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TO: Stew Messman and Larry Lewis

FROM: Jim Armstrong

SUBJECT: Whitney-Fidalgo Fish Processors Effluent Evaluation

DATE: September 13, 1973

State of Washington Department of Ecology

On Wednesday, August 22, 1973, an effluent evaluation was done at Whitney-Fidalgo Fish processors. The study was begun at 0830 hours and ended at 1330 hours with samples taken every one half hour.

Samples were taken from three areas: the fish transport water, the main effluent, and the secondary effluent, which empties out underneath the fresh fish conveyer.

The effluent from the head auger goes to the sewer.

Approximately 147,151 pounds of fish were processed on August 22, 1973. The amount coming out as finished product was 6,319 cases (48 cans to a case). 3,637 cases were 8 ounce cans and 1,682 were 4 ounce cans.

The roe consisted of 165 boxes with 22 pounds per box, for a total of 3,630 pounds.

JA:jmh

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

WATER QUALITY LABORATORY

ORIGINAL TO: A. Bernstein
COPIES TO:
LAB FILES

DATA SUMMARY

Source Whitney Estates — Collected By J.A

Date Collected _____ — Goal, Pro./Obj. _____

Log Number: 73- 302 303 309

Station:	FRESH FISH EFF	MAIN EFF	TRANSPORT SOURCE								STORET
pH	6.8	6.5	6.8								00403
Turbidity (JTU)	44	550	30								00070
Conductivity (umhos/cm)@25C	38,000	2,100	52,000								00095
COD	805	5360	690								00340
BOD (5 day)	243	2430	270								00310
Total Coliform (Col./100ml)	-	>16,000	<2,000								31504
Fecal Coliform (Col./100ml)	-	<1,000	<1,000								31616
NO3-N (Filtered)	.20	.12	.02								00620
NO2-N (Filtered)	.02	.02	.20								00615
NH3-N (Unfiltered)	1.6	4.8	1.0								00610
T. Kjeldahl-N (Unfiltered)	54	45.8	5.6								00625
O-PO4-P (Filtered)											00671
Total Phos.-P (Unfiltered)	220.	580	340								00665
Total Solids	18,150	4552	32,050								00500
Total Non Vol. Solids	24,260	825	27,490								
Total Suspended Solids	154	2900	208								00530
Total Sus. Non Vol. Solids	9	65	34								
Color	870	1480	490								
Total Grease (Hexane Ex)	-	198	-								

Note: All results are in PPM unless otherwise specified. ND is "None Detected"
Convert those marked with a * to PPB (PPM X 10^3) prior to entry into STORET

Summary By Lydia D. Roll Date 9-10-73

STP SURVEY REPORT FORM

(EFFICIENCY STUDY)

Whitney-Fidalgo

City Anacortes Plant Type Fish Proc. Population Served _____ Design Capacity _____

Receiving Water _____ Engineer _____

Date August 22, 1973 Survey Period 0900-1330 hours Survey Personnel Devitt-Armstrong

Comp. Sampling Frequency Every half hour Weather Conditions (last 48 hours) _____

Sampling Alequot 600 mls.

PLANT OPERATION

Total Flow Not recorded How Measured _____

Max. (Flow) _____ Time of Max. _____ Min. _____ Time of Min. _____

Pre Cl_2 _____ #/day Post Cl_2 _____ #/day

FIELD RESULTS

Determinations	Transport Water				Main Effluent			
	Max.	Min.	Mean	Median	Max.	Min.	Mean	Median
Temp. °C	12	10.1	11	11	19.6	18	18.7	18.6
pH	7.0	5.8			7.0	6.6		6.7
Conductivity (umhos/cm)					6000	1850		2750
Settleable Solids	1	.6	.8	.8	35	27	31	31

LABORATORY RESULTS ON COMPOSITE IN PPM

Laboratory Number	Transport Water	Main Effluent	% Reduction
5-Day BOD	270	2930	
COD	690	5360	
T.S.	32,050	4552	
T.N.V.S.	27,490	825	
T.S.S.	208	2900	
N.V.S.S.	34	65	
pH	6.8	6.5	
Conductivity	52,000	2100	
Turbidity	30	550	

BACTERIOLOGICAL RESULTS

$Na_2S_2O_3$ added to sample Previous ____ ~~After~~ to Sampling ____ min.

LAB #	SAMPLING TIME	COLONIES/100 MLS (MF) Fecal Coliform	Cl Residual	
			ppm	(after secs)
Transport water		≤10,000		
Main Effluent		≤10,000		

rator's Name _____ Phone # _____

ments: _____