

Bioassays of

Charlotte Harbor Water Association

Reverse Osmosis Water Treatment Plant

Charlotte County

NPDES #FL0035378

Sampled January 24, 25, 26, 28, 2005

May 2005

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Charlotte Harbor Water Association Reverse Osmosis Water Treatment Plant, 2515 Highlands Rd., Harbor Heights, Charlotte County, Florida, NPDES #FL0035378. Effluent samples for this facility were collected on January 24, 25, 26, and 28, 2005.

Introduction

The Charlotte Harbor Water Association Reverse Osmosis Water Treatment Plant is served by a demineralization concentrate treatment and disposal system with a design flow of 0.15 million gallons per day (MGD) maximum daily flow, and a mean flow of 0.1037 MGD (January 2004-December 2004). The facility consists of a triple train reverse osmosis (RO) system, a 10,000-gallon RO concentrate storage tank, a degasifier, associated pumps, piping, and appurtenances. Effluent is not chlorinated/disinfected. Effluent is discharged through a six (6) inch pipe at Outfall D-001, which is located (approximate latitude 26º 59' 14" N and longitude 82º 00' 14" W) at the terminal end of the San Marino Canal, which leads to the Class III Marine waters of the Peace River. The facility has a mixing zone for chronic toxicity, which has a length of 15 m (49 feet) from the point of discharge and a width of 31 m (102 feet) centered on the discharge point. The facility also has mixing zones for fluoride, gross alpha, and combined Radium 226 and Radium 228. These mixing zones have a common radius of 82.29 m (270 feet) around the point of discharge.

The facility is not currently under any administrative orders, consent orders, or enforcement actions (facility information provided by Elin Jackson of the FDEP South District, Fort Myers).

Methods

Samples were collected from the EFF-1 and EFA-1 NPDES sampling points by Ford Walton (FDEP South District) following DEP-SOP-001/01 FS 2400 Wastewater Sampling. All DEP SOP's are available on the web at: http://www.floridadep.org/labs/qa/sops.htm

The 7-day chronic screening toxicity tests and algal growth potential test were performed following internal DEP SOP's TA07_14,TA07_15, and TA08_01 through TA08_09. All internal DEP SOP's are available on the web at: http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp

The salinity of the samples collected for the bioassay tests ranged from 1.6 to 4.2 parts per thousand (ppth). Per permit conditions, the salinity of each sample was adjusted by the addition of artificial sea salts (Forty Fathoms®) to approximately 20 ppth. In addition to the 20 ppth artificial sea water (ASW) controls, salinity adjusted controls were prepared daily by adding artificial sea salts to ASW which had been diluted with well water in order to match the salinity of the original samples. The purpose of the salinity adjusted controls was to ensure that any observed toxicity in the effluent tests could not be attributed to the sea salt addition. There was no toxicity observed in the salinity adjusted control test. The sample of effluent for the AGP test was salinity adjusted from 4.9 ppth to 7 ppth to meet the salinity requirement of the test species per SOP TA08_01.

A grab sample of effluent (LIMS 810510) was collected for the bioassay test on January 25 and was used for test renewal at test time 24-hours due to insufficient volume in the sample collected on January 24, 2005.

Dunnett's procedure (available at Statistical Analysis for Biological Methods http://www.epa.gov/EERD/stat2.htm) and t-tests were used to analyze data from these tests.

Toxicity Test Results

Tests were performed January 25 – February 1, 2005.

Americamysis bahia 7-day chronic screening bioassay – NOEC = 100% for survival and growth

Menidia beryllina 7-day chronic screening bioassay – NOEC = 100% for survival and growth

Bioassay samples were not chronically toxic to the test organisms.

See Appendix 1 for bioassay bench sheets.

Algal Growth Potential

The effluent Algal Growth Potential (AGP) was 0.646 mg dry wt/L of the unicellular green alga, *Dunaliella tertiolecta*. Raschke and Shultz found that AGP values above 10 mg dry weight/L represent a “problem” threshold for marine receiving waters, implying nutrient enrichment (personal communication with Ron Raschke USEPA Region 4 1987). The analytical chemistry suggests that the effluent is nitrogen limited (Table 1).

See Table 1 for AGP results.

Chemistry Results

Total residual chlorine and total ammonia were not detected in the bioassay sample in the laboratory. The total ammonia concentration in the sample collected and preserved for chemical analysis was 0.098 mg/L. Based on the pH, salinity and temperature of the effluent as collected, the calculated unionized ammonia concentration was < 0.02 mg/L.

Chromium-III and iron were detected between the laboratory minimum detection limits (MDL) and practical quantitation limits (PQL). Effluent concentrations of total alpha (141 pCi/L) and radium 226+228 (49.5 pCi/L) exceeded water quality criteria limits of 15 and 5 pCi/L, respectively (62-302.530(58)(b) and (a), F.A.C.). However, this facility has mixing zones for these analytes.

See Table 2 for results of analytes detected in the effluent, and corresponding limits.

See Appendix 2 for a complete list of chemical analyses performed.

Conclusion

The effluent samples collected from EFA-1 and EFF-1 for this facility on January 24-28, 2004, were not chronically toxic to either test species during the 7-day bioassays. The effluent AGP result was less than the "problem” threshold for marine receiving waters. Effluent concentrations of radioactive substances exceeded marine water quality criteria; however, this facility has mixing zones for these substances.

Table 1. Measured algal growth potential (AGP) of Dunaliella tertiolecta *and the ratio of total nitrogen to total phosphorus.*

Location	AGP (mg dry weight/L)	Total N:P ratio
Effluent Samples	0.646	6.98

Table 2. Effluent limits, Class III Marine Criteria and chemical data.

Charlotte Harbor Water Association Reverse Osmosis Water Treatment Plant	Class III Stds	Effluent Limits	Effluent Grab Samples	Effluent Mixing Zone Composite Samples
Organic Constituents (µg/L)				
None Detected	-	-	-	-
Metals (µg/L unless otherwise noted)				
Aluminum	≤ 1500	-	5 U	-
Arsenic	≤ 50	-	26 U	-
Cadmium	≤ 9.3	-	0.37 U	-
Calcium (mg/L)	-	-	380	-
Chromium-III	-	-	2.8 I	-
Copper	≤ 3.7	≤ 2.9	2.5 U	-
Iron	≤ 300	-	16 I	-
Lead	≤ 8.5	-	0.64 U	-
Magnesium (mg/L)	-	-	253	-
Nickel	≤ 8.3	-	2 U	-
Selenium	≤ 71	-	2.5 U	-
Silver	≤ 2.3	-	0.13 U	-
Zinc	≤ 86	-	3 U	-
Nutrients (mg/L)				
Total Phosphorus	-	15	0.19	-
Ammonia	-	-	0.098 A	-
Unionized Ammonia	≤ 0.02	-	< 0.02 c	-
Nitrate+Nitrite	-	-	0.027	-
Total Kjeldahl Nitrogen	-	-	1.3	-
Organic Nitrogen	-	-	1.2 c	-
Total Nitrogen	-	-	1.33 c	-
Sulfide	-	-	0.05 UY	-
Fluoride	≤ 5	≤ 5 s*	-	0.67
General Physical and Chemical Parameters				
Alpha, Total (pCi/L)	≤ 15	≤ 15 *	141	-
Alpha-Counting Error (pCi/L)	-	-	8.9	-
Radium 226 (pCi/L)	-	-	47.5	-
Radium 226-Counting Error (pCi/L)	-	-	1	-
Radium 228 (pCi/L)	-	-	2	-
Radium 228-Counting Error (pCi/L)	-	-	0.8	-
Radium 226+228 (pCi/L)	≤ 5	≤ 5 *	49.5 c	-
Dissolved Oxygen (mg/L)	≥ 4	≥ 4	7.5	9.8
pH (S.U.)	6.5-8.5	6.5-8.5	8.1	8
Conductivity (umhos/cm)	-	-	8,697	3,602
Temperature (C)	-	-	21.6	16.1
Flow (MGD)	-	Report	-	-
TSS (mg/L)	-	50 s	-	8 I

Value exceeds the Class III Marine Water Quality Criteria (62-302, F.A.C.) and/or Effluent Limits

c - Calculated value

s - Single sample

A - Value reported is the mean of two or more determinations

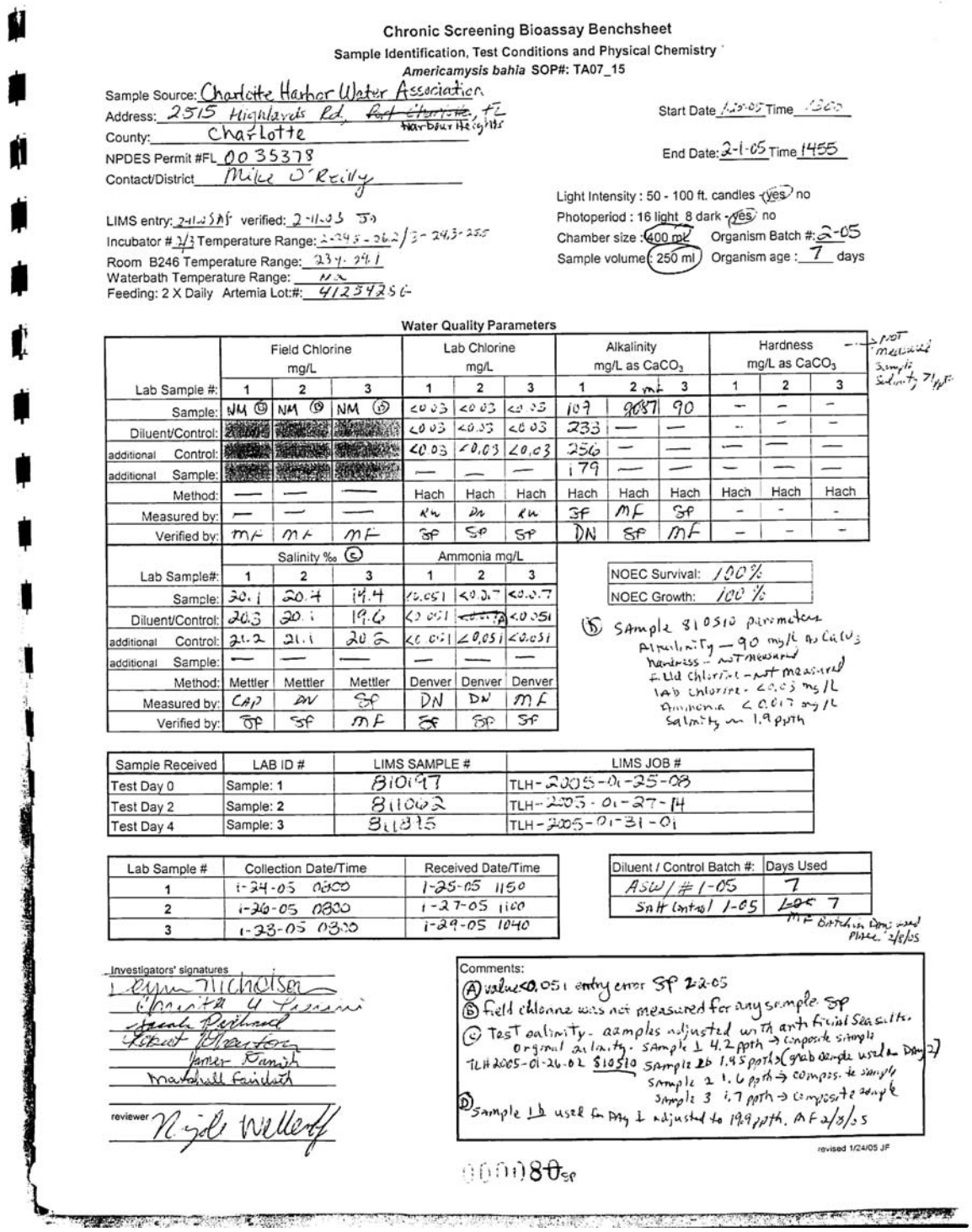
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation lim

U - Material analyzed for but not detected; value reported is the minimum detection limit

Y - The analysis was from an unpreserved or imporperly preserved sample. The data may not be accurate.

* - Limit applied at end of mixing zone

Appendix 1. Bench Sheets



Chronic Screening Bioassay Benchsheet

Sample Identification, Test Conditions and Physical Chemistry

***Americamysis bahia* SOP#: TA07_15**

Sample Source: Charlotte Harbor Water Association
Address: 2515 Highlands Rd, ~~Port Charlotte~~, FL Harbour Heights
County: Charlotte
NPDES Permit #FL 0035378
Contact/District Mike O'Reilly

Start Date 1-25-05 Time 1300
End Date: 2-1-05 Time 1455

LIMS entry: 2-1-05 SAF verified: 2-11-05 JF
Incubator # 2/3 Temperature Range: 24.5 - 26.2 / 24.3 - 25.5
Room B246 Temperature Range: 23.9 - 24.1
Waterbath Temperature Range: NA
Feeding: 2 X Daily Artemia Lot:#: 412542 SG

Light Intensity : 50 - 100 ft. candles (yes) no
Photoperiod : 16 light 8 dark (yes) no
Chamber size : (400 ml) Organism Batch #: 2-05
Sample volume: (250 ml) Organism age : 7 days

Water Quality Parameters

	Field Chlorine mg/L			Lab Chlorine mg/L			Alkalinity mg/L as $CaCO_3$			Hardness mg/L as $CaCO_3$		
Lab Sample #:	1	2	3	1	2	3	1	2 mL	3	1	2	3
Sample:	NM (B)	NM (B)	NM (B)	<0.03	<0.03	<0.03	107	9687	90	—	—	—
Diluent/Control:	[redacted]	[redacted]	[redacted]	<0.03	<0.03	<0.03	233	—	—	—	—	—
additional Control:	[redacted]	[redacted]	[redacted]	<0.03	<0.03	<0.03	256	—	—	—	—	—
additional Sample:	[redacted]	[redacted]	[redacted]	—	—	—	179	—	—	—	—	—
Method:	—	—	—	Hach	Hach	Hach	Hach	Hach	Hach	Hach	Hach	Hach
Measured by:	—	—	—	KW	DN	KW	SF	MF	SP	-	-	-
Verified by:	MF	MF	MF	SP	SP	SP	DN	SP	MF	-	-	-

	Salinity ‰ (C)			Ammonia mg/L		
Lab Sample#:	1	2	3	1	2	3
Sample:	20.1	20.4	19.4	<0.051	<0.017	<0.017
Diluent/Control:	20.3	20.1	19.6	<0.051	~~<0.017~~	<0.051
additional Control:	21.2	21.1	20.2	<0.051	<0.051	<0.051
additional Sample:	—	—	—	—	—	—
Method:	Mettler	Mettler	Mettler	Denver	Denver	Denver
Measured by:	CAP	DN	SP	DN	DN	MF
Verified by:	SP	SP	MF	SP	SP	SP

NOEC Survival:	100%
NOEC Growth:	100 %

(B) Sample 810510 parameters
Alkalinity — 90 mg/L as $CaCO_3$
Hardness - not measured
Field Chlorine - not measured
Lab Chlorine - <0.03 mg/L
Ammonia < 0.017 mg/L
Salinity on 1.9 ppth

Sample Received	LAB ID #	LIMS SAMPLE #	LIMS JOB #
Test Day 0	Sample: 1	810197	TLH-2005-01-25-08
Test Day 2	Sample: 2	811002	TLH-2005-01-27-14
Test Day 4	Sample: 3	811315	TLH-2005-01-31-01

Lab Sample #	Collection Date/Time	Received Date/Time
1	1-24-05 0600	1-25-05 1150
2	1-26-05 0800	1-27-05 1100
3	1-28-05 0830	1-29-05 1040

Diluent / Control Batch #:	Days Used
ASW / #1-05	7
SAF Control 1-05	~~10~~ 7

MF Batch was Days used Please. 2/8/05

Investigators' signatures
Lynn Nicholson
Christa Tessari
Sarah Redlund
Robert Thornton
James Ramik
Marshall Faircloth

reviewer Nigel Willett

Comments:
(A) value <0.051 entry error SP 2-2-05
(B) field chlorine was not measured for any sample SP
(C) Test salinity - samples adjusted with artificial Seasalts. Original salinity - Sample 1 4.2 ppth → composite sample TLH 2005-01-26-02 810510 Sample 2b 1.95 ppth (grab sample used on Day 2)
Sample 2 1.6 ppth → composite sample
Sample 3 1.7 ppth → composite sample
(D) Sample 1b used on Day 1 adjusted to 19.9 ppth. MF 2/8/05

revised 1/24/05 JF

0000180 SP

Appendix 1. Bench Sheets (continued)

Chronic Screening Test Survival Benchsheet

Americamysis bahia SOP TA07_15

Facility: Charlotte Harbor Water Association LIMS Sample Number: 810197

(for Lab Sample # 1)

Concentration		Chamber #	TEST DAY 0	1	2	3	4	5	6	7
Control	A	Tox1	5	5	5	5	5	5	5	5
	B	Tox2	5	5	5	5	5	5	5	5
	C	Tox3	5	5	5	5	5	5	5	5
	D	Tox4	5	5	5	5	5	5	5	5
	E	Tox5	5	4 10	4	4	4	4	4	4
	F	Tox6	5	4 10	4	4	4	4	4	4
	G	Tox7	5	5	5	5	5	5	5	5
	H	Tox8	5	5	4 10	4	4	4	4	4
D.N. ~~Sample~~ Salt Control	A	Tox9	5	5	5	4 10	4	4	4	4
	B	Tox10	5	5	5	5	5	5	5	5
	C	Tox11	5	5	5	5	5	5	5	5
	D	Tox12	5	5	5	5	5	5	5	5
	E	Tox13	5	5	5	4 10	4	4	4	4
	F	Tox14	5	5	5	5	5	5	5	5
	G	Tox15	5	5	5	5	5	5	5	5
	H	Tox16	5	[illegible]	4	3 10	3	3	3	3
Sample 100 %	A	Tox17	5	5	5	5	5	5	5	5
	B	Tox18	5	5	5	5	5	5	5	5
	C	Tox19	5	5	5	4 10	4	4	4	4
	D	Tox20	5	5	5	5	5	5	5	5
	E	Tox21	5	5	5	5	5	5	5	5
	F	Tox22	5	5	5	5	5	5	5	5
	G	Tox23	5	5	4 10	4	4	4	4	4
	H	Tox24	5	5	5	5	5	5	5	5
	A		5							
	B		5							
	C		5							
	D		5							
	E		5							
	F		5							
	G		5							
	H		5							
Loaded by: JD		Checked by: [redacted]		JD	JD	J.D	SB	MF	MF	DN
Verified by: PLP										

Survival	%CV	PMSD
Control	11.2	7.60
100%:	9.7	

Survival	Table	Calculated	dF
T-test	1.7600	0.5093	14

Comments: A-4 ID Mean control survival 92.5%
100% survival 95%

revised 7/27/04 MF

000009

Biology Laboratory Chronic Screening Bioassay Parameters Benchsheet
***Americamysis bahia* SOP TA-07_15**

Sample Source: Charlotte Harbor Water Association
LIMS Sample #: 810197 (for Lab sample #1)
Start Date: 1-25-05 End Date: 2/1/05
Time: 1300 Time: 1455

Test Day ↓		Conc.	New Sample: Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Salinity ppth	Old Sample: Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Salinity ppth
Day 0	sample:	Control	A	8.0	24.5	7.0	20.3					
	1	100%	A	8.3	24.7	7.4	20.1					
	Measured by:			CAP	CAP	CAP	CAP					
	Recorded by:			CAP	CAP	CAP	CAP					
Day 1	sample:	Control	B	8.3	24.0	ⓐ [illegible]	19.8	B	8.3	24.3	6.0	21.1
	1	100%	B	8.5	24.1	6.9	19.9	B	8.0	24.4	5.2	20.4
	Measured by:			DN	DN	DN	DN		DN	DN	DN	DN
	Recorded by:			DN	DN	DN	DN		DN	DN	DN	DN
Day 2	sample:	Control	C	8.2	24.0	6.4	6324	C	8.1	24.1	4.1	20.3
	2	100%	C	8.3	24.0	6.5	20.4	C	7.7	24.2	2.7	20.3
	Measured by:			DN	DN	DN	DN		JD	JD	JD	JD
	Recorded by:			DN	DN	DN	DN		JD	JD	JD	JD
Day 3	sample:	Control	D	8.4	24.0	6.6	19.3	D	8.0	24.4	4.6	20.7
	2	100%	D	8.2	24.5	6.5	19.6	D	7.8	24.3	3.8	20.4
	Measured by:			DN	DN	DN	DN		DN	DN	DN	DN
	Recorded by:			DN	DN	DN	DN		DN	DN	DN	DN
Day 4	sample:	Control	E	8.3	24.0	6.4	19.4	E	8.0	24.0	4.7	20.0
	3	100%	E	8.4	24.0	6.8	19.6	E	7.9	24.0	4.8	19.5
	Measured by:			SB	SB	SB	SB		RW	RW	RW	RW
	Recorded by:			SB	SB	SB	SB		SB	SB	SB	SB
Day 5	sample:	Control	F	8.3	24.1	6.2	19.0	F	8.1	24.0	4.2	19.3
	3	100%	F	8.4	24.3	6.2	20.9	F	8.0	24.0	4.3	20.3
	Measured by:			JD	JD	JD	JD		JD	JD	JD	JD
	Recorded by:			JD	JD	JD	JD		JD	JD	JD	JD
Day 6	sample:	Control	G	8.4	24.0	6.5	19.3	G	8.2	24.0	5.5	20.3
	3	100%	G	8.4	24.0	7.0	20.1	G	8.1	24.8	5.2	20.5
	Measured by:			DN	DN	DN	DN		MF	DN	MF	MF
	Recorded by:			DN	DN	DN	DN		MF	DN	MF	MF
Day 7	sample:	Control						H	8.0	24.0	4.9	~18.8
	3	100%						H	7.9	24.0	5.0	~19.7
	Measured by:								DN	DN	DN	DN
	Recorded by:								DN	DN	DN	DN

Test Rep. = Replicate

Comments: ⓐ D.O. = 6.9 D.N.
ⓐ Salinity CTRL = 20.1 ppT, 1st entry was conductivity. D.N.

revised 7/26/04 mf

000010

Appendix 1. Bench Sheets (continued)

Biology Laboratory Chronic Screening Bioassay Parameters Benchsheet
***Americamysis bahia* SOP TA-07_15**

Sample Source: Charlotte Harbor Water Association
LIMS Sample #: 810197 (for Lab sample #1)
Start Date: 1-25-05 End Date: 2/1/05
Time: 1300 Time: 1455

Parameter page 2

For Additional Concentrations:
Control = Salt Control
100% = —

Test Day ↓		Conc.	New Sample Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Salinity ppth	Old Sample Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Salinity ppth
Day 0	sample:	Salt Control	A	8.2	24.5	7.2	21.2					
	1	100%	A	—	—	—	—					
	Measured by:			CAP	CAP	CAP	CAP					
	Recorded by:			CAP	CAP	CAP	CAP					
Day 1	sample:	Salt Control	B	8.3	24.0	~~6.3~~(A) 6.9	~~20.5~~(B)	B	8.2	24.4	5.9	21.2
	1	100%	B	—	—	—	—	B	—	—	—	—
	Measured by:			DN	DN	DN	DN		DN	DN	DN	DN
	Recorded by:			DN	DN	DN	DN		DN	DN	DN	DN
Day 2	sample:	Salt Control	C	8.2	24.0	5.9	21.1	C	8.0	24.3	3.2	20.9
	2	100%	C	—	—	—	—	C	—	—	—	—
	Measured by:			DN	DN	DN	DN		JD	JD	JD	JD
	Recorded by:			DN	DN	DN	DN		JD	JD	JD	JD
Day 3	sample:	Salt Control	D	8.2	24.0	6.4	20.9	D	8.0	24.7	4.0	21.4
	2	100%	D	—	—	—	—	D	—	—	—	—
	Measured by:			DN	DN	DN	DN		DN	DN	DN	DN
	Recorded by:			DN	DN	DN	DN		DN	DN	DN	DN
Day 4	sample:	Salt Control	E	8.3	24.0	6.2	20.2	E	8.1	24.0	5.3	21.1
	3	100%	E	—	—	—	—	E	—	—	—	—
	Measured by:			SP	SP	SP	SP		RW	RW	RW	RW
	Recorded by:			SP	SP	SP	SP		SP	SP	SP	SP
Day 5	sample:	Salt Control	F	8.3	24.3	6.0	20.1	F	8.1	24.1	4.9	20.3
	3	100%	F	—	—	—	—	F	—	—	—	—
	Measured by:			JD	JD	JD	JD		JD	JD	JD	JD
	Recorded by:			JD	JD	JD	JD		JD	JD	JD	JD
Day 6	sample:	Salt Control	G	8.3	24.0	6.8	19.8	G	8.2	24.1	5.5	20.5
	3	100%	G	—	—	—	—	G	—	—	—	—
	Measured by:			DN	DN	DN	DN		MF	DN/MF	MF	MF
	Recorded by:			DN	DN	DN	DN		MF	DN	MF	MF
Day 7	sample:	Salt Control						H	8.0	24.0	4.9	~19.3
	3	100%						H	—	—	—	—
	Measured by:								DN	DN	DN	DN
	Recorded by:								DN	DN	DN	DN

Test Rep. = Replicate

Comments:
(A) D.O. = 6.9
(B) Salinity 21.1 ppt, 1st entry was Conductivity - D.N.

revised 7/26/04 mf

000011

Appendix 1. Bench Sheets (continued)

Chronic Screening Test Fecundity Benchsheet

Americamysis bahia SOP TA07_15

Facility: Chemical Hazard Water Association LIMS Sample Number: 810197

(for Lab Sample # 1)

Concentration	Replicate	Females with Eggs	Females no Eggs	Males	Immature
Control ASW	A	1	1	2	1
	B		2	3	
	C	1		4	
	D	2	1	2	
	E	1		3	
	F	1		3	
	G		1	3	1
	H	1	1	2	
MF 24-05 wrong concentration Sample 1197/5 MF Split + combined	A	1	1	2	
	B		1	3	1
	C		1	4	
	D		MF 2	3	2
	E		MF 2	2	2
	F		1	2	2
	G			3	2
Wrong concentration	H	1	1	1	
MF 24-05 ~~Split + combined~~ 100% sample	A	1	1	3	
	B		2	3	
	C	1	1	2	
	D	1	1	3	
	E	1		4	
	F	1	2	2	
	G	2	0	2	
	H		1	4	
	A				
	B				
	C				
	D				
	E				
	F				
	G				
	H				
Checked by:	[redacted]	MF	MF	MF	MF

Comments:

revised 7/27/04 MF

000012

Appendix 1. Bench Sheets (continued)

Chronic Screening Test Weighing Benchsheet

Facility: Marble Harbor Water Association

LIMS Sample Number: 810197
(for Lab Sample # 1)

Weigh page 1
Americamysis bahia **Bench sheet**
SOP TA06_21

Concentration	Replicate	Pan #	Pan wt. g	Pan + mysid g	Mysid wt. g	Original # mysids	Mean wt. mg
			mean wt =Mysid wt divided by 5 convert g to mg: move decimal 3 places to right				
Control (FSW)	A	91	0.0247	0.0268	0.0021	5	0.42
	B	92	0.0269	0.0290	0.0021	5	0.42
	C	93	0.0258	0.0278	0.0020	5	0.40
	D	94	0.0230	0.0252	0.0022	5	0.44
	E	95	0.0232	0.0251	0.0019	5	0.38
	F	96	0.0248	0.0271	0.0023	5	0.46
	G	97	0.0242	0.0261	0.0019	5	0.38
	H	98	0.0250	0.0266	0.0016	5	0.32
~~100%~~ sample Salt Control	A	99	0.0243	0.0263	0.0020	5	0.40
	B	100	0.0251	0.0268	0.0017	5	0.34
	C	101	0.0247	0.0262	0.0015	5	0.30
	D	102	0.0244	0.0263	0.0019	5	0.38
	E	103	0.0241	0.0256	0.0015	5	0.30
	F	104	0.0246	0.0266	0.0020	5	0.40
	G	105	0.0250	0.0273	0.0023	5	0.46
	H	106	0.0252	0.0268	0.0016	5	0.32
	Weighed by initials:		DI	DN			

~~Growth~~	%CV	PMSD
Control	10.8	14.49
100%	19.7	

Growth	Table	Calculated	dF
T-test	1.76000	0.6035 1	14

Drying	
Temperature °C:	105
Hours:	24

Tare Weighing Date: 02/16/05 Final Weighing Date: 2/3/05

			Measured Value	S-weight Value
Tare Pan 1 after Pan 5 (9)	0.0248 @	0.0247	S-weights	0.0200 g @ 0.02 g
Tare Pan 1 after Pan 10	0.0247 @	0.0247		
Tare Pan 1 after Pan 15	0.0247 @	0.0247	at tare	0.0500 g @ 0.05 g
Final Pan 1 after Pan 5 (9)	0.0268 @	0.0268	S-weights	0.0200 g @ 0.02 g
Final Pan 1 after Pan 10	0.0270 @	0.0268		
Final Pan 1 after Pan 15	0.0270 @	0.0268	at final	0.0600 g @ 0.0600 g

Note: Pan 5, 10 and 15 for Tare and Final refers to sequence of weighing as actual Pan #s may differ.

Comments:

revised 7/26/04 MF

000013 A

Appendix 1. Bench Sheets (continued)

Chronic Screening Test Weighing Benchsheet

Facility: Charlotte Harbor Water Association

LIMS Sample Number: 80197
(for Lab Sample # 1)

Weigh page 1
Americamysis bahia Bench sheet
SOP TA06_21

mean wt =Mysid wt divided by 5
convert g to mg: move decimal 3 places to right

Concentration	Replicate	Pan #	Pan wt. g	Pan + mysid g	Mysid wt. g	Original # mysids	Mean wt. mg
Control	A					5	
	B					5	
	C					5	
	D					5	
	E					5	
	F					5	
	G					5	
	H					5	
100 % sample	A	107	0.0254	0.0272	0.0018	5	0.36
	B	108	0.0252	0.0266	0.0014	5	0.28
	C	109	0.0240	0.0258	0.0018	5	0.36
	D	110	0.0252	0.0277	0.0025	5	0.50
	E	111	0.0257	0.0281	0.0024	5	0.48
	F	112	0.0247	0.0270	0.0023	5	0.46
	G	181	0.0262	0.0288	0.0026	5	0.52
	H	182	0.0238	0.0265	0.0021	5	0.42
	Weighed by initials:		DN	DN			

Growth	%CV	PMSD
Control	10.8	*14.49%
100%	11.7	—

Growth	Table	Calculated	dF
T-test	1.76000	0.60351	14

Drying	
Temperature °C:	105
Hours:	6

Tare Weighing Date: 02/01/05 Final Weighing Date: 2/3/05

			Measured Value		S-weight Value
Tare Pan 1 after Pan 5 20	0.0248 @ 0.0247 g				
Tare Pan 1 after Pan 10 24	0.0247 @ 0.0247 g				
Tare Pan 1 after Pan 15	— @ —				
Final Pan 1 after Pan 5 20	0.0269 @ 0.0268 g	S-weights	0.0200 g	@	0.02 g
Final Pan 1 after Pan 10 24	0.0269 @ 0.0268 g				
Final Pan 1 after Pan 15	— @ —	at tare	0.0500 g	@	0.05 g
		S-weights	0.0200 g	@	0.02 g
		at final	0.0600 g	@	0.06 g

Note: Pan 5, 10 and 15 for Tare and Final refers to sequence of weighing as actual Pan #s may differ.

Comments: (B) 100% M = 0.0244 g, DN 02/01/05.
mean control wt = 0.402 mg/organism
mean 100% wt = 0.4225 mg/organism

revised 7/26/04 MF

Page 000013 B

Appendix 1. Bench Sheets (continued)

Chronic Screening Bioassay Benchsheet

Sample Identification, Test Conditions and Physical Chemistry

State of Florida
Department of Environmental Protection
Biology Laboratory Chronic Screening Bioassay
P. promelas and *M. beryllina* Bench Sheet

Sample Source: Charlotte Harbor Water Association (city water) Harbour Heights
Address: 2515 Highlands Rd., Punta Gorda, FL
County: Charlotte
NPDES Permit #FL 0035378
Contact/District Mike O'Reilly
Start Date 1-25-05 Time 1245 End Date: 2-1-05 Time 1500
LIMS entry: 2-11-05 MF verified: 2-11-05 TD
Incubator #2/3 Temperature Range: 23-25-26.2/3-24.3-25.5
Room B246 Temperature Range: 23.9-24.1
Feeding: 2 X Daily Artemia Lot:#: 4125425G

P. promelas SOP#: TA07_09 *M. beryllina* SOP#: TA07_14
Light Intensity : 50 - 100 ft. candles - (yes) no
Photoperiod : 16 light 8 dark - (yes) no
Chamber size (1L) Organism Batch #: 2-05
Sample volume (500 ml) Organism age : 10 hours / days
Organism: *P. promelas* (*M.beryllina*) (circle one)

Water Quality Parameters

	Field Chlorine mg/L			Lab Chlorine mg/L			Alkalinity mg/L as $CaCO_3$			Hardness NOT measured mg/L as $CaCO_3$ Salinity > 1 ppth		
Lab Sample #:	1	2	3	1	2	3	1	2 mf	3	1	2	3
Sample:	NM (A)	NM (A)	NM (A)	<0.03	<0.03	<0.03	109	90 87	90	--	--	--
Diluent/Control:				<0.03	<0.03	<0.03	233	—	—	—	—	—
Method:	—	—	—	Hach	Hach	Hach	Hach	Hach	Hach	Hach	Hach	Hach
Measured by:	—	—	—	RW	DN	RW	SP	MF	SP	—	—	—
Verified by:	MF	MF	MF	SP	SP	SP	DN	SP	MF	-	-	—

	Conductivity (circle one) (C) µmhos-cm		mmhos-cm	Ammonia mg/L			Salinity (C) ‰		
Lab Sample#:	1	2	3	1	2	3	1	2	3
Sample:	7.78	3.05	3.32	<0.051	<0.017	<0.017	4.2	1.6	1.7
Diluent/Control:	328	31.3	31.2	<0.051	<0.051	<0.051	21.2	21.1	20.2
Method:	Mettler	Mettler	Mettler	Denver	Denver	Denver	Mettler	Mettler	Mettler
Measured by:	CAP	DN	SP	DN	DN	MF	TD	DN	RW
Verified by:	MF	MF	MF	SP	SP	SP	MF	MF	MF

conv. = conversion based on conductivity and temperature

Statistics (B)

Control %cv:	2.4%
Dunnetts PMSD:	7.7%
Survival NOEC:	100 %
Survival LOEC:	—
Growth NOEC:	100 %
Growth LOEC:	—

Sample Received	LAB ID #	LIMS SAMPLE #	LIMS JOB #
Test Day 0	Sample: 1	810497	TLH - 2005-01-25-02
Test Day 2	Sample: 2	810795	TLH - 2005-01-27-14
Test Day 4	Sample: 3	811945	TLH - 2005-01-31-01

Lab Sample #	Collection Date/Time	Received Date/Time
1	1-21-05 0300	1-25-05 1150
2	1-26-05 0300	1-27-05 1100
3	1-28-05 0300	1-29-05 1040

Diluent / Control Batch #:	Days Used
ASW 1-05	7
—	—

Investigators' signatures
Diana Nicholson
Edwarda Espinosa
Sigal Kuperman
Robert Wharton
James Daniel
Mark Fairbroth

reviewer Nicole Mellendorf

Comments:
(A) Field chlorine not measured for any sample SP
(B) Control CV% & PMSD for weight, MF 2/10/05
(C) Conductivity and Salinity measurements for original sample. Sample salinity adjusted to ~ 20 ppth for test.

A grab sample LIMS 810510 was used for renewal on Day 1. Insufficient bottles for collection of Sample 1: Sample 810510 – chlorine not measured in field <0.03 lab
alk 90 mg/L Hardness – not measured
Salinity ~ 1.9 Ammonia <0.017

revised 6/14/04 JF

Test Page 1 000032

Appendix 1. Bench Sheets (continued)

[redacted]

Chronic Screening Test Survival Benchsheet

Facility: Charlotte Harbor Water Association

State of Florida
Department of Environmental Protection
Biology Laboratory Chronic Screening Bioassay
***P. promelas* SOP TA07_09 *M. beryllina* SOP TA07_14**

LIMS Sample Number: 81097
(for Lab Sample # 1)

Organism: *P. promelas* (*M.beryllina*) (circle one)

		TEST DAY							
Concentration	Replicate	0	1	2	3	4	5	6	7
Control ASW	A	10	10	10	10	10	10	10	10
	B	10	10	10	10	10	10	10	10
	C	10	10	10	10	10	10	10	10
	D	10	10	10	10	10	10	10	10
100 % sample concentration	A	10	10	10	10	10	10	10	10
	B	10	10	10	10	10	10	10	10
	C	10	10	10	10	10	10	10	10
	D	10	10	10	10	10	10	10	10
Control Silt ctrl	A	10	10	10	10	10	10	10	10
	B	10	10	10	10	10	10	10	10
	C	10	10	10	10	10	10	10	10
	D	10	9 10	9	9	9	9	9	9
% sample concentration	A	10							
	B	10							
	C	10							
	D	10							
Loaded by: JD	Checked by: [redacted]		JD	JD	~~SP~~ JD	SP	MF	MF	MF
Verified by: JD									

Survival	%CV	PMSD
Control	—	—

Survival	Table	Calculated	dF
T-test	—	—	—

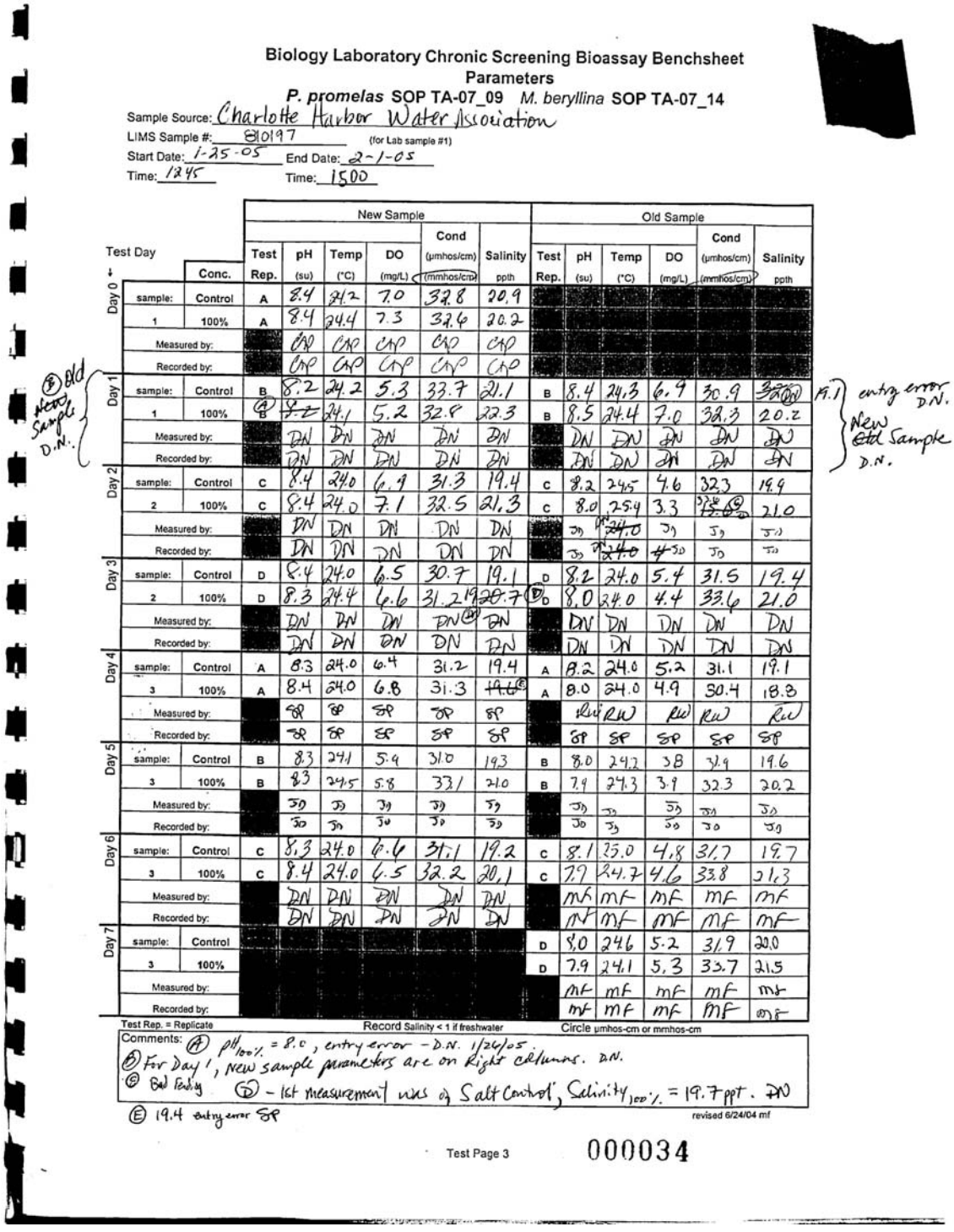
Comments: 100% control Survival - 100% Sample survival. Dunnetts - T-test did not calculate MF 2/8/15.

revised 6/24/04 MF

Test Page 2

000033

Appendix 1. Bench Sheets (continued)



Biology Laboratory Chronic Screening Bioassay Benchsheet
Parameters
***P. promelas* SOP TA-07_09** *M. beryllina* **SOP TA-07_14**

Sample Source: Charlotte Harbor Water Association
LIMS Sample #: 810197 (for Lab sample #1)
Start Date: 1-25-05 End Date: 2-1-05
Time: 1245 Time: 1500

Test Day			New Sample						Old Sample					
			Test	pH	Temp	DO	Cond (µmhos/cm) (mmhos/cm)	Salinity	Test	pH	Temp	DO	Cond (µmhos/cm) (mmhos/cm)	Salinity
	Conc.		Rep.	(su)	(°C)	(mg/L)		ppth	Rep.	(su)	(°C)	(mg/L)		ppth
Day 0	sample:	Control	A	8.4	24.2	7.0	32.8	20.9						
	1	100%	A	8.4	24.4	7.3	32.6	20.2						
	Measured by:			CAP	CAP	CAP	CAP	CAP						
	Recorded by:			CAP	CAP	CAP	CAP	CAP						
Day 1	sample:	Control	B	8.2	24.2	5.3	33.7	21.1	B	8.4	24.3	6.9	30.9	~~30.0~~ (E)
	1	100%	(A) B	~~8.2~~	24.1	5.2	32.8	22.3	B	8.5	24.4	7.0	32.3	20.2
	Measured by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
	Recorded by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
Day 2	sample:	Control	C	8.4	24.0	6.9	31.3	19.4	C	8.2	24.5	4.6	32.3	19.9
	2	100%	C	8.4	24.0	7.1	32.5	21.3	C	8.0	25.4	3.3	~~32.8~~ (D)	21.0
	Measured by:			DN	DN	DN	DN	DN		JD	~~24.0~~	JD	JD	JD
	Recorded by:			DN	DN	DN	DN	DN		JD	~~24.0~~	~~4~~ JD	JD	JD
Day 3	sample:	Control	D	8.4	24.0	6.5	30.7	19.1	D	8.2	24.0	5.4	31.5	19.4
	2	100%	D	8.3	24.4	6.6	31.2	~~20.7~~ 19 (D)	D	8.0	24.0	4.4	33.6	21.0
	Measured by:			DN	DN	DN	DN (D)	DN		DN	DN	DN	DN	DN
	Recorded by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
Day 4	sample:	Control	A	8.3	24.0	6.4	31.2	19.4	A	8.2	24.0	5.2	31.1	19.1
	3	100%	A	8.4	24.0	6.8	31.3	~~19.6~~ (E)	A	8.0	24.0	4.9	30.4	18.8
	Measured by:			SP	SP	SP	SP	SP		RW	RW	RW	RW	RW
	Recorded by:			SP	SP	SP	SP	SP		SP	SP	SP	SP	SP
Day 5	sample:	Control	B	8.3	24.1	5.9	31.0	19.3	B	8.0	24.2	3.8	31.9	19.6
	3	100%	B	8.3	24.5	5.8	33.1	21.0	B	7.9	24.3	3.9	32.3	20.2
	Measured by:			JD	JD	JD	JD	JD		JD	JD	JD	JD	JD
	Recorded by:			JD	JD	JD	JD	JD		JD	JD	JD	JD	JD
Day 6	sample:	Control	C	8.3	24.0	6.4	31.1	19.2	C	8.1	25.0	4.8	31.7	19.7
	3	100%	C	8.4	24.0	6.5	32.2	20.1	C	7.9	24.7	4.6	33.8	21.3
	Measured by:			DN	DN	DN	DN	DN		MF	MF	MF	MF	MF
	Recorded by:			DN	DN	DN	DN	DN		MF	MF	MF	MF	MF
Day 7	sample:	Control							D	8.0	24.6	5.2	31.9	20.0
	3	100%							D	7.9	24.1	5.3	33.7	21.5
	Measured by:									MF	MF	MF	MF	MF
	Recorded by:									MF	MF	MF	MF	MF

Test Rep. = Replicate — Record Salinity < 1 if freshwater — Circle µmhos-cm or mmhos-cm

Comments: (A) pH 100% = 8.0, entry error – D.N. 1/26/05
(B) For Day 1, New sample parameters are on Right columns. DN.
(C) Bad reading (D) – 1st measurement was of Salt Control, Salinity 100% = 19.7 ppt. DN
(E) 19.4 entry error SP

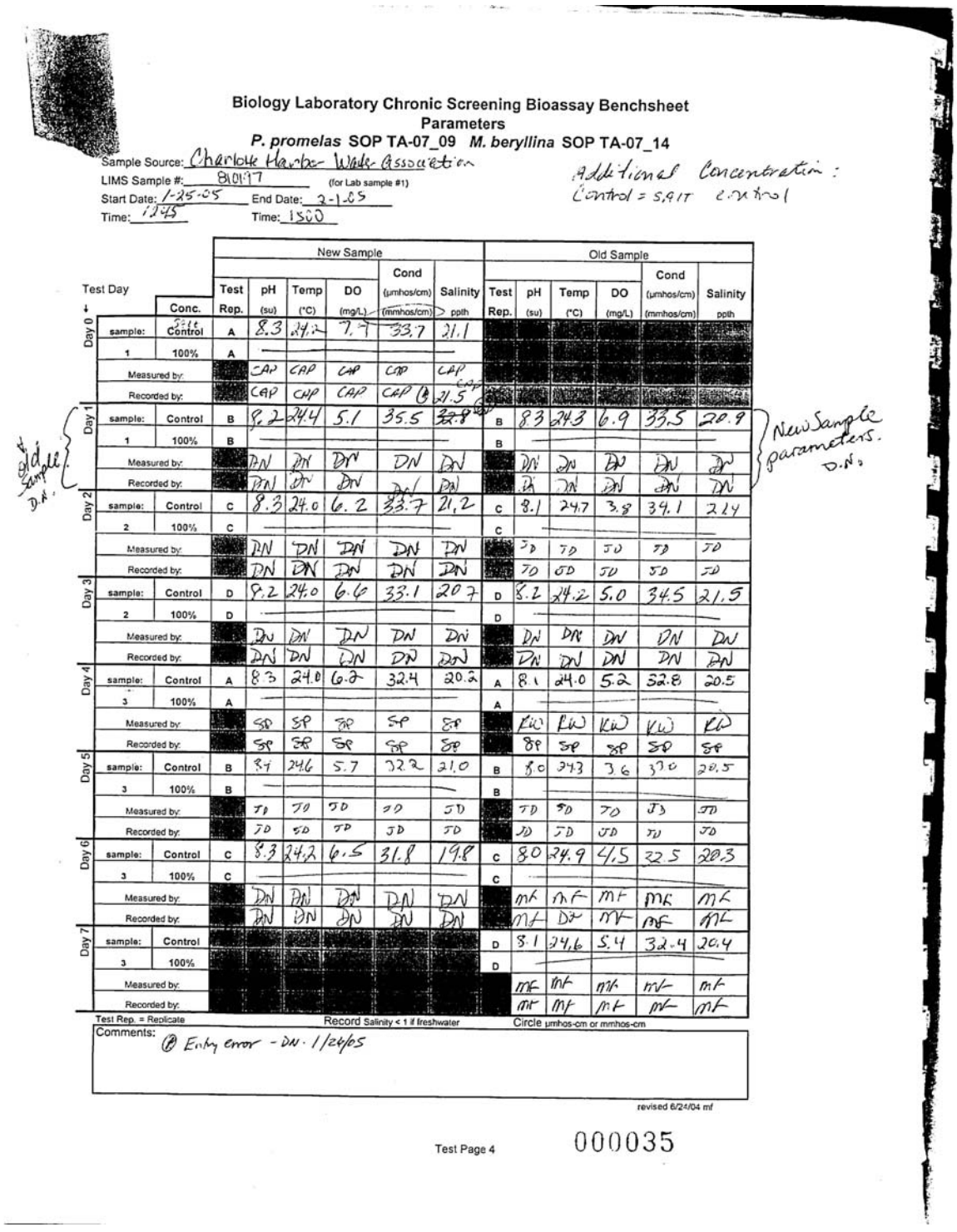
revised 6/24/04 mf

Test Page 3 000034

(B) Old Water Sample D.N.

A1 entry error D.N. New Old Sample D.N.

Appendix 1. Bench Sheets (continued)



Biology Laboratory Chronic Screening Bioassay Benchsheet
Parameters
***P. promelas* SOP TA-07_09 *M. beryllina* SOP TA-07_14**

Sample Source: Charlotte Harbor Water Association
LIMS Sample #: 810197 (for Lab sample #1)
Start Date: 1-25-05 End Date: 2-1-05
Time: 1345 Time: 1500

Additional Concentration:
Control = 5.91T control

Test Day				New Sample						Old Sample					
		Conc.	Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Cond (µmhos/cm) (mmhos/cm)	Salinity ppth		Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Cond (µmhos/cm) (mmhos/cm)	Salinity ppth
Day 0	sample:	Control	A	8.3	24.2	7.7	33.7	21.1							
	1	100%	A	—	—	—	—	—							
	Measured by:			CAP	CAP	CAP	CAP	CAP							
	Recorded by:			CAP	CAP	CAP	CAP	21.5							
Day 1	sample:	Control	B	8.2	24.4	5.1	35.5	~~32.8~~		B	8.3	24.3	6.9	33.5	20.9
	1	100%	B	—	—	—	—	—		B	—	—	—	—	—
	Measured by:			DN	DN	DN	DN	DN			DN	DN	DN	DN	DN
	Recorded by:			DN	DN	DN	DN	DN			DN	DN	DN	DN	DN
Day 2	sample:	Control	C	8.3	24.0	6.2	~~33.7~~	21.2		C	8.1	24.7	3.8	34.1	21.4
	2	100%	C	—	—	—	—	—		C	—	—	—	—	—
	Measured by:			DN	DN	DN	DN	DN			JD	JD	JD	JD	JD
	Recorded by:			DN	DN	DN	DN	DN			JD	JD	JD	JD	JD
Day 3	sample:	Control	D	8.2	24.0	6.6	33.1	20.7		D	8.2	24.2	5.0	34.5	21.5
	2	100%	D	—	—	—	—	—		D	—	—	—	—	—
	Measured by:			DN	DN	DN	DN	DN			DN	DN	DN	DN	DN
	Recorded by:			DN	DN	DN	DN	DN			DN	DN	DN	DN	DN
Day 4	sample:	Control	A	8.3	24.0	6.2	32.4	20.2		A	8.1	24.0	5.2	32.8	20.5
	3	100%	A	—	—	—	—	—		A	—	—	—	—	—
	Measured by:			SP	SP	SP	SP	SP			KW	KW	KW	KW	KW
	Recorded by:			SP	SP	SP	SP	SP			SP	SP	SP	SP	SP
Day 5	sample:	Control	B	8.4	24.6	5.7	32.2	21.0		B	8.0	24.3	3.6	33.0	20.5
	3	100%	B	—	—	—	—	—		B	—	—	—	—	—
	Measured by:			JD	JD	JD	JD	JD			JD	JD	JD	JD	JD
	Recorded by:			JD	JD	JD	JD	JD			JD	JD	JD	JD	JD
Day 6	sample:	Control	C	8.3	24.2	6.5	31.8	19.8		C	8.0	24.9	4.5	32.5	20.3
	3	100%	C	—	—	—	—	—		C	—	—	—	—	—
	Measured by:			DN	DN	DN	DN	DN			MF	MF	MF	MF	MF
	Recorded by:			DN	DN	DN	DN	DN			MF	DN	MF	MF	MF
Day 7	sample:	Control								D	8.1	24.6	5.4	32.4	20.4
	3	100%								D	—	—	—	—	—
	Measured by:										MF	MF	MF	MF	MF
	Recorded by:										MF	MF	MF	MF	MF

Test Rep. = Replicate — Record Salinity < 1 if freshwater — Circle µmhos-cm or mmhos-cm

Comments: @ Entry error - DN. 1/26/05

New Sample parameters. D.N.

Old sample. D.N.

revised 6/24/04 mf

Test Page 4

000035

Appendix 1. Bench Sheets (continued)

Chronic Screening Test Weighing Benchsheet

State of Florida
Department of Environmental Protection
Biology Laboratory Chronic Screening Bioassay
P. promelas and *M. beryllina* Bench Sheet
SOP TA06_21

Facility: Charlotte Harbor Water Association

LIMS Sample Number: 810197
(for Lab Sample # 1)

Concentration	Replicate	Pan #	Pan wt. g	Pan + Fish g	Fish wt. g	Original # Fish	Mean wt. mg
			mean wt = fish wt divided by 10 convert g to mg: move decimal 3 places to right				
Control (NSW)	A	183	0.0254	0.0583	0.0329	10	3.29
	B	184	0.0247	0.0567	0.0320	10	3.20
	C	185	0.0251	0.0574	0.0323	10	3.23
	D	186	0.0245	0.0583	0.0338	10	3.38
DN ~~%~~ sample Salt Control	A	182	0.0249	0.0529	0.0280	10	2.80
	B	183	0.0254	0.0535	0.0281	10	2.81
	C	189	0.0253	0.0605	0.0352	10	3.52
	D	191	0.0252	0.0580	0.0328	10	3.28
~~Control~~ DN 100% Sample	A	192	0.0242	0.0586	0.0344	10	3.44
	B	193	0.0249	0.0551	0.0303	10	3.03
	C	195	0.0262	0.0616	0.0354	10	3.54
	D	194	0.0247	0.0556	0.0309	10	3.09
% sample	A					10	
	B					10	
	C					10	
	D					10	
	Weighed by initials:		DN	DN			

Growth	%CV	PMSD
Control	2.4	7.85

Growth	Table	Calculated	dF
T-test	1.94300	0.00000	6

Drying	
Temperature °C:	105
Hours:	6

Tare Weighing Date: 02/01/05 Final Weighing Date: 02/02/05

			Measured Value		S-weight Value
Tare Pan 1 after Pan 5	~~0.0254~~ 0.0254 @ ~~0.0255~~ 0.0254	S-weights at tare (g)	0.0200	@	0.02
Tare Pan 1 after Pan 8 (g)	0.0255 @ 0.0254		0.0500	@	0.05
Final Pan 1 after Pan 5	0.0583 @ 0.0583	S-weights at final (g)	0.0200	@	0.02
Final Pan 1 after Pan 8 (g)	0.0583 @ 0.0583		0.0600	@	0.06

Comments: (A) Entry error 0.0255 ≠ 0.0254 g, DN 02/01/05.

100% sample weight %CV = 7.7%

revised 6/21/04 MF

Test Page 5

000036

Appendix 2. Chemical Analyses performed on the effluent from the Charlotte Harbor Water Association Reverse Osmosis Water Treatment Plant Outfall, sampled on January 24-28, 2005.

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
1/24/2005 10:58	IW-012405-1	Bio-AGP/LimNut	Algal Growth Potential	0.646	mg DryWt/L	I	0.3	0.9
1/24/2005 10:58	IW-012405-1	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	I	0.85	2.6
1/24/2005 10:58	IW-012405-1	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0	ug/L	J	0.85	2.6
1/24/2005 8:00	IW-012405-2	Bio-Toxicology	Bioassay-Chronic-Scrn-SW-Fish,	100	NOEC			
1/24/2005 8:00	IW-012405-2	Bio-Toxicology	Bioassay-Chronic-Scrn-SW-Mysid	100	NOEC			
1/24/2005 10:58	IW-012405-1	BNA-Water	1,2,4-Trichlorobenzene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	1,2-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	1,3-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	1,4-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	2,4,6-Trichlorophenol	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	2,4-Dichlorophenol	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	2,4-Dimethylphenol	49	ug/L	U	49	190
1/24/2005 10:58	IW-012405-1	BNA-Water	2,4-Dinitrophenol	15	ug/L	UJ	15	58
1/24/2005 10:58	IW-012405-1	BNA-Water	2,4-Dinitrotoluene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	2,6-Dinitrotoluene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	2-Chloronaphthalene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	2-Chlorophenol	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	12
1/24/2005 10:58	IW-012405-1	BNA-Water	2-Nitrophenol	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	3,3'-Dichlorobenzidine	39	ug/L	U	39	160
1/24/2005 10:58	IW-012405-1	BNA-Water	4,4'-DDD	1.5	ug/L	U	1.5	5.8
1/24/2005 10:58	IW-012405-1	BNA-Water	4,4'-DDE	1.5	ug/L	UJ	1.5	5.8
1/24/2005 10:58	IW-012405-1	BNA-Water	4,4'-DDT	1.5	ug/L	UJ	1.5	5.8
1/24/2005 10:58	IW-012405-1	BNA-Water	4-Bromophenyl phenyl ether	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	4-Chloro-3-methylphenol	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.8
1/24/2005 10:58	IW-012405-1	BNA-Water	4-Nitrophenol	15	ug/L	UJ	15	58
1/24/2005 10:58	IW-012405-1	BNA-Water	Acenaphthene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Acenaphthylene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Aldrin	1.5	ug/L	U	1.5	5.8
1/24/2005 10:58	IW-012405-1	BNA-Water	Anthracene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Benzidine	97	ug/L	U	97	390
1/24/2005 10:58	IW-012405-1	BNA-Water	Benzo(a)anthracene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Benzo(a)pyrene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Benzo(b)fluoranthene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Benzo(g,h,i)perylene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Benzo(k)fluoranthene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Bis(2-chloroethoxy)methane	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Bis(2-chloroethyl)ether	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	12
1/24/2005 10:58	IW-012405-1	BNA-Water	Bis(2-ethylhexyl)phthalate	15	ug/L	U	15	58
1/24/2005 10:58	IW-012405-1	BNA-Water	Butyl benzyl phthalate	4.9	ug/L	U	4.9	19
1/24/2005 10:58	IW-012405-1	BNA-Water	Chrysene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Di-n-butyl phthalate	4.9	ug/L	U	4.9	19
1/24/2005 10:58	IW-012405-1	BNA-Water	Di-n-octyl phthalate	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Dibenzo(a,h)anthracene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Dieldrin	1.5	ug/L	U	1.5	5.8
1/24/2005 10:58	IW-012405-1	BNA-Water	Diethyl phthalate	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Dimethyl phthalate	49	ug/L	U	49	190
1/24/2005 10:58	IW-012405-1	BNA-Water	Endosulfan I	3.9	ug/L	UJ	3.9	16
1/24/2005 10:58	IW-012405-1	BNA-Water	Endosulfan II	3.9	ug/L	U	3.9	16
1/24/2005 10:58	IW-012405-1	BNA-Water	Endosulfan sulfate	1.5	ug/L	U	1.5	5.8
1/24/2005 10:58	IW-012405-1	BNA-Water	Endrin	1.5	ug/L	U	1.5	5.8
1/24/2005 10:58	IW-012405-1	BNA-Water	Endrin aldehyde	3.9	ug/L	U	3.9	16
1/24/2005 10:58	IW-012405-1	BNA-Water	Fluoranthene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Fluorene	0.97	ug/L	U	0.97	3.9

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
1/24/2005 10:58	IW-012405-1	BNA-Water	Heptachlor	1.5	ug/L	U	1.5	5.8
1/24/2005 10:58	IW-012405-1	BNA-Water	Heptachlor epoxide	1.5	ug/L	U	1.5	5.8
1/24/2005 10:58	IW-012405-1	BNA-Water	Hexachlorobenzene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	12
1/24/2005 10:58	IW-012405-1	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	UJ	2.9	12
1/24/2005 10:58	IW-012405-1	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	12
1/24/2005 10:58	IW-012405-1	BNA-Water	Indeno(1,2,3-cd)pyrene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Isophorone	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.8
1/24/2005 10:58	IW-012405-1	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.8
1/24/2005 10:58	IW-012405-1	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	12
1/24/2005 10:58	IW-012405-1	BNA-Water	Naphthalene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.8
1/24/2005 10:58	IW-012405-1	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	12
1/24/2005 10:58	IW-012405-1	BNA-Water	Phenanthrene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Phenol	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	Pyrene	0.97	ug/L	U	0.97	3.9
1/24/2005 10:58	IW-012405-1	BNA-Water	alpha-BHC	1.5	ug/L	U	1.5	5.8
1/24/2005 10:58	IW-012405-1	BNA-Water	beta-BHC	1.5	ug/L	UJ	1.5	5.8
1/24/2005 10:58	IW-012405-1	BNA-Water	delta-BHC	1.5	ug/L	U	1.5	5.8
1/24/2005 10:58	IW-012405-1	BNA-Water	gamma-BHC	1.5	ug/L	U	1.5	5.8
1/24/2005 10:15	IW-012405-3	BNA-Water	1,2,4-Trichlorobenzene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	1,2-Dichlorobenzene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	1,3-Dichlorobenzene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	1,4-Dichlorobenzene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	2,4,6-Trichlorophenol	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	2,4-Dichlorophenol	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	2,4-Dimethylphenol	61	ug/L	U	61	240
1/24/2005 10:15	IW-012405-3	BNA-Water	2,4-Dinitrophenol	18	ug/L	UJ	18	73
1/24/2005 10:15	IW-012405-3	BNA-Water	2,4-Dinitrotoluene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	2,6-Dinitrotoluene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	2-Chloronaphthalene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	2-Chlorophenol	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	2-Methyl-4,6-dinitrophenol	3.7	ug/L	U	3.7	15
1/24/2005 10:15	IW-012405-3	BNA-Water	2-Nitrophenol	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	3,3'-Dichlorobenzidine	49	ug/L	U	49	200
1/24/2005 10:15	IW-012405-3	BNA-Water	4,4'-DDD	1.8	ug/L	U	1.8	7.3
1/24/2005 10:15	IW-012405-3	BNA-Water	4,4'-DDE	1.8	ug/L	UJ	1.8	7.3
1/24/2005 10:15	IW-012405-3	BNA-Water	4,4'-DDT	1.8	ug/L	UJ	1.8	7.3
1/24/2005 10:15	IW-012405-3	BNA-Water	4-Bromophenyl phenyl ether	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	4-Chloro-3-methylphenol	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	4-Chlorophenyl phenyl ether	2.4	ug/L	U	2.4	9.8
1/24/2005 10:15	IW-012405-3	BNA-Water	4-Nitrophenol	18	ug/L	UJ	18	73
1/24/2005 10:15	IW-012405-3	BNA-Water	Acenaphthene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Acenaphthylene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Aldrin	1.8	ug/L	U	1.8	7.3
1/24/2005 10:15	IW-012405-3	BNA-Water	Anthracene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Benzidine	120	ug/L	U	120	490
1/24/2005 10:15	IW-012405-3	BNA-Water	Benzo(a)anthracene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Benzo(a)pyrene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Benzo(b)fluoranthene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Benzo(g,h,i)perylene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Benzo(k)fluoranthene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Bis(2-chloroethoxy)methane	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Bis(2-chloroethyl)ether	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Bis(2-chloroisopropyl)ether	3.7	ug/L	U	3.7	15
1/24/2005 10:15	IW-012405-3	BNA-Water	Bis(2-ethylhexyl)phthalate	18	ug/L	U	18	73
1/24/2005 10:15	IW-012405-3	BNA-Water	Butyl benzyl phthalate	6.1	ug/L	U	6.1	24
1/24/2005 10:15	IW-012405-3	BNA-Water	Chrysene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Di-n-butyl phthalate	6.1	ug/L	U	6.1	24
1/24/2005 10:15	IW-012405-3	BNA-Water	Di-n-octyl phthalate	1.2	ug/L	U	1.2	4.9

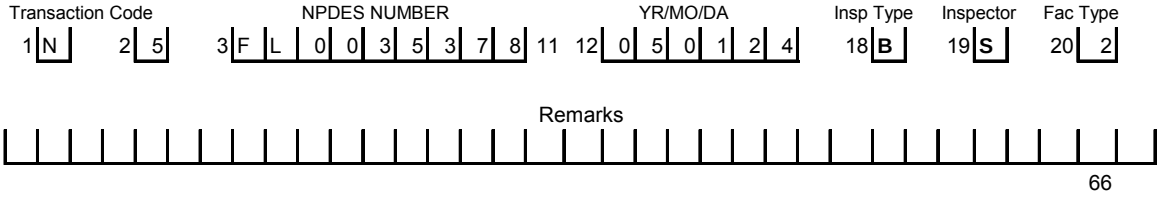
Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
1/24/2005 10:15	IW-012405-3	BNA-Water	Dibenzo(a,h)anthracene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Dieldrin	1.8	ug/L	U	1.8	7.3
1/24/2005 10:15	IW-012405-3	BNA-Water	Diethyl phthalate	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Dimethyl phthalate	61	ug/L	U	61	240
1/24/2005 10:15	IW-012405-3	BNA-Water	Endosulfan I	4.9	ug/L	UJ	4.9	20
1/24/2005 10:15	IW-012405-3	BNA-Water	Endosulfan II	4.9	ug/L	U	4.9	20
1/24/2005 10:15	IW-012405-3	BNA-Water	Endosulfan sulfate	1.8	ug/L	U	1.8	7.3
1/24/2005 10:15	IW-012405-3	BNA-Water	Endrin	1.8	ug/L	U	1.8	7.3
1/24/2005 10:15	IW-012405-3	BNA-Water	Endrin aldehyde	4.9	ug/L	U	4.9	20
1/24/2005 10:15	IW-012405-3	BNA-Water	Fluoranthene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Fluorene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Heptachlor	1.8	ug/L	U	1.8	7.3
1/24/2005 10:15	IW-012405-3	BNA-Water	Heptachlor epoxide	1.8	ug/L	U	1.8	7.3
1/24/2005 10:15	IW-012405-3	BNA-Water	Hexachlorobenzene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Hexachlorobutadiene	3.7	ug/L	U	3.7	15
1/24/2005 10:15	IW-012405-3	BNA-Water	Hexachlorocyclopentadiene	3.7	ug/L	UJ	3.7	15
1/24/2005 10:15	IW-012405-3	BNA-Water	Hexachloroethane	3.7	ug/L	U	3.7	15
1/24/2005 10:15	IW-012405-3	BNA-Water	Indeno(1,2,3-cd)pyrene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Isophorone	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	N-Nitrosodi-n-propylamine	2.4	ug/L	U	2.4	9.8
1/24/2005 10:15	IW-012405-3	BNA-Water	N-Nitrosodimethylamine	2.4	ug/L	U	2.4	9.8
1/24/2005 10:15	IW-012405-3	BNA-Water	N-Nitrosodiphenylamine	3.7	ug/L	U	3.7	15
1/24/2005 10:15	IW-012405-3	BNA-Water	Naphthalene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Nitrobenzene	2.4	ug/L	U	2.4	9.8
1/24/2005 10:15	IW-012405-3	BNA-Water	Pentachlorophenol	3.7	ug/L	U	3.7	15
1/24/2005 10:15	IW-012405-3	BNA-Water	Phenanthrene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Phenol	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	Pyrene	1.2	ug/L	U	1.2	4.9
1/24/2005 10:15	IW-012405-3	BNA-Water	alpha-BHC	1.8	ug/L	U	1.8	7.3
1/24/2005 10:15	IW-012405-3	BNA-Water	beta-BHC	1.8	ug/L	UJ	1.8	7.3
1/24/2005 10:15	IW-012405-3	BNA-Water	delta-BHC	1.8	ug/L	U	1.8	7.3
1/24/2005 10:15	IW-012405-3	BNA-Water	gamma-BHC	1.8	ug/L	U	1.8	7.3
1/24/2005 10:58	IW-012405-1	GC-Water	Alachlor	0.6	ug/L	UJ	0.6	2.4
1/24/2005 10:58	IW-012405-1	GC-Water	Ametryn	0.05	ug/L	U	0.05	0.2
1/24/2005 10:58	IW-012405-1	GC-Water	Atrazine	0.05	ug/L	U	0.05	0.2
1/24/2005 10:58	IW-012405-1	GC-Water	Azinphos Methyl	0.05	ug/L	U	0.05	0.2
1/24/2005 10:58	IW-012405-1	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
1/24/2005 10:58	IW-012405-1	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
1/24/2005 10:58	IW-012405-1	GC-Water	Chlorpyrifos Ethyl	0.05	ug/L	U	0.05	0.2
1/24/2005 10:58	IW-012405-1	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
1/24/2005 10:58	IW-012405-1	GC-Water	Diazinon	0.05	ug/L	U	0.05	0.2
1/24/2005 10:58	IW-012405-1	GC-Water	Ethion	0.05	ug/L	U	0.05	0.2
1/24/2005 10:58	IW-012405-1	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
1/24/2005 10:58	IW-012405-1	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
1/24/2005 10:58	IW-012405-1	GC-Water	Fonofos	0.1	ug/L	U	0.1	0.4
1/24/2005 10:58	IW-012405-1	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
1/24/2005 10:58	IW-012405-1	GC-Water	Malathion	0.15	ug/L	U	0.15	0.6
1/24/2005 10:58	IW-012405-1	GC-Water	Metalaxyl	0.25	ug/L	UJ	0.25	1
1/24/2005 10:58	IW-012405-1	GC-Water	Metolachlor	0.5	ug/L	U	0.5	2
1/24/2005 10:58	IW-012405-1	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
1/24/2005 10:58	IW-012405-1	GC-Water	Mevinphos	0.2	ug/L	U	0.2	0.8
1/24/2005 10:58	IW-012405-1	GC-Water	Naled	0.8	ug/L	UJ	0.8	3.2
1/24/2005 10:58	IW-012405-1	GC-Water	Norflurazon	0.1	ug/L	U	0.1	0.4
1/24/2005 10:58	IW-012405-1	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
1/24/2005 10:58	IW-012405-1	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
1/24/2005 10:58	IW-012405-1	GC-Water	Phorate	0.05	ug/L	U	0.05	0.2
1/24/2005 10:58	IW-012405-1	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
1/24/2005 10:58	IW-012405-1	GC-Water	Simazine	0.05	ug/L	U	0.05	0.2
1/24/2005 10:15	IW-012405-3	GC-Water	Alachlor	0.62	ug/L	UJ	0.62	2.5
1/24/2005 10:15	IW-012405-3	GC-Water	Ametryn	0.052	ug/L	U	0.052	0.21
1/24/2005 10:15	IW-012405-3	GC-Water	Atrazine	0.052	ug/L	U	0.052	0.21

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
1/24/2005 10:15	IW-012405-3	GC-Water	Azinphos Methyl	0.052	ug/L	U	0.052	0.21
1/24/2005 10:15	IW-012405-3	GC-Water	Bromacil	0.21	ug/L	U	0.21	0.84
1/24/2005 10:15	IW-012405-3	GC-Water	Butylate	0.21	ug/L	U	0.21	0.84
1/24/2005 10:15	IW-012405-3	GC-Water	Chlorpyrifos Ethyl	0.052	ug/L	U	0.052	0.21
1/24/2005 10:15	IW-012405-3	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
1/24/2005 10:15	IW-012405-3	GC-Water	Diazinon	0.052	ug/L	U	0.052	0.21
1/24/2005 10:15	IW-012405-3	GC-Water	Ethion	0.052	ug/L	U	0.052	0.21
1/24/2005 10:15	IW-012405-3	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
1/24/2005 10:15	IW-012405-3	GC-Water	Fenamiphos	0.21	ug/L	U	0.21	0.84
1/24/2005 10:15	IW-012405-3	GC-Water	Fonofos	0.1	ug/L	U	0.1	0.4
1/24/2005 10:15	IW-012405-3	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
1/24/2005 10:15	IW-012405-3	GC-Water	Malathion	0.16	ug/L	U	0.16	0.64
1/24/2005 10:15	IW-012405-3	GC-Water	Metalaxyl	0.26	ug/L	UJ	0.26	1
1/24/2005 10:15	IW-012405-3	GC-Water	Metolachlor	0.52	ug/L	U	0.52	2.1
1/24/2005 10:15	IW-012405-3	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
1/24/2005 10:15	IW-012405-3	GC-Water	Mevinphos	0.21	ug/L	U	0.21	0.84
1/24/2005 10:15	IW-012405-3	GC-Water	Naled	0.83	ug/L	UJ	0.83	3.3
1/24/2005 10:15	IW-012405-3	GC-Water	Norflurazon	0.1	ug/L	U	0.1	0.4
1/24/2005 10:15	IW-012405-3	GC-Water	Parathion Ethyl	0.16	ug/L	U	0.16	0.64
1/24/2005 10:15	IW-012405-3	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
1/24/2005 10:15	IW-012405-3	GC-Water	Phorate	0.052	ug/L	U	0.052	0.21
1/24/2005 10:15	IW-012405-3	GC-Water	Prometryn	0.16	ug/L	U	0.16	0.64
1/24/2005 10:15	IW-012405-3	GC-Water	Simazine	0.052	ug/L	U	0.052	0.21
1/24/2005 10:58	IW-012405-1	Metals-Water	Aluminum	5	ug/L	U	5	20
1/24/2005 10:58	IW-012405-1	Metals-Water	Arsenic	26	ug/L	U	26	100
1/24/2005 10:58	IW-012405-1	Metals-Water	Cadmium	0.37	ug/L	U	0.37	1.5
1/24/2005 10:58	IW-012405-1	Metals-Water	Calcium	380	mg/L		0.75	3
1/24/2005 10:58	IW-012405-1	Metals-Water	Chromium	2.8	ug/L	I	2	8
1/24/2005 10:58	IW-012405-1	Metals-Water	Copper	2.5	ug/L	U	2.5	10
1/24/2005 10:58	IW-012405-1	Metals-Water	Iron	16	ug/L	I	10	40
1/24/2005 10:58	IW-012405-1	Metals-Water	Lead	0.64	ug/L	U	0.64	2.6
1/24/2005 10:58	IW-012405-1	Metals-Water	Magnesium	253	mg/L		0.2	0.8
1/24/2005 10:58	IW-012405-1	Metals-Water	Nickel	2	ug/L	U	2	8
1/24/2005 10:58	IW-012405-1	Metals-Water	Selenium	2.5	ug/L	U	2.5	10
1/24/2005 10:58	IW-012405-1	Metals-Water	Silver	0.13	ug/L	U	0.13	0.5
1/24/2005 10:58	IW-012405-1	Metals-Water	Zinc	3	ug/L	U	3	12
1/24/2005 10:15	IW-012405-3	Metals-Water	Aluminum	5	ug/L	U	5	20
1/24/2005 10:15	IW-012405-3	Metals-Water	Arsenic	6	ug/L	U	6	24
1/24/2005 10:15	IW-012405-3	Metals-Water	Cadmium	0.12	ug/L	I	0.075	0.3
1/24/2005 10:15	IW-012405-3	Metals-Water	Calcium	0.075	mg/L	U	0.075	0.3
1/24/2005 10:15	IW-012405-3	Metals-Water	Chromium	2	ug/L	U	2	8
1/24/2005 10:15	IW-012405-3	Metals-Water	Copper	1.1	ug/L	U	1.1	4.4
1/24/2005 10:15	IW-012405-3	Metals-Water	Iron	10	ug/L	U	10	40
1/24/2005 10:15	IW-012405-3	Metals-Water	Lead	0.64	ug/L	U	0.64	2.6
1/24/2005 10:15	IW-012405-3	Metals-Water	Magnesium	0.02	mg/L	U	0.02	0.08
1/24/2005 10:15	IW-012405-3	Metals-Water	Nickel	2	ug/L	U	2	8
1/24/2005 10:15	IW-012405-3	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
1/24/2005 10:15	IW-012405-3	Metals-Water	Silver	0.054	ug/L	U	0.054	0.22
1/24/2005 10:15	IW-012405-3	Metals-Water	Zinc	6	ug/L	I	3	12
1/24/2005 10:58	IW-012405-1	Nutrients-Liquid	Ammonia-N	0.098	mg N/L	A	0.01	0.02
1/24/2005 10:58	IW-012405-1	Nutrients-Liquid	Kjeldahl Nitrogen	1.3	mg N/L		0.12	0.4
1/24/2005 10:58	IW-012405-1	Nutrients-Liquid	NO2NO3-N	0.027	mg N/L		0.004	0.01
1/24/2005 10:58	IW-012405-1	Nutrients-Liquid	Sulfide	0.05	mg S/L	UY	0.05	0.2
1/24/2005 10:58	IW-012405-1	Nutrients-Liquid	Total-P	0.19	mg P/L		0.02	0.06
1/24/2005 8:00	IW-012405-2	Nutrients-Liquid	Fluoride	0.67	mg F/L		0.05	0.1
1/24/2005 8:00	IW-012405-2	Nutrients-Liquid	TSS	8	mg/L	I	4	16
1/24/2005 10:15	IW-012405-3	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
1/24/2005 10:15	IW-012405-3	Nutrients-Liquid	Fluoride	0.05	mg F/L	U	0.05	0.1
1/24/2005 10:15	IW-012405-3	Nutrients-Liquid	Kjeldahl Nitrogen	0.06	mg N/L	U	0.06	0.2
1/24/2005 10:15	IW-012405-3	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01
1/24/2005 10:15	IW-012405-3	Nutrients-Liquid	O-Phosphate-P	0.009	mg P/L	I	0.004	0.01

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
1/24/2005 10:15	IW-012405-3	Nutrients-Liquid	Sulfide	0.05	mg S/L	UY	0.05	0.2
1/24/2005 10:15	IW-012405-3	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06
1/24/2005 10:58	IW-012405-1	Overflow	Alpha, Total	141	pCi/L			
1/24/2005 10:58	IW-012405-1	Overflow	Alpha-Counting Error	8.9	pCi/L			
1/24/2005 10:58	IW-012405-1	Overflow	Radium 226	47.5	pCi/L			
1/24/2005 10:58	IW-012405-1	Overflow	Radium 226-Counting Error	1	pCi/L			
1/24/2005 10:58	IW-012405-1	Overflow	Radium 228	2	pCi/L			
1/24/2005 10:58	IW-012405-1	Overflow	Radium 228-Counting Error	0.8	pCi/L			
1/24/2005 10:15	IW-012405-3	Overflow	Alpha, Total	0.7	pCi/L	U		
1/24/2005 10:15	IW-012405-3	Overflow	Alpha-Counting Error	0.4	pCi/L			
1/24/2005 10:15	IW-012405-3	Overflow	Radium 226	0.1	pCi/L	U		
1/24/2005 10:15	IW-012405-3	Overflow	Radium 226-Counting Error	0.1	pCi/L			
1/24/2005 10:15	IW-012405-3	Overflow	Radium 228	1	pCi/L	U		
1/24/2005 10:15	IW-012405-3	Overflow	Radium 228-Counting Error	0.6	pCi/L			

The Bioassay of Charlotte Harbor Water Association Reverse Osmosis Water Treatment Plant effluent sampled on January 24-28, 2005, NPDES #FL0035378.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)



The Priority Pollutants Analysis for Bioassay of Charlotte Harbor Water Association Reverse Osmosis Water Treatment Plant effluent sampled on January 24-28, 2005 , NPDES #FL0035378.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

