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State of Washington
Department of Ecology

Memo to: Mike Price, Ron Robinson

From: Ron Devitt

Subject: Pacific Lutheran University Sewage Treatment Plant Facilities

On December 7, 1972, I inspected the sewage treatment plant facilities at Pacific Lutheran in Parkland. Conversing with plant manager, Jim Phillips, I was told a consulting engineering firm is making proposals for improved sewage treatment. One of the alternatives is to eliminate the existing facilities and to connect to the city sewerage. This is dependent on extending the existing municipal sewerage to the area of Denny's Restaurant. Mr. Phillips said that the current facilities are overloaded hydraulically and that the design capacity is inadequate for the number of students enrolled.

The engineering reports are based on estimated water use per capita. There is no way to accurately determine the flow through the plant. The college operates on a minimum based water charge. The new buildings are metered but the old structures have no monitoring device. There are no weirs or flumes. For this reason composites were not taken; without a flow the significance of the BOD and solids would be of minimal value. Grab samples were taken of the influent and the effluent. The results are attached.

The effluent leaves the second pond and enters a drainage ditch and flows towards Carrie C. Keithley Junior High School. There was no above ground flow at the bridge at "L" Street So. and Garfield Street So. The course of the creek had been through the playground area at the school. The creek has been filled in and seeded with grass. The vegetation is much greener and the old course of the creek is evident. Either the fill dirt was very rich or the seepage down the old creek beds fertilizes that part of the lawn.

A temperature and dissolved oxygen were determined at various locations with a YSI instrument. Settleable solids were run on the effluent.

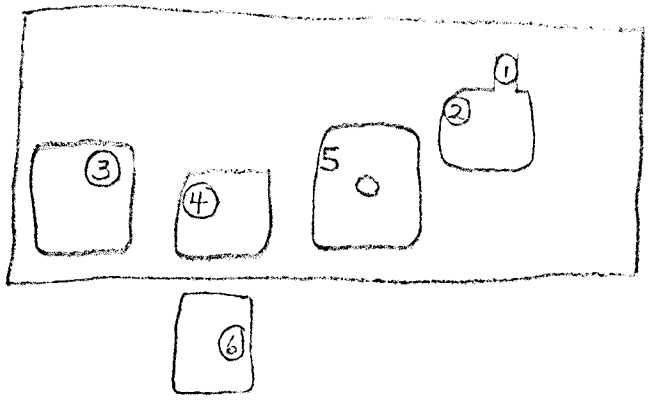
RD:slk

DATA REPORT FORM

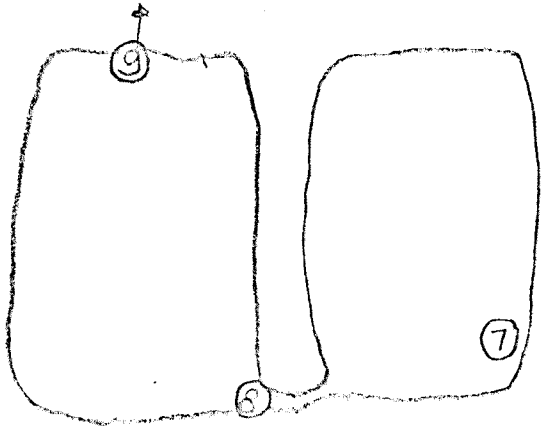
Location: Pacific Lutheran University
Grab Samples, 1030 hours

	Influent	Effluent
BOD (ppm)	206	30
COD (ppm)	380	160
pH	7.0	7.3
Conductivity (μmhos/cm)	470	540
Temperature (^{o}C)	21	10
Settleable Solids (ml/l)	---	.1
D.O.	5.9	1.4
T. Coliform (colonies/100 ml)		5×10^{6}
F. Coliform (colonies/100 ml)		1.5×10^{5}

	T	DO
1	21	5.9
2	22	3.5
3	20	0.6
4	22	0.4
5	19	2.0
6	18	0.9
7	12	3.4
8	14	3.1
9	10	1.4



OLD CREEK BED



TEMP.(C) AND D.O (PPM) - PLU - 12-7-72