

Bioassays of

Altamonte Springs Regional Water Reclamation Facility

Seminole County

NPDES #FL0033251

Sampled December 6, 2005

February 2006

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Altamonte Springs Regional Water Reclamation Facility, 950 Keller Road, Altamonte Springs, Seminole County, Florida, NPDES #FL0033251. Effluent samples for this facility were collected on December 6, 2005.

Introduction

Altamonte Springs Regional Water Reclamation Facility is an activated-sludge process waste-water treatment plant. The facility has a design flow of 12.5 million gallons per day (MGD) annual average daily flow (AADF). The AADF as reported in the October 2005 discharge monitoring report (DMR) was 1.25 MGD through Outfall D-001 and 4.95 MGD through the reuse system (R-001). The wastewater treatment system includes influent screening, grit removal, primary sedimentation, anoxic/aerobic nitrification, secondary clarification, flocculation, denitrification, filtration, a chemical feed system, post-aeration, chlorination with chlorine gas, dechlorination with sulfur dioxide, and a 0.25 million gallon effluent holding tank. Residuals are aerobically digested, then gravity thickened and belt pressed for dewatering. Residuals are transported to a residuals management facility (RMF) for treatment and land application. Treated effluent is discharged through Outfall D-001 to the Class III freshwaters of the Little Wekiva River. The D-001 outfall structure is located approximately 4,828 m (15,840 ft) from the plant on the southern bank of the Little Wekiva River and discharges at a depth of approximately 0.61 m (2 ft). The point of discharge is located approximately at latitude 28º39'15" N and longitude 81º24'26" W.

The facility has a public access reuse system (R-001) which provides reclaimed water throughout Altamonte Springs for irrigation of city parks, street and highway medians, city owned nurseries, and residential and commercial lawns. Reclaimed water is also used for street cleaning, dust control, fire protection, water-to-air heat pumps, chillers (cooling water towers), and automatic car washers. The reuse system can be augmented through the use of surface water, ground water, stormwater, potable water, and an interconnect with the Wekiva Hunt Club WWTF.

The facility is not under any Administrative Orders or Consent Orders. There have been no plant upsets during the past year. DMR data from 1997 to 2005 show that the monthly average concentrations of total phosphorus, ammonia, carbonaceous-biological oxygen demand, and total suspended solids are decreasing while average annual flow has increased. (Facility information provided by David Smicherko of FDEP Central District.)

Methods

Samples were collected from the EFD-1 NPDES sampling point for Outfall D-001 by Phil Kane and 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

The 48-hour acute screen toxicity tests and algal growth potential test were performed following internal DEP SOP's TA07_01, TA07_02, 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.

Toxicity Test Results

Tests were performed December 7 - 9, 2005.

Ceriodaphnia dubia 48-hour acute screening bioassay –	LC_{50} > 100%, 0% mortality* in 100% sample at 48 hours

Cyprinella leedsi 48-hour acute screening bioassay – LC_{50} > 100%, 5% mortality* in 100% sample at 48 hours

The bioassay sample was not acutely toxic to the test organisms.

See Appendix 1 for bioassay bench sheets.

*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 334 mg dry wt/L of the freshwater 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 312 (±20%) mg dry wt/L (Table 1; Miller et al. 1978).

See Table 1 for AGP results.

Chemistry Results

Total residual chlorine and total ammonia were not detected in the bioassay sample in the laboratory. The total ammonia concentration in the sample collected and preserved for chemical analysis was 0.028 mg/L. Based on the pH, salinity, and temperature of the effluent as collected, the calculated unionized ammonia concentration was < 0.02 mg/L.

Iron and zinc were detected in the effluent at levels that comply with Class III fresh water quality criteria. Atrazine, aluminum, lead, and nickel were detected between the laboratory method detection limits (MDL) and practical quantitation limits (PQL).

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

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

Conclusion

The effluent sample collected from Outfall D-001 for this facility on December 6, 2005, was not acutely toxic to either test species during the acute screen 48-hour bioassays. The effluent AGP result greatly exceeded the "problem" threshold for fresh receiving waters. Effluent water quality samples did not exceed any applicable water quality standards or violate any permit conditions.

Literature Cited

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

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

Table 1. Measured and predicted algal growth potential (AGP; mg dry weight/L) of the freshwater species Pseudokirchneriella subcapitata *for total soluble nitrogen (TSIN) and total nitrogen (TN) limitation and ratios of nitrogen to phosphorus for samples collected from Altamonte Springs Regional Water Reclamation Facility on December 6, 2005.*

Location	AGP (measured)	Predicted AGP (TSIN) ± 20%	Predicted AGP (TN) ± 20%	Inorganic N:P ratio	Total N:P ratio
Effluent Samples	334	312.66 ± 62.532	344.28 ± 68.856	5.49	5.66

Table 2. Effluent limits, Class III Fresh Criteria, and chemical and microbiological data for samples collected from Altamonte Springs Regional Water Reclamation Facility on December 6, 2005.

Altamonte Springs Regional Water Reclamation Facility NPDES# FL0033251	Class III Freshwater Stds	Effluent Limits	Effluent Samples
Organic Constituents (µg/L)			
Atrazine	-	-	0.1 I
Metals (µg/L unless otherwise noted)			
Aluminum	-	-	13 I
Arsenic	≤ 50	-	4 U
Cadmium	≤ 1.4 b	-	0.05 U
Calcium (mg/L)	-	-	37.5
Chromium-III	≤ 107.6 b	-	1 U
Copper	≤ 11.8 b	-	3.7 U
Iron	≤ 1,000	-	65
Lead	≤ 4.5 b	-	0.12 I
Magnesium (mg/L)	-	-	9.1
Nickel	≤ 65.6 b	-	3.3 I
Selenium	≤ 5	-	0.5 U
Silver	≤ 0.07	-	0.025 U
Zinc	≤ 150.7 b	-	27
Nutrients (mg/L)			
Ortho-phosphate	-	-	1.5
Total Phosphorus	-	Report m	1.6 A
Ammonia	-	≤ 1.0 m	0.028
Unionized Ammonia	≤ 0.02	-	< 0.02
Nitrate+Nitrite	-	-	8.2 A
Total Kjeldahl Nitrogen	-	-	0.86 A
Organic Nitrogen	-	-	0.83 c
Total Nitrogen	-	-	9.06 c
General Physical and Chemical Parameters			
pH (S.U.)	6.0-8.5	6.0-7.5	7
Conductivity (umhos/cm)	≤ 1,275	-	513
Temperature (C)	-	-	24.7
Dissolved Oxygen (mg/L)	≥ 5	≥ 6	8.4
BOD (mg/L)	-	≤ 10 s	0.2 AU
TSS (mg/L)	-	≤ 60 s	4 U
Flow (MGD)	-	≤ 12.5 ap	1.25 a
Hardness (mg/L)	-	-	131.1 c
Total Residual Chlorine (mg/L)	≤ 0.01	≤ 0.01	0.01 e
Microbiology (# counts/100ml)			
Fecal Coliforms-Membrane Filter	≤ 800 s	≤ 800 s	1 U*

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
e - field measurement
m - Monthly average
p - permited sampling point for this limit is EFF-01
s - Single sample
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
* - Data provided by FL DEP Central District lab

FDEP Biology Section - Acute Screen Bioassay Bench Sheets

Facility: Altamonte Springs Regional WRF

Address: 950 Keller Road

City: Altamonte Springs County: Seminole

Contact/District: Phil Kane / Central District

NPDES Permit #: FL 0033251

LIMS Job #: TLH-2005-12-07-118 LIMS Sample #: 88504B

Lims Data Entry: 12-15-05 SP Data Entry Verification: 12-16-05 MF

Sample Collection: Date: 12-6-05 Time: 0830

Hold Time Start: Date: 12-6-05 Time: 0830

Comments:

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_01

Control survival ≥90%: (Yes) No

Temperature Range ≤3°C (Yes) No

Test 2 validation: Test 2: SOP TA 07_02

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 # 3 Range 25.5-25.1

Room 0246: 23.8-26.5

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 Pinchard

Marshall Faircloth

Jason Ford

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:	Original Sample	Method	Measured by	Verified by
Field Total Residual Cl2 (mg/L)	N/A	N/A	N/A	N/A		0.01	unknown	P. Kane	SP
Lab Total Residual Cl2 (mg/L)	<0.02	<0.03				<0.03	HACH	SP	MF
Alkalinity (mg/L as $CaCO_3$)	86	149				102	HACH	FW/SP	MF
Hardness (mg/L as $CaCO_3$)	92	138				134	HACH	FW/SP	MF
Total Ammonia (mg/L as N)	<0.017	<0.017				<0.017	DENVER	MF	SP
Salinity (ppth)	<1	<1				<1	YSI / Mettler	SP	SP

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Appendix 1. Bench Sheets (continued)

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 885048 Test #: 1 Test Started: Date 12-7-05 Time: 1220
Organism: C. dubia SOP #: TA 07_01 Test Ended: Date 12-9-05 Time: 1300
Organism Batch: 46-05 Diluent/ Batch: DMW 136-05
Organism Age: <24 hrs Food: YCT *P. subcapitata* *Artemia*
Chamber Size: ~~100~~ 30 mL Batch: 04-05 06-05 –
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	A	5	5	5			
	B	B	5	5	5			
	C	C	5	5	5			
	D	D	5	5	5			
100%	A	A	5	5	5			
	B	B	5	5	5			
	C	C	5	5	5			
	D	D	5	5	5			
Organisms loaded by: SF		Checked by:	[redacted]	JD	JD			

Loading Verified by: JD

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).

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Appendix 1. Bench Sheets (continued)

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 885048 | Test #: 2 | Test Started: Date 12-7-05 Time: 1220
Organism: C. dubia | SOP #: TA 07_02 | Test Ended: Date 12-9-05 Time: 1245
Organism Batch: 36-05 | Diluent/ Batch: Well H2O, 12-5-05
Organism Age: 10 days | Food: YCT P. subcapitata Artemia
Chamber Size: 1000 mL | Batch: – – GSL536-90
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	G1	5	5	5			
	B	G2	5	5	5			
	C	G3	5	5	5			
	D	G4	5	5	5			
100%	A	G5	5	5	5			
	B	G6	5	4/0	4			
	C	G7	5	5	5			
	D	G8	5	5	5			
Organisms loaded by: LF		Checked by:	[redacted]	JD	SP			

Loading Verified by: SP

Comments:

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

Test Results:
% mortality in 100% sample: 5
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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FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 885048 Test #: 1 of 2

TEST SOP #: TA07_01 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			
pH (S.U.)	8.1		8.3			
Temperature °C	24.7	~~Stopped~~	24.7			
Dissolved Oxygen mg/L	8.0		7.5			
Conductivity ~~µmhos~~ mmhos	1731		233			..
(initials) Measured by:	[illegible]		JD			
(initials) Recorded by:	JD		JD			

Comments:

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	A		B			
pH (S.U.)	7.4		8.3			
Temperature °C	24.7		24.6			
Dissolved Oxygen mg/L	7.7		7.3			
Conductivity ~~µmhos~~ mmhos	513		563			
(initials) Measured by:	[illegible]		JD			
(initials) Recorded by:	JD		JD			

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:

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FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 885048 Test #: 2 of 2

TEST SOP #: TA07_02 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	8.2	8.2			
Temperature °C	24.6	24.6	25.4			
Dissolved Oxygen mg/L	7.6	7.0	7.1			
Conductivity ~~µmhos~~ mmhos	370	391	364			
(initials) Measured by:	SD	SD	BC			
(initials) Recorded by:	SD	SD	BC			

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.)	7.3	7.8	8.0			
Temperature °C	23.1	24.9	24.1			
Dissolved Oxygen mg/L	7.8	6.9	7.3			
Conductivity ~~µmhos~~ mmhos	510	555	554			
(initials) Measured by:	SD	SD	BC			
(initials) Recorded by:	SD	SD	BC			

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:

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Appendix 2. Chemical Analyses performed on the effluent from the Altamonte Springs Regional Water Reclamation Facility Outfall D-001, sampled on December 6, 2005.

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
12/6/2005 8:30	ALTA	Bio-AGP/LimNut	Algal Growth Potential	334	mg DryWt/L		0.3	0.9
12/6/2005 8:30	ALTA	Bio-BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	0.2	mg/L	AU	0.2	2
12/6/2005 8:30	ALTA	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
12/6/2005 8:30	ALTA	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	1.5	ug/L	U	1.5	4.5
12/6/2005 8:30	ALTA	Bio-Toxicology	Bioassay-Acute-Screen-FW-C.dubia, LC50	100	LC50	L		
12/6/2005 8:30	ALTA	Bio-Toxicology	Bioassay-Acute-Screen-FW-Fish, LC50	100	LC50	L		
12/6/2005 8:30	ALTA	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
12/6/2005 8:30	ALTA	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57
12/6/2005 8:30	ALTA	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	11
12/6/2005 8:30	ALTA	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	UJ	38	150
12/6/2005 8:30	ALTA	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
12/6/2005 8:30	ALTA	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
12/6/2005 8:30	ALTA	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Benzidine	95	ug/L	U	95	380
12/6/2005 8:30	ALTA	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
12/6/2005 8:30	ALTA	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
12/6/2005 8:30	ALTA	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
12/6/2005 8:30	ALTA	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
12/6/2005 8:30	ALTA	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	Diethyl phthalate	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
12/6/2005 8:30	ALTA	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
12/6/2005 8:30	ALTA	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
12/6/2005 8:30	ALTA	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
12/6/2005 8:30	ALTA	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
12/6/2005 8:30	ALTA	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
12/6/2005 8:30	ALTA	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
12/6/2005 8:30	ALTA	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	11
12/6/2005 8:30	ALTA	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
12/6/2005 8:30	ALTA	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
12/6/2005 8:30	ALTA	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
12/6/2005 8:30	ALTA	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
12/6/2005 8:30	ALTA	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	UJ	2.9	11

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
12/6/2005 8:30	ALTA	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11
12/6/2005 8:30	ALTA	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
12/6/2005 8:30	ALTA	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	1,2,4-Trichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	1,2-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	1,3-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	1,4-Dichlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	2,4,6-Trichlorophenol	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	2,4-Dichlorophenol	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	2,4-Dimethylphenol	48	ug/L	U	48	190
12/6/2005 9:00	BLANK	BNA-Water	2,4-Dinitrophenol	14	ug/L	U	14	57
12/6/2005 9:00	BLANK	BNA-Water	2,4-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	2,6-Dinitrotoluene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	2-Chloronaphthalene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	2-Chlorophenol	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	2-Methyl-4,6-dinitrophenol	2.9	ug/L	U	2.9	11
12/6/2005 9:00	BLANK	BNA-Water	2-Nitrophenol	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	3,3'-Dichlorobenzidine	38	ug/L	UJ	38	150
12/6/2005 9:00	BLANK	BNA-Water	4,4'-DDD	1.4	ug/L	U	1.4	5.7
12/6/2005 9:00	BLANK	BNA-Water	4,4'-DDE	1.4	ug/L	U	1.4	5.7
12/6/2005 9:00	BLANK	BNA-Water	4,4'-DDT	1.4	ug/L	U	1.4	5.7
12/6/2005 9:00	BLANK	BNA-Water	4-Bromophenyl phenyl ether	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	4-Chloro-3-methylphenol	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	4-Chlorophenyl phenyl ether	1.9	ug/L	U	1.9	7.6
12/6/2005 9:00	BLANK	BNA-Water	4-Nitrophenol	14	ug/L	U	14	57
12/6/2005 9:00	BLANK	BNA-Water	Acenaphthene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Acenaphthylene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Aldrin	1.4	ug/L	U	1.4	5.7
12/6/2005 9:00	BLANK	BNA-Water	alpha-BHC	1.4	ug/L	U	1.4	5.7
12/6/2005 9:00	BLANK	BNA-Water	Anthracene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Benzidine	95	ug/L	U	95	380
12/6/2005 9:00	BLANK	BNA-Water	Benzo(a)anthracene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Benzo(a)pyrene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Benzo(b)fluoranthene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Benzo(g,h,i)perylene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Benzo(k)fluoranthene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	beta-BHC	1.4	ug/L	U	1.4	5.7

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
12/6/2005 9:00	BLANK	BNA-Water	Bis(2-chloroethoxy)methane	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Bis(2-chloroethyl)ether	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Bis(2-chloroisopropyl)ether	2.9	ug/L	U	2.9	11
12/6/2005 9:00	BLANK	BNA-Water	Bis(2-ethylhexyl)phthalate	14	ug/L	U	14	57
12/6/2005 9:00	BLANK	BNA-Water	Butyl benzyl phthalate	4.8	ug/L	U	4.8	19
12/6/2005 9:00	BLANK	BNA-Water	Chrysene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	delta-BHC	1.4	ug/L	U	1.4	5.7
12/6/2005 9:00	BLANK	BNA-Water	Dibenzo(a,h)anthracene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Dieldrin	1.4	ug/L	U	1.4	5.7
12/6/2005 9:00	BLANK	BNA-Water	Diethyl phthalate	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Dimethyl phthalate	48	ug/L	U	48	190
12/6/2005 9:00	BLANK	BNA-Water	Di-n-butyl phthalate	4.8	ug/L	U	4.8	19
12/6/2005 9:00	BLANK	BNA-Water	Di-n-octyl phthalate	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Endosulfan I	3.8	ug/L	U	3.8	15
12/6/2005 9:00	BLANK	BNA-Water	Endosulfan II	3.8	ug/L	U	3.8	15
12/6/2005 9:00	BLANK	BNA-Water	Endosulfan sulfate	1.4	ug/L	U	1.4	5.7
12/6/2005 9:00	BLANK	BNA-Water	Endrin	1.4	ug/L	U	1.4	5.7
12/6/2005 9:00	BLANK	BNA-Water	Endrin aldehyde	3.8	ug/L	U	3.8	15
12/6/2005 9:00	BLANK	BNA-Water	Fluoranthene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Fluorene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	gamma-BHC	1.4	ug/L	U	1.4	5.7
12/6/2005 9:00	BLANK	BNA-Water	Heptachlor	1.4	ug/L	U	1.4	5.7
12/6/2005 9:00	BLANK	BNA-Water	Heptachlor epoxide	1.4	ug/L	U	1.4	5.7
12/6/2005 9:00	BLANK	BNA-Water	Hexachlorobenzene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Hexachlorobutadiene	2.9	ug/L	U	2.9	11
12/6/2005 9:00	BLANK	BNA-Water	Hexachlorocyclopentadiene	2.9	ug/L	U	2.9	11
12/6/2005 9:00	BLANK	BNA-Water	Hexachloroethane	2.9	ug/L	U	2.9	11
12/6/2005 9:00	BLANK	BNA-Water	Indeno(1,2,3-cd)pyrene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Isophorone	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Naphthalene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Nitrobenzene	1.9	ug/L	U	1.9	7.6
12/6/2005 9:00	BLANK	BNA-Water	N-Nitrosodimethylamine	1.9	ug/L	U	1.9	7.6
12/6/2005 9:00	BLANK	BNA-Water	N-Nitrosodi-n-propylamine	1.9	ug/L	U	1.9	7.6
12/6/2005 9:00	BLANK	BNA-Water	N-Nitrosodiphenylamine	2.9	ug/L	UJ	2.9	11
12/6/2005 9:00	BLANK	BNA-Water	Pentachlorophenol	2.9	ug/L	U	2.9	11
12/6/2005 9:00	BLANK	BNA-Water	Phenanthrene	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Phenol	0.95	ug/L	U	0.95	3.8
12/6/2005 9:00	BLANK	BNA-Water	Pyrene	0.95	ug/L	U	0.95	3.8

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
12/6/2005 8:30	ALTA	GC-Water	Alachlor	0.57	ug/L	U	0.57	2.3
12/6/2005 8:30	ALTA	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.19
12/6/2005 8:30	ALTA	GC-Water	Atrazine	0.1	ug/L	I	0.048	0.19
12/6/2005 8:30	ALTA	GC-Water	Azinphos Methyl	0.19	ug/L	U	0.19	0.76
12/6/2005 8:30	ALTA	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
12/6/2005 8:30	ALTA	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
12/6/2005 8:30	ALTA	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.19
12/6/2005 8:30	ALTA	GC-Water	Chlorpyrifos Methyl	0.095	ug/L	U	0.095	0.38
12/6/2005 8:30	ALTA	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.19
12/6/2005 8:30	ALTA	GC-Water	Ethion	0.048	ug/L	U	0.048	0.19
12/6/2005 8:30	ALTA	GC-Water	Ethoprop	0.095	ug/L	U	0.095	0.38
12/6/2005 8:30	ALTA	GC-Water	Fenamiphos	0.19	ug/L	UJ	0.19	0.76
12/6/2005 8:30	ALTA	GC-Water	Fonofos	0.095	ug/L	U	0.095	0.38
12/6/2005 8:30	ALTA	GC-Water	Hexazinone	0.095	ug/L	U	0.095	0.38
12/6/2005 8:30	ALTA	GC-Water	Malathion	0.14	ug/L	UJ	0.14	0.56
12/6/2005 8:30	ALTA	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
12/6/2005 8:30	ALTA	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.9
12/6/2005 8:30	ALTA	GC-Water	Metribuzin	0.095	ug/L	U	0.095	0.38
12/6/2005 8:30	ALTA	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
12/6/2005 8:30	ALTA	GC-Water	Naled	0.76	ug/L	U	0.76	3
12/6/2005 8:30	ALTA	GC-Water	Norflurazon	0.14	ug/L	U	0.14	0.56
12/6/2005 8:30	ALTA	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
12/6/2005 8:30	ALTA	GC-Water	Parathion Methyl	0.095	ug/L	U	0.095	0.38
12/6/2005 8:30	ALTA	GC-Water	Phorate	0.048	ug/L	U	0.048	0.19
12/6/2005 8:30	ALTA	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
12/6/2005 8:30	ALTA	GC-Water	Simazine	0.048	ug/L	U	0.048	0.19
12/6/2005 9:00	BLANK	GC-Water	Alachlor	0.58	ug/L	U	0.58	2.3
12/6/2005 9:00	BLANK	GC-Water	Ametryn	0.048	ug/L	U	0.048	0.19
12/6/2005 9:00	BLANK	GC-Water	Atrazine	0.048	ug/L	U	0.048	0.19
12/6/2005 9:00	BLANK	GC-Water	Azinphos Methyl	0.19	ug/L	U	0.19	0.76
12/6/2005 9:00	BLANK	GC-Water	Bromacil	0.19	ug/L	U	0.19	0.76
12/6/2005 9:00	BLANK	GC-Water	Butylate	0.19	ug/L	U	0.19	0.76
12/6/2005 9:00	BLANK	GC-Water	Chlorpyrifos Ethyl	0.048	ug/L	U	0.048	0.19
12/6/2005 9:00	BLANK	GC-Water	Chlorpyrifos Methyl	0.096	ug/L	U	0.096	0.38
12/6/2005 9:00	BLANK	GC-Water	Diazinon	0.048	ug/L	U	0.048	0.19
12/6/2005 9:00	BLANK	GC-Water	Ethion	0.048	ug/L	U	0.048	0.19
12/6/2005 9:00	BLANK	GC-Water	Ethoprop	0.096	ug/L	U	0.096	0.38
12/6/2005 9:00	BLANK	GC-Water	Fenamiphos	0.19	ug/L	UJ	0.19	0.76

Appendix 2. Chemical Analyses (continued)

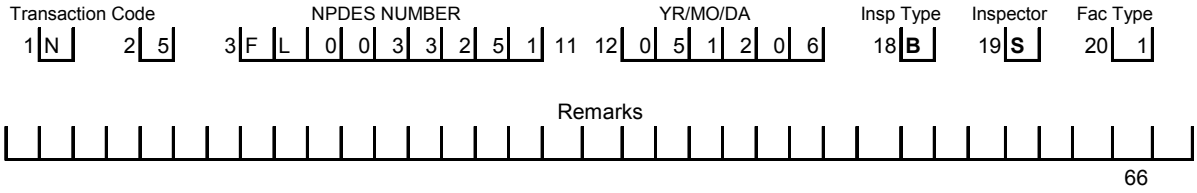
Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
12/6/2005 9:00	BLANK	GC-Water	Fonofos	0.096	ug/L	U	0.096	0.38
12/6/2005 9:00	BLANK	GC-Water	Hexazinone	0.096	ug/L	U	0.096	0.38
12/6/2005 9:00	BLANK	GC-Water	Malathion	0.14	ug/L	UJ	0.14	0.56
12/6/2005 9:00	BLANK	GC-Water	Metalaxyl	0.24	ug/L	U	0.24	0.96
12/6/2005 9:00	BLANK	GC-Water	Metolachlor	0.48	ug/L	U	0.48	1.9
12/6/2005 9:00	BLANK	GC-Water	Metribuzin	0.096	ug/L	U	0.096	0.38
12/6/2005 9:00	BLANK	GC-Water	Mevinphos	0.19	ug/L	U	0.19	0.76
12/6/2005 9:00	BLANK	GC-Water	Naled	0.77	ug/L	U	0.77	3.1
12/6/2005 9:00	BLANK	GC-Water	Norflurazon	0.14	ug/L	U	0.14	0.56
12/6/2005 9:00	BLANK	GC-Water	Parathion Ethyl	0.14	ug/L	U	0.14	0.56
12/6/2005 9:00	BLANK	GC-Water	Parathion Methyl	0.096	ug/L	U	0.096	0.38
12/6/2005 9:00	BLANK	GC-Water	Phorate	0.048	ug/L	U	0.048	0.19
12/6/2005 9:00	BLANK	GC-Water	Prometryn	0.14	ug/L	U	0.14	0.56
12/6/2005 9:00	BLANK	GC-Water	Simazine	0.048	ug/L	U	0.048	0.19
12/6/2005 8:30	ALTA	Metals-Water	Aluminum	13	ug/L	I	5	20
12/6/2005 8:30	ALTA	Metals-Water	Arsenic	4	ug/L	U	4	16
12/6/2005 8:30	ALTA	Metals-Water	Cadmium	0.05	ug/L	U	0.05	0.2
12/6/2005 8:30	ALTA	Metals-Water	Calcium	37.5	mg/L		0.05	0.2
12/6/2005 8:30	ALTA	Metals-Water	Chromium	1	ug/L	U	1	4
12/6/2005 8:30	ALTA	Metals-Water	Copper	3.7	ug/L	U	3.7	15
12/6/2005 8:30	ALTA	Metals-Water	Iron	65	ug/L		10	40
12/6/2005 8:30	ALTA	Metals-Water	Lead	0.12	ug/L	I	0.075	0.3
12/6/2005 8:30	ALTA	Metals-Water	Magnesium	9.1	mg/L		0.01	0.04
12/6/2005 8:30	ALTA	Metals-Water	Nickel	3.3	ug/L	I	1	4
12/6/2005 8:30	ALTA	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
12/6/2005 8:30	ALTA	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
12/6/2005 8:30	ALTA	Metals-Water	Zinc	27	ug/L		3	12
12/6/2005 9:00	BLANK	Metals-Water	Aluminum	5	ug/L	U	5	20
12/6/2005 9:00	BLANK	Metals-Water	Arsenic	4	ug/L	U	4	16
12/6/2005 9:00	BLANK	Metals-Water	Cadmium	0.05	ug/L	U	0.05	0.2
12/6/2005 9:00	BLANK	Metals-Water	Calcium	0.05	mg/L	U	0.05	0.2
12/6/2005 9:00	BLANK	Metals-Water	Chromium	1	ug/L	U	1	4
12/6/2005 9:00	BLANK	Metals-Water	Copper	0.25	ug/L	U	0.25	1
12/6/2005 9:00	BLANK	Metals-Water	Iron	10	ug/L	U	10	40
12/6/2005 9:00	BLANK	Metals-Water	Lead	0.075	ug/L	U	0.075	0.3
12/6/2005 9:00	BLANK	Metals-Water	Magnesium	0.01	mg/L	U	0.01	0.04
12/6/2005 9:00	BLANK	Metals-Water	Nickel	1	ug/L	U	1	4
12/6/2005 9:00	BLANK	Metals-Water	Selenium	0.5	ug/L	U	0.5	2

Appendix 2. Chemical Analyses (continued)

Date Sampled	Field ID	Analysis	Component	Result	Units	Remark	MDL	PQL
12/6/2005 9:00	BLANK	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
12/6/2005 9:00	BLANK	Metals-Water	Zinc	3	ug/L	U	3	12
12/6/2005 8:30	ALTA	Nutrients-Liquid	Ammonia-N	0.028	mg N/L		0.01	0.02
12/6/2005 8:30	ALTA	Nutrients-Liquid	Kjeldahl Nitrogen	0.86	mg N/L	A	0.16	0.4
12/6/2005 8:30	ALTA	Nutrients-Liquid	NO2NO3-N	8.2	mg N/L	A	0.4	1
12/6/2005 8:30	ALTA	Nutrients-Liquid	O-Phosphate-P	1.5	mg P/L		0.08	0.2
12/6/2005 8:30	ALTA	Nutrients-Liquid	Total-P	1.6	mg P/L	A	0.04	0.12
12/6/2005 8:30	ALTA	Nutrients-Liquid	TSS	4	mg/L	U	4	16
12/6/2005 9:00	BLANK	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
12/6/2005 9:00	BLANK	Nutrients-Liquid	Kjeldahl Nitrogen	0.08	mg N/L	U	0.08	0.2
12/6/2005 9:00	BLANK	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01
12/6/2005 9:00	BLANK	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01
12/6/2005 9:00	BLANK	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06

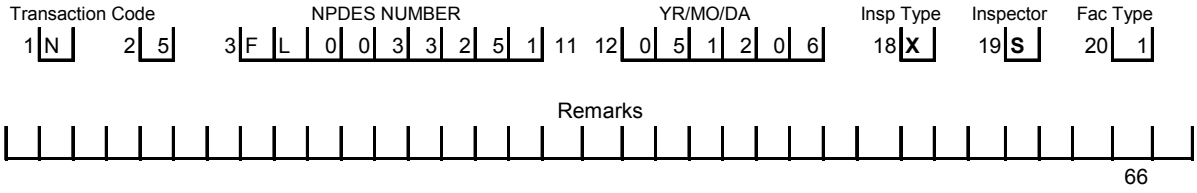
The Bioassay of Altamonte Springs Regional Water Reclamation Facility effluent sampled on December 6, 2005. NPDES #FL0033251.

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



The Priority Pollutants Analysis of Altamonte Springs Regional Water Reclamation Facility effluent sampled on December 6, 2005. NPDES #FL0033251.

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



Biological Analyses of Altamonte Springs Regional Water Reclamation Facility effluent sampled on December 6, 2005. NPDES #FL0033251.

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

