

Bioassays of

Starke WWTP

Bradford County

NPDES #FL0028126

Sampled October 13,15, and 17, 2003

March 2004

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

City of Starke Wastewater Treatment Facility, 602 Edwards Road, Starke, Bradford County, Florida, NPDES #FL0028126. Effluent samples for this facility were collected on October 13, 15, and 17, 2003.

Introduction

This facility is a conventional activated-sludge Wastewater Treatment Facility (WWTF) having a design flow of 1.65 MGD and an annual average daily flow (AADF) of 0.5 MGD (August 2002-June 2003). The treatment process includes coarse screening prior to the influent pump station, a flow equalization basin, influent screening, a vortex grit removal unit, two aeration basins, two clarifiers (each followed by a Parshall flume), a chlorine contact chamber and an irrigation pump station. Gas chlorine is used for disinfection and when effluent is discharged to surface waters, sulfur dioxide is used for dechlorination. The facility is permitted for both a surface water discharge and a land application discharge. The surface water discharge consists of a 1.25 MGD AADF permitted capacity discharge (Outfall D001) and a 0.4 MGD limited wet weather discharge (Outfall D002) to the Class III freshwaters of Alligator Creek. The land application discharge consists of a 0.8 MGD AADF permitted capacity slow-rate restricted public access system discharging to the City of Starke irrigation site (R001).

The facility is currently operating under Consent Order 02-0562 for problems with inflow and infiltration. According to plant operators, during large rain events, the facility flow can double (facility information provided by Brian Kelsay, FDEP, Northeast District, Jacksonville).

Methods

Samples were collected by Patrick O'Connor, C. Skintges, and Brian Kelsay 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_05,TA07_09, 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

Toxicity Test Results

Tests were performed October 14-21, 2003.

Ceriodaphnia dubia chronic screening bioassay –Toxic; NOEC <100%, reduced reproduction

Pimephales promelas chronic screening bioassay – Not Toxic; NOEC = 100%, growth
NOEC = 100%, survival

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, 30.3 mg Dry Wt/L of *Pseudokirchneriella subcapitata*, formerly known as *Selenastrum capricornutum*, was more than six times the "problem" threshold. The predicted AGP value based on nitrogen and phosphorous concentrations was 406 (±20%) mg dry wt/L (Table 3). The difference between the actual and the predicted AGP values indicates that there is algal growth inhibition in addition to the decreased reproduction in the *C. dubia* test.

See Table 3 for AGP results.

Chemistry Results

Total residual chlorine (TRC) was reported as being detected in the field in sample #1 (0.01 mg/L) and sample #3 (0.11 mg/L) but was not measured in sample #2. TRC was 0.02 mg/L or less in each of the bioassay samples in the laboratory. Total ammonia was not detected in the unpreserved bioassay samples, but was detected in concentrations ranging from 0.03-0.032 mg/L in the samples preserved for chemical analyses.

See Table 2 for chemicals detected in the effluent analytical chemistry samples.
See Appendix 1 for a complete list of chemical analyses performed.

Conclusion

The effluent collected from this facility on October 13, 15, and 17, 2003, showed chronic toxicity to the *Ceriodaphnia dubia* test organism. The water fleas exposed to the effluent showed a significant decrease in reproduction when compared to reproduction in the control organisms. The cause of the toxicity observed in the water flea test could not be determined. Toxicity was not demonstrated in the *P. promelas* test. The algal growth potential test, while demonstrating growth above the problem threshold, indicated algal growth inhibition, with the actual AGP value being more than an order of magnitude below the predicted value based upon nutrient concentrations.

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.

Miller et al. 1990. *The Acute and Chronic Toxicity of Ammonia to Marine Fish and Invertebrates*, Archives of Environmental Contamination and Toxicology 19:40-48.

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.

Weber, C. I. 1993. Methods for measuring the acute toxicity of effluents to freshwater and marine organisms. 4th edition. EPA/600/4-90/027. U. S. EPA, Cincinnati, Ohio. 216 pp.

USEPA. 2000. Nutrient Criteria Technical Guidance Manual – River and Streams. EPA-822-B-00-002.

USEPA. 2002. Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms. 4th Edition. EPA-821-R-02-013

Table 1. Data recorded during the chronic screening bioassays of a sample of effluent from City of Starke WWTF, 602 Edwards Road, Starke, Bradford County, Florida, NPDES# FL0028126, performed from 14 to 21 October, 2003.

Facility:	**City of Starke WWTF**		**NPDES #: FL0028126**	Facility Type:	**Wastewater Treatment Facility**	**Analysts:**	Marshall Faircloth
Location:	602 Edwards Road, Starke		Contact/District: Patrick O'conner /NE				Joshua Ayres
County:	Bradford		Test type: Chronic screen				Christa Pierini
Sample #1 Collection Date:	10/13/2003	Time: 1315	# tests: 2	Receiving Water:	Alligator Creek		
Sample #2 Collection Date:	10/15/2003	Time: 1135	Chlorination Type: de-chlorinated		Class III Freshwater		
Sample #3 Collection Date:	10/17/2003	Time: 1140					
Test Beginning Date:	10/14/2003	Time: 1430			**Page 1 of 3**		
Test Ending Date:	10/21/2003	Time: 1430	FDEP SOP#: TA07_05			**Reviewer:**	Rob Buda

Organism: ***Ceriodaphnia dubia*** Life stage: < 24 hour [A]Feeding: YCT/Algae
Chamber size: 30 ml Food Batch #: #3/#19 & 20

	Sample/Diluent	# Young								
Concentrations	Volume(mL)	0 hr	24 hr	48 hr	72 hr	96 hr	120 hr	144 hr	168 hr	Total
Control A	0/20	0	0	0	0	4	0	12	11	27
Control B	0/20	0	0	0	0	0	9	0	15	24
Control C	0/20	0	0	0	0	4	10	0	15	29
Control D	0/20	0	0	0	0	1	1	8	7	17
Control E	0/20	0	0	0	0	5	0	11	15	31
Control F	0/20	0	0	0	0	4	8	0	16	28
Control G	0/20	0	0	0	0	6	8	0	14	28
Control H	0/20	0	0	0	0	5	5	0	17	27
Control I	0/20	0	0	0	0	0	7	0	14	21
Control J	0/20	0	0	0	0	6	6	0	14	26
100% A	20/0	0	0	0	0	6	0	8	12	26
100% B	20/0	0	0	0	0	2	1	0	12	15
100% C	20/0	0	0	0	0	5	0	0	16	21
100% D	20/0	0	0	0	0	4	0	9	15	28
100% E	20/0	0	0	0	0	5	0	2	0	7
100% F	20/0	0	0	0	0	5	3	0	7	15
100% G	20/0	0	0	0	0	5	1	0	7	13
100% H	20/0	0	0	0	0	5	4	0	9	18
100% I	20/0	0	0	0	0	5	0	0	11	16
100% J	20/0	0	0	0	0	4	2	0	8	14

Test	Method	Result	Probability
Survival	T-test	NOEC 100	0.05
Reproduction	T-test	NOEC 100 K	0.05

K= Actual value known to be less than value given.

Adult	Percent Mortality
Control	0
100%	0

Total Young	Young	Young per Adult
Control	258	25.7
100%	173	17.3

[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 23.5 - 25.0 °C
Incubator #3 temperature range for the test period was 24.0 - 25
Light Intensity during the test was 50-100 foot candles.
Photoperiod during the test was 16 hours of light : 8 hours of da

LIMS	
Job number 1:	TLH-2003-10-14-27
sample number 1:	709023
Job number 2:	TLH-2003-10-16-11
sample number 2:	709857
Job number 3:	TLH-2003-10-17-43
sample number 3:	710424

Data Transcription Verification
date:12/10/03
by: Christa Pierini / Sarah Prichard

Total Resid. Chlorine	mg/L	Method
Field 100% sample 1:	<0.01	-
Field 100% sample 2:	not measured	-
Field 100% sample 3:	0.11	-
Lab Sample 1:	0.02	Hach
Lab Sample 2:	0.01	Hach
Lab Sample 3:	0.01	Hach
Control Water :	0.01	Hach

Ammonia	Total (mg/L)	Unionized (mg/L)
Control water DMW #35 :	<0.017	<0.017
Control water DMW #36 :	<0.017	<0.017
100% Sample 1:	<0.017	<0.017
100% Sample 2:	<0.017	<0.017
100% Sample 3:	<0.017	<0.017

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water DMW #35:	79	88
Control water DMW #36:	81	95
100% Sample 1:	129	165
100% Sample 2:	130	159
100% Sample 3:	131	154

Salinity [C]	ppt
100% sample:	<1
Control:	<1

[C] Salinity based on conductivity and temperature.

Ceriodaphnia dubia			After Renewal "new sample"			Conductivity Uncorrected		Before Renewal "old sample"	
Concentration	Surrogate	Hour	pH	Temperature°	DO mg/L	umhos/cm		pH	DO mg/L
Control	A	0	8.1	24.5	8.2	177		-	-
100%			8.0	24.8	8.2	476		-	-
Control	B	24	8.2	24.8	8.3	175		8.1	8.2
100%			7.9	24.5	8.0	525		8.4	8.3
Control	C	48	8.3	24.1	7.9	165		8.4	8.0
100%			8.1	24.2	7.7	530		8.4	7.9
Control	D	72	8.1	24.3	7.8	170		8.3	7.8
100%			8.0	24.0	8.2	555		8.3	7.7
Control	E	96	8.4	24.0	7.6	185		7.9	7.7
100%			8.3	23.8	7.5	555		8.2	7.5
Control	F	120	8.3	24.7	7.0	178		8.2	7.6
100%			8.2	24.5	6.9	532		8.2	7.6
Control	G	144	8.2	24.2	7.7	170		8.2	7.7
100%			8.2	24.4	8.0	595		8.4	7.6
Control	H	168	-	-	-	-		8.3	7.6
100%			-	-	-	-		8.3	7.6

DO = Dissolved Oxygen

Table 1. Data recorded during the chronic screening bioassays of a sample of effluent from the City of Starke WWTF, 602 Edwards Road, Starke, Bradford County, Florida, NPDES# FL0028126, performed from 14 to 21 October, 2003.
continued

Facility:	**City of Starke WWTF**		**NPDES #: FL0028126**	Facility Type:	**Wastewater Treatment Facility**	**Analysts:**	Marshall Faircloth
Location:	602 Edwards Road, Starke		Contact/District:	Patrick O'Conner/ Northeast			Joshua Ayres
County:	Bradford		Test type:	Chronic screen			James Daniels
Sample #1 Collection Date:	10/13/2003	Time: 1315	# tests:	2	Receiving Water: Alligator Creek		Christa Pierini
Sample #2 Collection Date:	10/15/2003	Time: 1135	Chlorination Type:	de-chlorinated	Class III Freshwater		
Sample #3 Collection Date:	10/17/2003	Time: 1140					
Test Beginning Date:	10/14/2003	Time: 1400			**Page 2 of 3**		
Test Ending Date:	10/21/2003	Time: 1430	FDEP SOP#: TA07_09			**Reviewer:**	Rob Buda

Organism: ***Pimephales promelas*** Life stage: < 24 hours [A]Feeding: *Artemia*
Chamber size: 1000 mL Food Batch #: 0194025G

	Sample/Diluent	Survival: Number alive							
Concentration	Volume(mL)	0 hr	24 hr	48 hr	72 hr	96 hr	120 hr	144 hr	168 hr
Control A	0/500	10	10	10	10	7	7	7	7
Control B	0/500	10	10	10	10	9	8	8	8
Control C	0/500	10	10	10	9	9	9	9	9
Control D	0/500	10	10	9	8	8	8	8	8
100% A	500/0	10	10	10	10	10	10	10	10
100% B	500/0	10	10	10	10	10	9	9	7
100% C	500/0	10	10	10	10	10	10	10	9
100% D	500/0	10	10	10	9	9	9	9	9

[A] Organisms were fed daily.

Test statistic	Method	NOEC
Survival	t test	100%

Test statistic	t test value	Probability
Survival	1.1289	p>0.05

Mortality	Percent
Control	20%
100%	12.5%

LIMS	
Job number 1:	TLH-2003-10-14-27
sample number 1:	709023
Job number 2:	TLH-2003-10-16-11
sample number 2:	709857
Job number 3:	TLH-2003-10-17-43
sample number 3:	710424

Data Transcription Verification
date: 12/10/03
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Temperatures of room and test incubator were continuously recorded on a strip chart recorder.
[B]Room Temperature range for the test period was 23.5 - 25.0°C. Light Intensity during the test was 50-100 foot candles.
Incubator #3 temperature range for the test period was 24.0-25.0°C. Photoperiod during the test was 16 hours of light : 8 hours of dark.
[C]Conductivity value is uncorrected umhos/cm. DO = dissolved oxygen.

			Before Renewal				After Renewal			
Concentration	Replicate	Hour	pH	Temp. (°C) [B]	DO (mg/L)	Conductivity [C]	pH	Temp. (°C) [B]	DO (mg/L)	Conductivity [C]
Control	A	0	8.4	24.2	8.2	285	-	-	-	-
100%			8.0	24.5	8.3	498	-	-	-	-
Control	B	24	8.1	24.5	7.8	330	8.2	24.0	8.2	330
100%			8.2	25.2	7.4	520	8.0	24.0	8.2	525
Control	C	48	8.2	24.2	6.7	310	8.1	24.2	7.6	325
100%			8.0	24.9	6.8	535	8.0	24.2	7.7	530
Control	D	72	8.1	24.2	7.0	325	8.0	24.0	8.5	340
100%			8.1	24.0	7.2	560	8.0	24.1	8.0	545
Control	A	96	7.9	24.0	7.6	305	8.2	23.8	7.8	310
100%			7.9	24.4	7.2	560	8.0	23.8	7.8	590
Control	B	120	7.9	25.0	5.4	339	8.3	24.7	6.9	309
100%			7.9	24.6	5.7	575	8.2	24.6	7.0	799
Control	C	144	8.1	24.0	6.9	330	8.2	24.0	8.1	305
100%			8.4	24.3	6.9	865	8.2	24.0	7.9	630
Control	D	168	8.2	25.3	6.7	321	-	-	-	-
100%			8.4	25.1	5.9	681	-	-	-	-

Total Resid. Chlorine	mg/L	Method
Field 100% sample 1:	0.01	-
Field 100% sample 2:	not measured	-
Field 100% sample 3:	0.11	-
Lab Sample 1:	0.02	Hach
Lab Sample 2:	0.01	Hach
Lab Sample 3:	0.01	Hach
Control Water:	0.01	Hach

Ammonia	Total (mg/L)	Unionized (mg/L)
Control water :	<0.017	<0.017
100% Sample 1:	<0.017	<0.017
100% Sample 2:	<0.017	<0.017
100% Sample 3:	<0.017	<0.017

Alk & Hardness	Alkalinity (mg/L)	Hardness (mg/L)
Control water:	79	91
100% Sample 1:	129	165
100% Sample 2:	130	159
100% Sample 3:	131	154

Salinity [C]	ppt
100% sample:	<1
Control:	<1

[C] Salinity based on conductivity and temperature.

Table 1. concluded Data recorded during the chronic screening bioassays of a sample of effluent from the City of Starke WWTF, 602 Edwards Road, Starke, Bradford County, Florida, NPDES# FL0028126, performed from 14 to 21 October, 2003.

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Sample #3	Collection Date: 10/17/2003	Time: 1140					
	Test Beginning Date: 10/14/2003	Time: 1400			**Page 3 of 3**		
	Test Ending Date: 10/21/2003	Time: 1430	FDEP SOP#: TA07_09			**Reviewer:**	Rob Buda
	Tare weighing Date: 10/21/2003						
	Final weighing Date: 10/24/2003						

Test Species		A	B	B-A	C	(B-A)/10[A]
Pimepales promelas		Pan weight (g)	Dry weight of pan + larvae (g)	Total dry weight of larvae (g)	Initial number of larve	Mean dry weight/larva (mg)
Concentration	Rep #					
Control A	9 A	0.02340	0.02726	0.00386	10	0.386
Control B	10 B	0.02279	0.02623	0.00344	10	0.344
Control C	11 C	0.02312	0.02662	0.00350	10	0.350
Control D	12 D	0.02413	0.02765	0.00352	10	0.352
100% A	13 A	0.02467	0.02919	0.00452	10	0.452
100% B	14 B	0.02441	0.02761	0.00320	10	0.320
100% C	15 C	0.02452	0.02933	0.00481	10	0.481
100% D	16 D	0.02529	0.02996	0.00467	10	0.467

Test statistic	Method	NOEC
Biomass	t test	100%

Test statistic	t test value	Probability
Biomass	1.8782	p>0.05

[A] Mean dry weight is determined by dividing the total dry weight per replicate by the number of larvae originally loaded in that replicate.

Table 2. Effluent limits, Class III Freshwater Criteria and chemical data from samples collected from the City of Starke WWTF on 13, 15 and 17 October, 2003.

City of Starke WWTF	Class III Stds	Effluent Limits	Effluent 10/13/03	Effluent 10/15/03	Effluent 10/17/03
Organic Constituents (µg/L)					
Atrazine	-	-	0.82	0.37	0.15 I
Metals (µg/L unless otherwise noted)					
Aluminum	-	-	45	44	46
Arsenic	≤ 50	-	6 U	6 U	6 U
Cadmium	≤ 1.7 h	-	0.037 I	0.04 I	0.05 I
Calcium (mg/L)	-	-	45.2	44.6	44.9
Chromium-III	≤ 127.9 h	-	3 U	3 U	3 U
Copper	≤ 14.1 h	-	3.2 I	3.4 I	4.1
Iron	≤ 1000	-	83	84	100
Lead	≤ 5.9 h	-	0.24	0.25	0.26
Magnesium (mg/L)		-	11.9	12.2	13.2
Nickel	≤ 78.4 h	-	3 U	3 U	3 U
Selenium	≤ 5	-	1 U	1 U	1 U
Silver	≤ 0.07	-	0.021 I	0.02 U	0.02 U
Zinc	≤ 180.2 h	-	35	34	43
Nutrients (mg/L)					
Ortho-phosphate	-	-	1.3	-	-
Total Phosphorus	-	-	1.4 A	-	-
Ammonia	-	-	0.032	0.031	0.03
Unionized Ammonia	≤ 0.02	≤ 0.02	≤ 0.02 c	≤ 0.02 c	≤ 0.02 c
Nitrate+Nitrite	-	-	9.6 A	-	-
Total Kjeldahl Nitrogen	-	-	1.1 A	-	-
Organic Nitrogen	-	10.0 s	1.07 c	-	-
Total Nitrogen	-	-	10.7 c	-	-
General Physical and Chemical Parameters					
Dissolved Oxygen (mg/L)	≥ 5.0	5.0 s	6.4	6.6	6.6
pH (S.U.)	-	6.0-8.5	7.2	7.2	7.1
Conductivity (umhos/cm)	≤ 1275	-	578	530	590
Temperature (C)	-	-	25.5	25.3	24.1
Hardness (mg/L)	-	-	161.9 c	161.6 c	166.5 c

h - Hardness based limit

c - Calculated value

s - Single sample

I - Value reported is < the minimum quantitation limit, and ≥ the minimum detection limit

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

Table 3. Measured and predicted algal growth potential (AGP) for total nitrogen (TN) and total soluble inorganic nitrogen (TSIN) limitation

Location	AGP (measured)	Predicted AGP (TN) ± 20%	Total N:P ratio
Effluent (mg dry wt/L)	30.3	406.6 ± 81.3	7.6
Location	**AGP (measured)**	**Predicted AGP (TSIN) ± 20%**	**Inorganic N:P ratio**
Effluent (mg dry wt/L)	30.3	366.0 ± 73.2	7.4

Appendix 1. Chemical Analyses performed on the effluent from the City of Starke WWTF sampled on 13, 15, and 17 October, 2003.

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
10/13/2003 13:15	FINAL EFFLUENT	Bio-AGP/LimNut	Algal Growth Potential	30.3	mg DryWt/L		0.1	0.3
10/13/2003 13:15	FINAL EFFLUENT	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
10/13/2003 13:15	FINAL EFFLUENT	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
10/13/2003 13:15	FINAL EFFLUENT	Bio-Toxicology	Bioassay-Chronic-Scrn-FW-C.dubia, NOEC	100	NOEC	K		
10/13/2003 13:15	FINAL EFFLUENT	Bio-Toxicology	Bioassay-Chronic-Scrn-FW-Fish, NOEC	100	NOEC			
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	1,3,5-Trinitrobenzene	3.8	ug/L	U	3.8	15
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	1,3-Dinitrobenzene	1.9	ug/L	U	1.9	7.6
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	1,4-Naphthoquinone	19	ug/L	U	19	76
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	1-Naphthylamine	9.5	ug/L	UJ	9.5	38
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2,3,4,6-Tetrachlorophenol	1.9	ug/L	U	1.9	7.6
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2,4,5-Trichlorophenol	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2,6-Dichlorophenol	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2-Acetylaminofluorene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	11
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2-Methylnaphthalene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2-Naphthylamine	9.5	ug/L	U	9.5	38
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2-Nitroaniline	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	2-Picoline	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	3,3'-Dimethylbenzidine	19	ug/L	U	19	76
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	3-Methylcholanthrene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	3-Nitroaniline	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	4-Aminobiphenyl	3.8	ug/L	U	3.8	15
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	4-Chloroaniline	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	4-Nitroaniline	0.95	ug/L	UJ	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	5-Nitro-o-toluidine	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Acetophenone	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Aldrin	1.4	ug/L	UJ	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Aniline	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Benzidine	95	ug/L	U	95	380
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Benzyl alcohol	0.95	ug/L	U	0.95	3.8

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	UJ	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Dibenzofuran	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Diethyl phthalate	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Dimethylaminoazobenzene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Dinoseb	3.8	ug/L	U	3.8	15
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Diphenylamine	2.9	ug/L	U	2.9	11
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Ethyl methanesulfonate	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Heptachlor	1.4	ug/L	UJ	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	UJ	2.9	11
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Hexachloropropene	1.9	ug/L	U	1.9	7.6
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Isosafrole	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Methapyrilene	3.8	ug/L	UJ	3.8	15
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Methyl methanesulfonate	0.95	ug/L	UJ	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	N-Nitrosodi-n-butylamine	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	N-Nitrosodiethylamine	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	11
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	N-Nitrosomethylethylamine	1.9	ug/L	U	1.9	7.6
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	N-Nitrosomorpholine	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	N-Nitrosopiperidine	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	N-Nitrosopyrrolidine	1.9	ug/L	U	1.9	7.6
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Nitroquinoline-1-oxide	19	ug/L	UJ	19	76
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Pentachlorobenzene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Pentachloroethane	48	ug/L	U	48	190
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Pentachloronitrobenzene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Phenacetin	3.8	ug/L	U	3.8	11
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Pyridine	3.8	ug/L	U	3.8	15
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	Safrole	0.95	ug/L	U	0.95	3.8
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	m,p-Cresols	1.9	ug/L	U	1.9	7.6
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	o-Cresol	1.9	ug/L	U	1.9	7.6

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
10/13/2003 13:15	FINAL EFFLUENT	BNA-Water	o-Toluidine	0.95	ug/L	U	0.95	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	1,2,4-Trichlorobenzene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	1,2-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	1,3,5-Trinitrobenzene	3.8	ug/L	U	3.8	15
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	1,3-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	1,3-Dinitrobenzene	1.9	ug/L	U	1.9	7.7
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	1,4-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	1,4-Naphthoquinone	19	ug/L	U	19	77
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	1-Naphthylamine	9.6	ug/L	UJ	9.6	38
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2,3,4,6-Tetrachlorophenol	1.9	ug/L	U	1.9	7.7
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2,4,5-Trichlorophenol	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2,4,6-Trichlorophenol	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2,4-Dichlorophenol	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	58
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2,4-Dinitrotoluene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2,6-Dichlorophenol	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2,6-Dinitrotoluene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2-Acetylaminofluorene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2-Chloronaphthalene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2-Chlorophenol	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	12
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2-Methylnaphthalene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2-Naphthylamine	9.6	ug/L	U	9.6	38
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2-Nitroaniline	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2-Nitrophenol	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	2-Picoline	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	3,3'-Dimethylbenzidine	19	ug/L	U	19	77
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	3-Methylcholanthrene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	3-Nitroaniline	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	4-Aminobiphenyl	3.8	ug/L	U	3.8	15
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	4-Bromophenyl phenyl ether	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	4-Chloro-3-methylphenol	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	4-Chloroaniline	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.7
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	4-Nitroaniline	0.96	ug/L	UJ	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	4-Nitrophenol	14	ug/L	U	14	58
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	5-Nitro-o-toluidine	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Acenaphthene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Acenaphthylene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Acetophenone	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Aldrin	1.4	ug/L	UJ	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Aniline	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Anthracene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Benzidine	96	ug/L	U	96	380
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Benzo(a)anthracene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Benzo(a)pyrene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Benzo(b)fluoranthene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Benzo(g,h,i)perylene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Benzo(k)fluoranthene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Benzyl alcohol	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Bis(2-chloroethoxy)methane	0.96	ug/L	UJ	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Bis(2-chloroethyl)ether	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	12
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	58
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Chrysene	0.96	ug/L	U	0.96	3.8

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Di-n-octyl phthalate	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Dibenzo(a,h)anthracene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Dibenzofuran	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Diethyl phthalate	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Dimethylaminoazobenzene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Dinoseb	3.8	ug/L	U	3.8	15
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Diphenylamine	2.9	ug/L	U	2.9	12
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Ethyl methanesulfonate	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Fluoranthene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Fluorene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Heptachlor	1.4	ug/L	UJ	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Hexachlorobenzene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	12
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	12
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	12
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Hexachloropropene	1.9	ug/L	U	1.9	7.7
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Indeno(1,2,3-cd)pyrene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Isophorone	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Isosafrole	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Methapyrilene	3.8	ug/L	UJ	3.8	15
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Methyl methanesulfonate	0.96	ug/L	UJ	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	N-Nitrosodi-n-butylamine	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.7
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	N-Nitrosodiethylamine	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.7
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	12
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	N-Nitrosomethylethylamine	1.9	ug/L	U	1.9	7.7
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	N-Nitrosomorpholine	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	N-Nitrosopiperidine	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	N-Nitrosopyrrolidine	1.9	ug/L	U	1.9	7.7
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Naphthalene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.7
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Nitroquinoline-1-oxide	19	ug/L	UJ	19	77
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Pentachlorobenzene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Pentachloroethane	48	ug/L	U	48	190
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Pentachloronitrobenzene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	12
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Phenacetin	3.8	ug/L	U	3.8	12
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Phenanthrene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Phenol	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Pyrene	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Pyridine	3.8	ug/L	U	3.8	15
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	Safrole	0.96	ug/L	U	0.96	3.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.8
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	m,p-Cresols	1.9	ug/L	U	1.9	7.7
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	o-Cresol	1.9	ug/L	U	1.9	7.7
10/15/2003 11:35	FINAL EFFLUENT	BNA-Water	o-Toluidine	0.96	ug/L	U	0.96	3.8
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Alachlor	0.57	ug/L	U	0.57	2.28
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Ametryn	0.048	ug/L	U	0.05	0.19
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Atrazine	0.82	ug/L		0.05	0.19
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Azinphos Methyl	0.048	ug/L	U	0.05	0.19
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.05	0.19
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	U	0.1	0.38
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Diazinon	0.048	ug/L	U	0.05	0.19
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Ethion	0.048	ug/L	U	0.05	0.19
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Ethoprop	0.095	ug/L	U	0.1	0.38
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Fonofos	0.095	ug/L	U	0.1	0.38
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Hexazinone	0.095	ug/L	U	0.1	0.38
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Malathion	0.14	ug/L	U	0.14	0.56
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Metalaxyl	0.24	ug/L	UJ	0.24	0.96
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.92
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Metribuzin	0.095	ug/L	U	0.1	0.38
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Naled	0.76	ug/L	U	0.76	3.04
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Norflurazon	0.095	ug/L	U	0.1	0.38
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Parathion Methyl	0.095	ug/L	U	0.1	0.38
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Phorate	0.048	ug/L	U	0.05	0.19
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
10/13/2003 13:15	FINAL EFFLUENT	GC-Water	Simazine	0.048	ug/L	U	0.05	0.19
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Alachlor	0.59	ug/L	U	0.59	2.36
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Ametryn	0.049	ug/L	U	0.05	0.2
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Atrazine	0.37	ug/L		0.05	0.2
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Azinphos Methyl	0.049	ug/L	U	0.05	0.2
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Chlorpyrifos Ethyl	0.049	ug/L	U	0.05	0.2
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Chlorpyrifos Methyl	0.098	ug/L	U	0.1	0.39
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Diazinon	0.049	ug/L	U	0.05	0.2
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Ethion	0.049	ug/L	U	0.05	0.2
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Ethoprop	0.098	ug/L	U	0.1	0.39
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Fonofos	0.098	ug/L	U	0.1	0.39
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Hexazinone	0.098	ug/L	U	0.1	0.39
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Malathion	0.15	ug/L	U	0.15	0.6
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Metalaxyl	0.24	ug/L	UJ	0.24	0.96
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Metolachlor	0.49	ug/L	U	0.49	1.96
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Metribuzin	0.098	ug/L	U	0.1	0.39
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Mevinphos	0.2	ug/L	UJ	0.2	0.8
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Naled	0.78	ug/L	U	0.78	3.12
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Norflurazon	0.098	ug/L	U	0.1	0.39
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Parathion Methyl	0.098	ug/L	U	0.1	0.39
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Phorate	0.049	ug/L	U	0.05	0.2
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
10/15/2003 11:35	FINAL EFFLUENT	GC-Water	Simazine	0.049	ug/L	U	0.05	0.2
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Aluminum	45	ug/L		7	28
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Arsenic	6	ug/L	U	6	24
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Cadmium	0.037	ug/L	I	0.03	0.1
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Calcium	45.2	mg/L		0.05	0.2
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Chromium	3	ug/L	U	3	12
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Copper	3.2	ug/L	I	1	4
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Iron	83	ug/L		15	60
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Lead	0.24	ug/L		0.05	0.2
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Magnesium	11.9	mg/L		0.02	0.08
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Nickel	3	ug/L	U	3	12
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Selenium	1	ug/L	U	1	4
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Silver	0.021	ug/L	I	0.02	0.08
10/13/2003 13:15	FINAL EFFLUENT	Metals-Water	Zinc	35	ug/L		4	16
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Aluminum	44	ug/L		7	28
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Arsenic	6	ug/L	U	6	24
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Cadmium	0.04	ug/L	I	0.03	0.1
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Calcium	44.6	mg/L		0.05	0.2

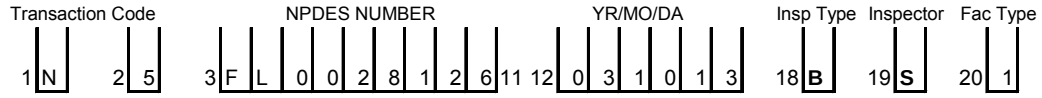
Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Chromium	3	ug/L	U	3	12
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Copper	3.4	ug/L	I	1	4
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Iron	84	ug/L		15	60
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Lead	0.25	ug/L		0.05	0.2
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Magnesium	12.2	mg/L		0.02	0.08
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Nickel	3	ug/L	U	3	12
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Selenium	1	ug/L	U	1	4
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
10/15/2003 11:35	FINAL EFFLUENT	Metals-Water	Zinc	34	ug/L		4	16
10/13/2003 13:15	FINAL EFFLUENT	Nutrients-Liquid	Ammonia-N	0.032	mg N/L		0.01	0.02
10/13/2003 13:15	FINAL EFFLUENT	Nutrients-Liquid	NO2NO3-N	9.6	mg N/L	A	0.4	1
10/13/2003 13:15	FINAL EFFLUENT	Nutrients-Liquid	N_KJEL_TOT	1.1	mg N/L	A	0.06	0.2
10/13/2003 13:15	FINAL EFFLUENT	Nutrients-Liquid	O-Phosphate-P	1.3	mg P/L		0.08	0.2
10/13/2003 13:15	FINAL EFFLUENT	Nutrients-Liquid	Total-P	1.4	mg P/L	A	0.12	0.36
10/15/2003 11:35	FINAL EFFLUENT	Nutrients-Liquid	Ammonia-N	0.031	mg N/L		0.01	0.02
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	1,2,4,5-Tetrachlorobenzene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	1,3,5-Trinitrobenzene	3.8	ug/L	U	3.8	15
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	1,3-Dinitrobenzene	1.9	ug/L	U	1.9	7.6
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	1,4-Naphthoquinone	19	ug/L	U	19	76
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	1-Naphthylamine	9.5	ug/L	UJ	9.5	38
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2,3,4,6-Tetrachlorophenol	1.9	ug/L	U	1.9	7.6
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2,4,5-Trichlorophenol	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2,6-Dichlorophenol	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2-Acetylaminofluorene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	11
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2-Methylnaphthalene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2-Naphthylamine	9.5	ug/L	U	9.5	38
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2-Nitroaniline	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	2-Picoline	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	3,3'-Dimethylbenzidine	19	ug/L	U	19	76
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	3-Methylcholanthrene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	3-Nitroaniline	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	4-Aminobiphenyl	3.8	ug/L	U	3.8	15
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	4-Chloroaniline	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	4-Nitroaniline	0.95	ug/L	UJ	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	5-Nitro-o-toluidine	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	7,12-Dimethylbenz(a)anthracene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Acetophenone	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Aldrin	1.4	ug/L	UJ	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Aniline	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8

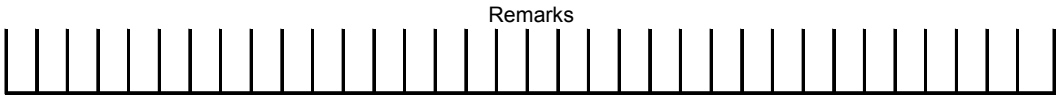
Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Azobenzene/1,2-Diphenylhydrazine	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Benzidine	95	ug/L	U	95	380
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Benzyl alcohol	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	UJ	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Dibenzofuran	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Diethyl phthalate	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Dimethylaminoazobenzene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Dinoseb	3.8	ug/L	U	3.8	15
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Diphenylamine	2.9	ug/L	U	2.9	11
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Ethyl methanesulfonate	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Heptachlor	1.4	ug/L	UJ	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	11
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Hexachloropropene	1.9	ug/L	U	1.9	7.6
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Isosafrole	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Methapyrilene	3.8	ug/L	UJ	3.8	15
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Methyl methanesulfonate	0.95	ug/L	UJ	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	N-Nitrosodi-n-butylamine	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	N-Nitrosodiethylamine	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	11
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	N-Nitrosomethylethylamine	1.9	ug/L	U	1.9	7.6
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	N-Nitrosomorpholine	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	N-Nitrosopiperidine	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	N-Nitrosopyrrolidine	1.9	ug/L	U	1.9	7.6
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Nitroquinoline-1-oxide	19	ug/L	UJ	19	76
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Pentachlorobenzene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Pentachloroethane	48	ug/L	U	48	190
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Pentachloronitrobenzene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Phenacetin	3.8	ug/L	U	3.8	11
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Pyridine	3.8	ug/L	U	3.8	15
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	Safrole	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	m,p-Cresols	1.9	ug/L	U	1.9	7.6
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	o-Cresol	1.9	ug/L	U	1.9	7.6
10/17/2003 11:40	FINAL EFFLUENT	BNA-Water	o-Toluidine	0.95	ug/L	U	0.95	3.8
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Alachlor	0.57	ug/L	U	0.57	2.28
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Ametryn	0.048	ug/L	U	0.05	0.19
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Atrazine	0.15	ug/L	I	0.05	0.19
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Azinphos Methyl	0.048	ug/L	U	0.05	0.19
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.05	0.19
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	U	0.1	0.38
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Diazinon	0.048	ug/L	U	0.05	0.19
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Ethion	0.048	ug/L	U	0.05	0.19
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Ethoprop	0.095	ug/L	U	0.1	0.38
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Fonofos	0.095	ug/L	U	0.1	0.38
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Hexazinone	0.095	ug/L	U	0.1	0.38
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Malathion	0.14	ug/L	U	0.14	0.56
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.92
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Metribuzin	0.095	ug/L	U	0.1	0.38
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Mevinphos	0.19	ug/L	UJ	0.19	0.76
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Naled	0.76	ug/L	U	0.76	3.04
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Norflurazon	0.095	ug/L	U	0.1	0.38
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Parathion Methyl	0.095	ug/L	U	0.1	0.38
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Phorate	0.048	ug/L	U	0.05	0.19
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
10/17/2003 11:40	FINAL EFFLUENT	GC-Water	Simazine	0.048	ug/L	U	0.05	0.19
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Aluminum	46	ug/L		7	28
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Arsenic	6	ug/L	U	6	24
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Cadmium	0.05	ug/L	I	0.03	0.1
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Calcium	44.9	mg/L		0.05	0.2
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Chromium	3	ug/L	U	3	12
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Copper	4.1	ug/L		1	4
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Iron	100	ug/L		15	60
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Lead	0.26	ug/L		0.05	0.2
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Magnesium	13.2	mg/L		0.02	0.08
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Nickel	3	ug/L	U	3	12
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Selenium	1	ug/L	U	1	4
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Silver	0.02	ug/L	U	0.02	0.08
10/17/2003 11:40	FINAL EFFLUENT	Metals-Water	Zinc	43	ug/L		4	16
10/17/2003 11:40	FINAL EFFLUENT	Nutrients-Liquid	Ammonia-N	0.03	mg N/L		0.01	0.02

The Bioassay of the City of Starke WWTF effluent sampled on October 13, 15 & 17, 2003, NPDES #FL0028126.

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 City of Starke WWTF effluent sampled on October 13, 15, & 17, 2003, NPDES #FL0028126.

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

