

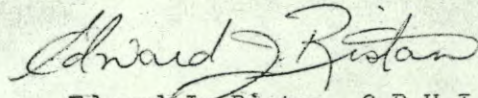
immediate vicinity of this area, as indicated on the attached map. This is not acceptable, there should be at least two additional signs posted, and all should include the Dogrib language, as well as English. This topic was discussed at the Yellowknife Board of Health meeting October 22, 1974.

This Fisheries Branch of Environment Canada, is going to take Giant Yellowknife Mines to court in the months ahead, and charge the mine with adding pollutants to the Back Bay area that are "deleterious" to fish life.

The allowable concentration of arsenic in fish is 0.5 Mg/M^3 , all indications thus far observed by the Fisheries laboratories, have analyzed the concentration of arsenic in the kidney and livers of fish from the Back Bay at 0.2 Mg/M^3 . Therefore it seems at this time, the consumption of fish from this area would not be hazardous to health. Complete results of the fish analysis will be forwarded to this office in the near future.

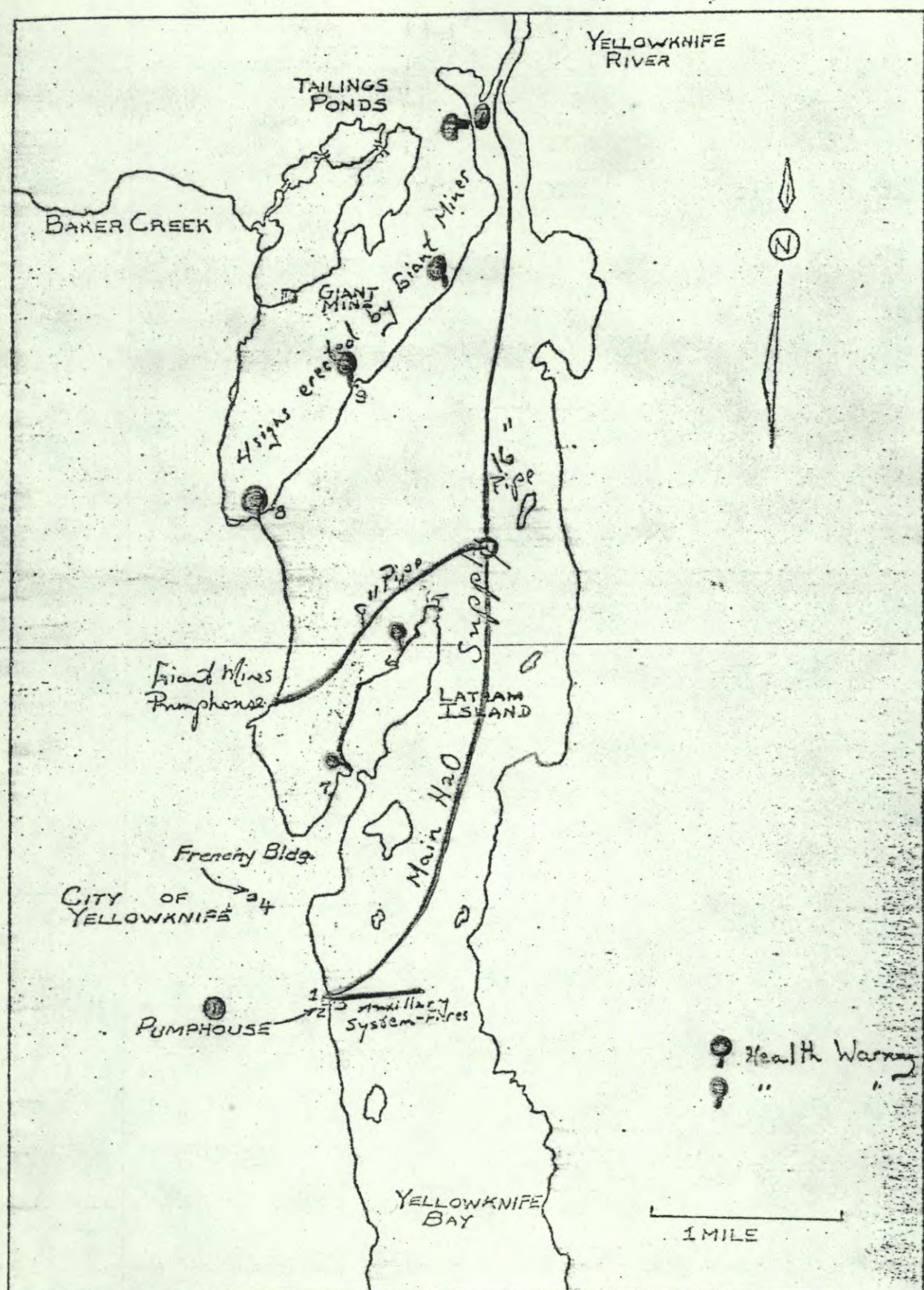
This letter is for your personal information, and may be regarded as completion of the Sampling Program conducted by the undersigned over the four month summer period.

Respectfully submitted,



Edward J. Ristan, C.P.H.I. (C)
Environmental Health Officer
Mackenzie Zone

*ap



Station locations for Yellowknife water supply sampling series
(Note: Stations 1 & 2 are located inside pumphouse.)

- Sampling Monday Mornings.
- Taken from raw intake water line.
 - Taken off shore - at 100 - yards of the river.

ARSENIC CONCENTRATION "1974"

Mg./L or P.P.M.

Municipal - Drinking Water Supply - City of Yellowknife, N.W.T.

Location that the Sample was taken.	June	Day	July	Day	August	Day	September	Day	Comments
Yellowknife's Water Plant intake, at the mouth of the Yellowknife River	< 0.020 —	10.	0.024 —	2.	0.026 —	6.	< 0.02 —	3.	As the results indicate all arsenic sample concentrations fall within the acceptable limit and maximum permissible limit, established by the Canadian Drinking Water Standards, 1968.
			< 0.020 —	11.	0.031 —	12.	< 0.02 —	9.	
	0.022 —	17.	< 0.020 —	15.	0.022 —	19.	< 0.02 —	16.	
			0.022 —	22.	< 0.02 —	26.	0.026 —	23.	
	< 0.020 —	24.	< 0.020 —	29.			0.034 —	30.	
Shoreline Sample - taken at the mouth of the Yellowknife River.	0.022 —	17.	< 0.020 —	2.	0.027 —	6.	0.03 —	3.	
			< 0.020 —	11.	0.032 —	12.	< 0.02 —	9.	
			0.021 —	15.			< 0.02 —	16.	
	< 0.020 —	24.	0.022 —	22.	0.021 —	19.	0.027 —	23.	
			0.021 —	29.	< 0.02 —	26.	0.03 —	30.	
Giant Mines - intake is tapped into Yellowknife's main supply line.	Average		Average		Average		Average		
			0.027		0.019				

Notes (1) All results are mg./l or p.p.m.

(2) (<) means "less than"

(3) Canadian Drinking Water Standards (mg./l)

objective = not detectable

acceptable limit = 0.01

maximum permissible limit = 0.05

ARSENIC CONCENTRATIONS IN WATERS NEAR YELLOWKNIFE, N.W.T.

LOCATION	<u>DATES (1974)</u>			
	MAY 6	MAY 9	MAY 23	MAY 30
1. Yellowknife River at Pump House				
(a) Before chlorination	<0.020	<0.020	<0.020	0.023
(b) After chlorination	<0.020	<0.020	<0.020	<0.020
2. Tap Water (Frenchy Bldg.)	<0.020	<0.020	<0.020	<0.020
3. Yellowknife Bay				
(a) Emergency Well Pumphouse	0.056	0.034	0.057	0.064
(b) End of Latham Island	ND	ND	0.074	0.184
(c) Dock in "Rainbow Valley"	ND	ND	0.056	0.067
(d) Dock at Weayer & Devore	ND	ND	0.038	0.141
(e) Dock at Giant Mine near mouth of Baker Creek	ND	ND	0.069	0.152
(f) Giant Mine - offshore at first spill site	ND	ND	1.65	0.095

NOTES: (1) All results are mg/l or p.p.m.

(2) (<) means "less than"

(3) ND means no sample was collected at the designated station on that date.

ARSENIC CONCENTRATIONS IN WATERS NEAR YELLOWKNIFE, N.W.T.

LOCATION	<u>DATES (1974)</u>		
	MAY 21	MAY 27	JUNE 10
1. Yellowknife River at Pump House			
(a) Before chlorination	< 0.020	< 0.020	< 0.020
(b) After chlorination	< 0.020	< 0.020	< 0.020
2. Tap Water (Frenchy Bldg.)	< 0.020	< 0.020	< 0.020
3. Yellowknife Bay			
(a) Emergency Well Pumphouse	0.059	0.080	0.063
(b) End of Latham Island	0.062	0.067	0.054
(c) Dock in "Rainbow Valley"	0.064	0.052	0.065
(d) Dock at Weaver & Devore	< 0.020	0.054	0.094
(e) Dock at Giant Mine near mouth of Baker Creek	0.083	0.106	0.098
(f) Giant Mine - offshore at first spill site	4.62	0.139	0.039

NOTE: All readings in mg/l or p.p.m.
 < means "less than"