

TO: Tom McCann, Ron Pine, Ron Devitt
and Files

FROM: Jim Armstrong

SUBJECT: Lynden Frosted Foods Efficiency Study

DATE: September 7, 1973

State of
Washington
Department of
Ecology



On Wednesday, August 15, 1973, an efficiency survey was conducted at Lynden Frosted Foods, Lynden, Washington. The survey lasted from 1100 hours to 1500 hours with 600 ml samples taken every half hour.

The total weight of the raw products brought into the plant between 0700 hours and 1900 hours was 152,320 pounds of peas. The total weight of the processed peas was 137,338 pounds of frozen peas.

The remaining 13,238 pounds of waste peas were hauled away by a cattle farmer. The trucks were not weighed in or out, so there is no way of telling just how much of the total waste actually went to the farmer and how much went into the waste water, onto the ground or elsewhere.

The Coliform tests seem to indicate that the Fecal Strep bacteria was not of human origin.

The ph's in the field ranged from 7.0 to 8.4.

JA:jmh

STP SURVEY REPORT FORM

(EFFICIENCY STUDY)

Lynden Frösted

City Lynden Plant Type Foods Population Served Design Capacity

Receiving Water Nooksack River Engineer _____

Date August 15, 1973 Survey Period 1100-1500 hrs. Survey Personnel Jim Armstrong

Comp. Sampling Frequency Every 1/2 hour Weather Conditions Clear, hot
(last 48 hours)

Sampling Alequot 600 mls.

PLANT OPERATION

Total Flow 245,296 GAL/6 HRS 29,412-6 hrs. How Measured Water Meter

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

Pre Cl₂ _____ #/day Post Cl₂ _____ #/day

FIELD RESULTS

Influent

Effluent

Determinations	Influent				Effluent			
	Max.	Min.	Mean	Median	Max.	Min.	Mean	Median
Temp. °C					22	17	19.8	20.4
pH					8.4	7.0		8.2
Conductivity (umhos/cm)								
Settleable Solids					5	.7	2.2	1

LABORATORY RESULTS ON COMPOSITE IN PPM

Laboratory Number	Influent	Effluent	% Reduction
5-Day BOD		632	
COD		985	
T.S.		2040	
T.N.V.S.		1408	
T.S.S.		485	
N.V.S.S.		266	
pH			
Conductivity		2500	
Turbidity		200	

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
 WATER QUALITY LABORATORY

ORIGINAL TO:
J. Bennett
 COPIES TO:

 LAB FILES

DATA SUMMARY

Source Lynden Canned Foods

Collected By _____

Date Collected 8-15-73

Goal; Pro./Obj. _____

Log Number:	23- 2980 3981 2982			STREET
Station:	EFF	DRAIN EFF	STAIN DRAIN	
pH				00403
Turbidity (NTU)	200			00070
Conductivity (umhos/cm) @ 25°C	2500			00095
COD	985			00340
BOD (5 day)	632			00310
Total Coliform (Col./100ml)	-	>16,110	>16,110	31504
Fecal Coliform (Col./100ml)	-	>8000	<2000	31616
NO3-N (Filtered)	0.42			00620
NO2-N (Filtered)	ND			00615
NH3-N (Unfiltered)				00610
T. Kjeldahl-N (Unfiltered)				00625
O-PO4-P (Filtered)				00671
Total Phos.-P (Unfiltered)	2.50			00665
Total Solids	2040			00500
Total Non Vol. Solids	1405			
Total Suspended Solids	485			00530
Total Sus. Non Vol. Solids	266			
COLOR	94			
FECAL STREP (col/100ml)	-	>40,000	>40,000	

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 J. Epton D. Bell Date 9-4-73