

WA-45-1020

TO: Merley McCall, Tom Haggarty

DATE: December 9, 1969

FROM: Ron Lee

R.A.L.

SUBJECT: Tree Top Juice Co., Cashmere

Results from a survey designed to measure the effect of discharging Tree Top juice plant effluent to the Wenatchee River indicate that a serious water quality problem exists downstream from the outfall. Most important is the drastic change in the stream-bed habitat at and immediately below the plant discharge. Substantial sphaerotilus growths develop in the stream as soon as the effluent emerges from the discharge pipe. The development of an extensive bed is assured in the first hundred yards downstream. These growths, which completely cover the streambed on the effluent side of the river, persist for approximately one stream mile. From this point, clumps of attached "slime" are readily apparent for the next 1 1/2 stream miles. An investigation of the streambed above the point of discharge indicated the presence of a rocky bottom containing various forms of green algae; no sphaerotilus growths were observed.

The analytical data obtained from an eight hour composite sample indicate a high COD, BOD, and dissolved solids. The plant flow averages 0.25 MGD (6,744,000 gal/26 days) minus losses due to cooling and evaporation.

RL:lm
12/11/69

Table 1. Analytical data for duplicate samples of an 8-hour composite of Tree Top Apple Juice Co. effluent collected on 11/20/69.

Sample No.	COD ppm	BOD ppm	pH	Conductivity μ mhos/cm	Solids		Suspended	
					Total ppm	Nonvolatile ppm	Total ppm	Nonvolatile ppm
1	1280	852	7.0	190	1190	114	102	58
2	1280	819	7.1	191	1204	141	93	40
Average	1280	836	7.1	191	1197	128	98	49

