

Bioassays of

Silver Dolphin Mobile Home Park
Wastewater Treatment Facility

Duval County

NPDES #FL0023001

Sampled February 14, 2005

June 2005

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Silver Dolphin Mobile Home Park Wastewater Treatment Facility, 11134 New Kings Road, Jacksonville, Duval County, Florida, NPDES #FL0023001. Effluent samples for this facility were collected on February 14, 2005.

Introduction

Silver Dolphin Mobile Home Park Wastewater Treatment Facility is an extended-aeration domestic facility. The design flow is 0.0075 million gallons per day (MGD), and the mean flow from January through December 2004 was 0.004 MGD. The treatment system includes an influent pump station, an aeration unit, a secondary clarifier, a chlorine contact chamber, and dechlorination. Residuals are held in an aerated waste sludge holding tank prior to being transported to the Buckman Residual Management Facility. Disinfection is performed using liquid hypochlorite solution. Dechlorination is performed using sodium sulfite. Treated effluent is discharged at D-001 to a ditch that empties into the Class III fresh waters of the Trout River. This facility does not have any mixing zones. This facility had three selenium exceedences and a total suspended solids violation in 2004. Toxicity sampling is not required in the permit (facility information provided by Kathleen Gerard of FDEP Northeast District).

Methods

Samples were collected from the D-001 NPDES sampling point by Pat O'Connor (FDEP Northeast 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. Bacteriological samples were analyzed by the DEP Northeast District Laboratory. Dissolved oxygen was not measured in the field due to excessive turbidity.

The 48-hour acute screening toxicity tests and algal growth potential test were performed following internal DEP SOP's TA07_01,TA07_02, and TA08_01 through TA08_07. All internal DEP SOP's are available on the web at: http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp The Department uses the 48-hour acute screening toxicity test to provide reasonable assurance that the facility does not adversely affect waters of the state.

Bioassay samples were filtered through a 60 µm Nitex screen upon receipt in the laboratory due to high levels of particulates. *Ceriodaphnia dubia* was tested only in the filtered sample because it was not possible to see the small organisms among the particulates. *Cyprinella leedsi* was tested in both the filtered and unfiltered sample.

Toxicity Test Results

Tests were performed February 15-17, 2005.

Ceriodaphnia dubia 48-hr acute screening bioassay –	LC_{50} > 100%, 0%* mortality in 100% filtered sample at 48 hours
Cyprinella leedsi 48-hr acute screening bioassay –	LC_{50} > 100%, 0%* mortality in 100% filtered sample at 48 hours
Cyprinella leedsi 48-hr acute screening bioassay –	LC_{50} > 100%, 35%* mortality in 100% unfiltered sample at 48 hours

Bioassay samples were not acutely toxic to the test organisms in the filtered sample. However, 35% mortality was observed in the *C. leedsi* test with unfiltered effluent. The dead test organisms appeared to have been ensnared in the particulate matter.

See Appendix 1 for bioassay bench sheets.

*NOTE: In a 48-hr 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 548 mg dry wt/L of the unicellular green alga, *Pseudokirchneriella subcapitata*, formerly known as *Selenastrum capricornutum*. Raschke and Shultz (1987) found that AGP values above 5.0 mg dry weight/L represent a "problem" threshold for fresh receiving waters, implying nutrient enrichment. The analytical chemistry suggests that the effluent is nitrogen limited. The predicted AGP based on inorganic nitrogen concentrations was 311.22 (±20%) mg dry wt/L (Table 1; Miller et al. 1978).

See Table 1 for AGP results

Chemistry Results

Total residual chlorine was not detected in the bioassay sample in either the field or the laboratory. The total ammonia concentration in the bioassay sample was 0.0594 mg/L. The total ammonia concentration in the sample collected and preserved for chemical analysis was 0.29 mg/L. Based on the pH, salinity and temperature of the effluent as collected, the calculated unionized ammonia concentration was 0.01 mg/L.

The fecal coliform concentration (2,250 cfu/100 mL) measured during this investigation violated the permit limit (800 cfu/100 mL) and the Class III freshwater quality criterion (400 cfu/100 mL; 62-302.530(6), F.A.C.). The total coliform concentration (440,000 cfu/100 mL) exceeded the Class III freshwater quality criterion (1,000 cfu/100 mL; 62.302.530(7), F.A.C.).

Cadmium, lead, nickel, and selenium were detected in the effluent at levels that comply with Class III fresh water quality criteria. Chromium and 2,4,6-Trichlorophenol were detected between the laboratory minimum detection limit (MDL) and practical quantitation limit (PQL). Copper (87 µg/L), iron (8690 µg/L), silver (0.61 µg/L), and zinc (336 µg/L) exceeded their respective Class III Fresh water quality criteria of ≤ 23.4 µg/L (62-302.530(24), F.A.C.), ≤ 1,000 µg/L (62-302.530(39), F.A.C.), ≤ 0.07 µg/L (62-302.530(60), F.A.C.), and ≤ 297.6 µg/L (62-302.530(71), F.A.C.). The effluent's total suspended solids (TSS) concentration (157 mg/L) and carbonaceous biochemical oxygen demand (CBOD) (120 mg/L) exceeded the permitted limits of 60 mg/L for each component.

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

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

Conclusion

The unfiltered effluent bioassay sample collected from Outfall D-001 for this facility on February 14, 2005, was acutely toxic to the *Cyprinella leedsi* test species during the 48-hour bioassays. The cause of toxicity is partially attributed to the particulate matter within the sample. The filtered aliquot of the bioassay sample was not acutely toxic to either test species. The effluent AGP result greatly exceeded the "problem" threshold for fresh receiving waters. The effluent's copper, iron, silver, and zinc levels exceeded their respective Class III fresh water quality criteria. The effluent TSS and BOD exceeded the permitted limits. The fecal coliform concentration exceeded

the permit limit and the Class III freshwater quality criterion, and the total coliform concentration exceeded the Class III freshwater quality criterion.

Literature Cited

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

Raschke, R. L. and D. A. Schultz. 1987. The use of the algal growth potential test for data assessment. J. Wat. Poll. Cont. Fed. 59(4): 222-227.

Table 1. Measured and predicted algal growth potential (AGP; mg dry wt/L) of Pseudokirchneriella subcapitata *for total soluble nitrogen (TSIN) and total nitrogen (TN) limitation for the sample of effluent collected from Silver Dolphin Mobile Home Park Wastewater Treatment Facility on February 14, 2005.*

Location	AGP (measured)	Predicted AGP (TSIN) ± 20%	Predicted AGP (TN) ± 20%	Inorganic N:P ratio	Total N:P ratio
Effluent Samples	548	311.22 ± 62.244	3264.2 ± 652.84	2.41	4.52

Table 2. Effluent limits, Class III Freshwater Criteria and chemical and microbiological data for samples collected from Silver Dolphin Mobile Home Park Wastewater Treatment Facility sampled on February 14, 2005.

Silver Dolphin Mobile Home Park WWTP NPDES# FL0023001	Class III Stds	Effluent Limits	Effluent Samples
Organic Constituents (µg/L)			
2,4,6-Trichlorophenol	≤ 6.5	-	1.5 I
Metals (µg/L unless otherwise noted)			
Aluminum	-	-	3,620
Arsenic	≤ 50	-	6 U
Cadmium	≤ 2.6 b	-	0.64
Calcium (mg/L)	-	-	76.3
Chromium-III	≤ 207.7 b	-	7.6 I
Copper	≤ 23.4 b	≤ 23.4 b	87
Iron	≤ 1,000	-	8,690
Lead	≤ 12.5 b	-	7.3
Magnesium (mg/L)	-	-	24.8
Nickel	≤ 129.4 b	-	9.6
Selenium	≤ 5	≤ 5	3.1
Silver	≤ 0.07	-	0.61
Zinc	≤ 297.6 b	-	336
Nutrients (mg/L)			
Ortho-phosphate	-	-	3.4
Total Phosphorus	-	-	19 J
Ammonia	-	-	0.29 A
Unionized Ammonia	≤ 0.02	-	< 0.02 c
Nitrate+Nitrite	-	-	7.9 A
Total Kjeldahl Nitrogen	-	-	78 J
Organic Nitrogen	-	-	77.71 c
Total Nitrogen	-	-	85.9 c
General Physical and Chemical Parameters			
pH (S.U.)	6.0-8.5	6.0-8.5 s	7.7
Conductivity (umhos/cm)	≤ 1,275	-	834
Temperature (C)	-	-	16.2
CBOD (mg/L)	≤ 60 s	-	120
Flow (MGD)	-	0.0075 a	-
Total Residual Chlorine (mg/L)	≤ 0.01	≤ 0.01	0
TSS (mg/L)	-	60 s	157
Alkalinity (mg/L as $CaCO_3$)	≥ 20	-	245
Hardness (mg/L)	-	Report	292.6 c
Microbiology (# cfu/100 ml)			
Fecal Coliforms-Membrane Filter	≤ 400	≤800 s	2,250 AB
Total Coliforms	≤ 1,000	-	440,000

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

s - Single sample

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

B - Results based on colony counts outside the acceptable range

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

J - Estimated value

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

FDEP Biology Section - Acute
Bioassay Bench Sheets

Facility: Silver Dolphin MHP WWTP
Address: 11134 New Kings Rd.
City: Jacksonville County: Duval
Contact/District: Kathleen Gerard / NED Jacksonville
NPDES Permit #: FL 0023001
LIMS Job #: TLH-2005-02-15-15 LIMS Sample #: 815502

Sample Collection: Date: 2-14-05 Time: 1030
Hold time Start: Date: 2-14-05 Time: 1030

Lims Data Entry: 2-18-05 MF Data Entry Verification: 2-18-05 MF

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

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

Test 1 validation:
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No

Test 2 validation:
Control survival ≥90%: (Yes) No
Temperature Range ≤3°C: (Yes) No

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

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)

Comments: Effluent sample had to be filtered through a 60um filter screen due to particulates. C.dubia tested only on filtered sample since organisms could not be seen in original sample - fish (C.latus) tested in filtered and unfiltered sample MF 2-15-05
(A) Alkalinity = 250 mg/L, 1st entry for another facility - DN
(B) Hardness = 248 mg/L, 1st entry for another facility - DN 2/18/05
Sample collected after Dechlorination - MF 2-18-05

Temperature Range °C
Incubator # 3 Range 24.2 - 24.8
Room B246: 23.6 - 23.8
Waterbath: NA

Investigators' Signatures
Sarah Pritchard
Marshall Faircloth
Donna Nicholson
James Daniels
Nicki Wellenfels
REVIEWER

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Water Quality Parameters	20% DMW	Well Water	Salt Water ASW NSW Test 1	Salt Water ASW NSW Test 2	Moderately Hard Water	Original Sample	Method	Measured by	Verified by
Field Total Residual Cl2 (mg/L):	N/A	N/A	N/A	N/A	N/A	0.0	——	Patrick Dickinson	MF
Lab Total Residual Cl2 (mg/L):	<0.03	<0.03				<0.03	HACH	SP	DN
Alkalinity (mg/L as $CaCO_3$):	94	146			250	~~158~~ 146	HACH	DN	MF
Hardness (mg/L as $CaCO_3$):	85	134			248	~~144~~ 134	HACH	DN	MF
Total Ammonia (mg/L as N):	<0.017	<0.017				0.0594	DENVER	DN	SP
Salinity (ppth):	<1	<1				<1	YSI (Mettler)	MF	DN

Appendix 1. Bench Sheets (continued)

FDEP Biology Section - - Bioassay Bench Sheet

Survival

LIMS Sample #: 815502 Test #: 1 Test Started: Date 2.15.05 Time: 1230

Organism: C. dubia Test Ended: Date 2.17.05 Time: 1200

Organism Batch: ~~<24~~ SP 605 Diluent/ Batch: 20% DMW 05-05

Organism Age: <24 hr Food: (YCT) (P. subcapitata) Artemia

Chamber Size 30 mL Batch: 5 43 NA

Test Volume 20 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	A ~~5~~ recording error	5	5	5			
	B	B ~~5~~ JD 2-15-05	5	5	5			
	C	C ~~5~~	5	5	5			
	D	D ~~5~~	5	5	5			
100% Filtered	A	A 5	5	5	5			
	B	B 5	5	5	5			
	C	C 5	5	5	5			
	D	D 5	5	5	5			
Organisms loaded by: JD		Checked by:	mF	JD	JD			
Loading Verified by: mF		(initials)						

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

Comments: Filtered sample (60um screen) used because organisms could not be seen in original sample due to massive quantity of ~~organic matter~~ particulates mF wrong word used 2-15-05

Test Results: filtered

% mortality in 100% sample Ø

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).

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Appendix 1. Bench Sheets (continued)

FDEP Biology Section - - Bioassay Bench Sheet
Survival

LIMS Sample #: 815502 Test #: 2 Test Started: Date 2.15.05 Time: 1230
Organism: C. leedsi Test Ended: Date 2.17.05 Time: 1200
Organism Batch: 7-05 Diluent/ Batch: Well / NA
Organism Age: 14 days Food: YCT P. subcapitata Artemia
Chamber Size 1000 mL Batch: 37113425G
Test Volume 500 mL Feeding: Prior to test - Prior to renewal - Daily

Concentration	Replicate	Chamber #	0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
CTRL	A	B1	5	5	5			
	B	B2	5	5	5			
	C	B3	5	4 1D	4			
	D	B4	5	5	5			
100%	A	B5	5	2 3D	2			
	B	B6	5	2 3D	2			
	C	B7	5	5	5			
	D	B8	5	4 1D	4			
Filtered 100%	A	B21	5	5	5			
	B	B22	5	5	5			
	C	B23	5	5	5			
	D	B24	5	5	5			
Organisms loaded by: JD		Checked by: (initials)	MF	JD	JD			

Loading Verified by: MF

Comments: Dead organisms trapped in particulates. Filtered 100% (60µm screen) due to particulate matter. MF 2-18-05

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

Test Results: Filtered

% 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).

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Appendix 1. Bench Sheets (continued)

Biossay Parameters

LIMS Sample #: 815502 Test #: 1 of 2

TEST SOP: TA07_01 Test Species: Ceriodaphnia dubia Cyprinella leedsi Pimephales prometas
Americamysis bahia Menidia beryllina Other:

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Concentration CTRL	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A		A			
pH (S.U.)	8.1		7.9 (B)			
Temperature °C	24.1	24.0 (B)	24.0			
Dissolved Oxygen mg/L	7.8	7.6 (B)	7.6			
Conductivity µmhos mmhos	185	225 (B)	225			
(initials) Measured by:	SD	SD	SD			
(initials) Recorded by:	SD	SD	SD			

Comments: (B) 8.0 SD (5) 24 hour pH was measured on 1 chamber. MF 2-18-05

Concentration 100% (Full Strength)	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A		A			
pH (S.U.)	7.3		8.5			
Temperature °C	24.9	24.0 (B)	24.1			
Dissolved Oxygen mg/L	6.1	7.6 (B)	7.6			
Conductivity µmhos mmhos	965	1049 (B)	1095			
(initials) Measured by:	SD		SD			
(initials) Recorded by:	SD		SD			

Comments: Four 96% Survival Pass Test. One mass mortality for Pimephales prometas replicate C. Effluent & Head Through on 2/20/05 MF 2/20/05

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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Bioassay Parameters

LIMS Sample # : 815502 **Test # :** 2 **of** 2

TEST SOP: TA07_ 02 **Test Species:** *Ceriodaphnia dubia* *Cyprinella leedsi* *Pimephales promelas* *Americamysis bahia* *Menidia beryllina* Other:_____

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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.)	7.8	7.8	8.1			
Temperature °C	24.6	24.2	24.0			
Dissolved Oxygen mg/L	7.9	7.1	7.5			
Conductivity (µmhos) mmhos	265	285	295			
(initials) Measured by:	JD	DN	JD			
(initials) Recorded by:	JD	DN	JD			

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.)	7.7	8.0	8.2			
Temperature °C	25.4	24.0	24.5			
Dissolved Oxygen mg/L	6.0	4.8	5.7			
Conductivity (µmhos) mmhos	930	1000	1060			
(initials) Measured by:	JD	DN	JD			
(initials) Recorded by:	JD	DN	JD			

Comments:

Concentration Filtered 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A	B	C			
pH (S.U.)	7.8	8.2	8.4			
Temperature °C	24.4	24.2	@ 24.5 ~~24.0~~			
Dissolved Oxygen mg/L	8.0	6.1	@ ~~7.7~~			
Conductivity (µmhos) mmhos	995	1010	1105			
(initials) Measured by:	MF	DN	JD			
(initials) Recorded by:	MF	DN	JD			

Comments: Due to mass quantity of particulate matter, sample (100% effluent) was filtered through a 60µm nitex screen. MF 2015.05

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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@ 24.5 6.0 JD

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Appendix 2. Chemical Analyses performed on the effluent from the Silver Dolphin Mobile Home Park Wastewater Treatment Facility Outfall D-001, sampled on February 14, 2005.

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
2/14/2005 10:30	SILVER DOLPHIN	Bio-AGP/LimNut	Algal Growth Potential	548	mg DryWt/L		0.3	0.9
2/14/2005 10:30	SILVER DOLPHIN	Bio-BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	120	mg/L			
2/14/2005 10:30	SILVER DOLPHIN	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	5.7	ug/L	U	5.7	17
2/14/2005 10:30	SILVER DOLPHIN	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	5.7	ug/L	U	5.7	17
2/14/2005 10:30	SILVER DOLPHIN	Bio-Toxicology	Bioassay-Acute-Screen-FW-C.dubia, LC50	100	LC50	L		
2/14/2005 10:30	SILVER DOLPHIN	Bio-Toxicology	Bioassay-Acute-Screen-FW-Fish, LC50	100	LC50	L		
2/14/2005 8:15	EQUIP BLANK	BNA-Water	1,2,4-Trichlorobenzene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	1,2-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	1,3-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	1,4-Dichlorobenzene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	2,4,6-Trichlorophenol	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	2,4-Dichlorophenol	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
2/14/2005 8:15	EQUIP BLANK	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	58
2/14/2005 8:15	EQUIP BLANK	BNA-Water	2,4-Dinitrotoluene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	2,6-Dinitrotoluene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	2-Chloronaphthalene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	2-Chlorophenol	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	12
2/14/2005 8:15	EQUIP BLANK	BNA-Water	2-Nitrophenol	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150
2/14/2005 8:15	EQUIP BLANK	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	4-Bromophenyl phenyl ether	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	4-Chloro-3-methylphenol	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.7
2/14/2005 8:15	EQUIP BLANK	BNA-Water	4-Nitrophenol	14	ug/L	U	14	58
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Acenaphthene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Acenaphthylene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Anthracene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Benzidine	96	ug/L	U	96	380
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Benzo(a)anthracene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Benzo(a)pyrene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Benzo(b)fluoranthene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Benzo(g,h,i)perylene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Benzo(k)fluoranthene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Bis(2-chloroethoxy)methane	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Bis(2-chloroethyl)ether	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	12
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	58
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Chrysene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Di-n-octyl phthalate	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Dibenzo(a,h)anthracene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Diethyl phthalate	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Fluoranthene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Fluorene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Hexachlorobenzene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	12
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	12
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	12
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Indeno(1,2,3-cd)pyrene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Isophorone	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.7
2/14/2005 8:15	EQUIP BLANK	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.7
2/14/2005 8:15	EQUIP BLANK	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	12
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Naphthalene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.7
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	12
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Phenanthrene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Phenol	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	Pyrene	0.96	ug/L	U	0.96	3.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.8
2/14/2005 8:15	EQUIP BLANK	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	2,4,6-Trichlorophenol	1.5	ug/L	I	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	11
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8

2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	U	38	150

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Benzidine	95	ug/L	U	95	380
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Diethyl phthalate	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	11
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6

2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	U	2.9	11
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
2/14/2005 10:30	SILVER DOLPHIN	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
2/14/2005 8:15	EQUIP BLANK	GC-Water	Alachlor	0.58	ug/L	U	0.58	2.3
2/14/2005 8:15	EQUIP BLANK	GC-Water	Ametryn	0.049	ug/L	U	0.049	0.2
2/14/2005 8:15	EQUIP BLANK	GC-Water	Atrazine	0.049	ug/L	U	0.049	0.2
2/14/2005 8:15	EQUIP BLANK	GC-Water	Azinphos Methyl	0.049	ug/L	U	0.049	0.2
2/14/2005 8:15	EQUIP BLANK	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
2/14/2005 8:15	EQUIP BLANK	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
2/14/2005 8:15	EQUIP BLANK	GC-Water	Chlorpyrifos Ethyl	0.049	ug/L	U	0.049	0.2
2/14/2005 8:15	EQUIP BLANK	GC-Water	Chlorpyrifos Methyl	0.097	ug/L	U	0.097	0.39
2/14/2005 8:15	EQUIP BLANK	GC-Water	Diazinon	0.049	ug/L	U	0.049	0.2
2/14/2005 8:15	EQUIP BLANK	GC-Water	Ethion	0.049	ug/L	U	0.049	0.2
2/14/2005 8:15	EQUIP BLANK	GC-Water	Ethoprop	0.097	ug/L	U	0.097	0.39
2/14/2005 8:15	EQUIP BLANK	GC-Water	Fenamiphos	0.19	ug/L	U	0.19	0.76
2/14/2005 8:15	EQUIP BLANK	GC-Water	Fonofos	0.097	ug/L	U	0.097	0.39
2/14/2005 8:15	EQUIP BLANK	GC-Water	Hexazinone	0.097	ug/L	U	0.097	0.39
2/14/2005 8:15	EQUIP BLANK	GC-Water	Malathion	0.15	ug/L	U	0.15	0.6
2/14/2005 8:15	EQUIP BLANK	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
2/14/2005 8:15	EQUIP BLANK	GC-Water	Metolachlor	0.49	ug/L	U	0.49	2
2/14/2005 8:15	EQUIP BLANK	GC-Water	Metribuzin	0.097	ug/L	U	0.097	0.39
2/14/2005 8:15	EQUIP BLANK	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
2/14/2005 8:15	EQUIP BLANK	GC-Water	Naled	0.78	ug/L	UJ	0.78	3.1
2/14/2005 8:15	EQUIP BLANK	GC-Water	Norflurazon	0.097	ug/L	U	0.097	0.39
2/14/2005 8:15	EQUIP BLANK	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
2/14/2005 8:15	EQUIP BLANK	GC-Water	Parathion Methyl	0.097	ug/L	U	0.097	0.39
2/14/2005 8:15	EQUIP BLANK	GC-Water	Phorate	0.049	ug/L	U	0.049	0.2
2/14/2005 8:15	EQUIP BLANK	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
2/14/2005 8:15	EQUIP BLANK	GC-Water	Simazine	0.049	ug/L	U	0.049	0.2
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Alachlor	0.6	ug/L	U	0.6	2.4
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Ametryn	0.05	ug/L	U	0.05	0.2
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Atrazine	0.05	ug/L	U	0.05	0.2
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Azinphos Methyl	0.05	ug/L	U	0.05	0.2
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Chlorpyrifos Ethyl	0.05	ug/L	U	0.05	0.2
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Diazinon	0.05	ug/L	U	0.05	0.2
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Ethion	0.05	ug/L	U	0.05	0.2

2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Fonofos	0.1	ug/L	U	0.1	0.4

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Malathion	0.15	ug/L	U	0.15	0.6
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Metalaxyl	0.25	ug/L	U	0.25	1
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Metolachlor	0.5	ug/L	U	0.5	2
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Mevinphos	0.2	ug/L	U	0.2	0.8
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Naled	0.8	ug/L	UJ	0.8	3.2
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Norflurazon	0.1	ug/L	U	0.1	0.4
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Phorate	0.05	ug/L	U	0.05	0.2
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
2/14/2005 10:30	SILVER DOLPHIN	GC-Water	Simazine	0.05	ug/L	U	0.05	0.2
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Aluminum	5	ug/L	U	5	20
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Arsenic	6	ug/L	U	6	24
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Cadmium	0.075	ug/L	U	0.075	0.3
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Calcium	0.075	mg/L	U	0.075	0.3
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Chromium	2	ug/L	U	2	8
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Copper	0.5	ug/L	U	0.5	2
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Iron	10	ug/L	U	10	40
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Lead	0.075	ug/L	U	0.075	0.3
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Magnesium	0.02	mg/L	U	0.02	0.08
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Nickel	2	ug/L	U	2	8
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
2/14/2005 8:15	EQUIP BLANK	Metals-Water	Zinc	3	ug/L	U	3	12
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Aluminum	0.0036	ug/L		5	20
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Arsenic	6	ug/L	U	6	24
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Cadmium	0.64	ug/L		0.075	0.3
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Calcium	76.3	mg/L		0.075	0.3
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Chromium	7.6	ug/L	I	2	8
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Copper	87	ug/L		0.5	2
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Iron	0.0087	ug/L		10	40
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Lead	7.3	ug/L		0.075	0.3
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Magnesium	24.8	mg/L		0.02	0.08
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Nickel	9.6	ug/L		2	8
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Selenium	3.1	ug/L		0.5	2
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Silver	0.61	ug/L		0.025	0.1
2/14/2005 10:30	SILVER DOLPHIN	Metals-Water	Zinc	336	ug/L		3	12
2/14/2005 8:15	EQUIP BLANK	Nutrients-Liquid	Alkalinity	0.65	mg CaCO3/L	U	0.65	2.5
2/14/2005 8:15	EQUIP BLANK	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
2/14/2005 8:15	EQUIP BLANK	Nutrients-Liquid	Kjeldahl Nitrogen	0.06	mg N/L	U	0.06	0.2
2/14/2005 8:15	EQUIP BLANK	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01
2/14/2005 8:15	EQUIP BLANK	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01

2/14/2005 8:15	EQUIP BLANK	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06
2/14/2005 10:30	SILVER DOLPHIN	Nutrients-Liquid	Alkalinity	245	mg CaCO3/L		0.65	2.5
2/14/2005 10:30	SILVER DOLPHIN	Nutrients-Liquid	Ammonia-N	0.29	mg N/L	A	0.02	0.04
2/14/2005 10:30	SILVER DOLPHIN	Nutrients-Liquid	Kjeldahl Nitrogen	78	mg N/L	J	1.2	4

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
2/14/2005 10:30	SILVER DOLPHIN	Nutrients-Liquid	NO2NO3-N	7.9	mg N/L	A	0.4	1
2/14/2005 10:30	SILVER DOLPHIN	Nutrients-Liquid	O-Phosphate-P	3.4	mg P/L		0.16	0.4
2/14/2005 10:30	SILVER DOLPHIN	Nutrients-Liquid	TSS	157	mg/L		4	16
2/14/2005 10:30	SILVER DOLPHIN	Nutrients-Liquid	Total-P	19	mg P/L	J	0.8	2.4

The Bioassay of Silver Dolphin MHP WWTP effluent sampled on February 14, 2005 NPDES #FL0023001.

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

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

Remarks

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The Priority Pollutants Analysis of Silver Dolphin MHP WWTP effluent sampled on February 14, 2005 NPDES #FL0023001.

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

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

Remarks

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Biological Analyses of Silver Dolphin MHP WWTP effluent sampled on February 14, 2005 NPDES #FL0023001.

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

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

Remarks

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