

Bioassays of

Kings Gate R.V. Park Reverse Osmosis Water Treatment Plant

Sarasota County

NPDES #FL0188948

Sampled February 6, 2006

June 2006

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Kings Gate R.V. Park Reverse Osmosis Water Treatment Plant, 1500 Kings Way, Nokomis, Sarasota County, Florida, NPDES #FL0188948. Effluent samples for this facility were collected on February 6, 2006.

Introduction

Kings Gate R.V. Park Reverse Osmosis (RO) Water Treatment Plant is a water treatment plant which uses the reverse osmosis process to produce potable water for the residents of Kings Gate R.V. Park. The facility has a design flow of 0.009 million gallons per day (MGD) average annual daily flow (AADF) of mineral concentrate. The AADF from January 2005 through December 2005 was 0.007 MGD. Effluent is treated by dilution with water from Salt Creek in a ratio of 4 parts creek water to 1 part concentrate and also passes through an inline aspirator to reduce hydrogen sulfide and increase dissolved oxygen prior to being discharged off-site through a 50.8 mm (2-inch) PVC pipe (Outfall D001) to the Class III fresh waters of Salt Creek thence to Shakett Creek and ultimately to Dona Bay. Outfall D001 is located approximately at latitude 27º 08' 46" N, longitude 82º 25' 29" W.

The facility is not under any Administrative Orders or Consent Orders. The facility has a mixing zone 12.19 m wide by 60.96 m long downstream of the discharge into Salt Creek for total alpha and combined radium 226+228. Prior to 2004, the facility had violations of total alpha and combined radium 226+228; however, since January 2005 the facility has not had any violations of its permit limits. The facility has no requirements for ongoing toxicity testing. The initial toxicity test required included salinity adjusted effluent tested at a concentration of 25%. (Facility information was provided by Lori Pillsbury of FDEP Southwest District).

Methods

Samples were collected from RO concentrate prior to blending of the concentrate with creek water. The outfall was under water and could not be sampled. The sampling location is in the effluent line upstream of Outfall D-001. Samples were collected by Lori Pillsbury and Chris Anastasiou (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.

See Appendix 1 for the completed chain of custody form.

The 48-hour acute screening toxicity tests and algal growth potential test were performed following internal DEP SOP's TA07_03, TA07_04, and TA08_01 through TA08_09. All internal DEP SOPs are available on the web at: http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp. The Department uses the 48-hour acute screening toxicity test to provide reasonable assurance that the facility does not adversely affect waters of the state.

Both bioassay tests were run using 25% effluent, produced by diluting 100% effluent with artificial seawater (ASW) at a ratio of 1 part effluent to 3 parts ASW.

Toxicity Test Results

Tests were performed February 7 - 9, 2006.

Americamysis bahia 48-hour acute screening bioassay –	LC_{50} > 25%, 40% mortality* in 25% sample at 48 hours
Menidia beryllina 48-hour acute screening bioassay –	LC_{50} > 25%, 0% mortality* in 25% sample at 48 hours

The bioassay sample was acutely toxic to the *Americamysis bahia* test organisms but was not toxic to the *Menidia beryllina* test organisms.

The chemistry results confirmed that the ion makeup of the sample was not in seawater proportions and that the apparent 3.7 parts per thousand (ppth) salinity of the sample was due to elevated levels of ground-water ions. The observed mortality in the *A. bahia* test is likely due, at least in part, to the seawater-ion imbalance of the sample. Previous research conducted by the FDEP Biology Section demonstrated that *A. bahia* is much more sensitive to seawater-ion imbalances than is *M. beryllina* (FDEP, 1995). The calcium concentration was 1180 mg/L at 3.7 ppth salinity (salinity based on conductivity and temperature), approximately 26.7 times (26.7X) the normal concentration for calcium in seawater of this salinity. The calculated calcium concentration in the sample (474 mg/L) as tested was approximately 2.5 times (2.5X) the normal calcium concentration in seawater of this salinity (approximately 16 ppth). The elevated calcium is one source of toxicity in this sample, but other unidentified sources of toxicity cannot be ruled out without performing the major-seawater-ion imbalance toxicity testing protocols cited above.

See Appendix 2 for bioassay bench sheets.

See Appendix 3 for results of the last 20 standard reference toxicant (SRT) tests and bench sheets and statistical analyses of the SRT test that corresponds to this facility test. See Appendix 4 for test organism receipts.

*NOTE: In a 48-hour acute screening test of 100% effluent, mortality of <20% provides reasonable assurance that the effluent meets the acute toxicity criterion of Florida's Surface Water Quality Standards (Rule 62-302.500 (1) (a) 4, F.A.C.). Mortality between 20-50% mortality indicates low to moderate levels of toxicity, and further action may be required. Mortality of >50% provides reasonable assurance that the effluent fails to meet the minimum requirement to discharge to waters of the state (Rule 62-4.244(3) (a), F.A.C.).

Algal Growth Potential

The effluent Algal Growth Potential (AGP) was not determined due to interference caused by a precipitate forming in the test vessels. The analytical chemistry suggests that the effluent is phosphorus-limited.

See Table 1 for AGP results.

Chemistry Results

Total residual chlorine was not detected in the bioassay sample in the laboratory. Total ammonia was detected at a concentration of 0.756 mg/L in the bioassay sample in the laboratory. The total ammonia concentration in the concentrate sample collected and preserved for chemical analysis was 0.85 mg/L. Based on the pH, salinity, and temperature of the concentrate as collected, the calculated unionized ammonia concentration was < 0.02 mg/L.

Arsenic, nickel, and zinc were detected in the sampled concentrate between the laboratory method detection limits (MDL) and practical quantitation limits (PQL); however, these results may not be accurate due to improper preservation of the sample. The concentrate total alpha particle activity (67.6 pCi/L) and concentration of combined radium 226+228 (34.3 pCi/L) both exceeded Class III fresh water quality criteria of 15 pCi/L and 5 pCi/L, respectively (62-302.530(58)(b) and (a), F.A.C.); however, the concentration of combined radium 226+228 in the concentrate did not exceed the effluent limit of 36 pCi/L, whereas, the concentrate total alpha particle activity exceeded the effluent limit of 44 pCi/L. The specific conductance (6,652 µmhos/cm) of the concentrate exceeded the Class III freshwater criterion (62-302.530(23), F.A.C.). A determination

cannot be made about whether or not the effluent (concentrate plus dilution water) would have exceeded any of these water quality criteria or permit limits.

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

See Appendix 5 for a complete list of chemical analyses performed.

Conclusion

The RO concentrate sample collected prior to Outfall D-001 for this facility on February 6, 2006, was acutely toxic to the *Americamysis bahia* test organisms during the acute screen 48-hour bioassays. The effluent algal growth potential was not determined. Total alpha particle activity in the concentrate exceeded both the Class III freshwater criterion and permitted limit. Combined radium 226+228 in the concentrate exceeded Class III fresh water quality criteria, but not permit limits. Concentrate specific conductance exceeded Class III fresh water quality criteria. A determination cannot be made about whether or not the effluent (concentrate plus dilution water) would have exceeded any of these water quality criteria or permit limits.

Literature Cited

FDEP. 1995. Protocols for determining Major-Seawater-Ion Toxicity in Membrane-Technology Water-Treatment Concentrate. Biology and Chemistry Section, FDEP Bureau of Laboratories, Tallahassee, Florida. 99 pp.

Table 1. Measured algal growth potential (AGP; mg dry weight/L) of the saltwater species Dunaliella tertiolecta *and ratios of nitrogen to phosphorus for samples collected from Kings Gate RV Park Reverse Osmosis Water Treatment Plant on February 6, 2006.*

Location	AGP (measured)	Inorganic N:P ratio	Total N:P ratio
Effluent Samples	No Result	91.54	Not applicable*

* - Total phosphorus was not detected in the effluent, so total N:P ratio could not be calculated.

Table 2. Effluent limits, Class III Freshwater Criteria, and chemical data for samples collected from Kings Gate Reverse Osmosis Water Treatment Plant on February 6, 2006.

Kings Gate RV Park RO WTP NPDES# FL0188948	Class III Freshwater Stds	Effluent Limits	Effluent Samples
Organic Constituents (µg/L)			
None Detected	-	-	-
Metals (µg/L unless otherwise noted)			
Aluminum	-	-	5 UY
Arsenic	≤ 50	-	5.8 IY
Cadmium	≤ 3.4 b	-	0.25 UY
Calcium (mg/L)	-	-	1,180 Y
Chromium-III	≤ 268.2 b	-	4.6 UY
Copper	≤ 30.5 b	-	1.95 Y
Iron	≤ 1,000	-	10 UY
Lead	≤ 18.6 b	-	0.37 UY
Magnesium (mg/L)	-	-	578 Y
Nickel	≤ 168.5 b	-	1.3 IY
Selenium	≤ 5	-	2.5 UY
Silver	≤ 0.07	-	0.13 UY
Zinc	≤ 387.8 b	-	10 IY
Nutrients (mg/L)			
Ortho-phosphate	-	-	0.013
Total Phosphorus	-	-	0.02 U
Ammonia	-	-	0.85
Unionized Ammonia	≤ 0.02	-	< 0.02 c
Nitrate+Nitrite	-	-	0.34 f
Total Kjeldahl Nitrogen	-	-	1.7
Organic Nitrogen	-	-	0.85 c
Total Nitrogen	-	-	2.04 c
General Physical and Chemical Parameters			
Alpha, Total (pCi/L)	≤ 15	44	67.6
Alpha-Counting Error (pCi/L)	-	-	13.8
Radium 226 (pCi/L)	-	-	32.9
Radium 226-Counting Error (pCi/L)	-	-	1
Radium 228 (pCi/L)	-	-	1.4
Radium 228-Counting Error (pCi/L)	-	-	0.6
Radium 226+228 (pCi/L)	≤ 5	36	34.3
Dissolved Oxygen (mg/L)	≥ 5	≥ 4	5.01
pH (S.U.)	6-8.5	6.5-8.5	6.5
Conductivity (µmhos/cm)	≤ 1,275	-	6,652
Temperature (C)	-	-	25.4
CBOD (mg/L)	-	-	2.1
Chlorophyll *a* (µg/L)	-	-	0.85 U
Phaeophytin *a* (µg/L)	-	-	1.5 U
TSS (mg/L)	-	-	4 U
Turbidity (NTU)	≤ 29 t	-	0.3
Flow (MGD)	-	0.009 a	0.007
Hardness (mg/L)	-	-	5,326.7 c

Value exceeds the Class III Fresh Water Quality Criteria (62-302, F.A.C.) and/or Effluent Limits

a - Annual average

b - Value is calculated based on hardness

c - Calculated value

f - Nitrate+nitrite was detected in the field blank at a concentration of 0.28 mg/L

t - Shall not exceed 29 NTUs above background

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

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

Y - The analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Request Number: RQ-2006-02-06-19
Kings Gate RV Park RO WTP

Customer: SW-DIST

Project ID: FYI3

PMAS: 1163

Event ID *

Requester: Shannan Bogdanov

Collected By: L Pillsbury, C. Anastasiou

Sampling Agency: FDEP

Field Report Prepared By: L Pillsbury

Send Final Report To: Ilia Balcom

Lab ID *	Location	Collection (begin)	Collection (end)	Bottle Group(s)**
	OUTFALL D001	☐ Comp ☑ Grab Date 02/06/06 Time 1023 (Eastern) Central	Date Time Eastern Central	A
	Field ID	Tot Res Chlorine (mg/L) —	Diss Oxygen (mg/L) 5.01	Storet Station Number
	Matrix (Include type e.g. Salt, Fresh, etc): salt	Temp (C) 25.35 pH 6.48	Sample Depth ☐ m ☐ ft Faucet	6652 ☐ Salinity (PPTh) ☑ Sp Conductance (umho/cm)
	Latitude o ' "	Longitude o ' "	NPDES Number	
	Comments: Sampled concentrated effluent			

Lab ID *	Location	Collection (begin)	Collection (end)	Bottle Group(s)**
	Field Blank	☐ Comp ☑ Grab Date 02/06/06 Time 1050 Eastern Central	Date Time Eastern Central	B
	Field ID	Tot Res Chlorine (mg/L) —	Diss Oxygen (mg/L) —	Storet Station Number
	Matrix (Include type e.g. Salt, Fresh, etc): fresh	Temp (C) — pH —	Sample Depth — ☐ m ☐ ft	— ☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm) NPDES Number
	Latitude o ' "	Longitude o ' "	Comments	

Lab ID *	Location	Collection (begin)	Collection (end)	Bottle Group(s)**
		☐ Comp ☐ Grab Date Time Eastern Central	Date Time Eastern Central	
	Field ID	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number
	Matrix (Include type e.g. Salt, Fresh, etc):	Temp (C) pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm) NPDES Number
	Latitude o ' "	Longitude o ' "	Comments	

Lab ID *	Location	Collection (begin)	Collection (end)	Bottle Group(s)**
		☐ Comp ☐ Grab Date Time Eastern Central	Date Time Eastern Central	
	Field ID	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number
	Matrix (Include type e.g. Salt, Fresh, etc):	Temp (C) pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm) NPDES Number
	Latitude o ' "	Longitude o ' "	Comments	

Relinquished By:	Date/Time:	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	02/06/06 1500	DHL	Tom E	2/7/06 9:15				

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

FDEP Biology Section - Acute Screen Bioassay Bench Sheets

Facility: Kings Gate RV Park RO WTP
Address: 1500 Kings Way
City: Nokomis County: Sarasota
Contact/District: Lori Pillsbury / SW District
NPDES Permit #: FL 0188948
LIMS Job #: TLH-2006-02-07-03 LIMS Sample #: 897613
Lims Data Entry: 2-9-06 SP Data Entry Verification: 2-9-06 MF

Sample Collection: Date: 2-6-06 Time: 1023
Hold Time Start: Date: 2-6-06 Time: 1023

Comments: Sample tested at 25% concentration per permit language MF 2-7-06

Instructions (for below): Circle appropriate wording. If yes is circled, complete blanks

Test Type: (Screen)
(Static) / Static Renewal / Flow-through
Test Duration: (48) / 96 Hours.
Light Intensity : 50 - 100 ft. candles.
Photoperiod : 16 hours light 8 hours dark.

Test 1 validation: Test 1: SOP TA 07_ 03
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No

Test 2 validation: Test 2: SOP TA 07_ 04
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No

Initial sample handling:
PH adjustment : yes (no) Initial pH: ____ NaOH N HCl N ____ Drops mL Final pH: ____
Aeration : yes (no) Initial DO: ____mg/L Final DO: ____mg/L Duration: ____minutes Rate: ~ ____bubbles/min
Salinity adjusted (Test 1): yes (no) Initial Salinity: ____ Final Salinity: ____ Salts Hypersaline brine
Salinity adjusted (Test 2): yes (no) Initial Salinity: ____ Final Salinity: ____ Salts Hypersaline brine
Dechlorination: yes (no) ____mL of 0.025N Sodium Thiosulfate per liter of sample. Final TRC: ____

Temperature Range °C
Incubator # 2 Range 24.6-24.9
Room B246: 22.8-25.0
Waterbath: N/A

Sample Validation:
Temperature: Shipped ≤6°C (Yes) No Hand Delivered: Cooling (received °C - collected °C) Yes No
Holding Time: ≤36 Hours (Yes) No (Composite-end of collection; grab-when collected; 4 in 24 - time last sample collected)

Investigators' Signatures
Sarah Pritchard
Marshall Faircloth
Bryan Alexander
Amber Daniel
[illegible]
REVIEWER Nicole Wellnitz

Water Quality Parameters	20% DMW	Moderately Hard Water/ Well Water	Salt Water (ASW) NSW Test 1	Salt Water (ASW) NSW Test 2	Other:	Original Sample	Method	Measured by	Verified by
Field Total Residual Cl2 (mg/L)	N/A	N/A	N/A	N/A		not measured	—	SP	
Lab Total Residual Cl2 (mg/L)			<0.03	<0.03		<0.03	HACH	BA	MF
Alkalinity (mg/L as $CaCO_3$)			174	174		339	HACH	BA/SA	MF
Hardness (mg/L as $CaCO_3$)			NA	NA		NA	HACH	—	—
Total Ammonia (mg/L as N)			<0.034	<0.034		0.756	DENVER	MF	SP
Salinity (ppth)			21.1	21.1		3.71	YSI (Meitler)	SP	MF

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Appendix 2. Bench Sheets (continued)

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 897613 Test #: 1 Test Started: Date 2-7-06 Time: 1300

Organism: A. bahia SOP #: TA 07_03 Test Ended: Date 2-9-06 Time: 1230

Organism Batch: 10-06 Diluent/ Batch: ASW 1 3-06

Organism Age: 3 days Food: YCT *P. subcapitata* *Artemia*

Chamber Size: 1000 mL Batch: - - GSL 536 90

Test Volume: 500 mL Feeding: ~~Prior to test~~ - Prior to renewal (Daily)

Concentration	~~Replicate~~ Chamber #	SP ~~Chamber #~~ Replicate	Test Hour 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
CTRL	F9	A	5	5	5			
	F10	B	5	5	5			
	F11	C	5	5	5			
	F12	D	5	5	5			
25%	F13	A	5	5	2 3D			
	F14	B	5	5	3 2D			
	F15	C	5	4 1D	3 1D			
	F16	D	5	4 1D	4			
Organisms loaded by: JD		Checked by:	[redacted]	JD	JD			

Loading Verified by: SP

m = missing d = dead BR = before renewal AR = after renewal

Comments:

Test Results: 25

% mortality in ~~100~~% sample: 40

LC_{50}: >25 If Calculated: 95% CI______ Method:______

Screening Tests:

Report LC50 as >100%, =100%, or <100%.

Substitue highest test concentration used if other than 100% (example: Ocean outfall tested at 30% concentration).

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Appendix 2. Bench Sheets (continued)

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 897613 Test #: 2 Test Started: Date 2-7-06 Time: 1315

Organism: M. beryllina SOP #: TA 07_ 04 Test Ended: Date 2-9-06 Time: 1245

Organism Batch: 11-06 Diluent/ Batch: ASW / 3-06

Organism Age: 10 days Food: YCT P. subcapitata Artemia

Chamber Size: 1000 mL Batch: - - GSL 536-90

Test Volume: 500 mL Feeding: (Prior to test) - Prior to renewal - Daily

Concentration	Replicate	Chamber #	Test Hour: 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
CTRL	A	F17	5	5	5			
	B	F18	5	5	5			
	C	F19	5	5	5			
	D	F20	5	5	5			
25%	A	F21	5	5	5			
	B	F22	5	5	5			
	C	F23	5	5	5			
	D	F24	5	5	5			
Organisms loaded by: JD		Checked by:	[redacted]	JD	JD			

Loading Verified by: SP

m = missing d = dead BR = before renewal AR = after renewal

Comments:

Test Results:

% mortality in ~~100~~ 25% sample: 0

LC_{50}: >25 If Calculated: 95% CI______ Method:______

Screening Tests:

Report LC50 as >100%, =100%, or <100%.

Substitue highest test concentration used if other than 100% (example: Ocean outfall tested at 30% concentration).

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Appendix 2. Bench Sheets (continued)

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample #: 897013 Test #: 1 of 2

TEST SOP #: TA07_03 Test Species: *Ceriodaphnia dubia* *Cyprinella leedsi* *Pimephales promelas* *Americamysis bahia* *Menidia beryllina* Other:

Concentration CTRL	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	8.2	8.2	8.0			
Temperature °C	24.9	24.0	24.4			
Dissolved Oxygen mg/L	7.9	5.6	5.3			
Conductivity µmhos mmhos	327	318	320			
(initials) Measured by:	SK	JH	JH			
(initials) Recorded by:	SK	JH/KM	JH			

Comments:

Concentration 25%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	7.9	8.1	8.0			
Temperature °C	24.7	24.3	24.4			
Dissolved Oxygen mg/L	5.7 (A)	6.0	5.4			
Conductivity µmhos mmhos	346.7	279	281			
(initials) Measured by:	SK	JH	JH			
(initials) Recorded by:	SK	JH/KM	JH			

Comments:
(A) transcription error JH

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

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FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 897613 **Test #:** 2 of 2

TEST SOP #: TA07_ 04 **Test Species:** *Ceriodaphnia dubia* *Cyprinella leedsi* *Pimephales promelas* *Americamysis bahia* (*Menidia beryllina*) Other:_____

Concentration CTRL	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	8.2	8.2	8.1			
Temperature °C	24.5	24.1	24.4			
Dissolved Oxygen mg/L	7.5	5.9	5.6			
Conductivity µmhos (mmhos)	32.3	32.6	33.7			
(initials) Measured by:	~~SP~~	~~JD~~	JD			
(initials) Recorded by:	~~SP~~	~~JD~~/SP	JD			

Comments:

Concentration 25%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	7.9	8.0	8.1			
Temperature °C	24.6	24.5	24.2			
Dissolved Oxygen mg/L	~~5.8~~ 7.5 (A)	5.8	6.1			
Conductivity µmhos (mmhos)	26.8	26.8	27.1			
(initials) Measured by:	SP	JD	JD			
(initials) Recorded by:	SP	JD/SP	JD			

Comments:
(A) transcription error SP

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

Concentration	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate						
pH (S.U.)						
Temperature °C						
Dissolved Oxygen mg/L						
Conductivity µmhos mmhos						
(initials) Measured by:						
(initials) Recorded by:						

Comments:

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Appendix 3. SRT Bench Sheets and Statistical Analysis

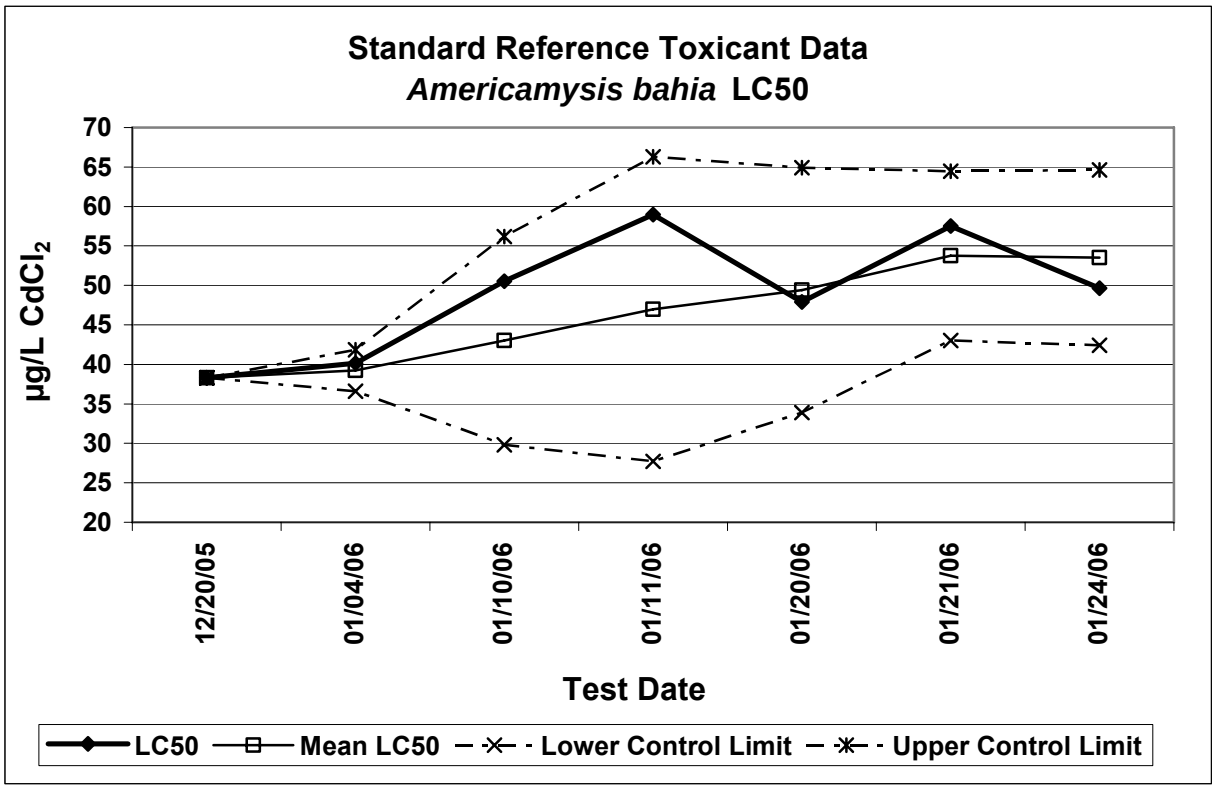
Florida Department of Environmental Protection
Bureau of Laboratories

Standard Reference Toxicant (SRT) Test Data - Acute Toxicity
Americamysis bahia (mysid shrimp) - Cadmium Chloride (CdCl2)

Date	LC50	Mean LC50	Std Dev	Lower Control Limit	Upper Control Limit
12/20/05	38.30	38.30	-	38.30	38.30
01/04/06	40.16	39.23	1.32	36.60	41.86
01/10/06	50.55	43.00	6.60	29.80	56.21
01/11/06	58.98	47.00	9.64	27.72	66.27
01/20/06	47.91	49.40	7.76	33.88	64.92
01/21/06	57.54	53.75	5.36	43.03	64.46
01/24/06	49.65	53.52	5.55	42.42	64.62

Lower Confidence Limit = mean - 2 * Std Dev
Upper Confidence Limit = mean + 2 * Std Dev

CV = 10.37
EPA reference 75th quartile CV = 26%



*Fewer than 20 points are charted due to recent initiation of SRT testing using $CdCl_2$.

Appendix 3. (continued)

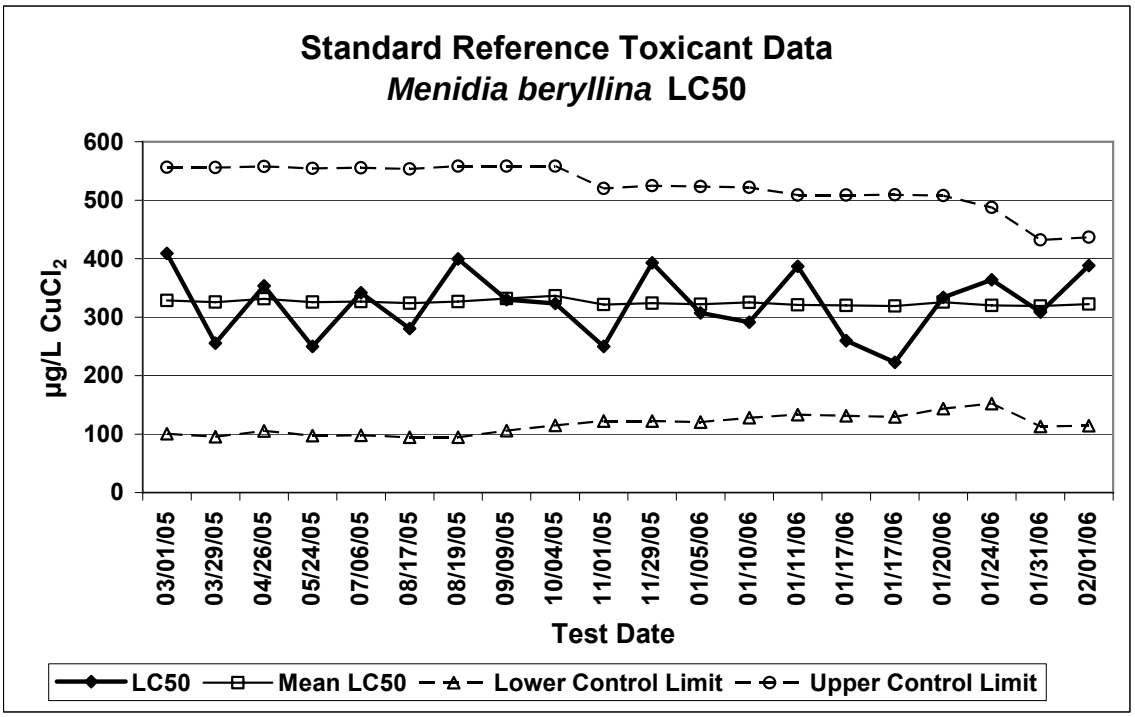
Florida Department of Environmental Protection
Bureau of Laboratories

Standard Reference Toxicant (SRT) Test Data - Acute Toxicity
Menidia beryllina (inland silverside) - Copper Chloride ($CuCl_2$)

Date	LC50	Mean LC50	Std Dev	Lower Control Limit	Upper Control Limit
03/01/05	409.10	328.68	113.88	100.93	556.43
03/29/05	255.31	325.46	115.05	95.36	555.55
04/26/05	353.55	331.47	113.10	105.27	557.67
05/24/05	250.00	325.88	114.28	97.32	554.44
07/06/05	341.51	326.46	114.33	97.80	555.12
08/17/05	280.62	324.00	114.78	94.43	553.56
08/19/05	399.46	326.40	115.88	94.63	558.16
09/09/05	329.88	331.94	113.09	105.75	558.13
10/04/05	323.49	336.45	110.73	115.00	557.90
11/01/05	250.00	321.21	99.50	122.21	520.21
11/29/05	392.98	323.59	100.67	122.25	524.94
01/05/06	307.20	321.88	100.64	120.60	523.16
01/10/06	291.06	325.02	98.52	127.97	522.07
01/11/06	386.80	320.91	93.81	133.29	508.53
01/17/06	259.80	319.91	94.38	131.15	508.67
01/17/06	222.49	319.26	95.03	129.21	509.32
01/20/06	333.67	325.74	91.10	143.54	507.94
01/24/06	363.93	319.79	83.89	152.01	487.57
01/31/06	308.77	318.93	56.58	113.17	432.09
02/01/06	388.25	322.39	57.21	114.43	436.82

Means are of the last 20 SRT tests.
Lower Confidence Limit = mean - 2 * Std Dev
Upper Confidence Limit = mean + 2 * Std Dev

CV = 17.74
EPA reference 75th quartile CV = 21%



Appendix 3. (continued)

FDEP Biology Section - Acute SRT Bench Sheet

Test Organism: (*Americamysis bahia*) Method 2007.0 | *Menidia beryllina* Method 2006.0 | *Hyalella azteca* Method 100.1 EPA-600-R-99-064
Ceriodaphnia dubia Method 2002.0 | *Cyprinella leedsi* Method 2000.0 | *Pimephales promelas* Method 2000.0 | Other:

Method from EPA-821-R-02-012
Test Type: Screening / Definitive
(Static) Static Renewal

Diluent/ Batch#: ASW / 12 C09
Toxicant/ Batch#: CdCl2 / 2-06

Test Beginning: Date: 1-24-06 Time: 1300
Test Ending: Date: 1-26-06 Time: 1320

Water Quality Parameters:	Diluent	Method
Total Residual Cl: (mg/L)	<0.3	Hach
Alkalinity (mg/L as $CaCO_3$):	212	Hach
Hardness (mg/L as CaCO3):	–	Hach
Total Ammonia (mg/L as N): 2.034 ~~0.017~~		Denver micro-distillation
Salinity (ppth)	20	Mettler

Organism Batch #/ Age: 7-AC / 4 days
Feeding:- (Prior to test) / Prior to renewal (Daily)
Food: YCT – *P.subcapitata* – Artemia
Food Batch: – – GSL-536-90
Chamber size: 1000 mL
Test volume: 500 mL per replicate

Conc. (µg/L) g/L	Rep.	Chamber#	Number Live 0 hr / 24 hr / 48 hr			pH (SU) 0 hr / 24 hr / 48 hr			Temperature (° C) 0 hr / 24 hr / 48 hr			D.O. (mg/l) 0 hr / 24 hr / 48 hr			UNCORRECTED Cond. (mmhos/cm) Cond. (µmhom/cm) 0 hr / 24 hr / 48 hr		
			48 hr	72 hr	96 hr	48 hr	72 hr	96 hr	48 hr	72 hr	96 hr	48 hr	72 hr	96 hr	48 hr	72 hr	96 hr
Control	A	G1	5	5	5	8.1			25.2			7.1			32.6		
	B	G2	5	5	5		8.1			24.9			5.2			33.3	
	C	G3	5	5	5			8.0			24.6			4.4			33.5
	D	G4	5	5	5												
20	A	G5	5	5	5	8.1			25.0			7.2			32.5		
	B	G6	5	5	5		8.1			24.1			4.5			34.0	
	C	G7	5	5	5			8.0			23.9			4.9			33.9
	D	G8	5	5	5												
30	A	G9	5	5	5	8.1			24.5			7.2			32.5		
	B	G10	5	5	5		8.1			24.2			4.9			33.2	
	C	G11	5	5	5			8.0			24.1			5.2			33.5
	D	G12	5	5	5												
45	A	G13	5	5	3 3D	8.2			24.4			7.3			32.5		
	B	G14	5	5	4 1D		8.1			24.1			5.1			33.8	
	C	G15	5	5	4 0D			8.0			24.1			5.5			33.5
	D	G16	5	5	2 5D												
67	A	G17	5	4	0 7D	8.2			24.4			7.3			32.6		
	B	G18	5	5	0 5D		8.1			24.9			4.8			33.1	
	C	G19	5	5	1 4D			8.0			24.3			5.2			33.8
	D	G20	5	5	1 4D												
100	A	G21	5	5	0 5D	8.2			24.6			7.3			32.6		
	B	G22	5	5	0 5D		8.1			24.7			4.9			32.7	
	C	G23	5	5	0 5D			8.1			24.8			5.2			33.7
	D	G24	5	5	0 5D												
	A																
	B																
	C																
	D																
Loaded / measured by:			TD	SF	AB	SF	AB	AB	SF	AB	AB	SF	AB	AB	SF	AB	AB
Recorded by:			AB	SF	AB	SF	AB	AB	SF	AB	AB	SF	AB	AB	SF	AB	AB

Investigators' Signatures
Brad Richardson
Frank Parkinson
Marshall Faircloth
Jose Lamit
Mark Wallen
REVIEWER

Concentrations prepared by: MF
Loading verified by: AB
Light Intensity: 50-100 Ft. candles (yes), no)
Photoperiod: 16 hours Light / 8 hours dark (yes), no)
Temperature Range °C:
Incubator # 2 min. 24.6 max. 25.1 mean 24.9
Incubator # N/A min. ____ max. ____ mean ____
Room B246 min. 23.9 max. 25.4 mean 24.1

Remarks:

Statistical Results: Method: Spearman-Karber
(48)/ 96 hour LC50: 49.65
95% Confidence Interval: lower 42.33 upper 54.93

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Appendix 3. (continued)

FDEP Biology Section - Acute SRT Bench Sheet

Test Organism: *Americamysis bahia* (Method 2007.0) / *Menidia beryllina* (Method 2006.0) / *Hyalella azteca* (Method 100.1 EPA-600-R-99-064) / *Ceriodaphnia dubia* (Method 2002.0) / *Cyprinella leedsi* (Method 2000.0) / *Pimephales promelas* (Method 2000.0) / Other: _____

Method from EPA-821-R-02-012
Test Type: Screening / Definitive
Static / Static Renewal

Diluent/ Batch#: ASW / 3-06
Toxicant/ Batch# $CuCl_2$ / 2-06

Test Beginning: Date: 2/.06 Time: 11:15
Test Ending: Date: 2-3-06 Time: 1230

Water Quality Parameters:	Diluent	Method
Total Residual Cl_2 (mg/L):	<0.03	Hach
Alkalinity (mg/L as $CaCO_3$):	210	Hach
Hardness (mg/L as CaCO3):	—	Hach
Total Ammonia (mg/L as N):	<0.034	Denver
Salinity (ppth):	20.3	Mettler

Organism Batch #/ Age: 10.06 / 10 days
Feeding: Prior to test / Prior to renewal / Daily
Food: YCT P.*subcapitata* Artemia
Food Batch: — — GSL536-90
Chamber size: 1000 mL
Test volume: 500 mL per replicate

Conc. µg/L	Rep.	Chamber#	Number Live 0 hr	Number Live 24 hr	Number Live 48 hr	pH (SU) 0 hr	pH (SU) 24 hr	pH (SU) 48 hr	Temperature (° C) 0 hr	Temperature (° C) 24 hr	Temperature (° C) 48 hr	D.O. (mg/l) 0 hr	D.O. (mg/l) 24 hr	D.O. (mg/l) 48 hr	UNCORRECTED Cond. (mmhos/cm) 0 hr	UNCORRECTED Cond. (mmhos/cm) 24 hr	UNCORRECTED Cond. (mmhos/cm) 48 hr
			48 hr	72 hr	96 hr	48 hr	72 hr	96 hr	48 hr	72 hr	96 hr	48 hr	72 hr	96 hr	48 hr	72 hr	96 hr
Control	A	B13	10	10	10	8.2		8.0	24.9		24.1	5.3		5.7	325		33.3
	B	B14	10	10	10		8.0			24.3			5.4			33.3	
	C					3					(B)						
	D																
100	A	B15	10	10	10	8.2		8.0	24.9		24.8	5.7		5.7	32.1		33.0
	B	B16	10	10	10		8.0			24.1			5.7			33.2	
	C																
	D																
200	A	B17	10	10	10	8.2		8.0	24.8		24.1	5.0		5.9	325		33.1
	B	B18	10	10	10		8.0			24.3			5.7			33.3	
	C																
	D																
300	A	B19	10	9 (D)	9	8.2		8.0	24.7		24.0	5.4		6.1	324		32.7
	B	B20	10	10	8 (D)		8.1			24.6			5.7			33.0	
	C																
	D																
400	A	B21	10	8 (D)	6 (D)	8.3		8.0	24.6		24.1	5.4		6.0	323		32.9
	B	B22	10	9 (D)	>20		8.0			24.8			5.3			33.0	
	C																
	D																
500	A	B23	10	10	0 (D)	8.3		8.0	24.5		24.1	5.5		6.0	323		32.8
	B	B24	10	~~8~~ (A)	0 (D)		8.0			24.2			5.2			33.3	
	C																
	D																
	A																
	B																
	C																
	D																
Loaded / measured by:			ZD	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP
Recorded by:			BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP	BP

Investigators' Signatures

REVIEWER

Concentrations prepared by: MF
Loading verified by: BP
Light Intensity: 50-100 Ft. candles (yes) no)
Photoperiod: 16 hours Light / 8 hours dark (yes) no)
Temperature Range °C:
Incubator # 2 min. 24.6 max. 24.9 mean 24.8
Incubator # ___ min. ___ max. ___ mean ___
Room B246 min. 23.7 max. 25.1 mean 24.4

Remarks: (A) transcription error 730 BP
(B) 24.6

Statistical Results: Method: Spearman-Karber
(48) 96 hour LC50: 388.25
95% Confidence Interval: lower 359.24 upper 419.61

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Appendix 3. (continued)

Americamysis bahia Acute Standard Reference Toxicant Test

START DATE: 01-24-06 DURATION: 48 h TOXICANT : CdCl2
SPECIES: *A. bahia*

RAW DATA: Concentration (µg/L)	Number Exposed	Mortalities
0.00	20	0
20.00	20	0
30.00	20	0
45.00	20	7
67.00	20	18
100.00	20	20

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES: LC50: 49.65
95% LOWER CONFIDENCE: 44.88
95% UPPER CONFIDENCE: 54.93

Menidia beryllina Acute Standard Reference Toxicant Test

DATE: 02-01-06 DURATION: 48 h TOXICANT : CuCl2
SPECIES: *M. beryllina*

RAW DATA: Concentration (ug/L)	Number Exposed	Mortalities
0.00	20	0
100.00	20	0
200.00	20	0
300.00	20	3
400.00	20	7
500.00	20	20

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES: LC50: 388.25
95% LOWER CONFIDENCE: 359.24
95% UPPER CONFIDENCE: 419.61

Appendix 4. Test Organism Receipts

Aquatic Indicators, Inc.

P.O. Box 632 • St. Augustine, FL 32085-0632 • (904) 829-2780

Date 1-23-06

Species:

1. M. bahia
2. M. beryllina
3.

Total Supplied:

1. 150 + 80 @ 15°/oo
2. 240 @ 20°/oo + 60 @ 10°/oo
3.

Brood Description:

1. EPA
2. EPA
3.

Age:

1. 3 days
2. 10 days
3.

Environmental Regime	Feeding:	Zooplankton Artemia NH ✓	Photo:	L 16	D 8

P.H.: 8.1 Temp: 25°C Salinity: 20‰

Comments:

Thanks.

Appendix 4. (continued)

Aquatic Indicators, Inc.

P.O. Box 632 • St. Augustine, FL 32085-0632 • (904) 829-2780

Date 1-30-06

Species:

1. M. bahia
2. M. beryllina
3.

Total Supplied:

1. 100
2. 120 @ 8 days + 120 @ 9 days
3.

Brood Description:

1. EPA
2. EPA
3.

Age:

1. 3 days
2. see above
3.

Environmental Regime	Feeding:	Zooplankton Artemia NH	Photo:	L 16	D 8
P.H.: 8.1	Temp:	25°C	Salinity:	20‰	

Comments:

Thanks.

Appendix 4. (continued)

Aquatic Indicators, Inc.

P.O. Box 632 • St. Augustine, FL 32085-0632 • (904) 829-2780

Date 2-6-06

Species:

1. M. bahia
2. M. berylllina
3.

Total Supplied:

1. 100
2. 100
3.

Brood Description:

1. GEA
2. GEA
3.

Age:

1. 2 days
2. 9 days
3.

Environmental Regime	Feeding:	Zooplankton Artemia NH ✓	Photo:	L 16	D 8
P.H.: 8.1	Temp:	25°C	Salinity:	20‰	

Comments:

Thanks.

Appendix 5. Chemical Analyses performed on the effluent from the Kings Gate R.V. Park Reverse Osmosis Water Treatment Plant Outfall D-001, sampled on February 6, 2006.

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
2/6/2006 10:23	OUTFALL DOO1	Bio-AGP/LimNut	Algal Growth Potential	No Result	mg DryWt/L			
2/6/2006 10:23	OUTFALL DOO1	Bio-BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	2.1	mg/L		0.2	2.0
2/6/2006 10:23	OUTFALL DOO1	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
2/6/2006 10:23	OUTFALL DOO1	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	1.5	ug/L	U	1.5	4.5
2/6/2006 10:23	OUTFALL DOO1	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC50	25	LC50	L		
2/6/2006 10:23	OUTFALL DOO1	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC50	25	LC50	L		
2/6/2006 10:50	FIELD BLANK	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
2/6/2006 10:50	FIELD BLANK	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57
2/6/2006 10:50	FIELD BLANK	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	11
2/6/2006 10:50	FIELD BLANK	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
2/6/2006 10:50	FIELD BLANK	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
2/6/2006 10:50	FIELD BLANK	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
2/6/2006 10:50	FIELD BLANK	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Benzidine	95	ug/L	U	95	380
2/6/2006 10:50	FIELD BLANK	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8

Appendix 4. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
2/6/2006 10:50	FIELD BLANK	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
2/6/2006 10:50	FIELD BLANK	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
2/6/2006 10:50	FIELD BLANK	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
2/6/2006 10:50	FIELD BLANK	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	Diethyl phthalate	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
2/6/2006 10:50	FIELD BLANK	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
2/6/2006 10:50	FIELD BLANK	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
2/6/2006 10:50	FIELD BLANK	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
2/6/2006 10:50	FIELD BLANK	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
2/6/2006 10:50	FIELD BLANK	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
2/6/2006 10:50	FIELD BLANK	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
2/6/2006 10:50	FIELD BLANK	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	UJ	2.9	11
2/6/2006 10:50	FIELD BLANK	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
2/6/2006 10:50	FIELD BLANK	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
2/6/2006 10:50	FIELD BLANK	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
2/6/2006 10:50	FIELD BLANK	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
2/6/2006 10:50	FIELD BLANK	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	11
2/6/2006 10:50	FIELD BLANK	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11

Appendix 4. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
2/6/2006 10:50	FIELD BLANK	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	11
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Benzidine	95	ug/L	U	95	380
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	U	0.95	3.8

Appendix 4. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Diethyl phthalate	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	UJ	2.9	11
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	11
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
2/6/2006 10:23	OUTFALL DOO1	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8
2/6/2006 10:50	FIELD BLANK	GC-Water	Alachlor	0.57	ug/L	U	0.57	2.3

Appendix 4. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
2/6/2006 10:50	FIELD BLANK	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.19
2/6/2006 10:50	FIELD BLANK	GC-Water	Atrazine	0.048	ug/L	U	0.048	0.19
2/6/2006 10:50	FIELD BLANK	GC-Water	Azinphos Methyl	0.19	ug/L	U	0.19	0.76
2/6/2006 10:50	FIELD BLANK	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
2/6/2006 10:50	FIELD BLANK	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
2/6/2006 10:50	FIELD BLANK	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.19
2/6/2006 10:50	FIELD BLANK	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	U	0.095	0.38
2/6/2006 10:50	FIELD BLANK	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.19
2/6/2006 10:50	FIELD BLANK	GC-Water	Ethion	0.048	ug/L	U	0.048	0.19
2/6/2006 10:50	FIELD BLANK	GC-Water	Ethoprop	0.095	ug/L	U	0.095	0.38
2/6/2006 10:50	FIELD BLANK	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
2/6/2006 10:50	FIELD BLANK	GC-Water	Fonofos	0.095	ug/L	U	0.095	0.38
2/6/2006 10:50	FIELD BLANK	GC-Water	Hexazinone	0.095	ug/L	U	0.095	0.38
2/6/2006 10:50	FIELD BLANK	GC-Water	Malathion	0.14	ug/L	U	0.14	0.56
2/6/2006 10:50	FIELD BLANK	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
2/6/2006 10:50	FIELD BLANK	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.9
2/6/2006 10:50	FIELD BLANK	GC-Water	Metribuzin	0.095	ug/L	U	0.095	0.38
2/6/2006 10:50	FIELD BLANK	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
2/6/2006 10:50	FIELD BLANK	GC-Water	Naled	0.76	ug/L	U	0.76	3
2/6/2006 10:50	FIELD BLANK	GC-Water	Norflurazon	0.14	ug/L	U	0.14	0.56
2/6/2006 10:50	FIELD BLANK	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
2/6/2006 10:50	FIELD BLANK	GC-Water	Parathion Methyl	0.095	ug/L	U	0.095	0.38
2/6/2006 10:50	FIELD BLANK	GC-Water	Phorate	0.048	ug/L	U	0.048	0.19
2/6/2006 10:50	FIELD BLANK	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
2/6/2006 10:50	FIELD BLANK	GC-Water	Simazine	0.048	ug/L	U	0.048	0.19
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Alachlor	0.6	ug/L	U	0.6	2.4
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Ametryn	0.05	ug/L	U	0.05	0.2
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Atrazine	0.05	ug/L	U	0.05	0.2
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Azinphos Methyl	0.2	ug/L	U	0.2	0.8
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Chlorpyrifos Ethyl	0.05	ug/L	U	0.05	0.2
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Diazinon	0.05	ug/L	U	0.05	0.2
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Ethion	0.05	ug/L	U	0.05	0.2
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Fonofos	0.1	ug/L	U	0.1	0.4

Appendix 4. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Malathion	0.15	ug/L	U	0.15	0.6
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Metalaxyl	0.25	ug/L	U	0.25	1
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Metolachlor	0.5	ug/L	U	0.5	2
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Mevinphos	0.2	ug/L	U	0.2	0.8
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Naled	0.8	ug/L	U	0.8	3.2
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Norflurazon	0.15	ug/L	U	0.15	0.6
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Phorate	0.05	ug/L	U	0.05	0.2
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
2/6/2006 10:23	OUTFALL DOO1	GC-Water	Simazine	0.05	ug/L	U	0.05	0.2
2/6/2006 10:50	FIELD BLANK	Metals-Water	Aluminum	5	ug/L	U	5	20
2/6/2006 10:50	FIELD BLANK	Metals-Water	Arsenic	4	ug/L	U	4	16
2/6/2006 10:50	FIELD BLANK	Metals-Water	Cadmium	0.05	ug/L	U	0.05	0.2
2/6/2006 10:50	FIELD BLANK	Metals-Water	Calcium	0.05	mg/L	U	0.05	0.2
2/6/2006 10:50	FIELD BLANK	Metals-Water	Chromium	2	ug/L	U	2	8
2/6/2006 10:50	FIELD BLANK	Metals-Water	Copper	0.25	ug/L	U	0.25	1
2/6/2006 10:50	FIELD BLANK	Metals-Water	Iron	10	ug/L	U	10	40
2/6/2006 10:50	FIELD BLANK	Metals-Water	Lead	0.075	ug/L	U	0.075	0.3
2/6/2006 10:50	FIELD BLANK	Metals-Water	Magnesium	0.01	mg/L	U	0.01	0.04
2/6/2006 10:50	FIELD BLANK	Metals-Water	Nickel	1	ug/L	U	1	4
2/6/2006 10:50	FIELD BLANK	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
2/6/2006 10:50	FIELD BLANK	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
2/6/2006 10:50	FIELD BLANK	Metals-Water	Zinc	3	ug/L	U	3	12
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Aluminum	5	ug/L	UY	5	20
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Arsenic	5.8	ug/L	IY	4	16
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Cadmium	0.25	ug/L	UY	0.25	1
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Calcium	1.18E+03	mg/L	Y	0.5	2
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Chromium	4.6	ug/L	UY	4.6	18
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Copper	1.95	ug/L	Y	0.25	1
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Iron	10	ug/L	UY	10	40
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Lead	0.37	ug/L	UY	0.37	1.5
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Magnesium	578	mg/L	Y	0.1	0.4
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Nickel	1.3	ug/L	IY	1	4
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Selenium	2.5	ug/L	UY	2.5	10
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Silver	0.13	ug/L	UY	0.13	0.5

Appendix 4. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
2/6/2006 10:23	OUTFALL DOO1	Metals-Water	Zinc	10	ug/L	IY	3	12
2/6/2006 10:50	FIELD BLANK	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
2/6/2006 10:50	FIELD BLANK	Nutrients-Liquid	Kjeldahl Nitrogen	0.08	mg N/L	U	0.08	0.2
2/6/2006 10:50	FIELD BLANK	Nutrients-Liquid	NO2NO3-N	0.28	mg N/L		0.004	0.01
2/6/2006 10:50	FIELD BLANK	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01
2/6/2006 10:50	FIELD BLANK	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06
2/6/2006 10:23	OUTFALL DOO1	Nutrients-Liquid	Ammonia-N	0.85	mg N/L		0.05	0.1
2/6/2006 10:23	OUTFALL DOO1	Nutrients-Liquid	Kjeldahl Nitrogen	1.7	mg N/L		0.16	0.4
2/6/2006 10:23	OUTFALL DOO1	Nutrients-Liquid	NO2NO3-N	0.34	mg N/L		0.004	0.01
2/6/2006 10:23	OUTFALL DOO1	Nutrients-Liquid	O-Phosphate-P	0.013	mg P/L		0.004	0.01
2/6/2006 10:23	OUTFALL DOO1	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06
2/6/2006 10:23	OUTFALL DOO1	Nutrients-Liquid	TSS	4	mg/L	U	4	16
2/6/2006 10:23	OUTFALL DOO1	Nutrients-Liquid	Turbidity	0.3	NTU		0.05	0.05
2/6/2006 10:50	FIELD BLANK	Overflow	Alpha, Total	0.5	pCi/L	U		
2/6/2006 10:50	FIELD BLANK	Overflow	Alpha-Counting Error	0.3	pCi/L			
2/6/2006 10:50	FIELD BLANK	Overflow	Radium 226	0.2	pCi/L	U		
2/6/2006 10:50	FIELD BLANK	Overflow	Radium 226-Counting Error	0.1	pCi/L			
2/6/2006 10:50	FIELD BLANK	Overflow	Radium 228	0.8	pCi/L	U		
2/6/2006 10:50	FIELD BLANK	Overflow	Radium 228-Counting Error	0.5	pCi/L			
2/6/2006 10:23	OUTFALL DOO1	Overflow	Alpha, Total	67.6	pCi/L			
2/6/2006 10:23	OUTFALL DOO1	Overflow	Alpha-Counting Error	13.8	pCi/L			
2/6/2006 10:23	OUTFALL DOO1	Overflow	Radium 226	32.9	pCi/L			
2/6/2006 10:23	OUTFALL DOO1	Overflow	Radium 226-Counting Error	1	pCi/L			
2/6/2006 10:23	OUTFALL DOO1	Overflow	Radium 228	1.4	pCi/L			
2/6/2006 10:23	OUTFALL DOO1	Overflow	Radium 228-Counting Error	0.6	pCi/L			

The Bioassay of Kings Gate R.V. Park Reverse Osmosis Water Treatment Plant effluent sampled on February 6, 2006. NPDES #FL0188948.

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

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5	3 F L 0 1 8 8 9 4 8 11	12 0 6 0 2 0 6	18 **B**	19 **S**	20 2

Remarks

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The Priority Pollutants Analysis of Kings Gate R.V. Park Reverse Osmosis Water Treatment Plant effluent sampled on February 6, 2006. NPDES #FL0188948.

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

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5	3 F L 0 1 8 8 9 4 8 11	12 0 6 0 2 0 6	18 **X**	19 **S**	20 2

Remarks

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Biological Analyses of Kings Gate R.V. Park Reverse Osmosis Water Treatment Plant effluent sampled on February 6, 2006. NPDES #FL0188948.

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

Transaction Code	NPDES NUMBER	YR/MO/DA	Insp Type	Inspector	Fac Type
1 N 2 5	3 F L 0 1 8 8 9 4 8 11	12 0 6 0 2 0 6	18 **S**	19 **S**	20 2

Remarks

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