

Bioassays of

Montco Research Products, Inc.

Putnam County

NPDES #FL0037800

Sampled September 25, 2006

December 2006

Biology Section
Bureau of Laboratories
Division of Resource Assessment and Management

Quality Manual No. 870346G
NELAC Certification No. E31780

Montco Research Products, Inc., End of Hollister Drive, Hollister, Putnam County, Florida, NPDES #FL0037800. Effluent samples for this facility were collected on September 25, 2006.

Introduction

Montco Research Products, Inc., manufactures specialty chemical intermediates for pharmaceuticals and quaternaries (includes surfactants, polymers, and specialty products (includes flavors, emulsifiers and solubilizers) used in food and pharmaceutical industries). The permitted facility at the manufacturing plant is an industrial wastewater treatment facility. The treatment facility has a design flow of 0.170 million gallons per day (MGD) annual average daily flow (AADF). The AADF from July 2005 through June 2006 was 0.142 MGD. The flow during the sampling event was 0.143 MGD. Effluent from the facility consists of once-through non-contact cooling water which is obtained from an on-site well. The facility routes approximately 5% of the cooling water to an on-site pond which is used as storage for fire control. Effluent is not treated prior to being discharged through Outfall D-001 to the Class III freshwaters of Rice Creek Swamp thence to Rice Creek. Outfall D-001 is located approximately at latitude 29º 40' 14.23" N and longitude 81º 47" 31.81" W.

The facility has no administrative orders (AO) or Consent Orders (CO). The facility has no mixing zones. A review of the Discharge Monitoring Report (DMR) for the past year revealed no permit violations. There has been no reported plant upset during the past year. (Facility information provided by Reza Shayan of FDEP Northeast District).

Methods

Samples were collected from the EFF-1 NPDES sampling point for Outfall D-001 by Chet McGhee and Reza Shayan (FDEP Northeast District) following DEP-SOP-001/01 FS 2400 Wastewater Sampling. All DEP SOPs are available on the web at: http://www.floridadep.org/labs/qa/sops.htm.

See Appendix A for the completed chain of custody form.

The 48-hour acute screen toxicity tests and algal growth potential test were performed following internal DEP SOPs TA07_01, TA07_02, and TA08_01 through TA08_09. All internal DEP SOPs are available on the web at: http://www.floridadep.org/labs/cgi-bin/sop/biosop.asp.

The Department uses the 48-hour acute screening toxicity test to provide reasonable assurance that the facility does not adversely affect waters of the state.

Toxicity Test Results

Tests were performed September 26 - 28, 2006.

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 –	No Result**

The bioassay samples were not acutely toxic to the *Ceriodaphnia dubia* test organisms.

See Appendix B for bioassay bench sheets. See Appendix C for results of the last 20 standard reference toxicant (SRT) tests and the bench sheets and statistical analyses of the SRT tests that correspond to these facility tests. See Appendix D 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% 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.).

** The *Cyprinella leedsi* test was invalidated at 48 hours due to excess control mortality (15% mortality; 10% mortality allowed).

Algal Growth Potential

The effluent Algal Growth Potential (AGP) was 4.61 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 3.65 (±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 the laboratory. Total ammonia was detected in the bioassay sample in the laboratory at a concentration of 0.107 mg/L. The total ammonia concentration in the sample collected and preserved for chemical analysis was 0.084 mg/L. Based on the pH, salinity, and temperature of the effluent as collected, the calculated unionized ammonia concentration was < 0.02 mg/L.

The effluent dissolved oxygen (4.54 mg/L) as measured in the field was less than the Class III Freshwater criterion for dissolved oxygen of ≥ 5.0 mg/L (62-302.530(31), F.A.C.).

Iron was detected between the laboratory method detection limit (MDL) and practical quantitation limit (PQL).

See Table 2 for results of analytes detected in the effluent, and corresponding limits. See Appendix E for a complete list of chemical analyses performed.

Conclusion

The effluent sample collected from Outfall D-001 for this facility on September 25, 2006 was not acutely toxic to the *Ceriodaphnia dubia* test species during the 48-hour acute screen bioassay. The *Cyprinella leedsi* bioassay was invalidated due to excess control mortality. The effluent AGP result was less than the "problem” threshold for fresh receiving waters. The effluent dissolved oxygen was less than the Class III freshwater criterion for dissolved oxygen.

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 Montco Research Products, Inc., on September 25, 2006.*

Location	AGP (measured)	Predicted AGP (TSIN) ± 20%	Predicted AGP (TN) ± 20%	Inorganic N:P ratio	Total N:P ratio
Effluent Samples	4.61	3.65 ± 0.73	5.78 ± 1.156	2.04	2.53

Table 2. *Effluent limits, Class III Criteria, chemical and toxicological data for samples collected from Montco Researh Products , Inc., on September 25, 2006.*

Montco Researh Products, Inc. NPDES# FL0037800	Class III Freshwater Stds	Effluent Limits	Effluent Samples
Organic Constituents (µg/L)			
None Detected	-	-	-
Metals (µg/L unless otherwise noted)			
Aluminum	-	-	4 U
Arsenic	≤ 50	-	0.5 U
Cadmium	≤ 1.3 b	-	0.05 U
Calcium (mg/L)	-	-	31 A
Chromium-III	≤ 96.5 b	-	0.3 U
Copper	≤ 10.5 b	-	0.2 U
Iron	≤ 1000	-	7.4 I
Lead	≤ 3.8 b	-	0.2 U
Magnesium (mg/L)	-	-	9.1 A
Nickel	≤ 58.7 b	-	1 U
Selenium	≤ 5	-	0.5 U
Silver	≤ 0.07	-	0.025 U
Zinc	≤ 134.8 b	-	3 U
Nutrients (mg/L)			
Ortho-phosphate	-	-	0.047
Total Phosphorus	-	-	0.06 A
Ammonia	-	-	0.084 A
Unionized Ammonia	≤ 0.02 s	-	≤ 0.02
Nitrate+Nitrite	-	-	0.012
Total Kjeldahl Nitrogen	-	-	0.14 I
Organic Nitrogen	-	-	0.06 c
Total Nitrogen	-	-	0.15 c
General Physical and Chemical Parameters			
Dissolved Oxygen (mg/L)	≥ 5 s	-	4.5
pH (S.U.)	6.0 - 8.5 s	6.0 - 8.5 s	7.9
Conductivity (umhos/cm)	≤ 1275	-	246
Temperature (C)	-	≤ 32.0 s	27.7
Flow (MGD)	-	≤ 0.170 a	0.143 a
Hardness (mg/L)	-	-	114.9 c

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

a - Annual average

b - Limit calculated based on water hardness

c - Calculated value

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

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Request Number: RQ-2006-09-25-12
Montco Research Products

Event ID *

Requester: Shannan Bogdanov
Field Report Prepared By:

Customer: NE-DIST
Project ID: FYI3
PMAS: 1163

Collected By: Chet McGhee / Reza Shayan
Send Final Report To Melissa Long

Sampling Agency: FDEP NED

Lab ID *	Location	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
	Montco Research Products, Inc	☐ Comp ☒ Grab	Date 9/25/04 Time 1055 (Eastern) Central	Date 9/25/04 Time 1130 Eastern Central	A
	Field ID: Effluent	Tot Res Chlorine (mg/L): 0	Diss Oxygen (mg/L): 4.54	Storet Station Number:	
	Matrix (Include type e.g. Salt, Fresh, etc)	Temp (C): 27.73	pH: 7.90	Sample Depth: .5 ☐ m ☒ ft	☐ Salinity (PPTh) ☒ Sp Conductance (umho/cm): 246
	Latitude o ' "	Longitude o ' "	NPDES Number:	Comments:	

Lab ID *	Location	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
	Montco Research Products, Inc	☐ Comp ☒ Grab	Date 9/25/04 Time 1125 Eastern Central	Date 9/25/04 Time 1130 Eastern Central	B
	Field ID: Blanks (Field)	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):
	Latitude o ' "	Longitude o ' "	NPDES Number:	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 Eastern Central	Date Time Eastern Central	
	Field ID	Tot Res Chlorine (mg/L):	Diss Oxygen (mg/L):	Storet Station Number:	
	Matrix (Include type e.g. Salt, Fresh, etc)	Temp (C):	pH:	Sample Depth: ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm):
	Latitude o ' "	Longitude o ' "	NPDES Number:	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 Eastern Central	Date Time Eastern Central	
	Field ID	Tot Res Chlorine (mg/L):	Diss Oxygen (mg/L):	Storet Station Number:	
	Matrix (Include type e.g. Salt, Fresh, etc)	Temp (C):	pH:	Sample Depth: ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm):
	Latitude o ' "	Longitude o ' "	NPDES Number:	Comments: 2 Discovery 10:08 9/26/06 James Dumb	

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
			ABA	9/26/06 0855				

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

IAGP 1209 9-26-06 sw

FDEP Biology Section - Acute Screen Bioassay Bench Sheets

Facility: Montco Research Products, INC

Address: End of Jenie Drive, Hollister, Florida

City: Hollister County: Putnam

Contact/District: Reza Shayan NE

NPDES Permit #: FL 0037800

LIMS Job #: TIH-2006-09-26-40-01 LIMS Sample #: 953248

Lims Data Entry: 9-28-2006 MF Data Entry Verification: 9-28-2006 BA

Sample Collection: Date: 9-25-06 Time: 11:00

Hold Time Start: Date: 9.25.06 Time: 11:00

Comments:
C. dubia test invalidated at 48 hours due to 15% Control Mortality.
MF 9-28-06
NCR 2199 created. MF 9-28-06

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

Test Type: (Screen) (Static) Static Renewal / Flow-through

Test Duration: (48) 96 Hours.

Light Intensity : 50 - 100 ft. candles.

Photoperiod : 16 hours light 8 hours dark.

Test 1 validation: **Test 1:** SOP TA 07 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: ____

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)

Temperature Range °C

Incubator # 2 Range 24.2 - 26.4

Room B246: 24.2 – 25.1

Waterbath: N/A

Investigators' Signatures

Jenna Daniels

Bill Adams

Eric Tuck

Marshall Faircloth

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 Cl_2 (mg/L):	N/A	N/A	N/A	N/A	—	ND	Marshall	—	BA
Lab Total Residual Cl_2 (mg/L):	<0.03	<0.03				<0.03	HACH	BA	JD
Alkalinity (mg/L as $CaCO_3$):	82	136				119	HACH	Eric	JD
Hardness (mg/L as $CaCO_3$):	86	128				112	HACH	Eric	JD
Total Ammonia (mg/L as N):	<0.017	<0.017				0.107	DENVER	MF	~~JD~~ JD
Salinity (ppth):	<1	<1				<1	YSI / Mettler	BA	JD

V 1.4 9/12/05

Appendix B. (continued)

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 953248 **Test #:** 1 of 2 **Test Started:** Date 9.26.06 Time: 12:30
Organism: C. dubia **SOP #:** TA 07_01 **Test Ended:** Date 9-28-06 Time: 12:10
Organism Batch: 40-06 **Diluent/ Batch:** DMV 1 24-06
Organism Age: <24hrs **Food:** YCT *P. subcapitata* *Artemia*
Chamber Size: 30 mL **Batch:** 2-06 4-06
Test Volume: 20 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	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: BH		Checked by:	[redacted]	JD	mF			

Loading Verified by: JD

Comments:

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

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 000022

Appendix B. (continued)

FDEP Biology Section - Bioassay Survival Sheet

LIMS Sample #: 953248 | Test #: 2 of 2 | Test Started: Date 92606 Time: 12:15

Organism: C. leedsi | SOP #: TA 07_02 | Test Ended: Date 9-28-06 Time: 12:15

Organism Batch: 23-06 | Diluent/ Batch: Well H2O / 9,2606

Organism Age: 13 days | Food: YCT P. subcapitata (Artemia)

Chamber Size: 1000 mL | Batch: — — — 95L-536-90

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

Concentration	Replicate	Chamber #	Test Hour 0 hr	24 hr	48 hr BR	48 hr AR	72 hr	96 hr
Ctrl	A	C1	5	5	5			
	B	C2	5	5	4, D (A)	-		
	C	C3	5	4D	4			
	D	C4	5	5	4, D			
100%	A	C5	5	5	5			
	B	C6	5	5	5			
	C	C7	5	5	5			
	D	C8	5	5	5			
Organisms loaded by: JD Loading Verified by: BA		Checked by:	[redacted]	JD	BA			

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

Comments: (A) Missing head, ~~eaten by others~~ BA 9-28-06 MF 9-28-06

Test invalidated at 48 hours

15% Control Mortality

MF-9-28-06

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 000023

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 953248 **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	M(a)	A(a)	A			
pH (S.U.)	8.0	–	8.2			
Temperature °C	25.1	25.2	25.2			
Dissolved Oxygen mg/L	7.4	–	7.4			
Conductivity (µmhos) mmhos	170	201	201			
(initials) Measured by:	BA	B	BA			
(initials) Recorded by:	BA		BA			

Comments: (a) M = meter Val BA 9-26-06
(b) wrong space used BA 9-25-06

Concentration 100%	0 Hr.	24 Hr.	48 Hr. before renewal	48 Hr. after renewal	72 Hr.	96 Hr.
Replicate	M	A	A			
pH (S.U.)	8.0	|	8.4			
Temperature °C	25.3	|	24.9			
Dissolved Oxygen mg/L	6.0	|	7.3			
Conductivity (µmhos) mmhos	239	|	281			
(initials) Measured by:	BA		BA			
(initials) Recorded by:	BA		BA			

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:

000024

V 2.0 2/24/04

FDEP Biology Section - Bioassay Parameter Sheet

LIMS Sample # : 953248 **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.)	7.8	8.1	8.1			
Temperature °C	25.0	25.0	24.5			
Dissolved Oxygen mg/L	7.5	7.1	7.0			
Conductivity (µmhos) mmhos	267	270	282			
(initials) Measured by:	JD	JD	BA			
(initials) Recorded by:	JD	JD	BA			

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.)	7.9	8.1	8.3			
Temperature °C	25.2	25.0	24.4			
Dissolved Oxygen mg/L	5.5	7.0	7.1			
Conductivity (µmhos) mmhos	247	246	254			
(initials) Measured by:	JD	JD	BA			
(initials) Recorded by:	JD	JD	BA			

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 C. SRT Bench Sheets and Statistical Analysis

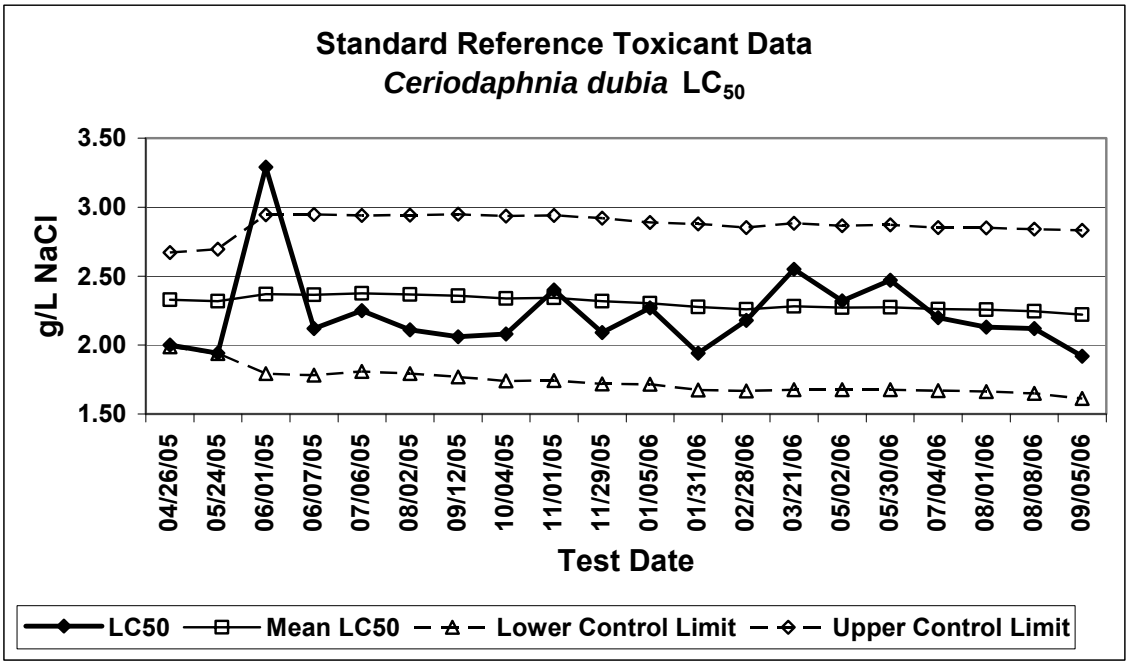
Florida Department of Environmental Protection
Bureau of Laboratories

Standard Reference Toxicant (SRT) Test Data - 48-hour Acute Toxicity
Ceriodaphnia dubia (water flea) - Sodium Chloride (NaCl)

Date	LC50	Mean LC50	Std Dev	Lower Control Limit	Upper Control Limit
04/26/05	2.00	2.33	0.17	1.99	2.67
05/24/05	1.94	2.32	0.19	1.94	2.70
06/01/05	3.29	2.37	0.29	1.79	2.94
06/07/05	2.12	2.36	0.29	1.78	2.95
07/06/05	2.25	2.37	0.28	1.81	2.94
08/02/05	2.11	2.37	0.29	1.79	2.94
09/12/05	2.06	2.36	0.29	1.77	2.95
10/04/05	2.08	2.34	0.30	1.74	2.94
11/01/05	2.40	2.34	0.30	1.74	2.94
11/29/05	2.09	2.32	0.30	1.72	2.92
01/05/06	2.27	2.30	0.29	1.72	2.89
01/31/06	1.94	2.28	0.30	1.67	2.88
02/28/06	2.18	2.26	0.30	1.67	2.85
03/21/06	2.55	2.28	0.30	1.68	2.88
05/02/06	2.32	2.27	0.30	1.68	2.87
05/30/06	2.47	2.27	0.30	1.68	2.87
07/04/06	2.20	2.26	0.30	1.67	2.85
08/01/06	2.13	2.26	0.30	1.66	2.85
08/08/06	2.12	2.24	0.30	1.65	2.84
09/05/06	1.92	2.22	0.30	1.61	2.83

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

CV = 13.70
EPA reference 75th quartile CV = 29%



Appendix C. (continued)

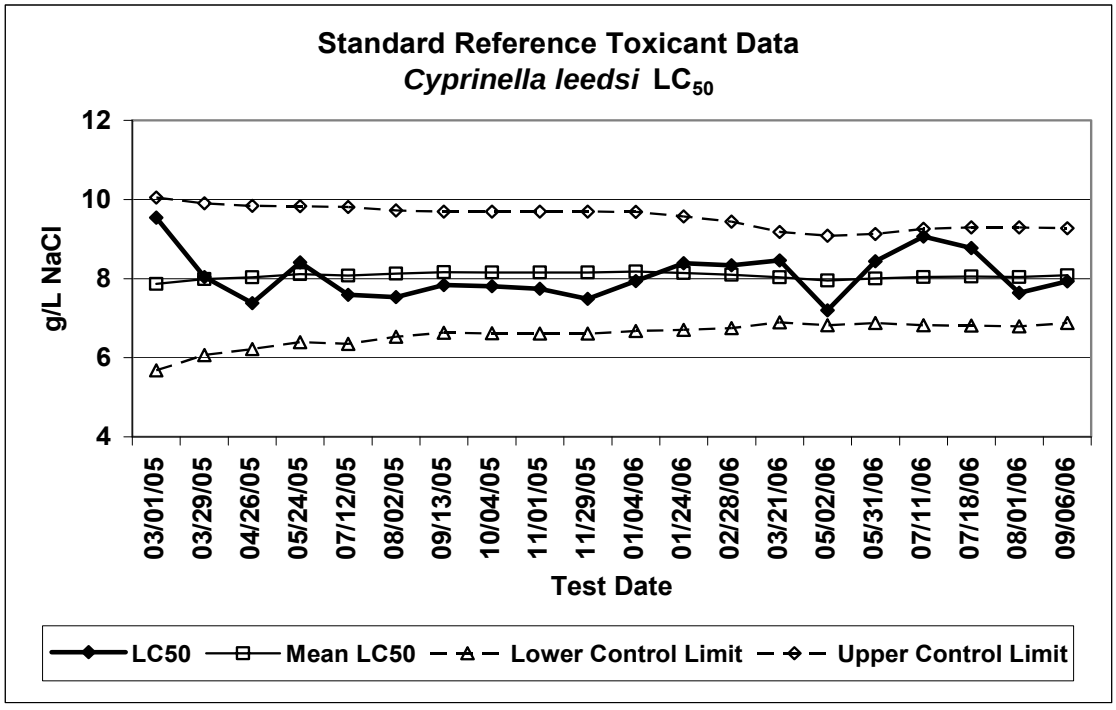
Florida Department of Environmental Protection
Bureau of Laboratories

Standard Reference Toxicant (SRT) Test Data - 48-hour Acute Toxicity
Cyprinella leedsi (bannerfin shiner) - Sodium Chloride (NaCl)

Date	LC50	Mean LC50	Std Dev	Lower Control Limit	Upper Control Limit
03/01/05	9.54	7.87	1.09	5.68	10.05
03/29/05	8.04	7.99	0.96	6.07	9.91
04/26/05	7.38	8.03	0.90	6.22	9.84
05/24/05	8.41	8.11	0.86	6.40	9.83
07/12/05	7.59	8.08	0.86	6.35	9.81
08/02/05	7.53	8.13	0.80	6.53	9.72
09/13/05	7.84	8.16	0.77	6.63	9.70
10/04/05	7.81	8.16	0.77	6.62	9.69
11/01/05	7.74	8.15	0.77	6.61	9.69
11/29/05	7.49	8.15	0.77	6.61	9.69
01/04/06	7.94	8.18	0.75	6.67	9.68
01/24/06	8.39	8.14	0.72	6.71	9.57
02/28/06	8.34	8.09	0.67	6.75	9.44
03/21/06	8.46	8.04	0.57	6.89	9.18
05/02/06	7.2	7.95	0.57	6.82	9.09
05/31/06	8.44	8.00	0.56	6.88	9.13
07/11/06	9.06	8.04	0.61	6.82	9.26
07/18/06	8.77	8.05	0.62	6.81	9.29
08/01/06	7.64	8.04	0.63	6.79	9.29
09/06/06	7.93	8.08	0.60	6.88	9.27

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

CV = 7.93
EPA reference 75th quartile CV = 19%



Appendix C. (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: Definitive
Static / Static Renewal
Test Page 1 of 2

Diluent/ Batch#: DMW / 23-06
Toxicant/ Batch# NaCl / 12-06

Test Beginning: Date: 9-5-06 Time: 1240
Test Ending: Date: 9-9-06 Time: 1430

Water Quality Parameters:	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	<0.03	Hach	BA
Alkalinity (mg/L as $CaCO_3$):	81	Hach	GW
Hardness (mg/L as CaCO3):	80	Hach	GW
Total Ammonia (mg/L as N):	<0.017	Denver	BA
Salinity (ppth):	<1	Mettler	BA

Organism Batch #/ Age: 37-06 ~~37-06~~ <24 hrs BA
Feeding: Prior to test / Prior to renewal / Daily
Food: YCT *P.subcapitata* Artemia
Food Batch: 2-06 4-06 –
Chamber size: 30 mL
Test volume: 20 mL per replicate

Conc. µg/L (B)	Rep.	Chamber#	Number Live 0 hr	Number Live 24 hr	Number Live 48 hr	pH (SU) 0 hr	pH (SU) 24 hr	pH (SU) 48 hr	Temperature (° C) 0 hr	Temperature (° C) 24 hr	Temperature (° C) 48 hr	D.O. (mg/l) 0 hr	D.O. (mg/l) 24 hr	D.O. (mg/l) 48 hr	UNCORRECTED Cond. (mmhos/cm) Cond. (µmhom/cm) 0 hr	24 hr	48 hr
			~~48 hr~~	~~72 hr~~	~~96 hr~~	~~48 hr~~	~~72 hr~~	~~96 hr~~	~~48 hr~~	~~72 hr~~	~~96 hr~~	~~48 hr~~	~~72 hr~~	~~96 hr~~	~~48 hr~~	~~72 hr~~	~~96 hr~~
Control	A	A	5	5	5	8.0		7.9	24.9		24.1	7.1		7.6	170.8		0.190
	B	B	5	5	5										0.176		
	C	C	5	5	5												
	D	D	5	5	5												
1.5	A	A	5	5	5	7.9		7.9	24.9		24.1	7.0		7.4	2.94		3.34
	B	B	5	5	5												
	C	C	5	5	5												
	D	D	5	5	5												
2.0	A	A	5	3 2D	2 1D	8.0		7.9	24.9		24.2	7.1		7.4	3.82		4.48
	B	B	5	5	2 3D												
	C	C	5	5	3 2D												
	D	D	5	4 1D	1 3D												
2.5	A	A	5	4 1D	0 4D	8.0		7.9	24.9		24.2	7.1		7.2	4.72		5.97
	B	B	5	5	0 5D												
	C	C	5	3 2D	0 3D												
	D	D	5	4 1D	0 4D												
3.0	A	A	5	4 1D	0 4D	8.0		7.9	24.8		24.2	7.1		7.2	5.59		6.81
	B	B	5	3 2D	0 3D												
	C	C	5	4 1D	0 4D												
	D	D	5	2 3D	0 2D												
4.0	A	A	5	0 5D	–	8.0		7.9	24.8		24.2	7.1		7.3	7.29		8.71
	B	B	5	0 5D	–												
	C	C	5	0 5D	–												
	D	D	5	1 4D	0 1D												
	A																
	B																
	C																
	D																
Loaded / measured by:			BA	BA	BA	BA		BA	BA		BA	BA		BA	BA		BA
Recorded by:			BA	BA	BA	BA		BA	BA		BA	BA		BA	BA		BA

Investigators' Signatures
Bruce Anderson
James Daniel
Marshall Faircloth
Mindi Wellendorf
REVIEWER

Concentrations prepared by: BA
Loading verified by: JD
Light Intensity: 50-100 Ft. candles
Photoperiod: 16 hours Light / 8 hours dark
Temperature Range °C:
Incubator # 2 min. 24.1 max. 26.3 mean 25.5
Incubator # ___ min. ___ max. ___ mean ___
Room B246 min. 24.5 max. 25.4 mean 24.9

Remarks: (B) written in uhmhos/cm at 0hr, corrected BA 9-6-06

Statistical Results: Method: Spearman-Karber
(B) / 96 hour LC50: 1.92
95% Confidence Interval: lower 1.81 upper 2.03

Revised 02/21/06

Page 000024

Appendix C. (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: Definitive / Static / Static Renewal
Test Page 1 of 2

Diluent/ Batch#: DMW / 23-06
Toxicant/ Batch# NaCl / 12-06

Test Beginning: Date: 9-5-06 Time: 1240
Test Ending: Date: 9-9-06 Time: 1430

Water Quality Parameters:	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	<0.03	Hach	BA
Alkalinity (mg/L as $CaCO_3$):	81	Hach	aw
Hardness (mg/L as CaCO3):	80	Hach	aw
Total Ammonia (mg/L as N):	<0.017	Denver	BA
Salinity (ppth):	<1	Mettler	BA

Organism Batch #/ Age: 37-06 / <24hrs
Feeding: Prior to test / Prior to renewal / Daily
Food: YCT / P.*subcapitata* / Artemia
Food Batch: 2-06 / 4-06 / —
Chamber size: 30 mL
Test volume: 20 mL per replicate

Conc. µg/L (Ni)	Rep.	Chamber#	Number Live 0 hr	Number Live 24 hr	Number Live 48 hr	pH (SU) 0 hr	pH (SU) 24 hr	pH (SU) 48 hr	Temperature (° C) 0 hr	Temperature (° C) 24 hr	Temperature (° C) 48 hr	D.O. (mg/l) 0 hr	D.O. (mg/l) 24 hr	D.O. (mg/l) 48 hr	UNCORRECTED Cond. (mmhos/cm) Cond. (µmhos/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	A	5	4 [1D]	4	8.0		8.1	24.9		24.8	7.9		8.4	0.171		0.187
	B	B	5	5	5												
	C	C	5	5	5												
	D	D	5	5	5												
1.5	A	A	5	5	5	7.9		8.0	25.2		24.7	7.5		8.3	2.95		3.21
	B	B	5	5	5												
	C	C	5	5	4 [1D]												
	D	D	5	5	4 [1D]												
2.0	A	A	2	1 [1M]	1	8.0		8.1	25.3		24.7	7.5		8.3	3.86		4.22
	B	B	2	2	1 [1D]												
	C	C	3	2 [1D]	1 [1D]												
	D	D	1	1	1												
2.5	A	A	—	—	—	8.0		—	25.2		—	7.4		—	4.72		—
	B	B	—	—	—												
	C	C	—	—	—												
	D	D	—	—	—												
3.0	A	A	—	—	—	8.0		—	25.0		—	7.5		—	5.57		—
	B	B	—	—	—												
	C	C	—	—	—												
	D	D	—	—	—												
4.0	A	A	—	—	—	8.0		—	24.7		—	7.4		—	7.28		—
	B	B	—	—	—												
	C	C	—	—	—												
	D	D	—	—	—												
	A																
	B																
	C																
	D																
Loaded / measured by:			BA	BA	MF	BA		MF	BA		MF	BA		MF	BA		MF
Recorded by:			BA	BA	MF	BA		MF	BA		MF	BA		MF	BA		MF

Investigators' Signatures
Paul Abdel
James Daniels
Marshall Faircloth
Gina Mays
Nidi Willendy
REVIEWER

Concentrations prepared by: BA
Loading verified by: —
Light Intensity: 50-100 Ft. candles
Photoperiod: 16 hours Light / 8 hours dark
Temperature Range °C:
Incubator # 2 min. 24.1 max. 26.3 mean 25.5
Incubator # ___ min. ___ max. ___ mean ___
Room B246 min. 24.5 max. 25.4 mean 24.9

Remarks:

Statistical Results: Method: Spearman-Karber
48 / 96 hour LC50: 1.80
95% Confidence Interval: lower 1.71 upper 1.90

Revised 02/21/06

Page 000025

Appendix C. (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: Definitive
Static / Static Renewal
Test Page 1 of 2

Diluent/ Batch#: Well H2O / 9-6-06
Toxicant/ Batch# NaCl / 13-06

Test Beginning: Date: 9-6-06 Time: 1330
Test Ending: Date: 9-10-06 Time: 12:15

Water Quality Parameters:	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	<0.03	Hach	BA
Alkalinity (mg/L as $CaCO_3$):	134	Hach	CW
Hardness (mg/L as CaCO3):	130	Hach	CW
Total Ammonia (mg/L as N):	<0.017	Denver	BA
Salinity (ppth):	<1	Mettler	BA

Organism Batch #/ Age: 20-06 / 12 days
Feeding: Prior to test / Prior to renewal / Daily
Food: YCT — P.subcapitata — Artemia
Food Batch: — — 9SL-536-90
Chamber size: 1000 mL
Test volume: 500 mL per replicate

Conc µg/L (a/L)	Rep.	Chamber#	Number Live 0 hr	Number Live 24 hr	Number Live 48 hr	pH (SU) 0 hr	pH (SU) 24 hr	pH (SU) 48 hr	Temperature (° C) 0 hr	Temperature (° C) 24 hr	Temperature (° C) 48 hr	D.O. (mg/l) 0 hr	D.O. (mg/l) 24 hr	D.O. (mg/l) 48 hr	UNCORRECTED Cond. (mmhos/cm) Cond. (µmhos/cm) 0 hr	24 hr	48 hr
(A) Control	A	D13 D23	10	10	10	7.8		8.1	24.3		24.3	7.7		7.6	0.371		0375
	B	D14 D24	10	10	10		8.1			24.2			7.2			0.293	
	C																
	D																
6.0	A	D15	10	10	10	7.9		8.1	24.2		25.1	7.4		7.2	10.50		10.5
	B	D16	10	9[10]	8[10]		8.0			24.6			6.7			10.1	
	C																
	D																
7.0	A	D17	10	9[10]	7[10]	7.9		8.1	24.4		25.2	7.4		7.1	12.51		12.5
	B	D18	10	10	10		8.0			24.7			6.8			11.9	
	C																
	D																
8.0	A	D19	10	8[10]	6[10]	7.9		8.1	24.4		24.4	7.2		7.1	13.83		13.9
	B	D20	10	8[10]	5[10]		8.0			24.7			6.8			13.6	
	C																
	D																
9.0	A	D21	10	2[10]	1[10]	7.9		8.2	24.4		25.0	7.1		7.1	15.52		16.0
	B	D22	10	0[10]	—		8.0			24.7			6.7			15.5	
	C																
	D																
(B) 10.0	A	D23 B	10	0[10]	—	7.9			24.4			7.1			16.80		16.9
	B	D24 B	10	2[10]	1[10]		8.0	8.2		24.6	24.6		6.4	6.9		16.8	16.9 BA B
	C																
	D																
	A																
	B																
	C																
	D																
Loaded / measured by:			JD	JD	JD	CW	JD	BA	CW	BA	CW	CW	JD	BA	CW	JD	BA
Recorded by:			JD	JD	JD	CW	JD	BA	CW	BA	CW	CW	JD	BA	CW	JD	BA

Investigators' Signatures
Brian Ahrens
Eric Crisp
James Smith
Marshall Faircloth
Nyjah Nilkerson
REVIEWER

Concentrations prepared by: JD
Loading verified by: EW
Light Intensity: 50-100 Ft. candles
Photoperiod: 16 hours Light / 8 hours dark
Temperature Range °C:
Incubator # 2 min. 24.1 max. 26.3 mean 25.5
Incubator # ___ min. ___ max. ___ mean ___
Room B246 min. 24.5 max. 25.4 mean 24.9

Remarks: (A) wrong chamber # CW 9-6-06
(B) Transcription error BA 9-8-06

Statistical Results: Method: Spearman-Karber
(48) 96 hour LC50: 7.93
95% Confidence Interval: lower 7.57 upper 8.32

Revised 02/21/06

Appendix C. (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: Definitive
Static / (Static Renewal)
Test Page 2 of 2

Diluent/ Batch#: well H2O 1.9.06
Toxicant/ Batch# NaCl 1.3.06

Test Beginning: Date: 9-6-06 Time: 1330
Test Ending: Date: 9/10/06 Time: 12:15

Water Quality Parameters:	Diluent	Method	Initials
Total Residual Cl_2 (mg/L):	<0.03	Hach	BA
Alkalinity (mg/L as $CaCO_3$):	134	Hach	GW
Hardness (mg/L as CaCO3):	130	Hach	GW
Total Ammonia (mg/L as N):	<0.017	Denver	BA
Salinity (ppth):	<1	Mettler	BA

Organism Batch #/ Age: 20-061 12-days
Feeding: (Prior to test) (Prior to renewal) / Daily
Food: YCT P.subcapitata (Artemia)
Food Batch: — — 551-536-40
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. (µmhos/cm) 0 hr / 24 hr / 48 hr (48 hr / 72 hr / 96 hr)
Control	A	D23	+09 / 9 10 / 9 (A)	7.9 / / 8.2	24.0 / / 24.7	7.6 / / 7.2	0.315 / / 0330
	B	D24	+010 / 10 / 10	/ 8.3 /	/ 24.4 /	/ 7.2 /	/ 0.280 /
	C	MF recount 9-27-06	10				
	D	(re-labeled 9-27-06)	10				
6.0	A	D15	10+0 / 10 / 9 10	7.9 / / 8.1	24.0 / / 24.7	7.3 / / 7.0	10.51 / / 10.3
	B	D16	8+0 / 8 / 8	/ 8.2 /	/ 24.3 /	/ 7.4 /	/ 10.6 /
	C		10				
	D		8				
7.0	A	D17	7+0 / 6 10 / 6	8.0 / / 8.0	24.0 / / 24.9	7.3 / / 6.8	12.32 / / 12.6
	B	D18	10+0 / 8 2D / 8	/ 8.1 /	/ 24.4 /	/ 7.2 /	/ 12.4 /
	C		7				
	D		10				
8.0	A	D19	+06 / 5 10 / 5	8.0 / / 8.0	24.0 / / 24.9	7.3 / / 6.6	14.01 / / 14.3
	B	D20	+05 / 4 10 / 4	/ 8.1 /	/ 24.6 /	/ 7.3 /	/ 14.2 /
	C		6				
	D		5				
9.0	A	D21	+01 / 1 / 1	8.0 / 8.1 / 8.0	24.0 / 24.4 / 24.9	7.2 / 7.1 / 6.4	15.85 / 15.9 / 16.1
	B	D22	+00 / — / —		24.4 MF wrong space 9-9-06	7.1 MF wrong space 9-9-06	
	C		1				
	D		—				
10.0 #10 J.D.	A	D23	+00 / — / —	8.0 / — / —	24.0 / — / —	7.3 / — / —	17.12 / — / —
	B	D24	+08 / 1 / 1	/ 8.1 / 8.1	/ 24.6 / 24.7	/ 6.7 / 6.4	/ 17.2 / (17.4)
	C	MF recount 9-27-06	—				wrong space MF for JD 9-27-06
	D		1				sheet to begin replicate 1 part.
	A						
	B						
	C						
	D						
Loaded / measured by:			JD / MF / JD	GW / MF / JD	GW / MF / JD	GW / MF / JD	GW / MF / JD
Recorded by:			JD / MF / JD	GW / MF / JD	GW / MF / JD	GW / MF / JD	GW / MF / JD

Investigators' Signatures
Brian Alcock
Gina Lago
James Daniels
Marshal Faircloth
Rejdi Wellendorf
REVIEWER

Concentrations prepared by: JD
Loading verified by: —
Light Intensity: 50-100 Ft. candles
Photoperiod: 16 hours Light / 8 hours dark
Temperature Range °C:
Incubator # 2 min. 24.9 max. 26.3 mean 25.5
Incubator # ___ min. ___ max. ___ mean ___
Room B246 min. 24.5 max. 25.4 mean 24.9

Remarks: (A) Transcription error recorded # in Reps "C 2D" BA 1-6-06
(B) Transcription error JD 9.8.06

Statistical Results: Method: Spearman-Karber
48 / (96) hour LC50: 7.68
95% Confidence Interval: lower 7.29 upper 8.10

Revised 02/21/06

Page 000027

Appendix C. (continued)

***Ceriodaphnia dubia* Acute Standard Reference Toxicant Test**

DATE: 9-05-06 DURATION: 48 h TOXICANT : NaCl
SPECIES: *C. dubia*

RAW DATA: Concentration --- ---- (g/L)	Number Exposed	Mortalities
0.00	20	0
1.50	20	0
2.00	20	12
2.50	20	20
3.00	20	20
4.00	20	20

SPEARMAN-KARBER TRIM: .00%

SPEARMAN-KARBER ESTIMATES: LC50: 1.92
95% LOWER CONFIDENCE: 1.81
95% UPPER CONFIDENCE: 2.03

***Cyprinella leedsi* Acute Standard Reference Toxicant Test**

DATE: 9-06-06 DURATION: 48 h TOXICANT : NaCl
SPECIES: *C. leedsi*

RAW DATA: Concentration --- ---- (g/L)	Number Exposed	Mortalities
0.00	20	0
6.00	20	2
7.00	20	3
8.00	20	9
9.00	20	19
10.00	20	19

SPEARMAN-KARBER TRIM: 10.00%

SPEARMAN-KARBER ESTIMATES: LC50: 7.93
95% LOWER CONFIDENCE: 7.57
95% UPPER CONFIDENCE: 8.32

Appendix D. Test Organism Receipts

MBL Aquaculture
4569 Samuel Street
Sarasota, Florida 34233
TEL: (800) 889-0384
FAX: (941) 922-3874
EMAIL: sales@mblaquaculture.com
WEB: www.MBLAquaculture.com

NELAC Accredited

Organism Shipment Record

State of Florida Aquaculture Certificate Number AQ0668007

Date: 9/5/06

Shipped to: FDEP

P.O. No: _____

Species	Quantity	Age	Brood Number	Temperature	Salinity
Mysidopsis bahia	150+	4 Days	MS060901	25°C	~18.2‰
Menidia beryllina	150+	11 Days	SS060825	25°C	~18.6‰
Cyprinella leedsi	150+	12 Days	CL060824	25°C	
Pimephales promelas	150+	11 Days 8-26 9/5/06	FM060824-1515 8-26 9/5/06	25°C	

Packed by: Frank Gangi

Shipped Via: FedEx

Notes: _____

Thank you for your order.

Appendix D. (Continued)



MBL Aquaculture
4569 Samuel Street
Sarasota, Florida 34233
TEL: (800) 889-0384
FAX: (941) 922-3874
EMAIL: sales@mblaquaculture.com
WEB: www.MBLAquaculture.com

NELAC Accredited

Organism Shipment Record

State of Florida Aquaculture Certificate Number AQ0668007

Date: 9/25/06

Shipped to: F-DEP

P.O. No: _____

Species	Quantity	Age	Brood Number	Temperature	Salinity
Mysidopsis bahia					
Menidia beryllina					
Cyprinella leedsi	100+	12 Days	CL060913	25C	
Pimephales promelas					

Packed by: Frank Gary

Shipped Via: FedEx

Notes: _____

Thank you for your order.

Appendix E. Chemical Analyses performed on the effluent from the Montco Research Products, Inc., Outfall D-001, sampled on September 25, 2006.

Dated Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
9/25/2006 10:55	EFFLUENT	Bio-AGP/LimNut	Algal Growth Potential	4.61	mg DryWt/L	A	0.3	0.9
9/25/2006 10:55	EFFLUENT	Bio-Chl-a	Chlorophyll-A, Monochromatic, Water	0.85	ug/L	U	0.85	2.6
9/25/2006 10:55	EFFLUENT	Bio-Chl-a	Phaeophytin-A, Monochromatic, Water	1.5	ug/L	U	1.5	4.5
9/25/2006 10:55	EFFLUENT	Bio-Toxicology	Bioassay-Acute-Screen-FW-C.dubia, LC50	100	LC50	L		
9/25/2006 10:55	EFFLUENT	Bio-Toxicology	Bioassay-Acute-Screen-FW-Fish, LC50	No Result	LC50			
9/25/2006 10:55	EFFLUENT	BNA-Water	1,2,4-Trichlorobenzene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	1,2-Dichlorobenzene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	1,3-Dichlorobenzene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	1,4-Dichlorobenzene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	2,4,6-Trichlorophenol	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	2,4-Dichlorophenol	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	2,4-Dimethylphenol	53	ug/L	U	53	210
9/25/2006 10:55	EFFLUENT	BNA-Water	2,4-Dinitrophenol	16	ug/L	U	16	64
9/25/2006 10:55	EFFLUENT	BNA-Water	2,4-Dinitrotoluene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	2,6-Dinitrotoluene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	2-Chloronaphthalene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	2-Chlorophenol	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	2-Methyl-4,6-dinitrophenol	3.2	ug/L	U	3.2	13
9/25/2006 10:55	EFFLUENT	BNA-Water	2-Nitrophenol	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	3,3'-Dichlorobenzidine	43	ug/L	UJ	43	170
9/25/2006 10:55	EFFLUENT	BNA-Water	4,4'-DDD	1.6	ug/L	U	1.6	6.4
9/25/2006 10:55	EFFLUENT	BNA-Water	4,4'-DDE	1.6	ug/L	U	1.6	6.4
9/25/2006 10:55	EFFLUENT	BNA-Water	4,4'-DDT	1.6	ug/L	U	1.6	6.4
9/25/2006 10:55	EFFLUENT	BNA-Water	4-Bromophenyl phenyl ether	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	4-Chloro-3-methylphenol	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	4-Chlorophenyl phenyl ether	2.1	ug/L	U	2.1	8.5
9/25/2006 10:55	EFFLUENT	BNA-Water	4-Nitrophenol	16	ug/L	U	16	64
9/25/2006 10:55	EFFLUENT	BNA-Water	Acenaphthene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Acenaphthylene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Aldrin	1.6	ug/L	U	1.6	6.4
9/25/2006 10:55	EFFLUENT	BNA-Water	Anthracene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Benzidine	110	ug/L	U	110	430

Appendix E. (Continued)

Dated Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
9/25/2006 10:55	EFFLUENT	BNA-Water	Benzo(a)anthracene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Benzo(a)pyrene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Benzo(b)fluoranthene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Benzo(g,h,i)perylene	1.1	ug/L	UJ	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Benzo(k)fluoranthene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Bis(2-chloroethoxy)methane	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Bis(2-chloroethyl)ether	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Bis(2-chloroisopropyl)ether	3.2	ug/L	U	3.2	13
9/25/2006 10:55	EFFLUENT	BNA-Water	Bis(2-ethylhexyl)phthalate	16	ug/L	U	16	64
9/25/2006 10:55	EFFLUENT	BNA-Water	Butyl benzyl phthalate	5.3	ug/L	U	5.3	21
9/25/2006 10:55	EFFLUENT	BNA-Water	Chrysene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Di-n-butyl phthalate	5.3	ug/L	U	5.3	21
9/25/2006 10:55	EFFLUENT	BNA-Water	Di-n-octyl phthalate	1.1	ug/L	UJ	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Dibenzo(a,h)anthracene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Dieldrin	1.6	ug/L	U	1.6	6.4
9/25/2006 10:55	EFFLUENT	BNA-Water	Diethyl phthalate	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Dimethyl phthalate	53	ug/L	U	53	210
9/25/2006 10:55	EFFLUENT	BNA-Water	Endosulfan I	4.3	ug/L	U	4.3	17
9/25/2006 10:55	EFFLUENT	BNA-Water	Endosulfan II	4.3	ug/L	U	4.3	17
9/25/2006 10:55	EFFLUENT	BNA-Water	Endosulfan sulfate	1.6	ug/L	U	1.6	6.4
9/25/2006 10:55	EFFLUENT	BNA-Water	Endrin	1.6	ug/L	UJ	1.6	6.4
9/25/2006 10:55	EFFLUENT	BNA-Water	Endrin aldehyde	4.3	ug/L	U	4.3	17
9/25/2006 10:55	EFFLUENT	BNA-Water	Fluoranthene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Fluorene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Heptachlor	1.6	ug/L	U	1.6	6.4
9/25/2006 10:55	EFFLUENT	BNA-Water	Heptachlor epoxide	1.6	ug/L	U	1.6	6.4
9/25/2006 10:55	EFFLUENT	BNA-Water	Hexachlorobenzene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Hexachlorobutadiene	3.2	ug/L	U	3.2	13
9/25/2006 10:55	EFFLUENT	BNA-Water	Hexachlorocyclopentadiene	3.2	ug/L	UJ	3.2	13
9/25/2006 10:55	EFFLUENT	BNA-Water	Hexachloroethane	3.2	ug/L	U	3.2	13
9/25/2006 10:55	EFFLUENT	BNA-Water	Indeno(1,2,3-cd)pyrene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Isophorone	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	N-Nitrosodi-n-propylamine	2.1	ug/L	U	2.1	8.5
9/25/2006 10:55	EFFLUENT	BNA-Water	N-Nitrosodimethylamine	2.1	ug/L	U	2.1	8.5
9/25/2006 10:55	EFFLUENT	BNA-Water	N-Nitrosodiphenylamine	3.2	ug/L	U	3.2	13

Appendix E. (Continued)

Dated Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
9/25/2006 10:55	EFFLUENT	BNA-Water	Naphthalene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Nitrobenzene	2.1	ug/L	U	2.1	8.5
9/25/2006 10:55	EFFLUENT	BNA-Water	Pentachlorophenol	3.2	ug/L	UJ	3.2	13
9/25/2006 10:55	EFFLUENT	BNA-Water	Phenanthrene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Phenol	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	Pyrene	1.1	ug/L	U	1.1	4.3
9/25/2006 10:55	EFFLUENT	BNA-Water	alpha-BHC	1.6	ug/L	U	1.6	6.4
9/25/2006 10:55	EFFLUENT	BNA-Water	beta-BHC	1.6	ug/L	U	1.6	6.4
9/25/2006 10:55	EFFLUENT	BNA-Water	delta-BHC	1.6	ug/L	U	1.6	6.4
9/25/2006 10:55	EFFLUENT	BNA-Water	gamma-BHC	1.6	ug/L	U	1.6	6.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	1,2,4-Trichlorobenzene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	1,2-Dichlorobenzene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	1,3-Dichlorobenzene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	1,4-Dichlorobenzene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	2,4,6-Trichlorophenol	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	2,4-Dichlorophenol	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	2,4-Dimethylphenol	56	ug/L	U	56	220
9/25/2006 11:25	FIELD BLANK	BNA-Water	2,4-Dinitrophenol	17	ug/L	U	17	67
9/25/2006 11:25	FIELD BLANK	BNA-Water	2,4-Dinitrotoluene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	2,6-Dinitrotoluene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	2-Chloronaphthalene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	2-Chlorophenol	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	2-Methyl-4,6-dinitrophenol	3.3	ug/L	U	3.3	13
9/25/2006 11:25	FIELD BLANK	BNA-Water	2-Nitrophenol	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	3,3'-Dichlorobenzidine	44	ug/L	UJ	44	180
9/25/2006 11:25	FIELD BLANK	BNA-Water	4,4'-DDD	1.7	ug/L	U	1.7	6.7
9/25/2006 11:25	FIELD BLANK	BNA-Water	4,4'-DDE	1.7	ug/L	U	1.7	6.7
9/25/2006 11:25	FIELD BLANK	BNA-Water	4,4'-DDT	1.7	ug/L	U	1.7	6.7
9/25/2006 11:25	FIELD BLANK	BNA-Water	4-Bromophenyl phenyl ether	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	4-Chloro-3-methylphenol	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	4-Chlorophenyl phenyl ether	2.2	ug/L	U	2.2	8.9
9/25/2006 11:25	FIELD BLANK	BNA-Water	4-Nitrophenol	17	ug/L	U	17	67
9/25/2006 11:25	FIELD BLANK	BNA-Water	Acenaphthene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Acenaphthylene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Aldrin	1.7	ug/L	U	1.7	6.7

Appendix E. (Continued)

Dated Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
9/25/2006 11:25	FIELD BLANK	BNA-Water	Anthracene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Benzidine	110	ug/L	U	110	440
9/25/2006 11:25	FIELD BLANK	BNA-Water	Benzo(a)anthracene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Benzo(a)pyrene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Benzo(b)fluoranthene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Benzo(g,h,i)perylene	1.1	ug/L	UJ	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Benzo(k)fluoranthene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Bis(2-chloroethoxy)methane	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Bis(2-chloroethyl)ether	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Bis(2-chloroisopropyl)ether	3.3	ug/L	U	3.3	13
9/25/2006 11:25	FIELD BLANK	BNA-Water	Bis(2-ethylhexyl)phthalate	17	ug/L	U	17	67
9/25/2006 11:25	FIELD BLANK	BNA-Water	Butyl benzyl phthalate	5.6	ug/L	U	5.6	22
9/25/2006 11:25	FIELD BLANK	BNA-Water	Chrysene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Di-n-butyl phthalate	5.6	ug/L	U	5.6	22
9/25/2006 11:25	FIELD BLANK	BNA-Water	Di-n-octyl phthalate	1.1	ug/L	UJ	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Dibenzo(a,h)anthracene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Dieldrin	1.7	ug/L	U	1.7	6.7
9/25/2006 11:25	FIELD BLANK	BNA-Water	Diethyl phthalate	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Dimethyl phthalate	56	ug/L	U	56	220
9/25/2006 11:25	FIELD BLANK	BNA-Water	Endosulfan I	4.4	ug/L	U	4.4	18
9/25/2006 11:25	FIELD BLANK	BNA-Water	Endosulfan II	4.4	ug/L	U	4.4	18
9/25/2006 11:25	FIELD BLANK	BNA-Water	Endosulfan sulfate	1.7	ug/L	U	1.7	6.7
9/25/2006 11:25	FIELD BLANK	BNA-Water	Endrin	1.7	ug/L	UJ	1.7	6.7
9/25/2006 11:25	FIELD BLANK	BNA-Water	Endrin aldehyde	4.4	ug/L	U	4.4	18
9/25/2006 11:25	FIELD BLANK	BNA-Water	Fluoranthene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Fluorene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Heptachlor	1.7	ug/L	U	1.7	6.7
9/25/2006 11:25	FIELD BLANK	BNA-Water	Heptachlor epoxide	1.7	ug/L	U	1.7	6.7
9/25/2006 11:25	FIELD BLANK	BNA-Water	Hexachlorobenzene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Hexachlorobutadiene	3.3	ug/L	U	3.3	13
9/25/2006 11:25	FIELD BLANK	BNA-Water	Hexachlorocyclopentadiene	3.3	ug/L	UJ	3.3	13
9/25/2006 11:25	FIELD BLANK	BNA-Water	Hexachloroethane	3.3	ug/L	U	3.3	13
9/25/2006 11:25	FIELD BLANK	BNA-Water	Indeno(1,2,3-cd)pyrene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Isophorone	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	N-Nitrosodi-n-propylamine	2.2	ug/L	U	2.2	8.9

Appendix E. (Continued)

Dated Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
9/25/2006 11:25	FIELD BLANK	BNA-Water	N-Nitrosodimethylamine	2.2	ug/L	U	2.2	8.9
9/25/2006 11:25	FIELD BLANK	BNA-Water	N-Nitrosodiphenylamine	3.3	ug/L	U	3.3	13
9/25/2006 11:25	FIELD BLANK	BNA-Water	Naphthalene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Nitrobenzene	2.2	ug/L	U	2.2	8.9
9/25/2006 11:25	FIELD BLANK	BNA-Water	Pentachlorophenol	3.3	ug/L	UJ	3.3	13
9/25/2006 11:25	FIELD BLANK	BNA-Water	Phenanthrene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Phenol	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	Pyrene	1.1	ug/L	U	1.1	4.4
9/25/2006 11:25	FIELD BLANK	BNA-Water	alpha-BHC	1.7	ug/L	U	1.7	6.7
9/25/2006 11:25	FIELD BLANK	BNA-Water	beta-BHC	1.7	ug/L	U	1.7	6.7
9/25/2006 11:25	FIELD BLANK	BNA-Water	delta-BHC	1.7	ug/L	U	1.7	6.7
9/25/2006 11:25	FIELD BLANK	BNA-Water	gamma-BHC	1.7	ug/L	U	1.7	6.7
9/25/2006 10:55	EFFLUENT	GC-Water	Alachlor	0.6	ug/L	U	0.6	2.4
9/25/2006 10:55	EFFLUENT	GC-Water	Ametryn	0.05	ug/L	U	0.05	0.2
9/25/2006 10:55	EFFLUENT	GC-Water	Atrazine	0.05	ug/L	U	0.05	0.2
9/25/2006 10:55	EFFLUENT	GC-Water	Azinphos Methyl	0.2	ug/L	U	0.2	0.8
9/25/2006 10:55	EFFLUENT	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
9/25/2006 10:55	EFFLUENT	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
9/25/2006 10:55	EFFLUENT	GC-Water	Chlorpyrifos Ethyl	0.05	ug/L	U	0.05	0.2
9/25/2006 10:55	EFFLUENT	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
9/25/2006 10:55	EFFLUENT	GC-Water	Diazinon	0.05	ug/L	UJ	0.05	0.2
9/25/2006 10:55	EFFLUENT	GC-Water	Ethion	0.05	ug/L	U	0.05	0.2
9/25/2006 10:55	EFFLUENT	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
9/25/2006 10:55	EFFLUENT	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
9/25/2006 10:55	EFFLUENT	GC-Water	Fonofos	0.1	ug/L	U	0.1	0.4
9/25/2006 10:55	EFFLUENT	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
9/25/2006 10:55	EFFLUENT	GC-Water	Malathion	0.15	ug/L	U	0.15	0.6
9/25/2006 10:55	EFFLUENT	GC-Water	Metalaxyl	0.25	ug/L	U	0.25	1
9/25/2006 10:55	EFFLUENT	GC-Water	Metolachlor	0.5	ug/L	U	0.5	2
9/25/2006 10:55	EFFLUENT	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
9/25/2006 10:55	EFFLUENT	GC-Water	Mevinphos	0.2	ug/L	U	0.2	0.8
9/25/2006 10:55	EFFLUENT	GC-Water	Naled	0.8	ug/L	U	0.8	3.2
9/25/2006 10:55	EFFLUENT	GC-Water	Norflurazon	0.15	ug/L	U	0.15	0.6
9/25/2006 10:55	EFFLUENT	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
9/25/2006 10:55	EFFLUENT	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4

Appendix E. (Continued)

Dated Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
9/25/2006 10:55	EFFLUENT	GC-Water	Phorate	0.05	ug/L	U	0.05	0.2
9/25/2006 10:55	EFFLUENT	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
9/25/2006 10:55	EFFLUENT	GC-Water	Simazine	0.05	ug/L	U	0.05	0.2
9/25/2006 11:25	FIELD BLANK	GC-Water	Alachlor	0.61	ug/L	U	0.61	2.4
9/25/2006 11:25	FIELD BLANK	GC-Water	Ametryn	0.051	ug/L	U	0.051	0.2
9/25/2006 11:25	FIELD BLANK	GC-Water	Atrazine	0.051	ug/L	U	0.051	0.2
9/25/2006 11:25	FIELD BLANK	GC-Water	Azinphos Methyl	0.2	ug/L	U	0.2	0.8
9/25/2006 11:25	FIELD BLANK	GC-Water	Bromacil	0.2	ug/L	U	0.2	0.8
9/25/2006 11:25	FIELD BLANK	GC-Water	Butylate	0.2	ug/L	U	0.2	0.8
9/25/2006 11:25	FIELD BLANK	GC-Water	Chlorpyrifos Ethyl	0.051	ug/L	U	0.051	0.2
9/25/2006 11:25	FIELD BLANK	GC-Water	Chlorpyrifos Methyl	0.1	ug/L	U	0.1	0.4
9/25/2006 11:25	FIELD BLANK	GC-Water	Diazinon	0.051	ug/L	UJ	0.051	0.2
9/25/2006 11:25	FIELD BLANK	GC-Water	Ethion	0.051	ug/L	U	0.051	0.2
9/25/2006 11:25	FIELD BLANK	GC-Water	Ethoprop	0.1	ug/L	U	0.1	0.4
9/25/2006 11:25	FIELD BLANK	GC-Water	Fenamiphos	0.2	ug/L	U	0.2	0.8
9/25/2006 11:25	FIELD BLANK	GC-Water	Fonofos	0.1	ug/L	U	0.1	0.4
9/25/2006 11:25	FIELD BLANK	GC-Water	Hexazinone	0.1	ug/L	U	0.1	0.4
9/25/2006 11:25	FIELD BLANK	GC-Water	Malathion	0.15	ug/L	U	0.15	0.6
9/25/2006 11:25	FIELD BLANK	GC-Water	Metalaxyl	0.26	ug/L	U	0.26	1
9/25/2006 11:25	FIELD BLANK	GC-Water	Metolachlor	0.51	ug/L	U	0.51	2
9/25/2006 11:25	FIELD BLANK	GC-Water	Metribuzin	0.1	ug/L	U	0.1	0.4
9/25/2006 11:25	FIELD BLANK	GC-Water	Mevinphos	0.2	ug/L	U	0.2	0.8
9/25/2006 11:25	FIELD BLANK	GC-Water	Naled	0.82	ug/L	U	0.82	3.3
9/25/2006 11:25	FIELD BLANK	GC-Water	Norflurazon	0.15	ug/L	U	0.15	0.6
9/25/2006 11:25	FIELD BLANK	GC-Water	Parathion Ethyl	0.15	ug/L	U	0.15	0.6
9/25/2006 11:25	FIELD BLANK	GC-Water	Parathion Methyl	0.1	ug/L	U	0.1	0.4
9/25/2006 11:25	FIELD BLANK	GC-Water	Phorate	0.051	ug/L	U	0.051	0.2
9/25/2006 11:25	FIELD BLANK	GC-Water	Prometryn	0.15	ug/L	U	0.15	0.6
9/25/2006 11:25	FIELD BLANK	GC-Water	Simazine	0.051	ug/L	U	0.051	0.2
9/25/2006 10:55	EFFLUENT	Metals-Water	Aluminum	4	ug/L	U	4	16
9/25/2006 10:55	EFFLUENT	Metals-Water	Arsenic	0.5	ug/L	U	0.5	2
9/25/2006 10:55	EFFLUENT	Metals-Water	Cadmium	0.05	ug/L	U	0.05	0.2
9/25/2006 10:55	EFFLUENT	Metals-Water	Calcium	31	mg/L	A	0.02	0.08
9/25/2006 10:55	EFFLUENT	Metals-Water	Chromium	0.3	ug/L	U	0.3	1.2
9/25/2006 10:55	EFFLUENT	Metals-Water	Copper	0.2	ug/L	U	0.2	0.8

Appendix E. (Continued)

Dated Sampled	Field ID	Analysis Group	Component	Result	Units	Remark	MDL	PQL
9/25/2006 10:55	EFFLUENT	Metals-Water	Iron	7.4	ug/L	I	5	20
9/25/2006 10:55	EFFLUENT	Metals-Water	Lead	0.2	ug/L	U	0.2	0.8
9/25/2006 10:55	EFFLUENT	Metals-Water	Magnesium	9.1	mg/L	A	0.005	0.02
9/25/2006 10:55	EFFLUENT	Metals-Water	Nickel	1	ug/L	U	1	4
9/25/2006 10:55	EFFLUENT	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
9/25/2006 10:55	EFFLUENT	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
9/25/2006 10:55	EFFLUENT	Metals-Water	Zinc	3	ug/L	U	3	12
9/25/2006 11:25	FIELD BLANK	Metals-Water	Aluminum	4	ug/L	U	4	16
9/25/2006 11:25	FIELD BLANK	Metals-Water	Arsenic	0.5	ug/L	U	0.5	2
9/25/2006 11:25	FIELD BLANK	Metals-Water	Cadmium	0.05	ug/L	U	0.05	0.2
9/25/2006 11:25	FIELD BLANK	Metals-Water	Calcium	0.025	mg/L	I	0.02	0.08
9/25/2006 11:25	FIELD BLANK	Metals-Water	Chromium	0.3	ug/L	U	0.3	1.2
9/25/2006 11:25	FIELD BLANK	Metals-Water	Copper	0.2	ug/L	U	0.2	0.8
9/25/2006 11:25	FIELD BLANK	Metals-Water	Iron	5	ug/L	U	5	20
9/25/2006 11:25	FIELD BLANK	Metals-Water	Lead	0.2	ug/L	U	0.2	0.8
9/25/2006 11:25	FIELD BLANK	Metals-Water	Magnesium	0.005	mg/L	U	0.005	0.02
9/25/2006 11:25	FIELD BLANK	Metals-Water	Nickel	1	ug/L	U	1	4
9/25/2006 11:25	FIELD BLANK	Metals-Water	Selenium	0.5	ug/L	U	0.5	2
9/25/2006 11:25	FIELD BLANK	Metals-Water	Silver	0.025	ug/L	U	0.025	0.1
9/25/2006 11:25	FIELD BLANK	Metals-Water	Zinc	3	ug/L	U	3	12
9/25/2006 10:55	EFFLUENT	Nutrients-Liquid	Ammonia-N	0.084	mg N/L	A	0.01	0.02
9/25/2006 10:55	EFFLUENT	Nutrients-Liquid	Kjeldahl Nitrogen	0.14	mg N/L	I	0.08	0.2
9/25/2006 10:55	EFFLUENT	Nutrients-Liquid	NO2NO3-N	0.012	mg N/L		0.004	0.01
9/25/2006 10:55	EFFLUENT	Nutrients-Liquid	O-Phosphate-P	0.047	mg P/L		0.004	0.01
9/25/2006 10:55	EFFLUENT	Nutrients-Liquid	Total-P	0.06	mg P/L	A	0.02	0.06
9/25/2006 11:25	FIELD BLANK	Nutrients-Liquid	Ammonia-N	0.01	mg N/L	U	0.01	0.02
9/25/2006 11:25	FIELD BLANK	Nutrients-Liquid	Kjeldahl Nitrogen	0.08	mg N/L	U	0.08	0.2
9/25/2006 11:25	FIELD BLANK	Nutrients-Liquid	NO2NO3-N	0.004	mg N/L	U	0.004	0.01
9/25/2006 11:25	FIELD BLANK	Nutrients-Liquid	O-Phosphate-P	0.004	mg P/L	U	0.004	0.01
9/25/2006 11:25	FIELD BLANK	Nutrients-Liquid	Total-P	0.02	mg P/L	U	0.02	0.06

The Bioassay of Montco Research Products, Inc., effluent sampled on September 25, 2006. NPDES #FL0037800.

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 3 7 8 0 0 11	12 0 6 0 9 2 5	18 **B**	19 **S**	20 2

Remarks

66

The Priority Pollutants Analysis of Montco Research Products, Inc., effluent sampled on September 25, 2006. NPDES #FL0037800.

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 3 7 8 0 0 11	12 0 6 0 9 2 5	18 **X**	19 **S**	20 2

Remarks

66

Biological Analyses of Montco Research Products, Inc., effluent sampled on September 25, 2006. NPDES #FL0037800.

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 3 7 8 0 0 11	12 0 6 0 9 2 5	18 **S**	19 **S**	20 2

Remarks

66