

Bioassays of

Indian River County Utility Department Hobart Park Reverse Osmosis Water Treatment Plant

Indian River County

NPDES #FL0166511

Sampled January 23, 2006

April 2006

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Indian River County Utilities Department Hobart Park Reverse Osmosis Water Treatment Plant, 58th Avenue at 77th Street, Vero Beach, Indian River County, Florida, NPDES #FL0166511. Effluent samples for this facility were collected on January 23, 2006.

Introduction

Indian River County Utilities Department Hobart Park Reverse Osmosis Water Treatment Plant is a potable water treatment plant which uses the reverse-osmosis (RO) process to produce potable water for the Town of Hobart Park. The facility has a design flow of 0.750 million gallons per day (MGD) of demineralization concentrate. The average annual daily flow (AADF) from January 2005 through December 2005 was 0.4729 MGD. Treatment of demineralization concentrate consists of chlorination and aeration to remove hydrogen sulfide. The demineralization concentrate pipeline is vented prior to discharge to remove residual chlorine. Effluent is discharged into the Class II marine waters of the Indian River Lagoon at the Highway 510 Bridge (Wabasso Causeway).

The facility is currently under a resolution agreement for permit violations of toxicity, hydrogen sulfide, combined radium, and total alpha particle activity. During the past year the facility had permit violations of toxicity (*Americamysis bahia* LC50 < 100%) in January, April, and July 2005 and residual chlorine in March and April 2005. (Facility information provided by Michael Eckoff of FDEP Central District.)

Methods

Samples were collected from the EFF-001 NPDES sampling point for Outfall D-001 by Steve Kent (FDEP Central 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 SOP's are available on the web at: http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp. While the 48-hour acute screening toxicity test does not reflect the permit required conditions, the Department uses it to provide reasonable assurance that the facility does not adversely affect waters of the state.

The bioassay sample used in the *Americamysis bahia* test was salinity adjusted from an apparent salinity of approximately 3 parts per thousand (ppth) to approximately 6 ppth using 40 Fathoms® artificial sea salts per permit requirements. The salt control used for this test was prepared by diluting 20 ppth salinity artificial seawater (ASW) with well water to an approximate salinity of 3 ppth, and then salting this solution with artificial sea salts to approximately 6 ppth salinity. The purpose of the salt controls was to confirm that there was no effect of adding artificial sea salts to the sample. There was 5% mortality in the salt control of the *A. bahia* bioassay. The bioassay sample used for the *Menidia beryllina* test was not salinity adjusted.

The AGP sample salinity was increased from approximately 3 ppth to 7 ppth to meet the minimum salinity requirements of the test species.

Toxicity Test Results

Tests were performed January 24 - 26, 2006.

Americamysis bahia 48-hour acute definitive bioassay –	LC_{50} < 100%, 100% mortality* in100% sample at 48 hours

Menidia beryllina 48-hour acute definitive bioassay – LC_{50} > 100%, 0% mortality* in 100% sample at 48 hours

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

The chemistry results confirmed that the ion makeup of the sample was not in seawater proportions and that the apparent 3 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 277 mg/L at 3 ppth salinity (salinity based on conductivity and temperature), approximately 6.7 times (6.7x) the normal concentration for calcium in seawater of this salinity. The calculated calcium concentration in the salinity adjusted sample (312 mg/L) was approximately four times the normal calcium concentration in seawater of this salinity (approximately 6 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 1.27 mg dry wt/L of the saltwater species *Dunaliella tertiolecta.* Raschke and Shultz found that AGP values above 10.0 mg dry weight/L represent a "problem" threshold for marine receiving waters, implying nutrient enrichment (personal communication with Ron Raschke USEPA Region 4 1987). 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 in the bioassay sample in the laboratory at a concentration of 1.44 mg/L. The total ammonia concentration in the sample collected and preserved for chemical analysis was 1.5 mg/L. Based on the pH, salinity, and temperature of the effluent as collected, the calculated unionized ammonia concentration was < 0.02 mg/L.

Copper was detected in the effluent at levels that comply with Class II water quality criteria. Lead and nickel were detected between the laboratory method detection limits (MDL) and practical quantitation limits (PQL). The effluent total alpha particle activity (23.3 pCi/L) and concentration of

combined radium 226+228 (9.2 pCi/L) exceeded the water quality criteria of 15 pCi/L and 5 pCi/L, (62-302.530(58)(b) and (a), F.A.C.) respectively.

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 effluent sample collected from Outfall D-001 for this facility on January 23, 2006, was acutely toxic to the marine mysid, *A. bahia,* and was not acutely toxic to the marine fish, *M. beryllina*, during the acute screen 48-hour bioassays. The effluent AGP result was less than the "problem" threshold for marine receiving waters. Effluent total alpha particle activity and concentrations of combined radium 226+228 exceeded their respective water quality criteria and permitted 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 Indian River County Utilities Department Hobart Park Reverse Osmosis Water Treatment Plant on January 23, 2006.*

Location	AGP (measured)	Inorganic N:P ratio	Total N:P ratio
Effluent Samples	1.27	71.71	51.24

Table 2. Effluent limits, Class II Water Quality Criteria, and chemical data for samples collected from Indian River County Utilities Department Hobart Park Reverse Osmosis Water Treatment Plant on January 23, 2006

IRCUD Hobart Park RO WTP NPDES# FL0166511	Class II Stds	Effluent Limits	Effluent Samples
Organic Constituents (µg/L)			
None Detected	-	-	-
Metals (µg/L unless otherwise noted)			
Aluminum	≤ 1,500	-	15 U
Arsenic	≤ 50	-	12 U
Cadmium	≤ 9.3	-	0.25 U
Calcium (mg/L)	-	-	277
Chromium-III	-	-	6 U
Copper	≤ 3.7	≤ 50	2.78
Iron	≤ 300	-	30 U
Lead	≤ 8.5	-	2 I
Magnesium (mg/L)	-	-	239
Nickel	≤ 8.3	-	0.77 I
Selenium	≤ 71	-	5 U
Silver	≤ 2.3	-	0.25 U
Zinc	≤ 86	-	9 U
Nutrients (mg/L)			
Ortho-phosphate	-	-	0.021
Total Phosphorus	-	≤ 1	0.045 I
Ammonia	-	-	1.5 A
Unionized Ammonia	-	-	< 0.02 c
Nitrate+Nitrite	-	-	0.006 I
Total Kjeldahl Nitrogen	-	-	2.3 A
Organic Nitrogen	-	-	0.8 c
Total Nitrogen	-	≤ 3	2.31 c
General Physical and Chemical Parameters			
Alpha, Total (pCi/L)	≤ 15	Report	23.3
Alpha-Counting Error (pCi/L)	-	-	4.4
Radium 226 (pCi/L)	-	-	9.2
Radium 226-Counting Error (pCi/L)	-	-	0.5
Radium 228 (pCi/L)	-	-	0.9 U
Radium 228-Counting Error (pCi/L)	-	-	0.5
Radium 226+228 (pCi/L)	≤ 5	Report	9.2 c
Chloride (mg/L)	g	g	1,400
Hydrogen sulfide (mg/L)	-	Report	-
Total residual chlorine (mg/L; lab)	≤ 0.01	≤ 0.0	< 0.03 U
Turbidity (NTU)	≤ 29 t	≤ 29 t	0.2
Dissolved Oxygen (mg/L)	≥ 4	≥ 5	8.9
pH (S.U.)	6.5-8.5	6.5-8.5	7
Conductivity (umhos/cm)	-	-	56,800
Temperature (C)	-	-	24.8
Chlorophyll *a* (µg/L)	-	-	0.85 U
Phaeophytin *a* (µg/L)	-	-	1.5 U
Flow (MGD)	-	0.750 d	0.4729 a
Hardness (mg/L)	-	-	1,675.9 c

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

a - Annual average

c - Calculated value

d - Daily maximum

g - Chlorides shall not be increased more than 10% above normal background

t - Shall not exceed 29 NTUs above background

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

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

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

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Request Number: RQ-2006-01-23-12
IRCUD/Hobart Park RO WTP

Event ID *

Requester: Shannan Gunnoe
Field Report Prepared By: KANE, KENT

Customer: CEN-DIST
Collected By: KENT,
Send Final Report To Phil Kane

Project ID: FYI3
Sampling Agency: FDEP CENTRAL DISTRICT

PMAS: 1163

Lab ID *	Location	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
★	IRCUD HOBART PARK R/O 1325 74TH AVE. SW VERO BEACH, FL.	☐ Comp ☑ Grab	Date 1/23/06 Time 12:30 Central	Date PK Time Central	A 20
	Field ID: HOBA	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 8.84	Storet Station Number	
	Matrix (Include type e.g. Salt, Fresh, etc): EFFLUENT	Temp (C): 24.84	pH: 7.0	Sample Depth ☐ m ☐ ft: 5	☐ Salinity (PPTh) ☑ Sp Conductance (umho/cm): 56,800	NPDES Number: FL0166511
	Latitude o ' "	Longitude o ' "	Comments: check PH Alpha and Radium bottles [redacted] sep.		

Lab ID *	Location	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
	IRCUD HOBART PARK R/O 1325 74TH AVE. SW VERO BEACH FL. [redacted]	[redacted]	Date 1/23/06 Time Central	Date PK Time Central	B 12
	[redacted]	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number	
	[redacted]	Temp (C)	pH	Sample Depth ☐ m ☑ ft: N/A	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	[redacted]
	Latitude o ' "	Longitude o ' "	Comments		

Lab ID *	Location	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
		☐ Comp ☐ Grab	Date Time	Date Time	
	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	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
		☐ Comp ☐ Grab	Date Time	Date Time	
	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: 2 Bio Assay 1/24/06 11:75am + 1930 James Davis		

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
	1/23/06	DHL	ABP	01-24-06 10:30			Barbara Kahl	1/24/06 1110

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Page 1 of 3

★ EFFLUENT No Sample for "SULFIDE" ABP 01-24-06 Received —X—

FDEP Biology Section - Acute Screen Bioassay Bench Sheets

Facility: Indian River County Utilities Dept. Hobart Park RO WTP

Address: 1325 74th Avenue SW

City: Vero Beach County: Indian River

Contact/District: Phil Kane / Central District

NPDES Permit #: FL 0166511

LIMS Job #: TH-2006-01-24-01SR 10

LIMS Sample #: 894611

Lims Data Entry: 2-3-06 BS

Data Entry Verification: MF 2/3/06

Sample Collection: Date: 1-23-06 Time: 1230

Hold Time Start: Date: 1-23-06 Time: 12:30

Comments: Sample salinity adjusted from 3parts per thousand (ppth) To 6ppth by the addition of artificial sea salts for the Americamysis bahia test. Sample salinity was not adjusted for the menidia beryllina Test. A salt control was prepared by diluting 20ppth ASW with well water to 3ppth then salting with artificial Sea Salts to 6ppth, MF 1-24-06

(A) Hardness not measured alkalinity 359 mg/L

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: 3 Final Salinity: 6 (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 241-263

Room 8246 237-249

Waterbath: NA

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 Pittland

Marshall Faircloth

Bill Nelson

James Daniel

Nicole Wellendorf

REVIEWER

Water Quality Parameters	20% DMW	Moderately Hard Water/ Well Water	Salt Water (ASW) NSW Test 1	Salt Water (ASW) NSW Test 2	Other: Test Salt Control	Original Sample	Method	Measured by	Verified by
Field Total Residual Cl2 (mg/L)	N/A	N/A	N/A	N/A	NA	not measured	-	-	BF
Lab Total Residual Cl2 (mg/L)	NA	NA	<0.03	<0.03	<0.03	<0.03	HACH	SB/JD	MF
Alkalinity (mg/L as $CaCO_3$)	NA	NA	160	148	161	—	HACH	JD	BF
Hardness (mg/L as $CaCO_3$)	NA	NA	—	—	—	(A) 359	HACH	JD	BF
Total Ammonia (mg/L as N)	NA	NA	<0.017	<0.017	<0.017	1.44	DENVER	MF	BF
Salinity (ppth)	NA	NA	3ppth → 6ppth		6ppth	3ppth	YSI / (Mettler)	JD	MF

ASW Test 1 is 6ppth > MF 1-24-06
ASW Test 2 is 3ppth

V 1.4 9/12/05

Appendix 2. Bench Sheets (continued)

[redacted]

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 89461	Test #: 1	Test Started: Date 1-24-06 Time: 1500
Organism: A. bahia	SOP #: TA 07_03	Test Ended: Date 1-26-06 Time: 1400
Organism Batch: 8-06	Diluent/ Batch: ASW 12-06	
Organism Age: 4 days	Food: YCT P. subcapitata Artemia	
Chamber Size: 1000 mL	Batch: – – 651-536-40	
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
Control	A	F1	5	5	5			
	B	F2	5	4 1D	4			
	C	F3	5	5	5			
	D	F4	5	4 1D	4			
Salt control	A	F5	5	4 1D	4			
	B	F6	5	5	5			
	C	F7	5	5	5			
	D	F8	5	5	5			
100%	A	F9	5	0 5D	—			
	B	F10	5	1 4D	0 1D			
	C	F11	5	1 4D	0 1D			
	D	F12	5	0 5D	—			
Organisms loaded by: [initials] Loading Verified by: [initials]		Checked by:	[redacted]	JD	JD			

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

Comments:

Test Results:
% mortality in 100% sample: 100%
LC_{50}: <100 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).

V 2.1 11/01/2005

Page 000057

Appendix 2. Bench Sheets (continued)

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 894611 | Test #: 2 | Test Started: Date 1-24-06 Time: 1325
Organism: M. beryllina | SOP #: TA 07_04 | Test Ended: Date 1-26-06 Time: 1330
Organism Batch: 8-06 | Diluent/ Batch: ASW 1 2-06
Organism Age: 11 days | Food: YCT P. subcapitata Artemia
Chamber Size: 1000 mL | Batch: – – GSI-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
Control	A	8 D1	5	5	5			
	B	D2	5	5	5			
	C	D3	5	5	5			
	D	D4	5	5	5			
100%	A	D5	5	5	5			
	B	D6	5	5	5			
	C	D7	5	5	5			
	D	D8	5	5	5			
Organisms loaded by: JD		Checked by:	[redacted]	JD	JD			

Loading Verified by: R

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

Comments:

Test Results:
% mortality in 100% sample: 0
LC_{50}: >100 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).

V 2.1 11/01/2005

Page 000058

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 894611 **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.)	8.0	8.0	7.9			
Temperature °C	24.7	25.2	25.8			
Dissolved Oxygen mg/L	7.9	5.6	4.5			
Conductivity µmhos (mmhos)	10.63	11.10	11.53			
(initials) Measured by:	MF	BP	B			
(initials) Recorded by:	MF	BP	B			

Comments:

Concentration SALT Control	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	8.1	8.0			
Temperature °C	24.2	25.8	25.4			
Dissolved Oxygen mg/L	8.0	5.1	4.8			
Conductivity µmhos (mmhos)	10.66	11.40	11.38			
(initials) Measured by:	MF	BP	B			
(initials) Recorded by:	MF	BP	B			

Comments:

Concentration 100% (salted)	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	A/C			
pH (S.U.)	7.2	8.1	8.2			
Temperature °C	24.7	26.0	24.0			
Dissolved Oxygen mg/L	7.9	5.4	5.0			
Conductivity µmhos (mmhos)	10.60	11.25	11.15			
(initials) Measured by:	MF	BP	B			
(initials) Recorded by:	MF	BP	B			

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:

V 2.0 2/24/04

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 894611 **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.)	7.9	8.1	8.1			
Temperature °C	24.0	25.2	24.6			
Dissolved Oxygen mg/L	8.2	5.8	5.0			
Conductivity µmhos (mmhos)	5.44	5.91	5.80			
(initials) Measured by:	MF	SB	B			
(initials) Recorded by:	MF	SB	B			

Comments:

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	7.1	8.1	8.1			
Temperature °C	24.7	24.9	24.0			
Dissolved Oxygen mg/L	8.0	6.1	6.1			
Conductivity µmhos (mmhos)	5.71	6.03	6.21			
(initials) Measured by:	MF	SB	B			
(initials) Recorded by:	MF	SB	B			

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:

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:

V 2.0 2/24/04

Appendix 3. SRT Bench Sheets and Statistical Analysis

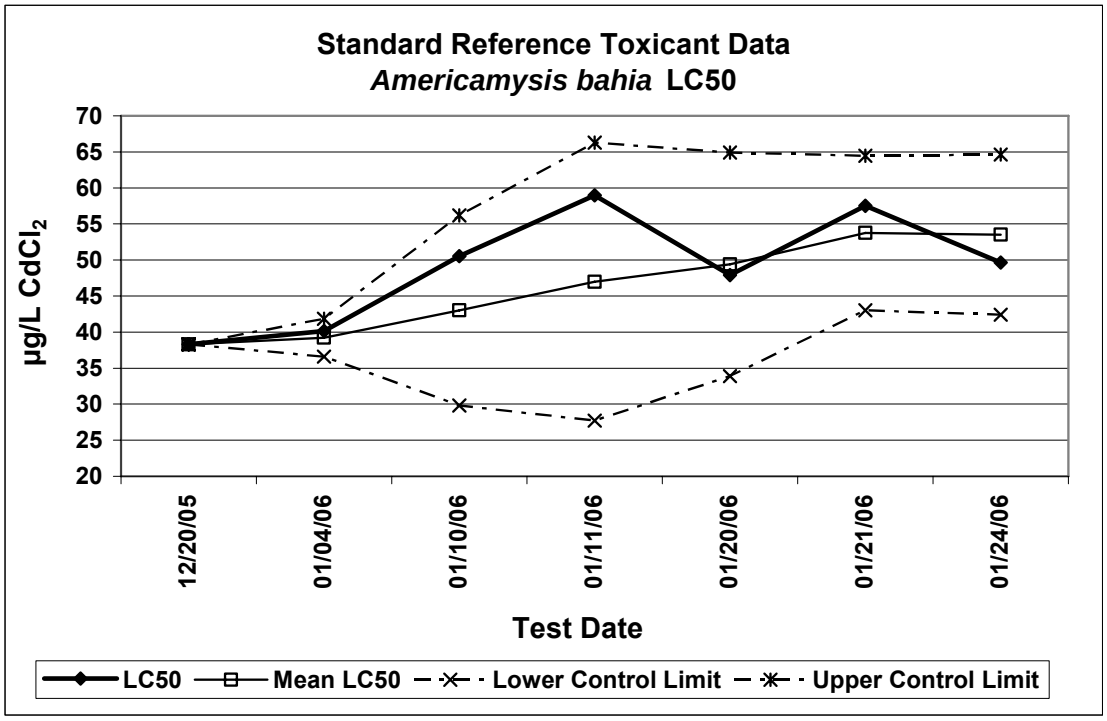
Florida Department of Environmental Protection
Bureau of Laboratories

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)

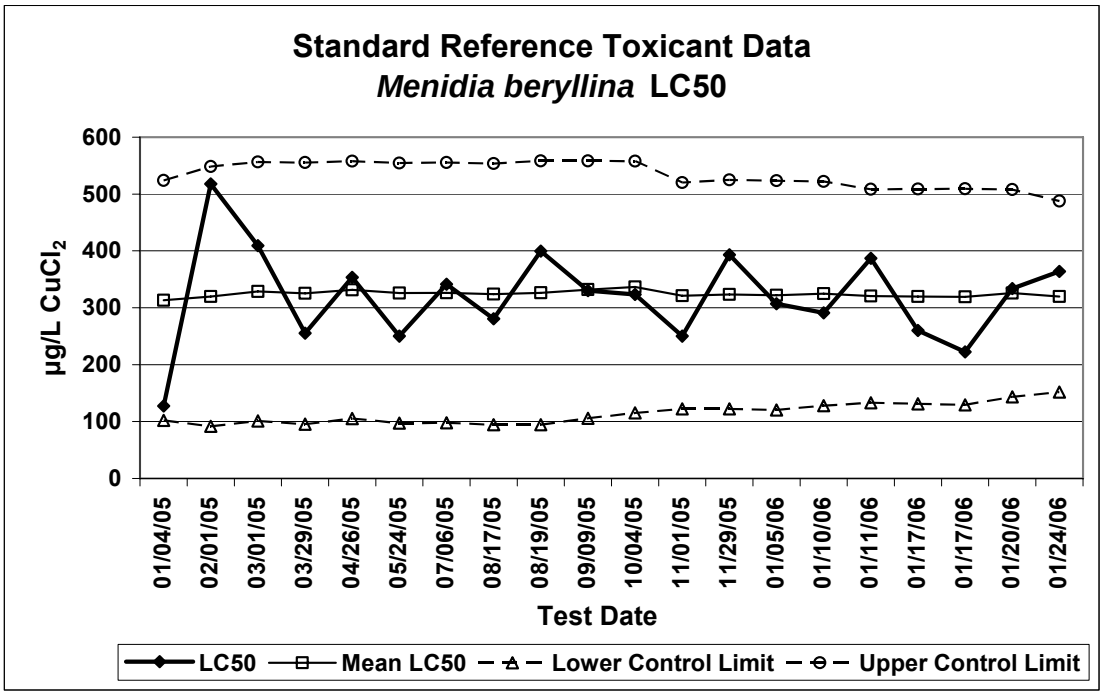
Florida Department of Environmental Protection
Bureau of Laboratories

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
01/04/05	127.30	312.95	105.36	102.24	523.66
02/01/05	517.63	319.89	114.13	91.63	548.14
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

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

CV = 26.23
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

[redacted]

Diluent/ Batch#: ASW / 2 06
Toxicant/ Batch#: $CdCl_2$ / 2-06

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

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): 24hr 96hr	0.17	Denver
Salinity (ppth):	20	Mettler

Organism Batch #/ Age: 7-06 / 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 / 48 hr / 72 hr / 96 hr	pH (SU) 0 hr / 24 hr / 48 hr / 48 hr / 72 hr / 96 hr	Temperature (° C) 0 hr / 24 hr / 48 hr / 48 hr / 72 hr / 96 hr	D.O. (mg/l) 0 hr / 24 hr / 48 hr / 48 hr / 72 hr / 96 hr	UNCORRECTED Cond. (mmhos/cm) Cond. (µmhom/cm) 0 hr / 24 hr. / 48 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	4.9	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	24.4	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 2D	8.2	24.4	7.3	32.5
	B	G14	5 5 4 1D	8.1	24.4	5.0	32.8
	C	G15	5 5 4 1D	8.0	24.3	5.5	33.5
	D	G16	5 5 2 3D				
67	A	G17	5 4 0 4D	8.2	24.4	7.3	32.0
	B	G18	5 5 0 5D	8.1	24.8	4.9	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	32.2
	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:			JJ SP B	SP B B	SP B B	SP B B	SP B B
Recorded by:			B SP B	SP B B	SP B B	SP B B	SP B B

Investigators' Signatures
Brad Blakeman
Frank Farnham
Marshall Fairchild
Jana Tamil
Mark Weller
REVIEWER

Concentrations prepared by: MF
Loading verified by: B
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 24.7
Incubator # NB min. ____ max. ____ mean ____
Room B246 min. 23.9 max. 25.4 mean 24.1

Remarks:

Statistical Results: Method: Spearman-Karber
(48) 96 hour LC50: 47.63
95% Confidence Interval: lower 42.38 upper 54.93

Revised 01/23/06

Page 00021

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 / 2-06
Toxicant/ Batch# $CuCl_2$ / 2-06

Test Beginning: Date: 1-24-06 Time: 1315
Test Ending: Date: 1-26-06 Time: 1210

Water Quality Parameters:	Diluent	Method
Total Residual Cl_2 (mg/L):	<0.03	Hach
Alkalinity (mg/L as $CaCO_3$):	212	Hach
Hardness (mg/L as CaCO3):	–	Hach
Total Ammonia (mg/L as N):	<0.034	Denver
Salinity (ppth):	20	Mettler

Organism Batch #/ Age: 7-06 / 11 days
Feeding: (Prior to test) / Prior to renewal / Daily
Food: YCT – P.*subcapitata* – Artemia GSL-536-90
Food Batch:
Chamber size: 1000 mL
Test volume: 500 mL per replicate

Conc. (mg/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. (umhos/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	B13	10	9 10	9	8.1		8.0	24.3		24.7	7.1		4.7	32.4		33.2
	B	B14	10	10	10		8.1			24.5			5.9			33.0	
	C		~~10~~														
	D																
100	A	B15	10	10	10	8.2		8.1	24.3		24.2	7.4		5.2	32.1		33.0
	B	B16	10	10	10		8.1			24.4			5.9			32.9	
	C																
	D																
200	A	B17	10	10	10	8.2		8.1	24.2		24.1	7.4		5.4	32.3		33.2
	B	B18	10	10	10		8.1			24.3			5.9			33.0	
	C		~~10~~														
	D																
300	A	B19	10	10	10	8.2		8.1	24.1		24.4	7.4		5.1	32.2		33.5
	B	B20	10	8 20	8		8.1			24.3			5.8			32.7	
	C																
	D																
400	A	B21	10	5 50	2 30	8.2		8.1	24.1		24.2	7.4		5.2	32.2		32.9
	B	B22	10	5 50	3 20		8.1			24.2			5.7			32.4	
	C																
	D																
500	A	B23	10	2 70	0 30	8.2		8.1	24.2		24.1	7.5		5.7	32.2		33.2
	B	B24	10	7 30	1 60		8.1			24.5			5.8			33.2	
	C																
	D																
	A																
	B																
	C																
	D																
Loaded / measured by:			JB	BP	BP	SP	SP	BP	SP	BP	BP	SP	SP	BA	SP	SP	BP
Recorded by:			BP	BP	BP	SP	SP	BP	SP	BP	BP	SP	SP	BA	SP	SP	BP

Investigators' Signatures
Bruce Anderson
Sarah Fairbanks
Marshall Faircloth
Jane Farid
Nyki Wellesley
REVIEWER

Concentrations prepared by: MF
Loading verified by: B
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 # ____ min. ____ max. ____ mean ____
Room B246 min. 23.8 max. 25.4 mean 24.1

Remarks:

Statistical Results: Method: Spearman-Karber
(48) / 96 hour LC50: 363.93
95% Confidence Interval: lower 339.93 upper 389.62

Revised 01/23/06

Page 000022

Appendix 3. (continued)

Americamysis bahia Acute Standard Reference Toxicant Test

START DATE: 01-24-06 END DATE: 01-26-06 DURATION: 48 h
TOXICANT : CdCl2

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

START DATE: 01-24-06 END DATE: 01-26-06 DURATION: 48 h
TOXICANT : CuCl2

RAW DATA: --- ---- Concentration (µg/L)	Number Exposed	Mortalities
0.00	20	1
100.00	20	0
200.00	20	0
300.00	20	2
400.00	20	15
500.00	20	19

SPEARMAN-KARBER TRIM: 5.08%

SPEARMAN-KARBER ESTIMATES: LC50: 363.93
95% LOWER CONFIDENCE: 339.93
95% UPPER CONFIDENCE: 389.62

NOTE: MORTALITY PROPORTIONS WERE NOT MONOTONICALLY INCREASING. ADJUSTMENTS WERE MADE PRIOR TO SPEARMAN-KARBER ESTIMATION.

Appendix 4. Test Organism Receipt

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. berylline
3.

Total Supplied:

1. 150 + 80 @ 15°/oo
2. 240 @ 20°/oo + 40 @ 10°/o
3.

Brood Description:

1. EBA
2. EBA
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 5. Chemical Analyses performed on the effluent from the Indian River County Utilities Department Hobart Park Reverse Osmosis Water Treatment Plant Outfall D-001, sampled on January 23, 2006.

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
1/23/2006 12:30	HOBA	Bio-AGP/LimNut	Algal Growth Potential	1.27	mg DryWt/L		0.3	0.9
1/23/2006 12:30	HOBA	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
1/23/2006 12:30	HOBA	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	1.5	ug/L	U	1.5	4.5
1/23/2006 12:30	HOBA	Bio-Toxicology	Bioassay-Acute-Screen-SW-Fish, LC50	100	LC50	L		
1/23/2006 12:30	HOBA	Bio-Toxicology	Bioassay-Acute-Screen-SW-Mysid, LC50	100	LC50	K		
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	1,2,4-Trichlorobenzene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	1,2-Dichlorobenzene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	1,3-Dichlorobenzene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	1,4-Dichlorobenzene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	2,4,6-Trichlorophenol	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	2,4-Dichlorophenol	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	2,4-Dimethylphenol	54	ug/L	U	54	220
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	2,4-Dinitrophenol	16	ug/L	U	16	65
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	2,4-Dinitrotoluene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	2,6-Dinitrotoluene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	2-Chloronaphthalene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	2-Chlorophenol	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	2-Methyl-4,6-dinitrophenol	3.3	ug/L	U	3.3	13
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	2-Nitrophenol	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	3,3'-Dichlorobenzidine	43	ug/L	U	43	170
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	4,4'-DDD	1.6	ug/L	U	1.6	6.5
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	4,4'-DDE	1.6	ug/L	U	1.6	6.5
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	4,4'-DDT	1.6	ug/L	U	1.6	6.5
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	4-Bromophenyl phenyl ether	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	4-Chloro-3-methylphenol	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	4-Chlorophenyl phenyl ether	2.2	ug/L	U	2.2	8.7
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	4-Nitrophenol	16	ug/L	U	16	65
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	Acenaphthene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	Acenaphthylene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	Aldrin	1.6	ug/L	U	1.6	6.5
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	alpha-BHC	1.6	ug/L	U	1.6	6.5
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	Anthracene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	Benzidine	110	ug/L	U	110	430
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	Benzo(a)anthracene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	Benzo(a)pyrene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	Benzo(b)fluoranthene	1.1	ug/L	U	1.1	4.3
1/23/2006 07:15	EQUIPMENT BLANK	BNA-Water	Benzo(g,h,i)perylene	1.1	ug/L	U	1.1	4.3

1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Benzo(k)fluoranthene	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	beta-BHC	1.6	ug/L	U	1.6	6.5
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Bis(2-chloroethoxy)methane	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Bis(2-chloroethyl)ether	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Bis(2-chloroisopropyl)ether	3.3	ug/L	U	3.3	13
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Bis(2-ethylhexyl)phthalate	16	ug/L	U	16	65
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Butyl benzyl phthalate	5.4	ug/L	U	5.4	22
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Chrysene	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	delta-BHC	1.6	ug/L	U	1.6	6.5
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Dibenzo(a,h)anthracene	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Dieldrin	1.6	ug/L	U	1.6	6.5
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Diethyl phthalate	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Dimethyl phthalate	54	ug/L	U	54	220
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Di-n-butyl phthalate	5.4	ug/L	U	5.4	22
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Di-n-octyl phthalate	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Endosulfan I	4.3	ug/L	U	4.3	17
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Endosulfan II	4.3	ug/L	U	4.3	17
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Endosulfan sulfate	1.6	ug/L	U	1.6	6.5
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Endrin	1.6	ug/L	U	1.6	6.5
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Endrin aldehyde	4.3	ug/L	U	4.3	17
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Fluoranthene	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Fluorene	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	gamma-BHC	1.6	ug/L	U	1.6	6.5
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Heptachlor	1.6	ug/L	U	1.6	6.5
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Heptachlor epoxide	1.6	ug/L	U	1.6	6.5
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Hexachlorobenzene	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Hexachlorobutadiene	3.3	ug/L	U	3.3	13
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Hexachlorocyclopentadiene	3.3	ug/L	UJ	3.3	13
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Hexachloroethane	3.3	ug/L	U	3.3	13
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Indeno(1,2,3-cd)pyrene	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Isophorone	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Naphthalene	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Nitrobenzene	2.2	ug/L	U	2.2	8.7
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	N-Nitrosodimethylamine	2.2	ug/L	U	2.2	8.7
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	N-Nitrosodi-n-propylamine	2.2	ug/L	U	2.2	8.7
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	N-Nitrosodiphenylamine	3.3	ug/L	U	3.3	13
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Pentachlorophenol	3.3	ug/L	U	3.3	13
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Phenanthrene	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Phenol	1.1	ug/L	U	1.1	4.3
1/23/2006	07:15	EQUIPMENT BLANK	BNA-Water	Pyrene	1.1	ug/L	U	1.1	4.3
1/23/2006	12:30	HOBA	BNA-Water	1,2,4-Trichlorobenzene	1	ug/L	U	1	4.1

1/23/2006 12:30	HOBA	BNA-Water	1,2-Dichlorobenzene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	1,3-Dichlorobenzene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	1,4-Dichlorobenzene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	2,4,6-Trichlorophenol	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	2,4-Dichlorophenol	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	2,4-Dimethylphenol	52	ug/L	U	52	210
1/23/2006 12:30	HOBA	BNA-Water	2,4-Dinitrophenol	15	ug/L	U	15	62
1/23/2006 12:30	HOBA	BNA-Water	2,4-Dinitrotoluene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	2,6-Dinitrotoluene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	2-Chloronaphthalene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	2-Chlorophenol	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	2-Methyl-4,6-dinitrophenol	3.1	ug/L	U	3.1	12
1/23/2006 12:30	HOBA	BNA-Water	2-Nitrophenol	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	3,3'-Dichlorobenzidine	41	ug/L	U	41	160
1/23/2006 12:30	HOBA	BNA-Water	4,4'-DDD	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	4,4'-DDE	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	4,4'-DDT	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	4-Bromophenyl phenyl ether	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	4-Chloro-3-methylphenol	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	4-Chlorophenyl phenyl ether	2.1	ug/L	U	2.1	8.2
1/23/2006 12:30	HOBA	BNA-Water	4-Nitrophenol	15	ug/L	U	15	62
1/23/2006 12:30	HOBA	BNA-Water	Acenaphthene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Acenaphthylene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Aldrin	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	alpha-BHC	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	Anthracene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Benzidine	100	ug/L	U	100	410
1/23/2006 12:30	HOBA	BNA-Water	Benzo(a)anthracene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Benzo(a)pyrene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Benzo(b)fluoranthene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Benzo(g,h,i)perylene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Benzo(k)fluoranthene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	beta-BHC	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	Bis(2-chloroethoxy)methane	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Bis(2-chloroethyl)ether	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Bis(2-chloroisopropyl)ether	3.1	ug/L	U	3.1	12
1/23/2006 12:30	HOBA	BNA-Water	Bis(2-ethylhexyl)phthalate	15	ug/L	U	15	62
1/23/2006 12:30	HOBA	BNA-Water	Butyl benzyl phthalate	5.2	ug/L	U	5.2	21
1/23/2006 12:30	HOBA	BNA-Water	Chrysene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	delta-BHC	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	Dibenzo(a,h)anthracene	1	ug/L	U	1	4.1

1/23/2006 12:30	HOBA	BNA-Water	Dieldrin	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	Diethyl phthalate	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Dimethyl phthalate	52	ug/L	U	52	210
1/23/2006 12:30	HOBA	BNA-Water	Di-n-butyl phthalate	5.2	ug/L	U	5.2	21
1/23/2006 12:30	HOBA	BNA-Water	Di-n-octyl phthalate	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Endosulfan I	4.1	ug/L	U	4.1	16
1/23/2006 12:30	HOBA	BNA-Water	Endosulfan II	4.1	ug/L	U	4.1	16
1/23/2006 12:30	HOBA	BNA-Water	Endosulfan sulfate	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	Endrin	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	Endrin aldehyde	4.1	ug/L	U	4.1	16
1/23/2006 12:30	HOBA	BNA-Water	Fluoranthene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Fluorene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	gamma-BHC	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	Heptachlor	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	Heptachlor epoxide	1.5	ug/L	U	1.5	6.2
1/23/2006 12:30	HOBA	BNA-Water	Hexachlorobenzene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Hexachlorobutadiene	3.1	ug/L	U	3.1	12
1/23/2006 12:30	HOBA	BNA-Water	Hexachlorocyclopentadiene	3.1	ug/L	UJ	3.1	12
1/23/2006 12:30	HOBA	BNA-Water	Hexachloroethane	3.1	ug/L	U	3.1	12
1/23/2006 12:30	HOBA	BNA-Water	Indeno(1,2,3-cd)pyrene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Isophorone	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Naphthalene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Nitrobenzene	2.1	ug/L	U	2.1	8.2
1/23/2006 12:30	HOBA	BNA-Water	N-Nitrosodimethylamine	2.1	ug/L	U	2.1	8.2
1/23/2006 12:30	HOBA	BNA-Water	N-Nitrosodi-n-propylamine	2.1	ug/L	U	2.1	8.2
1/23/2006 12:30	HOBA	BNA-Water	N-Nitrosodiphenylamine	3.1	ug/L	U	3.1	12
1/23/2006 12:30	HOBA	BNA-Water	Pentachlorophenol	3.1	ug/L	U	3.1	12
1/23/2006 12:30	HOBA	BNA-Water	Phenanthrene	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Phenol	1	ug/L	U	1	4.1
1/23/2006 12:30	HOBA	BNA-Water	Pyrene	1	ug/L	U	1	4.1
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Alachlor	0.63	ug/L	U	0.63	2.5
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Ametryn	0.053	ug/L	U	0.053	0.21
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Atrazine	0.053	ug/L	U	0.053	0.21
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Azinphos Methyl	0.21	ug/L	U	0.21	0.84
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Bromacil	0.21	ug/L	U	0.21	0.84
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Butylate	0.21	ug/L	U	0.21	0.84
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Chlorpyrifos Ethyl	0.053	ug/L	U	0.053	0.21
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Chlorpyrifos Methyl	0.11	ug/L	U	0.11	0.44
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Diazinon	0.053	ug/L	U	0.053	0.21
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Ethion	0.053	ug/L	U	0.053	0.21
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Ethoprop	0.11	ug/L	U	0.11	0.44

1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Fenamiphos	0.21	ug/L	U	0.21	0.84
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Fonofos	0.11	ug/L	U	0.11	0.44
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Hexazinone	0.11	ug/L	U	0.11	0.44
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Malathion	0.16	ug/L	UJ	0.16	0.64
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Metalaxyl	0.26	ug/L	U	0.26	1
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Metolachlor	0.53	ug/L	U	0.53	2.1
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Metribuzin	0.11	ug/L	U	0.11	0.44
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Mevinphos	0.21	ug/L	U	0.21	0.84
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Naled	0.84	ug/L	U	0.84	3.4
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Norflurazon	0.16	ug/L	U	0.16	0.64
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Parathion Ethyl	0.16	ug/L	U	0.16	0.64
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Parathion Methyl	0.11	ug/L	U	0.11	0.44
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Phorate	0.053	ug/L	U	0.053	0.21
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Prometryn	0.16	ug/L	U	0.16	0.64
1/23/2006 07:15	EQUIPMENT BLANK	GC-Water	Simazine	0.053	ug/L	U	0.053	0.21
1/23/2006 12:30	HOBA	GC-Water	Alachlor	0.6	ug/L	U	0.6	2.4
1/23/2006 12:30	HOBA	GC-Water	Ametryn	0.05	ug/L	U	0.05	0.2
1/23/2006 12:30	HOBA	GC-Water	Atrazine	0.05	ug/L	U	0.05	0.2
1/23/2006 12:30	HOBA	GC-Water	Azinphos Methyl	0.2	ug/L	U	0.2	0.8
1/23/2006 12:30	HOBA	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
1/23/2006 12:30	HOBA	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
1/23/2006 12:30	HOBA	GC-Water	Chlorpyrifos Ethyl	0.05	ug/L	U	0.05	0.2
1/23/2006 12:30	HOBA	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
1/23/2006 12:30	HOBA	GC-Water	Diazinon	0.05	ug/L	U	0.05	0.2
1/23/2006 12:30	HOBA	GC-Water	Ethion	0.05	ug/L	U	0.05	0.2
1/23/2006 12:30	HOBA	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
1/23/2006 12:30	HOBA	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
1/23/2006 12:30	HOBA	GC-Water	Fonofos	0.1	ug/L	U	0.1	0.4
1/23/2006 12:30	HOBA	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
1/23/2006 12:30	HOBA	GC-Water	Malathion	0.15	ug/L	UJ	0.15	0.6
1/23/2006 12:30	HOBA	GC-Water	Metalaxyl	0.25	ug/L	U	0.25	1
1/23/2006 12:30	HOBA	GC-Water	Metolachlor	0.5	ug/L	U	0.5	2
1/23/2006 12:30	HOBA	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
1/23/2006 12:30	HOBA	GC-Water	Mevinphos	0.2	ug/L	U	0.2	0.8
1/23/2006 12:30	HOBA	GC-Water	Naled	0.8	ug/L	U	0.8	3.2
1/23/2006 12:30	HOBA	GC-Water	Norflurazon	0.15	ug/L	U	0.15	0.6
1/23/2006 12:30	HOBA	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
1/23/2006 12:30	HOBA	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
1/23/2006 12:30	HOBA	GC-Water	Phorate	0.05	ug/L	U	0.05	0.2
1/23/2006 12:30	HOBA	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
1/23/2006 12:30	HOBA	GC-Water	Simazine	0.05	ug/L	U	0.05	0.2

1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Aluminum	5	ug/L	U	5	20
1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Arsenic	4	ug/L	U	4	16
1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Cadmium	0.05	ug/L	U	0.05	0.2
1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Calcium	0.05	mg/L	U	0.05	0.2
1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Chromium	2	ug/L	U	2	8
1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Copper	0.36	ug/L	I	0.25	1
1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Iron	10	ug/L	U	10	40
1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Lead	0.075	ug/L	U	0.075	0.3
1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Magnesium	0.01	mg/L	U	0.01	0.04
1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Nickel	0.77	ug/L	I	0.45	1.8
1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
1/23/2006 07:15	EQUIPMENT BLANK	Metals-Water	Zinc	3	ug/L	U	3	12
1/23/2006 12:30	HOBA	Metals-Water	Aluminum	15	ug/L	U	15	60
1/23/2006 12:30	HOBA	Metals-Water	Arsenic	12	ug/L	U	12	48
1/23/2006 12:30	HOBA	Metals-Water	Cadmium	0.25	ug/L	U	0.25	1
1/23/2006 12:30	HOBA	Metals-Water	Calcium	277	mg/L		0.15	0.6
1/23/2006 12:30	HOBA	Metals-Water	Chromium	6	ug/L	U	6	24
1/23/2006 12:30	HOBA	Metals-Water	Copper	2.78	ug/L		0.25	1
1/23/2006 12:30	HOBA	Metals-Water	Iron	30	ug/L	U	30	120
1/23/2006 12:30	HOBA	Metals-Water	Lead	2	ug/L	I	0.75	3
1/23/2006 12:30	HOBA	Metals-Water	Magnesium	239	mg/L		0.03	0.12
1/23/2006 12:30	HOBA	Metals-Water	Nickel	0.77	ug/L	I	0.68	2.7
1/23/2006 12:30	HOBA	Metals-Water	Selenium	5	ug/L	U	5	20
1/23/2006 12:30	HOBA	Metals-Water	Silver	0.25	ug/L	U	0.25	1
1/23/2006 12:30	HOBA	Metals-Water	Zinc	9	ug/L	U	9	36
1/23/2006 07:15	EQUIPMENT BLANK	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
1/23/2006 07:15	EQUIPMENT BLANK	Nutrients-Liquid	Kjeldahl Nitrogen	0.08	mg N/L	U	0.08	0.2
1/23/2006 07:15	EQUIPMENT BLANK	Nutrients-Liquid	NO2NO3-N	0.016	mg N/L		0.004	0.01
1/23/2006 07:15	EQUIPMENT BLANK	Nutrients-Liquid	O-Phosphate-P	0.005	mg P/L	I	0.004	0.01
1/23/2006 07:15	EQUIPMENT BLANK	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06
1/23/2006 12:30	HOBA	Nutrients-Liquid	Ammonia-N	1.5	mg N/L	A	0.2	0.4
1/23/2006 12:30	HOBA	Nutrients-Liquid	Chloride	1.40E+03	mg Cl/L		200	500
1/23/2006 12:30	HOBA	Nutrients-Liquid	Kjeldahl Nitrogen	2.3	mg N/L	A	0.4	1
1/23/2006 12:30	HOBA	Nutrients-Liquid	NO2NO3-N	0.006	mg N/L	I	0.004	0.01
1/23/2006 12:30	HOBA	Nutrients-Liquid	O-Phosphate-P	0.021	mg P/L		0.004	0.01
1/23/2006 12:30	HOBA	Nutrients-Liquid	Total-P	0.045	mg P/L	I	0.02	0.06
1/23/2006 12:30	HOBA	Nutrients-Liquid	Turbidity	0.2	NTU		0.05	0.05
1/23/2006 07:15	EQUIPMENT BLANK	Overflow	Alpha, Total	0.8	pCi/L			
1/23/2006 07:15	EQUIPMENT BLANK	Overflow	Alpha-Counting Error	0.5	pCi/L			
1/23/2006 07:15	EQUIPMENT BLANK	Overflow	Radium 226	0.1	pCi/L	U		

1/23/2006 07:15	EQUIPMENT BLANK	Overflow	Radium 226-Counting Error	0.1	pCi/L	
1/23/2006 07:15	EQUIPMENT BLANK	Overflow	Radium 228	0.9	pCi/L	U
1/23/2006 07:15	EQUIPMENT BLANK	Overflow	Radium 228-Counting Error	0.5	pCi/L	
1/23/2006 12:30	HOBA	Overflow	Alpha, Total	23.3	pCi/L	
1/23/2006 12:30	HOBA	Overflow	Alpha-Counting Error	4.4	pCi/L	
1/23/2006 12:30	HOBA	Overflow	Radium 226	9.2	pCi/L	
1/23/2006 12:30	HOBA	Overflow	Radium 226-Counting Error	0.5	pCi/L	
1/23/2006 12:30	HOBA	Overflow	Radium 228	0.9	pCi/L	U
1/23/2006 12:30	HOBA	Overflow	Radium 228-Counting Error	0.5	pCi/L	

The Bioassay of Indian River County Utility Department Hobart Park Reverse Osmosis Water Treatment Plant effluent sampled on January 23, 2006. NPDES # FL0166511.

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 6 6 5 1 1 11	12 0 6 0 1 2 3	18 **B**	19 **S**	20 1

Remarks

66

The Priority Pollutants Analysis of Indian River County Utility Department Hobart Park Reverse Osmosis Water Treatment Plant effluent sampled on January 23, 2006. NPDES # FL0166511.

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 6 6 5 1 1 11	12 0 6 0 1 2 3	18 **X**	19 **S**	20 1

Remarks

66

Biological Analyses of Indian River County Utility Department Hobart Park Reverse Osmosis Water Treatment Plant effluent sampled on January 23, 2006. NPDES # FL0166511.

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 6 6 5 1 1 11	12 0 6 0 1 2 3	18 **S**	19 **S**	20 1

Remarks

66