved. The rock samples were crushed and pulverized. All the samples were then digested and analyzed for 30 element ICP and gold by atomic absorption. The detailed description of the analytical procedures employed at the Acme laboratory along with the geochemical results for the soil and rock samples are given as Appendix II of this report.

## 2) Geochemical Results

Acme Analytical Laboratories supplied the soil and rock sample results on computer disk. Computer plots and statistical analyses were generated from this database. Appendix I, The Rock Assay Report, gives the rock sample number, grid location, geology code and analytical results. The Geological Plan (figure 3) shows rock results with greater than 500 ppm copper. All the rock results for

copper, molybdenum, silver and gold are given as figures 4 and 5. The contoured soil results for copper, molybdenum, gold, lead, zinc, silver, manganese and cadmium are given as figures 6 to 13. Statistical analysis for the soil samples consisted of calculating the means and standard deviations and drawing the histograms that are given as appendix I of this report. These histograms were used to define minimum contour values and contour intervals.

#### Rock:

Forty four percent of the 32 rock samples returned >500 ppm copper, with values up to 4006 ppm (.4%) copper. These higher copper values define three distinct zones, "I" centred on the central creek (100 east and 102 north), "II" along the beach and to grid west in the east central grid area (101 east and 104 north) and "III" centred in the southern grid (100 east and 100 north). Although the molybdenum, silver and gold values are low, the anomalous populations for these elements correlate well with the high copper.

#### Soil:

The contoured copper, molybdenum, gold, lead, zinc, manganese and cadmium (figures 6 to 13) further define the three zones defined by the high copper in rocks.

## Zone I

The narrow, strongly anomalous east to northeast trending zone located in the creek area returned copper values in soils to 3485 ppm. Rock samples taken in this area returned up to 1664 ppm copper, suggesting a mineralized source. Soil sample in this zone also were strongly anomalous in Molybdenum, Silver, Cadmium, Lead, and Zinc.

## 2) Zone II

Soil sampling in zone II showed the largest area of anomalous copper values with values of up to 961 ppm copper that are accompanied by strongly anomalous molybdenum and moderately anomalous silver and zinc values. Rock samples taken along the shoreline, just east of this zone returned copper values up to 4006 ppm (0.4%) copper and are thought to be an extension of the zone.

## 3) Zone III

Zone III is a north-east trending anomalous area located in the south end of the grid directly upslope from the cabin. Soil samples from this area returned anomalous copper with coincident anomalous silver, cadmium, lead and gold values. Rock samples taken in Zone III ran up to 1433 ppm copper.

The highest gold values of the survey occurred in a narrow north-

easterly trending zone that lies between Zones I and II where gold values of up to 51 ppb in soil and 257 ppb in rock occur.

#### C.) Geophysical Surveys

A total of 2000 meters of ground magnetometer survey was read at the 25 metre stations on the established grid lines with a Gemsystems Model GSM 8 proton magnetometer unit. Daily fluctuations were recorded by means of repeated basestation readings and the data corrected accordingly. Corrected magnetic readings minus 50,000 gammas were keypunched into the soil database and plotted as figure 14.

The contoured magnetic data shows zones I, II and III with magnetic high features on a grid east-west trend with up to a 1000 gamma contrast.

#### D.) GEOLOGY

##### 1.) Regional Geology

The regional geology of Gambier Island is mapped by J.A. Roddick of the Geological Survey of Canada and is published as Memoir 335 and Open File 611. This mapping shows the southern and western portions of Gambier Island to be underlain by intrusive rocks of granodiorite composition. Younger volcanic and clastic rocks of

the Jurassic to Cretaceous Age Gambier Group underlie the northern portion of Gambier Island. The Gambier Group rocks have a north to northwest strike and steep easterly to northeasterly dips. Ramilles Channel through McNab Creek to the north shows a strong northerly trending regional structure on the east side of Gambier Island.

## 2.) Copper Cove Geology

Geological mapping at a scale of 1:5000 was completed in conjunction with the soil sampling. Outcrop exposures were mapped in the grid area and by traverse along the beach. This geology is given with the rock chip sample locations containing >500 ppm copper as figure 3.

### Lithology

Rocks of Jurassic to Cretaceous Gambier Group were the oldest and most dominant lithology in the Copper Cove area. This mapping divided the Gambier Group into: 1) volcanic sediment and pyroclastic rocks comprised of a) feldspar porphyry, b) feldspar-hornblende porphyry, c) volcanic breccia and d) chert and 2) massive medium grained andesite.

During Upper Cretaceous to Tertiary time the Gambier Group rocks were intruded by massive medium grained diorite 3) and quartz

porphyry **4a)** to quartz feldspar porphyry **4b)** as dykes and small stocks.

Only one highly altered and silicified outcrop of diorite unit 3 was identified on the north side of the central creek although diorite float was found on the northern grid boundary.

Unit 4, the quartz and quartz-feldspar porphyry dykes as dykes along the shoreline with strikes of 035 and 065 degrees with moderate northwesterly dips. A large outcrop of quartz-feldspar porphyry was also mapped on the north side of the creek on line 100+00 East and contained minor disseminated chalcopyrite and chacosite. The quartz and quartz feldspar porphyry are thought to be equivalent to the quartz porphyry mapped by Fox Geological consultants associated with the Gambier Island Porphyry Copper deposit two kilometers to the northwest.

### Structure

Regionally the prominent structural directions on Gambier Island are west-northwest and north-south. Mapping in the Copper Cove area show strong jointing and minor faulting with two most dominant trends being 035\75NW and 092\vertical.

## Alteration

Hydrothermal alteration products in the Copper Cove area are mapped as fine hornfels and chlorite, epidote and strong silicification. Strong epidote alteration was found on the north side of the creek in Zone I. Local hornfelsing and chlorite alteration of Gambier Group rocks was common. The silicification is mapped as minor quartz flooding and extensive quartz veining parallel to the main joint sets that often develops sheeted veins and stockwork. A broad silicified zone more than 200 meters wide extends from the shoreline showing to the west and up the north side of the creek for the full width of the grid. Vein densities greater than thirty veins per meter were noted in sections of this zone. The quartz veining is strongest near and parallel to the quartz porphyry dykes. Minor quartz veining and hydrothermal alteration products are found throughout the grid area.

## Mineralization

Due to the heavy rainfall sulphide mineralization is absent from most outcrop exposures and only noted on freshly broken surfaces.

Pyrite occurring as disseminations and blebs in the matrix and on fractures and veins was noted in all lithologies and commonly accompanied by lesser chalcopyrite and malachite. The shoreline showing consists of a number of iron oxide and malachite stained



faces occurring within a large silicified zone in Gambier group and intrusive rocks. Fresh surfaces reveal pyrite and chalcopyrite occurring as disseminations in the matrix and as selvages in the quartz veins.

#### D.) DISCUSSION

The geochemical soil surveys have defined three anomalous copper zones. Geological mapping and rock sampling identified sulphide mineralization in bedrock as the source of these anomalies.

Geological mapping has shown the Copper Cove area to be underlain by Lower Cretaceous age Gambier Group volcanic sediments and pyroclastic rocks intruded by Cretaceous to Tertiary dioritic, quartz porphyry and quartz-feldspar porphyry intrusions. Hydrothermal alteration related to these intrusions is recognized as extensive silicification and associated sulphide mineralization as well as hornfelsing and propylitic alteration.

The location of Gaylord Mines' 1972 drill site was discovered in the creek bed on the east side of Zone I. Although no core or description of the geology is available, the reported assay results (0.117% copper over 815 feet) suggest Zone I could contain significant mineralization with vertical extent.

The Copper Cove area is seen as a porphyry copper target similar

to the deposit outlined in Gambier Creek (anomaly "C"), 2 kilometers to the northwest. Extensive jointing and faulting of the Gambier Group rocks in this area have produced a favorable host for mineralization.

Additional work as induced polarization surveys in conjunction with additional geological mapping would define targets for diamond drilling.

## APPENDIX I

## Itemized Cost Statement

## Technical Staff


Senior Geologist - R.M. Durfeld 2 days @ \$ 350/day	\$ 700.00
Junior Geologist - D.F. Dunlop 7 days @ \$ 250/day	1750.00
Assistants - B. Forseille 7 days @ \$ 175/day	1225.00
Room and Board	
16 mandays @ \$40/day	640.00
Radio Rentals	
- VHF B.C. Tel radio rental 7 days @ \$ 10/day	70.00
Field Equipment	
- rented Proton Magnetometer 4 days @ \$ 35/day	140.00
Geochemical Analyses -	1350.00
Report Preparation and Drafting -	700.00
Transportation - Water Taxi	290.00
Boat Rental	170.00
<b>TOTAL COST OF PROGRAM</b>	<b>\$ 7035.00</b>

APPENDIX II

Statement of Qualifications

I Rudolf M. Durfeld, do hereby certify:

- 1.) That I am a geologist with offices at 180 Yorston Street, Williams Lake, B.C.
- 2.) That I am a graduate of the University of British Columbia, B.Sc. Geology 1972, and have practiced my profession with various mining and/ or exploration companies and as an independent geologist since graduation.
- 3.) That I am a Fellow of the Geological Association of Canada (Member No: F3025), a member of the British Columbia and Youkon Chamber of Mines and a member of the Canadian Institute of Mining and Metallurgy.
- 4.) That this report is based on my personal knowledge of the property as manager and senior geologist of the exploration program conducted by Durfeld Geological Management Ltd. during the period from December 13, 1990 to March 13th, 1991.

  
\_\_\_\_\_  
R.M. Durfeld, B.Sc.  
(Geologist)

## Statement of Qualifications

I Dugald F Dunlop, do hereby certify:

- 1.) That I am a geologist residing at #5-1008 Hubble Road, Williams Lake, B.C.
- 2.) That I am a graduate of the University of British Columbia, B.Sc. Geology 1990, and have practiced my profession with Durfeld Geological Management Ltd. since graduation.
- 3.) That this report is based on my personal knowledge of the property as geologist responsible for the geological mapping and geochemical and geophysical surveys conducted by Durfeld Geological Management Ltd during the period December 13th, 1990 to March 13th, 1991.



---

D. F. Dunlop, B.Sc  
(Geologist)

APPENDIX III  
Geochemical Results

## POINT DATA ASSAY REPORT

## POINT DATA ASSAY REPORT

Sampl Nbr	East	North	Geo. Code	Description	Cu ppm	Mo ppm	Au ppb	Pb ppm	Zn ppm	Ag ppm	Mn ppm	Cd ppm
										.0		.0
9101	10015	9995	1C	highly sil, quartz veined, min py, cp, mal	1433	11	43	10	493	2.0	1097	.6
9102	10005	10020	1C	abundant q.veins, min py	1275	12	19	16	122	2.3	498	.7
9103	10005	10220	2	dk grey, fg, homo, gossanous	353	2	53	9	83	.9	660	.7
9104	9995	10220	2	sil, fg, grey, q.veining, cp on fract	1664	83	65	6	78	.5	334	.7
9105	10015	10250	4B	q.veining, minor diss cp	716	12	18	5	51	.1	228	.2
9106	10000	10280	3	densly q.veined, sil, minor diss py	733	26	257	3	62	1.1	291	.5
9107	10000	10330	1B	q.veined, sil, abund diss cp, py, bo	2082	20	66	5	69	.4	270	1.0
9108	10000	10400	1C	h.silicified	187	18	15	9	87	.6	220	1.3
9109	10000	10450	1A	sil, f.g. drk grey matrix, min diss py	364	8	48	14	97	.4	294	.3
9110	10000	10505	1D	h. sil drk grey, min diss py	309	2	6	6	117	.1	452	.8
9111	10000	10550	1C	clasts to 3 cm in f.g. grey matrix	161	4	5	4	259	.1	1669	1.1
9112	10000	10600	1C	mod sil, chl alt, (1% diss py	48	13	5	2	56	.3	502	.7
9113	10000	10650	3	-float- lt grey, 2-3% py as diss and stwk	19	4	32	12	53	.1	580	.2
9114	9890	10020	1B	med grained, w. sil, py as blebs and diss	45	1	3	12	93	.1	1154	.9
9115	9900	10090	2	grey, minor q.veining	30	1	4	2	73	.1	658	.6
9116	9900	10200	1A	grey, alt	287	2	9	8	101	.2	524	1.1
9117	9900	10225	1A	q.veined, mod silicified	591	5	18	7	140	.2	368	.5
9118	9900	10250	1C	grey, clasts (6cm	1039	4	27	16	117	.2	517	1.1
9119	9885	10270	1A	h. prop alt, yellow-green, dense q.stwk, minor py	167	17	15	92	96	.8	221	3.0
9120	9930	10285	1A	h.sil, dense q.stwk	849	2	16	9	79	.1	354	1.0
9121	9949	10375	1A	w.prop, w.sil, min diss py	602	7	6	5	141	.1	476	.9
9122	9946	10425	2	drk grey, f-wg homo, with diss py	771	16	5	41	207	1.4	965	2.1
9123	9930	10485	1C	clasts (10cm	136	2	8	7	539	.3	1226	4.4
9124	9315	10470	2	w.sil	85	1	4	10	189	.1	633	.8
9125	9790	10510	1C	w.sil	22	1	4	14	141	.1	883	1.5
9126	9800	10410	1C	green-grey, w.sil, w.prop	7	2	5	7	116	.1	824	1.0
9127	9800	10350	1C	clasts (10cm	66	1	1	2	126	.1	448	.3
9128	9800	10315	1A	dense q.stwk, sil	362	6	9	4	84	.3	304	1.2
9129	9800	10230	1A	lt grey, w.sil	223	1	4	2	225	.1	969	1.0
9130	10175	10505	1B	q.veined, hornfelsed, min cp in q.veins	563	4	8	15	66	.6	353	.4
9131	10168	10445	1B	h.sil, abund mal stain, 1-2% py/cp as diss and fract	4006	24	61	15	84	2.2	327	.6
9132	10154	10408	1B	dense sheeted veining, fe-mal staining	1410	8	15	23	63	6.0	294	.6

GEOCHEMICAL ANALYSIS CERTIFICATE

Douglas Bay Resources File # 90-6427 Page 1  
180 Yorston St., Williams Lake BC V2G 3Z1

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	
GI 99-00E 102+75N	8	145	45	66	.8	4	4	147	1.59	2	5	ND	1	24	.4	2	2	38	.28	.012	2	7	.08	35	.06	2	1.43	.01	.02	3	4
GI 99-00E 102+50N	28	3485	133	1204	3.3	13	55	8707	4.11	31	5	ND	1	83	25.5	2	5	87	1.07	.135	8	16	.17	137	.09	4	3.06	.02	.04	1	9
GI 99-00E 102+25N	4	120	36	113	.1	7	7	306	3.86	2	5	ND	2	36	.6	2	2	94	.28	.025	4	17	.14	45	.15	2	1.28	.01	.03	2	4
GI 99-00E 102+00N	11	303	163	357	.9	11	26	3537	2.84	10	5	ND	1	102	3.5	2	2	64	.46	.103	4	16	.25	134	.07	3	2.19	.02	.06	2	10
GI 99-00E 101+75N	2	73	26	263	.1	77	28	1353	6.01	5	5	ND	1	72	.8	2	2	74	.82	.053	3	112	2.41	115	.08	2	4.74	.05	.11	2	1
GI 99-00E 101+25N	1	27	122	299	.5	34	18	1369	2.86	5	5	ND	1	64	2.0	2	2	56	.70	.083	3	72	1.20	70	.13	4	2.89	.02	.05	1	1
GI 99-00E 101+00N	1	29	27	177	.6	27	15	1146	2.08	2	5	ND	1	69	1.1	2	2	49	.68	.091	3	52	.74	136	.08	3	2.37	.02	.04	1	3
GI 99-00E 100+75N	1	33	17	85	.1	40	13	537	2.29	2	5	ND	1	94	.8	2	2	60	1.70	.049	2	75	1.35	45	.17	2	2.71	.02	.02	3	1
GI 99-00E 100+50N	1	39	22	243	.1	28	14	6483	2.23	9	5	ND	1	107	2.0	2	2	44	1.05	.112	2	48	.74	320	.15	2	1.59	.03	.06	1	3
GI 99-00E 100+25N	2	31	64	108	1.0	23	10	1081	1.33	6	5	ND	3	83	3.4	2	2	25	1.74	.071	6	28	.59	140	.05	9	1.34	.04	.06	3	2
GI 99-00E 100+00N	3	66	145	193	.6	8	16	1335	2.59	6	5	ND	1	50	2.5	2	2	30	.82	.163	15	16	.26	104	.10	5	9.08	.03	.03	11	2
GI 99-00E 99+75N	4	66	105	171	.1	7	38	1630	3.41	2	5	ND	1	18	1.5	2	3	35	.19	.642	4	15	.12	93	.09	2	7.65	.02	.03	15	3
GI 99-00E 99+50N	1	31	42	222	.1	9	16	1518	3.62	6	5	ND	1	33	1.0	4	2	58	.42	.205	3	13	.31	179	.11	5	3.58	.03	.05	1	4
GI 99-00E 99+25N	4	69	78	137	.5	9	15	833	2.71	8	5	ND	1	44	1.8	2	2	35	.55	.089	3	10	.21	136	.05	3	2.32	.02	.03	2	3
GI 100-00E 106+50M	4	55	66	205	.2	6	8	466	7.96	8	5	ND	4	33	.9	2	2	53	.33	.086	3	6	.28	285	.10	2	3.03	.01	.04	1	2
GI 100-00E 106+25N	11	109	29	359	.2	6	23	1678	8.19	11	5	ND	2	25	.8	2	6	75	.22	.079	4	13	.55	167	.11	2	3.69	.02	.04	1	4
GI 100-00E 106+00N	13	111	49	300	.2	5	19	737	5.98	6	5	ND	2	26	.7	2	2	64	.29	.097	4	10	.36	91	.17	2	4.19	.02	.05	2	11
GI 100-00E 105+75N	27	278	63	358	.3	7	16	557	6.26	2	5	ND	3	28	1.0	2	2	74	.27	.068	4	10	.34	138	.17	2	4.10	.02	.04	4	6
GI 100-00E 105+50N	16	104	74	110	.7	4	4	189	5.01	3	5	ND	4	15	.3	2	3	64	.16	.114	2	11	.10	51	.13	2	5.94	.01	.02	7	3
GI 100-00E 105+25N	35	435	110	132	.8	3	3	192	4.31	12	5	ND	4	15	.2	2	2	58	.16	.193	6	9	.06	32	.10	2	9.53	.01	.02	5	13
GI 100-00E 105+00N	7	160	28	205	.7	6	7	708	3.99	7	5	ND	2	23	.7	2	2	58	.21	.146	4	11	.13	68	.15	2	4.87	.02	.03	1	6
GI 100-00E 104+75N	9	261	26	258	.4	6	8	443	4.09	4	5	ND	2	30	.6	2	2	56	.28	.068	4	10	.25	86	.11	2	4.12	.02	.03	2	1
GI 100-00E 104+50N	10	365	26	292	.3	5	23	943	3.41	2	5	ND	1	25	.5	2	2	39	.17	.142	4	12	.12	81	.09	2	5.45	.01	.03	5	4
GI 100-00E 104+25N	16	172	33	134	.4	2	3	256	4.52	3	5	ND	2	32	.3	2	2	48	.28	.139	4	9	.08	55	.07	2	2.86	.01	.03	5	9
GI 100-00E 104+00N	23	961	24	213	.7	6	9	374	4.39	5	5	ND	3	28	.4	2	4	47	.22	.081	5	13	.13	71	.15	3	5.01	.02	.03	2	6
GI 100-00E 103+75N	13	823	37	265	.5	8	16	359	4.42	4	5	ND	3	26	.2	3	2	75	.25	.054	6	16	.32	58	.24	2	4.36	.02	.04	1	15
GI 100-00E 103+50N	28	847	84	287	1.0	8	12	291	4.32	4	5	ND	2	33	.6	2	6	80	.28	.038	5	15	.29	43	.23	2	2.59	.02	.04	1	17
GI 100-00E 103+25N	11	265	32	101	.4	7	7	349	3.82	3	5	ND	2	40	.2	2	2	75	.39	.028	3	15	.26	56	.13	2	2.23	.01	.04	1	19
GI 100-00E 103+00N	17	284	19	90	.8	5	5	160	4.25	3	5	ND	2	44	.2	2	2	73	.33	.045	3	11	.18	28	.17	2	1.76	.02	.02	1	51
GI 100-00E 102+75N	12	96	10	40	.8	3	3	109	3.54	5	5	ND	2	38	.2	2	2	57	.30	.020	3	8	.12	17	.16	2	.97	.02	.02	1	26
GI 100-00E 102+50N	9	105	23	58	.4	5	4	94	4.26	3	5	ND	2	28	.6	2	2	94	.27	.022	3	9	.11	40	.13	3	.69	.02	.03	1	17
GI 100-00E 102+25N	38	1017	34	555	.5	10	25	570	6.31	11	5	ND	3	33	2.0	2	2	100	.35	.053	5	11	.21	59	.22	2	5.89	.02	.03	3	12
GI 100-00E 102+00N	16	201	29	205	.4	13	9	469	4.35	8	5	ND	2	36	1.0	2	2	79	.36	.050	4	21	.27	62	.17	3	4.72	.02	.04	1	7
GI 100-00E 101+75N	4	38	24	204	.2	24	12	732	3.49	10	5	ND	1	33	1.0	2	2	66	.33	.031	3	43	.63	77	.12	3	2.68	.02	.05	1	34
GI 100-00E 101+50N	2	71	27	222	.2	28	13	896	3.05	7	5	ND	1	68	2.3	2	2	51	.91	.048	2	42	.86	91	.12	4	3.92	.02	.08	1	4
GI 100-00E 101+25N	1	77	28	171	.2	43	18	1027	3.41	8	5	ND	1	92	1.3	5	2	64	.77	.043	2	55	1.54	103	.12	4	4.00	.03	.05	1	4
STANDARD C/AU-S	20	61	37	133	7.2	74	32	1079	4.01	42	19	7	39	52	18.5	15	22	56	.50	.095	38	59	.90	182	.09	33	1.89	.06	.13	11	47

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: SOIL AU\* ANALYSIS BY ACID LEACH/AA FROM 10 CM SAMPLE.

DATE RECEIVED: DEC 24 1990 DATE REPORT MAILED: Jan 7/91. SIGNED BY: [Signature] D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Au*
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppb	
G1 100+00E 101+00N	1	35	21	119	.1	27	15	1481	1.83	6	5	ND	1	53	.6	2	2	39	.49	.042	3	40	.84	73	.08	2	1.80	.02	.04	1	1
G1 100+00E 100+75N	1	28	35	76	.1	30	12	1075	1.80	3	5	ND	1	69	1.2	3	2	43	.58	.049	2	47	.82	76	.07	2	1.90	.01	.03	1	1
G1 100+00E 100+50N	1	55	38	205	.1	41	19	2245	3.36	7	5	ND	1	88	1.6	3	2	51	1.02	.053	2	58	1.78	167	.09	2	2.78	.02	.05	1	1
G1 100+00E 100+25N	8	444	33	113	.7	11	20	1079	2.39	38	5	ND	1	56	1.4	2	2	27	.82	.079	11	9	.56	82	.02	2	4.34	.02	.05	1	9
G1 100+00E 100+00N	5	684	80	126	1.2	11	29	2067	1.89	10	5	ND	1	33	6.1	2	2	22	.25	.134	12	10	.13	91	.05	2	6.42	.02	.02	1	8

## GEOCHEMICAL ANALYSIS CERTIFICATE

**Douglas Bay Resources** File # 91-0498 Page 1  
 180 Yorston St., Williams Lake BC V2G 3Z1 Submitted by: RANDY DURFELD

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
98+00E 106+50N	4	16	46	98	.1	7	9	606	4.38	6	6	ND	1	18	.2	2	8	51	.15	.048	2	9	.12	105	.18	6	3.74	.03	.03	1	1
98+00E 106+25N	12	178	150	58	.3	5	4	255	4.55	2	5	ND	1	8	.2	2	2	48	.06	.079	6	10	.13	41	.15	6	6.40	.02	.01	1	1
98+00E 106+00N	4	57	56	89	.3	7	11	548	3.44	11	5	ND	1	34	.5	2	2	36	.29	.082	4	7	.17	112	.08	3	4.17	.02	.02	1	6
98+00E 105+75N	2	30	105	174	.2	8	18	525	4.41	2	5	ND	1	31	.4	2	2	60	.32	.054	2	26	.20	85	.16	10	2.94	.02	.04	1	1
98+00E 105+50N	3	50	56	127	1.1	11	11	448	4.43	14	5	ND	4	35	1.8	2	2	57	.23	.182	8	14	.26	94	.14	7	5.25	.02	.03	1	1
98+00E 105+25N	1	26	52	162	.2	7	10	1445	3.26	5	5	ND	1	27	.6	2	2	48	.25	.124	5	11	.16	155	.13	4	3.91	.01	.03	1	1
98+00E 105+00N	1	27	42	135	.2	10	6	1190	2.95	4	5	ND	1	17	.4	2	2	47	.14	.166	3	13	.17	134	.14	9	4.69	.02	.03	1	1
98+00E 104+75N	1	13	26	159	.1	9	7	2511	2.51	2	5	ND	1	25	.2	2	2	37	.23	.127	2	10	.18	198	.12	6	2.84	.02	.02	1	1
98+00E 104+50N	1	20	37	111	.1	8	7	2346	2.45	2	5	ND	1	40	.5	2	2	52	.36	.042	3	10	.28	178	.13	3	1.89	.02	.03	1	2
98+00E 104+25N	1	45	36	94	.2	8	6	471	3.59	4	10	ND	1	21	.2	2	2	54	.19	.059	3	13	.14	98	.20	8	4.86	.02	.05	1	2
98+00E 104+00N	3	43	29	63	.3	10	9	476	3.45	3	12	ND	1	27	.6	2	2	55	.21	.071	6	10	.27	87	.17	5	6.44	.02	.05	1	2
98+00E 103+75N	3	43	24	59	.2	9	9	445	3.40	2	10	ND	1	26	.6	2	2	54	.19	.078	7	11	.41	75	.16	2	6.67	.02	.04	1	1
98+00E 103+50N	2	43	29	60	.3	10	10	460	3.33	8	12	ND	1	27	.4	2	2	56	.21	.065	7	12	.38	79	.17	2	6.13	.02	.05	1	1
98+00E 103+25N	3	123	25	171	.5	8	9	2224	3.70	4	13	ND	1	34	1.1	2	2	72	.34	.066	3	12	.12	90	.18	3	2.28	.02	.05	1	15
98+00E 103+00N	13	326	52	206	.8	10	7	944	4.96	2	10	ND	2	22	.4	2	2	119	.21	.056	5	20	.31	83	.29	6	3.11	.02	.05	1	29
98+00E 102+75N	3	108	146	157	.5	15	11	1198	2.97	2	5	ND	1	69	1.3	2	2	49	1.03	.063	3	23	.26	110	.10	10	3.16	.02	.04	1	5
98+00E 102+50N	5	164	29	173	.3	9	8	415	3.99	2	5	ND	1	22	.2	2	2	93	.24	.072	5	20	.81	52	.20	4	3.16	.01	.03	1	5
98+00E 102+25N	8	354	54	176	.2	24	16	925	3.64	2	5	ND	1	76	.8	2	4	89	.57	.077	2	39	1.03	82	.16	2	3.35	.04	.05	1	8
98+00E 102+00N	2	260	41	158	.3	31	16	860	3.19	2	5	ND	1	62	.8	2	2	63	.62	.079	2	52	.96	72	.13	3	2.83	.03	.04	1	5
98+00E 101+75N	1	49	123	77	.2	15	7	1511	1.44	12	5	ND	1	49	.8	3	2	34	.44	.069	2	30	.19	102	.05	5	1.00	.01	.03	1	2
98+00E 101+50N	1	18	79	93	.3	10	2	148	.39	4	5	ND	1	73	.7	2	2	9	.91	.062	2	8	.14	96	.01	6	.37	.02	.06	1	2
98+00E 101+25N	1	39	81	114	.5	24	15	7169	2.82	16	5	ND	1	48	.7	2	2	50	.50	.149	2	55	.29	129	.08	2	1.45	.01	.04	1	2
98+00E 101+00N	1	23	17	56	.3	21	8	816	2.11	7	5	ND	1	54	.2	3	2	56	.47	.025	2	56	.57	51	.05	2	1.61	.02	.01	1	1
98+00E 100+75N	1	29	11	74	.1	19	8	363	2.50	2	5	ND	1	81	.2	2	2	68	.92	.105	2	73	.51	43	.24	4	1.72	.01	.01	1	2
98+00E 100+50N	1	20	18	103	.1	11	14	672	4.22	2	5	ND	1	33	.4	2	2	57	.32	.031	3	15	.60	163	.04	7	2.84	.01	.09	1	1
98+00E 100+25N	1	142	84	166	1.3	8	12	3797	2.44	10	5	ND	1	24	3.4	2	2	27	.28	.109	10	10	.14	170	.07	4	4.12	.02	.04	1	1
98+00E 100+00N	1	48	48	144	.4	7	10	2588	2.14	4	5	ND	1	48	2.5	2	2	31	.75	.053	2	9	.20	220	.05	2	1.88	.02	.03	1	6
99+00E 106+50N	2	49	57	276	.3	8	33	1844	4.94	7	7	ND	1	23	3.6	2	2	32	.27	.096	3	9	.16	136	.07	7	3.90	.02	.03	1	1
99+00E 106+25N	4	55	39	128	.3	6	13	571	4.59	4	6	ND	1	18	1.2	2	5	33	.15	.097	5	6	.19	94	.09	9	5.72	.02	.02	1	2
99+00E 106+00N	2	36	28	131	.3	8	17	854	5.73	4	5	ND	1	28	.9	2	2	40	.27	.084	4	9	.25	194	.10	6	5.03	.02	.02	1	1
99+00E 105+75N	4	43	23	249	.4	9	24	1050	4.99	8	7	ND	1	28	1.6	2	2	37	.27	.097	3	8	.19	204	.11	8	5.82	.02	.02	1	1
99+00E 105+50N	6	40	22	146	.4	5	13	761	3.88	2	7	ND	1	20	.8	2	2	33	.76	.116	3	7	.15	96	.09	8	6.58	.02	.02	1	2
99+00E 105+25N	3	42	28	114	.3	4	13	627	3.14	2	5	ND	1	13	1.1	2	2	40	.12	.138	3	7	.08	67	.08	8	8.42	.01	.02	1	3
99+00E 105+00N	3	91	33	183	.1	7	13	972	3.60	6	5	ND	1	18	.8	2	2	45	.18	.143	4	9	.13	107	.14	2	5.97	.02	.04	1	3
99+00E 104+75N	7	684	15	98	.3	4	5	345	3.20	2	5	ND	1	16	.8	2	2	35	.14	.261	8	9	.10	73	.10	2	9.51	.02	.05	1	3
99+00E 104+50N	26	558	23	113	.5	4	4	318	4.85	6	8	ND	2	24	.4	2	2	52	.23	.177	5	8	.11	94	.11	2	6.92	.01	.02	2	1
STANDARD C/AU-S	19	61	39	136	7.4	72	34	1103	3.98	42	18	7	40	52	18.5	17	18	58	.49	.091	39	57	.88	181	.09	38	1.83	.07	.15	11	48

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: P1-P2 SOIL P3 ROCK AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE

DATE RECEIVED: FEB 25 1991 DATE REPORT MAILED: *March 5/91* SIGNED BY: *[Signature]* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
99+00E 104+25N	16	527	57	191	.5	6	5	411	4.13	18	5	ND	1	23	.5	2	2	63	.23	.100	6	12	.15	71	.14	2	4.56	.02	.04	1	15
99+00E 104+00N	40	417	47	224	.3	6	7	339	4.50	17	5	ND	2	33	.3	4	2	77	.32	.070	3	15	.13	80	.13	2	4.57	.02	.03	2	2
99+00E 103+75N	11	704	45	356	.1	6	37	1147	2.89	8	5	ND	1	37	.7	2	6	42	.29	.061	4	11	.11	111	.10	2	3.10	.03	.04	1	3
99+00E 103+50N	12	485	34	434	.2	7	22	895	4.36	8	5	ND	1	51	.5	2	2	97	.45	.031	2	10	.59	106	.29	2	2.52	.03	.05	1	29
99+00E 103+25N	14	601	43	165	.6	8	9	457	5.32	25	5	ND	1	24	.3	3	2	88	.23	.218	3	17	.18	45	.22	2	5.39	.02	.04	1	35
100+00E 99+75N	5	210	91	291	.2	10	22	1966	4.00	10	5	ND	1	29	2.2	2	2	60	.30	.075	2	14	.17	100	.13	3	3.94	.03	.04	1	6
100+00E 99+50N	5	68	39	71	.3	8	21	859	3.08	10	5	ND	1	34	1.3	2	2	58	.51	.065	6	17	.20	63	.12	5	4.96	.02	.02	1	4
100+00E 99+25N	5	39	40	82	.1	7	26	1064	2.57	2	5	ND	1	43	.7	2	2	48	.83	.044	2	12	.39	64	.13	2	2.72	.03	.02	1	3
100+00E 99+00N	3	34	45	159	.1	9	14	1178	2.90	6	5	ND	1	41	.7	3	2	58	.56	.049	2	11	.28	100	.12	2	1.90	.02	.04	1	2

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au** ppb
GR-91-1	11	1433	10	493	2.0	12	19	1097	6.05	2	5	ND	1	70	.6	2	14	89	.73	.031	2	15	1.94	161	.23	3	3.40	.22	.57	3	43
GR-91-2	12	1275	16	122	2.3	10	10	498	3.11	4	5	ND	1	27	.7	2	11	49	.42	.020	2	16	1.37	64	.16	7	2.07	.09	.15	2	19
GR-91-3	2	353	9	83	.9	8	12	660	4.16	2	5	ND	1	106	.7	2	2	65	2.40	.068	5	5	.85	30	.29	4	3.47	.18	.08	1	53
GR-91-4	83	1664	6	78	.5	12	20	334	6.08	2	5	ND	1	69	.7	2	20	114	.82	.026	2	8	1.25	13	.26	3	2.15	.11	.06	1	65
GR-91-5	12	716	5	51	.1	8	11	228	4.43	2	5	ND	1	25	.2	2	6	62	.44	.034	6	7	.82	28	.22	2	1.61	.08	.24	1	18
GR-91-6	26	733	3	62	1.1	12	16	291	6.98	8	5	ND	1	49	.5	4	8	76	.69	.063	4	9	.65	4	.22	6	1.37	.07	.06	3	257
GR-91-7	20	2082	5	69	.4	14	14	270	3.70	2	5	ND	1	129	1.0	3	11	98	1.79	.063	4	17	.98	16	.24	5	3.25	.23	.08	3	66
GR-91-8	18	187	9	87	.6	5	11	220	3.00	2	5	ND	1	128	1.3	2	10	12	1.32	.081	7	5	.68	9	.16	4	2.06	.03	.06	1	15
GR-91-9	8	364	14	97	.4	8	9	294	4.60	2	5	ND	1	74	.3	2	4	31	.74	.090	8	6	.34	109	.14	5	1.46	.10	.07	1	48
GR-91-10	2	309	6	117	.1	10	11	452	4.18	2	5	ND	1	151	.8	2	2	55	1.54	.076	5	7	.74	65	.13	2	3.76	.40	.09	1	6
GR-91-11	4	161	4	259	.1	5	14	1669	3.48	2	5	ND	1	69	1.1	2	6	32	2.25	.058	2	6	.80	135	.12	2	4.65	.11	.03	1	5
GR-91-12	13	48	2	56	.3	10	11	502	4.28	2	5	ND	2	72	.7	2	2	47	.82	.089	3	10	1.64	26	.18	2	2.79	.17	.07	1	5
GR-91-13	4	19	12	53	.1	11	7	580	3.20	2	5	ND	1	47	.2	2	2	15	.46	.025	2	8	.46	71	.08	3	1.33	.06	.14	1	32
GR-91-14	1	45	12	93	.1	14	15	1154	4.95	4	5	ND	1	128	.9	3	2	56	1.18	.054	2	15	1.26	118	.12	2	4.34	.33	.13	2	3
GR-91-15	1	30	2	73	.1	52	22	658	3.13	2	5	ND	1	85	.6	2	2	61	1.92	.054	2	100	2.36	5	.19	2	3.44	.02	.02	1	4
GR-91-16	2	287	8	101	.2	10	16	524	5.05	2	5	ND	1	91	1.1	3	2	123	1.25	.048	2	16	1.00	29	.20	5	2.71	.19	.05	1	9
GR-91-17	5	591	7	140	.2	14	19	368	3.46	2	5	ND	1	113	.5	2	2	152	1.26	.056	4	26	2.27	71	.38	3	3.64	.23	.60	1	18
GR-91-18	4	1039	16	117	.2	12	29	517	5.45	2	5	ND	1	81	1.1	2	7	85	.95	.066	6	11	1.44	23	.24	4	2.47	.13	.06	1	27
GR-91-19	17	167	92	96	.8	6	5	221	1.03	2	5	ND	1	91	3.0	3	4	13	1.07	.014	3	5	.19	6	.05	6	1.10	.03	.04	1	15
GR-91-20	2	849	9	79	.1	13	12	354	5.61	3	5	ND	1	74	1.0	2	7	96	1.01	.052	3	20	.58	27	.19	3	1.78	.13	.07	1	16
GR-91-21	7	602	5	141	.1	8	17	476	6.46	5	5	ND	1	55	.9	2	4	97	.90	.033	4	13	1.13	24	.20	4	2.44	.15	.04	1	6
GR-91-22	16	771	41	207	1.4	8	15	965	6.16	5	5	ND	1	96	2.1	2	9	52	1.05	.082	8	7	.71	150	.14	2	2.56	.16	.04	1	5
GR-91-23	2	136	7	539	.3	10	12	1226	5.02	5	5	ND	1	148	4.4	2	2	59	2.38	.100	3	7	.76	74	.11	4	5.24	.44	.08	2	8
GR-91-24	1	85	10	189	.1	6	14	633	3.51	2	5	ND	1	91	.8	2	2	39	1.06	.103	6	5	1.05	650	.13	4	2.71	.10	.07	1	4
GR-91-25	1	22	14	141	.1	8	11	883	3.18	2	8	ND	1	193	1.5	2	2	48	1.77	.084	5	5	.83	286	.10	2	3.84	.48	.10	1	4
GR-91-26	2	7	7	116	.1	11	21	824	3.27	2	5	ND	1	298	1.0	3	2	59	3.61	.069	2	6	1.18	78	.14	4	7.65	1.05	.07	1	5
GR-91-27	1	66	2	126	.1	10	23	448	4.99	6	5	ND	1	90	.3	3	2	65	.85	.049	3	9	1.35	35	.25	6	2.38	.05	.13	2	1
GR-91-28	6	362	4	84	.3	13	12	304	4.00	2	5	ND	1	131	1.2	2	4	103	1.42	.084	7	8	.55	27	.21	3	2.38	.26	.07	1	9
GR-91-29	1	223	2	225	.1	46	30	969	5.99	2	5	ND	1	122	1.0	2	2	106	1.49	.063	4	94	2.50	34	.21	3	4.58	.34	.05	1	4
STANDARD C/AJ-2	19	58	38	136	6.9	72	32	1092	4.04	41	16	7	40	52	18.9	15	20	56	.49	.092	39	59	.89	185	.09	35	1.92	.06	.15	13	455

## GEOCHEMICAL ANALYSIS CERTIFICATE

Douglas Bay Resources File # 91-0678  
180 YORSTON ST., WILLIAMS LAKE BC V2G 3Z1

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	AU* ppb
GR-91-30	4	563	15	66	.6	12	15	353	5.09	.2	5	ND	1	114	.4	2	2	121	2.00	.025	2	27	1.05	51	.21	2	3.14	.30	.08	1	8
GR-91-31	24	4006	15	84	2.2	10	12	327	4.13	10	5	ND	1	38	.6	2	8	71	.74	.026	2	21	.71	15	.15	2	1.43	.12	.03	3	61
GR-91-32	8	1410	23	63	.6	8	11	294	4.75	6	5	ND	1	38	.6	2	3	47	.58	.030	5	18	.89	52	.26	3	1.36	.13	.13	1	15

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: ROCK AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: MAR 14 1991 DATE REPORT MAILED: *March 18/91* SIGNED BY: *Chung* D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

APPENDIX IV  
Statistical Analysis

#####  
SUMMARY STATISTICS and HISTOGRAM ARITHMETIC VALUE

Variable =	Cu	ppm	Unit =		N =	75
Mean =	115.787		Min =	13.000	1st Quartile =	35.250
Std. Dev. =	118.781		Max =	485.000	Median =	56.000
CV % =	102.586		Skewness =	1.531	3rd Quartile =	156.250

```
=====
```

%	cum %	cls int	(# of bins = 19 - bin size = 26.222)
0.00	0.66	-0.111	
9.33	9.87	26.111	*****
36.00	45.39	52.333	*****
14.67	59.87	78.556	*****
4.00	63.82	104.778	***
8.00	71.71	131.000	*****
2.67	74.34	157.222	**
5.33	79.61	183.444	****
1.33	80.92	209.667	*
1.33	82.24	235.889	*
2.67	84.87	262.111	**
4.00	88.82	288.333	***
1.33	90.13	314.556	*
1.33	91.45	340.778	*
2.67	94.08	367.000	**
0.00	94.08	393.222	
1.33	95.39	419.444	*
2.67	98.03	445.667	**
0.00	98.03	471.889	
1.33	99.34	498.111	*

0 1 2 3

#####

20:15:22

Gambier Soil Grid 1990-91

03/17/91

#####  
 SUMMARY STATISTICS and HISTOGRAM ARITHMETIC VALUES

Variable = Mo ppm Unit = N = 83  
 Mean = 6.554 Min = 1.000 1st Quartile = 1.000  
 Std. Dev. = 6.861 Max = 28.000 Median = 4.000  
 CV % = 104.687 Skewness = 1.571 3rd Quartile = 10.750

```
=====
```

%	cum %	cls int	(# of bins = 20 - bin size = 1.421)
0.00	0.60	0.289	
26.51	26.79	1.711	*****
20.48	47.02	3.132	*****
10.84	57.74	4.553	*****
6.02	63.69	5.974	*****
3.61	67.26	7.395	***
3.61	70.83	8.816	***
3.61	74.40	10.237	***
4.82	79.17	11.658	****
7.23	86.31	13.079	*****
1.20	87.50	14.500	*
0.00	87.50	15.921	
6.02	93.45	17.342	*****
0.00	93.45	18.763	
0.00	93.45	20.184	
0.00	93.45	21.605	
1.20	94.64	23.026	*
0.00	94.64	24.447	
0.00	94.64	25.868	
2.41	97.02	27.289	**
2.41	99.40	28.711	**

```
-----
```

0 1 2 3 4

#####



20:05:23

Gambier Soil Grid 1990-91

03/17/91

#####  
 SUMMARY STATISTICS and HISTOGRAM ARITHMETIC VALUES

Variable = Ag ppm Unit = N = 85  
 Mean = 0.382 Min = 0.100 1st Quartile = 0.200  
 Std. Dev. = 0.280 Max = 1.300 Median = 0.300  
 CV % = 73.330 Skewness = 1.254 3rd Quartile = 0.500

%	cum %	cls int	(# of bins = 20 - bin size = 0.063)
0.00	0.58	0.068	
21.18	21.51	0.132	*****
0.00	21.51	0.195	
17.65	38.95	0.258	*****
20.00	58.72	0.321	*****
0.00	58.72	0.384	
10.59	69.19	0.447	*****
10.59	79.65	0.511	*****
0.00	79.65	0.574	
2.35	81.98	0.637	**
0.00	81.98	0.700	
4.71	86.63	0.763	****
5.88	92.44	0.826	*****
0.00	92.44	0.889	
1.18	93.60	0.953	*
2.35	95.93	1.016	**
0.00	95.93	1.079	
1.18	97.09	1.142	*
1.18	98.26	1.205	*
0.00	98.26	1.268	
1.18	99.42	1.332	*

-----  
 0 1 2 3 4

#####

20:11:51

Gambier Soil Grid 1990-91

03/17/91

#####  
SUMMARY STATISTICS and HISTOGRAM ARITHMETIC VALUES

Variable = Au ppb Unit = N = 86

Mean = 6.535 Min = 1.000 1st Quartile = 1.000  
 Std. Dev. = 8.960 Max = 51.000 Median = 3.000  
 CV % = 137.105 Skewness = 2.660 3rd Quartile = 6.500

```
=====
```

%	cum %	cls int	
0.00	0.57	-0.316	
43.02	43.10	2.316	*****
20.93	63.79	4.947	*****
11.63	75.29	7.579	*****
6.98	82.18	10.211	*****
2.33	84.48	12.842	**
4.65	89.08	15.474	****
2.33	91.38	18.105	**
1.16	92.53	20.737	*
0.00	92.53	23.368	
0.00	92.53	26.000	
1.16	93.68	28.632	*
2.33	95.98	31.263	**
0.00	95.98	33.895	
2.33	98.28	36.526	**
0.00	98.28	39.158	
0.00	98.28	41.789	
0.00	98.28	44.421	
0.00	98.28	47.053	
0.00	98.28	49.684	
1.16	99.43	52.316	*

```
-----
```

0                    1                    2                    3                    4

#####

20:01:31

Gambier Soil Grid 1990-91

03/17/91

#####  
 SUMMARY STATISTICS and HISTOGRAM ARITHMETIC VALUES

Variable = Zn ppm Unit = N = 85  
 Mean = 170.647 Min = 40.000 1st Quartile = 102.500  
 Std. Dev. = 94.067 Max = 555.000 Median = 157.500  
 CV % = 55.124 Skewness = 1.334 3rd Quartile = 205.250

=====  
 (# of bins = 20 - bin size = 27.105)  
 -----

%	cum %	cls int	
0.00	0.58	26.447	
1.18	1.74	53.553	*
12.94	14.53	80.658	*****
11.76	26.16	107.763	*****
17.65	43.60	134.868	*****
9.41	52.91	161.974	*****
12.94	65.70	189.079	*****
10.59	76.16	216.184	*****
4.71	80.81	243.289	****
4.71	85.47	270.395	****
4.71	90.12	297.500	****
2.35	92.44	324.605	**
0.00	92.44	351.711	
4.71	97.09	378.816	****
0.00	97.09	405.921	
0.00	97.09	433.026	
1.18	98.26	460.132	*
0.00	98.26	487.237	
0.00	98.26	514.342	
0.00	98.26	541.447	
1.18	99.42	568.553	*

-----  
 0 1 2 3 4

#####

19:57:20

Gambier Soil Grid 1990-91

03/17/91

#####  
 SUMMARY STATISTICS and HISTOGRAM ARITHMETIC VALUES

Variable = Pb ppm Unit = N = 86  
 Mean = 50.140 Min = 10.000 1st Quartile = 26.500  
 Std. Dev. = 34.928 Max = 163.000 Median = 38.000  
 CV % = 69.662 Skewness = 1.542 3rd Quartile = 57.000

%	cum %	cls int	(# of bins = 20 - bin size = 8.053)
0.00	0.57	5.974	
2.33	2.87	14.026	**
9.30	12.07	22.079	*****
25.58	37.36	30.132	*****
13.95	51.15	38.184	*****
12.79	63.79	46.237	*****
6.98	70.69	54.289	*****
4.65	75.29	62.342	****
3.49	78.74	70.395	***
2.33	81.03	78.447	**
5.81	86.78	86.500	*****
1.16	87.93	94.553	*
0.00	87.93	102.605	
3.49	91.38	110.658	***
0.00	91.38	118.711	
2.33	93.68	126.763	**
1.16	94.83	134.816	*
0.00	94.83	142.868	
3.49	98.28	150.921	***
0.00	98.28	158.974	
1.16	99.43	167.026	*

0 1 2 3 4

#####

20:07:51

Gambier Soil Grid 1990-91

03/17/91

#####  
SUMMARY STATISTICS and HISTOGRAM ARITHMETIC VALUES

Variable =	Mn ppm	Unit =	N =	81
Mean =	874.679	Min =	94.000	1st Quartile = 436.000
Std. Dev. =	602.635	Max =	2588.000	Median = 734.500
CV % =	68.898	Skewness =	1.042	3rd Quartile = 1146.250

%	cum %	cls int	(# of bins = 20 - bin size = 131.263)
0.00	0.61	28.368	
4.94	5.49	159.632	****
6.17	11.59	290.895	*****
13.58	25.00	422.158	*****
14.81	39.63	553.421	*****
7.41	46.95	684.684	*****
4.94	51.83	815.947	****
12.35	64.02	947.211	*****
6.17	70.12	1078.474	*****
8.64	78.66	1209.737	*****
1.23	79.88	1341.000	*
3.70	83.54	1472.263	***
3.70	87.20	1603.526	***
2.47	89.63	1734.789	**
1.23	90.85	1866.053	*
1.23	92.07	1997.316	*
1.23	93.29	2128.579	*
2.47	95.73	2259.842	**
1.23	96.95	2391.105	*
1.23	98.17	2522.368	*
1.23	99.39	2653.632	*

0 1 2 3 4

#####

20:09:55

Gambier Soil Grid 1990-91

03/17/91

#####  
 SUMMARY STATISTICS and HISTOGRAM ARITHMETIC VALUES

Variable = Cd ppm Unit = N = 84  
 Mean = 1.004 Min = 0.200 1st Quartile = 0.400  
 Std. Dev. = 0.869 Max = 4.000 Median = 0.700  
 CV % = 86.570 Skewness = 1.693 3rd Quartile = 1.300

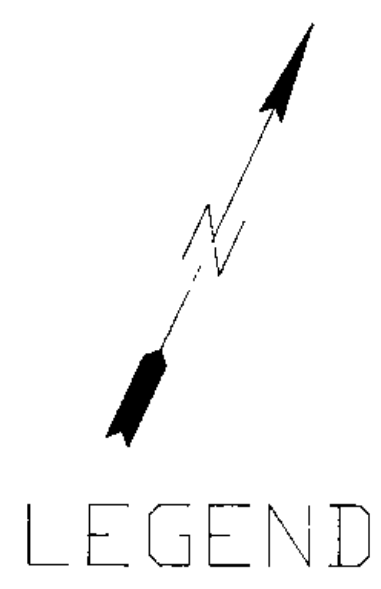
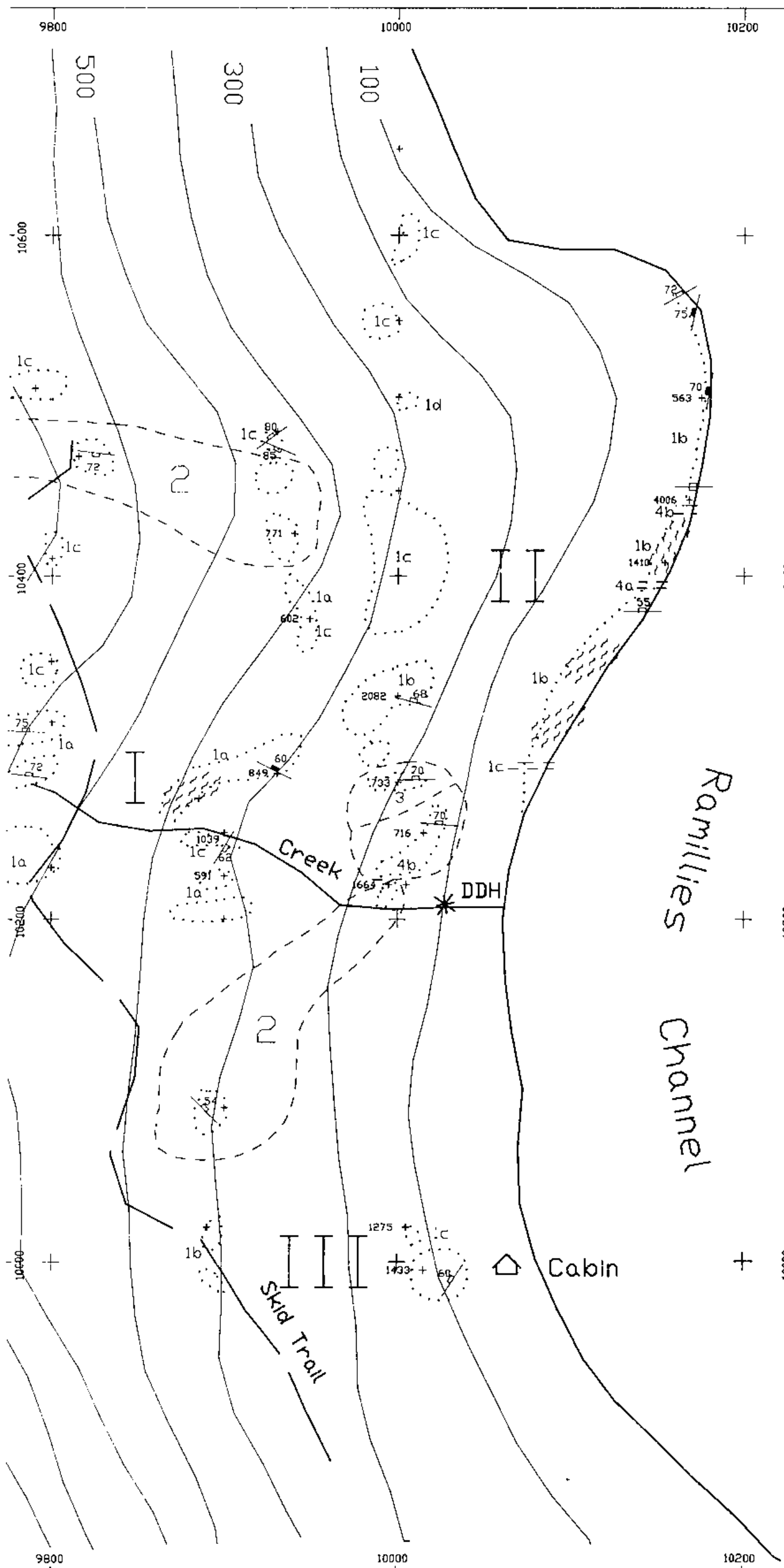
```
=====
```

%	cum %	cls int	(# of bins = 20 - bin size = 0.200)
0.00	0.59	0.100	
14.29	14.71	0.300	*****
13.10	27.65	0.500	*****
15.48	42.94	0.700	*****
19.05	61.76	0.900	*****
7.14	68.82	1.100	*****
5.95	74.71	1.300	*****
4.76	79.41	1.500	****
3.57	82.94	1.700	***
2.38	85.29	1.900	**
3.57	88.82	2.100	***
1.19	90.00	2.300	*
1.19	91.18	2.500	*
2.38	93.53	2.700	**
0.00	93.53	2.900	
0.00	93.53	3.100	
0.00	93.53	3.300	
2.38	95.88	3.500	**
2.38	98.24	3.700	**
0.00	98.24	3.900	
1.19	99.41	4.100	*

```
-----
```

0                    1                    2                    3                    4

#####



# LEGEND

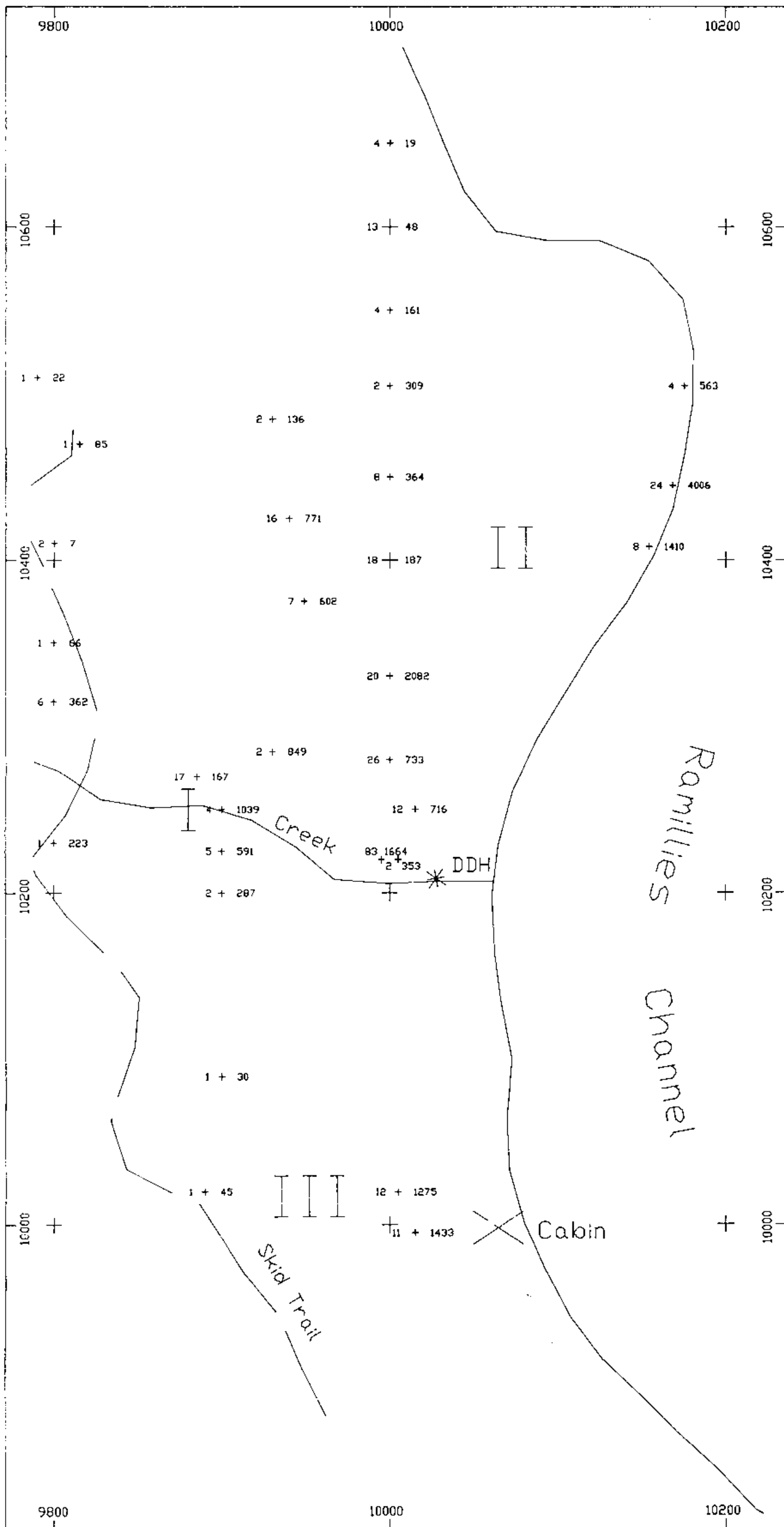
- LITHOLOGY**
- TERTIARY ?**
- 4** a) quartz porphyry dykes  
b) quartz-feldspar porphyry dykes
  - 3** Diorite - massive, medium grained, altered
- JURASSIC**  
Gambier Group
- 2** Andesite - massive, medium grained
  - 1** Volcanic Sediments and Pyroclastics
    - a) feldspar porphyry
    - b) feldspar-hornblend porphyry
    - c) volcanic breccia
    - d) chert
- SYMBOLS**
- I Geochemically anomalous zone
  - Outcrop Outline
  - - - Geological Contact
  - 45 Joint Set strike/dip inclined, vertical
  - 70 Quartz Vein strike/dip inclined, vertical
  - ▨ Quartz Stockwork or Sheeted Veins
  - 300 Contour Line
  - Skid Trail
  - ~ Creek
  - 4006 + Rock Sample Location with Copper (ppm)
  - \* Diamond Drill Hole - Gaylord Mines (1972)

**GAMBIER ISLAND PROPERTY**

Vancouver Mining Division  
**GEOLOGICAL / COPPER PLAN**  
 (Values below 500 ppm not shown)

Scale 1: 2500.0

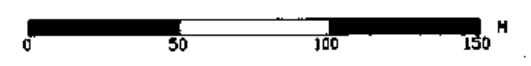
Date: MARCH 91	NTS 92GN11	FIGURE 3
technical work: DURFELD GEOLOGICAL MANAGEMENT		



LEGEND

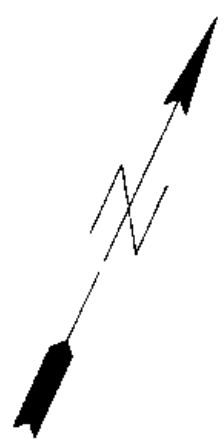
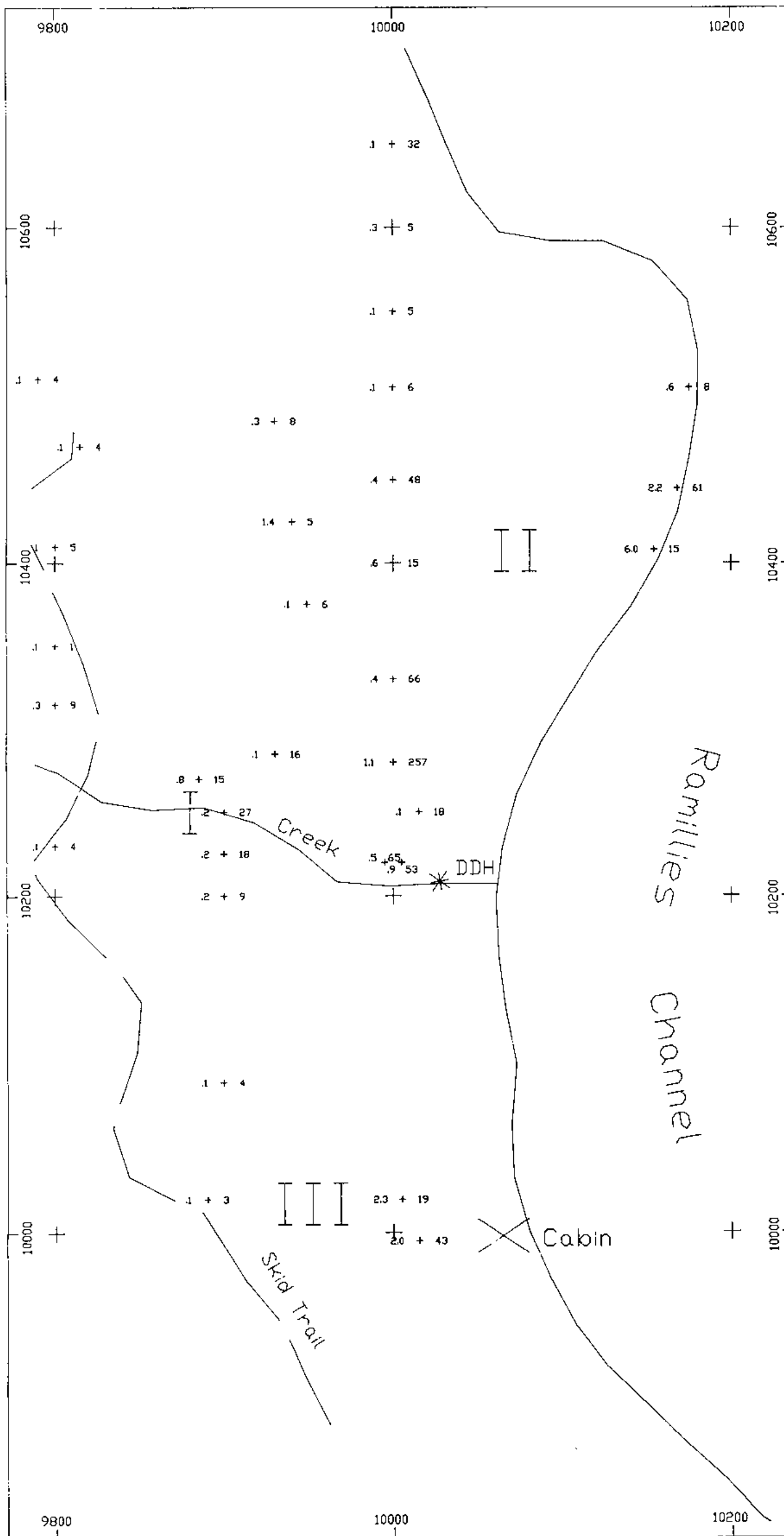
rock sample location  
 24 + 4006 copper value in ppm (right)  
 molybdenum value in ppm (left)

GAMBIER ISLAND PROPERTY  
 Vancouver Mining Division  
 ROCK GEOCHEMICAL PLAN  
 COPPER (PPM) / MOLYBDENUM (PPM)  
 Scale 1: 2500.0



Date: MARCH 91    NTS 92G\11    FIGURE 4  
 technical work: DURFELD GEOLOGICAL MANAGEMENT



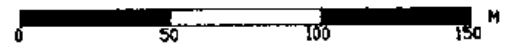


LEGEND

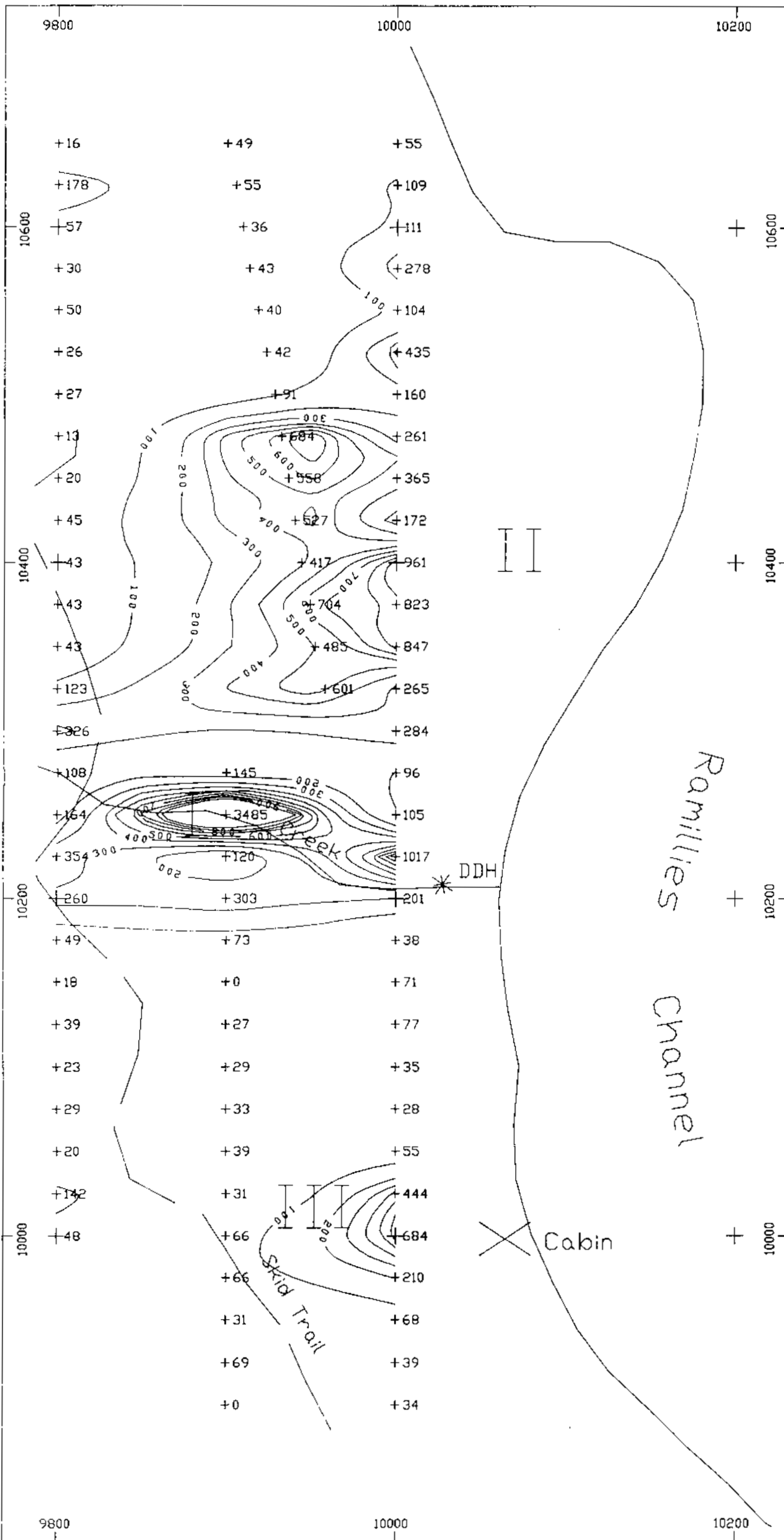
rock sample location  
 2.2 + 61 with silver value in ppm (left)  
 and gold value in ppb (right)

GAMBIER ISLAND PROPERTY


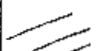


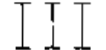
Vancouver Mining Division  
 ROCK GEOCHEMICAL PLAN  
 SILVER (PPM) / GOLD (PPB)  
 Scale 1: 2500.0



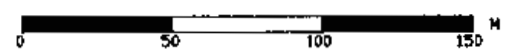
Date: MARCH 91	NTS 92G\11	FIGURE 5
technical work: DURFELD GEOLOGICAL MANAGEMENT		



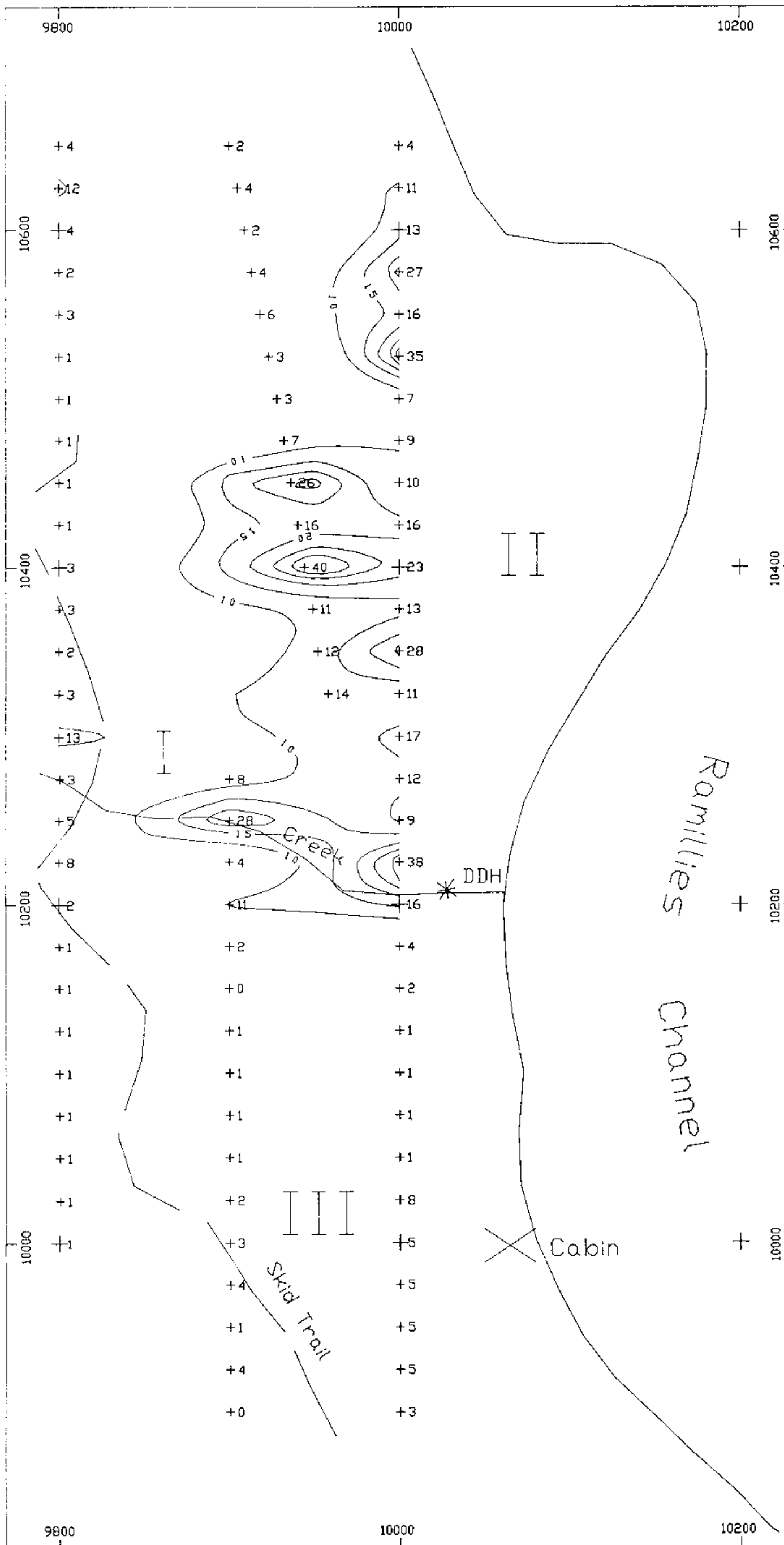
LEGEND

-  soil sample location with values in ppm
-  contour interval - 100 ppm
-  contour minimum - 100 ppm
-  contour maximum - 1000 ppm
-  geochemically anomalous zone

GAMBIER ISLAND PROPERTY  
 Vancouver Mining Division  
 SOIL GEOCHEMICAL PLAN  
 CONTOURED COPPER (PPM)  
 Scale 1: 2500.0



Date: 18 Mar 91    Drawn by: DFD    Figure: 6  
 technical work: DURFELD GEOLOGICAL MANAGEMENT



LEGEND

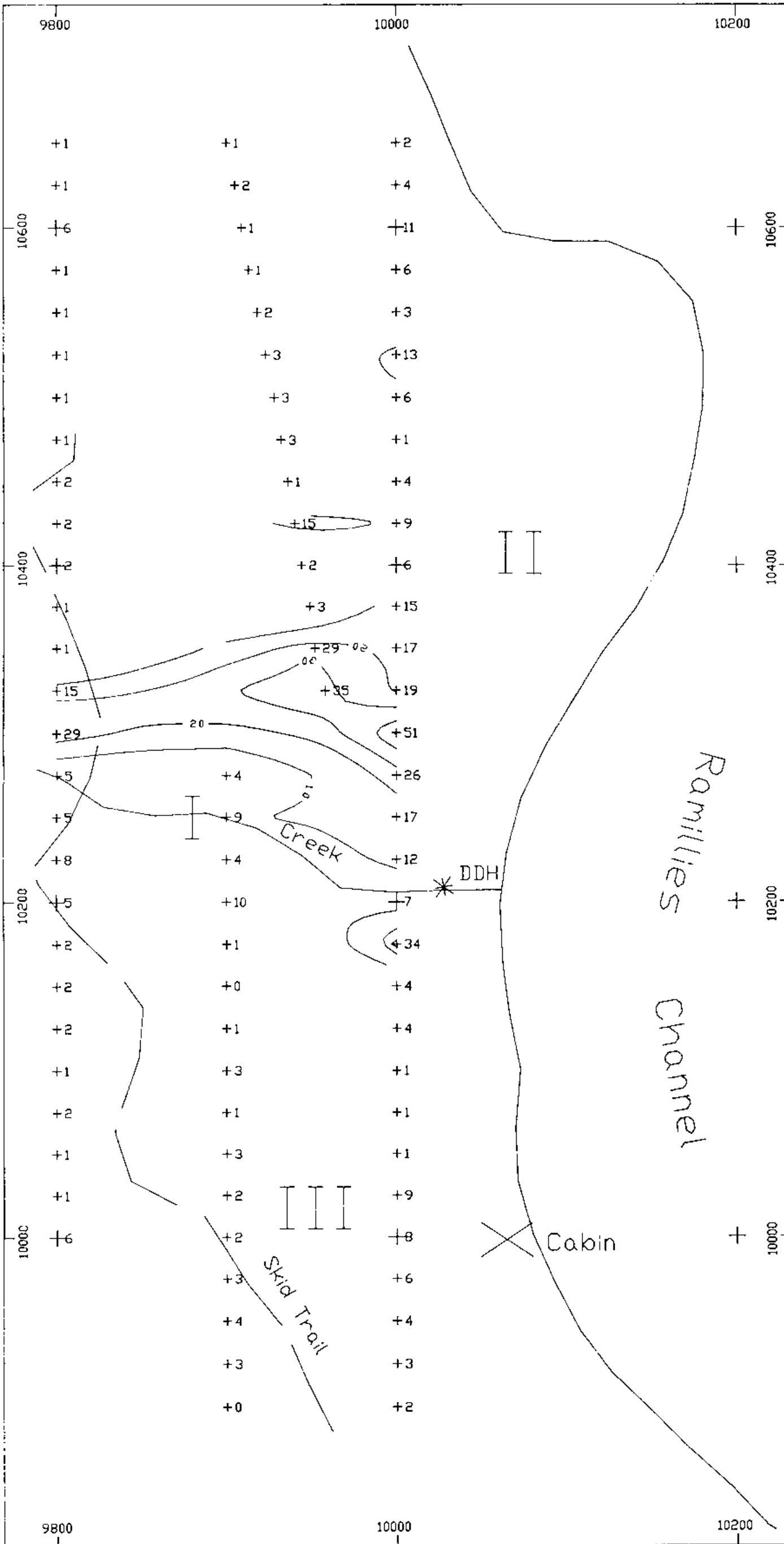
- soil sample location with values in ppm
- ⊕2245 contour interval - 5 ppm  
contour minimum - 10 ppm  
contour maximum - 30 ppm
- III geochemically anomalous zone

GAMBIER ISLAND PROPERTY  
 Vancouver Mining Division  
 SOIL GEOCHEMICAL PLAN  
 CONTOURED MOLYBDENUM (PPM)  
 Scale 1: 2500.0

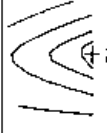


0 50 100 150 M

Date: 18 Mar 91	Drawn by: DFD	Figure: 7
-----------------	---------------	-----------

technical work: DURFELD GEOLOGICAL MANAGEMENT



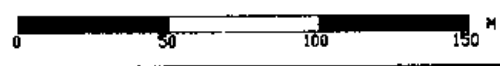
LEGEND

 soil sample location with values in ppb  
 contour interval - 10 ppb  
 contour minimum - 10 ppb  
 contour maximum - 40 ppb  
 III geochemically anomalous zone

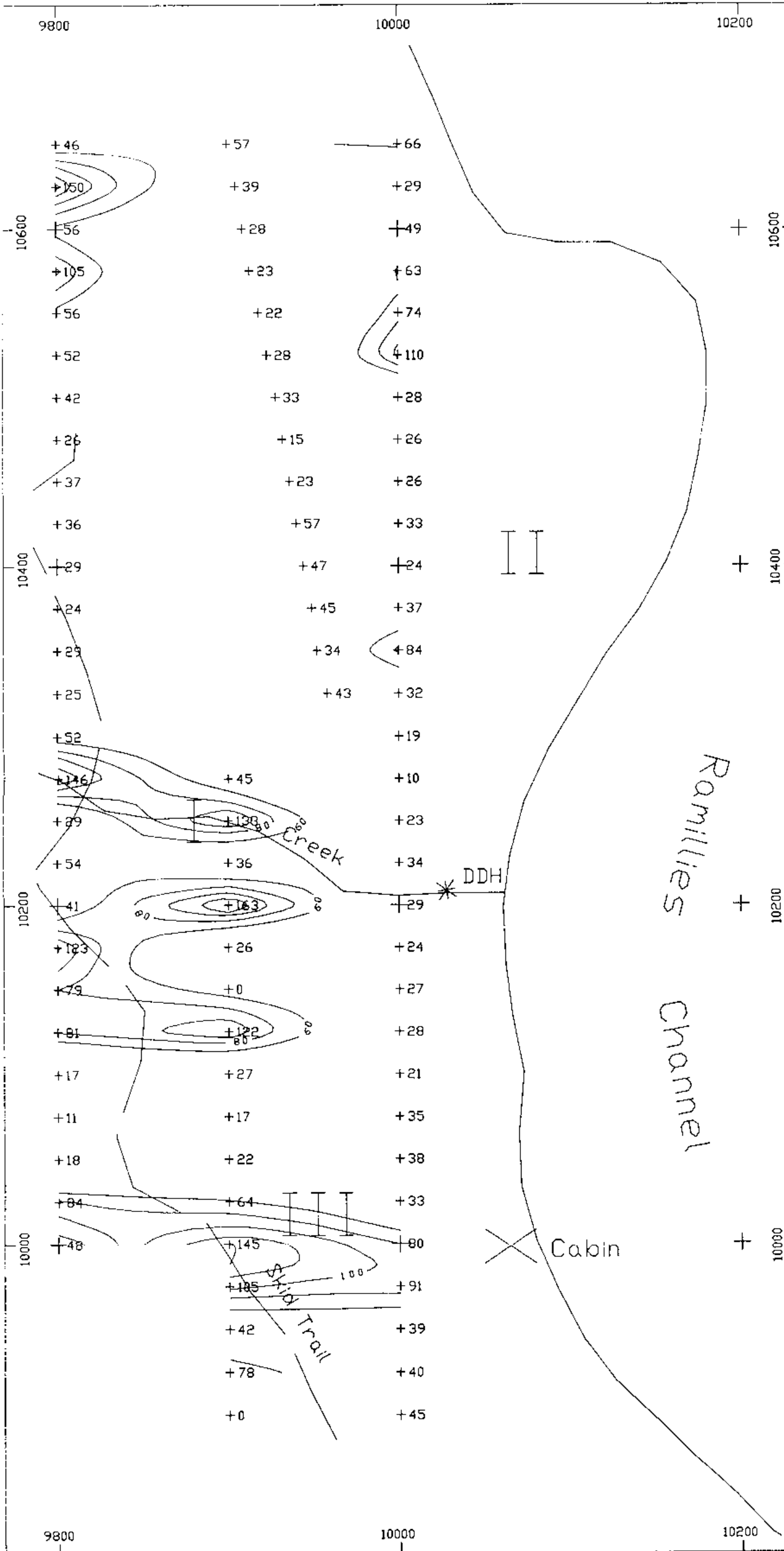
GAMBIER ISLAND PROPERTY

Vancouver Mining Division  
SOIL GEOCHEMICAL PLAN  
CONTOURED GOLD (PPB)

Scale 1: 2500.0



Date: 18 Mar 91	Drawn by: DFD	Figure: 8
technical work: DURFELD GEOLOGICAL MANAGEMENT		



**LEGEND**

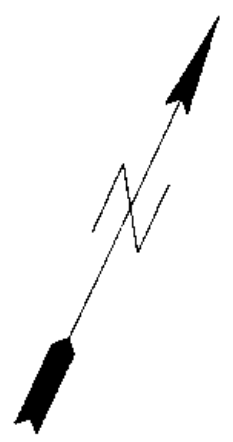
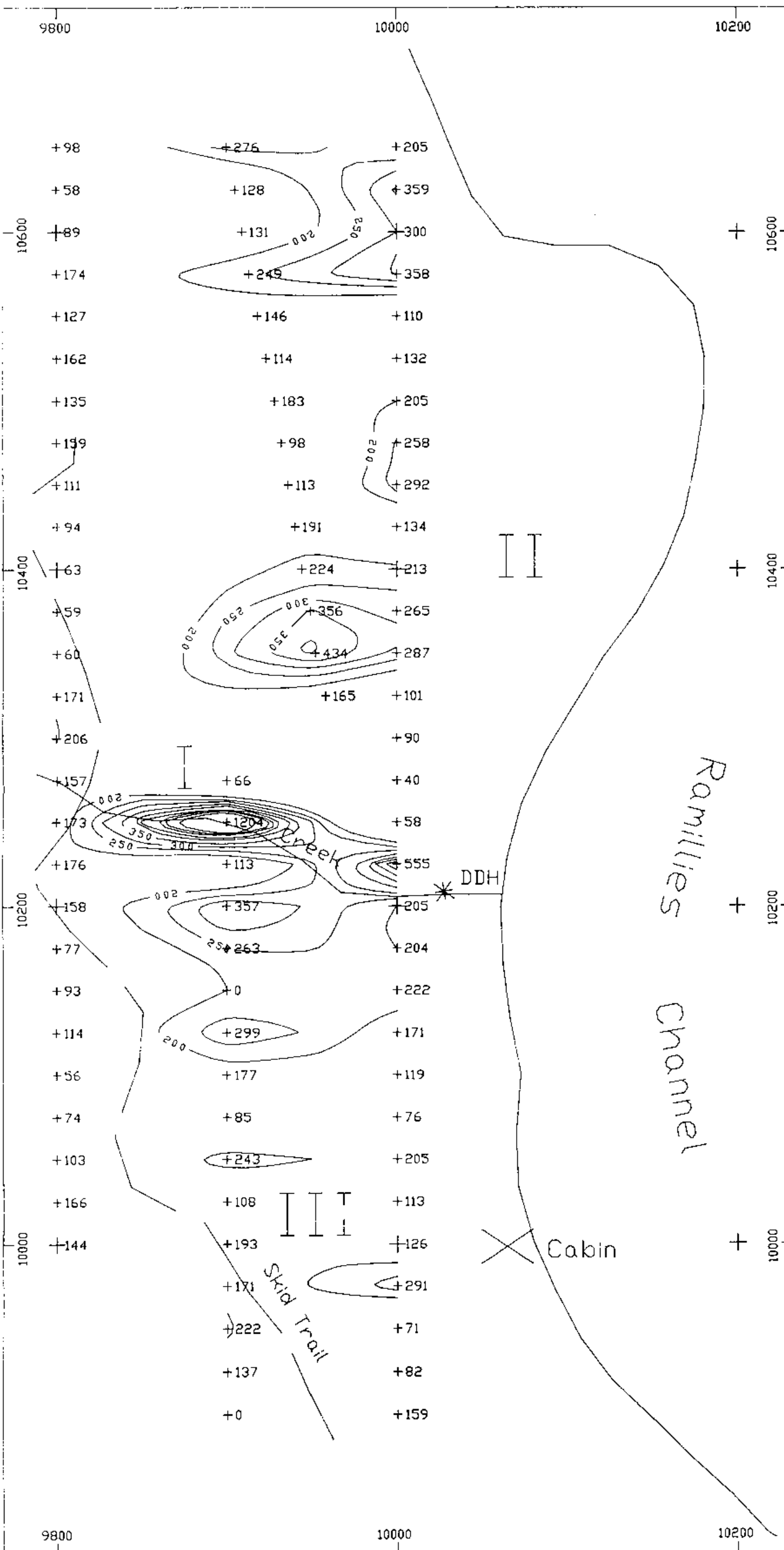
- soil sample location with values in ppm
- contour interval - 20 ppm
- contour minimum - 60 ppm
- contour maximum - 140 ppm
- III geochemically anomalous zone

**GAMBIER ISLAND PROPERTY**

Vancouver Mining Division  
SOIL GEOCHEMICAL PLAN  
CONTOURED LEAD (PPM)  
Scale 1: 2500.0

0 50 100 150 M

Date: 18 Mar 91	Drawn by: DFD	Figure: 9
technical work: DURFELD GEOLOGICAL MANAGEMENT		

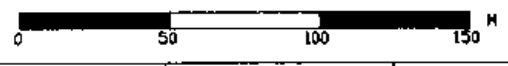


LEGEND

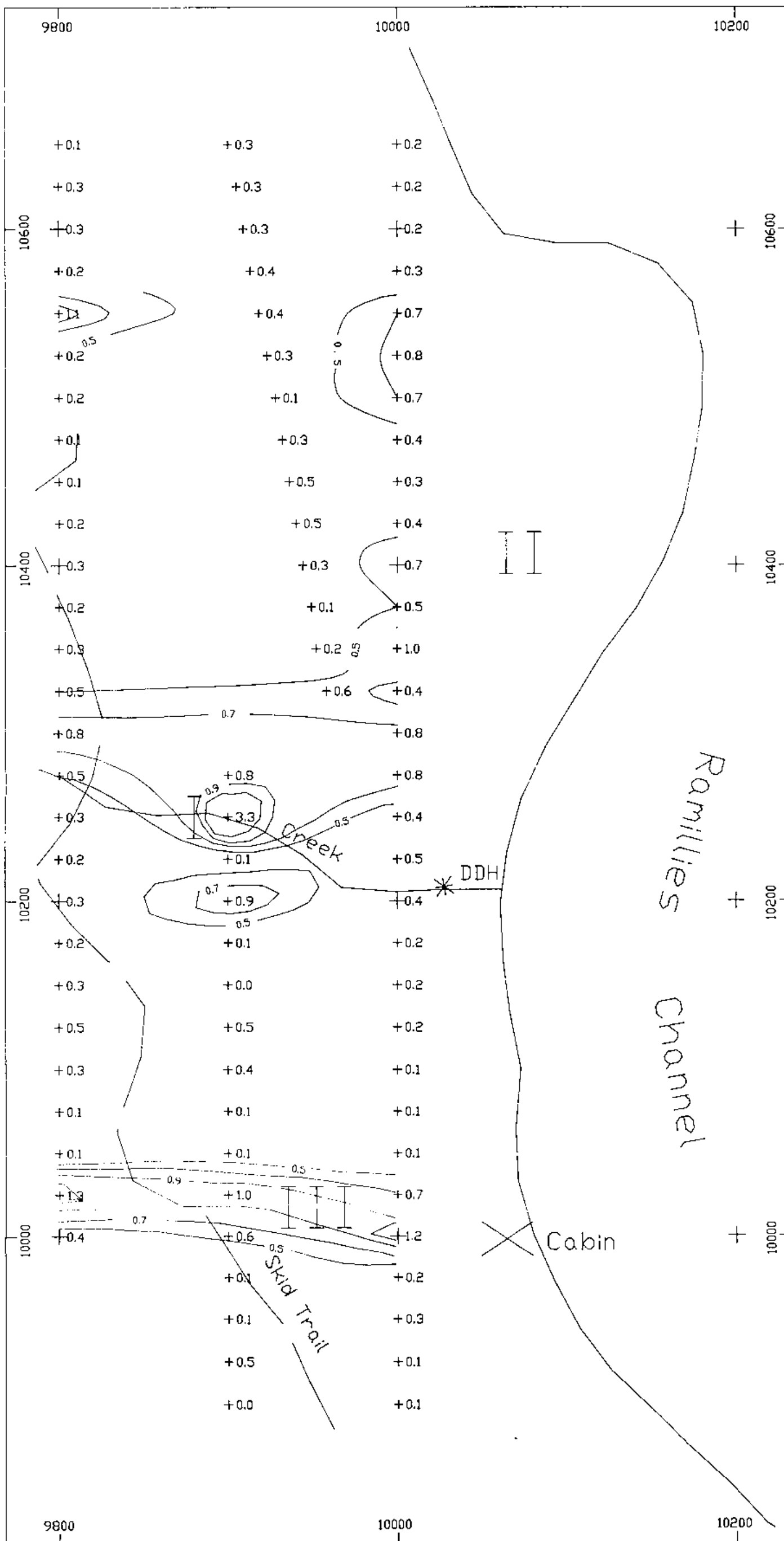
- soil sample location with values in ppm
- contour interval - 50 ppm
- contour minimum - 200 ppm
- contour maximum - 600 ppm
- geochemically anomalous zone

GAMBIER ISLAND PROPERTY

Vancouver Mining Division  
 SOIL GEOCHEMICAL PLAN  
 CONTOURED ZINC (PPM)  
 Scale 1: 2500.0



Date: 18 Mar 91	Drawn by: DFD	Figure: 10
technical work: DURFELD GEOLOGICAL MANAGEMENT		



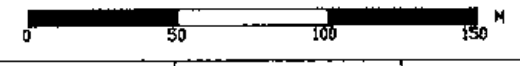
LEGEND

- soil sample location with values in ppm
- contour interval - 0.2 ppm  
contour minimum - 0.5 ppm  
contour maximum - 1.1 ppm
- geochemically anomalous zone

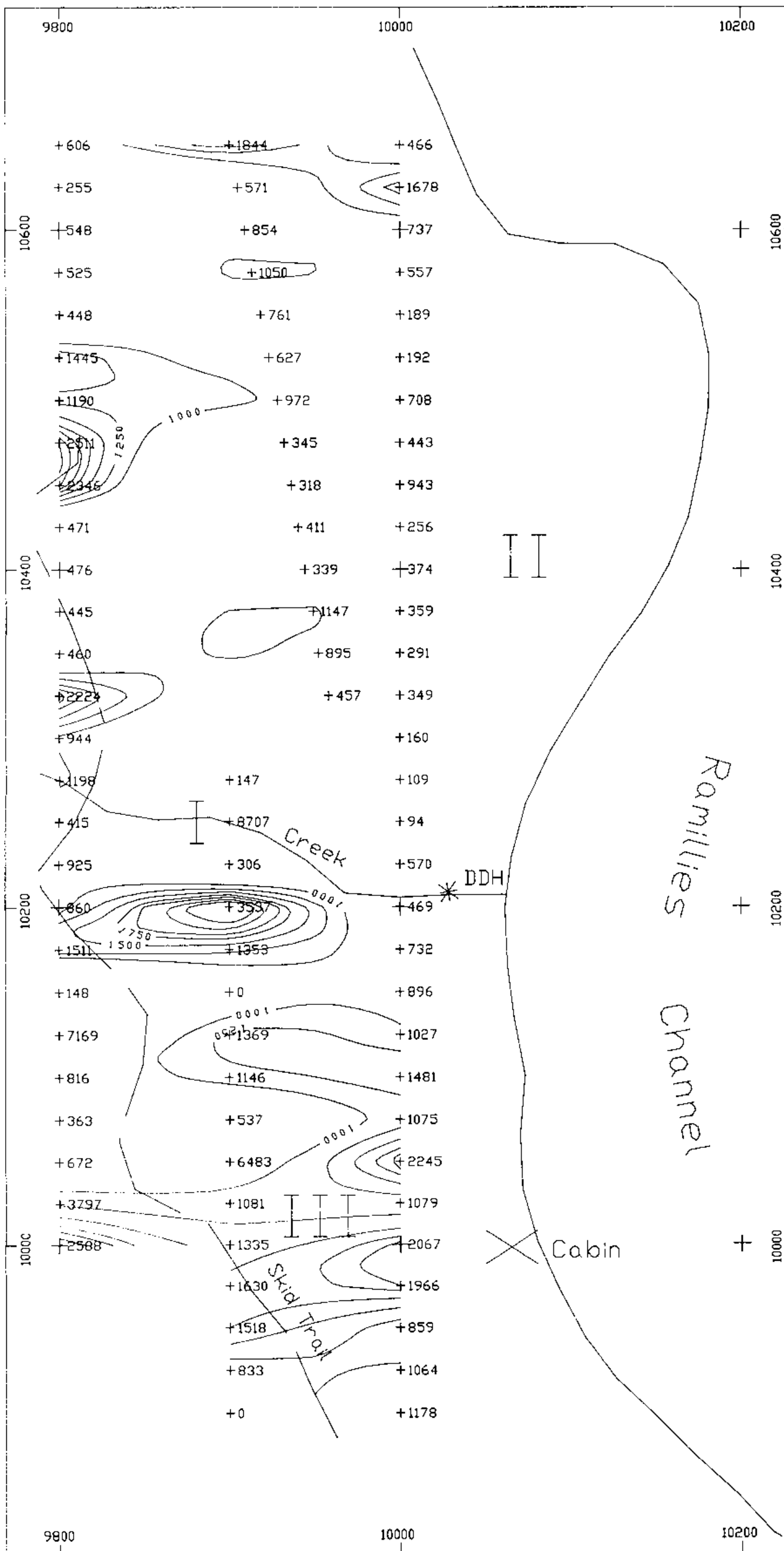
GAMBIER ISLAND PROPERTY

Vancouver Mining Division  
SOIL GEOCHEMICAL PLAN  
CONTOURED SILVER (PPM)

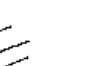
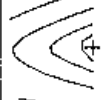
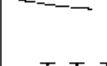
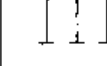
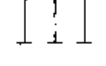
Scale 1: 2500.0



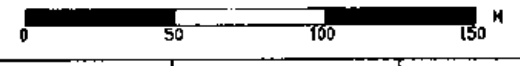
Date: 18 Mar 91	Drawn by: DFD	Figure: 11
technical work: DURFELD GEOLOGICAL MANAGEMENT		



LEGEND

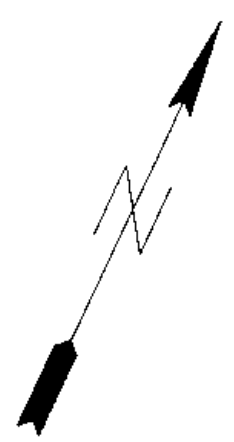
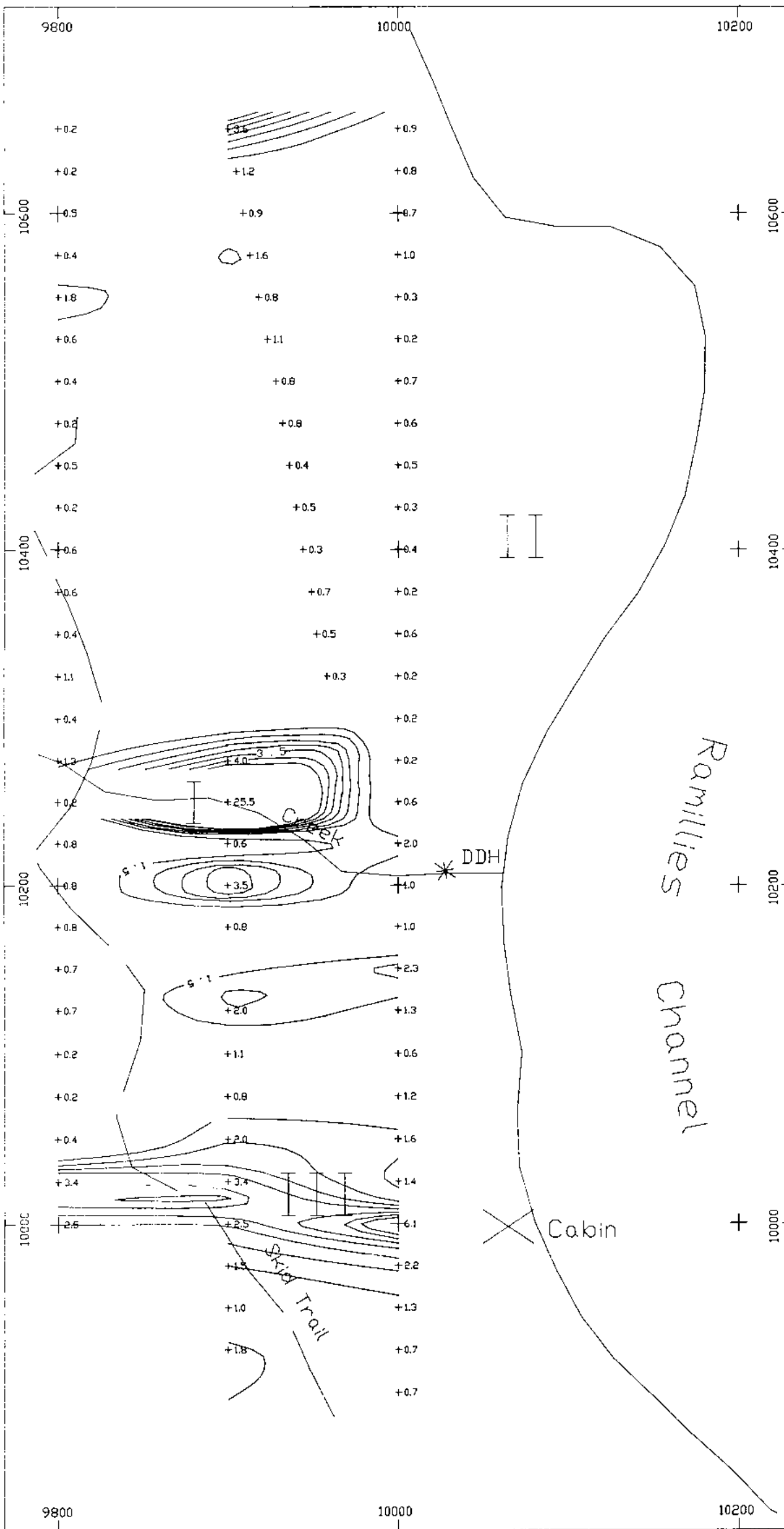
-  soil sample location with values in ppm
-  contour interval - 250 ppm
-  contour minimum - 1000 ppm
-  contour maximum - 2500 ppm
-  geochemically anomalous zone

GAMBIER ISLAND PROPERTY  
 Vancouver Mining Division  
 SOIL GEOCHEMICAL PLAN  
 CONTOURED MANGANESE (PPM)  
 Scale 1: 2500.0



Date: 18 Mar 91    Drawn by: DFD    Figure: 12  
 technical work: DURFELD GEOLOGICAL MANAGEMENT

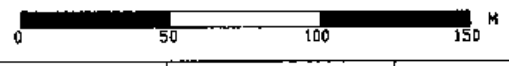




LEGEND

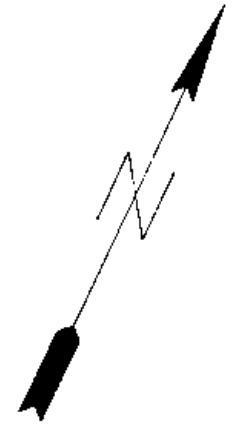
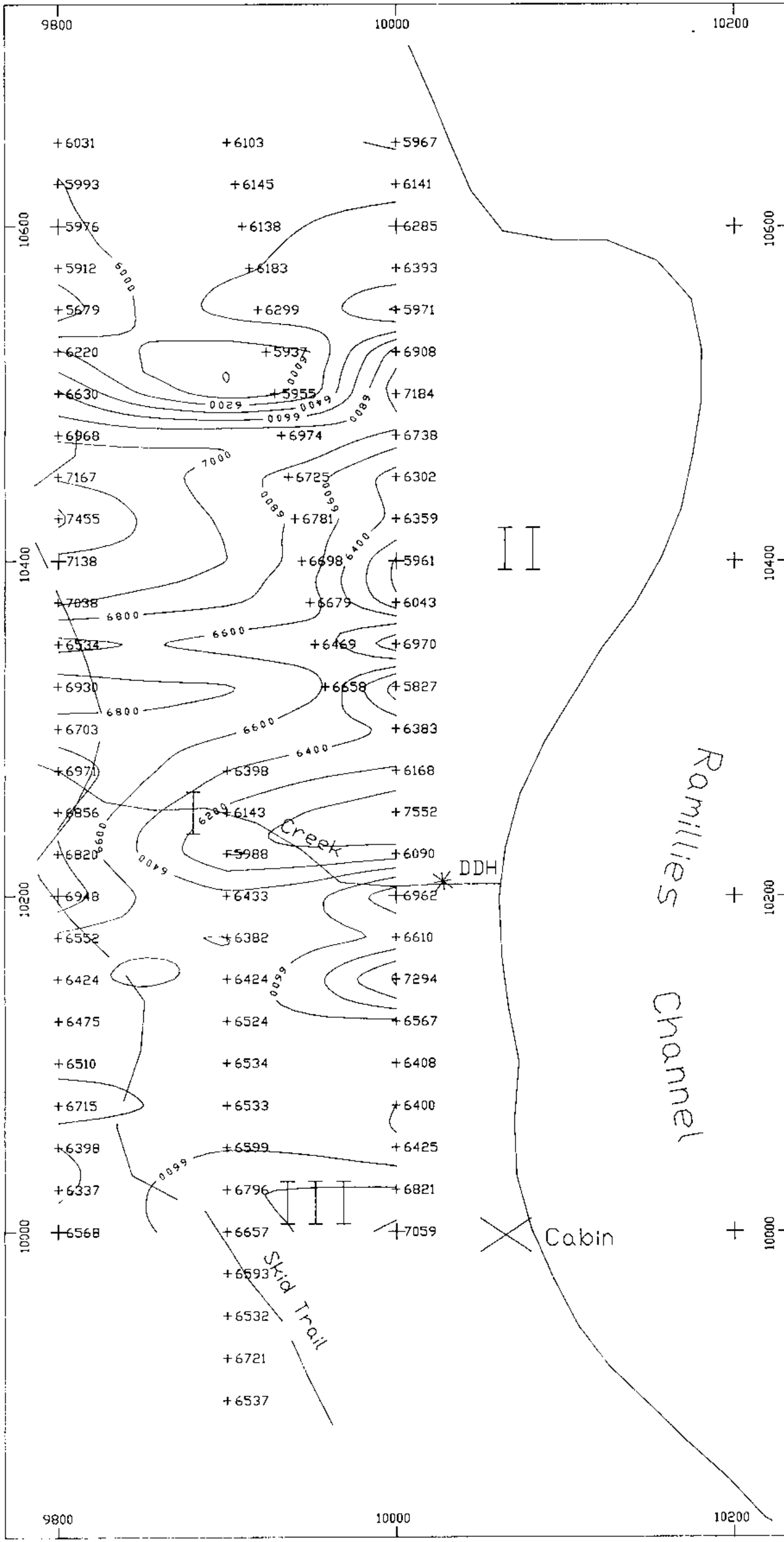
- soil sample location with values in ppm
- contour interval - 0.5 ppm
- contour minimum - 1.5 ppm
- contour maximum - 4.5 ppm
- III geochemically anomalous zone

GAMBIER ISLAND PROPERTY  
 Vancouver Mining Division  
 SOIL GEOCHEMICAL PLAN  
 CONTOURED CADMIUM (PPM)  
 Scale 1: 2500.0



Date: 18 Mar 91    Drawn by: DFD    Figure: 13'

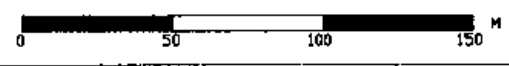
technical work: DURFELD GEOLOGICAL MANAGEMENT



LEGEND

- (\*) +5827 magnetometer reading site with reading in gammas (-50,000)
- contour interval - 200 gammas
- contour minimum - 56,000 gammas
- contour maximum - 57,400 gammas

GAMBIER ISLAND PROPERTY  
 Vancouver Mining Division  
 GEOPHYSICAL PLAN  
 GROUND MAGNETIC SURVEY  
 Scale 1: 2500.0



Date: 18 Mar 91	Drawn by: DFD	Figure: 14
-----------------	---------------	------------

technical work: DURFELD GEOLOGICAL MANAGEMENT