



MEMORANDUM

CLASSIFICATION

TO
A

Mr. R.E. Tait, Chief
Public Health Eng. Div.
OTTAWA, Ontario

YOUR FILE No.
Votre dossier

OUR FILE No.
Notre dossier

FROM
De

Edmonton 2, Alberta

DATE

July 31, 1970

FOLD

SUBJECT
Sujet

Yellowknife Bay Arsenic Survey

Attached are the locations for the Yellowknife Bay Arsenic Survey results reported by the Vancouver Laboratory on July 7, 1970. This survey was made by Dept. of Fisheries personnel on or about April 15, 1970. At this time, there was full ice cover on the lake with ice-fishing activity in the general area where the first six samples were taken. The locations are reported as standard military grid references for the 1:50,000 scale Yellowknife Bay map - Sheet 85 J/8.

Also attached is a copy of the analyses for arsenic and mercury made by the Food and Drug Directorate on fish samples from the Great Slave Lake area. All results are well below the established limits.

JWSh
for J.W. Grainge, P. Eng.
Regional Engineer

JWSh/es
Encls. 2

P.S. The sample locations are being sent to the other usual recipients of arsenic results.



Public Health Engineering Division
257 Federal Public Building
Edmonton 2, Alberta

July 31, 1970

CHEMICAL ANALYSIS, ARSENIC SURVEY

YELLOWKNIFE, N.W.T.

Location	Standard Military Grid Reference (Yellowknife Bay Sheet 85 J/8)	Arsenic (As) (mg/l)	
1	413087	0.006	
2	"	0.002	
3	"	N.D.	
4	"	0.004	
5	"	0.002	
6	"	0.005	
7	367086	0.002	
8	367138	0.014	
9	375174	N.D.	
10	376232	0.074	
11	370251	N.D.	
12	370262	0.040	0.012*
	(North Tip Mosher Island)		
13	362309	0.440	0.076*
	(Just SE of Baker Creek)		
14	363313	0.080	
	(Just NE of Baker Creek)		
16	366270	0.010	
17	Mouth of Baker Creek	84.000	1.930*

* - Filtered.

Date Received: July 2, 1970 in Vancouver.

June 22, 1970 in Edmonton.

Date Sampled: c. April 15, 1970.

Samples Taken By: Dept. of Fisheries, Hay River, N.W.T.

Analyzed By: R. Holowaty, Chemist, P.H.E. Lab., Vancouver

Regional Director,
Northern Health Services,
Northern Region,
Medical Services Directorate,
Edmonton, Alberta

920-2-2

Edmonton, Alberta

July 17, 1970

Re: Fish for Analysis of Mercury and Arsenic.

Further to our telephone conversation relative to the above topic. We have telex information confirming my conversation with Dr. D. Chapman. The Mercury results are from Vancouver. The figures marked with an asterisk are visceral. All other figures are on flesh portions.

"U" No.	Source	Species	As	Hg
67001	Hay River	Whitefish	--	--
67002	"	Pickeral	0.015	--
67003	Yellowknife	Whitefish	0.035	0.02
67004	"	"	>0.01	0.02
67005	"	"	0.018	0.02 0.05*
67006	"	"	0.020	0.05 0.02*
670011	"	"	0.010	0.05

Section B15.002, of the Food & Drug Regulations, lists 5 ppm of As as the maximum level in marine products. Our established actionable level for Mercury in the edible portion of fish is 0.5 ppm.

These reported levels therefore are considered to be well below these levels.

Our Ottawa people are most anxious to receive the vegetables for analysis.

W.D. Charles

WDC/a

W.D. CHARLES,
Officer in Charge - Northern Alberta
District.

c.c. Vancouver
Ottawa
Pub. Hlth. Eng. ✓
M.F. Gillis, Yellowknife

P. H. E. D. EDMONTON	
JUL 20 1970	
J. W. G.	✓
R. N. D.	
J. W. SL.	✓
S. K. K.	
J. W. SN.	