

Bioassays of

Panama City Beach Wastewater Treatment Plant

Panama City Beach, Bay County, Florida

NPDES #FL0021512

Sampled 11/18/02

April 2003

Biology Section

Division of Resource Assessment & Management

Comprehensive Quality Assurance Plan #870346G

Bioassays of

Panama City Beach Wastewater Treatment Plant

Panama City Beach, Bay County, Florida

NPDES #FL0021512

Biology Section
Bureau of Laboratories
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Panama City Beach WWTP, 206 North Gulf Boulevard, Panama City Beach, Bay County, Florida, NPDES #FL0021512, tests performed on 19 to 21 November 2002.

Introduction

This WWTP has a design flow of 7.0 MGD and an average daily flow of 3.99 MGD (January 2000-September 2002). The facility consists of three extended-aeration trains (two 2.5 MGD units and one 2.0 MGD unit). Treatment of wastewater includes pretreatment, nitrification, reaeration, secondary clarification, filtration, chlorination, and dechlorination with sulfur dioxide. Effluent is discharged into the Class II marine waters of West Bay. Residuals are digested and dried prior to land application (facility information provided by Wesley Keller, FDEP, Pensacola).

Methods

Samples were collected by Glenn Butts 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 TA07-01 and TA07-02. All internal DEP SOP's are available on the web at:
http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp.

Toxicity Test Results

Ceriodaphnia dubia 48-hr acute screen – Not Toxic
Cyprinella leedsi 48-hr acute screen – Not Toxic

See Table 1 for bioassay bench sheets.

Chemistry Results

Total residual chlorine and total ammonia were not detected in the bioassay sample in the laboratory.

See Table 2 for chemicals detected in the analytical chemistry samples. The concentration of copper detected in the effluent (3.3 µg/L) was between the laboratory detection limit and the laboratory practical quantitation limit, indicating a potential violation of the Class II water quality criterion of ≤ 2.9 µg/L.

See Table 3 for a complete list of chemical analyses performed.

Conclusion

The sample of effluent collected from this facility on November 18, 2002, did not show acute toxicity to either test species during the 48-hour bioassay tests. There was a potential violation of the Class II water quality criterion for copper of ≤ 2.9 µg/L.

Table 1. Data recorded during the 48-hour acute screening bioassays of a sample of effluent from the Panama City Beach WWTP, 206 North Gulf Boulevard, Panama City Beach, Bay County, Florida, NPDES# FL0021512, performed from 19 to 21 November 2002.

Facility:	**Panama City Beach WWTP**	**NPDES #**	**FL0021512**	Facility Type:	**WWTP**	**Analysts:**	Jacquelyn Brynda
Location:	206 North Gulf Boulevard, Panama City Beach	Contact/District:	Butts/NW				Joshua Ayres
County:	Bay	Test type:	static acute screen				James Daniels
Sample Collection Date:	11/18/2002 Time: 1030	# tests:	2	Receiving Water:	West Bay		Marshall Faircloth
Test Beginning Date:	11/19/2002 Time: 1315	Chlorination Type:	Chlorinated		Class II Marine		
Test Ending Date:	11/21/2002 Time: 1325		sample collected after dechlorination		**Page 1 of 1**	**Reviewer:**	David Whiting

Organism: ***Ceriodaphnia dubia*** Life stage: <24 hours

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[A]			Dissolved Oxygen[C]			Conductivity Uncorrected µmhos/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	0/20	5	5	5	8.3	-	7.8	24.1	-	24.0	8.1	-	7.4	165	185
Control B	0/20	5	5	5	-	-	8.0	-	-	24.1	-	-	7.6	-	195
Control C	0/20	5	5	5	-	-	8.1	-	-	24.1	-	-	7.4	-	205
Control D	0/20	5	5	5	-	-	8.2	-	-	24.1	-	-	7.3	-	230
100% A	20/0	5	5	5	7.3	-	8.0	24.5	-	24.1	8.0	-	7.5	1120	1100
100% B	20/0	5	5	5	-	-	7.9	-	-	24.0	-	-	7.3	-	1290
100% C	20/0	5	5	5	-	-	7.9	-	-	24.1	-	-	7.3	-	1300
100% D	20/0	5	5	5	-	-	7.9	-	-	24.0	-	-	7.2	-	1350

[A] Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
Room Temperature range for the test period was 21.0-24.0°C.
Incubator #3 temperature range for the test period was 25.0-26.0°C.

Organism: ***Cyprinella leedsi*** Life stage: 13 days

	Sample/Diluent	SURVIVAL # Alive			pH			Temperature[B]			Dissolved Oxygen[C]			Conductivity Uncorrected µmhos/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	8.5	8.4	8.2	24.5	24.9	27.3	7.9	7.3	5.7	260	295
Control B	0/500	5	5	5	8.5	8.5	8.3	24.5	24.9	25.7	7.9	7.3	6.0	270	300
Control C	0/500	5	5	5	8.5	8.5	8.3	24.5	26.0	25.8	7.9	7.1	6.3	275	300
Control D	0/500	5	5	5	8.5	8.5	8.4	24.4	25.5	25.4	7.9	7.3	6.3	265	290
100% A	500/0	5	5	5	7.2	7.8	7.7	25.1	25.5	25.3	7.8	7.1	7.1	1130	1185
100% B	500/0	5	5	5	7.2	7.7	7.7	25.1	25.3	26.5	7.8	7.1	6.8	1150	1250
100 % C	500/0	5	5	5	7.2	7.6	7.7	25.1	24.8	26.5	7.8	7.0	6.6	1160	1270
100% D	500/0	5	5	5	7.2	7.6	7.7	25.1	25.1	25.8	7.8	7.2	6.8	1160	1265

[B] Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
Room Temperature range for the test period was 21.0-24.0°C.
Incubator #3 temperature range for the test period was 25.0-26.0°C.

[C] Sample was aerated for 10 minutes to decrease the dissolved oxygen from 9.0 mg/L to 7.9 mg/L.

LIMS	
Job number:	TLH-2002-11-19-05
sample number:	637549

Data Transcription Verification	
date:	12/17/2002
by:	Cathy Oaks
	Travis Hill

Total Residual CL2	mg/L	Method
Field:	1.20	-
Lab:	<0.03	Hach

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

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water (fish):	143	140
Control water (water flea):	84	87
100% Sample:	43	143

Table 2. Results of chemical analyses on the effluent from Panama City Beach WWTP sampled on November 18, 2002

Metals			
Aluminum	52	ug/L	
Arsenic	3	ug/L	I
Calcium	37	mg/L	
Copper	3.3	ug/L	I
Iron	39	ug/L	
Lead	0.16	ug/L	I
Magnesium	13.4	mg/L	
Nickel	2.3	ug/L	I
Selenium	2.9	ug/L	I
Zinc	47.6	ug/L	
Pesticides and Herbicides			
Atrazine	0.092	ug/L	I
Nutrients			
Ammonia-N	0.024	mg N/L	
Nitrates and Nitrites	2.8	mg N/L	
Ortho-Phosphate	1.8	mg P/L	
Total Kjeldahl Nitrogen	0.84	mg N/L	J
Total Phosphorous	1.7	mg P/L	J
Base, Neutral, & Acid Extractable Organics			
None detected			

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

Table 3. **Chemical Analysis performed on the effluent from Panama City Beach WWTP, sampled on November 18, 2002.**

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
11/18/2002 10:30	# 1	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	1,2,4-Trichlorobenzene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	1,2-Dichlorobenzene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	1,3,5-Trinitrobenzene	3.9	ug/L	U	3.9	16
11/18/2002 10:30	# 1	BNA-Water	1,3-Dichlorobenzene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	1,3-Dinitrobenzene	2	ug/L	U	2	7.8
11/18/2002 10:30	# 1	BNA-Water	1,4-Dichlorobenzene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	1,4-Naphthoquinone	20	ug/L	U	20	78
11/18/2002 10:30	# 1	BNA-Water	1-Naphthylamine	9.8	ug/L	U	9.8	39
11/18/2002 10:30	# 1	BNA-Water	2,3,4,6-Tetrachlorophenol	2	ug/L	U	2	7.8
11/18/2002 10:30	# 1	BNA-Water	2,4,5-Trichlorophenol	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	2,4,6-Trichlorophenol	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	2,4-Dichlorophenol	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	2,4-Dimethylphenol	49	ug/L	U	49	200
11/18/2002 10:30	# 1	BNA-Water	2,4-Dinitrophenol	15	ug/L	U	15	59
11/18/2002 10:30	# 1	BNA-Water	2,4-Dinitrotoluene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	2,6-Dichlorophenol	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	2,6-Dinitrotoluene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	2-Acetylaminofluorene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	2-Chloronaphthalene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	2-Chlorophenol	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	12
11/18/2002 10:30	# 1	BNA-Water	2-Methylnaphthalene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	2-Naphthylamine	9.8	ug/L	U	9.8	39
11/18/2002 10:30	# 1	BNA-Water	2-Nitroaniline	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	2-Nitrophenol	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	2-Picoline	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	3,3'-Dichlorobenzidine	39	ug/L	U	39	160
11/18/2002 10:30	# 1	BNA-Water	3,3'-Dimethylbenzidine	20	ug/L	U	20	78
11/18/2002 10:30	# 1	BNA-Water	3-Methylcholanthrene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	3-Nitroaniline	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30	# 1	BNA-Water	4,4'-DDD	1.5	ug/L	U	1.5	5.9
11/18/2002 10:30	# 1	BNA-Water	4,4'-DDE	1.5	ug/L	U	1.5	5.9

11/18/2002 10:30 # 1	BNA-Water	4,4'-DDT	1.5	ug/L	U	1.5	5.9
11/18/2002 10:30 # 1	BNA-Water	4-Aminobiphenyl	3.9	ug/L	U	3.9	16
11/18/2002 10:30 # 1	BNA-Water	4-Bromophenyl phenyl ether	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	4-Chloro-3-methylphenol	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	4-Chloroaniline	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	4-Chlorophenyl phenyl ether	2	ug/L	U	2	7.8
11/18/2002 10:30 # 1	BNA-Water	4-Nitroaniline	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	4-Nitrophenol	15	ug/L	U	15	59
11/18/2002 10:30 # 1	BNA-Water	5-Nitro-o-toluidine	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Acenaphthene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Acenaphthylene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Acetophenone	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Aldrin	1.5	ug/L	U	1.5	5.9
11/18/2002 10:30 # 1	BNA-Water	Aniline	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Anthracene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Benzidine	98	ug/L	U	98	390
11/18/2002 10:30 # 1	BNA-Water	Benzo(a)anthracene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Benzo(a)pyrene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Benzo(b)fluoranthene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Benzo(g,h,i)perylene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Benzo(k)fluoranthene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Benzyl alcohol	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Bis(2-chloroethoxy)methane	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Bis(2-chloroethyl)ether	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	12
11/18/2002 10:30 # 1	BNA-Water	Bis(2-ethylhexyl)phthalate	15	ug/L	U	15	59
11/18/2002 10:30 # 1	BNA-Water	Butyl benzyl phthalate	4.9	ug/L	U	4.9	20
11/18/2002 10:30 # 1	BNA-Water	Chrysene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Di-n-butyl phthalate	4.9	ug/L	U	4.9	20
11/18/2002 10:30 # 1	BNA-Water	Di-n-octyl phthalate	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Dibenzo(a,h)anthracene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Dibenzofuran	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Dieldrin	1.5	ug/L	U	1.5	5.9
11/18/2002 10:30 # 1	BNA-Water	Diethyl phthalate	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Dimethyl phthalate	49	ug/L	U	49	200

11/18/2002 10:30 # 1	BNA-Water	Dimethylaminoazobenzene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Dinoseb	3.9	ug/L	U	3.9	16
11/18/2002 10:30 # 1	BNA-Water	Diphenylamine	2.9	ug/L	U	2.9	12
11/18/2002 10:30 # 1	BNA-Water	Endosulfan I	3.9	ug/L	U	3.9	16
11/18/2002 10:30 # 1	BNA-Water	Endosulfan II	3.9	ug/L	U	3.9	16
11/18/2002 10:30 # 1	BNA-Water	Endosulfan sulfate	1.5	ug/L	U	1.5	5.9
11/18/2002 10:30 # 1	BNA-Water	Endrin	1.5	ug/L	U	1.5	5.9
11/18/2002 10:30 # 1	BNA-Water	Endrin aldehyde	3.9	ug/L	U	3.9	16
11/18/2002 10:30 # 1	BNA-Water	Ethyl methanesulfonate	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Fluoranthene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Fluorene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Heptachlor	1.5	ug/L	U	1.5	5.9
11/18/2002 10:30 # 1	BNA-Water	Heptachlor epoxide	1.5	ug/L	U	1.5	5.9
11/18/2002 10:30 # 1	BNA-Water	Hexachlorobenzene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	12
11/18/2002 10:30 # 1	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	12
11/18/2002 10:30 # 1	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	12
11/18/2002 10:30 # 1	BNA-Water	Hexachloropropene	2	ug/L	U	2	7.8
11/18/2002 10:30 # 1	BNA-Water	Indeno(1,2,3-cd)pyrene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Isophorone	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Isosafrole	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Methapyrilene	3.9	ug/L	U	3.9	16
11/18/2002 10:30 # 1	BNA-Water	Methyl methanesulfonate	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	N-Nitrosodi-n-butylamine	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	N-Nitrosodi-n-propylamine	2	ug/L	U	2	7.8
11/18/2002 10:30 # 1	BNA-Water	N-Nitrosodiethylamine	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	N-Nitrosodimethylamine	2	ug/L	U	2	7.8
11/18/2002 10:30 # 1	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	12
11/18/2002 10:30 # 1	BNA-Water	N-Nitrosomethylethylamine	2	ug/L	U	2	7.8
11/18/2002 10:30 # 1	BNA-Water	N-Nitrosomorpholine	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	N-Nitrosopiperidine	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	N-Nitrosopyrrolidine	2	ug/L	U	2	7.8
11/18/2002 10:30 # 1	BNA-Water	Naphthalene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Nitrobenzene	2	ug/L	U	2	7.8
11/18/2002 10:30 # 1	BNA-Water	Nitroquinoline-1-oxide	20	ug/L	U	20	78
11/18/2002 10:30 # 1	BNA-Water	Pentachlorobenzene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Pentachloroethane	49	ug/L	U	49	200

11/18/2002 10:30 # 1	BNA-Water	Pentachloronitrobenzene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	12
11/18/2002 10:30 # 1	BNA-Water	Phenacetin	3.9	ug/L	U	3.9	12
11/18/2002 10:30 # 1	BNA-Water	Phenanthrene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Phenol	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Pyrene	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	Pyridine	3.9	ug/L	U	3.9	16
11/18/2002 10:30 # 1	BNA-Water	Safrole	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	BNA-Water	alpha-BHC	1.5	ug/L	U	1.5	5.9
11/18/2002 10:30 # 1	BNA-Water	beta-BHC	1.5	ug/L	U	1.5	5.9
11/18/2002 10:30 # 1	BNA-Water	delta-BHC	1.5	ug/L	U	1.5	5.9
11/18/2002 10:30 # 1	BNA-Water	gamma-BHC	1.5	ug/L	U	1.5	5.9
11/18/2002 10:30 # 1	BNA-Water	m,p-Cresols	2	ug/L	U	2	7.8
11/18/2002 10:30 # 1	BNA-Water	o-Cresol	2	ug/L	U	2	7.8
11/18/2002 10:30 # 1	BNA-Water	o-Toluidine	0.98	ug/L	U	0.98	3.9
11/18/2002 10:30 # 1	GC-Water	Alachlor	0.6	ug/L	U	0.6	2.4
11/18/2002 10:30 # 1	GC-Water	Ametryn	0.05	ug/L	U	0.05	0.2
11/18/2002 10:30 # 1	GC-Water	Atrazine	0.092	ug/L	I	0.05	0.2
11/18/2002 10:30 # 1	GC-Water	Azinphos Methyl	0.05	ug/L	U	0.05	0.2
11/18/2002 10:30 # 1	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
11/18/2002 10:30 # 1	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
11/18/2002 10:30 # 1	GC-Water	Chlorpyrifos Ethyl	0.05	ug/L	U	0.05	0.2
11/18/2002 10:30 # 1	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
11/18/2002 10:30 # 1	GC-Water	Diazinon	0.05	ug/L	U	0.05	0.2
11/18/2002 10:30 # 1	GC-Water	Ethion	0.05	ug/L	U	0.05	0.2
11/18/2002 10:30 # 1	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
11/18/2002 10:30 # 1	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
11/18/2002 10:30 # 1	GC-Water	Fonofos	0.1	ug/L	U	0.1	0.4
11/18/2002 10:30 # 1	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
11/18/2002 10:30 # 1	GC-Water	Malathion	0.15	ug/L	U	0.15	0.6
11/18/2002 10:30 # 1	GC-Water	Metalaxyl	0.25	ug/L	U	0.25	1
11/18/2002 10:30 # 1	GC-Water	Metolachlor	0.5	ug/L	U	0.5	2
11/18/2002 10:30 # 1	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
11/18/2002 10:30 # 1	GC-Water	Mevinphos	0.2	ug/L	U	0.2	0.8
11/18/2002 10:30 # 1	GC-Water	Naled	0.8	ug/L	U	0.8	3.2
11/18/2002 10:30 # 1	GC-Water	Norflurazon	0.1	ug/L	U	0.1	0.4
11/18/2002 10:30 # 1	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6

11/18/2002 10:30	# 1	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
11/18/2002 10:30	# 1	GC-Water	Phorate	0.05	ug/L	U	0.05	0.2
11/18/2002 10:30	# 1	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
11/18/2002 10:30	# 1	GC-Water	Simazine	0.05	ug/L	U	0.05	0.2
11/18/2002 10:30	# 1	Metals-Water	Aluminum	52	ug/L		10	40
11/18/2002 10:30	# 1	Metals-Water	Arsenic	3	ug/L	I	3	12
11/18/2002 10:30	# 1	Metals-Water	Cadmium	0.025	ug/L	U	0.025	0.1
11/18/2002 10:30	# 1	Metals-Water	Calcium	37	mg/L		0.04	0.12
11/18/2002 10:30	# 1	Metals-Water	Chromium	2	ug/L	U	2	8
11/18/2002 10:30	# 1	Metals-Water	Copper	3.3	ug/L	I	0.75	3
11/18/2002 10:30	# 1	Metals-Water	Iron	59	ug/L		7	28
11/18/2002 10:30	# 1	Metals-Water	Lead	0.16	ug/L	I	0.1	0.4
11/18/2002 10:30	# 1	Metals-Water	Magnesium	13.4	mg/L		0.01	0.04
11/18/2002 10:30	# 1	Metals-Water	Nickel	5.4	ug/L	I	2	8
11/18/2002 10:30	# 1	Metals-Water	Selenium	2.9	ug/L	I	1	4
11/18/2002 10:30	# 1	Metals-Water	Silver	0.088	ug/L	U	0.02	0.08
11/18/2002 10:30	# 1	Metals-Water	Zinc	51.7	ug/L		2	8
11/18/2002 10:30	# 1	Nutrients-Liquid	Ammonia-N	0.041	mg N/L		0.01	0.02
11/18/2002 10:30	# 1	Nutrients-Liquid	NO2NO3-N	2.8	mg N/L		0.04	0.1
11/18/2002 10:30	# 1	Nutrients-Liquid	N_KJEL_TOT	0.84	mg N/L	J	0.06	0.2
11/18/2002 10:30	# 1	Nutrients-Liquid	O-Phosphate-P	1.8	mg P/L		0.032	0.08
11/18/2002 10:30	# 1	Nutrients-Liquid	Total-P	1.7	mg P/L	J	0.06	0.16
11/18/2002 6:30	EQUIPMEN	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	1,3,5-Trinitrobenzene	3.8	ug/L	U	3.8	15
11/18/2002 6:30	EQUIPMEN	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	1,3-Dinitrobenzene	1.9	ug/L	U	1.9	7.6
11/18/2002 6:30	EQUIPMEN	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	1,4-Naphthoquinone	19	ug/L	U	19	76
11/18/2002 6:30	EQUIPMEN	BNA-Water	1-Naphthylamine	9.5	ug/L	U	9.5	38
11/18/2002 6:30	EQUIPMEN	BNA-Water	2,3,4,6-Tetrachlorophenol	1.9	ug/L	U	1.9	7.6
11/18/2002 6:30	EQUIPMEN	BNA-Water	2,4,5-Trichlorophenol	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
11/18/2002 6:30	EQUIPMEN	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57

11/18/2002 6:30	EQUIPMEN	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	2,6-Dichlorophenol	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	2-Acetylaminofluorene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	11
11/18/2002 6:30	EQUIPMEN	BNA-Water	2-Methylnaphthalene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	2-Naphthylamine	9.5	ug/L	U	9.5	38
11/18/2002 6:30	EQUIPMEN	BNA-Water	2-Nitroaniline	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	2-Picoline	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
11/18/2002 6:30	EQUIPMEN	BNA-Water	3,3'-Dimethylbenzidine	19	ug/L	U	19	76
11/18/2002 6:30	EQUIPMEN	BNA-Water	3-Methylcholanthrene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	3-Nitroaniline	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	4-Aminobiphenyl	3.8	ug/L	U	3.8	15
11/18/2002 6:30	EQUIPMEN	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	4-Chloroaniline	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
11/18/2002 6:30	EQUIPMEN	BNA-Water	4-Nitroaniline	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
11/18/2002 6:30	EQUIPMEN	BNA-Water	5-Nitro-o-toluidine	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Acetophenone	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	Aniline	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Benzidine	95	ug/L	U	95	380
11/18/2002 6:30	EQUIPMEN	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8

11/18/2002 6:30	EQUIPMEN	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Benzyl alcohol	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
11/18/2002 6:30	EQUIPMEN	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
11/18/2002 6:30	EQUIPMEN	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
11/18/2002 6:30	EQUIPMEN	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
11/18/2002 6:30	EQUIPMEN	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Dibenzofuran	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	Diethyl phthalate	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
11/18/2002 6:30	EQUIPMEN	BNA-Water	Dimethylaminoazobenzene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Dinoseb	3.8	ug/L	U	3.8	15
11/18/2002 6:30	EQUIPMEN	BNA-Water	Diphenylamine	2.9	ug/L	U	2.9	11
11/18/2002 6:30	EQUIPMEN	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
11/18/2002 6:30	EQUIPMEN	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
11/18/2002 6:30	EQUIPMEN	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
11/18/2002 6:30	EQUIPMEN	BNA-Water	Ethyl methanesulfonate	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
11/18/2002 6:30	EQUIPMEN	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	11
11/18/2002 6:30	EQUIPMEN	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
11/18/2002 6:30	EQUIPMEN	BNA-Water	Hexachloropropene	1.9	ug/L	U	1.9	7.6
11/18/2002 6:30	EQUIPMEN	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8

11/18/2002 6:30	EQUIPMEN	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Isosafrole	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Methapyrilene	3.8	ug/L	U	3.8	15
11/18/2002 6:30	EQUIPMEN	BNA-Water	Methyl methanesulfonate	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	N-Nitrosodi-n-butylamine	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
11/18/2002 6:30	EQUIPMEN	BNA-Water	N-Nitrosodiethylamine	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
11/18/2002 6:30	EQUIPMEN	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	11
11/18/2002 6:30	EQUIPMEN	BNA-Water	N-Nitrosomethylethylamine	1.9	ug/L	U	1.9	7.6
11/18/2002 6:30	EQUIPMEN	BNA-Water	N-Nitrosomorpholine	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	N-Nitrosopiperidine	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	N-Nitrosopyrrolidine	1.9	ug/L	U	1.9	7.6
11/18/2002 6:30	EQUIPMEN	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
11/18/2002 6:30	EQUIPMEN	BNA-Water	Nitroquinoline-1-oxide	19	ug/L	U	19	76
11/18/2002 6:30	EQUIPMEN	BNA-Water	Pentachlorobenzene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Pentachloroethane	48	ug/L	U	48	190
11/18/2002 6:30	EQUIPMEN	BNA-Water	Pentachloronitrobenzene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11
11/18/2002 6:30	EQUIPMEN	BNA-Water	Phenacetin	3.8	ug/L	U	3.8	11
11/18/2002 6:30	EQUIPMEN	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	Pyridine	3.8	ug/L	U	3.8	15
11/18/2002 6:30	EQUIPMEN	BNA-Water	Safrole	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
11/18/2002 6:30	EQUIPMEN	BNA-Water	m,p-Cresols	1.9	ug/L	U	1.9	7.6
11/18/2002 6:30	EQUIPMEN	BNA-Water	o-Cresol	1.9	ug/L	U	1.9	7.6
11/18/2002 6:30	EQUIPMEN	BNA-Water	o-Toluidine	0.95	ug/L	U	0.95	3.8
11/18/2002 6:30	EQUIPMEN	GC-Water	Alachlor	0.58	ug/L	U	0.58	2.32
11/18/2002 6:30	EQUIPMEN	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.192
11/18/2002 6:30	EQUIPMEN	GC-Water	Atrazine	0.048	ug/L	U	0.048	0.192
11/18/2002 6:30	EQUIPMEN	GC-Water	Azinphos Methyl	0.048	ug/L	U	0.048	0.192

11/18/2002 6:30	EQUIPMEN	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
11/18/2002 6:30	EQUIPMEN	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
11/18/2002 6:30	EQUIPMEN	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.192
11/18/2002 6:30	EQUIPMEN	GC-Water	Chlorpyrifos Methyl	0.097	ug/L	U	0.097	0.388
11/18/2002 6:30	EQUIPMEN	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.192
11/18/2002 6:30	EQUIPMEN	GC-Water	Ethion	0.048	ug/L	U	0.048	0.192
11/18/2002 6:30	EQUIPMEN	GC-Water	Ethoprop	0.097	ug/L	U	0.097	0.388
11/18/2002 6:30	EQUIPMEN	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
11/18/2002 6:30	EQUIPMEN	GC-Water	Fonofos	0.097	ug/L	U	0.097	0.388
11/18/2002 6:30	EQUIPMEN	GC-Water	Hexazinone	0.097	ug/L	U	0.097	0.388
11/18/2002 6:30	EQUIPMEN	GC-Water	Malathion	0.14	ug/L	U	0.14	0.56
11/18/2002 6:30	EQUIPMEN	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
11/18/2002 6:30	EQUIPMEN	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.92
11/18/2002 6:30	EQUIPMEN	GC-Water	Metribuzin	0.097	ug/L	U	0.097	0.388
11/18/2002 6:30	EQUIPMEN	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
11/18/2002 6:30	EQUIPMEN	GC-Water	Naled	0.78	ug/L	U	0.78	3.12
11/18/2002 6:30	EQUIPMEN	GC-Water	Norflurazon	0.097	ug/L	U	0.097	0.388
11/18/2002 6:30	EQUIPMEN	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
11/18/2002 6:30	EQUIPMEN	GC-Water	Parathion Methyl	0.097	ug/L	U	0.097	0.388
11/18/2002 6:30	EQUIPMEN	GC-Water	Phorate	0.048	ug/L	U	0.048	0.192
11/18/2002 6:30	EQUIPMEN	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
11/18/2002 6:30	EQUIPMEN	GC-Water	Simazine	0.048	ug/L	U	0.048	0.192
11/18/2002 6:30	EQUIPMEN	Metals-Water	Aluminum	10	ug/L	U	10	40
11/18/2002 6:30	EQUIPMEN	Metals-Water	Arsenic	3	ug/L	U	3	12
11/18/2002 6:30	EQUIPMEN	Metals-Water	Cadmium	0.025	ug/L	U	0.025	0.1
11/18/2002 6:30	EQUIPMEN	Metals-Water	Calcium	0.04	mg/L	U	0.04	0.12
11/18/2002 6:30	EQUIPMEN	Metals-Water	Chromium	2	ug/L	U	2	8
11/18/2002 6:30	EQUIPMEN	Metals-Water	Copper	2.2	ug/L	U	0.75	3
11/18/2002 6:30	EQUIPMEN	Metals-Water	Iron	20	ug/L	I	7	28
11/18/2002 6:30	EQUIPMEN	Metals-Water	Lead	0.1	ug/L	U	0.1	0.4
11/18/2002 6:30	EQUIPMEN	Metals-Water	Magnesium	0.01	mg/L	U	0.01	0.04
11/18/2002 6:30	EQUIPMEN	Metals-Water	Nickel	3.1	ug/L	I	2	8
11/18/2002 6:30	EQUIPMEN	Metals-Water	Selenium	1	ug/L	U	1	4
11/18/2002 6:30	EQUIPMEN	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
11/18/2002 6:30	EQUIPMEN	Metals-Water	Zinc	4.1	ug/L	I	2	8
11/18/2002 6:30	EQUIPMEN	Nutrients-Liquid	Ammonia-N	0.017	mg N/L	I	0.01	0.02
11/18/2002 6:30	EQUIPMEN	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01

11/18/2002 6:30	EQUIPMEN	Nutrients-Liquid	N_KJEL_TOT	0.06	mg N/L	U		0.06	0.2
11/18/2002 6:30	EQUIPMEN	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U		0.004	0.01
11/18/2002 6:30	EQUIPMEN	Nutrients-Liquid	Total-P	0.015	mg P/L	U		0.015	0.04

The Bioassay of Panama City Beach WWTP effluent sampled on November 18, 2002, NPDES #FL0021512.

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

Transaction Code		NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N	2 5	3 F L 0 0 2 1 5 1 2 # #	0 2 1 1 1 8	# **B**	# **S**	# 1

Remarks

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The Priority Pollutants Analysis for Bioassay of Panama City Beach WWTP effluent sampled on November 18, 2002, NPDES #FL0021512.

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

Transaction Code		NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N	2 5	3 F L 0 0 2 1 5 1 2 # #	0 2 1 1 1 8	# **B**	# **S**	# 1

Remarks

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