

Bioassays of

Jacksonville Beach WWTF

Duval County

NPDES #FL0020231

Sampled June 9, 2003

March 2004

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Jacksonville Beach Wastewater Treatment Facility, 910 10th Street, Jacksonville Beach, Duval County, Florida, NPDES #FL0020231. Effluent samples for this facility were collected on June 9, 2003.

Introduction

This facility has a design flow of 4.5 million gallons per day (MGD) annual average daily flow (AADF) and a current AADF of 2.6 MGD (June 2002-May, 2003). The facility consists of the following process units: two parallel climber screens for influent screening, a vortex grit removal unit; two contact stabilization trains consisting of contact tanks, secondary clarifiers, and stabilization tanks; a step feed treatment train consisting of an aeration tank and a secondary clarifier; a chlorine contact chamber, an equalization tank and dechlorination facilities. Treated effluent is discharged to the Class III marine waters of the St. Johns River. The facility also has a 0.5 MGD reclaimed water facility, which consists of two up-flow continuous backwash filters and a chlorine contact chamber. Residuals are digested, belt-filter pressed, and disposed by land application.

The facility has three permitted discharge locations. The two surface water discharge points are D001, which discharges treated effluent into the St. Johns River at Sherman Point, and D002, which is classified as a limited wet weather discharge, that discharges treated effluent and stormwater to Cradle Creek to Pablo Creek (Intracoastal Waterway to Class III marine waters). The reuse discharge point, R001, is to the Jacksonville Beach Municipal Golf Course, municipal ball fields, and municipal operation and maintenance facility grounds.

Methods

Samples were collected from outfall D001 by Patrick O'Connor (FDEP Northeast 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 toxicity and algal growth potential tests discussed in this report were performed following internal DEP SOP's TA07_03, TA07_04, TA07_13, and TA08_01 through TA08_06. 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 effluent sample was measured to be <1 ppt and was adjusted to 20‰ with Forty Fathoms® artificial sea salts for these bioassays per the toxicity language in the facility's NPDES permit.

Toxicity Test Results

Tests were performed June 10-12, 2003.

Americamysis bahia 48-hr acute screening bioassay - salinity adjusted effluent – Not Toxic;
LC_{50} > 100%, 0% mortality in 100% sample at 48 hours

Menidia beryllina 48-hr acute screening bioassay - salinity adjusted effluent – Not Toxic;
LC_{50} > 100%, 0% mortality in 100% sample at 48 hours

See Table 1 for bioassay bench sheets.

Algal Growth Potential

Raschke and Shultz (1987) found that Algal Growth Potential (AGP) values above 5.0 mg dry weight/L represent a “problem” threshold for fresh receiving waters, implying nutrient enrichment. The effluent AGP was 162 mg dry wt/L of *Pseudokirchneriella subcapitata*, formerly known as *Selenastrum capricornutum*. Due to laboratory protocol (since changed) at the time of the AGP analysis, an analysis was not performed with a saltwater test species. The “problem” threshold for marine receiving waters is 10.0 mg dry wt/L, therefore the presumptive evidence suggests that nutrient-enrichment would also have been demonstrated with the saltwater species.

Chemistry Results

Total residual chlorine was not measured in the field and was not detected in the bioassay sample in the laboratory. Total ammonia and unionized ammonia were detected in the bioassay sample at concentrations of 4.3 mg/L and 0.143 mg/L, respectively.

The concentration of copper (3.8 µg/L) in the effluent exceeded the Class III Marine Surface Water Quality Criterion (≤ 3.7 ug/L, FAC 62-302.530).

See Table 2 for results of analytes detected in the effluent.
See Table 3 for a complete list of chemical analyses performed.

Conclusion

The effluent samples collected from D001 for this facility on June 9, 2003, did not show acute toxicity to either test species during the 48-hour bioassay tests. Copper was detected in the effluent at a concentration that exceeded the Class III Marine Surface Water Quality Criterion. The effluent AGP result was approximately 32 times greater than the "problem" threshold for fresh receiving waters; the presumptive evidence suggests that nutrient-enrichment would also have been demonstrated with the saltwater species.

Literature Cited

Raschke, R. L. and D. A. Schultz. 1987. The use of the algal growth potential test for data assessment. J. Wat. Poll. Cont. Fed. 59(4): 222-227.

Table 1. Data recorded during the 48-hour acute screening bioassays of a sample of effluent from the Jacksonville Beach Wastewater Treatment Facility, 910 10th Street, Jacksonville Beach, Duval County, Florida, NPDES# FL0020231, performed from 10 to 12 June 2003.

Facility:	**Jacksonville Beach WWTF**		**NPDES #:**	**FL0020231**	Facility Type:	**Wastewater Treatment Facility**	**Analysts:**	Jacquelyn Champion	
Location:	910 10th Street, Jacksonville Beach		Contact/District:	O'Connor/NE				Joshua Ayres	
County:	Duval		Test type:	static acute screen				James Daniels	
Sample Collection Date:	6/9/2003	Time: 1015	# tests:	2	Receiving Water:	St. Johns River		Marshall Faircloth	
Test Beginning Date:	6/10/2003	Time: 1500	Chlorination Type:	dechlorinated		Class III Marine		Christa Pierini	
Test Ending Date:	6/12/2003	Time: 1300				**Page 1 of 1**	**Reviewer:**	Rob Buda	

Organism: ***Americamysis bahia*** Life stage: 5 days [A]Feeding: artemia Conductivity

Chamber size: 1 L Food Batch #: 01940425G Uncorrected

	Sample/Diluent	SURVIVAL # Alive			pH (Standard Units)			Temperature C[B]			Diss. Oxygen mg/L [C]			mmhos/cm	
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	0 hr	24 hr	48 hr	0 hr	24 hr	48 hr	0 hr	24 hr	48 hr	0 hour	48 hour
Control A	0/500	5	5	5	8.4	8.2	8.1	24.8	25.7	26.0	6.7	5.8	5.3	31.7	34.4
Control B	0/500	5	5	5	8.4	8.2	8.1	24.8	25.7	26.3	6.7	5.8	5.4	31.7	35.8
Control C	0/500	5	5	5	8.4	8.3	8.1	24.7	26.0	25.9	6.7	5.6	5.3	31.7	35.5
Control D	0/500	5	5	5	8.4	8.3	8.1	24.6	25.4	25.3	6.8	6.1	5.4	31.7	35.3
Salt Ctrl A	0/500	5	5	5	8.5	8.1	7.9	24.8	25.9	26.1	6.8	5.6	5.1	31.5	37.5
Salt Ctrl B	0/500	5	5	5	8.5	8.1	7.8	24.7	26.0	25.9	6.8	5.7	5.2	31.3	39.0
Salt Ctrl C	0/500	5	5	5	8.5	8.1	7.8	24.6	26.0	25.6	6.8	5.5	5.3	31.3	34.4
Salt Ctrl D	0/500	5	5	5	8.5	8.1	7.8	24.6	25.7	25.8	6.9	5.6	5.3	31.2	34.7
100% A	500/0	5	5	5	7.8	8.2	8.1	25.1	26.3	25.8	6.9	5.5	5.4	31.0	37.0
100% B	500/0	5	5	5	7.8	8.2	8.2	25.1	25.5	25.8	6.6	5.6	5.5	31.0	34.3
100 % C	500/0	5	5	5	7.8	8.2	8.2	25.1	26.2	25.9	6.5	5.5	5.5	30.8	34.5
100% D	500/0	5	5	5	7.8	8.2	8.2	25.1	25.4	25.8	6.4	5.8	5.5	30.7	35.8

[A] Organisms were fed daily.

[B] Temperatures of room and test incubator were continuously recorded on a strip chart recorder. Room Temperature range for the test period was 24.0 -25.0 °C. Incubator #3 temperature range for the test period was 24.5-25.0°C.

Organism: ***Menidia beryllina*** Life stage: 14 days [D]Feeding: artemia Conductivity

Chamber size: 1 L Food Batch #: 01940425G Uncorrected

	Sample/Diluent	SURVIVAL # Alive			pH (Standard Units)			Temperature C[B]			Diss. Oxygen mg/L [C]			mmhos/cm	
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	0 hr	24 hr	48 hr	0 hr	24 hr	48 hr	0 hr	24 hr	48 hr	0 hour	48 hour
Control A	0/500	5	5	5	8.4	8.3	8.3	24.9	24.7	25.1	6.8	6.0	6.0	31.6	32.4
Control B	0/500	5	5	5	8.4	8.3	8.3	24.9	25.1	25.5	6.7	6.1	6.1	31.6	34.1
Control C	0/500	5	5	5	8.4	8.3	8.3	24.7	24.4	24.0	6.7	6.0	6.2	31.6	33.8
Control D	0/500	5	5	5	8.4	8.3	8.3	24.7	24.6	24.2	6.7	6.0	6.7	31.6	33.6
Salt Ctrl A	0/500	5	5	5	8.5	8.2	8.1	24.7	25.1	25.6	6.7	5.5	6.6	31.7	34.5
Salt Ctrl B	0/500	5	5	5	8.5	8.2	8.1	24.5	25.0	25.5	6.8	5.5	6.5	31.3	33.3
Salt Ctrl C	0/500	5	5	5	8.5	8.2	8.1	24.5	24.4	25.0	6.8	5.6	6.2	31.2	33.6
Salt Ctrl D	0/500	5	5	5	8.5	8.2	8.1	24.5	24.7	24.3	6.8	5.7	6.2	31.1	32.9
100% A	500/0	5	5	5	7.7	8.1	8.2	24.9	24.6	25.6	6.8	5.6	6.3	30.9	33.1
100% B	500/0	5	5	5	7.7	8.1	8.2	24.9	25.1	24.5	6.5	5.7	6.0	30.8	32.3
100 % C	500/0	5	5	5	7.7	8.1	8.2	24.8	25.0	25.5	6.5	5.5	6.1	30.9	33.0
100% D	500/0	5	5	5	7.7	8.1	8.2	24.9	25.3	25.1	6.4	5.8	6.0	30.8	32.4

[C] All replicates aerated at 24 hours.

LIMS	
Job number:	TLH-2003-06-10-13
sample number:	680667

Data Transcription Verification	
date:	10/7/03
by:	Cathy Oaks/Brad Richardson

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

Ammonia	**Total (mg/L)**	**Unionized (mg/L)**
ASW:[E]	<0.017	<0.017
100% Sample:	4.300	0.167

[E] ASW=Artificial Seawater

Alk & Hardness	**Alkalinity (mg/L)**	**Hardness (mg/L)**
ASW:	215	-
100% Sample:	114	276

Salinity [F]	**ppt**
Mysid control:	~20
Menidia control:	~20
Mysid 100% sample:	~20
Menidia 100% sample	~20
unadjusted 100% sample:	<1

[F] Salinity based on conductivity and temperature.

Light Intensity during the test was 50-100 foot candles.
Photoperiod during the test was 16 hours of light : 8 hours of dark.

Mortality	Percent
Control water (mysids):	0%
100% (mysids):	0%
Control water (fish):	0%
100 % (fish):	0%

Table 2. Results of chemical analyses on the effluent from the Jacksonville Beach Wastewater Treatment Facility sampled on June 9, 2003.

Metals

Aluminum	35	µg/L	I
Calcium	66.9	mg/L	
Copper	3.8	µg/L	
Iron	77	µg/L	
Lead	0.39	µg/L	I
Magnesium	29.3	mg/L	
Silver	0.32	µg/L	
Zinc	21	µg/L	

Pesticides and Herbicides

Atrazine	0.19	µg/L	I

Nutrients

Ammonia	4.9	mg N/L	AQ
Nitrates and Nitrites	5.3	mg N/L	
Total Kjeldahl Nitrogen	7.3	mg N/L	
Ortho-Phosphates	2.3	mg P/L	
Total-Phosphorous	2.5	mg P/L	

Base, Neutral, & Acid Extractable Organics

Acetophenone	0.98	µg/L	I

A The reported value is an average of two or more values.

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

Q Sample held beyond normal holding time.

Table 3. Chemical Analyses performed on the effluent from the Jacksonville Beach Wastewater Treatment Facility, sampled on June 9, 2003.

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	1,3,5-Trinitrobenzene	3.8	ug/L	U	3.8	15
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	1,3-Dinitrobenzene	1.9	ug/L	U	1.9	7.6
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	1,4-Naphthoquinone	19	ug/L	UJ	19	76
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	1-Naphthylamine	9.5	ug/L	U	9.5	38
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2,3,4,6-Tetrachlorophenol	1.9	ug/L	U	1.9	7.6
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2,4,5-Trichlorophenol	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2,6-Dichlorophenol	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2-Acetylaminofluorene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	11
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2-Methylnaphthalene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2-Naphthylamine	9.5	ug/L	U	9.5	38
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2-Nitroaniline	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	2-Picoline	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	3,3'-Dimethylbenzidine	19	ug/L	UJ	19	76
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	3-Methylcholanthrene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	3-Nitroaniline	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	4-Aminobiphenyl	3.8	ug/L	U	3.8	15
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	4-Chloroaniline	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	4-Nitroaniline	0.95	ug/L	UJ	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	5-Nitro-o-toluidine	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Acetophenone	0.98	ug/L	I	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Aniline	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Benzidine	95	ug/L	U	95	380
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Benzyl alcohol	0.95	ug/L	UJ	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Dibenzofuran	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Diethyl phthalate	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Dimethylaminoazobenzene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Dinoseb	3.8	ug/L	U	3.8	15
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Diphenylamine	2.9	ug/L	U	2.9	11
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Ethyl methanesulfonate	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	11
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Hexachloropropene	1.9	ug/L	U	1.9	7.6
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Isosafrole	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Methapyrilene	3.8	ug/L	UJ	3.8	15
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Methyl methanesulfonate	0.95	ug/L	UJ	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	N-Nitrosodi-n-butylamine	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	N-Nitrosodiethylamine	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	11
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	N-Nitrosomethylethylamine	1.9	ug/L	U	1.9	7.6
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	N-Nitrosomorpholine	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	N-Nitrosopiperidine	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	N-Nitrosopyrrolidine	1.9	ug/L	U	1.9	7.6
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Nitroquinoline-1-oxide	19	ug/L	U	19	76
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Pentachlorobenzene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Pentachloroethane	48	ug/L	U	48	190
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Pentachloronitrobenzene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Phenacetin	3.8	ug/L	U	3.8	11
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Pyridine	3.8	ug/L	U	3.8	15
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	Safrole	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	m,p-Cresols	1.9	ug/L	U	1.9	7.6
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	o-Cresol	1.9	ug/L	U	1.9	7.6
6/9/2003 9:45	EQUIPMENT BLK	BNA-Water	o-Toluidine	0.95	ug/L	U	0.95	3.8
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Alachlor	0.57	ug/L	U	0.57	2.28
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.192
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Atrazine	0.048	ug/L	U	0.048	0.192
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Azinphos Methyl	0.048	ug/L	U	0.048	0.192
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.192
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	U	0.095	0.38
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.192
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Ethion	0.048	ug/L	U	0.048	0.192
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Ethoprop	0.095	ug/L	U	0.095	0.38
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Fonofos	0.095	ug/L	U	0.095	0.38

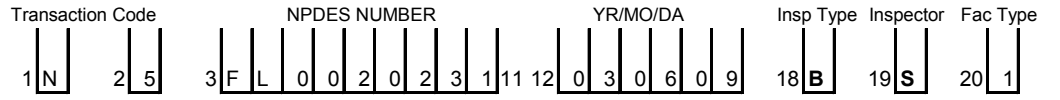
Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Hexazinone	0.095	ug/L	U	0.095	0.38
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Malathion	0.14	ug/L	U	0.14	0.56
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.92
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Metribuzin	0.095	ug/L	U	0.095	0.38
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Naled	0.76	ug/L	U	0.76	3.04
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Norflurazon	0.095	ug/L	U	0.095	0.38
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Parathion Methyl	0.095	ug/L	U	0.095	0.38
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Phorate	0.048	ug/L	U	0.048	0.192
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
6/9/2003 9:45	EQUIPMENT BLK	GC-Water	Simazine	0.048	ug/L	U	0.048	0.192
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Aluminum	10	ug/L	U	10	40
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Arsenic	7	ug/L	U	7	28
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Cadmium	0.025	ug/L	U	0.025	0.1
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Calcium	0.05	mg/L	U	0.05	0.3
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Chromium	2	ug/L	U	2	8
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Copper	0.8	ug/L	U	0.8	3.2
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Iron	10	ug/L	U	10	40
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Lead	0.1	ug/L	U	0.1	0.4
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Magnesium	0.01	mg/L	U	0.01	0.04
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Nickel	2	ug/L	U	2	8
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Selenium	1	ug/L	U	1	4
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
6/9/2003 9:45	EQUIPMENT BLK	Metals-Water	Zinc	3	ug/L	U	3	12
6/9/2003 9:45	EQUIPMENT BLK	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
6/9/2003 9:45	EQUIPMENT BLK	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01
6/9/2003 9:45	EQUIPMENT BLK	Nutrients-Liquid	N_KJEL_TOT	0.06	mg N/L	U	0.06	0.2
6/9/2003 9:45	EQUIPMENT BLK	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01
6/9/2003 9:45	EQUIPMENT BLK	Nutrients-Liquid	Total-P	0.015	mg P/L	U	0.015	0.04
6/9/2003 10:15	FINAL EFFLUENT	Bio-AGP/LimNut	Algal Growth Potential	162	mg DryWt/L		0.1	0.3
6/9/2003 10:15	FINAL EFFLUENT	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
6/9/2003 10:15	FINAL EFFLUENT	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
6/9/2003 10:15	FINAL EFFLUENT	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC50	100	LC50	L		
6/9/2003 10:15	FINAL EFFLUENT	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC50	100	LC50	L		
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	1,2,4-Trichlorobenzene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	1,2-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	1,3,5-Trinitrobenzene	3.8	ug/L	U	3.8	15
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	1,3-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	1,3-Dinitrobenzene	1.9	ug/L	U	1.9	7.7
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	1,4-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	1,4-Naphthoquinone	19	ug/L	UJ	19	77
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	1-Naphthylamine	9.6	ug/L	U	9.6	38
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2,3,4,6-Tetrachlorophenol	1.9	ug/L	U	1.9	7.7
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2,4,5-Trichlorophenol	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2,4,6-Trichlorophenol	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2,4-Dichlorophenol	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	58
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2,4-Dinitrotoluene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2,6-Dichlorophenol	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2,6-Dinitrotoluene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2-Acetylaminofluorene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2-Chloronaphthalene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2-Chlorophenol	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	12
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2-Methylnaphthalene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2-Naphthylamine	9.6	ug/L	U	9.6	38
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2-Nitroaniline	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2-Nitrophenol	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	2-Picoline	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	3,3'-Dimethylbenzidine	19	ug/L	UJ	19	77
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	3-Methylcholanthrene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	3-Nitroaniline	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.8

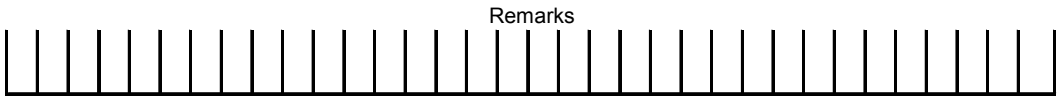
Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	4-Aminobiphenyl	3.8	ug/L	U	3.8	15
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	4-Bromophenyl phenyl ether	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	4-Chloro-3-methylphenol	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	4-Chloroaniline	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.7
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	4-Nitroaniline	0.96	ug/L	UJ	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	4-Nitrophenol	14	ug/L	U	14	58
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	5-Nitro-o-toluidine	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Acenaphthene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Acenaphthylene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Acetophenone	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Aniline	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Anthracene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Benzidine	96	ug/L	U	96	380
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Benzo(a)anthracene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Benzo(a)pyrene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Benzo(b)fluoranthene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Benzo(g,h,i)perylene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Benzo(k)fluoranthene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Benzyl alcohol	0.96	ug/L	UJ	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Bis(2-chloroethoxy)methane	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Bis(2-chloroethyl)ether	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	12
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	58
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Chrysene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Di-n-octyl phthalate	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Dibenzo(a,h)anthracene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Dibenzofuran	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Diethyl phthalate	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Dimethylaminoazobenzene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Dinoseb	3.8	ug/L	U	3.8	15
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Diphenylamine	2.9	ug/L	U	2.9	12
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Ethyl methanesulfonate	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Fluoranthene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Fluorene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Hexachlorobenzene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	12
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	12
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	12
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Hexachloropropene	1.9	ug/L	U	1.9	7.7
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Indeno(1,2,3-cd)pyrene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Isophorone	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Isosafrole	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Methapyrilene	3.8	ug/L	UJ	3.8	15
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Methyl methanesulfonate	0.96	ug/L	UJ	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	N-Nitrosodi-n-butylamine	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.7
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	N-Nitrosodiethylamine	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.7
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	12
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	N-Nitrosomethylethylamine	1.9	ug/L	U	1.9	7.7
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	N-Nitrosomorpholine	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	N-Nitrosopiperidine	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	N-Nitrosopyrrolidine	1.9	ug/L	U	1.9	7.7

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Naphthalene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.7
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Nitroquinoline-1-oxide	19	ug/L	U	19	77
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Pentachlorobenzene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Pentachloroethane	48	ug/L	U	48	190
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Pentachloronitrobenzene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	12
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Phenacetin	3.8	ug/L	U	3.8	12
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Phenanthrene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Phenol	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Pyrene	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Pyridine	3.8	ug/L	U	3.8	15
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	Safrole	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.8
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	m,p-Cresols	1.9	ug/L	U	1.9	7.7
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	o-Cresol	1.9	ug/L	U	1.9	7.7
6/9/2003 10:15	FINAL EFFLUENT	BNA-Water	o-Toluidine	0.96	ug/L	U	0.96	3.8
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Alachlor	0.57	ug/L	U	0.57	2.28
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.192
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Atrazine	0.19	ug/L	I	0.048	0.192
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Azinphos Methyl	0.048	ug/L	U	0.048	0.192
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.192
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	U	0.095	0.38
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.192
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Ethion	0.048	ug/L	U	0.048	0.192
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Ethoprop	0.095	ug/L	U	0.095	0.38
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Fonofos	0.095	ug/L	U	0.095	0.38
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Hexazinone	0.095	ug/L	U	0.095	0.38
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Malathion	0.14	ug/L	U	0.14	0.56
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.92
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Metribuzin	0.095	ug/L	U	0.095	0.38
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Naled	0.76	ug/L	U	0.76	3.04
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Norflurazon	0.095	ug/L	U	0.095	0.38
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Parathion Methyl	0.095	ug/L	U	0.095	0.38
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Phorate	0.048	ug/L	U	0.048	0.192
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
6/9/2003 10:15	FINAL EFFLUENT	GC-Water	Simazine	0.048	ug/L	U	0.048	0.192
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Aluminum	35	ug/L	I	10	40
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Arsenic	7	ug/L	U	7	28
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Cadmium	0.025	ug/L	U	0.025	0.1
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Calcium	66.9	mg/L		0.05	0.3
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Chromium	2	ug/L	U	2	8
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Copper	3.8	ug/L		0.8	3.2
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Iron	77	ug/L		10	40
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Lead	0.39	ug/L	I	0.1	0.4
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Magnesium	29.3	mg/L		0.01	0.04
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Nickel	2	ug/L	U	2	8
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Selenium	1	ug/L	U	1	4
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Silver	0.32	ug/L		0.02	0.08
6/9/2003 10:15	FINAL EFFLUENT	Metals-Water	Zinc	21	ug/L		3	12
6/9/2003 10:15	FINAL EFFLUENT	Nutrients-Liquid	Ammonia-N	4.9	mg N/L	AQ	0.2	0.4
6/9/2003 10:15	FINAL EFFLUENT	Nutrients-Liquid	NO2NO3-N	5.3	mg N/L		0.04	0.1
6/9/2003 10:15	FINAL EFFLUENT	Nutrients-Liquid	N_KJEL_TOT	7.3	mg N/L		1.2	4
6/9/2003 10:15	FINAL EFFLUENT	Nutrients-Liquid	O-Phosphate-P	2.3	mg P/L		0.16	0.4
6/9/2003 10:15	FINAL EFFLUENT	Nutrients-Liquid	Total-P	2.5	mg P/L		0.3	0.8

The Bioassay of the Jacksonville Beach WWTF effluent sampled on June 9, 2003, NPDES #FL0020231.

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





The Priority Pollutants Analysis for Bioassay of the Jacksonville Beach WWTF effluent sampled on June 9, 2003, NPDES #FL0020231.

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

