

Bioassays of

Mid-County Services Wastewater Treatment Plant

Pinellas County

NPDES #FL0034789

Sampled December 6, 8, and 10, 2004

March 2005

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Mid-County Services Wastewater Treatment Plant, 2299 Spanish Vista Dr., Palm Harbor, Pinellas County, Florida, NPDES #FL0034789. Effluent samples for this facility were collected on December 6, 8, and 10, 2004

Introduction

The Mid-County Services Wastewater Treatment Plant (WWTP) is a Type I advanced wastewater treatment plant. The design flow of the wastewater system is 0.900 million gallons per day (MGD). The mean flow from January 2004 through November 2004 was 0.723 MGD. Activities at this plant include the treatment of domestic wastewater using two separate treatment trains. Initially, the flow is directed through a static screen, a flow equalization basin, and then through a splitter box, which separates the flow into 0.300 MGD and 0.600 MGD streams. Each treatment train consists of an aeration basin and a clarifier. The two trains are combined into an effluent holding tank, which flows through three denitrification filters. The effluent is then directed to a chlorination/dechlorination chamber, and is finally discharged through a 12-inch pipe into the Class III fresh water of Curlew Creek. This facility does not have any mixing zones (facility information provided by Lori Pillsbury and Michelle Duggan of FDEP Southwest District office).

There were two previous sampling efforts at this facility in the previous year, in June and August 2004. In June, the toxicity tests were reported as No Result due to a problem receiving the third sample. In August, the *Ceriodaphnia dubia* (water flea) test yielded a lowest observed effect concentration (LOEC) of 100% effluent for reproduction, and the *Pimephales promelas* (fish) test was reported as No Result due to a Control failure. Those results were included in a Fifth Year Inspection report dated March 2005 (see http://www.dep.state.fl.us/labs/cgi-bin/reports/search.asp to search for report).

Methods

Samples were collected from the D-001 NPDES sampling point by Lori Pillsbury and Michelle Duggan (FDEP Southwest 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. Effluent samples one, two, and three were collected on December 6th, 8th, and 10th, respectively.

The freshwater 7-day chronic toxicity tests and algal growth potential test were performed following internal DEP SOP's TA07_05, TA07_09, and TA08_01 through TA08_07. All internal DEP SOP's are available on the web at: http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp.

The first bottle of the second sample, collected on December 8, 2004, was aerated for 30 minutes at approximately 100 bubbles per minute to reduce the dissolved oxygen concentration from 9.0 mg/L to 8.2 mg/L. The second bottle of the second sample was aerated for 35 minutes to reduce the dissolved oxygen from 9.0 mg/L to 8.1 mg/L.

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

Toxicity Test Results

Tests were performed December 7-14, 2004.

Ceriodaphnia dubia 7-day chronic screening bioassay – NOEC = 100% for survival and reproduction

Pimephales promelas 7-day chronic screening bioassay – NOEC = 100% for survival and growth

Bioassay samples were not chronically toxic to the test organisms. The no observed effect concentration (NOEC) was 100% effluent for both survival and reproduction in the *Ceriodaphnia dubia* test and survival and growth in the *Pimephales promelas* test.

See Appendix 1 for bioassay bench sheets.

Algal Growth Potential

The effluent Algal Growth Potential (AGP) was 52.9 mg dry wt/L of the unicellular green alga, *Pseudokirchneriella subcapitata*, formerly known as *Selenastrum capricornutum*. Raschke and Shultz (1987) found that AGP values above 5.0 mg dry weight/L represent a “problem” threshold for fresh receiving waters, implying nutrient enrichment. The analytical chemistry suggests that the effluent is nitrogen -limited. The predicted AGP based on inorganic nitrogen concentrations was 65.85 (±20%) mg dry wt/L (Table 1; Miller et al. 1978).

See Table 1 for AGP results.

Chemistry Results

Total residual chlorine and total ammonia were not detected in any of the three bioassay samples in the laboratory. The total ammonia concentrations in the samples collected and preserved for chemical analysis on December 6, 8, and 10 were 0.033, 0.031, and 0.042 mg/L, respectively. Based on the pH, salinity and temperature of the effluent as collected, the calculated unionized ammonia concentrations for all samples were < 0.02 mg/L.

Bromodichloromethane, chloroform, copper, iron, and zinc were detected in effluent sample one at levels that comply with Class III fresh water quality criteria. Aluminum, copper, and iron were detected in effluent sample two at levels that comply with Class III fresh water quality criteria. Copper, iron, and zinc were detected in effluent sample three at levels that comply with Class III fresh water quality criteria. Atrazine, dibromochloromethane, aluminum, and nickel were detected in sample one between the laboratory minimum detection limits (MDL) and practical quantitation limits (PQL). Atrazine was detected in sample two between the MDL and the PQL. Atrazine, aluminum, and nickel were detected in sample three between the MDL and the PQL.

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

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

Conclusion

The effluent samples collected from D-001 for this facility on December 6th, 8th, and 10th, 2004, were not chronically toxic to either test species during the 7-day chronic screening bioassays. The effluent AGP result exceeded the "problem” threshold for fresh receiving waters. Effluent water quality samples did not exceed any applicable water quality standards or violate any permit conditions.

Literature Cited

Miller, W. E., T. E. Maloney, and J. C. Greene. 1978. The *Selenastrum capricornutum* Printz algal assay bottle test. EPA-600/9-78-018. U. S. EPA, Cincinnati, Ohio. 126 p.

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. Measured and predicted algal growth potential (AGP; mg dry weight/L) for total soluble inorganic nitrogen (TSIN) limitation of Pseudokirchneriella subcapitata.

Mid-County Services WWTP	**AGP (measured)**	**Predicted AGP (TSIN) ± 20%**	**Inorganic N:P ratio**	**Total N:P ratio**
Effluent Grab Sample 1	52.9	65.85 ± 13.17	2.51	3.64

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

Mid-County Services WWTP	Class III Freshwater Standards	Effluent Limits	Effluent Grab Samples 12/6/04	Effluent Grab Samples 12/8/04	Effluent Grab Samples 12/10/04
Organic Constituents (µg/L)					
Atrazine	-	-	0.1 I	0.11 I	0.14 I
Bromodichloromethane	≤ 22	-	9.5	-	-
Chloroform	≤ 470.8	-	65	-	-
Dibromochloromethane	≤ 34	-	0.81 I	-	-
Metals (µg/L unless otherwise noted)					
Aluminum	≤ 1500	-	6.9 I	101	12 I
Arsenic	≤ 50	-	6 U	6 U	6 U
Cadmium	≤ 2.3 b	-	0.075 U	0.075 U	0.075 U
Calcium (mg/L)	-	-	84.6	27.2	91.3
Chromium-III	≤ 180.3 b	-	2 U	2 U	2 U
Copper	≤ 20.1 b	-	3	3.3	3.2
Iron	≤ 1000	-	54	158	62
Lead	≤ 10 b	-	0.66 U	0.075 U	0.075 U
Magnesium (mg/L)	-	-	8.5	15.7	9.2
Nickel	≤ 111.8 b	-	4.6 I	2 U	4.8 I
Selenium	≤ 5	-	0.5 U	0.5 U	0.5 U
Silver	≤ 0.07	-	0.02 U	0.02 U	0.02 U
Zinc	≤ 257.1 b	-	26	3 U	23
Nutrients (mg/L)					
Organic Carbon	-	-	5.8	-	-
Ortho-phosphate	-	-	0.69	-	-
Total Phosphorus	-	2 s *	0.77	-	-
Ammonia	-	-	0.033	0.031	0.042
Unionized Ammonia	≤ 0.02	-	< 0.02 c	< 0.02 c	< 0.02 c
Nitrate+Nitrite	-	-	1.7	-	-
Total Kjeldahl Nitrogen	-	-	1.1	-	-
Organic Nitrogen	-	-	1.067 c	-	-
Total Nitrogen	-	6 s *	2.8 c	-	-
General Physical and Chemical Parameters					
TSS (mg/L)	-	10.0 s *	4 U	-	-
Color (PCU)	-	-	5 U	-	-
Turbidity (NTU)	29 t	-	0.4	-	-
Dissolved Oxygen (mg/L)	≥ 5	≥ 5 s	8.4	7.6	8.3
pH (S.U.)	6.0 - 8.5	6.5 - 8.5	7.3	7.3	7.4
Conductivity (umhos/cm)	≤ 1275	-	1087	1085	1114
Temperature (C)	-	-	24.5	25.6	26
CBOD (mg/L)	-	10.0 s *	0.69 I	-	-
Oil and Grease (mg/l)	≤ 5	-	1.2 IV	-	-
Hardness (mg/L)	-	-	246.2 c	132.6 c	265.9 c
Total Residual Chlorine (mg/L)	≤ 0.01	≤ 0.01 s	< 0.01	-	-

Value exceeds the Class III Fresh Water Quality Criteria (62-302, F.A.C.)

* denotes limit for a composite sample

b - Value is calculated based on hardness

c - calculated value

s - Single sample

t - Shall not exceed 29 NTUs above background

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

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

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

V - Analyte was detected in both sample and method blank

Appendix 1. Bench Sheets

Chronic Screening Bioassay Benchsheet

Sample Identification, Test Conditions and Physical Chemistry

State of Florida
Department of Environmental Protection
Biology Laboratory Chronic Screening Bioassay
Ceriodaphnia dubia Bench Sheet

Sample Source: Mid-County Services
Address: 2249 Spanish Vista Drive, Palm Harbor
County: Pinellas
NPDES Permit #FL 0034789
Contact/District Lori Pillsbury / Southwest-Tampa
Start Date 12-7-04 Time 1315 End Date: 12/13/04 Time 1300
LIMS entry: 12-17-04 MF verified: 12/17/04 DN
Incubator # 3 Temperature Range: 24.8 °C – 25.5 °C
Room B246 Temperature Range: 23.9 °C – 24.4 °C

SOP#: TA07_05
Light Intensity : 50 - 100 ft. candles - (yes) no
Photoperiod : 16 light 8 dark - (yes) no
Chamber size : 30 ml Organism Batch #: 43
Sample volume : 20 ml Organism age : < 24 hours

Feeding: Daily YCT Batch#: D.N. 5/4 5 0.1 ml
P. subcapitata Batch #: 41 0.1 ml
Organism: *Ceriodaphnia dubia*

Water Quality Parameters

	Field Chlorine mg/L			Lab Chlorine mg/L			Alkalinity mg/L as $CaCO_3$			Hardness mg/L as $CaCO_3$		
Lab Sample #:	1	2	3	1	2	3	1	2	3	1	2	3
Sample:	NOT measured			<0.03	<0.03	<0.03	170	154	159	309	295	293
Diluent/Control:	[redacted]			<0.03	<0.03	<0.03	107	107	107	89	89	89
Method:	—	—	—	Hach	Hach	Hach	Hach	Hach	Hach	Hach	Hach	Hach
Measured by:	—	—	—	CAP	SP	MF/DN	SD	SD	SD/DN	SD	SD	SD/DN
Verified by:	MF	MF	MF	SP	DN	DN MF	DN	DN	SD MF	DN	DN	SD MF

	Conductivity (circle one) µmhos-cm		mmhos-cm	Ammonia mg/L			Salinity ‰		
Lab Sample#:	1	2	3	1	2	3	1	2	3
Sample:	1124	1162	1145	<0.017	<0.017	<0.017	<1	<1	<1
Diluent/Control:	190	275 (A)	190	<0.017	<0.017	<0.017	<1	<1	<1
Method:	Mettler	Mettler	Mettler	Denver	Denver	Denver	Mettler	Mettler	Mettler
Measured by:	MF/DN	DN/SD	DN	DN	DN	MF	MF/DN	DN/MF	DN
Verified by:	DN MF	MF	MF	CAP	MF	DN	DN	SD	SD

Reproduction NOEC = 100%
Survival NOEC: 100%
(A) Control conductivity likely result of reading/measurement error. MF 12-17-04

conv. = conversion based on conductivity and temperature

Sample Received	LAB ID #	LIMS SAMPLE #	LIMS JOB #
Test Day 0	Sample: 1	F01084	TLH 2004 12-07-20
Test Day 2	Sample: 2	F02263	TLH 2004 12-09-17
Test Day 4	Sample: 3	803044	TLH 2004 12-13-03

Lab Sample #	Collection Date/Time	Received Date/Time
1	12/06/04 / 0800	12/07/04 1015
2	12/08/04 / 0800	12/9/04 1105
3	12-10-04 0800	12-11-04 1050

Diluent / Control Batch #:	Days Used
DMW #43	7
—	—

Investigators' signatures
Krista Pereira
Debra Nicholson
Marshall Faircloth
James Daniels
Jacob Pinchard

reviewer Nicole McWendorf

Comments: Culture vials for Isopleny Runs
Run Start: ① B14 ② B10 ④ B12 ⑦ B13 ⑧ B14 ⑨ B16 ⑪ B17 ⑫ B18
Run Used: ⑨ B19 ⑩ B20

Sample #2 was aerated for 30 min. to adjust D.O. from 9.0 mg/L to 8.2 mg/L on 12/9/04 and aerated for 35 min. on 12/10/04 for 2nd Bottle of Sample #2 to adjust D.O. from 9.0 to 8.1 mg/L. - D.N. 12/10/04

revised 8/14/04 JF

Test Page 1 000018

Facility: Mid-County Services

State of Florida
Department of Environmental Protection
Biology Laboratory Chronic Screening Bioassay
Ceriodaphnia dubia Bench Sheets - Reproduction
SOP TA07_05

Begin Test:
Date: 12-7-04 Time: 1315

End Test:
Date: 12/9/04 Time: 1300

LIMS Sample # 501084 for lab sample #1.

Conc.	Day	Replicate Number 1	2	3	4	5	6	7	8	9	10	total # young	# original organisms	young per adult
Control	0*												10	
	1												10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	0
	3	6	7	6	5	5	4	6	6	5	6	56	10	5.6
	4	7	8	9	8	7	4	8	8	7	8	74	10	7.4
	5 (B)	1	0	0	1	0	0	0	0	0	0	10	10	1.0
	6	8	10	8	12	13	9	9	9	10	7	35	10	8.5
	7	—	—	—	—	—	—	—	—	—	—	—	—	—
	8	—	—	—	—	—	—	—	—	—	—	—	—	—
	Total	22	25	23	24	25	17	23	23	22	21	225	10	22.5
100%	0*												10	
	1												10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	0
	3	4	5	4	5	5	5	0	4	4	5	41	10	4.1
	4	10	9	0	8	8	8	6	0	7	8	64	10	6.4
	5	0	0	7	0	0	0	12	10	0	0	29	10	2.9
	6	9	13	0	11	12	10	13	14	12	13	107	10	10.7
	7	-	-	-	-	-	-	-	-	-	-	—	—	—
	8	23 (B)	-	-	-	- (C)	-	-	-	-	-	-	-	-
	Total	23	27	11	24	24	23	31	28	23	26	241	10	24.1

*Day 0 = equals test initiation day. X = Dead (original organism)

organisms loaded by: CAP

Day	**Counted by:
0	MF
1	ML
2	DW
3	MS
4	ME
5	DW
6	MF
7	—
8	—

**Initials-signatures on Chemistry page.

Comments: Control CV: 10.3%
Initials used 1-6a.m. Pmsd: 14.02
B-1
B10
B12
B13
B14
B16
B17
B18
B19
B20
Test terminated at Day 6 due to reproduction criteria being met (60% surviving females producing 3rd brood) MF 12-13-04
A - R1 control DW 5 : 1 MF 12-16-04
B - Total Rep 1 : 23 MF 12-16-04
C - Total Rep 5 : 23 MF 12-16-04

T-test Value 0.87723
T-Table Value 1.734 df = 18

reproduction	
LOEC =	NA
NOEC =	100%

Test acceptability
Mean control reproduction 15/female (yes) no
Third Brood ≥8 in 60% of surviving females: yes no
Temperature range ≤3°: (yes) no
Control survival ≥80%: (yes) no

revised 7/14/04 JF

000019

Ceriodaphnia dubia Chronic Bioassay Parameters

SOP TA07_05

Sample Source: Mid-County Services
LIMS Sample #: 801684.1 (for lab sample 1)
Start Date: 12-7-04 End Date: 12/13/04
Time: 1315 Time: 1305

Comment: Test Terminated at Day 6. Day 2 new control conductivity likely a recording error. MF 12-16-04

Test Day ↓		Conc.	New Sample: Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Cond (µmhos/cm) (mmhos/cm)	Old Sample: Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Cond (µmhos/cm) (mmhos/cm)
Day 0	sample:	Control	A	7.9	24.2	7.7	190					
	1	100%	A	7.8	25.0	7.7	1070					
	Measured by:			MF	CAP	MF	MF					
	Recorded by:			MF	CAP	MF	MF					
Day 1	sample:	Control	B	8.1	24.0	7.8	190	B	8.1	24.1	7.7	205
	1	100%	B	7.8	24.0	7.5	1075	B	8.3	24.1	7.6	1140
	Measured by:			MF	MF	MF	MF		MF	MF	MF	MF
	Recorded by:			MF	MF	MF	MF		MF	MF	MF	MF
Day 2	sample:	Control	C	8.0	24.1	7.5	275	C	7.9	24.3	7.5	200
	2	100%	C	7.8	25.0	7.9	1115	C	8.3	24.3	7.4	1210
	Measured by:			JD	JD	JD	JD		DN	DN	DN	DN
	Recorded by:			JD	JD	JD	JD		DN	DN	DN	DN
Day 3	sample:	Control	D	8.2	24.2	8.1	180	D	8.1	24.3	7.7	200
	2	100%	D	7.9	24.0	7.8	1095	D	8.3	24.5	7.4	1175
	Measured by:			MF	MF	MF	MF		MF	MF	MF	MF
	Recorded by:			MF	MF	MF	MF		MF	MF	MF	MF
Day 4	sample:	Control	E	8.1	24.0	7.4	190	E	8.1	24.3	7.7	200
	3	100%	E	7.9 @24.0	24.0	8.8	1045	E	8.3	24.5	7.7	1260
	Measured by:			DN	DN	DN	DN		DN	DN	DN	DN
	Recorded by:			DN	DN	DN	DN		DN	DN	DN	DN
Day 5	sample:	Control	F	8.0	24.2	7.7	180	F	7.9	24.2	7.8	205
	3	100%	F	7.8	24.5	8.3	1125	F	8.3	24.0	7.9	1180
	Measured by:			DN	DN	DN	DN		DN	DN	DN	DN
	Recorded by:			DN	DN	DN	DN		DN	DN	DN	DN
Day 6	sample:	Control	G	NOT MEASURED				G	8.1	24.0	7.8	200
	3	100%	G					G	8.2	24.1	7.7	1170
	Measured by:								DN	DN	DN	DN
	Recorded by:								DN	DN	DN	DN
Day 7	sample:	Control	H					H				
	3	100%	H	NA				H			NA	
	Measured by:											
	Recorded by:											
Day 8	sample:	Control						I				
	3	100%						I		NA		
	Measured by:											
	Recorded by:											

Test Rep. = Replicate Circle µmhos-cm or mmhos-cm

revised 6/24/04 mf

(a) T_{IC25} = 24.4 on Day 4 – DN 12/11/04

Test Page 3

000020

Chronic Screening Bioassay Benchsheet

Sample Identification, Test Conditions and Physical Chemistry

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

Sample Source: Mid-County Services
Address: 2299 Spanish Vista Drive, Palm Harbor
County: Pinellas
NPDES Permit #FL 0034789
Contact/District Lori Pillsbury / Southwest - Tampa
Start Date 12-7-04 Time 1330 End Date: 12/14/04 Time 0930
LIMS entry: 12-7-04 MF verified: 12/7/04 DN
Incubator # 3 Temperature Range: 24.8 °C - 25.5 °C
Room B246 Temperature Range: 23.7 °C - 24.4 °C
Feeding: 2 X Daily Artemia Lot:#: #12542SG

P. promelas SOP#: TA07_09 *M. beryllina* SOP#: TA07_14
Light Intensity : 50 - 100 ft. candles - (yes) no
Photoperiod : 16 light 8 dark (yes) no
Chamber size : 1 L Organism Batch #: 31
Sample volume : 500 ml Organism age : 1 day (hours / days)
Organism: (*P. promelas*) / *M.beryllina* (circle one)

Water Quality Parameters

	Field Chlorine mg/L			Lab Chlorine mg/L			Alkalinity mg/L as $CaCO_3$			Hardness mg/L as $CaCO_3$		
Lab Sample #:	1	2	3	1	2	3	1	2	3	1	2	3
Sample:	Not measured			<0.03	<0.03	<0.03	170	154	159	309	295	293
Diluent/Control:				<0.03	<0.03	<0.03	97	97	97	145	145	145
Method:	—	—	—	Hach	Hach	Hach	Hach	Hach	Hach	Hach	Hach	Hach
Measured by:	—	—	—	(illegible)	SP	SP/DN	JD	JD	SP/DN	JD	JD	SP/DN
Verified by:	DN	DN	DN	DN	DN	DN MF	DN	DN	JD	DN	DN	JD

	Conductivity (circle one) umhos-cm		mmhos-cm	Ammonia mg/L			Salinity ‰		
Lab Sample#:	1	2	3	1	2	3	1	2	3
Sample:	1124	1162	1145	<0.017	<0.017	<0.017	<1	<1	<1
Diluent/Control:	335	345	345	<0.017	<0.017	<0.017	<1	<1	<1
Method:	Mettler	Mettler	Mettler	Denver	Denver	Denver	Mettler	Mettler	Mettler
Measured by:	MF/DN	SP/DN	DN	DN	DN	MF	MF/DN	MF/DN	DN
Verified by:	DN MF	MF	MF	JD	JD	JD	DN	JD	JD

conv. = conversion based on conductivity and temperature

Sample Received	LAB ID #	LIMS SAMPLE #	LIMS JOB #
Test Day 0	Sample: 1	801084	TLH 2004 12-07-20
Test Day 2	Sample: 2	802263	TLH 2004 12-09-17
Test Day 4	Sample: 3	803044	TLH 2004 12-13-03

Lab Sample #	Collection Date/Time	Received Date/Time
1	12/06/04 / 0800	12/07/04 / 1015
2	12/08/04 / 0800	12/9/04 / 1105
3	12/10/04 / 0800	12/11/04 / 1056

Diluent / Control Batch #:	Days Used
MHW / ZP	8
—	—

Investigators' signatures
Christa Pereira
Marshall Faircloth
James Daniels
Fredd Pritchard
Jessica Nicholson

reviewer Nicole Mollendorf

Comments: Sample #2, bottle 1 was aerated to adjust DO from 9.0 mg/L to 8.2 mg/L for 30 min. and Bottle #2 was aerated for 35 min. to adjust DO. from 9.0 mg/L to 8.1 mg/L. DN 12/10/04.

revised 6/14/04 JF

Test Page 1

000027

[redacted]

Chronic Screening Test Survival Benchsheet

Facility: Mid-County Services

LIMS Sample Number: 80184
(for Lab Sample # 1)

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

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

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

Survival	%CV	PMSD
Control	5.1	6.23

Survival	Table	Calculated	dF
T-test	1.94300	0.65463	6

Comments:

revised 6/24/04 MF

000028

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

Sample Source: Mid-County Services
LIMS Sample #: 801084 (for Lab sample #1)
Start Date: 12-7-04 End Date: 12/14/04
Time: ~~1400~~ 1330 (AB) Time: 0930

Test Day			New Sample						Old Sample					
							Cond						Cond	
	Conc.	Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	(µmhos/cm) (mmhos/cm)	Salinity ppth	Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	(µmhos/cm) (mmhos/cm)	Salinity ppth
Day 0 sample:	Control	A	7.9	24.0	7.6	335	—						
1	100%	A	7.8	24.8	7.5	1065	—						
Measured by:			MF	CAO	MF	MF	MF						
Recorded by:			MF	MF	MF	MF	MF						
Day 1 sample:	Control	B	7.9	24.9	7.7	345	—	B	7.8	24.9	7.4	345	—
1	100%	B	7.8	24.9	7.5	1070	—	B	8.1	25.0	7.5	1075	—
Measured by:			MF	MF	MF	MF	—		MF	MF	MF	MF	—
Recorded by:			MF	MF	MF	MF	—		MF	MF	MF	MF	—
Day 2 sample:	Control	C	7.9	24.0	7.5	345	<1	C	7.7	24.0	7.1	350	<1
2	100%	C	7.8	24.3	7.7	1115	<1	C	8.1	24.0	7.1	1085	<1
Measured by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
Recorded by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
Day 3 sample:	Control	D	8.1	24.3	7.6	365	<1	D	8.0	24.3	~~24.A~~	395	<1
2	100%	D	7.9	24.4	7.7	1130	<1	D	8.2	24.4	7.2	1140	<1
Measured by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
Recorded by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
Day 4 sample:	Control	A	8.0	24.6	7.6	345	<1	A	8.0	25.7	7.7	360	<1
3	100%	A (B)	~~8.4~~ 8.1	24.7	8.1	1140	<1	A	8.2	25.7	7.4	1145	<1
Measured by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
Recorded by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
Day 5 sample:	Control	B	8.1	24.5	7.6	345	<1	B	7.5	24.2	5.9	355	<1
3	100%	B	7.8	24.8	7.2	1130	<1	B	7.8	24.4	5.4	1145	<1
Measured by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
Recorded by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
Day 6 sample:	Control	C	7.8	24.4	7.4	350	<1	C	7.6	24.2	5.9	1120	<1
3	100%	C	7.9	24.7	7.2	1135	<1	C	7.9 (C)	25.DN	5.1	1170	<1
Measured by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
Recorded by:			DN	DN	DN	DN	DN		DN	DN	DN	DN	DN
Day 7 sample:	Control							D	7.5	24.0	5.8	365	<1
3	100%							D	7.9	24.0	5.2	1200	<1
Measured by:									DN	DN	DN	DN	DN
Recorded by:									DN	DN	DN	DN	DN

A 73-hour place 5 D.

(B) pH @ Day 4 = 8.0 100%. 1st measurement was for different sample. D.N. 12/1/04

(C) $T_{100\%}$ = 24.4°C D.N. 12/13/04

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

Comments:

revised 6/24/04 mf

000029

Chronic Screening Test Weighing Benchsheet

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

Facility: Mid County Services

LIMS Sample Number: 801084
(for Lab Sample # 1)

Concentration	Replicate	Pan #	Pan wt. g	Pan + Fish g	Fish wt. g	Original # Fish	Mean wt. mg
			mean wt = fish wt divided by 10 convert g to mg: move decimal 3 places to right				
Control	A	66	0.0250	0.0287	0.0037	10	0.37
	B	67	0.0257	0.0288	0.0031	10	0.31
	C	68	0.0237	0.0274	0.0037	10	0.37
	D	69	0.0247	~~0.0226~~ 0.0273 DN	0.0026	10	0.26 ④
100 % sample	A	70	0.0245	0.0268	0.0023	10	0.23
	B	71	0.0260	0.0284	0.0024	10	0.24
	C	72	0.0242	0.0273	0.0031	10	0.31
	D	73	0.0256	0.0290	0.0034	10	0.34
Control	A					10	
	B					10	
	C					10	
	D					10	
% sample	A					10	
	B					10	
	C					10	
	D					10	
	Weighed by initials:		DN	DN			

④ 0.027: transcription error D.N. 12/4/04

Growth	%CV	PMSD
Control	16.2	22.34

Growth	Table	Calculated	dF
T-test	1.9440	1.25123	6

Drying	
Temperature °C:	105
Hours:	6.5

Tare Weighing Date: 12/13/04	Final Weighing Date:		Measured Value		S-weight Value
Tare Pan 1 after Pan 5	0.0251 @ 0.0250	S-weights	0.0100	@	0.0100
Tare Pan 1 after Pan 8	0.0255 @ 0.0250	at tare	0.0399	@	0.0400
Final Pan 1 after Pan 5	0.0287 @ 0.0287	S-weights	0.0100	@	0.0100
Final Pan 1 after Pan 8	0.0286 @ 0.0287	at final	0.0400	@	0.0400

Comments: Mean control wt = 0.3275 mg/organism
Mean 100% wt = 0.2800 mg/organism

revised 6/21/04 MF

Test Page 5

000031

Appendix 2. Chemical Analyses performed on the effluent from the Mid-County Services WWTP Outfall D-001, sampled on December 6, 8, and 10, 2005.

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
12/6/2004 8:00	31382	Bio-Toxicology	Bioassay-Chronic-Scrn-FW-C.dubia, NOEC	100		NOEC		
12/6/2004 8:00	31382	Bio-Toxicology	Bioassay-Chronic-Scrn-FW-Fish, NOEC	100		NOEC		
12/6/2004 9:40	31383	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383		2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
12/6/2004 9:40	31383	BNA-Water	2,4-Dinitrophenol	14	ug/L	UJ	14	57
12/6/2004 9:40	31383	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	UJ	2.9	11
12/6/2004 9:40	31383	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
12/6/2004 9:40	31383	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
12/6/2004 9:40	31383	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
12/6/2004 9:40	31383	BNA-Water	4,4'-DDT	1.4	ug/L	UJ	1.4	5.7
12/6/2004 9:40	31383	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
12/6/2004 9:40	31383	BNA-Water	4-Nitrophenol	14	ug/L	UJ	14	57
12/6/2004 9:40	31383	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
12/6/2004 9:40	31383	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Benzidine	95	ug/L	U	95	380
12/6/2004 9:40	31383	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
12/6/2004 9:40	31383	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
12/6/2004 9:40	31383	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
12/6/2004 9:40	31383	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
12/6/2004 9:40	31383	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
12/6/2004 9:40	31383	BNA-Water	Diethyl phthalate	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
12/6/2004 9:40	31383	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
12/6/2004 9:40	31383	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
12/6/2004 9:40	31383	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
12/6/2004 9:40	31383	BNA-Water	Endrin	1.4	ug/L	UJ	1.4	5.7
12/6/2004 9:40	31383	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
12/6/2004 9:40	31383	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
12/6/2004 9:40	31383	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
12/6/2004 9:40	31383	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
12/6/2004 9:40	31383	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	UJ	2.9	11
12/6/2004 9:40	31383	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
12/6/2004 9:40	31383	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
12/6/2004 9:40	31383	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
12/6/2004 9:40	31383	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	11
12/6/2004 9:40	31383	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
12/6/2004 9:40	31383	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11
12/6/2004 9:40	31383	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:40	31383	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
12/6/2004 9:40	31383	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
12/6/2004 9:40	31383	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
12/6/2004 9:40	31383	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
12/6/2004 9:40	31383	Bio-AGP/LimNut	Algal Growth Potential	52.9	mg DryWt/L	A	0.3	0.9
12/6/2004 9:40	31383	Bio-BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	0.69	mg/L		I	
12/6/2004 9:40	31383	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
12/6/2004 9:40	31383	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
12/6/2004 9:40	31383	GC-Water	Alachlor	0.58	ug/L	U	0.58	2.3
12/6/2004 9:40	31383	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.19
12/6/2004 9:40	31383	GC-Water	Atrazine	0.1	ug/L	I	0.048	0.19
12/6/2004 9:40	31383	GC-Water	Azinphos Methyl	0.048	ug/L	U	0.048	0.19
12/6/2004 9:40	31383	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
12/6/2004 9:40	31383	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
12/6/2004 9:40	31383	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.19
12/6/2004 9:40	31383	GC-Water	Chlorpyrifos Methyl	0.096	ug/L	U	0.096	0.38
12/6/2004 9:40	31383	GC-Water	Diazinon	0.048	ug/L	UJ	0.048	0.19
12/6/2004 9:40	31383	GC-Water	Ethion	0.048	ug/L	U	0.048	0.19
12/6/2004 9:40	31383	GC-Water	Ethoprop	0.096	ug/L	U	0.096	0.38
12/6/2004 9:40	31383	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
12/6/2004 9:40	31383	GC-Water	Fonofos	0.096	ug/L	U	0.096	0.38
12/6/2004 9:40	31383	GC-Water	Hexazinone	0.096	ug/L	U	0.096	0.38
12/6/2004 9:40	31383	GC-Water	Malathion	0.14	ug/L	UJ	0.14	0.56
12/6/2004 9:40	31383	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
12/6/2004 9:40	31383	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.9
12/6/2004 9:40	31383	GC-Water	Metribuzin	0.096	ug/L	U	0.096	0.38
12/6/2004 9:40	31383	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
12/6/2004 9:40	31383	GC-Water	Naled	0.77	ug/L	UJ	0.77	3.1
12/6/2004 9:40	31383	GC-Water	Norflurazon	0.096	ug/L	U	0.096	0.38
12/6/2004 9:40	31383	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
12/6/2004 9:40	31383	GC-Water	Parathion Methyl	0.096	ug/L	U	0.096	0.38
12/6/2004 9:40	31383	GC-Water	Phorate	0.048	ug/L	U	0.048	0.19
12/6/2004 9:40	31383	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
12/6/2004 9:40	31383	GC-Water	Simazine	0.048	ug/L	U	0.048	0.19
12/6/2004 9:40	31383	Metals-Water	Aluminum	6.9	ug/L	I	5	20
12/6/2004 9:40	31383	Metals-Water	Arsenic	6	ug/L	U	6	24
12/6/2004 9:40	31383	Metals-Water	Cadmium	0.075	ug/L	U	0.075	0.3
12/6/2004 9:40	31383	Metals-Water	Calcium	84.6	mg/L		0.05	0.2
12/6/2004 9:40	31383	Metals-Water	Chromium	2	ug/L	U	2	8
12/6/2004 9:40	31383	Metals-Water	Copper	3	ug/L		0.75	3
12/6/2004 9:40	31383	Metals-Water	Iron	54	ug/L		10	40
12/6/2004 9:40	31383	Metals-Water	Lead	0.66	ug/L	U	0.66	2.6
12/6/2004 9:40	31383	Metals-Water	Magnesium	8.5	mg/L		0.02	0.08
12/6/2004 9:40	31383	Metals-Water	Nickel	4.6	ug/L	I	2	8
12/6/2004 9:40	31383	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
12/6/2004 9:40	31383	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
12/6/2004 9:40	31383	Metals-Water	Zinc	26	ug/L		3	12
12/6/2004 9:40	31383	Nutrients-Liquid	Ammonia-N	0.033	mg N/L		0.01	0.02

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
12/6/2004 9:40	31383	Nutrients-Liquid	Color	5	PCU	U	5	5
12/6/2004 9:40	31383	Nutrients-Liquid	Kjeldahl Nitrogen	1.1	mg N/L		0.06	0.2
12/6/2004 9:40	31383	Nutrients-Liquid	NO2NO3-N	1.7	mg N/L		0.02	0.05
12/6/2004 9:40	31383	Nutrients-Liquid	O-Phosphate-P	0.69	mg P/L		0.08	0.2
12/6/2004 9:40	31383	Nutrients-Liquid	Organic Carbon	5.8	mg C/L		1	5
12/6/2004 9:40	31383	Nutrients-Liquid	TSS	4	mg/L	U	4	16
12/6/2004 9:40	31383	Nutrients-Liquid	Total-P	0.77	mg P/L		0.02	0.06
12/6/2004 9:40	31383	Nutrients-Liquid	Turbidity	0.4	NTU		0.05	0.05
12/6/2004 9:40	31383	Overflow	Oil and Grease	1.2	mg/l	IV		
12/6/2004 9:40	31383	VOC-Water	Bromodichloromethane	9.5	ug/L		0.2	1
12/6/2004 9:40	31383	VOC-Water	Bromoform	0.5	ug/L	U	0.5	2
12/6/2004 9:40	31383	VOC-Water	Chloroform	65	ug/L		0.2	1
12/6/2004 9:40	31383	VOC-Water	Dibromochloromethane	0.81	ug/L	I	0.2	1
12/6/2004 9:40	TRIP BLANK	VOC-Water	Bromodichloromethane	0.2	ug/L	U	0.2	1
12/6/2004 9:40	TRIP BLANK	VOC-Water	Bromoform	0.5	ug/L	U	0.5	2
12/6/2004 9:40	TRIP BLANK	VOC-Water	Chloroform	0.2	ug/L	U	0.2	1
12/6/2004 9:40	TRIP BLANK	VOC-Water	Dibromochloromethane	0.2	ug/L	U	0.2	1
12/6/2004 9:45	31384	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
12/6/2004 9:45	31384	BNA-Water	2,4-Dinitrophenol	14	ug/L	UJ	14	57
12/6/2004 9:45	31384	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	UJ	2.9	11
12/6/2004 9:45	31384	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
12/6/2004 9:45	31384	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
12/6/2004 9:45	31384	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
12/6/2004 9:45	31384	BNA-Water	4,4'-DDT	1.4	ug/L	UJ	1.4	5.7
12/6/2004 9:45	31384	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
12/6/2004 9:45	31384	BNA-Water	4-Nitrophenol	14	ug/L	UJ	14	57
12/6/2004 9:45	31384	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
12/6/2004 9:45	31384	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Benzidine	95	ug/L	U	95	380
12/6/2004 9:45	31384	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
12/6/2004 9:45	31384	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
12/6/2004 9:45	31384	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
12/6/2004 9:45	31384	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
12/6/2004 9:45	31384	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
12/6/2004 9:45	31384	BNA-Water	Diethyl phthalate	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
12/6/2004 9:45	31384	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
12/6/2004 9:45	31384	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
12/6/2004 9:45	31384	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
12/6/2004 9:45	31384	BNA-Water	Endrin	1.4	ug/L	UJ	1.4	5.7
12/6/2004 9:45	31384	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
12/6/2004 9:45	31384	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
12/6/2004 9:45	31384	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
12/6/2004 9:45	31384	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
12/6/2004 9:45	31384	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	UJ	2.9	11
12/6/2004 9:45	31384	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
12/6/2004 9:45	31384	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
12/6/2004 9:45	31384	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
12/6/2004 9:45	31384	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	11
12/6/2004 9:45	31384	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
12/6/2004 9:45	31384	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11
12/6/2004 9:45	31384	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8
12/6/2004 9:45	31384	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
12/6/2004 9:45	31384	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
12/6/2004 9:45	31384	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
12/6/2004 9:45	31384	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
12/6/2004 9:45	31384	GC-Water	Alachlor	0.63	ug/L	U	0.63	2.5
12/6/2004 9:45	31384	GC-Water	Ametryn	0.053	ug/L	U	0.053	0.21
12/6/2004 9:45	31384	GC-Water	Atrazine	0.053	ug/L	U	0.053	0.21
12/6/2004 9:45	31384	GC-Water	Azinphos Methyl	0.053	ug/L	U	0.053	0.21
12/6/2004 9:45	31384	GC-Water	Bromacil	0.21	ug/L	U	0.21	0.84
12/6/2004 9:45	31384	GC-Water	Butylate	0.21	ug/L	U	0.21	0.84
12/6/2004 9:45	31384	GC-Water	Chlorpyrifos Ethyl	0.053	ug/L	U	0.053	0.21
12/6/2004 9:45	31384	GC-Water	Chlorpyrifos Methyl	0.11	ug/L	U	0.11	0.44
12/6/2004 9:45	31384	GC-Water	Diazinon	0.053	ug/L	UJ	0.053	0.21
12/6/2004 9:45	31384	GC-Water	Ethion	0.053	ug/L	U	0.053	0.21
12/6/2004 9:45	31384	GC-Water	Ethoprop	0.11	ug/L	U	0.11	0.44
12/6/2004 9:45	31384	GC-Water	Fenamiphos	0.21	ug/L	U	0.21	0.84
12/6/2004 9:45	31384	GC-Water	Fonofos	0.11	ug/L	U	0.11	0.44
12/6/2004 9:45	31384	GC-Water	Hexazinone	0.11	ug/L	U	0.11	0.44
12/6/2004 9:45	31384	GC-Water	Malathion	0.16	ug/L	UJ	0.16	0.64
12/6/2004 9:45	31384	GC-Water	Metalaxyl	0.26	ug/L	U	0.26	1
12/6/2004 9:45	31384	GC-Water	Metolachlor	0.53	ug/L	U	0.53	2.1
12/6/2004 9:45	31384	GC-Water	Metribuzin	0.11	ug/L	U	0.11	0.44
12/6/2004 9:45	31384	GC-Water	Mevinphos	0.21	ug/L	U	0.21	0.84
12/6/2004 9:45	31384	GC-Water	Naled	0.84	ug/L	UJ	0.84	3.4
12/6/2004 9:45	31384	GC-Water	Norflurazon	0.11	ug/L	U	0.11	0.44
12/6/2004 9:45	31384	GC-Water	Parathion Ethyl	0.16	ug/L	U	0.16	0.64
12/6/2004 9:45	31384	GC-Water	Parathion Methyl	0.11	ug/L	U	0.11	0.44
12/6/2004 9:45	31384	GC-Water	Phorate	0.053	ug/L	U	0.053	0.21
12/6/2004 9:45	31384	GC-Water	Prometryn	0.16	ug/L	U	0.16	0.64
12/6/2004 9:45	31384	GC-Water	Simazine	0.053	ug/L	U	0.053	0.21
12/6/2004 9:45	31384	Metals-Water	Aluminum	5	ug/L	U	5	20
12/6/2004 9:45	31384	Metals-Water	Arsenic	6	ug/L	U	6	24
12/6/2004 9:45	31384	Metals-Water	Cadmium	0.075	ug/L	U	0.075	0.3
12/6/2004 9:45	31384	Metals-Water	Calcium	0.05	mg/L	U	0.05	0.2
12/6/2004 9:45	31384	Metals-Water	Chromium	2	ug/L	U	2	8
12/6/2004 9:45	31384	Metals-Water	Copper	0.75	ug/L	U	0.75	3
12/6/2004 9:45	31384	Metals-Water	Iron	10	ug/L	U	10	40

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
12/6/2004 9:45	31384	Metals-Water	Lead	0.66	ug/L	U	0.66	2.6
12/6/2004 9:45	31384	Metals-Water	Magnesium	0.02	mg/L	U	0.02	0.08
12/6/2004 9:45	31384	Metals-Water	Nickel	2	ug/L	U	2	8
12/6/2004 9:45	31384	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
12/6/2004 9:45	31384	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
12/6/2004 9:45	31384	Metals-Water	Zinc	3	ug/L	U	3	12
12/6/2004 9:45	31384	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
12/6/2004 9:45	31384	Nutrients-Liquid	Kjeldahl Nitrogen	0.06	mg N/L	U	0.06	0.2
12/6/2004 9:45	31384	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01
12/6/2004 9:45	31384	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01
12/6/2004 9:45	31384	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06
12/6/2004 9:45	31384	Overflow	Oil and Grease	0.78	mg/l	IV		
12/6/2004 9:45	31384	VOC-Water	Bromodichloromethane	0.2	ug/L	U	0.2	1
12/6/2004 9:45	31384	VOC-Water	Bromoform	0.5	ug/L	U	0.5	2
12/6/2004 9:45	31384	VOC-Water	Chloroform	0.2	ug/L	U	0.2	1
12/6/2004 9:45	31384	VOC-Water	Dibromochloromethane	0.2	ug/L	U	0.2	1
12/8/2004 9:30	31429	BNA-Water	1,2,4-Trichlorobenzene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	1,2-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	1,3-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	1,4-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	2,4,6-Trichlorophenol	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	2,4-Dichlorophenol	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
12/8/2004 9:30	31429	BNA-Water	2,4-Dinitrophenol	14	ug/L	UJ	14	58
12/8/2004 9:30	31429	BNA-Water	2,4-Dinitrotoluene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	2,6-Dinitrotoluene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	2-Chloronaphthalene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	2-Chlorophenol	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	UJ	2.9	12
12/8/2004 9:30	31429	BNA-Water	2-Nitrophenol	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
12/8/2004 9:30	31429	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.8
12/8/2004 9:30	31429	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.8
12/8/2004 9:30	31429	BNA-Water	4,4'-DDT	1.4	ug/L	UJ	1.4	5.8
12/8/2004 9:30	31429	BNA-Water	4-Bromophenyl phenyl ether	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	4-Chloro-3-methylphenol	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.7
12/8/2004 9:30	31429	BNA-Water	4-Nitrophenol	14	ug/L	UJ	14	58
12/8/2004 9:30	31429	BNA-Water	Acenaphthene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Acenaphthylene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.8
12/8/2004 9:30	31429	BNA-Water	Anthracene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Benzidine	96	ug/L	U	96	380
12/8/2004 9:30	31429	BNA-Water	Benzo(a)anthracene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Benzo(a)pyrene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Benzo(b)fluoranthene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Benzo(g,h,i)perylene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Benzo(k)fluoranthene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Bis(2-chloroethoxy)methane	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Bis(2-chloroethyl)ether	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	12
12/8/2004 9:30	31429	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	58
12/8/2004 9:30	31429	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
12/8/2004 9:30	31429	BNA-Water	Chrysene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
12/8/2004 9:30	31429	BNA-Water	Di-n-octyl phthalate	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Dibenzo(a,h)anthracene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.8
12/8/2004 9:30	31429	BNA-Water	Diethyl phthalate	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
12/8/2004 9:30	31429	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15

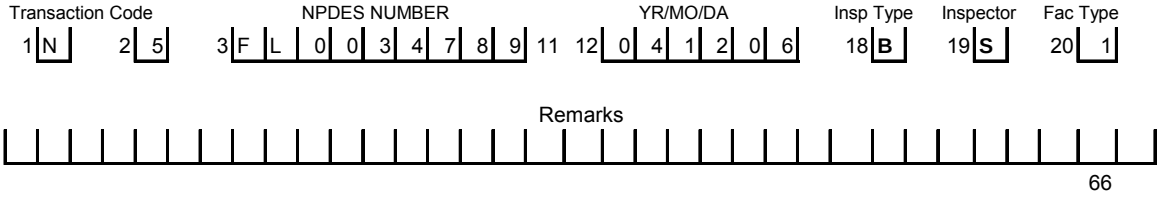
Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
12/8/2004 9:30	31429	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
12/8/2004 9:30	31429	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.8
12/8/2004 9:30	31429	BNA-Water	Endrin	1.4	ug/L	UJ	1.4	5.8
12/8/2004 9:30	31429	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
12/8/2004 9:30	31429	BNA-Water	Fluoranthene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Fluorene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.8
12/8/2004 9:30	31429	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.8
12/8/2004 9:30	31429	BNA-Water	Hexachlorobenzene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	12
12/8/2004 9:30	31429	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	UJ	2.9	12
12/8/2004 9:30	31429	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	12
12/8/2004 9:30	31429	BNA-Water	Indeno(1,2,3-cd)pyrene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Isophorone	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.7
12/8/2004 9:30	31429	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.7
12/8/2004 9:30	31429	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	12
12/8/2004 9:30	31429	BNA-Water	Naphthalene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.7
12/8/2004 9:30	31429	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	12
12/8/2004 9:30	31429	BNA-Water	Phenanthrene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Phenol	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	Pyrene	0.96	ug/L	U	0.96	3.8
12/8/2004 9:30	31429	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.8
12/8/2004 9:30	31429	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.8
12/8/2004 9:30	31429	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.8
12/8/2004 9:30	31429	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.8
12/8/2004 9:30	31429	GC-Water	Alachlor	0.57	ug/L	U	0.57	2.3
12/8/2004 9:30	31429	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.19
12/8/2004 9:30	31429	GC-Water	Atrazine	0.11	ug/L	I	0.048	0.19
12/8/2004 9:30	31429	GC-Water	Azinphos Methyl	0.048	ug/L	U	0.048	0.19
12/8/2004 9:30	31429	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
12/8/2004 9:30	31429	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
12/8/2004 9:30	31429	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.19
12/8/2004 9:30	31429	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	U	0.095	0.38
12/8/2004 9:30	31429	GC-Water	Diazinon	0.048	ug/L	UJ	0.048	0.19
12/8/2004 9:30	31429	GC-Water	Ethion	0.048	ug/L	U	0.048	0.19
12/8/2004 9:30	31429	GC-Water	Ethoprop	0.095	ug/L	U	0.095	0.38
12/8/2004 9:30	31429	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
12/8/2004 9:30	31429	GC-Water	Fonofos	0.095	ug/L	U	0.095	0.38
12/8/2004 9:30	31429	GC-Water	Hexazinone	0.095	ug/L	U	0.095	0.38
12/8/2004 9:30	31429	GC-Water	Malathion	0.14	ug/L	UJ	0.14	0.56
12/8/2004 9:30	31429	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
12/8/2004 9:30	31429	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.9
12/8/2004 9:30	31429	GC-Water	Metribuzin	0.095	ug/L	U	0.095	0.38
12/8/2004 9:30	31429	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
12/8/2004 9:30	31429	GC-Water	Naled	0.76	ug/L	UJ	0.76	3
12/8/2004 9:30	31429	GC-Water	Norflurazon	0.095	ug/L	U	0.095	0.38
12/8/2004 9:30	31429	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
12/8/2004 9:30	31429	GC-Water	Parathion Methyl	0.095	ug/L	U	0.095	0.38
12/8/2004 9:30	31429	GC-Water	Phorate	0.048	ug/L	U	0.048	0.19
12/8/2004 9:30	31429	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
12/8/2004 9:30	31429	GC-Water	Simazine	0.048	ug/L	U	0.048	0.19
12/8/2004 9:30	31429	Metals-Water	Aluminum	101	ug/L		5	20
12/8/2004 9:30	31429	Metals-Water	Arsenic	6	ug/L	U	6	24
12/8/2004 9:30	31429	Metals-Water	Cadmium	0.075	ug/L	U	0.075	0.3
12/8/2004 9:30	31429	Metals-Water	Calcium	27.2	mg/L		0.05	0.2
12/8/2004 9:30	31429	Metals-Water	Chromium	2	ug/L	U	2	8
12/8/2004 9:30	31429	Metals-Water	Copper	3.3	ug/L		0.75	3
12/8/2004 9:30	31429	Metals-Water	Iron	158	ug/L		10	40
12/8/2004 9:30	31429	Metals-Water	Lead	0.075	ug/L	U	0.075	0.3

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
12/8/2004 9:30	31429	Metals-Water	Magnesium	15.7	mg/L		0.02	0.08
12/8/2004 9:30	31429	Metals-Water	Nickel	2	ug/L	U	2	8
12/8/2004 9:30	31429	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
12/8/2004 9:30	31429	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
12/8/2004 9:30	31429	Metals-Water	Zinc	3	ug/L	U	3	12
12/8/2004 9:30	31429	Nutrients-Liquid	Ammonia-N	0.031	mg N/L		0.01	0.02
12/10/2004 9:10	31465	BNA-Water	1,2,4-Trichlorobenzene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	1,2-Dichlorobenzene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	1,3-Dichlorobenzene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	1,4-Dichlorobenzene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	2,4,6-Trichlorophenol	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	2,4-Dichlorophenol	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	2,4-Dimethylphenol	50	ug/L	U	50	200
12/10/2004 9:10	31465	BNA-Water	2,4-Dinitrophenol	15	ug/L	U	15	59
12/10/2004 9:10	31465	BNA-Water	2,4-Dinitrotoluene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	2,6-Dinitrotoluene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	2-Chloronaphthalene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	2-Chlorophenol	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	2-Methyl-4,6-dinitrophenol	3	ug/L	U	3	12
12/10/2004 9:10	31465	BNA-Water	2-Nitrophenol	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	3,3'-Dichlorobenzidine	40	ug/L	U	40	160
12/10/2004 9:10	31465	BNA-Water	4,4'-DDD	1.5	ug/L	U	1.5	5.9
12/10/2004 9:10	31465	BNA-Water	4,4'-DDE	1.5	ug/L	U	1.5	5.9
12/10/2004 9:10	31465	BNA-Water	4,4'-DDT	1.5	ug/L	U	1.5	5.9
12/10/2004 9:10	31465	BNA-Water	4-Bromophenyl phenyl ether	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	4-Chloro-3-methylphenol	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	4-Chlorophenyl phenyl ether	2	ug/L	U	2	7.9
12/10/2004 9:10	31465	BNA-Water	4-Nitrophenol	15	ug/L	U	15	59
12/10/2004 9:10	31465	BNA-Water	Acenaphthene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Acenaphthylene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Aldrin	1.5	ug/L	U	1.5	5.9
12/10/2004 9:10	31465	BNA-Water	Anthracene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Benzidine	99	ug/L	U	99	400
12/10/2004 9:10	31465	BNA-Water	Benzo(a)anthracene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Benzo(a)pyrene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Benzo(b)fluoranthene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Benzo(g,h,i)perylene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Benzo(k)fluoranthene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Bis(2-chloroethoxy)methane	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Bis(2-chloroethyl)ether	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Bis(2-chloroisopropyl)ether	3	ug/L	U	3	12
12/10/2004 9:10	31465	BNA-Water	Bis(2-ethylhexyl)phthalate	15	ug/L	U	15	59
12/10/2004 9:10	31465	BNA-Water	Butyl benzyl phthalate	5	ug/L	U	5	20
12/10/2004 9:10	31465	BNA-Water	Chrysene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Di-n-butyl phthalate	5	ug/L	U	5	20
12/10/2004 9:10	31465	BNA-Water	Di-n-octyl phthalate	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Dibenzo(a,h)anthracene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Dieldrin	1.5	ug/L	U	1.5	5.9
12/10/2004 9:10	31465	BNA-Water	Diethyl phthalate	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Dimethyl phthalate	50	ug/L	U	50	200
12/10/2004 9:10	31465	BNA-Water	Endosulfan I	4	ug/L	U	4	16
12/10/2004 9:10	31465	BNA-Water	Endosulfan II	4	ug/L	U	4	16
12/10/2004 9:10	31465	BNA-Water	Endosulfan sulfate	1.5	ug/L	U	1.5	5.9
12/10/2004 9:10	31465	BNA-Water	Endrin	1.5	ug/L	UJ	1.5	5.9
12/10/2004 9:10	31465	BNA-Water	Endrin aldehyde	4	ug/L	U	4	16
12/10/2004 9:10	31465	BNA-Water	Fluoranthene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Fluorene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Heptachlor	1.5	ug/L	U	1.5	5.9
12/10/2004 9:10	31465	BNA-Water	Heptachlor epoxide	1.5	ug/L	U	1.5	5.9
12/10/2004 9:10	31465	BNA-Water	Hexachlorobenzene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Hexachlorobutadiene	3	ug/L	U	3	12

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
12/10/2004 9:10	31465	BNA-Water	Hexachlorocyclopentadiene	3	ug/L	U	3	12
12/10/2004 9:10	31465	BNA-Water	Hexachloroethane	3	ug/L	U	3	12
12/10/2004 9:10	31465	BNA-Water	Indeno(1,2,3-cd)pyrene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Isophorone	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	N-Nitrosodi-n-propylamine	2	ug/L	U	2	7.9
12/10/2004 9:10	31465	BNA-Water	N-Nitrosodimethylamine	2	ug/L	U	2	7.9
12/10/2004 9:10	31465	BNA-Water	N-Nitrosodiphenylamine	3	ug/L	U	3	12
12/10/2004 9:10	31465	BNA-Water	Naphthalene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Nitrobenzene	2	ug/L	U	2	7.9
12/10/2004 9:10	31465	BNA-Water	Pentachlorophenol	3	ug/L	U	3	12
12/10/2004 9:10	31465	BNA-Water	Phenanthrene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Phenol	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	Pyrene	0.99	ug/L	U	0.99	4
12/10/2004 9:10	31465	BNA-Water	alpha-BHC	1.5	ug/L	U	1.5	5.9
12/10/2004 9:10	31465	BNA-Water	beta-BHC	1.5	ug/L	U	1.5	5.9
12/10/2004 9:10	31465	BNA-Water	delta-BHC	1.5	ug/L	U	1.5	5.9
12/10/2004 9:10	31465	BNA-Water	gamma-BHC	1.5	ug/L	U	1.5	5.9
12/10/2004 9:10	31465	GC-Water	Alachlor	0.58	ug/L	U	0.58	2.3
12/10/2004 9:10	31465	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.19
12/10/2004 9:10	31465	GC-Water	Atrazine	0.14	ug/L	I	0.048	0.19
12/10/2004 9:10	31465	GC-Water	Azinphos Methyl	0.048	ug/L	U	0.048	0.19
12/10/2004 9:10	31465	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
12/10/2004 9:10	31465	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
12/10/2004 9:10	31465	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.19
12/10/2004 9:10	31465	GC-Water	Chlorpyrifos Methyl	0.096	ug/L	U	0.096	0.38
12/10/2004 9:10	31465	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.19
12/10/2004 9:10	31465	GC-Water	Ethion	0.048	ug/L	U	0.048	0.19
12/10/2004 9:10	31465	GC-Water	Ethoprop	0.096	ug/L	U	0.096	0.38
12/10/2004 9:10	31465	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
12/10/2004 9:10	31465	GC-Water	Fonofos	0.096	ug/L	U	0.096	0.38
12/10/2004 9:10	31465	GC-Water	Hexazinone	0.096	ug/L	U	0.096	0.38
12/10/2004 9:10	31465	GC-Water	Malathion	0.14	ug/L	U	0.14	0.56
12/10/2004 9:10	31465	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
12/10/2004 9:10	31465	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.9
12/10/2004 9:10	31465	GC-Water	Metribuzin	0.096	ug/L	U	0.096	0.38
12/10/2004 9:10	31465	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
12/10/2004 9:10	31465	GC-Water	Naled	0.77	ug/L	UJ	0.77	3.1
12/10/2004 9:10	31465	GC-Water	Norflurazon	0.096	ug/L	U	0.096	0.38
12/10/2004 9:10	31465	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
12/10/2004 9:10	31465	GC-Water	Parathion Methyl	0.096	ug/L	U	0.096	0.38
12/10/2004 9:10	31465	GC-Water	Phorate	0.048	ug/L	U	0.048	0.19
12/10/2004 9:10	31465	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
12/10/2004 9:10	31465	GC-Water	Simazine	0.048	ug/L	U	0.048	0.19
12/10/2004 9:10	31465	Metals-Water	Aluminum	12	ug/L	I	5	20
12/10/2004 9:10	31465	Metals-Water	Arsenic	6	ug/L	U	6	24
12/10/2004 9:10	31465	Metals-Water	Cadmium	0.075	ug/L	U	0.075	0.3
12/10/2004 9:10	31465	Metals-Water	Calcium	91.3	mg/L		0.05	0.2
12/10/2004 9:10	31465	Metals-Water	Chromium	2	ug/L	U	2	8
12/10/2004 9:10	31465	Metals-Water	Copper	3.2	ug/L		0.75	3
12/10/2004 9:10	31465	Metals-Water	Iron	62	ug/L		10	40
12/10/2004 9:10	31465	Metals-Water	Lead	0.075	ug/L	U	0.075	0.3
12/10/2004 9:10	31465	Metals-Water	Magnesium	9.2	mg/L		0.02	0.08
12/10/2004 9:10	31465	Metals-Water	Nickel	4.8	ug/L	I	2	8
12/10/2004 9:10	31465	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
12/10/2004 9:10	31465	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
12/10/2004 9:10	31465	Metals-Water	Zinc	23	ug/L		3	12
12/10/2004 9:10	31465	Nutrients-Liquid	Ammonia-N	0.042	mg N/L		0.01	0.02

The Bioassay of Mid-County Services Wastewater Treatment Plant effluent sampled on December 6, 8, and 10, 2004, NPDES #FL0034789.

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



The Priority Pollutants Analysis for Bioassay of Mid-County Services Wastewater Treatment Plant effluent sampled on December 6, 8, and 10, 2004, NPDES #FL0034789.

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

