

## (EFFICIENCY STUDY)

WA-23-1020

City Chehalis Plant Type Secondary Population 5700 Design 1 MGD / Served Capacity  
 Receiving Water Chehalis River Engineer Nelson Graham  
 Date 9/18/72 Survey Period 1000 - 1700 Hrs. Survey Personnel Ty Thomas  
 Comp. Sampling Frequency 1/2 Hr. Weather Conditions Overcast  
 (Test 48 hours)  
 Sampling Aliquot MGD/x 1000 ml/sample

Average

## PLANT OPERATION

XXXXX Total Flow 1.8 MGD How Measured Parshall Flume - Yardstick  
 Max. (Flow) 2.4 Time of Max. 1000 Hr. Min. 1.7 Time of Min. 1100, 1300,  
1400, 1600, 1700 Hrs.  
 Pre Cl<sub>2</sub> --- #/day Post Cl<sub>2</sub> ? #/day

## FIELD RESULTS

## Influent

## Effluent

8 Determinations

Temp. °C

pH

Conductivity  
(umhos/cm)Settleable  
Solids

Max.	Min.	Mean	Median	Max.	Min.	Mean	Median
				16.8	15.7	16.3	16.5
				6.8	6.0	6.3	6.2
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				Nil	Nil	Nil	Nil

## LABORATORY RESULTS ON COMPOSITE IN PPM

Laboratory Number

5-Day BOD

COD

T.S.

T.N.V.S.

T.S.S.

N.V.S.S.

pH

Conductivity

Turbidity

Influent	Effluent	% Reduction
	72-3535	
	16	
	69	
	272	
	168	
	26	
	4	
	7.2	
	353	
	10	

Chehalis

## BACTERIOLOGICAL RESULTS

Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> added to sample \_\_\_\_\_ after in bottle \_\_\_\_\_ min.

LAB #	SAMPLING TIME	COLONIES/100 MLS (MF)	15 sec.	Cl Residual 3 min.
			ppm	(after secs.)
72-3536	1100	< 200	.3	1.0
72-3537	1300	200	.2	.8

Operator's Name Dick Miller Phone # 748-7187

Comments: Composites were also made of influent at the south Parshall flume. The field  
and lab data are not reported on the influent because these samples were influenced by  
a sludge return. The operator was not aware that the return system was operating.

## WATER QUALITY LABORATORY

COPIES TO:

LAB FILES

Source CHEHALIS STP

Collected By ASTHRE

Date Collected 9/18/72

Goal, Pro./Obj. 3.2.23

Log Number: 72-3533-3534-3535-3536-3537

STORET

Station:	INE	PRIM. CLAR. EFF	EFF	EFF 1100	EFF 1300
pH	6.0	5.2	7.2		
Turbidity (JTU)	275	53	10		
Conductivity ( $\mu\text{mhos/cm}$ ) @ 25°C	520	481	353		
COD	2060	740	69		
BOD (5 day)	960	408	16		
Total Coliform (Col./100ml)				<200	200
Fecal Coliform (Col./100ml)					
N <sup>-N</sup> (Filtered)					
NO <sub>2</sub> -N (Filtered)					
NH <sub>3</sub> -N (Unfiltered)					
T. Kjeldahl-N (Unfiltered)					
O-PO <sub>4</sub> -P (Filtered)					
Total Phos.-P (Unfiltered)					
Total Solids	1758	685	272		
Total Non Vol. Solids	344	177	168		
Total Suspended Solids	991	115	26		
Total Sus. Non Vol. Solids	166	5	4		

No good to DVC Gorge

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

Summary By Mary Holcomb Date 9/27/72

