



UNITED STATES
DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

1011 E. TUDOR RD.

ANCHORAGE, ALASKA 99503

(907) 276-3800

IN REPLY REFER TO:

June 20, 1979

JUN 25 1979

Artwin Schmidt
Fishery Biologist
Sport Fish Div.
State Office Bldg.
P.O. Box 499
Sitka, AK 99835

113-41-021

Dear Art:

The attached is the information you requested on acid snow analyzed in the Blue Lake watershed last winter. We were able to acquire 8 mature fish from the lake 6/15/79 for analysis purposes. I plan to send 4 fish in for heavy metal analysis and 4 fish to our contract lab for contaminant analysis. A progress report will be prepared in 1980 giving our findings.

Hope you find the information useful.

Sincerely,

Howard Metsker
ECE Program Supervisor

Attachment

Snow contaminants found near each 100-foot elevation above sea level to the 500-foot level of Blue Lake, located down wind from the Alaska Lumber and Pulp Company, Sitka, Alaska, January - April 1979

DATE	ELEVATION	SNOW DEPTH	CO ₂ ACTIVITY	SUSPENDED SOLIDS	PH	SO ₄	S	CONTAMINANTS (ppm)												
								As	B	Ca	Cd	Cu	Hg	K	Mg	Pb	Zn	Cl		
1/29/79	120	16"	37	19.6	7.1	1.4	0.47	-	-	-	-	-	-	-	-	-	-	-	-	-
	220	18"	35	16.4	7.0	1.1	0.37	-	-	-	-	-	-	-	-	-	-	-	-	-
	300	26"	43	11.6	7.0	1.4	0.47	-	-	-	-	-	-	-	-	-	-	-	-	-
	420	30"	24	5.6	6.3	1.2	0.40	-	-	-	-	-	-	-	-	-	-	-	-	-
3/2/79	480	30"	30	16.8	6.4	1.1	0.37	-	-	-	-	-	-	-	-	-	-	-	-	-
	120	14"	47	56	6.2	1.5	-	0.01	0.1	0.5	0.01	0.02	0.002	1.0	2.7	0.05	0.14	20.0	-	-
	220	17"	21	57	6.3	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	300	26"	54	20	6.6	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/4/79	420	32"	36	21	5.6	0.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	480	49"	35	23	5.4	0.7	-	0.01	0.1	0.5	0.01	0.02	0.002	1.0	2.7	0.05	0.14	20.0	-	-
	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	220	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4/4/79	300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	420	12"	15	-	5.8	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	480	18"	15	-	5.8	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	480*	-	55	29	5.8	-	-	0.01	-	-	0.01	0.05	0.002	-	-	0.05	0.05	-	-	-
	500**	-	95	24	5.6	-	-	0.01	-	-	0.01	0.05	0.002	-	-	0.05	0.05	-	-	-

*This analysis is of a grab water sample taken from Sawmill Creek, 200 feet below the "flash valve" outlet. Other elements analyzed and measured are as follows: Ag-0.05; Al-0.05; Cr-0.05; Fe-0.1; Mn-0.05; Se-0.01; Sr-0.05

**This analysis is of surface snow runoff into Blue Lake. Other elements analyzed and measured are as follows: Ag-0.05; Al-0.05; Ba-0.05; Cr-0.05; Fe-0.1; Mn-0.05; Ni-0.05; Se-0.01; Sr-0.05