

Aqua Survey, Inc.

JUN 1 1999

VOLUME I

TECHNICAL REPORT
TOXICOLOGICAL EVALUATION OF FRESHWATER SEDIMENTS
COLLECTED FROM LIBERTY INDUSTRIES
FARMINGDALE, N.Y.

DAMES AND MOORE
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May 13, 1999

ASI JOB #: 98-411R

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Chironomus tentans

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Hyaella azteca

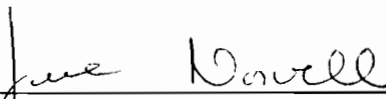
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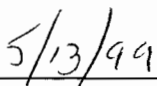
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TECHNICAL REPORT
TOXICOLOGICAL EVALUATION OF FRESHWATER SEDIMENTS
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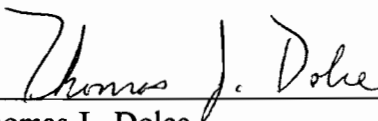
The report as well as all records and raw data were audited and found to be an accurate reflection of the study. Copies of raw data will be maintained by Aqua Survey, Inc, 499 Point Breeze Road, Flemington, New Jersey, 08822.



Jane Norvell
Quality Assurance Officer



Date



Thomas J. Dolce
Study Director



Date

recycled paper



TECHNICAL REPORT
TOXICOLOGICAL EVALUATION OF FRESHWATER SEDIMENTS
COLLECTED FROM LIBERTY INDUSTRIES
FARMINGDALE, N.Y.

AUTHOR

Thomas J. Dolce

STUDY INITIATION DATE

March 25, 1999

PERFORMING LABORATORY

Aqua Survey, Inc.
499 Point Breeze Road
Flemington, New Jersey 08822

SPONSOR

Dames and Moore
7101 Wisconsin Avenue
Suite 700
Bethesda, MD

LABORATORY PROJECT ID

STUDY # 98-411R

I. INTRODUCTION

The objective of this study was to provide data for use in an ecological risk assessment of sediment collected from Liberty Industries, Farmingdale, NY. A fourteen-day whole sediment toxicity test with the larvae of the midge, *Chironomus tentans* and a twenty-eight day whole sediment toxicity test with the amphipod, *Hyalella azteca* were conducted.

This report contains the results of benthic toxicity tests conducted on samples collected by Dames and Moore on March 24, 1999. An earlier set of benthic toxicity tests had been conducted and the results submitted to Dames and Moore (see Report 98-411, dated January 14, 1999), but after review, EPA determined that the results were not acceptable.

Also included in this report are the results of the ten-day whole sediment toxicity test with the larvae of the midge, *Chironomus tentans* initiated March 9, 1999 on the original samples received by ASI on November 4, 1998. This retest had been set up prior to EPA's determination that re-testing should be conducted on newly collected samples. Once EPA had rendered their decision, testing was terminated and accordingly, only the acute results of this 10 day test were completed.

II. TEST ADMINISTRATION

A. Sponsor

Dames and Moore
7101 Wisconsin Avenue
Suite 700
Bethesda, MD

B. Testing Facility

Aqua Survey, Inc.
499 Point Breeze Road
Flemington, New Jersey 08822

C. Dates of Experimentation

Date of Study Exposure: March 9, 1999 (*C. tentans*)
 March 30, 1999 (*C. tentans*)
 April 1, 1999 (*H. azteca*)

Date of Study Completion: May 14, 1999



D. Study Participants

Leroy Brown	Marine Operations
Thomas J. Dolce	Study Director
G. Stephen Hornberger	Technician
Michelle Thomas	Technician
Chris Doyle	Technician
Michelle Horvath	Technician
Duane Landsberger	Technician
Maureen Russell	Report Writer

III. MATERIALS AND METHODS

All sampling and testing were performed in conformance with the USEPA document, Methods for Measuring the Toxicity and Bioaccumulation of Sediment-Associated Contaminants with Freshwater Invertebrates (EPA/600/R-94/024, June 1994). The methods employed for this study also followed guidelines outlined by American Society of Testing Materials, Standard Guide for Conducting Sediment Toxicity Tests with Freshwater Invertebrates, ASTM E1706-96 and Aqua Survey's standard operating procedures entitled, Flowthrough or Static Renewal Test for Determining Acute or Chronic Toxicity of Sediments to Freshwater Midge Larvae (ASI/SOP/SED/101), and Flowthrough or Static Renewal Test for Determining Acute or Chronic Toxicity of Sediments to Freshwater Amphipods (ASI/SOP/SED/1620).

A. Sampling

Samples were collected by Dames and Moore personnel on March 24, 1999. Eight samples of sediment were received for toxicity testing by Aqua Survey personnel on March 25, 1999.

The original samples collected on November 3, 1998 were used for the March 9, 1999 rerun of the whole sediment toxicity test with the larvae of the midge, *Chironomus tentans*.

Samples were received in good condition at ASI in Flemington, NJ, and stored in the dark at 4°C. Upon arrival at ASI, all samples were logged in and assigned a unique sample number. Sample identification numbers are listed below.

Sample Location	ASI SAMPLE ID#	
	Sample Collection Dates	
	November 3, 1998	March 24, 1999
R1-01 (Reference)	82033	90653
P5-01	82034	90654
P4-01	82035	90655
P3-03	82036	90656
P3-01	82037	90657
P2-03	82038	90658
P1-02	82039	90659
P4-03	82040	90660
Control (<i>C. tentans</i>)	81997	81997
Control (<i>H. azteca</i>)		90462

B. Toxicity Testing

Whole sediment toxicity was assessed through 10-day and 14-day exposures with larvae of the midge, *Chironomus tentans* and 28-day exposures with the amphipod *Hyaella azteca*, both of which are representative benthic species.

The initial re-test with *Chironomus tentans* was conducted as a 10-day exposure. It was not until EPA determined that new samples were required for testing that the exposure period for this organism was changed to 14 days. The final retest conducted on the newly collected samples was conducted as a 14-day exposure.

The *Chironomus tentans* used in testing were cultured in-house at ASI. Toxicity testing ran from March 9 to 19, 1999 and March 30 to April 13, 1999. Unaltered silica sand was used as the control sediment. Moderately hard reconstituted water with vitamin B₁₂ and selenium added, was used as the overlay water.

The *Hyaella azteca* used in testing were hatched March 25, 1999 and received at ASI from Aquatic Research Organisms on March 30, 1999. They were held for two days prior to testing, during which time they were acclimated to test overlay water and test temperature. Toxicity testing ran from April 1 to 29, 1999. Pond sediment from ASI property was used as the control sediment. Well water was used as the overlay water. Daily water quality and physical parameters were monitored as per EPA 600/R-94/024. Final live counts, mean weights, mean lengths and water quality parameter ranges are in Tables 1 through 17.

A Standard Reference Toxicant test was performed for *C. tentans* and *H. azteca*. The reference toxicant data were entered into a program based on currently accepted methods for calculating an LC₅₀. The Standard Reference Toxicant Test results are in the biological raw data section.

IV. RESULTS AND DISCUSSION

A. Sample Preparation

All the samples prior to test initiation were sieved through a 0.5 millimeter sieve. Twenty-four hours before each test initiation, 100 ml of sample along with the control and reference were set out in each beaker with eight replicates per sample and were covered with 175 ml of the appropriate overlay water. Organisms were added the following day.

B. Toxicity Testing with *Chironomus tentans*

The results of the testing initiated on March 30, 1999 with the new set of samples, showed a control survival of 41% and a reference survival of 85%. All other test sample locations had survival above the 70% level with the exception of P3-01.

Our review of the data revealed no explanation for the low control survival. The results of the SRT tests fell within the expected ranges. Moreover, the organisms used in this test and the source of control sediment were identical to the two previous tests with these species, both of which met the control survival criteria. Lastly, survival in the reference sediment suggests that organisms used in the test were healthy. We conclude, therefore, that the control survival results are not indicative of the overall health of the organisms used in this test.

The re-testing conducted on March 9, 1999 with the old samples revealed a control survival of 80% in this test, which is well above the 70% survival required for an acceptable test. The survival live count data can be found in Tables 1 and 7.

Survival of organisms in all samples were analyzed and compared to the reference. Dry weights were calculated for surviving organisms from the 14-day test and an ANOVA was run comparing mean weights of organisms in the samples to that of the reference.

The survival of organisms in sample P3-01 were found to be statistically significantly lower (acute endpoint) when compared to the organisms in the reference sediment in the March 30, 1999 test. No other samples were found to be statistically significant for survival (acute endpoint) or growth (chronic endpoint) when compared to the reference for either test.

C. Toxicity Testing with *Hyaella azteca*

The control survival was 98%, which is well above the 80% survival required for an acceptable test. Live count data can be found in Table 12.

Survival of organisms in all samples were analyzed and compared to the reference. Lengths were measured for surviving organisms, and an ANOVA was run comparing mean lengths of organisms in the samples to that of the reference. No statistical significance was seen for survival (acute endpoint) or length (chronic endpoint) when compared to the reference sediment for these samples.

Table 1 14-Day Solid Phase Flowthrough Test			Species: <i>C. tentans</i>	
Test Date: March 30, 1999			Job #: 98-411R	
Initial Live Count: 10				
Position #	ID#	Sample	Final Live Count **	Percent Survival
39	0.01	Control	3	41%
30	0.02	81997	2	
69	0.03		4	
28	0.04		4	
42	0.05		2	
21	0.06		5	
10	0.07		8	
13	0.08		5	
48	1.01	R1-01	10	85%
2	1.02	90653	8	
54	1.03		8	
20	1.04		9	
15	1.05		8	
27	1.06		9	
53	1.07		8	
6	1.08		8	
19	2.01	P5-01	7	83%
43	2.02	90654	9	
71	2.03		10	
31	2.04		10	
32	2.05		4	
55	2.06		8	
38	2.07		10	
11	2.08		8	
56	3.01	P4-01	10	73%
47	3.02	90655	9	
26	3.03		7	
59	3.04		8	
61	3.05		8	
64	3.06		4	
40	3.07		4	
68	3.08		8	
33	4.01	P3-03	10	90%
14	4.02	90656	10	
66	4.03		6	
18	4.04		9	
25	4.05		10	
29	4.06		7	
9	4.07		10	
58	4.08		10	

Table 1 14-Day Solid Phase Flowthrough Test			Species: <i>C. tentans</i>	
Test Date: March 30, 1999			Job #: 98-411R	
Initial Live Count: 10				
Position #	ID#	Sample	Final Live Count **	Percent Survival
46	5.01	P3-01	3	53% *
4	5.02	90657	7	
41	5.03		5	
65	5.04		7	
12	5.05		5	
22	5.06		6	
16	5.07		5	
45	5.08		4	
72	6.01	P2-03	8	
35	6.02	90658	9	
60	6.03		8	
67	6.04		8	
44	6.05		10	
57	6.06		8	
49	6.07		9	
5	6.08		9	
23	7.01	P1-02	9	89%
51	7.02	90659	6	
3	7.03		9	
8	7.04		10	
24	7.05		8	
1	7.06		10	
52	7.07		10	
34	7.08		9	
17	8.01	P4-03	9	
50	8.02	90660	7	
37	8.03		9	
36	8.04		9	
7	8.05		6	
63	8.06		7	
70	8.07		8	
62	8.08		4	

*Statistically significantly lower than reference at P < 0.05

** 6 carcasses found in the control
 2 carcass found in sample P3-01
 1 carcass found in sample P4-03

Table 2 14-Day Solid Phase Flowthrough Readings (March 30, 1999)

Position #	ID#	Sample	Temperature (°C)														Low	High	
			0	1	2*	3	4	5	6	7	8	9	10	11	12	13			14
Species: <i>C. tentans</i>																			
Job #: 98-411R																			
39	0.01	Control	22.2	22.2	24.7	23.9	22.7	22.9	22.2	22.2	22.3	22.5	22.3	23.1	22.0	22.0	22.0	22.4	21.5
30	0.02	81997	22.3	22.3	24.7	24.0	22.6	23.0	22.1	22.3	22.4	22.4	22.4	23.2	22.1	22.1	22.1	22.4	21.7
69	0.03		22.3	22.3	24.7	24.0	22.7	23.0	22.2	22.4	22.5	22.5	23.2	22.2	22.1	22.1	22.1	22.4	21.6
28	0.04		22.1	22.1	24.5	24.0	22.1	22.5	22.1	22.1	22.3	22.1	23.2	22.2	22.1	22.1	22.1	22.4	21.6
42	0.05		22.2	22.2	24.6	23.9	22.4	22.8	22.0	22.1	22.2	22.2	22.9	22.1	21.9	21.9	22.2	22.4	21.5
21	0.06		22.3	22.3	24.7	24.0	22.7	23.0	22.0	22.2	22.2	22.4	23.2	22.2	22.1	22.1	22.1	22.4	21.7
10	0.07		22.2	22.2	24.6	24.0	22.1	22.7	22.7	22.5	22.0	22.0	23.1	22.0	22.1	22.1	22.1	22.3	21.5
13	0.08		22.0	22.0	24.4	23.9	22.1	22.4	21.9	22.7	22.1	22.2	23.3	22.1	22.1	22.1	22.1	22.4	21.5
48	1.01	R1-01	22.0	22.3	24.8	24.0	22.7	22.9	22.2	22.4	22.5	22.4	23.2	22.2	22.1	22.1	22.1	22.4	21.6
2	1.02	90653	22.3	22.3	24.1	24.0	22.4	22.9	22.1	22.1	22.2	22.3	23.1	22.1	22.0	22.0	22.2	22.2	21.3
54	1.03		22.2	22.2	24.7	24.0	22.7	23.0	22.2	22.3	22.4	22.6	23.2	22.2	22.1	22.1	22.1	22.4	21.6
20	1.04		22.2	22.2	24.6	24.0	22.3	22.8	22.0	22.1	22.1	22.2	23.2	22.2	22.1	22.1	22.1	22.4	21.6
15	1.05		22.3	22.3	24.7	24.0	22.7	22.9	21.9	22.5	22.5	22.6	23.2	22.2	22.1	22.1	22.1	22.3	21.6
27	1.06		22.3	22.3	24.6	24.0	22.7	23.1	22.3	22.5	22.5	22.6	23.2	22.1	22.1	22.1	22.1	22.4	21.7
53	1.07		22.2	22.2	24.6	24.0	22.5	22.8	22.3	22.2	22.4	22.4	23.3	22.2	22.1	22.1	22.1	22.4	21.6
6	1.08		22.3	22.3	24.6	24.1	22.9	22.9	22.2	22.4	22.4	22.7	23.2	22.1	22.1	22.1	22.1	22.3	21.3
19	2.01	P5-01	22.0	22.0	24.4	24.0	22.1	22.5	22.0	22.0	22.0	22.2	23.2	22.1	22.1	22.1	22.1	22.3	21.6
43	2.02	90654	22.3	22.3	24.5	24.0	22.0	22.5	22.0	22.2	22.1	22.0	23.1	22.1	22.0	22.0	22.0	22.3	21.3
71	2.03		22.2	22.2	24.6	24.1	22.4	22.9	22.4	22.2	22.5	22.5	23.3	22.3	22.2	22.2	22.2	22.4	21.6
31	2.04		22.0	22.0	24.6	24.0	22.3	22.8	22.1	22.0	22.0	22.1	23.2	22.1	22.0	22.0	22.0	22.4	21.6
32	2.05		22.2	22.2	24.6	24.0	22.5	22.9	22.3	22.3	22.2	22.3	23.2	22.1	22.0	22.0	22.0	22.4	21.6
55	2.06		22.1	22.1	24.5	24.0	22.4	22.2	22.2	22.0	22.1	22.1	23.3	22.3	22.2	22.2	22.2	22.4	21.6
38	2.07		22.2	22.2	24.6	23.9	22.4	22.6	22.4	22.2	22.4	22.2	23.1	22.0	22.0	22.0	22.0	22.4	21.5
11	2.08		22.3	22.3	24.6	24.0	22.4	22.9	22.5	22.7	22.4	22.3	23.1	22.1	22.1	22.1	22.1	22.3	21.5
56	3.01	P4-01	22.0	22.3	24.7	24.1	22.5	22.6	22.4	22.2	22.5	22.6	23.3	22.3	22.2	22.2	22.2	22.4	21.6
47	3.02	90655	22.2	22.2	24.7	24.0	22.4	22.6	22.3	22.3	22.4	22.3	23.1	22.2	22.1	22.1	22.1	22.4	21.6
26	3.03		22.2	22.2	24.5	24.0	22.4	22.9	22.5	22.5	22.5	23.3	22.2	22.2	22.1	22.1	22.1	22.4	21.6
59	3.04		22.2	22.2	24.7	24.1	22.6	23.0	22.4	22.3	22.4	22.5	23.2	22.2	22.2	22.2	22.2	22.4	21.6
61	3.05		22.0	22.0	24.6	24.1	22.3	22.8	22.8	22.0	22.1	22.0	23.3	22.2	22.2	22.2	22.2	22.4	21.6
64	3.06		22.0	22.0	24.6	24.1	22.3	22.8	22.1	22.0	22.0	22.1	23.3	22.3	22.2	22.2	22.2	22.4	21.7
40	3.07		22.0	22.0	24.3	23.6	22.2	22.6	22.5	22.0	22.1	22.0	22.8	21.7	21.6	21.6	21.6	22.1	21.2
68	3.08		22.2	22.2	24.6	24.1	22.4	22.8	22.3	22.4	22.5	22.3	23.3	22.3	22.2	22.2	22.2	22.4	21.2
33	4.01	P3-03	22.1	22.3	24.8	24.0	22.7	23.1	22.2	22.3	22.3	22.4	23.1	22.1	22.0	22.0	22.0	22.4	21.6
14	4.02	90656	22.2	22.2	24.7	24.0	22.3	22.6	21.9	22.6	22.5	22.5	23.2	22.2	22.1	22.1	22.1	22.3	21.5
66	4.03		22.3	22.3	24.7	24.1	22.7	23.1	22.2	22.2	22.4	22.4	23.3	22.3	22.1	22.1	22.1	22.4	21.6
18	4.04		22.3	22.3	24.7	24.1	22.8	23.0	22.0	22.3	22.4	22.5	23.3	22.2	22.1	22.1	22.1	22.4	21.6
25	4.05		22.1	22.1	24.4	24.0	22.2	22.8	22.8	22.2	22.1	22.2	23.3	22.2	22.1	22.1	22.1	22.4	21.7
29	4.06		22.2	22.2	24.7	24.0	22.3	22.7	22.1	22.3	22.4	22.2	23.2	22.1	22.1	22.1	22.1	22.4	21.6
9	4.07		22.3	22.3	24.6	24.0	22.8	22.9	21.9	22.4	22.4	22.6	23.2	22.1	22.1	22.1	22.1	22.3	21.5
58	4.08		22.0	22.0	24.6	24.1	22.4	22.9	22.1	22.0	22.2	22.3	23.3	22.3	22.2	22.2	22.2	22.4	21.6

5/2/09
2/1/09

Table 2 14-Day Solid Phase Flowthrough Readings (March 30, 1999) Species: *C. tentans* Job #: 98-411R

Position #	ID#	Sample	0	1	2*	3	4	5	6	7	8	9	10	11	12	13	14	Low	High
46	5.01	P3-01	22.1	22.0	24.6	24.0	22.0	22.4	22.3	22.1	22.1	22.0	23.0	22.2	22.1	22.4	21.6		
4	5.02	90657		22.3	24.6	24.0	22.3	22.4	22.6	22.1	22.0	22.1	23.2	22.2	22.0	22.3	21.3		
41	5.03			22.2	24.5	23.8	22.2	22.6	22.2	22.0	22.1	22.1	22.9	21.6	21.9	22.0	21.3		
65	5.04			22.2	24.7	24.1	22.4	22.9	22.3	22.2	22.3	22.2	23.3	22.2	22.1	22.4	21.6		
12	5.05			22.3	24.6	24.0	22.7	23.1	22.3	22.5	22.4	22.5	23.1	22.1	22.1	22.3	21.5		
22	5.06			22.2	24.6	24.0	22.2	22.5	22.5	22.1	22.0	22.1	23.3	22.2	22.2	22.4	21.6		
16	5.07			22.1	24.5	24.0	22.3	22.6	21.9	22.1	22.1	22.1	23.2	22.2	22.0	22.3	21.5		
45	5.08			22.3	24.8	24.0	22.7	22.9	22.0	22.3	22.3	22.4	23.2	22.2	22.1	22.4	21.6	21.3	24.8
72	6.01	P2-03	22.1	22.3	24.8	24.1	22.7	23.1	22.3	22.3	22.6	22.6	23.2	22.3	22.2	22.4	21.6		
35	6.02	90658		22.2	24.7	24.0	22.4	22.9	22.2	22.4	22.3	22.2	23.1	22.2	22.0	22.4	21.5		
60	6.03			22.4	24.7	23.9	22.8	23.2	22.4	22.4	22.5	22.6	23.1	22.2	22.1	22.4	21.6		
67	6.04			22.0	24.6	24.1	22.1	22.7	22.1	22.1	22.2	22.2	23.3	22.3	22.2	22.4	21.6		
44	6.05			22.3	24.8	24.0	22.4	22.6	22.1	22.3	22.3	22.3	23.1	22.2	22.1	22.4	21.5		
57	6.06			22.4	24.8	24.1	22.8	22.9	22.3	22.3	22.6	22.7	23.2	22.3	22.2	22.4	21.6		
49	6.07			22.3	24.7	23.9	22.9	22.4	22.2	22.1	22.0	22.0	23.2	22.0	21.8	22.0	21.4		
5	6.08			22.3	24.6	24.0	22.7	22.6	22.4	22.5	22.3	22.5	23.2	22.2	22.1	22.3	21.3	21.3	24.8
23	7.01	P1-02	22.2	22.3	24.6	24.0	22.6	22.7	22.4	22.4	22.2	22.4	23.3	22.2	22.1	22.4	21.6		
51	7.02	90659		22.6	24.7	23.9	23.1	22.9	22.1	22.3	22.3	22.4	23.1	21.9	22.1	22.4	21.5		
3	7.03			22.3	24.3	24.0	22.6	23.0	22.0	22.1	22.1	22.4	23.2	22.2	22.1	22.3	21.4		
8	7.04			22.2	24.6	24.0	22.7	22.7	21.9	22.6	22.4	22.5	23.2	22.1	22.1	22.3	21.4		
24	7.05			22.4	24.7	24.1	22.8	23.0	22.2	22.4	22.3	22.5	23.2	22.2	22.1	22.4	21.7		
1	7.06			22.2	24.0	23.7	22.1	22.4	22.4	22.0	22.0	22.0	23.0	22.1	22.0	21.9	21.2		
52	7.07			22.0	24.5	24.0	22.0	22.6	22.2	22.1	22.1	22.1	23.1	22.2	22.2	22.4	21.5		
34	7.08			22.0	24.6	23.9	22.1	22.6	22.1	22.1	22.1	22.0	23.1	22.1	22.0	22.3	21.5	21.2	24.7
17	8.01	P4-03	22.2	22.2	24.6	24.1	22.5	22.7	21.9	22.3	22.3	22.3	23.3	22.1	22.1	22.3	21.6		
50	8.02	90660		22.6	24.7	24.0	23.0	22.7	22.2	22.2	22.2	22.3	23.2	22.1	22.1	22.3	21.6		
37	8.03			22.0	24.6	23.9	22.1	22.4	22.5	22.0	22.1	22.0	23.1	22.0	22.0	22.4	21.5		
36	8.04			22.3	24.8	23.9	22.7	23.0	22.1	22.4	22.3	22.4	23.1	22.1	22.0	22.4	21.6		
7	8.05			22.0	24.6	24.0	22.1	22.5	22.0	22.7	22.1	22.1	23.2	22.2	22.2	22.4	21.4		
63	8.06			22.3	24.7	24.0	22.7	23.1	22.4	22.2	22.5	22.5	23.2	22.3	22.1	22.4	21.6		
70	8.07			22.0	24.6	24.0	22.2	22.9	22.2	22.1	22.1	22.1	23.2	22.3	22.2	22.4	21.5		
62	8.08			22.2	24.7	24.1	22.5	22.9	22.6	22.2	22.4	22.3	23.3	22.3	22.2	22.4	21.6	21.4	24.8
Range																			
21.2 24.8																			

*Temperature adjusted

06/17/99
R/S

Table 3 14-Day Solid Phase Flowthrough Readings (March 30, 1999)

		Species: <i>C. tentans</i>																	
		Job #: 98-411R																	
Position #	ID#	Sample	0	1	2*	3	4	5	6	7	8	9	10	11	12	13	14	Low	High
39	0.01	Control	8.06	6.22	4.42	7.76	8.21	7.89	8.05	8.34	8.11	8.15	7.96	7.86	7.89	8.04	7.09		
30	0.02	81997		6.81	4.14	7.80	8.15	7.85	8.62	8.31	8.11	8.10	7.94	8.00	8.06	8.12	7.53		
69	0.03			7.18	4.71	7.65	8.19	7.77	8.53	8.20	8.02	7.98	7.61	7.60	7.78	7.77	7.08		
28	0.04			7.41	5.85	7.78	8.27	7.95	8.60	8.37	8.14	8.15	7.90	7.98	8.05	8.10	7.49		
42	0.05			6.55	3.91	7.88	8.28	7.89	8.26	8.39	8.18	8.16	8.10	8.03	7.99	8.15	7.22		
21	0.06			7.08	5.18	7.76	8.21	7.82	8.67	7.24	8.13	8.02	7.85	7.98	7.96	8.08	7.17		
10	0.07			7.00	4.00	7.58	8.15	7.84	8.35	8.07	8.24	8.15	7.74	7.86	7.56	7.90	6.36		
13	0.08			7.23	6.69	7.71	8.19	7.92	8.61	8.19	8.23	8.10	7.88	7.93	7.65	7.98	6.56	3.91	8.67
48	1.01	R1-01	8.57	7.50	5.03	7.86	7.51	7.83	8.61	8.31	8.10	8.09	8.02	7.97	8.04	8.06	7.27		
2	1.02	90653		6.96	5.24	7.51	7.38	6.87	6.90	8.11	8.14	7.94	7.72	7.46	7.67	7.97	6.89		
54	1.03			6.22	3.29	7.75	7.12	7.62	8.20	8.06	8.06	7.97	7.84	6.97	7.38	7.73	6.90		
20	1.04			7.26	5.61	7.78	8.29	7.89	8.68	8.30	8.17	8.06	7.86	7.99	7.95	8.08	7.16		
15	1.05			7.03	5.41	7.80	8.12	7.83	8.62	8.28	8.15	8.03	7.88	7.99	7.78	8.01	6.75		
27	1.06			5.26	4.97	7.76	8.08	7.81	8.58	8.26	8.06	8.02	7.83	7.97	8.01	8.08	7.45		
53	1.07			6.34	2.33	7.78	7.63	7.62	8.47	8.08	8.07	8.00	7.96	6.83	7.29	7.68	6.63		
6	1.08			6.35	4.94	7.56	8.02	7.72	8.43	8.13	8.06	7.77	7.78	7.71	7.88	8.10	6.67	2.33	8.68
19	2.01	P5-01	8.40	7.64	6.10	7.79	8.34	7.94	8.68	8.36	8.22	8.09	7.86	8.02	7.96	8.09	7.13		
43	2.02	90654		7.49	5.83	7.86	8.31	7.86	8.70	8.37	8.22	8.22	8.05	8.04	8.01	8.12	7.35		
71	2.03			7.08	4.61	7.64	8.06	7.78	8.47	8.25	8.04	8.19	7.64	7.61	7.77	7.81	7.16		
31	2.04			7.40	3.98	7.82	8.23	7.90	8.63	8.41	8.20	8.18	7.98	8.03	8.09	8.15	7.56		
32	2.05			7.16	3.90	7.81	8.18	7.88	8.59	8.35	8.17	8.16	7.98	8.05	8.10	8.15	7.56		
55	2.06			7.34	5.77	7.62	7.37	7.87	8.35	8.18	8.11	8.08	7.59	7.12	7.44	7.73	6.90		
38	2.07			6.68	4.82	7.78	8.27	7.96	8.59	8.38	8.12	8.20	7.97	7.86	7.90	8.06	7.15		
11	2.08			6.71	4.01	7.59	8.08	7.81	8.42	8.14	8.18	8.09	7.80	7.87	7.53	7.88	6.39	3.90	8.70
56	3.01	P4-01	8.36	7.20	5.22	7.53	7.66	7.80	8.34	8.16	8.03	7.95	7.06	7.10	7.39	7.67	6.87		
47	3.02	90655		7.54	5.53	7.88	8.22	7.88	8.61	8.33	8.13	8.14	8.05	7.99	8.04	8.09	7.25		
26	3.03			5.56	5.26	7.76	8.10	7.85	8.55	8.27	8.07	8.05	7.83	7.97	8.01	8.09	7.44		
59	3.04			7.25	5.22	7.59	8.06	7.72	8.35	8.23	8.00	7.87	7.31	7.07	7.40	7.57	6.63		
61	3.05			7.50	5.90	7.70	8.06	7.80	8.42	8.29	8.05	7.99	7.56	7.28	7.65	7.71	6.74		
64	3.06			7.05	5.51	7.52	8.11	7.79	8.49	8.25	8.08	8.01	7.53	7.36	7.70	7.70	6.89		
40	3.07			7.44	5.88	7.84	8.32	7.94	8.34	8.39	8.19	8.20	8.03	8.00	8.03	8.12	7.15		
68	3.08			7.40	5.09	7.64	8.29	7.81	8.54	8.21	8.02	7.99	7.62	7.59	7.78	7.78	7.08	5.09	8.61
33	4.01	P3-03	8.28	6.95	3.07	7.81	8.14	7.84	8.61	8.34	8.15	8.12	7.98	8.06	8.10	8.16	7.52		
14	4.02	90656		7.09	5.96	7.76	8.17	7.89	8.61	8.24	8.15	8.05	7.89	7.98	7.75	8.00	6.68		
66	4.03			5.78	5.16	7.61	8.19	7.74	8.49	8.21	8.00	7.96	7.60	7.48	7.77	7.74	7.01		
18	4.04			7.32	5.36	7.81	8.17	7.84	8.66	8.36	8.20	8.06	7.89	8.03	7.94	8.10	7.06		
25	4.05			6.94	5.73	7.79	7.97	7.87	8.48	8.25	8.15	8.09	7.84	7.98	8.00	8.09	7.35		
29	4.06			7.14	4.69	7.79	8.23	7.91	8.59	8.32	8.11	8.13	7.92	7.99	8.06	8.11	7.51		
9	4.07			6.85	3.20	7.57	8.07	7.77	8.45	8.25	8.13	7.98	7.65	7.80	7.73	7.92	6.36		
58	4.08			7.40	5.66	7.57	7.95	7.73	8.29	8.31	8.05	7.94	7.19	7.06	7.38	7.56	6.68	3.07	8.66

DP
6/7/99

5/7/99

Table 3 14-Day Solid Phase Flowthrough Readings (March 30, 1999)

Position #	ID#	Sample	Species: <i>C. tentans</i>																
			0	1	2*	3	4	5	6	7	8	9	10	11	12	13	14	Low	High
46	5.01	P3-01	8.24	7.53	5.87	7.89	8.28	7.91	8.59	8.39	8.20	8.18	8.11	8.01	8.05	8.09	8.09	7.26	
4	5.02	90657	6.48	5.30	5.30	7.57	8.19	7.69	8.30	8.14	8.10	7.71	7.68	7.60	7.79	8.04	8.04	6.91	
41	5.03		7.14	5.13	7.87	8.32	7.94	8.42	8.39	8.19	8.19	8.19	8.06	8.09	7.97	8.16	7.18		
65	5.04		6.45	5.18	7.56	8.21	7.77	8.46	8.22	8.03	8.03	8.00	7.57	7.41	7.73	7.71	6.97		
12	5.05		6.46	4.25	7.60	8.03	7.77	8.48	8.13	8.16	8.04	8.04	7.82	7.88	7.56	7.90	6.48		
22	5.06		7.49	5.97	7.80	8.32	7.93	8.54	8.22	8.17	8.11	8.11	7.81	7.99	7.98	8.09	7.24		
16	5.07		7.67	6.59	7.83	8.26	7.90	8.66	8.39	8.26	8.13	7.91	7.91	8.02	7.90	8.07	6.89		
45	5.08		6.94	4.71	7.85	8.14	7.77	8.69	8.34	8.15	8.11	8.02	8.02	8.01	8.05	8.11	4.25	8.69	
72	6.01	P2-03	8.18	6.87	3.09	7.63	8.04	7.75	8.48	8.20	8.01	8.14	7.65	7.60	7.77	7.82	7.11		
35	6.02	90658	6.89	5.40	7.86	8.25	7.89	8.64	8.33	8.19	8.20	8.20	8.03	7.99	8.13	8.16	7.42		
60	6.03		6.95	4.50	7.64	7.94	7.69	8.39	8.20	7.97	7.84	7.42	7.42	7.15	7.49	7.59	6.66		
67	6.04		7.58	5.35	7.66	8.23	7.84	8.58	8.27	8.06	8.00	7.66	7.66	7.57	7.78	7.81	7.07		
44	6.05		7.18	4.89	7.85	8.21	7.83	8.69	8.35	8.17	8.16	8.04	8.04	8.01	8.04	8.12	7.32		
57	6.06		7.07	4.78	7.55	7.77	7.73	8.37	8.14	8.01	8.01	7.85	7.12	7.10	7.37	7.59	6.78		
49	6.07		7.88	4.92	7.98	8.30	7.96	8.61	8.36	8.23	8.17	8.15	8.15	8.11	8.27	8.34	7.14		
5	6.08		6.44	5.13	7.55	8.08	7.76	8.37	8.10	8.06	7.70	7.69	7.69	7.66	7.86	8.07	3.09	8.69	
23	7.01	P1-02	8.15	7.03	5.78	7.81	8.25	7.89	8.57	8.25	8.12	8.05	7.81	7.99	7.98	8.08	7.28		
51	7.02	90659	7.10	4.05	7.84	8.19	7.85	8.63	8.31	8.16	8.08	7.36	7.46	5.83	7.04	7.59	6.31		
3	7.03		6.57	5.16	7.51	7.40	6.82	6.65	8.09	8.09	7.36	7.66	7.66	7.46	7.65	7.93	6.88		
8	7.04		7.23	4.66	7.58	8.09	7.81	8.50	8.26	8.15	8.00	7.64	7.64	7.81	7.79	7.95	6.44		
24	7.05		6.82	5.09	7.79	8.17	7.84	8.62	8.27	8.09	8.02	7.82	7.82	7.97	7.98	8.07	7.30		
1	7.06		7.64	5.32	7.79	8.20	7.69	6.62	8.23	8.26	8.11	8.04	8.04	7.53	7.77	8.45	7.05		
52	7.07		6.91	2.08	7.79	8.23	7.49	8.45	8.15	8.14	8.08	8.15	8.15	6.78	7.22	7.65	6.30		
34	7.08		7.34	5.56	7.86	8.32	7.94	8.66	8.39	8.24	8.25	8.03	8.03	8.08	8.15	8.17	2.08	8.66	
17	8.01	P4-03	8.09	7.48	6.18	7.83	8.22	7.88	8.66	8.37	8.21	8.09	7.91	8.04	7.92	8.09	6.97		
50	8.02	90660	7.86	4.58	7.92	8.23	7.90	8.60	8.33	8.19	8.12	8.12	8.12	8.06	7.28	8.23	7.03		
37	8.03		7.05	5.08	7.80	8.33	7.99	8.54	8.42	8.19	8.23	7.98	7.98	7.89	7.92	8.07	7.21		
36	8.04		6.58	4.84	7.85	8.21	7.86	8.66	8.34	8.19	8.17	8.02	8.02	7.93	8.03	8.13	7.24		
7	8.05		7.51	5.07	7.60	8.20	7.84	8.52	8.24	8.23	8.02	7.79	7.79	7.80	7.86	8.06	6.58		
63	8.06		6.97	4.92	7.52	8.11	7.74	8.48	8.22	7.99	7.93	7.54	7.54	7.37	7.69	7.73	6.85		
70	8.07		7.36	5.07	7.66	7.93	7.79	8.50	8.29	8.10	8.28	7.63	7.63	7.62	7.78	7.80	7.13		
62	8.08		7.21	5.40	7.55	8.16	7.77	8.45	8.26	8.01	7.97	7.55	7.55	7.36	7.68	7.74	4.58	8.66	
																	2.08	8.70	

*Test aeration began

Table 4 14-Day Solid Phase Flowthrough Readings (March 30, 1999)

		Species: <i>C. tentans</i>																	
		Job #: 98-411R																	
Position #	ID#	Sample	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Low	High
39	0.01	Control	7.16	7.25	7.19	7.95	7.94	8.04	7.84	7.79	7.82	7.84	7.75	7.86	7.81	7.78	7.77		
30	0.02	81997		7.47	7.32	8.01	8.01	8.06	7.89	7.81	7.85	7.86	7.88	7.99	7.97	7.93	7.97		
69	0.03			7.35	7.17	7.82	7.83	7.95	7.74	7.69	7.67	7.68	7.58	7.66	7.73	7.66	7.65		
28	0.04			7.44	7.33	7.98	7.95	7.95	7.82	7.77	7.82	7.83	7.82	7.96	7.92	7.85	7.83		
42	0.05			7.32	7.22	7.97	7.99	8.05	7.86	7.84	7.85	7.87	7.88	7.96	7.94	7.87	7.86		
21	0.06			7.42	7.28	8.00	7.98	8.07	7.84	7.82	7.85	7.79	7.75	7.96	7.87	7.85	7.81		
10	0.07			7.47	7.43	7.96	7.97	7.89	7.89	7.67	7.83	7.77	7.74	7.96	7.71	7.74	7.61		
13	0.08			7.51	7.41	8.06	7.97	7.94	7.94	7.80	7.87	7.78	7.83	7.98	7.82	7.84	7.68	7.16	8.07
48	1.01	R1-01	6.98	7.30	7.14	7.97	7.93	8.10	7.84	7.80	7.81	7.84	7.77	7.92	7.86	7.82	7.81		
2	1.02	90653		7.79	7.10	8.08	8.26	8.37	7.96	7.76	8.13	8.10	7.59	8.08	7.76	8.08	7.68		
54	1.03			7.23	7.15	7.88	7.84	7.93	7.63	7.64	7.74	7.74	7.59	7.61	7.60	7.65	7.59		
20	1.04			7.42	7.26	8.01	7.97	8.08	7.82	7.82	7.86	7.79	7.74	7.97	7.86	7.86	7.80		
15	1.05			7.53	7.37	8.07	8.04	8.11	7.97	7.84	7.90	7.82	7.85	8.04	7.92	7.91	7.77		
27	1.06			7.32	7.23	7.99	7.95	8.08	7.83	7.79	7.81	7.83	7.75	7.96	7.85	7.82	7.82		
53	1.07			7.22	7.11	7.89	7.85	7.91	7.60	7.63	7.75	7.76	7.60	7.60	7.58	7.64	7.57		
6	1.08			7.36	7.14	8.04	7.98	8.19	7.88	7.72	7.95	7.90	7.70	8.06	7.84	7.89	7.62	6.98	8.37
19	2.01	P5-01	7.10	7.43	7.27	8.01	7.95	8.03	7.82	7.82	7.87	7.76	7.75	7.98	7.87	7.87	7.81		
43	2.02	90654		7.42	7.29	8.02	8.00	7.91	7.76	7.85	7.89	7.91	7.89	7.99	7.97	7.90	7.89		
71	2.03			7.34	7.14	7.86	7.90	8.01	7.78	7.77	7.75	7.81	7.65	7.70	7.76	7.77	7.67		
31	2.04			7.45	7.18	8.06	8.06	7.99	7.89	7.85	7.88	7.90	7.88	8.02	7.98	7.95	7.99		
32	2.05			7.42	7.17	8.07	8.05	8.09	7.91	7.86	7.89	7.91	7.86	8.03	7.95	7.93	7.97		
55	2.06			7.31	7.21	7.86	7.79	7.76	7.67	7.66	7.69	7.71	7.52	7.61	7.55	7.61	7.58		
38	2.07			7.23	7.10	7.98	7.95	8.01	7.81	7.79	7.82	7.85	7.76	7.92	7.79	7.79	7.78		
11	2.08			7.49	7.42	8.01	7.99	8.06	7.91	7.73	7.85	7.78	7.79	7.99	7.79	7.80	7.67	7.10	8.09
56	3.01	P4-01	7.11	7.31	7.20	7.86	7.81	7.92	7.68	7.66	7.69	7.70	7.53	7.62	7.55	7.59	7.57		
47	3.02	90655		7.31	7.13	7.98	7.95	8.13	7.82	7.79	7.82	7.84	7.79	7.95	7.87	7.84	7.84		
26	3.03			7.32	7.24	8.02	7.94	8.05	7.82	7.79	7.80	7.82	7.75	7.98	7.85	7.82	7.83		
59	3.04			7.34	7.20	7.88	7.78	7.87	7.66	7.64	7.65	7.63	7.56	7.60	7.65	7.62	7.58		
61	3.05			7.31	7.14	7.90	7.85	8.04	7.74	7.71	7.68	7.73	7.59	7.63	7.69	7.66	7.59		
64	3.06			7.29	7.11	7.82	7.78	7.99	7.70	7.71	7.64	7.68	7.56	7.63	7.67	7.64	7.61		
40	3.07			7.34	7.24	8.04	7.96	7.91	7.83	7.83	7.87	7.86	7.83	7.96	7.94	7.89	7.83		
68	3.08			7.32	7.17	7.85	7.83	7.97	7.74	7.69	7.67	7.69	7.56	7.67	7.70	7.65	7.65	7.11	8.13
33	4.01	P3-03	7.12	7.39	7.16	8.03	8.03	8.10	7.93	7.87	7.88	7.91	7.83	8.01	7.92	7.89	7.91		
14	4.02	90656		7.54	7.39	8.08	8.01	8.08	7.96	7.82	7.89	7.80	7.85	8.03	7.91	7.88	7.72		
66	4.03			7.25	7.11	7.80	7.80	7.92	7.72	7.71	7.65	7.68	7.58	7.63	7.69	7.66	7.60		
18	4.04			7.37	7.20	8.00	8.01	8.10	7.87	7.82	7.87	7.81	7.76	7.99	7.90	7.87	7.79		
25	4.05			7.29	7.23	7.98	7.93	7.99	7.81	7.78	7.81	7.82	7.73	7.96	7.85	7.83	7.82		
29	4.06			7.45	7.31	8.00	7.98	8.03	7.86	7.79	7.85	7.85	7.86	7.98	7.96	7.89	7.89		
9	4.07			7.33	7.11	7.98	7.97	8.15	7.89	7.72	7.87	7.82	7.70	7.99	7.68	7.75	7.59		
58	4.08			7.31	7.19	7.85	7.74	7.79	7.63	7.63	7.65	7.63	7.51	7.57	7.61	7.59	7.51	7.11	8.15

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Table 4 14-Day Solid Phase Flowthrough Readings (March 30, 1999)

Position #	ID#	Sample	Species: <i>C. tentans</i> Job #:																
			0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Low	High
46	5.01	P3-01	7.14	7.32	7.14	7.98	7.94	8.17	7.80	7.80	7.82	7.85	7.80	7.95	7.87	7.84	7.83		
4	5.02	90657		7.38	7.11	8.03	8.00	8.14	7.84	7.70	7.96	7.91	7.65	8.05	7.80	7.91	7.66		
41	5.03			7.33	7.18	7.99	7.99	8.04	7.85	7.84	7.86	7.88	7.83	7.93	7.92	7.88	7.80		
65	5.04			7.27	7.09	7.80	7.80	7.95	7.72	7.71	7.65	7.68	7.56	7.62	7.67	7.64	7.61		
12	5.05			7.48	7.37	8.04	8.00	8.09	7.93	7.77	7.87	7.80	7.77	7.97	7.81	7.81	7.69		
22	5.06			7.42	7.22	8.05	8.04	7.99	7.84	7.78	7.85	7.82	7.76	7.97	7.87	7.87	7.82		
16	5.07			7.42	7.29	8.05	8.02	7.98	7.85	7.82	7.88	7.80	7.83	8.03	7.92	7.91	7.81		
45	5.08			7.36	7.22	8.00	7.98	8.07	7.84	7.84	7.87	7.87	7.83	7.96	7.90	7.87	7.84	7.09	8.17
72	6.01	P2-03	7.15	7.32	7.12	7.85	7.88	8.00	7.77	7.75	7.75	7.79	7.63	7.69	7.74	7.75	7.64		
35	6.02	90658		7.29	7.18	8.02	8.02	8.13	7.85	7.82	7.83	7.89	7.79	7.95	7.85	7.85	7.90		
60	6.03			7.33	7.18	7.89	7.82	7.92	7.71	7.66	7.66	7.65	7.59	7.61	7.69	7.64	7.57		
67	6.04			7.32	7.17	7.85	7.82	8.00	7.74	7.68	7.67	7.67	7.58	7.66	7.71	7.69	7.64		
44	6.05			7.39	7.23	8.01	8.00	8.04	7.81	7.84	7.89	7.89	7.86	7.98	7.92	7.89	7.86		
57	6.06			7.31	7.18	7.82	7.82	7.96	7.69	7.66	7.69	7.68	7.50	7.60	7.55	7.56	7.53		
49	6.07			7.36	7.13	8.00	7.89	8.12	7.64	7.80	7.78	7.79	7.77	7.92	7.88	7.81	7.71	7.10	8.19
5	6.08			7.36	7.10	8.03	7.98	8.19	7.86	7.71	7.95	7.90	7.67	8.05	7.83	7.90	7.68		
23	7.01	P1-02	7.14	7.38	7.20	8.04	8.05	8.08	7.88	7.82	7.85	7.83	7.78	7.99	7.89	7.89	7.83		
51	7.02	90659		7.32	7.11	7.94	7.87	7.99	7.77	7.76	7.77	7.79	7.61	7.56	7.53	7.65	7.59		
3	7.03			7.71	7.12	8.09	8.18	8.31	7.95	7.75	8.10	8.04	7.61	8.08	7.78	8.01	7.69		
8	7.04			7.35	7.11	7.99	7.97	8.11	7.86	7.70	7.87	7.82	7.72	8.00	7.73	7.76	7.60		
24	7.05			7.33	7.18	8.01	8.03	8.11	7.89	7.84	7.85	7.84	7.78	8.00	7.89	7.87	7.85		
1	7.06			8.06	7.06	8.23	8.50	8.54	8.05	7.80	8.28	8.23	7.65	8.17	7.85	8.23	7.76		
52	7.07			7.24	7.10	7.92	7.86	7.83	7.58	7.63	7.76	7.78	7.61	7.61	7.58	7.64	7.58	7.06	8.54
34	7.08			7.32	7.20	8.06	8.03	8.13	7.82	7.80	7.83	7.90	7.83	8.02	7.94	7.92	7.94		
17	8.01	P4-03	7.14	7.38	7.22	8.04	8.03	8.07	7.86	7.82	7.88	7.81	7.81	8.03	7.93	7.91	7.84		
50	8.02	90660		7.34	7.11	7.94	7.90	8.06	7.75	7.79	7.80	7.81	7.67	7.87	7.58	7.70	7.64		
37	8.03			7.23	7.09	7.99	7.95	7.92	7.80	7.80	7.82	7.86	7.76	7.94	7.81	7.81	7.79		
36	8.04			7.24	7.14	8.00	7.99	8.08	7.85	7.81	7.81	7.88	7.76	7.94	7.83	7.83	7.83		
7	8.05			7.37	7.11	7.99	7.96	8.05	7.85	7.70	7.89	7.83	7.66	8.03	7.75	7.77	7.63		
63	8.06			7.28	7.11	7.76	7.82	7.97	7.74	7.70	7.66	7.70	7.54	7.63	7.66	7.62	7.57		
70	8.07			7.38	7.15	7.88	7.91	8.05	7.79	7.77	7.74	7.80	7.67	7.72	7.78	7.77	7.69	7.09	8.08
62	8.08			7.29	7.11	7.76	7.84	8.01	7.74	7.71	7.67	7.71	7.55	7.63	7.67	7.64	7.58	6.98	8.54
Range																			
6.98 8.54																			

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Table 5		14-Day Solid Phase Flowthrough Readings (March 30, 1999)			Species: <i>C. tentans</i>				
Job #:		98-411R							
		INITIAL			FINAL				
Position #	Sample	Alkalinity	Hardness	Conductivity	NH3	Alkalinity	Hardness	Conductivity	NH3
Control	81997	64	92	306	ND	76	88	338	2.78
R1-01	90653	60	84	309	0.44	40	96	320	ND
P5-01	90654	48	76	294	0.62	44	96	300	ND
P4-01	90655	44	72	283	1.80	44	84	293	ND
P3-03	90656	60	92	302	0.82	68	108	326	ND
P3-01	90657	48	76	284	0.39	60	88	306	ND
P2-03	90658	52	88	296	0.60	44	96	306	ND
P1-02	90659	48	80	293	1.63	32	96	291	ND
P4-03	90660	56	76	293	1.22	48	84	286	0.20

ND = <0.08 mg/L

Alkalinity = mg/L

Hardness = mg/L

Conductivity = μ mho/cm

NH3 = (mg/L) total ammonia

Table 6		SUMMARY - C. TENTANS DRY WEIGHT (g) AND SURVIVAL								
Sample	Code	Chamber	Wt. Pan Empty (g)	Dry Wt. Org. + pan (g)	Dry Wt. of Org.	No. Org.	% Survival	Wt. mg	Mean Wt. mg	
Control 81997	0.1	39	0.9461	0.9469	0.0008	3		0.267		
	0.2	30	0.9461	0.9493	0.0032	2		1.60		
	0.3	69	0.9519	0.9584	0.0065	4		1.63		
	0.4	28	0.9445	0.9481	0.0036	4		0.900		
	0.5	42	0.9477	0.9502	0.0025	2		1.25		
	0.6	21	0.9470	0.9522	0.0052	5		1.04		
	0.7	10	0.9470	0.9580	0.0110	8		1.38		
	0.8	13	0.9509	0.9596	0.0087	5	41	1.74	1.22	
R1-01 90653	1.1	48	0.9512	0.9672	0.0160	10		1.60		
	1.2	2	0.9406	0.9606	0.0200	8		2.50		
	1.3	54	0.9453	0.9608	0.0155	8		1.94		
	1.4	20	0.9462	0.9633	0.0171	9		1.90		
	1.5	15	0.9470	0.9609	0.0139	8		1.74		
	1.6	27	0.9433	0.9571	0.0138	9		1.53		
	1.7	53	0.9482	0.9643	0.0161	8		2.01		
	1.8	6	0.9502	0.9645	0.0143	8	85	1.79	1.88	
P5-01 90654	2.1	19	0.9469	0.9629	0.0160	7		2.29		
	2.2	43	0.9460	0.9648	0.0188	9		2.09		
	2.3	71	0.9474	0.9677	0.0203	10		2.03		
	2.4	31	0.9485	0.9672	0.0187	10		1.87		
	2.5	32	0.9495	0.9571	0.0076	4		1.90		
	2.6	55	0.9495	0.9650	0.0155	8		1.94		
	2.7	38	0.9466	0.9659	0.0193	10		1.93		
	2.8	11	0.9522	0.9692	0.0170	8	83	2.12	2.02	
P4-01 90655	3.1	56	0.9444	0.9598	0.0154	10		1.54		
	3.2	47	0.9479	0.9599	0.0120	9		1.33		
	3.3	26	0.9454	0.9537	0.0083	7		1.19		
	3.4	59	0.9469	0.9578	0.0109	8		1.36		
	3.5	61	0.9435	0.9590	0.0155	8		1.94		
	3.6	64	0.9496	0.9568	0.0072	4		1.80		
	3.7	40	0.9494	0.9566	0.0072	4		1.80		
	3.8	68	0.9519	0.9661	0.0142	8	73	1.78	1.59	
P3-03 90656	4.1	33	0.9468	0.9676	0.0208	10		2.08		
	4.2	14	0.9484	0.9686	0.0202	10		2.02		
	4.3	66	0.9483	0.9640	0.0157	6		2.62		
	4.4	18	0.9444	0.9667	0.0223	9		2.48		
	4.5	25	0.9465	0.9688	0.0223	10		2.23		
	4.6	29	0.9448	0.9608	0.0160	7		2.29		
	4.7	9	0.9448	0.9675	0.0227	10		2.27		
	4.8	58	0.9462	0.9686	0.0224	10	90	2.24	2.28	
P3-01 90657	5.1	46	0.9480	0.9515	0.0035	3		1.17		
	5.2	4	0.9396	0.9510	0.0114	7		1.63		
	5.3	41	0.9494	0.9523	0.0029	5		0.580		
	5.4	65	0.9505	0.9579	0.0074	7		1.06		
	5.5	12	0.9525	0.9611	0.0086	5		1.72		
	5.6	22	0.9459	0.9550	0.0091	6		1.52		
	5.7	16	0.9482	0.9546	0.0064	5		1.28		
	5.8	45	0.9431	0.9460	0.0029	4	53	0.725	1.21	
P2-03 90658	6.1	72	0.9496	0.9651	0.0155	8		1.94		
	6.2	35	0.9449	0.9656	0.0207	9		2.30		
	6.3	60	0.9480	0.9631	0.0151	8		1.89		
	6.4	67	0.9511	0.9706	0.0195	8		2.44		
	6.5	44	0.9469	0.9629	0.0160	10		1.60		
	6.6	57	0.9455	0.9648	0.0193	8		2.41		
	6.7	49	0.9522	0.9717	0.0195	9		2.17		
	6.8	5	0.9445	0.9634	0.0189	9	86	2.10	2.11	

Table 6		SUMMARY - C. TENTANS DRY WEIGHT (g) AND SURVIVAL								
Sample	Code	Chamber	Wt. Pan Empty (g)	Dry Wt. Org. + pan (g)	Dry Wt. of Org.	No. Org.	% Survival	Wt. mg	Mean Wt. mg	
P1-02 90659	7.1	23	0.9435	0.9604	0.0169	9		1.88		
	7.2	51	0.9470	0.9625	0.0155	6		2.58		
	7.3	3	0.9410	0.9558	0.0148	9		1.64		
	7.4	8	0.9482	0.9707	0.0225	10		2.25		
	7.5	24	0.9479	0.9681	0.0202	8		2.53		
	7.6	1	0.9409	0.9618	0.0209	10		2.09		
	7.7	52	0.9458	0.9655	0.0197	10		1.97		
	7.8	34	0.9460	0.9582	0.0122	9	89	1.36	2.04	
P4-03 90660	8.1	17	0.9454	0.9682	0.0228	9		2.53		
	8.2	50	0.9528	0.9752	0.0224	7		3.20		
	8.3	37	0.9477	0.9700	0.0223	9		2.48		
	8.4	36	0.9462	0.9642	0.0180	9		2.00		
	8.5	7	0.9489	0.9695	0.0206	6		3.43		
	8.6	63	0.9496	0.9679	0.0183	7		2.61		
	8.7	70	0.9472	0.9696	0.0224	8		2.80		
	8.8	62	0.9448	0.9575	0.0127	4	74	3.18	2.78	

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Table 7 10-Day Solid Phase Flowthrough Test			Species:	<i>C. tentans</i>
Test Date: March 9, 1999			Job #:	98-411R
Initial Live Count: 10				
Position #	ID#	Sample	Final Live Count*	Percent Survival
39	0.01	Control	9	
30	0.02	81997	7	
69	0.03		9	
28	0.04		10	
42	0.05		8	
21	0.06		7	
10	0.07		8	
13	0.08		6	80%
48	1.01	R1-01	9	
2	1.02	82033	8	
54	1.03		10	
20	1.04		9	
15	1.05		9	
27	1.06		10	
53	1.07		9	
6	1.08		10	93%
19	2.01	P5-01	9	
43	2.02	82034	10	
71	2.03		9	
31	2.04		10	
32	2.05		9	
55	2.06		7	
38	2.07		9	
11	2.08		8	89%
56	3.01	P4-01	10	
47	3.02	82035	7	
26	3.03		10	
59	3.04		9	
61	3.05		10	
64	3.06		9	
40	3.07		10	
68	3.08		9	93%
33	4.01	P3-03	7	
14	4.02	82036	10	
66	4.03		9	
18	4.04		9	
25	4.05		10	
29	4.06		10	
9	4.07		10	
58	4.08		10	94%

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Table 7 10-Day Solid Phase Flowthrough Test			Species:	<i>C. tentans</i>
Test Date: March 9, 1999			Job #:	98-411R
Initial Live Count: 10				
Position #	ID#	Sample	Final Live Count*	Percent Survival
46	5.01	P3-01	9	95%
4	5.02	82037	10	
41	5.03		10	
65	5.04		9	
12	5.05		10	
22	5.06		9	
16	5.07		10	
45	5.08		9	
72	6.01	P2-03	10	94%
35	6.02	82038	7	
60	6.03		10	
67	6.04		10	
44	6.05		10	
57	6.06		10	
49	6.07		8	
5	6.08		10	
23	7.01	P1-02	9	96%
51	7.02	82039	9	
3	7.03		9	
8	7.04		10	
24	7.05		10	
1	7.06		10	
52	7.07		10	
34	7.08		10	
17	8.01	P4-03	9	98%
50	8.02	82040	10	
37	8.03		10	
36	8.04		9	
7	8.05		10	
63	8.06		10	
70	8.07		10	
62	8.08		10	

*No carcasses found

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11/98

Table 8 10-Day Solid Phase Flowthrough Readings (March 9, 1999)

		Species: <i>C. tentans</i>													
		Job #: 98-411R													
Position #	ID#	Sample	Temperature (°C)												
			0	1*	2	3	4*	5	6	7	8	9	10	Low	High
39	0.01	Control	22.7	23.5	22.2	22.4	22.6	22.8	22.4	23.0	22.9	23.8	22.2		
30	0.02	81997		23.6	22.4	22.3	22.7	22.9	22.3	23.1	22.9	23.9	22.6		
69	0.03			23.5	22.1	22.2	22.5	22.7	22.2	23.0	23.1	24.0	22.5		
28	0.04			23.4	22.1	22.1	22.6	22.6	22.1	23.0	22.5	23.7	22.7		
42	0.05			23.6	22.2	22.2	22.4	22.9	22.3	23.0	23.0	23.9	22.5		
21	0.06			23.5	22.2	22.2	22.3	22.7	22.2	23.1	22.9	23.9	22.5		
10	0.07			23.4	22.2	22.2	22.1	22.6	22.1	22.8	22.3	23.0	22.3		
13	0.08			23.4	22.1	22.2	22.2	22.7	22.2	22.9	22.7	23.0	22.3	22.1	24.0
48	1.01	R1-01	22.8	23.7	22.1	22.3	22.5	22.8	22.2	23.1	22.9	23.8	22.6		
2	1.02	82033		23.9	22.5	23.5	24.1	23.3	24.3	23.6	23.8	23.8	22.1		
54	1.03			23.6	22.2	22.3	22.7	22.7	22.3	23.1	23.1	23.8	22.6		
20	1.04			23.5	22.2	22.2	22.7	22.8	22.2	23.1	22.5	23.6	22.5		
15	1.05			23.5	22.3	22.3	22.7	22.8	22.3	23.0	23.0	23.5	22.5		
27	1.06			23.6	22.4	22.4	22.3	22.7	22.3	23.1	23.1	23.9	22.7		
53	1.07			23.6	22.2	22.2	22.3	22.6	22.3	23.1	22.9	23.5	22.6		
6	1.08			24.2	22.6	22.6	23.7	24.5	24.4	23.9	23.9	24.1	22.2	22.1	24.5
19	2.01	P5-01	23.0	23.4	22.2	22.1	22.7	22.8	22.2	23.1	22.2	23.6	22.6		
43	2.02	82034		23.6	22.1	22.2	22.6	22.8	22.2	23.0	22.7	23.5	22.6		
71	2.03			23.5	22.2	22.2	22.7	22.7	22.2	23.0	22.9	23.3	22.4		
31	2.04			23.6	22.2	22.2	22.3	22.9	22.3	23.1	22.6	23.6	22.7		
32	2.05			23.6	22.3	22.3	22.4	22.7	22.3	23.1	22.8	23.7	22.6		
55	2.06			23.6	22.1	22.4	22.4	22.7	22.3	23.0	22.8	22.9	22.6		
38	2.07			23.4	22.1	22.2	22.2	22.6	22.3	22.9	22.6	23.5	22.1		
11	2.08			23.4	22.2	22.2	22.1	22.6	22.2	22.8	22.5	23.2	22.3	22.1	23.7
56	3.01	P4-01	23.1	23.6	22.1	22.2	22.7	22.8	22.3	23.1	23.0	23.2	22.7		
47	3.02	82035		23.6	22.1	22.3	22.5	22.8	22.3	23.1	22.7	23.6	22.6		
26	3.03			23.6	22.2	22.2	22.7	22.8	22.3	23.1	22.9	23.7	22.6		
59	3.04			23.6	22.1	22.2	22.2	22.7	22.3	23.1	22.9	23.5	22.7		
61	3.05			23.6	22.0	22.2	22.2	22.7	22.2	23.1	22.5	23.1	22.7		
64	3.06			23.5	22.1	22.3	22.3	22.7	22.2	23.1	22.5	23.2	22.7		
40	3.07			23.5	22.2	22.2	22.3	22.6	22.3	23.0	22.6	23.6	22.3		
68	3.08			23.6	22.1	22.2	22.2	22.5	22.2	23.0	22.8	23.7	22.5	22.0	23.7
33	4.01	P3-03	23.3	23.7	22.3	22.3	22.7	22.9	22.3	23.1	23.0	24.0	22.6		
14	4.02	82036		23.4	22.1	22.2	22.7	22.7	22.3	23.0	22.8	23.1	22.4		
66	4.03			23.6	22.1	22.2	22.5	22.6	22.2	23.0	23.0	23.7	22.6		
18	4.04			23.5	22.2	22.2	22.7	22.8	22.2	23.0	23.1	23.8	22.5		
25	4.05			23.6	22.2	22.2	22.4	22.7	22.3	23.1	22.5	23.6	22.6		
29	4.06			23.6	22.3	22.3	22.3	22.6	22.3	23.1	22.6	23.7	22.6		
9	4.07			23.3	22.3	22.3	22.1	22.7	22.2	22.7	22.9	23.9	22.3		
58	4.08			23.6	22.1	22.1	22.4	22.7	22.2	23.1	22.6	23.4	22.7	22.1	24.0

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Table 8 10-Day Solid Phase Flowthrough Readings (March 9, 1999)															
Temperature (°C)											Species: <i>C. tentans</i>				
Position #	ID#	Sample	0	1*	2	3	4*	5	6	7	8	9	10	Low	High
46	5.01	P3-01	23.4	23.6	22.1	22.4	22.7	22.8	22.3	23.1	22.6	23.5	22.6	22.1	24.3
4	5.02	82037		23.7	22.5	23.5	24.3	23.8	24.2	23.4	23.2	23.6	22.2		
41	5.03			23.6	22.2	22.3	22.5	22.8	22.2	23.0	22.8	23.7	22.4		
65	5.04			23.5	22.1	22.2	22.5	22.6	22.2	23.0	22.8	23.4	22.7		
12	5.05			23.5	22.3	22.2	22.7	22.5	22.3	22.8	22.8	23.5	22.4		
22	5.06			23.5	22.2	22.3	22.7	22.8	22.2	23.0	23.1	23.4	22.6		
16	5.07			23.4	22.2	22.4	22.7	22.9	22.4	23.0	22.7	23.3	22.5		
45	5.08			23.6	22.1	22.4	22.6	22.8	22.3	23.0	23.1	23.9	22.6	22.1	24.3
72	6.01	P2-03	23.4	23.5	22.2	22.2	22.7	22.7	22.2	23.0	23.1	23.7	22.4		
35	6.02	82038		23.6	22.4	22.5	22.7	22.9	22.4	23.1	22.7	23.8	22.7		
60	6.03			23.6	22.1	22.2	22.7	22.8	22.2	23.1	23.1	23.8	22.7		
67	6.04			23.6	22.1	22.2	22.5	22.7	22.2	23.0	22.3	23.5	22.6		
44	6.05			23.6	22.1	22.2	22.6	22.7	22.2	23.0	22.8	23.6	22.6		
57	6.06			23.7	22.4	22.4	22.7	22.8	22.4	23.1	23.2	23.6	22.7		
49	6.07			23.6	22.1	22.4	22.6	22.8	22.3	23.1	22.8	23.4	22.6		
5	6.08			23.9	22.5	23.6	24.5	24.0	24.4	23.6	23.4	23.7	22.2	22.1	24.5
23	7.01	P1-02	23.5	23.5	22.2	22.2	22.7	22.7	22.2	23.0	23.1	23.5	22.6		
51	7.02	82039		23.7	22.2	22.4	22.6	22.7	22.4	23.1	23.2	24.0	22.5		
3	7.03			24.0	22.4	23.3	24.2	23.1	24.3	23.7	23.9	24.0	22.1		
8	7.04			23.1	22.1	22.2	22.8	22.7	22.2	22.7	22.8	23.9	22.1		
24	7.05			23.5	22.2	22.2	22.7	22.7	22.3	23.0	23.1	23.8	22.6		
1	7.06			23.5	22.3	23.4	24.1	24.0	24.2	23.4	22.7	22.7	22.0		
52	7.07			23.6	22.1	22.4	22.6	22.7	22.3	23.1	22.6	23.4	22.6		
34	7.08			23.6	22.4	22.5	22.7	22.9	22.3	23.1	22.4	23.8	22.7	22.0	24.3
17	8.01	P4-03	23.9	23.5	22.2	22.1	22.7	22.8	22.2	23.0	22.9	23.5	22.5		
50	8.02	82040		23.3	22.1	22.4	22.6	22.8	22.2	23.1	23.0	23.7	22.5		
37	8.03			23.4	22.0	22.2	22.6	22.9	22.1	22.8	22.1	23.1	22.0		
36	8.04			23.6	22.4	22.5	22.7	22.9	22.4	23.1	22.9	24.0	22.7		
7	8.05			23.0	22.1	22.4	22.9	22.8	22.3	22.8	22.8	24.0	22.1		
63	8.06			23.6	22.1	22.1	22.5	22.7	22.2	23.1	22.9	23.8	22.7		
70	8.07			23.5	22.2	22.1	22.6	22.7	22.2	23.0	22.7	23.2	22.6	22.0	24.0
62	8.08			23.6	22.0	22.2	22.5	22.7	22.2	23.1	22.6	23.4	22.7	22.0	24.5
													Range		
													22.0	24.5	

*Temperature adjusted

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Table 9 10-Day Solid Phase Flowthrough Readings (March 9, 1999)

		Species: <i>C. tentans</i>													
		Job #: 98-411R													
Position #	ID#	Sample	0	1	2	3	4	5	6	7	8	9	10	Low	High
39	0.01	Control	8.27	5.86	7.00	5.88	6.64	6.36	6.49	6.01	7.04	7.34	5.42		
30	0.02	81997		6.17	6.43	5.17	7.10	6.66	6.56	6.32	7.51	7.48	4.46		
69	0.03			5.98	6.57	6.96	6.63	6.32	6.26	6.14	7.24	7.11	3.92		
28	0.04			6.13	6.37	6.56	7.14	6.37	6.98	6.23	7.79	7.03	4.07		
42	0.05			5.60	6.84	6.21	6.44	6.55	6.03	6.09	7.67	7.10	5.13		
21	0.06			5.87	6.71	6.20	7.18	6.81	7.16	6.41	8.09	6.88	4.04		
10	0.07			6.45	6.71	6.60	6.69	6.40	6.42	6.49	7.61	7.45	4.16		
13	0.08			6.45	6.43	6.29	6.94	6.48	6.61	6.66	7.39	6.14	4.03	3.92	8.27
48	1.01	R1-01	8.30	5.60	6.61	6.38	6.85	6.58	7.01	5.64	8.17	7.27	3.42		
2	1.02	82033		5.37	5.82	5.82	6.04	5.37	4.69	5.97	6.56	5.87	3.70		
54	1.03			5.38	6.73	4.49	6.54	5.12	7.09	5.51	7.46	6.90	3.71		
20	1.04			5.89	6.64	6.09	7.19	6.82	7.30	6.46	8.27	6.88	4.01		
15	1.05			6.28	6.43	5.82	7.10	6.10	6.89	6.51	7.60	6.81	3.98		
27	1.06			6.16	6.30	5.73	7.12	5.77	6.85	6.08	7.42	7.02	3.99		
53	1.07			5.48	6.70	5.05	6.77	5.62	6.76	5.52	7.74	7.19	3.91		
6	1.08			5.96	6.26	4.03	6.21	5.70	5.70	6.19	6.91	7.86	3.62	3.42	8.30
19	2.01	P5-01	8.24	7.06	6.58	6.20	7.21	6.94	7.16	6.46	8.19	6.40	3.99		
43	2.02	82034		5.85	6.76	6.42	6.90	6.56	6.55	6.24	7.76	6.52	4.36		
71	2.03			6.24	6.47	6.77	7.01	6.42	6.25	6.43	6.94	7.48	4.33		
31	2.04			6.46	6.40	6.38	7.06	6.91	6.68	6.19	7.59	7.16	4.35		
32	2.05			6.31	6.49	6.31	7.02	6.52	7.35	6.04	7.87	7.48	4.41		
55	2.06			6.15	6.69	6.12	6.42	5.38	6.34	5.73	7.75	7.02	3.42		
38	2.07			5.50	7.02	4.91	6.45	6.15	6.44	6.15	7.99	7.79	5.67		
11	2.08			6.34	6.68	6.55	6.72	6.39	6.34	6.34	7.92	6.86	4.06	3.42	8.24
56	3.01	P4-01	8.19	5.87	6.75	6.70	6.37	5.40	6.33	5.90	8.11	7.38	3.34		
47	3.02	82035		5.74	6.81	6.43	6.86	6.59	6.52	5.69	8.32	7.37	3.45		
26	3.03			6.22	6.40	4.52	7.11	5.66	6.80	6.07	7.73	6.72	3.99		
59	3.04			5.93	6.24	6.91	6.74	6.37	6.73	6.09	8.14	7.81	3.56		
61	3.05			6.11	6.49	6.88	7.04	6.28	6.62	5.78	7.65	7.26	3.85		
64	3.06			5.57	6.58	6.34	6.67	6.14	6.40	5.68	7.90	7.30	3.98		
40	3.07			5.79	7.01	6.46	6.73	6.63	6.39	6.28	7.47	6.52	5.18		
68	3.08			5.94	6.56	6.92	6.34	6.29	6.34	5.86	7.60	7.59	3.93	3.34	8.32
33	4.01	P3-03	8.11	6.27	6.72	5.65	7.01	6.55	7.42	6.00	7.53	7.53	4.39		
14	4.02	82036		6.45	6.34	6.18	7.07	6.32	6.78	6.57	7.70	6.66	4.00		
66	4.03			5.61	6.58	6.79	6.89	6.24	6.50	5.57	6.15	7.21	4.23		
18	4.04			5.71	6.45	6.39	7.14	6.33	6.95	6.37	7.38	6.88	4.00		
25	4.05			6.29	6.35	4.98	7.09	5.93	6.83	6.08	7.55	6.30	4.42		
29	4.06			6.14	6.42	5.82	7.12	6.57	6.68	6.31	8.09	7.38	4.27		
9	4.07			6.03	6.54	5.86	6.57	5.72	5.75	5.53	7.57	7.24	4.75		
58	4.08			5.87	6.27	6.96	6.44	6.29	6.64	6.25	7.86	7.49	3.43	3.43	8.11

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Table 9 10-Day Solid Phase Flowthrough Readings (March 9, 1999)

		Species: <i>C. tentans</i>													
		Job #: 98-411R													
Position #	ID#	Sample	0	1	2	3	4	5	6	7	8	9	10	Low	High
46	5.01	P3-01	8.09	5.82	6.92	6.29	6.89	6.62	6.64	6.24	8.02	6.87	3.58		
4	5.02	82037		6.40	6.24	5.04	6.08	6.33	6.20	6.09	6.79	7.34	3.29		
41	5.03			5.66	6.92	5.87	6.34	6.61	5.98	6.17	7.84	7.32	5.16		
65	5.04			5.56	6.60	6.78	6.94	6.20	6.44	5.61	6.62	7.50	4.24		
12	5.05			5.96	6.66	6.36	6.74	6.34	6.41	6.32	7.67	6.43	4.03		
22	5.06			5.94	6.23	6.36	7.11	6.80	6.71	6.38	7.34	6.61	4.63		
16	5.07			5.74	6.43	6.15	7.16	6.37	6.91	6.42	7.64	6.51	3.97		
45	5.08			5.90	6.74	6.26	6.88	6.58	6.64	6.38	7.85	7.22	3.92	3.29	8.09
72	6.01	P2-03	8.06	6.23	6.43	6.77	7.14	6.44	6.24	6.09	6.69	7.63	4.53		
35	6.02	82038		5.53	6.36	6.38	7.06	6.50	6.88	6.01	8.08	7.34	4.39		
60	6.03			6.01	6.31	6.90	6.60	6.37	6.72	5.99	7.80	7.95	3.79		
67	6.04			5.91	6.56	6.75	6.98	6.26	6.55	6.19	7.91	6.94	4.17		
44	6.05			5.87	6.75	6.52	6.79	6.56	6.56	6.36	8.02	7.04	4.16		
57	6.06			5.80	6.74	6.96	6.34	5.44	6.72	6.64	7.77	7.44	3.39		
49	6.07			5.64	6.84	6.46	6.72	6.54	5.46	5.78	7.92	6.93	3.48		
5	6.08			5.86	6.00	4.22	6.22	5.84	5.87	6.21	7.22	7.65	3.32	3.32	8.08
23	7.01	P1-02	8.01	5.98	6.04	6.35	7.08	6.74	6.68	6.30	6.74	7.29	4.77		
51	7.02	82039		5.80	6.16	5.85	6.64	6.39	5.72	5.66	7.56	6.94	4.01		
3	7.03			5.57	6.40	6.26	6.03	6.07	5.31	5.99	6.39	6.58	3.24		
8	7.04			5.70	6.35	5.36	6.54	5.79	5.74	5.56	7.81	7.65	4.38		
24	7.05			5.96	6.31	6.28	7.07	6.69	6.69	6.16	6.53	7.17	4.70		
1	7.06			5.64	5.93	5.30	6.11	5.31	4.62	6.10	8.54	7.04	4.80		
52	7.07			5.76	6.81	5.63	6.41	6.20	6.30	5.55	7.39	6.68	3.96		
34	7.08			5.69	6.45	6.05	7.02	6.52	7.46	6.03	7.65	7.10	4.37	3.24	8.54
17	8.01	P4-03	7.90	5.67	6.44	6.39	7.13	6.32	6.90	6.37	7.69	6.94	3.98		
50	8.02	82040		5.58	6.30	6.61	6.69	6.45	5.20	5.73	8.23	7.49	3.79		
37	8.03			5.33	7.04	4.96	6.69	6.55	7.15	6.39	8.58	8.10	5.98		
36	8.04			5.55	6.28	6.52	7.09	6.50	7.10	5.97	7.73	7.53	4.67		
7	8.05			6.20	6.46	4.98	6.53	6.20	6.06	6.49	7.61	7.29	3.99		
63	8.06			5.47	6.49	4.84	6.57	6.17	6.37	5.65	7.96	7.56	4.01		
70	8.07			6.20	6.54	6.88	6.95	6.38	6.30	6.31	7.81	6.99	4.15		
62	8.08			5.85	6.50	5.37	7.07	6.20	6.52	5.69	8.04	7.84	3.85	3.79	8.58
Range														3.24	8.58

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Table 10 10-Day Solid Phase Flowthrough Readings (March 9, 1999)

		Species: <i>C. tentans</i>														
		Job #: 98-411R														
Position #	ID#	Sample	pH (su)	0	1	2	3	4	5	6	7	8	9	10	Low	High
39	0.01	Control	7.86	7.07	7.23	7.30	7.22	7.33	7.38	7.35	7.34	7.40	6.91			
30	0.02	81997	7.25	7.31	7.17	7.36	7.23	7.26	7.40	7.28	7.42	7.40	6.79			
69	0.03		7.04	7.17	7.28	7.23	7.32	7.40	7.44	7.44	7.45	6.77				
28	0.04		7.19	7.28	7.24	7.30	7.23	7.37	7.29	7.38	7.36	7.37	6.91			
42	0.05		7.08	7.24	7.28	7.25	7.23	7.34	7.43	7.43	7.45	7.39	6.68			
21	0.06		7.11	7.28	7.22	7.24	7.31	7.44	7.32	7.51	7.59	7.63	6.52			
10	0.07		7.18	7.22	7.54	7.29	7.32	7.48	7.45	7.60	7.39	7.38	6.52			
13	0.08		7.35	7.15	7.15	7.22	7.19	7.31	7.27	7.32	7.35	7.36	6.93			
48	1.01	R1-01	7.77	6.97	7.14	7.31	7.38	7.55	7.30	7.81	7.76	7.35	6.29			
2	1.02	82033	6.99	7.12	7.15	7.22	7.37	7.42	7.51	7.50	7.41	6.79				
54	1.03		6.90	7.06	7.39	7.17	7.29	7.43	7.39	7.54	7.42	7.41	6.79			
20	1.04		7.06	7.13	7.16	7.17	7.27	7.34	7.41	7.42	7.31	7.32	6.94			
15	1.05		7.07	7.12	7.22	7.23	7.35	7.51	7.31	7.69	7.63	7.46	6.41			
27	1.06		7.03	7.23	7.10	7.27	7.20	7.34	7.22	7.43	7.49	7.27	6.70			
53	1.07		6.88	7.23	7.18	7.29	7.28	7.34	7.41	7.45	7.47	7.45	6.95			
6	1.08		7.14	7.15	7.18	7.22	7.30	7.39	7.33	7.35	7.36	7.44	6.93			
19	2.01	P5-01	7.62	7.07	7.23	7.10	7.22	7.35	7.37	7.43	7.34	7.29	6.92			
43	2.02	82034	6.84	7.27	7.18	7.29	7.17	7.28	7.23	7.24	7.28	7.22	6.90			
71	2.03		6.95	7.16	7.24	7.24	7.24	7.34	7.41	7.45	7.47	7.45	6.79			
31	2.04		7.15	7.15	7.17	7.21	7.33	7.40	7.43	7.43	7.43	7.43	6.80			
32	2.05		7.06	7.15	7.18	7.18	7.29	7.22	7.32	7.32	7.32	7.31	6.91			
55	2.06		6.98	7.20	7.23	7.22	7.34	7.33	7.33	7.35	7.36	7.44	6.93			
38	2.07		6.92	7.10	7.21	7.22	7.30	7.39	7.31	7.49	7.56	7.61	6.53			
11	2.08		7.10	7.20	7.24	7.24	7.19	7.30	7.24	7.34	7.31	7.29	6.92			
56	3.01	P4-01	7.61	6.92	7.16	7.21	7.21	7.33	7.27	7.34	7.38	7.32	6.93			
47	3.02	82035	6.90	7.08	7.11	7.18	7.28	7.34	7.42	7.45	7.38	6.79				
26	3.03		6.99	6.97	7.17	7.17	7.24	7.27	7.28	7.30	7.26	6.96				
59	3.04		6.88	7.04	7.20	7.15	7.25	7.23	7.25	7.30	7.11	6.94				
61	3.05		6.83	7.14	7.20	7.15	7.24	7.22	7.25	7.30	7.15	6.95				
64	3.06		6.85	7.25	7.33	7.24	7.37	7.30	7.39	7.41	7.20	6.90				
40	3.07		6.96	7.12	7.22	7.13	7.27	7.21	7.26	7.24	7.29	6.96				
68	3.08		6.85	7.16	7.17	7.21	7.33	7.43	7.42	7.41	7.43	6.80				
33	4.01	P3-03	7.57	7.21	7.50	7.17	7.32	7.46	7.42	7.58	7.48	7.48	6.60			
14	4.02	82036	7.21	7.17	7.23	7.16	7.28	7.42	7.23	7.26	7.23	7.25	6.95			
66	4.03		6.89	7.04	7.13	7.23	7.28	7.42	7.44	7.50	7.48	7.30	6.78			
18	4.04		7.04	7.33	7.04	7.13	7.21	7.30	7.36	7.43	7.48	7.42	6.78			
25	4.05		6.99	7.28	7.26	7.26	7.25	7.35	7.39	7.45	7.43	7.42	6.78			
29	4.06		7.21	7.14	7.21	7.31	7.44	7.24	7.24	7.48	7.59	7.43	6.50			
9	4.07		6.85	6.98	7.18	7.17	7.26	7.29	7.29	7.29	7.29	7.14	6.50			
58	4.08		6.90	7.18	7.18	7.17	7.26	7.29	7.29	7.29	7.29	7.14	6.95			

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Table 10 10-Day Solid Phase Flowthrough Readings (March 9, 1999)											Species: <i>C. tentans</i>					
pH (su)											Job #: 98-411R					
Position #	ID#	Sample	0	1	2	3	4	5	6	7	8	9	10	Low	High	
46	5.01	P3-01	7.54	6.94	7.21	7.21	7.23	7.35	7.29	7.38	7.41	7.21	6.92			
4	5.02	82037		7.03	7.15	7.29	7.35	7.54	7.32	7.74	7.69	7.29	6.35			
41	5.03			6.96	7.22	7.26	7.22	7.36	7.28	7.39	7.40	7.35	6.91			
65	5.04			6.91	7.18	7.25	7.17	7.29	7.25	7.25	7.24	7.23	6.97			
12	5.05			7.05	7.20	7.24	7.28	7.37	7.34	7.49	7.53	7.58	6.55			
22	5.06			7.18	7.36	7.32	7.30	7.40	7.47	7.49	7.50	7.25	6.69			
16	5.07			7.08	7.35	7.20	7.31	7.43	7.41	7.52	7.55	7.54	6.66			
45	5.08			6.90	7.22	7.19	7.19	7.33	7.27	7.38	7.35	7.39	6.93	6.35	7.74	
72	6.01	P2-03	7.49	6.96	7.18	7.28	7.16	7.27	7.23	7.26	7.27	7.24	6.95			
35	6.02	82038		6.89	7.02	7.15	7.18	7.29	7.36	7.38	7.44	7.39	6.87			
60	6.03			6.88	6.99	7.18	7.12	7.24	7.25	7.27	7.28	7.28	6.96			
67	6.04			6.89	7.14	7.23	7.14	7.27	7.21	7.27	7.27	7.33	6.93			
44	6.05			6.87	7.23	7.18	7.19	7.32	7.24	7.39	7.32	7.34	6.92			
57	6.06			6.91	7.17	7.22	7.19	7.28	7.29	7.31	7.31	7.30	6.94			
49	6.07			6.92	7.20	7.27	7.22	7.34	7.23	7.31	7.38	7.22	6.95			
5	6.08			7.07	7.17	7.21	7.38	7.53	7.32	7.72	7.66	7.42	6.38	6.38	7.72	
23	7.01	P1-02	7.42	7.10	7.21	7.26	7.27	7.39	7.45	7.48	7.48	7.42	6.74			
51	7.02	82039		6.92	7.19	7.18	7.21	7.32	7.19	7.28	7.32	7.34	6.93			
3	7.03			6.98	7.11	7.32	7.36	7.53	7.30	7.78	7.71	7.42	6.32			
8	7.04			6.89	7.21	7.24	7.34	7.46	7.28	7.53	7.62	7.41	6.49			
24	7.05			6.98	7.06	7.21	7.24	7.36	7.39	7.45	7.46	7.46	6.78			
1	7.06			7.04	7.12	7.36	7.45	7.60	7.30	7.94	7.95	7.52	6.23			
52	7.07			6.83	7.13	7.14	7.17	7.28	7.20	7.28	7.35	7.37	6.94			
34	7.08			6.94	7.03	7.02	7.16	7.29	7.39	7.40	7.47	7.26	6.83	6.23	7.95	
17	8.01	P4-03	7.41	7.10	7.35	7.26	7.30	7.44	7.45	7.52	7.53	7.53	6.68			
50	8.02	82040		6.99	7.22	7.27	7.23	7.33	7.21	7.30	7.35	7.35	6.95			
37	8.03			6.94	7.24	7.26	7.26	7.37	7.35	7.38	7.41	7.48	6.97			
36	8.04			6.96	7.06	7.22	7.20	7.29	7.36	7.37	7.41	7.42	6.87			
7	8.05			7.17	7.24	7.28	7.36	7.49	7.32	7.63	7.66	7.34	6.44			
63	8.06			6.93	7.12	7.18	7.16	7.23	7.23	7.25	7.25	7.25	6.94			
70	8.07			7.10	7.24	7.36	7.18	7.26	7.27	7.31	7.30	7.08	6.91	6.44	7.66	
62	8.08			6.90	7.08	7.18	7.16	7.25	7.22	7.23	7.27	7.21	6.94	6.44	7.66	
													Range		6.23	7.95

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Table 11		10-Day Solid Phase Flowthrough Readings (March 9, 1999)				Species: <i>C. tentans</i>			
Job #:		98-411R							
Position #	Sample	INITIAL			FINAL				
		Alkalinity	Hardness	Conductivity	NH3	Alkalinity	Hardness	Conductivity	NH3
Control	81997	60	92	300	0.08	78	66	337	1.18
R1-01	82033	56	100	328	1.41	50	92	340	1.71
P5-01	82034	48	128	370	0.41	44	96	347	1.39
P4-01	82035	52	146	338	0.84	44	96	299	0.67
P3-03	82036	48	116	358	1.42	44	76	302	1.37
P3-01	82037	48	98	322	1.84	54	76	288	0.71
P2-03	82038	52	98	345	1.65	52	88	284	1.12
P1-02	82039	48	96	346	2.89	52	84	282	1.37
P4-03	82040	48	84	313	2.99	58	80	289	1.34

ND = <0.08 mg/L

Alkalinity = mg/L

Hardness = mg/L

Conductivity = µmho/cm

NH3 = (mg/L) total ammonia

Table 12 28-Day Solid Phase Flowthrough Test			Species:	<i>H. azteca</i>
Initial Live Count: 10			Job #:	98-411R
Position #	ID#	Sample	Final Live Count*	Percent Survival
62	0.01	Control	9	
15	0.02	90462	10	
59	0.03		10	
43	0.04		10	
3	0.05		9	
11	0.06		10	
66	0.07		10	
34	0.08		10	98%
14	1.01	R1-01	8	
69	1.02	90653	7	
10	1.03		8	
53	1.04		10	
27	1.05		9	
45	1.06		4	
49	1.07		10	
64	1.08		8	80%
54	2.01	P5-01	10	
65	2.02	90654	9	
17	2.03		10	
1	2.04		10	
44	2.05		9	
41	2.06		9	
7	2.07		8	
36	2.08		8	91%
37	3.01	P4-01	10	
29	3.02	90655	10	
60	3.03		8	
5	3.04		10	
6	3.05		10	
18	3.06		8	
33	3.07		10	
46	3.08		7	91%
72	4.01	P3-03	10	
48	4.02	90656	10	
20	4.03		10	
61	4.04		10	
71	4.05		10	
56	4.06		9	
39	4.07		9	
28	4.08		10	98%

Table 12 28-Day Solid Phase Flowthrough Test			Species:	<i>H. azteca</i>
Initial Live Count: 10			Job #:	98-411R
Position #	ID#	Sample	Final Live Count*	Percent Survival
38	5.01	P3-01	10	98%
68	5.02	90657	9	
63	5.03		10	
47	5.04		9	
67	5.05		10	
24	5.06		10	
52	5.07		10	
23	5.08		10	
21	6.01	P2-03	10	95%
26	6.02	90658	9	
9	6.03		9	
42	6.04		10	
32	6.05		10	
13	6.06		10	
55	6.07		8	
19	6.08		10	
58	7.01	P1-02	9	91%
35	7.02	90659	9	
70	7.03		8	
40	7.04		10	
50	7.05		9	
31	7.06		10	
51	7.07		10	
4	7.08		8	
16	8.01	P4-03	6	74%
2	8.02	90660	5	
25	8.03		8	
30	8.04		6	
57	8.05		9	
8	8.06		8	
12	8.07		8	
22	8.08		9	

*No carcasses found

Table 13 28-Day Solid Phase Readings Temperature (°C) Species: *H. azteca* Job #: 98-411R

Position #	ID#	Sample	0	1	2	3	4	5	6	7	8*	9	10	11	12	13	14
62	0.01	Control	23.3	23.5	22.8	23.4	22.6	23.1	23.3	23.2	23.0	23.1	22.9	22.7	22.9	22.6	22.6
15	0.02	90462	24.1	23.3	23.3	23.8	23.1	23.5	23.4	23.8	24.3	23.5	23.4	23.0	23.3	22.5	22.5
59	0.03		23.6	22.5	22.9	22.6	23.1	23.2	23.2	23.2	23.3	23.2	22.8	22.6	22.7	22.5	22.4
43	0.04		23.9	22.8	23.5	23.1	23.3	23.3	22.7	23.5	24.3	23.4	23.4	23.1	23.3	22.4	22.5
3	0.05		24.1	23.4	24.1	23.3	23.3	23.3	23.3	23.5	24.3	23.5	23.3	23.0	23.4	22.3	22.5
11	0.06		24.0	23.0	23.5	23.2	23.4	23.4	23.4	23.7	24.3	23.3	23.3	23.0	23.2	22.4	22.5
66	0.07		23.4	22.3	22.7	22.5	22.5	22.9	23.0	22.8	23.3	23.1	22.7	22.7	22.9	22.8	22.6
34	0.08		23.8	22.7	22.7	23.0	23.0	23.0	22.9	23.5	24.3	23.3	23.2	22.8	22.8	22.3	22.5
14	1.01	R1-01	23.1	24.0	23.0	23.5	23.0	23.4	23.1	23.6	24.1	23.4	23.3	23.0	23.3	22.3	22.5
69	1.02	90653	23.4	22.6	23.0	23.0	22.4	22.9	23.0	23.0	23.3	23.0	22.8	22.5	22.9	22.6	22.4
10	1.03		23.9	22.8	23.3	23.3	23.1	23.3	23.3	23.6	24.2	23.4	23.3	22.9	22.9	22.3	22.5
53	1.04		24.0	23.0	23.2	23.0	23.0	23.3	23.4	23.7	24.3	23.4	23.3	23.1	23.0	22.4	22.5
27	1.05		24.0	23.0	23.5	23.5	22.9	23.1	23.3	23.2	24.1	23.1	23.2	22.8	23.4	22.3	22.4
45	1.06		24.3	23.3	23.8	23.2	23.2	23.5	23.4	23.8	24.3	23.5	23.4	23.2	23.4	22.5	22.5
49	1.07		24.0	23.1	23.4	23.4	23.2	23.3	23.2	23.7	24.4	23.4	23.4	23.1	22.6	22.4	22.5
64	1.08		23.4	22.7	23.4	23.4	22.6	23.1	23.2	23.1	23.3	23.0	22.8	22.7	23.0	22.6	22.6
54	2.01	P5-01	23.3	24.2	23.2	23.5	23.1	23.3	23.5	23.7	24.3	23.5	23.4	23.1	23.2	22.5	22.6
65	2.02	90654	23.4	22.1	22.4	22.4	22.4	22.9	22.9	22.7	23.2	23.1	22.4	22.5	22.7	22.6	22.4
17	2.03		24.1	22.8	23.5	23.1	23.1	23.3	23.5	23.6	24.1	23.3	23.2	23.0	23.3	22.4	22.4
1	2.04		23.7	23.0	22.8	22.9	22.9	22.9	22.4	23.3	23.9	22.9	22.9	22.4	22.6	22.2	22.1
44	2.05		24.1	23.0	23.6	23.1	23.4	23.4	23.2	23.6	24.4	23.5	23.3	23.1	23.4	22.4	22.4
41	2.06		24.1	23.1	23.4	23.1	23.1	23.4	23.2	23.7	24.2	23.3	23.3	23.1	23.1	22.4	22.5
7	2.07		23.8	22.4	23.6	23.0	23.0	22.8	22.7	23.5	24.2	23.2	23.3	22.9	23.2	22.3	22.4
36	2.08		24.1	23.3	23.4	23.4	23.1	23.3	23.3	23.7	24.2	23.4	23.3	22.9	23.3	22.4	22.5
37	3.01	P4-01	23.3	23.9	22.8	23.3	23.1	23.1	23.0	23.6	24.3	23.4	23.3	22.9	23.2	22.3	22.4
29	3.02	90655	24.0	23.1	23.4	23.4	23.1	23.1	23.2	23.5	24.1	23.5	23.3	23.0	23.2	22.5	22.5
60	3.03		23.5	22.6	23.2	23.2	22.6	23.1	23.3	23.2	23.3	23.2	22.8	22.6	22.9	22.5	22.4
5	3.04		24.2	22.7	23.9	23.9	23.0	23.5	23.2	23.3	24.1	23.2	23.2	22.9	23.4	22.3	22.5
6	3.05		24.2	23.1	24.0	23.2	23.2	23.5	23.4	23.5	24.3	23.5	23.3	23.0	23.4	22.4	22.5
18	3.06		24.2	23.3	23.7	23.2	23.4	23.5	23.5	23.7	24.2	23.5	23.3	23.0	23.3	22.4	22.5
33	3.07		23.9	22.8	23.6	23.6	22.8	23.2	23.1	23.5	24.2	23.2	23.2	22.8	23.3	22.4	22.4
46	3.08		24.0	23.0	23.4	23.4	23.2	23.3	23.1	23.5	24.4	23.5	23.4	23.0	23.3	22.4	22.4
72	4.01	P3-03	23.3	23.2	22.2	23.0	22.2	22.7	22.8	23.0	23.2	22.8	22.5	22.4	22.9	22.3	22.3
48	4.02	90656	24.3	23.4	23.4	23.8	23.2	23.5	23.5	23.7	24.3	23.5	23.5	23.1	23.4	22.6	22.6
20	4.03		24.0	22.9	23.3	23.0	23.0	23.2	23.4	23.4	24.1	23.3	23.2	22.9	23.1	22.3	22.5
61	4.04		23.5	22.7	23.3	22.6	23.1	23.3	23.3	23.2	23.2	23.1	22.9	22.7	22.9	22.5	22.5
71	4.05		23.1	22.3	23.0	22.3	22.8	22.9	22.9	23.0	23.2	22.8	22.6	22.4	22.9	22.3	22.3
56	4.06		24.1	23.0	23.6	23.1	23.4	23.4	23.4	23.7	23.6	23.5	23.3	23.0	23.1	22.5	22.5
39	4.07		24.2	23.2	23.7	23.2	23.4	23.4	23.4	23.8	24.2	23.4	23.3	23.1	23.3	22.4	22.6
28	4.08		23.9	22.9	23.1	23.0	23.0	22.9	22.7	23.3	24.1	23.4	23.3	22.8	22.8	22.4	22.3

Table 13 28-Day Solid Phase Readings																		
Position #	ID#	Sample	Temperature (°C)												Species: Job #:			
			0	1	2	3	4	5	6	7	8*	9	10	11	12	13	14	<i>H. azteca</i> 98-411R
38	5.01	P3-01	23.3	24.0	23.0	23.5	23.3	23.3	23.3	23.7	24.2	23.4	23.3	23.0	23.3	22.4	22.5	
68	5.02	90657	23.4	22.6	23.0	23.0	22.5	22.9	23.0	23.0	23.4	23.1	22.7	22.6	22.9	22.6	22.4	
63	5.03		23.5	22.8	23.4	23.4	22.6	23.1	23.2	23.2	23.0	23.1	22.9	22.7	22.9	22.6	22.6	
47	5.04		24.1	23.2	23.5	23.2	23.2	23.4	23.3	23.5	24.3	23.5	23.4	23.1	23.3	22.4	22.5	
67	5.05		23.4	22.5	22.9	22.5	22.5	22.9	23.0	22.9	23.3	23.1	22.7	22.6	22.9	22.7	22.5	
24	5.06		24.1	23.3	23.7	23.1	23.1	23.3	23.4	23.5	24.1	23.4	23.4	22.9	23.3	22.5	22.6	
52	5.07		23.9	22.8	23.2	23.0	23.0	23.1	23.3	23.6	24.3	23.3	23.3	23.0	23.0	22.4	22.4	
23	5.08		24.0	23.1	23.4	23.0	23.0	23.3	23.1	23.4	24.1	23.3	23.1	22.8	23.1	22.5	22.5	
21	6.01	P2-03	23.3	24.1	23.2	23.7	23.2	23.3	23.5	23.5	24.2	23.4	23.3	22.9	23.2	22.5	22.5	
26	6.02	90658	24.0	22.8	23.3	23.3	22.8	23.0	23.1	23.1	24.0	23.1	23.1	22.7	23.2	22.3	22.4	
9	6.03		24.1	23.3	24.0	23.3	23.3	23.5	23.3	23.8	24.3	23.3	23.4	23.0	23.3	22.4	22.6	
42	6.04		24.2	23.4	23.7	23.2	23.2	23.5	23.4	23.8	24.3	23.4	23.4	23.1	23.3	22.4	22.6	
32	6.05		23.9	22.5	23.4	22.8	22.8	23.2	23.0	23.4	24.0	23.2	23.1	22.8	23.1	22.3	22.4	
13	6.06		23.9	22.7	23.5	23.5	22.9	23.2	22.6	23.3	23.9	23.4	23.3	22.9	23.3	22.3	22.3	
55	6.07		24.0	22.9	23.5	23.0	23.0	23.3	23.2	23.6	24.4	23.5	23.3	23.0	22.8	22.4	22.3	
19	6.08		23.9	22.7	23.3	23.3	23.0	23.0	23.3	23.3	24.1	23.2	23.2	22.9	22.9	22.3	22.5	
58	7.01	P1-02	23.3	23.4	22.1	22.8	22.6	23.1	23.2	23.1	23.4	23.2	22.7	22.6	22.2	22.4	22.4	
35	7.02	90659	23.9	23.0	23.0	23.0	23.0	23.1	23.1	23.6	24.2	23.3	23.2	22.9	23.1	22.4	22.5	
70	7.03		23.4	22.6	23.1	22.3	22.3	22.9	22.9	23.0	23.3	22.9	22.8	22.5	22.9	22.6	22.4	
40	7.04		23.9	22.7	23.1	23.1	23.1	23.3	23.0	23.6	24.3	23.3	23.3	23.0	22.6	22.4	22.4	
50	7.05		24.1	23.1	23.5	23.2	23.2	23.4	23.3	23.7	24.3	23.4	23.4	23.1	23.1	22.4	22.6	
31	7.06		23.7	22.3	23.4	22.8	22.8	23.2	22.9	23.2	23.9	23.2	23.1	22.7	23.0	22.2	22.2	
51	7.07		24.2	23.3	23.7	23.2	23.2	23.4	23.5	23.8	24.3	23.6	23.4	23.2	23.3	22.5	22.6	
4	7.08		24.0	22.4	23.8	22.9	22.9	22.9	23.0	23.3	24.0	23.2	23.3	22.8	23.2	22.3	22.3	
16	8.01	P4-03	23.3	23.9	22.5	23.3	23.0	23.1	23.5	23.5	24.0	23.3	23.2	22.9	23.2	22.4	22.4	
2	8.02	90660	24.0	23.3	24.0	23.1	23.1	23.2	23.2	23.4	24.2	23.3	23.3	22.8	23.3	22.2	22.4	
25	8.03		23.8	22.8	23.2	22.8	22.8	22.9	23.0	23.0	24.0	23.2	23.1	22.8	22.9	22.3	22.5	
30	8.04		24.2	23.3	23.9	23.2	23.2	23.3	23.5	23.5	24.1	23.5	23.4	23.0	23.3	22.5	22.6	
57	8.05		24.2	23.2	23.9	23.2	23.2	23.4	23.5	23.9	23.3	23.5	23.4	23.1	23.2	22.6	22.5	
8	8.06		24.0	23.0	23.8	23.3	23.3	23.3	23.0	23.7	24.2	23.2	23.2	22.9	23.2	22.3	22.5	
12	8.07		24.2	23.3	24.0	23.3	23.3	23.5	23.4	23.8	24.4	23.5	23.5	23.0	23.3	22.6	22.5	
22	8.08		23.9	22.8	23.3	23.0	23.0	23.2	22.6	23.3	24.0	23.3	23.1	22.8	22.9	22.4	22.5	

*Temperature adjusted

28-Day Solid Phase Readings													Species: <i>H. azteca</i>					
Temperature (°C)													Job #: 98-411R					
Position #	ID#	Sample	15	16	17	18	19	20	21	22	23	24	25	26	27	28	Low	High
62	0.01	Control	23.2	23.1	22.9	23.1	22.7	22.7	23.2	23.2	22.8	22.7	23.2	22.9	23.1	22.4		
15	0.02	90462	23.4	23.3	23.3	23.5	22.7	22.5	23.2	23.3	23.0	23.0	23.4	22.9	23.1	22.8		
59	0.03		23.1	22.9	23.0	23.2	22.6	22.3	23.1	23.1	22.7	22.6	23.1	22.6	22.9	22.4		
43	0.04		23.4	22.8	23.5	23.6	22.8	22.6	23.3	23.3	23.0	23.0	23.5	23.1	23.1	22.8		
3	0.05		23.3	23.1	23.1	23.4	22.7	22.6	23.2	23.3	22.9	22.8	23.2	23.0	22.8	22.7		
11	0.06		23.3	23.3	23.2	23.7	22.7	22.6	23.3	23.3	22.9	22.8	23.4	23.1	22.9	22.6		
66	0.07		23.2	22.8	23.1	23.2	22.4	22.3	23.3	23.3	22.9	22.8	23.4	23.1	23.0	22.6		
34	0.08		23.3	23.2	23.4	23.6	22.9	22.5	23.2	23.2	22.8	22.8	23.3	23.0	22.9	22.6	22.3	24.3
14	1.01	R1-01	23.3	23.3	23.4	23.5	22.6	22.5	23.3	23.3	22.9	22.9	23.4	23.1	22.9	22.7		
69	1.02	90653	23.1	23.0	23.0	23.2	22.5	22.5	23.2	23.2	22.8	22.8	23.3	23.0	23.0	22.5		
10	1.03		23.3	23.3	23.0	23.6	22.6	22.5	23.3	23.3	22.8	22.6	23.4	23.0	22.8	22.6		
53	1.04		23.3	23.2	23.4	23.6	22.9	22.6	23.3	23.2	23.0	22.9	23.4	23.1	23.1	22.6		
27	1.05		23.3	23.2	22.9	23.6	22.6	22.5	23.2	23.2	22.9	22.9	23.4	23.1	22.7	22.5		
45	1.06		23.4	22.9	23.4	23.6	22.8	22.4	23.3	23.3	23.1	23.0	23.4	23.2	23.0	22.8		
49	1.07		23.4	22.9	23.4	23.6	22.8	22.6	23.3	23.2	23.1	23.0	23.4	23.1	23.1	22.6		
64	1.08		23.2	23.2	22.9	23.2	22.7	22.6	23.2	23.2	22.8	22.9	23.2	23.0	23.0	22.5	22.3	24.4
54	2.01	P5-01	23.3	23.2	23.3	23.6	22.9	22.7	23.3	23.2	23.1	22.9	23.4	22.9	23.0	22.6		
65	2.02	90654	23.1	22.7	23.1	23.2	22.3	22.3	23.2	23.1	22.7	22.8	23.3	22.8	22.9	22.3		
17	2.03		23.3	23.3	23.2	23.6	22.5	22.5	23.2	23.2	22.9	22.9	23.4	23.0	22.8	22.6		
1	2.04		23.1	23.0	23.1	23.3	22.6	22.4	22.9	23.1	22.8	22.6	23.1	22.7	22.3	22.4		
44	2.05		23.3	22.9	23.5	23.6	22.8	22.5	23.3	23.3	23.0	23.0	23.5	23.1	23.0	22.9		
41	2.06		23.3	22.9	23.4	23.6	22.8	22.4	23.3	23.2	23.1	22.8	23.4	23.1	23.1	22.8		
7	2.07		23.3	23.3	23.3	23.6	22.8	22.6	23.2	23.3	22.9	22.9	23.3	22.9	22.8	22.7		
36	2.08		23.3	23.1	23.3	23.6	22.8	22.5	23.2	23.3	23.0	22.9	23.2	23.0	23.0	22.8	22.1	24.4
37	3.01	P4-01	23.3	23.0	23.4	23.6	22.6	22.6	23.2	23.2	22.9	22.9	23.3	22.9	23.0	22.8		
29	3.02	90655	23.4	23.0	23.2	23.7	22.6	22.4	23.3	23.4	23.0	23.0	23.3	23.1	22.8	22.5		
60	3.03		23.2	23.0	23.0	23.2	22.5	22.3	23.1	23.0	22.7	22.7	23.2	22.7	22.9	22.4		
5	3.04		23.3	23.3	23.3	23.5	22.8	22.6	23.2	23.2	22.9	22.9	23.3	23.0	23.0	22.6		
6	3.05		23.3	23.4	23.3	23.5	22.7	22.7	23.2	23.3	23.0	22.9	23.3	23.0	23.0	22.7		
18	3.06		23.3	23.3	23.1	23.6	22.6	22.6	23.3	23.3	23.0	23.0	23.4	23.2	22.9	22.7		
33	3.07		23.3	23.0	23.0	23.5	22.6	22.5	23.2	23.2	23.0	22.7	23.3	23.1	23.1	22.6		
46	3.08		23.4	22.6	23.5	23.6	22.7	22.4	23.3	23.3	23.1	23.0	23.4	23.0	23.1	22.8	22.3	24.4
72	4.01	P3-03	23.1	23.0	23.0	23.2	22.4	22.4	23.1	23.0	22.6	22.6	23.2	22.7	22.8	22.1		
48	4.02	90656	23.4	22.6	23.3	23.7	22.7	22.6	23.3	23.3	23.1	23.1	23.4	23.1	23.1	22.8		
20	4.03		23.3	23.2	23.3	23.6	22.6	22.6	23.2	23.2	22.9	22.9	23.3	23.0	22.8	22.6		
61	4.04		23.2	23.0	23.0	23.2	22.6	22.3	23.1	23.1	22.7	22.7	23.2	22.8	22.9	22.4		
71	4.05		23.1	23.0	23.0	23.2	22.4	22.4	23.1	23.1	22.6	22.6	23.2	22.7	22.8	22.2		
56	4.06		23.4	23.4	23.2	23.6	22.9	22.7	23.3	23.3	23.0	23.1	23.4	23.0	23.1	22.5		
39	4.07		23.4	23.0	23.1	23.6	22.6	22.6	23.2	23.3	23.1	22.9	23.5	23.1	23.0	22.9		
28	4.08		23.4	23.1	23.1	23.6	22.9	22.3	23.3	23.2	22.8	22.9	23.4	23.1	23.0	22.2	22.1	24.3

JW
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28-Day Solid Phase Readings															Species: <i>H. azteca</i> Job #: 98-411R			
Position #	ID#	Sample	Temperature (°C)												Low	High		
			15	16	17	18	19	20	21	22	23	24	25	26			27	28
38	5.01	P3-01	23.3	23.0	23.1	23.6	22.5	22.5	23.2	23.2	23.2	23.1	22.9	23.3	23.0	23.0	22.9	22.6
68	5.02	90657	23.1	22.9	23.1	23.2	22.6	22.4	23.2	23.2	23.3	22.9	22.7	23.3	23.0	23.0	22.5	22.5
63	5.03		23.2	23.2	22.9	23.2	22.8	22.7	23.2	23.2	23.2	22.7	22.8	23.2	23.0	23.0	22.5	22.5
47	5.04		23.4	22.7	23.4	23.6	22.6	22.4	23.3	23.3	23.3	23.1	23.0	23.4	23.0	23.1	22.7	22.7
67	5.05		23.1	22.8	23.1	23.2	22.5	22.4	23.2	23.3	23.3	22.9	22.8	23.4	23.0	23.0	22.5	22.5
24	5.06		23.3	23.2	23.0	23.6	22.6	22.2	23.2	23.2	23.2	23.0	22.9	23.3	23.1	22.8	22.7	22.7
52	5.07		23.3	23.1	23.4	23.6	22.9	22.6	23.3	23.2	23.2	23.0	22.9	23.4	23.1	22.9	22.5	22.5
23	5.08		23.3	23.2	23.1	23.6	22.6	22.2	23.2	23.2	23.2	22.9	22.7	23.3	23.0	22.9	22.5	22.2
21	6.01	P2-03	23.3	23.1	23.3	23.6	22.6	22.5	23.2	23.3	23.3	22.9	22.9	23.3	23.1	22.9	22.6	22.6
26	6.02	90658	23.2	23.0	22.8	23.6	22.6	22.4	23.1	23.1	23.1	22.8	22.8	23.3	23.0	22.7	22.6	22.6
9	6.03		23.3	23.2	23.3	23.7	22.7	22.5	23.3	23.4	23.0	23.0	23.0	23.3	23.2	23.0	22.4	22.4
42	6.04		23.4	22.8	23.4	23.6	22.8	22.5	23.3	23.3	23.3	23.0	22.6	23.5	23.1	23.1	22.8	22.8
32	6.05		23.3	23.0	22.9	23.4	22.6	22.5	23.2	23.2	23.2	23.0	22.6	23.3	23.1	23.0	22.7	22.7
13	6.06		23.4	23.3	23.4	23.6	22.6	22.6	23.3	23.3	23.3	22.9	22.9	23.4	22.8	22.9	22.7	22.7
55	6.07		23.4	23.3	23.2	23.6	22.9	22.7	23.3	23.3	23.3	23.0	22.9	23.5	23.0	23.0	22.5	22.5
19	6.08		23.3	23.3	23.1	23.6	22.6	22.5	23.3	23.2	23.2	22.7	22.9	23.4	22.8	22.8	22.6	22.3
58	7.01	P1-02	23.1	22.6	22.9	23.1	22.6	22.3	23.1	23.0	23.0	22.6	22.2	23.0	22.6	22.6	22.2	22.2
35	7.02	90659	23.3	23.1	23.3	23.6	22.8	22.4	23.2	23.2	23.2	23.0	22.9	23.4	23.0	22.9	22.8	22.8
70	7.03		23.1	23.0	23.0	23.2	22.5	22.4	23.2	23.2	23.2	22.8	22.7	23.3	22.9	22.9	22.4	22.4
40	7.04		23.3	23.0	23.3	23.6	22.8	22.5	23.3	23.2	23.2	23.0	22.7	23.4	23.1	23.1	22.8	22.8
50	7.05		23.3	23.1	23.6	23.6	22.6	22.5	23.3	23.2	23.2	23.1	23.0	23.4	23.0	22.9	22.5	22.5
31	7.06		23.1	23.0	22.7	23.4	22.6	22.3	23.2	23.2	23.2	22.9	22.5	23.3	22.9	22.7	22.6	22.6
51	7.07		23.4	23.1	23.6	23.6	22.8	22.5	23.3	23.3	23.3	23.2	23.1	23.4	23.1	23.1	22.6	22.6
4	7.08		23.3	23.3	23.3	23.5	22.8	22.5	23.2	23.2	23.2	22.9	22.9	23.3	22.9	22.8	22.6	22.1
16	8.01	P4-03	23.4	23.2	23.3	23.6	22.6	22.5	23.2	23.2	23.2	22.9	22.9	23.4	22.9	22.8	22.7	22.7
2	8.02	90660	23.3	22.9	23.0	23.3	22.6	22.4	23.1	23.2	23.2	22.8	22.8	23.1	22.9	22.3	22.8	22.8
25	8.03		23.3	22.9	22.8	23.6	22.5	22.4	23.1	23.1	23.1	22.8	22.9	23.3	23.0	22.8	22.7	22.7
30	8.04		23.4	22.8	23.2	23.7	22.9	22.6	23.3	23.4	23.1	23.1	23.0	23.4	23.2	22.8	22.6	22.6
57	8.05		23.4	23.4	23.2	23.6	22.9	22.7	23.3	23.3	23.3	23.1	23.0	23.4	23.1	23.0	22.6	22.6
8	8.06		23.3	23.3	23.3	23.6	22.5	22.5	23.3	23.3	23.3	22.9	22.9	23.3	23.1	22.9	22.4	22.4
12	8.07		23.4	23.3	23.3	23.7	22.7	22.7	23.3	23.4	22.9	22.9	22.9	23.4	23.1	23.1	22.7	22.7
22	8.08		23.3	23.2	23.2	23.6	22.6	22.5	23.2	23.2	23.2	22.9	22.7	23.3	22.9	22.9	22.6	22.2
												Range		22.1	24.4			

ST
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Table 14 28-Day Solid Phase Readings Dissolved Oxygen (mg/L) Species: *H. azteca* Job #: 98-411R

Position #	ID#	Sample	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
62	0.01	Control	7.41	6.23	6.17	6.82	6.81	6.33	6.24	6.28	5.80	6.21	6.31	6.92	6.73	5.51	6.00
15	0.02	90462	6.64	7.53	7.07	7.07	6.85	6.76	6.96	6.71	5.86	5.70	5.61	6.57	6.91	6.23	6.60
59	0.03		6.27	6.44	7.68	7.03	6.70	6.84	6.84	6.89	6.28	6.35	6.59	7.34	7.27	6.15	6.07
43	0.04		7.21	7.54	7.14	6.90	6.90	7.18	6.93	6.94	5.78	5.96	6.00	6.27	7.12	6.64	6.90
3	0.05		6.34	7.06	6.74	6.49	6.49	6.72	7.05	6.19	5.71	5.32	4.58	6.40	5.54	6.17	6.52
11	0.06		6.86	7.69	7.32	6.88	6.79	6.79	6.75	6.81	6.07	5.85	6.05	6.47	7.30	6.46	6.26
66	0.07		6.75	6.33	7.51	7.18	7.18	6.86	7.12	6.95	6.53	6.39	6.78	6.89	7.13	6.31	6.12
34	0.08		7.45	7.96	7.34	7.07	7.07	7.26	7.36	6.98	5.80	5.96	6.09	7.28	7.50	7.21	6.86
14	1.01	R1-01	7.74	6.80	7.90	7.18	6.89	6.85	7.18	7.17	6.07	5.72	5.57	6.57	7.00	6.24	6.86
69	1.02	90653	6.63	6.30	6.85	6.98	6.54	6.54	6.53	6.42	5.55	6.25	6.42	6.78	6.94	6.14	6.02
10	1.03		7.17	7.48	7.14	6.97	7.06	7.06	7.07	6.95	5.81	5.81	5.92	6.38	7.52	6.70	6.24
53	1.04		6.87	8.04	7.40	6.90	6.90	6.97	6.92	6.71	5.95	5.98	5.99	6.49	7.14	6.14	6.39
27	1.05		5.90	7.30	7.16	6.01	6.28	6.28	6.26	6.41	5.62	5.91	5.61	6.52	5.47	6.06	6.42
45	1.06		6.62	7.58	7.20	6.76	6.76	6.81	6.77	6.37	5.68	5.88	5.99	6.38	6.74	6.44	6.37
49	1.07		7.26	7.72	7.30	7.07	7.07	7.18	7.39	6.74	5.63	5.71	5.86	6.38	7.84	5.84	6.17
64	1.08		6.23	6.30	6.35	6.73	6.73	6.17	5.97	6.06	5.81	6.09	6.27	6.69	6.56	5.68	6.04
54	2.01	P5-01	7.58	6.53	7.81	7.46	6.87	6.85	6.79	6.64	5.94	6.00	6.00	6.50	7.09	6.14	6.48
65	2.02	90654	6.87	7.03	7.72	7.26	7.26	7.02	7.29	7.08	6.58	6.47	7.06	6.98	7.33	6.49	6.67
17	2.03		6.58	7.93	7.33	4.84	4.84	7.05	6.73	6.75	5.69	5.17	4.56	6.36	6.07	5.43	6.42
1	2.04		6.88	8.11	7.94	6.99	6.99	7.63	8.20	6.82	6.17	6.62	6.35	6.85	8.62	6.33	6.91
44	2.05		6.88	7.76	7.29	6.82	6.82	6.90	7.11	6.70	5.84	5.91	6.01	6.28	6.88	6.59	6.61
41	2.06		6.32	7.52	7.46	6.84	6.84	6.84	7.03	6.74	5.80	5.89	6.00	6.41	7.02	6.75	6.75
7	2.07		7.31	8.08	7.26	7.14	7.14	7.41	7.38	6.95	5.94	5.71	5.86	6.55	7.27	6.87	6.24
36	2.08		6.86	7.63	7.41	6.95	6.95	6.97	7.01	6.62	5.77	5.91	6.12	7.15	7.19	7.14	6.79
37	3.01	P4-01	7.59	7.03	7.87	7.41	7.14	7.35	7.28	6.91	5.68	5.99	6.17	7.07	7.46	7.26	6.61
29	3.02	90655	6.75	7.46	7.08	6.55	6.55	6.71	6.75	6.51	5.50	5.74	5.67	6.41	7.09	5.94	6.91
60	3.03		6.26	5.95	7.46	6.86	6.86	6.48	6.52	6.49	6.19	6.28	6.41	7.22	7.11	6.10	6.12
5	3.04		6.99	7.73	7.18	6.69	6.69	6.37	7.24	6.77	6.04	5.46	5.47	6.28	7.04	6.38	6.55
6	3.05		6.78	7.52	7.04	6.58	6.58	6.24	7.01	6.52	5.87	5.51	5.51	6.38	6.91	6.32	6.57
18	3.06		6.36	7.27	7.13	5.29	5.29	6.69	6.43	6.49	5.68	5.60	5.51	6.30	6.10	5.90	6.44
33	3.07		6.32	7.64	7.19	6.75	6.75	6.50	6.77	6.61	5.79	5.84	5.89	6.56	6.97	6.54	6.90
46	3.08		7.17	7.68	7.27	7.10	7.10	7.46	7.32	6.93	5.62	5.88	6.01	6.76	7.52	7.26	6.89
72	4.01	P3-03	7.58	6.69	7.06	6.85	6.85	6.32	6.19	6.08	5.62	6.12	6.10	6.67	6.65	6.17	5.39
48	4.02	90656	6.73	7.70	7.38	6.86	6.86	6.63	6.78	6.57	5.62	5.77	5.96	6.62	7.08	5.01	6.70
20	4.03		6.98	7.92	7.22	6.83	6.83	7.23	6.95	6.69	5.87	6.13	6.03	6.39	7.15	5.94	6.61
61	4.04		6.27	6.01	7.09	6.84	6.84	6.42	6.36	6.37	5.94	6.25	6.40	7.09	6.93	6.06	6.11
71	4.05		6.70	6.62	6.63	6.88	6.88	6.37	6.27	6.14	5.65	6.15	6.31	6.71	6.69	6.13	6.04
56	4.06		6.83	7.84	7.47	6.05	6.05	6.37	6.73	6.60	6.47	6.08	6.11	6.50	7.20	5.57	6.28
39	4.07		4.45	7.78	7.34	6.03	6.03	6.83	6.78	6.55	5.77	6.00	6.14	6.83	7.28	6.27	6.43
28	4.08		7.05	7.72	7.31	6.66	6.66	6.92	7.27	6.83	5.57	5.84	5.70	6.51	7.16	6.07	7.04

510
5/13/91

Table 14		28-Day Solid Phase Readings														Species: <i>H. azteca</i>	
		Dissolved Oxygen (mg/L)														Job #: 98-411R	
Position #	ID#	Sample	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
38	5.01	P3-01	7.58	6.80	7.92	7.47	5.99	6.95	7.00	6.77	5.76	5.98	6.17	7.00	7.33	7.00	6.55
68	5.02	90657	6.66	6.24	6.98	6.98	7.04	6.84	6.75	6.58	5.57	6.31	6.55	6.86	7.02	6.17	5.97
63	5.03		6.22	6.28	6.59	6.59	6.75	6.18	6.10	6.14	5.79	6.15	6.27	6.76	6.64	5.66	6.00
47	5.04		6.92	7.88	7.40	7.40	6.96	7.04	7.11	6.70	5.61	5.83	6.00	6.69	7.34	5.81	6.76
67	5.05		6.70	6.10	7.15	7.15	7.10	6.87	7.01	6.74	6.33	6.37	6.65	6.87	7.07	6.23	5.93
24	5.06		6.15	6.97	7.20	7.20	6.32	6.46	6.26	6.38	5.62	5.98	5.73	6.49	7.18	6.48	6.48
52	5.07		7.26	6.94	7.26	7.26	7.05	7.28	7.28	6.96	5.90	5.98	5.96	6.52	7.35	6.24	6.48
23	5.08		6.19	7.42	7.37	7.37	6.33	6.74	6.92	6.51	5.63	6.04	5.83	6.46	7.37	6.46	6.48
21	6.01	P2-03	7.61	6.73	7.76	7.09	6.42	7.08	6.58	6.58	5.81	6.07	5.89	6.35	6.95	6.40	6.59
26	6.02	90658	6.06	6.69	7.31	7.31	6.01	6.77	6.59	6.54	5.69	5.97	5.62	6.56	5.88	6.24	6.45
9	6.03		6.69	7.31	7.06	7.06	5.74	6.30	6.83	5.89	5.11	5.81	5.87	6.43	6.97	6.41	6.18
42	6.04		6.20	7.30	7.38	7.38	6.80	6.65	6.81	6.42	5.77	5.88	5.99	6.46	6.74	6.69	6.60
32	6.05		6.65	7.85	7.23	7.23	6.75	6.73	7.01	6.76	5.82	5.82	5.86	6.58	7.10	6.58	7.01
13	6.06		7.07	7.80	6.99	6.99	6.96	7.30	7.38	7.25	6.10	5.77	5.56	6.56	7.07	6.16	7.00
55	6.07		7.01	7.68	7.35	7.35	6.08	6.64	7.09	6.90	5.87	6.06	6.08	6.54	7.49	6.29	6.74
19	6.08		7.12	7.81	7.22	7.22	6.99	7.57	7.17	6.98	5.84	6.14	6.06	6.40	7.34	6.12	6.64
58	7.01	P1-02	7.63	6.62	8.17	7.62	7.15	6.96	7.19	7.04	6.36	6.43	6.67	7.39	7.72	6.21	6.16
35	7.02	90659	7.15	7.84	7.49	7.49	7.00	7.09	7.14	6.72	5.87	5.92	6.11	7.20	7.35	7.01	6.83
70	7.03		6.61	6.46	6.77	6.77	6.94	6.45	6.38	6.27	5.61	6.20	6.35	6.72	6.77	6.12	6.03
40	7.04		6.54	7.45	7.35	7.35	6.91	7.08	7.26	6.95	5.79	5.93	6.05	6.31	7.68	6.85	6.99
50	7.05		6.97	7.91	7.42	7.42	7.00	7.09	7.19	6.55	5.85	5.73	5.82	6.25	7.25	5.77	6.07
31	7.06		6.97	7.65	7.01	7.01	6.85	6.86	7.20	7.09	5.68	5.81	5.82	6.52	7.23	6.83	7.10
51	7.07		6.61	7.75	7.28	7.28	6.97	7.02	6.83	6.52	5.88	5.77	5.82	6.38	6.96	5.78	6.06
4	7.08		7.25	7.62	6.91	6.91	6.95	7.22	7.47	6.90	6.27	5.43	5.41	6.31	7.26	6.70	6.51
16	8.01	P4-03	7.61	7.03	7.77	6.99	4.45	7.41	7.10	6.91	5.78	5.63	4.99	6.57	6.37	5.94	6.50
2	8.02	90660	6.49	7.19	6.84	6.84	6.69	6.89	7.37	6.44	5.86	5.59	5.38	6.55	6.86	6.22	6.68
25	8.03		6.72	7.46	7.10	7.10	6.09	7.07	6.83	6.89	5.68	6.01	5.71	6.57	7.61	6.55	6.51
30	8.04		6.51	6.64	6.71	6.71	6.54	6.52	6.30	6.41	5.48	5.73	5.66	6.37	7.00	5.90	6.83
57	8.05		6.55	7.72	7.36	7.36	6.09	6.21	6.46	6.14	7.06	6.03	6.07	6.45	7.00	5.53	6.18
8	8.06		7.13	7.77	7.24	7.24	5.84	6.81	7.43	6.45	5.23	5.79	5.90	6.53	7.11	6.72	6.21
12	8.07		6.63	7.50	6.87	6.87	6.86	6.72	6.68	6.74	6.07	5.85	5.50	6.53	7.12	5.89	6.24
22	8.08		6.47	7.79	7.23	7.23	6.47	6.95	7.52	6.80	6.17	6.09	5.85	6.42	7.55	6.47	6.57

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11/3/99

28-Day Solid Phase Readings													Species: <i>H. azteca</i>					
Dissolved Oxygen (mg/L)													Job #: 98-411R					
Position #	ID#	Sample	15	16	17	18	19	20	21	22	23	24	25	26	27	28	Low	High
62	0.01	Control	6.42	5.27	5.03	6.25	6.03	6.18	7.66	5.89	7.26	7.38	6.22	6.18	6.51	5.34		
15	0.02	90462	6.62	6.53	6.98	6.49	6.03	6.08	7.43	5.11	6.60	7.36	6.13	6.25	6.12	5.05		
59	0.03		6.63	4.51	5.37	5.42	5.93	5.90	7.57	4.91	5.46	7.45	5.95	6.16	6.55	5.29		
43	0.04		6.52	6.73	6.72	6.55	6.08	6.30	7.26	5.55	7.10	7.84	6.02	5.74	6.03	5.16		
3	0.05		7.00	6.45	6.99	6.52	5.14	5.36	7.37	5.12	5.77	5.73	6.21	5.05	5.78	4.14		
11	0.06		6.70	6.45	7.10	6.64	6.16	6.00	7.52	5.44	7.34	7.53	6.29	6.03	6.07	5.91		
66	0.07		6.45	6.35	6.80	6.71	6.77	6.23	7.96	5.32	6.39	7.77	6.36	5.68	6.12	5.26		
34	0.08		6.83	6.79	6.84	6.63	5.98	6.26	7.66	5.89	6.87	7.70	6.22	5.95	6.57	5.31	4.14	7.96
14	1.01	RI-01	6.64	6.53	6.97	6.51	6.05	6.07	7.42	5.12	6.48	7.39	6.11	5.92	6.03	5.06		
69	1.02	90653	6.37	6.40	6.84	6.78	6.72	5.82	7.54	5.03	6.22	7.63	6.19	5.51	5.97	4.96		
10	1.03		6.73	6.38	7.17	6.73	5.79	5.96	7.53	5.46	7.37	7.52	6.28	6.09	6.67	6.04		
53	1.04		6.27	6.34	6.64	6.58	6.10	6.07	6.55	5.20	6.01	6.50	6.07	4.98	6.35	5.79		
27	1.05		6.44	6.25	6.97	6.56	5.64	6.06	7.36	5.46	6.42	6.96	6.01	5.69	5.77	4.89		
45	1.06		6.43	6.64	6.68	6.53	6.06	6.22	7.29	5.53	6.97	7.79	6.04	5.59	6.06	5.27		
49	1.07		6.32	6.63	6.51	6.44	6.16	6.23	8.09	5.53	6.64	7.73	6.08	5.65	6.34	5.52		
64	1.08		6.30	5.53	5.92	6.28	5.98	5.89	7.68	5.77	6.46	7.38	6.27	6.10	6.23	5.28	4.89	8.09
54	2.01	P5-01	6.25	6.33	6.68	6.60	6.11	6.05	6.98	5.30	6.24	6.50	6.01	6.26	6.30	5.78		
65	2.02	90654	6.65	6.54	6.84	6.72	6.83	6.42	8.13	5.40	6.58	7.92	6.60	5.92	6.15	5.68		
17	2.03		5.77	6.60	7.01	6.53	6.08	6.05	7.52	5.09	6.62	7.07	6.00	5.06	5.68	5.05		
1	2.04		7.20	7.18	7.34	6.63	5.24	5.47	7.58	5.39	6.41	6.82	6.29	6.58	6.20	5.12		
44	2.05		6.50	6.68	6.69	6.54	6.05	6.22	7.28	5.54	7.05	7.84	6.02	5.63	6.05	5.25		
41	2.06		6.52	6.72	6.78	6.58	6.13	6.31	7.31	5.52	7.15	7.91	5.74	5.82	6.12	5.02		
7	2.07		6.92	6.46	7.23	6.74	6.31	6.17	7.59	6.02	6.90	7.58	6.42	6.72	7.01	6.31		
36	2.08		6.85	6.75	6.77	6.63	5.91	6.33	7.71	5.81	6.66	7.71	6.13	5.62	6.19	5.35	4.56	8.62
37	3.01	P4-01	6.81	6.75	6.71	6.60	5.98	6.26	7.62	5.72	7.68	7.69	4.53	6.85	6.18	5.35		
29	3.02	90655	6.39	6.33	6.78	6.46	6.06	5.83	7.39	5.44	6.70	7.04	6.06	5.28	6.15	5.88		
60	3.03		6.52	4.38	5.78	5.75	5.87	5.84	7.54	5.04	5.54	7.37	6.00	6.13	6.51	5.26		
5	3.04		6.94	6.46	7.12	6.55	6.18	6.24	7.46	5.18	5.94	6.74	6.22	6.15	6.25	4.74		
6	3.05		6.93	6.21	7.15	6.58	6.23	6.17	7.44	5.31	6.11	7.12	6.30	6.20	6.32	5.84		
18	3.06		5.96	6.61	7.02	6.56	6.14	6.01	7.43	4.89	6.53	7.00	5.96	5.24	6.18	5.02		
33	3.07		6.66	6.86	6.93	6.60	5.93	5.69	7.62	5.73	6.36	7.74	6.15	5.87	6.07	5.21		
46	3.08		6.40	6.72	6.65	6.54	6.15	6.23	7.35	5.64	6.95	7.80	6.12	5.60	6.16	5.32	4.38	7.87
72	4.01	P3-03	6.37	6.47	6.83	6.85	6.72	5.93	7.64	6.26	6.48	7.61	6.30	6.33	6.96	5.30		
48	4.02	90656	6.36	6.75	6.60	6.47	6.20	6.24	7.36	5.58	6.73	7.74	6.08	5.57	6.17	5.37		
20	4.03		6.44	6.78	7.06	6.72	6.38	6.46	7.49	5.82	7.55	7.24	6.14	5.82	5.96	4.98		
61	4.04		6.49	4.76	5.51	6.23	6.05	6.15	7.58	5.82	6.14	7.36	6.07	6.15	6.53	5.33		
71	4.05		6.44	6.46	6.83	6.82	6.75	5.82	7.61	5.24	6.33	7.62	6.22	5.64	6.02	5.29		
56	4.06		6.27	6.33	6.79	6.69	6.30	6.14	7.17	5.36	6.15	7.02	5.96	5.66	6.41	5.82		
39	4.07		6.70	6.76	6.83	6.61	6.14	6.31	7.56	5.68	6.59	7.66	5.52	6.05	6.17	5.15		
28	4.08		6.39	6.32	6.88	6.55	5.51	5.97	7.39	5.50	6.92	7.03	6.04	5.42	6.06	5.55	4.45	7.92

28-Day Solid Phase Readings															Species: <i>H. azteca</i>			
Dissolved Oxygen (mg/L)															Job #: 98-411R			
Position #	ID#	Sample	15	16	17	18	19	20	21	22	23	24	25	26	27	28	Low	High
38	5.01	P3-01	6.77	6.76	6.82	6.62	6.10	6.31	7.60	5.71	6.95	7.73	4.44	6.38	6.18	5.29		
68	5.02	90657	6.31	6.42	6.80	6.77	6.72	6.11	7.60	5.08	6.25	7.64	6.19	5.55	5.99	5.03		
63	5.03		6.36	5.41	5.53	6.27	6.00	5.92	7.70	5.90	6.76	7.41	6.29	6.16	6.35	5.31		
47	5.04		6.39	6.75	6.61	6.55	6.26	6.26	7.37	5.61	6.85	7.79	6.09	5.58	6.14	5.33		
67	5.05		6.35	6.31	6.81	6.70	6.74	6.17	7.73	5.27	6.36	7.68	6.24	5.62	6.06	5.17		
24	5.06		5.70	6.02	6.95	6.57	5.79	6.10	7.25	5.35	6.43	6.90	6.01	5.68	5.77	4.85		
52	5.07		6.29	6.40	6.56	6.52	6.15	6.14	7.59	5.43	6.52	6.90	6.16	5.70	6.50	5.78		
23	5.08		5.65	6.71	6.93	6.59	5.88	6.15	7.27	5.42	6.58	7.07	6.07	5.85	5.51	4.90	4.44	7.94
21	6.01	P2-03	6.35	6.80	7.06	6.72	6.38	6.32	7.44	5.61	7.44	7.25	6.17	5.75	5.95	4.93		
26	6.02	90658	6.16	6.11	7.03	6.58	5.71	6.13	7.33	5.42	5.46	6.93	5.96	5.67	5.70	4.88		
9	6.03		6.88	6.44	7.20	6.77	5.75	5.57	7.58	5.41	6.75	6.46	6.40	4.84	6.46	5.37		
42	6.04		6.50	6.72	6.76	6.58	6.13	6.32	7.26	5.51	7.12	7.82	6.00	5.78	6.03	5.03		
32	6.05		6.70	6.92	6.94	6.57	5.94	5.73	7.64	5.68	6.71	7.83	6.12	5.64	6.08	5.20		
13	6.06		6.64	6.52	6.98	6.55	6.14	6.11	7.50	5.22	6.49	7.48	6.13	6.07	5.98	5.07		
55	6.07		6.27	6.35	6.76	6.66	6.26	6.13	7.11	5.37	6.45	6.97	5.97	6.27	6.43	5.80		
19	6.08		6.41	6.72	7.04	6.62	6.29	6.08	7.45	5.68	7.73	7.08	6.06	6.99	5.97	5.03	4.84	7.85
58	7.01	P1-02	6.78	6.02	4.83	5.37	6.05	5.96	7.69	5.69	4.68	7.63	5.98	6.19	6.63	5.44		
35	7.02	90659	6.86	6.76	6.81	6.64	5.92	6.37	7.74	5.88	6.72	7.71	6.13	5.66	6.19	5.35		
70	7.03		6.43	6.44	6.84	6.81	6.73	5.80	7.56	5.15	6.22	7.62	6.22	5.55	6.01	5.27		
40	7.04		6.55	6.72	6.80	6.58	6.15	6.25	7.38	5.55	7.59	8.08	5.96	5.88	6.22	5.08		
50	7.05		6.31	6.55	6.47	6.48	6.28	6.27	7.88	5.49	6.55	7.73	6.10	5.65	6.48	5.66		
31	7.06		6.53	6.97	6.87	6.53	5.98	5.67	7.58	5.62	6.95	7.99	6.08	6.22	6.11	5.24		
51	7.07		6.29	6.51	6.48	6.49	6.26	6.22	7.75	5.44	6.41	7.69	6.13	5.68	6.51	5.72		
4	7.08		6.94	6.44	7.02	6.50	5.99	6.27	7.48	5.12	5.87	5.96	6.16	6.30	6.24	4.72	4.68	8.17
16	8.01	P4-03	6.62	6.55	6.98	6.49	6.08	6.13	7.50	5.15	6.71	7.21	6.11	4.60	6.21	5.06		
2	8.02	90660	7.05	6.84	7.01	6.55	5.16	5.37	7.39	5.24	5.83	5.70	6.25	5.17	6.13	4.22		
25	8.03		6.17	6.12	7.08	6.60	5.86	6.17	7.28	5.39	6.40	6.88	6.00	4.35	5.55	4.85		
30	8.04		6.40	6.40	6.75	6.45	6.01	5.89	7.44	5.51	6.69	7.04	6.08	5.36	6.18	5.83		
57	8.05		6.26	6.30	6.80	6.69	6.35	6.11	7.71	4.87	5.95	6.99	5.91	5.50	4.34	5.77		
8	8.06		6.90	6.46	7.23	6.78	6.35	6.22	7.62	5.94	7.16	7.50	6.46	6.27	6.85	5.53		
12	8.07		6.64	6.48	7.06	6.59	6.17	6.02	7.51	5.41	7.25	7.55	6.29	6.00	6.04	5.04		
22	8.08		6.28	6.82	7.02	6.69	6.29	6.35	7.35	5.51	6.69	7.53	6.15	6.29	5.95	4.91	4.22	7.79
															Range		4.14	8.62

7/13/99

28-Day Solid Phase Readings														Species: <i>H. azteca</i>			
pH (su)														Job #: 98-411R			
Position #	ID#	Sample	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
62	0.01	Control	8.07	7.76	7.79	7.82	7.94	7.84	7.79	7.83	7.86	7.87	8.09	8.20	8.17	8.27	8.27
15	0.02	90462		7.83	7.91	8.03	8.00	7.97	7.93	7.99	8.03	7.97	8.07	8.18	8.22	8.15	8.35
59	0.03			7.71	7.80	7.85	7.83	7.82	7.79	7.77	7.81	7.85	7.96	8.05	8.03	7.98	8.08
43	0.04			7.73	7.82	7.85	8.05	8.01	7.82	8.04	7.95	7.98	8.11	8.27	8.31	8.23	8.32
3	0.05			7.69	7.85	8.23	7.95	7.94	8.00	7.83	7.91	7.83	7.92	7.91	8.02	7.90	8.16
11	0.06			7.80	7.86	7.98	8.01	7.94	7.97	8.02	8.08	7.98	8.13	8.23	8.27	8.12	8.20
66	0.07			7.77	7.88	7.84	7.97	7.90	7.92	7.95	7.92	7.94	8.07	8.19	8.21	8.09	8.10
34	0.08			7.73	7.81	7.87	7.97	7.91	7.92	8.00	7.88	7.91	7.98	8.19	8.25	8.13	8.32
14	1.01	R1-01	8.16	7.79	7.89	7.97	7.98	7.92	7.89	7.95	7.93	7.93	7.97	8.15	8.18	8.03	8.20
69	1.02	90653		7.70	7.84	7.87	7.85	7.83	7.85	7.87	7.79	7.88	7.98	8.07	8.15	7.85	7.91
10	1.03			7.80	7.82	7.87	7.97	7.91	7.93	7.95	7.88	7.92	8.11	8.12	8.23	8.03	8.18
53	1.04			7.69	7.86	7.90	7.86	7.87	7.81	7.91	7.87	7.91	7.95	8.15	8.10	7.87	8.06
27	1.05			7.69	7.77	7.94	7.86	7.76	7.78	7.81	7.88	7.88	8.00	8.09	8.19	7.96	8.15
45	1.06			7.75	7.86	7.99	8.01	7.98	7.90	8.03	7.73	7.99	8.07	8.14	8.25	8.03	8.13
49	1.07			7.88	7.88	7.83	8.00	7.92	7.89	7.97	7.83	7.94	8.15	8.05	8.17	7.96	8.08
64	1.08			7.80	7.80	7.80	7.94	7.84	7.82	7.85	7.83	7.89	8.04	8.08	8.18	7.99	8.06
54	2.01	P5-01	7.98	7.73	7.87	7.94	7.95	7.91	7.85	7.93	7.83	7.96	8.01	8.14	8.14	7.97	8.12
65	2.02	90654		7.79	7.88	7.82	7.97	7.90	7.93	7.95	7.89	7.93	8.07	8.14	8.19	7.96	8.05
17	2.03			7.69	7.84	7.99	7.85	7.92	7.88	7.94	7.88	7.89	7.95	8.05	8.21	7.85	8.13
1	2.04			7.77	8.09	8.41	8.04	8.13	8.18	8.06	7.79	7.66	8.01	7.67	7.73	7.78	8.20
44	2.05			7.74	7.84	7.95	8.04	8.01	7.89	8.04	7.78	7.99	8.12	8.21	8.28	8.11	8.18
41	2.06			7.70	7.82	7.94	7.88	7.80	7.78	7.97	7.97	7.93	8.05	8.13	8.27	8.01	8.18
7	2.07			7.70	7.81	7.94	7.91	7.80	7.83	7.92	7.87	7.89	8.00	8.06	8.17	7.95	8.10
36	2.08			7.70	7.82	7.96	7.90	7.89	7.89	7.97	7.76	7.91	8.02	8.14	8.24	8.11	8.17
37	3.01	P4-01	7.95	7.72	7.82	7.86	7.89	7.88	7.89	7.92	7.87	7.89	7.96	8.14	8.23	8.04	8.11
29	3.02	90655		7.79	7.91	7.99	7.91	7.90	7.89	7.99	7.93	7.97	8.16	8.24	8.28	8.02	8.14
60	3.03			7.69	7.79	7.86	7.86	7.84	7.80	7.82	7.82	7.85	7.94	8.05	8.06	7.94	8.04
5	3.04			7.61	7.84	8.11	7.87	7.78	7.89	7.94	7.76	7.86	7.90	7.98	8.14	7.88	8.11
6	3.05			7.57	7.79	8.09	7.82	7.76	7.85	7.89	7.71	7.84	7.87	7.99	8.12	7.86	8.13
18	3.06			7.69	7.83	8.00	7.87	7.88	7.87	7.94	7.89	7.90	7.99	8.08	8.20	7.90	8.13
33	3.07			7.68	7.79	7.96	7.86	7.83	7.82	7.91	7.88	7.90	7.99	8.06	8.18	8.05	8.14
46	3.08			7.66	7.88	7.90	7.87	7.83	7.90	7.91	7.82	7.91	7.96	7.97	8.14	7.97	7.97
72	4.01	P3-03	8.17	7.82	7.84	7.88	7.90	7.86	7.84	7.90	7.97	8.02	8.41	8.39	8.28	8.29	8.29
48	4.02	90656		7.72	7.79	7.96	7.87	7.78	7.82	7.87	7.84	7.85	8.07	8.15	8.08	8.18	8.19
20	4.03			7.79	7.87	7.93	8.00	7.86	7.85	7.99	8.05	8.14	8.30	8.44	8.40	8.34	8.47
61	4.04			7.70	7.77	7.84	7.89	7.81	7.77	7.81	7.81	7.84	8.04	8.16	8.09	8.30	8.27
71	4.05			7.79	7.82	7.83	7.86	7.85	7.83	7.88	7.90	7.90	8.10	8.22	8.15	8.04	8.06
56	4.06			7.74	7.88	7.90	7.77	7.80	7.76	7.83	7.74	7.92	7.94	7.99	8.09	8.01	8.09
39	4.07			7.70	7.78	7.93	7.78	7.83	7.80	7.87	7.86	7.89	8.10	8.24	8.19	8.28	8.28
28	4.08			7.82	7.92	7.95	7.93	7.90	7.89	7.99	7.97	7.97	8.17	8.20	8.26	8.06	8.21

570
9/2/21

28-Day Solid Phase Readings														Species: <i>H. azteca</i>			
pH (su)														Job #: 98-411R			
Position #	ID#	Sample	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
38	5.01	P3-01	8.02	7.69	7.81	7.93	7.75	7.85	7.85	7.89	7.79	7.88	7.92	8.09	8.20	8.01	8.09
68	5.02	90657		7.70	7.86	7.88	7.87	7.85	7.88	7.90	7.76	7.90	7.95	8.04	8.19	7.90	7.98
63	5.03			7.75	7.80	7.82	7.95	7.85	7.83	7.86	7.80	7.87	8.04	8.11	8.21	7.99	8.07
47	5.04			7.61	7.82	7.96	7.84	7.78	7.85	7.87	7.91	7.86	7.88	7.97	8.09	7.82	8.01
67	5.05			7.74	7.88	7.87	7.93	7.88	7.92	7.94	7.83	7.95	8.00	8.13	8.21	7.98	8.08
24	5.06			7.62	7.77	7.96	7.82	7.79	7.78	7.84	7.81	7.97	7.92	8.15	8.28	7.97	8.09
52	5.07			7.68	7.87	7.82	7.79	7.85	7.81	7.90	7.89	7.87	7.92	8.00	8.07	7.80	7.99
23	5.08			7.62	7.79	7.95	7.82	7.79	7.80	7.85	7.81	8.00	8.00	8.22	8.31	8.02	8.11
21	6.01	P2-03	8.02	7.84	7.91	7.96	7.98	7.89	7.87	8.01	8.11	8.20	8.26	8.50	8.43	8.31	8.48
26	6.02	90658		7.65	7.75	7.90	7.77	7.75	7.77	7.79	7.76	7.86	7.90	8.00	8.17	7.90	8.12
9	6.03			7.67	7.77	7.97	7.78	7.81	7.81	7.80	7.72	7.87	8.01	8.02	8.14	7.99	8.21
42	6.04			7.69	7.81	7.96	7.89	7.84	7.78	7.96	7.99	7.93	8.06	8.17	8.26	8.08	8.34
32	6.05			7.67	7.79	7.92	7.85	7.83	7.81	7.91	7.94	7.90	7.99	8.09	8.18	8.07	8.19
13	6.06			7.76	7.86	7.89	7.95	7.88	7.86	7.94	7.88	7.92	7.96	8.15	8.17	7.99	8.23
55	6.07			7.73	7.90	7.80	7.68	7.81	7.79	7.86	7.82	7.96	7.96	8.01	8.10	7.88	8.03
19	6.08			7.75	7.85	7.93	7.99	7.84	7.84	7.97	7.92	7.95	8.09	8.19	8.32	8.33	8.46
58	7.01	P1-02	7.93	7.72	7.82	7.74	7.80	7.76	7.79	7.78	7.80	7.82	7.88	8.05	8.03	7.83	8.01
35	7.02	90659		7.71	7.82	7.93	7.93	7.91	7.92	8.00	7.79	7.91	8.01	8.15	8.26	8.15	8.19
70	7.03			7.72	7.85	7.89	7.85	7.85	7.84	7.88	7.80	7.89	7.95	8.06	8.13	7.82	7.90
40	7.04			7.72	7.83	7.88	7.86	7.80	7.79	7.97	7.83	7.93	8.13	8.24	8.34	8.08	8.22
50	7.05			7.83	7.90	7.94	7.97	7.92	7.89	7.97	7.75	7.93	8.02	8.09	8.13	7.93	8.09
31	7.06			7.65	7.78	7.82	7.85	7.83	7.81	7.90	7.83	7.89	8.01	8.07	8.19	8.01	8.15
51	7.07			7.75	7.88	7.95	7.93	7.90	7.87	7.95	7.87	7.92	7.97	8.06	8.12	7.90	8.08
4	7.08			7.72	7.87	8.06	7.90	7.93	7.92	7.97	7.86	7.88	7.99	8.02	8.15	7.89	8.10
16	8.01	P4-03	7.83	7.69	7.86	7.91	7.81	7.95	7.92	7.94	7.84	7.91	7.90	8.07	8.24	7.86	8.18
2	8.02	90660		7.71	7.90	8.30	7.90	8.01	8.07	7.98	7.73	7.74	7.89	7.82	7.93	7.83	8.10
25	8.03			7.62	7.75	7.80	7.71	7.77	7.78	7.80	7.78	7.88	7.88	8.03	8.17	7.87	8.07
30	8.04			7.69	7.86	7.99	7.88	7.88	7.85	7.95	7.84	7.91	8.05	8.14	8.27	7.90	8.14
57	8.05			7.77	7.86	7.92	7.84	7.81	7.75	7.82	7.82	7.88	7.95	8.00	8.11	7.96	8.10
8	8.06			7.71	7.80	7.99	7.74	7.79	7.83	7.83	7.67	7.89	7.97	7.96	8.15	7.94	8.08
12	8.07			7.73	7.86	8.02	7.97	7.94	7.97	8.05	7.86	7.98	7.96	8.18	8.26	7.97	8.18
22	8.08			7.65	7.83	7.88	7.82	7.80	7.84	7.88	7.88	8.09	8.08	8.34	8.35	7.96	8.21

5/13/90

Table 15 28-Day Solid Phase Readings *H. azteca* Job #: 98-411R

Position #	ID#	Sample	15	16	17	18	19	20	21	22	23	24	25	26	27	28	Low	High
62	0.01	Control	8.36	8.13	8.18	8.38	7.89	7.99	8.25	8.02	8.23	8.25	8.54	8.30	8.11	7.80		
15	0.02	90462	8.38	8.29	8.38	8.52	8.12	8.26	8.37	8.06	8.38	8.43	8.54	8.32	8.15	7.78		
59	0.03		8.28	8.11	8.18	8.42	7.82	7.88	8.18	8.01	8.14	8.30	8.43	8.26	8.13	7.81		
43	0.04		8.43	8.37	8.41	8.48	7.98	8.19	8.34	8.07	8.28	8.32	8.51	8.33	8.06	7.83		
3	0.05		8.15	8.09	8.24	8.26	7.78	8.07	8.19	8.02	8.22	8.29	8.38	8.35	8.27	7.64		
11	0.06		8.31	8.26	8.34	8.46	8.03	8.23	8.36	8.02	8.26	8.36	8.50	8.32	8.17	7.84		
66	0.07		8.24	8.18	8.27	8.43	7.96	8.01	8.27	7.91	8.21	8.36	8.52	8.32	8.06	7.81		
34	0.08		8.41	8.31	8.36	8.48	8.04	8.15	8.36	8.11	8.26	8.36	8.50	8.25	7.97	7.76	7.64	8.54
14	1.01	R1-01	8.32	8.28	8.36	8.52	8.08	8.23	8.37	7.99	8.32	8.37	8.46	8.25	8.06	7.71		
69	1.02	90653	8.26	8.13	8.25	8.45	7.91	8.02	8.22	7.91	8.10	8.25	8.43	8.29	8.04	7.76		
10	1.03		8.30	8.23	8.34	8.46	7.98	8.15	8.29	7.98	8.26	8.33	8.47	8.27	8.11	7.85		
53	1.04		8.29	8.17	8.37	8.46	7.97	8.01	8.20	7.99	8.08	8.11	8.44	8.21	8.02	7.87		
27	1.05		8.31	8.26	8.29	8.50	8.04	8.11	8.32	8.02	8.24	8.32	8.48	8.23	8.04	7.82		
45	1.06		8.33	8.27	8.34	8.46	8.02	8.16	8.36	8.06	8.30	8.36	8.55	8.33	8.09	7.84		
49	1.07		8.26	8.14	8.22	8.42	7.89	8.03	8.42	7.96	8.18	8.28	8.53	8.35	8.08	7.95		
64	1.08		8.27	8.11	8.25	8.38	7.88	7.92	8.22	7.93	8.18	8.27	8.44	8.27	7.98	7.76	7.69	8.55
54	2.01	P5-01	8.30	8.19	8.37	8.47	8.00	8.05	8.25	8.01	8.14	8.18	8.45	8.26	8.04	7.90		
65	2.02	90654	8.26	8.17	8.26	8.43	7.94	8.01	8.31	7.93	8.21	8.34	8.55	8.26	8.01	7.74		
17	2.03		8.28	8.26	8.37	8.52	8.05	8.10	8.39	8.05	8.35	8.41	8.55	8.31	8.11	7.83		
1	2.04		7.97	7.94	8.20	8.21	7.73	8.01	8.02	7.92	8.09	8.23	8.22	8.29	8.19	7.33		
44	2.05		8.39	8.33	8.36	8.48	8.02	8.16	8.37	8.08	8.31	8.36	8.56	8.33	8.08	7.83		
41	2.06		8.29	8.14	8.26	8.38	7.85	8.04	8.23	7.96	8.22	8.32	8.54	8.31	8.01	7.82		
7	2.07		8.24	8.11	8.34	8.40	7.88	8.05	8.27	8.01	8.20	8.31	8.44	8.31	8.17	7.78		
36	2.08		8.36	8.22	8.28	8.43	8.01	8.09	8.33	8.12	8.28	8.38	8.47	8.25	8.02	7.75	7.33	8.56
37	3.01	P4-01	8.32	8.23	8.31	8.45	8.02	8.11	8.34	8.06	8.26	8.39	8.50	8.30	7.98	7.76		
29	3.02	90655	8.31	8.20	8.26	8.43	7.89	7.97	8.27	8.03	8.16	8.28	8.47	8.16	7.98	7.84		
60	3.03		8.27	8.13	8.21	8.43	7.85	7.91	8.19	7.94	8.15	8.27	8.48	8.29	8.09	7.83		
5	3.04		8.26	8.11	8.30	8.36	7.84	8.04	8.22	8.00	8.20	8.33	8.43	8.31	8.16	7.76		
6	3.05		8.22	8.09	8.28	8.34	7.83	8.02	8.22	8.00	8.20	8.32	8.41	8.28	8.15	7.78		
18	3.06		8.29	8.26	8.37	8.50	8.03	8.11	8.35	8.01	8.34	8.38	8.54	8.28	8.08	7.82		
33	3.07		8.35	8.25	8.35	8.49	8.00	8.15	8.34	8.06	8.23	8.30	8.49	8.23	7.95	7.76		
46	3.08		8.25	8.15	8.24	8.42	7.97	8.12	8.27	7.94	8.20	8.31	8.47	8.24	7.99	7.78	7.57	8.54
72	4.01	P3-03	8.33	8.07	8.14	8.32	7.86	7.89	8.18	7.86	8.14	8.26	8.53	8.30	8.11	7.77		
48	4.02	90656	8.22	8.05	8.16	8.33	7.84	8.02	8.21	7.89	8.11	8.21	8.40	8.22	7.98	7.81		
20	4.03		8.34	8.33	8.31	8.44	7.97	8.06	8.28	7.97	8.24	8.27	8.46	8.21	7.95	7.70		
61	4.04		8.30	8.11	8.12	8.38	7.83	7.93	8.24	7.96	8.15	8.23	8.49	8.28	8.03	7.80		
71	4.05		8.21	8.09	8.20	8.38	7.88	7.95	8.26	7.89	8.13	8.24	8.48	8.32	7.97	7.78		
56	4.06		8.26	8.14	8.29	8.42	8.05	8.02	8.25	8.00	8.16	8.24	8.49	8.17	7.95	7.84		
39	4.07		8.30	8.17	8.24	8.37	7.89	8.00	8.21	7.92	8.16	8.24	8.43	8.23	7.95	7.68		
28	4.08		8.33	8.21	8.25	8.42	7.84	7.96	8.29	8.00	8.16	8.31	8.48	8.15	7.94	7.85	7.68	8.53

5/13/99

Table 15 28-Day Solid Phase Readings
 pH (su) Species: *H. azteca*
 Job #: 98-411R

Position #	ID#	Sample	15	16	17	18	19	20	21	22	23	24	25	26	27	28	Low	High
38	5.01	P3-01	8.29	8.18	8.25	8.42	7.98	8.08	8.28	8.00	8.17	8.32	8.46	8.26	7.95	7.69		
68	5.02	90657	8.25	8.15	8.24	8.47	7.92	7.95	8.23	7.85	8.11	8.26	8.38	8.23	7.98	7.77		
63	5.03		8.31	8.13	8.17	8.39	7.89	7.97	8.25	8.02	8.21	8.28	8.48	8.30	8.01	7.79		
47	5.04		8.20	8.05	8.16	8.34	7.85	8.04	8.22	7.90	8.12	8.23	8.42	8.21	7.98	7.77		
67	5.05		8.21	8.19	8.28	8.43	7.97	8.00	8.17	7.90	8.16	8.34	8.41	8.29	8.03	7.81		
24	5.06		8.19	8.18	8.31	8.41	7.90	8.07	8.29	8.00	8.21	8.28	8.44	8.24	8.00	7.80		
52	5.07		8.22	8.10	8.26	8.38	7.87	7.93	8.17	7.82	8.03	8.09	8.43	8.17	7.94	7.86		
23	5.08		8.17	8.18	8.31	8.43	7.90	8.09	8.31	8.02	8.24	8.35	8.49	8.30	8.01	7.83	7.61	8.49
21	6.01	P2-03	8.38	8.32	8.32	8.45	7.94	8.06	8.27	7.97	8.20	8.25	8.44	8.21	7.96	7.70		
26	6.02	90658	8.22	8.28	8.26	8.49	8.01	8.09	8.30	8.01	8.17	8.31	8.43	8.18	7.96	7.78		
9	6.03		8.26	8.16	8.32	8.45	7.96	8.15	8.29	8.00	8.20	8.25	8.40	8.20	8.10	7.82		
42	6.04		8.34	8.24	8.29	8.40	7.86	8.05	8.24	7.95	8.21	8.28	8.48	8.27	7.98	7.80		
32	6.05		8.36	8.28	8.37	8.49	7.97	8.10	8.32	8.10	8.21	8.29	8.45	8.21	7.95	7.72		
13	6.06		8.29	8.28	8.35	8.50	8.09	8.25	8.37	7.93	8.33	8.35	8.42	8.20	8.00	7.70		
55	6.07		8.27	8.15	8.31	8.46	8.05	8.12	8.27	8.03	8.17	8.23	8.49	8.19	8.00	7.89		
19	6.08		8.36	8.35	8.41	8.50	8.02	8.15	8.34	8.00	8.29	8.35	8.51	8.25	7.97	7.71	7.65	8.51
58	7.01	P1-02	8.24	8.08	8.12	8.42	7.78	7.88	8.17	7.83	8.07	8.26	8.32	8.26	7.94	7.69		
35	7.02	90659	8.38	8.22	8.28	8.44	8.02	8.11	8.33	8.07	8.24	8.37	8.47	8.23	7.97	7.75		
70	7.03		8.22	8.13	8.25	8.43	7.92	8.01	8.26	7.95	8.13	8.26	8.45	8.31	7.98	7.77		
40	7.04		8.32	8.16	8.23	8.39	7.85	8.02	8.20	7.94	8.24	8.35	8.59	8.32	8.06	7.77		
50	7.05		8.26	8.14	8.22	8.42	7.92	8.01	8.36	7.98	8.21	8.32	8.55	8.35	8.10	7.96		
31	7.06		8.34	8.26	8.34	8.47	8.00	8.00	8.32	8.15	8.24	8.31	8.47	8.23	7.96	7.72		
51	7.07		8.24	8.13	8.22	8.38	7.93	8.00	8.31	7.96	8.17	8.30	8.53	8.31	8.05	7.91		
4	7.08		8.28	8.18	8.36	8.37	7.87	8.12	8.22	8.04	8.22	8.35	8.46	8.35	8.20	7.72	7.65	8.59
16	8.01	P4-03	8.38	8.29	8.38	8.56	8.13	8.25	8.42	8.07	8.38	8.44	8.58	8.30	8.16	7.81		
2	8.02	90660	8.06	8.03	8.20	8.23	7.75	8.01	8.10	7.93	8.13	8.26	8.31	8.26	8.09	7.49		
25	8.03		8.20	8.10	8.19	8.41	7.91	8.06	8.28	8.01	8.19	8.30	8.42	8.22	7.99	7.78		
30	8.04		8.30	8.22	8.31	8.45	8.07	8.12	8.28	8.16	8.32	8.31	8.49	8.21	7.98	7.82		
57	8.05		8.28	8.13	8.27	8.41	7.98	7.98	8.27	7.90	8.12	8.20	8.45	8.14	7.73	7.77		
8	8.06		8.24	8.15	8.33	8.42	7.94	8.13	8.30	8.03	8.23	8.28	8.43	8.27	8.13	7.80		
12	8.07		8.26	8.24	8.33	8.44	8.04	8.26	8.37	8.01	8.31	8.38	8.48	8.27	8.05	7.78		
22	8.08		8.19	8.24	8.30	8.47	7.95	8.14	8.30	8.02	8.23	8.39	8.52	8.32	8.01	7.80	7.49	8.58
Range																		
7.33 8.59																		

JTD
5/12/99

Table 16 28-Day Solid Phase Flowthrough Readings									
		Job #: 98-411R				Species: <i>H. azteca</i>			
Position #	Sample	INITIAL				FINAL			
		Alkalinity	Hardness	Conductivity	NH3	Alkalinity	Hardness	Conductivity	NH3
Control	90462	152	128	618	0.32	168	148	617	ND
R1-01	90653	156	140	568	0.47	160	152	593	ND
P5-01	90654	148	132	553	0.56	168	136	595	ND
P4-01	90655	148	124	610	1.38	152	116	588	ND
P3-03	90656	160	140	615	0.55	164	132	583	ND
P3-01	90657	152	124	548	0.37	168	136	595	ND
P2-03	90658	156	136	564	0.57	160	136	604	ND
P1-02	90659	148	128	559	1.21	160	116	592	ND
P4-03	90660	160	140	555	1.46	164	140	595	ND

ND = <0.08 mg/L
 Alkalinity = mg/L
 Hardness = mg/L
 Conductivity = µmho/cm
 NH3 = (mg/L) total ammonia

JN
 5/12/99

Table 17														SUMMARY - H. AZTECA LENGTHS (mm)	
Chamber ID	Code #	Sample	Organisms										Mean per rep.	Mean per conc.	
			1	2	3	4	5	6	7	8	9	10			
62	0.01	Control 90462	3.9	3.6	3.1	3.4	3.0	3.2	3.4	3.0	3.2			3.31	3.26
15	0.02		3.9	4.0	3.3	3.4	3.6	3.7	3.1	3.4	3.6	3.3		3.53	
59	0.03		3.4	3.5	3.3	3.9	3.3	3.3	3.5	3.2	3.2	3.5		3.41	
43	0.04		2.8	3.6	3.5	3.0	3.1	3.2	3.4	3.2	3.0	2.9		3.17	
3	0.05		3.5	3.2	3.1	3.3	2.8	3.0	3.2	3.2	3.0			3.14	
11	0.06		3.1	2.9	3.5	3.6	3.5	3.1	3.8	3.4	3.0	3.4		3.33	
66	0.07		3.4	3.5	3.1	3.4	3.4	3.8	3.0	3.0	2.6	3.4		3.26	
34	0.08		2.9	2.8	2.8	3.2	3.0	2.9	2.7	3.0	3.1	2.9		2.93	
14	1.01	R1-01 90653	2.7	2.9	2.7	3.0	3.2	3.8	2.4	2.4				2.89	3.28
69	1.02		4.0	3.7	3.6	4.0	4.0	3.3	3.9					3.79	
10	1.03		3.3	3.3	3.2	3.1	3.4	3.1	3.9	3.1				3.30	
53	1.04		3.5	3.4	3.2	2.9	3.0	3.1	3.0	3.2	3.1	3.0		3.14	
27	1.05		3.7	3.7	3.6	3.3	2.9	3.4	3.0	3.3	3.0			3.32	
45	1.06		3.4	3.4	3.1	3.4								3.33	
49	1.07		3.8	3.3	3.2	3.0	3.7	3.8	2.9	3.3	2.8	3.0		3.28	
64	1.08		3.2	3.1	3.3	3.1	2.7	3.7	3.5	3.0				3.20	
54	2.01	P5-01 90654	3.7	3.1	3.2	3.8	3.8	3.4	3.6	3.5	3.1	3.0		3.42	3.23
65	2.02		3.0	3.0	2.8	2.5	2.9	2.8	3.2	3.2	3.0			2.93	
17	2.03		3.7	3.8	3.2	3.4	3.0	3.8	3.5	3.5	3.3	3.2		3.44	
1	2.04		3.6	3.9	3.5	3.0	3.1	3.7	3.0	2.8	3.1	3.0		3.27	
44	2.05		2.8	3.4	3.0	3.6	3.5	3.1	3.9	3.0	3.3			3.29	
41	2.06		2.9	3.0	2.7	2.8	3.2	3.5	3.0	3.1	2.9			3.01	
7	2.07		3.1	3.0	2.8	3.9	3.5	3.0	3.1	3.1				3.19	
36	2.08		3.4	3.1	3.2	3.9	3.4	3.2	3.3	3.1				3.33	
37	3.01	P4-01 90655	3.8	3.7	3.0	2.9	3.2	3.2	3.1	2.8	3.0	3.0		3.17	3.11
29	3.02		3.6	3.4	3.7	3.1	3.9	3.1	2.8	3.1	3.1	2.9		3.27	
60	3.03		3.2	3.1	3.2	3.0	3.0	3.2	2.9	3.0				3.08	
5	3.04		3.2	3.7	3.0	2.8	3.0	3.0	2.4	2.9	3.1	3.0		3.01	
6	3.05		3.3	3.0	2.7	3.4	3.5	2.6	3.8	2.9	3.2	2.8		3.12	
18	3.06		3.7	3.3	3.6	3.0	2.8	3.0	3.0	2.8				3.15	
33	3.07		3.1	3.2	3.4	3.3	3.2	3.2	3.1	2.8	2.9	3.0		3.12	
46	3.08		2.5	3.2	3.2	3.1	3.2	2.8	3.0					3.00	
72	4.01	P3-03 90656	4.5	3.9	4.0	3.9	3.8	3.7	4.0	4.2	3.9	3.1		3.90	3.74
48	4.02		3.0	3.4	3.8	3.5	3.5	3.8	3.6	3.1	3.1	3.2		3.40	
20	4.03		3.3	4.1	4.0	3.8	3.6	3.8	3.9	3.9	3.6	3.4		3.74	
61	4.04		4.1	4.4	4.1	4.1	3.9	3.8	4.2	4.0	4.2	3.9		4.07	
71	4.05		4.4	3.9	4.1	3.5	4.1	3.7	3.2	4.1	4.0	4.0		3.90	
56	4.06		3.5	3.2	3.4	3.2	3.5	3.8	3.0	3.3	3.1			3.33	
39	4.07		4.1	4.0	3.7	3.8	3.8	3.7	3.1	3.5	3.3			3.67	
28	4.08		4.0	3.9	3.3	3.7	4.0	3.7	4.3	4.0	3.8	4.1		3.88	
38	5.01	P3-01 90657	3.2	3.6	3.3	3.2	3.5	2.9	3.3	3.4	2.4	3.4		3.22	3.36
68	5.02		3.0	3.8	3.4	3.6	3.5	3.5	3.4	3.9	3.1			3.47	
63	5.03		3.4	2.8	3.2	3.1	3.3	3.1	2.9	3.0	2.9	2.6		3.03	
47	5.04		3.2	3.1	3.8	3.7	2.9	3.1	3.4	3.7	3.2			3.34	
67	5.05		3.7	3.5	3.4	3.6	3.6	3.7	3.6	4.1	3.9	3.3		3.64	
24	5.06		3.7	3.4	3.4	3.2	3.4	3.9	3.8	3.8	3.5	3.7		3.58	
52	5.07		3.4	3.3	3.8	3.5	3.1	3.2	4.0	3.5	3.0	3.3		3.41	
23	5.08		3.1	3.4	3.2	3.3	3.0	3.3	3.3	3.2	3.0	2.9		3.17	
21	6.01	P2-03 90658	3.7	4.0	4.0	4.1	3.9	4.2	3.8	3.1	3.9	3.8		3.85	3.56
26	6.02		3.6	3.1	3.1	3.1	3.3	3.3	3.5	3.4	3.4			3.31	
9	6.03		3.5	3.6	3.5	3.4	3.4	4.0	3.8	3.3	3.2			3.52	
42	6.04		3.2	3.9	3.4	3.5	3.3	4.0	3.1	3.2	3.8	3.1		3.45	
32	6.05		4.0	3.9	4.0	3.3	3.4	3.3	2.9	3.7	3.4	3.3		3.52	
13	6.06		4.1	3.9	3.1	3.6	4.0	3.8	3.6	2.9	3.5	3.9		3.64	
55	6.07		3.7	3.5	3.0	3.7	3.7	3.4	3.4	3.6				3.50	
19	6.08		4.1	4.0	4.0	3.9	3.2	3.6	3.7	3.4	3.2	4.0		3.71	

Table 17															SUMMARY - H. AZTECA LENGTHS (mm)	
Chamber ID	Code #	Sample	Organisms										Mean per rep.	Mean per conc.		
			1	2	3	4	5	6	7	8	9	10				
58	7.01	P1-02 90659	3.0	3.2	3.5	3.1	3.6	3.3	3.1	3.0	2.9			3.19		
35	7.02		4.0	3.5	3.0	3.1	3.4	3.1	2.7	3.2	3.0			3.22		
70	7.03		3.1	3.0	3.1	3.0	3.3	3.0	2.0	2.9				2.93		
40	7.04		3.4	3.8	3.3	3.8	3.8	2.9	3.8	3.6	3.5	4.0		3.59		
50	7.05		3.3	3.6	3.8	3.6	3.8	3.5	2.8	3.2	3.3			3.43		
31	7.06		3.4	3.8	3.6	3.0	3.2	3.5	2.7	3.2	3.0	3.2		3.26		
51	7.07		2.8	2.7	2.1	2.2	2.4	2.5	3.0	2.8	1.9	2.0		2.44		
4	7.08		3.8	3.9	3.4	3.3	3.1	3.0	4.0	3.0				3.44	3.19	
16	8.01	P4-03 90660	4.5	3.2	3.6	3.4	3.6	3.8						3.68		
2	8.02		3.3	4.0	3.8	3.8	3.7							3.72		
25	8.03		4.5	3.3	3.8	3.8	4.0	4.0	3.5	3.7				3.83		
30	8.04		4.5	4.1	4.3	4.1	4.1	4.3						4.23		
57	8.05		3.2	3.2	3.2	3.1	3.0	3.3	3.7	3.2	3.1			3.22		
8	8.06		3.8	3.5	3.7	3.4	3.7	3.6	3.5	3.7				3.61		
12	8.07		3.8	3.9	3.6	3.7	3.3	3.4	3.9	3.6				3.65		
22	8.08		4.0	3.8	3.9	3.2	3.5	4.0	3.9	3.6	4.1			3.78	3.72	

APPENDIX

BIOLOGICAL RAW DATA

March 30, 1999

C. tentans

98-411R C. tentans 14 day survival

File: 98411r.CTS Transform: ARC SINE(SQUARE ROOT(Y))

Chi-square test for normality: actual and expected frequencies

INTERVAL	<-1.5	-1.5 to <-0.5	-0.5 to 0.5	>0.5 to 1.5	>1.5
EXPECTED	4.288	15.488	24.448	15.488	4.288
OBSERVED	5	16	20	21	2

Calculated Chi-Square goodness of fit test statistic = 4.1269

Table Chi-Square value (alpha = 0.01) = 13.277

Data PASS normality test. Continue analysis.

98-411R C. tentans 14 day survival

File: 98411r.CTS Transform: ARC SINE(SQUARE ROOT(Y))

Bartlett's test for homogeneity of variance

Calculated B1 statistic = 9.36

Table Chi-square value = 18.48 (alpha = 0.01, df = 7)

Table Chi-square value = 14.07 (alpha = 0.05, df = 7)

Data PASS B1 homogeneity test at 0.01 level. Continue analysis.

TITLE: 98-411R C. tentans 14 day survival

FILE: 98411r.CTS

TRANSFORM: ARC SINE(SQUARE ROOT(Y))

NUMBER OF GROUPS: 8

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	R1-01	1	1.0000	1.4120
1	R1-01	2	0.8000	1.1071
1	R1-01	3	0.8000	1.1071
1	R1-01	4	0.9000	1.2490
1	R1-01	5	0.8000	1.1071
1	R1-01	6	0.9000	1.2490
1	R1-01	7	0.8000	1.1071
1	R1-01	8	0.8000	1.1071
2	P5-01	1	0.7000	0.9912
2	P5-01	2	0.9000	1.2490
2	P5-01	3	1.0000	1.4120
2	P5-01	4	1.0000	1.4120
2	P5-01	5	0.4000	0.6847
2	P5-01	6	0.8000	1.1071
2	P5-01	7	1.0000	1.4120
2	P5-01	8	0.8000	1.1071
3	P4-01	1	1.0000	1.4120
3	P4-01	2	0.9000	1.2490
3	P4-01	3	0.7000	0.9912
3	P4-01	4	0.8000	1.1071
3	P4-01	5	0.8000	1.1071
3	P4-01	6	0.4000	0.6847
3	P4-01	7	0.4000	0.6847
3	P4-01	8	0.8000	1.1071
4	P3-03	1	1.0000	1.4120
4	P3-03	2	1.0000	1.4120
4	P3-03	3	0.6000	0.8861
4	P3-03	4	0.9000	1.2490
4	P3-03	5	1.0000	1.4120
4	P3-03	6	0.7000	0.9912
4	P3-03	7	1.0000	1.4120
4	P3-03	8	1.0000	1.4120
5	P3-01	1	0.3000	0.5796
5	P3-01	2	0.7000	0.9912
5	P3-01	3	0.5000	0.7854
5	P3-01	4	0.7000	0.9912
5	P3-01	5	0.5000	0.7854
5	P3-01	6	0.6000	0.8861
5	P3-01	7	0.5000	0.7854
5	P3-01	8	0.4000	0.6847
6	P2-03	1	0.8000	1.1071
6	P2-03	2	0.9000	1.2490
6	P2-03	3	0.8000	1.1071
6	P2-03	4	0.8000	1.1071
6	P2-03	5	1.0000	1.4120
6	P2-03	6	0.8000	1.1071
6	P2-03	7	0.9000	1.2490
6	P2-03	8	0.9000	1.2490
7	P1-02	1	0.9000	1.2490
7	P1-02	2	0.6000	0.8861

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7	P1-02	3	0.9000	1.2490
7	P1-02	4	1.0000	1.4120
7	P1-02	5	0.8000	1.1071
7	P1-02	6	1.0000	1.4120
7	P1-02	7	1.0000	1.4120
7	P1-02	8	0.9000	1.2490
8	P4-03	1	0.9000	1.2490
8	P4-03	2	0.7000	0.9912
8	P4-03	3	0.9000	1.2490
8	P4-03	4	0.9000	1.2490
8	P4-03	5	0.6000	0.8861
8	P4-03	6	0.7000	0.9912
8	P4-03	7	0.8000	1.1071
8	P4-03	8	0.4000	0.6847

08-411R C. tentans 14 day survival

File: 98411r.CTS Transform: ARC SINE(SQUARE ROOT(Y))

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 1 of 2

GRP	IDENTIFICATION	N	MIN	MAX	MEAN
1	R1-01	8	1.107	1.412	1.181
2	P5-01	8	0.685	1.412	1.172
3	P4-01	8	0.685	1.412	1.043
4	P3-03	8	0.886	1.412	1.273
5	P3-01	8	0.580	0.991	0.811
6	P2-03	8	1.107	1.412	1.198
7	P1-02	8	0.886	1.412	1.247
8	P4-03	8	0.685	1.249	1.051

08-411R C. tentans 14 day survival

File: 98411r.CTS Transform: ARC SINE(SQUARE ROOT(Y))

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 2 of 2

GRP	IDENTIFICATION	VARIANCE	SD	SEM	C.V. %
1	R1-01	0.013	0.113	0.040	9.60
2	P5-01	0.065	0.256	0.090	21.81
3	P4-01	0.064	0.254	0.090	24.32
4	P3-03	0.047	0.216	0.076	16.96
5	P3-01	0.020	0.142	0.050	17.56
6	P2-03	0.012	0.111	0.039	9.28
7	P1-02	0.033	0.182	0.064	14.58
8	P4-03	0.041	0.203	0.072	19.35

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98-411R C. tentans 14 day survival
File: 98411r.CTS Transform: ARC SINE(SQUARE ROOT(Y))

ANOVA TABLE

SOURCE	DF	SS	MS	F
Between	7	1.266	0.181	4.885
Within (Error)	56	2.073	0.037	
Total	63	3.340		

Critical F value = 2.25 (0.05,7,40)
Since $F > \text{Critical } F$ REJECT H_0 : All equal

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8-411R C. tentans 14 day survival

File: 98411r.CTS

Transform: ARC SINE(SQUARE ROOT(Y))

DUNNETT'S TEST

TABLE 1 OF 2

Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG
1	R1-01	1.181	0.850		
2	P5-01	1.172	0.825	0.092	
3	P4-01	1.043	0.725	1.433	
4	P3-03	1.273	0.900	-0.962	
5	P3-01	0.811	0.525	3.842	*
6	P2-03	1.198	0.863	-0.184	
7	P1-02	1.247	0.888	-0.689	
8	P4-03	1.051	0.738	1.349	

Dunnnett table value = 2.42 (1 Tailed Value, P=0.05, df=40,7)

8-411R C. tentans 14 day survival

File: 98411r.CTS

Transform: ARC SINE(SQUARE ROOT(Y))

DUNNETT'S TEST

TABLE 2 OF 2

Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	Minimum Sig Diff (IN ORIG. UNITS)	% of CONTROL	DIFFERENCE FROM CONTROL
1	R1-01	8			
2	P5-01	8	0.196	23.0	0.025
3	P4-01	8	0.196	23.0	0.125
4	P3-03	8	0.196	23.0	-0.050
5	P3-01	8	0.196	23.0	0.325
6	P2-03	8	0.196	23.0	-0.012
7	P1-02	8	0.196	23.0	-0.037
8	P4-03	8	0.196	23.0	0.113

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8-411R C. tentans dry weight
File: 98411.ctw Transform: NO TRANSFORMATION

Chi-square test for normality: actual and expected frequencies

INTERVAL	<-1.5	-1.5 to <-0.5	-0.5 to 0.5	>0.5 to 1.5	>1.5
EXPECTED	3.752	13.552	21.392	13.552	3.752
OBSERVED	3	16	19	15	3

Calculated Chi-Square goodness of fit test statistic = 1.1658
Table Chi-Square value (alpha = 0.01) = 13.277

Data PASS normality test. Continue analysis.

8-411R C. tentans dry weight
File: 98411.ctw Transform: NO TRANSFORMATION

Bartlett's test for homogeneity of variance
Calculated B1 statistic = 12.14

Table Chi-square value = 16.81 (alpha = 0.01, df = 6)
Table Chi-square value = 12.59 (alpha = 0.05, df = 6)

Data PASS B1 homogeneity test at 0.01 level. Continue analysis.

TITLE: 98-411R C. tentans dry weight

FILE: 98411.ctw

TRANSFORM: NO TRANSFORMATION

NUMBER OF GROUPS: 7

RP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	R1-01	1	1.6000	1.6000
1	R1-01	2	2.5000	2.5000
1	R1-01	3	1.9400	1.9400
1	R1-01	4	1.9000	1.9000
1	R1-01	5	1.7400	1.7400
1	R1-01	6	1.5300	1.5300
1	R1-01	7	2.0100	2.0100
1	R1-01	8	1.7900	1.7900
2	P5-01	1	2.2900	2.2900
2	P5-01	2	2.0900	2.0900
2	P5-01	3	2.0300	2.0300
2	P5-01	4	1.8700	1.8700
2	P5-01	5	1.9000	1.9000
2	P5-01	6	1.9400	1.9400
2	P5-01	7	1.9300	1.9300
2	P5-01	8	2.1200	2.1200
3	P4-01	1	1.5400	1.5400
3	P4-01	2	1.3300	1.3300
3	P4-01	3	1.1900	1.1900
3	P4-01	4	1.3600	1.3600
3	P4-01	5	1.9400	1.9400
3	P4-01	6	1.8000	1.8000
3	P4-01	7	1.8000	1.8000
3	P4-01	8	1.7800	1.7800
4	P3-03	1	2.0800	2.0800
4	P3-03	2	2.0200	2.0200
4	P3-03	3	2.6200	2.6200
4	P3-03	4	2.4800	2.4800
4	P3-03	5	2.2300	2.2300
4	P3-03	6	2.2900	2.2900
4	P3-03	7	2.2700	2.2700
4	P3-03	8	2.2400	2.2400
5	P2-03	1	1.9400	1.9400
5	P2-03	2	2.3000	2.3000
5	P2-03	3	1.8900	1.8900
5	P2-03	4	2.4400	2.4400
5	P2-03	5	1.6000	1.6000
5	P2-03	6	2.4100	2.4100
5	P2-03	7	2.1700	2.1700
5	P2-03	8	2.1000	2.1000
6	P1-02	1	1.8800	1.8800
6	P1-02	2	2.5800	2.5800
6	P1-02	3	1.6400	1.6400
6	P1-02	4	2.2500	2.2500
6	P1-02	5	2.5300	2.5300
6	P1-02	6	2.0900	2.0900
6	P1-02	7	1.9700	1.9700
6	P1-02	8	1.3600	1.3600
7	P4-03	1	2.5300	2.5300
7	P4-03	2	3.2000	3.2000

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7	P4-03	3	2.4800	2.4800
7	P4-03	4	2.0000	2.0000
7	P4-03	5	3.4300	3.4300
7	P4-03	6	2.6100	2.6100
7	P4-03	7	2.8000	2.8000
7	P4-03	8	3.1800	3.1800

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6/13/99

8-411R C. tentans dry weight
file: 98411.ctw Transform: NO TRANSFORMATION

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 1 of 2

GRP	IDENTIFICATION	N	MIN	MAX	MEAN
1	R1-01	8	1.530	2.500	1.876
2	P5-01	8	1.870	2.290	2.021
3	P4-01	8	1.190	1.940	1.593
4	P3-03	8	2.020	2.620	2.279
5	P2-03	8	1.600	2.440	2.106
6	P1-02	8	1.360	2.580	2.038
7	P4-03	8	2.000	3.430	2.779

8-411R C. tentans dry weight
file: 98411.ctw Transform: NO TRANSFORMATION

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 2 of 2

GRP	IDENTIFICATION	VARIANCE	SD	SEM	C.V. %
1	R1-01	0.091	0.301	0.106	16.04
2	P5-01	0.020	0.141	0.050	6.98
3	P4-01	0.076	0.275	0.097	17.27
4	P3-03	0.038	0.195	0.069	8.58
5	P2-03	0.082	0.287	0.101	13.62
6	P1-02	0.176	0.419	0.148	20.58
7	P4-03	0.221	0.470	0.166	16.93

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18-411R C. tentans dry weight

file: 98411.ctw

Transform: NO TRANSFORMATION

ANOVA TABLE

SOURCE	DF	SS	MS	F
Between	6	6.483	1.081	10.747
Within (Error)	49	4.927	0.101	
Total	55	11.410		

Critical F value = 2.34 (0.05,6,40)

Since $F > \text{Critical } F$ REJECT H_0 : All equal

5/13/99

8-411R C. tentans dry weight

file: 98411.ctw

Transform: NO TRANSFORMATION

DUNNETT'S TEST - TABLE 1 OF 2

Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG
1	R1-01	1.876	1.876		
2	P5-01	2.021	2.021	-0.915	
3	P4-01	1.593	1.593	1.790	
4	P3-03	2.279	2.279	-2.539	
5	P2-03	2.106	2.106	-1.451	
6	P1-02	2.038	2.038	-1.017	
7	P4-03	2.779	2.779	-5.693	

Dunnett table value = 2.37 (1 Tailed Value, P=0.05, df=40,6)

8-411R C. tentans dry weight

file: 98411.ctw

Transform: NO TRANSFORMATION

DUNNETT'S TEST - TABLE 2 OF 2

Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	Minimum Sig Diff (IN ORIG. UNITS)	% of CONTROL	DIFFERENCE FROM CONTROL
1	R1-01	8			
2	P5-01	8	0.376	20.0	-0.145
3	P4-01	8	0.376	20.0	0.284
4	P3-03	8	0.376	20.0	-0.403
5	P2-03	8	0.376	20.0	-0.230
6	P1-02	8	0.376	20.0	-0.161
7	P4-03	8	0.376	20.0	-0.903

AQUA SURVEY, INC.
DRY WEIGHT DETERMINATION

Job #: 98-411
Test Start Date: 3/30/99

Client: DAM
Age at Start Test: _____

Organism: C. tentans
Balance: SART

Pan #	A	B	B-A	C	(B-A)/C	Pan #	A	B	B-A	C	(B-A)/C
1	0.9409	0.9618		10		33	0.9462	0.9676		10	
2	0.9406	0.9606		8		34	0.9460	0.9582		9	
3	0.9410	0.9558		9		35	0.9449	0.9656		9	
4	0.9396	0.9510		7		36	0.9462	0.9642		9	
5	0.9445	0.9634		9		37	0.9477	0.9700		9	
6	0.9502	0.9645		8		38	0.9466	0.9659		10	
7	0.9489	0.9695		6		39	0.9461	0.9469		3	
8	0.9482	0.9707		10		40	0.9494	0.9566		4	
9	0.9448	0.9625		10		41	0.9494	0.9523		5	
10	0.9470	0.9580		8		42	0.9477	0.9502		2	
11	0.9522	0.9692		8		43	0.9460	0.9648		9	
12	0.9525	0.9611		5		44	0.9469	0.9629		10	
13	0.9509	0.9596		5		45	0.9431	0.9460		4	
14	0.9484	0.9686		10		46	0.9480	0.9515		3	
15	0.9470	0.9609		8		47	0.9479	0.9599		9	
16	0.9482	0.9546		8.5		48	0.9512	0.9672		10	
17	0.9454	0.9682		9		49	0.9522	0.9717		9	
18	0.9444	0.9667		9		50	0.9528	0.9752		7	
19	0.9469	0.9629		7		51	0.9470	0.9625		6	
20	0.9462	0.9633		9		52	0.9458	0.9655		10	
21	0.9470	0.9522		5		53	0.9482	0.9643		8	
22	0.9459	0.9490		6		54	0.9453	0.9608		8	
23	0.9435	0.9604		9		55	0.9495	0.9650		8	
24	0.9479	0.9681		8		56	0.9444	0.9598		10	
25	0.9465	0.9688		10		57	0.9453	0.9648		8	
26	0.9454	0.9537		7		58	0.9462	0.9686		10	
27	0.9433	0.9571		9		59	0.9469	0.9578		8	
28	0.9445	0.9481		4		60	0.9480	0.9631		8	
29	0.9448	0.9608		7		61	0.9435	0.9590		8	
30	0.9461	0.9493		2		62	0.9448	0.9575		4	
31	0.9485	0.9672		10		63	0.9496	0.9679		7	
32	0.9495	0.9571		4		64	0.9496	0.9568		4	
Initial	LB	MH		LB		Initial	LB	MH		LB	
Date	4/13/99	4/20/99		4/13/99		Date	4/13/99	4/20/99		4/13/99	

A = Weight pan empty (mg)
B = Dry weight of organisms + pan (mg)
C = Number of surviving organisms
B-A/C = Mean Dry weight of organism (mg)

$\frac{B-A}{C} \times 1000 =$

Task	Pans in oven	Pans in desiccator	Organisms to pans	Organisms to oven	Organisms to desiccator
Date	4/12/99	4/13/99	4/13/99	4/13/99	4/14/99
Time	1300	1300	1430	1430	1430
Temperature	105°C	—	—	60°C	—
Initials	LB	LB	LB	LB	LB

0.9550 mg 4/20/99

AQUA SURVEY, INC.
 DRY WEIGHT DETERMINATION

Job #: 98-411
 Test Start Date: 3/30/99

Client: DAM
 Age at Start Test: _____

Organism: C. tentans
 Balance: SART

Pan #	A	B	B-A	C	(B-A)/C	Pan #	A	B	B-A	C	(B-A)/C
65	0.9505	0.9579		7		97					
66	0.9483	0.9640		6		98					
67	0.9511	0.9706		8		99					
68	0.9519	0.9661		8		100					
69	0.9519	0.9534		4		101					
70	0.9472	0.9696		8		102					
71	0.9474	0.9677		10		103					
72	0.9496	0.9651		8		104					
73						105					
74						106					
75						107					
76						108					
77						109					
78						110					
79						111					
80						112					
81						113					
82						114					
83						115					
84						116					
85						117					
86						118					
87						119					
88						120					
89						121					
90						122					
91						123					
92						124					
93						125					
94						126					
95						127					
96						128					
Initial	LB	MH				Initial					
Date	4/13/99	4/20/99				Date					

A = Weight pan empty (mg)
 B = Dry weight of organisms + pan (mg)
 C = Number of surviving organisms
 B-A/C = Mean Dry weight of organism (mg)

Task	Pans in oven	Pans in desiccator	Organisms to pans	Organisms to oven	Organisms to desiccator
Date	4/13/99	4/13/99	4/13/99	4/13/99	4/14/99
Time	1300	1300	1430	1430	1430
Temperature	105.6°C	—	—	60°C	—
Initials	LB	LB	LB	LB	LB

5/4/99

DAMES & MOORE 98-41R C. tentans pretest head capsule widths

(mm)

1	2.0 0.2
2	2.0 0.2
3	0.2
4	0.2
5	0.2
6	0.2
7	0.2
8	0.2
9	0.2
10	0.2
11	0.2
12	0.2
13	0.2
14	0.2
15	0.2
16	0.2
17	0.2
18	0.2
19	0.2
20	0.2
\bar{x}	0.2

908-411R Dames and Moore C. tentans 28 day

Position	sample	ASI No.	Code
39	Control	81997*	0.1
30		*	0.2
69		*	0.3
28		*	0.4
42		*	0.5
21		*	0.6
10		*	0.7
13		*	0.8
48	R1-01	90653	1.1
2		*	1.2
54		*	1.3
20		*	1.4
15		*	1.5
27		*	1.6
53		*	1.7
6		*	1.8
19	P5-01	90654	2.1
43		*	2.2
71		*	2.3
31		*	2.4
32		*	2.5
55		*	2.6
38		*	2.7
11		*	2.8
56	P4-01	90655	3.1
47		*	3.2
26		*	3.3
59		*	3.4
61		*	3.5
64		*	3.6
40		*	3.7
68		*	3.8
33	P3-03	90656	4.1
14		*	4.2
66		*	4.3
18		*	4.4
25		*	4.5
29		*	4.6
9		*	4.7
58		*	4.8
46	P3-01	90657	5.1
4		*	5.2
41		*	5.3
65		*	5.4
12		*	5.5
22		*	5.6
16		*	5.7
45		*	5.8
72	P2-03	90658	6.1
35		*	6.2
60		*	6.3
67		*	6.4
44		*	6.5
57		*	6.6
49		*	6.7
5		*	6.8
23	P1-02	90659	7.1

908-411R Dames and Moore C. tentans 28 day

Position	sample	ASI No.	Code
51		*	7.2
3		*	7.3
8		*	7.4
24		*	7.5
1		*	7.6
52		*	7.7
34		*	7.8
17	P4-03	90660	8.1
50			8.2
37			8.3
36			8.4
7			8.5
63			8.6
70			8.7
62			8.8

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411

Client Dames and Moore

Organism *C. tentans*

Bath C

Parameter Observations and Live counts

N - Normal D - DEAD

Chamber	Initial Day 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	10 N	N	N	N	N	N	N	N	N	N	N	N	N	N	10
2	10 N						N								8
3	10 N						N								9
4	10 N						N								7
5	10 N						N								9
6	10 N						N								8
7	10 N						N								6
8	10 N						N								10
9	10 N						N								10
10	10 N						N								8
11	10 N						N								8
12	10 N						N								5 (ID)
13	10 N						N								5
14	10 N						N								10
15	10 N						N								8
16	10 N						ID								5 (ID)
17	10 N						N								9
18	10 N						N								9
19	10 N						N								7
20	10 N						N								9
21	10 N						N								5 (ID)
22	10 N						N								6
23	10 N						N								9
24	10 N						N								8
25	10 N	↓	↓	↓	↓	↓	N	↓	↓	↓	↓	↓	↓	↓	10
t/Date	4/2/99	4/3/99	4/4/99	4/5/99	4/6/99	4/7/99	4/8/99	4/9/99	4/10/99	4/11/99	4/12/99	4/13/99	4/14/99	4/15/99	4/16/99

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411

Client Dames and Moore

Organism C. tentans

Parameter Observations and Live counts

Chamber	Initial Day 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
26	10 N	N	N	N	N	N	N	N	N	N	N	N	N	N	7
27	10 N														9
28	10 N														4
29	10 N														7
30	10 N														2+10
31	10 N														10
32	10 N														4
33	10 N														10
34	10 N														9
35	10 N														9
36	10 N														9
37	10 N														9
38	10 N														10
39	10 N														3+10
40	10 N														4
41	10 N										↓				5
42	10 N										(10)				2+10
43	10 N										N				9
44	10 N														10
45	10 N														4
46	10 N														3
47	10 N														9
48	10 N														10
49	10 N														9
50	10 N	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	7
nt/Date	3/24/99	3/25/99	3/26/99	3/27/99	3/28/99	3/29/99	3/30/99	3/31/99	4/1/99	4/2/99	4/3/99	4/4/99	4/5/99	4/6/99	4/7/99

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411

Client Dames and Moore

Organism C. tentans

Parameter Observations and Live counts

Chamber	Initial Day 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
51	10 N	N	N	N	N	N	N	N	N	N	N	N	N	N	6
52	10 N														10
53	10 N														8
54	10 N														8
55	10 N														8
56	10 N														10
57	10 N														8
58	10 N														10
59	10 N														8
60	10 N														8
61	10 N														8
62	10 N														4 (10)
63	10 N														7
64	10 N														4
65	10 N														7
66	10 N														6
67	10 N														8
68	10 N														8
69	10 N														4
70	10 N														8
71	10 N														10
72	10 N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	8
73															
74															
75															
nt/Date	3/30/99	3/31/99	4/1/99	4/2/99	4/3/99	4/4/99	4/5/99	4/6/99	4/7/99	4/8/99	4/9/99	4/10/99	4/11/99	4/12/99	4/13/99

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
3/30/99	8:46:54	90653	21.98	309.00	0.2	8.57	6.98
3/30/99	8:47:02	90654	21.96	294.00	0.1	8.40	7.10
3/30/99	8:47:08	90655	22.00	283.00	0.1	8.36	7.11
3/30/99	8:47:14	90656	22.06	302.00	0.1	8.28	7.12
3/30/99	8:47:20	90657	22.11	284.00	0.1	8.24	7.14
3/30/99	8:47:25	90658	22.14	296.00	0.1	8.18	7.15
3/30/99	8:47:31	90659	22.18	293.00	0.1	8.15	7.14
3/30/99	8:47:37	90660	22.19	293.00	0.1	8.09	7.14
3/30/99	8:47:43	(control)	22.21	306.00	0.2	8.06	7.16

Project #: 411 R Test type: ACUTE CHRONIC OTHER 14 day flow thru Date: 3/30/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *C. tentans* Day of Study: 0

OPERATIONAL RANGE:

Temperature: <u>22</u> to <u>24</u>	Check if OK <input checked="" type="checkbox"/>	Meter Used: Blue <input type="checkbox"/>
Salinity: <u>—</u> to <u>—</u>	<input checked="" type="checkbox"/>	Red <input checked="" type="checkbox"/>
Dissolved oxygen: > 4.0	<input checked="" type="checkbox"/>	
pH: 6.0 to 9.0	<input checked="" type="checkbox"/>	

Actions taken: _____

See deviation summary sheet

Initials: TD

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
3/31/99	10:37:22	22.15	3.00	0.0	7.64	8.06
3/31/99	10:37:27	22.30	3.00	0.0	6.96	7.79
3/31/99	10:37:33	22.28	3.00	0.0	6.57	7.71
3/31/99	10:38:57	22.34	2.00	0.0	6.48	7.38
3/31/99	10:39:04	22.31	2.00	0.0	6.44	7.36
3/31/99	10:39:11	22.28	3.00	0.0	6.35	7.36
3/31/99	10:39:36	22.02	2.00	0.0	7.51	7.37
3/31/99	10:39:44	22.21	2.00	0.0	7.23	7.35
3/31/99	10:39:50	22.27	2.00	0.0	6.85	7.33
3/31/99	10:40:21	22.15	2.00	0.0	7.00	7.47
3/31/99	10:40:26	22.25	2.00	0.0	6.71	7.49
3/31/99	10:40:33	22.26	2.00	0.0	6.46	7.48
3/31/99	10:41:03	22.04	2.00	0.0	7.23	7.51
3/31/99	10:41:08	22.20	2.00	0.0	7.09	7.54
3/31/99	10:41:14	22.27	5.00	0.0	7.03	7.53
3/31/99	10:41:42	22.05	2.00	0.0	7.67	7.42
3/31/99	10:41:46	22.18	2.00	0.0	7.48	7.38
3/31/99	10:41:52	22.26	3.00	0.0	7.32	7.37
3/31/99	10:42:19	22.03	2.00	0.0	7.64	7.43
3/31/99	10:42:24	22.21	2.00	0.0	7.26	7.42
3/31/99	10:42:30	22.31	2.00	0.0	7.08	7.42
3/31/99	10:43:02	22.19	2.00	0.0	7.49	7.42
3/31/99	10:43:08	22.28	2.00	0.0	7.03	7.38
3/31/99	10:43:14	22.35	3.00	0.0	6.82	7.33
3/31/99	10:43:39	22.05	2.00	0.0	6.94	7.29
3/31/99	10:43:45	22.22	2.00	0.0	5.56	7.32
3/31/99	10:43:50	22.32	2.00	0.0	5.26	7.32
3/31/99	10:44:29	22.05	2.00	0.0	7.41	7.44
3/31/99	10:44:34	22.23	2.00	0.0	7.14	7.45
3/31/99	10:44:40	22.31	2.00	0.0	6.81	7.47
3/31/99	10:45:05	22.03	2.00	0.0	7.40	7.45
3/31/99	10:45:11	22.21	2.00	0.0	7.16	7.42
3/31/99	10:45:16	22.26	2.00	0.0	6.95	7.39
3/31/99	10:45:46	22.04	2.00	0.0	7.34	7.32
3/31/99	10:45:53	22.19	2.00	0.0	6.89	7.29
3/31/99	10:46:01	22.27	2.00	0.0	6.58	7.24
3/31/99	10:46:29	22.02	2.00	0.0	7.05	7.23
3/31/99	10:46:34	22.15	2.00	0.0	6.68	7.23
3/31/99	10:46:40	22.23	2.00	0.0	6.22	7.25
3/31/99	10:47:06	22.03	2.00	0.0	7.44	7.34
3/31/99	10:47:11	22.16	2.00	0.0	7.14	7.33
3/31/99	10:47:16	22.24	2.00	0.0	6.55	7.32
3/31/99	10:48:05	22.31	2.00	0.0	7.49	7.42
3/31/99	10:48:10	22.29	2.00	0.0	7.18	7.39
3/31/99	10:48:16	22.31	2.00	0.0	6.94	7.36
3/31/99	10:48:37	22.02	2.00	0.0	7.53	7.32
3/31/99	10:48:41	22.18	2.00	0.0	7.54	7.31
3/31/99	10:48:46	22.27	2.00	0.0	7.50	7.30
3/31/99	10:49:38	22.33	2.00	0.0	7.88	7.36
3/31/99	10:49:43	22.60	2.00	0.0	7.86	7.34

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
3/31/99	10:49:48	22.58	2.00	0.0	7.10	7.32
3/31/99	10:50:16	22.02	2.00	0.0	6.91	7.24
3/31/99	10:50:20	22.17	2.00	0.0	6.34	7.22
3/31/99	10:50:25	22.23	2.00	0.0	6.22	7.23
3/31/99	10:50:50	22.05	1.00	0.0	7.34	7.31
3/31/99	10:50:55	22.25	1.00	0.0	7.20	7.31
3/31/99	10:51:00	22.35	1.00	0.0	7.07	7.31
3/31/99	10:51:22	22.04	1.00	0.0	7.40	7.31
3/31/99	10:51:29	22.22	1.00	0.0	7.25	7.34
3/31/99	10:51:35	22.35	3.00	0.0	6.95	7.33
3/31/99	10:52:06	22.04	2.00	0.0	7.50	7.31
3/31/99	10:52:11	22.24	2.00	0.0	7.21	7.29
3/31/99	10:52:15	22.31	2.00	0.0	6.97	7.28
3/31/99	10:52:41	22.01	1.00	0.0	7.05	7.29
3/31/99	10:52:46	22.18	1.00	0.0	6.45	7.27
3/31/99	10:52:50	22.26	1.00	0.0	5.78	7.25
3/31/99	10:53:14	22.04	1.00	0.0	7.58	7.32
3/31/99	10:53:19	22.22	1.00	0.0	7.40	7.32
3/31/99	10:53:24	22.32	1.00	0.0	7.18	7.35
3/31/99	10:53:49	22.00	1.00	0.0	7.36	7.38
3/31/99	10:53:55	22.20	1.00	0.0	7.08	7.34
3/31/99	10:54:01	22.30	2.00	0.0	6.87	7.32

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/01/99	11:19:43	23.98	0.00	0.0	5.32	7.06
4/01/99	11:20:01	24.06	1.00	0.0	5.24	7.10
4/01/99	11:20:11	24.25	0.00	0.0	5.16	7.12
4/01/99	11:21:00	24.58	0.00	0.0	5.30	7.11
4/01/99	11:21:08	24.60	0.00	0.0	5.13	7.10
4/01/99	11:21:18	24.59	0.00	0.0	4.94	7.14
4/01/99	11:22:05	24.60	0.00	0.0	5.07	7.11
4/01/99	11:22:14	24.62	0.00	0.0	4.66	7.11
4/01/99	11:22:24	24.64	0.00	0.0	3.20	7.11
4/01/99	11:23:26	24.63	0.00	0.0	4.00	7.43
4/01/99	11:23:39	24.63	0.00	0.0	4.01	7.42
4/01/99	11:23:46	24.64	0.00	0.0	4.25	7.37
4/01/99	11:24:21	24.37	0.00	0.0	6.69	7.41
4/01/99	11:24:37	24.67	0.00	0.0	5.96	7.39
4/01/99	11:24:46	24.67	0.00	0.0	5.41	7.37
4/01/99	11:25:18	24.45	0.00	0.0	6.59	7.29
4/01/99	11:25:27	24.62	0.00	0.0	6.18	7.22
4/01/99	11:25:35	24.69	0.00	0.0	5.36	7.20
4/01/99	11:26:08	24.37	0.00	0.0	6.10	7.27
4/01/99	11:26:21	24.63	0.00	0.0	5.61	7.26
4/01/99	11:26:29	24.69	0.00	0.0	5.18	7.28
4/01/99	11:27:19	24.62	0.00	0.0	5.97	7.22
4/01/99	11:27:26	24.62	0.00	0.0	5.78	7.20
4/01/99	11:27:32	24.66	0.00	0.0	5.09	7.18
4/01/99	11:28:10	24.36	0.00	0.0	5.73	7.23
4/01/99	11:28:19	24.50	0.00	0.0	5.26	7.24
4/01/99	11:28:27	24.63	0.00	0.0	4.97	7.23
4/01/99	11:29:08	24.49	0.00	0.0	5.85	7.33
4/01/99	11:29:26	24.72	0.00	0.0	4.69	7.31
4/01/99	11:29:38	24.72	0.00	0.0	4.14	7.32
4/01/99	11:30:39	24.58	0.00	0.0	3.98	7.18
4/01/99	11:30:51	24.58	0.00	0.0	3.90	7.17
4/01/99	11:31:15	24.77	0.00	0.0	3.07	7.16
4/01/99	11:31:51	24.63	0.00	0.0	5.56	7.20
4/01/99	11:31:58	24.69	0.00	0.0	5.40	7.18
4/01/99	11:32:10	24.75	0.00	0.0	4.84	7.14
4/01/99	11:32:55	24.63	0.00	0.0	5.08	7.09
4/01/99	11:33:03	24.62	0.00	0.0	4.82	7.10
4/01/99	11:33:14	24.66	0.00	0.0	4.42	7.19
4/01/99	11:33:51	24.27	0.00	0.0	5.88	7.24
4/01/99	11:34:02	24.45	0.00	0.0	5.13	7.18
4/01/99	11:34:15	24.62	0.00	0.0	3.91	7.22
4/01/99	11:34:52	24.48	0.00	0.0	5.83	7.29
4/01/99	11:35:15	24.76	0.00	0.0	4.89	7.23
4/01/99	11:35:23	24.75	0.00	0.0	4.71	7.22
4/01/99	11:36:07	24.63	0.00	0.0	5.87	7.14
4/01/99	11:36:19	24.69	0.00	0.0	5.53	7.13
4/01/99	11:36:34	24.77	0.00	0.0	5.03	7.14
4/01/99	11:38:08	24.65	0.00	0.0	4.92	7.13
4/01/99	11:38:19	24.68	0.00	0.0	4.58	7.11

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/01/99	11:38:31		24.72	0.00	0.0	4.05	7.11
4/01/99	11:39:10		24.54	0.00	0.0	2.08	7.10
4/01/99	11:39:23		24.60	0.00	0.0	2.33	7.11
4/01/99	11:39:35		24.68	0.00	0.0	3.29	7.15
4/01/99	11:40:07		24.54	0.00	0.0	5.77	7.21
4/01/99	11:40:19		24.71	0.00	0.0	5.22	7.20
4/01/99	11:40:27		24.75	0.00	0.0	4.78	7.18
4/01/99	11:41:05		24.59	0.00	0.0	5.66	7.19
4/01/99	11:41:13		24.65	0.00	0.0	5.22	7.20
4/01/99	11:41:25		24.74	0.00	0.0	4.50	7.18
4/01/99	11:42:03		24.59	0.00	0.0	5.90	7.14
4/01/99	11:42:14		24.69	0.00	0.0	5.40	7.11
4/01/99	11:42:23		24.71	0.00	0.0	4.92	7.11
4/01/99	11:43:02		24.58	0.00	0.0	5.51	7.11
4/01/99	11:43:14		24.66	0.00	0.0	5.18	7.09
4/01/99	11:43:26		24.71	0.00	0.0	5.16	7.11
4/01/99	11:44:15		24.63	0.00	0.0	5.35	7.17
4/01/99	11:44:24		24.62	0.00	0.0	5.09	7.17
4/01/99	11:44:35		24.65	0.00	0.0	4.71	7.17
4/01/99	11:45:16		24.62	0.00	0.0	5.07	7.15
4/01/99	11:45:22		24.64	0.00	0.0	4.61	7.14
4/01/99	11:45:43		24.75	0.00	0.0	3.09	7.12

Project #: 411 Test type: ACUTE CHRONIC OTHER 4 day flow thru Date: 4/1/99

Species: *P. promelas* *C. dubia* *M. bahia* Other C. tentans Day of Study: 2

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: — to — Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: * bath temp adjusted lower
* test aeration began today

See deviation summary sheet Initials: TD

YSI 6000 Time Series Report

Page 1

Date	Time	Temperature	DO	pH
mm/dd/yy	hh:mm:ss	C	mg/L	
4/02/99	10:43:35	23.73	7.79	8.23
4/02/99	10:44:03	24.04	7.51	8.08
4/02/99	10:44:16	24.02	7.51	8.09
4/02/99	10:44:42	23.96	7.57	8.03
4/02/99	10:45:02	24.03	7.55	8.03
4/02/99	10:45:14	24.07	7.56	8.04
4/02/99	10:45:50	24.04	7.60	7.99
4/02/99	10:46:01	24.01	7.58	7.99
4/02/99	10:46:12	23.96	7.57	7.98
4/02/99	10:46:36	24.03	7.58	7.98
4/02/99	10:46:46	24.01	7.59	8.01
4/02/99	10:47:02	24.04	7.60	8.04
4/02/99	10:47:26	23.90	7.71	8.06
4/02/99	10:47:47	23.96	7.76	8.08
4/02/99	10:48:13	24.04	7.80	8.07
4/02/99	10:48:31	23.96	7.83	8.05
4/02/99	10:48:55	24.06	7.83	8.04
4/02/99	10:49:09	24.06	7.81	8.00
4/02/99	10:49:26	23.99	7.79	8.01
4/02/99	10:49:37	23.99	7.78	8.01
4/02/99	10:49:47	24.04	7.76	8.00
4/02/99	10:50:10	23.98	7.80	8.05
4/02/99	10:50:23	24.03	7.81	8.04
4/02/99	10:50:32	24.06	7.79	8.01
4/02/99	10:50:56	24.02	7.79	7.98
4/02/99	10:51:13	24.03	7.76	8.02
4/02/99	10:51:25	24.00	7.76	7.99
4/02/99	10:51:45	24.01	7.78	7.98
4/02/99	10:51:55	24.01	7.79	8.00
4/02/99	10:52:03	24.01	7.80	8.01
4/02/99	10:52:25	23.99	7.82	8.06
4/02/99	10:52:38	23.99	7.81	8.07
4/02/99	10:52:49	24.00	7.81	8.03
4/02/99	10:53:13	23.94	7.86	8.06
4/02/99	10:53:30	23.98	7.86	8.02
4/02/99	10:53:44	23.94	7.85	8.00
4/02/99	10:54:20	23.94	7.80	7.99
4/02/99	10:54:34	23.91	7.78	7.98
4/02/99	10:54:45	23.91	7.76	7.95
4/02/99	10:55:01	23.64	7.84	8.04
4/02/99	10:55:22	23.76	7.87	7.99
4/02/99	10:55:40	23.85	7.88	7.97
4/02/99	10:56:00	23.97	7.86	8.02
4/02/99	10:56:11	23.98	7.85	8.01
4/02/99	10:56:21	24.01	7.85	8.00
4/02/99	10:57:04	24.00	7.89	7.98
4/02/99	10:57:15	23.96	7.88	7.98
4/02/99	10:57:28	24.00	7.86	7.97
4/02/99	11:00:10	23.92	7.98	8.00
4/02/99	11:00:28	23.97	7.92	7.94

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/02/99	11:00:45		23.90	7.84	7.94
4/02/99	11:01:17		24.02	7.79	7.92
4/02/99	11:01:30		23.99	7.78	7.89
4/02/99	11:01:48		24.02	7.75	7.88
4/02/99	11:02:34		23.98	7.62	7.86
4/02/99	11:03:08		24.05	7.53	7.86
4/02/99	11:03:22		24.06	7.55	7.82
4/02/99	11:04:02		24.10	7.57	7.85
4/02/99	11:04:18		24.05	7.59	7.88
4/02/99	11:04:36		23.94	7.64	7.89
4/02/99	11:05:05		24.08	7.70	7.90
4/02/99	11:06:07		24.06	7.55	7.76
4/02/99	11:06:19		24.02	7.52	7.76
4/02/99	11:06:48		24.07	7.52	7.82
4/02/99	11:06:58		24.05	7.56	7.80
4/02/99	11:07:15		24.08	7.61	7.80
4/02/99	11:07:54		24.12	7.66	7.85
4/02/99	11:08:14		24.11	7.64	7.85
4/02/99	11:08:26		24.04	7.65	7.82
4/02/99	11:08:46		24.04	7.66	7.88
4/02/99	11:08:57		24.08	7.64	7.86
4/02/99	11:09:08		24.05	7.63	7.85

Project #: 99-411R Test type: ACUTE CHRONIC OTHER 14 Day Date: 4/2/99

Species: *P. promelas* *C. dubia* *M. bahia* Other C.t. Day of Study: 3

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 High Blue

Salinity: to Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: MS

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/03/99	8:01:59	22.06	13.00	0.0	8.20	8.50
4/03/99	8:02:05	22.43	8.00	0.0	7.38	8.26
4/03/99	8:02:10	22.58	6.00	0.0	7.40	8.18
4/03/99	8:02:41	22.26	4.00	0.0	8.19	8.00
4/03/99	8:02:45	22.66	5.00	0.0	8.08	7.98
4/03/99	8:02:50	22.85	7.00	0.0	8.02	7.98
4/03/99	8:03:22	22.12	3.00	0.0	8.20	7.96
4/03/99	8:03:28	22.65	3.00	0.0	8.09	7.97
4/03/99	8:03:34	22.83	3.00	0.0	8.07	7.97
4/03/99	8:03:58	22.09	3.00	0.0	8.15	7.96
4/03/99	8:04:02	22.42	3.00	0.0	8.08	7.99
4/03/99	8:04:07	22.67	5.00	0.0	8.03	8.00
4/03/99	8:04:27	22.14	3.00	0.0	8.19	7.97
4/03/99	8:04:31	22.32	4.00	0.0	8.17	8.01
4/03/99	8:04:37	22.65	3.00	0.0	8.12	8.04
4/03/99	8:05:01	22.31	3.00	0.0	8.26	8.02
4/03/99	8:05:06	22.54	3.00	0.0	8.22	8.03
4/03/99	8:05:12	22.79	3.00	0.0	8.17	8.01
4/03/99	8:05:32	22.06	3.00	0.0	8.34	7.95
4/03/99	8:05:37	22.34	3.00	0.0	8.29	7.97
4/03/99	8:05:42	22.68	3.00	0.0	8.21	7.98
4/03/99	8:06:06	22.23	2.00	0.0	8.32	8.04
4/03/99	8:06:12	22.58	3.00	0.0	8.25	8.05
4/03/99	8:06:17	22.82	3.00	0.0	8.17	8.03
4/03/99	8:06:35	22.21	3.00	0.0	7.97	7.93
4/03/99	8:06:40	22.41	4.00	0.0	8.10	7.94
4/03/99	8:06:45	22.69	3.00	0.0	8.08	7.95
4/03/99	8:07:06	22.06	3.00	0.0	8.27	7.95
4/03/99	8:07:10	22.34	3.00	0.0	8.23	7.98
4/03/99	8:07:15	22.63	4.00	0.0	8.15	8.01
4/03/99	8:07:35	22.25	3.00	0.0	8.23	8.06
4/03/99	8:07:40	22.51	3.00	0.0	8.18	8.05
4/03/99	8:07:45	22.71	3.00	0.0	8.14	8.03
4/03/99	8:08:11	22.10	3.00	0.0	8.32	8.03
4/03/99	8:08:16	22.41	3.00	0.0	8.25	8.02
4/03/99	8:08:21	22.65	3.00	0.0	8.21	7.99
4/03/99	8:08:44	22.10	2.00	0.0	8.33	7.95
4/03/99	8:08:49	22.43	2.00	0.0	8.27	7.95
4/03/99	8:08:53	22.66	3.00	0.0	8.21	7.94
4/03/99	8:09:11	22.18	3.00	0.0	8.32	7.96
4/03/99	8:09:15	22.17	3.00	0.0	8.32	7.99
4/03/99	8:09:20	22.38	3.00	0.0	8.28	7.99
4/03/99	8:09:47	22.04	3.00	0.0	8.31	8.00
4/03/99	8:09:52	22.42	3.00	0.0	8.21	8.00
4/03/99	8:09:56	22.70	3.00	0.0	8.14	7.98
4/03/99	8:10:15	22.04	2.00	0.0	8.28	7.94
4/03/99	8:10:20	22.36	2.00	0.0	8.22	7.95
4/03/99	8:10:26	22.71	5.00	0.0	7.51	7.93
4/03/99	8:11:07	22.85	2.00	0.0	8.30	7.89
4/03/99	8:11:12	23.04	2.00	0.0	8.23	7.90

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/03/99	8:11:17		23.07	2.00	0.0	8.19	7.87
4/03/99	8:11:44		22.04	2.00	0.0	8.23	7.86
4/03/99	8:11:48		22.49	2.00	0.0	7.63	7.85
4/03/99	8:11:52		22.73	8.00	0.0	7.12	7.84
4/03/99	8:12:11		22.40	2.00	0.0	7.37	7.79
4/03/99	8:12:15		22.54	2.00	0.0	7.66	7.81
4/03/99	8:12:20		22.76	4.00	0.0	7.77	7.82
4/03/99	8:12:43		22.39	2.00	0.0	7.95	7.74
4/03/99	8:12:48		22.60	2.00	0.0	8.06	7.78
4/03/99	8:12:53		22.84	3.00	0.0	7.94	7.82
4/03/99	8:13:13		22.28	2.00	0.0	8.06	7.85
4/03/99	8:13:18		22.48	2.00	0.0	8.16	7.84
4/03/99	8:13:22		22.74	4.00	0.0	8.11	7.82
4/03/99	8:13:42		22.27	2.00	0.0	8.11	7.78
4/03/99	8:13:47		22.43	2.00	0.0	8.21	7.80
4/03/99	8:13:51		22.68	2.00	0.0	8.19	7.80
4/03/99	8:14:11		22.14	1.00	0.0	8.23	7.82
4/03/99	8:14:15		22.40	1.00	0.0	8.29	7.83
4/03/99	8:14:20		22.68	1.00	0.0	8.19	7.83
4/03/99	8:14:39		22.16	1.00	0.0	7.93	7.91
4/03/99	8:14:44		22.42	1.00	0.0	8.06	7.90
4/03/99	8:14:49		22.72	1.00	0.0	8.04	7.88

Project #: 411 Test type: ACUTE CHRONIC OTHER 14 day Flow thru Date: 4/3/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *C. tentans* Day of Study: 4

OPERATIONAL RANGE:

Temperature:	<u>22</u> to <u>24</u>	Check if OK <input checked="" type="checkbox"/>	Meter Used:	Blue <input checked="" type="checkbox"/>
Salinity:	<u>—</u> to <u>—</u>	<input checked="" type="checkbox"/>	Red <input type="checkbox"/>	
Dissolved oxygen:	> 4.0	<input checked="" type="checkbox"/>		
pH:	6.0 to 9.0	<input checked="" type="checkbox"/>		

Actions taken: _____

See deviation summary sheet

Initials: TP

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/04/99	6:01:36	22.43	0.00	0.0	7.69	8.54
4/04/99	6:01:42	22.89	0.00	0.0	6.87	8.37
4/04/99	6:01:47	23.01	0.00	0.0	6.82	8.31
4/04/99	6:02:12	22.38	0.00	0.0	7.69	8.14
4/04/99	6:02:17	22.61	0.00	0.0	7.76	8.19
4/04/99	6:02:21	22.89	0.00	0.0	7.72	8.19
4/04/99	6:02:46	22.52	0.00	0.0	7.84	8.05
4/04/99	6:02:51	22.72	1.00	0.0	7.81	8.11
4/04/99	6:02:55	22.93	4.00	0.0	7.77	8.15
4/04/99	6:03:17	22.66	1.00	0.0	7.84	7.97
4/04/99	6:03:22	22.88	1.00	0.0	7.81	8.06
4/04/99	6:03:27	23.08	1.00	0.0	7.77	8.09
4/04/99	6:03:49	22.43	1.00	0.0	7.92	7.94
4/04/99	6:03:54	22.64	1.00	0.0	7.89	8.08
4/04/99	6:03:59	22.90	1.00	0.0	7.83	8.11
4/04/99	6:04:17	22.62	1.00	0.0	7.90	7.98
4/04/99	6:04:22	22.73	1.00	0.0	7.88	8.07
4/04/99	6:04:26	22.95	1.00	0.0	7.84	8.10
4/04/99	6:04:45	22.53	1.00	0.0	7.94	8.03
4/04/99	6:04:50	22.75	1.00	0.0	7.89	8.08
4/04/99	6:04:56	23.04	1.00	0.0	7.82	8.07
4/04/99	6:05:19	22.52	1.00	0.0	7.93	7.99
4/04/99	6:05:24	22.72	1.00	0.0	7.89	8.08
4/04/99	6:05:28	22.96	1.00	0.0	7.84	8.11
4/04/99	6:05:46	22.84	1.00	0.0	7.87	7.99
4/04/99	6:05:50	22.94	1.00	0.0	7.85	8.05
4/04/99	6:05:55	23.10	1.00	0.0	7.81	8.08
4/04/99	6:06:14	22.48	1.00	0.0	7.95	7.95
4/04/99	6:06:19	22.70	1.00	0.0	7.91	8.03
4/04/99	6:06:24	22.95	1.00	0.0	7.85	8.06
4/04/99	6:06:42	22.76	1.00	0.0	7.90	7.99
4/04/99	6:06:47	22.88	1.00	0.0	7.88	8.09
4/04/99	6:06:52	23.06	1.00	0.0	7.84	8.10
4/04/99	6:07:28	22.64	1.00	0.0	7.94	8.13
4/04/99	6:07:33	22.87	1.00	0.0	7.89	8.13
4/04/99	6:07:37	23.04	1.00	0.0	7.86	8.08
4/04/99	6:07:58	22.40	1.00	0.0	7.99	7.92
4/04/99	6:08:03	22.56	1.00	0.0	7.96	8.01
4/04/99	6:08:07	22.85	1.00	0.0	7.89	8.04
4/04/99	6:08:26	22.61	1.00	0.0	7.94	7.91
4/04/99	6:08:31	22.61	1.00	0.0	7.94	8.04
4/04/99	6:08:36	22.82	1.00	0.0	7.89	8.05
4/04/99	6:08:55	22.46	1.00	0.0	7.86	7.91
4/04/99	6:08:59	22.62	1.00	0.0	7.83	8.04
4/04/99	6:09:04	22.88	1.00	0.0	7.77	8.07
4/04/99	6:09:27	22.37	1.00	0.0	7.91	8.17
4/04/99	6:09:32	22.55	1.00	0.0	7.88	8.13
4/04/99	6:09:37	22.85	2.00	0.0	7.83	8.10
4/04/99	6:10:29	22.37	1.00	0.0	7.96	8.12
4/04/99	6:10:34	22.68	1.00	0.0	7.90	8.06

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/04/99	6:10:39		22.92	2.00	0.0	7.85	7.99
4/04/99	6:10:59		22.61	1.00	0.0	7.49	7.83
4/04/99	6:11:03		22.76	1.00	0.0	7.62	7.91
4/04/99	6:11:08		22.98	1.00	0.0	7.62	7.93
4/04/99	6:11:38		22.20	1.00	0.0	7.87	7.76
4/04/99	6:11:44		22.56	1.00	0.0	7.80	7.92
4/04/99	6:11:49		22.92	1.00	0.0	7.73	7.96
4/04/99	6:12:08		22.86	1.00	0.0	7.73	7.79
4/04/99	6:12:13		22.95	1.00	0.0	7.72	7.87
4/04/99	6:12:19		23.15	1.00	0.0	7.69	7.92
4/04/99	6:12:41		22.78	1.00	0.0	7.80	8.04
4/04/99	6:12:45		22.94	1.00	0.0	7.77	8.01
4/04/99	6:12:49		23.11	1.00	0.0	7.74	7.97
4/04/99	6:13:07		22.77	1.00	0.0	7.79	7.99
4/04/99	6:13:11		22.86	1.00	0.0	7.77	7.95
4/04/99	6:13:15		23.05	2.00	0.0	7.74	7.92
4/04/99	6:13:32		22.65	1.00	0.0	7.84	8.00
4/04/99	6:13:37		22.82	1.00	0.0	7.81	7.97
4/04/99	6:13:41		23.04	1.00	0.0	7.77	7.95
4/04/99	6:13:58		22.86	1.00	0.0	7.79	8.05
4/04/99	6:14:02		22.94	1.00	0.0	7.78	8.01
4/04/99	6:14:06		23.09	1.00	0.0	7.75	8.00

Project #: 411 Test type: ACUTE CHRONIC OTHER 4 day flow thru Date: 4/4/99
 Species: *P. promelas* *C. dubia* *M. bahia* Other *C. tentans* Day of Study: 5

OPERATIONAL RANGE: Check if OK Meter Used:
 Temperature: 22 to 24 Blue
 Salinity: - to - Red
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: TB

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/05/99	8:11:49	22.35	1.00	0.0	6.62	8.05
4/05/99	8:11:54	22.13	0.00	0.0	6.90	7.96
4/05/99	8:11:59	22.01	0.00	0.0	6.65	7.95
4/05/99	8:12:31	22.57	1.00	0.0	8.30	7.84
4/05/99	8:12:36	22.40	1.00	0.0	8.37	7.86
4/05/99	8:12:42	22.18	1.00	0.0	8.43	7.88
4/05/99	8:13:37	21.95	0.00	0.0	8.52	7.85
4/05/99	8:13:43	21.91	0.00	0.0	8.50	7.86
4/05/99	8:14:01	21.90	1.00	0.0	8.45	7.89
4/05/99	8:14:34	22.66	1.00	0.0	8.35	7.89
4/05/99	8:14:38	22.49	1.00	0.0	8.42	7.91
4/05/99	8:14:43	22.29	1.00	0.0	8.48	7.93
4/05/99	8:15:25	21.92	1.00	0.0	8.61	7.94
4/05/99	8:15:30	21.93	1.00	0.0	8.61	7.96
4/05/99	8:15:35	21.92	1.00	0.0	8.62	7.97
4/05/99	8:16:28	21.92	1.00	0.0	8.66	7.85
4/05/99	8:16:33	21.94	0.00	0.0	8.66	7.86
4/05/99	8:16:37	21.96	0.00	0.0	8.66	7.87
4/05/99	8:17:20	21.99	0.00	0.0	8.68	7.82
4/05/99	8:17:26	21.98	0.00	0.0	8.68	7.82
4/05/99	8:17:30	22.00	0.00	0.0	8.67	7.84
4/05/99	8:18:02	22.45	0.00	0.0	8.54	7.84
4/05/99	8:18:07	22.36	0.00	0.0	8.57	7.88
4/05/99	8:18:11	22.23	0.00	0.0	8.62	7.89
4/05/99	8:18:42	22.83	0.00	0.0	8.48	7.81
4/05/99	8:18:48	22.52	0.00	0.0	8.55	7.82
4/05/99	8:18:53	22.29	0.00	0.0	8.58	7.83
4/05/99	8:19:26	22.05	0.00	0.0	8.60	7.82
4/05/99	8:19:31	22.13	0.00	0.0	8.59	7.86
4/05/99	8:19:35	22.09	0.00	0.0	8.62	7.89
4/05/99	8:19:58	22.11	0.00	0.0	8.63	7.89
4/05/99	8:20:02	22.30	0.00	0.0	8.59	7.91
4/05/99	8:20:07	22.22	0.00	0.0	8.61	7.93
4/05/99	8:20:40	22.09	0.00	0.0	8.66	7.82
4/05/99	8:20:45	22.18	0.00	0.0	8.64	7.85
4/05/99	8:20:50	22.10	0.00	0.0	8.66	7.85
4/05/99	8:21:17	22.52	0.00	0.0	8.54	7.80
4/05/99	8:21:22	22.37	0.00	0.0	8.59	7.81
4/05/99	8:21:27	22.18	0.00	0.0	8.05	7.84
4/05/99	8:21:53	22.48	0.00	0.0	8.34	7.83
4/05/99	8:21:58	22.16	0.00	0.0	8.42	7.85
4/05/99	8:22:02	21.96	0.00	0.0	8.26	7.86
4/05/99	8:23:20	22.01	0.00	0.0	8.70	7.76
4/05/99	8:23:24	22.05	0.00	0.0	8.69	7.81
4/05/99	8:23:28	22.03	0.00	0.0	8.69	7.84
4/05/99	8:24:01	22.29	0.00	0.0	8.59	7.80
4/05/99	8:24:06	22.26	0.00	0.0	8.61	7.82
4/05/99	8:24:11	22.15	0.00	0.0	8.61	7.84
4/05/99	8:25:09	22.17	0.00	0.0	8.61	7.64
4/05/99	8:25:14	22.19	0.00	0.0	8.60	7.75

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/05/99	8:25:19		22.11	0.00	0.0	8.63	7.77
4/05/99	8:25:46		22.15	0.00	0.0	8.45	7.58
4/05/99	8:25:50		22.26	0.00	0.0	8.47	7.60
4/05/99	8:25:55		22.17	0.00	0.0	8.20	7.63
4/05/99	8:26:24		22.19	0.00	0.0	8.35	7.67
4/05/99	8:26:28		22.37	0.00	0.0	8.34	7.68
4/05/99	8:26:33		22.30	0.00	0.0	8.37	7.69
4/05/99	8:26:57		22.09	0.00	0.0	8.29	7.63
4/05/99	8:27:02		22.41	0.00	0.0	8.35	7.66
4/05/99	8:27:06		22.35	0.00	0.0	8.39	7.71
4/05/99	8:27:42		22.78	0.00	0.0	8.42	7.74
4/05/99	8:27:46		22.55	0.00	0.0	8.45	7.74
4/05/99	8:27:51		22.36	0.00	0.0	8.48	7.74
4/05/99	8:28:11		22.06	0.00	0.0	8.49	7.70
4/05/99	8:28:15		22.26	0.00	0.0	8.46	7.72
4/05/99	8:28:20		22.22	0.00	0.0	8.49	7.72
4/05/99	8:28:47		22.08	0.00	0.0	8.58	7.74
4/05/99	8:28:52		22.25	0.00	0.0	8.54	7.74
4/05/99	8:28:56		22.24	0.00	0.0	8.53	7.74
4/05/99	8:29:20		22.18	0.00	0.0	8.50	7.79
4/05/99	8:29:24		22.36	0.00	0.0	8.47	7.78
4/05/99	8:29:29		22.29	0.00	0.0	8.48	7.77

Project #: 411 Test type: ACUTE CHRONIC OTHER # day flow thru Date: 4/6/99

Species: *P. promelas* *C. dubia* *M. bahia* Other C. tentans Day of Study: 6

OPERATIONAL RANGE:

Temperature:	<u>22</u> to <u>24</u>	Check if OK <input checked="" type="checkbox"/>	Meter Used:	Blue <input checked="" type="checkbox"/>
Salinity:	<u>-</u> to <u>-</u>	<input checked="" type="checkbox"/>	Red	<input type="checkbox"/>
Dissolved oxygen:	> 4.0	<input checked="" type="checkbox"/>		
pH:	6.0 to 9.0	<input checked="" type="checkbox"/>		

Actions taken: _____

See deviation summary sheet

Initials: TP

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/06/99	9:24:55	22.00	1.00	0.0	8.23	7.80
4/06/99	9:25:01	22.07	1.00	0.0	8.11	7.76
4/06/99	9:25:06	22.11	1.00	0.0	8.09	7.75
4/06/99	9:25:31	22.09	1.00	0.0	8.14	7.70
4/06/99	9:25:37	22.46	1.00	0.0	8.10	7.71
4/06/99	9:25:42	22.42	2.00	0.0	8.13	7.72
4/06/99	9:26:28	22.72	1.00	0.0	8.24	7.70
4/06/99	9:26:32	22.59	1.00	0.0	8.26	7.70
4/06/99	9:26:38	22.42	1.00	0.0	8.25	7.72
4/06/99	9:27:01	22.49	1.00	0.0	8.07	7.67
4/06/99	9:27:07	22.68	1.00	0.0	8.14	7.73
4/06/99	9:27:13	22.54	1.00	0.0	8.13	7.77
4/06/99	9:27:49	22.73	1.00	0.0	8.19	7.80
4/06/99	9:27:54	22.59	1.00	0.0	8.24	7.82
4/06/99	9:27:58	22.46	1.00	0.0	8.28	7.84
4/06/99	9:28:21	22.12	1.00	0.0	8.39	7.82
4/06/99	9:28:26	22.26	1.00	0.0	8.37	7.82
4/06/99	9:28:31	22.31	1.00	0.0	8.36	7.82
4/06/99	9:28:57	22.01	1.00	0.0	8.36	7.82
4/06/99	9:29:02	22.12	1.00	0.0	8.30	7.82
4/06/99	9:29:08	22.22	1.00	0.0	7.24	7.82
4/06/99	9:29:34	22.14	1.00	0.0	8.22	7.78
4/06/99	9:29:39	22.41	1.00	0.0	8.25	7.82
4/06/99	9:29:44	22.44	1.00	0.0	8.27	7.84
4/06/99	9:30:03	22.19	0.00	0.0	8.25	7.78
4/06/99	9:30:09	22.46	0.00	0.0	8.27	7.79
4/06/99	9:30:14	22.45	0.00	0.0	8.26	7.79
4/06/99	9:30:37	22.06	0.00	0.0	8.37	7.77
4/06/99	9:30:42	22.30	0.00	0.0	8.32	7.79
4/06/99	9:30:46	22.34	0.00	0.0	8.31	7.81
4/06/99	9:31:10	22.04	0.00	0.0	8.41	7.85
4/06/99	9:31:15	22.30	0.00	0.0	8.35	7.86
4/06/99	9:31:19	22.34	0.00	0.0	8.34	7.87
4/06/99	9:31:46	22.14	0.00	0.0	8.39	7.80
4/06/99	9:31:51	22.41	0.00	0.0	8.33	7.82
4/06/99	9:31:55	22.40	0.00	0.0	8.34	7.81
4/06/99	9:32:24	22.04	0.00	0.0	8.42	7.80
4/06/99	9:32:28	22.24	0.00	0.0	8.38	7.79
4/06/99	9:32:33	22.30	0.00	0.0	8.34	7.79
4/06/99	9:33:03	22.02	0.00	0.0	8.39	7.83
4/06/99	9:33:08	22.04	0.00	0.0	8.39	7.84
4/06/99	9:33:13	22.07	0.00	0.0	8.39	7.84
4/06/99	9:33:43	22.20	0.00	0.0	8.37	7.85
4/06/99	9:33:47	22.31	0.00	0.0	8.35	7.84
4/06/99	9:33:52	22.32	0.00	0.0	8.34	7.84
4/06/99	9:34:14	22.08	0.00	0.0	8.39	7.80
4/06/99	9:34:19	22.34	0.00	0.0	8.33	7.79
4/06/99	9:34:25	22.39	0.00	0.0	8.31	7.80
4/06/99	9:35:21	22.06	0.00	0.0	8.36	7.80
4/06/99	9:35:28	22.18	0.00	0.0	8.33	7.79

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/06/99	9:35:35		22.27	0.00	0.0	8.31	7.76
4/06/99	9:36:16		22.08	0.00	0.0	8.15	7.63
4/06/99	9:36:23		22.23	0.00	0.0	8.08	7.63
4/06/99	9:36:30		22.30	0.00	0.0	8.06	7.64
4/06/99	9:36:57		22.04	0.00	0.0	8.18	7.66
4/06/99	9:37:02		22.19	0.00	0.0	8.16	7.66
4/06/99	9:37:07		22.28	0.00	0.0	8.14	7.66
4/06/99	9:37:46		22.04	0.00	0.0	8.31	7.63
4/06/99	9:37:51		22.31	0.00	0.0	8.23	7.64
4/06/99	9:37:56		22.36	0.00	0.0	8.20	7.66
4/06/99	9:38:23		22.00	0.00	0.0	8.29	7.71
4/06/99	9:38:28		22.16	0.00	0.0	8.26	7.71
4/06/99	9:38:32		22.24	0.00	0.0	8.22	7.70
4/06/99	9:38:58		22.01	0.00	0.0	8.25	7.71
4/06/99	9:39:02		22.16	0.00	0.0	8.22	7.71
4/06/99	9:39:06		22.24	0.00	0.0	8.21	7.71
4/06/99	9:39:29		22.11	0.00	0.0	8.27	7.68
4/06/99	9:39:33		22.36	0.00	0.0	8.21	7.69
4/06/99	9:39:38		22.44	0.00	0.0	8.20	7.69
4/06/99	9:39:59		22.06	0.00	0.0	8.29	7.77
4/06/99	9:40:03		22.22	0.00	0.0	8.25	7.77
4/06/99	9:40:08		22.32	0.00	0.0	8.20	7.75

Project #: 711 Test type: ACUTE CHRONIC OTHER 14 day flow thru Date: 4/6/99

Species: *P. promelas* *C. dubia* *M. bahia* Other C. tentans Day of Study: 7

OPERATIONAL RANGE:

Temperature: 22 to 24 Check if OK
 Salinity: — to —
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Meter Used:

Blue
 Red

Actions taken: _____

See deviation summary sheet

Initials: TV

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/07/99	9:21:49	22.02	2.00	0.0	8.26	8.28
4/07/99	9:21:55	22.15	2.00	0.0	8.14	8.13
4/07/99	9:22:00	22.14	2.00	0.0	8.09	8.10
4/07/99	9:22:23	22.03	2.00	0.0	8.10	7.96
4/07/99	9:22:29	22.29	2.00	0.0	8.06	7.95
4/07/99	9:22:34	22.36	3.00	0.0	8.06	7.95
4/07/99	9:23:01	22.06	2.00	0.0	8.23	7.89
4/07/99	9:23:06	22.39	2.00	0.0	8.15	7.87
4/07/99	9:23:12	22.44	2.00	0.0	8.13	7.87
4/07/99	9:23:39	22.02	2.00	0.0	8.24	7.83
4/07/99	9:23:43	22.36	2.00	0.0	8.18	7.85
4/07/99	9:23:48	22.44	2.00	0.0	8.16	7.87
4/07/99	9:24:09	22.13	2.00	0.0	8.23	7.87
4/07/99	9:24:15	22.53	2.00	0.0	8.15	7.89
4/07/99	9:24:21	22.51	2.00	0.0	8.15	7.90
4/07/99	9:24:46	22.08	2.00	0.0	8.26	7.88
4/07/99	9:24:51	22.34	1.00	0.0	8.21	7.88
4/07/99	9:24:57	22.40	1.00	0.0	8.20	7.87
4/07/99	9:33:30	22.01	2.00	0.0	8.22	7.87
4/07/99	9:33:36	22.12	2.00	0.0	8.17	7.86
4/07/99	9:33:42	22.23	2.00	0.0	8.13	7.85
4/07/99	9:34:11	22.04	1.00	0.0	8.17	7.85
4/07/99	9:34:16	22.24	1.00	0.0	8.12	7.85
4/07/99	9:34:20	22.33	1.00	0.0	8.09	7.85
4/07/99	9:34:43	22.09	1.00	0.0	8.15	7.81
4/07/99	9:34:48	22.45	1.00	0.0	8.07	7.80
4/07/99	9:34:53	22.52	2.00	0.0	8.06	7.81
4/07/99	9:35:19	22.25	1.00	0.0	8.14	7.82
4/07/99	9:35:23	22.40	1.00	0.0	8.11	7.85
4/07/99	9:35:28	22.44	1.00	0.0	8.11	7.85
4/07/99	9:35:46	22.03	1.00	0.0	8.20	7.88
4/07/99	9:35:51	22.20	1.00	0.0	8.17	7.89
4/07/99	9:35:56	22.30	1.00	0.0	8.15	7.88
4/07/99	9:36:33	22.05	1.00	0.0	8.24	7.83
4/07/99	9:36:39	22.26	1.00	0.0	8.19	7.83
4/07/99	9:36:46	22.29	1.00	0.0	8.19	7.81
4/07/99	9:37:08	22.13	1.00	0.0	8.19	7.82
4/07/99	9:37:12	22.42	1.00	0.0	8.12	7.82
4/07/99	9:37:17	22.48	1.00	0.0	8.11	7.82
4/07/99	9:37:43	22.09	1.00	0.0	8.19	7.87
4/07/99	9:37:47	22.13	1.00	0.0	8.19	7.86
4/07/99	9:37:52	22.17	1.00	0.0	8.18	7.85
4/07/99	9:38:23	22.06	1.00	0.0	8.22	7.89
4/07/99	9:38:27	22.25	1.00	0.0	8.17	7.89
4/07/99	9:38:32	22.34	1.00	0.0	8.15	7.87
4/07/99	9:38:54	22.06	1.00	0.0	8.20	7.82
4/07/99	9:38:59	22.38	1.00	0.0	8.13	7.82
4/07/99	9:39:05	22.45	1.00	0.0	8.10	7.81
4/07/99	9:40:03	22.02	1.00	0.0	8.23	7.78
4/07/99	9:40:08	22.21	1.00	0.0	8.19	7.80

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/07/99	9:40:13		22.34	1.00	0.0	8.16	7.77
4/07/99	9:40:36		22.05	1.00	0.0	8.14	7.76
4/07/99	9:40:42		22.36	1.00	0.0	8.07	7.75
4/07/99	9:40:46		22.41	1.00	0.0	8.06	7.74
4/07/99	9:41:06		22.12	1.00	0.0	8.11	7.69
4/07/99	9:41:11		22.45	1.00	0.0	8.03	7.69
4/07/99	9:41:16		22.56	1.00	0.0	8.01	7.69
4/07/99	9:41:36		22.15	1.00	0.0	8.05	7.65
4/07/99	9:41:41		22.41	1.00	0.0	8.00	7.65
4/07/99	9:41:46		22.51	1.00	0.0	7.97	7.66
4/07/99	9:42:04		22.13	1.00	0.0	8.05	7.68
4/07/99	9:42:09		22.36	1.00	0.0	8.01	7.67
4/07/99	9:42:13		22.47	1.00	0.0	7.99	7.66
4/07/99	9:42:36		22.04	1.00	0.0	8.08	7.64
4/07/99	9:42:40		22.31	1.00	0.0	8.03	7.65
4/07/99	9:42:44		22.43	1.00	0.0	8.00	7.65
4/07/99	9:43:02		22.24	1.00	0.0	8.06	7.67
4/07/99	9:43:06		22.46	1.00	0.0	8.02	7.67
4/07/99	9:43:11		22.54	1.00	0.0	8.02	7.67
4/07/99	9:43:31		22.13	1.00	0.0	8.10	7.74
4/07/99	9:43:35		22.45	1.00	0.0	8.04	7.75
4/07/99	9:43:40		22.58	1.00	0.0	8.01	7.75

Project #: 411 Test type: ACUTE CHRONIC OTHER 14 day flow thru Date: 4/7/99

Species: *P. promelas* *C. dubia* *M. bahia* Other C. tentans Day of Study: 745

OPERATIONAL RANGE:

Temperature:	<u>22</u> to <u>24</u>	Check if OK <input checked="" type="checkbox"/>	Meter Used:
Salinity:	<u> </u> to <u> </u>	<input type="checkbox"/>	Blue <input checked="" type="checkbox"/>
Dissolved oxygen:	> 4.0	<input checked="" type="checkbox"/>	Red <input type="checkbox"/>
pH:	6.0 to 9.0	<input checked="" type="checkbox"/>	

Actions taken: _____

See deviation summary sheet

Initials: TM

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/08/99	8:25:50	22.01	3.00	0.0	8.11	8.23
4/08/99	8:25:56	22.26	3.00	0.0	7.94	8.10
4/08/99	8:26:01	22.35	4.00	0.0	7.36	8.04
4/08/99	8:26:41	22.12	2.00	0.0	7.71	7.91
4/08/99	8:26:45	22.52	2.00	0.0	7.70	7.90
4/08/99	8:26:50	22.65	3.00	0.0	7.77	7.90
4/08/99	8:27:17	22.11	2.00	0.0	8.02	7.83
4/08/99	8:27:22	22.45	2.00	0.0	8.00	7.82
4/08/99	8:27:27	22.56	2.00	0.0	7.98	7.82
4/08/99	8:27:57	22.00	2.00	0.0	8.15	7.77
4/08/99	8:28:02	22.32	2.00	0.0	8.09	7.78
4/08/99	8:28:06	22.49	3.00	0.0	8.04	7.80
4/08/99	8:28:28	22.19	2.00	0.0	8.10	7.78
4/08/99	8:28:32	22.45	2.00	0.0	8.05	7.80
4/08/99	8:28:37	22.60	3.00	0.0	8.03	7.82
4/08/99	8:28:56	22.12	2.00	0.0	8.13	7.80
4/08/99	8:29:00	22.34	2.00	0.0	8.09	7.81
4/08/99	8:29:05	22.52	3.00	0.0	8.06	7.81
4/08/99	8:29:20	22.16	2.00	0.0	8.09	7.76
4/08/99	8:29:25	22.22	2.00	0.0	8.06	7.79
4/08/99	8:29:29	22.38	2.00	0.0	8.02	7.79
4/08/99	8:29:55	22.14	2.00	0.0	8.11	7.82
4/08/99	8:30:01	22.42	1.00	0.0	8.05	7.83
4/08/99	8:30:05	22.54	2.00	0.0	8.02	7.84
4/08/99	8:30:32	22.22	3.00	0.0	8.09	7.82
4/08/99	8:30:37	22.46	3.00	0.0	8.05	7.82
4/08/99	8:30:42	22.61	2.00	0.0	8.02	7.83
4/08/99	8:31:01	22.10	2.00	0.0	8.15	7.83
4/08/99	8:31:05	22.23	2.00	0.0	8.13	7.85
4/08/99	8:31:10	22.43	2.00	0.0	8.10	7.86
4/08/99	8:31:28	22.13	2.00	0.0	8.18	7.90
4/08/99	8:31:32	22.26	2.00	0.0	8.16	7.91
4/08/99	8:31:37	22.43	2.00	0.0	8.12	7.91
4/08/99	8:32:10	22.04	2.00	0.0	8.25	7.90
4/08/99	8:32:14	22.23	2.00	0.0	8.20	7.89
4/08/99	8:32:19	22.38	2.00	0.0	8.17	7.88
4/08/99	8:32:39	22.01	2.00	0.0	8.23	7.86
4/08/99	8:32:44	22.17	2.00	0.0	8.20	7.85
4/08/99	8:32:48	22.33	2.00	0.0	8.15	7.84
4/08/99	8:33:06	22.00	2.00	0.0	8.20	7.86
4/08/99	8:33:12	22.05	2.00	0.0	8.19	7.88
4/08/99	8:33:16	22.20	2.00	0.0	8.16	7.87
4/08/99	8:33:46	22.03	2.00	0.0	8.22	7.91
4/08/99	8:33:51	22.27	2.00	0.0	8.16	7.89
4/08/99	8:33:55	22.44	2.00	0.0	8.11	7.87
4/08/99	8:34:17	22.03	2.00	0.0	8.18	7.85
4/08/99	8:34:21	22.25	2.00	0.0	8.14	7.84
4/08/99	8:34:26	22.41	2.00	0.0	8.09	7.84
4/08/99	8:35:15	22.04	2.00	0.0	8.17	7.79
4/08/99	8:35:21	22.26	2.00	0.0	8.12	7.81

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/08/99	8:35:25		22.40	2.00	0.0	8.08	7.79
4/08/99	8:35:50		22.10	2.00	0.0	8.08	7.78
4/08/99	8:35:54		22.43	2.00	0.0	8.00	7.76
4/08/99	8:35:58		22.58	2.00	0.0	7.97	7.74
4/08/99	8:36:22		22.09	2.00	0.0	8.08	7.71
4/08/99	8:36:32		22.55	2.00	0.0	7.95	7.70
4/08/99	8:36:38		22.69	2.00	0.0	7.85	7.68
4/08/99	8:37:29		22.25	2.00	0.0	7.94	7.63
4/08/99	8:37:35		22.48	2.00	0.0	7.87	7.63
4/08/99	8:37:40		22.58	2.00	0.0	7.84	7.65
4/08/99	8:38:09		22.04	2.00	0.0	7.99	7.73
4/08/99	8:38:14		22.32	2.00	0.0	7.97	7.71
4/08/99	8:38:18		22.52	2.00	0.0	7.93	7.70
4/08/99	8:38:36		22.05	2.00	0.0	8.01	7.68
4/08/99	8:38:41		22.16	2.00	0.0	8.00	7.68
4/08/99	8:38:45		22.37	2.00	0.0	7.96	7.68
4/08/99	8:39:01		22.22	2.00	0.0	8.00	7.67
4/08/99	8:39:05		22.30	2.00	0.0	7.99	7.69
4/08/99	8:39:10		22.46	2.00	0.0	7.98	7.68
4/08/99	8:42:32		22.12	2.00	0.0	8.28	7.80
4/08/99	8:42:36		22.45	2.00	0.0	8.19	7.81
4/08/99	8:42:41		22.61	2.00	0.0	8.14	7.79

Project #: 411 Test type: ACUTE CHRONIC OTHER 14 day flow thru Date: 4/8/99

Species: *P. promelas* *C. dubia* *M. bahia* Other C. tentans Day of Study: 9

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: — to — Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: T^B

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/09/99	10:23:00	22.99	0.00	0.0	8.04	7.65
4/09/99	10:23:14	23.10	0.00	0.0	7.72	7.59
4/09/99	10:23:22	23.18	0.00	0.0	7.66	7.61
4/09/99	10:23:44	23.18	0.00	0.0	7.68	7.65
4/09/99	10:23:54	23.19	0.00	0.0	7.69	7.67
4/09/99	10:24:12	23.18	0.00	0.0	7.78	7.70
4/09/99	10:24:35	23.24	0.00	0.0	7.79	7.66
4/09/99	10:25:09	23.17	0.00	0.0	7.64	7.72
4/09/99	10:25:23	23.17	0.00	0.0	7.65	7.70
4/09/99	10:25:47	23.14	0.00	0.0	7.74	7.74
4/09/99	10:26:18	23.13	0.00	0.0	7.80	7.79
4/09/99	10:26:28	23.14	0.00	0.0	7.82	7.77
4/09/99	10:27:05	23.26	0.00	0.0	7.88	7.83
4/09/99	10:27:17	23.18	0.00	0.0	7.89	7.85
4/09/99	10:27:27	23.20	0.00	0.0	7.88	7.85
4/09/99	10:27:44	23.20	0.00	0.0	7.91	7.83
4/09/99	10:28:05	23.26	0.00	0.0	7.91	7.81
4/09/99	10:28:14	23.25	0.00	0.0	7.89	7.76
4/09/99	10:28:32	23.22	0.00	0.0	7.86	7.75
4/09/99	10:28:39	23.20	0.00	0.0	7.86	7.74
4/09/99	10:28:50	23.20	0.00	0.0	7.85	7.75
4/09/99	10:29:16	23.34	0.00	0.0	7.81	7.76
4/09/99	10:29:28	23.25	0.00	0.0	7.81	7.78
4/09/99	10:29:40	23.24	0.00	0.0	7.82	7.78
4/09/99	10:30:09	23.30	0.00	0.0	7.84	7.73
4/09/99	10:30:24	23.25	0.00	0.0	7.83	7.75
4/09/99	10:30:37	23.20	0.00	0.0	7.83	7.75
4/09/99	10:31:01	23.16	0.00	0.0	7.90	7.82
4/09/99	10:31:14	23.17	0.00	0.0	7.92	7.86
4/09/99	10:31:27	23.17	0.00	0.0	7.94	7.88
4/09/99	10:31:52	23.21	0.00	0.0	7.98	7.88
4/09/99	10:32:05	23.15	0.00	0.0	7.98	7.86
4/09/99	10:32:16	23.14	0.00	0.0	7.98	7.83
4/09/99	10:32:52	23.10	0.00	0.0	8.03	7.83
4/09/99	10:33:04	23.10	0.00	0.0	8.03	7.79
4/09/99	10:33:13	23.08	0.00	0.0	8.02	7.76
4/09/99	10:33:31	23.11	0.00	0.0	7.98	7.76
4/09/99	10:33:40	23.09	0.00	0.0	7.97	7.76
4/09/99	10:33:49	23.05	0.00	0.0	7.96	7.75
4/09/99	10:34:05	22.77	0.00	0.0	8.03	7.83
4/09/99	10:34:35	22.92	0.00	0.0	8.06	7.83
4/09/99	10:34:49	22.89	0.00	0.0	8.10	7.88
4/09/99	10:35:21	23.11	0.00	0.0	8.05	7.89
4/09/99	10:35:34	23.12	0.00	0.0	8.04	7.86
4/09/99	10:35:47	23.20	0.00	0.0	8.02	7.83
4/09/99	10:36:19	22.98	0.00	0.0	8.11	7.80
4/09/99	10:36:28	23.11	0.00	0.0	8.05	7.79
4/09/99	10:36:39	23.15	0.00	0.0	8.02	7.77
4/09/99	10:38:28	23.22	0.00	0.0	8.15	7.77
4/09/99	10:38:41	23.21	0.00	0.0	8.12	7.67

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/09/99	10:38:52		23.11	0.00	0.0	7.46	7.61
4/09/99	10:40:23		23.10	1.00	0.0	8.15	7.61
4/09/99	10:40:42		23.25	1.00	0.0	7.96	7.60
4/09/99	10:41:00		23.24	1.00	0.0	7.84	7.59
4/09/99	10:41:31		23.30	0.00	0.0	7.59	7.52
4/09/99	10:41:42		23.25	0.00	0.0	7.06	7.53
4/09/99	10:41:53		23.23	0.00	0.0	7.12	7.50
4/09/99	10:42:18		23.30	0.00	0.0	7.19	7.51
4/09/99	10:42:42		23.24	0.00	0.0	7.31	7.56
4/09/99	10:42:57		23.10	0.00	0.0	7.42	7.59
4/09/99	10:43:27		23.26	0.00	0.0	7.56	7.59
4/09/99	10:43:44		23.27	0.00	0.0	7.55	7.55
4/09/99	10:43:54		23.24	0.00	0.0	7.54	7.54
4/09/99	10:44:19		23.29	0.00	0.0	7.53	7.56
4/09/99	10:44:30		23.26	0.00	0.0	7.57	7.56
4/09/99	10:44:39		23.25	0.00	0.0	7.60	7.58
4/09/99	10:45:08		23.31	0.00	0.0	7.66	7.58
4/09/99	10:45:28		23.28	0.00	0.0	7.62	7.56
4/09/99	10:45:38		23.20	0.00	0.0	7.61	7.58
4/09/99	10:45:50		23.21	0.00	0.0	7.63	7.67
4/09/99	10:46:01		23.27	0.00	0.0	7.64	7.65
4/09/99	10:46:10		23.22	0.00	0.0	7.65	7.63

Project #: 98-411 R Test type: ACUTE CHRONIC OTHER 14 Day

Date: 4/9/99

Species: *P. promelas* *C. dubia* *M. bahia* Other C.t.

Day of Study: 10

OPERATIONAL RANGE:

Check if OK

Meter Used:

Temperature: 22 to 24

Blue

Salinity: — to —

Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet

Initials: WT

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/10/99	9:05:04	22.13	2.00	0.0	7.53	8.17
4/10/99	9:05:13	22.13	2.00	0.0	7.46	8.08
4/10/99	9:05:22	22.21	1.00	0.0	7.46	8.08
4/10/99	9:05:42	22.17	2.00	0.0	7.60	8.05
4/10/99	9:05:52	22.15	2.00	0.0	7.66	8.05
4/10/99	9:06:00	22.14	2.00	0.0	7.71	8.06
4/10/99	9:06:13	22.15	2.00	0.0	7.80	8.03
4/10/99	9:06:27	22.06	2.00	0.0	7.81	8.00
4/10/99	9:06:38	22.08	4.00	0.0	7.80	7.99
4/10/99	9:06:52	21.97	2.00	0.0	7.86	7.96
4/10/99	9:07:03	22.06	2.00	0.0	7.87	7.99
4/10/99	9:07:17	22.14	9.00	0.0	7.88	7.97
4/10/99	9:07:31	22.14	4.00	0.0	7.93	7.98
4/10/99	9:07:55	22.15	3.00	0.0	7.98	8.03
4/10/99	9:08:06	22.20	4.00	0.0	7.99	8.04
4/10/99	9:08:19	22.15	3.00	0.0	8.02	8.03
4/10/99	9:08:31	22.11	4.00	0.0	8.04	8.03
4/10/99	9:08:43	22.20	4.00	0.0	8.03	7.99
4/10/99	9:08:57	22.11	3.00	0.0	8.02	7.98
4/10/99	9:09:11	22.20	3.00	0.0	7.99	7.97
4/10/99	9:09:19	22.23	4.00	0.0	7.98	7.96
4/10/99	9:09:32	22.23	3.00	0.0	7.99	7.97
4/10/99	9:09:42	22.15	3.00	0.0	7.99	7.99
4/10/99	9:09:53	22.16	3.00	0.0	7.97	8.00
4/10/99	9:10:08	22.15	3.00	0.0	7.98	7.96
4/10/99	9:10:22	22.17	4.00	0.0	7.97	7.98
4/10/99	9:10:31	22.13	4.00	0.0	7.97	7.96
4/10/99	9:10:51	22.15	4.00	0.0	7.98	7.96
4/10/99	9:10:59	22.14	4.00	0.0	7.99	7.98
4/10/99	9:11:08	22.12	5.00	0.0	8.00	7.99
4/10/99	9:11:22	22.10	6.00	0.0	8.03	8.02
4/10/99	9:11:37	22.09	4.00	0.0	8.05	8.03
4/10/99	9:11:50	22.12	4.00	0.0	8.06	8.01
4/10/99	9:12:01	22.06	5.00	0.0	8.08	8.02
4/10/99	9:12:25	22.17	5.00	0.0	7.99	7.95
4/10/99	9:12:32	22.11	4.00	0.0	7.93	7.94
4/10/99	9:12:46	22.01	5.00	0.0	7.89	7.94
4/10/99	9:12:57	22.03	4.00	0.0	7.86	7.92
4/10/99	9:13:06	22.03	7.00	0.0	7.86	7.86
4/10/99	9:13:31	21.69	5.00	0.0	8.00	7.96
4/10/99	9:13:49	21.59	5.00	0.0	8.09	7.93
4/10/99	9:14:11	22.11	5.00	0.0	8.03	7.96
4/10/99	9:14:25	22.12	5.00	0.0	8.04	7.99
4/10/99	9:14:48	22.21	4.00	0.0	8.01	7.98
4/10/99	9:14:57	22.20	5.00	0.0	8.01	7.96
4/10/99	9:15:09	22.20	4.00	0.0	8.01	7.95
4/10/99	9:15:22	22.21	5.00	0.0	7.99	7.95
4/10/99	9:15:30	22.20	5.00	0.0	7.97	7.92
4/10/99	9:17:17	22.02	4.00	0.0	8.11	7.92
4/10/99	9:17:34	22.07	4.00	0.0	8.06	7.87

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/10/99	9:18:51		21.93	4.00	0.0	5.83	7.56
4/10/99	9:19:52		22.20	4.00	0.0	6.78	7.61
4/10/99	9:20:03		22.19	5.00	0.0	6.83	7.60
4/10/99	9:20:17		22.18	4.00	0.0	6.97	7.61
4/10/99	9:20:43		22.28	4.00	0.0	7.12	7.61
4/10/99	9:21:06		22.29	4.00	0.0	7.10	7.62
4/10/99	9:21:19		22.29	4.00	0.0	7.10	7.60
4/10/99	9:21:34		22.26	3.00	0.0	7.06	7.57
4/10/99	9:21:48		22.24	4.00	0.0	7.07	7.60
4/10/99	9:22:01		22.17	3.00	0.0	7.15	7.61
4/10/99	9:22:19		22.21	5.00	0.0	7.28	7.63
4/10/99	9:22:35		22.28	3.00	0.0	7.36	7.63
4/10/99	9:22:45		22.28	4.00	0.0	7.37	7.63
4/10/99	9:23:11		22.29	3.00	0.0	7.36	7.63
4/10/99	9:23:27		22.24	3.00	0.0	7.41	7.62
4/10/99	9:23:43		22.27	4.00	0.0	7.48	7.63
4/10/99	9:24:03		22.28	3.00	0.0	7.57	7.66
4/10/99	9:24:20		22.27	3.00	0.0	7.59	7.67
4/10/99	9:24:30		22.21	3.00	0.0	7.60	7.66
4/10/99	9:24:49		22.28	3.00	0.0	7.62	7.72
4/10/99	9:25:00		22.30	3.00	0.0	7.61	7.70
4/10/99	9:25:10		22.25	3.00	0.0	7.60	7.69

Project #: 98-411 R Test type: ACUTE CHRONIC OTHER 74 Day Date: 4/10/99

Species: *P. promelas* *C. dubia* *M. bahia* Other Ct. Day of Study: 11

OPERATIONAL RANGE:

Check if OK

Meter Used:

Temperature: 22 to 24

Blue

Salinity: to

Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet

Initials: RA

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/11/99	11:13:34	22.00	7.77	7.85
4/11/99	11:13:44	22.04	7.67	7.76
4/11/99	11:13:58	22.13	7.65	7.78
4/11/99	11:14:19	22.04	7.79	7.80
4/11/99	11:14:29	22.06	7.86	7.83
4/11/99	11:14:36	22.08	7.88	7.84
4/11/99	11:15:02	22.15	7.86	7.75
4/11/99	11:15:10	22.13	7.79	7.73
4/11/99	11:15:21	22.09	7.73	7.68
4/11/99	11:15:43	22.14	7.56	7.71
4/11/99	11:15:54	22.13	7.53	7.79
4/11/99	11:16:08	22.14	7.56	7.81
4/11/99	11:16:22	22.12	7.65	7.82
4/11/99	11:16:41	22.08	7.75	7.91
4/11/99	11:16:50	22.09	7.78	7.92
4/11/99	11:17:15	22.04	7.90	7.92
4/11/99	11:17:25	22.05	7.92	7.93
4/11/99	11:17:31	22.08	7.94	7.90
4/11/99	11:17:49	22.06	7.96	7.87
4/11/99	11:18:07	22.08	7.95	7.86
4/11/99	11:18:16	22.08	7.96	7.87
4/11/99	11:18:44	22.15	7.98	7.87
4/11/99	11:18:55	22.10	7.98	7.89
4/11/99	11:19:04	22.06	7.98	7.89
4/11/99	11:19:21	22.08	8.00	7.85
4/11/99	11:19:28	22.08	8.01	7.85
4/11/99	11:19:43	22.06	8.01	7.85
4/11/99	11:20:08	22.06	8.05	7.92
4/11/99	11:20:17	22.05	8.06	7.96
4/11/99	11:20:24	22.05	8.06	7.97
4/11/99	11:20:45	22.03	8.09	7.98
4/11/99	11:21:03	22.03	8.10	7.95
4/11/99	11:21:11	22.01	8.10	7.92
4/11/99	11:21:42	21.95	8.15	7.94
4/11/99	11:21:58	22.01	8.13	7.85
4/11/99	11:22:15	21.97	8.03	7.83
4/11/99	11:22:41	22.02	7.92	7.81
4/11/99	11:22:55	22.02	7.90	7.79
4/11/99	11:23:09	22.04	7.89	7.81
4/11/99	11:23:29	21.56	8.03	7.94
4/11/99	11:23:55	21.88	7.97	7.92
4/11/99	11:24:10	21.94	7.99	7.94
4/11/99	11:24:25	22.00	8.01	7.97
4/11/99	11:24:49	22.07	8.04	7.92
4/11/99	11:24:57	22.05	8.05	7.90
4/11/99	11:25:10	22.08	8.05	7.87
4/11/99	11:25:20	22.08	8.04	7.87
4/11/99	11:25:29	22.05	8.04	7.86
4/11/99	11:27:41	21.77	8.27	7.88
4/11/99	11:28:17	22.10	7.28	7.58

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/11/99	11:28:28		22.05	7.04	7.53
4/11/99	11:29:01		22.15	7.22	7.58
4/11/99	11:29:11		22.12	7.29	7.58
4/11/99	11:29:24		22.10	7.38	7.60
4/11/99	11:30:05		22.18	7.44	7.55
4/11/99	11:30:14		22.16	7.39	7.55
4/11/99	11:30:22		22.15	7.37	7.55
4/11/99	11:30:54		22.17	7.38	7.61
4/11/99	11:31:07		22.15	7.40	7.65
4/11/99	11:31:23		22.06	7.49	7.69
4/11/99	11:31:52		22.15	7.65	7.69
4/11/99	11:32:00		22.15	7.68	7.67
4/11/99	11:32:07		22.14	7.69	7.66
4/11/99	11:32:26		22.16	7.70	7.67
4/11/99	11:32:39		22.14	7.73	7.67
4/11/99	11:32:50		22.12	7.77	7.69
4/11/99	11:33:11		22.24	7.78	7.71
4/11/99	11:33:19		22.23	7.78	7.70
4/11/99	11:33:31		22.12	7.78	7.73
4/11/99	11:33:51		22.15	7.78	7.78
4/11/99	11:33:57		22.16	7.77	7.76
4/11/99	11:34:04		22.15	7.77	7.74

Project #: 98-411R Test type: 14 Day Date: 4/11/99

Species: CT Day of study: 12

ACCEPTABLE RANGE: Check if OK

Temperature 22 to 24

Salinity: to

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet

Initials:

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/12/99	10:21:11	21.94	8.45	8.23
4/12/99	10:21:35	22.23	7.97	8.08
4/12/99	10:22:01	22.30	7.93	8.01
4/12/99	10:22:33	22.32	8.04	7.91
4/12/99	10:22:47	22.32	8.07	7.90
4/12/99	10:22:56	22.32	8.10	7.89
4/12/99	10:23:26	22.36	8.06	7.77
4/12/99	10:23:42	22.34	7.95	7.76
4/12/99	10:23:52	22.30	7.92	7.75
4/12/99	10:24:04	22.27	7.90	7.74
4/12/99	10:24:15	22.26	7.88	7.80
4/12/99	10:24:28	22.27	7.90	7.81
4/12/99	10:24:52	22.35	7.98	7.84
4/12/99	10:25:01	22.32	8.00	7.88
4/12/99	10:25:10	22.33	8.01	7.91
4/12/99	10:25:34	22.32	8.07	7.91
4/12/99	10:25:45	22.32	8.09	7.91
4/12/99	10:25:58	22.37	8.10	7.87
4/12/99	10:26:17	22.34	8.09	7.87
4/12/99	10:26:28	22.37	8.08	7.86
4/12/99	10:26:37	22.39	8.08	7.85
4/12/99	10:26:54	22.39	8.09	7.87
4/12/99	10:27:15	22.39	8.08	7.89
4/12/99	10:27:29	22.40	8.07	7.87
4/12/99	10:27:44	22.36	8.09	7.83
4/12/99	10:27:53	22.37	8.09	7.82
4/12/99	10:28:03	22.38	8.08	7.82
4/12/99	10:28:20	22.36	8.10	7.85
4/12/99	10:28:27	22.35	8.11	7.89
4/12/99	10:28:41	22.41	8.12	7.93
4/12/99	10:28:58	22.38	8.15	7.95
4/12/99	10:29:08	22.36	8.15	7.93
4/12/99	10:29:16	22.35	8.16	7.89
4/12/99	10:29:29	22.33	8.17	7.92
4/12/99	10:29:48	22.39	8.16	7.85
4/12/99	10:29:57	22.35	8.13	7.83
4/12/99	10:30:18	22.35	8.07	7.81
4/12/99	10:30:24	22.35	8.06	7.79
4/12/99	10:30:34	22.37	8.04	7.78
4/12/99	10:30:54	22.05	8.12	7.89
4/12/99	10:31:06	21.98	8.16	7.88
4/12/99	10:31:15	22.16	8.15	7.87
4/12/99	10:31:32	22.34	8.12	7.90
4/12/99	10:31:39	22.37	8.12	7.89
4/12/99	10:31:51	22.41	8.11	7.87
4/12/99	10:32:21	22.43	8.09	7.84
4/12/99	10:32:28	22.40	8.09	7.84
4/12/99	10:32:38	22.40	8.06	7.83
4/12/99	10:33:56	21.99	8.34	7.81
4/12/99	10:34:16	22.34	8.23	7.70

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/12/99	10:34:29		22.37	7.59	7.65
4/12/99	10:35:01		22.41	7.65	7.64
4/12/99	10:35:16		22.42	7.68	7.64
4/12/99	10:35:29		22.42	7.73	7.65
4/12/99	10:35:49		22.43	7.73	7.61
4/12/99	10:35:58		22.42	7.67	7.59
4/12/99	10:36:12		22.41	7.59	7.56
4/12/99	10:36:45		22.41	7.56	7.59
4/12/99	10:36:56		22.42	7.57	7.62
4/12/99	10:37:05		22.40	7.59	7.64
4/12/99	10:37:28		22.39	7.71	7.66
4/12/99	10:37:38		22.40	7.74	7.64
4/12/99	10:37:48		22.44	7.73	7.62
4/12/99	10:38:09		22.43	7.70	7.64
4/12/99	10:38:22		22.44	7.71	7.64
4/12/99	10:38:29		22.42	7.74	7.66
4/12/99	10:38:48		22.36	7.81	7.69
4/12/99	10:39:17		22.43	7.78	7.65
4/12/99	10:39:26		22.43	7.77	7.66
4/12/99	10:39:41		22.37	7.80	7.77
4/12/99	10:39:48		22.38	7.81	7.77
4/12/99	10:39:55		22.38	7.82	7.75

Project #: 411 Test type: ACUTE CHRONIC OTHER (4 day flow thru) Date: 4/12/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *C. tentans* Day of Study: 13

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: — to — Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: TP

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/13/99	7:57:45	21.15	7.05	7.76
4/13/99	7:58:12	21.30	6.89	7.68
4/13/99	7:58:44	21.37	6.88	7.69
4/13/99	7:58:56	21.31	6.91	7.66
4/13/99	7:59:09	21.34	6.92	7.68
4/13/99	7:59:54	21.49	6.67	7.62
4/13/99	8:00:18	21.39	6.58	7.63
4/13/99	8:00:37	21.42	6.44	7.60
4/13/99	8:00:49	21.46	6.36	7.59
4/13/99	8:01:00	21.45	6.36	7.61
4/13/99	8:01:08	21.47	6.39	7.67
4/13/99	8:01:18	21.52	6.48	7.69
4/13/99	8:01:29	21.48	6.56	7.68
4/13/99	8:01:37	21.51	6.68	7.72
4/13/99	8:01:45	21.56	6.75	7.77
4/13/99	8:01:57	21.54	6.89	7.81
4/13/99	8:02:08	21.58	6.97	7.84
4/13/99	8:02:18	21.62	7.06	7.79
4/13/99	8:02:33	21.57	7.13	7.81
4/13/99	8:02:43	21.60	7.16	7.80
4/13/99	8:02:53	21.66	7.17	7.81
4/13/99	8:03:07	21.61	7.24	7.82
4/13/99	8:03:18	21.63	7.28	7.83
4/13/99	8:03:26	21.67	7.30	7.85
4/13/99	8:03:36	21.66	7.35	7.82
4/13/99	8:03:54	21.64	7.44	7.83
4/13/99	8:04:04	21.66	7.45	7.82
4/13/99	8:04:17	21.59	7.49	7.83
4/13/99	8:04:36	21.64	7.51	7.89
4/13/99	8:04:56	21.67	7.53	7.97
4/13/99	8:05:10	21.59	7.56	7.99
4/13/99	8:05:19	21.58	7.56	7.97
4/13/99	8:05:32	21.64	7.52	7.91
4/13/99	8:05:48	21.53	7.48	7.94
4/13/99	8:05:58	21.52	7.42	7.90
4/13/99	8:06:21	21.64	7.24	7.83
4/13/99	8:06:31	21.54	7.21	7.79
4/13/99	8:06:41	21.50	7.15	7.78
4/13/99	8:06:50	21.51	7.09	7.77
4/13/99	8:07:07	21.24	7.15	7.83
4/13/99	8:07:24	21.31	7.18	7.80
4/13/99	8:07:45	21.46	7.22	7.86
4/13/99	8:08:05	21.34	7.35	7.89
4/13/99	8:08:25	21.54	7.32	7.86
4/13/99	8:08:44	21.62	7.22	7.84
4/13/99	8:09:05	21.55	7.26	7.83
4/13/99	8:09:20	21.58	7.25	7.84
4/13/99	8:09:38	21.59	7.27	7.81
4/13/99	8:11:22	21.44	7.14	7.71
4/13/99	8:11:39	21.55	7.03	7.64

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/13/99	8:11:49		21.54	6.31	7.59
4/13/99	8:12:02		21.52	6.30	7.58
4/13/99	8:12:17		21.59	6.63	7.57
4/13/99	8:12:37		21.64	6.90	7.59
4/13/99	8:12:58		21.61	6.90	7.58
4/13/99	8:13:07		21.59	6.87	7.57
4/13/99	8:13:21		21.62	6.78	7.53
4/13/99	8:13:34		21.62	6.68	7.51
4/13/99	8:13:49		21.61	6.63	7.58
4/13/99	8:13:59		21.58	6.66	7.57
4/13/99	8:14:10		21.55	6.74	7.59
4/13/99	8:14:21		21.58	6.83	7.58
4/13/99	8:14:29		21.57	6.85	7.57
4/13/99	8:15:15		21.65	6.89	7.61
4/13/99	8:15:34		21.63	6.97	7.61
4/13/99	8:15:44		21.61	7.01	7.60
4/13/99	8:15:54		21.58	7.07	7.64
4/13/99	8:16:02		21.56	7.08	7.65
4/13/99	8:16:10		21.57	7.08	7.65
4/13/99	8:16:27		21.51	7.13	7.69
4/13/99	8:16:39		21.56	7.16	7.67
4/13/99	8:16:49		21.56	7.11	7.64

Project #: 411 Test type: ACUTE CHRONIC OTHER 14 day flow thru Date: 4/13/99
 Species: *P. promelas* *C. dubia* *M. bahia* Other C. tentans Day of Study: 14

OPERATIONAL RANGE: Check if OK Meter Used:
 Temperature: 22 to 24 Blue
 Salinity: - to - Red
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: TV

Aqua Survey, Inc.
Solid Phase Testing

Client: Dames & Moore

Test Start Date: 3-30-99

Parameter: Various

Job #: 98-411R

Test End Date: 4/13/99

Organism: C. tentans

		INITIAL				FINAL			
Sample	ASI #	Alkalinity mg/L	Hardness mg/L	Cond.	NH ₃ mg/L	Alkalinity mg/L	Hardness mg/L	Cond..	NH ₃ mg/L
R1-01	90653	60	84	309	0.44	40	96	320	ND
P5-01	90654	48	76	294	0.62	44	96	300	ND
P4-01	90655	44	72	283	1.80	44	84	293	ND
P3-03	90656	60	92	302	0.82	68	108	326	ND
P3-01	90657	48	76	284	0.39	60	88	306	ND
P2-03	90658	52	88	296	0.60	44	96	306	ND
P1-02	90659	48	80	293	1.63	32	96	291	ND
P4-03	90660	56	76	293	1.22	48	84	286	0.20
Control	90662 81997	64	92	306	ND	76	88	338	2.78
Date		3/30/99	3/30/99	3/30	3/30/99	4/13/99	4/13/99	4/13/99	4/13/99
Initials		MH	MH	TD	MH	TD	TD	SH	SB

Notes:

Aqua Survey, Inc. Solid Phase Readings

Job # 98-411
 Client Dames & Moore
 Organism C. tentans FLOWTHROUGH
 Parameter Exchanges and Feeding

Day	Date	Exchanges		Feed
		1st Time / Initials	2nd Time / Initials	<i>Tetramin Slurry</i>
0	3/30/99	0800 TD	1400 MH	✓
1	3/31/99	0750 TD	1455 MH	✓
2	4/1/99	0820 MA	1400 MA	✓
3	4/2/99	0820 MA	1320 TD	✓
4	4/3/99	0640 TD	1000 MT	✓
5	4/4/99	0610 TD	950 TD	✓
6	4/5/99	0745 TD	1600 MT	✓
7	4/6/99	0825 TD	1510 MH	✓
8	4/7/99	0750 TD	1520 MH	✓
9	4/8/99	0815 TD	1600 RF	✓
10	4/9/99	0820 SH	1320 MA	✓
11	4/10/99	0830 MA	1545 MA	✓
12	4/11/99	0840 MA	1300 MA	✓
13	4/12/99	0815 MA	1335 MA	✓
14	4/13/99	0745 TD		

Additional Notes

AQUA SURVEY, INC.

CULTURE LAB DISTRIBUTION FORM

DATE: 3/30/99

TEST JOB#: 98-411

CLIENT: DAM

TEST LOCATION: IN-LAB

FIELD

TEST SPECIES: C. tentans

TOTAL NUMBER ORGANISMS TRANSFERRED: 720+

AQUA SURVEY, INC. CULTURE LAB INVESTIGATORS: CC/CD

A. ORGANISMS

1. ASI CULTURE/HOLDING UNIT: Gen. Cult.

2. RECEIVING LOG #: N/A

3. CULTURE LOG #: 99-0237

4. AGE/SIZE INFORMATION: 1-14 day HD 3/19/99 (3rd instar)

B. HOLDING CULTURE WATER PARAMETERS

1. TEMPERATURE: 23.4°C

2. SALINITY: N/A

3. WATER SOURCE: 100% Berlin w/ Bio + Set

C. TRANSFER CUSTODY & TRANSFER

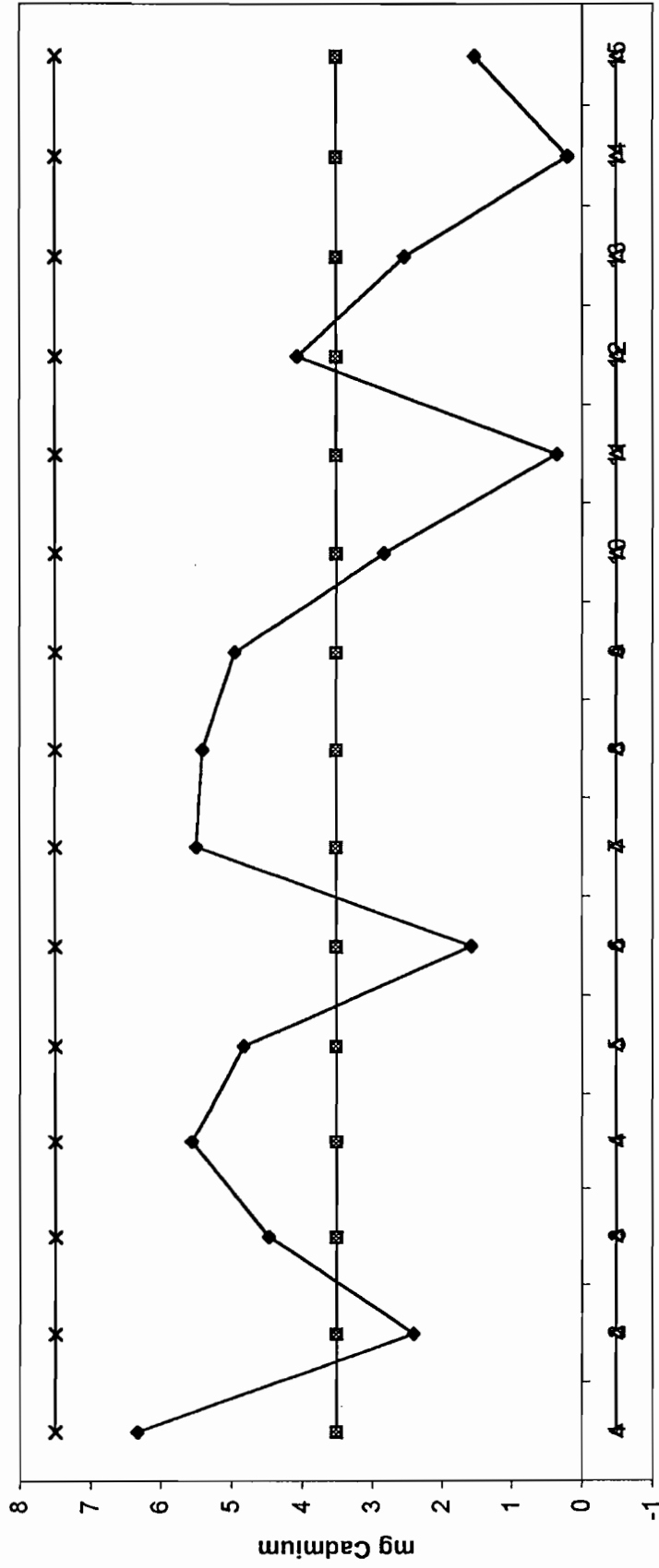
1. LIVESTOCK RELINQUISHMENT DATE: 3/30/99
TIME: 1300hrs
BY: CD

2. LIVESTOCK RECEIVING DATE: 3/30/99
TIME: 1300hrs
BY: CD

3. CULTURE SUPERVISOR OR SENIOR TECH. INITIALS: CD

REMARKS: _____

Control Chart LC50 Values, Acute SRT With C. tentans



Test Number (9/94 -3/99)

—◆— LC50 —■— Mean LC50 —▲— Lower 95% C.L. —x— Upper 95% C.L.

CT-TOX: BINOMIAL, MOVING AVERAGE, PROBIT, AND SPEARMAN METHODS

SPEARMAN-KARBER

TRIM: .00%
LC50: 1.521
95% LOWER CONFIDENCE: .916
95% UPPER CONFIDENCE: 2.526

CONC. mg/L	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB.(%)
.20	10.	0.	.00	.9766D-01
.60	10.	2.	20.00	.5469D+01
1.60	10.	6.	60.00	.3770D+02
5.00	10.	8.	80.00	.5469D+01
15.00	10.	10.	100.00	.9766D-01

THE BINOMIAL TEST SHOWS THAT .20 AND 15.00 CAN BE USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT CONFIDENCE LIMITS SINCE THE ACTUAL CONFIDENCE LEVEL ASSOCIATED WITH THESE LIMITS IS 99.8047 PERCENT.
AN APPROXIMATE LC50 FOR THIS DATA SET IS 1.264

RESULTS USING MOVING AVERAGE

SPAN	G	LC50	95% CONFIDENCE LIMIT
4	.114	1.57	.93 2.60

***** RESULTS CALCULATED BY PROBIT METHOD

ITERATIONS	G	H	GOODNESS OF FIT
5	.206	1.00	.75

SLOPE = 2.24

95% CONFIDENCE LIMITS: 1.23 AND 3.26

LC50= 1.53

95% CONFIDENCE LIMITS: .89 AND 2.65

LC1 = .14

95% CONFIDENCE LIMITS: .02 AND .33

DATE: 4/1/99 TEST NUMBER: SRT DURATION: 96 hours
SAMPLE: Cadmium chloride SPECIES: C. tentans

METHOD	LC50	CONFIDENCE LIMITS		
	LOWER	UPPER	SPAN	
BINOMIAL	1.264	.200	15.000	14.800
MAA	1.570	.930	2.599	1.669
PROBIT	1.530	.890	2.650	1.760
SPEARMAN	1.521	.916	2.526	1.610

**** = LIMIT DOES NOT EXIST

SRT

Prep sheet for Freshwater SRTs

Chironomus tentans / *Hyalella azteca*

10 replicates per concentration

20 mL per replicate

1 organism per replicate

Working Stock Solution

Add 0.064 grams of Cadmium chloride to 100 mL of DI water.

This will give you a 320 mg Cadmium/L stock solution.

Hyalella azteca

Add 1mL of the working stock solution to 1 liter of DI water.

This will give you a 32 ug Cadmium/L stock solution.

Concentration (ug/L)	Stock (mL)	Total (mL)
0	0	250
4	3.125	250
8	6.25	250
16	12.5	250
32	25	250
64	50	250

Chironomus tentans

Add 100 mL of the working stock solution to 1 Liter of DI water.

This will give you a 32 mg Cadmium/L stock solution.

Concentration (mg/L)	Stock (mL)	Total (mL)
0.2	1.6	250
0.6	4.7	250
1.6	12.5	250
5	39	250
15	117	250

H. azteca requires a screen substrate in each cup

C. tentans requires a small amount of sand enough to cover the bottom of each cup

Standard Reference Toxicant
Live Counts

For Job #: _____

Start Date: 4/1/99

End Date: _____

Organism: C. tentans/H. azteca

Organism Log #: _____

Starting Time: 1625

Dose	Initial	1	2	3	4	Dose	Initial	1	2	3	4
CON						A					X
B						B		X	---	---	---
C						C					
D						D					X
E						E					X
F						F					
G						G					X
H						H					
I						I					X
J						J					
0-2 *A						82 A5			X	---	---
B						B					X
C						C					
D						D			X	---	---
E						E					X
F						F			X	---	---
G						G			X	---	---
H						H					
I						I					X
J						J			X	---	---
26 8A						44 A5		X	---	---	---
B						B					
C						C			X	---	---
D						D			X	---	---
E						E		X	---	---	---
F						F		X	---	---	---
G						G		X	---	---	---
H					X	H		X	---	---	---
I					X	I				X	---
J						J				X	---
Initial	MH	TD	TD	TD	TD		MH	TD	TD	TD	TD
Date	4/1/99	4/2/99	4/3/99	4/4/99	4/5/99		4/1/99	4/2/99	4/3/99	4/4/99	4/5/99

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/02/99	10:55:55		23.52	295.00	0.1	8.14	7.79
4/02/99	10:56:03		23.91	298.00	0.1	7.98	7.85
4/02/99	10:56:11		24.04	296.00	0.1	7.94	7.89
4/02/99	10:56:23		24.12	288.00	0.1	7.91	7.90
4/02/99	10:56:30		24.13	264.00	0.1	7.92	7.89
4/02/99	10:56:36		24.15	199.00	0.1	7.92	7.83

Project #: SLT Test type: ACUTE CHRONIC OTHER 96L-
 Species: *P. promelas* *C. dubia* *M. bahia* Other C. tentans

Date: 4/2/99

Day of Study: 27

OPERATIONAL RANGE:

Temperature: 22 to 27 Check if OK
 Salinity: - to -
 Dissolved oxygen: >4.0
 pH: 6.0 to 9.0

Meter Used:

Blue
 Red

Actions taken: _____

See deviation summary sheet

Initials:

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/03/99	7:50:44		22.02	315.00	0.2	8.29	8.31
4/03/99	7:50:50		22.17	304.00	0.1	8.21	8.28
4/03/99	7:50:54		22.16	300.00	0.1	8.20	8.24
4/03/99	7:50:59		22.12	293.00	0.1	8.19	8.22
4/03/99	7:51:03		22.11	268.00	0.1	8.19	8.21
4/03/99	7:51:07		22.11	199.00	0.1	8.18	8.18

Project #: SRT Test type: ACUTE CHRONIC OTHER 96h

Date: 4/3/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *C. tentans*

Day of Study: 98hr

OPERATIONAL RANGE:

Check if OK

Meter Used:

Temperature: 22 to 24

Blue

Salinity: — to —

Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet

Initials: TD

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/04/99	5:59:32		22.50	798.00	0.4	7.34	8.76
4/04/99	5:59:37		22.99	358.00	0.2	7.43	8.64
4/04/99	5:59:41		23.16	310.00	0.2	7.41	8.57
4/04/99	5:59:45		23.31	298.00	0.1	7.61	8.53
4/04/99	5:59:49		23.41	269.00	0.1	7.38	8.49
4/04/99	5:59:53		23.46	200.00	0.1	7.45	8.48

Project #: SRT Test type: ACUTE CHRONIC OTHER 96hr

Date: 4/4/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *C. funaria*

Day of Study: 72hrs

OPERATIONAL RANGE:

Temperature: 22 to 24 Check if OK
 Salinity: — to —
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Meter Used:

Blue
 Red

Actions taken: _____

See deviation summary sheet

Initials: T

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/05/99	8:06:59		22.44	363.00	0.2	8.62	7.91
4/05/99	8:07:18		22.19	308.00	0.2	8.59	7.98
4/05/99	8:07:22		22.15	302.00	0.1	8.47	8.03
4/05/99	8:07:26		21.99	294.00	0.1	8.61	8.07
4/05/99	8:07:38		22.31	266.00	0.1	8.72	7.93
4/05/99	8:07:43		22.30	198.00	0.1	8.45	8.01

Project #: SRT Test type: ACUTE CHRONIC OTHER 96hrDate: 4/5/99Species: *P. promelas* *C. dubia* *M. bahia* Other *C. tentans*Day of Study: 96hr

OPERATIONAL RANGE:

Check if OK

Temperature: 22 to 24 Salinity: — to — Dissolved oxygen: > 4.0 pH: 6.0 to 9.0

Meter Used:

Blue Red

Actions taken: _____

See deviation summary sheet Initials: TB

AQUA SURVEY, INC.

CULTURE LAB DISTRIBUTION FORM

DATE: 4/1/99
TEST JOB#: SCT CLIENT: In house
TEST LOCATION: IN-LAB [] FIELD []
TEST SPECIES: C. tenuis
TOTAL NUMBER ORGANISMS TRANSFERRED: 60+
AQUA SURVEY, INC. CULTURE LAB INVESTIGATORS: CD

A. ORGANISMS

1. ASI CULTURE/HOLDING UNIT: General Culture
2. RECEIVING LOG #: N/A
3. CULTURE LOG #: 99-0250
4. AGE/SIZE INFORMATION: HD 3/19/99

B. HOLDING [] CULTURE [] WATER PARAMETERS

1. TEMPERATURE: 24.0°C
2. SALINITY: N/A
3. WATER SOURCE: 100% Recirc

C. TRANSFER CUSTODY & TRANSFER

1. LIVESTOCK RELINQUISHMENT DATE: 4/1/99
TIME: 1600 hrs
BY: CD
2. LIVESTOCK RECEIVING DATE: 4/1/99
TIME: 1600 hrs
BY: TD
3. CULTURE SUPERVISOR OR SENIOR TECH. INITIALS: CD

REMARKS: _____

Reporting time: Tuesday, May 04, 1999, 16:16

Recorder ID: 005764 Deploy No: 7 Span: 36 days, 8 hours Interval: one hour

Samples: 871 Start: 3/9/99 07:37 Recover: 4/14/99 16:13

Window: 18°C / 22°C Delay: 0 seconds State: Run Data source: File '005764.007'

Extremes: 26.5°C 17.5°C Description: 03/09/99 07:36 Dames and Moore C. tentans bath b special studies room

Daily summary

Date	Samples	Min °C	Max °C	Under window	Over window
3/9/99	16	18.5	26.5	0	14
3/10/99	24	21.5	23.5	0	22
3/11/99	24	21.0	22.0	0	0
3/12/99	24	21.0	22.0	0	0
3/13/99	24	21.5	23.0	0	19
3/14/99	24	22.5	23.0	0	24
3/15/99	24	21.5	23.0	0	8
3/16/99	24	21.5	23.5	0	15
3/17/99	24	23.0	24.5	0	24
3/18/99	24	24.0	24.5	0	24
3/19/99	24	22.0	24.0	0	22
3/20/99	24	22.0	24.0	0	23
3/21/99	24	22.5	23.5	0	24
3/22/99	24	22.0	23.0	0	19
3/23/99	24	21.5	23.5	0	15
3/24/99	24	23.0	24.0	0	24
3/25/99	24	22.5	23.5	0	24
3/26/99	24	21.5	24.5	0	16
3/27/99	24	24.0	25.0	0	24
3/28/99	24	24.0	24.5	0	24
3/29/99	24	24.0	24.5	0	24
3/30/99	24	24.0	24.5	0	24
3/31/99	24	24.0	24.5	0	24
4/1/99	24	24.5	25.0	0	24
4/2/99	24	24.5	25.5	0	24
4/3/99	24	24.0	25.0	0	24
4/4/99	24	24.5	25.0	0	24
4/5/99	24	23.0	25.0	0	24
4/6/99	24	23.5	24.5	0	24
4/7/99	24	23.5	25.0	0	24
4/8/99	24	24.0	25.5	0	24
4/9/99	24	24.0	25.5	0	24
4/10/99	24	23.5	24.5	0	24
4/11/99	24	23.0	24.0	0	24
4/12/99	24	23.0	24.0	0	24
4/13/99	24	19.0	23.0	0	12
4/14/99	15	17.5	20.5	1	0

Readings

Date/time	°C	Date/time	°C	Date/time	°C	Date/time	°C
3/9/99							
08:37:05	18.5	09:37:05	23.0	10:37:05	24.5	11:37:05	25.5

12:37:05	26.0	13:37:05	26.0	14:37:05	26.5	15:37:05	26.0
16:37:05	25.0	17:37:05	22.0	18:37:05	23.0	19:37:05	23.0
20:37:05	23.5	21:37:05	23.5	22:37:05	23.5	23:37:05	23.5
3/10/99							
00:37:05	23.5	01:37:05	23.5	02:37:05	23.5	03:37:05	23.0
04:37:05	23.0	05:37:05	23.0	06:37:05	23.5	07:37:05	23.5
08:37:05	23.5	09:37:05	23.5	10:37:05	23.5	11:37:05	23.5
12:37:05	23.5	13:37:05	23.5	14:37:05	23.5	15:37:05	23.5
16:37:05	23.0	17:37:05	23.0	18:37:05	23.0	19:37:05	23.0
20:37:05	22.5	21:37:05	22.5	22:37:05	22.0	23:37:05	21.5
3/11/99							
00:37:05	21.5	01:37:05	21.5	02:37:05	21.5	03:37:05	21.0
04:37:05	21.0	05:37:05	21.0	06:37:05	21.5	07:37:05	21.5
08:37:05	22.0	09:37:05	22.0	10:37:05	22.0	11:37:05	22.0
12:37:05	22.0	13:37:05	22.0	14:37:05	22.0	15:37:05	22.0
16:37:05	22.0	17:37:05	22.0	18:37:05	22.0	19:37:05	21.5
20:37:05	21.5	21:37:05	21.5	22:37:05	21.5	23:37:05	21.5
3/12/99							
00:37:05	21.5	01:37:05	21.5	02:37:05	21.5	03:37:05	21.5
04:37:05	21.0	05:37:05	21.0	06:37:05	21.5	07:37:05	21.5
08:37:05	21.5	09:37:05	22.0	10:37:05	22.0	11:37:05	22.0
12:37:05	22.0	13:37:05	22.0	14:37:05	22.0	15:37:05	22.0
16:37:05	22.0	17:37:05	22.0	18:37:05	22.0	19:37:05	22.0
20:37:05	21.5	21:37:05	21.5	22:37:05	21.5	23:37:05	21.5
3/13/99							
00:37:05	21.5	01:37:05	22.0	02:37:05	22.0	03:37:05	22.0
04:37:05	22.0	05:37:05	22.5	06:37:05	22.5	07:37:05	22.5
08:37:05	22.5	09:37:05	22.5	10:37:05	22.5	11:37:05	22.5
12:37:05	22.5	13:37:05	22.5	14:37:05	22.5	15:37:05	22.5
16:37:05	23.0	17:37:05	23.0	18:37:05	23.0	19:37:05	23.0
20:37:05	23.0	21:37:05	23.0	22:37:05	23.0	23:37:05	23.0
3/14/99							
00:37:05	23.0	01:37:05	23.0	02:37:05	23.0	03:37:05	23.0
04:37:05	23.0	05:37:05	23.0	06:37:05	23.0	07:37:05	23.0
08:37:05	23.0	09:37:05	22.5	10:37:05	22.5	11:37:05	22.5
12:37:05	22.5	13:37:05	22.5	14:37:05	22.5	15:37:05	22.5
16:37:05	23.0	17:37:05	23.0	18:37:05	23.0	19:37:05	23.0
20:37:05	23.0	21:37:05	23.0	22:37:05	23.0	23:37:05	23.0
3/15/99							
00:37:05	23.0	01:37:05	22.5	02:37:05	22.5	03:37:05	22.0
04:37:05	22.0	05:37:05	21.5	06:37:05	21.5	07:37:05	21.5
08:37:05	21.5	09:37:05	22.0	10:37:05	22.0	11:37:05	22.0
12:37:05	22.0	13:37:05	22.0	14:37:05	22.0	15:37:05	22.0
16:37:05	22.0	17:37:05	22.5	18:37:05	22.5	19:37:05	22.5
20:37:05	22.5	21:37:05	22.5	22:37:05	22.0	23:37:05	22.0

3/16/99

00:37:05	22.0	01:37:05	22.0	02:37:05	21.5	03:37:05	21.5
04:37:05	21.5	05:37:05	21.5	06:37:05	21.5	07:37:05	22.0
08:37:05	22.0	09:37:05	22.5	10:37:05	22.5	11:37:05	22.5
12:37:05	22.5	13:37:05	23.0	14:37:05	23.0	15:37:05	23.0
16:37:05	23.0	17:37:05	23.0	18:37:05	23.5	19:37:05	23.5
20:37:05	23.5	21:37:05	23.5	22:37:05	23.5	23:37:05	23.5

3/17/99

00:37:05	23.5	01:37:05	23.0	02:37:05	23.0	03:37:05	23.0
04:37:05	23.0	05:37:05	23.0	06:37:05	23.0	07:37:05	23.0
08:37:05	23.0	09:37:05	23.5	10:37:05	23.5	11:37:05	23.5
12:37:05	23.5	13:37:05	23.5	14:37:05	23.5	15:37:05	23.5
16:37:05	24.0	17:37:05	24.0	18:37:05	24.0	19:37:05	24.0
20:37:05	24.5	21:37:05	24.5	22:37:05	24.5	23:37:05	24.5

3/18/99

00:37:05	24.5	01:37:05	24.5	02:37:05	24.5	03:37:05	24.5
04:37:05	24.5	05:37:05	24.5	06:37:05	24.5	07:37:05	24.5
08:37:05	24.5	09:37:05	24.5	10:37:05	24.5	11:37:05	24.5
12:37:05	24.5	13:37:05	24.5	14:37:05	24.5	15:37:05	24.5
16:37:05	24.5	17:37:05	24.5	18:37:05	24.5	19:37:05	24.5
20:37:05	24.5	21:37:05	24.5	22:37:05	24.5	23:37:05	24.0

3/19/99

00:37:05	24.0	01:37:05	24.0	02:37:05	23.5	03:37:05	23.5
04:37:05	23.5	05:37:05	23.0	06:37:05	23.0	07:37:05	23.0
08:37:05	23.0	09:37:05	23.0	10:37:05	23.5	11:37:05	23.0
12:37:05	23.0	13:37:05	23.0	14:37:05	23.0	15:37:05	23.0
16:37:05	23.0	17:37:05	23.0	18:37:05	23.0	19:37:05	22.5
20:37:05	22.5	21:37:05	22.5	22:37:05	22.0	23:37:05	22.0

3/20/99

00:37:05	22.0	01:37:05	22.5	02:37:05	22.5	03:37:05	22.5
04:37:05	22.5	05:37:05	22.5	06:37:05	22.5	07:37:05	22.5
08:37:05	22.5	09:37:05	22.5	10:37:05	22.5	11:37:05	22.5
12:37:05	22.5	13:37:05	23.0	14:37:05	23.0	15:37:05	23.5
16:37:05	24.0	17:37:05	24.0	18:37:05	24.0	19:37:05	24.0
20:37:05	24.0	21:37:05	24.0	22:37:05	23.5	23:37:05	23.5

3/21/99

00:37:05	23.5	01:37:05	23.0	02:37:05	23.0	03:37:05	23.0
04:37:05	23.0	05:37:05	23.0	06:37:05	23.0	07:37:05	23.0
08:37:05	23.0	09:37:05	23.0	10:37:05	23.0	11:37:05	22.5
12:37:05	22.5	13:37:05	23.0	14:37:05	23.0	15:37:05	23.0
16:37:05	23.0	17:37:05	23.0	18:37:05	23.0	19:37:05	23.0
20:37:05	23.0	21:37:05	23.0	22:37:05	23.0	23:37:05	23.0

3/22/99

00:37:05	23.0	01:37:05	23.0	02:37:05	23.0	03:37:05	22.5
----------	------	----------	------	----------	------	----------	------

04:37:05	22.5	05:37:05	22.0	06:37:05	22.0	07:37:05	22.0
08:37:05	22.0	09:37:05	22.0	10:37:05	22.5	11:37:05	22.5
12:37:05	22.5	13:37:05	22.5	14:37:05	22.5	15:37:05	22.5
16:37:05	23.0	17:37:05	23.0	18:37:05	23.0	19:37:05	23.0
20:37:05	23.0	21:37:05	22.5	22:37:05	22.5	23:37:05	22.5

3/23/99

00:37:05	22.5	01:37:05	22.0	02:37:05	22.0	03:37:05	22.0
04:37:05	21.5	05:37:05	21.5	06:37:05	21.5	07:37:05	22.0
08:37:05	22.0	09:37:05	22.0	10:37:05	22.5	11:37:05	22.5
12:37:05	22.5	13:37:05	22.5	14:37:05	22.5	15:37:05	23.0
16:37:05	23.0	17:37:05	23.0	18:37:05	23.0	19:37:05	23.0
20:37:05	23.0	21:37:05	23.5	22:37:05	23.5	23:37:05	23.0

3/24/99

00:37:05	23.0	01:37:05	23.0	02:37:05	23.0	03:37:05	23.0
04:37:05	23.0	05:37:05	23.0	06:37:05	23.0	07:37:05	23.0
08:37:05	23.0	09:37:05	23.0	10:37:05	23.0	11:37:05	23.0
12:37:05	23.0	13:37:05	23.0	14:37:05	23.5	15:37:05	23.5
16:37:05	23.5	17:37:05	23.5	18:37:05	23.5	19:37:05	23.5
20:37:05	23.5	21:37:05	24.0	22:37:05	24.0	23:37:05	23.5

3/25/99

00:37:05	23.5	01:37:05	23.5	02:37:05	23.5	03:37:05	23.0
04:37:05	23.0	05:37:05	23.0	06:37:05	22.5	07:37:05	23.0
08:37:05	23.0	09:37:05	23.0	10:37:05	23.0	11:37:05	23.0
12:37:05	23.0	13:37:05	23.0	14:37:05	23.5	15:37:05	23.5
16:37:05	23.5	17:37:05	23.0	18:37:05	23.0	19:37:05	23.0
20:37:05	23.0	21:37:05	23.0	22:37:05	23.0	23:37:05	22.5

3/26/99

00:37:05	22.5	01:37:05	22.5	02:37:05	22.0	03:37:05	22.0
04:37:05	21.5	05:37:05	21.5	06:37:05	21.5	07:37:05	22.0
08:37:05	22.0	09:37:05	22.0	10:37:05	23.0	11:37:05	23.5
12:37:05	24.0	13:37:05	24.0	14:37:05	24.5	15:37:05	24.5
16:37:05	24.5	17:37:05	24.5	18:37:05	24.5	19:37:05	24.5
20:37:05	24.0	21:37:05	24.5	22:37:05	24.0	23:37:05	24.0

3/27/99

00:37:05	24.5	01:37:05	24.5	02:37:05	24.5	03:37:05	24.5
04:37:05	24.5	05:37:05	24.5	06:37:05	24.5	07:37:05	24.5
08:37:05	24.5	09:37:05	24.0	10:37:05	24.0	11:37:05	24.0
12:37:05	24.5	13:37:05	24.5	14:37:05	24.5	15:37:05	24.5
16:37:05	24.5	17:37:05	25.0	18:37:05	25.0	19:37:05	25.0
20:37:05	25.0	21:37:05	24.5	22:37:05	24.5	23:37:05	24.5

3/28/99

00:37:05	24.5	01:37:05	24.0	02:37:05	24.0	03:37:05	24.5
04:37:05	24.5	05:37:05	24.5	06:37:05	24.5	07:37:05	24.5
08:37:05	24.5	09:37:05	24.0	10:37:05	24.0	11:37:05	24.0
12:37:05	24.0	13:37:05	24.5	14:37:05	24.5	15:37:05	24.5

16:37:05	24.5	17:37:05	24.5	18:37:05	24.5	19:37:05	24.5
20:37:05	24.5	21:37:05	24.0	22:37:05	24.0	23:37:05	24.5
3/29/99							
00:37:05	24.5	01:37:05	24.5	02:37:05	24.5	03:37:05	24.5
04:37:05	24.0	05:37:05	24.0	06:37:05	24.0	07:37:05	24.0
08:37:05	24.0	09:37:05	24.0	10:37:05	24.5	11:37:05	24.5
12:37:05	24.5	13:37:05	24.5	14:37:05	24.5	15:37:05	24.5
16:37:05	24.5	17:37:05	24.5	18:37:05	24.5	19:37:05	24.5
20:37:05	24.5	21:37:05	24.0	22:37:05	24.0	23:37:05	24.0
3/30/99							
00:37:05	24.0	01:37:05	24.0	02:37:05	24.0	03:37:05	24.0
04:37:05	24.0	05:37:05	24.0	06:37:05	24.0	07:37:05	24.0
08:37:05	24.0	09:37:05	24.0	10:37:05	24.0	11:37:05	24.5
12:37:05	24.5	13:37:05	24.5	14:37:05	24.5	15:37:05	24.5
16:37:05	24.5	17:37:05	24.5	18:37:05	24.5	19:37:05	24.5
20:37:05	24.5	21:37:05	24.5	22:37:05	24.5	23:37:05	24.5
3/31/99							
00:37:05	24.0	01:37:05	24.0	02:37:05	24.0	03:37:05	24.0
04:37:05	24.0	05:37:05	24.0	06:37:05	24.0	07:37:05	24.0
08:37:05	24.0	09:37:05	24.0	10:37:05	24.5	11:37:05	24.5
12:37:05	24.5	13:37:05	24.5	14:37:05	24.5	15:37:05	24.5
16:37:05	24.5	17:37:05	24.5	18:37:05	24.5	19:37:05	24.5
20:37:05	24.5	21:37:05	24.5	22:37:05	24.5	23:37:05	24.5
4/1/99							
00:37:05	24.5	01:37:05	24.5	02:37:05	24.5	03:37:05	24.5
04:37:05	24.5	05:37:05	24.5	06:37:05	24.5	07:37:05	24.5
08:37:05	24.5	09:37:05	24.5	10:37:05	24.5	11:37:05	24.5
12:37:05	24.5	13:37:05	24.5	14:37:05	24.5	15:37:05	24.5
16:37:05	24.5	17:37:05	24.5	18:37:05	24.5	19:37:05	25.0
20:37:05	25.0	21:37:05	25.0	22:37:05	25.0	23:37:05	25.0
4/2/99							
00:37:05	25.0	01:37:05	25.0	02:37:05	25.0	03:37:05	25.0
04:37:05	25.0	05:37:05	24.5	06:37:05	24.5	07:37:05	24.5
08:37:05	24.5	09:37:05	24.5	10:37:05	24.5	11:37:05	24.5
12:37:05	24.5	13:37:05	24.5	14:37:05	24.5	15:37:05	25.0
16:37:05	25.0	17:37:05	25.0	18:37:05	25.0	19:37:05	25.5
20:37:05	25.5	21:37:05	25.5	22:37:05	25.5	23:37:05	25.5
4/3/99							
00:37:05	25.0	01:37:05	25.0	02:37:05	25.0	03:37:05	25.0
04:37:05	24.5	05:37:05	24.5	06:37:05	24.5	07:37:05	24.5
08:37:05	24.0	09:37:05	24.0	10:37:05	24.0	11:37:05	24.0
12:37:05	24.5	13:37:05	24.5	14:37:05	24.5	15:37:05	24.5
16:37:05	25.0	17:37:05	25.0	18:37:05	25.0	19:37:05	25.0
20:37:05	25.0	21:37:05	25.0	22:37:05	25.0	23:37:05	25.0

4/4/99

00:37:05	25.0	01:37:05	25.0	02:37:05	25.0	03:37:05	25.0
04:37:05	25.0	05:37:05	25.0	06:37:05	24.5	07:37:05	24.5
08:37:05	24.5	09:37:05	24.5	10:37:05	24.5	11:37:05	24.5
12:37:05	24.5	13:37:05	24.5	14:37:05	25.0	15:37:05	25.0
16:37:05	25.0	17:37:05	25.0	18:37:05	25.0	19:37:05	25.0
20:37:05	25.0	21:37:05	25.0	22:37:05	25.0	23:37:05	24.5

4/5/99

00:37:05	24.5	01:37:05	24.5	02:37:05	24.0	03:37:05	24.0
04:37:05	23.5	05:37:05	23.5	06:37:05	23.5	07:37:05	23.0
08:37:05	23.0	09:37:05	23.0	10:37:05	23.0	11:37:05	23.5
12:37:05	23.5	13:37:05	23.5	14:37:05	23.5	15:37:05	24.0
16:37:05	24.0	17:37:05	24.5	18:37:05	24.5	19:37:05	24.5
20:37:05	25.0	21:37:05	25.0	22:37:05	25.0	23:37:05	24.5

4/6/99

00:37:05	24.5	01:37:05	24.5	02:37:05	24.0	03:37:05	24.0
04:37:05	24.0	05:37:05	23.5	06:37:05	23.5	07:37:05	23.5
08:37:05	23.5	09:37:05	23.5	10:37:05	23.5	11:37:05	23.5
12:37:05	23.5	13:37:05	23.5	14:37:05	23.5	15:37:05	23.5
16:37:05	24.0	17:37:05	24.0	18:37:05	24.5	19:37:05	24.5
20:37:05	24.5	21:37:05	24.5	22:37:05	24.5	23:37:05	24.5

4/7/99

00:37:05	24.5	01:37:05	24.5	02:37:05	24.0	03:37:05	24.0
04:37:05	24.0	05:37:05	24.0	06:37:05	23.5	07:37:05	23.5
08:37:05	23.5	09:37:05	23.5	10:37:05	24.0	11:37:05	24.0
12:37:05	24.0	13:37:05	24.0	14:37:05	24.0	15:37:05	24.0
16:37:05	24.5	17:37:05	24.5	18:37:05	24.5	19:37:05	25.0
20:37:05	25.0	21:37:05	25.0	22:37:05	25.0	23:37:05	25.0

4/8/99

00:37:05	25.0	01:37:05	24.5	02:37:05	24.5	03:37:05	24.5
04:37:05	24.5	05:37:05	24.0	06:37:05	24.0	07:37:05	24.0
08:37:05	24.0	09:37:05	24.0	10:37:05	24.0	11:37:05	24.0
12:37:05	24.0	13:37:05	24.0	14:37:05	24.5	15:37:05	24.5
16:37:05	24.5	17:37:05	24.5	18:37:05	25.0	19:37:05	25.0
20:37:05	25.5	21:37:05	25.5	22:37:05	25.5	23:37:05	25.5

4/9/99

00:37:05	25.5	01:37:05	25.5	02:37:05	25.0	03:37:05	25.0
04:37:05	25.0	05:37:05	25.0	06:37:05	24.5	07:37:05	24.5
08:37:05	24.5	09:37:05	24.5	10:37:05	24.5	11:37:05	24.5
12:37:05	24.5	13:37:05	24.5	14:37:05	24.0	15:37:05	24.0
16:37:05	24.0	17:37:05	24.0	18:37:05	24.0	19:37:05	24.0
20:37:05	24.0	21:37:05	24.0	22:37:05	24.0	23:37:05	24.0

4/10/99

00:37:05	24.0	01:37:05	23.5	02:37:05	23.5	03:37:05	23.5
04:37:05	23.5	05:37:05	23.5	06:37:05	23.5	07:37:05	23.5

08:37:05	23.5	09:37:05	23.5	10:37:05	23.5	11:37:05	23.5
12:37:05	23.5	13:37:05	23.5	14:37:05	24.0	15:37:05	24.0
16:37:05	24.0	17:37:05	24.0	18:37:05	24.0	19:37:05	24.5
20:37:05	24.5	21:37:05	24.5	22:37:05	24.5	23:37:05	24.5

4/11/99

00:37:05	24.0	01:37:05	24.0	02:37:05	24.0	03:37:05	23.5
04:37:05	23.5	05:37:05	23.5	06:37:05	23.5	07:37:05	23.5
08:37:05	23.5	09:37:05	23.5	10:37:05	23.0	11:37:05	23.0
12:37:05	23.0	13:37:05	23.0	14:37:05	23.5	15:37:05	23.5
16:37:05	23.5	17:37:05	23.5	18:37:05	23.5	19:37:05	23.5
20:37:05	24.0	21:37:05	24.0	22:37:05	24.0	23:37:05	24.0

4/12/99

00:37:05	24.0	01:37:05	23.5	02:37:05	23.5	03:37:05	23.5
04:37:05	23.5	05:37:05	23.5	06:37:05	23.0	07:37:05	23.0
08:37:05	23.0	09:37:05	23.0	10:37:05	23.0	11:37:05	23.5
12:37:05	23.5	13:37:05	23.5	14:37:05	23.5	15:37:05	23.5
16:37:05	23.5	17:37:05	23.5	18:37:05	23.5	19:37:05	24.0
20:37:05	23.5	21:37:05	23.5	22:37:05	23.5	23:37:05	23.5

4/13/99

00:37:05	23.0	01:37:05	23.0	02:37:05	23.0	03:37:05	23.0
04:37:05	22.5	05:37:05	22.5	06:37:05	22.5	07:37:05	22.5
08:37:05	22.0	09:37:05	22.0	10:37:05	22.5	11:37:05	22.5
12:37:05	22.5	13:37:05	22.0	14:37:05	22.0	15:37:05	22.5
16:37:05	22.0	17:37:05	21.5	18:37:05	20.5	19:37:05	20.0
20:37:05	20.0	21:37:05	20.0	22:37:05	19.5	23:37:05	19.0

4/14/99

00:37:05	19.0	01:37:05	18.5	02:37:05	18.0	03:37:05	18.0
04:37:05	18.0	05:37:05	17.5	06:37:05	18.0	07:37:05	19.0
08:37:05	19.5	09:37:05	20.0	10:37:05	20.0	11:37:05	20.0
12:37:05	20.5	13:37:05	20.5	14:37:05	20.5		

BIOLOGICAL RAW DATA

March 9, 1999

C. tentans

98-411R C. tentans 10-day Survival
File: 411r.cts Transform: ARC SINE(SQUARE ROOT(Y))

Chi-square test for normality: actual and expected frequencies

INTERVAL	<-1.5	-1.5 to <-0.5	-0.5 to 0.5	>0.5 to 1.5	>1.5
EXPECTED	4.288	15.488	24.448	15.488	4.288
OBSERVED	7	9	13	35	0

Calculated Chi-Square goodness of fit test statistic = 38.6632
Table Chi-Square value (alpha = 0.01) = 13.277

Data FAIL normality test. Try another transformation.

Warning - The first three homogeneity tests are sensitive to non-normal data and should not be performed.

98-411R C. tentans 10-day Survival
File: 411r.cts Transform: ARC SINE(SQUARE ROOT(Y))

Bartlett's test for homogeneity of variance
Calculated B1 statistic = 8.48

Table Chi-square value = 18.48 (alpha = 0.01, df = 7)
Table Chi-square value = 14.07 (alpha = 0.05, df = 7)

Data PASS B1 homogeneity test at 0.01 level. Continue analysis.

JN
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TITLE: 98-411R C. tentans 10-day Survival

FILE: 411r.cts

TRANSFORM: ARC SINE(SQUARE ROOT(Y))

NUMBER OF GROUPS: 8

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	R1-01	1	0.9000	1.2490
1	R1-01	2	0.8000	1.1071
1	R1-01	3	1.0000	1.4120
1	R1-01	4	0.9000	1.2490
1	R1-01	5	0.9000	1.2490
1	R1-01	6	1.0000	1.4120
1	R1-01	7	0.9000	1.2490
1	R1-01	8	1.0000	1.4120
2	P5-01	1	0.9000	1.2490
2	P5-01	2	1.0000	1.4120
2	P5-01	3	0.9000	1.2490
2	P5-01	4	1.0000	1.4120
2	P5-01	5	0.9000	1.2490
2	P5-01	6	0.7000	0.9912
2	P5-01	7	0.9000	1.2490
2	P5-01	8	0.8000	1.1071
3	P4-01	1	1.0000	1.4120
3	P4-01	2	0.7000	0.9912
3	P4-01	3	1.0000	1.4120
3	P4-01	4	0.9000	1.2490
3	P4-01	5	1.0000	1.4120
3	P4-01	6	0.9000	1.2490
3	P4-01	7	1.0000	1.4120
3	P4-01	8	0.9000	1.2490
4	P3-03	1	0.7000	0.9912
4	P3-03	2	1.0000	1.4120
4	P3-03	3	0.9000	1.2490
4	P3-03	4	0.9000	1.2490
4	P3-03	5	1.0000	1.4120
4	P3-03	6	1.0000	1.4120
4	P3-03	7	1.0000	1.4120
4	P3-03	8	1.0000	1.4120
5	P3-01	1	0.9000	1.2490
5	P3-01	2	1.0000	1.4120
5	P3-01	3	1.0000	1.4120
5	P3-01	4	0.9000	1.2490
5	P3-01	5	1.0000	1.4120
5	P3-01	6	0.9000	1.2490
5	P3-01	7	1.0000	1.4120
5	P3-01	8	0.9000	1.2490
6	P2-03	1	1.0000	1.4120
6	P2-03	2	0.7000	0.9912
6	P2-03	3	1.0000	1.4120
6	P2-03	4	1.0000	1.4120
6	P2-03	5	1.0000	1.4120
6	P2-03	6	1.0000	1.4120
6	P2-03	7	0.8000	1.1071
6	P2-03	8	1.0000	1.4120
7	Ps-02	1	0.9000	1.2490

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7	PS-02	2	0.9000	1.2490
7	PS-02	3	0.9000	1.2490
7	PS-02	4	1.0000	1.4120
7	PS-02	5	1.0000	1.4120
7	PS-02	6	1.0000	1.4120
7	PS-02	7	1.0000	1.4120
7	PS-02	8	1.0000	1.4120
8	P4-03	1	0.9000	1.2490
8	P4-03	2	1.0000	1.4120
8	P4-03	3	1.0000	1.4120
8	P4-03	4	0.9000	1.2490
8	P4-03	5	1.0000	1.4120
8	P4-03	6	1.0000	1.4120
8	P4-03	7	1.0000	1.4120
8	P4-03	8	1.0000	1.4120

98-411R C. tentans 10-day Survival

File: 411r.cts

Transform: ARC SINE(SQUARE ROOT(Y))

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 1 of 2

GRP	IDENTIFICATION	N	MIN	MAX	MEAN
1	R1-01	8	1.107	1.412	1.292
2	P5-01	8	0.991	1.412	1.240
3	P4-01	8	0.991	1.412	1.298
4	P3-03	8	0.991	1.412	1.319
5	P3-01	8	1.249	1.412	1.331
6	P2-03	8	0.991	1.412	1.321
7	Ps-02	8	1.249	1.412	1.351
8	P4-03	8	1.249	1.412	1.371

98-411R C. tentans 10-day Survival

File: 411r.cts

Transform: ARC SINE(SQUARE ROOT(Y))

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 2 of 2

GRP	IDENTIFICATION	VARIANCE	SD	SEM	C.V. %
1	R1-01	0.012	0.110	0.039	8.51
2	P5-01	0.020	0.141	0.050	11.37
3	P4-01	0.022	0.148	0.052	11.40
4	P3-03	0.023	0.151	0.054	11.48
5	P3-01	0.008	0.087	0.031	6.55
6	P2-03	0.029	0.171	0.060	12.93
7	Ps-02	0.007	0.084	0.030	6.24
8	P4-03	0.006	0.075	0.027	5.50

98-411R C. tentans 10-day Survival

File: 411r.cts

Transform: ARC SINE(SQUARE ROOT(Y))

STEEL'S MANY-ONE RANK TEST

- Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	RANK SUM	CRIT. VALUE	df	SIG
1	R1-01	1.292				
2	P5-01	1.240	61.50	45.00	8.00	
3	P4-01	1.298	71.00	45.00	8.00	
4	P3-03	1.319	74.50	45.00	8.00	
5	P3-01	1.331	74.00	45.00	8.00	
6	P2-03	1.321	75.50	45.00	8.00	
7	Ps-02	1.351	77.50	45.00	8.00	
8	P4-03	1.371	81.00	45.00	8.00	

Critical values use $k = 7$, are 1 tailed, and $\alpha = 0.05$

JN
8/3/99

98-0411R Dames and Moore C. tentans

Position	sample	ASI No.	Code
39	Control	81997	* 0.1
30			* 0.2
69			* 0.3
28			* 0.4
42			* 0.5
21			* 0.6
10			* 0.7
13			* 0.8
48	R1-01	82033	1.1
2			* 1.2
54			* 1.3
20			* 1.4
15			* 1.5
27			* 1.6
53			* 1.7
6			* 1.8
19	P5-01	82034	2.1
43			* 2.2
71			* 2.3
31			* 2.4
32			* 2.5
55			* 2.6
38			* 2.7
11			* 2.8
56	P4-01	82035	3.1
47			* 3.2
26			* 3.3
59			* 3.4
61			* 3.5
64			* 3.6
40			* 3.7
68			* 3.8
33	P3-03	82036	4.1
14			* 4.2
66			* 4.3
18			* 4.4
25			* 4.5
29			* 4.6
9			* 4.7
58			* 4.8
46	P3-01	82037	5.1
4			* 5.2
41			* 5.3
65			* 5.4
12			* 5.5
22			* 5.6
16			* 5.7
45			* 5.8
72	P2-03	82038	6.1
35			* 6.2
60			* 6.3
67			* 6.4
44			* 6.5
57			* 6.6
49			* 6.7
5			* 6.8
23	P1-02	82039	7.1

98-0411R Dames and Moore C. tentans

Position	sample	ASI No.	Code
51		*	7.2
3		*	7.3
8		*	7.4
24		*	7.5
1		*	7.6
52		*	7.7
34		*	7.8
17	P4-03	82040	8.1
50			8.2
37			8.3
36			8.4
7			8.5
63			8.6
70			8.7
62			8.8

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411

Client Dames and Moore

Organism C. tentans

Parameter Observations and Live counts

Chamber	Initial Day 0	1	2	3	4	5	6	7	8	9	10	1D counts	12	13	14
1	10	N	N	N	N	N	N	N	N	N	N	10			
2	10	N										8			
3	10	N										9			
4	10	N										10			
5	10	N										10			
6	10	N										10			
7	10	N										10			
8	10	N										10			
9	10	N										10			
10	10	N										8			
11	10	N										8			
12	10	N										10			
13	10	N										6			
14	10	N										10			
15	10	N										9			
16	10	N										10			
17	10	N										9			
18	10	N										9			
19	10	N										9			
20	10	N										9			
21	10	N										7			
22	10	N										9			
23	10	N										9			
24	10	N										10			
25	10	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	10			
Int/Date	3/9/99 TM	3/10/99 TD	3/11/99 TD	3/12/99 TD	3/13/99 MH	3/14/99 MH	3/15/99 TD	3/16/99 TD	3/17/99 TD	3/18/99 TD	3/19/99 TD	3/20/99 TD			

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411

Client Dames and Moore

Organism C. tentans

Parameter Observations and Live counts

Chamber	Initial Day 0	1	2	3	4	5	6	7	8	9	10	10 COUNTS	12	13	14
26	10	N	N	N	N	N	N	N	N	N	N	10			
27	10	N										10			
28	10	N										10			
29	10	N										10			
30	10	N										7			
31	10	N										10			
32	10	N										9			
33	10	N										7			
34	10	N										10			
35	10	N										7			
36	10	N										9			
37	10	N										10			
38	10	N										9			
39	10	N										9			
40	10	N										10			
41	10	N										10			
42	10	N										8			
43	10	N										10			
44	10	N										10			
45	10	N										9			
46	10	N										9			
47	10	N										7			
48	10	N										9			
49	10	N										8			
50	10	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	10			
Int/Date	TD 3/1/99	TD 3/1/99	TD 3/1/99	TD 3/1/99	MH 3/1/99	MH 3/1/99	TD 3/1/99	TD 3/1/99	TD 3/1/99	TD 3/1/99	TD 3/1/99	TD 3/1/99			

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411

Client Dames and Moore

Organism C. tentans

Parameter Observations and Live counts

Chamber	Initial Day 0	1	2	3	4	5	6	7	8	9	10	ID (COUNT)	12	13	14
51	10	N	N	N	N	N	N	N	N	N	N	9			
52	10	N										10			
53	10	N										9			
54	10	N										10			
55	10	N										7			
56	10	N										10			
57	10	N										20			
58	10	N										10			
59	10	N										9			
60	10	N										20			
61	10	N										10			
62	10	N										10			
63	10	N										10			
64	10	N										9			
65	10	N										9			
66	10	N										9			
67	10	N										10			
68	10	N										9			
69	10	N										9			
70	10	N										10			
71	10	N										9			
72	10	N	↓	↓	↓	↓	↓	↓	↓	↓		10			
73															
74															
75											↓				
Count/Date	T0/MT 3/9/99	T0 3/10/99	T0 3/11/99	T0 3/12/99	T0/MT 3/13/99	MT 3/14/99	T0 3/15/99	T0 3/16/99	T0 3/17/99	T0 3/18/99	T0 3/19/99	3/19/99 T0			

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	Specific Cond uS/cm	DO mg/L	pH
3/09/99	9:07:44	Control	22.72	300.00	8.27	7.86
3/09/99	9:08:00	82033	22.76	328.00	8.30	7.77
3/09/99	9:08:16	82034	22.95	370.00	8.24	7.62
3/09/99	9:08:29	82035	23.06	338.00	8.19	7.61
3/09/99	9:08:45	82036	23.34	358.00	8.11	7.57
3/09/99	9:08:56	82037	23.39	322.00	8.09	7.54
3/09/99	9:09:11	82038	23.38	335.00	8.06	7.49
3/09/99	9:09:21	82039	23.50	346.00	8.01	7.42
3/09/99	9:09:37	82040	23.88	313.00	7.90	7.41

Project #: 98-411 R Test type: ACUTE CHRONIC OTHER 10 Day Date: 3/9/99
 Species: *P. promelas* *C. dubia* *M. bahia* Other Ct. Day of Study: 0

OPERATIONAL RANGE: Check if OK Meter Used:
 Temperature: 22 to 24 Blue
 Salinity: to Red
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Actions taken: Composite samples

See deviation summary sheet Initials: MA

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
3/10/99	13:26:39	23.53	5.64	7.04
3/10/99	13:27:11	23.87	5.37	6.99
3/10/99	13:27:37	24.03	5.57	6.98
3/10/99	13:28:18	23.67	6.40	7.03
3/10/99	13:28:47	23.87	5.86	7.07
3/10/99	13:29:11	24.20	5.96	7.14
3/10/99	13:33:12	22.96	6.20	7.17
3/10/99	13:34:17	23.07	5.70	6.89
3/10/99	13:35:00	23.33	6.03	6.85
3/10/99	13:35:39	23.35	6.45	7.18
3/10/99	13:36:01	23.36	6.34	7.10
3/10/99	13:36:25	23.46	5.96	7.05
3/10/99	13:38:46	23.35	6.45	7.35
3/10/99	13:39:04	23.35	6.45	7.21
3/10/99	13:39:23	23.47	6.28	7.07
3/10/99	13:39:40	23.42	5.74	7.08
3/10/99	13:39:53	23.45	5.67	7.10
3/10/99	13:40:09	23.52	5.71	7.04
3/10/99	13:41:15	23.40	7.06	7.07
3/10/99	13:42:05	23.51	5.89	7.06
3/10/99	13:42:15	23.47	5.87	7.11
3/10/99	13:42:31	23.53	5.94	7.18
3/10/99	13:42:43	23.50	5.98	7.10
3/10/99	13:42:57	23.51	5.96	6.98
3/10/99	13:43:42	23.59	6.29	6.99
3/10/99	13:44:00	23.60	6.22	6.99
3/10/99	13:44:15	23.64	6.16	7.03
3/10/99	13:44:34	23.43	6.13	7.19
3/10/99	13:44:52	23.57	6.14	7.21
3/10/99	13:45:08	23.64	6.17	7.25
3/10/99	13:46:00	23.57	6.46	7.15
3/10/99	13:46:25	23.64	6.31	7.06
3/10/99	13:46:41	23.66	6.27	7.07
3/10/99	13:47:12	23.62	5.69	6.94
3/10/99	13:47:38	23.63	5.53	6.89
3/10/99	13:47:54	23.61	5.55	6.96
3/10/99	13:49:35	23.42	5.33	6.94
3/10/99	13:49:56	23.43	5.50	6.92
3/10/99	13:50:17	23.53	5.86	7.07
3/10/99	13:50:50	23.54	5.79	6.96
3/10/99	13:51:09	23.61	5.66	6.96
3/10/99	13:51:29	23.60	5.60	7.08
3/10/99	13:52:40	23.56	5.85	6.84
3/10/99	13:52:59	23.57	5.87	6.87
3/10/99	13:53:15	23.64	5.90	6.90
3/10/99	13:53:45	23.64	5.82	6.94
3/10/99	13:54:10	23.63	5.74	6.90
3/10/99	13:55:03	23.72	5.60	6.97
3/10/99	13:55:41	23.64	5.64	6.92
3/10/99	13:56:43	23.29	5.58	6.99

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
3/10/99	13:57:08		23.66	5.80	6.92
3/10/99	13:57:39		23.64	5.76	6.83
3/10/99	13:58:10		23.63	5.48	6.88
3/10/99	13:58:23		23.61	5.38	6.90
3/10/99	13:59:10		23.62	6.15	6.98
3/10/99	14:00:00		23.59	5.87	6.92
3/10/99	14:00:17		23.68	5.80	6.91
3/10/99	14:00:39		23.57	5.87	6.90
3/10/99	14:00:55		23.61	5.93	6.88
3/10/99	14:01:14		23.59	6.01	6.88
3/10/99	14:02:04		23.59	6.11	6.83
3/10/99	14:02:33		23.61	5.85	6.90
3/10/99	14:02:51		23.62	5.47	6.93
3/10/99	14:03:12		23.54	5.57	6.85
3/10/99	14:03:28		23.54	5.56	6.91
3/10/99	14:03:46		23.59	5.61	6.89
3/10/99	14:04:53		23.58	5.91	6.89
3/10/99	14:05:13		23.56	5.94	6.85
3/10/99	14:05:29		23.52	5.98	7.04
3/10/99	14:05:52		23.50	6.20	7.10
3/10/99	14:06:08		23.53	6.24	6.95
3/10/99	14:06:23		23.53	6.23	6.96

Project #: 98-411 R Test type: ACUTE CHRONIC OTHER 10 Day

Date: 3/10/99

Species: *P. promelas* *C. dubia* *M. bahia* Other C+

Day of Study: 1

OPERATIONAL RANGE:

Check if OK

Meter Used:

Temperature: 22 to 24

Blue

Salinity: to

Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: Bath Temp adjusted lower

See deviation summary sheet

Initials: SA

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
3/11/99	9:22:58	22.31	5.93	7.12
3/11/99	9:23:24	22.47	5.82	7.14
3/11/99	9:23:48	22.43	6.40	7.11
3/11/99	9:25:10	22.53	6.24	7.15
3/11/99	9:25:36	22.53	6.00	7.17
3/11/99	9:25:58	22.58	6.26	7.22
3/11/99	9:27:33	22.10	6.46	7.24
3/11/99	9:27:41	22.07	6.35	7.21
3/11/99	9:27:57	22.27	6.54	7.14
3/11/99	9:28:18	22.17	6.71	7.22
3/11/99	9:28:34	22.19	6.68	7.21
3/11/99	9:28:45	22.25	6.66	7.20
3/11/99	9:31:03	22.05	6.43	7.54
3/11/99	9:31:12	22.05	6.34	7.50
3/11/99	9:31:27	22.25	6.43	7.39
3/11/99	9:31:38	22.24	6.43	7.35
3/11/99	9:31:45	22.21	6.44	7.35
3/11/99	9:31:52	22.18	6.45	7.33
3/11/99	9:32:10	22.18	6.58	7.23
3/11/99	9:32:20	22.18	6.64	7.22
3/11/99	9:32:35	22.22	6.71	7.28
3/11/99	9:34:30	22.16	6.23	7.36
3/11/99	9:34:59	22.16	6.04	7.21
3/11/99	9:35:18	22.21	6.31	7.06
3/11/99	9:35:33	22.19	6.35	7.04
3/11/99	9:36:00	22.21	6.40	7.08
3/11/99	9:36:19	22.35	6.30	7.13
3/11/99	9:36:43	22.14	6.37	7.28
3/11/99	9:37:06	22.32	6.42	7.28
3/11/99	9:37:21	22.38	6.43	7.31
3/11/99	9:39:20	22.23	6.40	7.16
3/11/99	9:39:37	22.28	6.49	7.15
3/11/99	9:39:52	22.32	6.72	7.16
3/11/99	9:40:42	22.39	6.45	7.03
3/11/99	9:40:56	22.39	6.36	7.02
3/11/99	9:41:08	22.39	6.28	7.06
3/11/99	9:43:32	22.04	7.04	7.24
3/11/99	9:43:50	22.14	7.02	7.20
3/11/99	9:44:01	22.20	7.00	7.23
3/11/99	9:44:17	22.16	7.01	7.25
3/11/99	9:44:30	22.17	6.92	7.22
3/11/99	9:44:40	22.18	6.84	7.24
3/11/99	9:44:53	22.11	6.76	7.27
3/11/99	9:45:04	22.09	6.75	7.23
3/11/99	9:45:12	22.10	6.74	7.22
3/11/99	9:47:02	22.09	6.92	7.21
3/11/99	9:47:21	22.09	6.81	7.16
3/11/99	9:47:29	22.05	6.61	7.15
3/11/99	9:47:44	22.11	6.84	7.20
3/11/99	9:47:53	22.11	6.30	7.22

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	Conc %	Temperature C	DO mg/L	pH
3/11/99	9:48:05		22.18	6.16	7.19
3/11/99	9:48:26		22.14	6.81	7.13
3/11/99	9:48:37		22.15	6.70	7.12
3/11/99	9:48:44		22.17	6.73	7.12
3/11/99	9:48:57		22.13	6.69	7.15
3/11/99	9:49:06		22.13	6.75	7.20
3/11/99	9:49:24		22.36	6.74	7.17
3/11/99	9:51:38		22.08	6.27	6.98
3/11/99	9:51:49		22.06	6.24	6.97
3/11/99	9:52:00		22.11	6.31	6.99
3/11/99	9:52:27		22.04	6.49	7.04
3/11/99	9:52:36		22.03	6.50	7.08
3/11/99	9:52:44		22.06	6.49	7.12
3/11/99	9:53:08		22.09	6.58	7.14
3/11/99	9:53:33		22.11	6.60	7.18
3/11/99	9:53:46		22.14	6.58	7.17
3/11/99	9:53:55		22.11	6.56	7.14
3/11/99	9:54:03		22.07	6.56	7.12
3/11/99	9:54:16		22.12	6.57	7.17
3/11/99	9:54:34		22.20	6.54	7.24
3/11/99	9:54:45		22.20	6.47	7.18
3/11/99	9:54:56		22.24	6.43	7.18

Project #: 93-411 R Test type: ACUTE CHRONIC OTHER 10 day

Date: 3/11/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *C. tentans*

Day of Study: 2

OPERATIONAL RANGE: Check if OK

Temperature: 22 to 24

Salinity: — to —

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Meter Used:

Blue

Red

Actions taken: _____

See deviation summary sheet

Initials: MH

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
3/12/99	14:50:03	23.41	0.00	0.0	5.30	7.36
3/12/99	14:50:29	23.52	0.00	0.0	5.82	7.31
3/12/99	14:50:54	23.28	0.00	0.0	6.26	7.32
3/12/99	14:51:42	23.46	0.00	0.0	5.04	7.29
3/12/99	14:53:19	23.60	0.00	0.0	4.22	7.21
3/12/99	14:53:40	23.71	0.00	0.0	4.03	7.23
3/12/99	14:55:02	22.37	1.00	0.0	4.98	7.28
3/12/99	14:55:29	22.21	1.00	0.0	5.36	7.24
3/12/99	14:55:48	22.14	1.00	0.0	5.86	7.21
3/12/99	14:56:04	22.11	1.00	0.0	6.60	7.24
3/12/99	14:56:43	22.07	1.00	0.0	6.55	7.22
3/12/99	14:56:59	22.18	1.00	0.0	6.36	7.24
3/12/99	14:57:19	22.23	1.00	0.0	6.29	7.29
3/12/99	14:57:56	22.24	0.00	0.0	6.18	7.17
3/12/99	14:58:15	22.34	1.00	0.0	5.82	7.17
3/12/99	14:58:35	22.36	0.00	0.0	6.15	7.20
3/12/99	14:59:12	22.13	0.00	0.0	6.39	7.26
3/12/99	14:59:32	22.22	0.00	0.0	6.39	7.23
3/12/99	15:00:37	22.10	0.00	0.0	6.20	7.10
3/12/99	15:00:59	22.20	0.00	0.0	6.09	7.17
3/12/99	15:01:22	22.26	0.00	0.0	6.20	7.25
3/12/99	15:01:48	22.31	1.00	0.0	6.36	7.32
3/12/99	15:02:05	22.23	0.00	0.0	6.35	7.26
3/12/99	15:02:16	22.20	1.00	0.0	6.28	7.21
3/12/99	15:02:54	22.36	1.00	0.0	4.98	7.13
3/12/99	15:03:03	22.30	1.00	0.0	4.52	7.11
3/12/99	15:03:29	22.33	1.00	0.0	5.73	7.16
3/12/99	15:03:51	22.06	1.00	0.0	6.56	7.23
3/12/99	15:04:18	22.31	0.00	0.0	5.82	7.26
3/12/99	15:04:30	22.31	1.00	0.0	5.17	7.28
3/12/99	15:04:55	22.33	0.00	0.0	6.38	7.24
3/12/99	15:05:20	22.40	1.00	0.0	6.31	7.17
3/12/99	15:05:40	22.33	1.00	0.0	5.65	7.17
3/12/99	15:06:21	22.47	1.00	0.0	6.05	7.02
3/12/99	15:06:41	22.45	1.00	0.0	6.38	7.15
3/12/99	15:07:00	22.45	1.00	0.0	6.52	7.22
3/12/99	15:09:05	22.24	1.00	0.0	4.96	7.26
3/12/99	15:09:20	22.22	1.00	0.0	4.91	7.23
3/12/99	15:09:42	22.42	1.00	0.0	5.88	7.30
3/12/99	15:10:02	22.29	1.00	0.0	6.46	7.33
3/12/99	15:10:48	22.31	1.00	0.0	5.87	7.26
3/12/99	15:11:13	22.35	1.00	0.0	6.21	7.30
3/12/99	15:11:30	22.21	1.00	0.0	6.42	7.27
3/12/99	15:12:00	22.23	1.00	0.0	6.52	7.18
3/12/99	15:12:22	22.37	1.00	0.0	6.26	7.19
3/12/99	15:12:41	22.38	1.00	0.0	6.29	7.21
3/12/99	15:13:14	22.33	1.00	0.0	6.43	7.21
3/12/99	15:13:29	22.28	1.00	0.0	6.38	7.22
3/12/99	15:13:48	22.39	1.00	0.0	6.46	7.27
3/12/99	15:14:15	22.36	1.00	0.0	6.61	7.27

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	Conc %	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
3/12/99	15:14:36		22.37	1.00	0.0	5.85	7.18
3/12/99	15:15:10		22.37	1.00	0.0	5.63	7.14
3/12/99	15:15:30		22.31	1.00	0.0	5.05	7.15
3/12/99	15:15:39		22.27	1.00	0.0	4.49	7.15
3/12/99	15:16:13		22.41	1.00	0.0	6.12	7.18
3/12/99	15:16:42		22.22	1.00	0.0	6.70	7.24
3/12/99	15:17:00		22.36	1.00	0.0	6.96	7.22
3/12/99	15:17:16		22.36	1.00	0.0	6.96	7.18
3/12/99	15:17:38		22.21	0.00	0.0	6.91	7.17
3/12/99	15:17:49		22.19	0.00	0.0	6.90	7.18
3/12/99	15:18:09		22.15	0.00	0.0	6.88	7.20
3/12/99	15:18:50		22.18	0.00	0.0	5.37	7.18
3/12/99	15:19:00		22.12	1.00	0.0	4.84	7.18
3/12/99	15:19:29		22.29	1.00	0.0	6.34	7.20
3/12/99	15:19:46		22.19	1.00	0.0	6.78	7.25
3/12/99	15:20:09		22.23	0.00	0.0	6.79	7.23
3/12/99	15:20:29		22.22	0.00	0.0	6.75	7.23
3/12/99	15:20:44		22.18	1.00	0.0	6.92	7.22
3/12/99	15:21:36		22.17	1.00	0.0	6.96	7.36
3/12/99	15:21:56		22.12	1.00	0.0	6.88	7.36
3/12/99	15:22:11		22.17	1.00	0.0	6.77	7.29
3/12/99	15:22:27		22.24	1.00	0.0	6.77	7.28

Project #: 98-411R Test type: ACUTE CHRONIC OTHER 10 day

Date: 3/12/99

Species: *P. promelas* *C. dubia* *M. bahia* Other Artentans

Day of Study: 3

OPERATIONAL RANGE:

Temperature: 22 to 24 Check if OK
 Salinity: to
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Meter Used:

Blue
Red

Actions taken: _____

See deviation summary sheet

Initials: MH

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
3/13/99	9:35:04	24.09	6.11	7.45
3/13/99	9:35:13	24.10	6.04	7.38
3/13/99	9:35:20	24.24	6.03	7.36
3/13/99	9:35:30	24.27	6.08	7.35
3/13/99	9:35:52	24.51	6.22	7.38
3/13/99	9:35:58	24.50	6.21	7.35
3/13/99	9:36:32	22.90	6.53	7.36
3/13/99	9:36:40	22.80	6.54	7.34
3/13/99	9:36:51	22.65	6.57	7.31
3/13/99	9:37:10	22.61	6.69	7.31
3/13/99	9:37:21	22.63	6.72	7.30
3/13/99	9:37:28	22.67	6.74	7.28
3/13/99	9:37:47	22.71	6.94	7.32
3/13/99	9:37:57	22.70	7.07	7.32
3/13/99	9:38:03	22.73	7.10	7.29
3/13/99	9:38:21	22.71	7.16	7.31
3/13/99	9:38:31	22.68	7.13	7.30
3/13/99	9:38:39	22.67	7.14	7.28
3/13/99	9:39:04	22.74	7.21	7.22
3/13/99	9:39:13	22.72	7.19	7.22
3/13/99	9:39:19	22.73	7.18	7.23
3/13/99	9:39:38	22.68	7.11	7.30
3/13/99	9:39:48	22.67	7.08	7.27
3/13/99	9:39:53	22.70	7.07	7.24
3/13/99	9:40:13	22.69	7.09	7.21
3/13/99	9:40:27	22.72	7.11	7.18
3/13/99	9:40:35	22.73	7.12	7.17
3/13/99	9:40:52	22.60	7.14	7.23
3/13/99	9:41:08	22.64	7.12	7.25
3/13/99	9:41:15	22.67	7.10	7.24
3/13/99	9:41:32	22.70	7.06	7.24
3/13/99	9:41:54	22.69	7.02	7.21
3/13/99	9:42:02	22.69	7.01	7.21
3/13/99	9:42:16	22.74	7.02	7.16
3/13/99	9:42:27	22.73	7.06	7.18
3/13/99	9:42:34	22.73	7.09	7.20
3/13/99	9:44:01	22.61	6.69	7.26
3/13/99	9:44:09	22.59	6.45	7.22
3/13/99	9:44:16	22.60	6.64	7.22
3/13/99	9:44:35	22.55	6.73	7.24
3/13/99	9:44:44	22.51	6.34	7.22
3/13/99	9:44:52	22.58	6.44	7.23
3/13/99	9:45:11	22.63	6.90	7.20
3/13/99	9:45:21	22.61	6.79	7.19
3/13/99	9:45:28	22.63	6.88	7.19
3/13/99	9:45:49	22.71	6.89	7.23
3/13/99	9:46:07	22.53	6.86	7.21
3/13/99	9:46:15	22.54	6.85	7.19
3/13/99	9:46:34	22.63	6.72	7.22
3/13/99	9:46:52	22.60	6.69	7.23

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Conc %	Temperature C	DO mg/L	pH
3/13/99	9:46:57		22.59	6.64	7.21
3/13/99	9:47:11		22.59	6.41	7.17
3/13/99	9:47:25		22.62	6.77	7.16
3/13/99	9:47:36		22.68	6.54	7.16
3/13/99	9:48:07		22.67	6.42	7.18
3/13/99	9:48:14		22.65	6.37	7.19
3/13/99	9:48:21		22.67	6.34	7.19
3/13/99	9:48:33		22.71	6.44	7.17
3/13/99	9:49:06		22.69	6.74	7.14
3/13/99	9:49:17		22.66	6.60	7.12
3/13/99	9:49:37		22.57	7.04	7.15
3/13/99	9:49:56		22.53	7.07	7.16
3/13/99	9:50:03		22.53	6.57	7.16
3/13/99	9:50:20		22.53	6.67	7.15
3/13/99	9:50:39		22.53	6.94	7.17
3/13/99	9:50:49		22.53	6.89	7.16
3/13/99	9:51:09		22.53	6.98	7.14
3/13/99	9:51:23		22.50	6.34	7.13
3/13/99	9:51:32		22.52	6.63	7.13
3/13/99	9:51:43		22.59	6.95	7.18
3/13/99	9:51:50		22.65	7.01	7.17
3/13/99	9:51:58		22.67	7.14	7.16

Project #: 98-41R Test type: ACUTE CHRONIC OTHER 10 dayDate: 3/13/99Species: *P. promelas* *C. dubia* *M. bahia* Other *C. tentans*Day of Study: 4

OPERATIONAL RANGE:

Check if OK

Meter Used:

Temperature: 22 to 24 *Blue Salinity: — to — Red Dissolved oxygen: > 4.0 pH: 6.0 to 9.0 Actions taken: * adjusted tempSee deviation summary sheet Initials: MH

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
3/14/99	9:29:32	23.95	5.31	7.60
3/14/99	9:29:42	23.25	5.37	7.55
3/14/99	9:29:52	23.05	6.07	7.53
3/14/99	9:30:12	23.76	6.33	7.54
3/14/99	9:30:43	23.98	5.84	7.53
3/14/99	9:30:50	23.75	5.70	7.51
3/14/99	9:31:17	22.75	6.20	7.49
3/14/99	9:31:23	22.69	5.79	7.46
3/14/99	9:31:29	22.61	5.72	7.44
3/14/99	9:31:45	22.63	6.40	7.44
3/14/99	9:32:00	22.49	6.39	7.39
3/14/99	9:32:05	22.48	6.34	7.37
3/14/99	9:32:33	22.70	6.48	7.48
3/14/99	9:32:43	22.69	6.32	7.46
3/14/99	9:32:51	22.75	6.10	7.43
3/14/99	9:33:10	22.85	6.37	7.43
3/14/99	9:33:19	22.82	6.32	7.44
3/14/99	9:33:28	22.79	6.33	7.42
3/14/99	9:33:48	22.79	6.94	7.35
3/14/99	9:33:55	22.77	6.82	7.32
3/14/99	9:34:01	22.77	6.81	7.34
3/14/99	9:34:17	22.76	6.80	7.40
3/14/99	9:34:28	22.73	6.74	7.39
3/14/99	9:34:34	22.71	6.69	7.36
3/14/99	9:35:00	22.80	5.93	7.30
3/14/99	9:35:07	22.81	5.66	7.28
3/14/99	9:35:13	22.82	5.77	7.27
3/14/99	9:35:26	22.64	6.37	7.32
3/14/99	9:35:40	22.77	6.57	7.35
3/14/99	9:35:46	22.85	6.66	7.35
3/14/99	9:36:05	22.90	6.91	7.34
3/14/99	9:36:17	22.91	6.52	7.33
3/14/99	9:36:23	22.93	6.55	7.33
3/14/99	9:36:39	22.88	6.52	7.29
3/14/99	9:36:45	22.88	6.50	7.29
3/14/99	9:36:50	22.91	6.50	7.29
3/14/99	9:38:04	22.86	6.55	7.37
3/14/99	9:38:13	22.83	6.15	7.34
3/14/99	9:38:19	22.84	6.36	7.33
3/14/99	9:38:37	22.84	6.63	7.37
3/14/99	9:38:49	22.84	6.61	7.36
3/14/99	9:38:57	22.85	6.55	7.37
3/14/99	9:39:20	22.80	6.56	7.34
3/14/99	9:39:32	22.74	6.56	7.32
3/14/99	9:39:40	22.79	6.58	7.33
3/14/99	9:39:56	22.83	6.62	7.35
3/14/99	9:40:10	22.75	6.59	7.33
3/14/99	9:40:15	22.76	6.58	7.31
3/14/99	9:40:35	22.82	6.54	7.34
3/14/99	9:40:45	22.75	6.45	7.33

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	Conc %	Temperature C	DO mg/L	pH
3/14/99	9:40:54		22.74	6.39	7.32
3/14/99	9:41:19		22.71	6.20	7.28
3/14/99	9:41:30		22.62	5.62	7.25
3/14/99	9:41:37		22.73	5.12	7.24
3/14/99	9:42:11		22.84	5.38	7.29
3/14/99	9:42:21		22.81	5.40	7.30
3/14/99	9:42:27		22.81	5.44	7.28
3/14/99	9:42:42		22.88	6.29	7.26
3/14/99	9:42:55		22.82	6.37	7.24
3/14/99	9:43:02		22.81	6.37	7.24
3/14/99	9:43:37		22.74	6.28	7.25
3/14/99	9:43:51		22.71	6.20	7.25
3/14/99	9:43:57		22.72	6.17	7.23
3/14/99	9:44:17		22.72	6.14	7.24
3/14/99	9:44:36		22.61	6.20	7.29
3/14/99	9:44:41		22.61	6.24	7.28
3/14/99	9:44:47		22.65	6.26	7.27
3/14/99	9:44:52		22.67	6.29	7.27
3/14/99	9:44:56		22.69	6.32	7.26
3/14/99	9:45:02		22.70	6.38	7.26
3/14/99	9:45:09		22.72	6.42	7.28
3/14/99	9:45:14		22.74	6.44	7.27

Project #: 98-411R Test type: ACUTE CHRONIC OTHER 10 day ~~28 day~~ Date: 3/14/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *e. tentans* Day of Study: 5

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: to Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: MH

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
3/15/99	14:19:49	24.18	4.62	7.30
3/15/99	14:20:22	24.31	4.69	7.30
3/15/99	14:20:46	24.34	5.31	7.30
3/15/99	14:21:27	24.16	6.20	7.32
3/15/99	14:21:42	24.40	5.87	7.32
3/15/99	14:21:58	24.41	5.70	7.31
3/15/99	14:23:17	22.31	6.06	7.32
3/15/99	14:23:41	22.18	5.74	7.28
3/15/99	14:24:00	22.15	5.75	7.24
3/15/99	14:24:33	22.13	6.42	7.32
3/15/99	14:24:52	22.22	6.34	7.31
3/15/99	14:25:37	22.27	6.41	7.34
3/15/99	14:26:25	22.20	6.61	7.45
3/15/99	14:26:47	22.25	6.78	7.42
3/15/99	14:27:06	22.26	6.89	7.39
3/15/99	14:27:37	22.35	6.91	7.41
3/15/99	14:28:10	22.20	6.90	7.45
3/15/99	14:28:27	22.15	6.95	7.44
3/15/99	14:28:50	22.21	7.16	7.37
3/15/99	14:29:03	22.22	7.30	7.37
3/15/99	14:29:29	22.18	7.16	7.43
3/15/99	14:29:50	22.22	6.71	7.47
3/15/99	14:30:07	22.23	6.68	7.45
3/15/99	14:30:29	22.26	6.69	7.39
3/15/99	14:31:12	22.26	6.83	7.36
3/15/99	14:31:28	22.30	6.80	7.34
3/15/99	14:31:42	22.25	6.85	7.34
3/15/99	14:32:18	22.05	6.98	7.40
3/15/99	14:32:51	22.27	6.68	7.39
3/15/99	14:33:05	22.29	6.56	7.40
3/15/99	14:33:19	22.30	6.68	7.41
3/15/99	14:33:33	22.32	7.35	7.40
3/15/99	14:33:45	22.26	7.42	7.43
3/15/99	14:34:11	22.32	7.46	7.39
3/15/99	14:34:29	22.38	6.88	7.36
3/15/99	14:34:43	22.36	7.10	7.36
3/15/99	14:36:14	22.12	7.15	7.35
3/15/99	14:36:56	22.33	6.44	7.33
3/15/99	14:37:25	22.36	6.49	7.38
3/15/99	14:38:12	22.30	6.39	7.30
3/15/99	14:38:40	22.24	5.98	7.28
3/15/99	14:39:04	22.28	6.03	7.29
3/15/99	14:40:20	22.20	6.55	7.22
3/15/99	14:40:33	22.21	6.56	7.24
3/15/99	14:40:49	22.31	6.64	7.27
3/15/99	14:41:20	22.28	6.64	7.29
3/15/99	14:41:33	22.25	6.52	7.27
3/15/99	14:42:07	22.22	7.01	7.27
3/15/99	14:42:43	22.26	5.46	7.23
3/15/99	14:42:56	22.22	5.20	7.21

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
3/15/99	14:43:26		22.39	5.72	7.19
3/15/99	14:43:43		22.28	6.30	7.20
3/15/99	14:43:58		22.25	6.76	7.23
3/15/99	14:44:10		22.30	7.09	7.22
3/15/99	14:44:32		22.30	6.34	7.22
3/15/99	14:44:45		22.26	6.33	7.24
3/15/99	14:47:27		22.39	6.72	7.29
3/15/99	14:47:40		22.24	6.64	7.29
3/15/99	14:48:00		22.25	6.73	7.27
3/15/99	14:48:09		22.24	6.72	7.25
3/15/99	14:48:27		22.22	6.62	7.23
3/15/99	14:48:37		22.19	6.52	7.22
3/15/99	14:48:51		22.16	6.37	7.23
3/15/99	14:49:11		22.21	6.40	7.22
3/15/99	14:49:27		22.18	6.44	7.25
3/15/99	14:49:37		22.19	6.50	7.23
3/15/99	14:49:53		22.19	6.55	7.21
3/15/99	14:50:13		22.23	6.34	7.21
3/15/99	14:50:29		22.21	6.26	7.23
3/15/99	14:50:47		22.19	6.30	7.27
3/15/99	14:50:59		22.19	6.25	7.23
3/15/99	14:51:14		22.22	6.24	7.23

Project #: 98-411 Test type: ACUTE CHRONIC OTHER isday Flowthrough Date: 3/15/99
 Species: *P. promelas* *C. dubia* *M. bahia* Other C. tentans Day of Study: 6

OPERATIONAL RANGE: Temperature: 22 to 24 Check if OK Meter Used: Blue
 Salinity: - to - Red
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: m

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
3/16/99	16:25:15	23.42	6.10	7.94
3/16/99	16:25:35	23.62	5.97	7.81
3/16/99	16:25:48	23.73	5.99	7.78
3/16/99	16:26:01	23.41	6.09	7.74
3/16/99	16:26:23	23.57	6.21	7.72
3/16/99	16:26:36	23.94	6.19	7.69
3/16/99	16:27:11	22.79	6.49	7.63
3/16/99	16:27:44	22.65	5.56	7.53
3/16/99	16:28:00	22.68	5.53	7.48
3/16/99	16:28:22	22.79	6.49	7.51
3/16/99	16:28:33	22.81	6.34	7.49
3/16/99	16:28:44	22.83	6.32	7.49
3/16/99	16:29:41	22.93	6.66	7.60
3/16/99	16:29:57	22.96	6.57	7.58
3/16/99	16:30:10	22.96	6.51	7.54
3/16/99	16:30:42	22.98	6.42	7.52
3/16/99	16:30:58	22.97	6.37	7.52
3/16/99	16:31:11	22.99	6.37	7.50
3/16/99	16:31:35	23.05	6.46	7.43
3/16/99	16:31:46	23.05	6.46	7.42
3/16/99	16:31:55	23.07	6.41	7.43
3/16/99	16:32:18	22.98	6.38	7.49
3/16/99	16:32:30	22.99	6.30	7.48
3/16/99	16:32:41	23.04	6.16	7.45
3/16/99	16:33:01	23.08	6.08	7.43
3/16/99	16:33:14	23.08	6.07	7.42
3/16/99	16:33:24	23.08	6.08	7.41
3/16/99	16:33:40	22.99	6.23	7.44
3/16/99	16:33:56	23.07	6.31	7.45
3/16/99	16:34:03	23.08	6.32	7.44
3/16/99	16:34:49	23.11	6.19	7.45
3/16/99	16:35:05	23.08	6.04	7.43
3/16/99	16:35:19	23.09	6.00	7.42
3/16/99	16:35:37	23.09	6.03	7.40
3/16/99	16:35:46	23.09	6.01	7.38
3/16/99	16:35:55	23.09	5.97	7.37
3/16/99	16:37:33	22.83	6.39	7.38
3/16/99	16:37:47	22.91	6.15	7.35
3/16/99	16:37:56	22.95	6.01	7.35
3/16/99	16:38:16	23.03	6.28	7.39
3/16/99	16:38:28	23.03	6.17	7.39
3/16/99	16:38:37	23.01	6.09	7.38
3/16/99	16:38:59	23.02	6.24	7.39
3/16/99	16:39:10	22.98	6.36	7.39
3/16/99	16:39:25	23.02	6.38	7.38
3/16/99	16:40:03	23.06	6.24	7.38
3/16/99	16:40:27	23.10	5.69	7.34
3/16/99	16:40:39	23.08	5.64	7.32
3/16/99	16:41:07	23.06	5.78	7.31
3/16/99	16:41:19	23.07	5.73	7.30

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
3/16/99	16:41:28		23.09	5.66	7.28
3/16/99	16:42:01		23.12	5.55	7.28
3/16/99	16:42:13		23.07	5.52	7.27
3/16/99	16:42:25		23.09	5.51	7.28
3/16/99	16:42:50		23.03	5.73	7.32
3/16/99	16:43:07		23.05	5.90	7.34
3/16/99	16:43:23		23.10	6.64	7.31
3/16/99	16:43:46		23.09	6.25	7.29
3/16/99	16:44:01		23.08	6.09	7.28
3/16/99	16:44:14		23.06	5.99	7.27
3/16/99	16:44:48		23.09	5.78	7.25
3/16/99	16:44:58		23.06	5.69	7.23
3/16/99	16:45:14		23.05	5.65	7.25
3/16/99	16:45:39		23.05	5.68	7.25
3/16/99	16:45:51		23.00	5.61	7.25
3/16/99	16:46:04		23.01	5.57	7.26
3/16/99	16:46:23		22.99	6.19	7.27
3/16/99	16:46:35		22.98	5.86	7.26
3/16/99	16:46:49		22.97	6.14	7.28
3/16/99	16:47:10		22.97	6.31	7.31
3/16/99	16:48:25		22.96	6.43	7.24
3/16/99	16:49:07		23.00	6.09	7.26

Project #: 411R Test type: ACUTE CHRONIC OTHER 10 Eden Southern Date: 3/16/99

Species: *P. promelas* *C. dubia* *M. bahia* Other C. tentans Day of Study: 7

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: - to - Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: TD

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
3/17/99	11:41:37	22.69	0.00	0.0	8.54	7.95
3/17/99	11:41:42	23.77	0.00	0.0	6.56	7.76
3/17/99	11:41:47	23.87	0.00	0.0	6.39	7.71
3/17/99	11:42:05	23.18	0.00	0.0	6.79	7.69
3/17/99	11:42:11	23.44	1.00	0.0	7.22	7.66
3/17/99	11:42:17	23.85	1.00	0.0	6.91	7.63
3/17/99	11:42:36	22.76	1.00	0.0	7.61	7.66
3/17/99	11:42:41	22.75	1.00	0.0	7.81	7.62
3/17/99	11:42:47	22.86	1.00	0.0	7.57	7.59
3/17/99	11:43:06	22.31	0.00	0.0	7.61	7.59
3/17/99	11:43:11	22.45	0.00	0.0	7.92	7.56
3/17/99	11:43:17	22.77	0.00	0.0	7.67	7.53
3/17/99	11:43:31	22.68	0.00	0.0	7.39	7.39
3/17/99	11:43:36	22.79	0.00	0.0	7.70	7.48
3/17/99	11:43:42	23.00	0.00	0.0	7.60	7.51
3/17/99	11:44:03	22.70	0.00	0.0	7.64	7.55
3/17/99	11:44:08	22.92	0.00	0.0	7.69	7.53
3/17/99	11:44:13	23.08	0.00	0.0	7.38	7.50
3/17/99	11:44:36	22.18	0.00	0.0	8.19	7.49
3/17/99	11:44:40	22.52	0.00	0.0	8.27	7.46
3/17/99	11:44:46	22.89	0.00	0.0	8.09	7.45
3/17/99	11:45:19	23.08	0.00	0.0	7.34	7.50
3/17/99	11:45:24	23.11	0.00	0.0	6.74	7.48
3/17/99	11:45:29	23.12	0.00	0.0	6.53	7.46
3/17/99	11:45:48	22.49	0.00	0.0	7.55	7.48
3/17/99	11:45:54	22.88	0.00	0.0	7.73	7.45
3/17/99	11:46:01	23.14	0.00	0.0	7.42	7.42
3/17/99	11:46:18	22.45	0.00	0.0	7.79	7.44
3/17/99	11:46:23	22.64	0.00	0.0	8.09	7.43
3/17/99	11:46:28	22.92	0.00	0.0	7.51	7.42
3/17/99	11:46:44	22.61	0.00	0.0	7.59	7.47
3/17/99	11:46:48	22.75	0.00	0.0	7.87	7.43
3/17/99	11:46:53	22.97	0.00	0.0	7.53	7.41
3/17/99	11:47:11	22.42	0.00	0.0	7.65	7.47
3/17/99	11:47:15	22.66	0.00	0.0	8.08	7.44
3/17/99	11:47:20	22.93	0.00	0.0	7.73	7.41
3/17/99	11:47:53	22.12	0.00	0.0	8.58	7.41
3/17/99	11:47:59	22.64	0.00	0.0	7.99	7.36
3/17/99	11:48:04	22.93	0.00	0.0	7.04	7.34
3/17/99	11:48:21	22.63	0.00	0.0	7.47	7.41
3/17/99	11:48:26	22.81	0.00	0.0	7.84	7.40
3/17/99	11:48:31	23.02	0.00	0.0	7.67	7.36
3/17/99	11:48:48	22.65	0.00	0.0	7.76	7.24
3/17/99	11:48:53	22.84	0.00	0.0	8.02	7.32
3/17/99	11:48:58	23.06	0.00	0.0	7.85	7.35
3/17/99	11:49:16	22.55	0.00	0.0	8.02	7.41
3/17/99	11:49:20	22.68	0.00	0.0	8.32	7.38
3/17/99	11:49:25	22.93	0.00	0.0	8.17	7.35
3/17/99	11:49:42	22.80	0.00	0.0	7.92	7.38
3/17/99	11:49:47	22.95	0.00	0.0	8.23	7.35

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
3/17/99	11:49:52		23.15	0.00	0.0	7.56	7.32
3/17/99	11:50:10		22.60	0.00	0.0	7.39	7.35
3/17/99	11:50:15		22.85	0.00	0.0	7.74	7.31
3/17/99	11:50:20		23.05	0.00	0.0	7.46	7.28
3/17/99	11:50:37		22.81	0.00	0.0	7.75	7.32
3/17/99	11:50:42		22.98	0.00	0.0	8.11	7.31
3/17/99	11:50:47		23.16	0.00	0.0	7.77	7.31
3/17/99	11:51:06		22.64	0.00	0.0	7.86	7.33
3/17/99	11:51:12		22.87	0.00	0.0	8.14	7.30
3/17/99	11:51:16		23.06	0.00	0.0	7.80	7.28
3/17/99	11:51:32		22.47	0.00	0.0	7.65	7.30
3/17/99	11:51:37		22.62	0.00	0.0	8.04	7.27
3/17/99	11:51:42		22.90	0.00	0.0	7.96	7.25
3/17/99	11:53:02		22.45	0.00	0.0	7.90	7.30
3/17/99	11:53:09		22.76	0.00	0.0	6.62	7.24
3/17/99	11:53:17		22.98	0.00	0.0	6.15	7.23
3/17/99	11:53:40		22.31	0.00	0.0	7.91	7.27
3/17/99	11:53:48		22.83	0.00	0.0	7.60	7.24
3/17/99	11:53:55		23.07	0.00	0.0	7.24	7.21
3/17/99	11:54:25		22.70	0.00	0.0	7.81	7.30
3/17/99	11:54:32		22.91	0.00	0.0	6.94	7.28
3/17/99	11:54:38		23.06	0.00	0.0	6.69	7.27

Project #: 411R Test type: ACUTE CHRONIC OTHER 10 day flow thru Date: 3/17/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *C. tentans* Day of Study: P

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: — to — Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: TR

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
3/18/99	13:23:18	22.74	2.00	0.0	7.04	7.52
3/18/99	13:23:38	23.78	2.00	0.0	5.87	7.35
3/18/99	13:23:42	23.99	3.00	0.0	6.58	7.42
3/18/99	13:24:03	23.63	2.00	0.0	7.34	7.29
3/18/99	13:24:07	23.69	3.00	0.0	7.65	7.42
3/18/99	13:24:11	24.14	3.00	0.0	7.86	7.46
3/18/99	13:24:30	23.96	2.00	0.0	7.29	7.34
3/18/99	13:24:34	23.87	2.00	0.0	7.65	7.41
3/18/99	13:24:38	23.86	2.00	0.0	7.24	7.43
3/18/99	13:34:26	22.96	2.00	0.0	7.45	7.63
3/18/99	13:34:31	23.19	3.00	0.0	6.86	7.61
3/18/99	13:34:35	23.45	3.00	0.0	6.43	7.58
3/18/99	13:34:49	23.00	2.00	0.0	6.14	7.38
3/18/99	13:34:53	23.09	2.00	0.0	6.66	7.48
3/18/99	13:34:58	23.47	2.00	0.0	6.81	7.50
3/18/99	13:35:14	23.28	2.00	0.0	6.51	7.54
3/18/99	13:35:18	23.47	2.00	0.0	6.94	7.53
3/18/99	13:35:23	23.76	2.00	0.0	6.88	7.50
3/18/99	13:35:36	23.57	2.00	0.0	6.40	7.27
3/18/99	13:35:40	23.64	2.00	0.0	6.88	7.36
3/18/99	13:35:45	23.88	2.00	0.0	6.88	7.39
3/18/99	13:35:59	23.43	2.00	0.0	6.61	7.25
3/18/99	13:36:04	23.48	2.00	0.0	7.29	7.42
3/18/99	13:36:08	23.78	2.00	0.0	7.17	7.46
3/18/99	13:36:23	23.56	2.00	0.0	6.30	7.30
3/18/99	13:36:27	23.65	2.00	0.0	6.72	7.38
3/18/99	13:36:31	23.93	2.00	0.0	7.02	7.41
3/18/99	13:36:46	23.73	2.00	0.0	7.03	7.45
3/18/99	13:36:50	23.72	2.00	0.0	7.38	7.42
3/18/99	13:36:54	23.90	2.00	0.0	7.48	7.40
3/18/99	13:37:10	23.64	2.00	0.0	7.16	7.45
3/18/99	13:37:14	23.71	2.00	0.0	7.48	7.43
3/18/99	13:37:18	23.95	2.00	0.0	7.53	7.43
3/18/99	13:37:31	23.80	2.00	0.0	7.10	7.26
3/18/99	13:37:35	23.82	2.00	0.0	7.34	7.39
3/18/99	13:37:39	24.01	2.00	0.0	7.53	7.42
3/18/99	13:38:13	23.12	2.00	0.0	8.10	7.48
3/18/99	13:38:17	23.47	2.00	0.0	7.79	7.44
3/18/99	13:38:22	23.76	2.00	0.0	7.34	7.40
3/18/99	13:38:35	23.62	2.00	0.0	6.52	7.20
3/18/99	13:38:39	23.69	2.00	0.0	7.32	7.35
3/18/99	13:38:44	23.91	2.00	0.0	7.10	7.37
3/18/99	13:38:58	23.50	2.00	0.0	6.52	7.23
3/18/99	13:39:02	23.60	2.00	0.0	7.04	7.34
3/18/99	13:39:06	23.86	2.00	0.0	7.22	7.39
3/18/99	13:39:20	23.53	2.00	0.0	6.87	7.21
3/18/99	13:39:24	23.55	2.00	0.0	7.37	7.32
3/18/99	13:39:28	23.79	2.00	0.0	7.27	7.36
3/18/99	13:39:43	23.41	2.00	0.0	6.93	7.22
3/18/99	13:39:49	23.72	2.00	0.0	7.49	7.35

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
3/18/99	13:39:53		23.99	2.00	0.0	6.94	7.34
3/18/99	13:40:08		23.44	2.00	0.0	6.68	7.37
3/18/99	13:40:12		23.51	2.00	0.0	7.19	7.32
3/18/99	13:40:17		23.82	2.00	0.0	6.90	7.29
3/18/99	13:40:34		22.91	2.00	0.0	7.02	7.31
3/18/99	13:40:39		23.19	2.00	0.0	7.38	7.29
3/18/99	13:40:43		23.64	2.00	0.0	7.44	7.30
3/18/99	13:40:59		23.36	2.00	0.0	7.49	7.14
3/18/99	13:41:03		23.53	2.00	0.0	7.81	7.26
3/18/99	13:41:07		23.83	2.00	0.0	7.95	7.28
3/18/99	13:41:23		23.12	2.00	0.0	7.26	7.11
3/18/99	13:41:28		23.37	2.00	0.0	7.84	7.21
3/18/99	13:41:32		23.75	2.00	0.0	7.56	7.25
3/18/99	13:41:50		23.16	2.00	0.0	7.30	7.15
3/18/99	13:41:54		23.42	2.00	0.0	7.50	7.23
3/18/99	13:41:58		23.74	2.00	0.0	7.21	7.25
3/18/99	13:42:15		23.50	2.00	0.0	6.94	7.33
3/18/99	13:42:21		23.71	2.00	0.0	7.59	7.29
3/18/99	13:42:26		23.97	2.00	0.0	7.11	7.25
3/18/99	13:42:42		23.24	2.00	0.0	6.99	7.08
3/18/99	13:42:47		23.34	2.00	0.0	7.48	7.22
3/18/99	13:42:51		23.65	2.00	0.0	7.63	7.24

Project #: 4UR Test type: ACUTE CHRONIC OTHER 30 day flow thru Date: 3/18/99

Species: *P. promelas* *C. dubia* *M. bahia* Other C. tentans Day of Study: _____

OPERATIONAL RANGE:
 Temperature: 22 to 24 Check if OK
 Salinity: — to —
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0
 Meter Used:
 Blue
 Red

Actions taken: _____

See deviation summary sheet Initials: TD

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
3/19/99	8:50:35	22.02	2.00	0.0	4.80	6.23
3/19/99	8:50:39	22.09	2.00	0.0	3.70	6.29
3/19/99	8:50:44	22.13	2.00	0.0	3.24	6.32
3/19/99	8:50:49	22.21	2.00	0.0	3.29	6.35
3/19/99	8:50:54	22.16	3.00	0.0	3.32	6.38
3/19/99	8:50:59	22.16	3.00	0.0	3.62	6.41
3/19/99	8:51:07	22.10	2.00	0.0	3.99	6.44
3/19/99	8:51:11	22.14	2.00	0.0	4.38	6.49
3/19/99	8:51:16	22.25	2.00	0.0	4.75	6.50
3/19/99	8:51:21	22.32	2.00	0.0	4.16	6.52
3/19/99	8:51:25	22.33	2.00	0.0	4.06	6.53
3/19/99	8:51:30	22.35	2.00	0.0	4.03	6.55
3/19/99	8:51:34	22.40	2.00	0.0	4.03	6.58
3/19/99	8:51:38	22.42	2.00	0.0	4.00	6.60
3/19/99	8:51:43	22.46	2.00	0.0	3.98	6.63
3/19/99	8:51:48	22.51	2.00	0.0	3.97	6.66
3/19/99	8:51:52	22.50	2.00	0.0	3.98	6.68
3/19/99	8:51:57	22.52	2.00	0.0	4.00	6.70
3/19/99	8:52:01	22.56	2.00	0.0	3.99	6.70
3/19/99	8:52:06	22.53	2.00	0.0	4.01	6.70
3/19/99	8:52:10	22.54	2.00	0.0	4.04	6.68
3/19/99	8:52:15	22.58	2.00	0.0	4.63	6.69
3/19/99	8:52:19	22.56	2.00	0.0	4.77	6.74
3/19/99	8:52:24	22.59	2.00	0.0	4.70	6.78
3/19/99	8:52:28	22.63	2.00	0.0	4.42	6.78
3/19/99	8:52:33	22.62	2.00	0.0	3.99	6.79
3/19/99	8:52:37	22.65	2.00	0.0	3.99	6.79
3/19/99	8:52:41	22.66	2.00	0.0	4.07	6.77
3/19/99	8:52:46	22.64	2.00	0.0	4.27	6.78
3/19/99	8:52:50	22.64	2.00	0.0	4.46	6.79
3/19/99	8:52:54	22.66	2.00	0.0	4.35	6.79
3/19/99	8:52:59	22.63	2.00	0.0	4.41	6.80
3/19/99	8:53:03	22.63	2.00	0.0	4.39	6.80
3/19/99	8:53:08	22.65	2.00	0.0	4.37	6.83
3/19/99	8:53:12	22.66	2.00	0.0	4.39	6.87
3/19/99	8:53:17	22.67	2.00	0.0	4.67	6.87
3/19/99	8:54:05	22.01	2.00	0.0	5.98	6.97
3/19/99	8:54:10	22.10	2.00	0.0	5.67	6.93
3/19/99	8:54:14	22.20	2.00	0.0	5.42	6.91
3/19/99	8:54:18	22.30	2.00	0.0	5.18	6.90
3/19/99	8:54:23	22.40	2.00	0.0	5.16	6.91
3/19/99	8:54:28	22.49	2.00	0.0	5.13	6.91
3/19/99	8:54:33	22.55	2.00	0.0	4.36	6.90
3/19/99	8:54:37	22.57	2.00	0.0	4.16	6.92
3/19/99	8:54:42	22.61	2.00	0.0	3.92	6.93
3/19/99	8:54:46	22.63	2.00	0.0	3.58	6.92
3/19/99	8:54:51	22.58	2.00	0.0	3.45	6.93
3/19/99	8:54:56	22.59	2.00	0.0	3.42	6.93
3/19/99	8:55:03	22.57	2.00	0.0	3.48	6.95
3/19/99	8:55:07	22.53	2.00	0.0	3.79	6.95

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
3/19/99	8:55:11		22.53	2.00	0.0	4.01	6.93
3/19/99	8:55:15		22.59	2.00	0.0	3.96	6.94
3/19/99	8:55:19		22.59	2.00	0.0	3.91	6.94
3/19/99	8:55:23		22.61	2.00	0.0	3.71	6.92
3/19/99	8:55:27		22.64	2.00	0.0	3.42	6.91
3/19/99	8:55:32		22.65	2.00	0.0	3.34	6.92
3/19/99	8:55:36		22.68	2.00	0.0	3.39	6.94
3/19/99	8:55:40		22.72	2.00	0.0	3.43	6.95
3/19/99	8:55:44		22.69	2.00	0.0	3.56	6.96
3/19/99	8:55:49		22.69	2.00	0.0	3.79	6.96
3/19/99	8:55:53		22.72	2.00	0.0	3.85	6.94
3/19/99	8:55:58		22.69	2.00	0.0	3.85	6.94
3/19/99	8:56:03		22.68	2.00	0.0	4.01	6.94
3/19/99	8:56:08		22.69	2.00	0.0	3.98	6.95
3/19/99	8:56:15		22.66	2.00	0.0	4.24	6.97
3/19/99	8:56:20		22.64	2.00	0.0	4.23	6.95
3/19/99	8:56:27		22.55	2.00	0.0	4.17	6.93
3/19/99	8:56:34		22.49	2.00	0.0	3.93	6.96
3/19/99	8:56:39		22.54	2.00	0.0	3.92	6.94
3/19/99	8:56:45		22.57	2.00	0.0	4.15	6.91
3/19/99	8:56:54		22.42	2.00	0.0	4.33	6.95
3/19/99	8:57:00		22.40	2.00	0.0	4.53	6.95

Project #: 411R Test type: ACUTE CHRONIC OTHER 10 day flow thru Date: 3/19/99

Species: *P. promelas* *C. dubia* *M. bahia* Other C. tentans Day of Study: _____

OPERATIONAL RANGE: Temperature: 22 to 24 Check if OK Meter Used: Blue
 Salinity: — to — Red
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: TD

Aqua Survey, Inc.
Solid Phase Readings

Client: Dames & Moore

Test Start Date: 3/9/99

Parameter: Various

Job #: 98-411

Test End Date: 3/19/99

Organism C. tentans

		INITIAL				FINAL			
Sample	ASI ID	Alkalinity mg/L	Hardness mg/L	Conductivity	NH ₃ mg/L	Alkalinity mg/L	Hardness mg/L	Conductivity	NH ₃ mg/L
P1-01	82033	56	100	328	1.41	50	92	340	1.71
P5-01	82034	48	128	370	0.41	44	96	347	1.39
P4-01	82035	52	146	338	0.84	44	96	299	0.67
P3-03	82036	48	116	358	1.42	44	76	302	1.37
P3-01	82037	48	98	322	1.84	54	76	288	0.71
P2-03	82038	52	98	345	1.65	52	88	284	1.12
P1--02	82039	48	96	346	2.89	52	84	282	1.37
PA-03	82040	48	84	313	2.99	58	80	289	1.34
Control	81997	60	92	300	0.08	78	66	337	1.18
	Date	3/9/99	3/9/99	3/9/99	3/9/99	3/19/99	3/19/99	3/19/99	3/19/99
	Initials	MA	MA	MA	MA	MA	MA	TD	JN

Notes:

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411 repeat
 Client Dames & Moore
 Organism C. tentans FLOWTHROUGH
 Parameter Exchanges and Feeding

Day	Date	Exchanges		Feed
		1st Time / Initials	2nd Time / Initials	<i>Tetramin Slurry</i>
0	3/9/99	0800 TD	1600 TD	✓
1	3/10/99	0900 TD	1530 MA	✓
2	3/11/99	0820 MA	1315 MH	✗
3	3/12/99	0815 MA	1615 MH	✓
4	3/13/99	0810 MH	1225 MH	✓
5	3/14/99	0815 MH	1225 MH	✓
6	3/15/99	0900 MA	1630 MA	✓
7	3/16/99	0920 MA	1530 MA	✓
8	3/17/99	0920 MA	1545 MA	✓
9	3/18/99	0750 TD	1415 TD	✓
10	3/19/99	————	————	————
11				
12				
13				
14				

Additional Notes

AQUA SURVEY, INC.

CULTURE LAB DISTRIBUTION FORM

DATE: 3/4/99
TEST JOB#: 98-411 CLIENT: DAM
TEST LOCATION: IN-LAB FIELD
TEST SPECIES: C. tentans
TOTAL NUMBER ORGANISMS TRANSFERRED: 750+
AQUA SURVEY, INC. CULTURE LAB INVESTIGATORS: (D)

A. ORGANISMS

1. ASI CULTURE/HOLDING UNIT: Gen. Culture
2. RECEIVING LOG #: N/A
3. CULTURE LOG #: 99-0174
4. AGE/SIZE INFORMATION: 4D 2/26/99 3rd Instar

B. HOLDING CULTURE WATER PARAMETERS

1. TEMPERATURE: 22.0°C
2. SALINITY: N/A
3. WATER SOURCE: 100% Recon

C. TRANSFER CUSTODY & TRANSFER

1. LIVESTOCK RELINQUISHMENT DATE: 3/9/99
TIME: 10:30hrs
BY: (D)
2. LIVESTOCK RECEIVING DATE: 3/9/99
TIME: 10:30hrs
BY: (D)
3. CULTURE SUPERVISOR OR SENIOR TECH. INITIALS: (D)

REMARKS: _____

BIOLOGICAL RAW DATA

H. azteca

98-0411R Dames & Moore H. azteca survival

File: 98411.has Transform: ARC SINE(SQUARE ROOT(Y))

Chi-square test for normality: actual and expected frequencies

INTERVAL	<-1.5	-1.5 to <-0.5	-0.5 to 0.5	>0.5 to 1.5	>1.5
EXPECTED	4.288	15.488	24.448	15.488	4.288
OBSERVED	8	11	13	32	0

Calculated Chi-Square goodness of fit test statistic = 31.7662

Table Chi-Square value (alpha = 0.01) = 13.277

Data FAIL normality test. Try another transformation.

Warning - The first three homogeneity tests are sensitive to non-normal data and should not be performed.

98-0411R Dames & Moore H. azteca survival

File: 98411.has Transform: ARC SINE(SQUARE ROOT(Y))

Bartlett's test for homogeneity of variance

Calculated B1 statistic = 14.34

Table Chi-square value = 18.48 (alpha = 0.01, df = 7)

Table Chi-square value = 14.07 (alpha = 0.05, df = 7)

Data PASS B1 homogeneity test at 0.01 level. Continue analysis.

JW
5/12/ac

TITLE: 98-0411R Dames & Moore H. azteca survival
 FILE: 98411.has
 TRANSFORM: ARC SINE(SQUARE ROOT(Y))

NUMBER OF GROUPS: 8

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	R1-01	1	0.8000	1.1071
1	R1-01	2	0.7000	0.9912
1	R1-01	3	0.8000	1.1071
1	R1-01	4	1.0000	1.4120
1	R1-01	5	0.9000	1.2490
1	R1-01	6	0.4000	0.6847
1	R1-01	7	1.0000	1.4120
1	R1-01	8	0.8000	1.1071
2	P5-01	1	1.0000	1.4120
2	P5-01	2	0.9000	1.2490
2	P5-01	3	1.0000	1.4120
2	P5-01	4	1.0000	1.4120
2	P5-01	5	0.9000	1.2490
2	P5-01	6	0.9000	1.2490
2	P5-01	7	0.8000	1.1071
2	P5-01	8	0.8000	1.1071
3	P4-01	1	1.0000	1.4120
3	P4-01	2	1.0000	1.4120
3	P4-01	3	0.8000	1.1071
3	P4-01	4	1.0000	1.4120
3	P4-01	5	1.0000	1.4120
3	P4-01	6	0.8000	1.1071
3	P4-01	7	1.0000	1.4120
3	P4-01	8	0.7000	0.9912
4	P3-03	1	1.0000	1.4120
4	P3-03	2	1.0000	1.4120
4	P3-03	3	1.0000	1.4120
4	P3-03	4	1.0000	1.4120
4	P3-03	5	1.0000	1.4120
4	P3-03	6	0.9000	1.2490
4	P3-03	7	0.9000	1.2490
4	P3-03	8	1.0000	1.4120
5	P3-01	1	1.0000	1.4120
5	P3-01	2	0.9000	1.2490
5	P3-01	3	1.0000	1.4120
5	P3-01	4	0.9000	1.2490
5	P3-01	5	1.0000	1.4120
5	P3-01	6	1.0000	1.4120
5	P3-01	7	1.0000	1.4120
5	P3-01	8	1.0000	1.4120
6	P2-03	1	1.0000	1.4120
6	P2-03	2	0.9000	1.2490
6	P2-03	3	0.9000	1.2490
6	P2-03	4	1.0000	1.4120
6	P2-03	5	1.0000	1.4120
6	P2-03	6	1.0000	1.4120
6	P2-03	7	0.8000	1.1071
6	P2-03	8	1.0000	1.4120
7	P1-02	1	0.9000	1.2490
7	P1-02	2	0.9000	1.2490

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7	P1-02	3	0.8000	1.1071
7	P1-02	4	1.0000	1.4120
7	P1-02	5	0.9000	1.2490
7	P1-02	6	1.0000	1.4120
7	P1-02	7	1.0000	1.4120
7	P1-02	8	0.8000	1.1071
8	P4-03	1	0.6000	0.8861
8	P4-03	2	0.5000	0.7854
8	P4-03	3	0.8000	1.1071
8	P4-03	4	0.6000	0.8861
8	P4-03	5	0.9000	1.2490
8	P4-03	6	0.8000	1.1071
8	P4-03	7	0.8000	1.1071
8	P4-03	8	0.9000	1.2490

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98-0411R Dames & Moore H. azteca survival

File: 98411.has

Transform: ARC SINE(SQUARE ROOT(Y))

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 1 of 2

GRP	IDENTIFICATION	N	MIN	MAX	MEAN
1	R1-01	8	0.685	1.412	1.134
2	P5-01	8	1.107	1.412	1.275
3	P4-01	8	0.991	1.412	1.283
4	P3-03	8	1.249	1.412	1.371
5	P3-01	8	1.249	1.412	1.371
6	P2-03	8	1.107	1.412	1.333
7	P1-02	8	1.107	1.412	1.275
8	P4-03	8	0.785	1.249	1.047

98-0411R Dames & Moore H. azteca survival

File: 98411.has

Transform: ARC SINE(SQUARE ROOT(Y))

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 2 of 2

GRP	IDENTIFICATION	VARIANCE	SD	SEM	C.V. %
1	R1-01	0.056	0.237	0.084	20.88
2	P5-01	0.016	0.128	0.045	10.04
3	P4-01	0.033	0.181	0.064	14.13
4	P3-03	0.006	0.075	0.027	5.50
5	P3-01	0.006	0.075	0.027	5.50
6	P2-03	0.014	0.117	0.041	8.80
7	P1-02	0.016	0.128	0.045	10.04
8	P4-03	0.030	0.174	0.062	16.65

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08-0411R Dames & Moore H. azteca survival

file: 98411.has

Transform: ARC SINE(SQUARE ROOT(Y))

STEEL'S MANY-ONE RANK TEST

Ho: Control < Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	RANK SUM	CRIT. VALUE	df	SIG
1	R1-01	1.134				
2	P5-01	1.275	80.50	45.00	8.00	
3	P4-01	1.283	79.50	45.00	8.00	
4	P3-03	1.371	89.00	45.00	8.00	
5	P3-01	1.371	89.00	45.00	8.00	
6	P2-03	1.333	85.50	45.00	8.00	
7	P1-02	1.275	80.50	45.00	8.00	
8	P4-03	1.047	60.50	45.00	8.00	

Critical values use $k = 7$, are 1 tailed, and $\alpha = 0.05$

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98-411R H. azteca Length
File: 411r.hal Transform: NO TRANSFORMATION

Chi-square test for normality: actual and expected frequencies

INTERVAL	<-1.5	-1.5 to <-0.5	-0.5 to 0.5	>0.5 to 1.5	>1.5
EXPECTED	4.288	15.488	24.448	15.488	4.288
OBSERVED	7	9	29	15	4

Calculated Chi-Square goodness of fit test statistic = 5.3154
Table Chi-Square value (alpha = 0.01) = 13.277

Data PASS normality test. Continue analysis.

98-411R H. azteca Length
File: 411r.hal Transform: NO TRANSFORMATION

Bartlett's test for homogeneity of variance
Calculated B1 statistic = 13.50

Table Chi-square value = 18.48 (alpha = 0.01, df = 7)
Table Chi-square value = 14.07 (alpha = 0.05, df = 7)

Data PASS B1 homogeneity test at 0.01 level. Continue analysis.

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TITLE: 98-411R H. azteca Length
FILE: 411r.hal
TRANSFORM: NO TRANSFORMATION

NUMBER OF GROUPS: 8

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	R1-01	1	2.8900	2.8900
1	R1-01	2	3.7900	3.7900
1	R1-01	3	3.3000	3.3000
1	R1-01	4	3.1400	3.1400
1	R1-01	5	3.3200	3.3200
1	R1-01	6	3.3300	3.3300
1	R1-01	7	3.2800	3.2800
1	R1-01	8	3.2000	3.2000
2	P5-01	1	3.4200	3.4200
2	P5-01	2	2.9300	2.9300
2	P5-01	3	3.4400	3.4400
2	P5-01	4	3.2700	3.2700
2	P5-01	5	3.2900	3.2900
2	P5-01	6	3.0100	3.0100
2	P5-01	7	3.1900	3.1900
2	P5-01	8	3.3300	3.3300
3	P4-01	1	3.1700	3.1700
3	P4-01	2	3.2700	3.2700
3	P4-01	3	3.0800	3.0800
3	P4-01	4	3.0100	3.0100
3	P4-01	5	3.1200	3.1200
3	P4-01	6	3.1500	3.1500
3	P4-01	7	3.1200	3.1200
3	P4-01	8	3.0000	3.0000
4	P3-03	1	3.9000	3.9000
4	P3-03	2	3.4000	3.4000
4	P3-03	3	3.7400	3.7400
4	P3-03	4	4.0700	4.0700
4	P3-03	5	3.9000	3.9000
4	P3-03	6	3.3300	3.3300
4	P3-03	7	3.6700	3.6700
4	P3-03	8	3.8800	3.8800
5	P3-01	1	3.2200	3.2200
5	P3-01	2	3.4700	3.4700
5	P3-01	3	3.0300	3.0300
5	P3-01	4	3.3400	3.3400
5	P3-01	5	3.6400	3.6400
5	P3-01	6	3.5800	3.5800
5	P3-01	7	3.4100	3.4100
5	P3-01	8	3.1700	3.1700
6	P2-03	1	3.8500	3.8500
6	P2-03	2	3.3100	3.3100
6	P2-03	3	3.5200	3.5200
6	P2-03	4	3.4500	3.4500
6	P2-03	5	3.5200	3.5200
6	P2-03	6	3.6400	3.6400
6	P2-03	7	3.5000	3.5000
6	P2-03	8	3.7100	3.7100
7	P1-02	1	3.1900	3.1900
7	P1-02	2	3.2200	3.2200

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7	P1-02	3	2.9300	2.9300
7	P1-02	4	3.5900	3.5900
7	P1-02	5	3.4300	3.4300
7	P1-02	6	3.2600	3.2600
7	P1-02	7	2.4400	2.4400
7	P1-02	8	3.4400	3.4400
8	P4-03	1	3.6800	3.6800
8	P4-03	2	3.7200	3.7200
8	P4-03	3	3.8300	3.8300
8	P4-03	4	4.2300	4.2300
8	P4-03	5	3.2200	3.2200
8	P4-03	6	3.6100	3.6100
8	P4-03	7	3.6500	3.6500
8	P4-03	8	3.7800	3.7800

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98-411R H. azteca Length

File: 411r.hal

Transform: NO TRANSFORMATION

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 1 of 2

GRP	IDENTIFICATION	N	MIN	MAX	MEAN
1	R1-01	8	2.890	3.790	3.281
2	P5-01	8	2.930	3.440	3.235
3	P4-01	8	3.000	3.270	3.115
4	P3-03	8	3.330	4.070	3.736
5	P3-01	8	3.030	3.640	3.358
6	P2-03	8	3.310	3.850	3.563
7	P1-02	8	2.440	3.590	3.188
8	P4-03	8	3.220	4.230	3.715

98-411R H. azteca Length

File: 411r.hal

Transform: NO TRANSFORMATION

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 2 of 2

GRP	IDENTIFICATION	VARIANCE	SD	SEM	C.V. %
1	R1-01	0.063	0.251	0.089	7.66
2	P5-01	0.034	0.183	0.065	5.67
3	P4-01	0.008	0.088	0.031	2.81
4	P3-03	0.067	0.259	0.091	6.92
5	P3-01	0.044	0.209	0.074	6.23
6	P2-03	0.028	0.167	0.059	4.68
7	P1-02	0.131	0.362	0.128	11.35
8	P4-03	0.078	0.279	0.099	7.51

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98-411R H. azteca Length

File: 411r.hal

Transform: NO TRANSFORMATION

ANOVA TABLE

SOURCE	DF	SS	MS	F
Between	7	3.266	0.467	8.265
Within (Error)	56	3.161	0.056	
Total	63	6.426		

Critical F value = 2.25 (0.05,7,40)

Since $F > \text{Critical } F$ REJECT H_0 : All equal

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98-411R H. azteca Length

File: 411r.hal Transform: NO TRANSFORMATION

DUNNETT'S TEST - TABLE 1 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG
1	R1-01	3.281	3.281		
2	P5-01	3.235	3.235	0.389	
3	P4-01	3.115	3.115	1.400	
4	P3-03	3.736	3.736	-3.830	
5	P3-01	3.358	3.358	-0.642	
6	P2-03	3.563	3.563	-2.368	
7	P1-02	3.188	3.188	0.789	
8	P4-03	3.715	3.715	-3.651	

Dunnett table value = 2.42 (1 Tailed Value, P=0.05, df=40,7)

98-411R H. azteca Length

File: 411r.hal Transform: NO TRANSFORMATION

DUNNETT'S TEST - TABLE 2 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	Minimum Sig Diff (IN ORIG. UNITS)	% of CONTROL	DIFFERENCE FROM CONTROL
1	R1-01	8			
2	P5-01	8	0.287	8.8	0.046
3	P4-01	8	0.287	8.8	0.166
4	P3-03	8	0.287	8.8	-0.455
5	P3-01	8	0.287	8.8	-0.076
6	P2-03	8	0.287	8.8	-0.281
7	P1-02	8	0.287	8.8	0.094
8	P4-03	8	0.287	8.8	-0.434

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James & Moore 98-411R H. azteca length (mm)

CHAMBER #

	1	2	3	4	5	6	7	8	9	10
1	3.6	3.9	3.5	3.0	3.1	3.7	3.0	2.8	3.1	3.0
2	3.3	4.0	3.8	3.8	3.7					
3	3.5	3.2	3.1	3.3	2.8	3.0	3.2	3.2	3.0	
4	3.8	3.9	3.4	3.3	3.1	3.0	4.0	3.0		
5	3.2	3.7	3.0	2.8	3.0	3.0	2.4	2.9	3.1	3.0
6	3.3	3.0	2.7	3.4	3.5	2.6	3.8	2.9	3.2	2.8
7	3.1	3.0	2.8	3.9	3.5	3.0	3.1	3.1		
8	3.8	3.5	3.7	3.4	3.7	3.6	3.5	3.7		
9	3.5	3.6	3.5	3.4	3.4	4.0	3.8	3.3	3.2	
10	3.3	3.3	3.2	3.1	3.4	3.1	3.9	3.1		
11	3.1	2.9	3.5	3.6	3.5	3.1	3.8	3.4	3.0	3.4
12	3.8	3.9	3.6	3.7	3.3	3.4	3.9	3.6		
13	4.1	3.9	3.1	3.6	4.0	3.8	3.6	2.9	3.5	3.9
14	2.7	2.9	2.7	3.0	3.2	3.8	2.4	2.4		
15	3.9	4.0	3.3	3.4	3.6	3.7	3.1	3.4	3.6	3.3
16	4.5	3.2	3.6	3.4	3.6	3.8				
17	3.7	3.8	3.2	3.4	3.0	3.8	3.5	3.5	3.3	3.2
18	3.7	3.3	3.6	3.0	2.8	3.0	3.0	2.8		
19	4.1	4.0	4.0	3.9	3.2	3.6	3.7	3.4	3.2	4.0
20	3.3	4.1	4.0	3.8	3.6	3.8	3.9	3.9	3.6	3.4
21	3.7	4.0	4.0	4.1	3.9	4.2	3.8	3.1	3.9	3.8

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DAMES & MOORE 98-411R H. azteca length (mm)

CHAMBER #

	1	2	3	4	5	6	7	8	9	10		
22	4.0	3.8	3.9	3.2	3.5	4.0	3.9	3.6	4.1			
23	3.1	3.4	3.2	3.3	3.0	3.3	3.3	3.2	3.0	2.9		
24	3.7	3.4	3.4	3.2	3.4	3.9	3.8	3.8	3.5	3.7		
25	4.5	3.3	3.8	3.8	4.0	4.0	3.5	3.7				
26	3.6	3.1	3.1	3.1	3.3	3.3	3.5	3.4	3.4			
27	3.7	3.7	3.6	3.3	2.9	3.4	3.0	3.3	3.0			
28	4.0	3.9	3.3	3.7	4.0	3.7	4.3	4.0	3.8	4.1		
29	3.6	3.4	3.7	3.1	3.9	3.1	2.8	3.1	3.1	2.9		
30	4.5	4.1	4.3	4.1	4.1	4.3	c					
31	3.4	3.8	3.6	3.0	3.2	3.5	2.7	3.2	3.0	3.2		
32	4.0	3.9	4.0	3.3	3.4	3.3	2.9	3.7	3.4	3.3		
33	3.1	3.2	3.4	3.3	3.2	3.2	3.1	2.8	2.9	3.0		
34	2.9	2.8	2.8	3.2	3.0	2.9	2.7	3.0	3.1	2.9		
35	4.0	3.5	3.0	3.1	3.4	3.1	2.7	3.2	3.0			
36	3.4	3.1	3.2	3.9	3.4	3.2	3.3	3.1				
37	3.8	3.7	3.0	2.9	3.2	3.2	3.1	2.8	3.0	3.0		
38	3.2	3.6	3.3	3.2	3.5	2.9	3.3	3.4	2.4	3.4		
39	4.1	4.0	3.7	3.8	3.8	3.7	3.1	3.5	3.3			
40	3.4	3.8	3.3	3.8	3.8	2.9	3.8	3.6	3.5	4.0		
41	2.9	3.0	2.7	2.8	3.2	3.5	3.0	3.1	2.9			
42	3.2	3.9	3.4	3.5	3.3	4.0	3.1	3.2	3.8	3.1		

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DAMES & MOORE 98-411R H. azteca length(mm)

HAMISEL #

	1	2	3	4	5	6	7	8	9	10
43	2.8	3.6	3.5	3.0	3.1	3.2	3.4	3.2	3.0	2.9
44	2.8	3.4	3.0	3.6	3.5	3.1	3.9	3.0	3.3	
45	3.4	3.4	3.1	3.4	X					
46	2.5	3.2	3.2	3.1	3.2	2.8	3.0			
47	3.2	3.1	3.8	3.7	2.9	3.1	3.4	3.7	3.2	
48	3.0	3.4	3.8	3.5	3.5	3.8	3.6	3.1	3.1	3.2
49	3.8	3.3	3.2	3.0	3.7	3.8	2.9	3.3	2.8	3.0
50	3.3	3.6	3.8	3.6	3.8	3.5	2.8	3.2	3.3	
51	2.8	2.7	2.1	2.2	2.4	2.5	3.0	2.8	1.9	2.0
52	3.4	3.3	3.8	3.5	3.1	3.2	4.0	3.5	3.0	3.3
53	3.5	3.4	3.2	2.9	3.0	3.1	3.0	3.2	3.1	3.0
54	3.7	3.1	3.2	3.8	3.8	3.4	3.6	3.5	3.1	3.0
55	3.7	3.5	3.0	3.7	3.7	3.4	3.4	3.6		
56	3.5	3.2	3.4	3.2	3.5	3.8	3.0	3.3	3.1	
57	3.2	3.2	3.2	3.1	3.0	3.3	3.7	3.2	3.1	
58	3.0	3.2	3.5	3.1	3.6	3.3	3.1	3.0	2.9	
59	3.4	3.5	3.3	3.9	3.3	3.3	3.5	3.2	3.2	3.5
60	3.2	3.1	3.2	3.0	3.0	3.2	2.9	3.0		
61	4.1	4.4	4.1	4.1	3.9	3.8	4.2	4.0	4.2	3.9
62	3.9	3.6	3.1	3.4	3.0	3.2	3.4	3.0	3.2	
63	3.4	2.8	3.2	3.1	3.3	3.1	2.9	3.0	2.9	2.6

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DAMES + MOORE 98-411R H. azteca length (mm)

NUMBER #	1	2	3	4	5	6	7	8	9	10
64	3.2	3.1	3.3	3.1	2.7	3.7	3.5	3.0		
65	3.0	3.0	2.8	2.5	2.9	2.8	3.2	3.2	3.0	
66	3.4	3.5	3.1	3.4	3.4	3.8	3.0	3.0	2.6	3.4
67	3.7	3.5	3.4	3.6	3.6	3.7	3.6	4.1	3.9	3.3
68	3.0	3.8	3.4	3.6	3.5	3.5	3.4	3.9	3.1	
69	4.0	3.7	3.6	4.0	4.0	3.3	3.9			
70	3.1	3.0	3.1	3.0	3.3	3.0	2.0	2.9		
71	4.4	3.9	4.1	3.5	4.1	3.7	3.2	4.1	4.0	4.0
72	4.5	3.9	4.0	3.9	3.8	3.7	4.0	4.2	3.9	3.1

TD 5/4/99

98-411C

DAMES + MOORE

P.C.E.T.E.S.T

H. azteca

length (mm)

1	0.7
2	1.0
3	0.8
4	0.7
5	1.0
6	1.0
7	1.0
8	0.9
9	0.8
10	1.0
11	1.0
12	1.1
13	1.2
14	0.8
15	0.9
16	1.1
17	0.9
18	1.0
19	0.9
20	0.8
X	X

908-411R Dames and Moore H. azteca 28 day

Position	sample	ASI No.	Code
62	Control	90462*	0.1
15		*	0.2
59		*	0.3
43		*	0.4
3		*	0.5
11		*	0.6
66		*	0.7
34		*	0.8
14	R1-01	90653	1.1
69		*	1.2
10		*	1.3
53		*	1.4
27		*	1.5
45		*	1.6
49		*	1.7
64		*	1.8
54	P5-01	90654	2.1
65		*	2.2
17		*	2.3
1		*	2.4
44		*	2.5
41		*	2.6
7		*	2.7
36		*	2.8
37	P4-01	90655	3.1
29		*	3.2
60		*	3.3
5		*	3.4
6		*	3.5
18		*	3.6
33		*	3.7
46		*	3.8
72	P3-03	90656	4.1
48		*	4.2
20		*	4.3
61		*	4.4
71		*	4.5
56		*	4.6
39		*	4.7
28		*	4.8
38	P3-01	90657	5.1
68		*	5.2
63		*	5.3
47		*	5.4
67		*	5.5
24		*	5.6
52		*	5.7
23		*	5.8
21	P2-03	90658	6.1
26		*	6.2
9		*	6.3
42		*	6.4
32		*	6.5
13		*	6.6
55		*	6.7
19		*	6.8
58	P1-02	90659	7.1

908-411R Dames and Moore H. azteca 28 day

Position	sample	ASI No.	Code
35		*	7.2
70		*	7.3
40		*	7.4
50		*	7.5
31		*	7.6
51		*	7.7
4		*	7.8
16	P4-03	90660	8.1
2			8.2
25			8.3
30			8.4
57			8.5
8			8.6
12			8.7
22			8.8

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411

Client Dames and Moore

Organism *H. azteca*

Parameter Observations and Live counts

Chamber	Initial Day 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	10	N	N	N	N	N	N	N	N	N	N	N	N	N	N
2	10	N													
3	10	N													
4	10	N													
5	10	N													
6	10	N													
7	10	N													
8	10	N													
9	10	N													
10	10	N													
11	10	N													
12	10	N													
13	10	N													
14	10	N													
15	10	N													
16	10	N													
17	10	N													
18	10	N													
19	10	N													
20	10	N													
21	10	N													
22	10	N													
23	10	N													
24	10	N													
25	10	N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Int/Date	3/1/99	3/2/99	3/3/99	3/4/99	3/5/99	3/6/99	3/7/99	3/8/99	3/9/99	3/10/99	3/11/99	3/12/99	3/13/99	3/14/99	3/15/99

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411

Client Dames and Moore

Organism H. aztecus

Parameter Observations and Live counts

Chamber	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	N	N	N	N	N	N	N	N	N	N	N	N	N	10
2														5
3														9
4														8
5														10
6														10
7														8
8														8
9														9
10														8
11														10
12														8
13														10
14														8
15														10
16														6
17														10
18														8
19														10
20														10
21														10
22														9
23														10
24														10
25	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	8
Int/Date	MT 4/16/99	MT 4/17/99	MT 4/18/99	TD 4/19/99	TD 4/20/99	TD 4/21/99	TD 4/22/99	TD 4/23/99	MT 4/24/99	MT 4/25/99	TD 4/26/99	TD 4/27/99	TD 4/28/99	TD 4/29/99

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411

Client Dames and Moore

Organism *H. azteca*

Parameter Observations and Live counts

Chamber	Initial Day 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
26	10 N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
27	10 N														
28	10 N														
29	10 N														
30	10 N														
31	10 N														
32	10 N														
33	10 N														
34	10 N														
35	10 N														
36	10 N														
37	10 N														
38	10 N														
39	10 N														
40	10 N														
41	10 N														
42	10 N														
43	10 N														
44	10 N														
45	10 N														
46	10 N														
47	10 N														
48	10 N														
49	10 N														
50	10 N	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Count/Date	TP 4/1/99	TP 4/2/99	TP 4/3/99	TP 4/4/99	TP 4/5/99	TP 4/6/99	TP 4/7/99	TP 4/8/99	MR 4/9/99	MR 4/10	MR 4/11	MR 4/12	MR 4/13	MR 4/14	MR 4/15

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411

Client Dames and Moore

Organism H. aztecus

Parameter Observations and Live counts

Chamber	15	16	17	18	19	20	21	22	23	24	25	26	27	28
26	N	N	N	N	N	N	N	N	N	N	N	N	N	9
27														9
28														10
29														10
30														6
31														10
32														10
33														10
34														10
35														9
36														8
37														10
38														10
39														9
40														10
41														9
42														10
43														10
44														9
45														4
46														7
47														9
48														10
49														10
50	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	9
Int/Date	4/16/99 MH	4/17/99 MH	4/18/99 MH	4/19/99 TD	4/20/99 TD	4/21/99 TD	4/22/99 TD	4/23/99 TD	4/24/99 MT	4/25/99 MT	4/26/99 TD	4/27/99 TD	4/28/99 TD	4/29/99 TD

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411

Client Dames and Moore

Organism H. aztecus

Parameter Observations and Live counts

Chamber	Initial Day 0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
51	10 N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
52	10 N														
53	10 N														
54	10 N														
55	10 N														
56	10 N														
57	10 N														
58	10 N														
59	10 N														
60	10 N														
61	10 N														
62	10 N														
63	10 N														
64	10 N														
65	10 N														
66	10 N														
67	10 N														
68	10 N														
69	10 N														
70	10 N														
71	10 N														
72	10 N	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
73															
74															
75															
Int/Date	10 4/1/99	10 4/2/99	10 4/3/99	10 4/4/99	10 4/5/99	10 4/6/99	10 4/7/99	10 4/8/99	10 4/9/99	10 4/10	10 4/11	10 4/12	10 4/13	10 4/14	10 4/15

Aqua Survey, Inc.
Solid Phase Readings

Job # 98-411

Client Dames and Moore

Organism H. aztecus

Parameter Observations and Live counts

Chamber	15	16	17	18	19	20	21	22	23	24	25	26	27	28
51	N	N	N	N	N	N	N	N	N	N	N	N	N	10
52														10
53														10
54														10
55														8
56														9
57														9
58														9
59														10
60														8
61														10
62														9
63														10
64														8
65														9
66														10
67														10
68														9
69														7
70														8
71														10
72	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	10
73	/													
74	/													
75	/													
Int/Date	MT 4/16/99	MT 4/17/99	MT 4/18/99	TP 4/19/99	TP 4/20/99	TP 4/21/99	TP 4/22/99	TP 4/23/99	MT 4/24/99	MT 4/25/99	TP 4/26/99	TP 4/27/99	TP 4/28/99	TP 4/29/99

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/01/99	9:15:42	90653	23.11	568.00	0.3	7.74	8.16
4/01/99	9:16:13	90654	23.33	553.00	0.3	7.58	7.98
4/01/99	9:16:39	90655	23.25	610.00	0.3	7.59	7.95
4/01/99	9:17:00	90656	23.29	615.00	0.3	7.58	8.17
4/01/99	9:17:16	90657	23.28	548.00	0.3	7.58	8.02
4/01/99	9:17:31	90658	23.29	564.00	0.3	7.61	8.02
4/01/99	9:17:53	90659	23.33	559.00	0.3	7.63	7.93
4/01/99	9:18:09	90660	23.27	555.00	0.3	7.61	7.83
4/01/99	9:18:36	control	23.26	618.00	0.3	7.41	8.07

Project #: 99-411 R Test type: ACUTE CHRONIC OTHER 28 Day

Date: 4/1/99

Species: *P. promelas* *C. dubia* *M. bahia* Other H.a.

Day of Study: 0

OPERATIONAL RANGE:

Check if OK

Meter Used:

Temperature: 22 to 24
 Salinity: to
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Blue
 Red

Actions taken: _____

See deviation summary sheet

Initials: SW

YSI 6000 Time Series Report

Page 1

Date	Time	Temp	SpCond	Salinity	DO	pH
mm/dd/yy	hh:mm:ss	C	uS/cm	PPT	mg/L	
4/02/99	11:00:10	23.68	0.00	0.0	6.88	7.77
4/02/99	11:00:21	23.96	0.00	0.0	6.49	7.71
4/02/99	11:00:29	24.06	0.00	0.0	6.34	7.69
4/02/99	11:01:23	24.03	0.00	0.0	7.25	7.72
4/02/99	11:01:46	24.16	1.00	0.0	6.99	7.61
4/02/99	11:01:56	24.15	2.00	0.0	6.78	7.57
4/02/99	11:02:33	23.84	1.00	0.0	7.31	7.70
4/02/99	11:02:40	23.98	1.00	0.0	7.13	7.71
4/02/99	11:02:48	24.12	2.00	0.0	6.69	7.67
4/02/99	11:03:21	23.93	1.00	0.0	7.17	7.80
4/02/99	11:03:30	24.04	1.00	0.0	6.86	7.80
4/02/99	11:03:38	24.15	1.00	0.0	6.63	7.73
4/02/99	11:04:31	23.85	1.00	0.0	7.07	7.76
4/02/99	11:04:39	23.97	1.00	0.0	6.80	7.79
4/02/99	11:04:46	24.09	1.00	0.0	6.64	7.83
4/02/99	11:05:18	23.91	1.00	0.0	7.03	7.69
4/02/99	11:05:28	24.07	1.00	0.0	6.58	7.69
4/02/99	11:05:42	24.23	1.00	0.0	6.36	7.69
4/02/99	11:06:17	23.91	1.00	0.0	7.12	7.75
4/02/99	11:06:25	23.98	1.00	0.0	6.98	7.79
4/02/99	11:06:38	24.14	1.00	0.0	6.73	7.84
4/02/99	11:07:26	23.90	1.00	0.0	6.47	7.65
4/02/99	11:07:41	23.99	1.00	0.0	6.19	7.62
4/02/99	11:07:50	24.05	1.00	0.0	6.15	7.62
4/02/99	11:08:23	23.78	1.00	0.0	6.72	7.62
4/02/99	11:08:37	23.95	1.00	0.0	6.06	7.65
4/02/99	11:08:45	24.01	1.00	0.0	5.90	7.69
4/02/99	11:09:25	23.85	1.00	0.0	7.05	7.82
4/02/99	11:09:33	24.04	1.00	0.0	6.75	7.79
4/02/99	11:09:42	24.19	1.00	0.0	6.51	7.69
4/02/99	11:10:15	23.74	1.00	0.0	6.97	7.65
4/02/99	11:10:24	23.86	1.00	0.0	6.65	7.67
4/02/99	11:10:32	23.94	1.00	0.0	6.32	7.68
4/02/99	11:11:08	23.75	1.00	0.0	7.45	7.73
4/02/99	11:11:17	23.94	1.00	0.0	7.15	7.71
4/02/99	11:11:24	24.05	1.00	0.0	6.86	7.70
4/02/99	11:11:57	23.94	1.00	0.0	7.03	7.72
4/02/99	11:12:07	24.03	1.00	0.0	6.80	7.69
4/02/99	11:12:26	24.20	1.00	0.0	4.45	7.70
4/02/99	11:12:56	23.90	1.00	0.0	6.54	7.72
4/02/99	11:13:05	24.05	1.00	0.0	6.32	7.70
4/02/99	11:13:12	24.15	1.00	0.0	6.20	7.69
4/02/99	11:13:38	23.87	1.00	0.0	7.21	7.73
4/02/99	11:13:47	24.07	1.00	0.0	6.88	7.74
4/02/99	11:13:58	24.26	1.00	0.0	6.62	7.75
4/02/99	11:14:33	24.01	1.00	0.0	7.17	7.66
4/02/99	11:14:42	24.14	1.00	0.0	6.92	7.61
4/02/99	11:14:56	24.31	1.00	0.0	6.73	7.72
4/02/99	11:15:30	23.99	1.00	0.0	7.26	7.88
4/02/99	11:15:41	24.11	1.00	0.0	6.97	7.83

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/03/99	8:30:47	22.96	1.00	0.0	8.11	8.09
4/03/99	8:30:54	23.32	1.00	0.0	7.19	7.90
4/03/99	8:31:00	23.44	1.00	0.0	7.06	7.85
4/03/99	8:31:24	22.35	1.00	0.0	7.62	7.87
4/03/99	8:31:29	22.74	1.00	0.0	7.73	7.84
4/03/99	8:31:34	23.08	1.00	0.0	7.52	7.79
4/03/99	8:32:01	22.44	1.00	0.0	8.08	7.81
4/03/99	8:32:08	23.02	1.00	0.0	7.77	7.80
4/03/99	8:32:13	23.32	1.00	0.0	7.31	7.77
4/03/99	8:32:32	22.80	1.00	0.0	7.48	7.82
4/03/99	8:32:37	23.02	1.00	0.0	7.69	7.86
4/03/99	8:32:42	23.34	1.00	0.0	7.50	7.86
4/03/99	8:33:03	22.68	1.00	0.0	7.80	7.86
4/03/99	8:33:08	22.97	1.00	0.0	7.90	7.89
4/03/99	8:33:14	23.27	1.00	0.0	7.53	7.91
4/03/99	8:33:32	22.45	1.00	0.0	7.77	7.86
4/03/99	8:33:38	22.81	1.00	0.0	7.93	7.84
4/03/99	8:33:45	23.27	1.00	0.0	7.27	7.83
4/03/99	8:34:03	22.67	1.00	0.0	7.81	7.85
4/03/99	8:34:07	22.92	1.00	0.0	7.92	7.87
4/03/99	8:34:12	23.16	1.00	0.0	7.76	7.91
4/03/99	8:34:39	22.78	1.00	0.0	7.79	7.83
4/03/99	8:34:44	23.11	1.00	0.0	7.42	7.79
4/03/99	8:34:50	23.29	1.00	0.0	6.97	7.77
4/03/99	8:35:07	22.75	1.00	0.0	7.46	7.75
4/03/99	8:35:12	22.83	1.00	0.0	7.69	7.75
4/03/99	8:35:17	23.02	1.00	0.0	7.30	7.77
4/03/99	8:35:48	22.86	2.00	0.0	7.72	7.92
4/03/99	8:35:52	23.12	1.00	0.0	7.46	7.91
4/03/99	8:35:57	23.32	1.00	0.0	6.64	7.86
4/03/99	8:36:17	22.30	1.00	0.0	7.65	7.78
4/03/99	8:36:22	22.50	1.00	0.0	7.85	7.79
4/03/99	8:36:27	22.82	1.00	0.0	7.64	7.79
4/03/99	8:36:49	22.68	1.00	0.0	7.96	7.81
4/03/99	8:36:54	23.02	1.00	0.0	7.84	7.82
4/03/99	8:36:59	23.27	1.00	0.0	7.63	7.82
4/03/99	8:37:17	22.79	1.00	0.0	7.87	7.82
4/03/99	8:37:22	22.98	1.00	0.0	7.92	7.81
4/03/99	8:37:27	23.24	1.00	0.0	7.78	7.78
4/03/99	8:37:47	22.69	1.00	0.0	7.45	7.83
4/03/99	8:37:53	23.07	1.00	0.0	7.52	7.82
4/03/99	8:37:58	23.35	1.00	0.0	7.30	7.81
4/03/99	8:38:16	22.81	1.00	0.0	7.54	7.82
4/03/99	8:38:20	22.98	1.00	0.0	7.76	7.84
4/03/99	8:38:25	23.28	1.00	0.0	7.58	7.86
4/03/99	8:38:42	22.99	1.00	0.0	7.68	7.88
4/03/99	8:38:48	23.17	1.00	0.0	7.88	7.82
4/03/99	8:38:52	23.39	1.00	0.0	7.70	7.79
4/03/99	8:39:09	23.06	1.00	0.0	7.72	7.88
4/03/99	8:39:14	23.14	1.00	0.0	7.91	7.90

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/03/99	8:39:18		23.33	1.00	0.0	7.75	7.88
4/03/99	8:39:37		22.79	1.00	0.0	7.94	7.87
4/03/99	8:39:42		22.95	1.00	0.0	8.04	7.86
4/03/99	8:39:47		23.24	1.00	0.0	7.81	7.87
4/03/99	8:40:04		22.90	1.00	0.0	7.68	7.90
4/03/99	8:40:08		22.97	1.00	0.0	7.84	7.88
4/03/99	8:40:13		23.23	1.00	0.0	7.72	7.86
4/03/99	8:40:52		22.13	1.00	0.0	8.17	7.82
4/03/99	8:40:57		22.46	1.00	0.0	6.44	7.80
4/03/99	8:41:02		22.64	1.00	0.0	5.95	7.79
4/03/99	8:41:06		22.74	1.00	0.0	6.01	7.77
4/03/99	8:41:11		22.77	1.00	0.0	6.17	7.79
4/03/99	8:41:15		22.78	1.00	0.0	6.28	7.80
4/03/99	8:41:19		22.73	1.00	0.0	6.30	7.80
4/03/99	8:42:03		22.05	1.00	0.0	7.03	7.88
4/03/99	8:42:08		22.33	1.00	0.0	6.33	7.88
4/03/99	8:42:13		22.48	1.00	0.0	6.10	7.88
4/03/99	8:42:18		22.57	1.00	0.0	6.24	7.86
4/03/99	8:42:22		22.60	1.00	0.0	6.30	7.84
4/03/99	8:42:27		22.59	1.00	0.0	6.46	7.85
4/03/99	8:42:36		22.30	1.00	0.0	6.62	7.82
4/03/99	8:42:41		22.21	1.00	0.0	7.06	7.84

Project #: 411 Test type: ACUTE CHRONIC OTHER 25 day flow thru Date: 4/3/99

Species: *P. promelas* *C. dubia* *M. bahia* Other H. azteca Day of Study: 2

OPERATIONAL RANGE: Check if OK

Temperature: 22 to 24 Blue

Salinity: — to — Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: TD

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/04/99	6:24:32	22.82	2.00	0.0	7.94	8.41
4/04/99	6:24:37	24.00	2.00	0.0	6.84	8.30
4/04/99	6:24:42	24.08	2.00	0.0	6.74	8.23
4/04/99	6:25:01	23.79	1.00	0.0	6.91	8.06
4/04/99	6:25:07	23.91	1.00	0.0	7.18	8.11
4/04/99	6:25:12	24.00	1.00	0.0	7.04	8.09
4/04/99	6:25:30	23.55	1.00	0.0	7.26	7.94
4/04/99	6:25:36	23.76	1.00	0.0	7.24	7.99
4/04/99	6:25:41	23.97	1.00	0.0	7.06	7.97
4/04/99	6:25:59	23.31	1.00	0.0	7.14	7.87
4/04/99	6:26:04	23.49	1.00	0.0	7.32	7.98
4/04/99	6:26:14	24.02	1.00	0.0	6.87	8.02
4/04/99	6:26:29	23.48	1.00	0.0	6.99	7.89
4/04/99	6:26:34	23.54	1.00	0.0	7.18	7.97
4/04/99	6:26:41	23.83	1.00	0.0	7.07	8.03
4/04/99	6:26:57	23.33	1.00	0.0	6.99	7.91
4/04/99	6:27:02	23.46	1.00	0.0	7.33	7.99
4/04/99	6:27:06	23.71	1.00	0.0	7.13	8.00
4/04/99	6:27:25	23.33	1.00	0.0	7.22	7.93
4/04/99	6:27:29	23.33	1.00	0.0	7.22	7.93
4/04/99	6:27:33	23.72	1.00	0.0	7.09	7.96
4/04/99	6:27:50	23.31	1.00	0.0	7.23	7.88
4/04/99	6:27:55	23.43	1.00	0.0	7.37	7.95
4/04/99	6:28:01	23.70	1.00	0.0	7.20	7.96
4/04/99	6:28:17	23.24	1.00	0.0	7.10	7.80
4/04/99	6:28:21	23.32	1.00	0.0	7.37	7.90
4/04/99	6:28:26	23.52	1.00	0.0	7.16	7.94
4/04/99	6:28:48	23.05	1.00	0.0	7.31	7.95
4/04/99	6:28:53	23.39	1.00	0.0	7.08	7.99
4/04/99	6:29:02	23.87	1.00	0.0	6.71	7.99
4/04/99	6:29:19	23.39	1.00	0.0	7.01	7.82
4/04/99	6:29:24	23.44	1.00	0.0	7.23	7.92
4/04/99	6:29:29	23.63	1.00	0.0	7.19	7.96
4/04/99	6:29:47	22.72	1.00	0.0	7.34	7.87
4/04/99	6:29:51	23.01	1.00	0.0	7.49	7.93
4/04/99	6:29:56	23.40	1.00	0.0	7.41	7.96
4/04/99	6:30:14	23.33	1.00	0.0	7.41	7.86
4/04/99	6:30:18	23.50	1.00	0.0	7.47	7.93
4/04/99	6:30:23	23.68	1.00	0.0	7.34	7.93
4/04/99	6:30:40	23.14	1.00	0.0	7.35	7.88
4/04/99	6:30:44	23.35	1.00	0.0	7.46	7.94
4/04/99	6:30:49	23.65	2.00	0.0	7.38	7.96
4/04/99	6:31:06	23.53	1.00	0.0	7.14	7.85
4/04/99	6:31:10	23.62	1.00	0.0	7.29	7.95
4/04/99	6:31:15	23.81	1.00	0.0	7.20	7.99
4/04/99	6:31:32	23.35	1.00	0.0	7.27	7.90
4/04/99	6:31:36	23.51	1.00	0.0	7.40	7.96
4/04/99	6:31:41	23.75	1.00	0.0	7.38	7.96
4/04/99	6:31:58	23.36	1.00	0.0	7.30	7.83
4/04/99	6:32:02	23.51	1.00	0.0	7.42	7.94

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/04/99	6:32:07		23.74	1.00	0.0	7.28	7.95
4/04/99	6:32:24		23.16	1.00	0.0	7.26	7.82
4/04/99	6:32:29		23.20	1.00	0.0	7.40	7.90
4/04/99	6:32:33		23.52	1.00	0.0	7.46	7.94
4/04/99	6:32:51		23.50	1.00	0.0	7.35	7.80
4/04/99	6:32:55		23.63	1.00	0.0	7.47	7.90
4/04/99	6:32:59		23.85	1.00	0.0	7.36	7.92
4/04/99	6:33:25		22.77	1.00	0.0	7.62	7.74
4/04/99	6:33:30		22.94	1.00	0.0	7.68	7.85
4/04/99	6:33:35		23.18	1.00	0.0	7.46	7.86
4/04/99	6:33:39		23.31	1.00	0.0	7.09	7.84
4/04/99	6:33:44		23.35	1.00	0.0	6.82	7.82
4/04/99	6:33:48		23.38	1.00	0.0	6.59	7.82
4/04/99	6:33:53		23.40	1.00	0.0	6.35	7.80
4/04/99	6:34:32		22.35	1.00	0.0	7.72	7.82
4/04/99	6:34:37		22.72	1.00	0.0	7.51	7.84
4/04/99	6:34:42		22.92	1.00	0.0	7.15	7.87
4/04/99	6:34:47		23.00	1.00	0.0	6.98	7.88
4/04/99	6:34:51		23.04	1.00	0.0	6.85	7.87
4/04/99	6:34:56		23.06	1.00	0.0	6.77	7.89
4/04/99	6:35:05		22.99	1.00	0.0	6.63	7.83
4/04/99	6:35:10		22.98	1.00	0.0	6.85	7.88

Project #: 411 Test type: ACUTE CHRONIC OTHER 2 day flow thru Date: 4/4/99

Species: *P. promelas* *C. dubia* *M. bahia* Other fl. artemia Day of Study: 3

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: — to — Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: Tr

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/05/99	8:51:43	22.91	0.00	0.0	6.99	8.04
4/05/99	8:52:05	23.06	0.00	0.0	6.69	7.90
4/05/99	8:52:32	23.26	0.00	0.0	6.49	7.95
4/05/99	8:53:29	22.94	0.00	0.0	6.95	7.90
4/05/99	8:53:40	23.00	0.00	0.0	6.69	7.87
4/05/99	8:53:52	23.17	0.00	0.0	6.58	7.82
4/05/99	8:54:41	23.03	0.00	0.0	7.14	7.91
4/05/99	8:55:17	23.26	0.00	0.0	5.84	7.74
4/05/99	8:55:31	23.31	0.00	0.0	5.74	7.78
4/05/99	8:56:12	23.09	0.00	0.0	6.97	7.97
4/05/99	8:56:25	23.17	0.00	0.0	6.88	8.01
4/05/99	8:56:36	23.28	0.00	0.0	6.86	7.97
4/05/99	8:57:32	22.91	0.00	0.0	6.96	7.95
4/05/99	8:57:44	23.03	0.00	0.0	6.89	7.98
4/05/99	8:57:50	23.12	0.00	0.0	6.85	8.00
4/05/99	8:59:05	23.02	0.00	0.0	4.45	7.81
4/05/99	8:59:17	23.08	0.00	0.0	4.84	7.85
4/05/99	8:59:25	23.15	0.00	0.0	5.29	7.87
4/05/99	9:00:08	22.95	0.00	0.0	6.99	7.99
4/05/99	9:00:20	23.00	0.00	0.0	6.83	8.00
4/05/99	9:00:36	23.16	0.00	0.0	6.42	7.98
4/05/99	9:01:35	23.02	0.00	0.0	6.47	7.82
4/05/99	9:01:44	23.01	0.00	0.0	6.33	7.82
4/05/99	9:01:58	23.07	0.00	0.0	6.32	7.82
4/05/99	9:03:04	22.78	0.00	0.0	6.09	7.71
4/05/99	9:03:16	22.83	0.00	0.0	6.01	7.77
4/05/99	9:03:25	22.89	0.00	0.0	6.01	7.86
4/05/99	9:04:21	22.99	0.00	0.0	6.66	7.93
4/05/99	9:04:33	23.08	0.00	0.0	6.55	7.91
4/05/99	9:04:41	23.19	0.00	0.0	6.54	7.88
4/05/99	9:05:36	22.77	0.00	0.0	6.85	7.85
4/05/99	9:05:44	22.76	0.00	0.0	6.75	7.85
4/05/99	9:05:50	22.78	0.00	0.0	6.75	7.86
4/05/99	9:06:51	22.97	0.00	0.0	7.07	7.97
4/05/99	9:06:59	23.01	0.00	0.0	7.00	7.93
4/05/99	9:07:07	23.10	0.00	0.0	6.95	7.90
4/05/99	9:07:57	23.12	0.00	0.0	7.14	7.89
4/05/99	9:08:31	23.25	0.00	0.0	5.99	7.75
4/05/99	9:08:40	23.19	0.00	0.0	6.03	7.78
4/05/99	9:09:40	23.06	0.00	0.0	6.91	7.86
4/05/99	9:09:52	23.12	0.00	0.0	6.84	7.88
4/05/99	9:10:00	23.18	0.00	0.0	6.80	7.89
4/05/99	9:10:52	23.11	0.00	0.0	6.90	8.05
4/05/99	9:11:01	23.11	0.00	0.0	6.82	8.04
4/05/99	9:11:09	23.17	0.00	0.0	6.76	8.01
4/05/99	9:12:01	23.19	0.00	0.0	7.10	7.87
4/05/99	9:12:14	23.19	0.00	0.0	6.96	7.84
4/05/99	9:12:24	23.24	0.00	0.0	6.86	7.87
4/05/99	9:13:16	23.19	0.00	0.0	7.07	8.00
4/05/99	9:13:23	23.19	0.00	0.0	7.00	7.97

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/05/99	9:13:31		23.23	0.00	0.0	6.97	7.93
4/05/99	9:14:23		23.01	0.00	0.0	7.05	7.79
4/05/99	9:14:32		23.02	0.00	0.0	6.90	7.86
4/05/99	9:14:41		23.10	0.00	0.0	6.87	7.95
4/05/99	9:15:44		23.00	0.00	0.0	6.08	7.68
4/05/99	9:15:55		23.07	0.00	0.0	6.05	7.77
4/05/99	9:16:04		23.18	0.00	0.0	6.09	7.84
4/05/99	9:17:13		22.59	0.00	0.0	7.15	7.80
4/05/99	9:17:23		22.55	0.00	0.0	7.03	7.83
4/05/99	9:17:36		22.56	0.00	0.0	6.86	7.86
4/05/99	9:17:47		22.55	0.00	0.0	6.84	7.89
4/05/99	9:17:55		22.57	0.00	0.0	6.81	7.94
4/05/99	9:18:04		22.63	0.00	0.0	6.75	7.95
4/05/99	9:18:14		22.61	0.00	0.0	6.73	7.94
4/05/99	9:19:53		22.36	0.00	0.0	7.26	7.97
4/05/99	9:20:03		22.45	0.00	0.0	7.18	7.97
4/05/99	9:20:12		22.51	0.00	0.0	7.10	7.93
4/05/99	9:20:20		22.46	0.00	0.0	7.04	7.87
4/05/99	9:20:29		22.38	0.00	0.0	6.98	7.85
4/05/99	9:20:39		22.31	0.00	0.0	6.94	7.85
4/05/99	9:20:47		22.25	0.00	0.0	6.88	7.86
4/05/99	9:20:54		22.20	0.00	0.0	6.85	7.90

Project #: 411 Test type: ACUTE CHRONIC OTHER 20 day flow thru
 Species: *P. promelas* *C. dubia* *M. bahia* Other H. azteca

Date: 4/5/99

Day of Study: 4

OPERATIONAL RANGE: Check if OK
 Temperature: 22 to 24
 Salinity: - to -
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Meter Used:
 Blue
 Red

Actions taken: _____

See deviation summary sheet

Initials: TD

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/06/99	9:54:01	22.90	0.00	0.0	7.63	8.13
4/06/99	9:54:07	23.17	0.00	0.0	6.89	8.01
4/06/99	9:54:13	23.25	0.00	0.0	6.72	7.94
4/06/99	9:54:31	22.86	0.00	0.0	7.22	7.93
4/06/99	9:54:57	23.50	0.00	0.0	6.37	7.78
4/06/99	9:55:05	23.51	0.00	0.0	6.24	7.76
4/06/99	9:55:25	22.80	0.00	0.0	7.41	7.80
4/06/99	9:55:37	23.31	0.00	0.0	6.81	7.79
4/06/99	9:55:46	23.50	0.00	0.0	6.30	7.81
4/06/99	9:56:13	23.32	0.00	0.0	7.06	7.91
4/06/99	9:56:21	23.44	0.00	0.0	6.79	7.94
4/06/99	9:56:29	23.52	0.00	0.0	6.72	7.94
4/06/99	9:56:58	23.15	0.00	0.0	7.30	7.88
4/06/99	9:57:09	23.37	0.00	0.0	6.85	7.92
4/06/99	9:57:17	23.49	0.00	0.0	6.76	7.97
4/06/99	9:57:42	23.12	0.00	0.0	7.41	7.95
4/06/99	9:57:49	23.28	0.00	0.0	7.05	7.92
4/06/99	9:57:58	23.40	0.00	0.0	6.69	7.88
4/06/99	9:58:23	22.95	0.00	0.0	7.57	7.84
4/06/99	9:58:30	23.15	0.00	0.0	7.23	7.86
4/06/99	9:58:36	23.26	0.00	0.0	7.08	7.89
4/06/99	9:59:10	23.20	0.00	0.0	6.95	7.80
4/06/99	9:59:16	23.27	0.00	0.0	6.74	7.79
4/06/99	9:59:21	23.30	0.00	0.0	6.46	7.79
4/06/99	9:59:50	22.93	0.00	0.0	7.07	7.77
4/06/99	9:59:55	22.99	0.00	0.0	6.77	7.75
4/06/99	10:00:01	23.09	0.00	0.0	6.28	7.76
4/06/99	10:00:30	22.90	0.00	0.0	6.92	7.90
4/06/99	10:00:35	23.14	0.00	0.0	6.71	7.90
4/06/99	10:00:42	23.30	0.00	0.0	6.52	7.88
4/06/99	10:01:41	23.15	0.00	0.0	6.86	7.83
4/06/99	10:01:47	23.16	0.00	0.0	6.73	7.83
4/06/99	10:01:54	23.18	0.00	0.0	6.50	7.83
4/06/99	10:02:25	22.96	0.00	0.0	7.26	7.91
4/06/99	10:02:31	23.12	0.00	0.0	7.09	7.91
4/06/99	10:02:36	23.25	0.00	0.0	6.97	7.89
4/06/99	10:03:04	23.11	0.00	0.0	7.35	7.88
4/06/99	10:03:10	23.25	0.00	0.0	6.95	7.85
4/06/99	10:03:15	23.35	0.00	0.0	6.83	7.83
4/06/99	10:03:51	23.31	0.00	0.0	7.08	7.80
4/06/99	10:03:58	23.37	0.00	0.0	6.84	7.80
4/06/99	10:04:05	23.45	0.00	0.0	6.65	7.84
4/06/99	10:04:43	23.27	0.00	0.0	7.18	8.01
4/06/99	10:04:49	23.39	0.00	0.0	6.90	8.01
4/06/99	10:04:56	23.47	0.00	0.0	6.81	7.98
4/06/99	10:05:28	23.25	0.00	0.0	7.46	7.83
4/06/99	10:05:37	23.41	0.00	0.0	7.04	7.78
4/06/99	10:05:45	23.53	0.00	0.0	6.63	7.78
4/06/99	10:06:26	23.34	0.00	0.0	7.18	7.92
4/06/99	10:06:31	23.36	0.00	0.0	7.09	7.92

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/06/99	10:06:36		23.38	0.00	0.0	7.02	7.90
4/06/99	10:07:05		23.09	0.00	0.0	7.28	7.85
4/06/99	10:07:13		23.25	0.00	0.0	6.97	7.87
4/06/99	10:07:18		23.33	0.00	0.0	6.85	7.91
4/06/99	10:07:57		23.31	0.00	0.0	6.64	7.81
4/06/99	10:08:05		23.37	0.00	0.0	6.37	7.80
4/06/99	10:08:10		23.42	0.00	0.0	6.21	7.81
4/06/99	10:09:15		23.14	0.00	0.0	6.96	7.76
4/06/99	10:09:26		23.08	0.00	0.0	6.70	7.82
4/06/99	10:09:33		23.08	0.00	0.0	6.48	7.84
4/06/99	10:09:41		23.06	0.00	0.0	6.42	7.81
4/06/99	10:09:48		23.07	0.00	0.0	6.33	7.84
4/06/99	10:09:56		23.11	0.00	0.0	6.18	7.85
4/06/99	10:10:04		23.08	0.00	0.0	6.17	7.84
4/06/99	10:11:28		22.86	0.00	0.0	7.02	7.90
4/06/99	10:11:33		22.86	0.00	0.0	6.86	7.90
4/06/99	10:11:39		22.88	0.00	0.0	6.87	7.88
4/06/99	10:11:44		22.92	0.00	0.0	6.84	7.85
4/06/99	10:11:51		22.93	0.00	0.0	6.54	7.83
4/06/99	10:11:56		22.89	0.00	0.0	6.45	7.85
4/06/99	10:12:01		22.81	0.00	0.0	6.37	7.85
4/06/99	10:12:06		22.70	0.00	0.0	6.32	7.86

Project #: 411 Test type: ACUTE CHRONIC OTHER 28 day flow thru Date: 4/6/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *A. artemia* Day of Study: 5

OPERATIONAL RANGE: Check if OK

Temperature: 22 to 24 Meter Used:

Salinity: — to — Blue

Dissolved oxygen: > 4.0 Red

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: TD

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/07/99	9:56:49	22.38	0.00	0.0	8.20	8.18
4/07/99	9:56:54	23.20	0.00	0.0	7.37	8.07
4/07/99	9:56:59	23.33	0.00	0.0	7.05	8.00
4/07/99	9:57:25	23.00	0.00	0.0	7.47	7.92
4/07/99	9:57:29	23.19	0.00	0.0	7.24	7.89
4/07/99	9:57:34	23.36	0.00	0.0	7.01	7.85
4/07/99	9:57:52	22.69	0.00	0.0	7.38	7.83
4/07/99	9:57:58	22.95	0.00	0.0	7.43	7.83
4/07/99	9:58:05	23.31	0.00	0.0	6.83	7.81
4/07/99	9:58:38	23.25	0.00	0.0	7.07	7.93
4/07/99	9:58:48	23.39	0.00	0.0	6.75	7.97
4/07/99	9:58:52	23.43	0.00	0.0	6.68	7.97
4/07/99	9:59:12	22.64	0.00	0.0	7.38	7.86
4/07/99	9:59:20	23.12	0.00	0.0	7.18	7.89
4/07/99	9:59:25	23.35	0.00	0.0	6.96	7.93
4/07/99	9:59:56	23.52	0.00	0.0	7.10	7.92
4/07/99	10:00:03	23.53	0.00	0.0	6.73	7.88
4/07/99	10:00:11	23.47	0.00	0.0	6.43	7.87
4/07/99	10:00:40	23.28	0.00	0.0	7.17	7.84
4/07/99	10:00:46	23.39	0.00	0.0	6.95	7.85
4/07/99	10:00:54	23.45	0.00	0.0	6.58	7.87
4/07/99	10:01:18	22.61	0.00	0.0	7.52	7.84
4/07/99	10:01:25	23.11	0.00	0.0	6.92	7.80
4/07/99	10:01:36	23.44	0.00	0.0	6.26	7.78
4/07/99	10:02:08	23.02	0.00	0.0	6.83	7.78
4/07/99	10:02:13	23.14	0.00	0.0	6.59	7.77
4/07/99	10:02:19	23.25	0.00	0.0	6.26	7.78
4/07/99	10:02:44	22.73	0.00	0.0	7.27	7.89
4/07/99	10:02:52	23.18	0.00	0.0	6.75	7.89
4/07/99	10:03:00	23.49	0.00	0.0	6.30	7.85
4/07/99	10:03:20	22.91	0.00	0.0	7.20	7.81
4/07/99	10:03:26	23.04	0.00	0.0	7.01	7.81
4/07/99	10:03:31	23.13	0.00	0.0	6.77	7.82
4/07/99	10:04:12	22.89	0.00	0.0	7.36	7.92
4/07/99	10:04:16	23.11	0.00	0.0	7.14	7.92
4/07/99	10:04:21	23.27	0.00	0.0	7.01	7.89
4/07/99	10:04:43	23.02	0.00	0.0	7.28	7.89
4/07/99	10:04:48	23.25	0.00	0.0	7.00	7.85
4/07/99	10:04:53	23.39	0.00	0.0	6.78	7.80
4/07/99	10:05:15	22.99	0.00	0.0	7.26	7.79
4/07/99	10:05:21	23.23	0.00	0.0	7.03	7.78
4/07/99	10:05:26	23.36	0.00	0.0	6.81	7.78
4/07/99	10:05:43	22.72	0.00	0.0	6.93	7.82
4/07/99	10:05:52	23.20	0.00	0.0	7.11	7.89
4/07/99	10:05:59	23.43	0.00	0.0	6.77	7.90
4/07/99	10:06:24	23.14	0.00	0.0	7.32	7.90
4/07/99	10:06:30	23.33	0.00	0.0	7.11	7.85
4/07/99	10:06:36	23.45	0.00	0.0	6.78	7.82
4/07/99	10:07:01	23.15	0.00	0.0	7.39	7.89
4/07/99	10:07:07	23.34	0.00	0.0	7.19	7.89

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/07/99	10:07:12		23.47	0.00	0.0	6.83	7.87
4/07/99	10:07:39		23.28	0.00	0.0	7.28	7.81
4/07/99	10:07:45		23.38	0.00	0.0	6.92	7.81
4/07/99	10:07:50		23.47	0.00	0.0	6.79	7.85
4/07/99	10:08:16		23.24	0.00	0.0	7.09	7.79
4/07/99	10:08:21		23.41	0.00	0.0	6.73	7.76
4/07/99	10:08:25		23.54	0.00	0.0	6.46	7.75
4/07/99	10:09:11		23.15	0.00	0.0	7.19	7.79
4/07/99	10:09:19		23.24	0.00	0.0	6.84	7.79
4/07/99	10:09:27		23.26	0.00	0.0	6.52	7.80
4/07/99	10:09:32		23.26	0.00	0.0	6.36	7.77
4/07/99	10:09:37		23.25	0.00	0.0	6.24	7.79
4/07/99	10:09:42		23.23	0.00	0.0	6.10	7.83
4/07/99	10:09:48		23.17	0.00	0.0	5.97	7.82
4/07/99	10:10:43		22.90	0.00	0.0	7.29	7.93
4/07/99	10:10:50		22.96	0.00	0.0	7.12	7.92
4/07/99	10:10:54		23.01	0.00	0.0	7.01	7.92
4/07/99	10:10:59		23.03	0.00	0.0	6.75	7.88
4/07/99	10:11:04		22.98	0.00	0.0	6.53	7.85
4/07/99	10:11:08		22.92	0.00	0.0	6.38	7.84
4/07/99	10:11:13		22.87	0.00	0.0	6.27	7.83
4/07/99	10:11:17		22.82	0.00	0.0	6.19	7.84

Project #: 411 Test type: ACUTE CHRONIC OTHER sediment flow thru Date: 4/7/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *H. azteca* Day of Study: 6

OPERATIONAL RANGE:

Temperature: 22 to 24 Check if OK
 Salinity: - to -
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Meter Used:

Blue
 Red

Actions taken: _____

See deviation summary sheet

Initials: TD

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/08/99	9:02:50	23.28	0.00	0.0	6.82	8.06
4/08/99	9:02:59	23.35	0.00	0.0	6.44	7.98
4/08/99	9:03:07	23.51	0.00	0.0	6.19	7.95
4/08/99	9:03:43	23.31	0.00	0.0	6.90	7.97
4/08/99	9:03:48	23.34	0.00	0.0	6.77	7.94
4/08/99	9:03:54	23.49	0.00	0.0	6.52	7.89
4/08/99	9:04:22	23.46	0.00	0.0	6.95	7.92
4/08/99	9:04:34	23.65	0.00	0.0	6.45	7.83
4/08/99	9:04:43	23.75	0.00	0.0	5.89	7.80
4/08/99	9:05:18	23.56	0.00	0.0	6.95	7.95
4/08/99	9:05:27	23.69	0.00	0.0	6.81	8.02
4/08/99	9:05:33	23.78	0.00	0.0	6.74	8.05
4/08/99	9:05:52	23.32	0.00	0.0	7.25	7.94
4/08/99	9:06:01	23.56	0.00	0.0	7.17	7.95
4/08/99	9:06:10	23.77	0.00	0.0	6.71	7.99
4/08/99	9:06:43	23.50	0.00	0.0	6.91	7.94
4/08/99	9:06:48	23.57	0.00	0.0	6.75	7.94
4/08/99	9:06:58	23.72	0.00	0.0	6.49	7.94
4/08/99	9:07:26	23.31	0.00	0.0	6.98	7.97
4/08/99	9:07:35	23.43	0.00	0.0	6.69	7.99
4/08/99	9:07:41	23.49	0.00	0.0	6.58	8.01
4/08/99	9:09:58	23.28	0.00	0.0	6.80	7.88
4/08/99	9:10:06	23.37	0.00	0.0	6.51	7.85
4/08/99	9:10:11	23.45	0.00	0.0	6.38	7.84
4/08/99	9:10:56	23.03	0.00	0.0	6.89	7.80
4/08/99	9:11:02	23.09	0.00	0.0	6.54	7.79
4/08/99	9:11:07	23.23	0.00	0.0	6.41	7.81
4/08/99	9:11:42	23.34	0.00	0.0	6.83	7.99
4/08/99	9:11:50	23.48	0.00	0.0	6.51	7.99
4/08/99	9:11:55	23.51	0.00	0.0	6.41	7.95
4/08/99	9:12:23	23.24	0.00	0.0	7.09	7.90
4/08/99	9:12:30	23.42	0.00	0.0	6.76	7.91
4/08/99	9:12:35	23.53	0.00	0.0	6.61	7.91
4/08/99	9:13:14	23.49	0.00	0.0	6.98	8.00
4/08/99	9:13:23	23.62	0.00	0.0	6.72	8.00
4/08/99	9:13:28	23.71	0.00	0.0	6.62	7.97
4/08/99	9:13:58	23.59	0.00	0.0	6.91	7.92
4/08/99	9:14:03	23.66	0.00	0.0	6.77	7.89
4/08/99	9:14:11	23.76	0.00	0.0	6.55	7.87
4/08/99	9:14:42	23.57	0.00	0.0	6.95	7.97
4/08/99	9:14:50	23.68	0.00	0.0	6.74	7.97
4/08/99	9:14:58	23.83	0.00	0.0	6.42	7.96
4/08/99	9:15:26	23.53	0.00	0.0	6.94	8.04
4/08/99	9:15:32	23.63	0.00	0.0	6.70	8.04
4/08/99	9:15:38	23.75	0.00	0.0	6.37	8.03
4/08/99	9:16:16	23.47	0.00	0.0	6.93	7.91
4/08/99	9:16:23	23.54	0.00	0.0	6.70	7.87
4/08/99	9:16:28	23.65	0.00	0.0	6.57	7.87
4/08/99	9:17:07	23.65	0.00	0.0	6.74	7.97
4/08/99	9:17:14	23.67	0.00	0.0	6.55	7.97

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/08/99	9:17:20		23.76	0.00	0.0	6.52	7.95
4/08/99	9:17:55		23.55	0.00	0.0	6.96	7.90
4/08/99	9:18:03		23.66	0.00	0.0	6.71	7.91
4/08/99	9:18:07		23.74	0.00	0.0	6.64	7.93
4/08/99	9:18:37		23.62	0.00	0.0	6.90	7.86
4/08/99	9:18:41		23.70	0.00	0.0	6.60	7.83
4/08/99	9:18:50		23.85	0.00	0.0	6.14	7.82
4/08/99	9:19:39		23.09	0.00	0.0	7.04	7.78
4/08/99	9:19:43		23.19	0.00	0.0	6.89	7.77
4/08/99	9:19:54		23.24	0.00	0.0	6.49	7.82
4/08/99	9:20:00		23.22	0.00	0.0	6.37	7.81
4/08/99	9:20:04		23.20	0.00	0.0	6.28	7.83
4/08/99	9:20:11		23.15	0.00	0.0	6.14	7.86
4/08/99	9:20:16		23.11	0.00	0.0	6.06	7.85
4/08/99	9:21:27		22.74	0.00	0.0	7.08	7.95
4/08/99	9:21:32		22.84	0.00	0.0	6.95	7.95
4/08/99	9:21:38		22.93	0.00	0.0	6.74	7.94
4/08/99	9:21:43		22.97	0.00	0.0	6.58	7.90
4/08/99	9:21:49		22.99	0.00	0.0	6.42	7.87
4/08/99	9:21:53		23.01	0.00	0.0	6.27	7.88
4/08/99	9:21:58		23.00	0.00	0.0	6.14	7.88
4/08/99	9:22:02		22.95	0.00	0.0	6.08	7.90

Project #: 411 Test type: ACUTE CHRONIC OTHER 28 day flow thru Date: 4/8/99

Species: *P. promelas* *C. dubia* *M. bahia* Other A. zteca Day of Study: 7

OPERATIONAL RANGE: Check if OK

Temperature: 22 to 24 Meter Used: Blue
 Salinity: — to — Red
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: TD

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/09/99	9:13:11	23.86	0.00	0.0	6.17	7.79
4/09/99	9:13:48	24.21	0.00	0.0	5.86	7.73
4/09/99	9:14:09	24.28	0.00	0.0	5.71	7.91
4/09/99	9:17:06	23.98	0.00	0.0	6.27	7.86
4/09/99	9:17:30	24.12	0.00	0.0	6.04	7.76
4/09/99	9:17:52	24.29	1.00	0.0	5.87	7.71
4/09/99	9:18:33	24.20	0.00	0.0	5.94	7.87
4/09/99	9:19:00	24.21	0.00	0.0	5.23	7.67
4/09/99	9:19:18	24.25	0.00	0.0	5.11	7.72
4/09/99	9:19:39	24.16	0.00	0.0	5.81	7.88
4/09/99	9:20:10	24.27	0.00	0.0	6.07	8.08
4/09/99	9:20:45	24.37	0.00	0.0	6.07	7.86
4/09/99	9:21:15	23.92	0.00	0.0	6.10	7.88
4/09/99	9:21:36	24.11	0.00	0.0	6.07	7.93
4/09/99	9:22:18	24.33	0.00	0.0	5.86	8.03
4/09/99	9:22:46	24.01	0.00	0.0	5.78	7.84
4/09/99	9:23:04	24.11	0.00	0.0	5.69	7.88
4/09/99	9:23:17	24.16	0.00	0.0	5.68	7.89
4/09/99	9:23:43	24.05	0.00	0.0	5.84	7.92
4/09/99	9:23:59	24.11	0.00	0.0	5.87	8.05
4/09/99	9:24:18	24.22	0.00	0.0	5.81	8.11
4/09/99	9:24:50	24.01	0.00	0.0	6.17	7.88
4/09/99	9:25:21	24.08	0.00	0.0	5.63	7.81
4/09/99	9:25:37	24.12	0.00	0.0	5.62	7.81
4/09/99	9:25:52	23.97	0.00	0.0	5.68	7.78
4/09/99	9:26:16	23.99	0.00	0.0	5.69	7.76
4/09/99	9:26:41	24.08	0.00	0.0	5.62	7.88
4/09/99	9:27:10	24.09	0.00	0.0	5.57	7.97
4/09/99	9:27:23	24.10	0.00	0.0	5.50	7.93
4/09/99	9:27:34	24.08	0.00	0.0	5.48	7.84
4/09/99	9:28:11	23.91	0.00	0.0	5.68	7.83
4/09/99	9:28:55	23.99	0.00	0.0	5.82	7.94
4/09/99	9:29:30	24.18	0.00	0.0	5.79	7.88
4/09/99	9:30:03	24.31	0.00	0.0	5.80	7.88
4/09/99	9:30:55	24.18	0.00	0.0	5.87	7.79
4/09/99	9:31:39	24.22	0.00	0.0	5.77	7.76
4/09/99	9:32:06	24.28	0.00	0.0	5.68	7.87
4/09/99	9:32:53	24.15	0.00	0.0	5.76	7.79
4/09/99	9:33:19	24.20	0.00	0.0	5.77	7.86
4/09/99	9:33:40	24.31	0.00	0.0	5.79	7.83
4/09/99	9:34:09	24.17	0.00	0.0	5.80	7.97
4/09/99	9:34:24	24.25	0.00	0.0	5.77	7.99
4/09/99	9:34:42	24.29	0.00	0.0	5.78	7.95
4/09/99	9:35:08	24.35	0.00	0.0	5.84	7.78
4/09/99	9:35:39	24.30	0.00	0.0	5.68	7.73
4/09/99	9:35:56	24.36	0.00	0.0	5.62	7.82
4/09/99	9:36:35	24.26	0.00	0.0	5.61	7.91
4/09/99	9:36:55	24.32	0.00	0.0	5.62	7.84
4/09/99	9:37:07	24.40	0.00	0.0	5.63	7.83
4/09/99	9:37:41	24.26	0.00	0.0	5.85	7.75

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/09/99	9:38:00		24.31	0.00	0.0	5.88	7.87
4/09/99	9:38:14		24.29	0.00	0.0	5.90	7.89
4/09/99	9:38:33		24.25	0.00	0.0	5.95	7.87
4/09/99	9:38:47		24.34	0.00	0.0	5.94	7.83
4/09/99	9:38:59		24.36	0.00	0.0	5.87	7.82
4/09/99	9:41:33		23.55	0.00	0.0	6.47	7.74
4/09/99	9:45:49		23.33	0.00	0.0	7.06	7.82
4/09/99	9:46:12		23.41	0.00	0.0	6.36	7.80
4/09/99	9:46:26		23.31	0.00	0.0	6.28	7.81
4/09/99	9:46:52		23.26	0.00	0.0	6.19	7.82
4/09/99	9:47:12		23.17	0.00	0.0	5.94	7.81
4/09/99	9:47:28		22.98	0.00	0.0	5.80	7.86
4/09/99	9:47:41		23.02	0.00	0.0	5.79	7.80
4/09/99	9:48:02		23.25	0.00	0.0	5.81	7.83
4/09/99	9:49:16		23.24	0.00	0.0	6.58	7.89
4/09/99	9:49:31		23.28	0.00	0.0	6.53	7.92
4/09/99	9:49:48		23.27	0.00	0.0	6.33	7.83
4/09/99	9:50:12		23.35	0.00	0.0	5.57	7.76
4/09/99	9:50:24		23.29	0.00	0.0	5.55	7.79
4/09/99	9:50:41		23.29	0.00	0.0	5.61	7.80
4/09/99	9:50:59		23.19	0.00	0.0	5.65	7.90
4/09/99	9:51:12		23.20	0.00	0.0	5.62	7.97

Project #: 98-411 R Test type: ACUTE CHRONIC OTHER 28 Day
 Species: *P. promelas* *C. dubia* *M. bahia* Other Ha.

Date: 4/9/99
 Day of Study: 8

OPERATIONAL RANGE: Check if OK
 Temperature: 22 to 24 High
 Salinity: to
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Meter Used:
 Blue
 Red

Actions taken: * temp adjusted by lowering bath temp

See deviation summary sheet

Initials: SLA

YSI 6000 Time Series Report

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Date	Time	Temperature	DO	pH
mm/dd/yy	hh:mm:ss	C	mg/L	
4/10/99	9:28:39	22.93	6.62	7.66
4/10/99	9:29:09	23.27	5.59	7.74
4/10/99	9:29:34	23.51	5.32	7.83
4/10/99	9:30:01	23.21	5.43	7.88
4/10/99	9:30:15	23.23	5.46	7.86
4/10/99	9:30:38	23.49	5.51	7.84
4/10/99	9:31:03	23.24	5.71	7.89
4/10/99	9:31:14	23.23	5.79	7.89
4/10/99	9:31:24	23.34	5.81	7.87
4/10/99	9:31:48	23.35	5.81	7.92
4/10/99	9:32:03	23.34	5.85	7.98
4/10/99	9:32:18	23.46	5.85	7.98
4/10/99	9:32:47	23.36	5.77	7.92
4/10/99	9:33:01	23.39	5.72	7.93
4/10/99	9:33:15	23.48	5.70	7.97
4/10/99	9:33:46	23.33	5.63	7.91
4/10/99	9:33:58	23.33	5.17	7.89
4/10/99	9:34:17	23.49	5.60	7.90
4/10/99	9:34:38	23.24	6.14	7.95
4/10/99	9:34:59	23.32	6.13	8.14
4/10/99	9:35:17	23.40	6.07	8.20
4/10/99	9:35:38	23.29	6.09	8.09
4/10/99	9:35:51	23.34	6.04	8.00
4/10/99	9:36:06	23.38	5.98	7.97
4/10/99	9:36:31	23.23	6.01	7.88
4/10/99	9:36:51	23.09	5.97	7.86
4/10/99	9:37:01	23.14	5.91	7.88
4/10/99	9:37:28	23.37	5.84	7.97
4/10/99	9:37:54	23.48	5.74	7.97
4/10/99	9:38:13	23.50	5.73	7.91
4/10/99	9:38:38	23.15	5.81	7.89
4/10/99	9:38:48	23.16	5.82	7.90
4/10/99	9:38:58	23.23	5.84	7.90
4/10/99	9:39:31	23.25	5.96	7.91
4/10/99	9:39:50	23.34	5.92	7.91
4/10/99	9:40:06	23.40	5.91	7.91
4/10/99	9:40:44	23.38	5.99	7.89
4/10/99	9:40:54	23.35	5.98	7.88
4/10/99	9:41:05	23.39	6.00	7.89
4/10/99	9:41:31	23.31	5.93	7.93
4/10/99	9:41:43	23.32	5.89	7.93
4/10/99	9:41:55	23.43	5.88	7.93
4/10/99	9:42:22	23.44	5.96	7.98
4/10/99	9:42:47	23.46	5.91	7.99
4/10/99	9:43:03	23.52	5.88	7.99
4/10/99	9:43:25	23.47	5.88	7.91
4/10/99	9:43:35	23.45	5.83	7.86
4/10/99	9:43:42	23.46	5.77	7.85
4/10/99	9:44:07	23.38	5.71	7.94
4/10/99	9:44:25	23.43	5.73	7.93

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/10/99	9:44:43		23.55	5.77	7.92
4/10/99	9:45:13		23.30	5.98	7.87
4/10/99	9:45:26		23.39	5.98	7.91
4/10/99	9:45:38		23.53	6.00	7.96
4/10/99	9:45:49		23.48	6.06	7.96
4/10/99	9:45:58		23.45	6.08	7.92
4/10/99	9:46:09		23.54	6.03	7.88
4/10/99	9:48:11		23.24	6.43	7.82
4/10/99	9:48:30		23.22	6.35	7.85
4/10/99	9:48:41		23.17	6.28	7.85
4/10/99	9:48:50		23.12	6.25	7.84
4/10/99	9:49:01		23.11	6.21	7.87
4/10/99	9:49:13		23.11	6.15	7.87
4/10/99	9:49:25		23.02	6.09	7.89
4/10/99	9:50:23		23.10	6.47	7.93
4/10/99	9:50:34		23.08	6.39	7.94
4/10/99	9:50:46		23.07	6.37	7.95
4/10/99	9:51:01		23.06	6.31	7.90
4/10/99	9:51:14		22.98	6.25	7.88
4/10/99	9:51:28		22.92	6.20	7.89
4/10/99	9:51:37		22.82	6.15	7.90
4/10/99	9:51:50		22.83	6.12	8.02

Project #: 98-411 Test type: ACUTE CHRONIC OTHER 28 Day Date: 4/10/99

Species: *P. promelas* *C. dubia* *M. bahia* Other H. m. Day of Study: 9

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: to Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet

Initials: MA

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/11/99	9:43:50	22.93	6.35	8.01
4/11/99	9:44:17	23.25	5.38	7.89
4/11/99	9:44:32	23.30	4.58	7.92
4/11/99	9:45:08	23.25	5.41	7.99
4/11/99	9:45:22	23.23	5.47	7.90
4/11/99	9:45:33	23.30	5.51	7.87
4/11/99	9:46:18	23.26	5.86	8.00
4/11/99	9:46:28	23.23	5.90	7.97
4/11/99	9:46:48	23.40	5.87	8.01
4/11/99	9:47:12	23.32	5.92	8.11
4/11/99	9:47:49	23.32	6.05	8.13
4/11/99	9:48:10	23.48	5.50	7.96
4/11/99	9:48:35	23.26	5.56	7.96
4/11/99	9:48:51	23.31	5.57	7.97
4/11/99	9:49:18	23.43	5.61	8.07
4/11/99	9:49:42	23.19	4.99	7.90
4/11/99	9:50:00	23.19	4.56	7.95
4/11/99	9:50:17	23.28	5.51	7.99
4/11/99	9:50:40	23.19	6.06	8.09
4/11/99	9:50:56	23.17	6.03	8.30
4/11/99	9:51:15	23.31	5.89	8.26
4/11/99	9:51:32	23.11	5.85	8.08
4/11/99	9:51:40	23.10	5.83	8.00
4/11/99	9:51:59	23.36	5.73	7.92
4/11/99	9:52:22	23.05	5.71	7.88
4/11/99	9:52:43	23.10	5.62	7.90
4/11/99	9:52:59	23.19	5.61	8.00
4/11/99	9:53:38	23.30	5.70	8.17
4/11/99	9:53:48	23.31	5.67	8.16
4/11/99	9:53:59	23.35	5.66	8.05
4/11/99	9:54:21	23.06	5.82	8.01
4/11/99	9:54:35	23.14	5.86	7.99
4/11/99	9:54:49	23.24	5.89	7.99
4/11/99	9:55:18	23.22	6.09	7.98
4/11/99	9:55:28	23.21	6.11	8.01
4/11/99	9:55:37	23.26	6.12	8.02
4/11/99	9:56:01	23.28	6.17	7.96
4/11/99	9:56:15	23.28	6.17	7.92
4/11/99	9:56:31	23.33	6.14	8.10
4/11/99	9:56:43	23.25	6.05	8.13
4/11/99	9:56:53	23.31	6.00	8.05
4/11/99	9:57:06	23.42	5.99	8.06
4/11/99	9:57:19	23.39	6.00	8.11
4/11/99	9:57:30	23.34	6.01	8.12
4/11/99	9:57:41	23.42	5.99	8.07
4/11/99	9:57:53	23.42	6.01	7.96
4/11/99	9:58:03	23.41	6.00	7.88
4/11/99	9:58:16	23.45	5.96	8.07
4/11/99	9:58:36	23.35	5.86	8.15
4/11/99	9:58:55	23.41	5.82	8.02

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	% Temperature Conc C	DO mg/L	pH
4/11/99	9:59:06	23.44	5.82	7.97
4/11/99	9:59:31	23.28	5.96	7.92
4/11/99	9:59:40	23.28	5.99	7.95
4/11/99	9:59:51	23.35	6.00	8.01
4/11/99	10:00:05	23.32	6.08	7.96
4/11/99	10:00:14	23.27	6.11	7.94
4/11/99	10:00:25	23.35	6.07	7.95
4/11/99	10:01:46	22.69	6.67	7.88
4/11/99	10:02:04	22.83	6.59	7.96
4/11/99	10:02:17	22.80	6.41	7.94
4/11/99	10:02:34	22.85	6.40	8.04
4/11/99	10:02:52	22.91	6.31	8.09
4/11/99	10:03:07	22.85	6.27	8.04
4/11/99	10:03:22	22.79	6.27	8.04
4/11/99	10:04:22	22.40	7.06	8.07
4/11/99	10:04:39	22.73	6.78	8.07
4/11/99	10:04:54	22.68	6.65	8.00
4/11/99	10:05:09	22.71	6.55	7.95
4/11/99	10:05:27	22.78	6.42	7.98
4/11/99	10:05:44	22.76	6.35	7.95
4/11/99	10:05:56	22.62	6.31	8.10
4/11/99	10:06:17	22.54	6.10	8.41

Project #: 98-411 R Test type: 28 Day Date: 4/11/99Species: Ha Day of study: 10

ACCEPTABLE RANGE: Check if OK

Temperature 22 to 24 Salinity: to Dissolved oxygen: > 4.0 pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: MS

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/12/99	7:58:10	22.40	6.85	7.67
4/12/99	7:58:35	22.81	6.55	7.82
4/12/99	7:58:49	22.95	6.40	7.91
4/12/99	7:59:16	22.79	6.31	8.02
4/12/99	7:59:36	22.87	6.28	7.98
4/12/99	7:59:59	22.98	6.38	7.99
4/12/99	8:00:45	22.86	6.55	8.06
4/12/99	8:01:03	22.93	6.53	7.96
4/12/99	8:01:16	23.01	6.43	8.02
4/12/99	8:01:44	22.94	6.38	8.12
4/12/99	8:02:11	23.02	6.47	8.23
4/12/99	8:02:24	23.01	6.53	8.18
4/12/99	8:02:44	22.91	6.56	8.15
4/12/99	8:02:59	22.96	6.57	8.15
4/12/99	8:03:09	23.00	6.57	8.18
4/12/99	8:03:32	22.89	6.57	8.07
4/12/99	8:03:50	22.95	6.36	8.05
4/12/99	8:04:02	23.01	6.30	8.08
4/12/99	8:04:23	22.93	6.40	8.19
4/12/99	8:04:40	22.87	6.39	8.44
4/12/99	8:04:51	22.89	6.35	8.50
4/12/99	8:05:11	22.81	6.42	8.34
4/12/99	8:05:21	22.83	6.46	8.22
4/12/99	8:05:31	22.87	6.49	8.15
4/12/99	8:05:47	22.80	6.57	8.03
4/12/99	8:06:01	22.74	6.56	8.00
4/12/99	8:06:16	22.79	6.52	8.09
4/12/99	8:06:35	22.83	6.51	8.20
4/12/99	8:06:48	22.95	6.41	8.24
4/12/99	8:07:01	23.03	6.37	8.14
4/12/99	8:07:19	22.67	6.52	8.07
4/12/99	8:07:33	22.77	6.58	8.09
4/12/99	8:07:55	22.77	6.56	8.06
4/12/99	8:08:31	22.80	7.28	8.19
4/12/99	8:08:48	22.92	7.20	8.15
4/12/99	8:09:02	22.94	7.15	8.14
4/12/99	8:09:24	22.91	7.07	8.14
4/12/99	8:09:41	22.97	7.00	8.09
4/12/99	8:09:58	23.10	6.83	8.24
4/12/99	8:10:19	22.97	6.31	8.24
4/12/99	8:10:42	23.07	6.41	8.13
4/12/99	8:10:59	23.13	6.46	8.17
4/12/99	8:11:57	23.05	6.27	8.27
4/12/99	8:12:30	23.07	6.28	8.21
4/12/99	8:12:56	23.17	6.38	8.14
4/12/99	8:13:44	23.02	6.76	7.97
4/12/99	8:13:59	23.05	6.69	7.97
4/12/99	8:14:14	23.14	6.62	8.15
4/12/99	8:14:58	23.09	6.38	8.05
4/12/99	8:15:32	23.11	6.25	8.09

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/12/99	8:16:08		23.22	6.38	8.06
4/12/99	8:17:10		22.96	6.52	8.00
4/12/99	8:17:46		23.11	6.49	8.15
4/12/99	8:18:03		23.12	6.50	8.14
4/12/99	8:18:29		23.01	6.54	8.01
4/12/99	8:18:36		23.01	6.50	7.99
4/12/99	8:18:44		23.05	6.45	8.00
4/12/99	8:20:23		22.56	7.39	8.05
4/12/99	8:20:35		22.55	7.34	8.05
4/12/99	8:20:49		22.64	7.22	8.05
4/12/99	8:21:04		22.65	7.09	8.16
4/12/99	8:21:21		22.66	6.92	8.20
4/12/99	8:21:35		22.70	6.76	8.11
4/12/99	8:21:46		22.67	6.69	8.08
4/12/99	8:22:48		22.51	6.98	8.14
4/12/99	8:23:02		22.66	6.89	8.19
4/12/99	8:23:17		22.62	6.87	8.13
4/12/99	8:23:30		22.56	6.86	8.04
4/12/99	8:23:47		22.53	6.78	8.07
4/12/99	8:24:05		22.54	6.72	8.06
4/12/99	8:24:18		22.41	6.71	8.22
4/12/99	8:24:27		22.36	6.67	8.39

Project #: 411 Test type: ACUTE CHRONIC OTHER dry flounder Date: 4/12/99

Species: *P. promelas* *C. dubia* *M. bahia* Other L. aeteca Day of Study: 11

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: to Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials:

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/13/99	14:28:26	22.63	0.00	0.0	8.62	7.73
4/13/99	14:28:39	23.25	0.00	0.0	6.86	7.93
4/13/99	14:28:49	23.39	0.00	0.0	5.54	8.02
4/13/99	14:29:20	23.15	0.00	0.0	7.26	8.15
4/13/99	14:29:31	23.37	0.00	0.0	7.04	8.14
4/13/99	14:29:39	23.42	0.00	0.0	6.91	8.12
4/13/99	14:30:20	23.15	0.00	0.0	7.27	8.17
4/13/99	14:30:28	23.21	0.00	0.0	7.11	8.15
4/13/99	14:30:35	23.28	0.00	0.0	6.97	8.14
4/13/99	14:30:58	22.89	0.00	0.0	7.52	8.23
4/13/99	14:31:08	23.23	0.00	0.0	7.30	8.27
4/13/99	14:31:15	23.32	0.00	0.0	7.12	8.26
4/13/99	14:32:06	23.29	0.00	0.0	7.07	8.17
4/13/99	14:32:12	23.30	0.00	0.0	7.00	8.18
4/13/99	14:32:19	23.30	0.00	0.0	6.91	8.22
4/13/99	14:32:57	23.20	0.00	0.0	6.37	8.24
4/13/99	14:33:04	23.25	0.00	0.0	6.07	8.21
4/13/99	14:33:11	23.26	0.00	0.0	6.10	8.20
4/13/99	14:33:39	22.91	0.00	0.0	7.34	8.32
4/13/99	14:33:47	23.12	0.00	0.0	7.15	8.40
4/13/99	14:33:54	23.23	0.00	0.0	6.95	8.43
4/13/99	14:34:23	22.87	0.00	0.0	7.55	8.35
4/13/99	14:34:29	23.14	0.00	0.0	7.37	8.31
4/13/99	14:34:34	23.27	0.00	0.0	7.18	8.28
4/13/99	14:35:00	22.90	0.00	0.0	7.61	8.17
4/13/99	14:35:07	23.19	0.00	0.0	5.88	8.17
4/13/99	14:35:15	23.38	0.00	0.0	5.47	8.19
4/13/99	14:35:39	22.76	0.00	0.0	7.16	8.26
4/13/99	14:35:47	23.15	0.00	0.0	7.09	8.28
4/13/99	14:35:53	23.32	0.00	0.0	7.00	8.27
4/13/99	14:36:23	22.98	0.00	0.0	7.23	8.19
4/13/99	14:36:28	23.13	0.00	0.0	7.10	8.18
4/13/99	14:36:36	23.26	0.00	0.0	6.97	8.18
4/13/99	14:37:07	22.82	0.00	0.0	7.50	8.25
4/13/99	14:37:13	23.07	0.00	0.0	7.35	8.26
4/13/99	14:37:20	23.26	0.00	0.0	7.19	8.24
4/13/99	14:37:52	23.16	0.00	0.0	7.46	8.23
4/13/99	14:37:59	23.25	0.00	0.0	7.33	8.20
4/13/99	14:38:06	23.33	0.00	0.0	7.28	8.19
4/13/99	14:38:30	22.62	0.00	0.0	7.68	8.34
4/13/99	14:38:39	23.11	0.00	0.0	7.02	8.27
4/13/99	14:38:47	23.31	0.00	0.0	6.74	8.26
4/13/99	14:39:23	23.25	0.00	0.0	7.12	8.31
4/13/99	14:39:32	23.35	0.00	0.0	6.88	8.28
4/13/99	14:39:40	23.38	0.00	0.0	6.74	8.25
4/13/99	14:40:16	23.08	0.00	0.0	7.52	8.14
4/13/99	14:40:21	23.30	0.00	0.0	7.34	8.09
4/13/99	14:40:27	23.38	0.00	0.0	7.08	8.08
4/13/99	14:41:07	22.61	0.00	0.0	7.84	8.17
4/13/99	14:41:15	23.09	0.00	0.0	7.25	8.13

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/13/99	14:41:23		23.30	0.00	0.0	6.96	8.12
4/13/99	14:41:56		22.96	0.00	0.0	7.35	8.07
4/13/99	14:42:04		22.99	0.00	0.0	7.14	8.10
4/13/99	14:42:09		23.19	0.00	0.0	7.09	8.14
4/13/99	14:42:43		22.76	0.00	0.0	7.49	8.10
4/13/99	14:42:49		23.07	0.00	0.0	7.20	8.09
4/13/99	14:42:53		23.24	0.00	0.0	7.00	8.11
4/13/99	14:43:30		22.15	0.00	0.0	7.72	8.03
4/13/99	14:43:36		22.67	0.00	0.0	7.27	8.03
4/13/99	14:43:41		22.85	0.00	0.0	7.11	8.06
4/13/99	14:43:46		22.90	0.00	0.0	6.93	8.09
4/13/99	14:43:50		22.92	0.00	0.0	6.73	8.17
4/13/99	14:43:56		22.94	0.00	0.0	6.64	8.21
4/13/99	14:44:02		22.98	0.00	0.0	6.56	8.18
4/13/99	14:44:57		22.72	0.00	0.0	7.33	8.19
4/13/99	14:45:03		22.86	0.00	0.0	7.13	8.21
4/13/99	14:45:08		22.93	0.00	0.0	7.07	8.21
4/13/99	14:45:12		22.93	0.00	0.0	7.02	8.19
4/13/99	14:45:18		22.92	0.00	0.0	6.94	8.15
4/13/99	14:45:24		22.90	0.00	0.0	6.77	8.13
4/13/99	14:45:29		22.88	0.00	0.0	6.69	8.15
4/13/99	14:45:35		22.90	0.00	0.0	6.65	8.28

Project #: 411 Test type: ACUTE CHRONIC OTHER 28 day flow thru Date: 4/13/99

Species: *P. promelas* *C. dubia* *M. bahia* Other A. azteca Day of Study: 12

OPERATIONAL RANGE: Check if OK

Temperature: 22 to 24 Meter Used: Blue

Salinity: — to — Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: TD

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/14/99	9:37:10	22.15	0.00	0.0	6.33	7.78
4/14/99	9:37:32	22.22	0.00	0.0	6.22	7.83
4/14/99	9:37:48	22.30	0.00	0.0	6.17	7.90
4/14/99	9:38:27	22.26	2.00	0.0	6.70	7.89
4/14/99	9:38:42	22.34	2.00	0.0	6.38	7.88
4/14/99	9:38:58	22.44	2.00	0.0	6.32	7.86
4/14/99	9:39:39	22.32	2.00	0.0	6.87	7.95
4/14/99	9:39:48	22.33	2.00	0.0	6.72	7.94
4/14/99	9:39:58	22.38	3.00	0.0	6.41	7.99
4/14/99	9:40:26	22.25	3.00	0.0	6.70	8.03
4/14/99	9:40:41	22.36	4.00	0.0	6.46	8.12
4/14/99	9:41:02	22.56	3.00	0.0	5.89	7.97
4/14/99	9:41:56	22.30	3.00	0.0	6.16	7.99
4/14/99	9:42:16	22.34	2.00	0.0	6.24	8.03
4/14/99	9:42:35	22.49	2.00	0.0	6.23	8.15
4/14/99	9:43:12	22.37	2.00	0.0	5.94	7.86
4/14/99	9:43:21	22.35	2.00	0.0	5.43	7.85
4/14/99	9:43:37	22.44	2.00	0.0	5.90	7.90
4/14/99	9:44:17	22.31	2.00	0.0	6.12	8.33
4/14/99	9:44:28	22.34	2.00	0.0	5.94	8.34
4/14/99	9:44:46	22.50	2.00	0.0	6.40	8.31
4/14/99	9:45:40	22.41	2.00	0.0	6.47	7.96
4/14/99	9:46:08	22.45	2.00	0.0	6.46	8.02
4/14/99	9:46:26	22.45	2.00	0.0	6.48	7.97
4/14/99	9:47:18	22.31	3.00	0.0	6.55	7.87
4/14/99	9:47:31	22.31	3.00	0.0	6.24	7.90
4/14/99	9:47:43	22.32	3.00	0.0	6.06	7.96
4/14/99	9:48:00	22.42	3.00	0.0	6.07	8.06
4/14/99	9:48:20	22.47	2.00	0.0	5.94	8.02
4/14/99	9:48:48	22.53	3.00	0.0	5.90	7.90
4/14/99	9:49:46	22.22	2.00	0.0	6.83	8.01
4/14/99	9:50:07	22.30	2.00	0.0	6.58	8.07
4/14/99	9:50:22	22.35	2.00	0.0	6.54	8.05
4/14/99	9:50:48	22.29	2.00	0.0	7.21	8.13
4/14/99	9:50:59	22.36	2.00	0.0	7.01	8.15
4/14/99	9:51:09	22.40	2.00	0.0	7.14	8.11
4/14/99	9:51:30	22.31	2.00	0.0	7.26	8.04
4/14/99	9:51:51	22.41	2.00	0.0	7.00	8.01
4/14/99	9:52:14	22.44	2.00	0.0	6.27	8.28
4/14/99	9:52:52	22.43	3.00	0.0	6.85	8.08
4/14/99	9:53:04	22.43	3.00	0.0	6.75	8.01
4/14/99	9:53:15	22.43	3.00	0.0	6.69	8.08
4/14/99	9:53:35	22.36	3.00	0.0	6.64	8.23
4/14/99	9:53:49	22.42	3.00	0.0	6.59	8.11
4/14/99	9:54:09	22.49	2.00	0.0	6.44	8.03
4/14/99	9:54:36	22.31	2.00	0.0	7.26	7.97
4/14/99	9:55:33	22.42	2.00	0.0	5.81	7.82
4/14/99	9:56:54	22.55	3.00	0.0	5.01	8.18
4/14/99	9:57:38	22.43	2.00	0.0	5.84	7.96
4/14/99	9:58:00	22.44	3.00	0.0	5.77	7.93

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/14/99	9:58:18		22.52	3.00	0.0	5.78	7.90
4/14/99	9:59:00		22.35	3.00	0.0	6.24	7.80
4/14/99	9:59:15		22.39	3.00	0.0	6.14	7.87
4/14/99	9:59:32		22.50	3.00	0.0	6.14	7.97
4/14/99	10:00:10		22.39	3.00	0.0	6.29	7.88
4/14/99	10:00:40		22.48	2.00	0.0	5.57	8.01
4/14/99	10:01:03		22.55	2.00	0.0	5.53	7.96
4/14/99	10:02:06		22.42	2.00	0.0	6.21	7.83
4/14/99	10:02:24		22.51	3.00	0.0	6.15	7.98
4/14/99	10:02:39		22.51	3.00	0.0	6.10	7.94
4/14/99	10:02:59		22.52	2.00	0.0	6.06	8.30
4/14/99	10:03:17		22.64	2.00	0.0	5.51	8.27
4/14/99	10:03:42		22.63	2.00	0.0	5.66	7.99
4/14/99	10:03:54		22.63	2.00	0.0	5.68	7.99
4/14/99	10:04:54		22.59	2.00	0.0	6.49	7.96
4/14/99	10:05:11		22.76	3.00	0.0	6.31	8.09
4/14/99	10:05:27		22.71	2.00	0.0	6.23	7.98
4/14/99	10:05:38		22.63	2.00	0.0	6.17	7.90
4/14/99	10:05:48		22.63	2.00	0.0	6.14	7.85
4/14/99	10:06:00		22.62	2.00	0.0	6.12	7.82
4/14/99	10:06:17		22.29	2.00	0.0	6.13	8.04
4/14/99	10:06:28		22.33	2.00	0.0	6.17	8.29

Project #: 98 99-411R Test type: ACUTE CHRONIC OTHER 28 day Flow thru Date: 4/14/99

Species: *P. promelas* *C. dubia* *M. bahia* Other Hazkeca Day of Study: 13

OPERATIONAL RANGE: Check if OK

Temperature: 22 to 24 Blue

Salinity: - to - Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: mf

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/15/99	7:45:55	22.07	6.91	8.20
4/15/99	7:46:17	22.38	6.68	8.10
4/15/99	7:46:37	22.47	6.52	8.16
4/15/99	7:47:18	22.34	6.51	8.10
4/15/99	7:47:36	22.48	6.55	8.11
4/15/99	7:47:49	22.50	6.57	8.13
4/15/99	7:48:57	22.41	6.24	8.10
4/15/99	7:49:13	22.46	6.21	8.08
4/15/99	7:49:29	22.59	6.18	8.21
4/15/99	7:49:52	22.48	6.24	8.18
4/15/99	7:50:11	22.51	6.26	8.20
4/15/99	7:50:21	22.51	6.24	8.18
4/15/99	7:51:04	22.30	7.00	8.23
4/15/99	7:51:24	22.48	6.86	8.20
4/15/99	7:51:59	22.46	6.60	8.35
4/15/99	7:52:25	22.38	6.50	8.18
4/15/99	7:52:38	22.39	6.42	8.13
4/15/99	7:52:52	22.49	6.44	8.13
4/15/99	7:53:18	22.51	6.64	8.46
4/15/99	7:53:29	22.47	6.61	8.47
4/15/99	7:53:43	22.48	6.59	8.48
4/15/99	7:54:16	22.47	6.57	8.21
4/15/99	7:54:35	22.53	6.48	8.11
4/15/99	7:54:56	22.55	6.48	8.09
4/15/99	7:55:22	22.51	6.51	8.07
4/15/99	7:55:34	22.44	6.45	8.12
4/15/99	7:55:42	22.42	6.42	8.15
4/15/99	7:56:48	22.34	7.04	8.21
4/15/99	7:57:07	22.50	6.91	8.14
4/15/99	7:57:30	22.59	6.83	8.14
4/15/99	7:58:37	22.24	7.10	8.15
4/15/99	7:59:03	22.36	7.01	8.19
4/15/99	7:59:18	22.35	6.90	8.14
4/15/99	8:00:18	22.49	6.86	8.32
4/15/99	8:00:42	22.49	6.83	8.19
4/15/99	8:01:03	22.50	6.79	8.17
① 4/15/99	8:02:05	21.82	6.99	8.14
4/15/99	8:02:34	22.35	6.61	8.11
4/15/99	8:03:03	22.45	6.55	8.09
4/15/99	8:03:29	22.57	6.43	8.28
4/15/99	8:04:06	22.44	6.99	8.22
4/15/99	8:04:24	22.50	6.75	8.18
4/15/99	8:04:40	22.56	6.60	8.34
4/15/99	8:05:18	22.51	6.90	8.32
4/15/99	8:05:41	22.43	6.61	8.18
4/15/99	8:06:01	22.54	6.37	8.13
4/15/99	8:06:41	22.38	6.89	7.97
4/15/99	8:07:05	22.52	6.76	8.01
4/15/99	8:07:33	22.59	6.70	8.19
4/15/99	8:08:17	22.47	6.17	8.08

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/15/99	8:08:38		22.55	6.07	8.09
4/15/99	8:08:51		22.55	6.06	8.08
4/15/99	8:09:40		22.42	6.48	7.99
4/15/99	8:09:54		22.47	6.39	8.06
4/15/99	8:10:14		22.57	6.48	8.12
4/15/99	8:10:55		22.34	6.74	8.03
4/15/99	8:11:17		22.52	6.28	8.09
4/15/99	8:11:29		22.54	6.18	8.10
4/15/99	8:12:39		22.38	6.16	8.01
4/15/99	8:12:53		22.41	6.07	8.08
4/15/99	8:13:18		22.38	6.12	8.04
4/15/99	8:13:43		22.47	6.11	8.27
4/15/99	8:14:06		22.60	6.00	8.27
4/15/99	8:14:23		22.63	6.00	8.07
4/15/99	8:14:36		22.61	6.04	8.06
4/15/99	8:15:23		22.44	6.67	8.05
4/15/99	8:15:49		22.62	6.12	8.10
4/15/99	8:16:06		22.53	5.93	8.08
4/15/99	8:16:23		22.41	5.97	7.98
4/15/99	8:16:38		22.39	6.02	7.91
4/15/99	8:16:50		22.36	6.03	7.90
4/15/99	8:17:05		22.27	6.04	8.06
4/15/99	8:17:32		22.32	5.39	8.29

① Disregard - accepted data before meter was stable 4/15/99

Project #: 78-411R Test type: ACUTE CHRONIC OTHER 28day Flowthru Date: 4/15/99

Species: *P. promelas* *C. dubia* *M. bahia* Other H. azteca Day of Study: 14

OPERATIONAL RANGE:

Temperature: 22 to 24 Check if OK
 Salinity: - to -
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Meter Used:
 Blue
 Red

Actions taken: _____

See deviation summary sheet

Initials: [Signature]

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/16/99	12:48:38	23.07	7.20	7.97
4/16/99	12:48:55	23.25	7.05	8.06
4/16/99	12:49:07	23.32	7.00	8.15
4/16/99	12:49:27	23.30	6.94	8.28
4/16/99	12:49:36	23.30	6.94	8.26
4/16/99	12:49:47	23.33	6.93	8.22
4/16/99	12:50:04	23.31	6.92	8.24
4/16/99	12:50:13	23.32	6.90	8.24
4/16/99	12:50:20	23.34	6.88	8.26
4/16/99	12:50:41	23.32	6.73	8.30
4/16/99	12:50:48	23.33	6.70	8.31
4/16/99	12:50:57	23.39	6.64	8.26
4/16/99	12:51:13	23.35	6.64	8.29
4/16/99	12:51:22	23.33	6.64	8.32
4/16/99	12:51:33	23.38	6.62	8.38
4/16/99	12:51:38	23.38	6.62	8.38
4/16/99	12:52:07	23.28	5.77	8.28
4/16/99	12:52:13	23.28	5.96	8.29
4/16/99	12:52:26	23.26	6.41	8.36
4/16/99	12:52:42	23.28	6.44	8.34
4/16/99	12:52:53	23.28	6.35	8.38
4/16/99	12:53:16	23.29	6.28	8.19
4/16/99	12:53:25	23.29	5.65	8.17
4/16/99	12:53:30	23.31	5.70	8.19
4/16/99	12:53:45	23.27	6.17	8.20
4/16/99	12:53:54	23.17	6.16	8.22
4/16/99	12:54:07	23.29	6.44	8.31
4/16/99	12:54:18	23.36	6.39	8.33
4/16/99	12:54:27	23.39	6.39	8.31
4/16/99	12:54:37	23.40	6.40	8.30
4/16/99	12:54:55	23.14	6.53	8.34
4/16/99	12:55:45	23.27	6.70	8.36
4/16/99	12:55:55	23.27	6.66	8.35
4/16/99	12:56:21	23.26	6.83	8.41
4/16/99	12:56:33	23.31	6.86	8.38
4/16/99	12:56:41	23.34	6.85	8.36
4/16/99	12:57:09	23.30	6.81	8.32
4/16/99	12:57:26	23.34	6.77	8.29
4/16/99	12:57:39	23.38	6.70	8.30
4/16/99	12:58:01	23.33	6.55	8.32
4/16/99	12:58:15	23.34	6.52	8.29
4/16/99	12:58:23	23.36	6.50	8.34
4/16/99	12:58:47	23.35	6.52	8.43
4/16/99	12:59:00	23.34	6.50	8.39
4/16/99	12:59:14	23.39	6.43	8.33
4/16/99	12:59:31	23.36	6.40	8.25
4/16/99	12:59:44	23.38	6.39	8.20
4/16/99	12:59:54	23.40	6.36	8.22
4/16/99	13:00:08	23.36	6.32	8.26
4/16/99	13:00:19	23.34	6.31	8.26

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/16/99	13:00:33		23.37	6.29	8.24
4/16/99	13:00:49		23.31	6.29	8.22
4/16/99	13:01:04		23.26	6.27	8.29
4/16/99	13:01:13		23.30	6.25	8.30
4/16/99	13:01:24		23.35	6.27	8.27
4/16/99	13:01:34		23.38	6.27	8.26
4/16/99	13:01:44		23.42	6.26	8.28
4/16/99	13:02:37		23.13	6.78	8.24
4/16/99	13:02:56		23.14	6.63	8.28
4/16/99	13:03:16		23.15	6.52	8.27
4/16/99	13:03:29		23.17	6.49	8.30
4/16/99	13:03:41		23.20	6.42	8.36
4/16/99	13:03:52		23.24	6.36	8.31
4/16/99	13:04:06		23.17	6.30	8.27
4/16/99	13:05:02		23.12	6.65	8.26
4/16/99	13:05:25		23.20	6.45	8.24
4/16/99	13:05:41		23.13	6.35	8.21
4/16/99	13:05:52		23.12	6.31	8.25
4/16/99	13:06:11		23.09	6.37	8.26
4/16/99	13:06:22		23.12	6.43	8.22
4/16/99	13:06:33		23.06	6.44	8.21
4/16/99	13:06:47		23.11	6.37	8.33

Project #: 98-411R Test type: ACUTE CHRONIC OTHER 28 day flow thru Date: 4/16/99

Species: *P. promelas* *C. dubia* *M. bahia* Other H. azteca Day of Study: 15

OPERATIONAL RANGE: Temperature: 22 to 24 Check if OK Blue
 Salinity: — to — Red
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: MH

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/17/99	8:31:04	22.97	7.18	7.94
4/17/99	8:31:12	22.91	6.84	8.03
4/17/99	8:31:19	23.13	6.45	8.09
4/17/99	8:31:32	23.32	6.44	8.18
4/17/99	8:31:44	23.34	6.46	8.11
4/17/99	8:31:49	23.35	6.21	8.09
4/17/99	8:32:03	23.33	6.46	8.11
4/17/99	8:32:19	23.28	6.46	8.15
4/17/99	8:32:24	23.24	6.44	8.16
4/17/99	8:32:36	23.31	6.38	8.23
4/17/99	8:32:51	23.34	6.45	8.26
4/17/99	8:32:56	23.32	6.48	8.24
4/17/99	8:33:10	23.33	6.52	8.28
4/17/99	8:33:25	23.30	6.53	8.28
4/17/99	8:33:30	23.25	6.53	8.29
4/17/99	8:33:40	23.24	6.55	8.29
4/17/99	8:33:56	23.26	6.60	8.26
4/17/99	8:34:01	23.28	6.61	8.26
4/17/99	8:34:16	23.25	6.72	8.35
4/17/99	8:34:28	23.16	6.78	8.33
4/17/99	8:34:33	23.10	6.80	8.32
4/17/99	8:34:49	23.20	6.82	8.24
4/17/99	8:35:08	23.16	6.71	8.18
4/17/99	8:35:15	23.15	6.02	8.18
4/17/99	8:35:46	22.91	6.12	8.10
4/17/99	8:35:58	23.02	6.11	8.28
4/17/99	8:36:19	23.15	6.25	8.26
4/17/99	8:36:42	23.05	6.32	8.21
4/17/99	8:36:50	22.95	6.33	8.20
4/17/99	8:37:04	22.76	6.40	8.22
4/17/99	8:37:33	23.01	6.97	8.26
4/17/99	8:37:59	22.98	6.92	8.28
4/17/99	8:38:09	22.97	6.86	8.25
4/17/99	8:38:31	23.22	6.79	8.31
4/17/99	8:38:51	23.13	6.76	8.22
4/17/99	8:38:59	23.05	6.75	8.22
4/17/99	8:39:15	23.04	6.75	8.23
4/17/99	8:39:29	23.03	6.76	8.18
4/17/99	8:39:36	23.02	6.76	8.17
4/17/99	8:39:51	23.02	6.72	8.16
4/17/99	8:40:00	22.88	6.72	8.14
4/17/99	8:40:07	22.81	6.72	8.24
4/17/99	8:40:21	22.75	6.73	8.37
4/17/99	8:40:29	22.86	6.68	8.33
4/17/99	8:40:37	22.90	6.64	8.27
4/17/99	8:40:52	22.61	6.72	8.15
4/17/99	8:41:07	22.68	6.75	8.05
4/17/99	8:41:12	22.63	6.75	8.05
4/17/99	8:41:32	22.91	6.63	8.14
4/17/99	8:41:40	23.06	6.55	8.14

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/17/99	8:41:47	23.10	6.51	8.13
4/17/99	8:42:03	23.07	6.40	8.10
4/17/99	8:42:16	23.16	6.34	8.17
4/17/99	8:42:22	23.23	6.33	8.19
4/17/99	8:42:40	23.32	6.35	8.15
4/17/99	8:42:47	23.37	6.33	8.14
4/17/99	8:42:54	23.38	6.30	8.13
4/17/99	8:43:36	22.62	6.02	8.08
4/17/99	8:43:43	22.92	4.51	8.11
4/17/99	8:43:49	22.99	4.38	8.13
4/17/99	8:43:55	23.02	4.76	8.11
4/17/99	8:44:02	23.09	5.27	8.13
4/17/99	8:44:07	23.15	5.41	8.13
4/17/99	8:44:13	23.18	5.53	8.11
4/17/99	8:45:14	22.68	6.54	8.17
4/17/99	8:45:20	22.75	6.35	8.18
4/17/99	8:45:25	22.83	6.31	8.19
4/17/99	8:45:31	22.90	6.42	8.15
4/17/99	8:45:37	22.95	6.40	8.13
4/17/99	8:45:43	22.97	6.44	8.13
4/17/99	8:45:49	22.97	6.46	8.09
4/17/99	8:45:55	22.95	6.47	8.07

Project #: 98-411R Test type: ACUTE CHRONIC OTHER 28 day flow thru Date: 4/17/99
 Species: *P. promelas* *C. dubia* *M. bahia* Other H. antenna Day of Study: 16
 OPERATIONAL RANGE: _____ Check if OK _____ Meter Used: _____
 Temperature: 22 to 24 Blue
 Salinity: — to — Red
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0
 Actions taken: _____

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/18/99	11:53:36	23.09	7.34	8.20
4/18/99	11:53:42	22.99	7.01	8.20
4/18/99	11:53:48	23.06	6.99	8.24
4/18/99	11:53:59	23.25	7.02	8.36
4/18/99	11:54:16	23.30	7.12	8.30
4/18/99	11:54:25	23.33	7.15	8.28
4/18/99	11:54:42	23.32	7.23	8.34
4/18/99	11:54:53	23.31	7.23	8.33
4/18/99	11:55:02	23.34	7.20	8.32
4/18/99	11:55:16	23.00	7.17	8.34
4/18/99	11:55:30	23.18	7.10	8.34
4/18/99	11:55:36	23.28	7.06	8.33
4/18/99	11:55:47	23.40	6.98	8.35
4/18/99	11:56:04	23.35	6.97	8.36
4/18/99	11:56:10	23.28	6.98	8.38
4/18/99	11:56:20	23.31	6.98	8.38
4/18/99	11:56:42	23.20	7.01	8.37
4/18/99	11:56:48	23.13	7.02	8.37
4/18/99	11:57:00	23.13	7.04	8.41
4/18/99	11:57:17	23.32	7.06	8.31
4/18/99	11:57:22	23.34	7.06	8.32
4/18/99	11:57:46	23.24	7.02	8.30
4/18/99	11:58:06	23.08	6.93	8.31
4/18/99	11:58:14	23.01	6.95	8.31
4/18/99	11:58:37	22.82	7.08	8.19
4/18/99	11:58:48	22.84	7.03	8.26
4/18/99	11:58:56	22.90	6.97	8.29
4/18/99	11:59:32	23.13	6.88	8.25
4/18/99	11:59:53	23.17	6.78	8.26
4/18/99	12:00:10	23.18	6.75	8.31
4/18/99	12:00:29	22.74	6.87	8.34
4/18/99	12:00:46	22.93	6.94	8.37
4/18/99	12:00:52	23.03	6.93	8.35
4/18/99	12:01:05	23.39	6.84	8.36
4/18/99	12:01:25	23.32	6.81	8.28
4/18/99	12:01:31	23.27	6.77	8.28
4/18/99	12:01:42	23.38	6.71	8.31
4/18/99	12:02:00	23.11	6.82	8.25
4/18/99	12:02:06	23.08	6.83	8.24
4/18/99	12:02:16	23.28	6.80	8.23
4/18/99	12:02:32	23.36	6.78	8.26
4/18/99	12:02:37	23.42	6.76	8.29
4/18/99	12:02:50	23.49	6.72	8.41
4/18/99	12:03:05	23.50	6.69	8.36
4/18/99	12:03:12	23.42	6.68	8.34
4/18/99	12:03:24	23.52	6.65	8.24
4/18/99	12:03:43	23.36	6.61	8.16
4/18/99	12:03:49	23.30	6.60	8.16
4/18/99	12:04:01	23.42	6.51	8.22
4/18/99	12:04:19	23.56	6.47	8.22

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/18/99	12:04:24	23.56	6.48	8.22
4/18/99	12:04:38	23.40	6.56	8.26
4/18/99	12:04:55	23.36	6.64	8.37
4/18/99	12:04:59	23.30	6.68	8.37
4/18/99	12:05:12	23.24	6.76	8.31
4/18/99	12:05:17	23.18	6.79	8.29
4/18/99	12:05:22	23.16	6.80	8.27
4/18/99	12:06:41	22.90	4.83	8.12
4/18/99	12:06:53	22.97	5.37	8.18
4/18/99	12:07:01	23.00	5.78	8.21
4/18/99	12:07:22	22.96	5.51	8.12
4/18/99	12:07:32	22.91	5.03	8.18
4/18/99	12:07:41	22.93	5.53	8.17
4/18/99	12:07:52	22.93	5.92	8.25
4/18/99	12:08:42	23.10	6.84	8.26
4/18/99	12:08:50	23.10	6.80	8.27
4/18/99	12:09:00	23.14	6.81	8.28
4/18/99	12:09:09	23.13	6.80	8.24
4/18/99	12:09:24	23.03	6.84	8.25
4/18/99	12:09:31	23.00	6.84	8.25
4/18/99	12:09:38	23.01	6.83	8.20
4/18/99	12:09:46	22.99	6.83	8.14

Project #: 98-411R Test type: ACUTE CHRONIC OTHER 28 day flow thru Date: 4/18/99
 Species: *P. promelas* *C. dubia* *M. bahia* Other *h. apteca* Day of Study: 17
 OPERATIONAL RANGE: _____ Check if OK _____ Meter Used: _____
 Temperature: 22 to 24 Blue
 Salinity: — to — Red
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0
 Actions taken: _____

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/19/99	13:41:03	23.26	0.00	0.0	6.63	8.21
4/19/99	13:41:10	23.34	1.00	0.0	6.55	8.23
4/19/99	13:41:15	23.44	1.00	0.0	6.52	8.26
4/19/99	13:41:28	23.46	1.00	0.0	6.50	8.37
4/19/99	13:41:39	23.46	1.00	0.0	6.55	8.36
4/19/99	13:41:46	23.54	2.00	0.0	6.58	8.34
4/19/99	13:42:08	23.58	1.00	0.0	6.74	8.40
4/19/99	13:42:21	23.59	1.00	0.0	6.78	8.42
4/19/99	13:42:35	23.66	1.00	0.0	6.77	8.45
4/19/99	13:42:47	23.61	1.00	0.0	6.73	8.46
4/19/99	13:43:10	23.67	1.00	0.0	6.64	8.46
4/19/99	13:43:16	23.65	1.00	0.0	6.59	8.44
4/19/99	13:43:29	23.62	1.00	0.0	6.55	8.50
4/19/99	13:43:45	23.54	1.00	0.0	6.51	8.52
4/19/99	13:43:53	23.54	1.00	0.0	6.49	8.52
4/19/99	13:44:03	23.59	1.00	0.0	6.49	8.56
4/19/99	13:44:22	23.59	1.00	0.0	6.53	8.52
4/19/99	13:44:32	23.60	1.00	0.0	6.56	8.50
4/19/99	13:44:43	23.57	1.00	0.0	6.62	8.50
4/19/99	13:44:58	23.55	1.00	0.0	6.72	8.44
4/19/99	13:45:06	23.57	1.00	0.0	6.72	8.45
4/19/99	13:45:23	23.58	1.00	0.0	6.69	8.47
4/19/99	13:45:43	23.62	1.00	0.0	6.59	8.43
4/19/99	13:45:49	23.61	1.00	0.0	6.57	8.41
4/19/99	13:46:05	23.58	1.00	0.0	6.60	8.41
4/19/99	13:46:22	23.59	1.00	0.0	6.58	8.49
4/19/99	13:46:30	23.60	1.00	0.0	6.56	8.50
4/19/99	13:46:58	23.61	1.00	0.0	6.55	8.42
4/19/99	13:47:19	23.66	1.00	0.0	6.46	8.43
4/19/99	13:47:32	23.65	1.00	0.0	6.45	8.45
4/19/99	13:47:49	23.36	1.00	0.0	6.53	8.47
4/19/99	13:48:04	23.44	1.00	0.0	6.57	8.49
4/19/99	13:48:14	23.50	1.00	0.0	6.60	8.49
4/19/99	13:48:25	23.55	1.00	0.0	6.63	8.48
4/19/99	13:48:50	23.58	1.00	0.0	6.64	8.44
4/19/99	13:48:55	23.57	1.00	0.0	6.63	8.43
4/19/99	13:49:06	23.56	1.00	0.0	6.60	8.45
4/19/99	13:49:23	23.63	1.00	0.0	6.62	8.42
4/19/99	13:49:34	23.63	1.00	0.0	6.61	8.37
4/19/99	13:49:45	23.60	1.00	0.0	6.58	8.39
4/19/99	13:49:59	23.61	1.00	0.0	6.58	8.38
4/19/99	13:50:06	23.61	1.00	0.0	6.58	8.40
4/19/99	13:50:17	23.62	1.00	0.0	6.55	8.48
4/19/99	13:50:34	23.62	1.00	0.0	6.54	8.48
4/19/99	13:50:40	23.61	1.00	0.0	6.53	8.46
4/19/99	13:50:55	23.63	1.00	0.0	6.54	8.42
4/19/99	13:51:13	23.63	1.00	0.0	6.55	8.34
4/19/99	13:51:24	23.66	1.00	0.0	6.47	8.33
4/19/99	13:51:36	23.61	1.00	0.0	6.44	8.42
4/19/99	13:51:57	23.63	1.00	0.0	6.48	8.42

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/19/99	13:52:03		23.62	1.00	0.0	6.49	8.38
4/19/99	13:52:14		23.58	1.00	0.0	6.52	8.38
4/19/99	13:52:30		23.61	1.00	0.0	6.58	8.46
4/19/99	13:52:34		23.62	1.00	0.0	6.60	8.47
4/19/99	13:52:50		23.61	1.00	0.0	6.66	8.46
4/19/99	13:52:58		23.60	1.00	0.0	6.69	8.42
4/19/99	13:53:04		23.64	1.00	0.0	6.69	8.41
4/19/99	13:53:45		23.14	2.00	0.0	5.37	8.42
4/19/99	13:53:51		23.19	2.00	0.0	5.42	8.42
4/19/99	13:53:58		23.18	2.00	0.0	5.75	8.43
4/19/99	13:54:12		23.18	2.00	0.0	6.23	8.38
4/19/99	13:54:21		23.12	2.00	0.0	6.25	8.38
4/19/99	13:54:25		23.15	1.00	0.0	6.27	8.39
4/19/99	13:54:31		23.17	1.00	0.0	6.28	8.38
4/19/99	13:55:41		23.17	1.00	0.0	6.72	8.43
4/19/99	13:55:46		23.17	1.00	0.0	6.71	8.43
4/19/99	13:55:51		23.17	1.00	0.0	6.70	8.43
4/19/99	13:56:14		23.22	1.00	0.0	6.77	8.47
4/19/99	13:56:20		23.21	1.00	0.0	6.78	8.45
4/19/99	13:56:25		23.18	1.00	0.0	6.81	8.43
4/19/99	13:56:32		23.18	1.00	0.0	6.82	8.38
4/19/99	13:56:38		23.17	1.00	0.0	6.85	8.32

Project #: 98-411R Test type: ACUTE CHRONIC OTHER 28 day Flow thru Date: 4/19/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *h. antea* Day of Study: 18

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: — to — Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: MH

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/20/99	10:14:31	22.64	5.24	7.73
4/20/99	10:14:37	22.62	5.16	7.75
4/20/99	10:14:42	22.66	5.14	7.78
4/20/99	10:14:54	22.78	5.99	7.87
4/20/99	10:15:10	22.76	6.18	7.84
4/20/99	10:15:17	22.71	6.23	7.83
4/20/99	10:15:37	22.78	6.31	7.88
4/20/99	10:15:57	22.52	6.35	7.94
4/20/99	10:16:09	22.66	5.75	7.96
4/20/99	10:16:21	22.62	5.79	7.98
4/20/99	10:16:37	22.68	6.16	8.03
4/20/99	10:16:45	22.67	6.17	8.04
4/20/99	10:16:56	22.58	6.14	8.09
4/20/99	10:17:17	22.63	6.05	8.08
4/20/99	10:17:26	22.69	6.03	8.12
4/20/99	10:17:38	22.63	6.08	8.13
4/20/99	10:17:55	22.51	6.08	8.05
4/20/99	10:18:07	22.55	6.14	8.03
4/20/99	10:18:23	22.57	6.29	8.02
4/20/99	10:18:37	22.57	6.38	7.97
4/20/99	10:18:47	22.62	6.38	7.94
4/20/99	10:19:03	22.59	6.29	7.95
4/20/99	10:19:23	22.60	5.88	7.90
4/20/99	10:19:30	22.63	5.79	7.90
4/20/99	10:19:53	22.51	5.86	7.91
4/20/99	10:20:07	22.55	5.71	8.01
4/20/99	10:20:16	22.57	5.64	8.04
4/20/99	10:20:58	22.86	5.51	7.84
4/20/99	10:21:29	22.61	6.06	7.89
4/20/99	10:21:59	22.86	6.01	8.07
4/20/99	10:22:25	22.58	5.98	8.00
4/20/99	10:22:31	22.56	5.94	7.97
4/20/99	10:22:39	22.59	5.93	8.00
4/20/99	10:23:00	22.85	5.98	8.04
4/20/99	10:23:14	22.82	5.92	8.02
4/20/99	10:23:23	22.77	5.91	8.01
4/20/99	10:23:36	22.57	5.98	8.02
4/20/99	10:23:46	22.49	6.10	7.98
4/20/99	10:23:57	22.57	6.14	7.89
4/20/99	10:24:17	22.78	6.15	7.85
4/20/99	10:24:31	22.76	6.13	7.85
4/20/99	10:24:38	22.77	6.13	7.86
4/20/99	10:24:48	22.77	6.08	7.98
4/20/99	10:25:02	22.81	6.05	8.02
4/20/99	10:25:10	22.82	6.06	8.02
4/20/99	10:25:23	22.74	6.15	7.97
4/20/99	10:25:44	22.58	6.26	7.85
4/20/99	10:25:51	22.70	6.20	7.84
4/20/99	10:26:06	22.75	6.16	7.89
4/20/99	10:26:25	22.64	6.28	7.92

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/20/99	10:26:37		22.78	6.26	7.93
4/20/99	10:26:50		22.86	6.15	7.87
4/20/99	10:27:07		22.92	6.10	7.97
4/20/99	10:27:12		22.93	6.11	8.00
4/20/99	10:27:31		22.90	6.26	8.05
4/20/99	10:27:37		22.87	6.30	8.05
4/20/99	10:27:44		22.86	6.35	7.98
4/20/99	10:28:51		22.59	6.05	7.78
4/20/99	10:29:05		22.57	5.93	7.82
4/20/99	10:29:15		22.54	5.87	7.85
4/20/99	10:29:25		22.56	6.05	7.83
4/20/99	10:29:37		22.68	6.03	7.89
4/20/99	10:29:49		22.75	6.00	7.89
4/20/99	10:30:00		22.66	5.98	7.88
4/20/99	10:30:37		22.27	6.83	7.94
4/20/99	10:30:45		22.35	6.77	7.96
4/20/99	10:30:52		22.49	6.74	7.97
4/20/99	10:31:03		22.55	6.72	7.92
4/20/99	10:31:11		22.50	6.72	7.91
4/20/99	10:31:18		22.46	6.73	7.92
4/20/99	10:31:29		22.40	6.75	7.88
4/20/99	10:31:39		22.40	6.72	7.86

Project #: 98-411R Test type: ACUTE CHRONIC OTHER 28 day flowthru Date: 4/20/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *L. aestiva* Day of Study: 19

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: - to - Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: 7.3 - 8.3

See deviation summary sheet Initials: MH

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/21/99	8:30:50	22.39	5.47	8.01
4/21/99	8:30:57	22.39	5.37	8.01
4/21/99	8:31:06	22.55	5.36	8.07
4/21/99	8:31:29	22.51	6.27	8.12
4/21/99	8:31:48	22.63	6.24	8.04
4/21/99	8:31:59	22.68	6.17	8.02
4/21/99	8:32:12	22.62	6.17	8.05
4/21/99	8:32:30	22.50	6.22	8.13
4/21/99	8:32:40	22.47	5.57	8.15
4/21/99	8:33:01	22.53	5.96	8.15
4/21/99	8:33:21	22.63	6.00	8.23
4/21/99	8:33:30	22.66	6.02	8.26
4/21/99	8:33:46	22.57	6.11	8.25
4/21/99	8:34:04	22.53	6.07	8.23
4/21/99	8:34:12	22.54	6.08	8.26
4/21/99	8:34:25	22.46	6.13	8.25
4/21/99	8:34:48	22.54	6.05	8.10
4/21/99	8:34:58	22.57	6.01	8.11
4/21/99	8:35:12	22.54	6.08	8.15
4/21/99	8:35:32	22.57	6.46	8.06
4/21/99	8:35:39	22.52	6.32	8.06
4/21/99	8:35:56	22.49	6.35	8.14
4/21/99	8:36:17	22.23	6.15	8.09
4/21/99	8:36:28	22.23	6.10	8.07
4/21/99	8:36:45	22.40	6.17	8.06
4/21/99	8:37:03	22.43	6.13	8.09
4/21/99	8:37:35	22.46	6.06	8.11
4/21/99	8:38:07	22.27	5.97	7.96
4/21/99	8:38:20	22.44	5.83	7.97
4/21/99	8:38:36	22.59	5.89	8.12
4/21/99	8:39:26	22.25	5.67	8.00
4/21/99	8:39:52	22.47	5.73	8.10
4/21/99	8:40:05	22.45	5.69	8.15
4/21/99	8:40:18	22.50	6.26	8.15
4/21/99	8:40:36	22.41	6.37	8.11
4/21/99	8:40:49	22.50	6.33	8.09
4/21/99	8:41:03	22.55	6.26	8.11
4/21/99	8:41:17	22.53	6.31	8.08
4/21/99	8:41:33	22.58	6.31	8.00
4/21/99	8:41:49	22.52	6.25	8.02
4/21/99	8:42:07	22.40	6.31	8.04
4/21/99	8:42:15	22.45	6.32	8.05
4/21/99	8:42:34	22.59	6.30	8.19
4/21/99	8:42:52	22.51	6.22	8.16
4/21/99	8:43:04	22.43	6.22	8.16
4/21/99	8:43:16	22.42	6.23	8.12
4/21/99	8:43:34	22.44	6.26	8.04
4/21/99	8:43:43	22.57	6.24	8.02
4/21/99	8:43:55	22.64	6.23	8.03
4/21/99	8:44:24	22.46	6.27	8.01

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/21/99	8:44:30		22.51	6.22	8.00
4/21/99	8:44:50		22.60	6.14	7.93
4/21/99	8:45:04		22.63	6.07	8.01
4/21/99	8:45:14		22.70	6.05	8.05
4/21/99	8:45:30		22.68	6.13	8.12
4/21/99	8:45:48		22.74	6.14	8.02
4/21/99	8:45:54		22.72	6.11	7.98
4/21/99	8:47:09		22.34	5.96	7.88
4/21/99	8:47:14		22.32	5.90	7.88
4/21/99	8:47:18		22.30	5.84	7.91
4/21/99	8:47:25		22.31	6.15	7.93
4/21/99	8:47:50		22.67	6.18	7.99
4/21/99	8:47:58		22.66	5.92	7.97
4/21/99	8:48:12		22.55	5.89	7.92
4/21/99	8:48:59		22.28	6.42	8.01
4/21/99	8:49:05		22.31	6.23	8.01
4/21/99	8:49:12		22.39	6.17	8.00
4/21/99	8:49:24		22.44	6.11	7.95
4/21/99	8:50:00		22.46	5.82	8.02
4/21/99	8:50:06		22.43	5.80	8.01
4/21/99	8:50:14		22.40	5.82	7.95
4/21/99	8:50:24		22.36	5.93	7.89

Project #: 98-411R Test type: ACUTE CHRONIC OTHER 28 day flow thru Date: 4/21/99

Species: *P. promelas* *C. dubia* *M. bahia* Other *L. aquatica* Day of Study: 20

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: — to — Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: MH

YSI 6000 Time Series Report

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Date	Time	Temperature	DO	pH
mm/dd/yy	hh:mm:ss	C	mg/L	
4/22/99	13:53:30	22.86	7.58	8.02
4/22/99	13:53:49	23.12	7.39	8.10
4/22/99	13:54:10	23.23	7.37	8.19
4/22/99	13:54:44	23.17	7.48	8.22
4/22/99	13:54:53	23.16	7.46	8.22
4/22/99	13:55:02	23.19	7.44	8.22
4/22/99	13:55:27	23.23	7.59	8.27
4/22/99	13:55:38	23.25	7.62	8.30
4/22/99	13:55:48	23.26	7.58	8.29
4/22/99	13:56:01	23.27	7.53	8.29
4/22/99	13:56:18	23.27	7.52	8.36
4/22/99	13:56:26	23.30	7.51	8.37
4/22/99	13:56:37	23.31	7.50	8.37
4/22/99	13:56:51	23.32	7.42	8.37
4/22/99	13:57:02	23.21	7.43	8.37
4/22/99	13:57:12	23.21	7.50	8.42
4/22/99	13:57:22	23.21	7.52	8.39
4/22/99	13:57:37	23.31	7.43	8.35
4/22/99	13:57:52	23.25	7.45	8.34
4/22/99	13:58:03	23.24	7.49	8.28
4/22/99	13:58:14	23.22	7.44	8.27
4/22/99	13:58:27	23.16	7.35	8.30
4/22/99	13:58:38	23.18	7.27	8.31
4/22/99	13:58:47	23.20	7.25	8.29
4/22/99	13:58:59	23.14	7.28	8.28
4/22/99	13:59:12	23.11	7.33	8.30
4/22/99	13:59:20	23.15	7.36	8.32
4/22/99	13:59:34	23.25	7.39	8.29
4/22/99	13:59:45	23.30	7.39	8.27
4/22/99	13:59:51	23.30	7.44	8.28
4/22/99	14:00:05	23.15	7.58	8.32
4/22/99	14:00:16	23.16	7.64	8.32
4/22/99	14:00:26	23.22	7.62	8.34
4/22/99	14:00:41	23.16	7.66	8.36
4/22/99	14:00:58	23.21	7.74	8.33
4/22/99	14:01:09	23.23	7.71	8.33
4/22/99	14:01:22	23.22	7.62	8.34
4/22/99	14:01:32	23.22	7.60	8.28
4/22/99	14:01:40	23.24	7.56	8.21
4/22/99	14:01:57	23.27	7.38	8.20
4/22/99	14:02:06	23.28	7.31	8.23
4/22/99	14:02:13	23.29	7.26	8.24
4/22/99	14:02:29	23.32	7.26	8.34
4/22/99	14:02:39	23.31	7.28	8.37
4/22/99	14:02:49	23.33	7.29	8.36
4/22/99	14:03:05	23.33	7.35	8.27
4/22/99	14:03:11	23.33	7.37	8.22
4/22/99	14:03:18	23.33	7.36	8.21
4/22/99	14:08:09	23.25	8.09	8.42
4/22/99	14:08:27	23.28	7.88	8.36

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/22/99	14:08:40		23.34	7.75	8.31
4/22/99	14:09:02		23.29	7.59	8.17
4/22/99	14:09:14		23.26	6.55	8.20
4/22/99	14:09:26		23.30	6.98	8.25
4/22/99	14:09:37		23.32	7.11	8.27
4/22/99	14:09:49		23.30	7.17	8.25
4/22/99	14:11:36		23.29	7.71	8.27
4/22/99	14:13:10		23.13	7.69	8.17
4/22/99	14:13:22		23.10	7.57	8.18
4/22/99	14:13:31		23.09	7.54	8.19
4/22/99	14:13:49		23.12	7.58	8.24
4/22/99	14:14:06		23.21	7.66	8.25
4/22/99	14:14:20		23.21	7.70	8.25
4/22/99	14:14:33		23.21	7.68	8.22
4/22/99	14:15:48		23.17	8.13	8.31
4/22/99	14:16:12		23.30	7.96	8.27
4/22/99	14:16:34		23.21	7.73	8.17
4/22/99	14:16:49		23.21	7.60	8.23
4/22/99	14:17:04		23.19	7.54	8.22
4/22/99	14:17:15		23.21	7.56	8.26
4/22/99	14:17:28		23.11	7.61	8.26
4/22/99	14:17:40		23.06	7.64	8.18

Project #: 98-411 Test type: ACUTE CHRONIC OTHER 28 Day Date: 4/22/99

Species: *P. promelas* *C. dubia* *M. bahia* Other Na Day of Study: 21

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: to Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: AA

YSI 6000 Time Series Report

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Date	Time	Temperature	DO	pH
mm/dd/yy	hh:mm:ss	C	mg/L	
4/23/99	9:13:30	23.05	5.39	7.92
4/23/99	9:13:48	23.22	5.24	7.93
4/23/99	9:14:03	23.34	5.12	8.02
4/23/99	9:14:29	23.20	5.12	8.04
4/23/99	9:14:42	23.22	5.18	8.00
4/23/99	9:14:54	23.25	5.31	8.00
4/23/99	9:15:17	23.25	6.02	8.01
4/23/99	9:15:27	23.28	5.94	8.03
4/23/99	9:15:42	23.36	5.41	8.00
4/23/99	9:16:04	23.30	5.46	7.98
4/23/99	9:16:16	23.32	5.44	8.02
4/23/99	9:16:27	23.37	5.41	8.01
4/23/99	9:16:52	23.27	5.22	7.93
4/23/99	9:17:04	23.28	5.12	7.99
4/23/99	9:17:15	23.34	5.11	8.06
4/23/99	9:17:42	23.22	5.15	8.07
4/23/99	9:17:50	23.20	5.09	8.05
4/23/99	9:18:05	23.32	4.89	8.01
4/23/99	9:18:26	23.23	5.68	8.00
4/23/99	9:18:42	23.17	5.82	7.97
4/23/99	9:19:06	23.30	5.61	7.97
4/23/99	9:19:17	23.19	5.51	8.02
4/23/99	9:19:29	23.17	5.42	8.02
4/23/99	9:19:44	23.23	5.35	8.00
4/23/99	9:19:59	23.14	5.39	8.01
4/23/99	9:20:15	23.14	5.42	8.01
4/23/99	9:20:25	23.19	5.46	8.02
4/23/99	9:20:41	23.23	5.50	8.00
4/23/99	9:21:08	23.35	5.44	8.03
4/23/99	9:21:26	23.39	5.51	8.16
4/23/99	9:21:45	23.17	5.62	8.15
4/23/99	9:21:53	23.17	5.68	8.10
4/23/99	9:22:14	23.24	5.73	8.06
4/23/99	9:22:36	23.18	5.89	8.11
4/23/99	9:22:49	23.18	5.88	8.07
4/23/99	9:23:06	23.27	5.81	8.12
4/23/99	9:23:28	23.24	5.72	8.06
4/23/99	9:23:40	23.24	5.71	8.00
4/23/99	9:23:51	23.29	5.68	7.92
4/23/99	9:24:15	23.20	5.55	7.94
4/23/99	9:24:27	23.21	5.52	7.96
4/23/99	9:24:42	23.29	5.51	7.95
4/23/99	9:25:03	23.32	5.55	8.07
4/23/99	9:25:16	23.29	5.54	8.08
4/23/99	9:25:29	23.28	5.53	8.06
4/23/99	9:25:52	23.31	5.64	7.94
4/23/99	9:26:04	23.29	5.61	7.90
4/23/99	9:26:13	23.29	5.58	7.89
4/23/99	9:26:30	23.24	5.53	7.96
4/23/99	9:26:41	23.24	5.49	7.98

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/23/99	9:26:52		23.28	5.44	7.96
4/23/99	9:27:22		23.21	5.43	7.82
4/23/99	9:27:53		23.19	5.20	7.99
4/23/99	9:28:04		23.23	5.30	8.01
4/23/99	9:28:19		23.26	5.37	8.03
4/23/99	9:28:32		23.26	5.36	8.00
4/23/99	9:28:50		23.30	4.87	7.90
4/23/99	9:30:56		22.96	5.69	7.83
4/23/99	9:32:36		23.09	4.91	8.01
4/23/99	9:33:18		23.03	5.04	7.94
4/23/99	9:33:48		23.12	5.82	7.96
4/23/99	9:34:08		23.22	5.89	8.02
4/23/99	9:34:23		23.24	5.90	8.02
4/23/99	9:34:41		23.21	5.77	7.93
4/23/99	9:36:47		23.13	5.40	7.93
4/23/99	9:37:09		23.29	5.32	7.91
4/23/99	9:37:31		23.30	5.27	7.90
4/23/99	9:38:06		23.29	5.08	7.85
4/23/99	9:38:27		23.15	5.03	7.91
4/23/99	9:38:49		23.21	5.15	7.95
4/23/99	9:39:03		23.05	5.24	7.89
4/23/99	9:39:26		22.98	6.26	7.86

Project #: 98-411 R Test type: ACUTE CHRONIC OTHER 28 Day Date: 4/23/99

Species: *P. promelas* *C. dubia* *M. bahia* Other H₂ Day of Study: 22

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: to Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: ML

YSI 6000 Time Series Report

Date	Time	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/24/99	9:49:28		22.81	1.00	0.0	6.41	8.09
4/24/99	9:49:52		22.77	1.00	0.0	5.83	8.13
4/24/99	9:50:15		22.94	1.00	0.0	5.77	8.22
4/24/99	9:50:37		22.86	2.00	0.0	5.87	8.22
4/24/99	9:50:49		22.85	3.00	0.0	5.94	8.20
4/24/99	9:51:07		22.99	2.00	0.0	6.11	8.20
4/24/99	9:51:21		22.88	2.00	0.0	6.90	8.20
4/24/99	9:51:34		22.87	2.00	0.0	7.16	8.23
4/24/99	9:51:52		23.03	2.00	0.0	6.75	8.20
4/24/99	9:53:12		22.82	2.00	0.0	7.37	8.26
4/24/99	9:53:22		22.87	2.00	0.0	7.34	8.26
4/24/99	9:53:30		22.92	2.00	0.0	7.25	8.31
4/24/99	9:53:43		22.90	2.00	0.0	6.49	8.33
4/24/99	9:53:54		22.89	2.00	0.0	6.48	8.32
4/24/99	9:54:11		23.02	1.00	0.0	6.60	8.38
4/24/99	9:54:28		22.90	1.00	0.0	6.71	8.38
4/24/99	9:54:39		22.89	1.00	0.0	6.62	8.35
4/24/99	9:54:50		22.97	1.00	0.0	6.53	8.34
4/24/99	9:56:22		22.66	1.00	0.0	7.73	8.29
4/24/99	9:56:36		22.85	1.00	0.0	7.55	8.24
4/24/99	9:56:44		22.92	1.00	0.0	7.44	8.20
4/24/99	9:57:01		22.88	1.00	0.0	6.69	8.23
4/24/99	9:57:11		22.85	1.00	0.0	6.58	8.24
4/24/99	9:57:29		22.97	1.00	0.0	6.43	8.21
4/24/99	9:57:50		22.84	1.00	0.0	6.40	8.19
4/24/99	9:58:02		22.80	1.00	0.0	5.46	8.17
4/24/99	9:58:20		22.91	1.00	0.0	6.42	8.24
4/24/99	9:59:17		22.78	1.00	0.0	6.92	8.16
4/24/99	9:59:33		23.02	1.00	0.0	6.70	8.16
4/24/99	9:59:49		23.09	1.00	0.0	6.69	8.32
4/24/99	10:01:15		22.87	2.00	0.0	6.95	8.24
4/24/99	10:01:35		23.01	1.00	0.0	6.71	8.21
4/24/99	10:01:51		22.98	1.00	0.0	6.36	8.23
4/24/99	10:02:13		22.80	1.00	0.0	6.87	8.26
4/24/99	10:02:30		22.96	1.00	0.0	6.72	8.24
4/24/99	10:02:41		23.03	1.00	0.0	6.66	8.28
4/24/99	10:03:28		22.94	1.00	0.0	7.68	8.26
4/24/99	10:03:57		23.11	1.00	0.0	6.59	8.16
4/24/99	10:05:42		23.01	1.00	0.0	7.59	8.24
4/24/99	10:05:55	Temperature	23.05	1.00	<input type="checkbox"/> 0.0	7.15	Blue 8.22
4/24/99	10:06:10	Salinity:	23.01	1.00	<input type="checkbox"/> 0.0	7.12	Red 8.21
4/24/99	10:06:28		23.01	1.00	<input type="checkbox"/> 0.0	7.10	8.28
4/24/99	10:06:39	Dissolved oxygen:	23.04	1.00	<input type="checkbox"/> 0.0	7.05	8.31
4/24/99	10:06:57	pH:	23.13	1.00	<input type="checkbox"/> 0.0	6.97	8.30
4/24/99	10:07:15		23.08	1.00	<input type="checkbox"/> 0.0	6.95	8.20
4/24/99	10:07:29		23.10	1.00	0.0	6.85	8.12
4/24/99	10:07:39		23.14	1.00	0.0	6.73	8.11
4/24/99	10:07:54		23.11	1.00	0.0	6.64	8.18
4/24/99	10:08:10		23.12	1.00	0.0	6.55	8.21

Project # _____ Test type: ACUTE CHRONIC OTHER _____ Date: _____
 Species: P. promelas C. dubia M. delta Other _____ Day of Study: _____
 OPERATIONAL RANGE: _____ Check if OK _____ Meter Used: _____
 Temperature _____ to _____ 0.0 _____ Blue _____
 Salinity: _____ to _____ 0.0 _____ Red _____
 Dissolved oxygen: _____ > 40 _____ 0.0 _____
 pH: _____ 6.0 to 9.0 _____ 0.0 _____
 Actions taken: _____
 See deviation summary sheet Initials: _____

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/24/99	10:08:26		23.16	1.00	0.0	6.41	8.17
4/24/99	10:09:53		22.97	1.00	0.0	6.52	8.03
4/24/99	10:10:03		23.00	1.00	0.0	6.01	8.08
4/24/99	10:10:14		23.07	1.00	0.0	6.24	8.14
4/24/99	10:10:28		22.98	1.00	0.0	6.45	8.17
4/24/99	10:10:42		23.00	1.00	0.0	6.15	8.16
4/24/99	10:11:06		23.07	1.00	0.0	5.95	8.12
4/24/99	10:12:29		22.56	1.00	0.0	4.68	8.07
4/24/99	10:12:51		22.69	1.00	0.0	5.46	8.14
4/24/99	10:13:01		22.66	1.00	0.0	5.54	8.15
4/24/99	10:13:12		22.67	1.00	0.0	6.14	8.15
4/24/99	10:13:37		22.76	1.00	0.0	7.26	8.23
4/24/99	10:13:55		22.74	1.00	0.0	6.76	8.21
4/24/99	10:14:20		22.83	1.00	0.0	6.46	8.18
4/24/99	10:15:52		22.74	1.00	0.0	6.58	8.21
4/24/99	10:16:08		22.87	1.00	0.0	6.39	8.21
4/24/99	10:16:24		22.85	1.00	0.0	6.36	8.16
4/24/99	10:16:38		22.90	1.00	0.0	6.25	8.11
4/24/99	10:16:49		22.80	1.00	0.0	6.22	8.10
4/24/99	10:17:01		22.78	1.00	0.0	6.22	8.13
4/24/99	10:17:18		22.63	1.00	0.0	6.33	8.13
4/24/99	10:17:35		22.62	1.00	0.0	6.48	8.14

Project #: 98-411 R Test type: ACUTE CHRONIC OTHER _____ Date: 4/24/99
 Species: *P. promelas* *C. dubia* *M. bahia* Other H. azteca Day of Study: 23

OPERATIONAL RANGE: _____ Check if OK _____ Meter Used: _____
 Temperature: 22 to 24 Blue
 Salinity: 2 to - Red
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0 7.3-8.3

Actions taken: _____

See deviation summary sheet

Initials: md

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/25/99	7:50:27		22.62	2.00	0.0	6.82	8.23
4/25/99	7:50:53		22.75	3.00	0.0	5.70	8.26
4/25/99	7:51:05		22.80	3.00	0.0	5.73	8.29
4/25/99	7:51:24		22.88	2.00	0.0	5.96	8.35
4/25/99	7:51:39		22.85	2.00	0.0	6.74	8.33
4/25/99	7:51:57		22.93	4.00	0.0	7.12	8.32
4/25/99	7:52:21		22.86	3.00	0.0	7.58	8.31
4/25/99	7:52:34		22.93	3.00	0.0	7.50	8.28
4/25/99	7:52:54		23.04	2.00	0.0	6.46	8.25
4/25/99	7:54:44		22.62	2.00	0.0	7.52	8.33
4/25/99	7:54:56		22.76	2.00	0.0	7.53	8.36
4/25/99	7:55:08		22.88	2.00	0.0	7.55	8.38
4/25/99	7:55:26		22.89	2.00	0.0	7.48	8.35
4/25/99	7:55:40		22.89	2.00	0.0	7.39	8.37
4/25/99	7:55:57		22.97	2.00	0.0	7.36	8.43
4/25/99	7:56:16		22.94	2.00	0.0	7.21	8.44
4/25/99	7:56:28		22.89	2.00	0.0	7.07	8.41
4/25/99	7:56:40		22.98	4.00	0.0	7.00	8.38
4/25/99	7:56:54		22.89	2.00	0.0	7.08	8.35
4/25/99	7:57:11		22.88	2.00	0.0	7.24	8.27
4/25/99	7:57:25		22.94	2.00	0.0	7.25	8.25
4/25/99	7:59:47		22.66	2.00	0.0	7.53	8.39
4/25/99	7:59:59		22.74	2.00	0.0	7.07	8.35
4/25/99	8:00:13		22.91	2.00	0.0	6.90	8.28
4/25/99	8:00:25		22.88	2.00	0.0	6.88	8.30
4/25/99	8:00:38		22.84	2.00	0.0	6.93	8.31
4/25/99	8:00:50		22.85	2.00	0.0	6.96	8.32
4/25/99	8:01:02		22.86	3.00	0.0	7.03	8.31
4/25/99	8:01:17		22.95	3.00	0.0	7.04	8.28
4/25/99	8:01:28		22.97	3.00	0.0	7.04	8.31
4/25/99	8:03:49		22.47	3.00	0.0	7.99	8.31
4/25/99	8:03:59		22.57	4.00	0.0	7.83	8.29
4/25/99	8:04:10		22.73	3.00	0.0	7.74	8.30
4/25/99	8:04:22		22.78	3.00	0.0	7.70	8.36
4/25/99	8:04:32		22.87	3.00	0.0	7.71	8.37
4/25/99	8:04:44		22.91	3.00	0.0	7.71	8.38
4/25/99	8:04:58		22.90	3.00	0.0	7.69	8.39
4/25/99	8:05:23		22.93	5.00	0.0	7.66	8.24
4/25/99	8:07:40		22.67	2.00	0.0	8.08	8.35
4/25/99	8:07:56	Temperature:	22.82	2.00	<input type="checkbox"/> 0.0	7.91	Blue 8.32
4/25/99	8:08:09		23.00	2.00	<input type="checkbox"/> 0.0	7.82	Red 8.28
4/25/99	8:08:26	Salinity:	22.97	3.00	<input type="checkbox"/> 0.0	7.84	8.32
4/25/99	8:08:38	Dissolved oxygen:	22.98	>40	<input type="checkbox"/> 0.0	7.84	8.36
4/25/99	8:08:48	pH:	23.03	6.0 to 9.0	<input type="checkbox"/> 0.0	7.79	8.36
4/25/99	8:09:01		23.02	2.00	<input type="checkbox"/> 0.0	7.80	8.31
4/25/99	8:09:13	Actions taken:	23.04	2.00	0.0	7.79	8.23
4/25/99	8:09:24		23.07	2.00	0.0	7.74	8.21
4/25/99	8:09:42		22.98	2.00	0.0	7.73	8.28
4/25/99	8:09:58	See deviation summary sheet <input type="checkbox"/>	22.98	2.00	0.0	7.71	Initials: 8.32

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/25/99	8:10:06		23.05	2.00	0.0	7.69	8.30
4/25/99	8:12:13		22.87	2.00	0.0	6.90	8.09
4/25/99	8:12:24		22.90	2.00	0.0	6.50	8.11
4/25/99	8:12:34		22.91	2.00	0.0	6.50	8.18
4/25/99	8:12:45		22.90	2.00	0.0	6.97	8.23
4/25/99	8:12:59		23.06	2.00	0.0	7.02	8.24
4/25/99	8:13:14		22.97	2.00	0.0	6.99	8.20
4/25/99	8:15:19		22.17	2.00	0.0	7.63	8.26
4/25/99	8:15:35		22.61	2.00	0.0	7.45	8.30
4/25/99	8:15:49		22.69	4.00	0.0	7.37	8.27
4/25/99	8:16:05		22.73	3.00	0.0	7.36	8.23
4/25/99	8:16:18		22.74	3.00	0.0	7.38	8.25
4/25/99	8:16:34		22.84	2.00	0.0	7.41	8.28
4/25/99	8:16:51		22.86	3.00	0.0	7.38	8.27
4/25/99	8:18:28		22.77	3.00	0.0	7.92	8.34
4/25/99	8:18:42		22.81	2.00	0.0	7.77	8.36
4/25/99	8:18:56		22.80	2.00	0.0	7.68	8.34
4/25/99	8:19:08		22.74	2.00	0.0	7.64	8.26
4/25/99	8:19:18		22.75	2.00	0.0	7.63	8.25
4/25/99	8:19:32		22.70	2.00	0.0	7.62	8.26
4/25/99	8:19:46		22.57	2.00	0.0	7.62	8.24
4/25/99	8:20:02		22.57	2.00	0.0	7.61	8.26

Project #: 98-411R Test type: ACUTE CHRONIC OTHER _____

Date: 4/25/99

Species: *P. promelas* *C. dubia* *M. bahia* Other Hazteca

Day of Study: 24

OPERATIONAL RANGE:

Check if OK

Meter Used:

Temperature: 22 to 24

Blue

Salinity: - to -

Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet

Initials: mf

YSI 6000 Time Series Report

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Date mm/dd/yy	Time hh:mm:ss	Temperature C	DO mg/L	pH
4/26/99	14:45:38	23.13	6.29	8.22
4/26/99	14:45:57	23.12	6.25	8.31
4/26/99	14:46:11	23.21	6.21	8.38
4/26/99	14:46:33	23.30	6.16	8.46
4/26/99	14:46:53	23.32	6.22	8.43
4/26/99	14:47:11	23.31	6.30	8.41
4/26/99	14:47:34	23.34	6.42	8.44
4/26/99	14:47:47	23.32	6.46	8.43
4/26/99	14:47:57	23.30	6.40	8.40
4/26/99	14:48:17	23.39	6.28	8.47
4/26/99	14:48:29	23.37	6.29	8.50
4/26/99	14:48:42	23.40	6.29	8.48
4/26/99	14:49:04	23.42	6.13	8.42
4/26/99	14:49:16	23.35	6.11	8.46
4/26/99	14:49:29	23.40	6.13	8.54
4/26/99	14:49:42	23.37	6.11	8.58
4/26/99	14:49:57	23.41	6.00	8.55
4/26/99	14:50:15	23.44	5.96	8.54
4/26/99	14:50:28	23.37	6.06	8.51
4/26/99	14:50:40	23.32	6.14	8.46
4/26/99	14:50:53	23.28	6.17	8.44
4/26/99	14:51:10	23.32	6.15	8.52
4/26/99	14:51:27	23.33	6.07	8.49
4/26/99	14:51:38	23.31	6.01	8.44
4/26/99	14:51:56	23.33	6.00	8.42
4/26/99	14:52:10	23.27	5.96	8.43
4/26/99	14:52:27	23.36	6.01	8.48
4/26/99	14:52:45	23.35	6.04	8.48
4/26/99	14:52:55	23.28	6.06	8.47
4/26/99	14:53:09	23.38	6.08	8.49
4/26/99	14:53:55	23.30	6.08	8.47
4/26/99	14:54:22	23.30	6.12	8.45
4/26/99	14:54:40	23.26	6.15	8.49
4/26/99	14:55:07	23.32	6.22	8.50
4/26/99	14:55:24	23.37	6.13	8.47
4/26/99	14:55:35	23.17	6.13	8.47
4/26/99	14:56:00	23.34	4.53	8.50
4/26/99	14:56:09	23.34	4.44	8.46
4/26/99	14:56:44	23.45	5.52	8.43
4/26/99	14:57:11	23.42	5.96	8.59
4/26/99	14:57:28	23.41	5.74	8.54
4/26/99	14:57:48	23.49	6.00	8.48
4/26/99	14:58:00	23.46	6.02	8.51
4/26/99	14:58:21	23.46	6.02	8.56
4/26/99	14:58:30	23.43	6.04	8.55
4/26/99	14:58:55	23.44	6.12	8.47
4/26/99	14:59:08	23.42	6.09	8.42
4/26/99	14:59:16	23.43	6.08	8.40
4/26/99	14:59:36	23.41	6.08	8.53
4/26/99	14:59:44	23.39	6.10	8.55

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temperature C	DO mg/L	pH
4/26/99	14:59:52		23.39	6.13	8.53
4/26/99	15:00:07		23.41	6.16	8.43
4/26/99	15:00:21		23.42	6.07	8.44
4/26/99	15:00:29		23.43	6.01	8.45
4/26/99	15:00:41		23.46	5.97	8.49
4/26/99	15:00:52		23.43	5.96	8.49
4/26/99	15:01:05		23.41	5.91	8.45
4/26/99	15:02:37		23.02	5.98	8.32
4/26/99	15:02:53		23.10	5.95	8.43
4/26/99	15:03:07		23.15	6.00	8.48
4/26/99	15:03:20		23.20	6.07	8.49
4/26/99	15:03:38		23.23	6.22	8.54
4/26/99	15:03:52		23.22	6.29	8.48
4/26/99	15:04:07		23.20	6.27	8.44
4/26/99	15:05:04		23.26	6.60	8.55
4/26/99	15:05:23		23.37	6.36	8.52
4/26/99	15:05:43		23.36	6.24	8.41
4/26/99	15:05:57		23.31	6.19	8.38
4/26/99	15:06:12		23.27	6.19	8.43
4/26/99	15:06:30		23.30	6.22	8.45
4/26/99	15:06:43		23.23	6.22	8.48
4/26/99	15:06:59		23.21	6.30	8.53

Project #: 411 R Test type: ACUTE CHRONIC OTHER 28 Dof

Date: 4/26/99

Species: *P. promelas* *C. dubia* *M. bahia* Other H.A.

Day of Study: 25

OPERATIONAL RANGE:

Check if OK

Meter Used:

Temperature: 22 to 24

Salinity: _____ to _____

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Blue

Red

Actions taken: _____

See deviation summary sheet

Initials: _____

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/27/99	8:38:31	22.73	0.00	0.0	6.58	8.29
4/27/99	8:38:54	22.93	1.00	0.0	5.17	8.26
4/27/99	8:39:12	22.96	1.00	0.0	5.05	8.35
4/27/99	8:39:48	22.94	1.00	0.0	6.30	8.35
4/27/99	8:40:02	23.04	1.00	0.0	6.15	8.31
4/27/99	8:40:15	23.02	4.00	0.0	6.20	8.28
4/27/99	8:40:40	22.86	4.00	0.0	6.72	8.31
4/27/99	8:40:53	23.08	2.00	0.0	6.27	8.27
4/27/99	8:41:37	23.18	2.00	0.0	4.84	8.20
4/27/99	8:42:05	22.97	3.00	0.0	6.09	8.27
4/27/99	8:42:24	23.11	3.00	0.0	6.03	8.32
4/27/99	8:42:44	23.05	6.00	0.0	6.00	8.27
4/27/99	8:43:08	22.84	4.00	0.0	6.07	8.20
4/27/99	8:43:22	23.06	5.00	0.0	5.92	8.25
4/27/99	8:43:37	22.94	6.00	0.0	6.25	8.32
4/27/99	8:45:08	22.89	3.00	0.0	4.60	8.30
4/27/99	8:45:50	23.03	3.00	0.0	5.06	8.31
4/27/99	8:46:18	23.15	3.00	0.0	5.24	8.28
4/27/99	8:46:57	22.77	4.00	0.0	6.99	8.25
4/27/99	8:47:28	22.95	4.00	0.0	5.82	8.21
4/27/99	8:47:59	23.06	4.00	0.0	5.75	8.21
4/27/99	8:49:06	22.88	4.00	0.0	6.29	8.32
4/27/99	8:49:18	23.01	3.00	0.0	5.85	8.30
4/27/99	8:49:35	23.13	19.00	0.0	5.68	8.24
4/27/99	8:50:12	22.97	3.00	0.0	4.35	8.22
4/27/99	8:50:53	23.04	3.00	0.0	5.67	8.18
4/27/99	8:51:11	23.08	3.00	0.0	5.69	8.23
4/27/99	8:51:59	23.10	3.00	0.0	5.42	8.15
4/27/99	8:52:10	23.11	4.00	0.0	5.28	8.16
4/27/99	8:52:21	23.17	4.00	0.0	5.36	8.21
4/27/99	8:53:33	22.91	4.00	0.0	6.22	8.23
4/27/99	8:53:57	23.09	5.00	0.0	5.64	8.21
4/27/99	8:54:17	23.10	4.00	0.0	5.87	8.23
4/27/99	8:54:58	23.01	4.00	0.0	5.95	8.25
4/27/99	8:55:17	23.04	4.00	0.0	5.66	8.23
4/27/99	8:55:27	23.04	4.00	0.0	5.62	8.25
4/27/99	8:56:01	22.87	4.00	0.0	6.85	8.30
4/27/99	8:56:11	23.02	4.00	0.0	6.38	8.26
4/27/99	8:56:20	23.11	18.00	0.0	6.05	8.23
4/27/99	8:56:43	23.09	3.00	0.0	5.88	8.32
4/27/99	8:56:51	23.08	3.00	0.0	5.82	8.31
4/27/99	8:57:01	23.11	4.00	0.0	5.78	8.27
4/27/99	8:57:22	23.11	3.00	0.0	5.74	8.33
4/27/99	8:57:43	23.12	3.00	0.0	5.63	8.33
4/27/99	8:57:53	23.15	3.00	0.0	5.59	8.33
4/27/99	8:58:16	23.03	3.00	0.0	5.60	8.24
4/27/99	8:58:23	23.02	3.00	0.0	5.58	8.21
4/27/99	8:58:31	23.09	5.00	0.0	5.57	8.22
4/27/99	8:58:57	23.08	3.00	0.0	5.65	8.35
4/27/99	8:59:09	23.03	3.00	0.0	5.65	8.35

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/27/99	8:59:23		23.13	3.00	0.0	5.68	8.31
4/27/99	8:59:46		23.08	3.00	0.0	5.70	8.17
4/27/99	8:59:59		23.10	3.00	0.0	4.98	8.21
4/27/99	9:00:23		22.92	3.00	0.0	6.26	8.26
4/27/99	9:01:04		22.98	3.00	0.0	6.27	8.19
4/27/99	9:01:27		23.04	3.00	0.0	5.66	8.17
4/27/99	9:01:41		23.05	3.00	0.0	5.50	8.14
4/27/99	9:03:13		22.55	3.00	0.0	6.19	8.26
4/27/99	9:03:22		22.57	3.00	0.0	6.16	8.26
4/27/99	9:03:30		22.68	3.00	0.0	6.13	8.29
4/27/99	9:03:48		22.78	3.00	0.0	6.15	8.28
4/27/99	9:03:58		22.86	3.00	0.0	6.18	8.30
4/27/99	9:04:08		22.99	4.00	0.0	6.16	8.30
4/27/99	9:04:21		22.97	4.00	0.0	6.10	8.27
4/27/99	9:05:15		22.79	3.00	0.0	5.92	8.26
4/27/99	9:05:51		23.06	4.00	0.0	5.68	8.32
4/27/99	9:06:01		23.01	3.00	0.0	5.62	8.29
4/27/99	9:06:10		23.03	3.00	0.0	5.55	8.23
4/27/99	9:06:23		23.02	3.00	0.0	5.51	8.29
4/27/99	9:06:35		22.92	3.00	0.0	5.55	8.31
4/27/99	9:06:49		22.72	3.00	0.0	5.64	8.32
4/27/99	9:07:09		22.70	6.00	0.0	6.33	8.30

Project #: 98-411 R Test type: ACUTE CHRONIC OTHER 28 day Flowthru Date: 4/27/99

Species: *P. promelas* *C. dubia* *M. bahia* Other Hazka Day of Study: 26

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: - to - Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: mf

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/28/99	8:35:28		22.29	0.00	0.0	6.20	8.19
4/28/99	8:35:42		22.26	0.00	0.0	6.13	8.09
4/28/99	8:36:18		22.82	1.00	0.0	5.78	8.27
4/28/99	8:37:03		22.82	1.00	0.0	6.24	8.20
4/28/99	8:37:22		22.95	1.00	0.0	6.25	8.16
4/28/99	8:37:37		22.98	1.00	0.0	6.32	8.15
4/28/99	8:38:12		22.81	2.00	0.0	7.01	8.17
4/28/99	8:38:25		22.91	1.00	0.0	6.85	8.13
4/28/99	8:38:34		22.95	1.00	0.0	6.46	8.10
4/28/99	8:39:08		22.81	1.00	0.0	6.67	8.11
4/28/99	8:39:56		22.94	1.00	0.0	6.07	8.17
4/28/99	8:40:15		23.10	1.00	0.0	6.04	8.05
4/28/99	8:40:31		22.88	1.00	0.0	5.98	8.00
4/28/99	8:40:43		22.94	1.00	0.0	6.03	8.06
4/28/99	8:40:56		23.07	1.00	0.0	6.12	8.15
4/28/99	8:41:26		22.81	1.00	0.0	6.21	8.16
4/28/99	8:41:42		22.80	1.00	0.0	5.68	8.11
4/28/99	8:41:56		22.86	1.00	0.0	6.18	8.08
4/28/99	8:42:48		22.81	1.00	0.0	5.97	7.97
4/28/99	8:42:59		22.82	1.00	0.0	5.96	7.95
4/28/99	8:43:12		22.89	1.00	0.0	5.95	7.96
4/28/99	8:43:29		22.92	1.00	0.0	5.95	8.01
4/28/99	8:43:41		22.90	1.00	0.0	5.51	8.01
4/28/99	8:43:54		22.82	1.00	0.0	5.77	8.00
4/28/99	8:44:15		22.80	1.00	0.0	5.55	7.99
4/28/99	8:44:45		22.72	1.00	0.0	5.70	7.96
4/28/99	8:45:03		22.74	1.00	0.0	5.77	8.04
4/28/99	8:46:24		22.97	1.00	0.0	6.06	7.94
4/28/99	8:46:54		22.82	1.00	0.0	6.15	7.98
4/28/99	8:47:12		22.77	1.00	0.0	6.18	7.98
4/28/99	8:48:32		22.68	1.00	0.0	6.11	7.96
4/28/99	8:49:07		22.98	1.00	0.0	6.08	7.95
4/28/99	8:49:28		23.06	1.00	0.0	6.07	7.95
4/28/99	8:51:03		22.86	2.00	0.0	6.57	7.97
4/28/99	8:51:23		22.93	2.00	0.0	6.19	7.97
4/28/99	8:51:40		23.02	2.00	0.0	6.19	8.02
4/28/99	8:52:06		23.04	2.00	0.0	6.18	7.98
4/28/99	8:52:18		23.01	2.00	0.0	6.17	7.95
4/28/99	8:52:28		23.01	2.00	0.0	6.17	7.95
4/28/99	8:52:54		23.05	2.00	0.0	6.22	8.06
4/28/99	8:53:22		23.09	1.00	0.0	6.12	8.01
4/28/99	8:53:42		23.14	1.00	0.0	6.03	7.98
4/28/99	8:53:59		23.06	1.00	0.0	6.03	8.06
4/28/99	8:54:13		22.98	1.00	0.0	6.05	8.08
4/28/99	8:54:21		22.97	1.00	0.0	6.06	8.09
4/28/99	8:54:43		23.07	1.00	0.0	6.16	7.99
4/28/99	8:55:01		23.11	1.00	0.0	6.14	7.98
4/28/99	8:55:11		23.11	1.00	0.0	6.17	7.98
4/28/99	8:55:34		23.07	1.00	0.0	6.34	8.08
4/28/99	8:55:51		22.88	1.00	0.0	6.48	8.10

Project #: _____ Test type: ACUTE CHRONIC OTHER _____ Date: _____
 Species: *R. promelas* *C. dubia* *M. bahia* Other _____ Day of Study: _____
 OPERATIONAL RANGE: _____ Check if OK: Meter Used: _____
 Temperature: _____ to _____ Blue Red
 Salinity: _____ to _____
 Dissolved oxygen: _____ > 40
 pH: _____ 6.0 to 9.0
 Actions taken: _____
 See deviation summary sheet Initials: _____

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/28/99	8:56:11		23.06	1.00	0.0	6.51	8.05
4/28/99	8:56:33		22.94	1.00	0.0	6.50	7.94
4/28/99	8:56:50		23.06	1.00	0.0	6.35	8.02
4/28/99	8:57:01		23.04	1.00	0.0	6.30	8.04
4/28/99	8:57:20		23.00	1.00	0.0	6.43	8.00
4/28/99	8:57:37		23.05	1.00	0.0	6.41	7.95
4/28/99	8:58:48		23.01	1.00	0.0	4.34	7.73
4/28/99	9:00:29		22.56	1.00	0.0	6.63	7.94
4/28/99	9:00:57		22.85	1.00	0.0	6.55	8.13
4/28/99	9:01:16		22.85	1.00	0.0	6.51	8.09
4/28/99	9:01:40		22.88	1.00	0.0	6.53	8.03
4/28/99	9:02:02		23.05	1.00	0.0	6.51	8.11
4/28/99	9:02:25		23.02	1.00	0.0	6.35	8.01
4/28/99	9:02:37		22.98	1.00	0.0	6.23	7.98
4/28/99	9:03:53		22.93	2.00	0.0	6.15	8.01
4/28/99	9:04:12		22.98	1.00	0.0	6.12	8.06
4/28/99	9:04:21		23.00	1.00	0.0	6.06	8.03
4/28/99	9:04:33		23.01	1.00	0.0	5.99	7.98
4/28/99	9:04:45		22.99	1.00	0.0	5.97	8.04
4/28/99	9:05:07		22.91	1.00	0.0	6.01	7.98
4/28/99	9:05:18		22.78	1.00	0.0	6.02	7.97
4/28/99	9:06:12		22.76	1.00	0.0	6.96	8.11

Project #: 98-411R Test type: ACUTE CHRONIC OTHER 28 day Flow Date: 4/28/99

Species: *P. promelas* *C. dubia* *M. bahia* Other Hazka Day of Study: 27

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: — to — Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: mf

YSI 6000 Time Series Report

Page 1

Date mm/dd/yy	Time hh:mm:ss	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/29/99	6:26:28	22.37	0.00	0.0	5.12	7.33
4/29/99	6:26:58	22.75	0.00	0.0	4.22	7.49
4/29/99	6:27:24	22.72	0.00	0.0	4.14	7.64
4/29/99	6:28:03	22.62	0.00	0.0	4.72	7.72
4/29/99	6:28:17	22.59	0.00	0.0	4.74	7.76
4/29/99	6:28:57	22.74	0.00	0.0	5.84	7.78
4/29/99	6:29:57	22.67	0.00	0.0	6.31	7.78
4/29/99	6:30:26	22.43	1.00	0.0	5.53	7.80
4/29/99	6:30:45	22.36	1.00	0.0	5.37	7.82
4/29/99	6:31:43	22.57	0.00	0.0	6.04	7.85
4/29/99	6:31:57	22.62	0.00	0.0	5.91	7.84
4/29/99	6:32:18	22.66	0.00	0.0	5.04	7.78
4/29/99	6:32:54	22.71	0.00	0.0	5.07	7.70
4/29/99	6:33:01	22.72	0.00	0.0	5.06	7.71
4/29/99	6:33:12	22.76	0.00	0.0	5.05	7.78
4/29/99	6:33:21	22.67	0.00	0.0	5.06	7.81
4/29/99	6:33:27	22.61	0.00	0.0	5.05	7.83
4/29/99	6:33:36	22.70	0.00	0.0	5.02	7.82
4/29/99	6:33:57	22.63	0.00	0.0	5.03	7.71
4/29/99	6:34:06	22.58	0.00	0.0	4.98	7.70
4/29/99	6:34:18	22.64	0.00	0.0	4.93	7.70
4/29/99	6:34:30	22.55	0.00	0.0	4.91	7.80
4/29/99	6:34:38	22.52	0.00	0.0	4.90	7.83
4/29/99	6:34:50	22.71	0.00	0.0	4.85	7.80
4/29/99	6:35:00	22.68	0.00	0.0	4.85	7.78
4/29/99	6:35:09	22.62	0.00	0.0	4.88	7.78
4/29/99	6:35:20	22.52	0.00	0.0	4.89	7.82
4/29/99	6:35:33	22.17	0.00	0.0	5.55	7.85
4/29/99	6:35:49	22.51	0.00	0.0	5.88	7.84
4/29/99	6:35:59	22.63	0.00	0.0	5.83	7.82
4/29/99	6:37:23	22.63	0.00	0.0	5.24	7.72
4/29/99	6:37:33	22.66	0.00	0.0	5.20	7.72
4/29/99	6:37:45	22.62	0.00	0.0	5.21	7.76
4/29/99	6:37:59	22.64	0.00	0.0	5.31	7.76
4/29/99	6:38:12	22.81	0.00	0.0	5.35	7.75
4/29/99	6:38:21	22.81	0.00	0.0	5.35	7.75
4/29/99	6:38:32	22.77	0.00	0.0	5.35	7.76
4/29/99	6:38:49	22.92	0.00	0.0	5.29	7.69
4/29/99	6:39:04	22.91	0.00	0.0	5.15	7.68
4/29/99	6:39:20	22.80	0.00	0.0	5.08	7.77
4/29/99	6:39:32	22.76	0.00	0.0	5.02	7.82
4/29/99	6:39:49	22.79	0.00	0.0	5.03	7.80
4/29/99	6:40:02	22.75	0.00	0.0	5.16	7.83
4/29/99	6:40:22	22.86	0.00	0.0	5.25	7.83
4/29/99	6:40:35	22.82	0.00	0.0	5.27	7.84
4/29/99	6:40:51	22.78	0.00	0.0	5.32	7.78
4/29/99	6:41:03	22.67	0.00	0.0	5.33	7.77
4/29/99	6:41:25	22.76	0.00	0.0	5.37	7.81
4/29/99	6:41:46	22.55	0.00	0.0	5.52	7.95
4/29/99	6:42:06	22.52	0.00	0.0	5.66	7.96

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/29/99	6:42:25		22.59	0.00	0.0	5.72	7.91
4/29/99	6:42:45		22.53	0.00	0.0	5.78	7.86
4/29/99	6:42:54		22.60	0.00	0.0	5.79	7.87
4/29/99	6:43:07		22.59	0.00	0.0	5.78	7.90
4/29/99	6:43:16		22.48	0.00	0.0	5.80	7.89
4/29/99	6:43:26		22.53	0.00	0.0	5.82	7.84
4/29/99	6:43:39		22.56	0.00	0.0	5.77	7.77
4/29/99	6:44:26		22.15	0.00	0.0	5.44	7.69
4/29/99	6:44:45		22.41	0.00	0.0	5.29	7.81
4/29/99	6:44:53		22.42	0.00	0.0	5.26	7.83
4/29/99	6:45:09		22.40	0.00	0.0	5.33	7.80
4/29/99	6:45:16		22.43	0.00	0.0	5.34	7.80
4/29/99	6:45:26		22.51	0.00	0.0	5.31	7.79
4/29/99	6:45:39		22.53	0.00	0.0	5.28	7.76
4/29/99	6:46:10		22.27	0.00	0.0	5.68	7.74
4/29/99	6:46:30		22.56	0.00	0.0	5.26	7.81
4/29/99	6:46:41		22.54	0.00	0.0	5.17	7.81
4/29/99	6:46:48		22.51	0.00	0.0	5.03	7.77
4/29/99	6:46:55		22.48	0.00	0.0	4.96	7.76
4/29/99	6:47:10		22.39	0.00	0.0	5.27	7.77
4/29/99	6:47:24		22.15	0.00	0.0	5.29	7.78
4/29/99	6:47:32		22.07	0.00	0.0	5.30	7.77

Project #: 98-411R Test type: ACUTE CHRONIC OTHER 28day Flew thru Date: 4/29/99

Species: *P. promelas* *C. dubia* *M. bahia* Other H. azteca Day of Study: 28

OPERATIONAL RANGE:

Temperature:	<u>18</u> to <u>24</u>	Check if OK <input checked="" type="checkbox"/>	Meter Used:	Blue <input checked="" type="checkbox"/>
Salinity:	<u>-</u> to <u>-</u>	<input type="checkbox"/>	Red <input type="checkbox"/>	
Dissolved oxygen:	> 4.0	<input checked="" type="checkbox"/>		
pH:	6.0 to 9.0	<input checked="" type="checkbox"/>		

Actions taken: _____

See deviation summary sheet

Initials: MA

Aqua Survey, Inc.
Solid Phase Testing

Client: Dames & Moore Test Start Date: 4/1/99 Parameter: Various
 Job #: 98-411R Test End Date: _____ Organism: H. azteca

		INITIAL				FINAL			
Sample	ASI #	Alkalinity mg/L	Hardness mg/L	Cond.	NH ₃ mg/L	Alkalinity mg/L	Hardness mg/L	Cond..	NH ₃ mg/L
R1-01	90653	156	140	568	0.47	160	152	593	ND
P5-01	90654	148	132	553	0.56	168	136	595	ND
P4-01	90655	148	124	610	1.38	152	116	588	ND
P3-03	90656	160	140	615	0.55	164	132	583	ND
P3-01	90657	152	124	548	0.37	168	136	595	ND
P2-03	90658	156	136	564	0.57	160	136	604	ND
P1-02	90659	148	128	559	1.21	160	116	592	ND
P4-03	90660	160	140	555	1.46	164	140	595	ND
Control	90462	152	128	618	0.32	168	148	617	ND
Date		4/1/99	4/1/99	4/1/99	4/1/99	4/29/99			→
Initials		MH	MH	MH	MH	MH	MH	MH	MH

Notes:

Aqua Survey, Inc.
Solid Phase Readings

Job #: 98-411R

Client: Dames & Moore

Organism: H. azteca

Parameter: Exchanges & Feeding

Day	Date	Exchanges		Feed
		1st Time/Initials	2nd Time/Initials	YCT
0	4/1/99	0800 MA	1345 MA	✓
1	4/2/99	0810 MA	1315 TD	✓
2	4/3/99	0650 TD	1000 MT	✓
3	4/4/99	0615 TD	1000 TD	✓
4	4/5/99	0750 TD	1600 MT	✓
5	4/6/99	0835 TD	1520 MH	✓
6	4/7/99	0800 TD	1515 MH	✓
7	4/8/99	0820 TD	1550 RF	✓
8	4/9/99	0810 SH	1320 MA	✓
9	4/10/99	0830 MA	1540 MA	✓
10	4/11/99	0830 MA	1345 MA	✓
11	4/12/99	0810 MA	1730 MA	✓
12	4/13/99	0830 SH	1530 LB	✓
13	4/14/99	0900 MA	1330 MA	✓
14	4/15/99	0915 MA	1610 MA	✓
15	4/16/99	0825 MA	1335 MA	✓
16	4/17/99	0830 MH	1230 MH	✓
17	4/18/99	0845 MH	1245 MH	✓
18	4/19/99	0800 MA	1445 MH	✓
19	4/20/99	0845 MA	1500 MA	✓
20	4/21/99	0800 MA	1515 MA	✓
21	4/22/99	0830 MA	1415 MA	✓
22	4/23/99	0800 MA	1410 MH	✓
23	4/24/99	0800 RF	1400 RF	✓
24	4/25/99	0730 RF	1400 RF	✓
25	4/26/99	1010 MA	1525 MA	✓
26	4/27/99	0815 MA	1620 MA	✓
27	4/28/99	0745 MA	1620 MS	✓
28				



Aquatic Research Organisms

DATA SHEET

I. Organism History

Species: Hyalella azteca

Source: Lab reared Hatchery reared _____ Field collected _____

Hatch date 3/25/99 Receipt date _____

Lot number 032599/A Strain ARO

Brood Origination USFW MO

II. Water Quality

Temperature 23°C Salinity 2 ppt DO 7.8

pH 7.4 Hardness 150 ppm

III. Culture Conditions

System: PW STATIC RECYCLING

Diet: Flake Food Phytoplankton _____ Trout Chow

Brine Shrimp _____ Rotifers _____ Other _____

Prophylactic Treatments: _____

Comments: _____

IV. Shipping Information

Client: AKUASIRUKY # of Organisms: 800+

Carrier: FED EX Date Shipped: 3/29/99

Biologist: John Sutski

1 - 800 - 927 - 1650

PO Box 1271 • One Lafayette Road • Hampton, NH 03842 • (603) 926-1650

AQUA SURVEY, INC.

CULTURE LABORATORY RECEIVING FORM

RECEIVING LOG #: 99-020 DATE: 3/30/99
SHIPPING CARRIER: FedEx CARRIER LOG #: N/A
SPECIES: H. catenella NUMBER SHIPPED: 800+
LIVESTOCK SOURCE/SHIPPER: ARO

SHIPPER INVOICE #: N/A PACKER'S NAME: SS
ASI ORDER REF. DATE: 3/24/99 ASI REF. INITIALS: CD
AGE/CHARACTERISTICS: HD 3/25/99
TAXONOMIC VERIFICATION LOG #: 99-016 DATE: 3/30/99

RECEIVING/WATER QUALITY PARAMETERS

D.O: Sat. TEMP: 20.4 °C NH₃/NO₂: 0/0
SALINITY/HARDNESS: 256 ALK: 144 pH: 7.9
WATER CLEAR/CLOUDY CONTAINER SIZE/NUMBER: 1 gallon p 1
OF BLUE ICE: 0 TYPE OF PACKING: styrofoam box
OBSERVATION/CONDITION OF LIVESTOCK: Appear healthy

RECEIVING TECH. INT.: CD SUPERVISORS'S INT.: CD

AQUA SURVEY, INC.

Taxonomic Verification Form

TAXONOMIC VERIFICATION LOG # 99-016 DATE: 3/30/99
SPECIES: H. azteca RECEIVING #/CULTURE LOT #: 99-020
LIVESTOCK SOURCE: ARO
JOB #: 98-411 CLIENT: DAM

TAXONOMIC KEYS/SOURCES USED "freshwater Invertebrates of the United States" 2nd Ed.
Pennack, 1978

DISTINGUISHING CHARACTERISTICS

1st antenna shorter than 2nd
and lacks an accessory flagellum
Telson is entire
3rd uropod is uniramous

AQUA SURVEY INVESTIGATOR(S) (CI)
SUPERVISORS INITIALS (CI)

AQUA SURVEY, INC.

Culture Lab Acclimation Form

Acclimatization

- No acclimatization required
- Temperature acclimatization
- Water acclimatization

Job #: 98-411

Test Species: H. azteca

Acclimatization Initial Parameters

Temperature: 20.4°C Salinity: N/A Type of Water: Rec. H₂O

Acclimatization Target Parameters

Temperature: 22.0°C ± 1 Salinity: N/A Type of Water: Well H₂O

Acclimatization Chamber Volume (liters): 1 L cube

Acclimatization Location: Culture Lab

Acclimatization Water Type: Well H₂O

Acclimatization Water Temperature: 22.0°C

Acclimatization Commencement-Date/Time: 3/30/99 1 1130hrs

Change Over Rate (Approximately mL/Minute): 5-10 ml/min.

Acclimatization Conclusion - Date/Time: 4/1/99 1 0900hrs

Technician Initials/Commencement: CD

Technician Initials/Conclusion: CD

Supervisor Initials: CD

Remarks: _____

AQUA SURVEY, INC.
CULTURE LABORATORY

15 Day - General Species Status Log

Species: H. azteca

Dates: 3/30/94 - 4/1

Receiving [] Culture [] Log #: 94-020

Initial Stock @: 800+

Test Job #: 98-411

Client: DAM

Food Type: Fluke

Date	Day Number	Temp/DO	NH ₃ /NO ₂	pH	Sal/Hardness	Alkalinity	Mortality	Remarks/Initials
3/30	1	20.4°C/8.4	0/0	7.9	256	144	∅	Acclimation started (C)
3/31	2	22.4°C/8.6	0/0	8.2	224	160	∅	Acclimation cont Fed Fluke (C)
4/1	3	23.1°C/8.0	0/0	8.3	156	172	∅	To test
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							

AQUA SURVEY, INC.

CULTURE LAB DISTRIBUTION FORM

DATE: 4/1/99
TEST JOB#: 98.411 CLIENT: Dam
TEST LOCATION: IN-LAB FIELD
TEST SPECIES: Hartzka
TOTAL NUMBER ORGANISMS TRANSFERRED: 720+
AQUA SURVEY, INC. CULTURE LAB INVESTIGATORS: CC/CD

A. ORGANISMS

1. ASI CULTURE/HOLDING UNIT: 12 Cube
2. RECEIVING LOG #: 99.020 ARO
3. CULTURE LOG #: 99.0248
4. AGE/SIZE INFORMATION: 7-10 day HD.3/25/99

B. HOLDING CULTURE WATER PARAMETERS

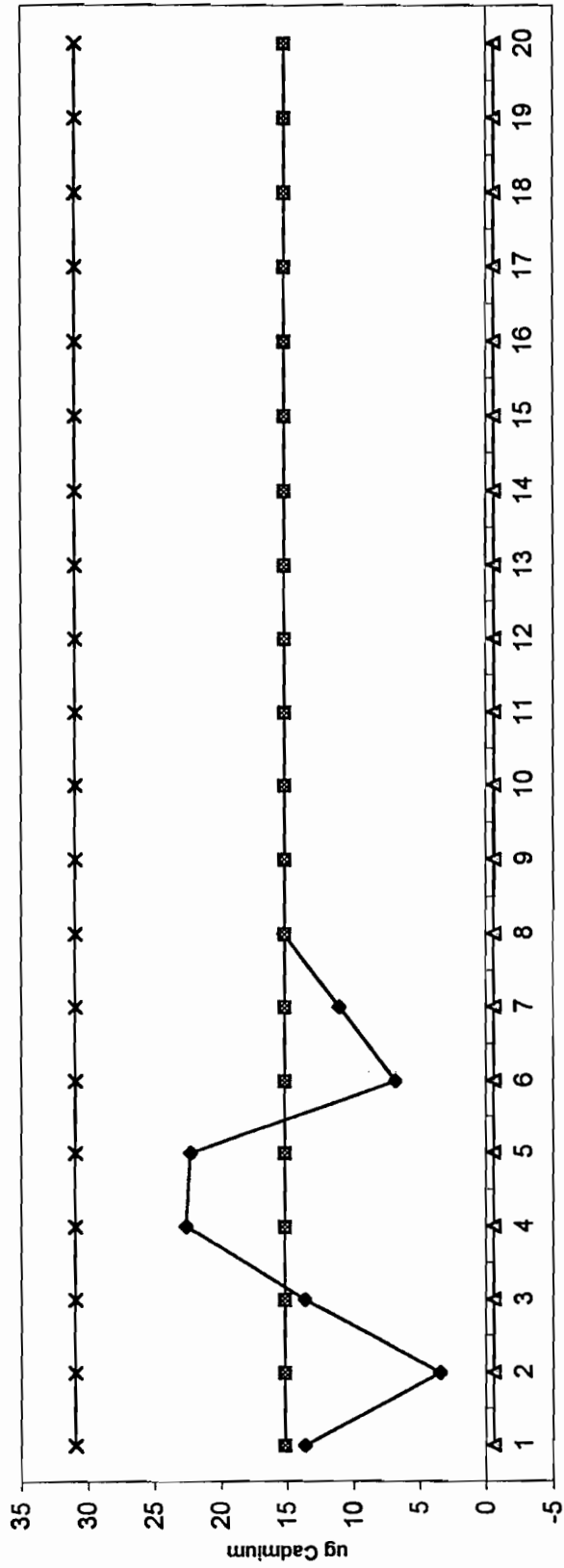
1. TEMPERATURE: 23.1°C
2. SALINITY: N/A
3. WATER SOURCE: well H₂O

C. TRANSFER CUSTODY & TRANSFER

1. LIVESTOCK RELINQUISHMENT DATE: 4/1/99
TIME: 1330hrs
BY: CC
2. LIVESTOCK RECEIVING DATE: 4/1/99
TIME: 1330hrs
BY: D
3. CULTURE SUPERVISOR OR SENIOR TECH. INITIALS: CD

REMARKS: _____

Control Chart LC50 Values, Acute SRT With *H. azteca* (ARO Organisms)



Test Number (8/98-3/99)

—●— Mean LC50 —▲— Lower 95% C.L. —×— Upper 95% C.L.

CT-TOX: BINOMIAL, MOVING AVERAGE, PROBIT, AND SPEARMAN METHODS

SPEARMAN-KARBER

TRIM: .00%
LC50: 14.929
95% LOWER CONFIDENCE: 11.089
95% UPPER CONFIDENCE: 20.098

CONC. ug/L	NUMBER EXPOSED	NUMBER DEAD	PERCENT DEAD	BINOMIAL PROB.(%)
4.00	10.	0.	.00	.9766D-01
8.00	10.	1.	10.00	.1074D+01
16.00	10.	7.	70.00	.1719D+02
32.00	10.	8.	80.00	.5469D+01
64.00	10.	10.	100.00	.9766D-01

THE BINOMIAL TEST SHOWS THAT 8.00 AND 64.00 CAN BE USED AS STATISTICALLY SOUND CONSERVATIVE 95 PERCENT CONFIDENCE LIMITS SINCE THE ACTUAL CONFIDENCE LEVEL ASSOCIATED WITH THESE LIMITS IS 98.8281 PERCENT.
AN APPROXIMATE LC50 FOR THIS DATA SET IS 12.887

RESULTS USING MOVING AVERAGE
SPAN G LC50 95% CONFIDENCE LIMIT
4 .114 15.44 11.05 21.37

***** RESULTS CALCULATED BY PROBIT METHOD
ITERATIONS G H GOODNESS OF FIT
5 .212 1.00 .50

SLOPE = 3.87
95% CONFIDENCE LIMITS: 2.09 AND 5.65

LC50= 15.22
95% CONFIDENCE LIMITS: 10.89 AND 21.25

LC1 = 3.81
95% CONFIDENCE LIMITS: 1.09 AND 6.31

DATE: 4/1/99 TEST NUMBER: SRt DURATION: 96 hours
SAMPLE: Cadmium chloride SPECIES: H. azteca

METHOD	LC50	CONFIDENCE LIMITS		
		LOWER	UPPER	SPAN
BINOMIAL	12.887	8.000	64.000	56.000
MAA	15.436	11.048	21.369	10.321
PROBIT	15.222	10.888	21.253	10.365
SPEARMAN	14.929	11.089	20.098	9.009

**** = LIMIT DOES NOT EXIST

SRT

Prep sheet for Freshwater SRTs

Chironomus tentans / *Hyalella azteca*

- 10 replicates per concentration
- 20 mL per replicate
- 1 organism per replicate

Working Stock Solution

Add 0.064 grams of Cadmium chloride to 100 mL of DI water.
This will give you a 320 mg Cadmium/L stock solution.

Hyalella azteca

Add 1 mL of the working stock solution to 1 liter of DI water.
This will give you a 32 ug Cadmium/L stock solution.

Concentration (ug/L)	Stock (mL)	Total (mL)
0	0	250
4	3.125	250
8	6.25	250
16	12.5	250
32	25	250
64	50	250

Chironomus tentans

Add 100 mL of the working stock solution to 1 Liter of DI water.
This will give you a 32 mg Cadmium/L stock solution.

Concentration (mg/L)	Stock (mL)	Total (mL)
0.2	1.6	250
0.6	4.7	250
1.6	12.5	250
5	39	250
15	117	250

H. azteca requires a screen substrate in each cup

C. tentans requires a small amount of sand enough to cover the bottom of each cup

Standard Reference Toxicant
Live Counts

For Job #: _____

Start Date: 4/1/99

End Date: _____

Organism C. tentans/H. azteca

Organism Log #: _____

Starting Time: 1615

Dose	Initial	1	2	3	4	Dose	Initial	1	2	3	4
10 ⁰ A						10 ⁰ A					
B						B					X
C						C					X
D						D					X
E					X	E					X
F						F					X
G						G					
H						H					X
I						I					X
J						J					
4 A						32 A					X
B						B					
C						C					
D						D					X
E						E					X
F						F		X	_____		
G						G					X
H						H			X	_____	
I						I			X	_____	
J						J					X
3 A						64 A			X	_____	
B						B			X	_____	
C						C		X	_____		
D						D			X	_____	
E						E			X	_____	
F					X	F			X	_____	
G						G		X	_____		
H						H		X	_____		
I						I			X	_____	
J						J		X	_____		
Initial	MH	TV	TV	TV	TV		MH	TV	TV	TV	TV
Date	4/1/99	4/2/99	4/3/99	4/4/99	4/5/99		4/1/99	4/2/99	4/3/99	4/4/99	4/5/99

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/01/99	15:58:30	0	23.14	578.00	0.3	8.40	8.47
4/01/99	15:58:47	4	23.21	580.00	0.3	8.30	8.50
4/01/99	15:59:02	8	23.22	574.00	0.3	8.27	8.50
4/01/99	15:59:15	16	23.17	562.00	0.3	8.26	8.52
4/01/99	15:59:24	32	23.12	537.00	0.3	8.26	8.53
4/01/99	15:59:36	64	22.97	480.00	0.2	8.28	8.55

Project #: SRT Test type: ACUTE CHRONIC OTHER 96 hr Date: 4/1/99

Species: *P. promelas* *C. dubia* *M. bahia* Other L. antea Day of Study: 0 hrs

OPERATIONAL RANGE: Check if OK Meter Used:

Temperature: 22 to 24 Blue

Salinity: — to — Red

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: MH

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/01/99	16:01:38	0	22.12	291.00	0.1	8.29	8.05
4/01/99	16:01:48	0.2	22.16	293.00	0.1	8.28	8.01
4/01/99	16:01:56	0.6	22.22	291.00	0.1	8.26	7.98
4/01/99	16:02:03	1.6	22.21	284.00	0.1	8.27	7.95
4/01/99	16:02:19	5	22.06	262.00	0.1	8.31	7.85
4/01/99	16:05:34	15	22.55	197.00	0.1	8.03	7.47

Project #: SRT Test type: ACUTE CHRONIC OTHER 96hr Date: 4/1/99
 Species: *P. promelas* *C. dubia* *M. bahia* Other *C. tentans* Day of Study: 0 hrs

OPERATIONAL RANGE: Check if OK Meter Used:
 Temperature: 22 to 24 Blue
 Salinity: — to — Red
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Actions taken: _____

See deviation summary sheet Initials: MH

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/02/99	10:57:14		23.20	572.00	0.3	8.14	8.02
4/02/99	10:57:26		23.98	588.00	0.3	7.91	8.36
4/02/99	10:57:36		24.05	582.00	0.3	7.88	8.44
4/02/99	10:57:44		24.08	571.00	0.3	7.86	8.45
4/02/99	10:57:52		24.06	547.00	0.3	7.86	8.48
4/02/99	10:57:59		24.06	490.00	0.2	7.85	8.48

Project #: SRT Test type: ACUTE CHRONIC OTHER 96hr

Date: 4/2/99

Species: *P. promelas* *C. dubia* *M. bahia* Other H. azteca

Day of Study: 24

OPERATIONAL RANGE:

Temperature: 22 to 24 Check if OK
 Salinity: — to —
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Meter Used:
 Blue
 Red

Actions taken: _____

See deviation summary sheet

Initials: TD

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/03/99	7:51:22		22.14	586.00	0.3	8.16	8.12
4/03/99	7:51:26		22.19	594.00	0.3	8.12	8.36
4/03/99	7:51:30		22.16	588.00	0.3	8.11	8.46
4/03/99	7:51:36		22.10	579.00	0.3	8.11	8.52
4/03/99	7:51:41		22.04	556.00	0.3	8.08	8.53
4/03/99	7:51:45		22.02	504.00	0.2	8.07	8.55

Project #: SAT Test type: ACUTE CHRONIC OTHER 96L

Date: 4/3/99

Species: *P. promelas* *C. dubia* *M. bahia* Other A. azteca

Day of Study: 48L

OPERATIONAL RANGE: Check if OK

Temperature: 22 to 24

Salinity: — to —

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Meter Used:

Blue

Red

Actions taken: _____

See deviation summary sheet

Initials: JD

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/04/99	6:00:06		23.45	565.00	0.3	7.43	8.32
4/04/99	6:00:11		23.47	600.00	0.3	7.46	8.44
4/04/99	6:00:15		23.50	596.00	0.3	7.59	8.49
4/04/99	6:00:21		23.54	585.00	0.3	7.14	8.55
4/04/99	6:00:25		23.55	561.00	0.3	7.27	8.58
4/04/99	6:00:30		23.54	505.00	0.2	7.53	8.59

Project #: SAT Test type: ACUTE CHRONIC OTHER 966-

Date: 4/4/99

Species: *P. promelas* *C. dubia* *M. bahia* Other A. azteca

Day of Study: 72

OPERATIONAL RANGE:

Temperature: 22 to 24 Check if OK
 Salinity: — to —
 Dissolved oxygen: > 4.0
 pH: 6.0 to 9.0

Meter Used:

Blue
 Red

Actions taken: _____

See deviation summary sheet

Initials: TX

YSI 6000 Time Series Report

Date mm/dd/yy	Time hh:mm:ss	% Conc	Temp C	SpCond uS/cm	Salinity PPT	DO mg/L	pH
4/05/99	8:07:55		22.09	566.00	0.3	8.48	7.99
4/05/99	8:08:09		22.33	607.00	0.3	8.43	8.37
4/05/99	8:08:13		22.29	588.00	0.3	8.44	8.45
4/05/99	8:08:17		22.08	583.00	0.3	8.50	8.53
4/05/99	8:08:22		21.94	560.00	0.3	8.54	8.57
4/05/99	8:08:32		22.13	502.00	0.2	8.45	8.49

Project #: SRT Test type: ACUTE CHRONIC OTHER 96Lr

Date: 4/5/99

Species: *P. promelas* *C. dubia* *M. bahia* Other Hiarteca

Day of Study: 96Lr

OPERATIONAL RANGE: Check if OK

Temperature: 22 to 24

Salinity: — to —

Dissolved oxygen: > 4.0

pH: 6.0 to 9.0

Meter Used:

Blue

Red

Actions taken: _____

See deviation summary sheet

Initials: TO



Aquatic Research Organisms

DATA SHEET

I. Organism History

Species: Hyalella azteca

Source: Lab reared Hatchery reared Field collected

Hatch date 3/25/99 Receipt date

Lot number 032599/A Strain ALC

Brood Origination USFW MO

II. Water Quality

Temperature 23°C Salinity 42 ppt DO 7.8

pH 7.4 Hardness 150 ppm

III. Culture Conditions

System: PW STATIC RECIRC

Diet: Flake Food Phytoplankton Trout Chow

Brine Shrimp Rotifers Other

Prophylactic Treatments:

Comments:

IV. Shipping Information

Client: BK HASMEY # of Organisms: 800T

Carrier: PO EX Date Shipped: 3/29/99

Biologist: Stan Dubski

1 - 800 - 927 - 1650

AQUA SURVEY, INC.

Taxonomic Verification Form

TAXONOMIC VERIFICATION LOG # 99-016 DATE: 3/30/99
SPECIES: H. azteca RECEIVING #/CULTURE LOT #: 99-020
LIVESTOCK SOURCE: ARO
JOB #: 98-411 CLIENT: DAMI

TAXONOMIC KEYS/SOURCES USED "Freshwater Invertebrates of the United States" 2nd Ed.
Pennak, 1978

DISTINGUISHING CHARACTERISTICS

1st antenna shorter than 2nd
and lacks an accessory flagellum
Telson is entire
3rd uropod is unicamous

AQUA SURVEY INVESTIGATOR(S) (CI)
SUPERVISORS INITIALS (CI)

AQUA SURVEY, INC.

CULTURE LABORATORY RECEIVING FORM

RECEIVING LOG #: 99-020 DATE: 3/30/99
SHIPPING CARRIER: FedEx CARRIER LOG #: N/A
SPECIES: H. cetera NUMBER SHIPPED: 800+
LIVESTOCK SOURCE/SHIPPER: ARO

SHIPPER INVOICE #: N/A PACKER'S NAME: SS
ASI ORDER REF. DATE: 3/24/99 ASI REF. INITIALS: CD
AGE/CHARACTERISTICS: HD 3/25/99
TAXONOMIC VERIFICATION LOG #: 99-016 DATE: 3/30/99

RECEIVING/WATER QUALITY PARAMETERS

D.O: Sat. TEMP: 20.4°C NH₃/NO₂: 0/0
SALINITY/HARDNESS: 256 ALK: 144 pH: 7.9
WATER CLEAR/CLOUDY CONTAINER SIZE/NUMBER: 1 gallon p 1
OF BLUE ICE: 0 TYPE OF PACKING: styrofoam box
OBSERVATION/CONDITION OF LIVESTOCK: Appear healthy

RECEIVING TECH. INT.: CD SUPERVISORS'S INT.: CD

AQUA SURVEY, INC.

Culture Lab Acclimation Form

Acclimatization

- No acclimatization required
- Temperature acclimatization
- Water acclimatization

Job #: 98-411

Test Species: H. azteca

Acclimatization Initial Parameters

Temperature: 20.4°C Salinity: N/A Type of Water: Rec. H₂O

Acclimatization Target Parameters

Temperature: 22.0°C ± 1 Salinity: N/A Type of Water: well H₂O

Acclimatization Chamber Volume (liters): 1 L cube

Acclimatization Location: Culture Lab

Acclimatization Water Type: well H₂O

Acclimatization Water Temperature: 22.0°C

Acclimatization Commencement-Date/Time: 3/30/99 1 1130 hrs

Change Over Rate (Approximately mL/Minute): 5-10 ml/min.

Acclimatization Conclusion - Date/Time: 4/1/99 1 0900 hrs

Technician Initials/Commencement: CD

Technician Initials/Conclusion: CD

Supervisor Initials: CD

Remarks: _____

**AQUA SURVEY, INC.
CULTURE LABORATORY**

15 Day - General Species Status Log

Species: H. azteca

Dates: 3/30/99 →

Receiving [] Culture [] Log #: 99-020

Initial Stock @: 800+

Test Job #: 98-411

Client: DAM

Food Type: F/uke

Date	Day Number	Temp/DO	NH, NO ₃	pH	Sal/Hardness	Alkalinity	Mortality	Remarks/Initials
3/30	1	20.4°C/8.1	0/0	7.9	256	144	∅	Acclimation started (C)
3/31	2	22.4°C/8.6	0/0	8.2	224	160	∅	Acclimation cont Fed F/uke (C)
4/1	3	23.1°C/9.0	0/0	8.3	156	172	∅	To test
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							

AQUA SURVEY, INC.

CULTURE LAB DISTRIBUTION FORM

DATE: 4/1/99

TEST JOB#: SRT

CLIENT: In House

TEST LOCATION: IN-LAB

FIELD

TEST SPECIES: H. azteca

TOTAL NUMBER ORGANISMS TRANSFERRED: 60+

AQUA SURVEY, INC. CULTURE LAB INVESTIGATORS: CC/CD

A. ORGANISMS

- 1. ASI CULTURE/HOLDING UNIT: 12 Cube
- 2. RECEIVING LOG #: 99-020 ARO
- 3. CULTURE LOG #: 99-0249
- 4. AGE/SIZE INFORMATION: 7-10 day HD 3/25/99

B. HOLDING CULTURE WATER PARAMETERS

- 1. TEMPERATURE: 23.1°C
- 2. SALINITY: N/A
- 3. WATER SOURCE: 100% well H₂O

C. TRANSFER CUSTODY & TRANSFER

- 1. LIVESTOCK RELINQUISHMENT DATE: 4/1/99
TIME: 1330h3
BY: CC
- 2. LIVESTOCK RECEIVING DATE: 4/1/99
TIME: 1330h3
BY: FD
- 3. CULTURE SUPERVISOR OR SENIOR TECH INITIALS: CD

REMARKS: _____

Reporting time: Thursday, April 29, 1999, 15:25

Recorder ID: 7004804 Deploy No: 3 Span: 28 days, 23 hours Interval: one hour
Samples: 694 Start: 3/31/99 15:27 Recover: 4/29/99 15:24
Window: -39°C / 87°C Delay: 0 seconds State: Stop Data source: Unit '7004804'
Extremes: 24.5°C 14.0°C Description: 03/31/99 15:26 98-411R H. azteca bath B

Daily summary

Date	Samples	Min °C	Max °C	Under window	Over window
3/31/99	8	20.0	22.0	0	0
4/1/99	24	22.5	24.5	0	0
4/2/99	24	24.0	25.5	0	0
4/3/99	24	24.0	25.5	0	0
4/4/99	24	24.0	25.0	0	0
4/5/99	24	23.5	25.0	0	0
4/6/99	24	23.5	24.5	0	0
4/7/99	24	23.5	25.0	0	0
4/8/99	24	24.0	25.5	0	0
4/9/99	24	24.5	25.5	0	0
4/10/99	24	23.5	24.5	0	0
4/11/99	24	23.5	24.5	0	0
4/12/99	24	23.0	24.0	0	0
4/13/99	24	22.5	24.0	0	0
4/14/99	24	22.0	23.5	0	0
4/15/99	24	22.0	24.0	0	0
4/16/99	24	23.0	24.0	0	0
4/17/99	24	23.5	24.5	0	0
4/18/99	24	23.5	24.5	0	0
4/19/99	24	23.0	24.5	0	0
4/20/99	24	22.5	24.0	0	0
4/21/99	24	22.5	24.0	0	0
4/22/99	24	23.0	24.0	0	0
4/23/99	24	23.0	24.0	0	0
4/24/99	24	23.0	24.0	0	0
4/25/99	24	23.0	24.5	0	0
4/26/99	24	23.0	24.5	0	0
4/27/99	24	23.0	24.5	0	0
4/28/99	24	23.0	24.0	0	0
4/29/99	14	23.0	24.0	0	0

Readings

Date/time	°C	Date/time	°C	Date/time	°C	Date/time	°C
3/31/99							
16:32:54	20.0	17:32:54	20.5	18:32:54	21.0	19:32:54	21.0
20:32:54	21.5	21:32:54	22.0	22:32:54	22.0	23:32:54	22.0
4/1/99							
00:32:54	22.5	01:32:54	22.5	02:32:54	22.5	03:32:54	22.5
04:32:54	22.5	05:32:54	22.5	06:32:54	22.5	07:32:54	22.5
08:32:54	22.5	09:32:54	22.5	10:32:54	22.5	11:32:54	23.0
12:32:54	23.0	13:32:54	23.0	14:32:54	23.5	15:32:54	23.5

16:32:54	23.5	17:32:54	23.5	18:32:54	24.0	19:32:54	24.0
20:32:54	24.0	21:32:54	24.5	22:32:54	24.5	23:32:54	24.5

4/2/99

00:32:54	24.5	01:32:54	24.5	02:32:54	24.0	03:32:54	24.0
04:32:54	24.0	05:32:54	24.0	06:32:54	24.0	07:32:54	24.0
08:32:54	24.0	09:32:54	24.0	10:32:54	24.0	11:32:54	24.0
12:32:54	24.5	13:32:54	24.5	14:32:54	24.5	15:32:54	24.5
16:32:54	24.5	17:32:54	25.0	18:32:54	25.0	19:32:54	25.0
20:32:54	25.0	21:32:54	25.5	22:32:54	25.5	23:32:54	25.0

4/3/99

00:32:54	25.0	01:32:54	25.0	02:32:54	25.0	03:32:54	24.5
04:32:54	24.5	05:32:54	24.5	06:32:54	24.0	07:32:54	24.0
08:32:54	24.0	09:32:54	24.0	10:32:54	24.0	11:32:54	24.0
12:32:54	24.0	13:32:54	24.0	14:32:54	24.5	15:32:54	24.5
16:32:54	24.5	17:32:54	25.0	18:32:54	25.0	19:32:54	25.0
20:32:54	25.0	21:32:54	25.5	22:32:54	25.5	23:32:54	25.5

4/4/99

00:32:54	25.0	01:32:54	25.0	02:32:54	25.0	03:32:54	25.0
04:32:54	24.5	05:32:54	24.5	06:32:54	24.5	07:32:54	24.5
08:32:54	24.0	09:32:54	24.5	10:32:54	24.5	11:32:54	24.5
12:32:54	24.5	13:32:54	24.5	14:32:54	24.5	15:32:54	24.5
16:32:54	25.0	17:32:54	25.0	18:32:54	25.0	19:32:54	25.0
20:32:54	25.0	21:32:54	25.0	22:32:54	25.0	23:32:54	25.0

4/5/99

00:32:54	24.5	01:32:54	24.5	02:32:54	24.5	03:32:54	24.0
04:32:54	24.0	05:32:54	23.5	06:32:54	23.5	07:32:54	23.5
08:32:54	23.5	09:32:54	23.5	10:32:54	23.5	11:32:54	23.5
12:32:54	23.5	13:32:54	23.5	14:32:54	24.0	15:32:54	24.0
16:32:54	24.0	17:32:54	24.0	18:32:54	24.5	19:32:54	24.5
20:32:54	25.0	21:32:54	25.0	22:32:54	25.0	23:32:54	25.0

4/6/99

00:32:54	24.5	01:32:54	24.5	02:32:54	24.5	03:32:54	24.0
04:32:54	24.0	05:32:54	23.5	06:32:54	23.5	07:32:54	23.5
08:32:54	23.5	09:32:54	23.5	10:32:54	23.5	11:32:54	23.5
12:32:54	24.0	13:32:54	24.0	14:32:54	24.0	15:32:54	24.0
16:32:54	24.0	17:32:54	24.0	18:32:54	24.5	19:32:54	24.5
20:32:54	24.5	21:32:54	24.5	22:32:54	24.5	23:32:54	24.5

4/7/99

00:32:54	24.5	01:32:54	24.5	02:32:54	24.0	03:32:54	24.0
04:32:54	24.0	05:32:54	24.0	06:32:54	23.5	07:32:54	23.5
08:32:54	23.5	09:32:54	23.5	10:32:54	23.5	11:32:54	24.0
12:32:54	24.0	13:32:54	24.0	14:32:54	24.0	15:32:54	24.0
16:32:54	24.5	17:32:54	24.5	18:32:54	24.5	19:32:54	25.0
20:32:54	25.0	21:32:54	25.0	22:32:54	25.0	23:32:54	25.0

4/8/99

00:32:54	25.0	01:32:54	24.5	02:32:54	24.5	03:32:54	24.5
04:32:54	24.5	05:32:54	24.0	06:32:54	24.0	07:32:54	24.0
08:32:54	24.0	09:32:54	24.0	10:32:54	24.0	11:32:54	24.0
12:32:54	24.0	13:32:54	24.0	14:32:54	24.5	15:32:54	24.5
16:32:54	24.5	17:32:54	24.5	18:32:54	25.0	19:32:54	25.0
20:32:54	25.5	21:32:54	25.5	22:32:54	25.5	23:32:54	25.5

4/9/99

00:32:54	25.5	01:32:54	25.0	02:32:54	25.0	03:32:54	25.0
04:32:54	25.0	05:32:54	24.5	06:32:54	24.5	07:32:54	24.5
08:32:54	24.5	09:32:54	24.5	10:32:54	24.5	11:32:54	24.5
12:32:54	24.5	13:32:54	24.5	14:32:54	24.5	15:32:54	24.5
16:32:54	24.5	17:32:54	24.5	18:32:54	24.5	19:32:54	24.5
20:32:54	24.5	21:32:54	24.5	22:32:54	24.5	23:32:54	24.5

4/10/99

00:32:54	24.5	01:32:54	24.0	02:32:54	24.0	03:32:54	24.0
04:32:54	23.5	05:32:54	23.5	06:32:54	23.5	07:32:54	23.5
08:32:54	23.5	09:32:54	23.5	10:32:54	23.5	11:32:54	23.5
12:32:54	23.5	13:32:54	24.0	14:32:54	24.0	15:32:54	24.0
16:32:54	24.0	17:32:54	24.0	18:32:54	24.5	19:32:54	24.5
20:32:54	24.5	21:32:54	24.5	22:32:54	24.5	23:32:54	24.5

4/11/99

00:32:54	24.5	01:32:54	24.0	02:32:54	24.0	03:32:54	24.0
04:32:54	24.0	05:32:54	23.5	06:32:54	23.5	07:32:54	23.5
08:32:54	23.5	09:32:54	23.5	10:32:54	23.5	11:32:54	23.5
12:32:54	23.5	13:32:54	23.5	14:32:54	23.5	15:32:54	23.5
16:32:54	23.5	17:32:54	24.0	18:32:54	24.0	19:32:54	24.0
20:32:54	24.0	21:32:54	24.0	22:32:54	24.0	23:32:54	24.0

4/12/99

00:32:54	24.0	01:32:54	24.0	02:32:54	24.0	03:32:54	23.5
04:32:54	23.5	05:32:54	23.5	06:32:54	23.0	07:32:54	23.0
08:32:54	23.0	09:32:54	23.0	10:32:54	23.5	11:32:54	23.5
12:32:54	23.5	13:32:54	23.5	14:32:54	23.5	15:32:54	23.5
16:32:54	23.5	17:32:54	24.0	18:32:54	24.0	19:32:54	24.0
20:32:54	24.0	21:32:54	24.0	22:32:54	24.0	23:32:54	24.0

4/13/99

00:32:54	24.0	01:32:54	23.5	02:32:54	23.5	03:32:54	23.0
04:32:54	23.0	05:32:54	23.0	06:32:54	23.0	07:32:54	22.5
08:32:54	22.5	09:32:54	23.0	10:32:54	23.0	11:32:54	23.0
12:32:54	23.0	13:32:54	23.5	14:32:54	23.5	15:32:54	23.5
16:32:54	23.5	17:32:54	24.0	18:32:54	24.0	19:32:54	24.0
20:32:54	24.0	21:32:54	24.0	22:32:54	24.0	23:32:54	23.5

4/14/99

00:32:54	23.5	01:32:54	23.0	02:32:54	23.0	03:32:54	22.5
04:32:54	22.5	05:32:54	22.0	06:32:54	22.0	07:32:54	22.0

08:32:54	22.0	09:32:54	22.5	10:32:54	22.5	11:32:54	22.5
12:32:54	22.5	13:32:54	22.5	14:32:54	23.0	15:32:54	23.0
16:32:54	23.0	17:32:54	23.0	18:32:54	23.5	19:32:54	23.5
20:32:54	23.5	21:32:54	23.5	22:32:54	23.5	23:32:54	23.5

4/15/99

00:32:54	23.5	01:32:54	23.0	02:32:54	23.0	03:32:54	23.0
04:32:54	22.5	05:32:54	22.5	06:32:54	22.0	07:32:54	22.5
08:32:54	22.5	09:32:54	22.5	10:32:54	22.5	11:32:54	23.0
12:32:54	23.0	13:32:54	23.0	14:32:54	23.0	15:32:54	23.5
16:32:54	23.5	17:32:54	23.5	18:32:54	23.5	19:32:54	23.5
20:32:54	24.0	21:32:54	24.0	22:32:54	24.0	23:32:54	24.0

4/16/99

00:32:54	23.5	01:32:54	23.5	02:32:54	23.5	03:32:54	23.0
04:32:54	23.0	05:32:54	23.0	06:32:54	23.0	07:32:54	23.0
08:32:54	23.0	09:32:54	23.0	10:32:54	23.0	11:32:54	23.0
12:32:54	23.5	13:32:54	23.5	14:32:54	23.5	15:32:54	23.5
16:32:54	23.5	17:32:54	23.5	18:32:54	23.5	19:32:54	24.0
20:32:54	24.0	21:32:54	24.0	22:32:54	24.0	23:32:54	23.5

4/17/99

00:32:54	23.5	01:32:54	23.5	02:32:54	23.5	03:32:54	23.5
04:32:54	23.5	05:32:54	23.5	06:32:54	23.5	07:32:54	23.5
08:32:54	23.5	09:32:54	23.5	10:32:54	23.5	11:32:54	23.5
12:32:54	23.5	13:32:54	23.5	14:32:54	24.0	15:32:54	24.0
16:32:54	24.0	17:32:54	24.0	18:32:54	24.0	19:32:54	24.0
20:32:54	24.5	21:32:54	24.5	22:32:54	24.5	23:32:54	24.0

4/18/99

00:32:54	24.0	01:32:54	24.0	02:32:54	24.0	03:32:54	24.0
04:32:54	24.0	05:32:54	23.5	06:32:54	23.5	07:32:54	23.5
08:32:54	23.5	09:32:54	23.5	10:32:54	23.5	11:32:54	24.0
12:32:54	24.0	13:32:54	24.0	14:32:54	24.0	15:32:54	24.0
16:32:54	24.5	17:32:54	24.5	18:32:54	24.5	19:32:54	24.5
20:32:54	24.5	21:32:54	24.5	22:32:54	24.5	23:32:54	24.5

4/19/99

00:32:54	24.5	01:32:54	24.0	02:32:54	24.0	03:32:54	24.0
04:32:54	23.5	05:32:54	23.5	06:32:54	23.0	07:32:54	23.0
08:32:54	23.0	09:32:54	23.0	10:32:54	23.5	11:32:54	23.5
12:32:54	23.5	13:32:54	23.5	14:32:54	23.5	15:32:54	23.5
16:32:54	24.0	17:32:54	24.0	18:32:54	24.0	19:32:54	24.0
20:32:54	24.0	21:32:54	24.0	22:32:54	24.0	23:32:54	24.0

4/20/99

00:32:54	24.0	01:32:54	23.5	02:32:54	23.5	03:32:54	23.0
04:32:54	23.0	05:32:54	23.0	06:32:54	22.5	07:32:54	22.5
08:32:54	23.0	09:32:54	23.0	10:32:54	23.0	11:32:54	23.0
12:32:54	23.0	13:32:54	23.0	14:32:54	23.0	15:32:54	23.0
16:32:54	23.5	17:32:54	23.5	18:32:54	23.5	19:32:54	23.5

20:32:54	24.0	21:32:54	24.0	22:32:54	24.0	23:32:54	23.5
4/21/99							
00:32:54	23.5	01:32:54	23.5	02:32:54	23.0	03:32:54	23.0
04:32:54	23.0	05:32:54	22.5	06:32:54	22.5	07:32:54	22.5
08:32:54	22.5	09:32:54	22.5	10:32:54	22.5	11:32:54	23.0
12:32:54	23.0	13:32:54	23.0	14:32:54	23.0	15:32:54	23.0
16:32:54	23.5	17:32:54	23.5	18:32:54	23.5	19:32:54	23.5
20:32:54	24.0	21:32:54	24.0	22:32:54	24.0	23:32:54	24.0
4/22/99							
00:32:54	23.5	01:32:54	23.5	02:32:54	23.5	03:32:54	23.0
04:32:54	23.0	05:32:54	23.0	06:32:54	23.0	07:32:54	23.0
08:32:54	23.0	09:32:54	23.0	10:32:54	23.0	11:32:54	23.0
12:32:54	23.0	13:32:54	23.0	14:32:54	23.5	15:32:54	23.5
16:32:54	23.5	17:32:54	23.5	18:32:54	23.5	19:32:54	24.0
20:32:54	24.0	21:32:54	24.0	22:32:54	24.0	23:32:54	24.0
4/23/99							
00:32:54	24.0	01:32:54	24.0	02:32:54	24.0	03:32:54	23.5
04:32:54	23.5	05:32:54	23.5	06:32:54	23.0	07:32:54	23.0
08:32:54	23.0	09:32:54	23.5	10:32:54	23.5	11:32:54	23.5
12:32:54	23.5	13:32:54	23.5	14:32:54	23.5	15:32:54	23.5
16:32:54	23.5	17:32:54	23.5	18:32:54	24.0	19:32:54	24.0
20:32:54	24.0	21:32:54	24.0	22:32:54	24.0	23:32:54	23.5
4/24/99							
00:32:54	23.5	01:32:54	23.5	02:32:54	23.5	03:32:54	23.5
04:32:54	23.0	05:32:54	23.0	06:32:54	23.0	07:32:54	23.0
08:32:54	23.0	09:32:54	23.0	10:32:54	23.0	11:32:54	23.0
12:32:54	23.0	13:32:54	23.5	14:32:54	23.5	15:32:54	23.5
16:32:54	23.5	17:32:54	24.0	18:32:54	24.0	19:32:54	24.0
20:32:54	24.0	21:32:54	24.0	22:32:54	24.0	23:32:54	24.0
4/25/99							
00:32:54	24.0	01:32:54	23.5	02:32:54	23.5	03:32:54	23.5
04:32:54	23.0	05:32:54	23.0	06:32:54	23.0	07:32:54	23.0
08:32:54	23.0	09:32:54	23.0	10:32:54	23.0	11:32:54	23.0
12:32:54	23.5	13:32:54	23.5	14:32:54	23.5	15:32:54	24.0
16:32:54	24.0	17:32:54	24.0	18:32:54	24.0	19:32:54	24.0
20:32:54	24.5	21:32:54	24.5	22:32:54	24.5	23:32:54	24.0
4/26/99							
00:32:54	24.0	01:32:54	24.0	02:32:54	23.5	03:32:54	23.5
04:32:54	23.0	05:32:54	23.0	06:32:54	23.0	07:32:54	23.0
08:32:54	23.0	09:32:54	23.0	10:32:54	23.0	11:32:54	23.0
12:32:54	23.0	13:32:54	23.5	14:32:54	23.5	15:32:54	23.5
16:32:54	23.5	17:32:54	23.5	18:32:54	24.0	19:32:54	24.0
20:32:54	24.0	21:32:54	24.5	22:32:54	24.5	23:32:54	24.0
4/27/99							

00:32:54	24.0	01:32:54	24.0	02:32:54	24.0	03:32:54	23.5
04:32:54	23.5	05:32:54	23.0	06:32:54	23.0	07:32:54	23.0
08:32:54	23.0	09:32:54	23.0	10:32:54	23.0	11:32:54	23.0
12:32:54	23.5	13:32:54	23.5	14:32:54	23.5	15:32:54	23.5
16:32:54	23.5	17:32:54	24.0	18:32:54	24.0	19:32:54	24.0
20:32:54	24.0	21:32:54	24.0	22:32:54	24.5	23:32:54	24.0

4/28/99

00:32:54	24.0	01:32:54	24.0	02:32:54	24.0	03:32:54	23.5
04:32:54	23.5	05:32:54	23.0	06:32:54	23.0	07:32:54	23.0
08:32:54	23.0	09:32:54	23.0	10:32:54	23.0	11:32:54	23.5
12:32:54	23.5	13:32:54	23.5	14:32:54	23.5	15:32:54	23.5
16:32:54	23.5	17:32:54	23.5	18:32:54	23.5	19:32:54	24.0
20:32:54	24.0	21:32:54	24.0	22:32:54	24.0	23:32:54	24.0

4/29/99

00:32:54	24.0	01:32:54	23.5	02:32:54	23.5	03:32:54	23.5
04:32:54	23.0	05:32:54	23.0	06:32:54	23.0	07:32:54	23.0
08:32:54	23.0	09:32:54	23.0	10:32:54	23.0	11:32:54	23.0
12:32:54	23.0	13:32:54	23.0				

CHAINS OF CUSTODY

CHAIN OF CUSTODY RECORD

FACILITY/LOCATION: <p align="center" style="font-size: 1.2em;"><i>LIBERTY FINISHING</i></p>	METHOD OF SHIPMENT: <i>Hand carry</i> TO FROM
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SAMPLING AND ANALYSES AUTHORIZED BY:	DATE: <p align="center" style="font-size: 1.2em;"><i>3/24/99</i></p>
--------------------------------------	---

90653 <
 10654 <
 1655 <
 0656 <

SAMPLE #	SAMPLING LOCATION AND DESCRIPTION	DATE	TIME	SAMPLE TYPE			# OF CONT.	ANALYSES REQUIRED
				C	G	SOLID		
<i>1 of 2</i>	<i>R1-01</i>	<i>3/24/99</i>						
<i>2 of 2</i>	<i>R1-01</i>	<i>3/24/99</i>						
<i>1 of 2</i>	<i>P5-01</i>	<i>3/24/99</i>						
<i>2 of 2</i>	<i>P5-01</i>	<i>3/24/99</i>						
<i>1 of 2</i>	<i>P4-01</i>	<i>3/24/99</i>						
<i>2 of 2</i>	<i>P4-01</i>	<i>3/24/99</i>						
<i>1 of 2</i>	<i>P3-03</i>	<i>3/24/99</i>						
<i>2 of 2</i>	<i>P3-03</i>	<i>3/24/99</i>						

SAMPLE COLLECTED BY: <p style="font-size: 1.2em;"><i>DS/JS</i></p>	EXACT SAMPLING LOCATION: <p style="font-size: 1.2em;"><i>Massapequa Cr.</i></p>
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SAMPLE RELINQUISHED BY: <p style="font-size: 1.2em;"><i>[Signature]</i></p>	SAMPLE RECEIVED BY: <p style="font-size: 1.2em;"><i>Tom Dolce</i></p>	DATE <p style="font-size: 1.2em;"><i>3/25/99</i></p>	TIME <p style="font-size: 1.2em;"><i>1715</i></p>
SAMPLE RELINQUISHED BY:	SAMPLE RECEIVED BY:	DATE	TIME
SAMPLE RELINQUISHED BY:	SAMPLE RECEIVED BY:	DATE	TIME
SAMPLE RELINQUISHED BY:	SAMPLE RECEIVED BY:	DATE	TIME

SAMPLE RELINQUISHED AFTER ANALYSES:	ANALYZED SAMPLE RECEIVED BY:	DATE	TIME
-------------------------------------	------------------------------	------	------

SAMPLE DESCRIPTION:	# OF CONTAINERS:
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CHAIN OF CUSTODY RECORD

FACILITY/LOCATION: <p align="center" style="font-size: 1.2em;"><i>Liberty Finishing</i></p>	METHOD OF SHIPMENT: TO FROM <i>hand carry</i>
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SAMPLING AND ANALYSES AUTHORIZED BY:	DATE: <i>3/24/99</i>
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SAMPLE #	SAMPLING LOCATION AND DESCRIPTION	DATE	TIME	SAMPLE TYPE			# OF CONT.	ANALYSES REQUIRED
				C	G	SOLID		
<i>90657</i> { <i>1 of 2</i>	<i>P3-01</i>	<i>3/24/99</i>						<i>Sed. Tox</i>
<i>2 of 2</i>	<i>P3-01</i>	<i>3/24/99</i>						}
<i>658</i> { <i>1 of 2</i>	<i>P2-03</i>	<i>3/24/99</i>						
<i>2 of 2</i>	<i>P2-03</i>	<i>3/24/99</i>						
<i>2659</i> { <i>1 of 2</i>	<i>P1-02</i>	<i>3/24/99</i>						
<i>2 of 2</i>	<i>P1-02</i>	<i>3/24/99</i>						
<i>2660</i> { <i>1 of 2</i>	<i>PA-03</i>	<i>3/24/99</i>						
<i>2 of 2</i>	<i>PA-03</i>	<i>3/24/99</i>					<i>Sed. Tox</i>	

SAMPLE COLLECTED BY: <i>DS/JS</i>	EXACT SAMPLING LOCATION: <i>Massapequa Creek</i>
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SAMPLE RELINQUISHED BY: <i>[Signature]</i>	SAMPLE RECEIVED BY: <i>Tom Dole</i>	DATE <i>3/25/99</i>	TIME <i>1715</i>
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SAMPLE RELINQUISHED BY:	SAMPLE RECEIVED BY:	DATE	TIME
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SAMPLE RELINQUISHED BY:	SAMPLE RECEIVED BY:	DATE	TIME
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SAMPLE RELINQUISHED BY:	SAMPLE RECEIVED BY:	DATE	TIME
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SAMPLE RELINQUISHED AFTER ANALYSES:	ANALYZED SAMPLE RECEIVED BY:	DATE	TIME
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SAMPLE DESCRIPTION:	# OF CONTAINERS: <i>8</i>
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ASI, INC.
SAMPLE RECEIVING FORM

Page of

Client: DAM							
Shipped Via: DAM					# of Shipping Containers: 8		
Type of Shipping Container coolers			Custody Seal Present <input type="checkbox"/> Absent <input checked="" type="checkbox"/> Broken <input type="checkbox"/>		Condition of Shipping Containers: Acceptable <input checked="" type="checkbox"/> Unacceptable <input type="checkbox"/>		
ASI #	Sample ID	Type of Container	Number of Containers	Condition of Samples†	Temp. °C	Ice -	Type of Sample*
1.	411R 90653	plastic	2	A	8°C	I	Se
2.	90654	↓	↓	↓	↓	↓	↓
3.	90655	↓	↓	↓	↓	↓	↓
4.	90656	↓	↓	↓	↓	↓	↓
5.	90657	↓	↓	↓	↓	↓	↓
6.	90658	↓	↓	↓	↓	↓	↓
7.	90659	↓	↓	↓	↓	↓	↓
8.	90660	↓	↓	↓	↓	↓	↓
9.							
10.							
Notes: (Discrepancies Between Sample Label and COC Record)							
Opened / Received by: Tom De					Date/Time: 3/25/99 1715		

S - Soil
 Sa - Sediment
 Sl - Sludge
 W - Water
 E - Effluent

A - Acceptable
 U - Unusable or Contaminated

I - Ice
 D - Dry Ice
 B - Blue Ice
 N - None

98-411

CHAIN OF CUSTODY RECORD

FACILITY/LOCATION: <i>Liberty IND.</i>	METHOD OF SHIPMENT: TO FROM
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SAMPLING AND ANALYSES AUTHORIZED BY: <i>CBP</i>	DATE: <i>11-3-98</i>
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SAMPLE #	SAMPLING LOCATION AND DESCRIPTION	DATE	TIME	SAMPLE TYPE			# OF CONT.	ANALYSES REQUIRED
				C	G	SOLID		
<i>82033</i>	<i>R1-01 Mill Pond</i>	<i>11-3</i>	<i>0740</i>		<i>X</i>	<i>SED</i>	<i>2</i>	<i>14 DAY C. Tentons 28-D H. Azteca</i>
<i>82034</i>	<i>P5-01</i>	<i>11-3</i>	<i>0900</i>		<i>X</i>	<i>SED</i>	<i>2</i>	<i>14 DAY C. Tentons 28-D H. Azteca</i>
<i>12035</i>	<i>P4-01</i>	<i>11-3</i>	<i>1100</i>		<i>X</i>	<i>SED</i>	<i>2</i>	<i>14 DAY C. Tentons 28-D H. Azteca</i>
<i>82036</i>	<i>P3-03</i>	<i>11-3</i>	<i>1230</i>		<i>X</i>	<i>SED</i>	<i>2</i>	<i>"</i>
<i>82037</i>	<i>P3-01</i>	<i>11-3</i>	<i>1300</i>		<i>X</i>	<i>SED</i>	<i>2</i>	<i>"</i>
<i>82038</i>	<i>P2-03</i>	<i>11-3</i>	<i>1340</i>		<i>X</i>	<i>SED</i>	<i>2</i>	<i>"</i>
<i>82039</i>	<i>P1-02</i>	<i>11-3</i>	<i>1430</i>		<i>X</i>	<i>SED</i>	<i>2</i>	<i>"</i>
<i>82040</i>	<i>PA-03</i>	<i>11-3</i>	<i>1530</i>		<i>X</i>	<i>SED</i>	<i>2</i>	<i>"</i>

SAMPLE COLLECTED BY: <i>C. Pace / D. Savercoo</i>	EXACT SAMPLING LOCATION: <i>Farmingdale N.Y.</i>
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SAMPLE RELINQUISHED BY: <i>Charles B Pace</i>	SAMPLE RECEIVED BY: <i>Tom Doherty</i>	DATE <i>11/4/98</i>	TIME <i>1415</i>
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SAMPLE RELINQUISHED BY:	SAMPLE RECEIVED BY:	DATE	TIME
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SAMPLE RELINQUISHED BY:	SAMPLE RECEIVED BY:	DATE	TIME
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SAMPLE RELINQUISHED BY:	SAMPLE RECEIVED BY:	DATE	TIME
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SAMPLE RELINQUISHED AFTER ANALYSES:	ANALYZED SAMPLE RECEIVED BY:
	DATE TIME

SAMPLE DESCRIPTION:	# OF CONTAINERS:
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ASI, INC.
SAMPLE RECEIVING FORM

Page of

Client: DAMES / MOOR							
Shipped Via: COURIER				# of Shipping Containers: 7 coolers			
Type of Shipping Container cooler			Custody Seal Present <input type="checkbox"/> Absent <input checked="" type="checkbox"/> Broken <input type="checkbox"/>		Condition of Shipping Containers: Acceptable <input checked="" type="checkbox"/> Unacceptable <input type="checkbox"/>		
ASI #	Sample ID	Type of Container	Number of Containers	Condition of Samples†	Temp. °C	Ice †	Type of Sample*
1.	82033	R1-01	Plastic 2	A	4°C	I	Se
2.	82034	P5-01	↓	↓	↓	↓	↓
3.	82035	P4-01					
4.	82036	P3-03					
5.	82037	P3-01					
6.	82038	P2-03					
7.	82039	P1-02					
8.	82040	PA-03					
9.							
10.							
Notes: (Discrepancies Between Sample Label and COC Record)							
Opened / Received by: Tom Doherty						Date/Time: 11/4/98 14:5	

S - Soil
Se - Sediment
Sl - Sludge
W - Water
E - Effluent

A - Acceptable
U - Unusable or Contaminated

I - Ice
D - Dry Ice
B - Blue Ice
N - None

In response to EPA's comments regarding the Chain of Custody Record from 11/3/98:

Dames and Moore originally told Aqua survey, Inc. that a 14-day *C. tentans* test was required for this study. Upon receipt of the samples from Dames and Moore, the Chain of Custody record showed a 10-day *C. tentans* test. Aqua Survey, Inc. informed Dames and Moore about the possible error and was told to run the study for *C. tentans* as a 10-day test instead of a 14-day test as originally told. It was not until after both the original test in November 1998 and the March 9, 1999 retest were complete that Aqua Survey, Inc. was told to run the test for a 14-day exposure.