

Bioassays of

Boca Raton Water Reclamation Facility

Boca Raton, Palm Beach County, Florida

NPDES #FL0026344

Sampled 12/16/02

March 2003

Biology Section

Division of Resource Assessment & Management

Comprehensive Quality Assurance Plan #870346G

Bioassays of the City of

Boca Raton Water Reclamation Facility

Boca Raton, Palm Beach County, Florida

NPDES #FL0026344

Biology Section
Bureau of Laboratories
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City of Boca Raton Water Reclamation Facility, 1501 W. Glades Road, Boca Raton, Palm Beach County, Florida, NPDES #FL0026344, tests performed on 17 to 21 December 2002.

Introduction

This activated-sludge domestic wastewater treatment plant has a design flow of 26 MGD and an average daily flow of 17.5 MGD (December, 2001-December, 2002). High-level disinfection exists for reuse irrigation. The sludge process includes anaerobic digestion and dewatering with disposal to agricultural sites. Wastewater treatment consists of flow equalization, influent screening, grit removal, primary sedimentation, aeration, secondary clarification, chemical feed, filtration, coagulation, chlorination, anaerobic digesters, rotary drum thickeners, gravity belt thickener, sludge belt filter dewatering presses, effluent pump station, and long ocean outfall force main for dechlorination. After treatment the effluent is discharged into the Class III marine waters of the Atlantic Ocean where a mixing zone exists for chlorine residuals and toxicity (facility information provided by Hubert Philoctete, FDEP, West Palm Beach).

Methods

Four separate grab samples were collected at evenly spaced (6-hour) intervals over a 24-hour period, as required by permit conditions. Samples were collected by Terry Davis 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 toxicity tests discussed in this report were performed following internal DEP SOP's TA07-03 and TA07-04. All internal DEP SOP's are available on the web at: http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp.

Toxicity Test Results

Sample #1
Americamysis bahia 96-hr acute screen – 30% effluent – Not Toxic
Americamysis bahia 96-hr acute screen – 100% effluent – Toxic – 40% Mortality
Menidia beryllina 96-hr acute screen – 30% effluent– Not Toxic
Menidia beryllina 96-hr acute screen – 100% effluent– Not Toxic

Sample #2
Americamysis bahia 96-hr acute screen – 30% effluent – Not Toxic
Americamysis bahia 96-hr acute screen – 100% effluent – Toxic – 35% Mortality
Menidia beryllina 96-hr acute screen – 30% effluent– Not Toxic
Menidia beryllina 96-hr acute screen – 100% effluent– Not Toxic

Sample #3
Americamysis bahia 96-hr acute screen – 30% effluent – Not Toxic
Americamysis bahia 96-hr acute screen – 100% effluent – Toxic – 65% Mortality
Menidia beryllina 96-hr acute screen – 30% effluent– Not Toxic
Menidia beryllina 96-hr acute screen – 100% effluent– Not Toxic

Sample #4
Americamysis bahia 96-hr acute screen – 30% effluent – Not Toxic
Americamysis bahia 96-hr acute screen – 100% effluent –Toxic – 55% Mortality
Menidia beryllina 96-hr acute screen – 30% effluent– Not Toxic
Menidia beryllina 96-hr acute screen – 100% effluent– Not Toxic

See Tables 1-4 for bioassay bench sheets.

Chemistry Results

Total residual chlorine was not detected in sample #1; however, total residual chlorine was detected in the bioassay samples 2 through 4 in the laboratory at concentrations of 0.07, 0.04, and 0.07 mg/L, respectively.

Total ammonia was detected in bioassay samples 1 through 4 in the laboratory at concentrations of 0.0513, 7.540, 12.80, and 10.10 mg/L, respectively. The corresponding unionized ammonia concentrations were 0.040, 0.680, 0.963, and 0.923 mg/L, respectively.

See Table 5 for chemicals detected in the analytical chemistry samples for sample #4.
See Table 6 for the results of all the chemical analyses performed for sample #4.

Conclusion

The 30% effluent bioassay test concentrations prepared from samples collected from this facility on December 15 and 16, 2002, did not show acute toxicity to either test species during the 96-hour bioassay tests. Toxicity was observed in the *A. bahia* 100% effluent bioassays; however, the NPDES permit states that the whole effluent (100% effluent) sample is for monitoring purposes only and shall not be used for compliance.

Table 1. Data recorded during the 96-hour acute screening bioassays of a sample of effluent from the City of Boca Raton Water Reclamation Facility (Sample #1), 1501 W. Glades RD, Boca Raton, Palm Beach County, Florida, NPDES# FL0026344, performed from 17 to 21 December 2002.

Facility:	**City of Boca Raton WRF (Sample #1)**	**NPDES#:**	**FL0026344**	Facility Type:	**Water Reclamation**	**Analysts:**	Jacquelyn Brynda
Location:	1501 W. Glades RD, Boca Raton	Contact/District:	Davis/SE		**Facility**		Joshua Ayres
County:	Palm Beach	Test type:	acute screen renewal				James Daniels
Sample Collection Date:	12/15/2002 Time: 0945	# tests:	8	Receiving Water:	Atlantic Ocean		Marshall Faircloth
Test Beginning Date:	12/17/2002 Time: 1700	Chlorination Type:	dechlorinated		Class III marine		Christa Pierini
Test Ending Date:	12/21/2002 Time: 1710				**Page 1 of 2**	**Reviewer:**	David Whiting

Organism: ***Americamysis bahia*** Life stage: 5 days

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	48 hour
Control A	0/500	5	5	5	8.3	8.2	8.2	24.5	26.1	23.8	6.8	5.0	4.9	35.5	36.1
Control B	0/500	5	5	5	8.3	8.2	8.2	24.6	24.9	24.2	6.8	5.6	4.9	35.2	36.4
Control C	0/500	5	5	5	8.3	8.2	8.1	24.5	25.1	24.9	6.8	5.5	4.8	35.6	35.8
Control D	0/500	5	5	5	8.3	8.2	8.1	24.5	24.1	24.9	6.9	5.6	4.4	35.5	38.7
Salt Cntl A	0/500	5	5	5	8.3	8.3	8.3	24.3	24.4	25.2	6.9	5.9	4.6	30.5	33.8
Salt Cntl B	0/500	5	5	5	8.3	8.3	8.3	24.2	24.9	25.0	7.0	5.8	4.4	30.3	31.6
Salt Cntl C	0/500	5	5	4	8.3	8.3	8.3	24.1	24.8	24.9	7.1	5.6	4.4	30.4	31.9
Salt Cntl D	0/500	5	5	5	8.3	8.3	8.3	24.1	25.4	24.8	7.1	5.5	4.2	30.4	32.0
100% A	500/0	5	5	5	8.2	8.2	8.2	24.5	25.7	25.0	6.1	5.4	4.5	30.9	33.3
100% B	500/0	5	5	4	8.1	8.2	8.2	24.7	25.1	24.2	6.0	5.5	4.4	31.1	32.2
100% C	500/0	5	4	3	8.1	8.2	8.2	24.6	25.4	24.3	5.8	5.7	4.4	31.0	31.1
100% D	500/0	5	5	5	8.1	8.2	8.2	24.3	25.1	24.3	5.7	5.6	4.3	30.7	31.6
30% A	125/375	5	5	5	8.2	8.2	8.2	24.3	24.9	23.8	5.8	5.6	4.2	30.8	31.1
30% B	125/375	5	4	4	8.2	8.3	8.2	24.4	24.4	24.0	6.1	5.6	4.0	31.0	31.8
30% C	125/375	5	5	5	8.2	8.3	8.2	24.3	24.7	24.1	6.6	5.1	4.0	31.0	31.3
30% D	125/375	5	5	4	8.2	8.3	8.2	24.1	25.1	23.7	6.7	5.2	3.8	30.9	31.8

Organism: ***Americamysis bahia***

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	48 hr	72 hr	96 hr	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	96 hour
Control A	0/500	5	5	5	8.3	8.2	8.1	23.5	25.2	25.1	6.2	6.0	5.9	34.5	38.3
Control B	0/500	5	5	5	8.3	8.2	8.1	23.6	24.0	24.2	6.1	5.8	5.8	35.4	38.7
Control C	0/500	5	5	5	8.3	8.2	8.1	23.5	23.8	24.4	6.3	5.9	5.8	35.7	37.7
Control D	0/500	5	4	4	8.3	8.2	8.1	23.6	24.4	24.3	6.2	5.7	5.7	35.9	38.3
Salt Cntl A	0/500	5	4	4	8.3	8.3	8.3	23.6	24.1	24.3	5.8	5.6	5.6	31.9	33.6
Salt Cntl B	0/500	5	5	5	8.3	8.3	8.2	23.5	23.9	24.5	5.8	5.6	5.5	31.1	33.2
Salt Cntl C	0/500	4	4	4	8.3	8.3	8.2	23.5	23.7	24.2	5.9	5.5	5.3	31.0	33.9
Salt Cntl D	0/500	5	5	5	8.3	8.3	8.3	23.6	24.5	24.6	5.9	5.7	5.1	31.3	32.2
100% A	500/0	5	5	4	8.2	8.2	8.2	24.1	24.0	24.4	5.7	5.0	5.2	30.9	32.5
100% B	500/0	4	4	4	8.2	8.2	8.2	24.2	24.0	24.2	5.6	5.0	5.2	30.6	33.2
100% C	500/0	3	2	2	8.2	8.2	8.2	24.3	24.3	24.5	5.3	4.8	5.2	30.9	32.3
100% D	500/0	5	5	2	8.2	8.2	8.2	24.3	24.2	24.1	5.3	4.7	5.2	30.4	33.2
30% A	125/375	5	5	5	8.3	8.2	8.2	23.6	24.0	25.3	5.5	5.0	5.1	32.9	35.8
30% B	125/375	4	4	4	8.3	8.2	8.2	23.6	24.6	24.9	5.6	5.0	5.1	33.2	35.6
30% C	125/375	5	5	5	8.3	8.2	8.2	23.7	24.5	24.5	5.8	4.9	5.1	33.2	35.1
30% D	125/375	4	4	4	8.3	8.2	8.2	23.7	24.0	24.0	5.8	4.9	5.5	33.4	35.6

Continued

LIMS	
Job number:	TLH-2002-12-17-19
sample number:	643873

Data Transcription Verification	
date:	2/3/2003
by:	Cathy Oaks
	Brad Richardson

Total Residual CL2	mg/L	Method
Field:	-	-
Lab:	<0.03	Hach

Ammonia	Total (mg/L)	Unionized (mg/L)
Control water:	<0.017	<0.017
100% Sample:	0.513	0.040

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water:	249	-
100% Sample:	110	122
[C] adjusted sample:	326	-

Salinity [B]	ppt
Control water:	20
100% sample:	<1
[C] adjusted sample:	20

[B] Salinity based on conductivity and temperature.

[C] Sample was salt adjusted using 40 fathoms artifical sea salts.

[A] Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
Room Temperature range for the test period was 22.0-25.5°C.
Incubator #3 temperature range for the test period was 24.5-26.5°C.

Table 1. Concluded

Data recorded during the 96-hour acute screening bioassays of a sample of effluent from City of Boca Raton Water Reclamation Facility (Sample #1), 1501 W. Glades RD, Boca Raton, Palm Beach County, Florida, NPDES# FL0026344, performed from 17 to 21 December 2002.

Facility:	**City of Boca Raton WRF (Sample #1)**	**NPDES#:**	**FL0026344**	Facility Type:	**Water Reclamation**	**Analysts:**	Jacquelyn Brynda
Location:	1501 W. Glades RD, Boca Raton	Contact/District:	Davis/SE		**Facility**		Joshua Ayres
County:	Palm Beach	Test type:	acute screen renewal				James Daniels
Sample Collection Date:	12/15/2002 Time: 0945	# tests:	8	Receiving Water:	Atlantic Ocean		Marshall Faircloth
Test Beginning Date:	12/17/2002 Time: 1700	Chlorination Type:	dechlorinated		Class III marine		Christa Pierini
Test Ending Date:	12/21/2002 Time: 1710				**Page 2 of 2**	**Reviewer:**	David Whiting

Organism: ***Menidia Beryllina*** Life stage: 13 days

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	48 hour
Control A	0/500	5	5	5	8.3	8.2	8.2	24.3	25.4	24.4	7.2	4.8	4.4	34.6	36.5
Control B	0/500	5	5	5	8.3	8.2	8.2	24.4	24.6	24.3	7.1	5.3	4.3	35.7	36.8
Control C	0/500	5	5	5	8.3	8.2	8.2	24.4	25.8	24.2	7.1	5.1	4.2	35.7	36.8
Control D	0/500	5	5	5	8.3	8.2	8.2	24.2	26.2	24.5	7.0	5.1	4.3	35.6	37.5
Salt Cntl A	0/500	5	5	5	8.3	8.3	8.3	24.1	24.7	24.2	7.0	5.5	4.4	30.7	31.8
Salt Cntl B	0/500	5	5	5	8.3	8.3	8.3	24.0	24.2	24.8	7.0	5.6	4.5	30.4	32.1
Salt Cntl C	0/500	5	5	5	8.3	8.3	8.3	24.0	24.3	24.6	7.3	5.8	4.5	30.1	31.4
Salt Cntl D	0/500	5	5	5	8.3	8.3	8.3	23.8	25.0	24.4	7.3	5.7	4.5	30.2	31.2
100% A	500/0	5	5	5	8.1	8.2	8.2	24.4	24.2	25.1	7.0	5.9	4.6	30.9	33.4
100% B	500/0	5	5	5	8.1	8.2	8.2	24.6	25.3	24.8	6.8	6.0	4.5	31.0	32.1
100% C	500/0	5	5	5	8.1	8.2	8.2	24.6	24.1	24.6	6.1	5.7	4.5	31.1	32.5
100% D	500/0	5	5	5	8.1	8.2	8.2	24.4	23.8	25.1	6.2	5.7	4.2	30.9	32.5
30% A	125/375	5	5	5	8.2	8.3	8.2	24.4	24.7	24.3	6.0	5.9	4.1	31.1	32.0
30% B	125/375	5	5	5	8.2	8.3	8.2	24.4	25.1	24.8	6.2	5.7	4.2	31.0	31.9
30% C	125/375	5	5	5	8.2	8.3	8.2	24.4	24.6	25.1	6.5	5.5	4.1	31.0	32.6
30% D	125/375	5	5	5	8.2	8.3	8.2	24.2	24.7	24.8	6.6	5.5	4.3	30.7	32.7

Organism: ***Menidia Beryllina***

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	48 hr	72 hr	96 hr	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	96 hour
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Control C	0/500	5	5	5	8.3	8.3	8.3	23.6	24.2	24.2	5.9	6.2	6.5	35.4	38.0
Control D	0/500	5	5	5	8.4	8.3	8.3	23.6	23.9	23.8	6.0	6.3	6.5	35.6	36.7
Salt Cntl A	0/500	5	5	5	8.2	8.3	8.3	23.5	23.9	23.8	6.1	5.9	6.4	31.5	32.6
Salt Cntl B	0/500	5	5	5	8.2	8.3	8.3	23.5	23.8	23.9	6.0	5.9	6.4	31.3	32.8
Salt Cntl C	0/500	5	5	5	8.2	8.3	8.4	23.6	24.2	23.8	5.9	6.0	6.4	31.1	33.5
Salt Cntl D	0/500	5	5	5	8.2	8.3	8.3	23.6	24.0	23.6	5.9	6.1	6.4	31.1	32.2
100% A	500/0	5	5	5	8.2	8.2	8.3	24.4	23.9	23.9	5.7	6.2	6.3	31.0	32.1
100% B	500/0	5	5	5	8.2	8.2	8.3	24.5	24.0	24.0	5.5	5.9	6.2	30.8	31.6
100% C	500/0	5	5	5	8.2	8.2	8.3	24.6	24.6	23.9	5.3	5.9	6.3	30.8	32.5
100% D	500/0	5	5	5	8.2	8.2	8.3	24.5	23.5	24.2	5.2	5.8	6.2	30.7	32.6
30% A	125/375	5	5	5	8.3	8.3	8.3	24.0	24.4	23.9	5.3	5.9	6.3	33.4	35.6
30% B	125/375	5	5	5	8.3	8.3	8.3	23.9	24.4	23.8	5.5	6.0	6.3	33.4	35.4
30% C	125/375	5	5	5	8.3	8.3	8.3	23.9	23.8	23.7	5.8	6.0	6.4	33.5	34.8
30% D	125/375	5	5	5	8.3	8.3	8.3	23.9	23.7	23.7	5.9	6.2	6.4	33.5	35.1

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sample number:	643873

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Field:	-	-
Lab:	<0.03	Hach

Ammonia	Total (mg/L)	Unionized (mg/L)
Control water:	<0.017	<0.017
100% Sample:	0.513	0.040

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water:	249	-
100% Sample:	110	122
[C] adjusted sample:	326	-

Salinity [B]	ppt
Control water:	20
100% sample:	<1
[C]adjusted sample:	20

[B] Salinity based on conductivity and temperature.

[C] Sample was salt adjusted using 40 fathoms artifical sea salts.

[A] Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
Room Temperature range for the test period was 22.0-25.5°C.
Incubator #3 temperature range for the test period was 24.5-26.5°C.

Table 2. Data recorded during the 96-hour acute screening bioassays of a sample of effluent from the City of Boca Raton Water Reclamation Facility (Sample #2), 1501 W. Glades RD, Boca Raton, Palm Beach County, Florida, NPDES# FL0026344, performed from 17 to 21 December 2002.

Facility:	**City of Boca Raton WRF (Sample #2)**	**NPDES#:**	**FL0026344**	Facility Type:	**Water Reclamation**	**Analysts:**	Jacquelyn Brynda
Location:	1501 W. Glades RD, Boca Raton	Contact/District:	Davis/SE		**Facility**		Joshua Ayres
County:	Palm Beach	Test type:	acute screen renewal				James Daniels
Sample Collection Date:	12/15/2002 Time: 1545	# tests:	8	Receiving Water:	Atlantic Ocean		Marshall Faircloth
Test Beginning Date:	12/17/2002 Time: 1715	Chlorination Type:	dechlorinated		Class III marine		Christa Pierini
Test Ending Date:	12/21/2002 Time: 1700				**Page 1 of 2**	**Reviewer:**	David Whiting

Organism: ***Americamysis bahia*** Life stage: 5 days

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	48 hour
Control A	0/500	5	5	5	8.3	8.3	8.1	23.8	24.7	24.4	6.7	5.5	5.4	34.8	35.7
Control B	0/500	5	5	5	8.3	8.3	8.1	23.6	24.6	24.3	7.0	5.5	4.9	34.9	35.9
Control C	0/500	5	5	5	8.3	8.3	8.1	23.5	24.4	24.2	7.0	5.6	4.8	34.4	36.0
Control D	0/500	5	5	5	8.3	8.3	8.1	23.2	24.5	24.3	7.0	5.5	4.4	34.3	36.6
Salt Cntl A	0/500	5	5	5	8.3	8.3	8.3	23.7	24.3	24.5	7.0	5.8	4.5	30.1	32.6
Salt Cntl B	0/500	5	5	5	8.3	8.3	8.3	23.4	24.7	24.4	7.1	5.8	4.6	29.5	31.4
Salt Cntl C	0/500	5	5	5	8.3	8.3	8.3	23.3	24.7	24.4	7.4	5.5	4.4	29.4	31.0
Salt Cntl D	0/500	5	5	5	8.3	8.3	8.3	23.1	24.1	24.3	7.3	5.8	4.1	29.1	30.6
100% A	500/0	5	5	5	8.2	8.2	8.2	23.4	24.1	24.5	7.2	5.8	3.7	30.4	32.0
100% B	500/0	5	5	5	8.2	8.2	8.2	23.3	24.4	24.4	7.0	5.8	3.2	30.2	32.0
100% C	500/0	5	5	4	8.2	8.2	8.2	23.4	24.4	24.4	7.0	5.7	3.1	30.4	32.0
100% D	500/0	5	5	4	8.2	8.2	8.2	23.0	24.6	24.4	6.8	5.7	3.3	30.2	32.4
30% A	125/375	5	5	5	8.2	8.3	8.3	23.6	23.8	23.9	6.9	5.8	3.4	30.4	31.5
30% B	125/375	5	5	5	8.2	8.3	8.3	23.7	24.3	23.9	6.9	5.8	3.5	30.1	31.0
30% C	125/375	5	5	4	8.2	8.3	8.3	23.2	24.4	23.9	7.2	5.8	3.5	29.8	31.1
30% D	125/375	5	5	5	8.3	8.3	8.3	23.0	24.5	24.0	7.2	5.8	3.5	29.6	30.7

Organism: ***Americamysis bahia***

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	48 hr	72 hr	96 hr	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	96 hour
Control A	0/500	5	5	5	8.3	8.2	8.1	23.3	24.5	24.0	6.7	5.8	4.9	34.7	36.9
Control B	0/500	5	5	5	8.3	8.2	8.1	23.4	23.6	24.1	6.6	5.9	5.0	35.5	37.5
Control C	0/500	5	5	5	8.3	8.2	8.1	23.4	23.7	24.6	6.4	6.0	5.2	35.2	37.3
Control D	0/500	5	5	5	8.3	8.2	8.1	23.3	23.7	24.2	6.4	6.0	5.3	35.2	37.3
Salt Cntl A	0/500	5	5	5	8.3	8.3	8.3	23.4	23.8	23.6	6.4	6.0	5.8	31.3	33.3
Salt Cntl B	0/500	5	4	4	8.3	8.3	8.3	23.4	24.3	24.0	6.3	6.0	6.0	31.2	33.2
Salt Cntl C	0/500	5	5	5	8.3	8.3	8.3	23.6	23.6	23.9	6.1	6.0	6.0	31.2	32.8
Salt Cntl D	0/500	5	5	5	8.3	8.3	8.3	23.4	23.4	23.8	6.0	6.1	5.9	31.0	32.2
100% A	500/0	5	4	3	8.2	8.2	8.3	23.8	24.6	24.4	6.2	6.0	5.2	31.3	32.6
100% B	500/0	5	3	3	8.2	8.2	8.2	24.0	24.1	23.7	6.0	5.9	5.6	31.3	32.5
100% C	500/0	4	4	4	8.2	8.2	8.2	24.1	24.5	24.5	6.0	5.9	4.5	31.3	32.6
100% D	500/0	4	4	3	8.2	8.2	8.2	24.0	25.1	23.3	6.0	5.7	5.4	30.9	32.9
30% A	125/375	5	5	5	8.3	8.2	8.2	23.2	26.3	23.7	6.2	4.8	5.0	32.9	35.3
30% B	125/375	5	5	4	8.3	8.2	8.2	23.3	26.1	24.5	6.2	4.8	4.8	33.0	35.7
30% C	125/375	4	4	4	8.3	8.2	8.2	23.4	25.5	23.9	6.2	5.1	4.8	33.0	35.1
30% D	125/375	5	5	5	8.3	8.2	8.2	23.4	24.2	24.0	6.2	5.4	5.0	33.2	35.1

Continued

LIMS	
Job number:	TLH-2002-12-17-19
sample number:	643874

Data Transcription Verification	
date:	2/3/2003
by:	Cathy Oaks
	Brad Richardson

Total Residual CL2	mg/L	Method
Field:	-	-
Lab:	0.07	Hach

Ammonia	Total (mg/L)	Unionized (mg/L)
Control water:	<0.017	<0.017
100% Sample:	7.540	0.680

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water:	249	-
100% Sample:	135	123
[C] adjusted sample:	359	-

Salinity [B]	ppt
Control water:	20
100% sample:	<1
[C] adjusted sample:	20

[B] Salinity based on conductivity and temperature.

[C] Sample was salt adjusted using 40 fathoms artifical sea salts.

[A] Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
Room Temperature range for the test period was 22.0-25.5°C.
Incubator #3 temperature range for the test period was 24.5-26.5°C.

Table 2. Concluded

Data recorded during the 96-hour acute screening bioassays of a sample of effluent from City of Boca Raton Water Reclamation Facility (Sample #2), 1501 W. Glades RD, Boca Raton, Palm Beach County, Florida, NPDES# FL0026344, performed from 17 to 21 December 2002.

Facility:	**City of Boca Raton WRF (Sample #2)**	**NPDES#:**	**FL0026344**	Facility Type:	**Water Reclamation**	**Analysts:**	Jacquelyn Brynda
Location:	1501 W. Glades RD, Boca Raton	Contact/District:	Davis/SE		**Facility**		Joshua Ayres
County:	Palm Beach	Test type:	acute screen renewal				James Daniels
Sample Collection Date:	12/15/2002 Time: 1545	# tests:	8	Receiving Water:	Atlantic Ocean		Marshall Faircloth
Test Beginning Date:	12/17/2002 Time: 1720	Chlorination Type:	dechlorinated		Class III marine		Christa Pierini
Test Ending Date:	12/21/2002 Time: 1710				**Page 2 of 2**	**Reviewer:**	David Whiting

Organism: ***Menidia Beryllina*** Life stage: 13 days

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	48 hour
Control A	0/500	5	5	5	8.3	8.3	8.1	24.3	25.0	23.8	6.2	5.3	6.9	33.6	34.0
Control B	0/500	5	5	5	8.3	8.3	8.1	24.3	25.3	24.0	6.1	5.3	5.1	34.8	35.4
Control C	0/500	5	5	5	8.3	8.2	8.1	24.3	25.5	24.1	6.6	5.2	4.9	35.2	35.5
Control D	0/500	5	5	5	8.3	8.2	8.2	24.0	25.8	24.0	6.7	5.2	4.7	35.1	35.6
Salt Cntl A	0/500	5	5	5	8.3	8.3	8.3	24.1	24.4	23.8	7.1	5.5	4.7	35.0	30.6
Salt Cntl B	0/500	5	5	5	8.3	8.3	8.3	24.0	25.6	23.8	7.3	5.5	4.6	30.4	30.9
Salt Cntl C	0/500	5	5	5	8.3	8.3	8.3	24.0	25.2	23.8	7.1	5.2	4.6	29.9	30.2
Salt Cntl D	0/500	5	5	5	8.3	8.4	8.3	23.8	25.1	23.7	7.1	5.1	4.8	29.4	30.6
100% A	500/0	5	5	5	8.2	8.2	8.2	23.9	24.7	23.5	7.0	5.2	4.7	29.6	31.2
100% B	500/0	5	5	5	8.2	8.2	8.2	24.1	24.7	23.6	6.7	5.3	4.0	30.6	31.4
100% C	500/0	5	5	5	8.2	8.2	8.2	24.1	25.0	23.6	6.6	5.3	3.8	30.5	30.8
100% D	500/0	5	5	5	8.2	8.2	8.2	23.7	24.9	23.4	6.7	5.2	3.6	30.5	30.7
30% A	125/375	5	5	5	8.2	8.3	8.2	23.9	24.1	23.2	6.6	5.5	3.5	30.3	32.7
30% B	125/375	5	5	5	8.2	8.3	8.2	24.1	24.9	23.5	6.6	5.5	4.2	30.5	31.4
30% C	125/375	5	5	5	8.2	8.3	8.2	24.1	25.4	23.6	6.7	5.1	4.8	30.3	31.5
30% D	125/375	5	5	5	8.2	8.3	8.2	24.0	24.7	23.6	6.8	5.4	4.5	30.2	30.8

Organism: ***Menidia Beryllina***

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	48 hr	72 hr	96 hr	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	96 hour
Control A	0/500	5	5	5	8.3	8.3	8.1	22.9	25.2	25.2	6.4	6.1	5.5	34.5	39.7
Control B	0/500	5	5	5	8.3	8.3	8.2	23.0	25.2	25.3	6.3	6.1	5.5	34.7	37.9
Control C	0/500	5	5	5	8.3	8.3	8.2	23.9	24.5	24.3	6.5	6.2	5.5	35.1	37.0
Control D	0/500	5	5	5	8.3	8.3	8.2	22.8	24.2	24.5	6.4	6.3	5.8	35.0	37.6
Salt Cntl A	0/500	5	5	5	8.3	8.3	8.3	23.0	25.1	24.7	6.1	6.3	6.0	31.1	33.7
Salt Cntl B	0/500	5	5	5	8.3	8.3	8.3	23.1	25.1	25.0	6.1	6.2	6.0	31.0	33.0
Salt Cntl C	0/500	5	5	5	8.3	8.3	8.3	23.1	24.0	25.0	6.2	5.8	5.6	30.9	33.8
Salt Cntl D	0/500	5	5	5	8.3	8.3	8.3	23.0	24.8	24.9	6.2	5.8	5.6	30.7	33.1
100% A	500/0	5	5	5	8.1	8.2	8.2	23.7	24.0	25.3	6.1	5.9	4.9	30.1	33.1
100% B	500/0	5	5	5	8.1	8.2	8.2	23.7	23.9	25.1	6.0	6.0	4.9	30.5	34.4
100% C	500/0	5	5	5	8.1	8.2	8.2	23.8	25.6	25.1	6.0	6.0	5.0	31.1	32.6
100% D	500/0	5	5	5	8.1	8.2	8.2	23.7	24.3	25.4	6.0	6.0	5.1	30.9	33.4
30% A	125/375	5	5	5	8.2	8.2	8.2	23.4	25.8	24.9	6.1	5.8	5.6	33.5	36.1
30% B	125/375	5	5	5	8.2	8.3	8.3	23.4	24.8	24.9	6.1	5.6	5.7	33.1	35.7
30% C	125/375	5	5	5	8.2	8.3	8.3	23.4	23.9	24.6	6.3	5.6	5.7	33.1	36.4
30% D	125/375	5	5	5	8.2	8.3	8.2	23.4	24.1	24.6	6.3	5.8	5.8	32.5	35.5

LIMS	
Job number:	TLH-2002-12-17-19
sample number:	643874

Data Transcription Verification	
date:	2/3/2003
by:	Cathy Oaks
	Brad Richardson

Total Residual CL2	mg/L	Method
Field:	-	-
Lab:	0.07	Hach

Ammonia	Total (mg/L)	Unionized (mg/L)
Control water:	<0.017	<0.017
100% Sample:	7.540	0.680

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water:	249	-
100% Sample:	135	123
[C] adjusted sample:	359	-

Salinity [B]	ppt
Control water:	20
100% sample:	<1
[C]adjusted sample:	20

[B] Salinity based on conductivity and temperature.

[C] Sample was salt adjusted using 40 fathoms artifical sea salts.

[A] Temperatures of room and test incubator were continuously recorded on a strip chart recorder.

Room Temperature range for the test period was 22.0-25.5°C.

Incubator #3 temperature range for the test period was 24.5-26.5°C.

Table 3. Data recorded during the 96-hour acute screening bioassays of a sample of effluent from the City of Boca Raton Water Reclamation Facility (Sample #3), 1501 W. Glades RD, Boca Raton, Palm Beach County, Florida, NPDES# FL0026344, performed from 17 to 21 December 2002.

Facility:	**City of Boca Raton WRF (Sample #3)**	**NPDES#:**	**FL0026344**	Facility Type:	**Water Reclamation**	**Analysts:**	Jacquelyn Brynda
Location:	1501 W. Glades RD, Boca Raton	Contact/District:	Davis/SE		**Facility**		Joshua Ayres
County:	Palm Beach	Test type:	acute screen renewal				James Daniels
Sample Collection Date:	12/15/2002 Time: 2145	# tests:	8	Receiving Water:	Atlantic Ocean		Marshall Faircloth
Test Beginning Date:	12/17/2002 Time: 1730	Chlorination Type:	dechlorinated		Class III marine		Christa Pierini
Test Ending Date:	12/21/2002 Time: 1600				**Page 1 of 2**	**Reviewer:**	David Whiting

Organism: ***Americamysis bahia*** Life stage: 5 days

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	48 hour
Control A	0/500	5	5	5	8.3	8.3	8.2	24.1	24.2	23.9	7.5	5.6	4.7	34.7	36.1
Control B	0/500	5	5	5	8.3	8.3	8.2	24.1	25.0	24.1	7.2	5.6	4.6	35.3	35.8
Control C	0/500	5	5	5	8.3	8.3	8.2	24.0	24.9	24.0	7.1	5.5	4.8	35.3	35.3
Control D	0/500	5	5	5	8.3	8.3	8.2	23.9	24.8	24.0	7.0	5.4	4.8	35.2	35.6
Salt Cntl A	0/500	5	5	5	8.3	8.3	8.3	23.9	25.4	23.8	7.1	5.3	5.0	30.6	32.0
Salt Cntl B	0/500	5	5	5	8.3	8.3	8.3	23.8	25.4	24.0	7.1	5.3	5.0	30.0	30.9
Salt Cntl C	0/500	5	5	5	8.3	8.3	8.3	23.8	25.5	24.1	7.3	5.4	4.8	30.0	30.6
Salt Cntl D	0/500	5	5	4	8.3	8.3	8.3	23.8	25.3	24.0	7.3	5.4	4.7	29.9	30.7
100% A	500/0	5	5	5	8.2	8.2	8.2	23.9	24.4	23.6	7.3	5.5	4.7	30.9	32.5
100% B	500/0	5	5	3	8.2	8.3	8.2	23.9	25.0	23.9	7.4	5.5	4.6	30.9	32.0
100% C	500/0	5	5	4	8.1	8.2	8.2	23.6	24.9	24.1	7.4	5.5	3.6	30.7	31.5
100% D	500/0	5	5	3	8.1	8.3	8.3	23.6	25.2	24.0	7.4	5.4	3.3	30.9	31.0
30% A	125/375	5	5	5	8.2	8.3	8.2	23.8	25.5	23.9	7.3	5.3	3.2	30.6	32.0
30% B	125/375	5	5	4	8.2	8.3	8.2	23.7	25.7	24.7	7.4	5.3	3.6	30.4	30.8
30% C	125/375	5	5	4	8.2	8.3	8.2	23.8	25.3	23.8	7.3	5.4	3.6	30.4	31.4
30% D	125/375	5	5	5	8.2	8.3	8.2	23.8	25.2	23.7	7.4	5.4	3.8	30.6	32.0

Organism: ***Americamysis bahia***

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	48 hr	72 hr	96 hr	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	96 hour
Control A	0/500	5	5	5	8.2	8.2	8.1	23.1	23.9	24.6	6.3	4.5	5.3	35.1	37.5
Control B	0/500	5	5	5	8.2	8.2	8.1	23.3	23.6	24.7	6.2	4.9	5.3	35.4	36.8
Control C	0/500	5	5	5	8.2	8.2	8.1	23.3	23.8	24.3	6.2	5.3	5.3	35.0	37.1
Control D	0/500	5	5	4	8.2	8.2	8.1	23.1	23.5	26.1	6.2	5.4	5.5	34.9	37.2
Salt Cntl A	0/500	5	4	4	8.2	8.3	8.2	23.3	24.2	24.7	6.2	4.8	5.3	31.5	32.9
Salt Cntl B	0/500	5	5	5	8.2	8.3	8.2	23.5	24.7	25.1	6.1	4.9	5.3	31.2	32.2
Salt Cntl C	0/500	5	5	5	8.2	8.3	8.3	23.4	24.2	24.6	5.9	4.9	5.4	30.8	32.5
Salt Cntl D	0/500	4	3	3	8.2	8.3	8.3	23.3	23.9	24.9	5.8	5.0	5.6	31.0	33.3
100% A	500/0	5	3	3	8.2	8.2	8.2	23.7	23.9	24.3	5.7	4.2	5.4	31.1	32.6
100% B	500/0	3	1	1	8.2	8.2	8.2	23.8	24.2	24.8	5.9	4.2	5.4	31.0	32.8
100% C	500/0	4	3	2	8.2	8.2	8.2	23.9	24.6	24.5	5.9	4.3	5.3	31.0	32.1
100% D	500/0	3	1	1	8.2	8.2	8.2	23.8	25.3	24.3	5.8	4.4	5.3	30.7	32.3
30% A	125/375	5	5	5	8.3	8.2	8.2	23.6	24.2	24.3	5.8	4.6	4.6	33.4	33.9
30% B	125/375	4	4	4	8.3	8.2	8.1	23.6	24.0	23.7	5.8	4.5	4.7	33.0	34.9
30% C	125/375	4	3	3	8.3	8.2	8.1	23.4	24.2	25.6	5.6	4.4	4.9	33.0	35.0
30% D	125/375	5	5	5	8.3	8.2	8.2	23.1	24.4	25.4	5.6	4.4	4.8	33.1	34.6

Continued

LIMS	
Job number:	TLH-2002-12-17-19
sample number:	643875

Data Transcription Verification	
date:	2/3/2003
by:	Cathy Oaks
	Brad Richardson

Total Residual CL2	mg/L	Method
Field:	-	-
Lab:	0.04	Hach

Ammonia	Total (mg/L)	Unionized (mg/L)
Control water:	<0.017	<0.017
100% Sample:	12.800	0.963

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water:	249	-
100% Sample:	149	120
[C] adjusted sample:	370	-

Salinity [B]	ppt
Control water:	20
100% sample:	<1
[C] adjusted sample:	20

[B] Salinity based on conductivity and temperature.

[C] Sample was salt adjusted using 40 fathoms artifical sea salts.

[A] Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
Room Temperature range for the test period was 22.0-25.5°C.
Incubator #3 temperature range for the test period was 24.5-26.5°C.

Table 3. Concluded

Data recorded during the 96-hour acute screening bioassays of a sample of effluent from City of Boca Raton Water Reclamation Facility (Sample #3), 1501 W. Glades RD, Boca Raton, Palm Beach County, Florida, NPDES# FL0026344, performed from 17 to 21 December 2002.

Facility:	**City of Boca Raton WRF (Sample #3)**	**NPDES#:**	**FL0026344**	Facility Type:	**Water Reclamation**	**Analysts:**	Jacquelyn Brynda
Location:	1501 W. Glades RD, Boca Raton	Contact/District:	Davis/SE		**Facility**		Joshua Ayres
County:	Palm Beach	Test type:	acute screen renewal				James Daniels
Sample Collection Date:	12/15/2002 Time: 2145	# tests:	8	Receiving Water:	Atlantic Ocean		Marshall Faircloth
Test Beginning Date:	12/17/2002 Time: 1740	Chlorination Type:	dechlorinated		Class III marine		Christa Pierini
Test Ending Date:	12/21/2002 Time: 1600				**Page 2 of 2**	**Reviewer:**	David Whiting

Organism: ***Menidia Beryllina*** Life stage: 13 days

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	48 hour
Control A	0/500	5	5	5	8.3	8.2	8.1	24.2	24.0	24.0	6.8	4.9	5.0	33.5	33.5
Control B	0/500	5	5	5	8.3	8.2	8.1	24.2	25.5	23.9	6.8	5.0	4.9	35.2	35.5
Control C	0/500	5	5	5	8.3	8.2	8.1	24.2	26.5	24.0	6.9	4.3	4.4	35.1	38.5
Control D	0/500	5	5	5	8.3	8.2	8.1	24.0	24.6	24.1	6.9	4.4	4.4	35.2	36.8
Salt Cntl A	0/500	5	5	5	8.3	8.3	8.2	24.1	24.9	24.3	7.0	4.9	3.9	31.2	32.1
Salt Cntl B	0/500	5	5	5	8.3	8.3	8.2	24.2	26.2	24.4	7.1	5.0	4.0	30.4	32.8
Salt Cntl C	0/500	5	5	5	8.2	8.3	8.3	24.2	25.5	24.3	7.2	5.1	4.1	30.7	32.0
Salt Cntl D	0/500	5	5	5	8.2	8.3	8.3	23.9	25.5	23.8	7.2	5.2	4.1	30.3	31.6
100% A	500/0	5	5	5	8.2	8.2	8.1	24.0	25.8	23.9	7.3	4.5	3.0	30.9	31.4
100% B	500/0	5	5	5	8.1	8.2	8.2	23.9	25.2	23.8	7.1	4.8	3.1	31.1	32.1
100% C	500/0	5	5	5	8.1	8.2	8.2	23.9	25.9	23.9	7.1	4.8	3.9	31.1	32.2
100% D	500/0	5	5	5	8.1	8.2	8.2	23.8	25.2	24.9	7.2	4.8	4.0	30.8	31.7
30% A	125/375	5	5	5	8.2	8.3	8.4	24.0	25.0	23.8	7.3	5.4	4.6	31.0	31.7
30% B	125/375	5	5	5	8.2	8.3	8.4	24.0	24.3	23.8	7.2	5.5	4.5	30.9	33.1
30% C	125/375	5	5	5	8.2	8.3	8.4	23.8	24.5	23.8	7.3	5.5	4.5	30.7	32.3
30% D	125/375	5	5	5	8.2	8.3	8.4	23.7	24.3	24.1	7.2	5.4	4.5	30.8	32.0

Organism: ***Menidia Beryllina***

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	48 hr	72 hr	96 hr	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	96 hour
Control A	0/500	5	5	5	8.3	8.2	8.2	23.5	24.5	25.2	6.4	5.9	6.1	34.5	38.5
Control B	0/500	5	5	5	8.3	8.2	8.2	23.5	24.2	25.0	6.2	5.9	6.1	35.7	38.0
Control C	0/500	5	5	5	8.3	8.2	8.2	23.5	24.9	25.0	6.2	5.5	6.2	36.6	38.0
Control D	0/500	5	5	5	8.3	8.2	8.2	23.4	24.8	25.2	6.0	5.4	6.1	35.9	38.9
Salt Cntl A	0/500	5	5	5	8.3	8.3	8.3	23.6	24.6	25.1	6.0	5.2	5.8	31.6	33.4
Salt Cntl B	0/500	5	5	5	8.3	8.3	8.3	23.7	23.9	25.0	5.8	5.2	5.8	31.8	33.7
Salt Cntl C	0/500	5	5	5	8.3	8.3	8.3	23.6	25.0	25.8	5.5	5.8	5.6	31.5	34.6
Salt Cntl D	0/500	5	5	5	8.3	8.3	8.3	23.5	26.0	27.0	5.2	5.7	5.8	31.4	36.6
100% A	500/0	5	5	5	8.2	8.3	8.3	24.0	26.3	25.3	5.3	5.3	5.7	31.0	32.4
100% B	500/0	5	5	5	8.2	8.3	8.3	24.2	24.6	27.7	5.6	5.4	5.6	31.4	35.3
100% C	500/0	5	5	5	8.2	8.3	8.4	24.2	26.1	26.1	6.0	5.6	5.6	31.2	34.0
100% D	500/0	5	5	5	8.2	8.2	8.3	24.1	24.9	25.9	6.2	5.7	5.8	31.4	34.6
30% A	125/375	5	5	5	8.3	8.3	8.3	23.8	25.1	27.4	6.2	5.7	5.7	33.2	36.8
30% B	125/375	5	5	5	8.3	8.3	8.3	23.7	25.9	25.2	6.2	5.7	5.8	33.7	35.6
30% C	125/375	5	5	5	8.3	8.3	8.3	23.7	25.5	26.2	6.1	5.7	5.9	33.4	36.2
30% D	125/375	5	5	5	8.3	8.3	8.3	23.7	24.4	27.7	6.1	5.7	5.9	33.3	35.8

LIMS	
Job number:	TLH-2002-12-17-19
sample number:	643875

Data Transcription Verification	
date:	2/3/2003
by:	Cathy Oaks
	Brad Richardson

Total Residual CL2	mg/L	Method
Field:	-	-
Lab:	0.04	Hach

Ammonia	Total (mg/L)	Unionized (mg/L)
Control water:	<0.017	<0.017
100% Sample:	12.800	0.963

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water:	249	-
100% Sample:	149	120
[C] adjusted sample:	370	-

Salinity [B]	ppt
Control water:	20
100% sample:	<1
[C]adjusted sample:	20

[B] Salinity based on conductivity and temperature.

[C] Sample was salt adjusted using 40 fathoms artifical sea salts.

[A] Temperatures of room and test incubator were continuously recorded on a strip chart recorder.

Room Temperature range for the test period was 22.0-25.5°C.

Incubator #3 temperature range for the test period was 24.5-26.5°C.

Table 4. Data recorded during the 96-hour acute screening bioassays of a sample of effluent from City of Boca Raton Water Reclamation Facility (Sample #4), 1501 W. Glades RD, Boca Raton, Palm Beach County, Florida, NPDES# FL0026344, performed from 17 to 21 December 2002.

Facility:	**City of Boca Raton WRF (Sample #4)**	**NPDES#:**	**FL0026344**	Facility Type:	**Water Reclamation**	**Analysts:**	Jacquelyn Brynda
Location:	1501 W. Glades RD, Boca Raton	Contact/District:	Davis/SE		**Facility**		Joshua Ayres
County:	Palm Beach	Test type:	acute screen renewal				James Daniels
Sample Collection Date:	12/16/2002 Time: 0345	# tests:	8	Receiving Water:	Atlantic Ocean		Marshall Faircloth
Test Beginning Date:	12/17/2002 Time: 1745	Chlorination Type:	dechlorinated		Class III marine		Christa Pierini
Test Ending Date:	12/21/2002 Time: 1620				**Page 1 of 2**	**Reviewer:**	David Whiting

Organism: ***Americamysis bahia*** Life stage: 5 days

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	48 hour
Control A	0/500	5	5	5	8.3	8.2	7.9	24.0	24.4	23.4	7.1	5.6	6.2	34.7	34.6
Control B	0/500	5	5	5	8.3	8.2	8.1	23.9	24.2	23.3	7.1	5.3	4.9	35.0	36.3
Control C	0/500	5	5	5	8.3	8.3	8.1	24.0	24.5	23.2	7.0	5.4	4.9	35.3	35.8
Control D	0/500	5	5	5	8.3	8.3	8.1	24.0	24.5	23.2	7.1	5.4	4.8	34.5	36.1
Salt Cntl A	0/500	5	5	5	8.3	8.3	8.3	23.7	24.8	23.4	7.1	5.6	4.8	30.4	31.2
Salt Cntl B	0/500	5	5	5	8.3	8.3	8.3	23.7	24.6	23.5	7.1	5.5	5.0	30.2	31.2
Salt Cntl C	0/500	5	5	5	8.3	8.3	8.3	23.7	24.2	23.6	7.2	5.7	5.0	30.0	31.0
Salt Cntl D	0/500	5	5	5	8.3	8.3	8.3	23.6	24.6	23.5	7.2	5.8	5.1	29.9	30.5
100% A	500/0	5	5	5	8.2	8.3	8.3	23.6	24.4	23.6	7.3	5.9	5.2	30.5	31.7
100% B	500/0	5	5	5	8.2	8.3	8.3	23.7	24.4	23.6	7.5	5.8	5.2	30.7	31.9
100% C	500/0	5	4	4	8.2	8.3	8.3	23.7	24.6	23.5	7.6	5.6	5.2	30.8	31.4
100% D	500/0	5	5	5	8.2	8.3	8.3	23.6	24.6	23.5	7.6	5.5	5.3	30.7	31.2
30% A	125/375	5	5	5	8.2	8.3	8.3	23.6	24.8	23.7	7.7	6.0	5.3	30.9	32.0
30% B	125/375	5	5	5	8.2	8.3	8.3	23.6	24.7	23.8	7.6	5.9	5.2	30.9	32.0
30% C	125/375	5	5	5	8.2	8.3	8.3	23.5	24.7	23.7	7.3	5.7	5.2	30.8	32.4
30% D	125/375	5	5	5	8.2	8.3	8.3	23.5	24.8	23.7	7.3	5.7	5.1	30.7	31.3

Organism: ***Americamysis bahia***

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	48 hr	72 hr	96 hr	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	96 hour
Control A	0/500	5	5	5	8.2	8.0	8.0	23.3	23.4	25.9	6.0	4.5	5.0	35.6	39.7
Control B	0/500	5	5	5	8.2	8.1	8.0	23.4	23.2	25.3	5.7	4.5	5.0	35.9	39.4
Control C	0/500	5	5	5	8.2	8.1	8.2	23.4	23.2	25.6	5.7	4.6	4.9	35.6	33.8
Control D	0/500	5	5	5	8.2	8.0	8.0	23.4	23.0	24.8	5.8	4.6	5.0	35.8	39.5
Salt Cntl A	0/500	5	5	5	8.3	8.2	8.2	23.4	23.4	26.3	5.7	4.7	5.1	31.2	35.1
Salt Cntl B	0/500	5	5	5	8.3	8.2	8.3	23.5	23.4	25.1	5.7	4.7	5.1	31.1	33.5
Salt Cntl C	0/500	5	3	3	8.3	8.2	8.3	23.5	23.3	25.1	5.7	4.8	5.2	31.3	33.8
Salt Cntl D	0/500	5	5	5	8.3	8.2	8.2	23.5	23.2	25.1	5.7	4.8	5.1	31.1	38.1
100% A	500/0	5	3	1	8.3	8.2	8.2	23.6	24.0	25.5	5.7	4.6	5.0	31.0	34.7
100% B	500/0	5	3	3	8.2	8.2	8.2	23.6	24.1	24.9	5.9	4.6	5.0	31.2	34.4
100% C	500/0	4	1	1	8.3	8.2	8.2	23.7	24.0	24.8	6.0	4.7	5.1	30.9	34.2
100% D	500/0	5	4	4	8.3	8.2	8.2	23.7	23.5	24.5	6.3	4.8	5.3	31.0	33.6
30% A	125/375	5	5	5	8.3	8.1	8.2	23.5	24.0	25.7	6.4	4.7	5.0	32.9	37.6
30% B	125/375	5	5	5	8.3	8.2	8.2	23.5	23.6	24.8	6.2	4.7	4.9	33.2	35.9
30% C	125/375	5	5	5	8.3	8.2	8.2	23.6	23.7	25.3	6.1	4.4	4.9	33.4	35.8
30% D	125/375	5	5	5	8.3	8.2	8.3	23.6	23.8	25.0	6.0	4.4	4.8	33.1	36.0

LIMS	
Job number:	TLH-2002-12-17-19
sample number:	643876

Data Transcription Verification	
date:	2/3/2003
by:	Cathy Oaks
	Brad Richardson

Total Residual CL2	mg/L	Method
Field:	-	-
Lab:	0.07	Hach

Ammonia	Total (mg/L)	Unionized (mg/L)
Control water:	<0.017	<0.017
100% Sample:	10.100	0.923

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water:	249	-
100% Sample:	150	122
[C] adjusted sample:	400	-

Salinity [B]	ppt
Control water:	20
100% sample:	<1
[C]adjusted sample:	20

[B] Salinity based on conductivity and temperature.

[C] Sample was salt adjusted using 40 fathoms artifical sea salts.

[A] Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
Room Temperature range for the test period was 22.0-25.5°C.
Incubator #3 temperature range for the test period was 24.5-26.5°C.

Continued

Table 4. Concluded

Data recorded during the 96-hour acute screening bioassays of a sample of effluent from the City of Boca Raton Water Reclamation Facility (Sample #4), 1501 W. Glades RD, Boca Raton, Palm Beach County, Florida, NPDES# FL0026344, performed from 17 to 21 December 2002.

Facility:	**City of Boca Raton WRF (Sample #4)**	**NPDES#:**	**FL0026344**	Facility Type:	**Water Reclamation**	**Analysts:**	Jacquelyn Brynda
Location:	1501 W. Glades RD, Boca Raton	Contact/District:	Davis/SE		**Facility**		Joshua Ayres
County:	Palm Beach	Test type:	acute screen renewal				James Daniels
Sample Collection Date:	12/16/2002 Time: 0345	# tests:	8	Receiving Water:	Atlantic Ocean		Marshall Faircloth
Test Beginning Date:	12/17/2002 Time: 1750	Chlorination Type:	dechlorinated		Class III marine		Christa Pierini
Test Ending Date:	12/21/2002 Time: 1620				**Page 2 of 2**	**Reviewer:**	David Whiting

Organism: ***Menidia Beryllina*** Life stage: 13 days

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	24 hour	48 hour	0 hour	24 hour
Control A	0/500	5	5	5	8.3	8.3	8.1	23.8	23.8	23.6	7.1	5.9	5.2	34.5	33.3
Control B	0/500	5	5	5	8.3	8.3	8.2	23.7	24.5	25.3	7.1	6.0	4.9	34.9	35.9
Control C	0/500	5	5	5	8.3	8.3	8.2	23.6	24.4	25.2	7.1	6.0	4.1	34.6	38.3
Control D	0/500	5	5	5	8.3	8.3	8.2	23.6	25.7	24.6	7.1	5.9	4.1	35.0	37.6
Salt Cntl A	0/500	5	5	5	8.3	8.3	8.3	23.5	24.1	24.6	7.1	5.2	4.2	30.2	32.4
Salt Cntl B	0/500	5	5	5	8.3	8.3	8.3	23.4	24.1	24.5	7.2	5.9	3.9	29.8	31.2
Salt Cntl C	0/500	5	5	5	8.3	8.3	8.3	23.3	24.5	24.0	7.2	6.0	4.1	29.5	30.9
Salt Cntl D	0/500	5	5	5	8.3	8.3	8.3	23.4	24.5	24.8	7.2	6.1	4.5	29.4	31.9
100% A	500/0	5	5	5	8.2	8.2	8.2	23.4	24.0	24.2	7.6	6.1	4.2	30.5	33.3
100% B	500/0	5	4	4	8.2	8.3	8.3	23.4	24.1	24.6	7.7	6.2	4.5	30.5	32.0
100% C	500/0	5	5	5	8.2	8.3	8.3	23.4	25.4	25.8	7.7	5.5	4.5	30.4	32.2
100% D	500/0	5	5	5	8.2	8.3	8.2	23.4	25.4	25.8	7.7	5.2	4.6	30.5	31.7
30% A	125/375	5	5	5	8.2	8.3	8.2	23.5	24.9	24.4	7.5	5.7	4.7	30.5	31.8
30% B	125/375	5	5	5	8.2	8.3	8.3	23.4	24.7	24.1	7.5	5.8	4.6	30.6	32.0
30% C	125/375	5	5	5	8.2	8.3	8.2	23.4	24.2	24.9	7.4	6.0	4.3	30.8	34.3
30% D	125/375	5	5	5	8.2	8.3	8.2	23.3	24.3	25.6	7.3	6.1	4.3	30.5	35.2

Organism: ***Menidia Beryllina***

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen			Conductivity Uncorrected mmhos/cm	
Concentrations	Volume(mL)	48 hr	72 hr	96 hr	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	72 hour	96 hour	48 hour	96 hour
Control A	0/500	5	5	5	8.2	8.2	8.2	23.1	25.0	25.4	6.2	5.9	5.6	34.5	39.4
Control B	0/500	5	5	5	8.2	8.2	8.2	23.3	24.6	25.1	5.8	6.0	5.9	35.9	38.6
Control C	0/500	5	5	5	8.2	8.2	8.2	23.3	24.8	24.8	5.8	5.7	6.1	36.5	38.5
Control D	0/500	5	5	5	8.2	8.2	8.2	23.3	24.2	24.4	5.8	5.8	6.4	36.1	38.2
Salt Cntl A	0/500	5	5	5	8.3	8.3	8.4	23.4	24.4	24.4	5.9	5.9	6.3	31.4	32.8
Salt Cntl B	0/500	5	5	5	8.2	8.3	8.4	23.4	24.5	24.4	5.8	5.9	6.4	31.3	32.9
Salt Cntl C	0/500	5	5	5	8.3	8.3	8.3	23.4	24.7	24.7	5.8	5.6	6.2	31.1	32.9
Salt Cntl D	0/500	5	5	5	8.3	8.3	8.4	23.4	24.2	24.9	5.7	5.8	6.2	31.3	32.9
100% A	500/0	5	5	5	8.2	8.3	8.4	23.6	24.4	24.7	5.6	5.6	6.3	31.1	33.0
100% B	500/0	4	4	4	8.2	8.3	8.3	23.7	24.6	24.7	6.1	5.7	6.1	30.9	32.9
100% C	500/0	5	5	5	8.2	8.3	8.3	23.7	24.0	24.5	6.3	5.9	6.1	31.0	32.8
100% D	500/0	5	5	5	8.2	8.3	8.3	23.7	24.2	24.5	6.4	5.9	6.1	31.2	33.1
30% A	125/375	5	5	5	8.3	8.3	8.3	23.5	25.0	24.6	6.4	5.8	6.0	32.3	35.2
30% B	125/375	5	5	5	8.3	8.3	8.3	23.5	24.5	24.5	6.3	6.0	6.1	33.1	35.8
30% C	125/375	5	5	5	8.3	8.3	8.3	23.5	24.4	24.5	6.2	6.0	6.2	33.7	34.7
30% D	125/375	5	5	5	8.3	8.3	8.3	23.5	24.1	24.9	6.1	6.0	6.1	34.0	35.7

LIMS	
Job number:	TLH-2002-12-17-19
sample number:	643876

Data Transcription Verification	
date:	2/3/2003
by:	Cathy Oaks
	Brad Richardson

Total Residual CL2	mg/L	Method
Field:	-	-
Lab:	0.07	Hach

Ammonia	Total (mg/L)	Unionized (mg/L)
Control water:	<0.017	<0.017
100% Sample:	10.100	0.923

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water:	249	-
100% Sample:	150	122
[C] adjusted sample:	400	-

Salinity [B]	ppt
Control water:	20
100% sample:	<1
[C]adjusted sample:	20

[B] Salinity based on conductivity and temperature.

[C] Sample was salt adjusted using 40 fathoms artifical sea salts.

[A] Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
Room Temperature range for the test period was 22.0-25.5°C.
Incubator #3 temperature range for the test period was 24.5-26.5°C.

Table 5. Results of chemical analyses on the effluent from City of Boca Raton Water Reclamation Facility sample #4, sampled on December 15, 2002.

Metals			
Aluminum	164	ug/L	
Cadmium	0.031	ug/L	[I]
Calcium	39.9	mg/L	
Iron	253	ug/L	
Magnesium	5.2	mg/L	
Silver	0.23	ug/L	
Zinc	15.3	ug/L	
Pesticides and Herbicides			
Atrazine	0.3	ug/L	
Nutrients			
Ammonia-N	6.3	mg N/L	
Nitrates and Nitrites	4.973	mg N/L	
Total Kjeldahl Nitrogen	7.8	mg N/L	
Ortho-Phosphate	0.41	mg P/L	
Total Phosphorous	0.65	mg P/L	
Base, Neutral, & Acid Extractable Organics			
Acetophenone	2.8	ug/L	[I]
Bis(2-ethylhexyl)phthalate	15	ug/L	[I]

[I] The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.

Table 6. Chemical Analyses performed on the effluent from City of Boca Raton Water Reclaimation Facility, sampled on December 15, 2002.

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
12/15/2002 9:45	51-BR-1	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC5(	30	LC50	L		
12/15/2002 9:45	51-BR-1	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC	30	LC50	L		
12/15/2002 15:45	51-BR-2	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC5(	30	LC50	L		
12/15/2002 15:45	51-BR-2	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC	30	LC50	L		
12/15/2002 21:45	51-BR-3	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC5(	30	LC50	L		
12/15/2002 21:45	51-BR-3	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC	30	LC50	L		
12/16/2002 3:45	51-BR-4	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC5(	30	LC50	L		
12/16/2002 3:45	51-BR-4	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC	30	LC50	L		
12/16/2002 9:00	51-BR-5	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	1,2,4-Trichlorobenzene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	1,2-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	1,3,5-Trinitrobenzene	3.9	ug/L	U	3.9	16
12/16/2002 9:00	51-BR-5	BNA-Water	1,3-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	1,3-Dinitrobenzene	1.9	ug/L	U	1.9	7.8
12/16/2002 9:00	51-BR-5	BNA-Water	1,4-Dichlorobenzene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	1,4-Naphthoquinone	19	ug/L	U	19	78
12/16/2002 9:00	51-BR-5	BNA-Water	1-Naphthylamine	9.7	ug/L	U	9.7	39
12/16/2002 9:00	51-BR-5	BNA-Water	2,3,4,6-Tetrachlorophenol	1.9	ug/L	U	1.9	7.8
12/16/2002 9:00	51-BR-5	BNA-Water	2,4,5-Trichlorophenol	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	2,4,6-Trichlorophenol	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	2,4-Dichlorophenol	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	2,4-Dimethylphenol	49	ug/L	U	49	190
12/16/2002 9:00	51-BR-5	BNA-Water	2,4-Dinitrophenol	15	ug/L	U	15	58
12/16/2002 9:00	51-BR-5	BNA-Water	2,4-Dinitrotoluene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	2,6-Dichlorophenol	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	2,6-Dinitrotoluene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	2-Acetylaminofluorene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	2-Chloronaphthalene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	2-Chlorophenol	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	12
12/16/2002 9:00	51-BR-5	BNA-Water	2-Methylnaphthalene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	2-Naphthylamine	9.7	ug/L	U	9.7	39
12/16/2002 9:00	51-BR-5	BNA-Water	2-Nitroaniline	0.97	ug/L	U	0.97	3.9

12/16/2002 9:00	51-BR-5	BNA-Water	2-Nitrophenol	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	2-Picoline	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	3,3'-Dichlorobenzidine	39	ug/L	U	39	160
12/16/2002 9:00	51-BR-5	BNA-Water	3,3'-Dimethylbenzidine	19	ug/L	UJ	19	78
12/16/2002 9:00	51-BR-5	BNA-Water	3-Methylcholanthrene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	3-Nitroaniline	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	4,4'-DDD	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	4,4'-DDE	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	4,4'-DDT	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	4-Aminobiphenyl	3.9	ug/L	U	3.9	16
12/16/2002 9:00	51-BR-5	BNA-Water	4-Bromophenyl phenyl ether	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	4-Chloro-3-methylphenol	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	4-Chloroaniline	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.8
12/16/2002 9:00	51-BR-5	BNA-Water	4-Nitroaniline	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	4-Nitrophenol	15	ug/L	U	15	58
12/16/2002 9:00	51-BR-5	BNA-Water	5-Nitro-o-toluidine	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Acenaphthene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Acenaphthylene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Acetophenone	2.8	ug/L	I	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Aldrin	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	Aniline	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Anthracene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Benzidine	97	ug/L	U	97	390
12/16/2002 9:00	51-BR-5	BNA-Water	Benzo(a)anthracene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Benzo(a)pyrene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Benzo(b)fluoranthene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Benzo(g,h,i)perylene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Benzo(k)fluoranthene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Benzyl alcohol	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Bis(2-chloroethoxy)methane	0.97	ug/L	UJ	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Bis(2-chloroethyl)ether	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	12
12/16/2002 9:00	51-BR-5	BNA-Water	Bis(2-ethylhexyl)phthalate	15	ug/L	I	15	58
12/16/2002 9:00	51-BR-5	BNA-Water	Butyl benzyl phthalate	4.9	ug/L	U	4.9	19

12/16/2002 9:00	51-BR-5	BNA-Water	Chrysene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Di-n-butyl phthalate	4.9	ug/L	U	4.9	19
12/16/2002 9:00	51-BR-5	BNA-Water	Di-n-octyl phthalate	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Dibenzo(a,h)anthracene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Dibenzofuran	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Dieldrin	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	Diethyl phthalate	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Dimethyl phthalate	49	ug/L	U	49	190
12/16/2002 9:00	51-BR-5	BNA-Water	Dimethylaminoazobenzene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Dinoseb	3.9	ug/L	U	3.9	16
12/16/2002 9:00	51-BR-5	BNA-Water	Diphenylamine	2.9	ug/L	U	2.9	12
12/16/2002 9:00	51-BR-5	BNA-Water	Endosulfan I	3.9	ug/L	U	3.9	16
12/16/2002 9:00	51-BR-5	BNA-Water	Endosulfan II	3.9	ug/L	U	3.9	16
12/16/2002 9:00	51-BR-5	BNA-Water	Endosulfan sulfate	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	Endrin	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	Endrin aldehyde	3.9	ug/L	U	3.9	16
12/16/2002 9:00	51-BR-5	BNA-Water	Ethyl methanesulfonate	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Fluoranthene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Fluorene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Heptachlor	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	Heptachlor epoxide	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	Hexachlorobenzene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	12
12/16/2002 9:00	51-BR-5	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	12
12/16/2002 9:00	51-BR-5	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	12
12/16/2002 9:00	51-BR-5	BNA-Water	Hexachloropropene	1.9	ug/L	U	1.9	7.8
12/16/2002 9:00	51-BR-5	BNA-Water	Indeno(1,2,3-cd)pyrene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Isophorone	0.97	ug/L	UJ	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Isosafrole	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Methapyrilene	3.9	ug/L	UJ	3.9	16
12/16/2002 9:00	51-BR-5	BNA-Water	Methyl methanesulfonate	0.97	ug/L	UJ	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	N-Nitrosodi-n-butylamine	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.8
12/16/2002 9:00	51-BR-5	BNA-Water	N-Nitrosodiethylamine	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.8
12/16/2002 9:00	51-BR-5	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	12
12/16/2002 9:00	51-BR-5	BNA-Water	N-Nitrosomethylethylamine	1.9	ug/L	U	1.9	7.8

12/16/2002 9:00	51-BR-5	BNA-Water	N-Nitrosomorpholine	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	N-Nitrosopiperidine	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	N-Nitrosopyrrolidine	1.9	ug/L	U	1.9	7.8
12/16/2002 9:00	51-BR-5	BNA-Water	Naphthalene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.8
12/16/2002 9:00	51-BR-5	BNA-Water	Nitroquinoline-1-oxide	19	ug/L	U	19	78
12/16/2002 9:00	51-BR-5	BNA-Water	Pentachlorobenzene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Pentachloroethane	49	ug/L	U	49	190
12/16/2002 9:00	51-BR-5	BNA-Water	Pentachloronitrobenzene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	12
12/16/2002 9:00	51-BR-5	BNA-Water	Phenacetin	3.9	ug/L	U	3.9	12
12/16/2002 9:00	51-BR-5	BNA-Water	Phenanthrene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Phenol	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Pyrene	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	Pyridine	3.9	ug/L	U	3.9	16
12/16/2002 9:00	51-BR-5	BNA-Water	Safrole	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	BNA-Water	alpha-BHC	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	beta-BHC	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	delta-BHC	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	gamma-BHC	1.5	ug/L	U	1.5	5.8
12/16/2002 9:00	51-BR-5	BNA-Water	m,p-Cresols	1.9	ug/L	U	1.9	7.8
12/16/2002 9:00	51-BR-5	BNA-Water	o-Cresol	1.9	ug/L	U	1.9	7.8
12/16/2002 9:00	51-BR-5	BNA-Water	o-Toluidine	0.97	ug/L	U	0.97	3.9
12/16/2002 9:00	51-BR-5	GC-Water	Alachlor	0.62	ug/L	U	0.62	2.48
12/16/2002 9:00	51-BR-5	GC-Water	Ametryn	0.052	ug/L	U	0.052	0.208
12/16/2002 9:00	51-BR-5	GC-Water	Atrazine	0.3	ug/L		0.052	0.208
12/16/2002 9:00	51-BR-5	GC-Water	Azinphos Methyl	0.052	ug/L	U	0.052	0.208
12/16/2002 9:00	51-BR-5	GC-Water	Bromacil	0.21	ug/L	U	0.21	0.84
12/16/2002 9:00	51-BR-5	GC-Water	Butylate	0.21	ug/L	U	0.21	0.84
12/16/2002 9:00	51-BR-5	GC-Water	Chlorpyrifos Ethyl	0.052	ug/L	U	0.052	0.208
12/16/2002 9:00	51-BR-5	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
12/16/2002 9:00	51-BR-5	GC-Water	Diazinon	0.052	ug/L	U	0.052	0.208
12/16/2002 9:00	51-BR-5	GC-Water	Ethion	0.052	ug/L	U	0.052	0.208
12/16/2002 9:00	51-BR-5	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
12/16/2002 9:00	51-BR-5	GC-Water	Fenamiphos	0.21	ug/L	U	0.21	0.84
12/16/2002 9:00	51-BR-5	GC-Water	Fonofos	0.1	ug/L	UJ	0.1	0.4
12/16/2002 9:00	51-BR-5	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4

12/16/2002 9:00	51-BR-5	GC-Water	Malathion	0.16	ug/L	UJ	0.16	0.64
12/16/2002 9:00	51-BR-5	GC-Water	Metalaxyl	0.26	ug/L	U	0.26	1.04
12/16/2002 9:00	51-BR-5	GC-Water	Metolachlor	0.52	ug/L	U	0.52	2.08
12/16/2002 9:00	51-BR-5	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
12/16/2002 9:00	51-BR-5	GC-Water	Mevinphos	0.21	ug/L	U	0.21	0.84
12/16/2002 9:00	51-BR-5	GC-Water	Naled	0.83	ug/L	U	0.83	3.32
12/16/2002 9:00	51-BR-5	GC-Water	Norflurazon	0.1	ug/L	U	0.1	0.4
12/16/2002 9:00	51-BR-5	GC-Water	Parathion Ethyl	0.16	ug/L	U	0.16	0.64
12/16/2002 9:00	51-BR-5	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
12/16/2002 9:00	51-BR-5	GC-Water	Phorate	0.052	ug/L	U	0.052	0.208
12/16/2002 9:00	51-BR-5	GC-Water	Prometryn	0.16	ug/L	U	0.16	0.64
12/16/2002 9:00	51-BR-5	GC-Water	Simazine	0.052	ug/L	U	0.052	0.208
12/16/2002 9:00	51-BR-5	Metals-Water	Aluminum	164	ug/L		10	40
12/16/2002 9:00	51-BR-5	Metals-Water	Arsenic	3	ug/L	U	3	12
12/16/2002 9:00	51-BR-5	Metals-Water	Cadmium	0.031	ug/L	I	0.025	0.1
12/16/2002 9:00	51-BR-5	Metals-Water	Calcium	39.9	mg/L		0.04	0.12
12/16/2002 9:00	51-BR-5	Metals-Water	Chromium	2	ug/L	U	2	8
12/16/2002 9:00	51-BR-5	Metals-Water	Copper	3.4	ug/L	I	0.75	3
12/16/2002 9:00	51-BR-5	Metals-Water	Iron	253	ug/L		7	28
12/16/2002 9:00	51-BR-5	Metals-Water	Lead	0.43	ug/L		0.1	0.4
12/16/2002 9:00	51-BR-5	Metals-Water	Magnesium	5.2	mg/L		0.01	0.04
12/16/2002 9:00	51-BR-5	Metals-Water	Nickel	2	ug/L	U	2	8
12/16/2002 9:00	51-BR-5	Metals-Water	Selenium	1	ug/L	U	1	4
12/16/2002 9:00	51-BR-5	Metals-Water	Silver	0.23	ug/L		0.02	0.08
12/16/2002 9:00	51-BR-5	Metals-Water	Zinc	20.1	ug/L		2	8
12/16/2002 9:00	51-BR-5	Nutrients-Liquid	Ammonia-N	6.3	mg N/L		0.4	0.8
12/16/2002 9:00	51-BR-5	Nutrients-Liquid	NO2NO3-N	5	mg N/L		0.04	0.1
12/16/2002 9:00	51-BR-5	Nutrients-Liquid	N_KJEL_TOT	7.8	mg N/L		0.24	0.8
12/16/2002 9:00	51-BR-5	Nutrients-Liquid	O-Phosphate-P	0.41	mg P/L		0.024	0.06
12/16/2002 9:00	51-BR-5	Nutrients-Liquid	Total-P	0.65	mg P/L		0.015	0.04
12/16/2002 12:00	51-BR-6	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	1,2,4-Trichlorobenzene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	1,2-Dichlorobenzene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	1,3,5-Trinitrobenzene	3.8	ug/L	U	3.8	15
12/16/2002 12:00	51-BR-6	BNA-Water	1,3-Dichlorobenzene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	1,3-Dinitrobenzene	1.9	ug/L	U	1.9	7.5
12/16/2002 12:00	51-BR-6	BNA-Water	1,4-Dichlorobenzene	0.94	ug/L	U	0.94	3.8

12/16/2002 12:00	51-BR-6	BNA-Water	1,4-Naphthoquinone	19	ug/L	U	19	75
12/16/2002 12:00	51-BR-6	BNA-Water	1-Naphthylamine	9.4	ug/L	U	9.4	38
12/16/2002 12:00	51-BR-6	BNA-Water	2,3,4,6-Tetrachlorophenol	1.9	ug/L	U	1.9	7.5
12/16/2002 12:00	51-BR-6	BNA-Water	2,4,5-Trichlorophenol	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	2,4,6-Trichlorophenol	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	2,4-Dichlorophenol	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	2,4-Dimethylphenol	47	ug/L	U	47	190
12/16/2002 12:00	51-BR-6	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57
12/16/2002 12:00	51-BR-6	BNA-Water	2,4-Dinitrotoluene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	2,6-Dichlorophenol	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	2,6-Dinitrotoluene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	2-Acetylaminofluorene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	2-Chloronaphthalene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	2-Chlorophenol	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	2-Methyl-4,6-dinitrophenol	2.8	ug/L	U	2.8	11
12/16/2002 12:00	51-BR-6	BNA-Water	2-Methylnaphthalene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	2-Naphthylamine	9.4	ug/L	U	9.4	38
12/16/2002 12:00	51-BR-6	BNA-Water	2-Nitroaniline	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	2-Nitrophenol	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	2-Picoline	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
12/16/2002 12:00	51-BR-6	BNA-Water	3,3'-Dimethylbenzidine	19	ug/L	UJ	19	75
12/16/2002 12:00	51-BR-6	BNA-Water	3-Methylcholanthrene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	3-Nitroaniline	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
12/16/2002 12:00	51-BR-6	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
12/16/2002 12:00	51-BR-6	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
12/16/2002 12:00	51-BR-6	BNA-Water	4-Aminobiphenyl	3.8	ug/L	U	3.8	15
12/16/2002 12:00	51-BR-6	BNA-Water	4-Bromophenyl phenyl ether	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	4-Chloro-3-methylphenol	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	4-Chloroaniline	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.5
12/16/2002 12:00	51-BR-6	BNA-Water	4-Nitroaniline	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
12/16/2002 12:00	51-BR-6	BNA-Water	5-Nitro-o-toluidine	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Acenaphthene	0.94	ug/L	U	0.94	3.8

12/16/2002 12:00	51-BR-6	BNA-Water	Acenaphthylene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Acetophenone	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
12/16/2002 12:00	51-BR-6	BNA-Water	Aniline	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Anthracene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Benzidine	94	ug/L	U	94	380
12/16/2002 12:00	51-BR-6	BNA-Water	Benzo(a)anthracene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Benzo(a)pyrene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Benzo(b)fluoranthene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Benzo(g,h,i)perylene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Benzo(k)fluoranthene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Benzyl alcohol	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Bis(2-chloroethoxy)methane	0.94	ug/L	UJ	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Bis(2-chloroethyl)ether	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Bis(2-chloroisopropyl)ether	2.8	ug/L	U	2.8	11
12/16/2002 12:00	51-BR-6	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
12/16/2002 12:00	51-BR-6	BNA-Water	Butyl benzyl phthalate	4.7	ug/L	U	4.7	19
12/16/2002 12:00	51-BR-6	BNA-Water	Chrysene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Di-n-butyl phthalate	4.7	ug/L	U	4.7	19
12/16/2002 12:00	51-BR-6	BNA-Water	Di-n-octyl phthalate	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Dibenzo(a,h)anthracene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Dibenzofuran	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
12/16/2002 12:00	51-BR-6	BNA-Water	Diethyl phthalate	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Dimethyl phthalate	47	ug/L	U	47	190
12/16/2002 12:00	51-BR-6	BNA-Water	Dimethylaminoazobenzene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Dinoseb	3.8	ug/L	U	3.8	15
12/16/2002 12:00	51-BR-6	BNA-Water	Diphenylamine	2.8	ug/L	U	2.8	11
12/16/2002 12:00	51-BR-6	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
12/16/2002 12:00	51-BR-6	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
12/16/2002 12:00	51-BR-6	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
12/16/2002 12:00	51-BR-6	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
12/16/2002 12:00	51-BR-6	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
12/16/2002 12:00	51-BR-6	BNA-Water	Ethyl methanesulfonate	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Fluoranthene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Fluorene	0.94	ug/L	U	0.94	3.8

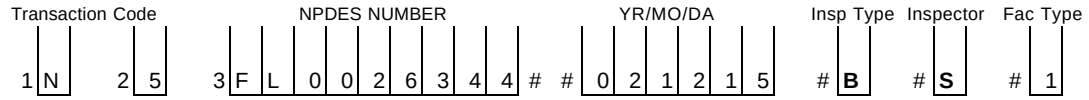
12/16/2002 12:00	51-BR-6	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
12/16/2002 12:00	51-BR-6	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
12/16/2002 12:00	51-BR-6	BNA-Water	Hexachlorobenzene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Hexachlorobutadiene	2.8	ug/L	U	2.8	11
12/16/2002 12:00	51-BR-6	BNA-Water	Hexachlorocyclopentadiene	2.8	ug/L	U	2.8	11
12/16/2002 12:00	51-BR-6	BNA-Water	Hexachloroethane	2.8	ug/L	U	2.8	11
12/16/2002 12:00	51-BR-6	BNA-Water	Hexachloropropene	1.9	ug/L	U	1.9	7.5
12/16/2002 12:00	51-BR-6	BNA-Water	Indeno(1,2,3-cd)pyrene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Isophorone	0.94	ug/L	UJ	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Isosafrole	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Methapyrilene	3.8	ug/L	UJ	3.8	15
12/16/2002 12:00	51-BR-6	BNA-Water	Methyl methanesulfonate	0.94	ug/L	UJ	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	N-Nitrosodi-n-butylamine	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.5
12/16/2002 12:00	51-BR-6	BNA-Water	N-Nitrosodiethylamine	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.5
12/16/2002 12:00	51-BR-6	BNA-Water	N-Nitrosodiphenylamine	2.8	ug/L	U	2.8	11
12/16/2002 12:00	51-BR-6	BNA-Water	N-Nitrosomethylethylamine	1.9	ug/L	U	1.9	7.5
12/16/2002 12:00	51-BR-6	BNA-Water	N-Nitrosomorpholine	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	N-Nitrosopiperidine	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	N-Nitrosopyrrolidine	1.9	ug/L	U	1.9	7.5
12/16/2002 12:00	51-BR-6	BNA-Water	Naphthalene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.5
12/16/2002 12:00	51-BR-6	BNA-Water	Nitroquinoline-1-oxide	19	ug/L	U	19	75
12/16/2002 12:00	51-BR-6	BNA-Water	Pentachlorobenzene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Pentachloroethane	47	ug/L	U	47	190
12/16/2002 12:00	51-BR-6	BNA-Water	Pentachloronitrobenzene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Pentachlorophenol	2.8	ug/L	U	2.8	11
12/16/2002 12:00	51-BR-6	BNA-Water	Phenacetin	3.8	ug/L	U	3.8	11
12/16/2002 12:00	51-BR-6	BNA-Water	Phenanthrene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Phenol	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Pyrene	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	Pyridine	3.8	ug/L	U	3.8	15
12/16/2002 12:00	51-BR-6	BNA-Water	Safrole	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
12/16/2002 12:00	51-BR-6	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
12/16/2002 12:00	51-BR-6	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7

12/16/2002 12:00	51-BR-6	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
12/16/2002 12:00	51-BR-6	BNA-Water	m,p-Cresols	1.9	ug/L	U	1.9	7.5
12/16/2002 12:00	51-BR-6	BNA-Water	o-Cresol	1.9	ug/L	U	1.9	7.5
12/16/2002 12:00	51-BR-6	BNA-Water	o-Toluidine	0.94	ug/L	U	0.94	3.8
12/16/2002 12:00	51-BR-6	GC-Water	Alachlor	0.58	ug/L	U	0.58	2.32
12/16/2002 12:00	51-BR-6	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.192
12/16/2002 12:00	51-BR-6	GC-Water	Atrazine	0.048	ug/L	U	0.048	0.192
12/16/2002 12:00	51-BR-6	GC-Water	Azinphos Methyl	0.048	ug/L	U	0.048	0.192
12/16/2002 12:00	51-BR-6	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
12/16/2002 12:00	51-BR-6	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
12/16/2002 12:00	51-BR-6	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.192
12/16/2002 12:00	51-BR-6	GC-Water	Chlorpyrifos Methyl	0.096	ug/L	U	0.096	0.384
12/16/2002 12:00	51-BR-6	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.192
12/16/2002 12:00	51-BR-6	GC-Water	Ethion	0.048	ug/L	U	0.048	0.192
12/16/2002 12:00	51-BR-6	GC-Water	Ethoprop	0.096	ug/L	U	0.096	0.384
12/16/2002 12:00	51-BR-6	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
12/16/2002 12:00	51-BR-6	GC-Water	Fonofos	0.096	ug/L	UJ	0.096	0.384
12/16/2002 12:00	51-BR-6	GC-Water	Hexazinone	0.096	ug/L	U	0.096	0.384
12/16/2002 12:00	51-BR-6	GC-Water	Malathion	0.14	ug/L	UJ	0.14	0.56
12/16/2002 12:00	51-BR-6	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
12/16/2002 12:00	51-BR-6	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.92
12/16/2002 12:00	51-BR-6	GC-Water	Metribuzin	0.096	ug/L	U	0.096	0.384
12/16/2002 12:00	51-BR-6	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
12/16/2002 12:00	51-BR-6	GC-Water	Naled	0.77	ug/L	U	0.77	3.08
12/16/2002 12:00	51-BR-6	GC-Water	Norflurazon	0.096	ug/L	U	0.096	0.384
12/16/2002 12:00	51-BR-6	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
12/16/2002 12:00	51-BR-6	GC-Water	Parathion Methyl	0.096	ug/L	U	0.096	0.384
12/16/2002 12:00	51-BR-6	GC-Water	Phorate	0.048	ug/L	U	0.048	0.192
12/16/2002 12:00	51-BR-6	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
12/16/2002 12:00	51-BR-6	GC-Water	Simazine	0.048	ug/L	U	0.048	0.192
12/16/2002 12:00	51-BR-6	Metals-Water	Aluminum	10	ug/L	U	10	40
12/16/2002 12:00	51-BR-6	Metals-Water	Arsenic	3	ug/L	U	3	12
12/16/2002 12:00	51-BR-6	Metals-Water	Cadmium	0.025	ug/L	U	0.025	0.1
12/16/2002 12:00	51-BR-6	Metals-Water	Calcium	0.04	mg/L	U	0.04	0.12
12/16/2002 12:00	51-BR-6	Metals-Water	Chromium	2	ug/L	U	2	8
12/16/2002 12:00	51-BR-6	Metals-Water	Copper	3.3	ug/L	I	0.75	3
12/16/2002 12:00	51-BR-6	Metals-Water	Iron	7	ug/L	U	7	28

12/16/2002 12:00	51-BR-6	Metals-Water	Lead	0.35	ug/L	I	0.1	0.4
12/16/2002 12:00	51-BR-6	Metals-Water	Magnesium	0.01	mg/L	U	0.01	0.04
12/16/2002 12:00	51-BR-6	Metals-Water	Nickel	2	ug/L	U	2	8
12/16/2002 12:00	51-BR-6	Metals-Water	Selenium	1	ug/L	U	1	4
12/16/2002 12:00	51-BR-6	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
12/16/2002 12:00	51-BR-6	Metals-Water	Zinc	4.8	ug/L	I	2	8
12/16/2002 12:00	51-BR-6	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
12/16/2002 12:00	51-BR-6	Nutrients-Liquid	NO2NO3-N	0.027	mg N/L		0.004	0.01
12/16/2002 12:00	51-BR-6	Nutrients-Liquid	N_KJEL_TOT	0.06	mg N/L	U	0.06	0.2
12/16/2002 12:00	51-BR-6	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01
12/16/2002 12:00	51-BR-6	Nutrients-Liquid	Total-P	0.015	mg P/L	U	0.015	0.04

The Bioassay of City of Boca Raton Water Reclamation Facility effluent sampled on December 15, 2002, NPDES #FL0026344.

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



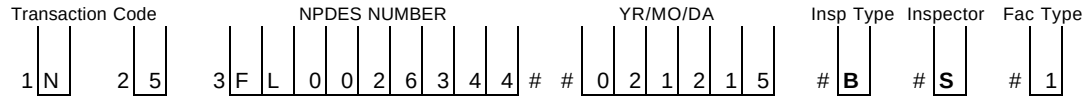
Remarks



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The Priority Pollutants Analysis for Bioassay of City of Boca Raton Water Reclamation Facility effluent sampled on December 15, 2002, NPDES #FL0026344.

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



Remarks



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