MEMORANDUM

Department of Ecology

P. O. Box 829

OLYMPIA, WASHINGTON

98504

Publication No. 71-e01

TO: Nelson Graham

DATE: December 13, 1971

FROM: Bob Bishop

SUBJECT: Weyerhaeuser Wood Division Survey, Longview

On September 22, 1971, Ron Devitt and I conducted an industrial efficiency study on two treatment and collection systems at Weyerhaeuser Wood Products Division at Longview. The survey was conducted after the strike ended and when the plant was on full schedule. Ron and I collected composites at the 46 foot clarifier and the 85 foot clarifier, respectively, and collected grab samples at the indicated pump stations, Figure 1. Ron reported his results in a memo.

I began the composite of influent and effluent for the 85 foot clarifier at 0830 hours. Influent to the clarifier was generated from the barker, steam vat, plywood plant and technical center. At 1045 hours it was learned that the center inflow apron of the clarifier where influent sample was being taken, was not representable of complete influent due to recycling of sludge. The composite was dumped, and a new one was begun at 1100 hours from the main influent line at the base of the clarifier. The influent composite from 1100 to 1700 hours was composed of 1.5 liter samples from every 30 minutes. The influent total coliform sample was taken at 1330 hours. Settleable solids were tested at 1230 and 1400 hours.

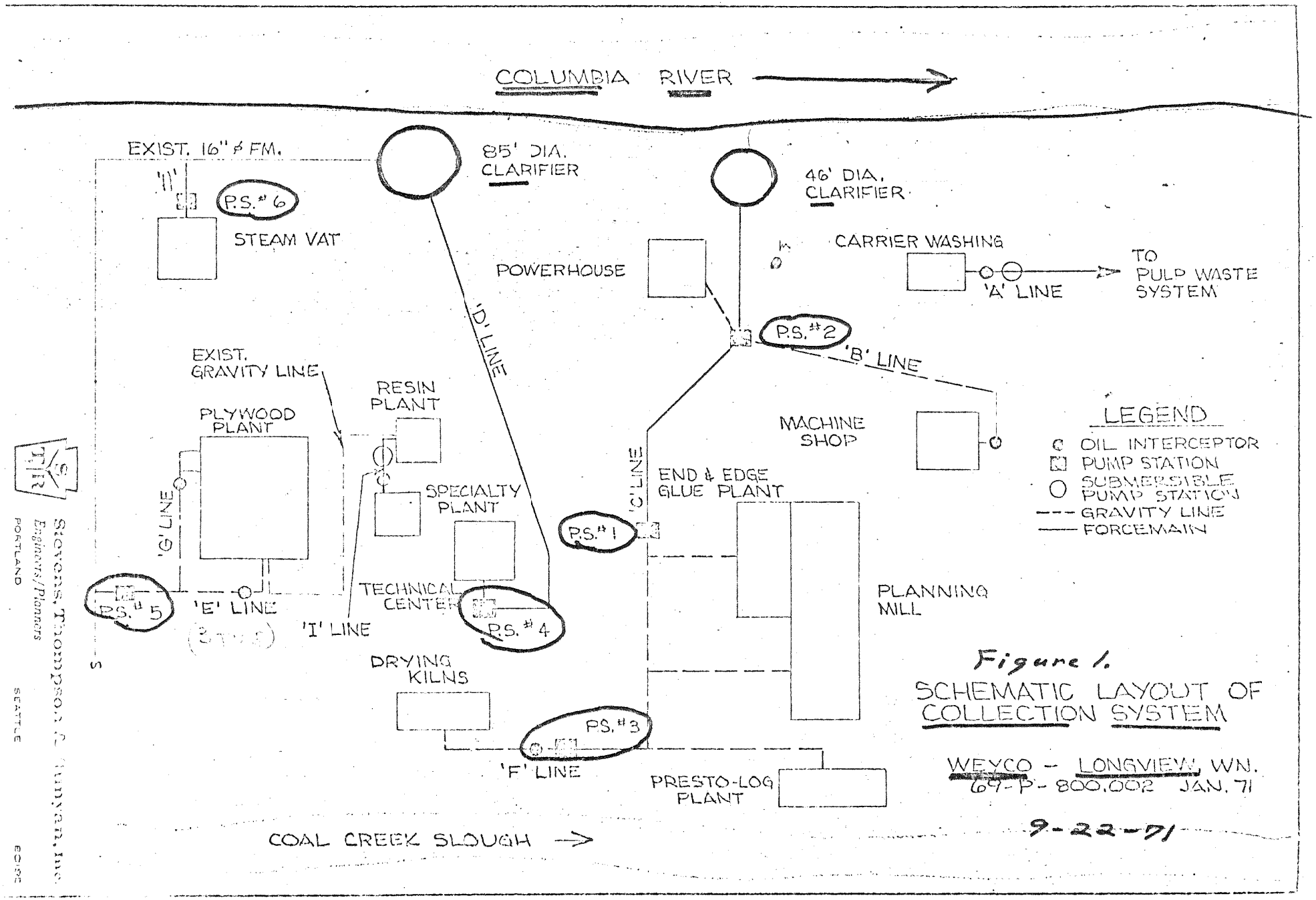
At 1100 hours the effluent sampling point was changed from the west trough outflow to the main effluent outflow at the east end of the clarifier. The total coliform sample was taken at 1340 hours. Settleable solid samples were measured at 1240 and 1410 hours. Composite sampling was 1.5 liters for every 30 minutes.

The lab report sheet and efficiency study report form give survey parameter results for clarifier influent and effluent sampling.

Pump station flow readings were recorded prior to and after survey sampling, Table. 1.

Temperature and pH for grab samples at pump stations 4,5 and 6 were:

p.s.	time	temp. °C	pH
4	1455	24.8	7.1
5	1445	26.6	9.2
6	1430	50.0	7.0


COLUMBIA RIVER
EXIST. 16" ϕ FM.
'H'
P.S. # 6
STEAM VAT
85' DIA. CLARIFIER
46' DIA. CLARIFIER
POWERHOUSE
CARRIER WASHING
'A' LINE
TO PULP WASTE SYSTEM
'D' LINE
P.S. # 2
'B' LINE
EXIST. GRAVITY LINE
RESIN PLANT
PLYWOOD PLANT
MACHINE SHOP
'C' LINE
END & EDGE GLUE PLANT
SPECIALTY PLANT
'G' LINE
P.S. # 1
TECHNICAL CENTER
P.S. # 5
'E' LINE
'I' LINE
P.S. # 4
PLANNING MILL
DRYING KILNS
P.S. # 3
'F' LINE
PRESTO-LOG PLANT
COAL CREEK SLOUGH
LEGEND
OIL INTERCEPTOR
PUMP STATION
SUBMERSIBLE PUMP STATION
GRAVITY LINE
FORCEMAIN
Figure 1.
SCHEMATIC LAYOUT OF COLLECTION SYSTEM
WEYCO - LONGVIEW, WN.
69-P-800.002 JAN. 71
9-22-71
Stevens, Thompson & Runyan, Inc.
Engineers/Planners
PORTLAND
SEATTLE
BOISE

~~STP~~ SURVEY REPORT FORM

(EFFICIENCY STUDY)

City Weyco Longview Plant Type wood mill Population Served — Design Capacity —

Receiving Water Columbia River Engineer Leo Theonnus

Date 9-22-71 Survey Period 0700 - 1730 Survey Personnel Ron Devitt Bob Bishop

Comp. Sampling Frequency 1.5 l. each 1/2 hr. Weather Conditions overcast, no rain (last 48 hours)

Sampling Alequot —

PLANT OPERATION

Total Flow — How Measured

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

Pre Cl_2 — #/day Post Cl_2 #/day

FIELD RESULTS

Determinations	Influent Max.	Influent Min.	Influent Mean	Influent Median	Effluent Max.	Effluent Min.	Effluent Mean	Effluent Median
Temp. °C	24.3	22.6	23.6	—	25.0	23.6	24.4	—
pH	8.2	7.3	7.6	—	7.8	7.4	7.5	
Conductivity (umhos/cm) infl.	—	—			—	—		
Settleable Solids 3.0 ml. at 1230 hrs. 3.5 ml. at 1400 hrs. → effluent 0.3 ml. at 1230 & 0.1 ml. at 1400 hrs.								

LABORATORY RESULTS ON COMPOSITE IN PPM

	Influent	Effluent	% Reduction
Laboratory Number	60	55	8.3
5-Day BOD	380	335	11.8
COD			
T.S.	495	324	34.5
T.N.V.S.	92	98	—
T.S.S.	323 * 242	139 * 134	56.9 * 44.6
N.V.S.S.	64 * 51	44 * 34	31.2 * 33.3
~~pH~~ pH	7.0	7.1	—
Conductivity	—	—	—
Turbidity	35	35	0.0

* filtered, Whatman 40

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY — OFFICE OF TECHNICAL SERVICES

ANALYTICAL REPORT SHEET

Routing

Original to LABORATO

Copies to:
Nelson Graham
Bob Bishop
Ron Dewitt
Merley McCall

To: Bob Bishop

The following are the analytical results from survey conducted at:

Weyerhaeuser @ Longview

03-02.23

Collected 9/22/71

LAB. NO.	STATION NO.	ppm BOD	ppm COD	pH	J.T.U. Turbidity	colonies 100ml Total coliform	ppm Phenols	ppm Oils
71-3159	Lg Clarifier Influent	60.	380.	7.0	35.	600,000.		
3160	Lg Clarifier Effluent	55.	335.	7.1	35.	200,000.	.112	2.
3161	Sm Clarifier Inf 2nd Mill	90.	390.	5.9	50.	400.		
3162	Sm Clarifier Inf P. Station	15.	130.	10.7	45.	>160,000.		
3163	Sm Clarifier Inf 1st Mill	115.	970.	5.4	55.			
3164	Sm Clarifier Effluent	70.	350.	6.7	50.		.089	2.
3165	Pump Station #2	15.	105.	10.9	40.			
3166	Pump Station #3	125.	300.	6.0	4.			.8.
3167	Pump Station #4	5.	25.	7.2	3.			
3168	Pump Station #5	45.	380.	9.0	20.		.470	5.
3169	Pump Station #6	350.	780.	6.5	5.			
3170	Sm Clarifier Inf → Comp.	85.	650.	5.9	55.			

Notes:

Summarized by Pat Lee

Date 9/30/71

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71-3159	495.	92.	323.	64.	259.	242.	51.	191.
3160	324.	98.	139.	44.	95.	134.	34.	100.
3161	440.	134.	316.	105.	211.	207.	70.	137.
3162	2,343.	2,124.	328.	214.	114.	122.	85.	37.
3163	557.	118.	425.	86.	339.	294.	62.	232.
3164	640.	354.	150.	72.	78.	98.	47.	51.
3165	614.	105.	65.	26.	39.	N:1	N:1	N:1
3166	291.	8.	15.	3.	12.	17.	8.	9.
3167	119.	75.	7.	2.	5.	N:1	N:1	N:1
3168	231.	0.	78.	8.	70.	44.	9.	35.
3169	584.	65.	30.	9.	21.	N:1	N:1	N:1
3170	422.	64.	332.	86.	246.	168.	68.	100.

Notes:

Summarized by Pat Lee

Date 9/30/71

Table 1. Pump Station Flow Readings

Pump Station	Hrs. of Survey Time	Time	Pump No.	Reading Hours	Flow Rate GPM	Motor HP	Pump on, hrs.	Gal. for Survey hr
1	0920	1730 0810	1	297.3 297.1	200	5	0.2	2,400
			2	301.1 300.9	"		0.2	2,400
2	0935	1740 0805	1	2376.1 2376.1	600	7.5	0.0	0.0
			2	2388.9 2384.7	"		4.2	151,200
3	0935	1735 0800	1	315.0 314.7	90	1.5	0.3	1,620
			2	165.6 165.3	"		0.3	1,620
4	0935	1725 0750	1	2468.8 2465.2	270	7.5	3.6	58,320
			2	1467.1 1464.7	"		2.4	38,880
5	0935	1720 0745	1	1277.2 1274.1	900	75	3.1	167,400
			2	11303.0 11300.0	"		3.0	162,000
6	0935	1715 0740	1	206.8* 206.2	150	20	0.6	5,400
			2	315.4 314.8	"		0.6	5,400

*reading error, will call it ~~260~~.8 206.8

32/1

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Department of Ecology
P. O. Box 829
OLYMPIA, WASHINGTON
98504

	Check
Information	
For Action	
Permit	
Other	

TO: Nelson Graham DATE: June 29, 72

FROM: Rec DeVitt

SUBJECT: Del Monte Fruit - Longview

On June 8, 1972, Gary Rothwell and I met with Mr. Claude Scott at Del Monte Fruit in Longview.

Preparations were being made to install a Parshall flume. The concrete south of the building was being broken up. The sewer line to the street was already in, the end capped off near where the discharge from the flume will leave their property. Intentions were to have the system operable before July 1 when the beans are to be processed.

The industry has provided the capability to route their cooling water to either the storm system or the domestic sewer.