

Biological Assessment of

Pensacola Beach WWTF

Escambia County

NPDES #FL0024007

Sampled June 15, 2009

February 2010

Biology Section

Bureau of Laboratories

Division of Environmental Assessment and Restoration

Quality Manual No. 870346G
NELAC Certification No. E31780

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Fifth Year Inspection Summary

The Fifth Year Inspection of the Pensacola Beach Wastewater Treatment Facility conducted on June 15, 2009 produced the following notable results.

In the effluent, no organic constituents were detected and metals were detected at levels that complied with effluent permit limits and Class III Marine Water Quality Criterion (62-302.530 F.A.C.).

Sediment metal analysis shows a gradient of increasing concentrations from west to east. At the site 400 ft east of the discharge pipe (400 East Site), sediment concentrations of chromium III, copper, and nickel exceeded the Threshold Effects Level (TEL) for sediment metals (MacDonald, 1994). Higher sediment metal levels at the 400 East Site may be due to greater binding affinity of metals to smaller sediment particle sizes, which were in much greater proportion at the 400 East Site compared to the sites 200 ft east (200 East Site), 200 ft west (200 West Site), and 400 ft west (400 West Site) of the discharge. If of interest, determining the spatial variability and the sources of sediment metals in the area would warrant a separate study.

The No Observed Effect Concentration (NOEC) for survival and growth of the fish, *Pimephales promelas*, and survival and reproduction of the water flea, *Ceriodaphnia dubia*, during the 7 day chronic screening bioassays was 100%, and therefore complied with effluent permit limits.

Dissolved oxygen (≤ 0.5 mg/L) near the bottom, 4.5 m deep, at all four receiving water sites did not meet the minimum Class III Marine Water Quality Criterion (62-302.530(30) F.A.C.). Reduced mixing due to stratification in the water column could result in lower dissolved oxygen on the bottom. All other general physical-chemical and microbiological measurements complied with water quality criteria and effluent permit limits. Based on analytical chemistry and supported by chlorophyll *a* and AGP results, nutrient enrichment was not detected in the receiving water despite comparatively elevated levels of nitrogen and phosphorus in the effluent.

The benthic invertebrate community was depauperate at all 4 receiving water sites, and the diversity scores may be negatively biased due to calculation based on fewer than 300 individuals (Lande 1996). Extremely low levels of dissolved oxygen, lack of habitat, and depth of the water are likely causes for the lack of a diverse benthic community.

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.

Facility Overview

The Pensacola Beach Wastewater Treatment Facility is an Advanced Domestic Wastewater Treatment (AWT) facility. The effluent discharge pipe extends approximately 400 ft offshore and discharges through a 70 ft long, closed end diffuser into a portion of Santa Rosa Sound that is classified as Outstanding Florida Waters due to its being within the boundaries of the Gulf Islands National Seashore (see map Appendix A). The design flow of the wastewater system is 2.4 million gallons per day (MGD) (monthly average daily flow). The total flow to Santa Rosa Sound on the day the samples were collected was 0.915 MGD. The mean flow for the previous 12 months (6/2008 to 5/2009) was 0.8439 MGD (Northwest District Office, Pensacola).

The facility was issued Consent Order 06-1522 on 9/20/07 for discharge of approximately 48,000 gallons of un-disinfected AWT effluent over seven separate occasions during 2005 from the facility to Santa Rosa Sound and failure to conduct monthly ambient water quality sampling for a number of surface water monitoring locations. The facility is currently in compliance while completing the in-kind project of converting the disinfection process from ultra violet radiation to sodium hypochlorite. See the Facility Summary (Appendix B) for a description of the facility, a summary of permit limits, and consent order (CO) and discharge monitoring report (DMR) information.

Methods

The purpose of this investigation was to determine the discharger's effects on the biota of the receiving waters. During reconnaissance, rhodamine dye was pumped into the effluent at the Pensacola Beach WWTF and fluorescence was detected with a YSI rhodamine dye probe at the surface of the water near the point of discharge (POD) pipeline. The path of the effluent plume could not be followed or mapped likely due to dilution and turbulence caused by the diffuser. The Pensacola Beach WWTF was sampled on June 15, 2009. Chemical and biological comparisons were made along a gradient at 200 foot intervals at 2 sites west and 2 sites east of the POD. Sites were sampled on an outgoing tide (water flowing west); the effluent pipe's diffuser boil could not be seen at any time. It is our understanding that the plume can only be seen on the calmest days. Both effluent composite and grab samples were taken from monitoring station EFF-01.

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

Samples were collected by Chad Nowling, Jonathon Colmer, Nathan Mulkey, and Rick Abad (NW District Office, Pensacola). Analyses were performed by the FDEP Central Laboratory in Tallahassee, Water and Air, Inc. in Gainesville, and the University of West Florida in Pensacola. The report was reviewed by District representatives and the Point Source Studies Review Committee (Michael Tanski and Nancy Ross).

Results and Discussion

Organic Constituents - Water (See Table 1 and Appendix E)

- No organic constituents were detected in the effluent or the receiving waters.

Metals - Water (See Table 1 and Appendix E)

- Effluent arsenic, copper, nickel, and zinc were detected at levels that complied with Class III Marine Water Quality Criteria (62-302.530 F.A.C.) and effluent permit limits.
- Effluent iron was present at a level between the minimum detection limit (MDL) and practical quantitation limit (PQL) and within the water quality criterion.

- 400 West, 200 West, and 200 East Site arsenic, chromium, and iron, and 400 East Site chromium and iron were present at levels between the MDL and PQL and within the water quality criteria.
- Metals analyzed and not specifically mentioned above were not detected in effluent or receiving water samples.

Whole Effluent Toxicity Test (See Table 1 and Appendices E, F, and G)

- Whole Effluent Toxicity tests were performed June 16 through June 22, 2009.
- The effluent sample NOEC for survival and growth of the fish, *Pimephales promelas*, and for survival and reproduction of the water flea, *Ceriodaphnia dubia*, during the 7 day chronic screening bioassays were 100%, and therefore complied with effluent permit limits.

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

- Rip-rap and vertical seawalls line the shores; stormwater runoff is likely to enter the system. Grass beds are present closer to shore. The bottom sediments are categorized as sand and mud.
- Dissolved oxygen (mg/L) and pH (Standard Units) of the effluent complied with Class III Marine Water Quality Criteria (62-302.530 F.A.C.) and effluent permit limits.
- Dissolved oxygen (mg/L) near the bottom, 4.5 m deep, at all four receiving water sites was less than or equal to 0.5 mg/L, which does not meet the minimum Class III Marine Water Quality Criterion (62-302.530(30) F.A.C.). The low DO indicates an almost anoxic benthic environment. Stratification in the water column caused by denser, higher salinity water on the bottom with less dense, less saline overlying water, could result in less mixing and low bottom dissolved oxygen levels. The surface and mid depth dissolved oxygen measurements were above 6.4 mg/L. Note that the YSI meter successfully passed post-sampling verification for all parameters and it was confirmed that the probe did not touch the bottom during measurements.
- Vertical physical and chemical measurements indicate that conductivities and salinities at the 4.5m depths are twice those near the surface which indicates that the freshwater effluent rises to and resides near the surface of the water column.
- Total residual chlorine (TRC) detected in the first bioassay sample in the bioassay laboratory (0.04 mg/L) was likely the result of interfering substances within the sample since the effluent is not chlorinated at this facility.
- Chlorophyll *a* content estimates algal biomass, and high algal biomass implies nutrient stress (Stevenson and Bahls, 1999). Chlorophyll *a* was detected in the effluent between the MDL and PQL and detected in the four receiving water sites at low levels.

Microbiology (See Table 1 and Appendix E)

- Enterococci and fecal coliform analyses were performed by the University of West Florida, Pensacola, Florida. Enterococci and fecal coliforms were not detected in the effluent. No samples were collected for the 4 receiving water sites.

Nutrients (See Table 1 and Appendices E)

- Nutrient concentrations in the effluent complied with permit limits. Nutrient concentrations were higher in the effluent than in the receiving waters. Nutrient concentrations were similar at all receiving water sites, indicating no detectable nutrient enrichment from the effluent in the receiving water samples.

Algal Growth Potential (See Tables 2a and 2b, and Appendix E)

- Algal growth potential (AGP) is a measure of nutrients available for algal growth (Miller et al. 1978). 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 AGP value in the effluent grab sample using the freshwater species *Pseudokirchneriella subcapitata* was approximately 5 times greater than the “problem” threshold value. Nutrient analysis was not performed on the effluent grab sample, therefore the nutrient values from the effluent composite sample were used to calculate the predicted AGP values, the inorganic N:P ratio, and the total N:P ratio. The analytical chemistry suggests that the effluent is nitrogen limited.

- Raschke and Shultz (1987) found that AGP values above 10.0 mg dry weight/L represent a “problem” threshold for marine receiving waters, implying nutrient enrichment. The AGP value in the salinity-adjusted effluent grab sample using the saltwater species *Dunaliella tertiolecta* was below the “problem” threshold value. One potential explanation for the lack of growth in the salinity-adjusted sample is precipitation of enough orthophosphate by the added salts that the sample became extremely phosphorus-limited (Manahan 1994).
- The AGP of the saltwater species *Dunaliella tertiolecta* in all four receiving water sites was undetected; and therefore, below the marine “problem” threshold. The ratio of inorganic nitrogen to ortho-phosphate in the receiving water suggests nitrogen limitation; whereas, the ratio of total nitrogen to total phosphorus suggests phosphorus limitation. The diffuser pipe appears to provide sufficient dilution such that no nutrient enrichment in this portion of Santa Rosa Sound related to the Pensacola Beach WWTF discharge can be detected.

Sediments (See Table 3, Figures 1 and 2, and Appendix E)

- The sediments were described on the Habitat Assessment as sand and mud. This description seems accurate for the 400 West, 200 West, and 200 East Sites which had similar sediment particle sizes and organic content. The 400 East sediments differed greatly from the other 3 sites, with 77% of particle size being silts and a 33% organic content compared with 8% to 18% silts and 1% organic content at the other sites. FDEP Northwest District is not aware of any sources that might cause such a difference in sediment composition. Sediment analysis was performed on a single grab sample from each site, which might explain some of the difference if there happened to be a pocket of silt which was sampled by chance.
- The pesticide DDT-p,p' was detected at the 200 East Site at a level between the MDL and PQL and below the Probable Effects Level (PEL) for sediment pesticides (MacDonald, 1994). This constituent was not detected at the other 3 sites.
- Sediment metal analysis shows an increasing gradient from west to east, with similar concentrations at the 400 and 200 West Sites, increasing to slightly higher concentrations at the 200 East Site and to much higher concentrations at the 400 East Site. Higher sediment metal levels at the 400 East Site are likely due to the greater binding affinity of metals to smaller sediment particle sizes (Horowitz, 1985). Metals could be precipitating out of the effluent stream and would likely have a chance to reach the bottom farther from the upwelling near the point of discharge. FDEP Northwest District is not aware of any sources of metals in the Sound other than the Pensacola Beach facility. The combination of tides, prevailing winds, and substrate composition that allows for greater binding of metals relative to the other sites could possibly produce the graded sediment metal concentrations. The analytical chemistry for this inspection indicates compliance of the effluent with water metals limits. If of interest, determining the spatial variability and the sources of sediment metals in the area would warrant a separate study.
- 400 East Site concentrations of chromium III, copper, and nickel exceeded the Threshold Effects Level (TEL) for sediment metals (MacDonald, 1994). Beryllium, cadmium, and lead were detected at the 400 East Site at levels below but approaching the TEL. Silver was detected at a level below the TEL and there is no TEL or Probable Effect Level (PEL) for beryllium.
- 400 and 200 West Site chromium and 200 East Site chromium, copper, lead, and nickel were detected at levels below the TEL.

- 400 and 200 West Site beryllium, copper, lead, and nickel, and 200 East Site beryllium, cadmium, and silver were detected at levels between the MDL and PQL and below the TEL. There is no TEL or PEL for beryllium.

Bioassessment - Macroinvertebrates (See Table 4 and Appendices I-1 and I-2)

- Water and Air Research, Inc in Gainesville, FL performed the macroinvertebrate identifications. Quantitative data from petite ponars indicate that the benthic macroinvertebrate community is depauperate at all four receiving water sites. The Shannon-Weaver Diversity scores may be negatively biased due to calculation based on fewer than 300 individuals (Lande 1996). Polychaete worms made up 77% to 97% of total individuals, and the polychaete *Paraprionospio* sp. was dominant at all 4 sites. There was a lower percentage of surface deposit and suspension feeders and a greater percentage of burrowing deposit feeders and predators at the 2 east sites than at the 2 west sites. There is no gradient pattern to benthic invertebrate diversity or community composition in relation to the discharge pipe, sediment particle size, or sediment metal concentrations. Based on physical and chemical vertical profile measurements, it is likely the benthic community is not exposed to high levels of effluent, which rises to and travels along the surface. Extremely low levels of dissolved oxygen, lack of habitat, and depth of the water are likely causes for the low diversity within the benthic community.

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Table 1. Effluent limits, Class III Criteria for predominantly marine waters and chemical, microbiological and toxicological data.

Pensacola Beach WWTF	Class III Criteria	Effluent Limits	Effluent - Composite	Effluent - Grab	400 West	200 West	200 East	400 East
Organic Constituents (µg/L)								
None Detected	-	-	-	None Detected				
Metals (µg/L unless otherwise noted)								
Aluminum	≤ 1500	-	60 U	-	60 U	60 U	60 U	60 U
Arsenic	≤ 50	-	1.59 A	-	0.98 I	0.79 I	0.83 I	0.75 U
Cadmium	≤ 8.8	-	0.03 U	-	0.09 U	0.09 U	0.09 U	0.09 U
Calcium (mg/L)	-	-	33 A	-	164	167	171 A	168
Chromium-III	-	-	0.3 U	-	1.6 I	1.7 I	1.6 I	1.6 I
Copper	≤ 3.7	≤ 3.7 s,p	1.61 A	-	1.5 U	1.5 U	1.5 U	1.5 U
Iron	≤ 300	-	110 I	-	90 I	96 I	110 I	100 I
Lead	≤ 8.5	-	0.2 U	-	0.6 U	0.6 U	0.6 U	0.6 U
Magnesium (mg/L)	-	-	17.2 A	-	538	542	554 A	545
Nickel	≤ 8.3	-	1.57 A	-	0.75 U	0.75 U	0.75 U	0.75 U
Selenium	≤ 71	-	0.2 U	-	0.6 U	0.6 U	0.6 U	0.6 U
Silver	≤ 2.3	≤ 2.3 s,p	0.025 U	-	0.075 U	0.075 U	0.075 U	0.075 U
Zinc	≤ 86	-	33 A	-	5 U	5 U	5 U	5 U
Nutrients (mg/L)								
Ortho-phosphate	-	-	0.75	-	0.004 U	0.008 U	0.008 U	0.008 U
Total Phosphorus	-	≤ 2.0 s,p	0.84 A	-	0.013 I	0.013 I	0.014 I	0.015 I
Total Ammonia	-	-	0.23	-	0.01 U	0.01 U	0.01 U	0.01 U
Un-ionized Ammonia	-	-	≤ 0.02 c	-	≤ 0.02 c	≤ 0.02 c	≤ 0.02 c	≤ 0.02 c
Nitrate and Nitrite	-	-	0.25	-	0.005 I	0.006 I	0.006 I	0.006 I
Total Kjeldahl Nitrogen	-	-	1.1	-	0.69	0.64	0.66	0.61
Organic Nitrogen	-	-	0.87 c	-	0.685 c	0.635 c	0.655 c	0.605 c
Total Nitrogen	-	≤ 6.0 s,p	1.35 c	-	0.695 c	0.646 c	0.666 c	0.616 c
General Physical and Chemical Parameters								
PChem Measurement Depth (m) - top	-	-	-	-	0.1	0.1	0.4	0.04
PChem Measurement Depth (m) - middle	-	-	-	-	2.2	2.1	2.3	2.3
PChem Measurement Depth (m) - bottom	-	-	-	-	4.4	4.3	4.5	4.5
Dissolved Oxygen (mg/L) - top	≥ 4.0	≥ 4.0 s,g	7.6 £	8.4	7.1	7.0	6.8	6.9
Dissolved Oxygen (mg/L) - middle	≥ 4.0	≥ 4.0 s,g	-	-	6.5	6.4	6.7	6.8
Dissolved Oxygen (mg/L) - bottom	≥ 4.0	≥ 4.0 s,g	-	-	0.2	0.5	0.4	0.1
pH (SU) - top	6.5 - 8.5	6.5 - 8.5	7.9 £	7.2	7.7	7.7	7.7	7.7
pH (SU) - middle	6.5 - 8.5	6.5 - 8.5	-	-	7.7	7.6	7.7	7.8
pH (SU) - bottom	6.5 - 8.5	6.5 - 8.5	-	-	7.2	7.3	7.1	7.0
Conductivity (µmhos/cm) - top	-	-	1170 £	1140	24,912	25,000	25,424	25,480
Conductivity (µmhos/cm) - middle	-	-	-	-	28,900	29,090	25,530	25,531
Conductivity (µmhos/cm) - bottom	-	-	-	-	42,180	41,782	40,670	37,000
Temperature (°C) - top	-	-	25.3 £	29.9	30.3	30.3	28.8	29.4
Temperature (°C) - middle	-	-	-	-	29.4	29.4	28.9	29.0
Temperature (°C) - bottom	-	-	-	-	26.4	26.7	26.8	26.7
Salinity - top	-	-	-	-	15.1	15.1	15.4	15.5
Salinity - middle	-	-	-	-	17.7	17.8	15.5	15.5
Salinity - bottom	-	-	-	-	27.1	26.8	25.9	23.2
Sample Depth (m)	-	-	-	-	0.15	0.15	0.15	0.15
Total Residual Chlorine (mg/L) - day 1 toxicity sample	≤ 0.01	-	< 0.04 £	-	-	-	-	-
Chlorophyll *a* (µg/L) - Corrected	-	-	-	0.65 I	4	4.4	5.2	4.6
Phaeophytin (µg/L)	-	-	-	0.4 U	0.4 U	0.46 I	0.72 I	0.47 I
Total Suspended Solids (mg/L)	-	≤ 10.0 s,p	4 U	-	11 I	4 I	11 I	6 I
CBOD, 5 day (mg/L), N - inhibited	-	≤ 10.0 s,p	1.2 I	-	1.3 I	2.1	1.3 I	1.1 I
Flow (MGD)	-	2.4 m	-	0.915	-	-	-	-
Hardness (mg $CaCO_3$)	-	-	153.23 c	-	-	-	-	-
Toxicity (7 day chronic screen, NOEC, % effluent)								
Bioassay - Water flea *(Ceriodaphnia dubia)* - survival	-	NOEC	100%	-	-	-	-	-
Bioassay - Water flea *(Ceriodaphnia dubia)* - reproduction	-	NOEC	100%	-	-	-	-	-
Bioassay - Fish *(Pimephales promelas)* - survival	-	NOEC	100%	-	-	-	-	-
Bioassay - Fish *(Pimephales promelas)* - growth	-	NOEC	100%	-	-	-	-	-
Microbiology (Number of colony forming units/100ml)								
Fecal Coliforms @	≤ 400s #	86 s	-	1 U	-	-	-	-
Enterococci @	-	-	-	2 B	-	-	-	-

Value exceeds the Class III Water Quality Criteria or permit limits

c - Value is calculated
m - monthly average daily flow
p - 24 hour flow-proportioned composite sample
s - Single sample
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
U - Material analyzed for but not detected; value reported is the method detection limit
NOEC - A no observed effect concentration less than 100% effluent will constitute a violation of this permit
@ - Fecal coliform and enterococci analysis performed by University of West Florida, Pensacola, FL
# - If 10 or fewer samples are taken within a month, the single sample limit is 400 CFU (62-302.530(6), F.A.C.)
£ - sample measurement taken in laboratory

Table 2a. Measured and predicted algal growth potential (AGP; mg dry weight/L) for total soluble inorganic nitrogen (TSIN) and total nitrogen (TN) limitation of the freshwater species *Pseudokirchneriella subcapitata* and ratios of nitrogen to phosphorus.

Pensacola Beach WWTF					
Location	AGP (measured)	Predicted AGP (TSIN) ± 20%	Predicted AGP (TN) ± 20%	Inorganic N:P ratio	Total N:P ratio
Effluent ^	24.5	18.2 ± 3.6	51.3 ± 10.3	0.6	1.6

^ - Effluent AGP from grab sample; predicted values and ratios based on effluent composite sample nutrient analysis

Table 2b. Measured and predicted algal growth potential (AGP; mg dry weight/L) of the saltwater species *Dunaliella tertiolecta* and ratios of nitrogen to phosphorus.

Pensacola Beach WWTF			
Location	AGP (measured)	Inorganic N:P ratio	Total N:P ratio
Effluent ^	3.7	0.6	1.6
400 West	3.0 AU	3.8	53.5
200 West	3.0 U	2.0	49.7
200 East	3.0 U	2.0	47.6
400 East	3.0 U	2.0	41.1

^ - Effluent AGP grab sample salinity adjusted to 7ppt; Effluent ratios based on effluent composite sample nutrient analysis

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

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

Table 3. Sediment Data for Pensacola Beach WWTF

Pensacola Beach WWTF	Sediment Quality Assessment Guidelines		400 West	200 West	200 East	400 East
	TEL	PEL				
Particle Size Distribution (percent volume < 2mm)						
< 0.063 mm	-	-	8.28 A	18.8	17.3	76.9
0.063 - 0.125 mm	-	-	0.9 A	2.17	2.42	14.3
0.125 - 0.25 mm	-	-	10.6 A	9.64	16.4	5.78
0.25 - 0.5 mm	-	-	58.7 A	48.2	52.5	2.72
0.5 - 2.0 mm	-	-	21.6 A	21.2	11.5	0.35
> 2.0 mm (percent dry weight)	-	-	1 K	1 K	1 K	1 K
Organic Content						
Organic Content (percent dry weight)	-	-	1 K	1.2	1.2	33
Organic Constituents (µg/kg)						
DDT-p,p'	1.19	4.77	1 U	1 U	2.6 I	1 U
Metals (mg/kg)						
Beryllium	-	-	0.041 I	0.046 I	0.16 I	1.61
Cadmium	0.676	4.21	0.049 U	0.049 U	0.058 I	0.46
Chromium III	52.3	160	2.26	2.03	6.76 A	68.5 *
Copper	18.7	108	0.82 I	0.75 I	2.8 A	26.4 *
Lead	30.2	112	0.8 I	0.87 I	3.1 A	29.9
Nickel	15.9	42.8	0.55 I	0.55 I	1.84 A	18.2 *
Silver	0.733	1.77	0.012 U	0.012 U	0.019 I	0.193

Sediment Quality Assessment Guidlines (MacDonald, 1994): TEL = Threshold Effects Level; PEL = Probable Effects Level

* Exceeds the threshold effects level from Sediment Quality Assessment Guidlines (MacDonald, 1994)

** Exceeds the probable effects level from Sediment Quality Assessment Guidlines (MacDonald, 1994)

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

K - Actual value is known to be less than value given

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

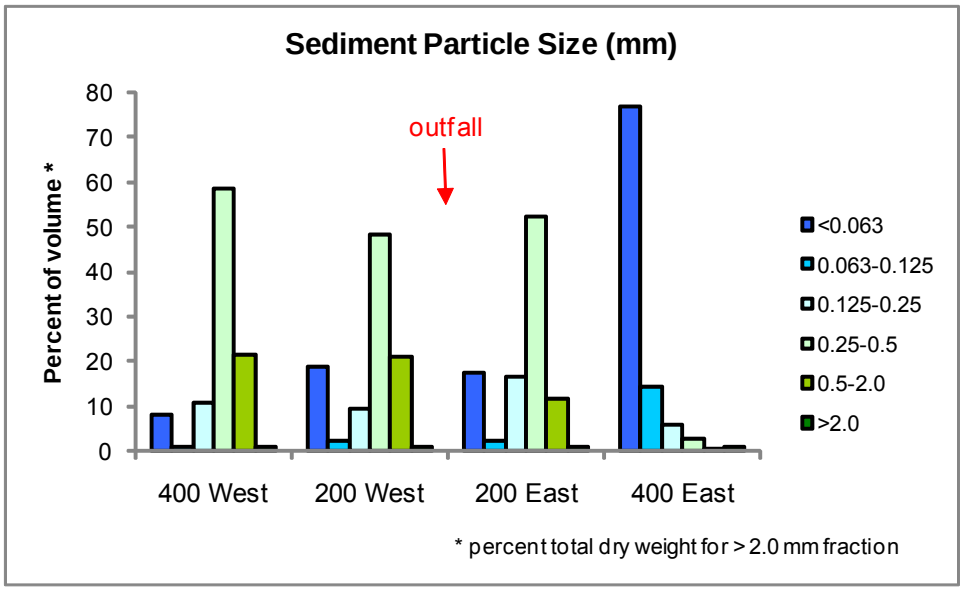


Figure 1. Sediment particle size (mm) for 4 sampling sites at Pensacola Beach WWTF, June 15, 2009.

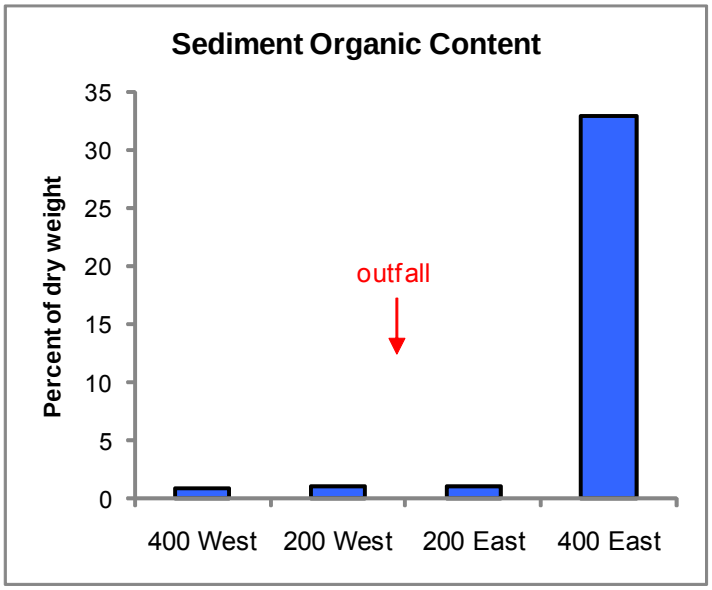


Figure 2. Sediment organic content for 4 sampling sites at Pensacola Beach WWTF, June 15, 2009.

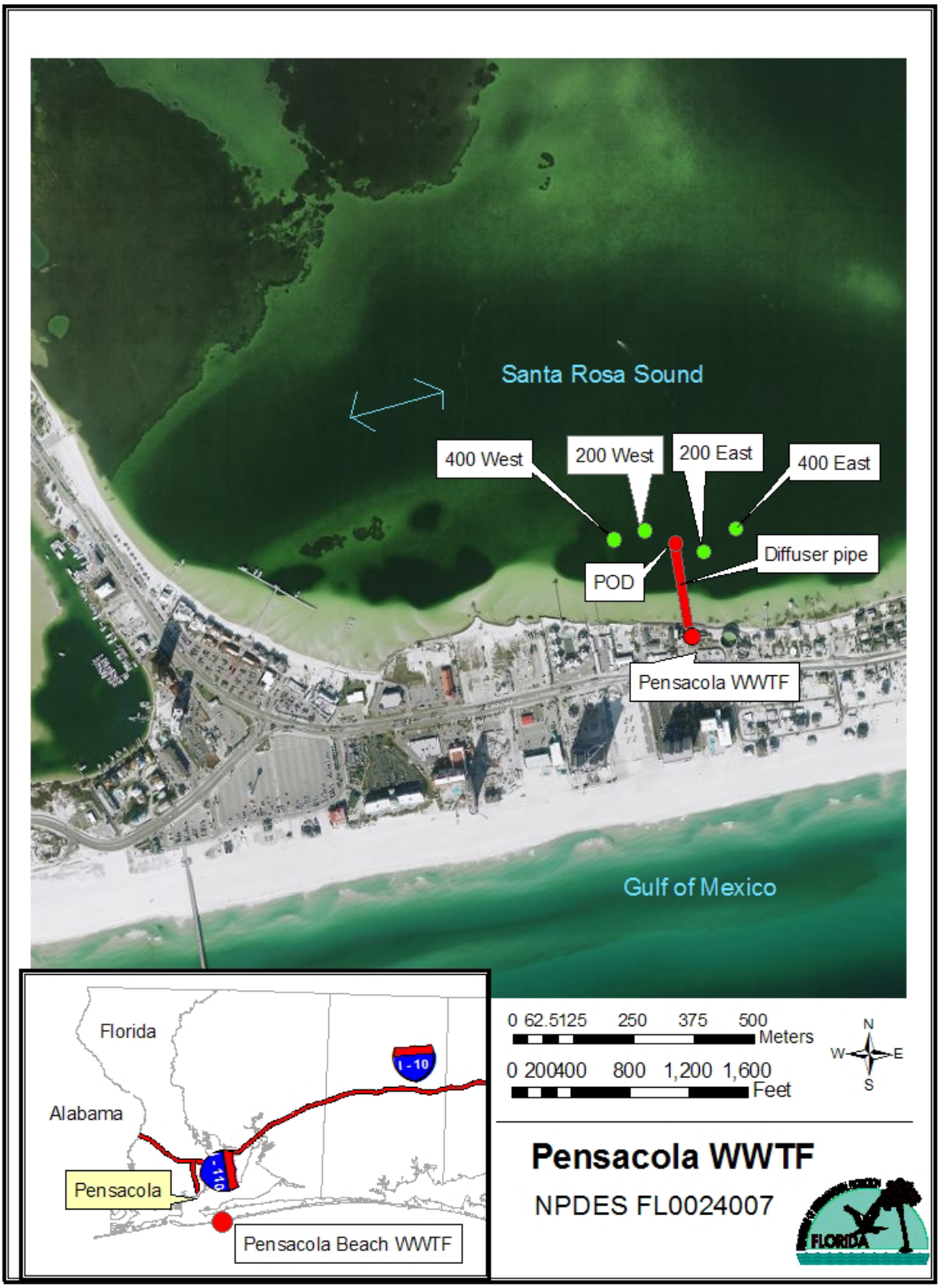
Table 4. Macroinvertebrate Petite Ponar Samples - Quantitative.
Invertebrates identified by Water and Air Research, Inc. Metrics calculated by FDEP.

Pensacola Beach WWTF	400 West	200 West	200 East	400 East
Summary Statistics				
Shannon-Weaver Diversity	2.76 *	1.25 *	3.49 *	3.00 *
Number of Taxa	21	8	26	15
Percent Dominant Taxon	57.2	77.8	38.6	28.9
Dominant Taxon Name	*Paraprionospio* sp. (Polychaeta)	*Paraprionospio* sp. (Polychaeta)	*Paraprionospio* sp. (Polychaeta)	*Paraprionospio* sp. (Polychaeta)
Number of samples/site	5	5	5	5
Total Number of Individuals (counted)	82	108	106	121
Community Composition: Percent of total				
Amphipoda	9.8	0.0	1.0	0.0
Bivalvia	2.5	0.0	1.9	3.3
Cephalochordata	2.4	0.0	0.0	0.0
Cumacea	1.2	0.0	0.0	0.0
Decapoda	1.2	0.0	0.0	0.0
Echinodermata	1.2	0.0	1.9	0.0
Gastropoda	3.7	0.0	6.6	3.3
Nemertea	1.2	0.0	7.5	1.7
Oligochaeta	0.0	1.9	1.9	0.0
Polychaeta	76.7	97.2	77.3	90.8
Sipuncula	0.0	0.0	1.9	0.0
Other	0.0	0.9	0.0	0.9
Functional Feeding Groups: Percent of total				
Browser-Grazers	1.2	0.0	0.5	0.0
Burrowing Deposit Feeders	8.6	6.5	17.9	11.6
Predators	8.6	0.0	22.4	42.7
Scavengers	1.2	0.0	1.9	0.0
Scrapers	3.7	0.0	5.5	1.1
Surface Deposit Feeders	34.1	44.4	26.4	24.8
Suspension Feeders	39.0	45.4	21.7	19.8
Unknown	3.7	3.7	3.8	0.0

* - Shannon Weaver Diversity scores calculated on samples with < 300 individuals have the potential for negative bias (lower diversity scores compared to sites with more individuals) (Lande, 1996).

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: Kim Allen	**Contact Number:** 595-8300 ext. 1185
Facility Name (as it appears on permit): Pensacola Beach WWTF	**Former Names:**
NPDES Permit Number: FL0024007	**Permit Expiration Date:** 6/28/10 (Renewed 12/2009, expires 12/2014)
Physical Address: 53 Via De Luna Street, Pensacola,FL 32561	
District: NWD	**County:** Escambia
Function of Facility: Municipal wastewater treatment facility.	
Facility Type: Domestic	**Permitted Capacity (MGD):** 2.4 MGD MADF
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): .8439 mgd (6/08-5/09)	
If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months): **0.0**	
Description of type of Discharge: ☒ **Continuous** ☐ **Intermittent** ☐ **Seasonal** ☐ **Rainfall Dependent** ☐ **Other, please specify**	

Description of Sampling Location(s) - actual permit designation of permitted sampling point(s):

Monitoring Location Site Number	Description of Monitoring Location
EFA-01	Automatic Effluent Sampler at the Outfall Box
EFF-01	Automatic Effluent Sampler at the Outfall Box
OTH-01	Calculated Value
FLW-01	V-notch Weir and Ultrasonic Total Effluent Flow Meter at Post-UV System Wet-Well
PPI-01	UV Intensity, Wastewater Transmittance and Water Level Indicators Located Internal to the UV Channel

Description of Permitted Outfall(s):

The outfall pipe is approximately 400-feet in length, with a 70-foot long closed-end diffuser that has 6-inch diameter holes at 10-foot centers and discharges at a depth of approximately 18 feet. The point of discharge is located approximately at latitude 30° 20' 14" N, longitude 87° 07' 57" W. The discharge is located in a portion of Santa Rosa Sound within 0.6 miles from the western boundary of that portion of Santa Rosa Sound classified as Class II Marine Waters. The discharge is located in a portion of Santa Rosa Sound classified as Outstanding Florida Waters due to its being within the boundaries of the Gulf Islands National Seashore.

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

The facility has two treatment trains each with a design capacity of 1.2 MGD, operating in the activated sludge mode and discharging effluent that meets the 5:5:3:1 CBOD5, TSS, Nitrogen and Phosphorus requirements defined under section 403.086(4)(a), FS, and the intermediate disinfection requirements defined by Rule 62-600.440(6), F.A.C. Continued operation under, and renewal of, this permit is contingent upon the facility effluent consistently meeting the self-imposed 5:5:3:1 CBOD5, TSS, Nitrogen and Phosphorus requirements defined under section 403.086(4)(a), FS, and the intermediate disinfection requirements defined by Rule 62-600.440(6), F.A.C.

The new Plant #1 consists of the following processes: influent pumping, metering, grit removal, anoxic denitrification zone, aeration, mixed liquor recycle and final clarification. The old Plant #2 consists of the following processes: influent pumping, metering, grit removal, first stage step aeration nitrification, anoxic denitrification, second stage aeration, and final clarification. Both plants share influent screens, a filter pump station, denitrification filters, ultraviolet disinfection, flow measurement and reject storage (of secondary effluent). Residual treatment consists of sludge wasting to aerated sludge holding tanks and concentrating, prior to loading into tanker trucks for hauling to the Main Street WWTP in Pensacola. A 2.4 MG holding tank is available for upset process storage.

The effluent from both Plants # 1 & 2 discharges into the existing outfall in Santa Rosa Sound as the primary means of disposal.

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)

I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Surface Water Discharges

1. During the period beginning on the issuance date and lasting through the expiration date of this permit, the permittee is authorized to discharge effluent from Outfall D-001 to a portion of Santa Rosa Sound. Such discharge shall be limited and monitored by the permittee as specified below:

			Effluent Limitations				Monitoring Requirements			
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Flow, in conduit or thru treatment plant	MGD	Maximum	-	2.4	-	-	Continuous	Recording flow meters and totalizers	FLW-01	See Cond.I.A.4
BOD, Carbonaceous 5 day, 20C	MG/L	Maximum	5.0	6.25	7.5	10.0	Weekly	24-hour flow proportioned composite	EFF-01	
Solids, Total Suspended	MG/L	Maximum	5.0	6.25	7.5	10.0	Weekly	24-hour flow proportioned composite	EFF-01	
Nitrogen, Total (as N)	MG/L	Maximum	3.0	3.75	4.5	6.0	Weekly	24-hour flow proportioned composite	EFF-01	
Phosphorus, Total (as P)	MG/L	Maximum	1.0	1.25	1.5	2.0	Weekly	24-hour flow proportioned composite	EFF-01	
Coliform, Fecal	#/100ML	See Permit Condition I.A.5.					3 Days / week	Grab	EFA-01	
Oxygen, Dissolved (DO)	MG/L	Minimum	-	-	-	4.0	Daily	Grab	EFF-01	
pH	SU	Range	-	-	-	6.5 to 8.5	Continuous	Recorder	EFF-01	See Cond.I.A.3
Whole Effluent Toxicity	See Permit Condition I.A.7									
Copper, Total Recoverable	UG/L	Maximum	-	-	-	3.7	Semiannually	24-hour flow proportioned composite	EFF-01	
Silver	UG/L	Maximum	-	-	-	2.3	Semiannually	24-hour flow proportioned composite	EFF-01	
Ultraviolet Light Dosage	MW-S/CM2	Minimum				30	Continuous	Calculated	OTH-01	See I.A.9. & I.A.17 & 18
Ultraviolet Light Transmittance	PERCENT	Minimum	-	-	-	Report	3 days/week	Grab	PPI-01	See I.A.9. & I.A.16 & 18
Water Flow Through Reactor 1[1]	MGD	Maximum - Minimum				Report	Continuous	Meter	PPI-01	See I.A.9. & I.A.14

PART I: Continued

Receiving Waters:	**Classification (indicate whether fresh or marine):**
The discharge is located in a portion of Santa Rosa Sound within 0.6 miles from the western boundary of that portion of Santa Rosa Sound classified as Class II Marine Waters. The discharge is located in a portion of Santa Rosa Sound classified as Outstanding Florida Waters due to its being within the boundaries of the Gulf Islands National Seashore.	Marine

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

The permittee is required to conduct a daphnid, **Ceriodaphnia dubia**, Survival and Reproduction test and a fathead minnow, **Pimephales promelas**, Larval Survival and Growth Test. These tests are required to be conducted using a control (0% effluent) and one test concentration of **100%** effluent. For each set of tests conducted, a 24-hour flow proportioned sample of final effluent is required to be collected and used. Two additional composite samples are required to be collected according to the protocol and used as renewal solutions on Day 3 (48 hours) and Day 5 (96 hours) of the test.

Additional tests are conducted using a control (0% effluent) and a minimum of five dilutions: **100%, 50%, 25%, 12.5% and 6.25%** effluent. The dilution series may be modified in the second and third test to more accurately identify the toxicity, such that at least two dilutions above (not to exceed 100% effluent) and two dilutions below the target concentration and a control (0% effluent) are run.

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

CO 06-1522 was executed on 9/28/07 for the discharge of un-disinfected effluent from the Facility to Santa Rosa Sound on seven separate occasions between April and November 2005 and the failure to conduct monthly ambient water quality sampling for the following monitoring locations for the months of January through May 2005: surface water ("SW")-1, SW-2, SW-3, SW-4, SW-5, SW-6, SW-7 and SW-8. Approximately 48,000 gallons of untreated effluent was released into Santa Rosa Sound during these occasions. ECUA determined that the discharges occurred as a result of a malfunctioning air conditioning system, which rendered the Facility's UV disinfection system incapable of disinfecting the Facility's effluent being discharged.

Facility Mixing Zone Details (if applicable):
N/A

List Permit Violations (DMR data) and plant upsets that occurred at the plant within the last year:			
Date	Parameter and Units	Limit	Result
4/08 **9/08** **10/08**	**TN mg/L** **Fecal coliform #/100 mls** **Ceriodaphnia dubia**	**6.0** **86** **NOEC 100**	**6.9** **200** <**100*** ***Conductivities 4420, 4530, 3490. Believed to be from I&I from Ike as it passed in Gulf.**

Describe previous FYI and WQBEL study:

Discussion taken from 10/04 Draft Permit Fact Sheet:

The 5:5:3:1 effluent limitations are also supported by a Level II Water Quality Based Effluent Limitation (WQBEL) determination conducted in May 2003, as a condition of the permit renewal application process. The Level II WQBEL states that the effluent from the facility has no directly attributable effect on the assimilative capacity of Santa Rosa Sound and that, since the effluent limitations are lower than the pre-upgrade limits, the water quality in Santa Rosa Sound is not expected to be affected by the discharge from the facility. Ambient water quality monitoring that was required in the last permit to support the WQBEL Study is not being continued in this renewal due to the favorable WQBEL Study conclusion.

Results of a 5th year bioassessment in 1995were as follows: Toxics Sampling Inspection (XSI) found no organic pollutants or metals in the effluent exceeding State standards. Most of these were below detection limits; Compliance Biomonitoring Inspection (CBI) showed that the effluent was not toxic to the fish or water flea; Impact Bioassessment (IBI) revealed high numbers of benthic species, high diversity, and high percentages of clean water indicators at all stations. Little or no impact from the discharge is suggested; Water Quality Inspection (WQI) found no impact from the facility on nutrients, algal production, or coliform bacteria.

A 3rd year bioassessment report was submitted on May 2003, by the Biology Section, Division of Resource Assessment & Management. The tests were performed on 11 to 18 February 2003. The Toxicity Tests showed the samples of effluent collected from the facility did not show chronic toxicity to either test species during the 7-day chronic bioassay tests. Chemistry tests showed that total residual chlorine and total ammonia were not detected in any of the bioassay samples in the laboratory. Chemicals detected in the analytical chemistry samples were: Aluminum 10 ug/L, Calcium 30.5 mg/L, Copper 1.2 ug/L, Iron 139 ug/L, Lead 0.12 ug/L, Magnesium 14.9 mg/L, Zinc 20 ug/L. No Pesticides or Herbicides were detected. Nutrients detected in the analytical chemistry samples were: Ammonia 0.034 mg N/L, Nitrates and Nitrites 4.181 mg N/L, Total Kjeldahl Nitrogen 0.75 mg N/L, Ortho Phosphates 0.29 mg P/L, Total Phosphorous 0.35 mg P/L. No Base, Neutral, & Acid Extractable Organics were detected.

Describe previous or current Enforcement Actions (including WLs):

See discussion of CO 06-1522 above.

Describe any violations or problems noted in previous inspection:

An inspection was performed 6/13/08. No problems were noted.

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.floridadep.org/labs/sop/index.htm and/or http://www.floridadep.org/labs/qa/index.htm .

(2) Chemical Analyses

The effluent and water from sampling stations were analyzed for nutrients, metals, organic constituents (base, neutral, and acid extractables) and pesticides. 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) Toxicity Bioassays

Greater than 50% mortality in an acute toxicity test may constitute an exceedence of 62-302.500(1)a and/or a violation of facility permit limits. An inhibition concentration greater than 25% in a chronic test may constitute exceedences of 62-302.530(20), 62-302.530(61) and/or a violation of facility permit limits. Standard reference toxicant (SRT) tests are conducted monthly to ensure quality in toxicity testing.

(4) Bacteriological Testing

High levels of fecal coliform bacteria may constitute an exceedence of 62-302.530(6) and/or a violation of facility permit limits.

(5) Chlorophyll *a* Content

Chlorophyll *a* content is an estimate algal biomass. High algal biomass implies nutrient stress (Stevenson and Bahls 1999) and may constitute exceedences 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..

(6) 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 10.0 mg dry weight/L represents a “problem” threshold for marine receiving waters, implying nutrient enrichment. High AGP values may constitute exceedences 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..f

The concentration of nutrients in a water sample may be used to calculate the expected yield of AGP in a low salinity sample 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 ± 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 (EPA-822-B-00-002). 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 exceedence of 62-302.530(61) F.A.C.. Expected AGP is not calculated for marine samples incubated with *Dunaliella*.

(7) Sediment Sampling

Sediments were collected using a petite ponar dredge at all sampling stations. Sediment samples were analyzed for metals, organic constituents, pesticides, organic content and sediment grain size. The results from these analyses were compared with sediment quality assessment guidelines applicable to Florida coastal waters (Table 4. in MacDonald 1994). The range of sediment contaminant concentrations that fall below the threshold effects level (TEL) are not likely to be associated with adverse biological effects on aquatic organisms. The range of sediment contaminant concentrations that fall above the probable effects level (PEL) are usually or always associated with adverse biological effects. Within the range of concentrations delineated by

the TEL (lower limit) and the PEL (upper limit), adverse biological effects are possible but it is difficult to predict the occurrence, nature, and/or severity of these effects (MacDonald 1994).

(8) Benthic Macroinvertebrate Assemblages

Benthic macroinvertebrates were collected using a petite ponar dredge at all sampling stations. Five replicate ponar samples were collected at each station and sieved through a 500 μm mesh. 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. Decreases in taxa richness related to a facility's effluent may constitute exceedences 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 exceedences 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 (Karr and Chu 1998). Shifts in community composition related to a facility's effluent may constitute exceedences 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.). Changes in the proportions of functional feeding groups related to a facility's effluent may constitute exceedences 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 samples at test and control sites constitutes exceedences of 62-302.530(10) F.A.C..

Appendix D
Chain of Custody

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Request Number: RQ-2009-06-15-28
Pensacola Beach WWTP

Event ID *

Requester: Jennifer Paris
Field Report Prepared By:

Customer: NW-DIST
Collected By: Chad Nowling
Send Final Report To Greg Smith

Project ID: FYI5
Sampling Agency: NWFDEP

PMAS: 1143

Lab ID *	Location: Pensacola Beach WWTP			☒ Comp ☐ Grab	Collection (begin) Date 6/15/09 Time 0823	Eastern Central	Collection (end) Date 6/15/09 Time 0950	Eastern Central	Bottle Group(s)** A+O
	Field ID: PB1			Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L) 8.43		Storet Station Number NA		
	Matrix (Include type e.g. Salt, Fresh, etc)	Temp (C) 29.89	pH 7.15	Sample Depth ☐ m ☐ ft	1140	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number		
	Latitude o ' "	Longitude o ' "		Comments					
Lab ID *	Location: Pensacola Beach WWTP			☐ Comp ☒ Grab	Collection (begin) Date 6/15/09 Time 0952	Eastern Central	Collection (end) Date Time	Eastern Central	Bottle Group(s)** A+O
	Field ID: PB2			Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L) 8.43		Storet Station Number		
	Matrix (Include type e.g. Salt, Fresh, etc)	Temp (C) 29.89	pH 7.15	Sample Depth ☐ m ☐ ft	1140	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number		
	Latitude o ' "	Longitude o ' "		Comments					
Lab ID *	Location: ~~Pensacola Beach WWTP~~			☐ Comp ☐ Grab	Collection (begin) Date ~~6/15/09~~ Time	Eastern Central	Collection (end) Date Time	Eastern Central	Bottle Group(s)**
	Field ID: PB2			Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)		Storet Station Number		
	Matrix (Include type e.g. Salt, Fresh, etc)	Temp (C)	pH	Sample Depth ☐ m ☐ ft		☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number		
	Latitude o ' "	Longitude o ' "		Comments					
Lab ID *	Location: ~~Pensacola Beach WWTP~~			☐ Comp ☐ Grab	Collection (begin) Date ~~6/15/09~~ Time	Eastern Central	Collection (end) Date Time	Eastern Central	Bottle Group(s)**
	Field ID			Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)		Storet Station Number		
	Matrix (Include type e.g. Salt, Fresh, etc)	Temp (C)	pH	Sample Depth ☐ m ☐ ft		☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number		
	Latitude o ' "	Longitude o ' "		Comments					

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
~~Mark Key~~	6/15/09	Fed Ex	Tahmoures Ebrahimi	9:30 06/16/09				

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

* Loc, Field Id: Blank Time: 10:29

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2009-06-15-38
Pensacola Beach WWTP

Customer: NW-DIST

Project ID: FYI5

PMAS: 1163

Requester: Jennifer Paris

Collected By: Nathan Mulkey / Rich Alan

Sampling Agency: NWFDEP

Field Report Prepared By: N Mulkey

Send Final Report To: Greg Smith

Lab ID *	Location	Collection (begin)	Collection (end)	Bottle Group(s)**
	Pensacola Beach WWTP	☐ Comp ☒ Grab Date 6/15/09 Time 0845 Eastern Central	Date Time Eastern Central	A+B
	Field ID: PB200E	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 6.82	Storet Station Number
	Matrix (Include type e.g. Salt, Fresh, etc)	Temp (C): 28.84	pH: 7.70	Sample Depth: 0.15 ☒ m ☐ ft
				☐ Salinity (PPTh) ☒ Sp Conductance (umho/cm): 25424
				NPDES Number
	Latitude: 30 20 13.0	Longitude: 087 07 54.8	Comments: + Sediment Samples	

Lab ID *	Location	Collection (begin)	Collection (end)	Bottle Group(s)**
	Pensacola Beach WWTP	☐ Comp ☒ Grab Date 6/15/09 Time 1040 Eastern Central	Date Time Eastern Central	A+B
	Field ID: PB400E	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 6.89	Storet Station Number
	Matrix (Include type e.g. Salt, Fresh, etc)	Temp (C): 29.40	pH: 7.71	Sample Depth: 0.15 ☒ m ☐ ft
				☐ Salinity (PPTh) ☒ Sp Conductance (umho/cm): 25480
				NPDES Number
	Latitude: 30 20 14.6	Longitude: 087 07 52.5	Comments: + Sediment Samples	

Lab ID *	Location	Collection (begin)	Collection (end)	Bottle Group(s)**
	Pensacola Beach WWTP	☐ Comp ☒ Grab Date 6/15/09 Time 1250 Eastern Central	Date Time Eastern Central	A+B
	Field ID: PB200W	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 7.04	Storet Station Number
	Matrix (Include type e.g. Salt, Fresh, etc)	Temp (C): 30.32	pH: 7.68	Sample Depth: 0.15 ☒ m ☐ ft
				☐ Salinity (PPTh) ☒ Sp Conductance (umho/cm): 25000
				NPDES Number
	Latitude: 30 20 14.2	Longitude: 087 07 59.3	Comments: + sediment samples Duplicate taken	

Lab ID *	Location	Collection (begin)	Collection (end)	Bottle Group(s)**
	Pensacola Beach WWTP	☐ Comp ☒ Grab Date 6/15/09 Time 1410 Eastern Central	Date Time Eastern Central	A+B
	Field ID: PB400W	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 7.14	Storet Station Number
	Matrix (Include type e.g. Salt, Fresh, etc)	Temp (C): 30.27	pH: 7.70	Sample Depth: 0.15 ☒ m ☐ ft
				☐ Salinity (PPTh) ☒ Sp Conductance (umho/cm): 24912
				NPDES Number
	Latitude: 30 20 14.0	Longitude: 087 08 01.4	Comments: + sediment sample 2 biomassy Rec'd in Tox by JD 6.16.09 10:18	

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
	6/15/09	Fed Ex	Tahmooures Ebrahimi	06/16/09 9:30				

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Request Number: RQ-2009-06-15-28
Pensacola Beach WWTP

Event ID *

Requester: Jennifer Paris
Field Report Prepared By: N. Milby
Collected By: Nathan Milby / Rick Abad
Send Final Report To Greg Smith
Sampling Agency: NWFDEP

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

Lab ID *	Location	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
	Pensacola Beach WWTF	☐ Comp ☒ Grab	Date 6/15/09 Time 0845 Eastern (Central)	Date Time Eastern Central	B+C
	Field ID: PB200E	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 6.82	Storet Station Number	
	Matrix (Salt / Fresh, etc): Salt	Temp (C): 28.84	pH: 7.70	Sample Depth: 0.15 ☐ m ☐ ft	25424 ☐ Salinity (PPTh) ☒ Sp Conductance (umho/cm)	NPDES Number
	Latitude o ' "	Longitude o ' "	Comments		

Lab ID *	Location	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
	Pensacola Beach WWTF	☐ Comp ☒ Grab	Date 6/15/09 Time 1040 Eastern (Central)	Date Time Eastern Central	B+C
	Field ID: PB400E	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 6.89	Storet Station Number	
	Matrix (Salt / Fresh, etc): Salt	Temp (C): 29.40	pH: 7.71	Sample Depth: 0.15 ☒ m ☐ ft	25480 ☐ Salinity (PPTh) ☒ Sp Conductance (umho/cm)	NPDES Number
	Latitude o ' "	Longitude o ' "	Comments		

Lab ID *	Location	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
	Pensacola Beach WWTF	☐ Comp ☒ Grab	Date 6/15/09 Time 1250 Eastern (Central)	Date Time Eastern Central	B+C
	Field ID: PB200W	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 7.04	Storet Station Number	
	Matrix (Salt / Fresh, etc): Salt	Temp (C): 30.32	pH: 7.68	Sample Depth: 0.15 ☐ m ☐ ft	25000 ☐ Salinity (PPTh) ☒ Sp Conductance (umho/cm)	NPDES Number
	Latitude o ' "	Longitude o ' "	Comments		

Lab ID *	Location	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
	Pensacola Beach WWTF	☐ Comp ☒ Grab	Date 6/15/09 Time 1410 Eastern (Central)	Date Time Eastern Central	B+C
	Field ID: PB400W	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 7.14	Storet Station Number	
	Matrix (Salt / Fresh, etc): Salt	Temp (C): 30.27	pH: 7.70	Sample Depth: 0.15 ☐ m ☐ ft	24912 ☐ Salinity (PPTh) ☒ Sp Conductance (umho/cm)	NPDES Number
	Latitude o ' "	Longitude o ' "	Comments		

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	6/15/09	Fed Ex	Tahmoores Ebrahimi	9:30 06/16/09				

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2009-06-15-28
Pensacola Beach WWTP

Requester: Jennifer Paris

Field Report Prepared By: Al Milby

Customer: NW-DIST

Collected By: Nathan Milby / Rich Ard

Send Final Report To Greg Smith

Project ID: FYI5

Sampling Agency: NWFDEP

PMAS: 1143

Lab ID *	Location				Collection (begin)	Collection (end)	Bottle Group(s)**
	Pensacola Beach WWTF				☐ Comp ☒ Grab Date 6/15/09 Time 0920 ☐ Eastern ☒ Central	Date Time ☐ Eastern ☐ Central	C
	Field ID PB200E			Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number	
	Matrix (Include type e.g. Salt, Fresh, etc) Bottle Trap	Temp (C)	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number	
	Latitude o ' " .	Longitude o ' " .		Comments			

Lab ID *	Location				Collection (begin)	Collection (end)	Bottle Group(s)**
	Pensacola Beach WWTF				☐ Comp ☒ Grab Date 6/15/09 Time 1050 ☐ Eastern ☒ Central	Date Time ☐ Eastern ☐ Central	C
	Field ID PB400E			Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number	
	Matrix (Include type e.g. Salt, Fresh, etc) Bottle Trap	Temp (C)	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number	
	Latitude o ' " .	Longitude o ' " .		Comments			

Lab ID *	Location				Collection (begin)	Collection (end)	Bottle Group(s)**
	Pensacola Beach WWTF				☐ Comp ☒ Grab Date 6/15/09 Time 1310 ☐ Eastern ☒ Central	Date Time ☐ Eastern ☐ Central	C
	Field ID PB200W			Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number	
	Matrix (Include type e.g. Salt, Fresh, etc) Bottle Trap	Temp (C)	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number	
	Latitude o ' " .	Longitude o ' " .		Comments			

Lab ID *	Location				Collection (begin)	Collection (end)	Bottle Group(s)**
	Pensacola Beach WWTF				☐ Comp ☒ Grab Date 6/15/09 Time 1430 ☐ Eastern ☒ Central	Date Time ☐ Eastern ☐ Central	C
	Field ID PB400W			Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number	
	Matrix (Include type e.g. Salt, Fresh, etc) Bottle Trap	Temp (C)	pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number	
	Latitude o ' " .	Longitude o ' " .		Comments			

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
	6/15/09	Fed Ex	AB	6-16-09 09:30				

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

SAMPLE TRANSMITTAL FORM
Document Reference # 05.1.0

Project: 5th Year Inspection Pensacola Beach WWTF Laboratory: Wetlands Research Laboratory Sampler's intials : JG JR/CN

Method of transport: vehicle Drop off by Chad Nowling Page 1 of 1

Samples delivered by: ~~Mike King~~ Chad Nowling of DEP Date/Time: 6-15-09/11.06am

Sample received by: [signature] of URL Date/Time: 6/15/09 1106

Instructions: Fill in all fields except "Lab ID" on sample transport form completely. Each sample container must use a separate line. Place this form in a waterproof bag and place it with the samples for transport. If a field log or other chain-of custody is attached, that information may be referenced on this form and the log or COC attached.

Lab ID	Sample ID	Matrix[1]	Type[2]	Container Type	Analyses Requested	Preservative	Sample (°C)[3]	Sampling Date/Time
	Pensacola Beach (ECUA) WWTF	SW	G	Sterile plastic	Enterococcus/Fecal coliforms	ice/Na2S2O3	9.6	6/15/09 9:18
	" DUP			Sterile plastic	Fecal Duplicate	ice/$Na_2S_2O_3$	10.0	6/15/09 9:19

Comments ___ RQ-2009 _____ Lot# L08305

Contact organization _____DEP _____ Contact name _____Nathan Mulkey_____ Phone:_____ 850-595-8300 x1123

Address _____ Sampler's name: __Chad Nowling Jonathan Colmer_____

[1]Matrix: SW = surface water, PW = pore water, GW = ground water, S = soil/sediment, X = _____SW_____

[2]Type codes: G = grab, C = composite, X = _____G_____ [3] Recorded using IRT-2

Wetlands Research Laboratory University of West Florida C:\Documents and Settings\king_m\My Documents\TMDL\UWF\blanksampletransmittalform120108

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Request Number: RQ-2009-06-15-28
Pensacola Beach WWTP

Event ID *

Requester: Jennifer Paris

Field Report Prepared By: Nathan Mulkey

Customer: NW-DIST

Collected By: Johnathen Colmer

Send Final Report To Greg Smith

Project ID: FYI5

Sampling Agency: NWFDEP

PMAS: 1143

Lab ID *	Location	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
	Pensacola Beach WWTP	☑ Comp ☐ Grab	Date 6/16/09 Time 0700 (Central)	Date 6/17/09 Time 0600 (Central)	A
	Field ID: PB1 #1	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 7.99	Storet Station Number	
	Matrix (Include type e.g. Salt, Fresh, etc): (Fresh) Temp (C): 30.17 pH: 7.30	Sample Depth ☐ m ☐ ft: 1173	☐ Salinity (PPTh) ☑ Sp Conductance (umho/cm)	NPDES Number	
	Latitude o ' " . Longitude o ' " .	Comments: sample collected at 1029 CST			

Lab ID *	Location	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
	Pensacola Beach WWTP	☑ Comp ☐ Grab	Date 6/16/09 Time 0700 (Central)	Date 6/17/09 Time 0600 (Central)	A
	Field ID: PB1 #2	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 7.99	Storet Station Number	
	Matrix (Include type e.g. Salt, Fresh, etc: Temp (C): 30.17 pH: 7.30	Sample Depth ☐ m ☐ ft: 1173	☐ Salinity (PPTh) ☑ Sp Conductance (umho/cm)	NPDES Number	
	Latitude o ' " . Longitude o ' " .	Comments: sample collected at 1034 CST			

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

Lab ID *	Location	Comp / Grab	Collection (begin) Date Time Eastern Central	Collection (end) Date Time Eastern Central	Bottle Group(s)**
		☐ Comp ☐ Grab			
	Field ID	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number	
	Matrix (Include type e.g. Salt, Fresh, etc: Temp (C) pH	Sample Depth ☐ m ☐ ft	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number	
	Latitude o ' " . Longitude o ' " .	Comments: 1 Dissolved Rad 1,1 Tox by J.D. (P.B. 1) 10:31 6-18-09			

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	6/17/09	Fed Ex	Tahmoures Ebrahim	9:20 06/18/09				

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2009-06-15-28
Pensacola Beach WWTP

Requester: Jennifer Paris
Field Report Prepared By: N. Malkey
Collected By: Johnathen Culmer
Send Final Report To Greg Smith
Sampling Agency: NWFDEP

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

Lab ID *	Location: Pensacola Beach WWTP	☑ Comp ☐ Grab	Collection (begin) Eastern Central: Date 6/18/09 Time 0700	Collection (end) Eastern Central: Date 6/19/09 Time 0600	Bottle Group(s)**
	Field ID: PB1 #1	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 9.08	Storet Station Number	A
	Matrix (Include type e.g. Salt, Fresh, etc): Fresh	Temp (C): 30.6	pH: 7.30	Sample Depth ☐ m ☐ ft: 12 11	☐ Salinity (PPTh) ☑ Sp Conductance (umho/cm)	NPDES Number
	Latitude o ' "	Longitude o ' "	Comments: Sample taken @ 1139 Flow 1.044 MGD		
Lab ID *	Location: Pensacola Beach WWTP	☑ Comp ☐ Grab	Collection (begin) Eastern Central: Date 6/18/09 Time 0700	Collection (end) Eastern Central: Date 6/19/09 Time 0600	Bottle Group(s)**
	Field ID: PB1 #2	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 9.08	Storet Station Number	A
	Matrix (Include type e.g. Salt, Fresh, etc): Fresh	Temp (C): 30.6	pH: 7.30	Sample Depth ☐ m ☐ ft: 12 11	☐ Salinity (PPTh) ☑ Sp Conductance (umho/cm)	NPDES Number
	Latitude o ' "	Longitude o ' "	Comments: Sample taken @ 1142		
Lab ID *	Location: Pensacola Beach WWTP	☑ Comp ☐ Grab	Collection (begin) Eastern Central: Date 6/18/09 Time 0700	Collection (end) Eastern Central: Date 6/19/09 Time 0600	Bottle Group(s)**
	Field ID: PB1 #3	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L): 9.08	Storet Station Number	A
	Matrix (Include type e.g. Salt, Fresh, etc): Fresh	Temp (C): 30.6	pH: 7.30	Sample Depth ☐ m ☐ ft: 12 11	☐ Salinity (PPTh) ☑ Sp Conductance (umho/cm)	NPDES Number
	Latitude o ' "	Longitude o ' "	Comments: Sample taken @ 1144		
Lab ID *	Location	☐ Comp ☐ Grab	Collection (begin) Eastern Central: Date Time	Collection (end) Eastern Central: Date Time	Bottle Group(s)**
	Field ID	Tot Res Chlorine (mg/L)	Diss Oxygen (mg/L)	Storet Station Number	
	Matrix (Include type e.g. Salt, Fresh, etc):	Temp (C):	pH:	Sample Depth ☐ m ☐ ft:	☐ Salinity (PPTh) ☐ Sp Conductance (umho/cm)	NPDES Number
	Latitude o ' "	Longitude o ' "	Comments		

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
	6/19/09	FedEx	Marshall Fairchild	6-20-09 0902				

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

3 BIOASSAY Jugs MF 6/20/09
Cooler #1 = 0.8°C
Cooler #2 = 0.6°C

Need only
+ Tot and 1 sample #

Appendix E

Chemical analysis of effluent and receiving water

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	1.2	I	mg/L	0.2	2
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Toxicology	Bioassay-Chronic-Scrn-FW-C.dubia, NOEC	100		NOEC		
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Toxicology	Bioassay-Chronic-Scrn-FW-Fish, NOEC	100		NOEC		
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Arsenic	1.59	A	ug/L	0.25	1
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Magnesium	17.2	A	mg/L	0.04	0.16
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Zinc	33	A	ug/L	5	20
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Lead	0.2	U	ug/L	0.2	0.8
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Aluminum	60	U	ug/L	60	240
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Silver	0.025	U	ug/L	0.025	0.1
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Copper	1.61	A	ug/L	0.5	0.5
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Iron	110	I	ug/L	30	120
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Calcium	33	A	mg/L	0.075	0.3
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Selenium	0.2	U	ug/L	0.2	0.8
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Chromium	0.3	U	ug/L	0.3	1.2
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Nickel	1.57	A	ug/L	0.25	1
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Metals	Cadmium	0.03	U	ug/L	0.03	0.12
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Nutrients	Kjeldahl Nitrogen	1.1		mg N/L	0.08	0.2
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Nutrients	O-Phosphate-P	0.75		mg P/L	0.02	0.05
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Nutrients	NO2NO3-N	0.25		mg N/L	0.004	0.01
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Nutrients	Total-P	0.84	A	mg P/L	0.02	0.05
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Nutrients	Ammonia-N	0.23		mg N/L	0.01	0.02
6/15/2009 10:23	Effluent - Composite	Pensacola Beach	Nutrients	TSS	4	U	mg/L	4	16
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	AGP/LN	Algal Growth Potential	24.5		mg DryWt/L	0.3	0.9
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	AGP/LN	Algal Growth Potential-Salinity Adjusted	3.65		mg DryWt/L	3	3
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.4	U	ug/L	0.4	1.2
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.65	I	ug/L	0.55	1.7
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Azinphos Methyl	0.19	UJ	ug/L	0.19	0.76
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Butylate	0.19	UJ	ug/L	0.19	0.76
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Hexazinone	0.095	U	ug/L	0.095	0.38
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Naled	0.76	U	ug/L	0.76	3
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Norflurazon	0.14	U	ug/L	0.14	0.56
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Delta-BHC	0.0095	U	ug/L	0.0095	0.038
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Endosulfan I	0.019	U	ug/L	0.019	0.076
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Ametryn	0.048	UJ	ug/L	0.048	0.19
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Atrazine	0.048	U	ug/L	0.048	0.19

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Chlorpyrifos Ethyl	0.048	U	ug/L	0.048	0.19
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Metalaxyl	0.24	U	ug/L	0.24	0.96
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Dieldrin	0.019	U	ug/L	0.019	0.076
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Alachlor	0.57	UJ	ug/L	0.57	2.3
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Metolachlor	0.48	UJ	ug/L	0.48	1.9
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Beta-BHC	0.0095	U	ug/L	0.0095	0.038
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	DDD-p,p'	0.019	U	ug/L	0.019	0.076
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Endosulfan II	0.019	U	ug/L	0.019	0.076
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Heptachlor Epoxide	0.019	U	ug/L	0.019	0.076
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Bromacil	0.19	U	ug/L	0.19	0.76
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Diazinon	0.048	U	ug/L	0.048	0.19
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Ethion	0.048	U	ug/L	0.048	0.19
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Malathion	0.14	U	ug/L	0.14	0.56
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Alpha-BHC	0.0095	U	ug/L	0.0095	0.038
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Endrin	0.048	U	ug/L	0.048	0.19
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Gamma-BHC	0.0095	U	ug/L	0.0095	0.038
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Simazine	0.048	U	ug/L	0.048	0.19
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	DDE-p,p'	0.019	U	ug/L	0.019	0.076
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	DDT-p,p'	0.029	U	ug/L	0.029	0.12
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Metribuzin	0.095	U	ug/L	0.095	0.38
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Parathion Methyl	0.095	U	ug/L	0.095	0.38
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Prometryn	0.14	UJ	ug/L	0.14	0.56
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Chlordane	0.19	U	ug/L	0.19	0.76
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Methoxychlor	0.048	U	ug/L	0.048	0.19
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Chlorpyrifos Methyl	0.095	U	ug/L	0.095	0.38
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Ethoprop	0.095	U	ug/L	0.095	0.38
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Fenamiphos	0.19	UJ	ug/L	0.19	0.76
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Mevinphos	0.19	U	ug/L	0.19	0.76
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Phorate	0.048	U	ug/L	0.048	0.19
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Toxaphene	0.71	U	ug/L	0.71	2.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Fonofos	0.095	UJ	ug/L	0.095	0.38
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Parathion Ethyl	0.14	U	ug/L	0.14	0.56
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Aldrin	0.0095	U	ug/L	0.0095	0.038
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Endosulfan Sulfate	0.019	U	ug/L	0.019	0.076
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Endrin Aldehyde	0.019	U	ug/L	0.019	0.076
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Pesticides	Heptachlor	0.0095	U	ug/L	0.0095	0.038
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.96	U	ug/L	0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Naphthalene	0.96	U	ug/L	0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.9	U	ug/L	2.9	12
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Fluorene	0.96	U	ug/L	0.96	3.8

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units	Word_Result	MDL	PQL
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Chrysene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	14	U	ug/L		14	58
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.9	U	ug/L		2.9	12
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Phenanthrene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	2,4-Dichlorophenol	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Anthracene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Benzo(b)fluoranthene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9	U	ug/L		1.9	7.7
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Nitrobenzene	1.9	U	ug/L		1.9	7.7
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Phenol	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrotoluene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Fluoranthene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.9	U	ug/L		2.9	12
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	4-Nitrophenol	14	U	ug/L		14	58
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Acenaphthylene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Di-n-octyl phthalate	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Diethyl phthalate	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Dimethyl phthalate	9.6	U	ug/L		9.6	38
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Hexachlorobenzene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	2-Chloronaphthalene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	2-Chlorophenol	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9	U	ug/L		1.9	7.7
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Benzo(a)anthracene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Di-n-butyl phthalate	4.8	U	ug/L		4.8	19
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Pentachlorophenol	2.9	U	ug/L		2.9	12
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Pyrene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	2-Nitrophenol	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Butyl benzyl phthalate	4.8	U	ug/L		4.8	19
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Hexachlorobutadiene	2.9	U	ug/L		2.9	12
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	2,4-Dimethylphenol	9.6	U	ug/L		9.6	38
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Acenaphthene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.96	U	ug/L		0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	2,6-Dinitrotoluene	0.96	U	ug/L		0.96	3.8

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Benzidine	96	U	ug/L	96	380
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Benzo(k)fluoranthene	0.96	U	ug/L	0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Hexachloroethane	2.9	U	ug/L	2.9	12
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Isophorone	0.96	U	ug/L	0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9	U	ug/L	1.9	7.7
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrophenol	14	U	ug/L	14	58
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9	U	ug/L	2.9	12
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	3,3'-Dichlorobenzidine	38	UJ	ug/L	38	150
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Priority Organic Pollutants	Benzo(a)pyrene	0.96	U	ug/L	0.96	3.8
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Field Parameter	Temperature	29.89		C		
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Field Parameter	Specific Conductance	1140		umhos/cm		
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Field Parameter	pH	7.15				
6/15/2009 10:52	Effluent - Grab	Pensacola Beach	Field Parameter	Dissolved Oxygen	8.43		mg/L		
6/17/2009 7:00	Effluent	Pensacola Beach	Field Parameter	Specific Conductance	1173		umhos/cm		
6/17/2009 7:00	Effluent	Pensacola Beach	Field Parameter	Dissolved Oxygen	7.99		mg/L		
6/17/2009 7:00	Effluent	Pensacola Beach	Field Parameter	pH	7.3				
6/17/2009 7:00	Effluent	Pensacola Beach	Field Parameter	Temperature	30.17		C		
6/19/2009 6:00	Effluent	Pensacola Beach	Field Parameter	Dissolved Oxygen	9.08		mg/L		
6/19/2009 6:00	Effluent	Pensacola Beach	Field Parameter	pH	7.3				
6/19/2009 6:00	Effluent	Pensacola Beach	Field Parameter	Specific Conductance	1211		umhos/cm		
6/19/2009 6:00	Effluent	Pensacola Beach	Field Parameter	Temperature	30.6		C		
6/15/2009 10:18	Effluent - ECUA	Pensacola Beach	Overflow	Fecal Coliforms-Membrane Filter	1	U	#/100 mL	1	1
6/15/2009 10:18	Effluent - ECUA	Pensacola Beach	Overflow	Enterococci-Membrane Filter	2	B	#/100 mL	2	2
6/15/2009 10:18	Effluent - ECUA	Pensacola Beach	Field Parameter	Temperature	9.6		C		
6/15/2009 10:19	Effluent - ECUA Dup	Pensacola Beach	Overflow	Fecal Coliforms-Membrane Filter	1	U	#/100 mL	1	1
6/15/2009 10:19	Effluent - ECUA Dup	Pensacola Beach	Overflow	Enterococci-Membrane Filter	2	U	#/100 mL	2	2
6/15/2009 10:19	Effluent - ECUA Dup	Pensacola Beach	Field Parameter	Temperature	10		C		
6/15/2009 15:10	400 West	Pensacola Beach	AGP/LN	Algal Growth Potential	3	AU	mg DryWt/L	3	3
6/15/2009 15:10	400 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment % Organic	1	K	% dry wt		
6/15/2009 15:10	400 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.25-0.5 mm	58.7	A	% vol <2mm	0	0.01
6/15/2009 15:10	400 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, <0.063 mm	8.28	A	% vol <2mm	0	0.01
6/15/2009 15:10	400 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.125-0.25 mm	10.6	A	% vol <2mm	0	0.01
6/15/2009 15:10	400 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.5-2.0 mm	21.6	A	% vol <2mm	0	0.01
6/15/2009 15:10	400 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.063-0.125mm	0.9	A	% vol <2mm	0	0.01
6/15/2009 15:10	400 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	1.3	I	mg/L	0.2	2
6/15/2009 15:10	400 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, >2.0 mm	1	K	%tot drywt	0	1
6/15/2009 15:10	400 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.4	U	ug/L	0.4	1.2
6/15/2009 15:10	400 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	4		ug/L	0.55	1.7
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Copper	1.5	U	ug/L	1.5	1.5
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Nickel	0.75	U	ug/L	0.75	3

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Cadmium	0.049	U	mg/Kg	0.049	0.2
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Chromium	2.26		mg/Kg	0.25	0.98
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Magnesium	538		mg/L	0.8	3.2
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Copper	0.82	I	mg/Kg	0.25	0.98
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Silver	0.075	U	ug/L	0.075	0.3
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Selenium	0.6	U	ug/L	0.6	2.4
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Cadmium	0.09	U	ug/L	0.09	0.36
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Iron	90	I	ug/L	30	120
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Beryllium	0.041	I	mg/Kg	0.039	0.16
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Chromium	1.6	I	ug/L	0.9	3.6
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Aluminum	60	U	ug/L	60	240
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Arsenic	0.98	I	ug/L	0.75	3
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Silver	0.012	U	mg/Kg	0.012	0.049
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Calcium	164		mg/L	0.075	0.3
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Zinc	5	U	ug/L	5	20
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Nickel	0.55	I	mg/Kg	0.25	0.98
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Lead	0.8	I	mg/Kg	0.37	1.5
6/15/2009 15:10	400 West	Pensacola Beach	Metals	Lead	0.6	U	ug/L	0.6	2.4
6/15/2009 15:10	400 West	Pensacola Beach	Nutrients	Ammonia-N	0.01	U	mg N/L	0.01	0.02
6/15/2009 15:10	400 West	Pensacola Beach	Nutrients	NO2NO3-N	0.005	I	mg N/L	0.004	0.01
6/15/2009 15:10	400 West	Pensacola Beach	Nutrients	Kjeldahl Nitrogen	0.69		mg N/L	0.16	0.4
6/15/2009 15:10	400 West	Pensacola Beach	Nutrients	O-Phosphate-P	0.004	U	mg P/L	0.004	0.01
6/15/2009 15:10	400 West	Pensacola Beach	Nutrients	Total-P	0.013	I	mg P/L	0.008	0.02
6/15/2009 15:10	400 West	Pensacola Beach	Nutrients	TSS	11	I	mg/L	4	16
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Alpha-BHC	0.33	U	ug/Kg	0.33	1.3
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Endrin	1.7	U	ug/Kg	1.7	6.8
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Azinphos Methyl	6.8	U	ug/kg	6.8	27
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Bromacil	9	U	ug/kg	9	36
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Malathion	4.5	U	ug/kg	4.5	18
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Phorate	2.3	U	ug/kg	2.3	9.2
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Bromacil	0.19	U	ug/L	0.19	0.76
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Ethion	0.047	U	ug/L	0.047	0.19
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Naled	0.75	U	ug/L	0.75	3
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Prometryn	0.14	UJ	ug/L	0.14	0.56
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Alpha-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	DDE-p,p'	0.67	U	ug/Kg	0.67	2.7
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Alachlor	14	U	ug/kg	14	56
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Ethion	2.3	U	ug/kg	2.3	9.2
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Hexazinone	4.5	U	ug/kg	4.5	18
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Metribuzin	4.5	U	ug/kg	4.5	18

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Parathion Methyl	4.5	U	ug/kg	4.5	18
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Chlorpyrifos Ethyl	0.047	U	ug/L	0.047	0.19
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Hexazinone	0.094	U	ug/L	0.094	0.38
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Norflurazon	0.14	U	ug/L	0.14	0.56
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Chlordane	0.19	U	ug/L	0.19	0.76
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	PCB-1254	0.28	U	ug/L	0.28	1.1
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	DDT-p,p'	1	U	ug/Kg	1	4
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Methamidophos	23	U	ug/kg	23	92
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Naled	18	U	ug/kg	18	72
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Parathion Ethyl	4.5	U	ug/kg	4.5	18
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Chlorpyrifos Methyl	0.094	U	ug/L	0.094	0.38
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Diazinon	0.047	U	ug/L	0.047	0.19
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Metalaxyl	0.24	U	ug/L	0.24	0.96
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Aldrin	0.0094	U	ug/L	0.0094	0.038
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	PCB-1242	0.28	U	ug/L	0.28	1.1
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Toxaphene	0.71	U	ug/L	0.71	2.8
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Dieldrin	0.33	U	ug/Kg	0.33	1.3
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Heptachlor	0.33	U	ug/Kg	0.33	1.3
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Methoxychlor	1.7	U	ug/kg	1.7	6.8
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Ametryn	2.3	U	ug/kg	2.3	9.2
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Chlorpyrifos Methyl	4.5	U	ug/kg	4.5	18
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Butylate	0.19	UJ	ug/L	0.19	0.76
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Metolachlor	0.47	UJ	ug/L	0.47	1.9
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Endosulfan I	0.019	U	ug/L	0.019	0.076
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Endosulfan Sulfate	0.019	U	ug/L	0.019	0.076
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Gamma-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	PCB-1221	0.19	U	ug/L	0.19	0.76
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Chlordane	5	U	ug/Kg	5	20
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Endosulfan I	0.33	U	ug/Kg	0.33	1.3
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Heptachlor Epoxide	0.33	U	ug/kg	0.33	1.3
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Atrazine	2.3	U	ug/kg	2.3	9.2
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Diazinon	2.3	U	ug/kg	2.3	9.2
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Ethoprop	2.3	U	ug/kg	2.3	9.2
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Fonofos	2.3	U	ug/kg	2.3	9.2
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Metolachlor	14	U	ug/kg	14	56
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Simazine	2.3	U	ug/kg	2.3	9.2
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Alachlor	0.56	UJ	ug/L	0.56	2.2
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Simazine	0.047	U	ug/L	0.047	0.19
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Beta-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	PCB-1232	0.19	U	ug/L	0.19	0.76

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Aldrin	0.33	U	ug/Kg	0.33	1.3
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Gamma-BHC	0.33	U	ug/Kg	0.33	1.3
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Prometryn	4.5	U	ug/kg	4.5	18
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Ametryn	0.047	UJ	ug/L	0.047	0.19
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Malathion	0.14	U	ug/L	0.14	0.56
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Mevinphos	0.19	U	ug/L	0.19	0.76
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Phorate	0.047	U	ug/L	0.047	0.19
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	DDT-p,p'	0.028	U	ug/L	0.028	0.11
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Heptachlor Epoxide	0.019	U	ug/L	0.019	0.076
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	PCB-1016	0.19	U	ug/L	0.19	0.76
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	PCB-1248	0.19	U	ug/L	0.19	0.76
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Endosulfan Sulfate	0.67	U	ug/Kg	0.67	2.7
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Endrin Aldehyde	0.67	U	ug/Kg	0.67	2.7
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Chlorpyrifos Ethyl	2.3	U	ug/kg	2.3	9.2
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Fenamiphos	9	U	ug/kg	9	36
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Atrazine	0.047	U	ug/L	0.047	0.19
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Azinphos Methyl	0.19	UJ	ug/L	0.19	0.76
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Ethoprop	0.094	U	ug/L	0.094	0.38
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Metribuzin	0.094	U	ug/L	0.094	0.38
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Parathion Ethyl	0.14	U	ug/L	0.14	0.56
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Parathion Methyl	0.094	U	ug/L	0.094	0.38
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Delta-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Endrin Aldehyde	0.019	U	ug/L	0.019	0.076
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Heptachlor	0.0094	U	ug/L	0.0094	0.038
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	PCB-1260	0.19	U	ug/L	0.19	0.76
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Beta-BHC	0.33	U	ug/Kg	0.33	1.3
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	DDD-p,p'	0.67	U	ug/Kg	0.67	2.7
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Delta-BHC	0.67	U	ug/Kg	0.67	2.7
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Endosulfan II	0.33	U	ug/Kg	0.33	1.3
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Toxaphene	25	U	ug/Kg	25	100
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Mevinphos	9	U	ug/kg	9	36
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Monocrotophos	23	UJ	ug/kg	23	92
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Norflurazon	4.5	U	ug/kg	4.5	18
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Fenamiphos	0.19	UJ	ug/L	0.19	0.76
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Fonofos	0.094	UJ	ug/L	0.094	0.38
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	DDD-p,p'	0.019	U	ug/L	0.019	0.076
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	DDE-p,p'	0.019	U	ug/L	0.019	0.076
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Dieldrin	0.019	U	ug/L	0.019	0.076
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Endosulfan II	0.019	U	ug/L	0.019	0.076
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Endrin	0.047	U	ug/L	0.047	0.19

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 15:10	400 West	Pensacola Beach	Pesticides	Methoxychlor	0.047	U	ug/L	0.047	0.19
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Fluoranthene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Fluorene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9	U	ug/L	1.9	7.5
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2,4,6-Trichlorophenol	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Acenaphthene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Acenaphthylene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Azobenzene/1,2-Diphenylhydrazine	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Dibenzo(a,h)anthracene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Hexachlorobenzene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Acenaphthylene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Benzo(a)anthracene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Di-n-octyl phthalate	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.8	U	ug/L	2.8	11
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Nitrobenzene	1.9	U	ug/L	1.9	7.5
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Pentachlorophenol	2.8	U	ug/L	2.8	11
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dimethylphenol	490	U	ug/kg	490	2000
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2-Chlorophenol	240	U	ug/kg	240	980
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	4-Chloro-3-methylphenol	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Benzo(a)anthracene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Di-n-octyl phthalate	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Hexachlorobutadiene	240	U	ug/kg	240	980
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Naphthalene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Phenol	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2-Chloronaphthalene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.8	U	ug/L	2.8	11
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Diethyl phthalate	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.8	U	ug/L	2.8	11
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Naphthalene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Benzidine	1800	U	ug/kg	1800	7100
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Benzo(a)pyrene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	490	U	ug/kg	490	2000
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Phenanthrene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.94	U	ug/L	0.94	3.8

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units	Word_Result	MDL	PQL
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9	U	ug/L		1.9	7.5
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.94	U	ug/L		0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Butyl benzyl phthalate	4.7	U	ug/L		4.7	19
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Hexachlorobutadiene	2.8	U	ug/L		2.8	11
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dichlorophenol	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	3,3'-Dichlorobenzidine	4900	U	ug/kg		4900	20000
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Benzo(b)fluoranthene	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethyl)ether	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Di-n-butyl phthalate	490	U	ug/kg		490	2000
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Diethyl phthalate	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Fluoranthene	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Fluorene	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Benzidine	94	U	ug/L		94	380
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Benzo(a)pyrene	0.94	U	ug/L		0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Hexachlorobenzene	0.94	U	ug/L		0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Isophorone	0.94	U	ug/L		0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Phenanthrene	0.94	U	ug/L		0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Phenol	0.94	U	ug/L		0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	4-Nitrophenol	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Benzo(k)fluoranthene	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Nitrobenzene	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Pentachlorophenol	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dimethylphenol	9.4	U	ug/L		9.4	38
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2-Chlorophenol	0.94	U	ug/L		0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.94	U	ug/L		0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Acenaphthene	0.94	U	ug/L		0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9	U	ug/L		1.9	7.5
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Pyrene	0.94	U	ug/L		0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrophenol	490	U	ug/kg		490	2000
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrotoluene	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Butyl benzyl phthalate	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Chrysene	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Dimethyl phthalate	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Hexachloroethane	240	U	ug/kg		240	980
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Isophorone	81	U	ug/kg		81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodimethylamine	490	U	ug/kg		490	2000
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.94	U	ug/L		0.94	3.8

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrophenol	14	U	ug/L	14	56
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Benzo(b)fluoranthene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.8	U	ug/L	2.8	11
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	14	U	ug/L	14	56
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Di-n-butyl phthalate	4.7	U	ug/L	4.7	19
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Dimethyl phthalate	9.4	U	ug/L	9.4	38
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	4-Bromophenyl phenyl ether	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Pyrene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2-Nitrophenol	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	3,3'-Dichlorobenzidine	38	UJ	ug/L	38	150
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Benzo(k)fluoranthene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Chrysene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Hexachloroethane	2.8	U	ug/L	2.8	11
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	1,2,4-Trichlorobenzene	240	U	ug/kg	240	980
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2,6-Dinitrotoluene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2-Chloronaphthalene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2-Nitrophenol	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Anthracene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Benzo(g,h,i)perylene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Hexachlorocyclopentadiene	81	U	ug/kg	81	330
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dichlorophenol	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrotoluene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	2,6-Dinitrotoluene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	4-Nitrophenol	14	U	ug/L	14	56
6/15/2009 15:10	400 West	Pensacola Beach	Priority Organic Pollutants	Anthracene	0.94	U	ug/L	0.94	3.8
6/15/2009 15:10	400 West	Pensacola Beach	Nutrients	% Solid	73.6		%		
6/15/2009 15:10	400 West	Pensacola Beach	Field Parameter	pH	7.7				
6/15/2009 15:10	400 West	Pensacola Beach	Field Parameter	Temperature	30.27		C		
6/15/2009 15:10	400 West	Pensacola Beach	Field Parameter	Temperature	30.27		C		
6/15/2009 15:10	400 West	Pensacola Beach	Field Parameter	Dissolved Oxygen	7.14		mg/L		
6/15/2009 15:10	400 West	Pensacola Beach	Field Parameter	pH	7.7				
6/15/2009 15:10	400 West	Pensacola Beach	Field Parameter	Dissolved Oxygen	7.14		mg/L		
6/15/2009 15:10	400 West	Pensacola Beach	Field Parameter	Sample Depth	0.15		m		
6/15/2009 15:10	400 West	Pensacola Beach	Field Parameter	Sample Depth	0.15		m		
6/15/2009 15:10	400 West	Pensacola Beach	Field Parameter	Specific Conductance	24912		umhos/cm		
6/15/2009 15:10	400 West	Pensacola Beach	Field Parameter	Specific Conductance	24912		umhos/cm		
6/15/2009 13:50	200 West	Pensacola Beach	AGP/LN	Algal Growth Potential	3	U	mg DryWt/L	3	3

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 13:50	200 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.5-2.0 mm	21.2		% vol <2mm	0	0.01
6/15/2009 13:50	200 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	4.4		ug/L	0.55	1.7
6/15/2009 13:50	200 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.46	I	ug/L	0.4	1.2
6/15/2009 13:50	200 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.063-0.125mm	2.17		% vol <2mm	0	0.01
6/15/2009 13:50	200 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.25-0.5 mm	48.2		% vol <2mm	0	0.01
6/15/2009 13:50	200 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, >2.0 mm	1	K	%tot drywt	0	1
6/15/2009 13:50	200 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment % Organic	1.2		% dry wt		
6/15/2009 13:50	200 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	2.1		mg/L	0.2	2
6/15/2009 13:50	200 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, <0.063 mm	18.8		% vol <2mm	0	0.01
6/15/2009 13:50	200 West	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.125-0.25 mm	9.64		% vol <2mm	0	0.01
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Cadmium	0.049	U	mg/Kg	0.049	0.19
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Selenium	0.6	U	ug/L	0.6	2.4
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Calcium	167		mg/L	0.075	0.3
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Lead	0.6	U	ug/L	0.6	2.4
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Copper	0.75	I	mg/Kg	0.24	0.97
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Copper	1.5	U	ug/L	1.5	1.5
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Chromium	1.7	I	ug/L	0.9	3.6
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Cadmium	0.09	U	ug/L	0.09	0.36
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Magnesium	542		mg/L	0.8	3.2
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Iron	96	I	ug/L	30	120
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Beryllium	0.046	I	mg/Kg	0.039	0.16
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Chromium	2.03		mg/Kg	0.24	0.97
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Aluminum	60	U	ug/L	60	240
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Arsenic	0.79	I	ug/L	0.75	3
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Zinc	5	U	ug/L	5	20
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Nickel	0.75	U	ug/L	0.75	3
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Silver	0.075	U	ug/L	0.075	0.3
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Lead	0.87	I	mg/Kg	0.36	1.5
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Nickel	0.55	I	mg/Kg	0.24	0.97
6/15/2009 13:50	200 West	Pensacola Beach	Metals	Silver	0.012	U	mg/Kg	0.012	0.049
6/15/2009 13:50	200 West	Pensacola Beach	Nutrients	Ammonia-N	0.01	U	mg N/L	0.01	0.02
6/15/2009 13:50	200 West	Pensacola Beach	Nutrients	O-Phosphate-P	0.008	U	mg P/L	0.008	0.02
6/15/2009 13:50	200 West	Pensacola Beach	Nutrients	TSS	4	I	mg/L	4	16
6/15/2009 13:50	200 West	Pensacola Beach	Nutrients	NO2NO3-N	0.006	I	mg N/L	0.004	0.01
6/15/2009 13:50	200 West	Pensacola Beach	Nutrients	Kjeldahl Nitrogen	0.64		mg N/L	0.16	0.4
6/15/2009 13:50	200 West	Pensacola Beach	Nutrients	Total-P	0.013	I	mg P/L	0.008	0.02
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Ethion	2.3	U	ug/kg	2.3	9.2
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Mevinphos	9	U	ug/kg	9	36
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Malathion	0.14	U	ug/L	0.14	0.56
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Norflurazon	0.14	U	ug/L	0.14	0.56

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Parathion Ethyl	0.14	U	ug/L	0.14	0.56
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Beta-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Endosulfan I	0.019	U	ug/L	0.019	0.076
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Heptachlor Epoxide	0.019	U	ug/L	0.019	0.076
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	PCB-1248	0.19	U	ug/L	0.19	0.76
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Aldrin	0.33	U	ug/Kg	0.33	1.3
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Beta-BHC	0.33	U	ug/Kg	0.33	1.3
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Toxaphene	25	U	ug/Kg	25	100
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Ametryn	2.3	U	ug/kg	2.3	9.2
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Chlorpyrifos Ethyl	2.3	U	ug/kg	2.3	9.2
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Norflurazon	4.5	U	ug/kg	4.5	18
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Parathion Ethyl	4.5	U	ug/kg	4.5	18
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Parathion Methyl	4.5	U	ug/kg	4.5	18
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Prometryn	4.5	U	ug/kg	4.5	18
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Alachlor	0.56	UJ	ug/L	0.56	2.2
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Bromacil	0.19	U	ug/L	0.19	0.76
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Butylate	0.19	UJ	ug/L	0.19	0.76
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Metribuzin	0.094	U	ug/L	0.094	0.38
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Prometryn	0.14	UJ	ug/L	0.14	0.56
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Chlordane	0.19	U	ug/L	0.19	0.76
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	DDT-p,p'	0.028	U	ug/L	0.028	0.11
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Delta-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	PCB-1232	0.19	U	ug/L	0.19	0.76
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Metolachlor	14	U	ug/kg	14	56
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Monocrotophos	23	UJ	ug/kg	23	92
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Ametryn	0.047	UJ	ug/L	0.047	0.19
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Chlorpyrifos Ethyl	0.047	U	ug/L	0.047	0.19
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Chlorpyrifos Methyl	0.094	U	ug/L	0.094	0.38
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Ethoprop	0.094	U	ug/L	0.094	0.38
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Hexazinone	0.094	U	ug/L	0.094	0.38
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Metalaxyl	0.23	U	ug/L	0.23	0.92
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Mevinphos	0.19	U	ug/L	0.19	0.76
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	DDD-p,p'	0.019	U	ug/L	0.019	0.076
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Endosulfan II	0.019	U	ug/L	0.019	0.076
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Methoxychlor	0.047	U	ug/L	0.047	0.19
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Alpha-BHC	0.33	U	ug/Kg	0.33	1.3
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Delta-BHC	0.67	U	ug/Kg	0.67	2.7
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Endosulfan II	0.33	U	ug/Kg	0.33	1.3
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Azinphos Methyl	6.8	U	ug/kg	6.8	27
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Bromacil	9	U	ug/kg	9	36

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Ethoprop	2.3	U	ug/kg	2.3	9.2
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Phorate	0.047	U	ug/L	0.047	0.19
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Endrin	0.047	U	ug/L	0.047	0.19
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Endrin Aldehyde	0.019	U	ug/L	0.019	0.076
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	PCB-1221	0.19	U	ug/L	0.19	0.76
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Toxaphene	0.7	U	ug/L	0.7	2.8
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Endosulfan I	0.33	U	ug/Kg	0.33	1.3
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Endosulfan Sulfate	0.67	U	ug/Kg	0.67	2.7
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Heptachlor	0.33	U	ug/Kg	0.33	1.3
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Heptachlor Epoxide	0.33	U	ug/kg	0.33	1.3
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Methoxychlor	1.7	U	ug/kg	1.7	6.8
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Diazinon	2.3	U	ug/kg	2.3	9.2
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Malathion	4.5	U	ug/kg	4.5	18
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Metribuzin	4.5	U	ug/kg	4.5	18
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Metolachlor	0.47	UJ	ug/L	0.47	1.9
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Simazine	0.047	U	ug/L	0.047	0.19
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Aldrin	0.0094	U	ug/L	0.0094	0.038
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	DDE-p,p'	0.019	U	ug/L	0.019	0.076
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Endosulfan Sulfate	0.019	U	ug/L	0.019	0.076
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Heptachlor	0.0094	U	ug/L	0.0094	0.038
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Chlordane	5	U	ug/Kg	5	20
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Fonofos	2.3	U	ug/kg	2.3	9.2
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Hexazinone	4.5	U	ug/kg	4.5	18
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Methamidophos	23	U	ug/kg	23	92
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Naled	18	U	ug/kg	18	72
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Phorate	2.3	U	ug/kg	2.3	9.2
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Atrazine	0.047	U	ug/L	0.047	0.19
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Azinphos Methyl	0.19	UJ	ug/L	0.19	0.76
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Alpha-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	PCB-1242	0.28	U	ug/L	0.28	1.1
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	PCB-1254	0.28	U	ug/L	0.28	1.1
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Dieldrin	0.33	U	ug/Kg	0.33	1.3
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Endrin Aldehyde	0.67	U	ug/Kg	0.67	2.7
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Gamma-BHC	0.33	U	ug/Kg	0.33	1.3
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Chlorpyrifos Methyl	4.5	U	ug/kg	4.5	18
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Diazinon	0.047	U	ug/L	0.047	0.19
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Ethion	0.047	U	ug/L	0.047	0.19
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Fenamiphos	0.19	UJ	ug/L	0.19	0.76
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Fonofos	0.094	UJ	ug/L	0.094	0.38
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Parathion Methyl	0.094	U	ug/L	0.094	0.38

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Gamma-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	PCB-1260	0.19	U	ug/L	0.19	0.76
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	DDD-p,p'	0.67	U	ug/Kg	0.67	2.7
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Endrin	1.7	U	ug/Kg	1.7	6.8
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Alachlor	14	U	ug/kg	14	56
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Fenamiphos	9	U	ug/kg	9	36
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Simazine	2.3	U	ug/kg	2.3	9.2
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Naled	0.75	U	ug/L	0.75	3
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Dieldrin	0.019	U	ug/L	0.019	0.076
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	PCB-1016	0.19	U	ug/L	0.19	0.76
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	DDE-p,p'	0.67	U	ug/Kg	0.67	2.7
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	DDT-p,p'	1	U	ug/Kg	1	4
6/15/2009 13:50	200 West	Pensacola Beach	Pesticides	Atrazine	2.3	U	ug/kg	2.3	9.2
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	4-Bromophenyl phenyl ether	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Acenaphthene	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2-Chlorophenol	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Acenaphthylene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Fluorene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Naphthalene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dimethylphenol	490	U	ug/kg	490	2000
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrotoluene	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Benzo(g,h,i)perylene	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Benzo(k)fluoranthene	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Butyl benzyl phthalate	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Di-n-butyl phthalate	490	U	ug/kg	490	2000
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Fluoranthene	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Pyrene	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	3,3'-Dichlorobenzidine	38	UJ	ug/L	38	150
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Benzo(k)fluoranthene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Butyl benzyl phthalate	4.7	U	ug/L	4.7	19
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Chrysene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Hexachloroethane	2.8	U	ug/L	2.8	11
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Pentachlorophenol	2.8	U	ug/L	2.8	11
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Azobenzene/1,2-Diphenylhydrazine	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Di-n-octyl phthalate	81	U	ug/kg	81	330

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units	Word_Result	MDL	PQL
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Nitrobenzene	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Phenol	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Anthracene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Di-n-butyl phthalate	4.7	U	ug/L		4.7	19
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Fluoranthene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.8	U	ug/L		2.8	11
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Phenol	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2,6-Dinitrotoluene	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Acenaphthylene	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethyl)ether	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Fluorene	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Phenanthrene	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2,6-Dinitrotoluene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2-Chloronaphthalene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2-Nitrophenol	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Benzo(a)anthracene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	14	U	ug/L		14	57
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Isophorone	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9	U	ug/L		1.9	7.5
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Phenanthrene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2,4,6-Trichlorophenol	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrophenol	490	U	ug/kg		490	2000
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2-Chloronaphthalene	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2-Nitrophenol	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Anthracene	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Benzidine	1800	U	ug/kg		1800	7100
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Benzo(a)anthracene	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	490	U	ug/kg		490	2000
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Dibenzo(a,h)anthracene	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodimethylamine	490	U	ug/kg		490	2000
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Naphthalene	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Pentachlorophenol	81	U	ug/kg		81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.8	U	ug/L		2.8	11
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9	U	ug/L		1.9	7.5

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Diethyl phthalate	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9	U	ug/L	1.9	7.5
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Nitrobenzene	1.9	U	ug/L	1.9	7.5
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2-Chlorophenol	240	U	ug/kg	240	980
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Benzo(a)pyrene	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Hexachlorobutadiene	240	U	ug/kg	240	980
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Hexachlorocyclopentadiene	81	UJ	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dimethylphenol	9.4	U	ug/L	9.4	38
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrophenol	14	U	ug/L	14	57
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.8	U	ug/L	2.8	11
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Di-n-octyl phthalate	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	3,3'-Dichlorobenzidine	4900	U	ug/kg	4900	20000
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Benzo(b)fluoranthene	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Dimethyl phthalate	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Hexachlorobenzene	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrotoluene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Benzidine	94	U	ug/L	94	380
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Benzo(a)pyrene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Dimethyl phthalate	9.4	U	ug/L	9.4	38
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Hexachlorobutadiene	2.8	U	ug/L	2.8	11
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	1,2,4-Trichlorobenzene	240	U	ug/kg	240	980
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dichlorophenol	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	4-Chloro-3-methylphenol	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	4-Nitrophenol	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Chrysene	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Diethyl phthalate	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Hexachloroethane	240	UJ	ug/kg	240	980
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Isophorone	81	U	ug/kg	81	330
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	2,4-Dichlorophenol	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	4-Nitrophenol	14	U	ug/L	14	57
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Acenaphthene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Benzo(b)fluoranthene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Hexachlorobenzene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.94	U	ug/L	0.94	3.8
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.8	U	ug/L	2.8	11
6/15/2009 13:50	200 West	Pensacola Beach	Priority Organic Pollutants	Pyrene	0.94	U	ug/L	0.94	3.8

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 13:50	200 West	Pensacola Beach	Field Parameter	Dissolved Oxygen	7.04		mg/L		
6/15/2009 13:50	200 West	Pensacola Beach	Field Parameter	Temperature	30.32		C		
6/15/2009 13:50	200 West	Pensacola Beach	Field Parameter	Temperature	30.32		C		
6/15/2009 13:50	200 West	Pensacola Beach	Nutrients	% Solid	73.6		%		
6/15/2009 13:50	200 West	Pensacola Beach	Field Parameter	Specific Conductance	25000		umhos/cm		
6/15/2009 13:50	200 West	Pensacola Beach	Field Parameter	pH	7.68				
6/15/2009 13:50	200 West	Pensacola Beach	Field Parameter	Dissolved Oxygen	7.04		mg/L		
6/15/2009 13:50	200 West	Pensacola Beach	Field Parameter	Sample Depth	0.15		m		
6/15/2009 13:50	200 West	Pensacola Beach	Field Parameter	Sample Depth	0.15		m		
6/15/2009 13:50	200 West	Pensacola Beach	Field Parameter	pH	7.68				
6/15/2009 13:50	200 West	Pensacola Beach	Field Parameter	Specific Conductance	25000		umhos/cm		
6/15/2009 9:45	200 East	Pensacola Beach	AGP/LN	Algal Growth Potential	3	U	mg DryWt/L	3	3
6/15/2009 9:45	200 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.72	I	ug/L	0.4	1.2
6/15/2009 9:45	200 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	1.3	I	mg/L	0.2	2
6/15/2009 9:45	200 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, >2.0 mm	1	K	%tot drywt	0	1
6/15/2009 9:45	200 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.125-0.25 mm	16.4		% vol <2mm	0	0.01
6/15/2009 9:45	200 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.063-0.125mm	2.42		% vol <2mm	0	0.01
6/15/2009 9:45	200 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.25-0.5 mm	52.5		% vol <2mm	0	0.01
6/15/2009 9:45	200 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, <0.063 mm	17.3		% vol <2mm	0	0.01
6/15/2009 9:45	200 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.5-2.0 mm	11.5		% vol <2mm	0	0.01
6/15/2009 9:45	200 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	5.2		ug/L	0.55	1.7
6/15/2009 9:45	200 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment % Organic	1.2		% dry wt		
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Chromium	6.76	A	mg/Kg	0.25	0.98
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Copper	2.8	A	mg/Kg	0.25	0.98
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Magnesium	554	A	mg/L	0.8	3.2
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Cadmium	0.09	U	ug/L	0.09	0.36
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Beryllium	0.16	I	mg/Kg	0.039	0.16
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Silver	0.075	U	ug/L	0.075	0.3
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Aluminum	60	U	ug/L	60	240
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Nickel	1.84	A	mg/Kg	0.25	0.98
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Calcium	171	A	mg/L	0.075	0.3
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Lead	3.1	A	mg/Kg	0.37	1.5
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Copper	1.5	U	ug/L	1.5	1.5
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Lead	0.6	U	ug/L	0.6	2.4
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Nickel	0.75	U	ug/L	0.75	3
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Selenium	0.6	U	ug/L	0.6	2.4
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Cadmium	0.058	I	mg/Kg	0.049	0.2
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Silver	0.019	I	mg/Kg	0.012	0.049
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Iron	110	I	ug/L	30	120
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Zinc	5	U	ug/L	5	20

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Arsenic	0.83	I	ug/L	0.75	3
6/15/2009 9:45	200 East	Pensacola Beach	Metals	Chromium	1.6	I	ug/L	0.9	3.6
6/15/2009 9:45	200 East	Pensacola Beach	Nutrients	TSS	11	I	mg/L	4	16
6/15/2009 9:45	200 East	Pensacola Beach	Nutrients	Total-P	0.014	I	mg P/L	0.008	0.02
6/15/2009 9:45	200 East	Pensacola Beach	Nutrients	NO2NO3-N	0.006	I	mg N/L	0.004	0.01
6/15/2009 9:45	200 East	Pensacola Beach	Nutrients	Ammonia-N	0.01	U	mg N/L	0.01	0.02
6/15/2009 9:45	200 East	Pensacola Beach	Nutrients	Kjeldahl Nitrogen	0.66		mg N/L	0.16	0.4
6/15/2009 9:45	200 East	Pensacola Beach	Nutrients	O-Phosphate-P	0.008	U	mg P/L	0.008	0.02
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	DDD-p,p'	0.67	U	ug/Kg	0.67	2.7
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Delta-BHC	0.67	U	ug/Kg	0.67	2.7
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Chlorpyrifos Ethyl	2.7	U	ug/kg	2.7	11
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Fenamiphos	11	U	ug/kg	11	44
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Naled	22	U	ug/kg	22	88
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Parathion Methyl	5.4	U	ug/kg	5.4	22
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Chlorpyrifos Methyl	0.094	U	ug/L	0.094	0.38
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Metolachlor	0.47	UJ	ug/L	0.47	1.9
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Naled	0.75	U	ug/L	0.75	3
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Simazine	0.047	U	ug/L	0.047	0.19
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Aldrin	0.0094	U	ug/L	0.0094	0.038
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Endrin	0.047	U	ug/L	0.047	0.19
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Heptachlor	0.0094	U	ug/L	0.0094	0.038
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	PCB-1254	0.28	U	ug/L	0.28	1.1
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	PCB-1260	0.19	U	ug/L	0.19	0.76
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Aldrin	0.33	U	ug/Kg	0.33	1.3
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Endrin Aldehyde	0.67	U	ug/Kg	0.67	2.7
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Ametryn	2.7	U	ug/kg	2.7	11
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Methamidophos	27	U	ug/kg	27	110
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Norflurazon	5.4	U	ug/kg	5.4	22
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Prometryn	5.4	U	ug/kg	5.4	22
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Alachlor	0.56	UJ	ug/L	0.56	2.2
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Atrazine	0.047	U	ug/L	0.047	0.19
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Butylate	0.19	UJ	ug/L	0.19	0.76
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Chlorpyrifos Ethyl	0.047	U	ug/L	0.047	0.19
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Ethion	0.047	U	ug/L	0.047	0.19
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Fenamiphos	0.19	UJ	ug/L	0.19	0.76
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Prometryn	0.14	UJ	ug/L	0.14	0.56
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Endosulfan II	0.019	U	ug/L	0.019	0.076
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Endosulfan Sulfate	0.019	U	ug/L	0.019	0.076
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Gamma-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	PCB-1242	0.28	U	ug/L	0.28	1.1

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Toxaphene	0.71	U	ug/L	0.71	2.8
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	DDE-p,p'	0.67	U	ug/Kg	0.67	2.7
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	DDT-p,p'	2.6	I	ug/Kg	1	4
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Endosulfan Sulfate	0.67	U	ug/Kg	0.67	2.7
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Bromacil	11	U	ug/kg	11	44
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Fonofos	2.7	U	ug/kg	2.7	11
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	DDD-p,p'	0.019	U	ug/L	0.019	0.076
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	DDE-p,p'	0.019	U	ug/L	0.019	0.076
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Heptachlor Epoxide	0.019	U	ug/L	0.019	0.076
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Dieldrin	0.33	U	ug/Kg	0.33	1.3
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Endrin	1.7	U	ug/Kg	1.7	6.8
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Gamma-BHC	0.33	U	ug/Kg	0.33	1.3
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Toxaphene	25	U	ug/Kg	25	100
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Metribuzin	5.4	U	ug/kg	5.4	22
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Simazine	2.7	U	ug/kg	2.7	11
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Azinphos Methyl	0.19	UJ	ug/L	0.19	0.76
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Diazinon	0.047	U	ug/L	0.047	0.19
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Fonofos	0.094	UJ	ug/L	0.094	0.38
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Hexazinone	0.094	U	ug/L	0.094	0.38
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Metribuzin	0.094	U	ug/L	0.094	0.38
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Mevinphos	0.19	U	ug/L	0.19	0.76
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Parathion Methyl	0.094	U	ug/L	0.094	0.38
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Dieldrin	0.019	U	ug/L	0.019	0.076
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Endosulfan I	0.019	U	ug/L	0.019	0.076
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Chlordane	5	U	ug/Kg	5	20
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Alachlor	16	U	ug/kg	16	64
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Diazinon	2.7	U	ug/kg	2.7	11
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Malathion	5.4	U	ug/kg	5.4	22
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Metolachlor	16	U	ug/kg	16	64
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Alpha-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Beta-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	DDT-p,p'	0.028	U	ug/L	0.028	0.11
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	PCB-1016	0.19	U	ug/L	0.19	0.76
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	PCB-1221	0.19	U	ug/L	0.19	0.76
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Beta-BHC	0.33	U	ug/Kg	0.33	1.3
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Endosulfan II	0.33	U	ug/Kg	0.33	1.3
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Heptachlor	0.33	U	ug/Kg	0.33	1.3
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Heptachlor Epoxide	0.33	U	ug/kg	0.33	1.3
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Methoxychlor	1.7	U	ug/kg	1.7	6.8
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Atrazine	2.7	U	ug/kg	2.7	11

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Chlorpyrifos Methyl	5.4	U	ug/kg	5.4	22
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Ethion	2.7	U	ug/kg	2.7	11
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Ethoprop	2.7	U	ug/kg	2.7	11
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Monocrotophos	27	UJ	ug/kg	27	110
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Parathion Ethyl	5.4	U	ug/kg	5.4	22
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Phorate	2.7	U	ug/kg	2.7	11
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Ethoprop	0.094	U	ug/L	0.094	0.38
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Parathion Ethyl	0.14	U	ug/L	0.14	0.56
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Phorate	0.047	U	ug/L	0.047	0.19
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Delta-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	PCB-1232	0.19	U	ug/L	0.19	0.76
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	PCB-1248	0.19	U	ug/L	0.19	0.76
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Endosulfan I	0.33	U	ug/Kg	0.33	1.3
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Hexazinone	5.4	U	ug/kg	5.4	22
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Mevinphos	11	U	ug/kg	11	44
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Ametryn	0.047	UJ	ug/L	0.047	0.19
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Malathion	0.14	U	ug/L	0.14	0.56
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Norflurazon	0.14	U	ug/L	0.14	0.56
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Alpha-BHC	0.33	U	ug/Kg	0.33	1.3
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Azinphos Methyl	8.2	U	ug/kg	8.2	33
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Bromacil	0.19	U	ug/L	0.19	0.76
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Metalaxyl	0.24	U	ug/L	0.24	0.96
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Chlordane	0.19	U	ug/L	0.19	0.76
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Endrin Aldehyde	0.019	U	ug/L	0.019	0.076
6/15/2009 9:45	200 East	Pensacola Beach	Pesticides	Methoxychlor	0.047	U	ug/L	0.047	0.19
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2-Chloronaphthalene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	4-Chloro-3-methylphenol	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	4-Nitrophenol	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Benzo(a)anthracene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Benzo(a)pyrene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Di-n-octyl phthalate	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Dibenzo(a,h)anthracene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Pentachlorophenol	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9	U	ug/L	1.9	7.6
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	4-Nitrophenol	14	U	ug/L	14	57
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.95	U	ug/L	0.95	3.8

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Benzo(k)fluoranthene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	14	U	ug/L	14	57
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Di-n-octyl phthalate	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Fluoranthene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Benzidine	2100	U	ug/kg	2100	8500
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	590	U	ug/kg	590	2300
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Nitrobenzene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrophenol	14	U	ug/L	14	57
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2-Chloronaphthalene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Butyl benzyl phthalate	4.7	U	ug/L	4.7	19
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Di-n-butyl phthalate	4.7	U	ug/L	4.7	19
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Diethyl phthalate	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.8	U	ug/L	2.8	11
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Pentachlorophenol	2.8	U	ug/L	2.8	11
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Azobenzene/1,2-Diphenylhydrazine	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Dimethyl phthalate	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodimethylamine	590	U	ug/kg	590	2300
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dichlorophenol	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Hexachlorobutadiene	2.8	U	ug/L	2.8	11
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9	U	ug/L	1.9	7.6
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Naphthalene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Phenol	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dimethylphenol	590	U	ug/kg	590	2300
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethyl)ether	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Butyl benzyl phthalate	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Chrysene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Di-n-butyl phthalate	590	U	ug/kg	590	2300
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Fluorene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Hexachlorobenzene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Hexachlorocyclopentadiene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Isophorone	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Naphthalene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Phenanthrene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrotoluene	0.95	U	ug/L	0.95	3.8

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2-Nitrophenol	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	3,3'-Dichlorobenzidine	38	UJ	ug/L	38	150
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Benzidine	95	U	ug/L	95	380
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Benzo(a)anthracene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Hexachlorobenzene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Nitrobenzene	1.9	U	ug/L	1.9	7.6
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	1,2,4-Trichlorobenzene	290	U	ug/kg	290	1200
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2,4,6-Trichlorophenol	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrophenol	590	U	ug/kg	590	2300
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Benzo(b)fluoranthene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Hexachloroethane	290	U	ug/kg	290	1200
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Phenol	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.8	U	ug/L	2.8	11
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Isophorone	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2,6-Dinitrotoluene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2-Chlorophenol	290	U	ug/kg	290	1200
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	4-Bromophenyl phenyl ether	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Acenaphthene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Benzo(k)fluoranthene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Fluoranthene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Pyrene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.8	U	ug/L	2.8	11
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Benzo(a)pyrene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Phenanthrene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dichlorophenol	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrotoluene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2-Nitrophenol	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	3,3'-Dichlorobenzidine	5900	U	ug/kg	5900	23000
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Acenaphthylene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Benzo(g,h,i)perylene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Hexachlorobutadiene	290	U	ug/kg	290	1200
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2-Chlorophenol	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Acenaphthene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Benzo(b)fluoranthene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Chrysene	0.95	U	ug/L	0.95	3.8

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Fluorene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Hexachloroethane	2.8	U	ug/L	2.8	11
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.8	U	ug/L	2.8	11
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Pyrene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Anthracene	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Diethyl phthalate	98	U	ug/kg	98	390
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dimethylphenol	9.5	U	ug/L	9.5	38
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	2,6-Dinitrotoluene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Acenaphthylene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Anthracene	0.95	U	ug/L	0.95	3.8
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	Dimethyl phthalate	9.5	U	ug/L	9.5	38
6/15/2009 9:45	200 East	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9	U	ug/L	1.9	7.6
6/15/2009 9:45	200 East	Pensacola Beach	Field Parameter	Specific Conductance	25424		umhos/cm		
6/15/2009 9:45	200 East	Pensacola Beach	Nutrients	% Solid	61.3		%		
6/15/2009 9:45	200 East	Pensacola Beach	Field Parameter	Temperature	28.84		C		
6/15/2009 9:45	200 East	Pensacola Beach	Field Parameter	pH	7.7				
6/15/2009 9:45	200 East	Pensacola Beach	Field Parameter	Sample Depth	0.15		m		
6/15/2009 9:45	200 East	Pensacola Beach	Field Parameter	Specific Conductance	25424		umhos/cm		
6/15/2009 9:45	200 East	Pensacola Beach	Field Parameter	Dissolved Oxygen	6.82		mg/L		
6/15/2009 9:45	200 East	Pensacola Beach	Field Parameter	Temperature	28.84		C		
6/15/2009 9:45	200 East	Pensacola Beach	Field Parameter	pH	7.7				
6/15/2009 9:45	200 East	Pensacola Beach	Field Parameter	Dissolved Oxygen	6.82		mg/L		
6/15/2009 9:45	200 East	Pensacola Beach	Field Parameter	Sample Depth	0.15		m		
6/15/2009 11:40	400 East	Pensacola Beach	AGP/LN	Algal Growth Potential	3	U	mg DryWt/L	3	3
6/15/2009 11:40	400 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	1.1	I	mg/L	0.2	2
6/15/2009 11:40	400 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.5-2.0 mm	0.35		% vol <2mm	0	0.01
6/15/2009 11:40	400 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment % Organic	33		% dry wt		
6/15/2009 11:40	400 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.063-0.125mm	14.3		% vol <2mm	0	0.01
6/15/2009 11:40	400 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.25-0.5 mm	2.72		% vol <2mm	0	0.01
6/15/2009 11:40	400 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.47	I	ug/L	0.4	1.2
6/15/2009 11:40	400 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, >2.0 mm	1	K	%tot drywt	0	1
6/15/2009 11:40	400 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, <0.063 mm	76.9		% vol <2mm	0	0.01
6/15/2009 11:40	400 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	4.6		ug/L	0.55	1.7
6/15/2009 11:40	400 East	Pensacola Beach	Chlorophyll/Grain Size/BOD	Sediment Particle Size, %, 0.125-0.25 mm	5.78		% vol <2mm	0	0.01
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Chromium	68.5		mg/Kg	0.24	0.97
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Nickel	18.2		mg/Kg	0.24	0.97
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Chromium	1.6	I	ug/L	0.9	3.6
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Arsenic	0.75	U	ug/L	0.75	3
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Iron	100	I	ug/L	30	120
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Lead	0.6	U	ug/L	0.6	2.4

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Copper	1.5	U	ug/L	1.5	1.5
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Magnesium	545		mg/L	0.8	3.2
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Silver	0.193		mg/Kg	0.012	0.049
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Zinc	5	U	ug/L	5	20
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Copper	26.4		mg/Kg	0.24	0.97
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Aluminum	60	U	ug/L	60	240
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Calcium	168		mg/L	0.075	0.3
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Cadmium	0.09	U	ug/L	0.09	0.36
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Cadmium	0.46		mg/Kg	0.049	0.19
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Lead	29.9		mg/Kg	0.37	1.5
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Nickel	0.75	U	ug/L	0.75	3
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Selenium	0.6	U	ug/L	0.6	2.4
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Silver	0.075	U	ug/L	0.075	0.3
6/15/2009 11:40	400 East	Pensacola Beach	Metals	Beryllium	1.61		mg/Kg	0.039	0.16
6/15/2009 11:40	400 East	Pensacola Beach	Nutrients	O-Phosphate-P	0.008	U	mg P/L	0.008	0.02
6/15/2009 11:40	400 East	Pensacola Beach	Nutrients	Kjeldahl Nitrogen	0.61		mg N/L	0.16	0.4
6/15/2009 11:40	400 East	Pensacola Beach	Nutrients	Total-P	0.015	I	mg P/L	0.008	0.02
6/15/2009 11:40	400 East	Pensacola Beach	Nutrients	Ammonia-N	0.01	U	mg N/L	0.01	0.02
6/15/2009 11:40	400 East	Pensacola Beach	Nutrients	NO2NO3-N	0.006	I	mg N/L	0.004	0.01
6/15/2009 11:40	400 East	Pensacola Beach	Nutrients	TSS	6	I	mg/L	4	16
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Endosulfan I	0.019	U	ug/L	0.019	0.076
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Endosulfan Sulfate	0.019	U	ug/L	0.019	0.076
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Heptachlor	0.0094	U	ug/L	0.0094	0.038
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	PCB-1260	0.19	U	ug/L	0.19	0.76
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Alpha-BHC	0.33	U	ug/Kg	0.33	1.3
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Diazinon	9.8	U	ug/kg	9.8	39
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Alachlor	0.57	UJ	ug/L	0.57	2.3
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Atrazine	0.047	U	ug/L	0.047	0.19
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Ethion	0.047	U	ug/L	0.047	0.19
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Norflurazon	0.14	U	ug/L	0.14	0.56
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Alpha-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	DDE-p,p'	0.019	U	ug/L	0.019	0.076
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Chlordane	5	U	ug/Kg	5	20
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Endosulfan I	0.33	U	ug/Kg	0.33	1.3
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Heptachlor	0.33	U	ug/Kg	0.33	1.3
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Chlorpyrifos Ethyl	9.8	U	ug/kg	9.8	39
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Metolachlor	59	U	ug/kg	59	240
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Monocrotophos	98	UJ	ug/kg	98	390
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Parathion Ethyl	20	U	ug/kg	20	80
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Diazinon	0.047	U	ug/L	0.047	0.19

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Naled	0.75	U	ug/L	0.75	3
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Prometryn	0.14	UJ	ug/L	0.14	0.56
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Delta-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Endrin Aldehyde	0.019	U	ug/L	0.019	0.076
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	PCB-1242	0.28	U	ug/L	0.28	1.1
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Beta-BHC	0.33	U	ug/Kg	0.33	1.3
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Delta-BHC	0.67	U	ug/Kg	0.67	2.7
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Endrin	1.7	U	ug/Kg	1.7	6.8
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Azinphos Methyl	29	U	ug/kg	29	120
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Fenamiphos	39	U	ug/kg	39	160
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Mevinphos	39	U	ug/kg	39	160
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Simazine	9.8	U	ug/kg	9.8	39
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Metalaxyl	0.24	U	ug/L	0.24	0.96
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Metolachlor	0.47	UJ	ug/L	0.47	1.9
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Mevinphos	0.19	U	ug/L	0.19	0.76
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Endosulfan II	0.019	U	ug/L	0.019	0.076
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	PCB-1221	0.19	U	ug/L	0.19	0.76
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Toxaphene	0.71	U	ug/L	0.71	2.8
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	DDE-p,p'	0.67	U	ug/Kg	0.67	2.7
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Chlorpyrifos Methyl	20	U	ug/kg	20	80
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Ethoprop	9.8	U	ug/kg	9.8	39
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Norflurazon	20	U	ug/kg	20	80
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Prometryn	20	U	ug/kg	20	80
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Ametryn	0.047	UJ	ug/L	0.047	0.19
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Azinphos Methyl	0.19	UJ	ug/L	0.19	0.76
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Metribuzin	0.094	U	ug/L	0.094	0.38
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Simazine	0.047	U	ug/L	0.047	0.19
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	PCB-1232	0.19	U	ug/L	0.19	0.76
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	PCB-1254	0.28	U	ug/L	0.28	1.1
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Dieldrin	0.33	U	ug/Kg	0.33	1.3
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Toxaphene	25	U	ug/Kg	25	100
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Bromacil	39	U	ug/kg	39	160
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Phorate	9.8	U	ug/kg	9.8	39
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Chlorpyrifos Ethyl	0.047	U	ug/L	0.047	0.19
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Aldrin	0.0094	U	ug/L	0.0094	0.038
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Chlordane	0.19	U	ug/L	0.19	0.76
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Dieldrin	0.019	U	ug/L	0.019	0.076
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Endrin	0.047	U	ug/L	0.047	0.19
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Heptachlor Epoxide	0.019	U	ug/L	0.019	0.076
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Endosulfan II	0.33	U	ug/Kg	0.33	1.3

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Endrin Aldehyde	0.67	U	ug/Kg	0.67	2.7
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Atrazine	9.8	U	ug/kg	9.8	39
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Metribuzin	20	U	ug/kg	20	80
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Chlorpyrifos Methyl	0.094	U	ug/L	0.094	0.38
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Ethoprop	0.094	U	ug/L	0.094	0.38
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Fonofos	0.094	UJ	ug/L	0.094	0.38
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Hexazinone	0.094	U	ug/L	0.094	0.38
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Parathion Methyl	0.094	U	ug/L	0.094	0.38
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Beta-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	DDT-p,p'	0.028	U	ug/L	0.028	0.11
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Gamma-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Aldrin	0.33	U	ug/Kg	0.33	1.3
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	DDD-p,p'	0.67	U	ug/Kg	0.67	2.7
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	DDT-p,p'	1	U	ug/Kg	1	4
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Heptachlor Epoxide	0.33	U	ug/kg	0.33	1.3
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Alachlor	59	U	ug/kg	59	240
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Ametryn	9.8	U	ug/kg	9.8	39
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Fonofos	9.8	U	ug/kg	9.8	39
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Malathion	20	U	ug/kg	20	80
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Methamidophos	98	U	ug/kg	98	390
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Naled	78	U	ug/kg	78	310
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Parathion Methyl	20	U	ug/kg	20	80
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Butylate	0.19	UJ	ug/L	0.19	0.76
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Fenamiphos	0.19	UJ	ug/L	0.19	0.76
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Malathion	0.14	U	ug/L	0.14	0.56
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	DDD-p,p'	0.019	U	ug/L	0.019	0.076
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Methoxychlor	0.047	U	ug/L	0.047	0.19
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	PCB-1016	0.19	U	ug/L	0.19	0.76
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	PCB-1248	0.19	U	ug/L	0.19	0.76
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Endosulfan Sulfate	0.67	U	ug/Kg	0.67	2.7
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Gamma-BHC	0.33	U	ug/Kg	0.33	1.3
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Methoxychlor	1.7	U	ug/kg	1.7	6.8
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Ethion	9.8	U	ug/kg	9.8	39
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Hexazinone	20	U	ug/kg	20	80
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Bromacil	0.19	U	ug/L	0.19	0.76
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Parathion Ethyl	0.14	U	ug/L	0.14	0.56
6/15/2009 11:40	400 East	Pensacola Beach	Pesticides	Phorate	0.047	U	ug/L	0.047	0.19
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dichlorophenol	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrophenol	2100	U	ug/kg	2100	8500
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrotoluene	350	U	ug/kg	350	1400

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Hexachlorocyclopentadiene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dimethylphenol	9.5	U	ug/L	9.5	38
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Benzidine	95	U	ug/L	95	380
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Benzo(a)pyrene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Di-n-butyl phthalate	4.7	U	ug/L	4.7	19
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Pentachlorophenol	2.8	U	ug/L	2.8	11
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	1,2,4-Trichlorobenzene	1100	U	ug/kg	1100	4200
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Anthracene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Chrysene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Diethyl phthalate	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Hexachloroethane	1100	U	ug/kg	1100	4200
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Isophorone	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Pentachlorophenol	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Phenanthrene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrophenol	14	U	ug/L	14	57
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2-Chloronaphthalene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	3,3'-Dichlorobenzidine	38	UJ	ug/L	38	150
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	4-Nitrophenol	14	U	ug/L	14	57
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Dimethyl phthalate	9.5	U	ug/L	9.5	38
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Hexachlorobutadiene	2.8	U	ug/L	2.8	11
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Nitrobenzene	1.9	U	ug/L	1.9	7.6
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Phenanthrene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dimethylphenol	2100	U	ug/kg	2100	8500
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	4-Nitrophenol	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Benzo(a)pyrene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Fluorene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Acenaphthene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.8	U	ug/L	2.8	11
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Di-n-octyl phthalate	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Hexachlorobenzene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.8	U	ug/L	2.8	11
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Naphthalene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2,6-Dinitrotoluene	350	U	ug/kg	350	1400

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Benzo(k)fluoranthene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	2100	U	ug/kg	2100	8500
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Butyl benzyl phthalate	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Naphthalene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Nitrobenzene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Phenol	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Pyrene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2,6-Dinitrotoluene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Benzo(a)anthracene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9	U	ug/L	1.9	7.6
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9	U	ug/L	1.9	7.6
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2-Chlorophenol	1100	U	ug/kg	1100	4200
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	4-Chloro-3-methylphenol	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Acenaphthene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Acenaphthylene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Di-n-octyl phthalate	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Fluoranthene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dichlorophenol	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.8	U	ug/L	2.8	11
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Benzo(k)fluoranthene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Butyl benzyl phthalate	4.7	U	ug/L	4.7	19
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Chrysene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Diethyl phthalate	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.8	U	ug/L	2.8	11
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2-Nitrophenol	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Di-n-butyl phthalate	2100	U	ug/kg	2100	8500
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2-Chlorophenol	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2-Nitrophenol	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Benzo(b)fluoranthene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Fluorene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Pyrene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2,4,6-Trichlorophenol	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2-Chloronaphthalene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Azobenzene/1,2-Diphenylhydrazine	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Benzidine	7600	U	ug/kg	7600	31000

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Benzo(a)anthracene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Dibenzo(a,h)anthracene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Hexachlorobenzene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Hexachlorobutadiene	1100	U	ug/kg	1100	4200
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodimethylamine	2100	U	ug/kg	2100	8500
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Hexachloroethane	2.8	U	ug/L	2.8	11
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Isophorone	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Phenol	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	3,3'-Dichlorobenzidine	21000	U	ug/kg	21000	85000
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	4-Bromophenyl phenyl ether	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Benzo(b)fluoranthene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Benzo(g,h,i)perylene	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethyl)ether	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Dimethyl phthalate	350	U	ug/kg	350	1400
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrotoluene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9	U	ug/L	1.9	7.6
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Acenaphthylene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Anthracene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	14	U	ug/L	14	57
6/15/2009 11:40	400 East	Pensacola Beach	Priority Organic Pollutants	Fluoranthene	0.95	U	ug/L	0.95	3.8
6/15/2009 11:40	400 East	Pensacola Beach	Field Parameter	pH	7.71				
6/15/2009 11:40	400 East	Pensacola Beach	Field Parameter	Sample Depth	0.15		m		
6/15/2009 11:40	400 East	Pensacola Beach	Field Parameter	Sample Depth	0.15		m		
6/15/2009 11:40	400 East	Pensacola Beach	Field Parameter	Temperature	29.4		C		
6/15/2009 11:40	400 East	Pensacola Beach	Field Parameter	Temperature	29.4		C		
6/15/2009 11:40	400 East	Pensacola Beach	Field Parameter	pH	7.71				
6/15/2009 11:40	400 East	Pensacola Beach	Field Parameter	Dissolved Oxygen	6.89		mg/L		
6/15/2009 11:40	400 East	Pensacola Beach	Field Parameter	Specific Conductance	25480		umhos/cm		
6/15/2009 11:40	400 East	Pensacola Beach	Nutrients	% Solid	16.9		%		
6/15/2009 11:40	400 East	Pensacola Beach	Field Parameter	Specific Conductance	25480		umhos/cm		
6/15/2009 11:40	400 East	Pensacola Beach	Field Parameter	Dissolved Oxygen	6.89		mg/L		
6/15/2009 10:29	Blank	Blank	Metals	Aluminum	60	U	ug/L	60	240
6/15/2009 10:29	Blank	Blank	Metals	Magnesium	0.04	U	mg/L	0.04	0.16
6/15/2009 10:29	Blank	Blank	Metals	Selenium	0.2	U	ug/L	0.2	0.8
6/15/2009 10:29	Blank	Blank	Metals	Chromium	0.3	U	ug/L	0.3	1.2
6/15/2009 10:29	Blank	Blank	Metals	Nickel	0.25	U	ug/L	0.25	1

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 10:29	Blank	Blank	Metals	Zinc	5	U	ug/L	5	20
6/15/2009 10:29	Blank	Blank	Metals	Silver	0.025	U	ug/L	0.025	0.1
6/15/2009 10:29	Blank	Blank	Metals	Copper	0.5	U	ug/L	0.5	0.5
6/15/2009 10:29	Blank	Blank	Metals	Calcium	0.075	U	mg/L	0.075	0.3
6/15/2009 10:29	Blank	Blank	Metals	Cadmium	0.03	U	ug/L	0.03	0.12
6/15/2009 10:29	Blank	Blank	Metals	Arsenic	0.25	U	ug/L	0.25	1
6/15/2009 10:29	Blank	Blank	Metals	Iron	30	U	ug/L	30	120
6/15/2009 10:29	Blank	Blank	Metals	Lead	0.2	U	ug/L	0.2	0.8
6/15/2009 10:29	Blank	Blank	Nutrients	NO2NO3-N	0.004	UY	mg N/L	0.004	0.01
6/15/2009 10:29	Blank	Blank	Nutrients	Kjeldahl Nitrogen	0.08	UY	mg N/L	0.08	0.2
6/15/2009 10:29	Blank	Blank	Nutrients	O-Phosphate-P	0.004	U	mg P/L	0.004	0.01
6/15/2009 10:29	Blank	Blank	Nutrients	Ammonia-N	0.01	UY	mg N/L	0.01	0.02
6/15/2009 10:29	Blank	Blank	Nutrients	Total-P	0.004	UY	mg P/L	0.004	0.01
6/15/2009 10:29	Blank	Blank	Pesticides	DDD-p,p'	0.02	U	ug/L	0.02	0.08
6/15/2009 10:29	Blank	Blank	Pesticides	Malathion	0.15	U	ug/L	0.15	0.6
6/15/2009 10:29	Blank	Blank	Pesticides	Fenamiphos	0.2	UJ	ug/L	0.2	0.8
6/15/2009 10:29	Blank	Blank	Pesticides	Azinphos Methyl	0.2	UJ	ug/L	0.2	0.8
6/15/2009 10:29	Blank	Blank	Pesticides	Chlorpyrifos Ethyl	0.049	U	ug/L	0.049	0.2
6/15/2009 10:29	Blank	Blank	Pesticides	Ethoprop	0.099	U	ug/L	0.099	0.4
6/15/2009 10:29	Blank	Blank	Pesticides	Metolachlor	0.49	UJ	ug/L	0.49	2
6/15/2009 10:29	Blank	Blank	Pesticides	Metribuzin	0.099	U	ug/L	0.099	0.4
6/15/2009 10:29	Blank	Blank	Pesticides	Norflurazon	0.15	U	ug/L	0.15	0.6
6/15/2009 10:29	Blank	Blank	Pesticides	Parathion Methyl	0.099	U	ug/L	0.099	0.4
6/15/2009 10:29	Blank	Blank	Pesticides	Chlordane	0.2	U	ug/L	0.2	0.8
6/15/2009 10:29	Blank	Blank	Pesticides	Endosulfan Sulfate	0.02	U	ug/L	0.02	0.08
6/15/2009 10:29	Blank	Blank	Pesticides	Heptachlor Epoxide	0.02	U	ug/L	0.02	0.08
6/15/2009 10:29	Blank	Blank	Pesticides	Heptachlor	0.0099	U	ug/L	0.0099	0.04
6/15/2009 10:29	Blank	Blank	Pesticides	Endrin	0.049	U	ug/L	0.049	0.2
6/15/2009 10:29	Blank	Blank	Pesticides	Gamma-BHC	0.0099	U	ug/L	0.0099	0.04
6/15/2009 10:29	Blank	Blank	Pesticides	Atrazine	0.049	U	ug/L	0.049	0.2
6/15/2009 10:29	Blank	Blank	Pesticides	Ethion	0.049	U	ug/L	0.049	0.2
6/15/2009 10:29	Blank	Blank	Pesticides	Simazine	0.049	U	ug/L	0.049	0.2
6/15/2009 10:29	Blank	Blank	Pesticides	Aldrin	0.0099	U	ug/L	0.0099	0.04
6/15/2009 10:29	Blank	Blank	Pesticides	Beta-BHC	0.0099	U	ug/L	0.0099	0.04
6/15/2009 10:29	Blank	Blank	Pesticides	DDT-p,p'	0.03	U	ug/L	0.03	0.12
6/15/2009 10:29	Blank	Blank	Pesticides	Methoxychlor	0.049	U	ug/L	0.049	0.2
6/15/2009 10:29	Blank	Blank	Pesticides	Delta-BHC	0.0099	U	ug/L	0.0099	0.04
6/15/2009 10:29	Blank	Blank	Pesticides	DDE-p,p'	0.02	U	ug/L	0.02	0.08
6/15/2009 10:29	Blank	Blank	Pesticides	Mevinphos	0.2	U	ug/L	0.2	0.8
6/15/2009 10:29	Blank	Blank	Pesticides	Butylate	0.2	UJ	ug/L	0.2	0.8

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units	Word_Result	MDL	PQL
6/15/2009 10:29	Blank	Blank	Pesticides	Hexazinone	0.099	U	ug/L		0.099	0.4
6/15/2009 10:29	Blank	Blank	Pesticides	Prometryn	0.15	UJ	ug/L		0.15	0.6
6/15/2009 10:29	Blank	Blank	Pesticides	Alpha-BHC	0.0099	U	ug/L		0.0099	0.04
6/15/2009 10:29	Blank	Blank	Pesticides	Endrin Aldehyde	0.02	U	ug/L		0.02	0.08
6/15/2009 10:29	Blank	Blank	Pesticides	Toxaphene	0.74	U	ug/L		0.74	3
6/15/2009 10:29	Blank	Blank	Pesticides	Fonofos	0.099	UJ	ug/L		0.099	0.4
6/15/2009 10:29	Blank	Blank	Pesticides	Diazinon	0.049	U	ug/L		0.049	0.2
6/15/2009 10:29	Blank	Blank	Pesticides	Alachlor	0.59	UJ	ug/L		0.59	2.4
6/15/2009 10:29	Blank	Blank	Pesticides	Ametryn	0.049	UJ	ug/L		0.049	0.2
6/15/2009 10:29	Blank	Blank	Pesticides	Chlorpyrifos Methyl	0.099	U	ug/L		0.099	0.4
6/15/2009 10:29	Blank	Blank	Pesticides	Endosulfan II	0.02	U	ug/L		0.02	0.08
6/15/2009 10:29	Blank	Blank	Pesticides	Endosulfan I	0.02	U	ug/L		0.02	0.08
6/15/2009 10:29	Blank	Blank	Pesticides	Phorate	0.049	U	ug/L		0.049	0.2
6/15/2009 10:29	Blank	Blank	Pesticides	Bromacil	0.2	U	ug/L		0.2	0.8
6/15/2009 10:29	Blank	Blank	Pesticides	Metalaxyl	0.25	U	ug/L		0.25	1
6/15/2009 10:29	Blank	Blank	Pesticides	Parathion Ethyl	0.15	U	ug/L		0.15	0.6
6/15/2009 10:29	Blank	Blank	Pesticides	Naled	0.79	U	ug/L		0.79	3.2
6/15/2009 10:29	Blank	Blank	Pesticides	Dieldrin	0.02	U	ug/L		0.02	0.08
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	2,4-Dinitrophenol	15	U	ug/L		15	59
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Acenaphthylene	0.99	U	ug/L		0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Dimethyl phthalate	9.9	U	ug/L		9.9	40
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Pentachlorophenol	3	U	ug/L		3	12
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.99	U	ug/L		0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	4-Nitrophenol	15	U	ug/L		15	59
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Acenaphthene	0.99	U	ug/L		0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Benzidine	99	U	ug/L		99	400
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.99	U	ug/L		0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.99	U	ug/L		0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.99	U	ug/L		0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Hexachlorobutadiene	3	U	ug/L		3	12
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	3	U	ug/L		3	12
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Isophorone	0.99	U	ug/L		0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Naphthalene	0.99	U	ug/L		0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Chrysene	0.99	U	ug/L		0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Hexachloroethane	3	U	ug/L		3	12
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	3	U	ug/L		3	12
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	15	U	ug/L		15	59
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Diethyl phthalate	0.99	U	ug/L		0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Hexachlorobenzene	0.99	U	ug/L		0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Pyrene	0.99	U	ug/L		0.99	4

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units_Word_Result	MDL	PQL
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3	U	ug/L	3	12
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	2	U	ug/L	2	7.9
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Anthracene	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Nitrobenzene	2	U	ug/L	2	7.9
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	2,4-Dimethylphenol	9.9	U	ug/L	9.9	40
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	2-Chlorophenol	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Butyl benzyl phthalate	4.9	U	ug/L	4.9	20
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Fluoranthene	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	2	U	ug/L	2	7.9
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Phenol	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	2-Nitrophenol	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	3	U	ug/L	3	12
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Fluorene	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	40	UJ	ug/L	40	160
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Di-n-butyl phthalate	4.9	U	ug/L	4.9	20
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.99	U	ug/L	0.99	4
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	2	U	ug/L	2	7.9
6/15/2009 10:29	Blank	Blank	Priority Organic Pollutants	Phenanthrene	0.99	U	ug/L	0.99	4
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Bromacil	0.19	U	ug/L	0.19	0.76
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Naled	0.75	U	ug/L	0.75	3
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Parathion Ethyl	0.14	U	ug/L	0.14	0.56
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Phorate	0.047	U	ug/L	0.047	0.19
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Azinphos Methyl	0.19	UJ	ug/L	0.19	0.76
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Diazinon	0.047	U	ug/L	0.047	0.19
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Hexazinone	0.094	U	ug/L	0.094	0.38
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Delta-BHC	0.0094	U	ug/L	0.0094	0.038
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Endosulfan I	0.019	U	ug/L	0.019	0.076

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units	Word_Result	MDL	PQL
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Heptachlor Epoxide	0.019	U	ug/L		0.019	0.076
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Methoxychlor	0.047	U	ug/L		0.047	0.19
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Ethion	0.047	U	ug/L		0.047	0.19
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Metalaxyl	0.24	U	ug/L		0.24	0.96
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Metribuzin	0.094	U	ug/L		0.094	0.38
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	DDD-p,p'	0.019	U	ug/L		0.019	0.076
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Endrin Aldehyde	0.019	U	ug/L		0.019	0.076
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Ametryn	0.047	UJ	ug/L		0.047	0.19
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Chlorpyrifos Ethyl	0.047	U	ug/L		0.047	0.19
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Fenamiphos	0.19	UJ	ug/L		0.19	0.76
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Metolachlor	0.47	UJ	ug/L		0.47	1.9
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Mevinphos	0.19	U	ug/L		0.19	0.76
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Parathion Methyl	0.094	U	ug/L		0.094	0.38
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Chlordane	0.19	U	ug/L		0.19	0.76
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Dieldrin	0.019	U	ug/L		0.019	0.076
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Gamma-BHC	0.0094	U	ug/L		0.0094	0.038
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Toxaphene	0.71	U	ug/L		0.71	2.8
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Atrazine	0.047	U	ug/L		0.047	0.19
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Butylate	0.19	UJ	ug/L		0.19	0.76
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Alachlor	0.56	UJ	ug/L		0.56	2.2
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Chlorpyrifos Methyl	0.094	U	ug/L		0.094	0.38
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Ethoprop	0.094	U	ug/L		0.094	0.38
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Fonofos	0.094	UJ	ug/L		0.094	0.38
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Malathion	0.14	U	ug/L		0.14	0.56
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	DDT-p,p'	0.028	U	ug/L		0.028	0.11
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Endosulfan II	0.019	U	ug/L		0.019	0.076
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Heptachlor	0.0094	U	ug/L		0.0094	0.038
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Norflurazon	0.14	U	ug/L		0.14	0.56
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Simazine	0.047	U	ug/L		0.047	0.19
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Prometryn	0.14	UJ	ug/L		0.14	0.56
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Aldrin	0.0094	U	ug/L		0.0094	0.038
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Alpha-BHC	0.0094	U	ug/L		0.0094	0.038
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Beta-BHC	0.0094	U	ug/L		0.0094	0.038
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	DDE-p,p'	0.019	U	ug/L		0.019	0.076
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Endosulfan Sulfate	0.019	U	ug/L		0.019	0.076
6/15/2009 13:50	200W dup	Pensacola Beach	Pesticides	Endrin	0.047	U	ug/L		0.047	0.19
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	2-Chloronaphthalene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Phenol	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Di-n-octyl phthalate	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Dimethyl phthalate	9.4	U	ug/L		9.4	38

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units	Word_Result	MDL	PQL
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.8	U	ug/L		2.8	11
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Hexachloroethane	2.8	U	ug/L		2.8	11
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Phenanthrene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9	U	ug/L		1.9	7.5
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Butyl benzyl phthalate	4.7	U	ug/L		4.7	19
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Benzo(b)fluoranthene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9	U	ug/L		1.9	7.5
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	2-Chlorophenol	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.8	U	ug/L		2.8	11
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	2-Nitrophenol	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	3,3'-Dichlorobenzidine	38	UJ	ug/L		38	150
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Di-n-butyl phthalate	4.7	U	ug/L		4.7	19
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Hexachlorobenzene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Hexachlorobutadiene	2.8	U	ug/L		2.8	11
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Isophorone	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Benzo(k)fluoranthene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	14	U	ug/L		14	56
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Nitrobenzene	1.9	U	ug/L		1.9	7.5
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrotoluene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	2,6-Dinitrotoluene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	4-Nitrophenol	14	U	ug/L		14	56
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Acenaphthylene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Benzo(a)anthracene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.8	U	ug/L		2.8	11
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	2,4-Dichlorophenol	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Anthracene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Benzo(a)pyrene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Chrysene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Fluoranthene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9	U	ug/L		1.9	7.5
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	2,4-Dimethylphenol	9.4	U	ug/L		9.4	38
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Fluorene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Naphthalene	0.94	U	ug/L		0.94	3.8

Date_Sampled	UDL	Station	SCH_Group	Component	Value	Qualifier	Units	Word_Result	MDL	PQL
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Pentachlorophenol	2.8	U	ug/L		2.8	11
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Acenaphthene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Benzidine	94	U	ug/L		94	380
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Diethyl phthalate	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.8	U	ug/L		2.8	11
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	Pyrene	0.94	U	ug/L		0.94	3.8
6/15/2009 13:50	200W dup	Pensacola Beach	Priority Organic Pollutants	2,4-Dinitrophenol	14	U	ug/L		14	56
6/15/2009 13:50	200W dup	Pensacola Beach	Field Parameter	Sample Depth	0.15		m			
6/15/2009 13:50	200W dup	Pensacola Beach	Field Parameter	Specific Conductance	25000		umhos/cm			
6/15/2009 13:50	200W dup	Pensacola Beach	Field Parameter	Dissolved Oxygen	7.04		mg/L			
6/15/2009 13:50	200W dup	Pensacola Beach	Field Parameter	pH	7.68					
6/15/2009 13:50	200W dup	Pensacola Beach	Field Parameter	Temperature	30.32		C			

Appendix F

Toxicological results

FDEP Biology Laboratory - Chronic Screen Bench Sheet

Ceriodaphnia dubia

Facility: Pensacola Beach WWTF
Address: 53 Via De Luna Street
County: Pensacola, Escambia County 32561
NPDES Permit #: FL 0024007
Contact/District: Kim Allen / North west

LIMS entry: 7-9-09 MF verified: 7-10-09 BA

Diluent/ Batch: 20% DMW / 6.16.09 Test Days Used: 0-7 (6 test terminated on day 7 MF 7-10-09)
20% DMW / _____ Test Days Used: _____

SOP#: TA07_05 EPA 821-R-02-013 Method 1002.0

Start Date: 6.16.09 Time: 12:15
End Date: 6.22.09 Time: 14:10

Organism: *Ceriodaphnia dubia*
Organism Batch #: 20-09
Organism age : <24 hours
Feeding: Prior to Test and Daily
Food: YCT *P. subcapitata*
Food Batch: 1.12.09 2.13.09
Chamber size : 30 ml
Sample volume : 20 ml

Sample Received	Lab Sample #	LIMS Job #	LIMS Sample #	Collection Date/Time	Received Date/Time
Test Day 0	1	TLH-2009-06-16.15	1194 802	6.15.09 / 9:50	6.16.09 / 10:18
Test Day 2	2	TLH-2009-06-18.34	119 5237	6.17.09 / 10:34	6.18.09 / 10:31
Test Day 4	3	TLH-2009-06-24-01	1196427	6.19.09 / 11:44	6/20/09 / 9:02

Water Quality Parameters	Field Chlorine (mg/L)			Lab Chlorine (mg/L)			~~Ammonia~~ Alkalinity (mg/L as $CaCO_3$) BA		
Lab Sample #:	1	2	3	1	2	3	1	2	3
Sample:	Not measured			0.04	<0.03	<0.03	0.101	0.316	0.1378
Diluent/Control:				<0.03	<0.03	<0.03	<0.017	<0.017	<0.017
Method:	—	—	—	Hach	Hach	Hach	Hach	Hach	Hach
Measured by:	—	—	—	AGR	AGR	JD/AGR	BA	BA	BA/MF
Verified by:	MF	MF	MF	BA	BA	BA	MF	MF	MF/BA
	Conductivity (circle one) (µmhos-cm) (mmhos-cm)			~~Ammonia~~ Alkalinity (mg/L) BA			Hardness (mg/L as $CaCO_3$)		
Lab Sample #:	1	2	3	1	2	3	1	2	3
Sample:	1.17	1.16	1.18	76	79	68	155	146	148
Diluent/Control:	0.119	0.177	0.177	81	81	81	79	79	79
Method:	Mettler	Mettler	Mettler	Denver	Denver	Denver	Hach	Hach	Hach
Measured by:	BA	MF	MF	AGR	AGR	AGR/MF	AGR	AGR	AGR/MF
Verified by:	MF	BA	BA	BA	BA	BA	BA	BA	BA

Temperature Shipped ≤6° C (all samples) (yes) no
Holding Time ≤36 hours (yes) no
Light Intensity : 50 - 100 ft. candles
Photoperiod : 16 light 8 dark
Temperature Range °C:
Incubator # 2 min. 26.0 max. 26.6 mean 26.3
Room B246 min. 24.9 max. 25.5 mean 25.2

Test Replicate	Loaded from culture vial
1	A1
2	A9
3	A10
4	A21
5	A24
6	A28
7	B2
8	B9
9	B14
10	B25

Statistics	
Control % CV:	16.4
Dunnetts PMSD:	26.0%
Reproduction NOEC:	100%
Survival NOEC:	100%
T-test value	1.48765
T- table value:	1.734
df:	18

Hetero... T-...

Investigators' signatures
Marshall Faircloth
Amelia Rankin

Loretta C. Wolfe
REVIEWER

Comments:

Test Page 1 of 3 PAGE 000040 revised 08/24/06 MF/SP

FDEP Biology Laboratory - Chronic Screen Bench Sheet

Ceriodaphnia dubia Survival and Reproduction

Facility: Pensacola Beach

LIMS Sample # 1194802 for lab sample 1

Start Date: 6.16.09 Time: 12:15

End Date: 6.22.09 Time: 14:10

Conc.	Day	Replicate Number 1	2	3	4	5	6	7	8	9	10	Total Neonates	Surviving adults	Neonates per adult
Control	0*												10	
	1												10	
	2	6	0	0	0	0	6	0	0	0	0	6	10	6
	3	4	1	4	0	2	5	6	4	5	4	35	10	3.5
	4	10	0	0	7	0	0	7	0	10	6	40	10	4.0
	5	0	9	7	9	5	5	0	5	0	0	40	10	4.0
	6	11	9	8	9	13	9	13	9	10	7	98	10	9.8
	7													
	8													
	Total	25	19	19	25	20	19	26	18	25	17	213	10	21.3

Conc.	Day	Replicate Number 1	2	3	4	5	6	7	8	9	10	Total Neonates	Surviving adults	Neonates per adult
Ⓐ % sample	0*												10	
	1												10	
	BB 2 3	6	4	3X	3	4	1	4	4	4	3	day2: 0	9	0
	BB 2	0	0	0	0	0	MF	0	0	0	0	day3: 36	9	4.0
	4	8	0	X	0	0	X	7	0	0	8	23	8	2.88
	5	6	9	|	5	8	|	0	0	8	0	30	8	3.75
	6	9	12	|	8	9	|	12	5	13	10	78	8	9.75
	7			↓			↓							
	8													
	Total	23	25	3	16	21	1	23	9	25	21	167	8	16.7

Organisms loaded by: BA

Day	Counted/ verified by:
0	MF
1	BA
2	BA
3	BA
4	MF
5	MF
6	BA
7	
8	

Concentration	Mean neonates /adult	% survival
Control	21.3	100
100%	16.7	82

Test acceptability	
Mean control reproduction 15/female	(yes) no
3rd brood in 60% of surviving females	(yes) no
Control survival ≥80%:	(yes) no

Comments: Ⓐ day 2 counts written in wrong spot (day 3) 6.20.09

*Day 0 is test initiation day

X = Dead (original organism)

Test Page 2 of 3

PAGE

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FDEP Biology Laboratory - Chronic Screen Bench Sheet

Ceriodaphnia dubia Parameters

Facility: Pensacola Beach WWTP

LIMS Sample # : 1194802 for lab sample 1

Circle µmhos-cm or mmhos-cm

Test Day ↓		Concentration	New Sample: Test Replicate	pH (su)	Temp (°C)	DO (mg/L)	Conductivity (µmhos/cm) (mmhos/cm)	Old Sample: 6.16.09 Test Replicate	pH (su)	Temp (°C)	DO (mg/L)	Conductivity (µmhos/cm) (mmhos/cm)
Day 0	sample:	Control	M	8.0	24.0	7.7	0.179					
	1	100%	M	7.9	25.3	7.6	1.17					
	Measured by:			BA	BA	BA	BA					
	Recorded by:			BA	BA	BA	BA					
Day 1	sample:	Control	M	8.2	24.6	9.0	~~0.348~~ 0.178	MA	7.9	24.0	8.1	0.177
	1	100%	M	~~7.8~~ 7.8	24.3	8.8	1.17	MA	7.9	24.0	7.1	1.16
	Measured by:			AOL	AOL	AOL	AOL		BA	BA	BA	BA
	Recorded by:			AOL	AOL	AOL	AOL		BA	BA	BA	BA
Day 2	sample:	Control	M	8.0	25.0	7.5	0.177	MA	7.8	24.0	6.8	0.179
	2		M	7.7	25.0	7.2	1.158	MA	7.8	24.0	7.1	1.14
	Measured by:			MF	MF	MF	MF		BA	BA	BA	BA
	Recorded by:			MF	MF	MF	MF		BA	BA	BA	BA
Day 3	sample:	Control	M	7.9	24.2	7.4	0.179	MA	7.9	24.0	7.1	0.179
	2		M	7.7	24.1	7.5	1.19	MA	7.8	24.0	6.8	1.17
	Measured by:			BA	BA	BA	BA		BA	BA	BA	BA
	Recorded by:			BA	BA	BA	BA		BA	BA	BA	BA
Day 4	sample:	Control	M	8.1	24.3	7.6	0.177	MA	8.0	24.7	7.5	0.182
	3		M	7.8	24.8	7.8	1.18	MA	8.0	24.7	7.4	1.18
	Measured by:			MF	MF	MF	MF		MF	MF	MF	MF
	Recorded by:			MF	MF	MF	MF		MF	MF	MF	MF
Day 5	sample:	Control	M	8.0	24.5	7.7	0.177	MA	8.1	25.1	7.4	0.190
	3		M	7.7	25.4	8.0	1.19	MA	8.0	25.2	7.4	1.19
	Measured by:			MF	MF	MF	MF		MF	MF	MF	MF
	Recorded by:			MF	MF	MF	MF		MF	MF	MF	MF
Day 6	sample:	Control	M					M	8.0	24.6	6.6	0.167
	3		M	Not Renewed				M	8.0	24.6	7.3	1.13
	Measured by:								BA	BA	BA	BA
	Recorded by:								BA	BA	BA	BA
Day 7	sample:	Control	M					M				
	3		M					M				
	Measured by:											
	Recorded by:											
Day 8	sample:	Control						M				
	3							M				
	Measured by:											
	Recorded by:											

Comments: ① transcription error BR 6-17-09

Replicate M= "Metered" vial, a surrogate vial for parameters

FDEP Biology Laboratory - Chronic Bioassay Bench Sheet

Pimphales promelas or Menidia beryllina

Facility: Pensacola Beach WWTF
Address: 53 Via De Luna Street
County: Pensacola, Escambia County 32561
NPDES Permit #: FL 0024007
Contact/District: Kim Allen / North West

Test Species (circle one)
(P. promelas) SOP#: TA07_09 EPA-821-R-02-013 Method 1000.0
M. beryllina SOP#: TA07_14 EPA-821-R-02-014 Method 1006.0

Start Date: 6.16.09 Time: 1300
End Date: 6.23.09 Time: 1100

Diluent/ Batch:
MHW / 6.1.09 Test Days Used: 1-7
MHW / _____ Test Days Used: _____
ASW / _____ Test Days Used: _____
ASW / _____ Test Days Used: _____

Organism Batch # : 6.16.09
Feeding Prior to Test and Daily
Artemia Lot # : 38458
Chamber size : 1000 ml
Test volume : 500 ml
Organism age : <24 hrs ~~days~~

Artemia Batch #	
Day 0 79.09	Day 4 83.09
Day 1 80.09	Day 5 84.09
Day 2 81.09	Day 6 85.09
Day 3 82.09	

LIMS:	Date	Initials
Entry:	7-9-09	MF
Verification:	7-10-09	BA

Sample Received	Lab Sample #	LIMS Job #	LIMS Sample #	Collection Date/Time	Received Date/Time
Test Day 0	1	TLH-2009-06-16-75	1194802	6.15.09 / 9:50	6.16.09 / 10:18
Test Day 2	2	TLH-2009-06-18-34	1195231	6.17.09 / 10:34	6.18.09 / 10:31
Test Day 4	3	TLH-2009-06-24-01	1196427	6.19.09 / 11:44	6.20.09 / 9:02

Water Quality Parameters	Batch # 6-1-09 ☒ MHW ☐ ASW	☒ MHW ☐ ASW	NA Sample 1	NA Sample 2	NA Sample 3	Other:	Measured by:	Verified by:
Field Total Residual Cl_2 (mg/L):	NA	NA	Not measured				—	MF
Lab Total Residual Cl_2 (mg/L):	<0.03		<0.04	<0.03	<0.03		AGR/JD	JD/MF
Alkalinity (mg/L as $CaCO_3$):	83		~~172~~ 76 JD	79	68		BA / AGR	JD
Hardness (mg/L as $CaCO_3$):	94		~~177~~ 155 JD	146	148		AGR	JD
Total Ammonia (mg/L as N):	<0.017		0.101	0.316	0.378		BA/	JD
Conductivity (~~µmhos~~ mmhos):	338		1188	1182	1209		JD	BA
Salinity (ppth):	<1		0.54	0.54	0.56		JD	BA

Temperature Shipped ≤6° C (all samples) (yes) no
Holding Time ≤36 hours (yes) no
Light Intensity : 50 - 100 ft. candles
Photoperiod : 16 light 8 dark

Temperature Range °C: (if used) JD 26.0 to 26.3
Incubator # 2 min. ~~24.9~~ 26.0 max. ~~25.5~~ JD 25.2 mean ~~25.2~~
Water bath # ____ min. JD ____ max. ____ mean ____
Room B246 min. 24.9 max. 25.5 mean 25.2

Test Incubated in: ☑ Incubator #: 2
☐ Waterbath #: ____

Investigators' signatures
Jenny Daniels
Amelia Rankin
Brian Baughman
Marshall Faircloth

REVIEWER Loretta C. Wolfe

Statistics	
Control %cv:	15.672
Dunnetts PMSD:	17.1
Survival NOEC:	100%
Survival LOEC:	>100%
Growth NOEC:	100 %
Growth LOEC:	>100

Comments:

PAGE 11

revised 7/15/08 MF

FDEP Biology Laboratory - Chronic Screen Bench Sheet

Pimphales promelas or Menidia beryllina Survival

Facility: Pensacola Beach WWTP

Organism: *P. promelas* *M.beryllina* (circle one)

LIMS Sample Number: 144802 for lab sample #1

Start Date: 6-16-09 Time: 13:00

End Date: 6-23-09 Time: 11:00

		TEST DAY							
Concentration	Replicate	0	1	2	3	4	5	6	7
Control	A	10	9	9	9	9	9	9	9
	B	10	10	10	10	10	10	10	10
	C	10	7	7	7	7	7	7	7
	D	10	10	10	10	10	10	10	10
100 % sample concentration	A	10	10	10	9	9	9	9	9
	B	10	10	10	10	10	10	10	10
	C	10	10	10	10	10	10	10	10
	D	10	9	9	9	9	9	9	9
Control	A	10							
	B	10							
	C	10							
	D	10							
% sample concentration	A	10							
	B	10							
	C	10							
	D	10							
Loaded by: [illegible]	Checked by:		BA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Verified by: BA									

Comments:

Biology Laboratory Chronic Screening Bioassay Benchsheet

Parameters

P. promelas SOP TA-07_09 *M. beryllina* SOP TA-07_14

Sample Source: Pennsauken Brook WWTP

LIMS Sample #: 1194802 (for Lab sample #1)

Test Day ↓		Conc.	Old Sample: Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Cond (µmhos/cm) (mmhos/cm)	Salinity ppth	New Sample: Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Cond (µmhos/cm) (mmhos/cm)	Salinity ppth
Day 0	sample:	Control							A	8.1	24.3	7.6	338	—
	1	100%							A	7.9	25.9	7.5	1385	—
	Measured by:									JB	JB	JB	JB	—
	Recorded by:									JB	JB	JB	JB	—
Day 1	sample:	Control	B	8.0	24.9	8.2	332	—	B	7.9	24.7	7.3	333	—
	1	100%	B	7.9	25.2	8.1	1130	—	B	7.7	24.8	7.8	1169	—
	Measured by:			JBR	BA	JBR	JBR	—		BA	BA	BA	BA	—
	Recorded by:			JBR	JBR	JBR	JBR	—		BA	BA	BA	BA	—
Day 2	sample:	Control	C	7.6	24.0	6.5	338	—	C	8.0	24.1	6.9	330	—
	2	100%	C	7.6	24.1	6.5	1200	—	C	7.8	24.2	7.0	1168	—
	Measured by:			JB	JB	JB	JB	—		BA	BA	BA	BA	BA
	Recorded by:			JB	JB	JB	JB	—		BA	BA	BA	BA	BA
Day 3	sample:	Control	D	7.3	24.5	6.2	341	—	D	7.7	24.5	7.2	333	—
	2	100%	D	7.5	24.3	6.0	1188	—	D	7.5	24.7	7.2	1170	—
	Measured by:			JB	JB	JB	JB	—		JBR	JBR	JBR	JBR	—
	Recorded by:			JB	JB	JB	JB	—		JBR	JBR	JBR	JBR	—
Day 4	sample:	Control	A	7.2	24.3	5.0	351	—	A	7.7	24.2	6.9	344	—
	3	100%	A	7.1	24.3	4.9	1200	—	A	7.5	24.3	7.0	1175	—
	Measured by:			JB	JB	JB	JB	—		JB	JB	JB	JB	—
	Recorded by:			JB	JB	JB	JB	—		JB	JB	JB	JB	—
Day 5	sample:	Control	B	7.5	24.2	5.6	388	—	B	7.6	24.0	7.5	345	—
	3	100%	B	7.4	24.5	5.4	1210	—	B	7.5	24.1	7.2	1189	—
	Measured by:			—	—	—	JB	—		—	—	—	—	—
	Recorded by:			—	—	—	JB	—		—	—	—	—	—
Day 6	sample:	Control	C	7.5	24.5	6.8	343	—	C	7.6	23.9	7.8	325	—
	3	100%	C	7.4	24.6	6.7	1198	—	C	7.4	24.4	7.9	1174	—
	Measured by:			JB	JB	JB	JB	—		JBR	JBR	JBR	JBR	—
	Recorded by:			JB	JB	JB	JB	—		JBR	JBR	JBR	JBR	—
Day 7	sample:	Control	D	7.3	24.0	5.9	342	—						
	3	100%	D	7.2	24.0	5.9	1202	—						
	Measured by:			JB	JB	JB	JB	—						
	Recorded by:			JB	JB	JB	JB	—						

Test Rep. = Replicate Record Salinity < 1 if freshwater Circle µmhos-cm or mmhos-cm

Comments:

revised 7/15/08 mf

FDEP Biology Laboratory - Chronic Screen Bench Sheet

Facility: Pensacola Beach WWTF

LIMS Sample Number: 1194802 for lab sample #1

Concentration	Replicate	Pan #	Pan wt. (g)	Pan + Fish (g)	Fish wt. (g)	Original # Fish	Mean wt. (mg)
			mean wt = fish wt divided by 10 convert g to mg: move decimal 3 places to right				
Control	A	1	0.02375	0.03178	0.00803	10	.803
	B	2	0.02418	0.03200	0.00782	10	.782
	C	3	0.02274	0.02797	0.00573	10	.573
	D	4	0.02610	0.03437	0.00827	10	.827
100 %	A	5	0.02209	0.02917	0.00708	10	.708
sample	B	6	0.02259	0.03096	0.00837	10	.837
	C	7	0.01946	0.02715	0.00769	10	.769
	D	8	0.02296	0.03123	0.00827	10	.827
Control	A					10	
	B					10	
	C					10	
	D					10	
%	A					10	
sample	B					10	
	C					10	
	D					10	
	Weighed by initials:						

Growth	%CV	PMSD
Control	15.7	17.1

Growth	Table	Calculated	dF
T-test	1.94300	0.59424	6
Survival T-test	1.94300	0.50975	6

Drying	VAR2
Temperature °C:	95
Hours:	8

S-weight ID: BIO-S-WEIGHTS-01

Balance ID: OHAUS 250D SER. 1125481084

Tare Weighing Date: 6.22.09 Final Weighing Date: 6.29.09

			Measured Value (g)		S-weight Value (g)
Tare Pan 1 after Pan 5 (g)	0.02376 @ 0.02375	S-weights	0.00999	@	0.01
Tare Pan 1 after Pan 8 (g)	0.02374 @ 0.02375	at tare	0.03000	@	0.03
Final Pan 1 after Pan 5 (g)	~~0.03 0.01003~~ @ JD 0.01	S-weights	0.01003	@	0.01
Final Pan 1 after Pan 8 (g)	0.03180 @ 0.03178	at final	0.05005	@	0.05

.03180 @ 0.03178 J.D. →

Comments: Control average wt = 0.746 / organism (original)] MF 7/6/09
100% average wt = 0.785 / original organism

Bioassay Instrument ID

Test ID: Pensacola Beach WWTF Dates: 6/16-6/23/09

METER / DEVICE	ID	SOP	Parameter	Method	√used
YSI Model 58 Dissolved Oxygen Meter	90H018262	TA06_04	Dissolved Oxygen	SM 4500 O G	✓
Accumet AR-10 pH Meter	93312105	TA06_23	pH	SM 4500 H+	✓
Mettler-Toledo SevenMulti Conductivity Meter	SN 1225117049 Probe H04257	TA06_25	Conductivity Salinity	SM 2510 B SM 2520 B	✓
Denver Model 225 ISE with ammonia probe	SN K01377	TA06_17	Ammonia	SM 4500 NH3 F	✓
Thermometer (DO probe)	YSI 5750 SN 05J1720	TA06_05	Temperature	SM-2530B modified DEP SOP-001/01 FT1400	✓
Hach Pocket Colorimeter II	05050C026378	TA06_22	Total Residual Chlorine	EPA 330.5 SM 4500 CL G	✓
Alkalinity (Hach Kit)	No SN	TA06_08	Alkalinity	SM 2320 B	✓
Hardness (Hach Kit)	No SN	TA06_09	Hardness	SM 2340 C	✓
OHAUS Balance 250D	1125481084	TA06_21 TA06_27	Weight	-	✓
S-Weights	BIO-S-WEIGHTS-01	NA	Balance check	-	✓
NWR2	green	—	weights/Argon	—	✓

SM-2530B modified to allow use of electronic and non-mercury filled thermometers.

Insert other device information in blank spaces(if used). Test ID = Facility or SRTs (acute SRT--Chronic SRT)

Entered by BA 6-30-09

V 1.1 6/12/08 MF

Appendix G
Standard Reference Toxicant (SRT) Results

FDEP Biology Laboratory - Chronic SRT Bench Sheet

Ceriodaphnia dubia

Diluent/ Batch: 20% DMW / 6-16-09 Test Days Used: 0-7 5 MF
20% DMW / _____ Test Days Used: _____
Toxicant/ Batch: NaCl / 6-15-09

SOP # : TA 07_05
EPA-821-R-02-013 Method 1002.0

Organism: *Ceriodaphnia dubia*
Organism Batch #/ Age: 20-09 / <24 hr.
Feeding: Prior to Test and Daily
Food: ☐ YCT ☐ *P. subcapitata*
Food Batch: 1-22-09 2-13-09
Chamber size: 30 mL
Test Volume: 20 mL

Start Date: 6-16-09 Time: 12:30
End Date: 6-22-09 Time: 1452

Batch:	6-16-09				
Water Quality Parameters	20% DMW	20% DMW	Other	Measured by:	Verified by:
Lab Total Residual Cl_2 (mg/L):	<0.03			AGR	BA
Alkalinity (mg/L as $CaCO_3$):	81			AGR	BA
Hardness (mg/L as $CaCO_3$):	79			AGR	BA
Total Ammonia (mg/L as N):	<0.017			BA	MF
Conductivity µmhos-cm (mmhos-cm):	0.179			BA	MF

Results	
Control % CV:	11.5 %
Dunnetts PMSD:	18.6 %
Reproduction NOEC:	0.89 g/L
Reproduction LOEC:	1.3 g/L
Survival NOEC:	2 g/L
Survival LOEC:	3 g/L
ICP_{20}:	0.96 g/L
ICP_{25}:	1.03 g/L

Day	Concentrations prepared by	Counted by
0	BA	BA
1	BA	BA
2	BA	BA
3	BA	BA
4	BA	MF
5	BA	MF
6	—	BA
7		
8		

Loaded by:

Test Replicate	Loaded from culture vial
1	A1
2	A9
3	A10
4	A21
5	A24
6	A28
7	B2
8	B9
9	B14
10	B25

Comments:

Investigators' signatures

Marshall Faircloth
Bruce Ahlstedt
Tasha Parker

Retta Wolfe
REVIEWER

Test Incubated in: Incubator: # 2
Light Intensity : 50 - 100 ft. candles
Photoperiod : 16 light 8 dark
Temperature Range °C:
Incubator # 2 min. 24.0 max. 26.6 mean 26.3
Room B246 ____ min. 24.9 max. 25.5 mean 25.2
Test min. 24.0 max. 25.3 mean —

000001

Ceriodaphnia dubia Survival and Reproduction

Start Date: 6-16-09 Time: 12:30 Loaded by: ~~12:30~~ BA
End Date: 6-22-09 Time: 14:50 Verified by: MF

Concentration	Day	Replicate Number 1	2	3	4	5	6	7	8	9	10	Total neonates	Live adults	Neonates per adult
Control	0												10	
	1	0	0	0	0	0	0	0	0	0	0		10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	0
	3	1	4	4	3	4	5	3	5	4	3	36	10	3.6
	4	5	6	7	0	0	0	8	7	5	6	~~44~~ 45 (A)	10	4.5
	5	15	0	0	7	6	9	0	0	0	0	22	10	2.2
	6	9	9	12	9	11	7	6	9	9	13	94	10	9.4
	7													
	8													
	Total	16	19	23	19	21	21	17	21	18	22	197	10	19.7
0.59 ppth	0												10	
	1												10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	0
	3	5	3	3	5	4	2	4	3	5	4	38	10	3.8
	4	9	0	0	0	0	8	0	0	0	7	24	10	2.4
	5	0	3	7	8	7	0	10	7	6	0	48	10	4.8
	6	13	5	8	8	8	6	11	10	8	7	84	10	8.4
	7													
	8													
	Total	27	11	18	21	19	16	25	20	19	18	194	10	19.4
0.89 ppth	0												10	
	1												10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	0
	3	6	4	4	2	4	X1	3	4	4	4	36	10	3.6
	4	6	0	0	0	0	0	0	0	0	7	13	~~MF 6-09~~ (B)	1.44
	5	0	4	7	6	5		8	6	8	0	44	9	4.89
	6	9	11	6	8	9		7	7	10	8	75	9	8.33
	7													
	8													
	Total	21	19	17	16	18	1	18	17	22	19	168	10	16.8

Comments: S = split Brood MF 6-21-09
(B)- Count corrected MF for BA 6-20-09
(A) Corrected counts MF 6-20-09

FDEP Biology Laboratory - Chronic SRT Bench Sheet

Ceriodaphnia dubia Survival and Reproduction

Concentration	Day	Replicate Number 1	2	3	4	5	6	7	8	9	10	Total neonates	Live adults	Neonates per adult
1.3 ppth	0												10	
	1												10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	0
	3	3	2	2	1	2	1	3	√0	1	2	17	10	1.7
	4	0	0	0	0	0	0	0	0	0	0	0	10	0
	5	4	5	5	3	3	4	4	2	7	5	42	10	4.2
	6	5	6	5	4	4	7	2	3	6	6	48	10	4.8
	7													
	8													
	Total	12	13	12	8	9	12	9	5	14	13	107	10	10.7
2.0 ppth	0												10	
	1												10	
	2	0	0	0	0	0	0	0	0	0	0	0	10	0
	3	1	0	0	1	0	0	0	1	0	0	3	10	0.3
	4	0	0	0	0	0	0	0	0	0	0	0	10	0
	5	Ø1	0	2	1	0	0	0	1	1	1	7	10	0.7
	6	0	0	0	0	0	1	0	0	0	1	2	10	0.2
	7													
	8													
	Total	2	0	2	2	0	1	0	2	1	2	12	10	1.2
3.0 ppth	0												10	
	1		X		X	X				X			6	
	2	X		X			X	X	X		X	0	0	0
	3													
	4													
	5													
	6													
	7													
	8													
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

Comments: (A) mf 6-21-08 wrote incorrect #

FDEP Biology Laboratory - Chronic SRT Bench Sheet

Ceriodaphnia dubia Parameters

Test Day ↓	Conc.	New Sample Replicate	pH (su)	Temp (°C)	DO (mg/L)	Conductivity (µmhos/cm) (mmhos/cm)	Old Sample Replicate	pH (su)	Temp (°C)	DO (mg/L)	Conductivity (µmhos/cm) (mmhos/cm)
Day 0	Control	M	8.0	24.0	7.6	0.179					
	0.59 ppth	M	8.0	24.0	7.5	1.32					
	0.89 ppth	M	8.0	24.0	7.1	1.86					
	1.3ppth	M	8.1	24.1	7.1	2.66					
	2.0 ppth	M	8.1	24.1	7.3	3.83					
	3.0 ppth	M	8.1	24.0	6.9	5.53					
	Measured by:		BA	BA	BA	BA					
	Recorded by:		BA	BA	BA	BA					
Day 1	Control	M	8.2	23.9	8.9	0.178	A	8.3	24.0	6.8	0.201
	0.59 ppth	M	8.2	24.2	8.4	1.29	A	8.2	24.0	6.9	1.32
	0.89 ppth	M	8.3	24.3	8.6	1.85	A	8.2	24.0	6.9	1.87
	1.3ppth	M	8.3	24.2	8.4	2.64	A	8.2	24.0	6.9	2.70
	2.0 ppth	M	8.3	24.3	8.6	3.84	A	8.2	24.0	6.8	3.85
	3.0 ppth	M	8.3	24.3	8.2	5.62	A	8.2	24.0	6.7	5.57
	Measured by:		ADR	ADR	ADR	ADR		BA	BA	BA	BA
	Recorded by:		ADR	ADR	ADR	ADR		BA	BA	BA	BA
Day 2	Control	M	8.0	24.4	7.2	0.179	A	7.9	24.0	6.9	0.178
	0.59 ppth	M	8.0	24.6	7.4	1.24	A	7.9	24.0	6.9	1.31
	0.89 ppth	M	8.0	24.6	7.4	1.80	A	7.9	24.0	7.0	1.89
	1.3ppth	M	8.0	24.7	7.3	2.60	A	7.9	24.0	7.0	2.72
	2.0 ppth	M	8.0	24.7	7.3	3.78	A	7.9	24.0	6.9	3.89
	3.0 ppth	M	—	—	—	—	A	8.0	24.0	7.0	5.65
	Measured by:		BA	BA	BA	BA		BA	BA	BA	BA
	Recorded by:		BA	BA	BA	BA		BA	BA	BA	BA
Day 3	Control	M	7.9	24.5	7.4 8.0 (A)	0.177	A	(B) 24.0 (B)	7.9	7.1	0.177
	0.59 ppth	M	8.0	24.9	7.2	1.33	A	24.0	7.8	7.0	1.30
	0.89 ppth	M	8.0	24.7	7.3	1.88	A	24.0	7.9	7.0	1.85
	1.3ppth	M	8.0	25.0	7.4	2.68	A	24.0	7.9	7.0	2.71
	2.0 ppth	M	8.0	24.9	7.4	3.86	A	24.0	7.9	7.1	3.77
	3.0 ppth	M	—	—	—	—	A	—	—	—	
	Measured by:		BA	BA	BA	BA		BA	BA	BA	BA
	Recorded by:		BA	BA	BA	BA		BA	BA	BA	BA

Comments: (A) pH recorded in DO spot BA 6-19-09

(B) Temp & pH swapped BA 6-19-09

M= "Metered" vial, a surrogate vial for parameters

FDEP Biology Laboratory - Chronic SRT Bench Sheet

Ceriodaphnia dubia Parameters

Test Day SAT.		New Sample				Conductivity	Old Sample				Conductivity
↓	Conc.	Replicate	pH (su)	Temp (°C)	DO (mg/L)	(µmhos/cm) (mmhos/cm)	Replicate	pH (su)	Temp (°C)	DO (mg/L)	(µmhos/cm) (mmhos/cm)
Day 4	Control	M	8.0	24.7	7.5	0.180	A	8.0	24.4	7.4	0.182
	0.59 ppth	M	8.0	24.5	7.6	1.31	A	8.1	24.2	7.4	1.41
	0.89 ppth	M	8.0	24.6	7.6	1.87	A	8.0	24.2	7.6	1.96
	1.3ppth	M	8.1	24.6	7.5	2.66	A	8.1	24.3	7.6	2.81
	2.0 ppth	M	8.1	24.6	7.5	3.87	A	8.1	24.2	7.5	3.91
	3.0 ppth	M									
	Measured by:		MF	MF	MF	MF		MF	MF	MF	MF
	Recorded by:		MF	MF	MF	MF		MF	MF	MF	MF
Day 5	Control	M	8.0	24.5	7.7	0.178	A	8.1	24.8	7.4	0.184
	0.59 ppth	M	8.0	24.8	7.6	1.32	A	8.1	24.9	7.5	1.38
	0.89 ppth	M	8.1	24.4	7.6	1.82	A	8.1	24.8	7.6	1.95
	1.3ppth	M	8.1	24.8	7.7	2.78	A	8.1	24.9	7.6	2.82
	2.0 ppth	M	8.1	25.0	7.6	3.90	A	8.1	25.3	7.4	3.86
	3.0 ppth	M									
	Measured by:		MF	MF	MF	MF		MF	MF	MF	MF
	Recorded by:		MF	MF	MF	MF		MF	MF	MF	MF
Day 6	Control	M					A	8.1	24.0	7.2	0.166
	0.59 ppth	M					A	8.0	24.0	6.8	1.29
	0.89 ppth	M					A	8.1	24.0	7.2	1.91
	1.3ppth	M					A	8.1	24.0	7.1	2.68
	2.0 ppth	M					A	8.1	24.1	7.3	3.80
	3.0 ppth	M					+	—	—	—	—
	Measured by:							BA	BA	BA	BA
	Recorded by:							BA	BA	BA	BA
Day 7	Control	M									
	0.59 ppth	M									
	0.89 ppth	M									
	1.3ppth	M									
	2.0 ppth	M									
	3.0 ppth	M									
	Measured by:										
	Recorded by:										
Day 8	Control	M									
	0.59 ppth	M									
	0.89 ppth	M									
	1.3ppth	M									
	2.0 ppth	M									
	3.0 ppth	M									
	Measured by:										
	Recorded by:										

Replicate M= "Metered" vial, a surrogate vial for parameters

Bioassay Instrument ID

Test ID: Columbia chronic SRT Dates: June 16-22, 2009

METER / DEVICE	ID	SOP	Parameter	Method	√used
YSI Model 58 Dissolved Oxygen Meter	90H018262	TA06_04	Dissolved Oxygen	SM 4500 O G	✓
Accumet AR-10 pH Meter	93312105	TA06_23	pH	SM 4500 H+	✓
Mettler-Toledo SevenMulti Conductivity Meter	SN 1225117049 Probe H04257	TA06_25	Conductivity Salinity	SM 2510 B SM 2520 B	✓
Denver Model 225 ISE with ammonia probe	SN K01377	TA06_17	Ammonia	SM 4500 NH3 F	✓
Thermometer (DO probe)	YSI 5750 SN 05J1720	TA06_05	Temperature	SM-2530B modified DEP SOP-001/01 FT1400	✓
Hach Pocket Colorimeter II	05050C026378	TA06_22	Total Residual Chlorine	EPA 330.5 SM 4500 CL G	✓
Alkalinity (Hach Kit)	No SN	TA06_08	Alkalinity	SM 2320 B	✓
Hardness (Hach Kit)	No SN	TA06_09	Hardness	SM 2340 C	✓
OHAUS Balance 250D	1125481084	TA06_21 TA06_27	Weight	-	—
S-Weights	BIO-S-WEIGHTS-01	NA	Balance check	-	—

SM-2530B modified to allow use of electronic and non-mercury filled thermometers.

Insert other device information in blank spaces(if used). Test ID = Facility or SRTs (acute SRT--Chronic SRT)

entered by M. Faircloth 7-6-09

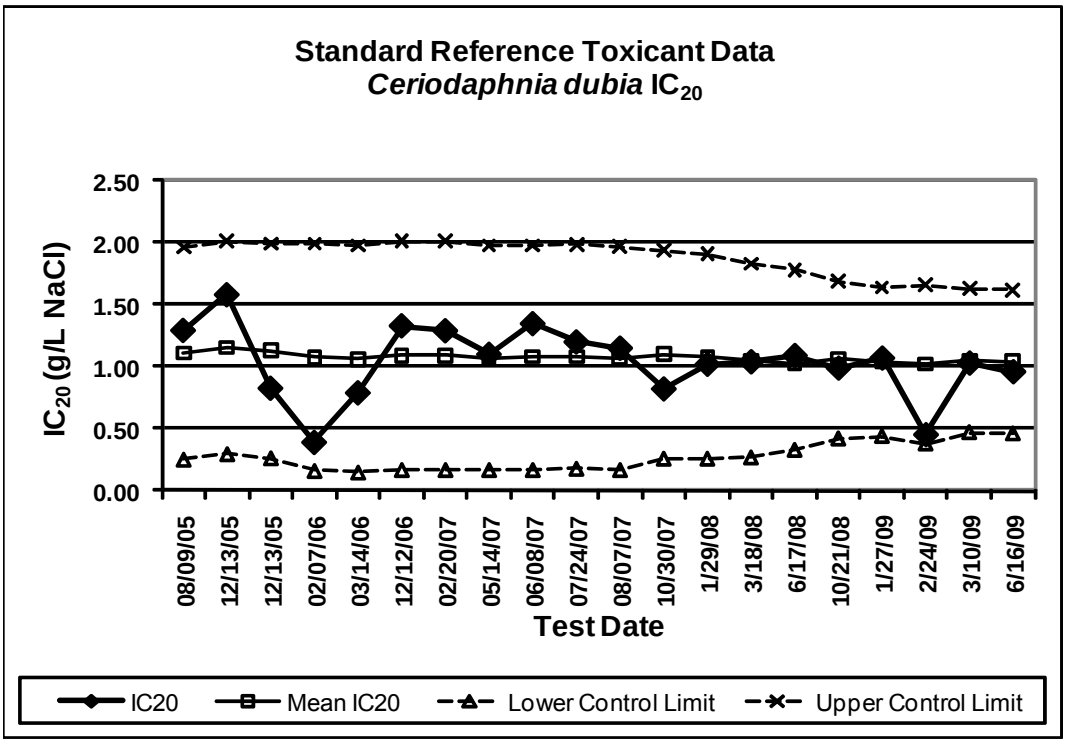
V 1.1 6/12/08 MF

Florida Department of Environmental Protection
Bureau of Laboratories

Standard Reference Toxicant (SRT) Test Data - 7-Day Chronic Toxicity
Ceriodaphnia dubia (water flea) - Sodium Chloride (NaCl)

Date	IC20	Mean IC20	Std Dev	Lower Control Limit	Upper Control Limit	Date
11/16/04	1.29	1.11	0.43	0.25	1.96	08/09/05
08/09/05	1.58	1.15	0.43	0.30	2.01	12/13/05
12/13/05	0.83	1.13	0.43	0.26	1.99	12/13/05
02/07/06	0.39	1.08	0.46	0.16	1.99	02/07/06
03/14/06	0.79	1.06	0.46	0.15	1.98	03/14/06
12/12/06	1.33	1.09	0.46	0.17	2.01	12/12/06
02/20/07	1.29	1.09	0.46	0.17	2.01	02/20/07
05/14/07	1.10	1.07	0.45	0.17	1.98	05/14/07
06/08/07	1.35	1.08	0.45	0.17	1.98	06/08/07
07/24/07	1.20	1.08	0.45	0.18	1.99	07/24/07
08/07/07	1.15	1.07	0.45	0.17	1.97	08/07/07
10/30/07	0.82	1.10	0.42	0.26	1.94	10/30/07
1/29/08	1.02	1.08	0.41	0.26	1.91	1/29/08
3/18/08	1.04	1.05	0.39	0.27	1.83	3/18/08
6/17/08	1.09	1.02	0.36	0.33	1.78	6/17/08
10/21/08	0.99	1.06	0.32	0.42	1.69	10/21/08
1/27/09	1.07	1.04	0.30	0.44	1.64	1/27/09
2/24/09	0.45	1.02	0.32	0.38	1.66	2/24/09
3/10/09	1.03	1.05	0.29	0.47	1.63	3/10/09
6/16/09	0.96	1.04	0.29	0.46	1.62	6/16/09

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



FDEP Biology Laboratory - Chronic SRT Benchsheet

Pimephales promelas or *Menidia beryllina*

Test Species (circle one)

(P. promelas)	SOP#: TA07_09	EPA-821-R-02-013	Method 1000.0
M. beryllina	SOP#: TA07_14	EPA-821-R-02-014	Method 1006.0

Diluent/ Batch: 6.1.09 Test Days Used: 0-6 Start Date: 6/6/09 Time: 1300

Diluent/ Batch: _____ Test Days Used: _____ End Date: 6.23.09 Time: 1115

Toxicant/ Batch # : KCl 6.15.09 Organism Batch #/ Age: 6.16.09 / <24 hr.

Artemia Lot # : 38438

Artemia Batch #	Day 2 8/-09	Day 5 84-09	Chamber size : 1000 ml
Day 0 79-09	Day 3 82-09	Day 6 85-09	Test volume : 500 ml
Day1 80-09	Day 4 83-09		

Feeding: *P. promelas* 0.15 g wet wt. 2X day 6 hour interval

M. beryllina 0.10 g wet wt days 0-2 0.15g wet wt. days 3-7

Water Quality Parameters	Diluent 6-1-09	Diluent (or other)	Method	Measured by	Verified by
Total Residual Cl_2 (mg/L):	<0.03		HACH	AGR	JD
Alkalinity (mg/L as $CaCO_3$):	83		HACH	BA	JD
Hardness (mg/L as $CaCO_3$):	94		HACH	BA	JD
Total Ammonia (mg/L as N):	<0.017		DENVER	MF	JD
Conductivity (umhos-cm) mmhos-cm:	337		METTLER	JD	MF

Statistics	
Growth NOEC:	0.25 g/L
Growth LOEC:	0.5 g/L
Growth IC_{20}:	0.357
Growth IC_{25}:	0.397
Ctrl % CV:	15.9 %
Dunnetts PMSD:	24.4 %
Survival NOEC:	0.25 g/L
Survival LOEC:	0.5 g/L

Test incubated in : [X] Incubator # 2

[ ] Waterbath #_____

Light Intensity : 50 - 100 ft. candles

Photoperiod : 16 light 8 dark

Temperature Range °C:

Incubator # 2 min. 26.0 max. 26.6 mean 26.3

Water bath # ____ min.____ max.____ mean____

Room B246 min. 24.9 max. 25.5 mean 25.2

P. promelas PMSD Bounds for Growth: Lower 12 Upper 30

M. beryllina PMSD Bounds for Growth: Lower 11 Upper 28

Investigators' signatures

James Daniel

Amelia Parker

Bree Abember

Marshall Faircloth

_____

Loretta C. Wolfe

REVIEWER

Comments:

revised 7/16/08 M

FDEP Biology Laboratory - Chronic SRT Benchsheet

Pimephales promelas or Menidia beryllina Survival

Organism: (*P. promelas*) *M.beryllina* (circle one) D = dead M = missing

Concentration: µg/L (g/L) (circle one)

Concentration	Replicate	Chamber	TEST DAY 0	1	2	3	4	5	6	7
Control	A	D1	10	10	10	10	10	10	10	10
	B	D2	10	10	10	10	10	10	10	10
	C	D3	10	9 1D	9	9	9	8 1D	8	8
	D	D9	10	10	10	10	10	10	10	10
0.125	A	D5	10	10	10	10	10	10	10	10
	B	D6	10	10	9 1D	9	9	9	9	9
	C	D7	10	10	10	10	10	10	10	10
	D	D8	10	10	10	10	10	10	9 1D	9
0.25	A	D9	10	9 1D	9	9	9	9	9	9
	B	D10	10	9 1D	9	9	9	9	9	9
	C	D11	10	9 1D	9	8 1D	7 1D	7	7	7
	D	D12	10	10	10	10	10	10	10	10
0.5	A	D13	10	5 5D	5	5	5	5	5	5
	B	D14	10	7 3D	7	7	7	5	5	5
	C	D15	10	5 1D	5	5	5	5	5	5
	D	D16	10	8 2D	8	8	8	8	8	8
1.0	A	D17	10	4 6D	3 1D	3	3	3	3	3
	B	D18	10	1 4D	0 1D	-	-	-	-	-
	C	D19	10	1 4D	1	0 1D	-	-	-	-
	D	D20	10	8 2D	3 5D	3	3	3	3	3
2.0	A	D21	10	0 10D	-	-	-	-	-	-
	B	D22	10	0 10D	-	-	-	-	-	-
	C	D23	10	0 10D	-	-	-	-	-	-
	D	D24	10	0 10D	-	-	-	-	-	-
	A		10							
	B		10							
	C		10							
	D		10							
Loaded by (0 hr): [illegible]		Checked by:		BA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Verified by (0 hr): BA										
Concentrations prepared by:				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Comments:

revised 7/16/08 MF

Chronic SRT Parameters Benchsheet

P. promelas and M. beryllina SOP TA07_09 and TA-07_15 parameter pg. 1

Start Date: 6/16/09 End Date: 6.23.09

Start Time: 1300 End Time: 1115

conc = concentration rep = replicate circle (umhos) or mmhos

Test Day ↓	Conc. (concentration g/L)	New Sample Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Conductivity (umhos) mmhos	Salinity ppth	Old Sample Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Conductivity umhos mmhos	Salinity ppth
Day 0	Control	A	7.8	24.1	7.8	337	—						
	.125	A	7.9	24.3	7.7	623	—						
	.25	A	8.0	24.3	7.8	857	—						
	.5	A	8.1	24.3	7.9	1356	—						
	1.0	A	8.1	24.1	8.0	2370	—						
	2.0	A	8.2	24.0	8.3	4310	—						
		A											
	Measured by		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
	Recorded by		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]						
		Rep	pH	Temp	DO	Conductivity	Salinity	Rep	pH	Temp	DO	Conductivity	Salinity
Day 1	Control	B	8.0	24.8	8.1	339	—	B	7.6	24.6	6.8	334	—
	.125	B	8.0	24.9	8.2	637	—	B	7.7	24.7	7.1	594	—
	.25	B	8.0	24.8	8.1	880	—	B	7.8	24.8	6.9	856	—
	.5	B	8.0	25.1	8.0	1371	—	B	7.9	24.8	6.8	1367	—
	1.0	B	8.0	25.1	8.1	2380	—	B	8.0	24.6	7.1	2,390	—
	2.0	B	8.0	25.1	8.1	4210	—	B	—	—	—	—	—
		B						B					
	Measured by		ADR	BA	ADR	ADR	—		BA	BA	BA	BA	—
	Recorded by		ADR	ADR	ADR	ADR	—		BA	BA	BA	BA	—
		Rep	pH	Temp	DO	Conductivity	Salinity	Rep	pH	Temp	DO	Conductivity	Salinity
Day 2	Control	C	7.8	24.6	7.3	331	—	C	7.5	24.0	6.7	344	—
	.125	C	7.9	24.7	7.1	595	—	C	7.5	24.2	6.6	605	—
	.25	C	7.9	24.5	7.1	951	—	C	7.5	24.3	6.2	861	—
	.5	C	8.0	24.5	7.1	1358	—	C	7.6	24.3	6.1	1373	—
	1.0	C	8.0	24.3	7.2	2330	—	C	7.6	24.3	6.4	2390	—
	2.0	C				—	—	C					
		C						C					
	Measured by		ADR	ADR	ADR	ADR			JD	JD	JD	JD	—
	Recorded by		ADR	ADR	ADR	ADR			JD	JD	JD	JD	—
		Rep	pH	Temp	DO	Conductivity	Salinity	Rep	pH	Temp	DO	Conductivity	Salinity
Day 3	Control	D	7.9	23.8	7.2	334	—	D	7.4	25.1	5.3	348	—
	.125	D	7.9	23.8	7.2	587	—	D	7.4	25.1	5.8	666	—
	.25	D	7.9	23.8	7.1	894	—	D	7.4	25.1	5.8	970	—
	.5	D	8.0	23.9	7.0	1381	—	D	7.4	25.2	5.8	1411	—
	1.0	D	8.0	23.6	7.2	2320	—	D	7.5	25.5	6.0	2380	—
		D						D					
		D						D					
	Measured by		ADR	ADR	ADR	ADR	—		[illegible]	[illegible]	[illegible]	[illegible]	—
	Recorded by		ADR	ADR	ADR	ADR	—		[illegible]	[illegible]	[illegible]	[illegible]	—

Comments:

For salinity <1 ppth insert <1. For salinity > 1 ppth, conductivity measurement is not required if salinity probe is functional.

Chronic SRT Parameters Benchsheet

P. promelas and M. beryllina SOP TA07_09 and TA-07_15 parameter pg. 2

Start Date: 6.16.09 End Date: 6.23.09

Start Time: 1300 End Time: 1115

concentration g/L conc = concentration rep = replicate

Test Day ↓	Conc.	New Sample: Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Conductivity umhos/mmhos	Salinity ppth	Old Sample: Test Rep.	pH (su)	Temp (°C)	DO (mg/L)	Conductivity umhos/mmhos	Salinity ppth
Day 4	Control	A	7.6	25.1	7.4	347	—	A	7.4	25.9	6.0	347	—
	.125	A	7.6	25.9	7.3	596	—	A	7.4	25.9	5.1	596	—
	.25	A	7.6	25.4	7.2	859	—	A	7.5	25.4	5.1	908	—
	.5	A	7.7	25.4	7.3	1362	—	A	7.5	25.4	5.4	1406	—
	1.0	A	7.8	25.9	7.3	2330	—	A	7.5	25.9	5.4	2380	—
		A						A					
		A						A					
	Measured by		~~JD~~	~~JD~~	~~JD~~	~~JD~~	—		~~JD~~	~~JD~~	~~JD~~	~~JD~~	—
	Recorded by		~~JD~~	~~JD~~	~~JD~~	~~JD~~	—		~~JD~~	~~JD~~	~~JD~~	~~JD~~	—
		Rep	pH	Temp	DO	Conductivity	Salinity	Rep	pH	Temp	DO	Conductivity	Salinity
Day 5	Control	B	7.7	24.0	7.1	337	—	B	7.6	24.7	5.6	347	—
	1.25 (A)	B	7.7	24.1	7.0	602	—	B	7.6	24.9	5.9	599	—
	.25	B	7.8	24.1	7.2	855	—	B	7.6	24.4	6.0	892	—
	.5	B	7.8	24.0	7.3	1348	—	B	7.7	24.4	6.1	1402	—
	1.0	~~D~~ B		24.0	7.4	2310	—	~~D~~ B	7.7	24.3	6.0	2360	—
		B						B					
		B						B					
	Measured by		—	—	—	—	—		~~JD~~	~~JD~~	~~JD~~	~~JD~~	—
	Recorded by		—	—	—	—	—		~~JD~~	~~JD~~	~~JD~~	~~JD~~	—
		Rep	pH	Temp	DO	Conductivity	Salinity	Rep	pH	Temp	DO	Conductivity	Salinity
Day 6	Control	C	7.8	23.6	7.7	332	—	C	7.4	24.5	6.4	335	—
	1.25 (A)	C	7.8	23.5	7.6	593	—	C	7.3	24.5	6.2	605	—
	.25	C	7.8	23.7	7.5	841	—	C	7.4	24.5	5.9	861	—
	.5	C	7.9	23.7	7.5	1328	—	C	7.4	24.2	6.3	1346	—
	1.0	~~A~~ C	7.9	23.8	7.7	2300	—	~~A~~ C	7.4	24.2	6.7	2330	—
		C						C					
		C						C					
	Measured by		~~JD~~	~~JD~~	~~JD~~	~~JD~~	—		~~JD~~	~~JD~~	~~JD~~	~~JD~~	~~JD~~
	Recorded by		~~JD~~	~~JD~~	~~JD~~	~~JD~~	—		~~JD~~	~~JD~~	~~JD~~	~~JD~~	~~JD~~
		Rep	pH	Temp	DO	Conductivity	Salinity	Rep	pH	Temp	DO	Conductivity	Salinity
Day 7	Control							D	7.4	24.0	6.0	348	—
	.125							D	7.4	24.1	6.1	612	—
	.25							D	7.4	24.2	6.3	869	—
	.5							D	7.4	24.2	6.1	1361	—
	1.0							A ~~D~~	7.5	24.3	6.3	2360	—
								D					
								D					
	Measured by								~~JD~~	~~JD~~	~~JD~~	~~JD~~	—
	Recorded by								~~JD~~	~~JD~~	~~JD~~	~~JD~~	—

(A) Concentration 0.125 g/L MF 7/6/09

For salinity <1 ppth insert <1. For salinity > 1 ppth, conductivity measurement is not required if salinity probe is functional.

FDEP Biology Laboratory - Chronic SRT Benchsheet

Pimephales promelas or *Menidia beryllina* Weights

SOP TA06_21

Organism: (*P. promelas*) *M.beryllina* (circle one)

Concentration: µg/L (g/L) (circle one)

mean wt = fish wt divided by 10

convert g to mg: move decimal 3 places to right

Concentration	Replicate	Pan #	Pan wt. (g)	Pan + Fish (g)	Fish wt. (g)	Original # of fish	Mean wt. (mg)	
Control	A	9	0.02289	0.02954	0.00665	10	0.665	mean 0.7615
	B	10	0.02254	0.03147	0.00893	10	0.893	
	C	11	0.02087	0.02740	0.00653	10	0.653	
	D	12	0.02249	0.03084	0.00835	10	0.835	
.125	A	13	0.02206	0.03009	0.00803	10	0.803	0.7628
	B	14	0.02151	0.02831	0.00680	10	0.680	
	C	15	0.01947	0.02732	0.00785	10	0.785	
	D	16	0.02170	0.02953	0.00783	10	0.783	
.25	A	17	0.02417	0.03133	0.00716	10	0.716	0.7125
	B	18	0.02416	0.03149	0.00733	10	0.733	
	C	19	0.02229	0.02868	0.00639	10	0.639	
	D	20	0.02261	0.03023	0.00762	10	0.762	
.5	A	21	0.02117	0.02481	0.00364	10	0.364	0.4725
	B	22	0.02221	0.02691	0.00470	10	0.470	
	C	23	0.02007	0.02382	0.00375	10	0.375	
	D	24	0.02273	0.02955	0.00682	10	0.682	
1.0	A	25	0.02282	0.02522	0.00240	10	0.240	0.1223
	B	–	–	–	–	10	–	
	C	–	–	–	–	10	–	
	D	26	0.02588	0.02837	0.00249	10	0.249	
	A					10		
	B					10		
	C					10		
	D					10		
	A					10		
	B					10		
	C					10		
	D					10		
		Weighed by:	JD	JD				

Comments:

Note: Pan number (#) refers to actual Pan number.

FDEP Biology Laboratory - Chronic SRT Benchsheet

Pimephales promelas or *Menidia beryllina* QC

SOPs TA07_09, TA07_14 and TA06_21

all weights in grams

Empty Pan Weights Date: 6.22.09 Weighed by: J.D.

	Pan 1 wt.	Pan 1 initial wt.
after Pan 5	0.02376	@ 0.02375
after Pan 10	0.02374	@ 0.02375
after Pan 15	0.02375	@ 0.02375
after Pan 20	0.02374	@ 0.02375
after Pan 25	0.02376	@ 0.02375
after Pan 30		@
after Pan 35		@
after Pan 40		@
after Pan 45		@
after Pan 48		@

	Measured Value	S-weight Value
S-weights	0.00999	@ 0.01
	0.03000	@ 0.03

Balance: Ohaus 250D Ser# 1125481084

S-Weights: BIO-S-Weights-01

Fish + Pan Weights Date: 6.29.09 Weighed by: J.D.

	Pan 1 wt.	Pan 1 initial wt.
after Pan 5	0.02954	@ 0.02954
after Pan 10	0.02957	@ 0.02954
after Pan 15	0.02956	@ 0.02954
after Pan 20	0.02958	@ 0.02954
after Pan 25	0.02955	@ 0.02954
after Pan 30		@
after Pan 35		@
after Pan 40		@
after Pan 45		@
after Pan 48		@

	Measured Value	S-weight Value
S-weights	0.01003	@ 0.01
	0.05005	@ 0.05

Drying Oven ID: UWR2

Temperature °C: 95

Drying Hours: 8

Note: Pan number (5, 10, etc.) refers to sequence of weighing as actual Pan #s may differ.

Comments:

Bioassay Instrument ID

Test ID: P. promelas chronic SRT June 2009 Dates: June 16-23, 2009

METER / DEVICE	ID	SOP	Parameter	Method	√used
YSI Model 58 Dissolved Oxygen Meter	90H018262	TA06_04	Dissolved Oxygen	SM 4500 O G	✓
Accumet AR-10 pH Meter	93312105	TA06_23	pH	SM 4500 H+	✓
Mettler-Toledo SevenMulti Conductivity Meter	SN 1225117049 Probe H04257	TA06_25	Conductivity Salinity	SM 2510 B SM 2520 B	✓
Denver Model 225 ISE with ammonia probe	SN K01377	TA06_17	Ammonia	SM 4500 NH3 F	✓
Thermometer (DO probe)	YSI 5750 SN 05J1720	TA06_05	Temperature	SM-2530B modified DEP SOP-001/01 FT1400	✓
Hach Pocket Colorimeter II	05050C026378	TA06_22	Total Residual Chlorine	EPA 330.5 SM 4500 CL G	✓
Alkalinity (Hach Kit)	No SN	TA06_08	Alkalinity	SM 2320 B	✓
Hardness (Hach Kit)	No SN	TA06_09	Hardness	SM 2340 C	✓
OHAUS Balance 250D	1125481084	TA06_21 TA06_27	Weight	-	✓
S-Weights	BIO-S-WEIGHTS-01	NA	Balance check	-	✓
VWR2	Drying oven	—	Drying weights	—	✓

SM-2530B modified to allow use of electronic and non-mercury filled thermometers.

Insert other device information in blank spaces(if used). Test ID = Facility or SRTs (acute SRT--Chronic SRT)

entered by M. faircloth 7/6/09

V 1.1 6/12/08 MF

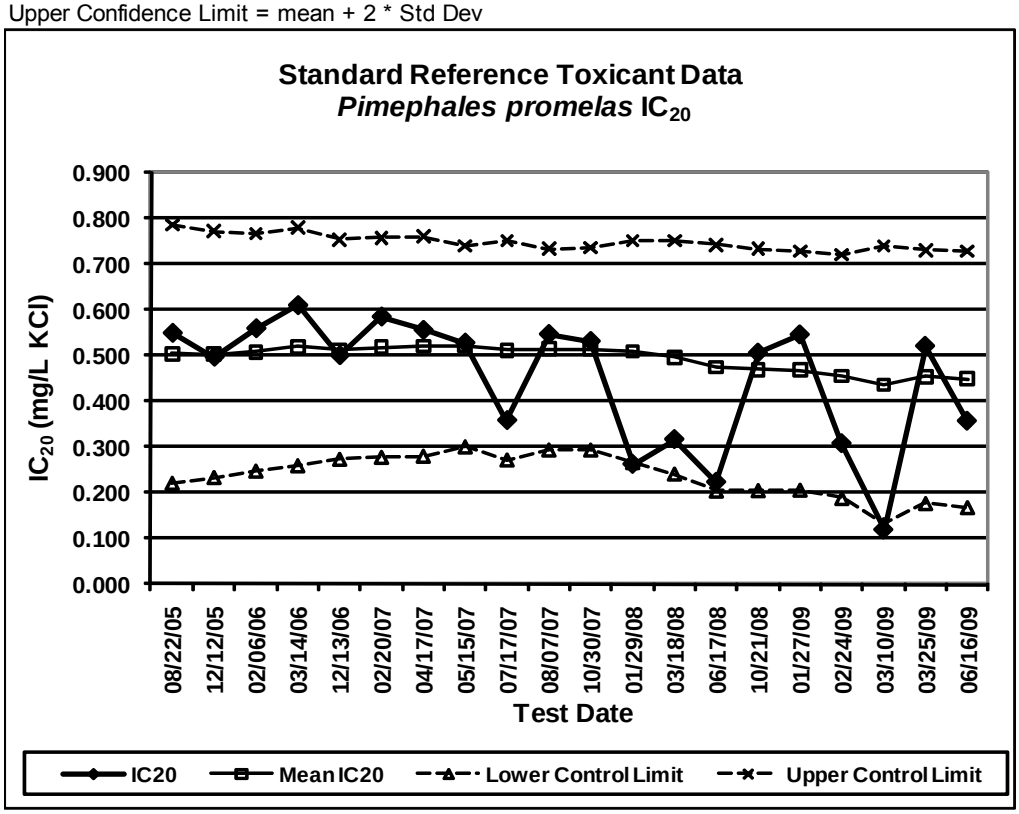
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Florida Department of Environmental Protection
Bureau of Laboratories

Standard Reference Toxicant (SRT) Test Data - 7-Day Chronic Toxicity
Pimephales promelas (fathead minnow) - Potassium Chloride (KCl)

Date	IC20	Mean IC20	Std Dev	Lower Control Limit	Upper Control Limit	Date
08/22/05	0.549	0.504	0.14	0.222	0.786	08/22/05
12/12/05	0.497	0.503	0.13	0.234	0.772	12/12/05
02/06/06	0.559	0.508	0.13	0.248	0.767	02/06/06
03/14/06	0.610	0.520	0.13	0.260	0.780	03/14/06
12/13/06	0.501	0.514	0.12	0.274	0.754	12/13/06
02/20/07	0.585	0.518	0.12	0.278	0.758	02/20/07
04/17/07	0.556	0.521	0.12	0.281	0.761	04/17/07
05/15/07	0.528	0.521	0.11	0.301	0.741	05/15/07
07/17/07	0.358	0.513	0.12	0.273	0.753	07/17/07
08/07/07	0.547	0.514	0.11	0.294	0.734	08/07/07
10/30/07	0.531	0.515	0.11	0.294	0.736	10/30/07
01/29/08	0.263	0.509	0.12	0.267	0.752	01/29/08
03/18/08	0.317	0.497	0.13	0.242	0.752	03/18/08
06/17/08	0.223	0.474	0.13	0.205	0.743	06/17/08
10/21/08	0.506	0.470	0.13	0.206	0.734	10/21/08
01/27/09	0.546	0.468	0.13	0.207	0.729	01/27/09
02/24/09	0.308	0.455	0.13	0.189	0.721	02/24/09
03/10/09	0.119	0.437	0.15	0.132	0.741	03/10/09
03/25/09	0.521	0.455	0.14	0.178	0.731	03/25/09
06/16/09	0.357	0.449	0.14	0.169	0.729	06/16/09

Means are from all SRT tests, up to 20 tests..
Lower Confidence Limit = mean - 2 * Std Dev
Upper Confidence Limit = mean + 2 * Std Dev



Appendix H

Habitat Assessment Field Sheets

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FD9000-26 MARINE PHYSICAL/CHEMICAL CHARACTERIZATION FIELD DATA SHEET (4/25/00)

LAT/LONGS:	STORET STATION NUMBER:	DATE (M/D/Y):	TIME	RECEIVING BODY OF WATER:
N 30 20' 14.0" W 87 08' 01.4"	—	6/15/09	1410	Pensacola Bay

REMARKS:	COUNTY:	SITE LOCATION:	FIELD ID/NAME:
Gradient Approach	Escambia	Pensacola Beach WWTF	PB 400 W

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Land-Use in Watershed (specify relative percent in each category):

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)

Local Watershed Erosion (check box): None ☒ Slight ☐ Moderate ☐ Heavy ☐

Local Watershed NPS Pollution (check box): No evidence ☐ Slight ☐ Moderate potential ☐ Obvious sources ☒

Width of riparian vegetation (m) on least buffered side:

Draw aerial view sketch of sampling area including habitats and community types

Artificially Channelized ☐ no ☐ recent, severe ☐ some recovery ☐ mostly recovered, more sinuous

Artificially Impounded ☐ yes

High Water Mark: .5 (m above present water level) + 4.5 (present depth in m) = 5.0 (m above bed)

Tide Types and Times

High 0724 AM / PM

Low 0928 AM / PM

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

SEDIMENT/SUBSTRATE

Sediment Odors: Normal: ☒ Sewage: ☐ Petroleum: ☐ Chemical: ☐ Anaerobic: ☐ Other: ☐

Sediment Oils: Absent: ☒ Slight: ☐ Moderate: ☐ Profuse: ☐

Sediment Deposition: Sludge: ☐ Sand smothering: (none) slight moderate severe Silt smothering: none (slight) moderate severe Other:

Substrate Types	% coverage	# times sampled	method	Substrate Types	% coverage	# times sampled	method
Seagrass				Sand		5	Peal
Rock or Shell Rubble		5	Peal	Mud/Muck/Silt		5	Peal
Aquatic Vegetation				Other:			

Community Types

Mangroves ☐ Oyster bars ☐ Reef ☐ Natural beach ☐ Other: ☒ Ry Rmf

WATER QUALITY	Depth (m):	Temp. (°C):	pH (SU):	D.O. (mg/l):	Cond. (µmho/cm) or Salinity (ppt):	DO %	Sal	Secchi (m):
Top	0.140	30.27	7.70	7.14	29912	103.0	1506	1.0
Mid-depth	2.160	29.37	7.68	6.51	28900	94.2	1774	
Bottom	4.372	26.35	7.19	0.19	42180	2.7	2705	

System Type : Stream: ☐ (1st - 2nd order, 3rd - 4th order, 5th - 6th order, 7th order or greater) Estuary: ☒ Other: ☐

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

Water Surface Oils (check box): None: ☒ Sheen: ☐ Globs: ☐ Slick: ☐

Clarity (check box): Clear: ☐ Slightly turbid: ☒ Turbid: ☐ Opaque: ☐

Color (check box): Tannic: ☐ Green (algae): ☐ Clear: ☒ Other: ☐

Weather Conditions/Notes:

Abundance:	Absent	Rare	Common	Abundant
Periphyton	☐	☐	☐	☐
Fish	☐	☐	☐	☐
Aquatic Macrophytes	☐	☐	☐	☐
Iron/sulfur Bacteria	☐	☐	☐	☐

SAMPLING TEAM:	SIGNATURE:	DATE:
Nathan Milby / Rich Mead		6/15/09

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FD9000-26 MARINE PHYSICAL/CHEMICAL CHARACTERIZATION FIELD DATA SHEET (4/25/00)

LAT/LONGS:	STORET STATION NUMBER:	DATE (M/D/Y):	TIME	RECEIVING BODY OF WATER:
N 30°20'14.2" W 87°07'59.3"	—	6/15/09	1250	Pensacola Bay

REMARKS:	COUNTY:	SITE LOCATION:	FIELD ID/NAME:
	Escambia	Pensacola Beach WWTF	PB200W

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Land-Use in Watershed (specify relative percent in each category):

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)
				X	X		

Local Watershed Erosion (check box): None ☒ Slight ☐ Moderate ☐ Heavy ☐

Local Watershed NPS Pollution (check box): No evidence ☐ Slight ☐ Moderate potential ☐ Obvious sources ☒

Width of riparian vegetation (m) on least buffered side:

Draw aerial view sketch of sampling area including habitats and community types

Artificially Channelized ☐ no ☐ recent, severe ☐ some recovery ☐ mostly recovered, more sinuous

Artificially Impounded ☐ yes

High Water Mark: .5 (m above present water level) + 4.5 (present depth in m) = 5.0 (m above bed)

Tide Types and Times

High 0724 AM / PM : ____ AM / PM

Low 0128 AM / PM : ____ AM / PM

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

SEDIMENT/SUBSTRATE

Sediment Odors: Normal: ☐ Sewage: ☐ Petroleum: ☐ Chemical: ☒ Anaerobic: ☐ Other: ☐

Sediment Oils: Absent: ☒ Slight: ☐ Moderate: ☐ Profuse: ☐

Sediment Deposition: Sludge: ☐ Sand smothering: (none) slight moderate severe Silt smothering: none (slight) moderate severe Other:

Substrate Types	% coverage	# times sampled	method	Substrate Types	% coverage	# times sampled	method
Seagrass				Sand X		5	Ponar
Rock or Shell Rubble X		5	Ponar	Mud/Muck/Silt X		5	Ponar
Aquatic Vegetation				Other:			

Community Types

Mangroves ☐ Oyster bars ☐ Reef ☐ Natural beach ☐ Other: ☒ Rip Rap

WATER QUALITY	Depth (m):	Temp. (°C):	pH (SU):	D.O. (mg/l):	Cond. (µmho/cm) or Salinity (ppt):	DO%	Sal	Secchi (m):
Top	0.070	30.32	7.68	7.04	25000	101.7	15.11	1.2
Mid-depth	2.111	29.39	7.65	6.38	29090	92.5	17.84	
Bottom	4.270	26.65	7.26	0.45	41782	6.4	26.77	

System Type : Stream: ☐ (1st - 2nd order, 3rd - 4th order, 5th - 6th order, 7th order or greater) Estuary: ☒ Other: ☐

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

Water Surface Oils (check box): None: ☒ Sheen: ☐ Globs: ☐ Slick: ☐

Clarity (check box): Clear: ☐ Slightly turbid: ☒ Turbid: ☐ Opaque: ☐

Color (check box): Tannic: ☐ Green (algae): ☐ Clear: ☒ Other: ☐

Weather Conditions/Notes:

Abundance:	Absent	Rare	Common	Abundant
Periphyton	☐	☐	☐	☐
Fish	☐	☐	☐	☐
Aquatic Macrophytes	☐	☐	☐	☐
Iron/sulfur Bacteria	☐	☐	☐	☐

SAMPLING TEAM:	SIGNATURE:	DATE:
Nathan Malloy / Rick Heard		6/15/09

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FD9000-26 MARINE PHYSICAL/CHEMICAL CHARACTERIZATION FIELD DATA SHEET (4/25/00)

LAT/LONGS:	STORET STATION NUMBER:	DATE (M/D/Y):	TIME	RECEIVING BODY OF WATER:
N 30 20' 13.0" W87 07 54.8"		6/15/09	0845	Pensacola Bay

REMARKS:	COUNTY:	SITE LOCATION:	FIELD ID/NAME:
	Escambia	Pensacola Beach WWTF	PB200E

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Land-Use in Watershed (specify relative percent in each category):

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)
				X	X	X	

Local Watershed Erosion (check box): None ☒ Slight ☐ Moderate ☐ Heavy ☐

Local Watershed NPS Pollution (check box): No evidence ☐ Slight ☐ Moderate potential ☐ Obvious sources ☒

Width of riparian vegetation (m) on least buffered side:

Draw aerial view sketch of sampling area including habitats and community types

Artificially Channelized ☐ no ☐ recent, severe ☐ some recovery ☐ mostly recovered, more sinuous
Artificially Impounded ☐ yes

High Water Mark: .5 (m above present water level) + 4.5 (present depth in m) = 5.0 (m above bed)

Tide Types and Times

High 0724 AM / PM : AM / PM

Low 0928 AM / PM : AM / PM

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

SEDIMENT/SUBSTRATE

Sediment Odors: Normal: ☐ Sewage: ☐ Petroleum: ☐ Chemical: ☒ Anaerobic: ☐ Other: ☐

Sediment Oils: Absent: ☒ Slight: ☐ Moderate: ☐ Profuse: ☐

Sediment Deposition: Sludge: ☐ Sand smothering: (none) slight moderate severe Silt smothering: none (slight) moderate severe Other:

Substrate Types	% coverage	# times sampled	method	Substrate Types	% coverage	# times sampled	method
Seagrass				Sand	X	5	Poor
Rock or Shell Rubble	X	5	Poor	Mud/Muck/Silt	X	5	Poor
Aquatic Vegetation				Other:			

Community Types

Mangroves ☐ Oyster bars ☐ Reef ☐ Natural beach ☐ Other: ☒ Rip Rap

WATER QUALITY	Depth (m):	Temp. (°C):	pH (SU):	D.O. (mg/l):	Cond. (µmho/cm) or Salinity (ppt):	00%	Sal	Secchi (m):
Top	0.440	28.84	7.70	6.82	25424	96.6	15.43	1.3
Mid-depth	2.307	28.87	7.67	6.66	25530	94.7	15.47	
Bottom	4.50	26.75	7.12	0.35	40670	5.0	25.85	

System Type : Stream: ☐ (1st - 2nd order, 3rd - 4th order, 5th - 6th order, 7th order or greater) Estuary: ☒ Other: ☒ Sound

Water Odors (check box): Normal: ☑ Sewage: ☐ Petroleum: ☐ Chemical: ☐ Other: ☐

Water Surface Oils (check box): None: ☑ Sheen: ☐ Globs: ☐ Slick: ☐

Clarity (check box): Clear: ☐ Slightly turbid: ☑ Turbid: ☐ Opaque: ☐

Color (check box): Tannic: ☐ Green (algae): ☐ Clear: ☑ Other: ☐

Weather Conditions/Notes:

winds 10mph
Sunny hot

Abundance:

	Absent	Rare	Common	Abundant
Periphyton	☐	☐	☐	☐
Fish	☐	☐	☐	☐
Aquatic Macrophytes	☐	☐	☐	☐
Iron/sulfur Bacteria	☐	☐	☐	☐

SAMPLING TEAM:	SIGNATURE:	DATE:
Rick Hood / Nathan Milkey		6/15/09

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FD9000-26 MARINE PHYSICAL/CHEMICAL CHARACTERIZATION FIELD DATA SHEET (4/25/00)

LAT/LONGS:	STORET STATION NUMBER:	DATE (M/D/Y):	TIME	RECEIVING BODY OF WATER:
N 30 20'14.6" W 87 07'52.5"		6/15/09	1040	Pensacola Bay

REMARKS:	COUNTY:	SITE LOCATION:	FIELD ID/NAME:
	Escambia	Pensacola Beach WWTF	PB400E

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Land-Use in Watershed (specify relative percent in each category):

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)
				X	X		

Local Watershed Erosion (check box): None [X] Slight [ ] Moderate [ ] Heavy [ ]

Local Watershed NPS Pollution (check box): No evidence [ ] Slight [ ] Moderate potential [ ] Obvious sources [X]

Width of riparian vegetation (m) on least buffered side:

Draw aerial view sketch of sampling area including habitats and community types

Artificially Channelized [ ] no [ ] recent, severe [ ] some recovery [ ] mostly recovered, more sinuous

Artificially Impounded [ ] yes

High Water Mark: .5 (m above present water level) + 4.5 (present depth in m) = 5.0 (m above bed)

Tide Types and Times

High 0724 AM / PM : AM / PM

Low 0128 AM / PM : AM / PM

Canopy Cover % : Open : [X] Lightly Shaded (11-45%): [ ] Moderately Shaded (46-80%): [ ] Heavily Shaded:

SEDIMENT/SUBSTRATE

Sediment Odors: Normal: [X] Sewage: [ ] Petroleum: [ ] Chemical: [ ] Anaerobic: [ ] Other: [ ]

Sediment Oils: Absent: [X] Slight: [ ] Moderate: [ ] Profuse: [ ]

Sediment Deposition: Sludge: [ ] Sand smothering: (none) slight moderate severe Silt smothering: (none) slight moderate severe Other:

Substrate Types	% coverage	# times sampled	method	Substrate Types	% coverage	# times sampled	method
Seagrass				Sand		5	Diver
Rock or Shell Rubble		5	Diver	Mud/Muck/Silt		5	Diver
Aquatic Vegetation				Other:			

Community Types

Mangroves [ ] Oyster bars [ ] Reef [ ] Natural beach [ ] Other: [X] Rip Rap

WATER QUALITY	Depth (m):	Temp. (°C):	pH (SU):	D.O. (mg/l):	Cond. (µmho/cm) or Salinity (ppt):	DO %	Sal	Secchi (m):
Top	0.040	29.40	7.71	6.89	23480	98.4	15.45	1.2
Mid-depth	2.315	29.02	7.78	6.75	25531	96.9	16.47	
Bottom	4.545	26.73	7.02	0.12	31000	1.6	23.18	

System Type : Stream: [ ] (1st - 2nd order / 3rd - 4th order 5th - 6th order / 7th order or greater) Estuary: [X] Other: [ ]

Water Odors (check box): Normal: [X] Sewage: [ ] Petroleum: [ ] Chemical: [ ] Other: [ ]

Water Surface Oils (check box): None: [X] Sheen: [ ] Globs: [ ] Slick: [ ]

Clarity (check box): Clear: [ ] Slightly turbid: [X] Turbid: [ ] Opaque: [ ]

Color (check box): Tannic: [ ] Green (algae): [ ] Clear: [X] Other: [ ]

Weather Conditions/Notes:

Abundance:	Absent	Rare	Common	Abundant
Periphyton	[ ]	[ ]	[ ]	[ ]
Fish	[ ]	[ ]	[ ]	[ ]
Aquatic Macrophytes	[ ]	[ ]	[ ]	[ ]
Iron/sulfur Bacteria	[ ]	[ ]	[ ]	[ ]

SAMPLING TEAM:	SIGNATURE:	DATE:
Rick Abel / Nathan Miller		6/15/09

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

FD 9000-30 MARINE BENTHIC HABITAT ASSESSMENT FIELD DATA SHEET

SUBMITTING AGENCY CODE: / SUBMITTING AGENCY NAME: FDEP	STORET STATION NUMBER:	DATE (M/D/Y): 6/15/09	RECEIVING BODY OF WATER: Pensacola Bay
REMARKS:	LOCATION: Pensacola Beach WWTF		FIELD ID/NAME: PB200W

Habitat Parameter / score	Excellent	Good	Fair	Poor
Littoral Alterations 5	None—Unaltered shoreline. **9-10 points**	Mostly natural shoreline, but with occasional riprap. **6-8 points**	Shoreline consisting mostly of riprap and vertical seawalls. **3-5 points**	Shoreline consisting almost entirely of vertical seawalls. **0-2 points**
Community Types Observed 10	At least four communities observed from the following list: mangrove swamp, marsh, oyster bar, grass bed, reef, saltern, natural beach, or tidal creek. **38-50 points**	Two or three communities observed from those listed. **26-37 points**	One community observed from those listed. **13-25 points**	No communities observed from those listed. **0-12 points**
Tidal Fluctuation 3	>0.75 m. **4-5 points**	0.5 - 0.75 m. **3 points**	0.25 - 0.5 m. **2 points**	<0.25 m. **0-1 point**
Freshwater Discharges/ Alterations 4	Only natural runoff.. **9-10 points**	Mostly natural runoff, but with a few, small stormwater sources. **6-8 points**	Considerable stormwater discharge from local roads, parking lots, etc. **3-5 points**	Extensive manmade discharges, especially from canals draining large tracts of land. **0-2 points**
Flow and Wave Action 9	Light to moderate wave action present except under the harshest weather conditions. Flow unrestricted by manmade structures. **9-10 points**	—	—	Heavy wave action sometimes present even during average weather conditions, or flow restricted by manmade structures so that velocities are very high. **0-2 points**
Sediment Type 10	Combination of sand, gravel, and shell. **12-15 points**	Primarily sand, with small areas of mud. **8-11 points**	Mixture of sand and mud, or well-aerated mud only. **4-7 points**	Anaerobic mud. **0-3 points**

TOTAL SCORE 41

COMMENTS: Habitat scores the same for all field IDs

ANALYSIS DATE: 6/15/09	ANALYST: Nathan Mallay	SIGNATURE:

Appendix I-1

Benthic macroinvertebrates collected from ponar samples at 4 Sites bracketing the Pensacola Beach facility's effluent discharge pipe. Taxa collected and density (average number of individuals/m^2) rounded to the nearest individual (n = 5 samples/site). See SOP LT 7100 sect. 4.2.1 for method on collapsing taxa.

	400 West	200 West	200 East	400 East
Annelida				
Oligochaeta				
Tubificidae	-	17	17	-
Polychaeta				
Aonides sp.	-	-	8	-
Aphelochaeta sp.	8	-	-	-
Carazziella sp.	-	-	25	75
Chaetozone sp.	-	-	8	-
Clymenella torquata	8	8	8	-
Diopatra sp.	-	-	8	-
Eusyllis sp.	8	-	-	-
Glycera americana	-	-	-	17
Glycera sp.	8	-	-	-
Glycinde solitaria	25	-	25	42
Malmgreniella taylori	-	-	8	-
Mediomastus ambiseta	33	25	100	-
Mediomastus sp.	-	-	-	17
Melinna sp.	-	-	8	-
Minuspio perkinsi	-	8	33	100
Monticellina sp.	8	33	33	-
Owenia fusiformis	17	-	-	-
Paramphinome sp.	-	-	17	58
Paraprionospio sp.	392	700	342	292
Podarkeopsis levifuscina	-	-	8	-
Sigambra tentaculata	-	-	50	275
Spiochaetopterus costarum	-	-	-	17
Streblospio sp.	17	100	-	25
Arthropoda				
Amphipoda				
Ampelisca sp. C	25	-	-	-
Listriella sp.	17	-	-	-
Monocorophium tuberculatum	8	-	-	-
Pseudohaustorius sp.	17	-	-	-
Unidentified Amphipoda	-	-	8	-
Cumacea				
Leucon sp.	8	-	-	-
Decapoda				
Pinnixa sp.	8	-	-	-
Chordata				
Cephalochordata				
Branchiostoma sp.	17	-	-	-

Appendix I-1 (continued)

	400 West	200 West	200 East	400 East
Echinodermata				
Amphiura sp.	-	-	8	-
Ophiuroidea	8	-	8	-
Echiura				
Unidentified Echiura	-	-	-	8
Mollusca				
Bivalvia				
Macoma tenta	-	-	-	34
Tellina versicolor	-	-	8	-
Tellinidae	17	-	-	-
Veneridae	-	-	8	-
Gastropoda				
Acteocina canaliculata	-	-	20	-
Boonea bisuturalis	-	-	10	22
Nassarius vibex	25	-	-	-
Prunum apicinum	-	-	-	11
Turbonilla conradi	-	-	29	-
Nemertea				
Unidentified Nemertea	8	-	67	17
Phoronida				
Unidentified Phoronidae	-	8	-	-
Sipuncula				
Phascolion sp.	-	-	17	-

Appendix I-2

Benthic macroinvertebrates collected in ponar samples at 4 Sites bracketing the Pensacola Beach facility's effluent discharge pipe. Taxa collected and total number of individuals counted (n = 5 samples/site).

	400 West	200 West	200 East	400 East
Annelida				
Oligochaeta				
Tubificidae	-	2	2	-
Polychaeta				
Aonides sp.	-	-	1	-
Aphelochaeta sp.	1	-	-	-
Carazziella sp.	-	-	3	9
Chaetozone sp.	-	-	1	-
Clymenella torquata	1	1	1	-
Diopatra sp.	-	-	1	-
Eusyllis sp.	1	-	-	-
Glycera americana	-	-	-	2
Glycera sp.	1	-	-	-
Glycinde solitaria	3	-	3	5
Malmgreniella taylori	-	-	1	-
Mediomastus ambiseta	1	2	3	-
Mediomastus sp.	3	1	9	2
Melinna sp.	-	-	1	-
Minuspio perkinsi	-	1	4	7
Minuspio sp.	-	-	-	5
Monticellina sp.	1	4	4	-
Owenia fusiformis	2	-	-	-
Paramphinome sp.	-	-	2	7
Paraprionospio sp.	47	84	41	35
Podarkeopsis levifuscina	-	-	1	-
Sigambra tentaculata	-	-	6	33
Spiochaetopterus costarum	-	-	-	2
Streblospio sp.	2	12	-	3
Arthropoda				
Amphipoda				
Ampelisca sp.	2	-	-	-
Ampelisca sp. C	1	-	-	-
Listriella sp.	2	-	-	-
Monocorophium tuberculatum	1	-	-	-
Pseudohaustorius sp.	2	-	-	-
Unidentified Amphipoda	-	-	1	-
Cumacea				
Leucon sp.	1	-	-	-
Decapoda				
Pinnixa sp.	1	-	-	-
Chordata				
Cephalochordata				
Branchiostoma sp.	2	-	-	-

Appendix I-2 (continued)

	400 West	200 West	200 East	400 East
Echinodermata				
Amphiura sp.	-	-	1	-
Ophiuroidea	1	-	1	-
Echiura				
Unidentified Echiura	-	-	-	1
Mollusca				
Bivalvia				
Macoma tenta	-	-	-	2
Tellina versicolor	-	-	1	-
Tellinidae	1	-	-	2
Unidentified Bivalvia	1	-	-	-
Veneridae	-	-	1	-
Gastropoda				
Acteocina canaliculata	-	-	2	-
Boonea bisuturalis	-	-	1	2
Nassarius vibex	3	-	-	-
Prunum apicinum	-	-	-	1
Turbonilla conradi	-	-	3	-
Unidentified Gastropoda	-	-	1	1
Nemertea				
Unidentified Nemertea	1	-	8	2
Phoronida				
Unidentified Phoronidae	-	1	-	-
Sipuncula				
Phascolion sp.	-	-	2	-

The Bioassay of the Pensacola Beach WWTF effluent sampled on June 16, 2009, NPDES #FL0024007

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 FL	00240077 11 12 0	090615	# B	# S	# 2

Remarks

#

The Priority Pollutants Analysis for Bioassay of the Pensacola Beach WWTF effluent sampled on June 16, 2009, NPDES #FL0024007

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 FL	00240077 11 12 0	090615	# X	# S	# 2

Remarks

#

Biological Analyses of the Pensacola Beach WWTF effluent sampled on June 16, 2009, NPDES #FL0024007

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 FL	00240077 11 12 0	090615	# S	# S	# 2

Remarks