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Shellfish Growing Water Sanitary Survey of **Baynes Sound, Gartley** Point to Deep Bay, British Columbia, 1974

Surveillance Report EPS 5-PR-74-10

Pacific Region November, 1974

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SHELLFISH GROWING WATER SANITARY SURVEY

OF

BAYNES SOUND, GARTLEY POINT TO DEEP BAY

BRITISH COLUMBIA

by

B. Kay, B.Sc.

and

T. J. Tevendale, P.Eng.

Pollution Abatement Branch Environmental Protection Service Pacific Region Vancouver, B. C.

Report EPS 5-PR-74-10 November 1974

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ABSTRACT

A sanitary and bacteriological survey of the waters of Baynes Sound, including the tidal foreshore of Vancouver Island between Gartley Point and Deep Bay, was conducted during the periods of February 12 to March 8, 1974, and April 17 to May 10, 1974, by personnel of the Environmental Protection Service, Pacific Region.

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The survey was conducted to determine the bacteriological quality of the shellfish growing waters and to assess the impact of domestic sewage discharges on the quality of the receiving waters.

A total of 276 sea water samples from 28 locations and 128 stream samples from 21 locations were collected and analysed for coliform and fecal coliform numbers using the 5-tube MPN method.

With only one exception, the water quality of the sampled areas was bacteriologically acceptable for shellfish growing waters. Unacceptable coliform densities were experienced at the mouth of Waterloo Creek located immediately north of Mud Bay.

A recommendation is made to prohibit oyster harvesting at the mouth of Waterloo Creek, and to maintain the 1000 foot closure currently in effect around the Union Bay Wharf.

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RESUME

Le personnel du Service de protection de l'environment (région du Pacifique) a entrpris une étude sanitaire et bactériologique des eaux du détroit de Baynes et de l'avantplage contigüe qui s'étend de la pointe Gartley à la baie Deep dans l'île de Vancouver, pendant les périodes du 17 février au 8 mars 1974 et du 17 avril au 10 mai 1974.

L'étude avait pour objet d'évaluer la qualité des eaux où se reproduisent les crustacés et les mollusques et de découvrir l'effet des eaux usées sur la qualité des eaux réceptrices.

On a prélevé 276 échantillons d'eau de mer à 28 endroits et 128 échantillons d'eau de rivière à 21 endroits, et on les a analysés dans le but de compter les coliformes et les coliformes fécaux au moyen de la méthode MPN à 5 éprouvettes.

Tous les échantillons prélevés sauf un furent acceptables du point de vue bactériologique pour la reproduction des crustacés et des mollusques. L'échantillon prélevé à l'embouchure du crique Waterloo juste au nord de la baie Mud ne répondait pas aux normes acceptable.

On a donc recommandé d'interdire la prise d'huîtres à l'embouchure du crique Waterloo et de maintenir la zone d'interdiction actuelle de mille pieds autour du quai de la baie Union.

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1. INTRODUCTION

Baynes Sound is one of British Columbia's prime oyster culture areas and extensive commercial harvesting from the foreshore waters takes place at both Denman Island and Vancouver Island. Oysters harvested from the area are processed by five shucking plants operating in Baynes Sound, or are shipped to other processors in southern British Columbia.

The area was last surveyed in April and November of 1964 by the Departments of Fisheries and National Health and Welfare, and the growing waters were shown to be of acceptable quality in the majority of those areas tested. However, due to limited time and facilities, a statistically significant number of samples was not collected in all areas and it was recommended that further sampling should take place. A full sanitary survey of Baynes Sound from Deep Bay to Gartley Point, was launched in early 1974 to reassess the quality of the growing waters. This reassessment was necessary for several (1) considerable development had taken place along reasons: the shoreline since the 1964 survey and the presence or absence of pollution from these sources must be ascertained; (2) high fecal coliform levels had been found in oyster meats taken from Ships Point, Deep Bay and Mud Bay in 1973; (3) Schedule J closures imposed around the government wharves at Deep Bay and Union Bay required verification; (4) public health protection was of prime importance due to the extensive commercial harvesting of oysters in Baynes Sound.

In order to conduct a comprehensive bacteriological study of the growing areas, it was necessary to divide the survey into two sections. The first part of the survey included the shoreline of Vancouver Island from Deep Bay to Buckley Bay and was conducted from February 11 to March 15,

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1974. The second part of the survey included the remainder of the shoreline as far north as Gartley Point and was conducted from April 17 to May 10, 1974. (The western shoreline of Denman Island was surveyed simultaneously with the eastern shoreline of Vancouver Island and the results of this survey can be found in EPS Surveillance Report $5-PR-74-9^{(3)}$.)

The survey was conducted in late winter - early spring, coincident with heavy precipitation and unfavourable hydrographic conditions, in order that the water quality be assessed during the worst possible pollution conditions.

2. SAMPLE STATION LOCATIONS

Due to the extensive area surveyed, sample stations were limited to those growing waters most probably subject to bacterial contamination. As a result, few sample stations were located in areas where no residential or commercial development was evident.

Three sample stations were chosen along the shoreline between Gartley Point and Union Bay. Limited shoreline development and a limited oyster resource made extensive sampling in this area unnecessary.

To evaluate domestic sewage pollution and verify the present 1000 foot wharf closure at Union Bay, four foreshore sample stations were established within a 1000 foot radius of the wharf. Sample stations were also located along the shoreline of Ship Peninsula, Mud Bay and Deep Bay to monitor growing water quality.

Sample stations were located offshore from the Baynes Sound Oyster Co., SnoCap Pacific Oysters Ltd., Mac's Oysters Ltd., Oyster House Select Oysters and Reef Oyster Cooperative, where oysters are held in wet storage.



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Sample stations were also located in growing waters subject to bacterial contamination from fresh water inputs. All significant freshwater inputs were sampled in conjunction with the growing water sampling program.

Sample station locations are shown in Figures 1 and 2, and a description of the marine and freshwater sample stations can be found in Tables 6 and 7 respectively, of Appendix I.

3. FIELD PROCEDURES AND METHODS

3.1 Bacteriological Sampling and Analyses

All samples for bacteriological analysis were collected in sterile 6 ounce wide-mouth bottles approximately 6 inches to one foot below the water surface. The water depth at collection points did not exceed 4 feet. Samples were collected by boat or by wading and stored in coolers at temperatures not exceeding 10°C until processed. Analyses were carried out in the Environmental Protection Service mobile laboratory and were performed within four hours of collection.

The total confirmed coliform MPN per 100 ml was determined using the multiple tube fermentation technique (at least 3 decimal dilutions of 5 tubes each) as described in Part 407A of the 13th edition of <u>Standard Methods for the</u> Examination of Water and Wastewater.⁽²⁾

The fecal coliform MPN per 100 ml was determined as described in Part 407C of Standard Methods. Incubation was for 24 $\stackrel{+}{-}$ 2 hours in a water bath equipped with a circulation device and maintained at 44.5°C $\stackrel{+}{-}$ 0.2°C.

Media used for the coliform MPN determinations was Lauryl Tryptose Broth and Brilliant Green Bile (2%) Broth for the confirmed test, and EC medium for the fecal coliform

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test.¹ The MPN/100 ml of each sample was calculated from Table II, <u>Recommended Procedures for the Examination of</u> Sea Water and Shellfish, Fourth Edition (1970)⁽¹⁾.

3.2 Physical Testing Equipment and Analyses

Temperature and salinity measurements were determined at a depth of 6 inches to one foot below the water surface. A Beckman Model RB3-349 Solubridge Electrolytic Conductivity Meter was used during the February 12 to March 8 sampling period and after April 24, during the second sampling period. A YS1 Model 33 Salinity-Conductivity-Temperature Meter was used from April 17 to April 24 after which time it became inoperable.

Tide data is for the Point Atkinson reference port. Daily rainfall and wind velocity (range recorded between 1100 and 1600 hours) was that recorded at Canadian Forces Base, Comox. Results are presented in Appendix II.

3.3 Shellstock Sampling and Analysis

Samples were collected and stored in coolers at temperatures not exceeding 10°C until processed. Analyses were carried out by the Fish Inspection Laboratories, Vancouver, and were performed within 20 hours of collection. At least 12 oysters were collected for each sample.

4. DISCUSSION OF RESULTS

Sample station locations are shown in Figures 1 and 2. Daily bacteriological and elemental data for each sample station is presented in Tables 9 and 10 of Appendix II. Total and fecal coliform MPN results for marine sample stations are summarized in Tables 1 and 2, respectively. Bacteriological results for freshwater sample stations are summarized in Table 3. As a point of interest and future reference, fecal coliform data is summarized in terms of the two most recently proposed fecal coliform growing water

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¹ All test media used was Bacto Brand obtained from Difco Laboratories Detroit, Michigan.

standards presently under consideration by the National Shellfish Sanitation Program (US Food and Drug Administration). See Appendix II.

The existing growing water standard is defined as follows: "In order that an area can be considered bacteriologically safe for the harvesting of shellfish, the total confirmed coliform median MPN of the water must not exceed 70 per 100 ml, and not more than 10 per cent of the samples ordinarily exceed an MPN of 230 per 100 ml for a 5 tube decimal dilution test in those portions of the area most probably exposed to fecal contamination during the most unfavourable hydrographic and pollution conditions. The foregoing limits need not be applied if it can be shown by detailed study that the coliforms are not of direct fecal origin and do not indicate a public health hazard."²

A total of 276 marine and 128 freshwater samples were collected for bacteriological analysis during the survey period. A minimum of six samples was collected for each marine station.

The bacteriological results presented in Table 9 indicate that all of the sample stations, with the exception of stations 2 and 23, fall within the bacteriological standards detailed above. Sample station 2, located south of Gartley Point, and sample station 23, located north of Mud Bay, exceed the 90 percentile limit of the standards. Sixteen samples were collected at station 23; therefore, there is good confidence in the statistical validity of the results. Since only six samples were collected at station 2, an accurate 90 percentile level could not be determined, but the low fecal coliform median MPN of 1.8/100 ml indicated an absence of significant contamination.

2 National Shellfish Sanitation Program Manual of Operations Part 1. Sanitation for Shellfish Growing Areas 1965 Revision, U.S. Department of Health, Education and Welfare.

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Sample Station	Number of Samples		MPN Range	Median MPN per 100 ml	<pre>% Exceeding 230 MPN/100 ml</pre>
1	10	<	1.8 - 70	22.5	0.0
2	6	<	1.8 - 350	15.0	16.6
3	10		2.0 - 130	28.0	0.0
4	6		4.0 - 23	9.9	0.0
5	10	<	1.8 - 79	6.8	0.0
6	10	<	1.8 - 14	7.8	0.0
7	10		2.0 - 49	6.2	0.0
8	10		2.0 - 79	19.0	0.0
9	10	<	1.8 - 49	15.5	0.0
10	7	<	1.8 - 49	4.5	0.0
11	10	<	1.8 - 130	< 1.8	0.0
12	11	<	1.8 - 240	2.0	9.1
13	6	<	1.8 - 7.8	3.3	0.0
14	10	<	1.8 - 49	33.0	0.0
15	9	<	1.8 - 170	7.8	0.0
16	11		1.8 - 350	14.0	9.1
17	11		2.0 - 540	7.8	9.1
18	8	<	1.8 - 17	2.8	0.0
19	10	<	1.8 - 33	8.5	0.0
20	9	<	1.8 - 33	2.0	0.0
21	9	<	1.8 - 23	4.0	0.0
22	9	<	1.8 - 170	2.0	0.0
23	16		2.0 - 240	27.5	12.5
24	16		1.8 - 920	10.4	6.2
25	9	<	1.8 - 41	2.0	0.0
26	11	<	1.8 - 240	2.0	9.1
27	10	<	1.8 - 130	3.2	0.0
28	12	<	1.8 - 170	7.8	0.0

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TABLE 1: SUMMARY OF TOTAL CONFIRMED COLIFORM MPN DATA FOR SHELLFISH GROWING WATER SAMPLES.

Sample Station	Number of Samples	MPN Range	Median MPN per 100 ml
1	10	< 1.8 - 22	3.0
2	6	< 1.8 - 2.0	1.8
3	10	< 1.8 - 33	3.0
4	6	< 1.8 - 23	5.9
5	10	< 1.8 - 6.8	2.0
6	10	< 1.8 - 7.8	2.0
7	10	< 1.8 - 7.8	∿ 1.9
8	10	< 1.8 - 13	4.4
9	10	< 1.8 - 23	∿ 1.9
10	7	< 1.8 - 2.0	< 1.8
11	10	< 1.8 - 4.5	< 1.8
12	11	< 1.8 - 130	< 1.8
13	6	< 1.8 - 2.0	< 1.8
14	10	< 1.8 - 23	2.0
15	9	< 1.8 - 6.1	< 1.8
16	11	< 1.8 - 6.8	< 1.8
17	11	< 1.8 - 11	< 1.8
18	8	< 1.8 - 4.5	< 1.8
19	10	< 1.8 - 17	< 1.8
20	9	< 1.8 - 4.0	< 1.8
21	9	< 1.8 - 4.0	1.8
22	9	< 1.8 - 4.5	< 1.8
23	16	< 1.8 - 130	4.1
24	16	< 1.8 - 17	4.5
25	9	< 1.8 - 2.0	< 1.8
26	11	< 1.8 - 4.5	< 1.8
27	10	< 1.8 - 4.0	< 1.8
28	12	< 1.8 - 13	< 1.8

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TABLE 2 : SUMMARY OF FECAL COLIFORM MPN DATA FOR SHELLFISH GROWING WATER SAMPLES

Sample Station	Number of Samples	Coliform MPN Rang Total Confirmed	re (per 100 ml) Fecal
Sl	5	2.0 - 14	1.8 - 11
S2	4	220 - 1700	220 - 1700
S3	4	> 16,000 - 5.4x10 [°]	>16,000 - 2.4x10
S4	4	2.0 - 17	< 1.8 - 4.5
S5	4	< 1.8 - 6.8	< 1.8 - 2.0
S6	4	< 1.8 - 14	< 1.8 -<1.8
S7	6	< 1.8 - 11	< 1.8 - 11
S8	9	< 1.8 - 49	< 1.8 - 49
S9	13	2.0 ->1600	< 1.8 - 220
S10	2	33 - 70	< 1.8 - 4.5
S11	11	11 - 540	< 1.8 - 33
S12	13	6.8 - 16,000	< 1.8 - 16,000
S13	2	2400 - 5400	68 - 140
S14	6	< 1.8 - 49	< 1.8 - 7.8
S15	6	< 1.8 - 17	< 1.8 - 2.0
S16	5	1.8 - 49	< 1.8 - 4.5
S17	6	< 1.8 - 49	< 1.8 - 49
S18	6	< 1.8 - 49	< 1.8 - 7.8
S19	6	4.5 - 33	< 1.8 - 4.5
S20	6	11 - 70	< 1.8 - 33
S21	6	79 ->16,000	79 - 5400

TABLE 3 : SUMMARY OF BACTERIOLOGICAL MPN DATA FOR FRESHWATER SAMPLES

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The remaining 26 sample stations exhibited periodic high total coliform densities, often coincident with heavy precipitation. However, the corresponding fecal coliform densities were low, never exceeding an MPN of 17/100 ml, indicating the contamination was of non-fecal origin.

Shellstock samples collected at or near sample stations 19, 21 and 23 all were of acceptable bacteriological quality with fecal coliform MPN densities not exceeding 20/100 g (Table 4).

4.1 Gartley Point to Union Point

The growing waters between Gartley Point and Union Point are not presently being commercially exploited, primarily due to the limited oyster resource. Most of the houses in the area are relatively new and all have septic tanks and tile fields which are operating satisfactorily. One exception was the Lynn Maur Resort, where one septic tank absorption field was found to be unsatisfactory.

The source of the bacterial contamination at station 2 was not determined. However, due to the low fecal coliform densities the contamination was most probably the result of landwash. In fact, the higher coliform densities occurred on May 5, coincident with a period of increased precipitation (Figure 3).

Station 3 was located at the northern entrance to Baynes Sound to determine the impact of sewage discharges from the towns of Courtenay and Comox. At present, the City of Courtenay discharges 675,000 gpd of unchlorinated sewage from an aeration lagoon into the Courtenay River. The Town of Comox has no treatment facilities and raw sewage is discharged into the receiving waters at the rate of 490,000 gpd.

Sample Number	Colle Da	ction te	Inspe Da	ection ate	<u>Coli</u> Total	form MPN per Confirmed	<u>l00 g</u> Fecal
la	Feb.	26/74	Feb.	27/74		50	<20
2 ^b	Feb.	26/74	Feb.	27/74		70	20
3 ^C	Feb.	26/74	Feb.	27/74	-	L30	<20

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TABLE 4: OYSTER SHELLSTOCK COLIFORM DATA

a collected at mouth of Waterloo Creek (S12) near station 23
b collected at mouth of S7 near station 19
c collected at station 21

TABLE 5: FLOW DATA FOR STREAMS S2 and S3

Sample		low (gallons per d	lav)
Station	May 7	May 8	May 9
S2		10,800	8,640
S3	4,155	4,547	5,082

Examination of the bacteriological data for station 3 indicates that intermittent pollution resulting from Courtenay and Comox does occur. However, the coliform levels do not present a public health hazard. Furthermore, dilution and dispersion of the effluent sufficiently reduces any potential problem from contaminated input to the growing waters between Gartley Point and Union Point.

4.2 Union Bay

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The waters and tidal foreshore of Union Bay lying within 1000 feet of the Government Wharf are presently under Schedule J closure (Area 14-3).

The closure in Union Bay was imposed due to the poor condition of many of the septic tanks. Union Bay was originally a docking facility for a mining company and many of the present homes are older company houses with original cedar septic tanks that collectively drain into a rock pit and subsequently into ditches with the effluent eventually reaching the foreshore. Approximately 15 drainage culverts service the community of Union Bay and landwash emanating from these culverts flows across the foreshore to the receiving waters. Septic characteristics were observed in four of these culverts, two of which were sampled.

Freshwater inputs S2 and S3 had fecal coliform median MPN's of 340/100 ml and 31,000/100 ml respectively. The flow from these two inputs was very low during the survey period (Table 5) and the impact on the receiving waters was negligible. Sample stations 6 and 7, located offshore from S2 and S3 respectively, exhibited total coliform medians of 7.8/100 ml and 6.2/100 ml. Nevertheless, a significant health hazard does exist since oysters could be picked from those areas over which the drainage flows. Furthermore, during periods of heavy precipitation it is

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conceivable that the receiving water quality would decrease considerably as a result of pollution contributed by the drainage ditches.

Sample stations 5 and 8 were located at the northern and southern extremities respectively, of the 1000 foot wharf closure. Median total and fecal coliform MPN's at station 5 were 6.8/100 ml and 2.0/100 ml, and at station 8, 19/100 ml and 4.4/100 ml, respectively.

4.3 Union Bay to Buckley Bay

Oyster leases exist along most of the coastline in this area and extensive commercial harvesting takes place. There is limited residential development, most of which occurs on the west side of the highway, approximately 800 to 1000 feet from the foreshore. New homes equipped with septic tanks are being constructed between Union Bay and Hindoo Creek. However, they would appear to be a sufficient distance from the foreshore to effectively eliminate any health risk.

There are three major freshwater inputs to these growing waters: S4, located approximately 150 feet north of the Baynes Sound Oyster Co.; S5, (Hindoo Creek), located approximately 200 feet south of SnoCap Pacific Oysters Limited; and S6, which flows into the receiving waters at marine station There was no evidence of fecal contamination in any 12. of these streams. Marine sample station 19, located over oyster beds offshore from the Baynes Sound Oyster Co., and stations 10 and 11, located over oyster beds offshore from SnoCap Pacific Oyster Ltd., all had satisfactory water quality. Both shucking plants utilize chemical toilets to prevent contamination of the growing waters. A single high total coliform MPN of 240/100 ml was observed at station 12, but this would appear to be an isolated case as the water quality on all other sampling days was excellent. A single

dwelling located approximately 200 feet south of S6 is the only source of fecal contamination to the area. However, the septic tank and field are located a sufficient distance from the stream to eliminate any health risk. Stream S6 reportedly only flows in the winter and therefore no pollution sources would be present during the summer months.

Sample station 14 was located north of the Denman Island ferry terminal at Buckley Bay. There appears to be a continuous, low level source of pollution at station 14. However, the water quality is well within the acceptable limits. Station 14 was positioned offshore from five homes equipped with septic tank facilities. The tile fields were positioned well away from the foreshore and there was no evidence of seepage.

The Denman Island ferry has an average 24 hour discharge of 200 Imperial gallons of untreated sewage effluent. There is sufficient dilution of this effluent to eliminate any health risk. Further, the 400 foot closure around the ferry terminal at Buckley Bay provides an adequate safety buffer zone.

4.4 Fanny Bay

Fanny Bay is almost exclusively used for commercial oyster harvesting, with most of the growing areas under lease. Three sample stations were located in Fanny Bay, and all had acceptable water quality. High total coliform MPN's were observed at all three sample stations on February 14 and 15, coincident with heavy precipitation. The corresponding fecal coliform densities were low however, indicating the pollution was of non-fecal origin. Three freshwater inputs, S7, S21 and S8, were monitored as possible sources of fecal contamination. The bacteriological results for S7 (Tsable River) and S8 (Cougar Creek) indicate the absence of fecal pollution in both of these creeks. However, S21 had a fecal coliform median MPN of 420/100 ml most probably resulting from animal fecal matter. This creek drains pastureland located on the west side of the highway and its flow is directly coincident with precipitation intensity. There appeared to be adequate dilution of the creek after entering the receiving waters, as there was no significant deterioration in the quality of these waters (stations 15, 16) even during periods of heavy precipitation.

The remaining houses along the roadway are a sufficient distance from the foreshore so as not to present a health hazard. Mac's Oysters Ltd. shucking plant utilizes a chemical toilet to prevent growing water contamination. Sewage from Mac's Restaurant is pumped under the road to a septic tank and tile field and does not present any danger. The septic tank and tile field for the Fanny Bay Inn are located approximately 1,000 feet from the foreshore, and there was no evidence of seepage into the receiving water.

4.5 Ship Peninsula

The water quality over the oyster leases at Ship Peninsula was acceptable at all stations tested. Three sample stations were located close to shore to monitor possible domestic sewage seepage. Approximately 35 homes and trailers are situated on both sides of the road along the foreshore, but only 8 are permanently occupied, the others being summer homes. Some evidence of fecal contamination was observed at S9, a drainage ditch which flows over the foreshore. The source of the pollution was not pinpointed; however, it is most likely some septic tank seepage combined with natural run-off. The flow from this ditch was minimal and did not impair the water quality at station 20 located offshore from the stream mouth. Also, oysters sampled from the stream bed had a fecal coliform MPN of 20/100 g, suggesting the contamination was insignificant.

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Ships Point Lodge, located at the northern tip of Ship Peninsula, has accommodation for 8 to 10 people and is a possible source of fecal contamination, although this was not observed during the survey period. There are three toilet facilities, and the septic tank is located 20 feet from the high water mark with a 12 foot tile field directed towards the foreshore.

4.6 Mud Bay

Oyster leases occupy most of the growing waters in Mud Bay, with two shucking plants operating in the area. Sample stations were located over oyster beds offshore from the Reef Oyster Cooperative shucking plant and the Oyster House Select Oysters shucking plant and also near the mouth of Coal Creek (Wilfred Creek). A fourth sample station was located in the small bay south of Ship Peninsula

The bacteriological results indicate significant contamination of the growing waters at station 23. The total coliform median MPN is 27.5/100 ml; however, 12.5% of the samples exceed the acceptable 90 percentile limit. The major source of the pollution to the growing waters is the Waterloo Creek (S12), where a total coliform median MPN of 540/100 ml for 13 samples was observed. The probable source of contamination to Waterloo Creek is a small farm situated near the southern bank of the creek. A small creek which flows past the farm's septic tank and tile field and subsequently enters the Waterloo Creek exhibited total coliform densities of 2400/100 ml and 5400/100 ml, suggesting septic tank seepage. Two goats were also seen grazing in the area, suggesting the possibility of direct fecal contamination to the creek. The creek was not subject to contamination from any other dwellings; however, coliform densities increased coincident with heavy rainfall, suggesting landwash

also contributed significantly to the counts observed. One oyster sample taken at the mouth of the Waterloo Creek had low coliform densities (Table 10); however, continued sampling of the oysters would be required to determine a trend in the results.

The water quality at station 24 was satisfactory although intermittent contamination was observed. Sixteen samples were collected at this station and the results can be considered to have good statistical validity. The source of the intermittent pollution was most probably the Waterloo Creek, as there are only four homes situated along the shoreline in this area. The dwellings are located approximately 80 feet from shore with septic tanks and tile fields located approximately 30 feet from the high water mark. A small creek drains this area (S14); however, there was no evidence of significant fecal contamination. The Reef Oyster Cooperative shucking plant utilizes chemical toilets to prevent growing water contamination.

Sample stations 21 and 22 both exhibited excellent water quality during the survey period. Oysters sampled from station 21 had very low coliform densities (Table 4). Homes on Ship Peninsula in the area of station 21 may be a possible source of contamination during the summer months, but did not present a problem during the survey period as they were unoccupied. Coal Creek (S10, S11) provides a significant freshwater input to station 22. Coliform densities in the creek were low during the survey period; it is subject to direct contamination by 6 cows and a number of chickens on a small farm located near the highway. Three houses in the vicinity are served by septic tank absorption field systems located 60 to 200 feet from the creek.

4.7 Deep Bay

Sample stations 25 through 28 were located along the tidal foreshore between Mud Bay and Deep Bay. All stations had acceptable water quality during the survey period. Several creeks (S15 through S20) drain into the receiving waters in this area; however, none exhibited evidence of significant fecal contamination. There is very little development along the entire shoreline, thus there is little, if any, domestic sewage pollution.

There is some development in Deep Bay, with about 6 to 12 permanent residences along the foreshore. Approximately 24 homes and 10 trailers are situated along the spit, but only four homes were occupied during the survey period, the remainder being summer dwellings.

The government wharf was used primarily for moorage of fishing boats during the survey period and pollution from this source was minimal. A 1,000 foot closure is presently in effect around the government wharf.

4. CONCLUSIONS

- (i) The waters and tidal foreshore of Baynes Sound, from Gartley Point to Deep Bay are of acceptable shellfish growing water quality, with the exception of the growing waters at the mouth of Waterloo Creek.
- (ii) The sanitary survey of Union Bay indicates that many of the sewage disposal systems may be faulty and therefore the waters and tidal foreshore of Union Bay are subject to bacterial contamination during periods of heavy rainfall.

- (iii) The 400 foot wharf closure at Buckley Bay is adequate.
- 6. RECOMMENDATIONS
 - (i) The 1000 foot wharf closure at Union Bay should remain in effect until the septic tank seepage problem is rectified.
 - (ii) The waters off the mouth of Waterloo Creek should be closed to the taking of shellfish and signs should be erected on the foreshore to indicate the extent of the closure. A recommended closure would read: "The waters of Baynes Sound lying within a quarter mile radius measured from the mouth of Waterloo Creek located north of Mud Bay."
 - (iii) The present 1000 foot wharf closure at Deep Bay (Schedule J contaminated area 14-2) should be maintained until a summer water monitoring program has established that the impact of summer home occupancy and recreational boating does not extend beyond the general wharf closure of 400 feet.

REFERENCES

- 1. <u>Recommended Procedures for the Examination of</u> <u>Sea Water and Shellfish</u>, 1970, Fourth edition. Amer. Public Health Assoc., N.Y.
- 2. <u>Standard Methods for the Examination of Water</u> <u>and Wastewater</u>, 1971, 13th ed. Amer. Public Health Assoc., N.Y.
- 3. Shellfish Growing Water Sanitary Survey of Denman Island, Report EPS 5-PR-74-9, 1974, Pollution Abatement Branch, Environmental Protection Service, Environment Canada.

ACKNOWLEDGEMENTS

B. Kay, Bacteriologist, and M. Gaertner, Bacteriological Technician, conducted the bacteriological analyses in the Environmental Protection Service mobile laboratory located at Fanny Bay. Mr. Kay compiled the bacteriological data.

Mr. K. Cooper, Engineering Technician, and Mr. G. Derksen, Biological Technician, conducted the Sanitary Survey and carried out the sampling program.

APPENDIX I

SAMPLE STATION LOCATION DESCRIPTIONS

TABLE6:MARINE SAMPLE STATION LOCATIONS

TABLE7:FRESHWATER SAMPLE STATION LOCATIONS

TABLE 6 : MARINE SAMPLE STATION LOCATIONS.

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Sample Station	Latitude	Longitude	Location
1	49°38'16".0N	124°54'48".0W	Southside of Gartley Pt.
2	49°37'56".0N	124°54'40".0W	Off Lynn Maur Resort
3	49 °37'27".0N	124°52 ' 45".0W	Between Lighthouse on Vancouver Is. and Seal Islet
4	49°36'25".0N	124°53'23".0W	Opposite Longbeak Pt.
5	49°35'10".0N	124°52'58".0W	Union Bay \sim 1500' N. of whar
6	49°34'57".ON	124°52'52".0W	Union Bay \sim 400' N. of wharf
7	49°34'37".0N	124°52'45".0W	Union Bay \sim 400' S. of wharf
8	49°34'32".0N	124°52'39".0W	Union Bay \sim 1500' S. of whar
9	49°33'45".0N	124°52'07".0W	Baynes Sound Oysters Ltd.
10	49°33'28".0N	124°52'02".0W	Opposite Denman Point
11	49°32'36".ON	124°51'29".0W	SnoCap Oysters Ltd.
12	49°32'08".0N	124°51'13".0W	Buckley Bay - just N. of 13
13	49°31'58".ON	124°51'05".0W	Buckley Bay
14	49°31'32".ON	124°49'50".0W	Buckley Bay
15	49°30'54".ON	124°49'45".0W	Fanny Bay
16	49°30'42".ON	124°49'45".0W	Fanny Bay
17	49°30'09".0N	124°48'40".0W	Fanny Bay
18	49°30'20".0N	124°48'09".0W	Ship Peninsula
19	49°30'03".ON	124°47'40".0W	Ship Peninsula
20	49°29'42".ON	124°47'18".0W	Ship Peninsula

TABLE 6: Cont'd

Sample Station	Latitude	Longitude	Location
21	49°29'30".ON	124°47'40".0W	Ship Peninsula
22	49°28'55".ON	124°47'25".0W	Mud Bay
23	49°28'14".ON	124°47'25".0W	Mud Bay
24	49°27'52".ON	124°47'14".0W	Mud Bay
25	49°28'03".ON	124°45'41".0W	Mud Bay
26	49°27'36".ON	124°44'54".0W	Deep Bay
27	49°27'45".0N	124°43'45".0W	Deep Bay \sim 400' S. of wharf
28	49°27'59".ON	124°44'10".0W	Deep Bay

Sample Station	Location
Sl	Mouth of Washer Creek, Union Bay
S2	Culvert \sim 400' N. of wharf, Union Bay
S3	Culvert \sim 400' S. of wharf, Union Bay
S4	Unnamed creek N. side of Baynes Sound Oysters Ltd.
S5	Hindoo Creek S. side of SnoCap Oysters Ltd.
S6	Mouth of unnamed creek just north of Buckley Bay.
S7	Tsable River at Island Hwy. bridge.
S8	Cougar Creek at Island Hwy. bridge.
S9	Mouth of storm water ditch, Ship Peninsula at intersection of Ship Point Road and Baynes Road
S10	Coal Creek at Island Hwy.
S11	Mouth of Coal Creek
S12	Waterloo Creek at Island Hwy.
S13	Ditch on westside of Island Hwy. draining into Waterloo Creek.
S14	Mouth of first unnamed creek south of Waterloo Creek.
S15	Rosewall Creek at Island Hwy.
S16	Small stream just north of McNaughton Creek.
S17	McNaughton Creek at Island Hwy.
S18	Cook Creek at Island Hwy.
S19	First unnamed creek south of Cook Creek at Island Hwy.
S20	Second unnamed creek south of Cook Creek at Island Hwy.

TABLE 7 : FRESHWATER SAMPLE STATION LOCATIONS

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APPENDIX II

BACTERIOLOGICAL RESULTS AND SAMPLING CONDITIONS

- TABLE 8:SUMMARY OF FECAL COLIFORM MPN DATA FOR
PROPOSED SHELLFISH GROWING WATER STANDARDS
- TABLE 9: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES
- TABLE 10: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR FRESHWATER SAMPLES

Sample Station	Number of Samples	MPN Range	Median MPN per 100 ml	<pre>% Exceeding 43 MPN/100 ml</pre>	<pre>% Exceeding 76 MPN/100 ml</pre>
1	10 <	< 1.8 - 22	3.0	0.0	0.0
2	6 <	< 1.8 - 2.0	1.8	0.0	0.0
3	10 <	< 1.8 - 33	3.0	0.0	0.0
4	6 <	< 1.8 - 23	5.9	0.0	0.0
5	10 <	< 1.8 - 6.8	2.0	0.0	0.0
6	10 <	< 1.8 - 7.8	2.0	0.0	0.0
7	10 <	< 1.8 - 7.8	∿ 1.9	0.0	0.0
8	10 <	< 1.8 - 13	4.4	0.0	0.0
9	10 <	< 1.8 - 23	∿ 1.9	0.0	0.0
10	7 <	< 1.8 - 2.0	< 1.8	0.0	0.0
11	10 <	< 1.8 - 4.5	< 1.8	0.0	0.0
12	11 <	< 1.8 - 130	< 1.8	9.1	9.1
13	6 <	< 1.8 - 2.0	< 1.8	0.0	0.0
14	10 <	< 1.8 - 23	2.0	0.0	0.0
15	9 <	< 1.8 - 6.1	< 1.8	0.0	0.0
16	11 <	< 1.8 - 6.8	< 1.8	0.0	0.0
17	11 <	< 1.8 - 11	< 1.8	0.0	0.0
18	8 <	< 1.8 - 4.5	< 1.8	0.0	0.0
19	10 <	< 1.8 - 17	< 1.8	0.0	0.0
20	9 <	< 1.8 - 4.0	< 1.8	0.0	0.0
21	9 <	< 1.8 - 4.0	1.8	0.0	0.0
22	9 <	< 1.8 - 4.5	< 1.8	0.0	0.0
23	16 .<	< 1.8 - 130	4.1	12.5	6.25
24	16 <	< 1.8 - 17	4.5	0.0	0.0
25	· 9 <	< 1.8 - 2.0	< 1.8	0.0	0.0
26	11 <	< 1.8 - 4.5	< 1.8	0.0	0.0
27	10 <	< 1.8 - 4.0	< 1.8	0.0	0.0
28	12 <	< 1.8 - 13	< 1.8	0.0	0.0

TABLE 8 : SUMMARY OF FECAL COLIFORM MPN DATA FOR PROPOSED SHELLFISH GROWING WATER STANDARDS.*

* U.S. Food and Drug Administration proposed standards per 100 ml.
(1) Proposed at Microbiology Task Force Meeting June, 1973 median MPN of 23, 90 percentile of 76.

(2) Proposed at 8th National Shellfish Sanitation Workshop median MPN of 14, 90 percentile of 43.
TABLE	9 : BAC	TERIOI	LOGICAL	ANALYSES	RESULTS 1	AND SAMPLIN(CONDIT.	IONS FOR M	ARINE SA	MPLES.	
Sample	Station:	Ч		::	Locatic	on: Baynes	Sound -	Gartley P	oint		1
Date	Sample	T. Cond	ide itions	Water Temp.	Total Précip.	Wind	Local Sea	Salinity	Colif MPN/ 1	corm 100 ml	
(1974)	Time	Time	Ht.(Ft)	() (°C)	(in.)	(mph)	Cond.	(ppt)	Total	Fecal	1
Apr 17	1600	1400 1955	10.6 6.9	11.0	0.0	E@ 2-5	8	14.0	23	<1.8	
Apr 18	1100	0925 1510	7.1 11.2	10.0	0.01	Ед 3-7	ripple	16.5	22	6.1	
Apr 19	1115	0950 1605	6.1 12.0	ł	0.02	SE@ 15-18	1	1	33	4.5	
Apr 22	1420	1120 1820	2.9 13.9	9.6	0.12	NE@ 3-11	-	18.0	49	<1.8	•
Apr 23	1045	0500 1200	13.8 2.2	9.5	TR	NW@ 9-13	1	21.0	17	20	
Apr 24	1055	0530 1240	13.8 1.7	ł	0.02	NW@ 4-11	1	1	<1.8	<1.8	
Apr 25	1215	0600 1325	13.6 1.6	8.5	0.71	SE@ 6-14	ripple	0.6	34	22	
Apr 26	1100	0645 1410	13.1 1.8	8.0	0.24	Ee 3 - 6	ripple	13.5	70	6.8	
Apr 29	1700	1100 1800	11.0 4.2	12.2	TR	Еез-9	ripple	12.0	14	<1.8	
Apr 30	1510	1245 1910	10.7	ł	0.01	NE@ 9-16	ł	;	4.0	4.0	

TABLE	. 9 : BA	CTERIO	LOGICAL A	NALYSES	RESULTS A	ND SAMPLING	G CONDIT	IONS FOR M	ARINE SA	MPLES.
Sampl	e Station	: 2			Locatio	n: Off Ly1	nn Maur	Resort		
Date (1974)	Sample Time	T Cond Time	ide itions Ht.(Ft))	Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Local Sea Cond.	Salinity (ppt)	Colif MPN/1 Total	orm 00 ml Fecal
Apr 2	9 1655	1100 1800	11.0 4.2	12.5	ŢŖ	EG 3 - 9	ripple	12.0	<1.8	<1.8
Apr 3	0 1500	1245 1910	10.7 5.2	ł	0.01	NE@ 9-16	!	 	79	1.8
May [`] l	1625	1430 2020	10.9 6.2	1	0.02	SE@ 12-16	!	1	17	<1.8
May 2	1230	0940 1555	5.5 11.7	10.0	TR	SE@ 7-12	choppy	13.0	7.8	1 . 8
May 3	1005	0335 1025	14.0 4.2	8.5	0.0	SE@ 6-10	ripple	19.0	13	2.0
May 6	1230	1225 1940	2.1 14.3	8	0.11	SE@ 7-15	i I	3	350	2.0

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TABL	មា	9: BAC	TERIO	LOGICAL	ANALYSES	RESULTS A	ND SAMPLIN	G CONDIT	IONS FOR M	ARINE S.	AMPLES.	
Samp	le	Station:	m			Locatic	n: Mid cha	nnel of l	North Bayn	es Sound	I	
Date	. ~	Sample Time	T. Cond	ide itions	Water Temp.	Total Precip.	Wind ("mob	Local Sea	Salinity ()	Coli MPN/ Total	form 100 ml	
			Time	Ht.(Ft)		(•117)	(ហៅរហ	colla.	(PPC)	LUCAL	гесат	1
Apr .	18	1100	0925 1510	7.1 11.2	10.0	0.01	E@ 3 - 7	ripple	18.5	33	2.0	
Apr ;	22	1415	1120 1820	2.9 13.9	9.5	0.12	NE@ 3-11	ripple	20.0	49	4.0	
Apr ;	23	1040	0500 1200	13.8 2.2	9.5	ТК	NW8 9-13	1	20.2	17	4.5	
Apr	24	1055	0530 1240	13.8 1.7	1	0.02	NW@ 4-11	8		21	<1.8	
Apr ;	25	1210	0600 1325	13.6 1.6	8.5	0.71	SE@ 6-14	ripple	6.5	49	33	
Apr ;	26	1050	0645 1410	13.1 1.8	8.0	0.24	E@ 3 - 6	ripple	16.5	130	14	
Apr ;	29	1650	1100 1800	11.0 4.2	12.2	TR	Ее 3 – 9	ripple	17.0	2.0	<1.8	
Apr	30	0360	0805 1245	8.3 10.7	10.0	0.01	NE@ 9-16	ł	23.5	е С	4.5	
Мау	2	1225	0940 1555	5.5 11.7	9.5	TR	SE@ 7-12	choppy	19.0	23	2.0	
May (80	1040	0625 1335	12.9 2.2	10.0	TR	SE@ 0-18	ripple	24.0	13	2.0	

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SAMPLES
MARINE
FOR
CONDITIONS
SAMPLING
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RESULTS
ANALYSES
BACTERIOLOGICAL
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TABLE

Sample	Station:	4			Locatic	n: Baynes	Sound			
14		E	ide	Water	Total		Local		· [00	f. rm
Date (1974)	Sample Time	Cond Time	itions Ht.(Ft))	Temp. (°C)	Precip. (in.)	Wind (hqm)	Sea Cond.	Salinity (ppt)	MPN/ Total	Fecal
Apr 29	1645	1100 1800	11.0 4.2	12.8	TR	Ee 3 - 9	ripple	25.0	4.0	2.0
Apr 30	1450	1245 1910	10.7 5.2	!	0.01	NE@ 9-16	ł	1	4.5	<1.8
May l	1615	1430 2020	10.9 6.2	ł	0.02	SE@ 12-16	ł		7.8	7.8
May 2	1220	094 0 1555	5.5 11.7	0.6	TR	SE@ 7-12	сһорру	0.6	23	. 13
May 3	0955	0335 1025	14.0 4.2	10.0	0.0	SE@ 6-10	ripple	20.0	23	23
May 6	1215	0525 1225	13.4 2.1	ł	0.11	SE@ 7-15	ł	;	12	4.0

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TABLE	9: BAC	CTERIOL	OGICAL AN	VALYSES	RESULTS A	ND SAMPLIN	CONDIT.	IONS FOR M	ARINE S	AMPLES.
Sample	Station	ۍ ۲			Locatio	n: Union	вау			
Date	Sample	Ti Condi	de tions	Water Temp.	Total Precip.	Wind	Local Sea	Salinity	Coli MPN/	form 100 ml
(1974)	Time	Time	Ht.(Ft))	(°C)	(in.)	(hgm)	Cond.	(ppt)	Total	Fecal
Apr 17	1540	1400 1955	10.6 6.9	11.Ó	0.0	E@ 2 - 5	1	17	4.0	<1.8
Apr 18	1050	0925 1510	7.1 11.2	10.8	0.01	E@ 3 - 7	ripple	16.8	<1.8	<1.8
41. JQA	1135	0950 1605	6.1 12.0	ł	0.02	SE@ 15-18	ł	ł	2.0	2.0
Apr 22	1415	1120 1820	2.9 13.9	9.2	0.12	NE@ 3-11	ripple	22.8	22	2.0
Apr 23	1035	0500 1200	13.8 2.2	9.5	ТК	NW@ 9-13	8	22.0	13	2.0
Apr 24	1045	0530 1240	13.8 1.7	11.5	0.02	NW@ 4- 11	ripple	23.2	4.0	4.0
Apr 25	1205	0600 1325	13.6 1.6	9.5	0.71	SE@ 6-14	ripple	24.0	6.8	4.5
Apr 26	1045	0645 1410	13.1 1.8	0.6	0.24	E@ 3 - 6	ripple	19.0	79	2.0
Apr 29	1255	1100 1800	11.0 4.2	ł	TR	Eê 3 - 9	ł	2 .	11	2.0
Apr 30	1445	1245 1910	10.7 5.2	:	0.01	NE@ 9-16	;	ł	6.8	6.8

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TABLE	9: BA(CTERIOL	OGICAL AI	NALYSES	RESULTS P	AND SAMPLIN	CONDIT	TONS FOR M	ARINE S.	AMPLES.
Sample	Station	•			Locatic	n: Union	Bay			
Dato	Slumes	Ţİ.	đe	Water	Total Dragin	נעילי דער בערלי בער	Local	utinileo	Coli MDN/	form
1974)	Time	Cond Time	ltions Ht.(Ft))	(C))	recip.	(udu)	Cond.	ppt) (ppt)	Total	Fecal
Apr 29	1245	1100 1800	11.0 4.2	1	TR	Ед 3 - 9	L I) 	2.0	2.0
Apr 30	1440	1245 1910	10.7 5.2	1	0.01	NE@ 9-16	I I	1 1	13	2.0
May l	1600	1430 2020	10.9 6.2	1	0.02	SE@ 12-16	t I	1	с. 6	2.0
May 2	1155	0940 1555	5.5 11.7	9.2	ТК	SE@ 7-12	ripple	. 17.0	4.5	< 1.8
May 3	0945	0335 1025	14.0 4.2	9.2	0.0	SE@ 6-10	ripple	21.2	7.8	7.8
May 6	1200	0525 1225	13.4 2.1	ł	0.11	SE@ 7-15	1	1	2.0	2.0
May 7	1210	0555 1300	13.2 2.0	}	0.03	SE@ 13-23	6	1	<1.8	<1.8
cMay 8	1130	0625 1335	12.9 2.2	10.0	TR	SE@ 0-18	сһорру	25.0	14	<1.8
May 9	1400	0705 1415	12.6 2.6	:	0,22	S@ 5 - 17	1	1	13	2.0
May 10	06 60	0740 1450	12.1 3.2	;	Т.	NE@ 2-10	5 1	1	7.8	4.5

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TABLE	9: BAC	CTERIOI	LOGICAL A	NALYSES	RESULTS 1	AND SAMPLIN	G CONDIT.	IONS FOR M	ARINE S.	AMPLES.
Sample	Station:	: 7			Locatic	n: Union H	Зау			
Date	Sample	T. Cond	ide itions	Water Temp.	Total Precip.	Wind	Local Sea	Salinity	Coli MPN/	form 100 ml
(19/4)	TIME	Time	Ht.(Ft))	(c)	(in.)	(udm)	Cond.	(ppt)	Total	Fecal
Apr 26	1040	0645 1410	13.1 1.8	0•6	0.24	E@ 3 - 6	ripple	18.7	49	4.5
Apr 29	1230	1100 1800	11.0 4.2	ł	TR	Ед 3 – 9	ł	ł,	7.8	¢1.8
Apr 30	1430	1245 1910	10.7 5.2	ł	0.01	NE@ 9-16	ł	!	4.5	<l.8< td=""></l.8<>
May l	1600	1430 2020	10.9 6.2	ł	0.02	SE@ 12-16	1	 	23	2.0
May 2	1150	0940 1555	5.5 11.7	0.6	TR	SE@ 7-12	ripple	13.0	4.5	<1.8
May 3	0935	0335 1025	14.0 4.2	9.4	0.0	SE@ 6-10	ripple	25.0	17	7.8
May 6	1200	0525 1225	13.4 2.1	!	0.11	SE@ 7-15	ł	1	11	4.0
May 7	1200	0555 1300	13.2 2.0	!	0.03	SE@ 13-23	ł	4 8	4.5	<1.8
May 8	1130	0625 1335	12.9 2.2	10.2	TR	SE@ 0-13	сһорру	23.5	2.0	<1.8
Мау 9	1350	0705 1415	12.6 2.6	ł	0.22	S@ 5 - 17	:	ł	4.5	2.0

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TABLE	9: BAC	TERIOLO	GICAL	ANALYSES	RESULTS A	ND SAMPLIN	CONDIT.	IONS FOR M	ARINE SI	AMPLES.	
Sample	Station:	80			Locatio	n: Union 1	Вау	•			1
Date	Sample	Tide Condit:	e ions	Water Temp.	Total Precip.	Wind	Local Sea	Salinity	Coli MPN/	form 100 ml	
(1974)	Time	Time H	t.(Ft)) (°C)	(in.)	(uph)	Cond.	(ppt)	Total	Fecal	1
Apr 17	1530	14 00 1955	10.6 6.9	11.0	0.0	E@ 2 - 5	1	14.0	49	13	
Apr 18	1040	0925 1510	7.1 11.2	10.0	0.01	E@ 3 - 7	ripple	16.0	2.0	<1.8	
Apr '19	1145	0950 1605	6.1 12.0	1	0.02	SE@ 15-18	1	1	17	<1.8	
Apr 22	1410	1120 1820	2.9 13.9	0.0	0.12	NE@ 3-11	ripple	21.5	33	7.8	
Apr 23	1030	0500 1200	13.8 2.2	9.5	TR	NW@ 9-13	ł	21.5	21	7.8	
Apr 24	1040	0530 1240	13.8 1.7	10.5	0.02	NW@ 4-11	ripple	23.0	49	6.8	
Apr 25	1200	0600 1325	13.6 1.6	9.5	0.71	SE@ 6-14	ripple	25.5	7.8	2.0	
Apr 26	1035	0645 1410	13.1 1.8	8.8	0.24	E@ 3-6	ripple	17.0	79	6.8	
Apr 29	1225	1100 1800	11.0 4.2	!	TR	Ee 3 - 9	ł	*	2.0	2.0	
Apr 30	1420	1245 1910	10.7 5.2	ł	0.01	NE@ 9-16	1	!	6.8	<۲ . 8	

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TABLE	9: BA(TERIOI	COGICAL	ANALYSES	RESULTS A	ND SAMPLIN	G CONDIT	IONS FOR M	IARINE S.	AMPLES.	
Sample	Station	6			Locatio	n: Baynes	Sound O	ysters Ltd	•		
		T.	ide	Water	Total		Local		Coli	form	
Date (1974)	Sample Time	<u>Cond</u> Time	itions Ht.(Ft)	Temp.	Precip. (in.)	Wind (hqm)	Sea Cond.	Salinity (ppt)	MPN/ Total	<u>100 ml</u> Fecal	
Apr 17	1530	1400 1955	10.6 6.9	11.0	0.0	Ед 2 – 5		16.0	49	23	
Apr 18	1040	0925 1510	7.1 11.2	10.0	0.01	E@ 3 - 7	ripple	1,5.5	<1.8	<1.8	
Apr 19	1155	0950 1605	6.1 12.0	1	0.02	SE@ 15-18	1	ł	2.0	<1.8	
Apr 22	1405	1120 1820	2.9 13.9	9.1	0.12	NE@ 3-11	ripple	. 21.0	23	2.0	
Apr 23	1025	0500 1200	13.8 2.2	0.0	ТК	NW@ 9-13	1	21.2	17	4.5	
Apr 24	1040	0530 1240	13.8 1.7	10.5	0.02	NW@ 4- 11	ripple	23.2	<1.8	<1.8	
Apr 25	1155	0600 1325	13.6 1.6	9.5	0.71	SE@ 6-14	ripple	25.5	2.0	<1.8	
Apr 26	1030	0645 1410	13.1 1.8	8 8	0.24	EG 3 1 6	ripple	. 18.0	49	4.0	
Apr 29	1220	1100 1800	11.0 4.2	2 2	ТК	E@ 3 - 9	1	1	33	4.5	
Apr 30	1415	1245 1910	10.7 5.2	8	0.01	NE@ 9-16	ł	8	14	<1.8	

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SAMPLES
MARINE
FOR
CONDITIONS
SAMPLING
AND
RESULTS
ANALYSES
BACTERIOLOGICAL
** 0
TABLE

Sample	Station:	10			Locatio	n: Baynes	Sound			
Date (1974)	Sample Time	Tic Time	de tions Ht.(Ft))	Water Temp. (°C)	Total Precip. (in.)	Wind (moh)	Local Sea Cond	Salinity	Colif MPN/]	orm 00 ml
						(J)		いしどし	TOLAT	Fecal
Apr 17	1520	1400 1955	10.6 6.9	12.0	0.0	E@ 2 - 5	ł	14.0	7.8	<1.8
Apr 18	1030	0925 1510	7.1	10.0	0.01	E@ 3 - 7	ripple	16.5	23	2.0
Apr 19	1220	0950 1605	6.1 12.0	1	0.02	SE@ 15-18	-	1	<1.8	<1.8
Apr 22	1400	1120 1820	2.9 13.9	0.0	0.12	NE@ 3-11	ripple	22.9	49	<].
Apr 23	1020	0500 1200	13.8 2.2	0.0	TR	NW@ 9-13	ł	22.0	4.5	2.0
Apr 24	1030	0530 1240	13.8 1.7	10.0	0.02	NW@ 4-11	ripple	22.2	<1.8	<1.8
Apr 25	1150	0600 1325	13.6 1.6	9.5	0.71	SE@ 6-14	ripple	26.0	2.0	2.0

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TABLE	9: BA(CTERIOL	OGICAL	ANALYSES	RESULTS A	AND SAMPLINC	CONDIT	IONS FOR M	ARINE SA	AMPLES.	
Sample	Station:	11			Locatic	n: SnoCap	Oysters	itd.			
Date (1974)	Sample Time	Ti Condi Time	de tions Ht.(Ft)	Water Temp.	Total Precip. (in.)	Wind (hqm)	Local Sea Cond.	Salinity (ppt)	Colif MPN/ 1 Total	form 100 ml Fecal	
Apr 17	1515	1400 1955	10.6 6.9	11.0	0.0	E@ 2 - 5	1	14.0	13	<1.8	1
Apr 18	1030	0925 1510	7.1 11.2	10.2	0.01	E@ 3 - 7	ripple	18.8	< 1 .8	<1.8	
Apr 19	1230	0950 1605	6.1 12.0	ł	0.02	SE@ 15-18	1	1	<1.8	<1.8	
Apr 22	1400	1120 1820	2.9 13.9	0.6	0.12	NE@ 3-11	ripple	23.6	13	< 1. 8	•
Apr 23	1015	0500 1200	13.8 2.2	9.2	ТК	NW@ 9-13	3	22.2	2.0	<1.8	
Apr 24	1030	0530 1240	13.8 1.7	10.2	0.02	NW@ 4-11	ripple	22.0	<1.8	<1.8	
Apr 26	1025	0645 1410	13.1 1.8	0.6	0.24	E@ 3 - 6	calm	16.0	130	4.5	
Apr 29	1210	1100 1800	11.0 4.2	ł	TR	Ee 3 - 9	1		<1.8	<1.8	
Apr 30	1410	1245 1910	10.7 5.2	ł	0.01	NE@ 9-16	1: 1:	1 · 1	<1.8	<1.8	
May l	1555	1430 2020	10.9 6.2	ł	0.02	SE@ 12-16	1	ł	<1.8	<1.8	

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TABLE	.9: BAC	TERIOLC	DGICAL 1	ANALYSES	RESULTS A	ND SAMPLIN	G CONDIT.	IONS FOR M	ARINE SI	AMPLES.
Sample	Station:	: 12			Locatio	n: Buckle	Y Bay			
i.		Tic	le	Water	Total	-	Local		Coli	form
Date (1974)	Sample Time	Condi ¹ Time I	tions Ht.(Ft))	Temp.	Precip. (in.)	Wind (hqm)	Sea Cond.	Salinity (ppt)	MPN/ Total	100 ml Fecal
Apr 26	1020	0645 1410	13.1 1.8	0.6	0.24	E@ 3 - 6		19.0	33	1.8
Apr 29	1155	1100 1800	11.0 4.2	ł	TR	Ед 3 – 9	ł	1	<1.8	<1.8
Apr 30	1400	1245 1910	10.7 5.2	1 1	0.01	NE@ 9-16	1	1	240	130
May l	1520	14 30 2020	10.9 6.2	ł	0.02	SE@ 12-16	ł	•	4.5	2.0
May 2	1130	0940 1555	5.5	9.2	TR	SE@ 7-12	ripple	26.5	4.5	<1.8
Мау З	0920	0335 1025	14.0 4.2	9.6	0.0	SE@ 6-10	ripple	22.0	<1.8	<1.8
May 6	1145	0525 1225	13.4 2.1	ł	0.11	SE@ 7-15	1	ł	2.0	<1.8
May 7	0915	0555 1300	13.2 2.0	ł	0.03	SE@ 13-23	ł	8	2.0	<1.8
May 8	1120	0625 1335	12.9 2.2	9.8	TR	SE@ 0-18	choppy	20.0	17	<1.8
May 9	1345	0705 1415	12.6 2.6	F B	0.22	S@ 5-17	ł	!	<1.8	<1.8
May 10	0945	0740 1450	12.1 3.2	1	. TR	NE@ 2-10	L L	1	2.0	<1.8

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TABLE	9: BA(CTERIOL	OGICAL A	NALYSES	RESULTS 1	AND SAMPLIN	CONDIT.	IONS FOR M	ARINE SI	AMPLES.
Sample	Station	: 13			Locatic	n: Buck	ley Bay			
Date (1974)	Sample Time	Ti Condi Time	lde itions Ht.(Ft))	Water Temp. (°C)	Total Precip. (in.)	Wind (hqm)	Local Sea Cond.	Salinity (ppt)	Colif MPN/] Total	Fecal
Apr 17	1510	1400 1955	10.6 6.9	11.5	0.0	E@ 2 - 5	1	18.0	7.8	2.0
Apr 18	1020	0925 1510	7.1 11.2	11.0	0.01	E@ 3 - 7	ripple	20.5	2.0	2.0
Apr 19	1240	0950 1650	6.1 12.0		0.02	SE@ 15-18	1	ł	4.5	<1.8
Apr 22	1355	1120 1820	2.9 13.9	0.6	0.12	NEG 3-11	ripple	25.0	4.5	<1.8
Apr 23	1010	0500 1200	13.8 2.2	9.5	ТК	NW@ 9-13	ł	22.0	<1.8	<l.8< td=""></l.8<>
Apr 24	1020	0530 1240	13.8 1.7	10.0	0.02	NW@ 4-11	ripple	23.2	2.0	<1.8

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TABLE	9 : BA(TERIOL	OGICAL A	NALYSES	RESULTS A	ND SAMPLINC	3 CONDIT	IONS FOR M	IARINE S	AMPLES.	
Sample	Station	: 14			Locatio	n: Buckle	Y Bay				
Date (1974)	Sample Time	Ti Condi Time	.de <u>[tions</u> Ht.(Ft])	Water Temp. (°C)	Total Precip. (in.)	Wind (hqm)	Local Sea Cond.	Salinity (ppt)	Coli MPN/ Total	form 100 ml Focal	
Feb. 12	1400	0850 1600	14.8 4.9	6.5	0.32	NW@ 7-10	сһорру	27.5	<1.8	<1.8	1
Feb 13	1020	0925 1655	14.1 4.8	ດ	0.82	SE@ 28-33	choppy	25.0	49	2.0	
Feb ¹ 4	0940	0445 0955	11.2	6.2	0.27	E@ 3 - 14	calm	27.5	49	4.5	
Feb 15	0935	0640 1040	11.8	6.2	1.01	SE@ 8-18	choppy	27.0	22	2.0	
Feb 18	1450	1420 2130	12.1 4.5	6.0	0.32	SE@ 9-15	choppy	26.5	17	1.8	
Feb 19	0945	0510 1040	14.2 10.4	6.0	0.0	N@ 0 - 5	calm	25.5	с С	11	
Feb 20	1545	1100 1555	9.9 12.7	ł	0.09	SE@ 23-31		1	33	23	
Feb 21	1040	0550 1130	14.3 9.2	6.8	0.58	NE@ 2 - 8	choppy	27.5	13	<1.8	
Feb 22	0830	0610 1200	14.5 8.5	4.8	TR	SE@ 3-18	ripple	22.0	49	7.8	
Feb 26	1035	0735 1425	14.6 5.3	6.0	TR	N@ 2 - 7	ripple	27.0	33	<1.8	

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TABLE	9: BAC	TERIOL	OGICAL 1	ANALYSES	RESULTS A	ND SAMPLING	G CONDIT.	IONS FOR M	IARINE SI	AMPLES.
Sample	Station:	15			Locatio	n: Fanny	Вау			
Date	Sample mimo	Ti Condi	de tions	Water Temp.	Total Precip.	Wind	Local Sea	Salinity	Coli MPN/	form 100 ml
(1) (1)	allit t	Time	Ht.(Ft)) (20)	(• UT)	(udw)	cond.	(ppt)	Total	Fecal
Feb 12	1345	0850 1600	14.8 4.9	6.0	0.32	NW@ 7-10	choppy	22.0	<1.8	<1.8
Feb 13	1010	0925 1655	14.1 4.8	6.0	0.82	SE@ 28-33	choppy	26.0	17	4.5
Feb 14	0935	0445 0955	11.2 13.4	4.5	0.27	E@ 3 - 14	calm	19.0	49	1.8
Feb 15	0830	0640 1040	11.8 12.7	6.4	1.01	SE@ 8-18	сћорру	. 27.0	170	<1.8
Feb 18	1450	1420 2130	12.1 4.5	6.5	0.32	SE@ 9-15	choppy	25.5	7.8	< 1. 8
Feb 19	0940	0510 1040	14.2 10.4	5.2	0.0	N@ 0 - 5	calm	27.0	27	6.1
Feb 20	1540	1100 1555	9.9 12.7	1	0.09	SE@ 23-31	ł	-	2.0	2.0
Feb 21	1045	0550 1130	14.3 9.2	6.5	0.58	NE@ 2-8	ripple	27.0	4.5	<1.8
Feb 22	0101	0610 1200	14.5 8.5	6.2	TR	SE@ 3-18	calm	27.5	4.5	<1.8

<u>н</u> , ,	9: BAC	CTERIO	LOGICAL	ANALYSES	RESULTS A	AND SAMPLIN	G CONDIT	IONS FOR M	ARINE S	AMPLES.
	Station:	: 16			Locatic	on: Fanny H	Зау			
	Sample	T. Cond.	ide itions	Water Temp.	Total Precip.	Wind	Local Sea	Salinity	Coli MPN/	form 100 ml
	emt.t.	Time	Ht.(Ft)) (°C)	('uı)	(udm)	Cond.	(ppt)	Total	Fecal
	1340	0850 1600	14.8 4.9	6.0	0.32	NW@ 7-10	сһорру	25.0	14	1.8
	1005	0925 1655	14.1 4.8	5•5	0.82	SE@ 28-33	сћорру	25.0	46	2.0
	0630	0445 0955	11.2 13.4	4.5	0.27	E@ 3 - 14	calm	14.0	350	6.8
	0630	0640 1040	11.8 12.7	6.4	1.01	SE@ 8-18	choppy	27.0	49	< 1 .8
	1445	14 20 2130	12.1 4.5	6.5	0.32	SE@ 9-15	сћорру	27.0	2.0	<1.8
	0935	0510 1040	14.2 10.4	6.0	0.0	N@ 0 - 5	calm	27.0	14	2.0
	1535	1100 1555	9.9 12.7	ł	0.09	SE@ 23-31	ł	1 1	7.8	<1.8
	1050	0550 1130	14.3 9.2	6.2	0.58	NE@ 2-8	ripple	27.0	6.1	<1.8
	1015	0610 1200	14.5 8.5	5.8	TR	SE@ 3-18	calm	26.5	4.5	<1.8
	1155	0800 1505	14.4 4.7	6.0	0.09	SE@ 17-22	1	21.0	1.8	<1.8
	1100	0830 1600	14.1 4.2	6.2	0.62	SE@ 21-27	choppy	27.0	170	4.0

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	VO • •	TOTYTT	LUGICAL A	NALISES	KESULTS	AND SAMPLIF	NG CONDIT	TONS FOR M	ARINE S	AMPLES.
Sample	Station	: 17			Locati	on: Fanny I	Зау			
Date (1974)	Sample Time	T Cond: Time	ide itions Ht.(Ft <u>)</u>)	Water Temp. (°C)	Total Precip. (in.)	Wind (hqn)	Local Sea Cond.	Salinity (ppt)	Coli MPN/ Total	form 100 ml Fecal
Feb 12	1330	0850 1600	14.8 4.9	6.0	0.32	01-1 0mn	сһорру	23.0	13	4.5
Feb 13	1000	0925 1655	14.1 4.8	6.5	0.82	SE@ 28-33	choppy	28.0	7.8	2.0
Feb 14	0925	0445 0955	11.2 13.4	3.8	0.27	Ee 3 - 14	calm	. 0.6	540	11
Feb 15	0920	0640 1040	11.8 12.7	6.4	1.01	SE@ 8-18	ripple	28.0	2.0	2.0
Feb 18	1440	1420 2130	12.1 4.5	6.5	0.32	SE@ 9-15	ripple	28.0	4.5	< 1. 8
Feb 19	0830	0510 1040	14.2 10.4	5.0	0.0	N@ 0 - 5	calm	26.0	4.5	2.0
Feb 20	1510	1100 1555	9.9 12.7	1	0.09	SE@ 23-31	8	ł	7.8	<1.8
Feb 21	1055	0550 1130	14.3 9.2	6.0	0.58	NE@ 2-9	ripple	25.5	2.0	<1.8
Feb 22	1020	0610 1200	14.5 8.5	5.0	TR	SE@ 3-18	calm	26.0	7.8	<1.8
Feb 27	1150	0800 1505	14.4 4.7	5.0	0.09	SE@ 17-22	ł	13.0	17	<1.8
Feb 28	1110	0830 1600	14.1 4.2	6.2	0.62	SE@ 21-27	срорру	28.5	11	<l.8< td=""></l.8<>

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9: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES. TABLE

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Sample	Station	: 18			Locatic	n: Ship I	Peninsula	•		
Date (1974)	Sample Time	Ti Condi Time	ide itions Ht.(Ft))	Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Local Sea Cond.	Salinity (ppt)	Coli MPN/ Total	form 100 ml Fecal
Feb 13	0950	0925 1655	14.1 4.8	5.5	0.82	SE@ 28-33	choppy	27.0	2.0	<1.8
Feb 14	0920	0445 0955	11.2 13.4	6.0	0.27	E@ 3-14	calm	26.5	1.8	<1.8
Feb 15	0915	0640 1040	11.8 12.7	6.5	1.01	SE@ 8-18	сһорру	28.0	<1.8	<1.8
Feb 18	1430	1420 2130	12.1 4.5	7.0	0.32	SE@ 9-15	choppy	27.5	2.0	<1.8
Feb 19	0925	0510 1040	14.2 10.4	5°2	0.0	N@ 0 - 5	calm	26.0	17	4.5
Feb 20	1500	1100 1555	9.9 12.7	1	0.09	SE@ 23-31	ł	{	3.7	1. 8
Feb 21	1057	0550 1130	14.3 9.2	6.8	0.58	NE@ 2-8	ripple	28.5	4.5	<1.8
Feb 22	1020	0610 1200	14.5 8.5	6.8	TR	SE@ 3-18	calm	27.5	11	2.0

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TADLE	DAU DAN	ULARULU	NA LOUICAL AN	NUISES	KESULTS P	NILIAMAC UN	CONDIT.	TON A CHI	AKINE O	AMFLES.
Sample	Station	: 19			Locatic	n: Ship Pe	eninsula			
Date (1974)	Sample Time	T Cond Time	ide itions Ht (Ft))	Water Temp. (°C)	Total Precip. (in.)	Wind (hqm)	Local Sea Cond.	Salinity (ppt)	Coli MPN/. Total	form 100 ml Fecal
Feb 12	1325	0350 1600	14.8 4.9	6.5	0.32	NW@ 7-10	сһоруу	27.5	<1.8	< 1. 8
Feb 13	0945	0925 1655	14.1 4.8	5.5	0.82	SE@ 28-33	choppy	25.0	2.0	2.0
Feb 14	0915	0445 0955	11.2 13.4	6.5	0.27	Eê 3-14	calm	26.5	14	< 1. 8
Feb 15	0905	0640 1040	11.8 12.7	6.5	1.01	SE@ 8-18	choppy	. 28.0	2.0	<1.8
Feb 18	1430	1420 2130	12.1 4.5	7.0	0.32	SE@ 9-15	сһорру	27.5	4.0	<1.8
Feb 19	0920	0510 1040	14.2 10.4	5.8	0.0	N@ 0-5	calm	27.5	22	4.0
Feb 20	1510	1100 1555	9.9 12.7	1	0.09	SE@ 23-31	ł	8	33	17
Feb 21	1100	0550 1130	14.3 9.2	7.0	0.58	NE@ 2-8	ripple	28.5	7.8	<1.8
Feb 22	1025	0610 1200	14.5 8.5	6.8	TR	SE@ 3-18	ripple	27.5	9.2	4.0
Feb 26	1020	0735 1425	14.6 5.3	5.5	TR	N@ 2 - 7	ripple	24.0	22	<1.8

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CAMDLEC MADINE ANALYSES RESULTS AND SAMPLING CONDITIONS FOR RACTERTOLOGICAL ð TABLF.

SAMPLES
MARINE
FOR
CONDITIONS
SAMPLING
AND
RESULTS
ANALYSES
BACTERIOLOGICAL
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TABLE

							_	49 -						
SAMPLES.		lform 100 ml	recal	<1.8	<1.8	<1.8	<1.8	<1.8	4.0	2.0	<1.8	<1.8		
ARINE S		Coli MPN/	TOTAL	4.5	<1.8	33	<1.8	2.0	17	2.0	<1.8	4.5		
IONS FOR M		Salinity	(JQ4)	27.0	25.0	27.5	25.5	26.8	26.5	•	28.5	27.5		
G CONDIT	insula	Local Sea	-ond	choppy	choppy	calm	choppy	сһорру	calm	1	ripple	ripple		
ND SAMPLIN	n: Ship Pen	Wind (dum)	(117]111)	NW@ 7-10	SE@ 28-33	E@ 3-14	SE@ 8-18	SE@ 9-15	N@ 0 - 5	SE@ 23-31	NE@ 2-8	SE@ 3-18		
RESULTS A	Locatio	Total Precip.	(• 17 7)	0.32	0.82	0.27	1.01	0.32	0.0	0.09	0.58	TR		
ANALYSES		Water Temp.	5-1	6.0	6.0	6.0	6.0	7.0	6.0	ł	7.0	5.5		·
LOGICAL 1		ide itions	н с. (<i>F</i> с.	14.8 4.9	14.1 4.8	11.2 13.4	11.8 12.7	12.1 4.5	14.2 10.4	9.9 12.7	14.2 9.2	14.5 8.5		
CTERIO	: 20	Cond	emt.t	0850 1600	0925 1655	0445 0955	0640 1040	1420 2130	0510 1040	1100 1555	0550 1130	0610 1200		
9 : BA(Station	Sample Time		1315	0940	0160	0060	1425	0915	1455	1105	1025		
TABLE	Sample	Date (1974)		Feb 12	Feb 13	Feb 14	Feb 15	Feb 18	Feb 19	Feb 20	Feb 21	Feb 22		

SAMPLES
MARINE
FOR
CONDITIONS
SAMPLING
AND
RESULTS
ANALYSES
BACTERIOLOGICAL
. 6
TABLE

Sample	Station	: 21			Locatio	n: Ship I	Peninsula			
		Τ	ide	Water	Total		Local			form
Date (1974)	Sample Time	Cond. Time	itions Ht.(Ft))	Temp. (°C)	Precip. (in.)	Wind (mph)	Sea Cond.	Salinity (ppt)	MPN/ Total	100 ml Fecal
Feb 12	1310	0850 1600	14.8 4.9	6.0	0.32	01-7 @WN	ripple	27.0	4.0	1.8
Feb 13	0630	0925 1655	14.1 4.8	5 • J	0.82	SE@ 28-33	сһорру	24.0	1. 8	<1.8
Feb 14	0905	0445 0955	11.2 13.4	5°2	0.27	E@ 3-14	calm	27.2	23	2.0
Feb 15	0855	0640 1040	11.8 12.7	5.5	1.01	SE@ 8-18	choppy	12.8	17	4.0
Feb 13	1420	1420 2130	12.1 4.5	6.5	0.32	SE@ 9-15	calm	26.0	<1.8	<1.8
Feb 19	0905	0510 1040	14.2 10.4	5.5	0.0	N@ 0 - 5	calm	27.0	4.5	2.0
Feb 20	1415	1100 1555	9.9 12.7	1	0.09	SE@ 23-31	I I	1	4.5	2.0
Feb 21	1115	0550 1130	14.3 9.2	6.5	0.58	NE@ 2-8	ripple	27.0	2.0	2.0
Feb 22	1030	0610 1200	14.5 8.5	6.0	TR	SE@ 3-18	ripple	27.5	<1.8	<1.8

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BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES. **.** б TABLE

Samp1e	Station	: 22			Locatic	pnM :nc	Вау			
Date (1974)	Sample Time	T Cond Time	ide itions Ht.(Ft))	Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Local Sea Cond.	Salinity (ppt)	Coli MPN/ Total	form 100 ml Fecal
Feb 12	1305	0850 1600	14.8 4.9	6.0	0.32	NW@ 7-10	сһорру	24.0	<1.8	<1.8
Feb 13	0925	0925 1655	14.1 4.8	6.5	0.82	SE@ 28-33	choppy	27.0	2.0	<1.8
Feb 14	0060	0445 0955	11.2 13.4	5.5	0.27	Eê 3-14	calm	28.0	170	<1.8
Feb 15	0845	0640 1040	11.8 12.7	6.0	1.01	SE@ 8-18	choppy	. 25.5	7.8	4 . 5
Feb 18	1415	1010 14 2 0	10.9 12.1	6.0	0.32	SE@ 9-15	calm	27.0	2.0	<1.8
Feb 19	0060	0510 1040	14.2 10.4	5.5	0.0	N@ 0 - 5	calm	26.5	4.5	2.0
Feb 20	1410	1100 1555	9.9 12.7	5.5	60.0	SE@ 23-31	calm	26.5	11	2.0
Feb 21	0845	0550 1130	14.3 9.2	6.0	0.58	NE@ 2-8	choppy	27.0	2.0	2.0
Feb 22	1035	0610 1200	14.5 8.5	5.5	TR	SE@ 3-18	ripple	27.5	2.0	<l.8< li=""></l.8<>

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TABLE	9: BA(CTERIOL	OGICAL 1	ANALYSES	RESULTS	AND SAMPLIN	IG CONDIT.	IONS FOR M	ARINE S	AMPLES.	
Sample	Station	: 23			Locati	I pnW :uc	Вау				1
Date	Sample	Ti Ti	de tione	Water Temp.	Total Precip.	Wind	Local Sea	Salinitv	Coli MPN/	form 100 ml	
(1974)	Time	Time	Ht. (Ft).	(o°) ((in.)	(uph)	Cond.	(ppt)	Total	Fecal	1
Feb 12	1256	0850 1600	14.8 4.9	7.0	0.32	NW@ 7-10	сһорру	26.0	33	13	
Feb 13	0915	0335 0925	10.0 14.1	4.5	0.82	SE@ 28-22	choppy	7.0	140	49	
Feb 14	1115	0955 1755	13.4 4.8	5.0	0.27	E@ 3-14	ripple	22.0	79	3.7	
Feb 15	1035	0640 1040	11.8 12.7	5.0	1.01	SE@ 8-18	ripple	18.0	220	14	•
Feb 18	1545	1420 2130	12.1 4.5	5.5	0.32	SE@ 9-15	choppy	21.0	49	17	
Feb 19	1115	1040 1510	10.4 12.4	6.0	0.0	N@ 0 - 5	calm	27.0	140	21	
Feb 20	1430	1100 1555	9.9 12.7	1	0.09	SE@ 23-31	8) 1	7.8	2.0	
Feb 21	0850	0550 1130	14.3 9.2	5.5	0.58	NE@ 2-8	ripple	26.8	7.8	7.8	
Feb 22	0830	0610 1200	14.5 8,5	5.5	TR	SE@ 3-18	calm	27.0	22	2.0	
Feb 26	1125	0735 1425	14.6 5.3	5.5	TR	N@ 2 - 7	ripple	27.0	240	2.0	
Feb 27	1135	0800 1505	14.4 4.7	5.0	0.09	SE@ 17-22	۱.	24.0	6.8	<1.8	
Feb 28	0630	0830 1600	14.1 4.2	4 . 8	0.62	SE@ 21-27	choppy	24.8	240	130	

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TABLE	9: BA(CTERIO	LOGICAL 7	ANALYSES	RESULTS 7	AND SAMPLIN(CONDIT	IONS FOR M	ARINE S	AMPLES.
Sample	Station	: 23	cont'd		Locatic	a bum :nd B	ау	•		
Date	Sample	T Cond	ide itions	Water Temp.	Total Precip.	Wind	Local Sea	Salinity	Coli MPN/	form 100 ml
(1974)	Time	Time	Ht.(Ft),	(oc)	(in.)	(mph)	Cond.	(ppt)	Total	Fecal
Mar l	0845	0350 0905	11.1 13.8	4.2	0.03	SW@ 8-17	calm	25.5	4.5	4.5
Mar 6	1010	1005 1525	9.0 13.4	l I	0.0	N@ 2-10	1	ł	2.0	<1.8
Mar 7	1020	0455 1050	14.8 7.7	ł	0.02	NW@ 5-10	ł	ł	14	2.0
Mar 8	1025	0525 1130	14.9 6.5	1	0.18	SE@ 34-40	ł	ł	2.0	2.0

Mar 7

Mar 8

TABLE	9: BA	CTERIOL	OGICAL /	ANALYSES	RESULTS	AND SAMPLIN	IG CONDIT	IONS FOR M	ARINE S	AMPLES.
Sample	Station	: 24			Locatio	I pnW :uc	Зау			
		ΤĻ	de	Water	Total		Local		Coli	form
Date (1974)	Sample Time	<u>Condi</u> Time	tions Ht.(Ft))	Temp.	Precip. (in.)	Wind (mph)	Sea Cond:	Salinity (ppt)	MPN/ Total	100 ml Fecal
Feb 12	1250	0850 1600	14.8 4.9	7.0	0.32	NW@ 7-10	choppy	25.0	2.0	2.0
Feb 13	1140	0925 1655	14.1 4.8	6.0	0.82	SE@ 28-33 •	choppy	26.0	33 33	4.5
Feb 14	0111	0955 1755	13.4 4.8	5•5	0.27	E@ 3-14	ripple	26.0	920	17 、
Feb 15	1030	0640 1040	11.8 12.7	6.2	1.01	SE@ 8-18	ripple	. 28.5	2.0	<1.8
Feb 18	1540	1420 2130	12.1 4.5	6.5	0.32	SE@ 9-15	ripple	28.0	4.5	4.5
Feb 19	0111	1040 1510	10.4 12.4	6.0	0.0	N@ 0 - 2	calm	27.0	1.8	1.8
Feb 20	1600	1555 2245	12.7 4.5	t I	0.09	SE@ 23-31	8 1	ł	13	13
Feb 21	0855	0550 1130	14.3 9.2	5.8	0.58	NE@ 2-8	8	26.5	13	7.8
Feb 22	0835	0610 1200	14.5 8.5	5.0	TR	SE@ 3-18	calm	26.5	7.8	2.0
Feb 26	1120	0735 1425	14.6 5.3	6.5	TR	N@ 2-7	ripple	26.0	19	<1.8

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cont'd

TABLE	9 : BA(CTERIO	LOGICAL A	NALYSES	RESULTS A	ND SAMPLING	CONDIT	IONS FOR M	ARINE S	AMPLES.
Sample	Station	: 24	cont'd		Locatic	n: Mud Ba	Y			
Date (1974)	Sample Time	T. Cond Time	ide itions Ht.(Ft))	Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Local Sea Cond.	Salinity (ppt)	Coli MPN/ Total	form 100 ml Fecal
Feb 27	1130	0800 1505	14.4 4.7	6.0	0.09	SE@ 17-22	ł	24.5	13	<1.8
Feb 28	0935	0830 1600	14.1 4.2	6.0	0.62	SE@ 21-27	сһорру	26.5	4 • 5	4.5
Mar l	0850	0350 0905	11.1 13.8	5.2	0.03	SW@ 8-17	calm	24.5	4.5	4.5
Mar 6	1015	1005 1525	9.0 13.4	1	0.0	N@ 2-10	ł	1	7.8	4.5
Mar 7	1025	0455 1050	14.8 7.7	ł	0.02	NW@ 5-10	!	 	22	4.5

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SE@ 34-40

0.18

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14.9 6.5

0525 1130

1030

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TABLE	9: BAC	TERIOLOG	ICAL A	NALYSES	RESULTS A	ND SAMPLING	CONDITI	ONS FOR M	ARINE SI	MPLES.
Sample	Station:	25			Locatio	n: Muđ	Bay			
Date (1974)	Sample Time	Tide Conditi Time Ht	ons .(Ft))	Water Temp. (°C)	Total Precip. (in.)	Wind (mph)	Local Sea Cond.	Salinity (ppt)	Colif MPN/] Total	orm 00 ml Fecal
		0350 1	4 8							
reb 12	L240	1600	4.9	7.5	0.32	NW@ 7-10	choppy	27.0	2.0	<1.8
Feb 13	1130	0925 1 1655	.4.1 4.8	6.5	0.82	SE@ 28-33	choppy	28.0	1.8	<1.8
Feb 14	1100	0955 1 1755	4.8	5.5	0.27	Ee 3-14	ripple	16.5	41	2.0
Feb 15	1025	0640 1 1040 1	1.8	6.4	1.01	SE@ 8-18	ripple	27.0	< 1 .8	<1.8
Feb 13	1535	1420 1 2130	4.5	7.0	0.32	SE@ 9-15	сhoppy	27.5	2.0	<1.8
Feb 19	1105	1040 1 1510 1	0.4	6.8	0.0	N@ 0 - 5	calm	27.0	4.5	<1.8
Feb 20	1630	1555 1 2245	4.5	8	0.09	SE@ 23-31	1	:	2.0	2.0
Feb 21	0855	0550 1 1130	9.2	6.5	0.58	NE@ 2-8	rolling	28.5	2.0	2.0
Feb 22	0840	0610 1 1200	- 4 .5 8.5	6.0	TR	SE@ 3-18	calm	26.5	21	2.0

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THORT	DAL DAL	TOTYGI	OGTOWN H	NALICES	A STUDEAN	ND SAMPLING	CONDIT.	LONS FOR M	IARINE S.	AMPLES.
Sample	Station:	26			Locatic	n: Deep	Вау			
Date	Sample Time	Ti Condi	de tions	Water Temp.	Total Precip.	Wind	Local Sea	Salinity	Coli MPN/	form 100 ml
	DIIIT T	ттте	Ht.(Ft))		(-111)	(nqm)	cona.	(ppt)	Total	recal
Feb 12	1225	0850 1600	14.8 4.9	7.0	0.32	NW@ 7-10	choppy	27.0	2.0	<1.8
Feb 13	1120	0925 1655	14.1 4.8	6.5	. 0.82	SE@ 28-33	ripple	26.0	79	<1.8
Feb 14	1055	0955 1755	13.4 4.8	5.0	0.27	E@ 3-14	ripple	18.2	240	4 • 5
Feb 15	1020	0640 1040	11.8 12.7	6.8	1.01	SE@ 8-18	ripple	. 28.5	<1.8	<1.8
Feb 18	1530	14 20 2130	12.1 4.5	6.0	0.32	SE@ 9-15	ripple	28.0	1.8	<1.8
Feb 19	1100	1040 1510	10.4 12.4	6.0	0.0	N@ 0 - 5	calm	27.0	4.5	4.5
Feb 21	0060	0550 1130	14.3 9.2	6.5	0.58	NE@ 2-8	ripple	28.5	<1.8	<1.8
Feb 22	0845	0610 1200	14.5 8.5	5.8	TR	SE@ 3-18	calm	26.5	2.0	<1.8
Feb 27	1120	0800 1505	14.4 4.7	6.0	0.09	SE@ 17-22	ł	25.0	11	<1.8
Feb 28	0945	0830 1600	14.1 4.2	6.2	0.62	SE@ 21-27	ripple	28.5	4.5	<1.8
Mar l	0060	0350 0905	11.1 13.8	5.2	. 0.03	SW@ 8-17	swell	28.5	<1.8	<1.8

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SAMPLES.
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CONDITIONS
SAMPLING
AND
RESULTS
ANALYSES
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TABLE

Sample	Station	27			Locatio	n: Deep]	Вау			
		Tide	0	Water	Total		Local		÷Γου	лчш Стш
Date (1974)	Sample Time	Condit: Time H	ions t.(Ft))	Temp. (°C)	Precip. (in.)	Wind (mph)	Sea Cond.	Salinity (ppt)	MPN/] Total	Fecal
Feb 12	1215	0850 1600	14.8 4.9	7.0	0.32	NW@ 7-10	сһорру	28.0	<1.8	<1.8
Feb 13	1115	0925 1655	14.1 4.8	6.5	0.82	SE@ 28-33	ripple	28.0	<1.8	<1.8
Feb 14	1050	0955 1755	13.4 4.8	6 • 0	0.27	E@ 3-14	ripple	27.0	130	2.0
Feb 15	1015	0640 1040	11.8 12.7	6.8	1.01	SE@ 8-18	ripple	28.5	4.5	~ 1 ~8
Feb 18	1525	1420 2130	12.1 4.5	7.0	0.32	SE@ 9-15	ripple	28.5	<1.8	<lor>8</lor>
Feb 19	1055	1040 1510	10.4 12.4	6.2	0.0	N@ 0 - 5	calm	27.0	1.8	<1.8
Feb 20	1650	1555 2245	12.7 4.5	1 8	0.09	SE@ 23-31	1	I I	49	4.0
Feb 21	0160	0550 1130	14.3 9.2	6.5	0.58	NE@ 2-8	ripple	28.5	1.8	<1.8
Feb 22	0060	0610 1200	14.5 8.5	5.2	TR	SE@ 3-18	ripple	26.5	13	<1.8
Feb 28	0350	0830 1600	14.1 4.2	6.2	0.62	SE@ 21-27	ripple	29.0	7.8	2.0

Sample	Station:	28			Locatio	n: Deep B	ау	•		
1a+o(Samle	Tid	le	Water Temp	Total Drocin	لر ت : 14 14	Local		. Colif	form
1974)	Time	Condit Time E	tions It.(Ft))	. (c)	recip.	(udm)	cond.	(ppt)	Total	Fecal
Feb 12	1155	085 0 1600	14.8 4.9	6.5	0.32	NW@ 7-10	сһорру	28.0	13	<1.8
Feb 13	1105	0925 1655	14.1 4.8	6.2	0.82	SE@ 28-33	swell	25.0	< 1 .8	<1.8
Feb'14	1040	0955 1755	13.4 4.8	5.0	0.27	E@ 3-14	ripple	15.0	T 70	13
Feb 15	1010	0640 1040	11.8 12.7	7.0	1.01	SE@ 8-18	choppy	28.5	2.0	<1.8
Feb 18	1520	1420 2130	12.1	7.0	0.32	SE@ 9-15	сһорру	29.0	<1.8	<1.8
Feb 19	1050	1040 1510	10.4 12.4	4.5	0.0	N@ 0 - 5	calm	24.5	7.8	<1.8
Feb 20	1000	0530 1100	14.2 9.9	6 • 5	0.09	SE@ 23-31	choppy	27.5	7.8	2.0
Feb 21	0905	0550 1130	14.3 9.2	6.8	0.58	NE@ 2-8	rolling	28.5	7.8	2.0
Feb 22	0905	0610 1200	14.5 8.5	5.8	лт	SE@ 3-18	calm	26.0	31	1.8
Feb 27	1030	0800 1505	14.4 4.7	7.0	0.09	SE@ 17-22	l t	27.0	7.8	<1.8
Feb 28	1000	0830 1600	14.1 4.2	6.8	0.62	SE@ 21-27	choppy	29.0	4.0	1.8
Mar l	0905	0350 0905	11.1 13.8	6.5	0.03	SW@ 8-17	rolling	28.5	<1.8	<1.8

BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR MARINE SAMPLES. . . TABLE

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IONS FOR	Creek	form 100 ml Fecal	2.0	11	6.8	2.0	1.8	
MPLING CONDIT	ion: Washer	Coli MPN/ Total	2.0	14	6.3	4.5	3.6	
RESULTS AND SAN	Locat	Total Precip. (in.)	0.02	TR	0.11	0.03	TR	
DEOGICAL ANALYSES	SI	Time of Collection .	1250	1215	1205	0955	1135	
TABLE 10: BACTERIC FRESHWAT	Sample Station:	Date (1974)	Apr. 19	May 2	. Мау б	Мау 7	Мау 8	

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TABLE 10: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR

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AMPLING CONDITIONS FOR	tion: Union Bay	orm 00 ml Fecal	> 16,000	2.4x10 ⁵	2.6x10 ⁴	3.1x10 ⁴	
		Colif(MPN/1(Total	> 16,000	5.4x10 ⁵	1.1x10 ⁵	1.1x10 ⁵	
RESULTS AND S.	Loca	Total Precip. (in.)	TR	0.0	0.11	0.03	
OGICAL ANALYSES R SAMPLES.	S3	Time of Collection	1150	0940	1150	0945	
TABLE 10: BACTERIOI FRESHWATI	Sample Station:	Date (1974)	May 2	. Мау 3	Мау б	May 7	

	und Oyster Ltd	orm 00 ml Fecal	2.0	4.5	<1.8	<1.8	-
	tion: Baynes So	. Colif MPN/1 Total	2.0	7.8	17	6.1	
	Locat	Total Precip. (in.)	0.02	TR	0.11	0.03	
FRESHWATER SAMPLES.	S4	Time of Collection	1245	1145	1545	0935	
	Sample Station:	Date (1974)	Apr. 19	May 2	May 6	May 7	
					•		

10: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR TABLE

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FRESHWATER SAMPLES.	Location: SnoCap Oysters Ltd	iform /100 m ^g Fecal	2.0	<1.8	<1.8	<1.8	
		Col MPN, Total	2.0	<1.8	6.8	<1.8	•
		Total Precip. (in.)	0.02	TR	0.11	0.03	
	S5	Time of Collection	1240	1140	1540	0925	
	Sample Station:	Date (1974)	Apr. 19	May 2	Мау б	Мау 7	

BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR TABLE 10:

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BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR FRESHWATER SAMPLES. :01 TABLE

Location: Creek just north of Buckley Bay Fecal <1.8 <1.8 <1.8 <1.8 MPN/100 ml Coliform Total <1.8 4.5 2.0 14 Precip. (in.) Total 0.03 0.11 0.0 \mathbf{TR} • Time of Collection 0925 1145 1130 0915 S6 Sample Station: Date (1974) 2 m ဖ 5 МаУ Мау Мау Мау
]							
IONS FOR	River	form 100 ml Fecal	2.0	4.5	11	4.5	<1.8	<1.8	
MPLING CONDIT	ion: Tsable	. Coli MPN/ Total	4.5	4.5	11	4.5	<1.8	<1.8	
RESULTS AND SA	Locat	Total Precip. (in.)	0.32	0.82	0.27	1.01	0.32	0.0	
OLOGICAL ANALYSES TER SAMPLES.	S7	Time of Collection	1430	1050	0830	0940	0925	1430	
TABLE 10: BACTERI FRESHWA	Sample Station:	Date (1974)	Feb. 12	Feb. 13	Feb. 14	Feb. 15	Feb. 18	Feb. 19	

	Creek	form 100 ml Fecal	13	49	4.5	4.5	33	<1.8	<1.8	2.0	<1.8	
	n: Cougar	Coli MPN/ Total	23	49	4.5	7.8	33	2.0	<1.8	12	<1.8	
	Locatic	Total Precip. (in.)	0.32	0.82	0.27	1.01	0.32	0.0	0.58	ТК	0.14	
TER SAMPLES.	S8	Time of Collection	1450	1045	0925	0630	0630	1425	1500	0835	1000	
FRESHWA	Sample Station:	Date (1974)	Feb. 12	Feb. 13	Feb. 14	Feb. 15	Feb. 18	Feb. 19	Feb. 21	Feb. 22	Feb. 25	

AMPLES.	Location: Ships Point Peninsula	Time ofTotalColiformTime ofPrecip.MPN/100 mlIlection(in.)Total	1520 0.32 790 220	1130 0.82 240 79	0940 . 0.27 79 13	0945 1.01 240 110	0945 0.32 17 <1.8	1435 0.0 6.3 <1.8	1530 0.58 2.0 <1.8	0850 TR 540 130	1000 0.14 13 4.5	1500 TR 540 2.0	1000 0.09 · 49 <1.8	1435 0.62 >1600 13	1055 0.03 1600 4.5	
FER SAMPLES.	S9	Time of Collection •	1520	1130	. 0940	0945	0945	1435	1530	0850	1000	1500	1000	1435	1055	
FRESHWAT	Sample Station:	Date (1974)	Feb. 12	Feb. 13	. Feb. 14	Feb. 15	Feb. 18	Feb. 19	Feb. 21	Feb. 22	Feb. 25	Feb. 26	Feb. 27	Feb. 28	March l	

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TABLE 10: BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR

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TABLE	

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Location: Coal Creek at Island Highway Fecal Coliform MPN/100 ml Total Total Precip. (in.) ٠ Time of Collection S10Sample Station: Date (1974)

4.5 < 1.8 70 33 0.62 0.03 1445 1040 Feb. 28 . March 1

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IONS FOR	eek	form 100 ml Fecal		9.3	<1.8	33	22	7.8	<1.8	1.8	4.0	6.8	
APLING CONDIT	ion: Coal Cr	. Coli MPN/ Total	•	12	23	33	49	43	14	11	170	33	
RESULTS AND SAM	Locati	Total Precip. (in.)		0.32	0.82	0.27	1.01	0.32	0.0	0.58	TR .	0.14	
LOGICAL ANALYSES ER SAMPLES.	S11	Time of Collection		1450	1037	0920	0925	0920	1420	1420	0830	1000	
TABLE 10: BACTERIOI FRESHWATI	Sample Station:	Date (1974)		Feb. 12	Feb. 13	Feb. 14	Feb. 15	Feb. 18	Feb. 19	Feb. 21	Feb. 22	Feb. 25	

		1											000		
	o Creek	form 100 ml Fecal	2.0	3.6	9.5	490	170	21	460	170	140	<1.8	16,	40	9.2
	Waterlo	Coli MPN/ Total	6.8	1600	>1600	2400	350	920	700	330	540	26	16,000	1300	170
	Location:	•													
		Total Precip (in.)	0.32	0.82	0.27	1.01	0.32	0.0	0.58	TR	0.14	TR	0.09	0.62	0.03
IR SAMPLES.	S12	Time of Collection	1310.	0855	0835	0835	0845	1350	1400	0825	1000	1435	1000	1500	1030
FRESHWATE	Sample Station:	Date (1974)	Feb. 12	Feb. 13	Feb. 14	Feb. 15	Feb. 18	Feb. 19	Feb. 21	Feb. 22	Feb. 25	Feb. 26	Feb. 27	Feb. 28	March l

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erloo	1		
ining into Wat	orm 00 ml Fecal	68 140	
ion: Ditch dra Creek	Colif MPN/1 Total	2400 5400	
Locati	Total Precip. (in.)	0.62	· .
Sl3	Time of Collection	1515 1030	
Sample Station:	Date (1974)	Feb. 28 March 1	

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	Waterloo							•		
	ist south of	form 100 ml Fecal		<1.8	<1.8	6.8	78	<1.8	2.0	
	lon: Creek ju Creek	Coli MPN/ Total	•	13	<1.8	11	49	<1.8	11	
KESULTS AND SM	Locati	Total Precip. (in.)		0.32	0.82	0.27	1.01	0.32	0.0	
OGICAL ANALYSES SR SAMPLES.	S14	Time of Collection		1310	0060	0838	0840	0850	1355	
TABLE 10: BACTERIOI FRESHWATE	Sample Station:	Date (1974)		Feb. 12	Feb. 13	Feb. 14	Feb. 15	Feb. 18	Feb. 19	

IOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR ۴ ٢

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	wall Creek	oliform PN/100 ml Fecal	<1.8	<1.8	2.0	<1.8	<1.8	<l. 8<="" li=""></l.>	
	ation: Rose	Cc Total	<1.8	<1.8	4.5	17	<1.8	<1.8	
	Loc	Total Precip. (in.)	0.32	0.82	0.27	1.01	0.32	0.0	
IWATER SAMPLES.	n: S15	Time of Collection	1150	0905	0840	0845	0855	1400	
FRESI	Sample Static	Date (1974)	Feb. 12	Feb. 13	Feb. 14	Feb. 15	Feb. 18	Feb. 19	

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	McNaughton							
ONS FOR	st north of	corm 00 ml Fecal	<1.8	2.0	2.0	4.5	1.8	
ING CONDITI	: Creek ju: Creek	Colif MPN/1 Total	4.5	9.3	49	7.8	1.8	
RESULTS AND SAMPL	Location	Total Precip. (in.)	0.82	0.27	1.01	0.32	0.0	
LOGICAL ANALYSES ER SAMPLES.	S16	Time of Collection .	.0160	0840	0320	0060	1400	
TABLE 10: BACTERIO FRESHWATI	Sample Station:	Date (1974)	Feb. 13	Feb. 14	Feb. 15	Feb. 18	Feb. 19	

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FRESHWA' Sample Station:	TER SAMPLES. S17	Locat:	ion: McNaudh	ton Creek
	. + 7		*****	
Date (1974)	Time of Collection	Total Precip. (in.)	Colif MPN/J Total	form 100 ml Fecal
н 10 10	.006 г	0 32	α Γ	α
ren. 12	1000	7.0	0 • •	0 • H
Feb. 13	0915	0.82	49	49
Feb. 14	0854	0.27	2.0	<1.8
Feb. 15	0915	1.01	17	<1.8
Feb. 13	0905	0.32	13	13
Feb. 19	1415	0.0	4.5	<1.8

BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR TABLE 10:

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DITIONS FOR	
SAMPLING CON	
AND	
RESULTS	
ANALYSES	ES.
BACTERIOLOGICAL	FRESHWATER SAMPL
10:	
TABLE	

Sample Station: S18

Location: Cook Creek

corm LOO ml Fecal		<1.3	7.8	<1.8	<1.8	2.0	<1.8	
Colif MPN/J Total		<1.8	7.8	7.8	49	2.0	<1.8	
Total Precip. (in.)	-	0.32	0.82	•0.27	1.01	0.32	0.0	
Time of Collection		1155	0920	0855	0850	0907	1405	
Date (1974)		Feb. 12	Feb. İ3	Feb. 14	Feb. 15	Feb. 18	Feb. 19	

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TABLE	10:	BACTERIOLOGICAL	ANALYSES	RESULTS	AND	SAMPLING	CONDITIONS	FOR
		FRESHWATER SAMPI	F.S.					

Sample Station: S19

of Cook Creek 7 2 Location: First

sourn o								
	liform V/100 ml Fecal	4.5	4.5	4.5	4.5	4.5	<1.8	
	Co. MPr Total	4.5	33	4 ° 5	29	7.8	27	
	Total Precip. (in.)	0.32	, 0.82	0.27	1.01	0.32	0.0	
	Time of Collection	1300	0320	0060	0160	0160	1410	
	Date (1974)	Feb. 12	Feb. 13	Feb. 14	Feb. 15	Feb. 18	Feb. 19	

	of							
	south							
	ınamed creek sk	iform /100 ml Fecal	2.0	13	7.8	7.8	33	<1.8
	ion:Second un Cook Cree	Col: MPN, Total	11	31	23	70	33	14
	Locat	Total Precip. (in.)	0.32	0.82	0.27	1.01	0.32	0.0
R SAMPLES.	S20	Time of Collection •	1245	0927	0905	0855	0915	1410
FRESHWATE	Sample Station:	Date (1974)	Feb. 12	Feb. 13	Feb. 14	Feb. 15	Feb. 18	Feb. 19

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BACTERIOLOGICAL ANALYSES RESULTS AND SAMPLING CONDITIONS FOR FRESHWATER SAMPLES. 10. TABLE

on 16

Sample Station:	S21	Locat	ion: Storm wate	er pipe at static
Date	Time of	Total Precip.	Colif MPN/1	огт 00 m l
(1974)	Collection	(in.)	Total	Fecal
· · ·				
Feb. 21	1545	0.58	79	79
Feb. 22	0840	ИТ	>1600	350
Feb. 26	1445	R .	2800	110
Feb. 27	1000	0.09	>16,000	5400
Feb. 28	1425	0.62	79ð	490
March l	1040	0.03	3500	700

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