

Biological Assessment of

Wewahitchka Wastewater Treatment Facility

Gulf County

NPDES # FL0020125

Sampled June 24 and 25, 2013

December 2013

Biology Section

Bureau of Laboratories

Division of Environmental Assessment and Restoration

2013 FDEP Bureau of Laboratories Quality Manual

NELAC Certification No. E31780

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Facility Overview

The Wewahitchka Wastewater Treatment Plant is a Municipal Wastewater Treatment Plant. The effluent is discharged into the Chipola River, a Class III Fresh Water (see map Appendix A). The design flow of the wastewater system is 0.200 million gallons per day (MGD). The annual average flow for June 2012 to May 2013 was 0.08 MGD. The plant discharges using a sequencing batch reactor, and the flow measured on June 24, 2013 was 0.093 MGD (Northwest District Office sampling staff).

Biological assessments are prepared by FDEP staff to provide information for review of NPDES permit renewal applications. Biological assessments, in conjunction with other information concerning the subject facility and its receiving-water body, are used to determine appropriate permit conditions.

See the Facility Summary (Appendix B) for a description of the facility, summary of permit limits, and Administrative Order (AO) and Discharge Monitoring Report (DMR) information. The facility is operating under Administrative Order AO074NW which requires compliance with effluent loading rates for carbonaceous biochemical oxygen demand (CBOD), total suspended solids (TSS), total nitrogen (TN), and total phosphorus (TP), and compliance with staffing requirements and Consent Order OGC 09-0378A-23-DW which contains interim limits for total nitrogen (TN).

Methods

The purpose of this investigation was to determine the discharge's effects on the biota of the receiving waters. Chemical and biological comparisons were made between a Control Site (105 m upstream of the point of discharge) and a Test Site (5 m downstream of the point of discharge) in the Chipola River. Effluent samples were taken as grab samples from monitoring location EFF-01, after dechlorination.

All field and laboratory biological methods followed Bureau of Laboratories and Biology Section Standard Operating Procedures (see http://www.dep.state.fl.us/labs/library/lab_sops.htm and http://www.dep.state.fl.us/water/sas/sop/sops.htm for details) and met DEP quality assurance/quality control standards (see http://www.dep.state.fl.us/water/sas/qa/index.htm). Explanations of specific methods and measurements can be found in Appendix C.

The following were involved in this investigation: Dan Crean and Mark Sumner (FDEP Northwest District Office, Panama City), and FDEP Central Laboratory in Tallahassee. The report was reviewed by District representatives and the Point Source Studies Review Committee (Mike Tanski, Andrew Tintle and Jennifer Weger).

Results

Organic Constituents (See Table 1 and Appendix F)

- 1,4-dioxane and metolachlor were detected in the effluent grab sample. Chlorpyrifos ethyl was detected in the effluent grab sample between the method detection limit (MDL) and the practical quantitation limit (PQL).
- Atrazine and simazine were detected in both the Control and Test Site grab samples. 1,4-dioxane was detected between the MDL and PQL in both the Control and Test Site grab samples.
- Sucralose was detected in the effluent sample and at lower levels in both the Control and Test Site grab samples.
- 1,4-dioxane was detected in the blank sample so the levels detected in the effluent, Control Site, and Test Site grab samples may not be reliable. Di-n-butyl phthalate was detected between the MDL and PQL in the blank sample but was not detected in the effluent, Control Site, and Test Site grab samples.

Metals (See Table 2 and Appendix F)

- All metals detected in the effluent grab samples were present at levels that complied with Class III Freshwater Quality Criteria (62-302.530, F. A. C.).
- All metals in Control and Test Site grab samples were either undetected or detected at levels that complied with Class III Freshwater Quality Criteria (62-302.530, F. A. C.).

- No metals were detected in the blank.

Physical and Chemical Parameters (See Table 1 and Appendices D, E and F)

- The pH (Standard Units) of the effluent grab sample complied with Class III Freshwater Quality Criteria (62-302.530, F.A.C.) and effluent permit limits. Dissolved oxygen and specific conductance were not measured in the effluent because the samplers did not have a meter to measure those parameters. Dissolved oxygen (mg/L), pH (Standard Units), and specific conductance (µmhos/cm) of the Control and Test Site grab samples complied with Class III Freshwater Quality Criteria (62-302.530, F.A.C.).
- Chlorophyll *a* (corrected) was detected in the effluent grab sample and in both the Control and Test Site grab samples at similar concentrations.
- Total residual chlorine (TRC) of the effluent complied with Class III Freshwater Quality Criterion (62-302.530(18), F.A.C.) and the permitted limit.
- Total suspended solids (TSS) detected in the effluent grab sample were between the MDL and PQL (I-qualifer) which complies with the permitted limit.
- Carbonaceous biochemical oxygen demand (CBOD; mg/L) of the effluent grab sample complied with permit limits.

Microbiology (See Table 1 and Appendix F)

- Effluent fecal coliform analysis was performed by The Water Spigot, Panama City, Florida.
- Fecal coliforms detected in the effluent grab sample complied with Class III Freshwater Quality Criterion (62-302.530(6), F.A.C.) and the permitted limit.
- Fecal coliforms were detected in both the Control and Test Site grab samples at levels which complied with Class III Freshwater Quality Criterion (62-302.530(6), F.A.C.).

Nutrients (See Table 1 and Appendix F)

- All nutrient detected in the effluent grab samples complied with permit limits.
- Nutrient levels in the Control and Test Site grab samples were similar to each other and lower than effluent grab sample levels. There was no detectable nutrient enrichment from the effluent at the Test Site.
- No nutrients were detected in the blank.

Algal Growth Potential (See Table 3 and Appendix F)

- Raschke and Shultz (1987) determined that AGP values above 5.0 mg dry weight/L, which represents a "problem" threshold for fresh receiving waters, imply nutrient enrichment. The AGP value in the effluent sample using the freshwater species, *Pseudokirchneriella subcapitata,* was 32 times greater than the problem threshold value. The analytical chemistry suggests that the effluent is nitrogen-limited.
- The AGP values in the Control and Test Site grab samples using the freshwater species, *Pseudokirchneriella subcapitata,* were approximately two times greater than the problem threshold value. The analytical chemistry suggests that the Control Site is phosphorus-limited and the Test Site is co-limited by nitrogen and phosphorus. The facility's effluent has the potential to further enrich this portion of the Chipola River when the facility is discharging.

Bioassessment

Macroinvertebrates (See Table 4 and Appendices G-1 and G-2)

- Due to sampling difficulties, the depth of the river, and lack of habitat, the Stream Condition Index (SCI) was not performed. Quantitative macroinvertebrate data were collected from Hester Dendy samplers at the Control and Test Sites. The Shannon-Weaver diversity scores were similar at the Control and Test Sites (3.50 and 3.75, respectively). Both sites were dominated by trichopterans. Both sites had sensitive taxa present but the Control Site had more Ephemeroptera, Plecoptera, and Trichoptera (EPT) taxa and a greater percentage of ephemeropterans than the Test Site. The Test Site had a greater percentage of dipterans, which are considered to be pollution tolerant, than the Control Site. Suspension feeders dominated at both the Control and Test Sites. Although the quality of the macroinvertebrate taxa was slightly better at the Control Site, no negative impacts to the Test Site macroinvertebrates could be attributed to the effluent.

Conclusion

Despite the elevated nutrient levels of the effluent, there were no detectable signs of enhanced nutrient enrichment at the Test Site compared to the Control Site which is partially attributable to the large amount of dilution available in the receiving water. The macroinvertebrate data collected did not indicate a significant difference in the community composition between the Control and Test Sites due to the effluent. The effluent did not appear to be adversely affecting the biota in this portion of the Chipola River.

Literature Cited

Fore, L.S., Frydenborg, R., Miller, D., Frick, T., Whiting, D., Espy, J., and Wolfe, L. 2007. Development and Testing of Biomonitoring Tools for Macroinvertebrates in Florida Streams (Stream Condition Index and Biorecon). Florida Department of Environmental Protection. 110pp.

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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.

Plafkin, J. L., M. T. Barbour, K. D. Porter, S. K. Gross and R. M. Hughes. 1989. Rapid bioassessment protocols for use in streams and rivers: Benthic macroinvertebrates and fish. U. S. EPA, Office of Water Regulations and Standards, Washington D.C., EPA 440-4-89-001

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.

USEPA. 2000. Nutrient Criteria Technical Guidance Manual – River and Streams. EPA-822-B-00-002.

Table 1. Effluent limits, Class III Freshwater Criteria and chemical and microbiological data

Wewahitchka WWTP	Class III Criteria	Effluent Limits	Effluent (Grab)	Control Site	Test Site	Blank
Organic Constituents (µg/L)						
1,4-Dioxane	-	-	0.53	0.043 I	0.043 I	0.38
Atrazine	-	-	0.0095 U	0.043	0.045	0.0094 U
Chlorpyrifos Ethyl	-	-	0.022 I	0.0095 U	0.0096 U	0.0094 U
Di-n-butyl phthalate	-	-	0.99 U	0.97 U	0.97 U	1.1 I
Metolachlor	-	-	4.6	0.057 U	0.058 U	0.057 U
Simazine	-	-	0.0095 U	0.052	0.054	0.0094 U
Sucralose	-	-	26	0.53	0.68 A	0.010 U
Nutrients (mg/L)						
Ortho-phosphate	-	-	2.6	0.004 I	0.004 I	0.004 U
Total Phosphorus	-	≤ 8.0 ps	2.9	0.029	0.038	0.002 U
Total Ammonia	-	-	9.2	0.022	0.024	0.002 U
Un-ionized Ammonia	≤ 0.02 s	-	-	< 0.02 c	< 0.02 c	-
Nitrate and Nitrite	-	-	0.61	0.30	0.30	0.004 U
Total Kjeldahl Nitrogen	-	-	12	0.38	0.35	0.080 U
Organic Nitrogen	-	-	2.8 c	0.36 c	0.33 c	0.04 c
Total Nitrogen	-	≤ 20.0 ps	13 c	0.68 c	0.65 c	0.04 c
Total Organic Carbon	-	-	8.0 A	3.7	3.6	0.50 U
General Physical and Chemical Parameters						
Dissolved Oxygen (mg/L)	≥ 5.0	≥ 5.0 s	-	6.2	6.1	-
pH (SU)	6.0 - 8.5	6.0 - 8.5 s	7.5	6.7	6.7	-
Specific Conductance (µmhos/cm)	≤ 1,275	-	-	127	128	-
Temperature (°C)	-	-	-	28.3	28.3	-
Salinity	-	-	-	< 0.06 c	< 0.06 c	-
Sample Depth (m)	-	-	-	0.3	0.2	-
Total Residual Chlorine (mg/L)	≤ 0.01	≤ 0.01 s	< 0.01	-	-	-
Chlorophyll *a* (µg/L) - Corrected	-	-	7.4	7.6	7.8	-
Phaeophytin (µg/L)	-	-	0.45 U	3.4	3.2	-
Total Suspended Solids (mg/L)	-	≤ 20 ps	6 I	19	15	-
Turbidity (NTU)	< 29 t	Report	3.6	9.2	10 A	-
Color (true, PCU)	-	-	22 A	28	22	2.5 U
Alkalinity (mg CaCO3/L)	-	-	162	43	43	0.65 U
CBOD, 5 day (mg/L), N - inhibited	-	≤ 20.0 ps	8.7	2.2	2.8	0.20 U
Chloride (mg/L)	-	-	77	5.9	5.9	0.20 U
Fluoride (mg/L)	≤ 10.0	-	0.67	0.081 I	0.081 I	0.035 U
Sulfate (mg/L)	-	-	78	7.4	7.4	0.20 U
Flow (MGD)	-	≤ 0.200 a	-	-	-	-
Hardness (mg $CaCO_3$)	-	-	196 c	46.7 c	46.0 c	0.35 c
Microbiology (Number of colony forming units/100ml)						
Fecal Coliforms	≤ 400 s#	≤ 86 s	46 ¥	6 B	3 B	-

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.

a - Annual average
c - Value is calculated
p - 8 hour flow proportioned composite
s - Single sample
t - Shall not exceed 29 NTUs above background
A - Value reported is the mean of two or more determinations
B - Results based on colony counts outside the acceptance range
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J - Estimated value (appears in Appendix F)
U - Material analyzed for but not detected; value reported is the method detection limit
¥ - Fecal coliform analysis performed by The Water Spigot lab, E81105
- If 10 or fewer samples are taken within a month, the single sample limit is 400 CFU (62-302.530(6), F.A.C.)

Table 2. Effluent limits, Class III Freshwater Criteria and metals data - Class III Criteria based on hardness are presented individually for each site based on hardness at that site

Wewahitchka WWTP	Effluent Class III Criteria	Effluent	Control Site Class III Criteria	Control Site	Test Site Class III Criteria	Test Site
Metals (µg/L unless otherwise noted)						
Aluminum	-	60 U	-	540	-	590
Arsenic	≤ 50	0.28 I	≤ 50	0.52 I	≤ 50	0.56 I
Cadmium	≤ 0.446 b	0.050 U	≤ 0.154 b	0.050 U	≤ 0.152 b	0.050 U
Calcium (mg/L)	-	37.6	-	15.0	-	14.8
Chromium, total	≤ 150 bψ	0.30 U	≤ 46.2 bψ	0.92 I	≤ 45.6 bψ	0.92 I
Copper	≤ 16.6 b	8.10	≤ 4.87 b	0.97 I	≤ 4.81 b	0.95 I
Iron	≤ 1,000	120	≤ 1,000	750	≤ 1,000	730
Lead	≤ 7.51 b	0.27 I	≤ 1.21 b	0.39 I	≤ 1.18 b	0.40 I
Magnesium (mg/L)	-	24.9	-	2.24	-	2.20
Nickel	≤ 92.3 b	1.28	≤ 27.4 b	0.53 I	≤ 27.1 b	0.52 I
Potassium (mg/L)	-	11.4	-	1.7	-	1.7
Selenium	≤ 5.0	0.25 I	≤ 5.0	0.20 U	≤ 5.0	0.21 I
Silver	≤ 0.07	0.025 U	≤ 0.07	0.025 U	≤ 0.07	0.025 U
Sodium (mg/L)	-	57.2		6.8	-	6.8
Zinc	≤ 212 b	24	≤ 62.8 b	5.0 U	≤ 62.1 b	5.0 U

See Table 1 for calculated hardness.

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.

b - Value is calculated based on hardness

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 method detection limit

ψ - Class III Freshwater Quality Criterion (62-302.530(19)(a), F.A.C.) for chromium-III

Table 3. Measured and predicted algal growth potential (AGP; mg dry weight/L) for total soluble inorganic nitrogen (TSIN), ortho-phosphate (OP), total nitrogen (TN) and total phosphorus (TP) limitation of the freshwater species *Pseudokirchneriella subcapitata* and ratios of nitrogen to phosphorus

Wewahitchka WWTP							
Location	AGP (measured)	Predicted AGP (TSIN) ± 20%	Predicted AGP (OP) ± 20%	Predicted AGP (TN) ± 20%	Predicted AGP (TP) ± 20%	Inorganic N:P ratio	Total N:P ratio
Effluent	160 A	372.8 ± 74.6		479.2 ± 95.8		3.8	4.3
Control Site	10.1		1.7 ± 0.3		12.5 ± 2.5	80.5	23.4
Test Site	9.28	12.3 ± 2.5	1.7 ± 0.3	24.7 ± 4.9	16.3 ± 3.3	81	17.1

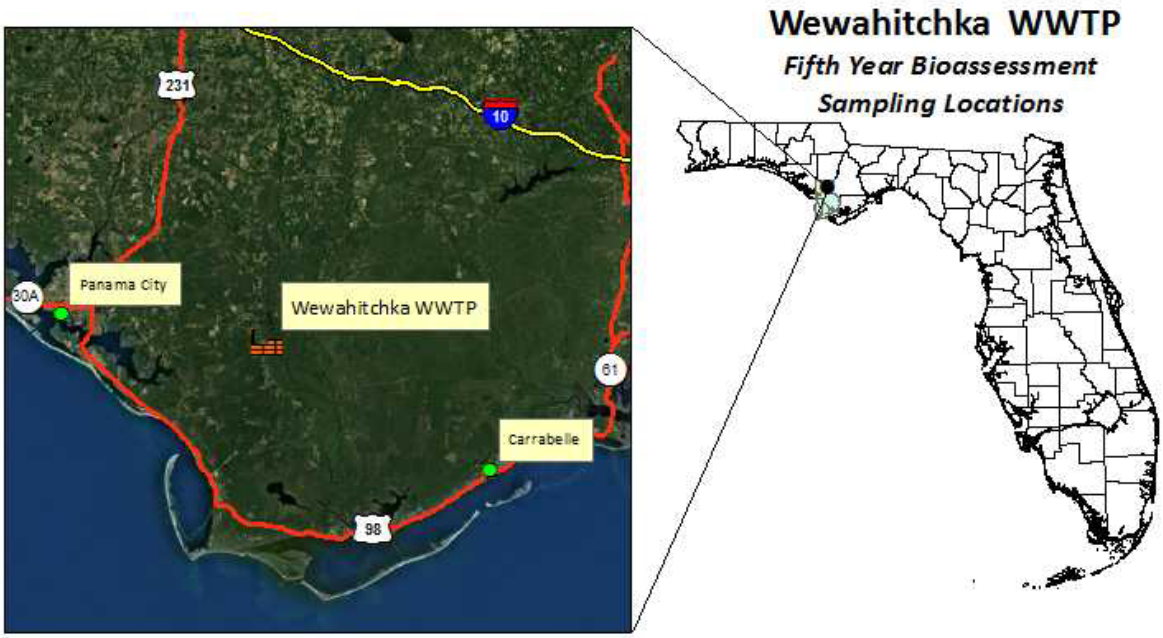
A - Value reported is the mean of two or more determinations

Table 4. Macroinvertebrate Hester-Dendy samples - quantitative

Wewahitchka WWTP	Control Site	Test Site
Summary Statistics		
Shannon-Weaver Diversity	3.50	3.75
Number of Taxa	65	54
Number of EPT Taxa	23	18
Percent Dominant Taxon	40.2	36.0
Dominant Taxon Name	*Neureclipsis melco* (Ephemeroptera)	*Neureclipsis melco* (Ephemeroptera)
Total Number of Individuals (counted)	1,967	1,396
Total Number of Individuals (#/m^2)	3,906	2,773
Community Composition: Percent of total		
Amphipoda	2.8	1.6
Bivalvia	0.7	0.7
Coleoptera	3.4	0.8
Decapoda	0.1	0.0
Diptera	13.1	24.0
Ephemeroptera	15.0	8.6
Gastropoda	0.1	0.4
Odonata	0.3	0.2
Plecoptera	1.4	1.0
Trichoptera	62.6	61.4
Other	0.7	1.2
Functional Feeding Groups: Percent of total		
Piercers	0.2	4.2
Predators	25.3	25.2
Scrapers	7.1	5.2
Shredders	3.7	6.4
Surface Deposit Feeders	14.5	18.4
Suspension Feeders	49.2	40.5
Unknown	0.1	0.0

Appendix A

Map of Facility





Appendix B

Facility Summary

State of Florida
Department of Environmental Protection
Facility Introduction & Summary

PART I: Information gathered prior to sampling event	
Prepared By: Daniel J. Crean and Josie Penton	**Contact Number:** (850) 767-0054
Facility Name (as it appears on permit): Wewahitchka Wastewater Treatment Plant	**Former Names:**
NPDES Permit Number: FL0020125	**Permit Expiration Date:** December 15, 2014
Physical Address: 808 East Sycamore St., Wewahitchka Florida 33465-9432	
District: NWD	**County:** Gulf County
Function of Facility: Municipal Wastewater Treatment Plant	
Facility Type: Intermittent Cycle Extended Aeration System (ICEAS)	**Permitted Capacity (MGD):** 0.200 MGD
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): 0.0807 MGD 8/01/2012 to 08/31/2013	
If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months):	
Description of type of Discharge: ☐ Continuous X Intermittent ☐ Seasonal ☐ Rainfall Dependent ☐ Other, please specify	

Actual permit designation of permitted sampling point(s):

FLW-01- Effluent Flow Metering: Stevens Meter at Effluent Weir at Chlorine Contact Chamber
EFF-01- Final Effluent Sampling at Effluent Transfer Pump Basin: Auto Sampler at Pump Holding Basin or Sampling Port in discharge pipe
EFB-01- Sampling before Chlorination: Effluent Sampling after filtration in the Filter Effluent Box
EFA-01 - Sampling after Chlorination: Effluent Weir at Chlorine Contact Chamber
EFD-01- Sampling after Dechlorination: Sampling Port in discharge pipe at Effluent Transfer Pump Basin
CAL-01- Calculated Value

Description of Permitted Outfall(s):
The outfall is located approximately ½ mile along the Cochran slough from the point of confluence with the Chipola River from the Wastewater Treatment Plant Site. The effluent discharges through a 10-inch HDPE pipe, with a concrete end section with rip-rap revetment. The point of discharge into the Chipola River is located approximately at latitude 30°6' 6.3" N, longitude 85°10' 55" W.

Description of Treatment Process (if multiple discharge points, include a detailed map or diagram of facility):

An existing 0.200 MGD annual average daily flow activated sludge system using the Austgen-Bigot Intermittent Cycle Extended Aeration System (ICEAS). The system includes equalization with grit removal, nitrification/de-nitrification, re-aeration, clarification, chlorine disinfection, and de-chlorination. Effluent receives intermediate level disinfection for discharge to the Chipola River. Biosolids undergo aerobic sludge digestion and dewatering on drying beds prior to land application at an agricultural land application site.

WWTP is constructing upgrades for 0.240 MGD treatment capacity.

PART I: Continued

List current Effluent Limits of Outfall(s) to be Sampled: This should include any AO or CO limits the facility may be under
(Leave cell blank if not applicable)

			Limitations		Monitoring Requirements			
Parameter	Units	Max/ Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site	Notes
Flow to D-001	MGD	Max Max	0.200 Report	Annual Average Monthly Average	5 Days/Week	Recording Flow Meter with Totalizer	FLW-01	See I.A.3
BOD, Carbonaceous 5-day, 20C	mg/L	Max Max Max Max	10.0 12.5 15.0 20.0	Annual Average Monthly Average Weekly Average Single Sample	Bi-weekly; every 2 weeks	8-hr FPC	EFF-01	
BOD, Carbonaceous 5-day, 20C	lb/day	Max	Report	Monthly Average	Monthly	Calculated	CAL-01	AO Interim Limit
Solids, Total Suspended	mg/L	Max Max Max Max	10.0 12.5 15.0 20.0	Annual Average Monthly Average Weekly Average Single Sample	Bi-weekly; every 2 weeks	8-hr FPC	EFF-01	
Solids, Total Suspended	lbs/day	Max	Report	Monthly Average	Monthly	Calculated	CAL-01	AO Interim Limit
Nitrogen, Total	mg/L	Max Max Max Max	10.0 12.5 15 20	Annual Average Monthly Average Weekly Average Single Sample	Bi-weekly; every 2 weeks	8-hr FPC	EFF-01	CO Interim Limits
Nitrogen, Total	lb/day	Max	Report	Monthly Average	Monthly	Calculated	CAL-01	AO Interim Limits
Phosphorus, Total (as P)	mg/L	Max Max Max Max	4.0 5.0 6.0 8.0	Annual Average Monthly Average Weekly Average Single Sample	Bi-weekly; every 2 weeks	8-hr FPC	EFF-01	CO Interim Limits
Phosphorus, Total (as P)	lb/day	Max	Report	Monthly Average	Monthly	Calculated	CAL-01	AO Interim Limits
Coliform, Fecal	#/ 100mL	Max Max Max	14 14 86	Annual Average Monthly Median Single Sample	Bi-weekly; every 2 weeks	Grab	EFF-01	
pH	s.u.	Min Max	6.0 8.5	Single Sample Single Sample	5 Days/Week	Grab	EFF-01	
Oxygen, Dissolved (DO)	mg/L	Min	5.0	Single Sample	5 Days/Week	Grab	EFF-01	
Chlorine Total Residual (For Disinfection)	mg/L	Min	1.0	Single Sample	5 Days/Week	Grab	EFA-01	See I.A.5, I.A.6, and I.A.9
Chlorine, Total Residual (For Dechlorination)	mg/L	Max	0.01	Single Sample	Bi-weekly; every 2 weeks	Grab	EFD-01	

PART I: Continued

Receiving Waters:	Classification (indicate whether fresh or marine):
Chipola River	Fresh

Toxicity Test Requirements (routine and/or additional test language, test species, salinity adjustment, etc.):

Not required since the plant is considered a minor and there have been no toxicity issues in the recent past. Toxicity was listed in the 2004 permit but was removed in the 2009 permit due to successful testing and pursuant to Rules 62-620.620(1),(2), and (3)(a).

Administrative or Consent Orders (date executed, specific requirements, interim limit dates-if applicable, etc.):

Administrative Order AO074NW is in effect until August 31, 2014, which requires compliance with effluent loading rates for CBOD5, TSS, TN, & TP of permit condition I.A.1, and comply with staffing requirements of permit condition V.A.1.

Consent Order, OGC 09-0378A-23-DW, effective July 31, 2009, compliance schedule with interim limits for total Nitrogen. Compliance schedule and Interim Limits extended until August 31, 2014.

Facility Mixing Zone Details (if applicable):

List Permit Violations (DMR data) and plant upsets that occurred at the plant within the last year:

Month	Parameter	Data	Limit	Statistical Base	Units
4/12/2013	PHOSPHORUS, TOTAL (AS P)	5.54	5 (Interim)	MO AVG	mg/L
5/31/2012	PHOSPHORUS, TOTAL (AS P)	6.6	6 (interim)	WKLY AVG	mg/L
4/30/2013	SOLIDS, TOTAL SUSPENDED	22	20	MAXIMUM	mg/L
4/30/2013	NITROGEN, TOTAL	29.5	20 (Interim)	MAXIMUM	mg/L
4/30/2013	NITROGEN, TOTAL	13.2	12.5 (Interim)	MO AVG	mg/L
5/31/2013	NITROGEN, TOTAL	13.8	12.5 (Interim)	MO AVG	mg/L
5/31/2013	COLIFORM, FECAL	>1600	86	MAXIMUM	#/100mL
5/31/2013	COLIFORM, FECAL	45	14	ANNL AVG	#/100mL
6/30/2013	COLIFORM, FECAL	40	14	ANNL AVG	#/100mL

Describe previous FYI and WQBEL study:

Previous FYI sampled June 1 and August 6, 2009. Report issued February 2010.

Describe previous or current Enforcement Actions (including WLs):

Consent Order, OGC 09-0378A-23-DW, effective July 31, 2009, compliance schedule with interim limits for total Nitrogen. Compliance schedule and Interim Limits extended until August 31, 2014.

Describe any violations or problems noted in previous inspection: None
Discuss whether DMR trends within previous five years are improving or declining:
Additional Comments (this should include a trend of the Effluent, i.e. if the facility is now Reuse):

PART II: Sampling Event Information

Date(s) sample collected:	**Sampler(s):**
Temperature (Deg C):	**pH (SU):**
Dissolved Oxygen (mg/L):	**Conductivity (umhos/cm):**
Total Residual Chlorine (mg/L):	**Total Residual Chlorine - after Disinfection (mg/L):**
Method of Chlorination:	**Method of De-chlorination:**
Flow During Sample Collection for each outfall(MGD):	
Mean Flow for each outfall for previous 12 months based on sampling date (If samples are taken on more than one day, indicate Mean Flow for each day):	
Describe Discharge during Sampling Event: ☐ **Continuous** ☐ **Intermittent** ☐ **Seasonal** ☐ **Rainfall Dependent** ☐ **Other, please specify**	

Describe any conditions, difficulties or abnormal events that occurred during the sample collection and any other additional comments here:

Appendix C

Explanation of Measurements

(1) Quality Assurance and Quality Control

FDEP's quality assurance requirements for analytical laboratories and field activities are codified in Chapter 62-160, F.A.C., Quality Assurance (QA Rule) and in internal Standard Operating Procedures (FDEP SOPs). Methods for all analyses are on file at the FDEP Central Laboratory in Tallahassee and may be viewed on the web at http://www.dep.state.fl.us/labs/library/lab_sops.htm and/or http://www.dep.state.fl.us/water/sas/qa/index.htm.

(2) Chemical Analyses of the Effluent

The effluent was analyzed for nutrients, metals, organic constituents (base, neutral, and acid extractables) and pesticides following FDEP SOPs. The results from these analyses were compared with Water Quality Criteria (62-302, F.A.C.) and facility permit limits. Exceedances of Water Quality Criteria may constitute violations of specific provisions of Chapter 62-302 (F.A.C.) and/ or facility permit limits.

(3) Bacteriological Testing

High levels of fecal coliform bacteria may constitute an exceedance of 62-302.530(6) and/or a violation of facility permit limits. Fecal coliform and enterococci results often are based on colony counts outside the acceptable range (B-qualifier). The dilutions performed on the sample did not yield results within the method acceptable range of 20- 60 colony forming units per plate. The B-qualifier does not affect data quality.

(4) Algal Growth Potential (AGP)

The algal growth potential (AGP) value is the peak growth of the alga within that 14-day period, recorded as mg dry weight/L. Raschke and Shultz (1987) found that an AGP above 5.0 mg dry weight/L represents a "problem" threshold for fresh receiving waters, implying nutrient enrichment. High AGP values may constitute exceedances of 62-302.530(46), F.A.C., 62-302.530(47)(a), F.A.C. and/or 62-302.530(47)(b), F.A.C..

The concentration of nutrients in a water sample may be used to calculate the expected yield of AGP under the assumption that other required nutrients (e.g. silicon, micronutrients) are present in excess (Miller *et al*. 1978). The expected amount of production is calculated as 38 times the total soluble inorganic nitrogen (nitrate and nitrite plus ammonia) under nitrogen limitation or 430 times the ortho-phosphate (OP) concentration under phosphorus limitation with an error of $\pm$ 20%. When the ratio of nitrogen to phosphorus (N: P) is less than 10:1, nitrogen limitation of algal production is likely. When the N: P ratio is 20:1 or greater, phosphorus limitation is likely (USEPA 2000). For ratios in-between, co-limitation may occur. Production of lower biomass than expected may be evidence of growth inhibition related to toxic compounds present in the water sample tested and may constitute an exceedance of 62-302.530(61), F.A.C.

(5) Benthic Macroinvertebrate Assemblages

Quantitative samples were collected from Hester-Dendy multi-plate samplers incubated for 28 days. Benthic macroinvertebrates were sorted and identified to the lowest practical taxonomic level, usually species.

Taxa richness: Taxa richness is the number of distinct macroinvertebrate taxa present in a sample. Stress, habitat destruction and pollution tend to reduce the number of different types of organisms present (Karr and Chu 1998). Decreases in taxa richness related to a facility's effluent may constitute exceedances of 62-302.530(46), F.A.C., 62-302.530(47)(a), F.A.C., 62-302.530(47)(b), F.A.C. and/or 62-302.530(61), F.A.C..

Percent Contribution of Dominant Taxon: Percent contribution of the dominant taxon is calculated by dividing the number of individuals in the most abundant taxa by the total number of individuals counted. Percent contribution of the dominant taxon tends to

increase with increasing perturbation (Plafkin *et al*., 1989). Increases in the percent contribution of the dominant taxon related to a facility's effluent may constitute exceedances of 62-302.530(46), F.A.C., 62-302.530(47)(a), F.A.C. and/or 62-302.530(47)(b), F.A.C..

Community Composition: Shifts in proportions of major groups of organisms downstream of a point source, compared to upstream, control conditions, may indicate negative effects of a discharge (Fore et. al. 2007, Karr and Chu 1998). Shifts in community composition related to a facility's effluent may constitute exceedances of 62-302.530(46) F.A.C., 62-302.530(47)(a), F.A.C., 62-302.530(47)(b), F.A.C. and/or 62-302.530(61), F.A.C.

Functional Feeding Groups: Environmental degradation may differentially affect groups of invertebrates based on how the group feeds (e.g. predators, deposit feeders, etc.). In Florida, pollution may be responsible for reducing the numbers of filter feeders and shredders (Fore et. al. 2007). Changes in the proportions of functional feeding groups related to a facility's effluent may constitute exceedances of 62-302.530(46), F.A.C., 62-302.530(47)(a), F.A.C., 62-302.530(47)(b), F.A.C. and/or 62-302.530(61), F.A.C..

Shannon-Weaver Diversity Index: This index is specified in the Florida Administrative Code 62-302 as a measure of biological integrity. Low diversity scores are undesirable. Where diversity is low, only a few taxa are abundant as compared to an area where many taxa are present in equitable abundance among taxa (Magurran 1988). A difference of 25% in Shannon-Weaver diversity between results from Hester-Dendy multiplate samplers incubated for 28 days at test and control sites constitute exceedances of 62-302.530(10), F.A.C.

(6) Definition of Qualifiers

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 limit.
J - Estimated value
K - Actual value is known to be less than value given
L - Actual value is known to be greater than value given
N - Presumptive evidence of presence of material.
O - Sampled, but analysis lost or not performed.
Q - Sample held beyond normal holding time.
T - Value reported is less than the criterion of detection.
U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
V - Analyte was detected in both sample and method blank.
X - Too few individuals to calculate SCI value.
Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate
Z - Colonies were too numerous to count (TNTC)

Appendix D

Chain of Custody

Florida Department of Environmental Protection

Event ID *

Central Laboratory Sample Submittal Form

Request Number: RQ-2013-06-24-15
FYI Wewahitchka WWTP Sampling Inspection

Requester: ~~Michelle Fish~~ Dan Crean
Field Report Prepared By: Dan Crean

Customer: NW-DIST
Project ID: FYI5
PMAS: 1143

Collected By: Dan Crean, Mark Sumner
Send Final Report To: Kim Allen
Sampling Agency:

Lab ID *	Location	Collection (comp begin or grab) Eastern Central	Composite end Eastern Central	Bottle Group(s)**
	Wewahitchka	☐ Comp ☒ Grab Date 6-24-13 Time 10:04 (Central)	Date Time	
	Field ID	Tot Res Chlorine (mg/L) 0.62	Diss Oxygen (mg/L)	Storet Station Number
	Matrix (include type e.g. Salt, Fresh, etc) EFFLUENT	Temp (C)	pH 7.53	Sample Depth ☐ m ☐ ft
				☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)
				NPDES Number
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Comments	

Lab ID *	Location	Collection (comp begin or grab) Eastern Central	Composite end Eastern Central	Bottle Group(s)**
	Wewahitchka	☐ Comp ☐ Grab Date 6-24-13 Time 10:22 (Central)	Date Time	
	Field ID Blank	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number
	Matrix (include type e.g. Salt, Fresh, etc) N.I.	Temp (C)	pH	Sample Depth ☐ m ☐ ft
				☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)
				NPDES Number
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Comments	

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

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

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Dan Crean	6/24	Fedex						6/25/13 9:30

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Page 1 of 5

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2013-06-24-15
FYI Wewahitchka WWTP Sampling Inspection

Customer: NW-DIST
Project ID: FYI5
PMAS: 1143

Requester: Michelle Fish
Collected By: H. Walters, J. Savage, J. Weger
Sampling Agency: FDEP - BioLab

Field Report Prepared By: J. Weger
Send Final Report To: Kim Allen

Lab ID *	Location / Field ID / Matrix / Temp (C) / pH / Latitude / Longitude	Collection (comp begin or grab) Eastern / Composite end Eastern / Tot Res Chlorine (mg/L) / Diss Oxygen (mg/L) / Storet Station Number / Sample Depth / Salinity (PPTh) / Sp Conductance (umho/cm) / NPDES Number / Comments	Bottle Group(s)**
WWW	Location: Wewahitchka WWTP - Chipola River Field ID: Test Sitr Matrix (include type e.g. Salt, Fresh, etc): Fresh Temp (C): 28.31 pH: 6.69 Latitude: 30.099945 71°N ☒ dd ☐ dms Longitude: 85.18169885°W ☒ dd ☐ dms	☐ Comp ☒ Grab Collection Date 06/25/13 Time 1035 Central Composite end Date Time Central Tot Res Chlorine (mg/L) Diss Oxygen (mg/L): 6.10 Sample Depth ☒ m ☐ ft: 0.2 Salinity (PPTh) ☒ Sp Conductance (umho/cm): 138 NPDES Number Comments: 2g sodium sulfite added for dechlor for 1,4-Dioxane samples	B
	Location: Wewahitchka WWTP - Chipola River Field ID: Test Site - Rep1 Matrix (include type e.g. Salt, Fresh, etc): Temp (C): pH: Latitude: ☐ dd ☐ dms Longitude: ☐ dd ☐ dms	☐ Comp ☒ Grab Collection Date 06/25/13 Time 1010 Central Composite end Date Time Central Tot Res Chlorine (mg/L) Diss Oxygen (mg/L) Sample Depth ☐ m ☐ ft Salinity (PPTh) ☐ Sp Conductance (umho/cm) NPDES Number Comments: HD Rep 1	C
	Location: Wewahitchka WWTP - Chipola River Field ID: Test Site - Rep2 Matrix (include type e.g. Salt, Fresh, etc): Temp (C): pH: Latitude: ☐ dd ☐ dms Longitude: ☐ dd ☐ dms	☐ Comp ☒ Grab Collection Date 06/25/13 Time 1010 Central Composite end Date Time Central Tot Res Chlorine (mg/L) Diss Oxygen (mg/L) Sample Depth ☐ m ☐ ft Salinity (PPTh) ☐ Sp Conductance (umho/cm) NPDES Number Comments: HD Rep 2	C
	Location: Wewahitchka WWTP - Chipola River Field ID: Test Site - Rep3 Matrix (include type e.g. Salt, Fresh, etc): Temp (C): pH: Latitude: ☐ dd ☐ dms Longitude: ☐ dd ☐ dms	☐ Comp ☒ Grab Collection Date 06/25/13 Time 1010 Central Composite end Date Time Central Tot Res Chlorine (mg/L) Diss Oxygen (mg/L) Sample Depth ☐ m ☐ ft Salinity (PPTh) ☐ Sp Conductance (umho/cm) NPDES Number Comments: HD Rep 3	C

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
J. Weger	06/25/13 1530	N/A						6-25-13/5:30

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group Information.

last revised October 1, 2003

6-25-13 1540
15MICRO Kmspencer

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2013-06-24-15
FYI Wewahitchka WWTP Sampling Inspection

Requester: Michelle Fish
Field Report Prepared By: J. Weger
Collected By: H. Walters, J. Savage, J. Weger
Send Final Report To: Kim Allen
Sampling Agency: FDEP-Bio Lab

Customer: NW-DIST
Project ID: FYI5
PMAS: 1143

Lab ID *:
Location: Wewahitchka WWTP - Chipola River
Field ID: Test Site - Rep4
Matrix (include type e.g. Salt, Fresh, etc):
Temp (C):
pH:
Latitude: ☐ dd ☐ dms
Longitude: ☐ dd ☐ dms
☐ Comp ☒ Grab
Collection (comp begin or grab) Eastern Central: Date 06/25/13 Time 1010
Composite end Eastern Central: Date Time
Tot Res Chlorine (mg/L):
Diss Oxygen (mg/L):
Storet Station Number:
Sample Depth ☐ m ☐ ft
☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)
NPDES Number:
Bottle Group(s)**: C
Comments: HD Rep4

Lab ID *: VPWW
Location: Wewahitchka WWTP - Chipola River
Field ID: Control Site
Matrix (include type e.g. Salt, Fresh, etc): Fresh
Temp (C): 28.32
pH: 6.67
Latitude: 30.10073178 ☒ dd ☐ dms
Longitude: 85.18208261 ☒ dd ☐ dms
☐ Comp ☒ Grab
Collection (comp begin or grab) Eastern Central: Date 06/25/13 Time 1050
Composite end Eastern Central: Date Time
Tot Res Chlorine (mg/L):
Diss Oxygen (mg/L): 6.16
Storet Station Number:
Sample Depth ☒ m ☐ ft: 0.3
☐ Salinity (PPTh) ☒ Sp Conductance (umho/cm): 121
NPDES Number:
Bottle Group(s)**: B C VPWW
Comments:

Lab ID *:
Location: Wewahitchka WWTP - Chipola River
Field ID: Control Site - Rep1
Matrix (include type e.g. Salt, Fresh, etc):
Temp (C):
pH:
Latitude: ☐ dd ☐ dms
Longitude: ☐ dd ☐ dms
☒ Comp ☒ Grab
Collection (comp begin or grab) Eastern Central: Date 06/25/13 Time 1050
Composite end Eastern Central: Date Time
Tot Res Chlorine (mg/L):
Diss Oxygen (mg/L):
Storet Station Number:
Sample Depth ☐ m ☐ ft
☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)
NPDES Number:
Bottle Group(s)**: B C VPWW
Comments: HD Rep1

Lab ID *:
Location: Wewahitchka WWTP - Chipola River
Field ID: Control Site - Rep2
Matrix (include type e.g. Salt, Fresh, etc):
Temp (C):
pH:
Latitude: ☐ dd ☐ dms
Longitude: ☐ dd ☐ dms
☐ Comp ☒ Grab
Collection (comp begin or grab) Eastern Central: Date 06/25/13 Time 1050
Composite end Eastern Central: Date Time
Tot Res Chlorine (mg/L):
Diss Oxygen (mg/L):
Storet Station Number:
Sample Depth ☐ m ☐ ft
☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)
NPDES Number:
Bottle Group(s)**: B C VPWW
Comments: HD Rep2

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
VPWW	06/25/13 1530	n/a						6-25-13 1540

* Shaded Areas for Lab use only.
** Please see reverse side for Bottle Group information.

last revised October 1, 2003

6.25.13 1540
1 MICRO

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2013-06-24-15
FYI Wewahitchka WWTP Sampling Inspection

Customer: NW-DIST
Project ID: FYI5
PMAS: 1143

Requester: Michelle Fish
Collected By: J. Weger, J. Savage, H. Walters
Sampling Agency: FDEP - Bio Lab

Field Report Prepared By: J. Weger
Send Final Report To: Kim Allen

Lab ID *	Location	Comp / Grab	Collection (comp begin or grab) Eastern Central	Composite end Eastern Central	Bottle Group(s)**
	Wewahitchka WWTP - Chipola River Field ID: Control Site - Rep 3	☐ Comp ☒ Grab	Date 06/25/13 Time 1050	Date Time	C
	Matrix (include type e.g. Salt, Fresh, etc)	Temp (C)	pH	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)
				Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Comments: HD Rep 3	Storet Station Number / NPDES Number

Lab ID *	Location	Comp / Grab	Collection (comp begin or grab) Eastern Central	Composite end Eastern Central	Bottle Group(s)**
	Wewahitchka WWTP - Chipola River Field ID: Control Site - Rep 4	☐ Comp ☒ Grab	Date 06/25/13 Time 1050	Date Time	C
	Matrix (include type e.g. Salt, Fresh, etc)	Temp (C)	pH	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)
				Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)
	Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms		Comments: HD Rep 4	Storet Station Number / NPDES Number

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

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

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
	06/25/13	n/a						6.25.13 3:30

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Appendix E

Physical/Chemical field sheets

DEP-SOP-001/01: Form FD 9000-3

PHYSICAL/CHEMICAL CHARACTERIZATION FIELD SHEET

SAMPLE ID : _____ ORG ID : _____

COUNTY : GULF STORET # : _____

DATE : 06/25/13 TIME : 10:50 central

Latitude : 30.10073178 °N (degrees) (minutes) (seconds) | Longitude : 85.18408261°W (degrees) (minutes) (seconds)

SITE NAME : # for Wewahitchka WWTP - Chipola River SAMPLE COMPLETE ? Y

FIELD ID/NAME : Control Site RECEIVING BODY OF WATER : _____

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) :

Forest/Natural	silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)

Local Watershed Erosion (select one) : ☐ None ☐ Slight ☐ Moderate ☐ Heavy

Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☐ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side

Left Bank : _____ Right Bank : _____

High Water Mark: _____ + _____ = _____

(m) (above present water level) (present depth) (above bed)

Artificially Impounded ☐ Yes ☒ No

Typical Width (m) Depth (m)/Velocity (m/sec) Transect

_____ m wide

_____ m/s _____ m/s _____ m/s

_____ m deep _____ m deep _____ m deep

Artificially Channelized : ☒ No ☐ Some recovery ☐ Mostly recovered, more sinuous ☐ Recent, severe

Canopy Cover % : ☒ Open ☐ Heavily Shaded ☐ Lightly Shaded (11-45%) ☐ Moderate Shaded (46-80%)

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse

Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify) :

Sediment Deposition ☐ Sludge ☐ Other (Specify) :

Sand Smothering : None Slight Moderate Severe

Silt Smothering : None Slight Moderate Severe

SUBSTRATE TYPE

Assessment Tool: ☐ SCI ☐ BioRecon

HDS-Floating ☐ LCI ☐ LVI

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)			
Undercut Banks / Roots			
Leaf Packs or Mat			
Aquatic Vegetation			
Rock or Shell Rubble..			
Sand.....			
Mud / Muck / Silt			
Other			
Other			

WATER QUALITY YSI meter #2 Depth is incorrect. 06/25/13

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top : 0.3	~~0.494~~	28.32	6.67	6.16	127		
Mid-Depth :							☐ VOB
Bottom :							

Water Surface Oils : ☒ None ☐ Sheen ☐ Globs ☐ Slick

Water Odors : ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Other (Specify) :

Water Sample Taken ? ☒ Yes ☐ No

Algae Sample Taken ? ☐ Yes ☒ No

SYSTEM TYPE ☐ Stream ☐ Lake ☐ Wetland ☐ Estuary ☒ Other (Specify) : River

Clarity ☐ Clear ☒ Slightly Turbid ☒ Turbid ☐ Opaque

Color ☒ Tannic ☐ Green (Algae) ☒ Clear ☐ Other (Specify) :

WEATHER CONDITIONS / NOTES : 90s, sunny

~1g Sodium sulfite and ~1g sodium Bisulfate added.

1,4-Dioxane samples < 4 SU pH

☒ The antecedent hydrologic conditions have been met to my best knowledge.

Water samples preserved ? ☐ Yes ☒ pH<2 ☐ No Algae samples preserved ? ☐ Yes ☐ No

ABUNDANCE

	Absent	Rare	Common	Abundant
Periphyton :	☐	☐	☐	☒
Fish :	☐	☐	☐	☒
Aquatic Macrophytes :	☒	☐	☐	☐
Iron/Sulfur Bacteria :	☒	☐	☐	☐

SAMPLING TEAM : H. Walters, J. Savage, J. Weger

SIGNATURE : J. Weger

DATE : 06/25/13

Revision Date: September 5, 2008

DEP-SOP-001/01: Form FD 9000-3

PHYSICAL/CHEMICAL CHARACTERIZATION FIELD SHEET

SAMPLE ID : _____ ORG ID : _____

COUNTY : GULF STORET # : _____

DATE : 06/25/13 TIME : 10:10-Central ; 1025-Central

Latitude : 30.0999457 °N (degrees) (minutes) (seconds) | Longitude : 85.1816988 5°W (degrees) (minutes) (seconds)

SITE NAME : Wewahitchka WWTP - HDP Chipola River water SAMPLE COMPLETE ? Y

FIELD ID/NAME : Test Site RECEIVING BODY OF WATER : _____

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) :

Forest/Natural	silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)

Local Watershed Erosion (select one) : ☐ None ☐ Slight ☐ Moderate ☐ Heavy

Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☐ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side

Left Bank : _____ Right Bank : _____

High Water Mark: _____ (m) + _____ (above present water level) = _____ (present depth) (above bed)

Artificially Impounded ☐ Yes ☒ No

Typical Width (m) Depth (m)/Velocity (m/sec) Transect

_____ m wide

_____ m/s _____ m/s _____ m/s

_____ m deep _____ m deep _____ m deep

Artificially Channelized : ☒ No ☐ Some recovery ☐ Mostly recovered, more sinuous ☐ Recent, severe

Canopy Cover % : ☒ Open ☐ Lightly Shaded (11-45%) ☐ Heavily Shaded ☐ Moderate Shaded (46-80%)

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse

Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify) :

Sediment Deposition ☐ Sludge ☐ Other (Specify) :

Sand Smothering : None Slight Moderate Severe

Silt Smothering : None Slight (Moderate) Severe

SUBSTRATE TYPE

Assessment Tool: ☐ SCI ☐ BioRecon HDs-Floating ☐ LCI ☐ LVI

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)			
Undercut Banks / Roots			
Leaf Packs or Mat			
Aquatic Vegetation			
Rock or Shell Rubble..			
Sand.....			
Mud / Muck / Silt			
Other			
Other			

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top :	0.2	28.31	6.69	6.10	128		
Mid-Depth :							☐ VOB
Bottom :							

Water Surface Oils : ☒ None ☐ Sheen ☐ Globs ☐ Slick

Water Odors : ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Other (Specify) :

Water Sample Taken ? ☒ Yes ☐ No

Algae Sample Taken ? ☐ Yes ☒ No

Clarity ☐ Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque

SYSTEM TYPE ☐ Stream ☐ Lake ☐ Wetland ☐ Estuary ☒ Other (Specify) : RIVER

Color ☐ Tannic ☐ Green (Algae) ☒ Clear ☐ Other (Specify) :

WEATHER CONDITIONS / NOTES : 90s, Sunny

~2g Sodium sulfite added to dioxane samples, ~1g Sodium Bisulfate added.

Effluent discharge observed.

1,4-Dioxane samples < 450 µH

☒ The antecedent hydrologic conditions have been met to my best knowledge. N/A

Water samples preserved ? ☐ Yes ☒ pH<2 ☐ No Algae samples preserved ? ☐ Yes ☐ No

ABUNDANCE

	Absent	Rare	Common	Abundant
Periphyton :	☒	☐	☐	☒
Fish :	☐	☐	☐	☒
Aquatic Macrophytes :	☒	☐	☐	☐
Iron/Sulfur Bacteria :	☒	☐	☐	☐

SAMPLING TEAM : H. Walters, J. Savage, J. Weger

SIGNATURE : J. Weger

DATE : 06/25/13

Revision Date: September 5, 2008

Effluent discharging 9:30 - 11:30 am Central

Appendix F
Chemical analysis of effluent and receiving water

Date_Sampled	UDL	SCH_Group	Component	Value	Qualifier	Units	MDL	PQL
6/24/2013 11:04	Effluent	AGP/LN	Algal Growth Potential	160	A	mg DryWt/L	0.3	0.9
6/24/2013 11:04	Effluent	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.45	U	ug/L	0.45	1.4
6/24/2013 11:04	Effluent	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	8.7		mg/L	0.2	2
6/24/2013 11:04	Effluent	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	7.4		ug/L	0.62	1.9
6/24/2013 11:04	Effluent	Overflow	Fecal Coliforms-Membrane Filter	46		cfu/100 mL	2	
6/24/2013 11:04	Effluent	Metals	Calcium	37.6		mg/L	0.075	0.3
6/24/2013 11:04	Effluent	Metals	Selenium	0.25	I	ug/L	0.2	0.8
6/24/2013 11:04	Effluent	Metals	Lead	0.27	I	ug/L	0.2	0.8
6/24/2013 11:04	Effluent	Metals	Copper	8.10		ug/L	0.5	1
6/24/2013 11:04	Effluent	Metals	Nickel	1.28		ug/L	0.25	1
6/24/2013 11:04	Effluent	Metals	Arsenic	0.28	I	ug/L	0.25	1
6/24/2013 11:04	Effluent	Metals	Iron	120		ug/L	30	120
6/24/2013 11:04	Effluent	Metals	Chromium	0.30	U	ug/L	0.3	1.2
6/24/2013 11:04	Effluent	Metals	Cadmium	0.050	U	ug/L	0.05	0.2
6/24/2013 11:04	Effluent	Metals	Potassium	11.4		mg/L	0.3	1.2
6/24/2013 11:04	Effluent	Metals	Zinc	24		ug/L	5	20
6/24/2013 11:04	Effluent	Metals	Silver	0.025	U	ug/L	0.025	0.1
6/24/2013 11:04	Effluent	Metals	Magnesium	24.9		mg/L	0.04	0.16
6/24/2013 11:04	Effluent	Metals	Sodium	57.2		mg/L	0.5	2
6/24/2013 11:04	Effluent	Metals	Aluminum	60	U	ug/L	60	240
6/24/2013 11:04	Effluent	Nutrients	Color (true)	22	A	PCU	2.5	6
6/24/2013 11:04	Effluent	Nutrients	Chloride	77		mg Cl/L	2	5
6/24/2013 11:04	Effluent	Nutrients	Kjeldahl Nitrogen	12		mg N/L	0.4	1
6/24/2013 11:04	Effluent	Nutrients	Ammonia-N	9.2		mg N/L	0.2	0.5
6/24/2013 11:04	Effluent	Nutrients	NO2NO3-N	0.61		mg N/L	0.04	0.1
6/24/2013 11:04	Effluent	Nutrients	TSS	6	I	mg/L	2	10
6/24/2013 11:04	Effluent	Nutrients	Sulfate	78		mg SO4/L	2	5
6/24/2013 11:04	Effluent	Nutrients	Fluoride	0.67		mg F/L	0.035	0.1
6/24/2013 11:04	Effluent	Nutrients	Turbidity	3.6		NTU	0.1	0.1
6/24/2013 11:04	Effluent	Nutrients	Organic Carbon	8.0	A	mg C/L	1	2
6/24/2013 11:04	Effluent	Nutrients	O-Phosphate-P	2.6		mg P/L	0.08	0.2
6/24/2013 11:04	Effluent	Nutrients	Alkalinity	162		mg CaCO3/L	0.65	2.5
6/24/2013 11:04	Effluent	Nutrients	Total-P	2.9		mg P/L	0.025	0.25
6/24/2013 11:04	Effluent	Pesticides	Metribuzin	0.019	U	ug/L	0.019	0.076
6/24/2013 11:04	Effluent	Pesticides	Malathion	0.0095	U	ug/L	0.0095	0.038
6/24/2013 11:04	Effluent	Pesticides	Alachlor	0.057	UJ	ug/L	0.057	0.23
6/24/2013 11:04	Effluent	Pesticides	Azinphos Methyl	0.019	U	ug/L	0.019	0.076

Date_Sampled	UDL	SCH_Group	Component	Value	Qualifier	Units	MDL	PQL
6/24/2013 11:04	Effluent	Pesticides	Chlorpyrifos Methyl	0.0095	U	ug/L	0.0095	0.038
6/24/2013 11:04	Effluent	Pesticides	Parathion Ethyl	0.019	U	ug/L	0.019	0.076
6/24/2013 11:04	Effluent	Pesticides	Parathion Methyl	0.0095	U	ug/L	0.0095	0.038
6/24/2013 11:04	Effluent	Pesticides	Sucralose	26		ug/L	0.2	1
6/24/2013 11:04	Effluent	Pesticides	Ametryn	0.0095	U	ug/L	0.0095	0.038
6/24/2013 11:04	Effluent	Pesticides	Metalaxyl	0.038	U	ug/L	0.038	0.15
6/24/2013 11:04	Effluent	Pesticides	Metolachlor	4.6		ug/L	0.057	0.23
6/24/2013 11:04	Effluent	Pesticides	Norflurazon	0.029	U	ug/L	0.029	0.11
6/24/2013 11:04	Effluent	Pesticides	Prometryn	0.019	U	ug/L	0.019	0.076
6/24/2013 11:04	Effluent	Pesticides	Atrazine	0.0095	U	ug/L	0.0095	0.038
6/24/2013 11:04	Effluent	Pesticides	Chlorpyrifos Ethyl	0.022	I	ug/L	0.0095	0.038
6/24/2013 11:04	Effluent	Pesticides	Ethoprop	0.0048	U	ug/L	0.0048	0.019
6/24/2013 11:04	Effluent	Pesticides	Hexazinone	0.029	UJ	ug/L	0.029	0.11
6/24/2013 11:04	Effluent	Pesticides	Butylate	0.019	U	ug/L	0.019	0.076
6/24/2013 11:04	Effluent	Pesticides	Fonofos	0.0095	U	ug/L	0.0095	0.038
6/24/2013 11:04	Effluent	Pesticides	Naled	0.038	UJ	ug/L	0.038	0.15
6/24/2013 11:04	Effluent	Pesticides	Phorate	0.0048	U	ug/L	0.0048	0.019
6/24/2013 11:04	Effluent	Pesticides	Bromacil	0.038	U	ug/L	0.038	0.15
6/24/2013 11:04	Effluent	Pesticides	Fenamiphos	0.029	U	ug/L	0.029	0.11
6/24/2013 11:04	Effluent	Pesticides	Simazine	0.0095	U	ug/L	0.0095	0.038
6/24/2013 11:04	Effluent	Pesticides	Diazinon	0.0095	U	ug/L	0.0095	0.038
6/24/2013 11:04	Effluent	Pesticides	Ethion	0.0095	U	ug/L	0.0095	0.038
6/24/2013 11:04	Effluent	Pesticides	Mevinphos	0.0095	U	ug/L	0.0095	0.038
6/24/2013 11:04	Effluent	Priority Organic Pollutants	2,4-Dinitrophenol	15	U	ug/L	15	59
6/24/2013 11:04	Effluent	Priority Organic Pollutants	2-Chloronaphthalene	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Pyrene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Diethyl phthalate	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Chrysene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	3.0	U	ug/L	3	12
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Acenaphthylene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Benzo(b)fluoranthene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Butyl benzyl phthalate	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Di-n-octyl phthalate	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Nitrobenzene	2.0	U	ug/L	2	7.9
6/24/2013 11:04	Effluent	Priority Organic Pollutants	2-Nitrophenol	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Anthracene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.20	U	ug/L	0.2	0.79

Date_Sampled	UDL	SCH_Group	Component	Value	Qualifier	Units	MDL	PQL
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Hexachlorobenzene	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Hexachlorobutadiene	3.0	U	ug/L	3	12
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Hexachlorocyclopentadiene	3.0	U	ug/L	3	12
6/24/2013 11:04	Effluent	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Benzidine	99	U	ug/L	99	400
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Benzo(a)anthracene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	2.0	U	ug/L	2	7.9
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Dimethyl phthalate	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Fluoranthene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Pentachlorophenol	3.0	U	ug/L	3	12
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Phenanthrene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	1,4-Dioxane	0.53		ug/L	0.02	0.1
6/24/2013 11:04	Effluent	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	2,4-Dimethylphenol	9.9	U	ug/L	9.9	40
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Benzo(a)pyrene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Di-n-butyl phthalate	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	2.0	U	ug/L	2	7.9
6/24/2013 11:04	Effluent	Priority Organic Pollutants	N-Nitrosodimethylamine	2.0	U	ug/L	2	7.9
6/24/2013 11:04	Effluent	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	3.0	U	ug/L	3	12
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Naphthalene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Phenol	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	2.0	U	ug/L	2	7.9
6/24/2013 11:04	Effluent	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	2,4-Dichlorophenol	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.0	U	ug/L	3	12
6/24/2013 11:04	Effluent	Priority Organic Pollutants	3,3'-Dichlorobenzidine	40	U	ug/L	40	160
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Benzo(k)fluoranthene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Fluorene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	2,4-Dinitrotoluene	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	2,6-Dinitrotoluene	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	4-Nitrophenol	15	U	ug/L	15	59
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Acenaphthene	0.20	U	ug/L	0.2	0.79
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Hexachloroethane	3.0	U	ug/L	3	12
6/24/2013 11:04	Effluent	Priority Organic Pollutants	Isophorone	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Priority Organic Pollutants	2-Chlorophenol	0.99	U	ug/L	0.99	4
6/24/2013 11:04	Effluent	Field Parameter	Total Residual Chlorine	0.62		mg/L		
6/24/2013 11:04	Effluent	Field Parameter	pH	7.53				
6/25/2013 11:50	Control Site	AGP/LN	Algal Growth Potential	10.1		mg DryWt/L	0.3	0.9

Date_Sampled	UDL	SCH_Group	Component	Value	Qualifier	Units	MDL	PQL
6/25/2013 11:50	Control Site	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	7.6		ug/L	0.69	2.1
6/25/2013 11:50	Control Site	Chlorophyll/Grain Size/BOD	Phaeophytin-a	3.4		ug/L	0.5	1.5
6/25/2013 11:50	Control Site	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	2.2		mg/L	0.2	2
6/25/2013 11:50	Control Site	Microbiology	Fecal Coliforms-Membrane Filter	6	B	cfu/100 mL	6	6
6/25/2013 11:50	Control Site	Metals	Magnesium	2.24		mg/L	0.04	0.16
6/25/2013 11:50	Control Site	Metals	Cadmium	0.050	U	ug/L	0.05	0.2
6/25/2013 11:50	Control Site	Metals	Potassium	1.7		mg/L	0.3	1.2
6/25/2013 11:50	Control Site	Metals	Aluminum	540		ug/L	60	240
6/25/2013 11:50	Control Site	Metals	Selenium	0.20	U	ug/L	0.2	0.8
6/25/2013 11:50	Control Site	Metals	Iron	750		ug/L	30	120
6/25/2013 11:50	Control Site	Metals	Calcium	15.0		mg/L	0.075	0.3
6/25/2013 11:50	Control Site	Metals	Zinc	5.0	U	ug/L	5	20
6/25/2013 11:50	Control Site	Metals	Arsenic	0.52	I	ug/L	0.25	1
6/25/2013 11:50	Control Site	Metals	Copper	0.97	I	ug/L	0.5	1
6/25/2013 11:50	Control Site	Metals	Chromium	0.92	I	ug/L	0.3	1.2
6/25/2013 11:50	Control Site	Metals	Lead	0.39	I	ug/L	0.2	0.8
6/25/2013 11:50	Control Site	Metals	Nickel	0.53	I	ug/L	0.25	1
6/25/2013 11:50	Control Site	Metals	Sodium	6.8		mg/L	0.5	2
6/25/2013 11:50	Control Site	Metals	Silver	0.025	U	ug/L	0.025	0.1
6/25/2013 11:50	Control Site	Nutrients	Chloride	5.9		mg Cl/L	0.2	0.5
6/25/2013 11:50	Control Site	Nutrients	Alkalinity	43		mg CaCO3/L	0.65	2.5
6/25/2013 11:50	Control Site	Nutrients	Total-P	0.029		mg P/L	0.002	0.005
6/25/2013 11:50	Control Site	Nutrients	Color (true)	28		PCU	2.5	6
6/25/2013 11:50	Control Site	Nutrients	TSS	19		mg/L	2	10
6/25/2013 11:50	Control Site	Nutrients	Organic Carbon	3.7		mg C/L	0.5	1
6/25/2013 11:50	Control Site	Nutrients	Turbidity	9.2		NTU	0.1	0.1
6/25/2013 11:50	Control Site	Nutrients	Sulfate	7.4		mg SO4/L	0.2	0.5
6/25/2013 11:50	Control Site	Nutrients	NO2NO3-N	0.30		mg N/L	0.004	0.01
6/25/2013 11:50	Control Site	Nutrients	Kjeldahl Nitrogen	0.38		mg N/L	0.08	0.2
6/25/2013 11:50	Control Site	Nutrients	O-Phosphate-P	0.004	I	mg P/L	0.004	0.01
6/25/2013 11:50	Control Site	Nutrients	Fluoride	0.081	I	mg F/L	0.035	0.1
6/25/2013 11:50	Control Site	Nutrients	Ammonia-N	0.022		mg N/L	0.002	0.005
6/25/2013 11:50	Control Site	Pesticides	Ethoprop	0.0048	U	ug/L	0.0048	0.019
6/25/2013 11:50	Control Site	Pesticides	Atrazine	0.043		ug/L	0.0095	0.038
6/25/2013 11:50	Control Site	Pesticides	Metribuzin	0.019	U	ug/L	0.019	0.076
6/25/2013 11:50	Control Site	Pesticides	Alachlor	0.057	UJ	ug/L	0.057	0.23
6/25/2013 11:50	Control Site	Pesticides	Parathion Ethyl	0.019	U	ug/L	0.019	0.076
6/25/2013 11:50	Control Site	Pesticides	Malathion	0.0095	U	ug/L	0.0095	0.038
6/25/2013 11:50	Control Site	Pesticides	Ethion	0.0095	U	ug/L	0.0095	0.038
6/25/2013 11:50	Control Site	Pesticides	Chlorpyrifos Ethyl	0.0095	U	ug/L	0.0095	0.038

Date_Sampled	UDL	SCH_Group	Component	Value	Qualifier	Units	MDL	PQL
6/25/2013 11:50	Control Site	Pesticides	Mevinphos	0.0095	U	ug/L	0.0095	0.038
6/25/2013 11:50	Control Site	Pesticides	Bromacil	0.038	U	ug/L	0.038	0.15
6/25/2013 11:50	Control Site	Pesticides	Ametryn	0.0095	U	ug/L	0.0095	0.038
6/25/2013 11:50	Control Site	Pesticides	Phorate	0.0048	U	ug/L	0.0048	0.019
6/25/2013 11:50	Control Site	Pesticides	Sucralose	0.53		ug/L	0.01	0.05
6/25/2013 11:50	Control Site	Pesticides	Diazinon	0.0095	U	ug/L	0.0095	0.038
6/25/2013 11:50	Control Site	Pesticides	Azinphos Methyl	0.019	U	ug/L	0.019	0.076
6/25/2013 11:50	Control Site	Pesticides	Prometryn	0.019	U	ug/L	0.019	0.076
6/25/2013 11:50	Control Site	Pesticides	Naled	0.038	UJ	ug/L	0.038	0.15
6/25/2013 11:50	Control Site	Pesticides	Metolachlor	0.057	U	ug/L	0.057	0.23
6/25/2013 11:50	Control Site	Pesticides	Simazine	0.052		ug/L	0.0095	0.038
6/25/2013 11:50	Control Site	Pesticides	Parathion Methyl	0.0095	U	ug/L	0.0095	0.038
6/25/2013 11:50	Control Site	Pesticides	Chlorpyrifos Methyl	0.0095	U	ug/L	0.0095	0.038
6/25/2013 11:50	Control Site	Pesticides	Norflurazon	0.029	U	ug/L	0.029	0.11
6/25/2013 11:50	Control Site	Pesticides	Metalaxyl	0.038	U	ug/L	0.038	0.15
6/25/2013 11:50	Control Site	Pesticides	Fonofos	0.0095	U	ug/L	0.0095	0.038
6/25/2013 11:50	Control Site	Pesticides	Fenamiphos	0.029	U	ug/L	0.029	0.11
6/25/2013 11:50	Control Site	Pesticides	Butylate	0.019	U	ug/L	0.019	0.076
6/25/2013 11:50	Control Site	Pesticides	Hexazinone	0.029	UJ	ug/L	0.029	0.11
6/25/2013 11:50	Control Site	Priority Organic Pollutants	2-Chloronaphthalene	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9	U	ug/L	1.9	7.8
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Acenaphthylene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Benzidine	97	U	ug/L	97	390
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Di-n-octyl phthalate	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.9	U	ug/L	2.9	12
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Hexachloroethane	2.9	U	ug/L	2.9	12
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Isophorone	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9	U	ug/L	1.9	7.8
6/25/2013 11:50	Control Site	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.9	U	ug/L	2.9	12
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Pentachlorophenol	2.9	U	ug/L	2.9	12
6/25/2013 11:50	Control Site	Priority Organic Pollutants	2,6-Dinitrotoluene	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	4-Nitrophenol	15	U	ug/L	15	58
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Benzo(k)fluoranthene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Fluoranthene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Naphthalene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Nitrobenzene	1.9	U	ug/L	1.9	7.8
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Phenanthrene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.97	U	ug/L	0.97	3.9

Date_Sampled	UDL	SCH_Group	Component	Value	Qualifier	Units	MDL	PQL
6/25/2013 11:50	Control Site	Priority Organic Pollutants	2,4-Dichlorophenol	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	2,4-Dinitrophenol	15	U	ug/L	15	58
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Acenaphthene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Anthracene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Benzo(a)pyrene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Butyl benzyl phthalate	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Diethyl phthalate	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9	U	ug/L	1.9	7.8
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Phenol	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	2,4-Dimethylphenol	9.7	U	ug/L	9.7	39
6/25/2013 11:50	Control Site	Priority Organic Pollutants	2,4-Dinitrotoluene	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.9	U	ug/L	2.9	12
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Chrysene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Dimethyl phthalate	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Hexachlorobenzene	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	2-Chlorophenol	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Benzo(a)anthracene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Di-n-butyl phthalate	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Fluorene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Hexachlorobutadiene	2.9	U	ug/L	2.9	12
6/25/2013 11:50	Control Site	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9	U	ug/L	2.9	12
6/25/2013 11:50	Control Site	Priority Organic Pollutants	2-Nitrophenol	0.97	U	ug/L	0.97	3.9
6/25/2013 11:50	Control Site	Priority Organic Pollutants	3,3'-Dichlorobenzidine	39	U	ug/L	39	160
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Benzo(b)fluoranthene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Pyrene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:50	Control Site	Priority Organic Pollutants	1,4-Dioxane	0.043	I	ug/L	0.02	0.1
6/25/2013 11:50	Control Site	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	1.9	U	ug/L	1.9	7.8
6/25/2013 11:50	Control Site	Field Parameter	Sample Depth	0.3		m		
6/25/2013 11:50	Control Site	Field Parameter	pH	6.67				
6/25/2013 11:50	Control Site	Field Parameter	Specific Conductance	127		umhos/cm		
6/25/2013 11:50	Control Site	Field Parameter	Temperature	28.32		C		
6/25/2013 11:50	Control Site	Field Parameter	Dissolved Oxygen	6.16		mg/L		
6/25/2013 11:25	Test Site	AGP/LN	Algal Growth Potential	9.28		mg DryWt/L	0.3	0.9
6/25/2013 11:25	Test Site	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	2.8		mg/L	0.2	2

Date_Sampled	UDL	SCH_Group	Component	Value	Qualifier	Units	MDL	PQL
6/25/2013 11:25	Test Site	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	7.8		ug/L	0.8	2.5
6/25/2013 11:25	Test Site	Chlorophyll/Grain Size/BOD	Phaeophytin-a	3.2		ug/L	0.58	1.8
6/25/2013 11:25	Test Site	Microbiology	Fecal Coliforms-Membrane Filter	3	B	cfu/100 mL	2	2
6/25/2013 11:25	Test Site	Metals	Sodium	6.8		mg/L	0.5	2
6/25/2013 11:25	Test Site	Metals	Arsenic	0.56	I	ug/L	0.25	1
6/25/2013 11:25	Test Site	Metals	Chromium	0.92	I	ug/L	0.3	1.2
6/25/2013 11:25	Test Site	Metals	Potassium	1.7		mg/L	0.3	1.2
6/25/2013 11:25	Test Site	Metals	Magnesium	2.20		mg/L	0.04	0.16
6/25/2013 11:25	Test Site	Metals	Aluminum	590		ug/L	60	240
6/25/2013 11:25	Test Site	Metals	Silver	0.025	U	ug/L	0.025	0.1
6/25/2013 11:25	Test Site	Metals	Cadmium	0.050	U	ug/L	0.05	0.2
6/25/2013 11:25	Test Site	Metals	Nickel	0.52	I	ug/L	0.25	1
6/25/2013 11:25	Test Site	Metals	Selenium	0.21	I	ug/L	0.2	0.8
6/25/2013 11:25	Test Site	Metals	Calcium	14.8		mg/L	0.075	0.3
6/25/2013 11:25	Test Site	Metals	Lead	0.40	I	ug/L	0.2	0.8
6/25/2013 11:25	Test Site	Metals	Iron	730		ug/L	30	120
6/25/2013 11:25	Test Site	Metals	Copper	0.95	I	ug/L	0.5	1
6/25/2013 11:25	Test Site	Metals	Zinc	5.0	U	ug/L	5	20
6/25/2013 11:25	Test Site	Nutrients	O-Phosphate-P	0.004	I	mg P/L	0.004	0.01
6/25/2013 11:25	Test Site	Nutrients	Ammonia-N	0.024		mg N/L	0.002	0.005
6/25/2013 11:25	Test Site	Nutrients	Sulfate	7.4		mg SO4/L	0.2	0.5
6/25/2013 11:25	Test Site	Nutrients	Organic Carbon	3.6		mg C/L	0.5	1
6/25/2013 11:25	Test Site	Nutrients	Kjeldahl Nitrogen	0.35		mg N/L	0.08	0.2
6/25/2013 11:25	Test Site	Nutrients	NO2NO3-N	0.30		mg N/L	0.004	0.01
6/25/2013 11:25	Test Site	Nutrients	Alkalinity	43		mg CaCO3/L	0.65	2.5
6/25/2013 11:25	Test Site	Nutrients	TSS	15		mg/L	2	10
6/25/2013 11:25	Test Site	Nutrients	Turbidity	10	A	NTU	0.1	0.1
6/25/2013 11:25	Test Site	Nutrients	Color (true)	22		PCU	2.5	6
6/25/2013 11:25	Test Site	Nutrients	Chloride	5.9		mg Cl/L	0.2	0.5
6/25/2013 11:25	Test Site	Nutrients	Fluoride	0.081	I	mg F/L	0.035	0.1
6/25/2013 11:25	Test Site	Nutrients	Total-P	0.038		mg P/L	0.002	0.005
6/25/2013 11:25	Test Site	Pesticides	Chlorpyrifos Ethyl	0.0096	U	ug/L	0.0096	0.038
6/25/2013 11:25	Test Site	Pesticides	Fonofos	0.0096	U	ug/L	0.0096	0.038
6/25/2013 11:25	Test Site	Pesticides	Metalaxyl	0.038	U	ug/L	0.038	0.15
6/25/2013 11:25	Test Site	Pesticides	Hexazinone	0.029	UJ	ug/L	0.029	0.12
6/25/2013 11:25	Test Site	Pesticides	Bromacil	0.038	U	ug/L	0.038	0.15
6/25/2013 11:25	Test Site	Pesticides	Phorate	0.0048	U	ug/L	0.0048	0.019
6/25/2013 11:25	Test Site	Pesticides	Parathion Methyl	0.0096	U	ug/L	0.0096	0.038
6/25/2013 11:25	Test Site	Pesticides	Diazinon	0.0096	U	ug/L	0.0096	0.038
6/25/2013 11:25	Test Site	Pesticides	Ethoprop	0.0048	U	ug/L	0.0048	0.019

Date_Sampled	UDL	SCH_Group	Component	Value	Qualifier	Units	MDL	PQL
6/25/2013 11:25	Test Site	Pesticides	Norflurazon	0.029	U	ug/L	0.029	0.12
6/25/2013 11:25	Test Site	Pesticides	Azinphos Methyl	0.019	U	ug/L	0.019	0.077
6/25/2013 11:25	Test Site	Pesticides	Mevinphos	0.0096	U	ug/L	0.0096	0.038
6/25/2013 11:25	Test Site	Pesticides	Metolachlor	0.058	U	ug/L	0.058	0.23
6/25/2013 11:25	Test Site	Pesticides	Butylate	0.019	U	ug/L	0.019	0.077
6/25/2013 11:25	Test Site	Pesticides	Alachlor	0.058	UJ	ug/L	0.058	0.23
6/25/2013 11:25	Test Site	Pesticides	Malathion	0.0096	U	ug/L	0.0096	0.038
6/25/2013 11:25	Test Site	Pesticides	Chlorpyrifos Methyl	0.0096	U	ug/L	0.0096	0.038
6/25/2013 11:25	Test Site	Pesticides	Simazine	0.054		ug/L	0.0096	0.038
6/25/2013 11:25	Test Site	Pesticides	Fenamiphos	0.029	U	ug/L	0.029	0.12
6/25/2013 11:25	Test Site	Pesticides	Atrazine	0.045		ug/L	0.0096	0.038
6/25/2013 11:25	Test Site	Pesticides	Prometryn	0.019	U	ug/L	0.019	0.077
6/25/2013 11:25	Test Site	Pesticides	Parathion Ethyl	0.019	U	ug/L	0.019	0.077
6/25/2013 11:25	Test Site	Pesticides	Sucralose	0.68	A	ug/L	0.01	0.05
6/25/2013 11:25	Test Site	Pesticides	Naled	0.038	UJ	ug/L	0.038	0.15
6/25/2013 11:25	Test Site	Pesticides	Ametryn	0.0096	U	ug/L	0.0096	0.038
6/25/2013 11:25	Test Site	Pesticides	Metribuzin	0.019	U	ug/L	0.019	0.077
6/25/2013 11:25	Test Site	Pesticides	Ethion	0.0096	U	ug/L	0.0096	0.038
6/25/2013 11:25	Test Site	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Acenaphthene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Acenaphthylene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Anthracene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Diethyl phthalate	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	2,6-Dinitrotoluene	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	2-Chlorophenol	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.9	U	ug/L	2.9	12
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Chrysene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Hexachlorobutadiene	2.9	U	ug/L	2.9	12
6/25/2013 11:25	Test Site	Priority Organic Pollutants	2,4-Dimethylphenol	9.7	U	ug/L	9.7	39
6/25/2013 11:25	Test Site	Priority Organic Pollutants	2-Chloronaphthalene	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	2-Nitrophenol	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Benzidine	97	U	ug/L	97	390
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Benzo(k)fluoranthene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Di-n-octyl phthalate	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Hexachloroethane	2.9	U	ug/L	2.9	12
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Isophorone	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Nitrobenzene	1.9	U	ug/L	1.9	7.8
6/25/2013 11:25	Test Site	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.97	U	ug/L	0.97	3.9

Date_Sampled	UDL	SCH_Group	Component	Value	Qualifier	Units	MDL	PQL
6/25/2013 11:25	Test Site	Priority Organic Pollutants	2,4-Dinitrophenol	15	U	ug/L	15	58
6/25/2013 11:25	Test Site	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Benzo(b)fluoranthene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Phenanthrene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Pyrene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	1,4-Dioxane	0.043	I	ug/L	0.02	0.1
6/25/2013 11:25	Test Site	Priority Organic Pollutants	2,4-Dinitrotoluene	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Benzo(a)pyrene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Butyl benzyl phthalate	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Fluoranthene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Hexachlorobenzene	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9	U	ug/L	1.9	7.8
6/25/2013 11:25	Test Site	Priority Organic Pollutants	4-Nitrophenol	15	U	ug/L	15	58
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Benzo(a)anthracene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Naphthalene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Pentachlorophenol	2.9	U	ug/L	2.9	12
6/25/2013 11:25	Test Site	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9	U	ug/L	2.9	12
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	1.9	U	ug/L	1.9	7.8
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Di-n-butyl phthalate	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.9	U	ug/L	2.9	12
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.9	U	ug/L	2.9	12
6/25/2013 11:25	Test Site	Priority Organic Pollutants	2,4-Dichlorophenol	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	3,3'-Dichlorobenzidine	39	U	ug/L	39	160
6/25/2013 11:25	Test Site	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Dimethyl phthalate	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Fluorene	0.19	U	ug/L	0.19	0.78
6/25/2013 11:25	Test Site	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9	U	ug/L	1.9	7.8
6/25/2013 11:25	Test Site	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9	U	ug/L	1.9	7.8
6/25/2013 11:25	Test Site	Priority Organic Pollutants	Phenol	0.97	U	ug/L	0.97	3.9
6/25/2013 11:25	Test Site	Field Parameter	pH	6.69				
6/25/2013 11:25	Test Site	Field Parameter	Temperature	28.31		C		
6/25/2013 11:25	Test Site	Field Parameter	Sample Depth	0.2		m		
6/25/2013 11:25	Test Site	Field Parameter	Dissolved Oxygen	6.10		mg/L		
6/25/2013 11:25	Test Site	Field Parameter	Specific Conductance	128		umhos/cm		
6/24/2013 11:22	Blank	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	0.20	U	mg/L	0.2	2
6/24/2013 11:22	Blank	Metals	Cadmium	0.050	U	ug/L	0.05	0.2
6/24/2013 11:22	Blank	Metals	Silver	0.025	U	ug/L	0.025	0.1

Date_Sampled	UDL	SCH_Group	Component	Value	Qualifier	Units	MDL	PQL
6/24/2013 11:22	Blank	Metals	Aluminum	60	U	ug/L	60	240
6/24/2013 11:22	Blank	Metals	Lead	0.20	U	ug/L	0.2	0.8
6/24/2013 11:22	Blank	Metals	Nickel	0.25	U	ug/L	0.25	1
6/24/2013 11:22	Blank	Metals	Copper	0.50	U	ug/L	0.5	1
6/24/2013 11:22	Blank	Metals	Chromium	0.30	U	ug/L	0.3	1.2
6/24/2013 11:22	Blank	Metals	Arsenic	0.25	U	ug/L	0.25	1
6/24/2013 11:22	Blank	Metals	Calcium	0.075	U	mg/L	0.075	0.3
6/24/2013 11:22	Blank	Metals	Potassium	0.30	U	mg/L	0.3	1.2
6/24/2013 11:22	Blank	Metals	Zinc	5.0	U	ug/L	5	20
6/24/2013 11:22	Blank	Metals	Magnesium	0.040	U	mg/L	0.04	0.16
6/24/2013 11:22	Blank	Metals	Selenium	0.20	U	ug/L	0.2	0.8
6/24/2013 11:22	Blank	Metals	Sodium	0.50	U	mg/L	0.5	2
6/24/2013 11:22	Blank	Metals	Iron	30	U	ug/L	30	120
6/24/2013 11:22	Blank	Nutrients	Kjeldahl Nitrogen	0.080	U	mg N/L	0.08	0.2
6/24/2013 11:22	Blank	Nutrients	Sulfate	0.20	U	mg SO4/L	0.2	0.5
6/24/2013 11:22	Blank	Nutrients	Total-P	0.002	U	mg P/L	0.002	0.005
6/24/2013 11:22	Blank	Nutrients	Color (true)	2.5	U	PCU	2.5	6
6/24/2013 11:22	Blank	Nutrients	O-Phosphate-P	0.004	U	mg P/L	0.004	0.01
6/24/2013 11:22	Blank	Nutrients	Ammonia-N	0.002	U	mg N/L	0.002	0.005
6/24/2013 11:22	Blank	Nutrients	Organic Carbon	0.50	U	mg C/L	0.5	1
6/24/2013 11:22	Blank	Nutrients	NO2NO3-N	0.004	U	mg N/L	0.004	0.01
6/24/2013 11:22	Blank	Nutrients	Alkalinity	0.65	U	mg CaCO3/L	0.65	2.5
6/24/2013 11:22	Blank	Nutrients	Fluoride	0.035	U	mg F/L	0.035	0.1
6/24/2013 11:22	Blank	Nutrients	Chloride	0.20	U	mg Cl/L	0.2	0.5
6/24/2013 11:22	Blank	Pesticides	Mevinphos	0.0094	U	ug/L	0.0094	0.038
6/24/2013 11:22	Blank	Pesticides	Simazine	0.0094	U	ug/L	0.0094	0.038
6/24/2013 11:22	Blank	Pesticides	Chlorpyrifos Ethyl	0.0094	U	ug/L	0.0094	0.038
6/24/2013 11:22	Blank	Pesticides	Ethoprop	0.0047	U	ug/L	0.0047	0.019
6/24/2013 11:22	Blank	Pesticides	Phorate	0.0047	U	ug/L	0.0047	0.019
6/24/2013 11:22	Blank	Pesticides	Butylate	0.019	U	ug/L	0.019	0.075
6/24/2013 11:22	Blank	Pesticides	Chlorpyrifos Methyl	0.0094	U	ug/L	0.0094	0.038
6/24/2013 11:22	Blank	Pesticides	Fonofos	0.0094	U	ug/L	0.0094	0.038
6/24/2013 11:22	Blank	Pesticides	Malathion	0.0094	U	ug/L	0.0094	0.038
6/24/2013 11:22	Blank	Pesticides	Sucralose	0.010	U	ug/L	0.01	0.05
6/24/2013 11:22	Blank	Pesticides	Metalaxyl	0.038	U	ug/L	0.038	0.15
6/24/2013 11:22	Blank	Pesticides	Diazinon	0.0094	U	ug/L	0.0094	0.038
6/24/2013 11:22	Blank	Pesticides	Metolachlor	0.057	U	ug/L	0.057	0.23
6/24/2013 11:22	Blank	Pesticides	Hexazinone	0.028	UJ	ug/L	0.028	0.11
6/24/2013 11:22	Blank	Pesticides	Bromacil	0.038	U	ug/L	0.038	0.15
6/24/2013 11:22	Blank	Pesticides	Ametryn	0.0094	U	ug/L	0.0094	0.038

Date_Sampled	UDL	SCH_Group	Component	Value	Qualifier	Units	MDL	PQL
6/24/2013 11:22	Blank	Pesticides	Azinphos Methyl	0.019	U	ug/L	0.019	0.075
6/24/2013 11:22	Blank	Pesticides	Fenamiphos	0.028	U	ug/L	0.028	0.11
6/24/2013 11:22	Blank	Pesticides	Parathion Methyl	0.0094	U	ug/L	0.0094	0.038
6/24/2013 11:22	Blank	Pesticides	Ethion	0.0094	U	ug/L	0.0094	0.038
6/24/2013 11:22	Blank	Pesticides	Prometryn	0.019	U	ug/L	0.019	0.075
6/24/2013 11:22	Blank	Pesticides	Metribuzin	0.019	U	ug/L	0.019	0.075
6/24/2013 11:22	Blank	Pesticides	Atrazine	0.0094	U	ug/L	0.0094	0.038
6/24/2013 11:22	Blank	Pesticides	Naled	0.038	UJ	ug/L	0.038	0.15
6/24/2013 11:22	Blank	Pesticides	Norflurazon	0.028	U	ug/L	0.028	0.11
6/24/2013 11:22	Blank	Pesticides	Alachlor	0.057	UJ	ug/L	0.057	0.23
6/24/2013 11:22	Blank	Pesticides	Parathion Ethyl	0.019	U	ug/L	0.019	0.075
6/24/2013 11:22	Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	43	U	ug/L	43	170
6/24/2013 11:22	Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Di-n-octyl phthalate	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	Fluoranthene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Phenol	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	2,4-Dimethylphenol	11	U	ug/L	11	43
6/24/2013 11:22	Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	2-Chloronaphthalene	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Naphthalene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	4-Nitrophenol	16	U	ug/L	16	64
6/24/2013 11:22	Blank	Priority Organic Pollutants	Fluorene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	1,4-Dioxane	0.38		ug/L	0.02	0.1
6/24/2013 11:22	Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	2,4-Dinitrophenol	16	U	ug/L	16	64
6/24/2013 11:22	Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	2.1	U	ug/L	2.1	8.5
6/24/2013 11:22	Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Diethyl phthalate	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	2.1	U	ug/L	2.1	8.5
6/24/2013 11:22	Blank	Priority Organic Pollutants	2-Nitrophenol	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	Acenaphthene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Chrysene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Hexachlorobenzene	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	Hexachloroethane	3.2	U	ug/L	3.2	13

Date_Sampled	UDL	SCH_Group	Component	Value	Qualifier	Units	MDL	PQL
6/24/2013 11:22	Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	2.1	U	ug/L	2.1	8.5
6/24/2013 11:22	Blank	Priority Organic Pollutants	Phenanthrene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Anthracene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Benzidine	110	U	ug/L	110	430
6/24/2013 11:22	Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	3.2	U	ug/L	3.2	13
6/24/2013 11:22	Blank	Priority Organic Pollutants	Hexachlorobutadiene	3.2	U	ug/L	3.2	13
6/24/2013 11:22	Blank	Priority Organic Pollutants	Isophorone	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	Nitrobenzene	2.1	U	ug/L	2.1	8.5
6/24/2013 11:22	Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	2-Chlorophenol	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	2.1	U	ug/L	2.1	8.5
6/24/2013 11:22	Blank	Priority Organic Pollutants	Acenaphthylene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Butyl benzyl phthalate	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	3.2	U	ug/L	3.2	13
6/24/2013 11:22	Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Pyrene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	2,4-Dichlorophenol	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.2	U	ug/L	3.2	13
6/24/2013 11:22	Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.21	U	ug/L	0.21	0.85
6/24/2013 11:22	Blank	Priority Organic Pollutants	Di-n-butyl phthalate	1.1	I	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	Dimethyl phthalate	1.1	U	ug/L	1.1	4.3
6/24/2013 11:22	Blank	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	3.2	U	ug/L	3.2	13
6/24/2013 11:22	Blank	Priority Organic Pollutants	Pentachlorophenol	3.2	U	ug/L	3.2	13

Appendix G-1

Benthic macroinvertebrates collapsed taxa list and density (average number of individuals/m^2 rounded to the nearest individual, n = 3 samples) from Hester-Dendy artificial substrates incubated for 28 days upstream and downstream of the Wewahithcka WWTP and collected on 6/25/13. See SOP LT 7100 sect. 4.2.1 for method on collapsing taxa.

	Control Site	Test Site
Arthropoda		
Crustacea		
Amphipoda		
Corophiidae	109	44
Decapoda		
Cambaridae	2	-
Insecta		
Coleoptera		
Ancyronyx variegatus	4	-
Dineutus sp.	-	2
Macronychus glabratus	6	4
Stenelmis antennalis	15	16
Stenelmis decorata	92	-
Stenelmis lignicola	15	-
Diptera		
Ablabesmyia rhamphe grp.	27	23
Chaoborus sp.	2	4
Chironomus sp.	-	2
Cladotanytarsus sp. F Epler	2	-
Cricotopus or orthocladius sp.	4	6
Cryptochironomus sp.	4	2
Dicrotendipes modestus	2	2
Endochironomus sp.	2	-
Glyptotendipes sp.	2	-
Harnischia sp.	2	-
Hemerodromia sp.	30	88
Kribiodorum perpulchrum	8	14
Labrundinia sp.	-	2
Nanocladius sp.	21	10
Palpomyia/bezzia grp.	10	34
Parachironomus carinatus	-	2
Paracladopelma sp.	4	-
Pentaneura inconspicua	23	4
Polypedilum fallax	2	6
Polypedilum flavum	161	204
Polypedilum halterale grp.	10	4

Appendix G-1 (continued)

Polypedilum illinoense grp.	2	4
Polypedilum scalaenum grp.	74	59
Rheotanytarsus exiguus grp.	17	19
Rheotanytarsus pellucidus	-	2
Stenochironomus sp.	12	53
Tanytarsus sp. A Epler	10	10
Tanytarsus sp. C Epler	2	-
Thienemanniella lobapodema	17	45
Thienemannimyia grp.	41	43
Tribelos fuscicornis	17	23
Xenochironomus xenolabis	2	-
Ephemeroptera		
Baetis intercalaris	-	18
Caenis sp.	-	86
Caenis hilaris	274	-
Isonychia sp.	165	20
Labiobaetis ephippiatus	11	-
Labiobaetis propinquus	5	-
Maccaffertium sp.	-	18
Maccaffertium exiguum	40	-
Maccaffertium mexicanum integrum	9	-
Maccaffertium smithae	3	-
Stenacron sp.	8	12
Tricorythodes albilineatus	71	85
Megaloptera		
Corydalus cornutus	23	31
Nigronia sp.	3	3
Odonata		
Libellulidae	10	6
Plecoptera		
Acroneuria arenosa/evoluta	50	26
Neoperla carlsoni	-	2
Paragnetina fumosa	2	-
Paragnetina kansensis	2	-
Trichoptera		
Cheumatopsyche	14	5
Cyrnellus fraternus	88	46
Hydropsyche incommoda	54	47
Hydropsyche mississippiensis	9	-
Hydroptila sp.	8	117
Macrostemum carolina	647	416
Nectopsyche candida	12	8
Nectopsyche exquisita	-	4

Appendix G-1 (continued)

Neotrichia sp.	32	56
Neureclipsis melco	1,570	998
Oecetis sp.	-	6
Oecetis persimilis	8	-
Oxyethira sp.	2	-
Mollusca		
Bivalvia		
Corbicula fluminea	23	8
Sphaeriidae (mollusca)	3	12
Gastropoda		
Ancylidae	2	10
Physa sp.	-	2
Pleurocera sp.	2	-

Appendix G-2

Benthic macroinvertebrates taxa list and counts (number of individuals counted) collected from Hester-Dendy artificial substrates (n= 3 samples) incubated upstream and downstream of the Wewahitchka WWTP for 28 days and collected on 6/25/13.

	Control Site	Test Site
Arthropoda		
Crustacea		
Amphipoda		
Corophiidae	55	22
Decapoda		
Cambaridae	1	-
Insecta		
Coleoptera		
Ancyronyx variegatus	2	-
Dineutus sp.	-	1
Elmidae	1	-
Macronychus glabratus	3	2
Stenelmis sp.	53	5
Stenelmis antennalis	1	3
Stenelmis decorata	6	-
Stenelmis lignicola	1	-
Diptera		
Ablabesmyia rhamphe grp.	13	11
Chaoborus sp.	1	2
Chironomidae	9	8
Chironomus sp.	-	1
Cladotanytarsus sp. F Epler	1	-
Cricotopus or orthocladius sp.	2	3
Cryptochironomus sp.	2	1
Dicrotendipes modestus	1	1
Endochironomus sp.	1	-
Glyptotendipes sp.	1	-
Harnischia sp.	1	-
Hemerodromia sp.	15	44
Kribiodorum perpulchrum	4	7
Labrundinia sp.	-	1
Nanocladius sp.	10	5
Palpomyia/bezzia grp.	5	17
Parachironomus carinatus	-	1
Paracladopelma sp.	2	-
Pentaneura inconspicua	11	2

Appendix G-2 (continued)

Polypedilum fallax	1	3
Polypedilum flavum	78	100
Polypedilum halterale grp.	5	2
Polypedilum illinoense grp.	1	2
Polypedilum scalaenum grp.	36	29
Rheotanytarsus exiguus grp.	8	9
Rheotanytarsus pellucidus	-	1
Stenochironomus sp.	6	26
Tanytarsus sp. A Epler	5	5
Tanytarsus sp. C Epler	1	-
Thienemanniella sp.	1	16
Thienemanniella lobapodema	7	6
Thienemannimyia grp.	20	21
Tribelos fuscicornis	8	11
Xenochironomus xenolabis	1	-
Ephemeroptera		
Baetidae	2	8
Baetis intercalaris	-	1
Caenis sp.	73	43
Caenis hilaris	65	-
Heptageniidae	8	2
Isonychia sp.	83	10
Labiobaetis ephippiatus	4	-
Labiobaetis propinquus	2	-
Maccaffertium sp.	2	8
Maccaffertium exiguum	13	-
Maccaffertium mexicanum integrum	3	-
Maccaffertium smithae	1	-
Stenacron sp.	3	5
Tricorythodes albilineatus	36	43
Megaloptera		
Corydalidae	3	-
Corydalus cornutus	9	10
Megaloptera	-	6
Nigronia sp.	1	1
Odonata		
Libellulidae	5	3
Plecoptera		
Acroneuria sp.	19	9
Acroneuria arenosa/evoluta	6	3
Neoperla carlsoni	-	1
Paragnetina fumosa	1	-
Paragnetina kansensis	1	-

Appendix G-2 (continued)

Perlidae	-	1
Trichoptera		
Cheumatopsyche sp.	7	2
Cyrnellus fraternus	43	18
Hydropsyche sp.	3	18
Hydropsyche incommoda	24	2
Hydropsyche mississippiensis	4	-
Hydropsychidae	7	33
Hydroptila sp.	4	58
Hydroptilidae	-	1
Macrostemum carolina	317	179
Nectopsyche sp.	5	3
Nectopsyche candida	1	2
Nectopsyche exquisita	-	1
Neotrichia sp.	16	28
Neureclipsis sp.	581	337
Neureclipsis melco	185	54
Oecetis sp.	2	3
Oecetis persimilis	2	-
Oxyethira sp.	1	-
Polycentropodidae	20	114
Undetermined Trichoptera	10	5
Mollusca		
Bivalvia		
Corbicula fluminea	8	2
Sphaeriidae(mollusca)	1	3
Undetermined Bivalvia	4	5
Gastropoda		
Ancylidae	1	5
Physa sp.	-	1
Pleurocera sp.	1	-

EPA End Sheet

The Priority Pollutants Analysis of the Wewahitchka WWTP effluent sampled on June 24-25, 2013 NPDES #FL0020125

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 FL0020125 11	12 130624	# X	# S	# 1

Remarks

#

Biological Analyses of the Wewahitchka WWTP effluent sampled on June 25, 2013, NPDES #FL0020125

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 FL0020125 11	12 130625	# S	# S	# 1

Remarks

#