



PINETOP - LAKESIDE SANITARY DISTRICT

May 21, 1992

Mr. Bill Ruth
 Mountain Air Nursery
 4681 W. Mogollon Drive
 Show Low, AZ 85901

Dear Mr. Ruth,

I am writing this letter as you requested, to explain our general use for the BOD test in our environmental laboratory.

Biochemical Oxygen Demand (BOD) determination is an empirical test in which standardized laboratory procedures are used to determine the relative oxygen requirements of wastewater, effluents, and polluted waters. The test measures the oxygen required for the biochemical degradation of organic material (carbonaceous demand) and the oxygen used to oxidize inorganic material such as sulfides and ferrous iron.

The method consists of placing a sample in a full, airtight bottle and incubating the bottle under specified conditions for a specific time. Dissolved oxygen (DO) is measured initially and after incubation. The BOD is computed from the difference between initial and final DO.

The Pinetop-Lakeside Sanitary District ran 15 tests for BOD during the period of February 19, through March 6th of 1992. These tests were run on our effluent, and a duplicate sample with various amounts of your concentrated product, Vita Flora, added.

The results showed that adding your product reduced our normal BOD by 5 to 11 percent, per mL of concentrate (Vita Flora), with the average being 8% per mL. As we have explained this is only one of many tests that can and should be run on your product to determine it's strengths and weaknesses.

I have enclosed a copy of our results. If you have any questions please do not hesitate to call me.

Sincerely,

 Phil Hayes
 Laboratory Director

ROUTE #3 BOX P-LSO

LAKESIDE, ARIZONA 85929

(602) 368-5370

PINETOP-LAKESIDE SANITARY DIST.					Initial	
RT. 3, BOX P-LSO					Prepared By	
LAKESIDE, AZ 85929					Approved By	
© WILSON JONES COMPANY 8764 Columbia					MADE	
1					2	
3					4	
Addition of Vita Flora					INF - BOD	
1992					INF/VITA - BOD	
BODs					% Reduction	
					% Reduction Per ml	
2	19	Addition	1ml Conc	120	107	11%
3	19	Addition	5ml Conc	116	98	16%
4	19	Addition	5ml Conc	117	88	25%
5	26	Addition	1ml Conc	145	133	8%
6	26	Addition	3ml Conc	146	115	21%
7	26	Addition	5ml Conc	147	94	36%
8	28	Addition	5ml Conc	175	70	47%
9	28	Addition	8ml Conc	184	54	71%
10	28	Addition	10ml Conc	N/A	36	
11	4	Addition	5ml Conc	105	57	46%
12	4	Addition	8ml Conc	116	41	65%
13	4	Addition	10ml Conc	102	32	69%
14	6	Addition	8ml Conc	90	30	67%
15	6	Addition	10ml Conc	86	22	74%
16	6	Addition	15ml Conc	87	16	82%

PHS
 Dec