Effluent Quality Assessment of City of Fernandina Beach WWTF Nassau County NPDES # FL0027260 Sampled August 19, 21, & 23, 2024

Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection
December 2024

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Summary of Results

Effluent fecal coliform and enterococci exceeded effluent permit limits, and the enterococci exceeded Class III Water Quality Criterion for Marine Waters. The effluent sample was not toxic to the marine organisms tested however, the result for the fish species was J qualified because the fish were 1 day older than the acceptable age range for the test. The marine algal growth potential (AGP) and nutrient results do not suggest a potential for nutrient enrichment of the receiving waters. There were 14 organic constituents detected in the effluent grab sample.

Facility Overview

The City of Fernandina Beach Wastewater Treatment Facility is a domestic wastewater treatment facility. A Facility Summary, including a description of the facility, summary of permit limits, and any relevant Administrative Order (AO), Consent Order (CO), and Discharge Monitoring Report (DMR) information is provided in Appendix A. The effluent is continuously discharged into the Amelia River, a Class III Marine Water [waterbody identification (WBID) 2124A] (Figure 1).

The receiving waters for this facility fall under the Estuary-Specific Numeric Interpretations of the Narrative Nutrient Criteria (NNC) for the Amelia River within the Lower St. Marys River. For this region, the NNC are 0.77 mg/L total nitrogen, 0.181 mg/L total phosphorus, and 12.9 µg/L chlorophyll *a* (Subparagraph 62-302.532(1)(cc)1., F.A.C.). The criterion for total nitrogen is expressed as an annual geometric mean, while the criteria for total phosphorus and chlorophyll *a* shall not be exceeded in more than 10 percent of the measurements. For Class III predominantly marine waters, the daily average dissolved oxygen (DO) saturation shall not be below 42 percent in more than 10 percent of the values (Subsection 62-302.533(2), F.A.C.). This FYI event only provides single sample results. It should be noted that waterbody impairment assessments are based on longer-term data, and individual exceedances of a criterion do not indicate use impairment. http://ca.dep.state.fl.us/mapdirect/?focus=nutrientcriteria

Methods

Effluent grab and 24-hour time proportioned composite samples were collected from monitoring site location EFD-1, for outfall D-001 on August 19, 2024. Effluent renewal composite samples were collected on August 21 and August 23, 2024. The permit specifies flow-proportioned composite samples and time-proportioned composite samples were collected.

Samples were collected by Conor Lucey and Bronze Titus (Northeast District). Analyses were performed by Eurofins Environmental Testing in Jacksonville, Orlando, and Pensacola; and the DEP Laboratory in Tallahassee.

All field and laboratory methods followed DEP Standard Operating Procedures (see https://floridadep.gov/dear/quality-assurance/content/dep-sops and https://floridadep.gov/dear/florida-dep-laboratory/content/dep-laboratory-quality-assurance-

manual-and-sops for details) and met DEP quality assurance/quality control standards (see https://floridadep.gov/dear/quality-assurance). Explanations of specific methods and measurements can be found in Appendix B.

Class III Water Quality Criteria for Fresh and Marine Waters are found in Chapter 62-302, F.A.C. All references to Rule 62-302.530, F.A.C. are to the surface water quality criteria table with an effective date of 02/17/2016 and a notice identification number of 17115667.

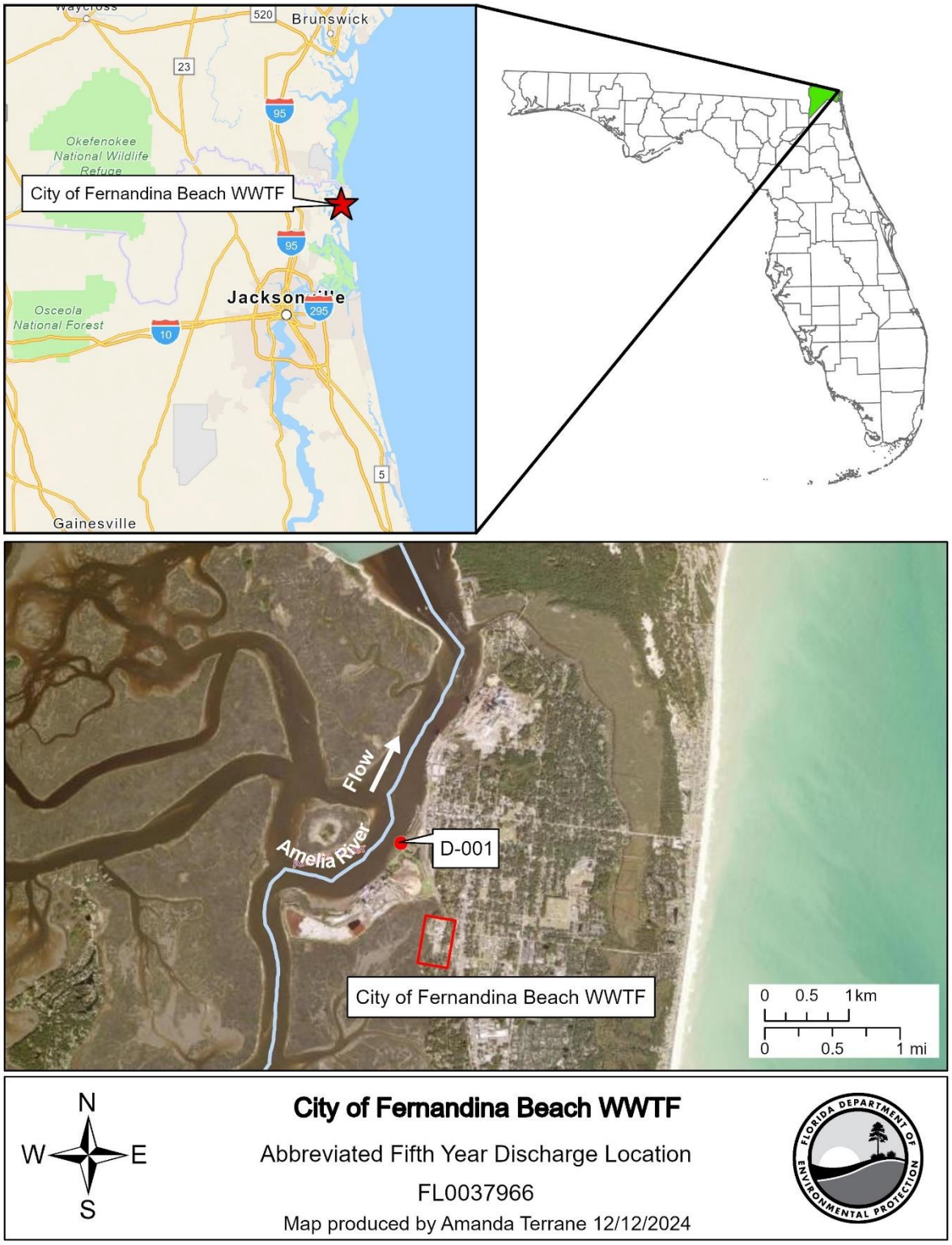


Figure 1. Map of Facility and Discharge Location

Results

Physical and Chemical Parameters (See Table 1 and Appendices C & D)

- All field measured effluent water quality parameters complied with Class III Water Quality Criteria for Marine Waters and effluent permit limits.

Analytical Water Chemistry (See Table 2 and Appendix D)

- For comparative purposes only, the single-sample effluent grab and composite values for total nitrogen were greater than the Estuary-Specific Numeric Nutrient Criteria (NNC) annual geometric mean value for the region. The single-sample effluent grab and composite value for total phosphorus was greater than the NNC not be exceeded in more than 10 percent of the measurements.

- Total phosphorus was detected in the equipment blank.

Microbiology (See Table 2 and Appendix B)

- Fecal coliform and enterococci detected in the effluent grab samples exceeded the effluent permit limits.

- Enterococci detected in the effluent grab sample exceeded the Ten Percent Threshold Value for the Class III Water Quality Criterion for Marine Waters (Subsection 62-302.530(6)(c), F.A.C.).

Toxicity Whole Effluent Test (See Table 2)

- Tests were performed August 20 through August 27, 2024.

- The sample was aerated for 15 minutes at a rate of approximately 100 bubbles per minute to decrease the dissolved oxygen (DO) from 11.3 mg/L to 8.7 mg/L.

- Aliquots of the bioassay sample were salinity-adjusted according to method requirements from an apparent salinity of approximately 0.3 parts per thousand (ppth) to a salinity of approximately 20 ppth for the *Americamysis bahia* test and to a salinity of approximately 5 ppth for the *Menidia beryllina* test. Control mortality was within method acceptance criteria.

- Chronic bioassay results are reported as the 25% Inhibition Concentration (IC25). An IC25 is the effluent concentration causing a 25% reduction in a biological response such as biomass or reproduction when compared to a control population. An IC25 of less than 100% in a chronic test may constitute exceedances of Subsection 62-302.200(5), Subsection 62-302.530(20) and/or facility permit limits.

- For the chronic definitive bioassay, the IC25 for the mysid, *Americamysis bahia*, and the fish, *Menidia beryllina*, were calculated as being greater than 100% effluent, and therefore complied with effluent permit limits.

- The *Menidia beryllina* chronic bioassay was performed with fish aged 12 days instead of the method required 7 to 11 days. The results were reported with a J qualifier.

- For more information or to obtain copies of the toxicity bench sheets, please contact the Biology Laboratory at 850-245-8177.

Metals (See Table 3 and Appendix D)

- Effluent metals complied with Class III Water Quality Criteria for Marine Waters and effluent permit limits.

Algal Growth Potential (See Table 4 and Appendix B)

- The freshwater unicellular green alga, *Pseudokirchneriella subcapitata*, and the marine species, *Dunaliella tertiolecta*, were used to determine the AGP values in the effluent grab samples. The analytical chemistry suggests that the effluent for both species is nitrogen-limited (Miller et al. 1978).

- An aliquot of the AGP sample was salinity-adjusted from an apparent salinity of approximately 0.35 parts per thousand (ppth) to a salinity of approximately 6.8 ppth by the addition of artificial sea salts to meet the salinity requirements of the test species *Dunaliella tertiolecta*.

- The non-salinity adjusted effluent grab sample AGP result of 7.86 mg dry wt/L is within the AGP range (6.10 to 20.0 mg dry wt/L) suggested to be representative of high productivity for freshwater (Miller et al. 1978).

- Differences greater than an order of magnitude between actual and predicted AGP values for the freshwater test species, *Pseudokirchneriella subcapitata*, are considered sufficient evidence to warrant follow up testing with the algal growth inhibition bioassay. True algal growth inhibition can only be determined by performing an actual algal growth inhibition test. Should algal growth inhibition be suspected, the district should request that the algal growth inhibition test be performed as a follow-up to the inspection.

Organic Constituents (See Table 7 and Appendix D)

- Atrazine (herbicide), azoxystrobin (fungicide), bromacil (herbicide), caffeine (stimulant), chlorfenapyr (insecticide), fipronil (insecticide), fipronil desulfinyl (insecticide), fipronil sulfide (insecticide), fipronil sulfone (insecticide), fludioxonil (fungicide), fluxapyroxad (fungicide), loratadine (antihistamine), sulfentrazone (herbicide), and tebuconazole (fungicide) were detected in the effluent grab sample.

- There are no effluent permit limits for organic constituents.

Literature Cited

Miller, W. E., Maloney, T. E. and Greene, J. C. 1978. The *Selenastrum capricornutum* Printz algal assay bottle test. EPA600/978-018. U. S. EPA, Cincinnati, Ohio. 126 p.

Stevenson, R. J. and Bahls, L. L. 1999. Periphyton protocols. Pp. 6.1-6.22 in: Rapid bioassessment protocols for use in wadeable streams and rivers. 2nd edition. By: M. T. Barbour, J. Gerritsen, B. D. Snyder and J. B. Stribling. EPA 841-B-99-002. U. S. Environmental Protection Agency, Office of Water, Washington, D. C.

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

Table 1. Measured field parameters

Effluent limits, Class III Water Quality Criteria for Marine Waters, and field parameters

Parameter	Units	Class III Criteria	Effluent Permit Limits	Effluent EFD-1
Temperature	C	-	-	28.6
pH	SU	6.5 - 8.5	6.5 - 8.5	7.1
Specific Conductance	µmhos/cm	-	Report	841
Salinity	ppt	-	-	0.4 c
Dissolved Oxygen	% saturation	≥ 42	-	85.3
Dissolved Oxygen	mg/L	-	≥ 5.0	6.6 c

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

Table 2. Analytical water chemistry, microbiological, and toxicological data

Effluent limits, Class III Water Quality Criteria for Marine Waters, and analytical water chemistry, microbiological, and toxicological data

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Composite	Effluent Grab
Ortho-phosphate	mg P/L	-	Report	-	0.49
Total Phosphorus[1]	mg P/L	≤ 0.181	Report	2.2	0.57
Total Ammonia Nitrogen	mg N/L	-	Report	0.11	0.079
Un-ionized Ammonia (calc salinity)	ppt	-	-	-	< 0.02 c
Nitrate and Nitrite	mg N/L	-	Report	1.2	1.2
Total Kjeldahl Nitrogen	mg N/L	-	Report	1.4	1.3
Organic Nitrogen	mg N/L	-	Report	1.3 c	1.2 c
Total Nitrogen	mg N/L	≤ 0.77 g	Report	2.6 c	2.5 c
Total Organic Carbon	mg C/L	-	-	13	12
Chlorophyll *a* - Corrected	µg/L	≤ 12.9	-	-	1.9 I
Phaeophytin	µg/L	-	-	-	1.0 U
CBOD, 5 day, N - inhibited	mg/L	-	≤ 60.0 sp	4.2 J	3.2 J
Hardness	mg CaCO3/L	-	-	-	251 c
Total Suspended Solids	mg/L	-	≤ 60.0 sp	6 I	3 I
Turbidity	NTU	≤ 29 t	-	-	1.3
Color (true)	PCU	-	-	-	26
Alkalinity	mg CaCO3/L	-	-	-	126 A
Chloride	mg Cl/L	-	-	-	110 A
Fluoride	mg F/L	≤ 5.0	-	-	0.39
Sulfate	mg SO4/L	-	-	-	120 A
Fecal Coliforms	MPN/100mL	-	≤ 800 s	-	4,880 e
Enterococci	MPN/100mL	≤ 130	≤ 130	-	2,420 e
Bioassay - Fish *(M. beryllina)*	% effluent	-	≥ 100	>100 J	-
Bioassay - Mysid *(A. bahia)*	% effluent	-	≥ 100	>100	-

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.
c - Value is calculated
e - Value exceeds the Class III Water Quality Criteria or permit limits
g - Value expressed as an annual geometric mean
p - 24 hour flow proportioned composite
s - Single sample
t - Shall not exceed 29 NTUs above background
A - Value reported is the mean of two or more determinations
I - The reported value is between the laboratory MDL and the laboratory PQL
J - Estimated value
U - Material analyzed for but not detected; value reported is the method detection limit
1 - Analyte detected in the equipment blank

Table 3. Analytical metals data

Effluent limits, Class III Water Quality Criteria for Marine Waters, and analytical metals data

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab
Aluminum	µg/L	≤ 1,500	-	44
Arsenic	µg/L	≤ 50	-	1.54
Cadmium	µg/L	≤ 8.8	-	0.020 U
Calcium	mg/L	-	-	62.5
Chromium, Total [2]	µg/L	≤ 50	-	0.73 I
Copper	µg/L	≤ 3.7	-	2.11
Iron	µg/L	≤ 300	-	35 I
Lead	µg/L	≤ 8.5	-	0.20 U
Magnesium	mg/L	-	-	23.0
Mercury	ng/L	≤ 25	≤ 25	1.2
Nickel	µg/L	≤ 8.3	-	0.64 I
Potassium	mg/L	-	-	8.4
Selenium	µg/L	≤ 71	-	0.27 I
Silver	µg/L	≤ 2.3	-	0.010 U
Sodium	mg/L	-	-	75.2
Zinc	µg/L	≤ 86	-	17 I

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.
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
2 - Class III Marine Water Quality Criterion (62-302.530(19)(b), F.A.C.) is for chromium-VI

Table 4. Algal Growth Potential (AGP)

Measured and predicted algal growth potential (AGP; mg dry weight/L) for total soluble inorganic nitrogen (TSIN), ortho-phosphate (OP), total nitrogen (TN) and total phosphorus (TP) limitation and ratios of nitrogen to phosphorus

Location	Test Species	AGP (measured)	Predicted AGP (TSIN) ± 20%	Predicted AGP (OP) ± 20%	Predicted AGP (TN) ± 20%	Predicted AGP (TP) ± 20%	Inorganic N:P ratio	Total N:P ratio
Effluent Grab	*Pseudokirchneriella subcapitata*	7.86 A	49 ± 9.7	210 ± 42	95 ± 19	250 ± 49	2.6	4.4
Effluent Grab	*Dunaliella tertiolecta*	3.0 U *	not applicable [3]	not applicable [3]	not applicable [3]	not applicable [3]	2.6	4.4

* - sample salinity adjusted to 6.8 ppth

3 - predictions not applicable to marine matrix

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 5. Detected Organic Constituents

Effluent limits, Class III Water Quality Criteria for Marine Waters, and analytical organic and pesticide data

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab
Atrazine	ng/L	-	-	5.8 J
Azoxystrobin	ng/L	-	-	6.0 J
Bromacil	ng/L	-	-	16
Caffeine	ng/L	-	-	50
Chlorfenapyr	ng/L	-	-	6.1
Fipronil	ng/L	-	-	19
Fipronil Desulfinyl	ng/L	-	-	0.36 I
Fipronil Sulfide	ng/L	-	-	4.9
Fipronil Sulfone	ng/L	-	-	5.0
Fludioxonil	ng/L	-	-	4.0
Fluxapyroxad	ng/L	-	-	0.28 I
Loratadine	ng/L	-	-	7.9
Sulfentrazone	ng/L	-	-	32
Tebuconazole	ng/L	-	-	9.4

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J - Estimated value

Appendix A. Facility Summary

PART I: Information gathered prior to sampling event	
Prepared By: Aniyah Graham & Ian Watkins	Contact Number: 904-256-1688
Facility Name: City of Fernandina Beach WWTF	Former Names: N/A
NPDES Permit Number: FL0027260 (Major)	Permit Expiration Date: December 16, 2024
Physical Address: 1007 South 5th Street Fernandina Beach, Florida 32034	
District: NED	County: Nassau
Function of Facility: Domestic wastewater treatment	
Facility Type: DW NPDES Major	Permitted Capacity (MGD): 3.50 MGD
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): June 30, 2023- May 31, 2024 Average= 1.822 MGD	

Date	Description	Result	Limit	Units	Statistical Base
05/31/2024	Flow	1.776	Report	MGD	MK - Monthly Average
04/30/2024	Flow	1.97	Report	MGD	MK - Monthly Average
03/31/2024	Flow	2.067	Report	MGD	MK - Monthly Average
02/29/2024	Flow	1.883	Report	MGD	MK - Monthly Average
01/31/2024	Flow	2.003	Report	MGD	MK - Monthly Average
12/31/2023	Flow	1.975	Report	MGD	MK - Monthly Average
11/30/2023	Flow	1.617	Report	MGD	MK - Monthly Average
10/31/2023	Flow	1.838	Report	MGD	MK - Monthly Average
09/30/2023	Flow	1.664	Report	MGD	MK - Monthly Average
08/31/2023	Flow	1.737	Report	MGD	MK - Monthly Average
07/31/2023	Flow	1.709	Report	MGD	MK - Monthly Average
06/30/2023	Flow	1.633	Report	MGD	MK - Monthly Average

If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months): N/A

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 Site	**Description of Monitoring Site**
CAL-1	Calculated value
FLW-1	Flow rate to be measured at the Parshall Flume
EFA-1	Effluent, immediately after chlorination and prior to dechlorination
EFD-1	Effluent, after dechlorination and prior to discharge to D-001
SWA-1	Ambient River sampling, off-shore and upstream of outfall D-001
SWD-1	Ambient River sampling, approximately 300 feet downstream of Outfall D-001 and approximately 100-ft offshore

Description of Permitted Outfall(s):

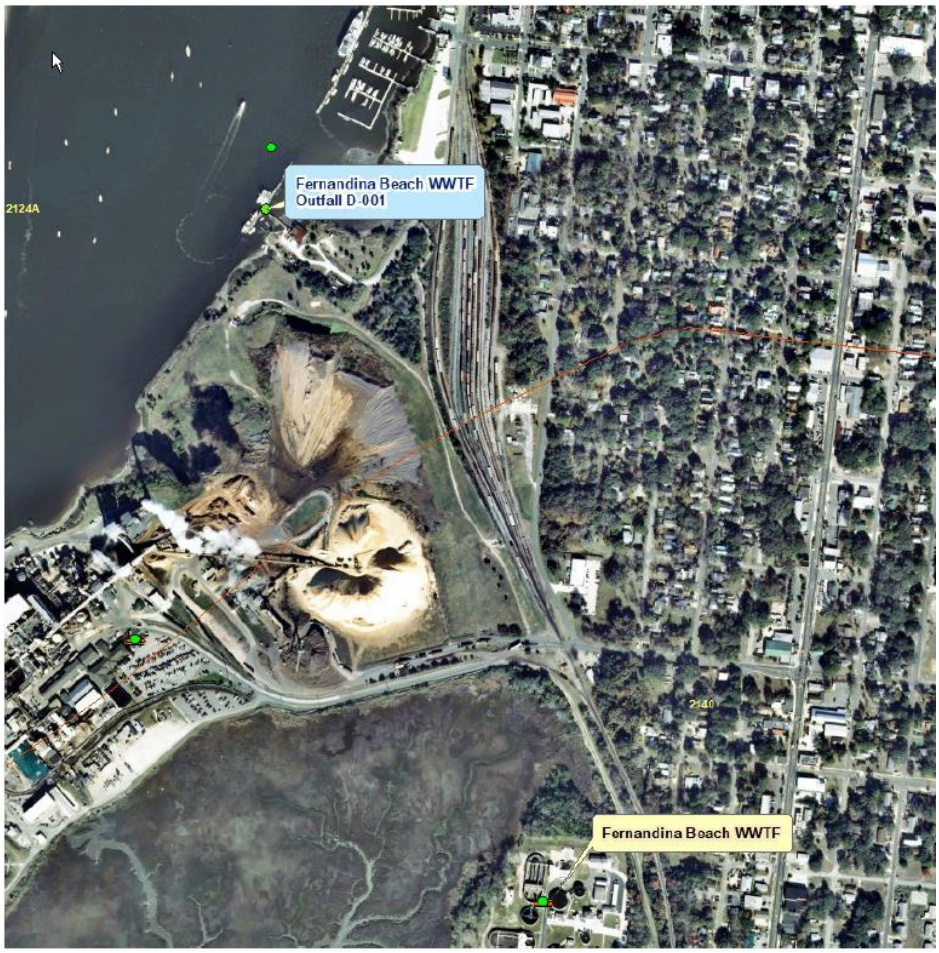
Surface Water Discharge D-001: An existing 3.50 MGD annual average daily flow (AADF) permitted discharge to Amelia River (Class III Marine Waters, WBID# 2124). Outfall D-001 consists of a 3,164-ft segment of a 24-inch diameter concrete pipe connected with a 198-ft cast iron pipe discharging at a depth of approximately 9 feet below water surface. The point discharge D-001 is located approximately at longitude 81° 24’ 4.8” W and latitude: 30° 40’ 4.79” N in the WBID: 2124A in the Lower St. Mary’s River unit of Nassau St. Mary’s River Basin.

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

To operate an existing 3.50 million gallons per day (MGD) annual average daily flow (AADF) permitted capacity biological nutrient removal (BNR) domestic wastewater treatment facility (WWTF) consisting of two parallel carousel oxidation ditch wastewater treatment trains. Preliminary treatment consists of a mechanical screening device with 0.125-inch openings and a dewatering conveyor followed by two backup manual bar screens and a grit removal chamber. Screened wastewater is directed to the grit removal chamber and then to a flow splitter box for separation to the two treatment trains. Each treatment train consists of a 2.50 MGD design capacity oxidation ditch (having a 210,000-gallon anoxic zone and a 1.003 MG aerobic zone), a 489,000-gallon secondary clarifier (80-ft diameter, 13-ft SWD), and a 56,800-gallon chlorine contact chamber. Chlorinated reclaimed water from the two treatment trains converges in a 24” gravity pipe and is conveyed to a dechlorination chamber prior to discharge to the Amelia River. The biosolids/waste activated sludges are treated in three aerobic digesters having

A cumulative volume of approximately 1.24-million gallons and are dewatered on-site with a rotary press for transport to a Class I Landfill for disposal.

Location of Outfall D – 001 (Aerial Photo)



Outfall D-001 consists of a 3,164-ft segment of a 24-inch diameter concrete pipe connected with a 198-ft cast iron pipe discharging at a depth of approximately 9 feet below water surface, and located approximately at latitude 30° 40' 4.79 N, longitude 81° 28' 4.8" W.

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)

			Effluent Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site	Notes
Flow	MGD	Max	3.50	Annual Average	Continuous	Recording Flow Meter with Totalizer	FLW-1	See I.A.4
		Max	Report	3-Mon Rolling Average				
		Max	Report	Monthly Average				
Percent Capacity, (TMADF/Permitted Capacity) x 100	percent	Max	Report	Monthly Total	Monthly	Calculated	CAL-1	
BOD, Carbonaceous 5-day, 20C	mg/L	Max	20.0	Annual Average	Weekly	24-hr FPC	EFD-1	
		Max	25.0	Monthly Average				
		Max	40.0	Weekly Average				
		Max	60.0	Single Sample				
CBOD, % Removal, 5-day	percent	Min	85	Monthly Average	Monthly	Calculated	CAL-1	See I.A.6
	mg/L	Max	20.0	Annual Average	Weekly	24-hr FPC	EFD-1	
		Max	30.0	Monthly Average				

PART I: Continued								
List <u>current</u> 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)								
Solids, Total Suspended		Max	45.0	Weekly Average				
		Max	60.0	Single Sample				
Solids, Total Suspended, % Removal	percent	Min	85	Monthly Average	Monthly	Calculated	CAL-1	See I.A.6

			Effluent Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site	Notes
Coliform, Fecal	#/100mL	Max	200	Annual Average	Weekly	Grab	EFD-1	See I.A.7
		Max	200	Monthly Geometric Mean				
		Max	400	90th Percentile				
		Max	800	Single Sample				
Enterococci	#/100mL	Max	35.0	Monthly Geometric Mean	5/Month	Grab	EFD-1	See I.A.8
		Max	130	90th Percentile				

pH	s.u.	Min	6.5	Single Sample	Continuous	Meter	EFD-1	See I.A.3
		Max	8.5	Single Sample				
Chlorine, Total Residual (For Disinfection)	mg/L	Min	0.5	Single Sample	Continuous	Meter	EFA-1	See I.A.9
Chlorine, Total Residual (For Dechlorination)	mg/L	Max	0.01	Single Sample	Daily; 24 hours	Grab	EFD-1	
Oxygen, Dissolved (DO)	mg/L	Min	5.0	Single Sample	Daily; 24 hours	Meter	EFD-1	See I.A.10
Nitrogen, Total	mg/L	Max	Report	Single Sample	Weekly	24-hr FPC	EFD-1	
		Max	Report	Monthly Average				
Nitrogen, Total	lb/mth	Max	Report	Monthly Total	Monthly	Calculated	CAL-1	See I.A.11
	lb/yr	Max	67,549	Annual Total				
Phosphorus, Total (as P)	mg/L	Max	Report	Single Sample	Monthly	24-hr FPC	EFD-1	
		Max	Report	Monthly Average				
Phosphate, Ortho (as P)	mg/L	Max	Report	Single Sample	Monthly	Filtered Grab	EFD-1	

			Effluent Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site	Notes
Phosphorus, Total (as P)	lb/mth	Max	Report	Monthly Total	Monthly	Calculated	CAL-1	See I.A.11
	lb/yr	Max	30,365	Annual Total				
Nitrogen, Kjeldahl, Total (as N)	mg/L	Max	Report	Single Sample	Quarterly	24-hr FPC	EFD-1	See I.A.17
Nitrogen, Organic, Total (as N)	mg/L	Max	Report	Single Sample	Quarterly	24-hr FPC	EFD-1	See I.A.17
Nitrogen, Ammonia, Total (as N)	mg/L	Max	Report	Single Sample	Quarterly	24-hr FPC	EFD-1	See I.A.17
Nitrite plus Nitrate, Total 1 det. (as N)	mg/L	Max	Report	Single Sample	Quarterly	24-hr FPC	EFD-1	See I.A.17
Specific Conductance	µmhos/cm	Max	Report	Single Sample	Quarterly	Meter	EFD-1	See I.A.17
Mercury, Total Recoverable	µg/L	Max	0.025	Single Sample	Annually	Grab	EFD-1	See I.A.12
Chronic Whole Effluent Toxicity, 7-Day IC25 (*Americamysis bahia*)	percent	Min	100	Single Sample	Semi-Annually; twice per year	24-hr FPC	EFD-1	See I.A.13
Chronic Whole Effluent Toxicity, 7-Day IC25 (*Menidia beryllina*)	percent	Min	100	Single Sample	Semi-Annually; *twice per year*	24-hr FPC	EFD-1	See I.A.13

BOD, Carbonaceous 5-day, 20C	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWA-1 SWD-1	See I.A.17
Solids, Total Suspended	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWA-1 SWD-1	See I.A.17
Chlorophyll a	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWA-1 SWD-1	See I.A.17
Tide Stage	ft	Max	Report	Single Sample	Quarterly	Meter	SWA-1 SWD-1	See I.A.17
pH	s.u.	Min Max	Report Report	Single Sample Single Sample	Quarterly	Meter	SWA-1 SWD-1	See I.A.17
Oxygen, Dissolved (DO)	mg/L	Min	Report	Single Sample	Quarterly	Meter	SWA-1 SWD-1	See I.A.17

			Effluent Limitations		Monitoring Requirements				
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site	Notes	
Temperature , Water	Deg C	Max	Report	Single Sample	Quarterly	Meter	SWA-1 SWD-1	See I.A.17	
Specific Conductance	µmhos/cm	Max	Report	Single Sample	Quarterly	Meter	SWA-1 SWD-1	See I.A.17	

Nitrogen, Total	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWA-1 SWD-1	See I.A.17	
Nitrogen, Kjeldahl, Total (as N)	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWA-1 SWD-1	See I.A.17	
Nitrogen, Ammonia, Total (as N)	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWA-1 SWD-1	See I.A.17	
Nitrogen, Organic, Total (as N)	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWA-1 SWD-1	See I.A.17	
Nitrite plus Nitrate, Total 1 det. (as N)	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWA-1 SWD-1	See I.A.17	
Phosphorus, Total (as P)	mg/L	Max	Report	Single Sample	Quarterly	Grab	SWA-1 SWD-1	See I.A.17	
Phosphate, Ortho (as P)	mg/L	Max	Report	Single Sample	Quarterly	Filtered Grab	SWA-1 SWD-1	See I.A.17	

Note: (*) The weekly average limit is applicable when more than one sample is taken within a period of seven consecutive days

PART I: Continued	
Receiving Waters: Amelia River	Classification (indicate whether fresh or marine): Class III Marine Waters, WBID# 2124A

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

a. Effluent Limitation

(1) In any routine or additional follow-up test for chronic whole effluent toxicity, the 25 percent inhibition concentration (IC25) shall not be less than 100% effluent. [Rules 62-302.530(61) and 62-4.241(1)(b), F.A.C.]

(2) For acute whole effluent toxicity, the 96-hour LC50 shall not be less than 100% effluent in any test. *[Rules 62-302.500(1)(a)4. and 62-4.241(1)(a), F.A.C.]*

b. Monitoring Frequency

(1) Routine toxicity tests shall be conducted once every six months, the first starting within 6 months of the most recent tests and lasting for the duration of this permit.

c. Sampling Requirements

(1) For each routine test or additional follow-up test conducted, a total of three flow proportional 24-hr composite samples of final effluent shall be collected and used in accordance with the sampling protocol discussed in EPA-821-R-02-014, Section 8.

(2) The first sample shall be used to initiate the test. The remaining two samples shall be collected according to the protocol and used as renewal solutions on Day 3 (48 hours) and Day 5 (96 hours) of the test.

(3) Samples for routine and additional follow-up tests shall not be collected on the same day.

d. Test Requirements

(1) Routine Tests: All routine tests shall be conducted using a control (0% effluent) and a minimum of five test dilutions: **100%**, **50%**, **25%**, **12.5%**, and **6.25%** final effluent.

(2) The permittee shall conduct 7-day survival and growth chronic toxicity tests with a mysid shrimp, ***Americamysis (Mysidopsis) bahia***, Method 1007.0, and an inland silverside, ***Menidia beryllina***, Method 1006.0, concurrently.

(3) All test species, procedures and quality assurance criteria used shall be in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, 3rd Edition, EPA-821-R-02-014. Any deviation of the bioassay procedures outlined herein shall be submitted in writing to the Department for review and approval prior to use. In the event the above method is revised, the permittee shall conduct chronic toxicity testing in accordance with the revised method.

(4) The control water and dilution water used shall be artificial sea salts as described in EPA-821-R-02-014, Section 7.2. The test salinity shall be determined as follows:

(a) For the ***Americamysis bahia*** bioassays, the effluent shall be adjusted to a salinity of 20 parts per thousand (ppt) with artificial sea salts. The salinity of the control/dilution water (0% effluent) shall be 20 ppt. If the salinity of the effluent is greater than 20 ppt, then no salinity adjustment shall be made to the effluent and the test shall be run at the effluent salinity. The salinity of the control/dilution water shall match the salinity of the effluent.

(b) For the ***Menidia beryllina*** bioassays, if the effluent salinity is less that 5 ppt, the salinity shall be adjusted to 5 ppt with artificial sea salts. The salinity of the control/dilution water (0% effluent) shall be 5 ppt. If the salinity of the effluent is greater than 5 ppt, then no salinity adjustment shall be made to the effluent and the test shall be run at the effluent salinity. The salinity of the control/dilution water shall match the salinity of the effluent.

(c) If the salinity of the effluent requires adjustment, then a salinity adjustment control should be prepared and included with each bioassay. The salinity adjustment control is intended to identify

toxicity resulting from adjusting the effluent salinity with artificial sea salts. To prepare the salinity adjustment control, dilute the control/dilution water to the salinity of the effluent and adjust the salinity of the salinity adjustment control at the same time and to the same salinity that the salinity of the effluent is adjusted using the same artificial sea salts.

e. Quality Assurance Requirements

(1) A standard reference toxicant (SRT) quality assurance (QA) chronic toxicity test shall be conducted with each species used in the required toxicity tests either concurrently or initiated no more than 30 days before the date of each routine or additional follow-up test conducted. Additionally, the SRT test must be conducted concurrently if the test organisms are obtained from outside the test laboratory unless the test organism supplier provides control chart data from at least the last five monthly chronic toxicity tests using the same reference toxicant and test conditions. If the organism supplier provides the required SRT data, then the organism supplier's SRT data and the test laboratory's monthly SRT-QA data shall be included in the reports for each companion routine or additional follow-up test required.

(2) If the mortality in the control (0% effluent) exceeds 20% for either species in any test, or any other test acceptability criteria are not met, then the test for that species (including the control) shall be invalidated and the test repeated. Test acceptability criteria for each species are defined in EPA-821-R-02-014, Section 14.12 (***Americamysis bahia***) and Section 13.12 (***Menidia beryllina***). The repeat test shall begin within 21 days after the last day of the invalid test.

(3) If 100% mortality occurs in all effluent concentrations for either species prior to the end of any test and the control mortality is less than 20% at that time, then the test (including the control) for that species shall be terminated with the conclusion that the test fails and constitutes non-compliance.

(4) Routine and additional follow-up tests shall be evaluated for acceptability based on the observed dose-response relationship as required by EPA-821-R-02-014, Section 10.2.6., and the evaluation shall be included with the bioassay laboratory reports.

f. Reporting Requirements

(1) Results from all required routine and additional follow-up tests shall be reported on the **Monthly** Discharge Monitoring Report (DMR) as the calculated IC25 for each test species.
(2) A bioassay laboratory report for each routine test shall be prepared according to EPA-821-R-02-014, Section 10, Report Preparation and Test Review, and **e-mailed** or mailed to the Department at the address below **within 30 days** after the last day of the test.
(3) For additional follow-up tests, a single bioassay laboratory report shall be prepared according to EPA-821-R-02-014, Section 10, and **e-mailed** or mailed **within 30 days** after the last day of the second valid additional follow-up test.
(4) Data for invalid tests shall be included in the bioassay laboratory report for the repeat test.
(5) The same bioassay data shall not be reported as the results of more than one test.
(6) All bioassay laboratory reports shall be **e-mailed** or mailed **within 30 days** to Jacksonville *only*:

g. Test Failures

(1) A test fails when the test results do not meet the limits in 13.a.(1).
(2) Additional Follow-up Tests: (a) If a routine test does not meet the chronic toxicity limitation in 13.a.(1) above, then the permittee shall notify the Department at the address above within 21 days after the last day of the failed routine test and conduct two additional follow-up tests on each species that failed the test in accordance with 13.d.
(b) The first test shall be initiated within 28 days after the last day of the failed routine test. The remaining additional follow-up tests shall be conducted weekly thereafter until a total of two valid additional follow-up tests are completed.

(c) The first additional follow-up test shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 50%, 25%, 12.5%, and 6.25% effluent. The permittee
may modify the dilution series in the second additional follow-up test to more accurately bracket the toxicity such that at least two dilutions above and two dilutions below the target concentration and a control (0% effluent) are run. All test results shall be analyzed according to the procedures in EPA-821-R-02-014.
(3) In the event of three valid test failures (whether routine or additional follow-up tests) within a 12-month period, the permittee shall notify the Department within 21 days after the last day of the third test failure. (a) The permittee shall submit a plan for correction of the effluent toxicity within 60 days after the last day of the third test failure.
(b) The Department shall review and approve the plan before initiation.
(c) The plan shall be initiated within 30 days following the Department's written approval of the plan.
(d) Progress reports shall be submitted quarterly to the Department at the address above.
(e) During the implementation of the plan, the permittee shall conduct quarterly routine whole effluent toxicity tests in accordance with 13.d. Additional follow-up tests are not required while the plan is in progress. Following completion or termination of the plan, the frequency of monitoring for routine and additional follow-up tests shall return to the schedule established in 13.b.(1). If a routine test is invalid according to the acceptance criteria in EPA-821-R-02-014, then a repeat test shall be initiated within 21 days after the last day of the invalid routine test.
(f) Upon completion of four consecutive quarterly valid routine tests that demonstrate compliance with the effluent limitation in 13.a.(1) above, the permittee may submit a written request to the Department to terminate the plan. The plan shall be terminated upon written verification by the Department that the facility has passed at least four consecutive quarterly valid routine whole effluent toxicity tests.
(g) If a test within the sequence of the four is deemed invalid, but is replaced by a repeat valid test initiated within 21 days after the last day of the invalid test, then the invalid test will not be counted against the requirement for four consecutive quarterly valid routine tests for the purpose of terminating the plan.

(4) If chronic toxicity test results indicate greater than 50% mortality within 96 hours in an effluent concentration equal to or less than the effluent concentration specified as the acute toxicity limit in 13.a.(2), then the Department may revise this permit to require acute definitive whole effluent toxicity testing.
(5) The additional follow-up testing and the plan do not preclude the Department taking enforcement action for acute or chronic whole effluent toxicity failures.

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

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	Result	Limit	Units	Statistical Base
05/31/2024	Enterococci	325.5	130	#/100mL	9A - 90th Percentile
04/30/2024	Enterococci	579.4	130	#/100mL	9A - 90th Percentile
03/31/2024	Enterococci	1203.3	130	#/100mL	9A - 90th Percentile
02/29/2024	Enterococci	648.8	130	#/100mL	9A - 90th Percentile
01/31/2024	Enterococci	142.1	130	#/100mL	9A - 90th Percentile
12/31/2023	Enterococci	648.8	130	#/100mL	9A - 90th Percentile
05/31/2024	Enterococci	140.01	35	#/100mL	MM - Monthly Geometric Mean
04/30/2024	Enterococci	99.35	35	#/100mL	MM - Monthly Geometric Mean
03/31/2024	Enterococci	501.27	35	#/100mL	MM - Monthly Geometric Mean
02/29/2024	Enterococci	306.07	35	#/100mL	MM - Monthly Geometric Mean
01/31/2024	Enterococci	78.49	35	#/100mL	MM - Monthly Geometric Mean
11/30/2023	Enterococci	42.92	35	#/100mL	MM - Monthly Geometric Mean
05/31/2024	IC25 Statre 7day Chr Mendia	56.95	100	percent	ME - Minimum
11/30/2023	IC25 Statre 7day Chr Mendia	58.98	100	percent	ME - Minimum
05/31/2024	IC25 Statre 7day Chr Mysid Bahia	37.47	100	percent	ME - Minimum
11/30/2023	IC25 Statre 7day Chr Mysid Bahia	50.29	100	percent	ME - Minimum
05/31/2024	Nitrogen, Total	112042	67549	lb/yr	AD - Annual Total
04/30/2024	Nitrogen, Total	97449	67549	lb/yr	AD - Annual Total
03/31/2024	Nitrogen, Total	86245	67549	lb/yr	AD - Annual Total
02/29/2024	Nitrogen, Total	74252	67549	lb/yr	AD - Annual Total

Describe previous FYI and WQBEL study:

Last FYI3 was done on March 26, 2014, results can be viewed here:

https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=38.284040.1]&[profile=Discovery_Compliance]

Describe previous or current Enforcement Actions (including WLs): N/A

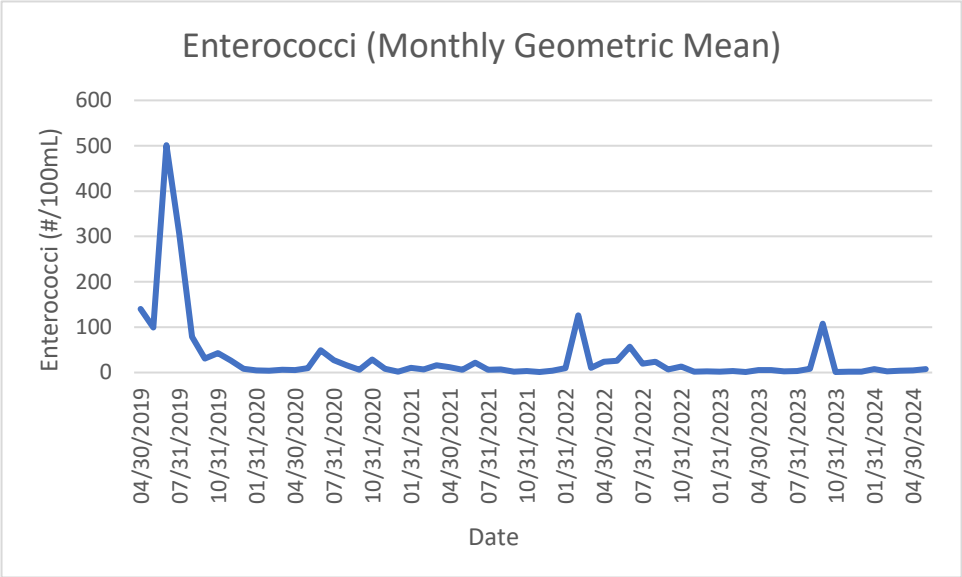
Describe any violations or problems noted in previous inspection:

Previous inspection on 9/8/2022 showed deficiencies in the DMR.

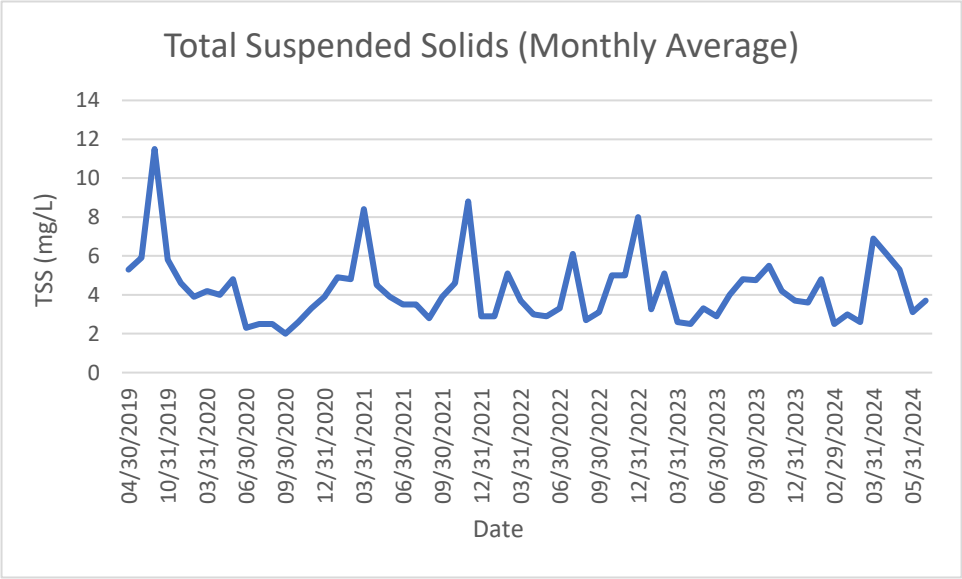
"A review of the Discharge Monitoring Reports (DMRs) revealed the exceedances for Enterococci in the observation below."

Date	Monitoring Location	Description	Result	Limit	Units	Statistical Base
3/31/22	EFD-1	Enterococci	200	130	#/100mL	9A – 90th Percentile
7/31/21	EFD-1	Enterococci	420	130	#/100mL	9A – 90th Percentile
3/31/21	EFD-1	Enterococci	177	130	#/100mL	9A – 90th Percentile
1/31/21	EFD-1	Enterococci	1410	130	#/100mL	9A – 90th Percentile
7/31/21	EFD-1	Enterococci	126.29	35	#/100mL	MM – Monthly Geometric Mean
3/31/21	EFD-1	Enterococci	57.08	35	#/100mL	MM – Monthly Geometric Mean
12/31/19	EFD-1	Enterococci	107.9	35	#/100mL	MM – Monthly Geometric Mean

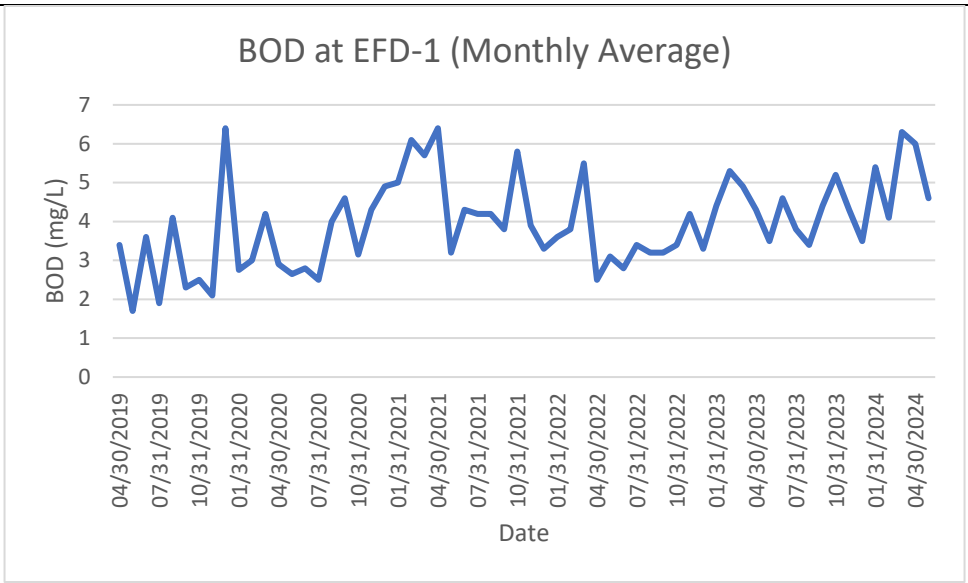
Discuss whether DMR trends within previous five years are improving or declining:



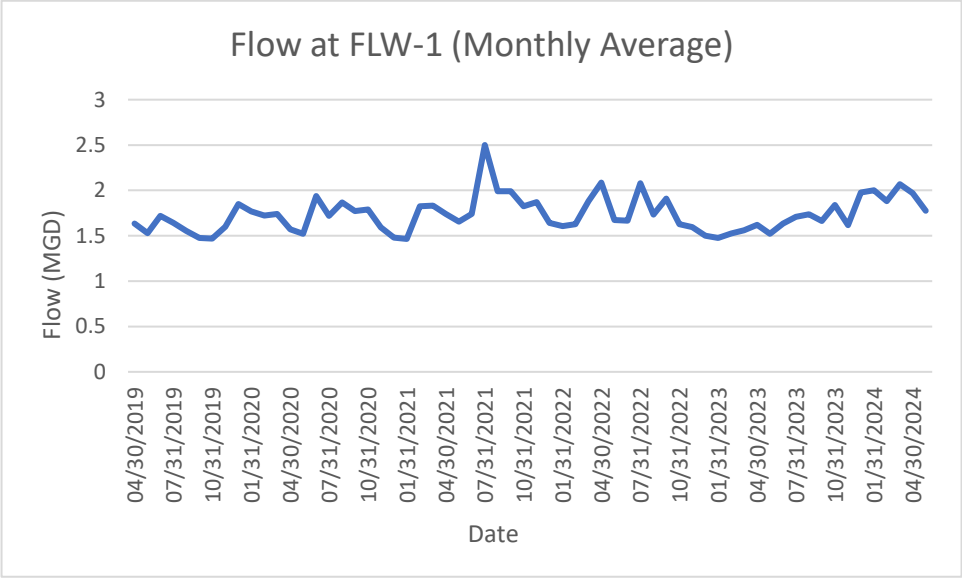
As seen above- There was a large spike between 4/20/2019 and 7/31/2019, with other exceedances around 2/28/2022 and 9/30/2023. Other than that, there are no visible trends.



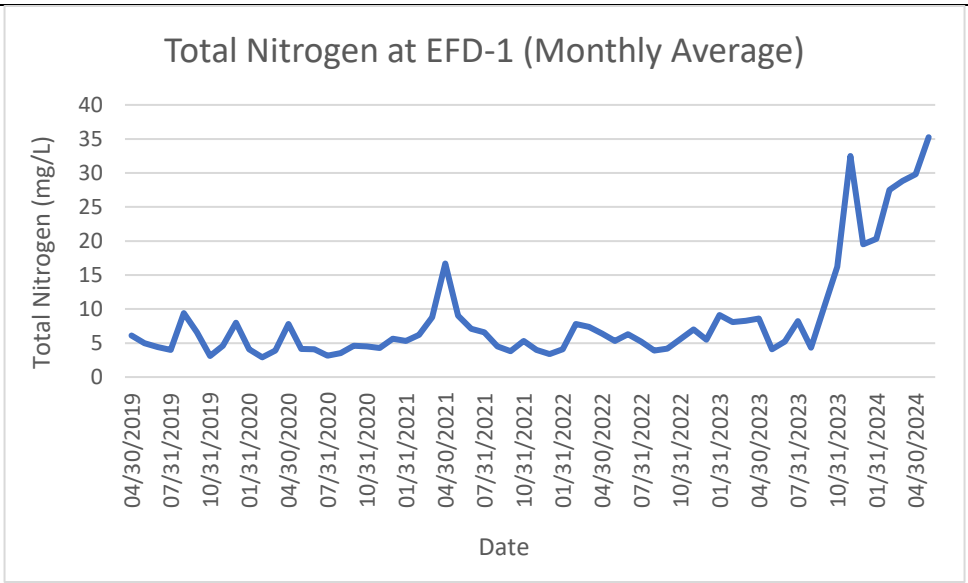
As seen above- TSS was at its highest around 6/30/2019, with other spikes throughout the last 5 years.



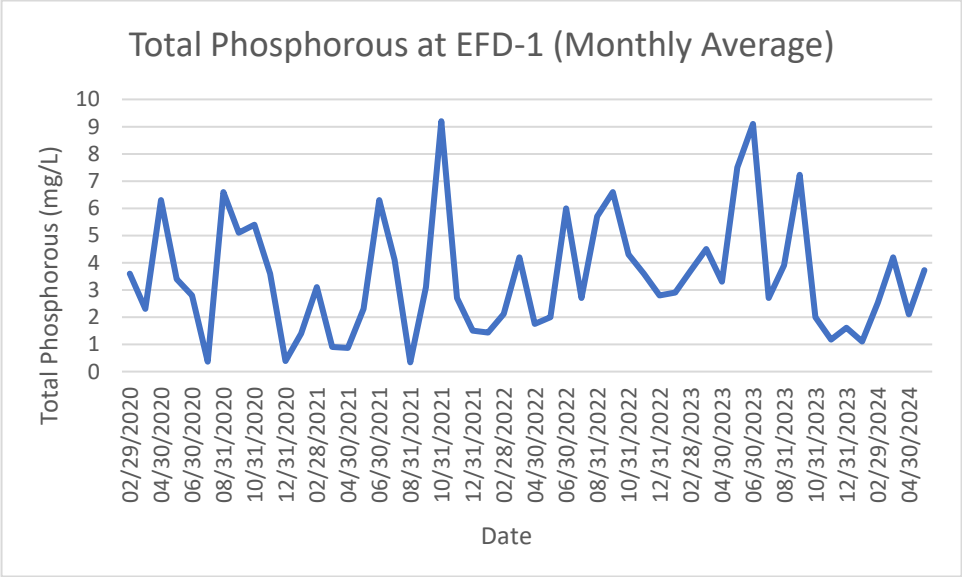
As seen above- BOD average has increased slightly over the years with a spike around 10/31/2019 and other spikes throughout indicating frequent increases of BOD.



As seen above- No visible trend seen with flow, pretty level readings excluding a spike around 7/31/2021.



As seen above- Notable spike in total nitrogen around 04/30/2021. There's been a large increase in total nitrogen starting around 10/31/2023 continuing to present.



As seen above- Phosphorous at EFD-1 had notable spikes in 10/31/2021 and 06/30/2023, with other spikes over the years, but no exceedances.

Additional Comments (this should include a trend of the Effluent, i.e. if the facility is now Reuse):
N/A

Appendix B. Explanations of Measurements

Biological assessments are prepared by DEP 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. References to Rule 62-302.530, F.A.C., are to the currently applicable surface water quality criteria table with an effective date of 02/17/2016 and a notice identification number of 17115667.

- **Chemical Analyses of the Effluent**

  The effluent was analyzed for nutrients, metals, organic constituents (base, neutral, and acid extractables) and pesticides following DEP SOPs. The results from these analyses were compared with Water Quality Criteria (Chapter 62-302, F.A.C.) and facility permit limits.

- **Toxicity Bioassays**

  Greater than 50% mortality in an acute toxicity test may constitute an exceedance of Paragraph 62-302.500(1)(a) and/or facility permit limits. A 25% inhibition concentration (IC25) is the effluent concentration causing a 25% reduction in a biological response such as biomass or reproduction when compared to a control population. An IC25 of less than 100% in a chronic test may constitute exceedances of Subsection 62-302.530(20), Subsection 62-302.530(62) and/or facility permit limits. A no observed effect concentration (NOEC) less than 100% effluent in a chronic test may constitute an exceedance of Subsection 62-302.530(62) and/or facility permit limits. Standard reference toxicant (SRT) tests are conducted monthly to ensure quality in toxicity testing.

- **Bacteriological Testing**

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

- **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. AGP results within the range 6.10 to 20.0 mg dry wt/L are suggested to be representative of high productivity for freshwaters (Miller et al. 1978). High AGP values may constitute exceedances of Subsection 62-302.530(47), F.A.C., Paragraph 62-302.530(48)(a), F.A.C. and/or Paragraph 62-302.530(48)(b), F.A.C.

  The concentration of nutrients in a water sample may be used to calculate the expected yield of AGP under the assumption that other required nutrients (e.g. silicon, micronutrients) are present in excess (Miller *et al*. 1978). The expected amount of production is calculated as 38 times the total soluble inorganic nitrogen (nitrate and nitrite plus ammonia) under nitrogen limitation or 430 times the ortho-phosphate (OP) concentration under phosphorus limitation with an error of ± 20%. When the ratio of nitrogen to phosphorus (N: P) is less than 10:1, nitrogen limitation of algal production is likely. When the N: P ratio is 20:1 or greater,

phosphorus limitation is likely (USEPA 2000). For ratios in-between, co-limitation may occur. Production of lower biomass than expected may be evidence of growth inhibition related to toxic compounds present in the water sample tested and may constitute an exceedance of Subsection 62-302.530(62), F.A.C.

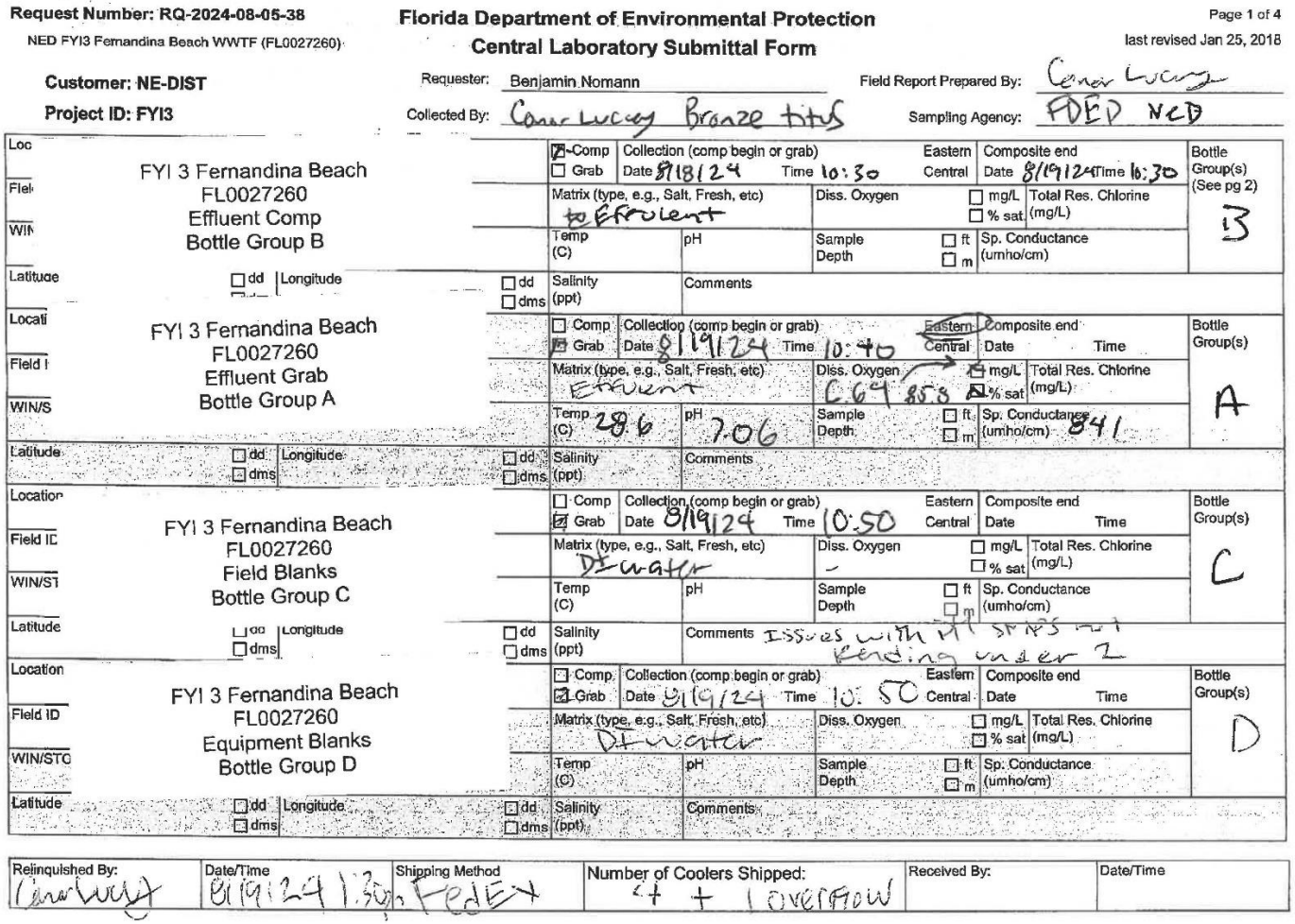
- **Chlorophyll *a* Content**

  Chlorophyll *a* content is an estimate of algal biomass. High algal biomass implies nutrient stress (Stevenson and Bahls 1999) and may be constitute exceedances of Subsection 62-302.530(47), F.A.C., Paragraph 62-302.530(48)(a) F.A.C. and/or Paragraph 62-302.530(48)(b) F.A.C.

- **Definition of Qualifiers** (Rule 62-160.700, F.A.C.)

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

Appendix C. Chain of Custody



Request Number: RQ-2024-08-05-38
NED FYI3 Fernandina Beach WWTF (FL0027260)
Customer: NE-DIST
Project ID: FYI3

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Page 1 of 4
last revised Jan 25, 2018

Requester: Benjamin Nomann
Field Report Prepared By: Conor Lucey
Collected By: Conor Lucey Bronze titus
Sampling Agency: FDEP NED

FYI 3 Fernandina Beach
FL0027260
Effluent Comp
Bottle Group B

☑ Comp ☐ Grab | Collection (comp begin or grab) Date 8/18/24 Time 10:30 | Eastern Central | Composite end Date 8/19/24 Time 10:30 | Bottle Group(s) (See pg 2): B
Matrix (type, e.g., Salt, Fresh, etc): Effluent | Diss. Oxygen | ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L)
Temp (C) | pH | Sample Depth ☐ ft ☐ m | Sp. Conductance (umho/cm)
Latitude ☐ dd ☐ dms | Longitude | Salinity (ppt) | Comments

FYI 3 Fernandina Beach
FL0027260
Effluent Grab
Bottle Group A

☐ Comp ☑ Grab | Collection (comp begin or grab) Date 8/19/24 Time 10:40 | Eastern Central | Composite end Date Time | Bottle Group(s): A
Matrix (type, e.g., Salt, Fresh, etc): Effluent | Diss. Oxygen 6.69 85.8 ☐ mg/L ☑ % sat | Total Res. Chlorine (mg/L)
Temp (C) 28.6 | pH 7.06 | Sample Depth ☐ ft ☐ m | Sp. Conductance (umho/cm) 841
Latitude ☐ dd ☑ dms | Longitude | Salinity (ppt) | Comments

FYI 3 Fernandina Beach
FL0027260
Field Blanks
Bottle Group C

☐ Comp ☑ Grab | Collection (comp begin or grab) Date 8/19/24 Time 10:50 | Eastern Central | Composite end Date Time | Bottle Group(s): C
Matrix (type, e.g., Salt, Fresh, etc): DI water | Diss. Oxygen – | ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L)
Temp (C) | pH | Sample Depth ☐ ft ☐ m | Sp. Conductance (umho/cm)
Latitude ☐ dd ☐ dms | Longitude | Salinity (ppt) | Comments Issues with MFL SPMS not pending under 2

FYI 3 Fernandina Beach
FL0027260
Equipment Blanks
Bottle Group D

☐ Comp ☑ Grab | Collection (comp begin or grab) Date 8/19/24 Time 10:50 | Eastern Central | Composite end Date Time | Bottle Group(s): D
Matrix (type, e.g., Salt, Fresh, etc): DI water | Diss. Oxygen | ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L)
Temp (C) | pH | Sample Depth ☐ ft ☐ m | Sp. Conductance (umho/cm)
Latitude ☐ dd ☐ dms | Longitude | Salinity (ppt) | Comments

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Conor Lucey	8/19/24 1:30p	FedEx	4 + 1 overflow		

Request Number: RQ-2024-08-05-38

NED FYI3 Fernandina Beach WWTF (FL0027260)

Florida Department of Environmental Protection

Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: NE-DIST

Project ID: FYI3

Requester: Benjamin Nomann

Collected By: Conor Lucy Bronzetitus

Field Report Prepared By: Conor Lucy

Sampling Agency: FDEP NED

Location: FYI 3 USN Mayport FL0000922 Effluent Comp Bottle Group B	☑ Comp ☐ Grab	Collection (comp begin or grab) Date 8/20/24 Time 12:00	Eastern Central	Composite end Date 8/21/24 Time 12:00	Bottle Group(s) (See pg 2): B				
Field ID	Matrix (type, e.g., Salt, Fresh, etc): Effluent			Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN/STORET #	Temp (C)	pH		Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms	☐ dd ☐ dms	Salinity (ppt)	Comments						
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern Central	Composite end Date Time	Bottle Group(s)				
Field ID	Matrix (type, e.g., Salt, Fresh, etc)			Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN/STORET #	Temp (C)	pH		Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments						
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern Central	Composite end Date Time	Bottle Group(s)				
Field ID	Matrix (type, e.g., Salt, Fresh, etc)			Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN/STORET #	Temp (C)	pH		Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments						
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern Central	Composite end Date Time	Bottle Group(s)				
Field ID	Matrix (type, e.g., Salt, Fresh, etc)			Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN/STORET #	Temp (C)	pH		Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments						

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
	8/21/24 2:00 pm	FedEx	1	A.SHAIK	08/22/2024 9:10
					8/22/24 942

Request Number: RQ-2024-08-05-38

NED FYI3 Fernandina Beach WWTF (FL0027260)

Customer: NE-DIST

Project ID: FYI3

Florida Department of Environmental Protection

Central Laboratory Submittal Form

last revised Jan 25, 2018

Requester: Benjamin Nomann

Collected By: Conor Lucey Bronze titus

Field Report Prepared By: Conor Lucey

Sampling Agency: FDEP NED

FYI 3 Fernandina Beach
FL0027260
Effluent Comp
Bottle Group B

Loc	☑ Comp ☐ Grab	Collection (comp begin or grab) Date 8/22/24 Time 10:00	Eastern Central	Composite end Date 8/23/24 Time 10:00	Bottle Group(s) (See pg 2)			
Fiel	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN	Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)	B		
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments Flume flooded due to rain infiltration at time of collection			
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern Central	Composite end Date Time	Bottle Group(s)			
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN/STORET #	Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments			
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern Central	Composite end Date Time	Bottle Group(s)			
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN/STORET #	Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments			
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern Central	Composite end Date Time	Bottle Group(s)			
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN/STORET #	Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude	☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments			

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Conor Lucey	8/23/24 12:00	FedEX	1		

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
TASK ASSIGNMENT/NOTIFICATION FORM: LAB145

Contract Manager: Linda Allen/Devan Cobb (850)-245-8084 / (850) 245-8078
2600 Blair Stone Rd., MS 6512
Tallahassee, FL 32399-2400

Contractor: Eurofins Environmental Testing Southeast, LLC
5102 LaRoche Ave
Savannah, GA 31404
ATTN: Noel Savoie

DEP Approval By: David Whiting Digitally signed by David Whiting Date: 2024.07.23 10:36:16 -04'00' Contractor Approval By: Noel Savoie
Project Manager

Contractor Representatives Contacted: Noel Savoie

Date: 7/23/2024
Means of Contact: Email

Task Assignment Number: OV597 Maximum Cost: **$83.00** Turnaround Time: 5 BD

Sample Delivery Date: 8/20/2024

Project Name/Description:
RQ-2024-08-05-38:NED FY13 Fernandina Beach WWTF (FL0027260)

Deliverable Number/ Parameter Group/ Method	**Sample Matrix**	**# of Samples**	**# of Containers**	**DEP ID #**	**Unit Cost**	**% Mark-up (if any)**	**Cost**
Quote/OV-CBOD-1N CBOD, nitrogen-inhibited 5210B-2011	W	2	2		$39.00		$78.00
217/Sample Disposal Fee:	2				$2.50		$5.00
Total Number of Containers Shipped:	2					**Total:**	**$83.00**

67D-45814 Chain of Custody

QC Instructions:

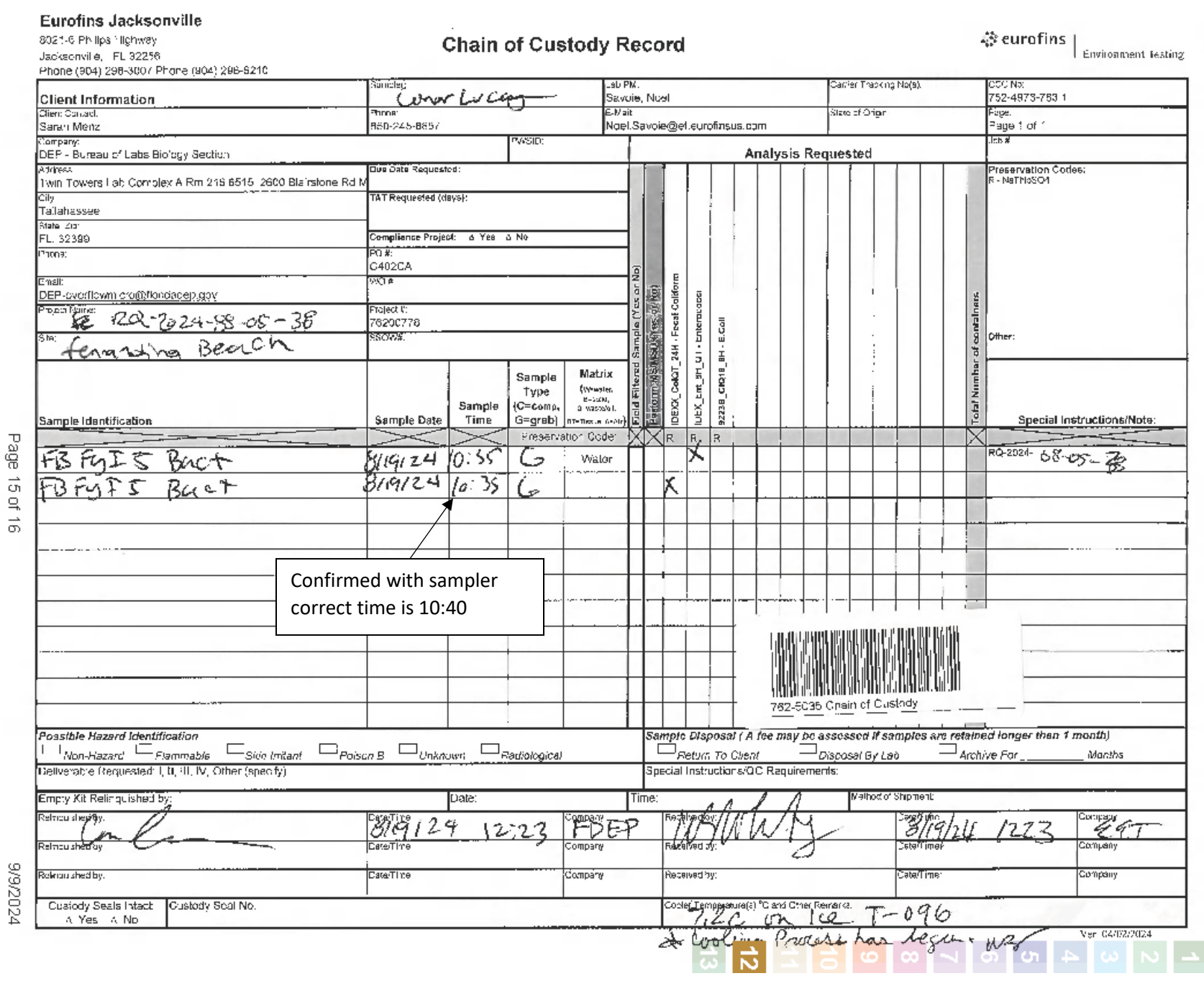
Comments: Quote #

Samples released to Contract Lab by: Lena Rucker Date/Time: 9/19/24 1:10 pm

Delivery Method: FedEx Shipping

Samples Accepted by: [signature] Date/Time 8-20-24 0930 1.7/1.7°c

* **Please sign and return by email to** Linda.S.Allen@FloridaDEP.gov and Devan.R.Cobb@dep.state.fl.us



Eurofins Jacksonville
8021-6 Phillips Highway
Jacksonville, FL 32256
Phone (904) 296-3007 Phone (904) 296-6210

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Wwtf Lv Copy	Lab PM: Savoie, Noel	Carrier Tracking No(s):	COC No: 752-4973-753.1
Client Contact: Sarah Mentz	Phone: 850-245-8857	E-Mail: Noel.Savoie@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: DEP - Bureau of Labs Biology Section	PWSID:	Analysis Requested		Job #:
Address: Twin Towers Lab Complex A Rm 215 6515 2600 Blairstone Rd M	Due Date Requested:			Preservation Codes: R - NaTNaSO4
City: Tallahassee	TAT Requested (days):			
State, Zip: FL, 32399	Compliance Project: ☐ Yes ☐ No			
Phone:	PO #: C402CA			Other:
Email: DEP-overflowm.coc@floridadep.gov	WO #:			
Project Name: RQ-2024-88-05-38	Project #: 76200778			
Site: Fernandina Beach	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	IDEXX_ColiQT_24H - Fecal Coliform	IUEX_Ent_9FI_U1 - Enterococci	9223B_CR2I8_8H - E.Coli	Total Number of containers	Special Instructions/Note:
			Preservation Code:				R	R	R		
FB FyI S Bact	8/19/24	10:35	G	Water				X			RQ-2024-68-05-38
FB FyI S Bact	8/19/24	10:35	G				X				

Confirmed with sampler correct time is 10:40

782-5035 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8/19/24 1223	Company: FDEP	Received by:	Date/Time: 8/19/24 1223	Company: EET
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks: 7.2c on Ice T-096 & cooling process has begun WR

Ver: 06/08/2021

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9/9/2024

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
TASK ASSIGNMENT/NOTIFICATION FORM: LAB145

640.Tallahassee

Contract Manager: Linda Allen/Devan Cobb (850)-245-8084 / (850) 245-8078
2600 Blair Stone Rd., MS 6512
Tallahassee, FL 32399-2400

Contractor: Eurofins Environmental Testing Southeast, LLC
5102 LaRoche Ave
Savannah, GA 31404
ATTN: Noel Savoie

400-261292 COC

DEP Approval By: Devan R. Cobb-Williams Contractor Approval By: Noel Savoie
Project Manager

Contractor Representatives Contacted: Noel Savoie

Date: 8/22/2024
Means of Contact: Email

Task Assignment Number: OV617 Maximum Cost: **$215.00** Turnaround Time: 10 BD

Sample Delivery Date: 8/22/2024

Project Name/Description:
RQ-2024-08-05-38;NE-DIST-2024-08-20-01;NED FYI3 Fernandina Beach WWTF;TLH-2024-08-20-35

Deliverable Number/ Parameter Group/ Method	Sample Matrix	# of Samples	# of Containers	DEP ID #	Unit Cost	% Mark-up (if any)	Cost
65/mercury, Low Level (LL CVAFS)1631E	W	2	8 vials	2509337, 2509338	$105.00		$210.00
217/Sample Disposal Fee:	2				$2.50		$5.00
Total Number of Containers Shipped:		**8**				**Total:**	**$215.00**

QC Instructions:

Comments:

Samples released to Contract Lab by: Matt Barnhart Date/Time: 8/22/24 1605

Delivery Method: _____HD_____

Samples Accepted by: Noel Savoie Date/Time 8-22-2024 1605

* **Please sign and return by email to** Linda.S.Allen@FloridaDEP.gov and Devan.R.Cobb@dep.state.fl.us

Relinquished by: Noel Savoie 8-22-2024 1630

BP 8/23/24 847
WIC IRM

Appendix D. Chemical Analysis of Effluent

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
8/19/2024 10:30	Effluent Composite	Overflow	Carbonaceous Biochemical Oxygen Demand	4.2 J	mg/L	2.0	2.0
8/19/2024 10:30	Effluent Composite	Toxicology	Bioassay-Chron-Def-SW-Mysid, IC25	100 L	IC25		
8/19/2024 10:30	Effluent Composite	Toxicology	Bioassay-Chron-Def-SW-Fish, IC25	100 LJ	IC25		
8/19/2024 10:30	Effluent Composite	Toxicology	Bioassay-Chron-Def-SW-Fish, NOEC	100 J	NOEC		
8/19/2024 10:30	Effluent Composite	Toxicology	Bioassay-Chron-Def-SW-Mysid, NOEC	100	NOEC		
8/19/2024 10:30	Effluent Composite	Nutrients	Total-P	2.2	mg P/L	0.050	0.25
8/19/2024 10:30	Effluent Composite	Nutrients	Ammonia-N	0.11	mg N/L	0.0020	0.0050
8/19/2024 10:30	Effluent Composite	Nutrients	TSS	6 I	mg/L	2.0	10
8/19/2024 10:30	Effluent Composite	Nutrients	Kjeldahl Nitrogen	1.4	mg N/L	0.080	0.20
8/19/2024 10:30	Effluent Composite	Nutrients	NO2NO3-N	1.2	mg N/L	0.040	0.10
8/19/2024 10:30	Effluent Composite	Nutrients	Organic Carbon	13	mg C/L	0.50	1.0
8/19/2024 10:40	Effluent Grab	AGP/LN	Algal Growth Potential-Salinity Adjusted	3.0 U	mg DryWt/L	3.0	3.0
8/19/2024 10:40	Effluent Grab	AGP/LN	Algal Growth Potential	7.86 A	mg DryWt/L	0.3	0.6
8/19/2024 10:40	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	1.9 I	µg/L	0.93	2.8
8/19/2024 10:40	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Uncorrected	2.2	µg/L	0.68	2.0
8/19/2024 10:40	Effluent Grab	Chlorophyll/Grain Size/BOD	Phaeophytin-a	1.0 U	µg/L	1.0	3.0
8/19/2024 10:40	Effluent Grab	Overflow	Carbonaceous Biochemical Oxygen Demand	3.2 J	mg/L	2.0	2.0
8/19/2024 10:40	Effluent Grab	Overflow	Enterococci-Quanti-Tray	2,420	MPN/100 mL	1.00	1.00
8/19/2024 10:40	Effluent Grab	Overflow	Fecal Coliform-Quanti-Tray	4,880	MPN/100 mL	10.0	10.0
8/19/2024 10:40	Effluent Grab	Metals	Chromium	0.73 I	µg/L	0.40	1.6
8/19/2024 10:40	Effluent Grab	Metals	Calcium	62.5	mg/L	0.075	0.30
8/19/2024 10:40	Effluent Grab	Metals	Copper	2.11	µg/L	0.40	0.80
8/19/2024 10:40	Effluent Grab	Metals	Nickel	0.64 I	µg/L	0.50	2.0
8/19/2024 10:40	Effluent Grab	Metals	Cadmium	0.020 U	µg/L	0.020	0.080
8/19/2024 10:40	Effluent Grab	Metals	Selenium	0.27 I	µg/L	0.20	0.80
8/19/2024 10:40	Effluent Grab	Metals	Potassium	8.4	mg/L	0.30	1.2
8/19/2024 10:40	Effluent Grab	Metals	Lead	0.20 U	µg/L	0.20	0.40
8/19/2024 10:40	Effluent Grab	Metals	Zinc	17 I	µg/L	5.0	20
8/19/2024 10:40	Effluent Grab	Metals	Magnesium	23.0	mg/L	0.040	0.16
8/19/2024 10:40	Effluent Grab	Metals	Arsenic	1.54	µg/L	0.050	0.20
8/19/2024 10:40	Effluent Grab	Metals	Aluminum	44	µg/L	5.0	20

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
8/19/2024 10:40	Effluent Grab	Metals	Silver	0.010 U	µg/L	0.010	0.040
8/19/2024 10:40	Effluent Grab	Metals	Iron	35 I	µg/L	30	120
8/19/2024 10:40	Effluent Grab	Metals	Sodium	75.2	mg/L	0.50	2.0
8/19/2024 10:40	Effluent Grab	Nutrients	NO2NO3-N	1.2	mg N/L	0.040	0.10
8/19/2024 10:40	Effluent Grab	Nutrients	Sulfate	120 A	mg SO4/L	0.40	1.0
8/19/2024 10:40	Effluent Grab	Nutrients	Total Alkalinity	126 A	mg CaCO3/L	0.65	2.5
8/19/2024 10:40	Effluent Grab	Nutrients	Chloride	110 A	mg Cl/L	0.40	1.0
8/19/2024 10:40	Effluent Grab	Nutrients	Kjeldahl Nitrogen	1.3	mg N/L	0.080	0.20
8/19/2024 10:40	Effluent Grab	Nutrients	Color (true)	26	PCU	2.5	6.0
8/19/2024 10:40	Effluent Grab	Nutrients	Ammonia-N	0.079	mg N/L	0.0020	0.0050
8/19/2024 10:40	Effluent Grab	Nutrients	Fluoride	0.39	mg F/L	0.025	0.10
8/19/2024 10:40	Effluent Grab	Nutrients	Total-P	0.57	mg P/L	0.010	0.050
8/19/2024 10:40	Effluent Grab	Nutrients	Organic Carbon	12	mg C/L	0.50	1.0
8/19/2024 10:40	Effluent Grab	Nutrients	O-Phosphate-P	0.49	mg P/L	0.040	0.10
8/19/2024 10:40	Effluent Grab	Nutrients	Turbidity	1.3	NTU	0.10	1.0
8/19/2024 10:40	Effluent Grab	Nutrients	TSS	3 I	mg/L	2.0	10
8/19/2024 10:40	Effluent Grab	Overflow	Mercury	1.2	ng/L	0.20	0.50
8/19/2024 10:40	Effluent Grab	Pesticides	Fenbuconazole	0.51 U	ng/L	0.51	2.6
8/19/2024 10:40	Effluent Grab	Pesticides	Fludioxonil	4.0	ng/L	0.10	0.51
8/19/2024 10:40	Effluent Grab	Pesticides	Metalaxyl	0.51 U	ng/L	0.51	2.6
8/19/2024 10:40	Effluent Grab	Pesticides	Parathion Ethyl	0.15 UJ	ng/L	0.15	0.77
8/19/2024 10:40	Effluent Grab	Pesticides	Phenytoin	5.4 U	ng/L	5.4	27
8/19/2024 10:40	Effluent Grab	Pesticides	Prodiamine	0.20 U	ng/L	0.20	1.0
8/19/2024 10:40	Effluent Grab	Pesticides	Propargite	0.82 U	ng/L	0.82	4.1
8/19/2024 10:40	Effluent Grab	Pesticides	Stirophos	0.41 U	ng/L	0.41	3.3
8/19/2024 10:40	Effluent Grab	Pesticides	Triadimefon	0.15 U	ng/L	0.15	0.77
8/19/2024 10:40	Effluent Grab	Pesticides	Atrazine Desethyl	1.3 U	ng/L	1.3	6.6
8/19/2024 10:40	Effluent Grab	Pesticides	Azoxystrobin	6.0 J	ng/L	0.41	2.0
8/19/2024 10:40	Effluent Grab	Pesticides	Bromacil	16	ng/L	0.61	3.1
8/19/2024 10:40	Effluent Grab	Pesticides	Diazinon	0.13 U	ng/L	0.13	0.64
8/19/2024 10:40	Effluent Grab	Pesticides	EPTC	0.51 U	ng/L	0.51	2.6
8/19/2024 10:40	Effluent Grab	Pesticides	Fipronil Desulfinyl	0.36 I	ng/L	0.10	0.51
8/19/2024 10:40	Effluent Grab	Pesticides	Fipronil Sulfone	5.0	ng/L	0.10	0.51
8/19/2024 10:40	Effluent Grab	Pesticides	Fluxapyroxad	0.28 I	ng/L	0.26	1.3

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
8/19/2024 10:40	Effluent Grab	Pesticides	Oxadiazon	0.36 U	ng/L	0.36	1.8
8/19/2024 10:40	Effluent Grab	Pesticides	Pronamide	0.10 U	ng/L	0.10	0.51
8/19/2024 10:40	Effluent Grab	Pesticides	Alachlor	0.41 U	ng/L	0.41	2.0
8/19/2024 10:40	Effluent Grab	Pesticides	Disulfoton	0.61 U	ng/L	0.61	3.1
8/19/2024 10:40	Effluent Grab	Pesticides	Ethion	0.31 U	ng/L	0.31	1.5
8/19/2024 10:40	Effluent Grab	Pesticides	Pendimethalin	1.7 U	ng/L	1.7	8.7
8/19/2024 10:40	Effluent Grab	Pesticides	Propanil	0.10 U	ng/L	0.10	0.51
8/19/2024 10:40	Effluent Grab	Pesticides	Tebuconazole	9.4	ng/L	1.4	7.2
8/19/2024 10:40	Effluent Grab	Pesticides	Terbufos	0.20 U	ng/L	0.20	1.0
8/19/2024 10:40	Effluent Grab	Pesticides	Ametryn	1.1 U	ng/L	1.1	5.6
8/19/2024 10:40	Effluent Grab	Pesticides	Flutolanil	0.10 U	ng/L	0.10	0.51
8/19/2024 10:40	Effluent Grab	Pesticides	Iprodione	0.51 U	ng/L	0.51	2.6
8/19/2024 10:40	Effluent Grab	Pesticides	Loratadine	7.9	ng/L	0.31	1.5
8/19/2024 10:40	Effluent Grab	Pesticides	Pyraflufen Ethyl	0.31 U	ng/L	0.31	1.5
8/19/2024 10:40	Effluent Grab	Pesticides	Acetochlor	0.20 U	ng/L	0.20	1.0
8/19/2024 10:40	Effluent Grab	Pesticides	Chlorpyrifos Methyl	0.10 U	ng/L	0.10	0.51
8/19/2024 10:40	Effluent Grab	Pesticides	Coumaphos	1.1 U	ng/L	1.1	5.6
8/19/2024 10:40	Effluent Grab	Pesticides	Difenoconazole	0.61 U	ng/L	0.61	3.1
8/19/2024 10:40	Effluent Grab	Pesticides	Dimethenamid	0.10 U	ng/L	0.10	0.51
8/19/2024 10:40	Effluent Grab	Pesticides	Etridiazole	0.10 U	ng/L	0.10	0.51
8/19/2024 10:40	Effluent Grab	Pesticides	Fipronil	19	ng/L	0.20	1.0
8/19/2024 10:40	Effluent Grab	Pesticides	Fluazifop-P-butyl	0.10 U	ng/L	0.10	0.51
8/19/2024 10:40	Effluent Grab	Pesticides	Fonofos	0.15 U	ng/L	0.15	0.77
8/19/2024 10:40	Effluent Grab	Pesticides	Terbuthylazine	0.20 UJ	ng/L	0.20	1.0
8/19/2024 10:40	Effluent Grab	Pesticides	Dithiopyr	1.0 U	ng/L	1.0	5.1
8/19/2024 10:40	Effluent Grab	Pesticides	Fenamiphos	0.46 U	ng/L	0.46	2.3
8/19/2024 10:40	Effluent Grab	Pesticides	Malathion	0.36 U	ng/L	0.36	1.8
8/19/2024 10:40	Effluent Grab	Pesticides	Metolachlor	0.77 U	ng/L	0.77	3.8
8/19/2024 10:40	Effluent Grab	Pesticides	Metribuzin	0.41 U	ng/L	0.41	2.0
8/19/2024 10:40	Effluent Grab	Pesticides	Molinate	0.26 U	ng/L	0.26	1.3
8/19/2024 10:40	Effluent Grab	Pesticides	Napropamide	0.72 U	ng/L	0.72	3.6
8/19/2024 10:40	Effluent Grab	Pesticides	Prometon	3.1 U	ng/L	3.1	15
8/19/2024 10:40	Effluent Grab	Pesticides	Pyriproxyfen	0.26 U	ng/L	0.26	1.6
8/19/2024 10:40	Effluent Grab	Pesticides	Butylate	0.46 U	ng/L	0.46	2.3

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
8/19/2024 10:40	Effluent Grab	Pesticides	Cyanazine	5.1 U	ng/L	5.1	26
8/19/2024 10:40	Effluent Grab	Pesticides	Demeton	3.6 U	ng/L	3.6	18
8/19/2024 10:40	Effluent Grab	Pesticides	Ethoprop	0.13 U	ng/L	0.13	0.64
8/19/2024 10:40	Effluent Grab	Pesticides	Fipronil Sulfide	4.9	ng/L	0.10	0.51
8/19/2024 10:40	Effluent Grab	Pesticides	Hexazinone	0.51 U	ng/L	0.51	2.6
8/19/2024 10:40	Effluent Grab	Pesticides	Imazalil	0.66 U	ng/L	0.66	3.3
8/19/2024 10:40	Effluent Grab	Pesticides	Myclobutanil	0.36 U	ng/L	0.36	1.8
8/19/2024 10:40	Effluent Grab	Pesticides	Propiconazole	0.61 U	ng/L	0.61	3.1
8/19/2024 10:40	Effluent Grab	Pesticides	Naproxen	0.023 I	µg/L	0.0080	0.032
8/19/2024 10:40	Effluent Grab	Pesticides	Ibuprofen	0.080 U	µg/L	0.080	0.32
8/19/2024 10:40	Effluent Grab	Pesticides	Caffeine	50	ng/L	7.7	38
8/19/2024 10:40	Effluent Grab	Pesticides	Carfentrazone Ethyl	0.15 U	ng/L	0.15	0.77
8/19/2024 10:40	Effluent Grab	Pesticides	Chlorpyrifos Ethyl	0.31 U	ng/L	0.31	1.5
8/19/2024 10:40	Effluent Grab	Pesticides	Dimethomorph	0.31 U	ng/L	0.31	1.5
8/19/2024 10:40	Effluent Grab	Pesticides	Flumioxazin	3.1 U	ng/L	3.1	15
8/19/2024 10:40	Effluent Grab	Pesticides	Mevinphos	1.0 U	ng/L	1.0	5.1
8/19/2024 10:40	Effluent Grab	Pesticides	Naled	2.6 U	ng/L	2.6	13
8/19/2024 10:40	Effluent Grab	Pesticides	Norflurazon	1.0 U	ng/L	1.0	5.1
8/19/2024 10:40	Effluent Grab	Pesticides	Oxyfluorfen	0.20 U	ng/L	0.20	1.0
8/19/2024 10:40	Effluent Grab	Pesticides	Parathion Methyl	0.20 U	ng/L	0.20	1.0
8/19/2024 10:40	Effluent Grab	Pesticides	Phorate	0.26 U	ng/L	0.26	1.3
8/19/2024 10:40	Effluent Grab	Pesticides	Prometryn	0.36 U	ng/L	0.36	1.8
8/19/2024 10:40	Effluent Grab	Pesticides	Pyridaben	1.4 U	ng/L	1.4	7.2
8/19/2024 10:40	Effluent Grab	Pesticides	Simazine	0.26 U	ng/L	0.26	1.3
8/19/2024 10:40	Effluent Grab	Pesticides	Sulfentrazone	32	ng/L	1.4	7.2
8/19/2024 10:40	Effluent Grab	Pesticides	Thiobencarb	0.51 U	ng/L	0.51	2.6
8/19/2024 10:40	Effluent Grab	Pesticides	Sucralose	41	µg/L	0.10	0.40
8/19/2024 10:40	Effluent Grab	Pesticides	Atrazine	5.8 J	ng/L	0.20	1.0
8/19/2024 10:40	Effluent Grab	Pesticides	Azinphos Methyl	3.1 U	ng/L	3.1	15
8/19/2024 10:40	Effluent Grab	Pesticides	Carbophenothion	0.51 U	ng/L	0.51	2.6
8/19/2024 10:40	Effluent Grab	Pesticides	Chlorfenapyr	6.1	ng/L	0.31	1.5
8/19/2024 10:40	Effluent Grab	Pesticides	Cyprodinil	0.20 U	ng/L	0.20	1.0
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	2-Nitrophenol	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Hexachlorobenzene	0.051 U	µg/L	0.051	0.20

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Nitrobenzene	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	3,3'-Dichlorobenzidine	10 U	µg/L	10	41
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Di-n-octyl phthalate	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrotoluene	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Benzo(a)anthracene	0.026 U	µg/L	0.026	0.10
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.1 U	µg/L	5.1	20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Di-n-butyl phthalate	2.0 U	µg/L	2.0	8.2
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	2-Chloronaphthalene	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Hexachlorobutadiene	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	4-Nitrophenol	10 U	µg/L	10	41
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Acenaphthene	0.026 U	µg/L	0.026	0.10
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Phenol	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Benzidine	10 U	µg/L	10	41
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	2-Chlorophenol	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.1 U	µg/L	3.1	12
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Pentachlorophenol	0.51 U	µg/L	0.51	2.0
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.026 U	µg/L	0.026	0.10
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Dimethyl phthalate	0.20 U	µg/L	0.20	0.82
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	N-Nitrosodimethylamine	2.0 U	µg/L	2.0	8.2
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Isophorone	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Naphthalene	0.10 U	µg/L	0.10	0.41
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Benzo(k)fluoranthene	0.026 U	µg/L	0.026	0.10
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Chrysene	0.026 U	µg/L	0.026	0.10
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Diethyl phthalate	2.0 U	µg/L	2.0	8.2
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Fluorene	0.026 U	µg/L	0.026	0.10
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Hexachloroethane	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Acenaphthylene	0.026 U	µg/L	0.026	0.10

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Butyl benzyl phthalate	1.0 U	µg/L	1.0	4.1
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Pyrene	0.10 U	µg/L	0.10	0.41
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Fluoranthene	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.051 UJ	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Anthracene	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Benzo(a)pyrene	0.026 U	µg/L	0.026	0.10
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	2,4-Dichlorophenol	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	2,4-Dimethylphenol	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.026 U	µg/L	0.026	0.10
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	2,6-Dinitrotoluene	0.051 U	µg/L	0.051	0.20
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrophenol	0.010 U	µg/L	0.010	0.041
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Benzo(b)fluoranthene	0.026 U	µg/L	0.026	0.10
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.026 U	µg/L	0.026	0.10
8/19/2024 10:40	Effluent Grab	Priority Organic Pollutants	Phenanthrene	0.10 U	µg/L	0.10	0.41
8/19/2024 10:40	Effluent Grab	Nutrients	pH	7.06	SU		
8/19/2024 10:40	Effluent Grab	Nutrients	Temperature	28.6	C		
8/19/2024 10:40	Effluent Grab	Nutrients	Specific Conductance	841	µmhos/cm		
8/19/2024 10:40	Effluent Grab	Nutrients	Dissolved Oxygen %Sat	85.3	%Sat		
8/19/2024 10:50	Equipment Blank	Nutrients	Organic Carbon	0.50 U	mg C/L	0.50	1.0
8/19/2024 10:50	Equipment Blank	Nutrients	Total-P	0.007	mg P/L	0.0020	0.0050
8/19/2024 10:50	Equipment Blank	Nutrients	Ammonia-N	0.002 U	mg N/L	0.0020	0.0050
8/19/2024 10:50	Equipment Blank	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.080	0.20
8/19/2024 10:50	Equipment Blank	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.0040	0.010
8/19/2024 10:50	Field Blank	Metals	Calcium	0.075 U	mg/L	0.075	0.30
8/19/2024 10:50	Field Blank	Metals	Zinc	5.0 U	µg/L	5.0	20
8/19/2024 10:50	Field Blank	Metals	Magnesium	0.040 U	mg/L	0.040	0.16
8/19/2024 10:50	Field Blank	Metals	Silver	0.010 U	µg/L	0.010	0.040
8/19/2024 10:50	Field Blank	Metals	Nickel	0.50 U	µg/L	0.50	2.0
8/19/2024 10:50	Field Blank	Metals	Cadmium	0.020 U	µg/L	0.020	0.080
8/19/2024 10:50	Field Blank	Metals	Arsenic	0.050 U	µg/L	0.050	0.20
8/19/2024 10:50	Field Blank	Metals	Sodium	0.50 U	mg/L	0.50	2.0
8/19/2024 10:50	Field Blank	Metals	Potassium	0.30 U	mg/L	0.30	1.2

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
8/19/2024 10:50	Field Blank	Metals	Selenium	0.20 U	µg/L	0.20	0.80
8/19/2024 10:50	Field Blank	Metals	Copper	0.40 U	µg/L	0.40	0.80
8/19/2024 10:50	Field Blank	Metals	Aluminum	5.0 U	µg/L	5.0	20
8/19/2024 10:50	Field Blank	Metals	Lead	0.20 U	µg/L	0.20	0.40
8/19/2024 10:50	Field Blank	Metals	Chromium	0.40 U	µg/L	0.40	1.6
8/19/2024 10:50	Field Blank	Metals	Iron	30 U	µg/L	30	120
8/19/2024 10:50	Field Blank	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.080	0.20
8/19/2024 10:50	Field Blank	Nutrients	Turbidity	0.10 U	NTU	0.10	1.0
8/19/2024 10:50	Field Blank	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.0040	0.010
8/19/2024 10:50	Field Blank	Nutrients	Sulfate	0.20 U	mg SO4/L	0.20	0.50
8/19/2024 10:50	Field Blank	Nutrients	Total Alkalinity	0.65 U	mg CaCO3/L	0.65	2.5
8/19/2024 10:50	Field Blank	Nutrients	Chloride	0.20 U	mg Cl/L	0.20	0.50
8/19/2024 10:50	Field Blank	Nutrients	Fluoride	0.025 U	mg F/L	0.025	0.10
8/19/2024 10:50	Field Blank	Nutrients	Ammonia-N	0.002 U	mg N/L	0.0020	0.0050
8/19/2024 10:50	Field Blank	Nutrients	O-Phosphate-P	0.004 U	mg P/L	0.0040	0.010
8/19/2024 10:50	Field Blank	Nutrients	Color (true)	2.5 U	PCU	2.5	6.0
8/19/2024 10:50	Field Blank	Nutrients	Total-P	0.002 U	mg P/L	0.0020	0.0050
8/19/2024 10:50	Field Blank	Nutrients	Organic Carbon	0.50 U	mg C/L	0.50	1.0
8/19/2024 10:50	Field Blank	Overflow	Mercury	0.20 U	ng/L	0.20	0.50
8/19/2024 10:50	Field Blank	Pesticides	Pendimethalin	1.8 U	ng/L	1.8	8.9
8/19/2024 10:50	Field Blank	Pesticides	Prometon	3.1 U	ng/L	3.1	16
8/19/2024 10:50	Field Blank	Pesticides	Pyriproxyfen	0.26 U	ng/L	0.26	1.7
8/19/2024 10:50	Field Blank	Pesticides	Stirophos	0.42 U	ng/L	0.42	3.3
8/19/2024 10:50	Field Blank	Pesticides	Dithiopyr	1.0 U	ng/L	1.0	5.2
8/19/2024 10:50	Field Blank	Pesticides	Ethion	0.31 U	ng/L	0.31	1.6
8/19/2024 10:50	Field Blank	Pesticides	Fenbuconazole	0.52 U	ng/L	0.52	2.6
8/19/2024 10:50	Field Blank	Pesticides	Fipronil	0.21 U	ng/L	0.21	1.0
8/19/2024 10:50	Field Blank	Pesticides	Carbophenothion	0.52 U	ng/L	0.52	2.6
8/19/2024 10:50	Field Blank	Pesticides	Cyanazine	5.2 U	ng/L	5.2	26
8/19/2024 10:50	Field Blank	Pesticides	Cyprodinil	0.21 U	ng/L	0.21	1.0
8/19/2024 10:50	Field Blank	Pesticides	Norflurazon	1.0 U	ng/L	1.0	5.2
8/19/2024 10:50	Field Blank	Pesticides	Disulfoton	0.62 U	ng/L	0.62	3.1
8/19/2024 10:50	Field Blank	Pesticides	Etridiazole	0.10 U	ng/L	0.10	0.52
8/19/2024 10:50	Field Blank	Pesticides	Fipronil Desulfinyl	0.10 U	ng/L	0.10	0.52

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
8/19/2024 10:50	Field Blank	Pesticides	Imazalil	0.68 U	ng/L	0.68	3.4
8/19/2024 10:50	Field Blank	Pesticides	Metribuzin	0.42 U	ng/L	0.42	2.1
8/19/2024 10:50	Field Blank	Pesticides	Sucralose	0.010 U	µg/L	0.010	0.040
8/19/2024 10:50	Field Blank	Pesticides	Acetochlor	0.21 U	ng/L	0.21	1.0
8/19/2024 10:50	Field Blank	Pesticides	Naled	2.6 U	ng/L	2.6	13
8/19/2024 10:50	Field Blank	Pesticides	Propiconazole	0.62 U	ng/L	0.62	3.1
8/19/2024 10:50	Field Blank	Pesticides	Sulfentrazone	1.5 U	ng/L	1.5	7.3
8/19/2024 10:50	Field Blank	Pesticides	Terbuthylazine	0.21 UJ	ng/L	0.21	1.0
8/19/2024 10:50	Field Blank	Pesticides	Thiobencarb	0.52 U	ng/L	0.52	2.6
8/19/2024 10:50	Field Blank	Pesticides	Fludioxonil	0.10 U	ng/L	0.10	0.52
8/19/2024 10:50	Field Blank	Pesticides	Hexazinone	0.52 U	ng/L	0.52	2.6
8/19/2024 10:50	Field Blank	Pesticides	Iprodione	0.52 U	ng/L	0.52	2.6
8/19/2024 10:50	Field Blank	Pesticides	Naproxen	0.0080 U	µg/L	0.0080	0.032
8/19/2024 10:50	Field Blank	Pesticides	Alachlor	0.42 U	ng/L	0.42	2.1
8/19/2024 10:50	Field Blank	Pesticides	Bromacil	0.62 U	ng/L	0.62	3.1
8/19/2024 10:50	Field Blank	Pesticides	Chlorfenapyr	0.31 U	ng/L	0.31	1.6
8/19/2024 10:50	Field Blank	Pesticides	Coumaphos	1.1 U	ng/L	1.1	5.7
8/19/2024 10:50	Field Blank	Pesticides	Demeton	3.6 U	ng/L	3.6	18
8/19/2024 10:50	Field Blank	Pesticides	Molinate	0.26 U	ng/L	0.26	1.3
8/19/2024 10:50	Field Blank	Pesticides	Myclobutanil	0.36 U	ng/L	0.36	1.8
8/19/2024 10:50	Field Blank	Pesticides	Oxadiazon	0.36 U	ng/L	0.36	1.8
8/19/2024 10:50	Field Blank	Pesticides	Phenytoin	5.5 U	ng/L	5.5	28
8/19/2024 10:50	Field Blank	Pesticides	Prometryn	0.36 U	ng/L	0.36	1.8
8/19/2024 10:50	Field Blank	Pesticides	Dimethenamid	0.10 U	ng/L	0.10	0.52
8/19/2024 10:50	Field Blank	Pesticides	Atrazine	0.21 UJ	ng/L	0.21	1.0
8/19/2024 10:50	Field Blank	Pesticides	Caffeine	7.8 U	ng/L	7.8	39
8/19/2024 10:50	Field Blank	Pesticides	Phorate	0.26 U	ng/L	0.26	1.3
8/19/2024 10:50	Field Blank	Pesticides	Propanil	0.10 U	ng/L	0.10	0.52
8/19/2024 10:50	Field Blank	Pesticides	Fipronil Sulfide	0.10 U	ng/L	0.10	0.52
8/19/2024 10:50	Field Blank	Pesticides	Fipronil Sulfone	0.10 U	ng/L	0.10	0.52
8/19/2024 10:50	Field Blank	Pesticides	Fluazifop-P-butyl	0.10 U	ng/L	0.10	0.52
8/19/2024 10:50	Field Blank	Pesticides	Fluxapyroxad	0.26 U	ng/L	0.26	1.3
8/19/2024 10:50	Field Blank	Pesticides	Loratadine	0.31 U	ng/L	0.31	1.6
8/19/2024 10:50	Field Blank	Pesticides	Atrazine Desethyl	1.4 U	ng/L	1.4	6.8

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
8/19/2024 10:50	Field Blank	Pesticides	Azoxystrobin	0.42 U	ng/L	0.42	2.1
8/19/2024 10:50	Field Blank	Pesticides	Butylate	0.47 U	ng/L	0.47	2.3
8/19/2024 10:50	Field Blank	Pesticides	Chlorpyrifos Ethyl	0.31 U	ng/L	0.31	1.6
8/19/2024 10:50	Field Blank	Pesticides	Napropamide	0.73 U	ng/L	0.73	3.6
8/19/2024 10:50	Field Blank	Pesticides	Pronamide	0.10 U	ng/L	0.10	0.52
8/19/2024 10:50	Field Blank	Pesticides	Dimethomorph	0.31 U	ng/L	0.31	1.6
8/19/2024 10:50	Field Blank	Pesticides	EPTC	0.52 U	ng/L	0.52	2.6
8/19/2024 10:50	Field Blank	Pesticides	Metalaxyl	0.52 U	ng/L	0.52	2.6
8/19/2024 10:50	Field Blank	Pesticides	Ibuprofen	0.080 U	µg/L	0.080	0.32
8/19/2024 10:50	Field Blank	Pesticides	Mevinphos	1.0 U	ng/L	1.0	5.2
8/19/2024 10:50	Field Blank	Pesticides	Oxyfluorfen	0.21 U	ng/L	0.21	1.0
8/19/2024 10:50	Field Blank	Pesticides	Parathion Methyl	0.21 U	ng/L	0.21	1.0
8/19/2024 10:50	Field Blank	Pesticides	Prodiamine	0.21 U	ng/L	0.21	1.0
8/19/2024 10:50	Field Blank	Pesticides	Difenoconazole	0.62 U	ng/L	0.62	3.1
8/19/2024 10:50	Field Blank	Pesticides	Flutolanil	0.10 U	ng/L	0.10	0.52
8/19/2024 10:50	Field Blank	Pesticides	Fonofos	0.16 U	ng/L	0.16	0.78
8/19/2024 10:50	Field Blank	Pesticides	Ametryn	1.1 U	ng/L	1.1	5.7
8/19/2024 10:50	Field Blank	Pesticides	Azinphos Methyl	3.1 U	ng/L	3.1	16
8/19/2024 10:50	Field Blank	Pesticides	Carfentrazone Ethyl	0.16 U	ng/L	0.16	0.78
8/19/2024 10:50	Field Blank	Pesticides	Chlorpyrifos Methyl	0.10 U	ng/L	0.10	0.52
8/19/2024 10:50	Field Blank	Pesticides	Parathion Ethyl	0.16 UJ	ng/L	0.16	0.78
8/19/2024 10:50	Field Blank	Pesticides	Propargite	0.83 U	ng/L	0.83	4.2
8/19/2024 10:50	Field Blank	Pesticides	Pyraflufen Ethyl	0.31 U	ng/L	0.31	1.6
8/19/2024 10:50	Field Blank	Pesticides	Pyridaben	1.5 U	ng/L	1.5	7.3
8/19/2024 10:50	Field Blank	Pesticides	Simazine	0.26 U	ng/L	0.26	1.3
8/19/2024 10:50	Field Blank	Pesticides	Tebuconazole	1.5 U	ng/L	1.5	7.3
8/19/2024 10:50	Field Blank	Pesticides	Terbufos	0.21 U	ng/L	0.21	1.0
8/19/2024 10:50	Field Blank	Pesticides	Triadimefon	0.16 U	ng/L	0.16	0.78
8/19/2024 10:50	Field Blank	Pesticides	Diazinon	0.13 U	ng/L	0.13	0.65
8/19/2024 10:50	Field Blank	Pesticides	Ethoprop	0.13 U	ng/L	0.13	0.65
8/19/2024 10:50	Field Blank	Pesticides	Fenamiphos	0.47 U	ng/L	0.47	2.3
8/19/2024 10:50	Field Blank	Pesticides	Flumioxazin	3.1 U	ng/L	3.1	16
8/19/2024 10:50	Field Blank	Pesticides	Malathion	0.36 U	ng/L	0.36	1.8
8/19/2024 10:50	Field Blank	Pesticides	Metolachlor	0.78 U	ng/L	0.78	3.9

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Hexachlorobutadiene	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Pentachlorophenol	0.56 U	µg/L	0.56	2.3
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	2.3 U	µg/L	2.3	9.0
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	2,4-Dimethylphenol	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	4-Nitrophenol	11 U	µg/L	11	45
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.028 U	µg/L	0.028	0.11
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Di-n-butyl phthalate	2.3 U	µg/L	2.3	9.0
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Nitrobenzene	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Isophorone	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Naphthalene	0.11 U	µg/L	0.11	0.45
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.028 U	µg/L	0.028	0.11
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Fluoranthene	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.4 U	µg/L	3.4	14
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.028 U	µg/L	0.028	0.11
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	2,4-Dinitrophenol	0.011 U	µg/L	0.011	0.045
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	11 U	µg/L	11	45
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.028 U	µg/L	0.028	0.11
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Phenol	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	2-Chlorophenol	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Hexachlorobenzene	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.056 UJ	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Acenaphthene	0.028 U	µg/L	0.028	0.11
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.028 U	µg/L	0.028	0.11
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.028 U	µg/L	0.028	0.11
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Fluorene	0.028 U	µg/L	0.028	0.11
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.056 U	µg/L	0.056	0.23

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Acenaphthylene	0.028 U	µg/L	0.028	0.11
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Phenanthrene	0.11 U	µg/L	0.11	0.45
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Pyrene	0.11 U	µg/L	0.11	0.45
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Hexachloroethane	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	2-Nitrophenol	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Benzidine	11 U	µg/L	11	45
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.6 U	µg/L	5.6	23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Chrysene	0.028 U	µg/L	0.028	0.11
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Dimethyl phthalate	0.23 U	µg/L	0.23	0.90
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.028 U	µg/L	0.028	0.11
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Anthracene	0.056 U	µg/L	0.056	0.23
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Butyl benzyl phthalate	1.1 U	µg/L	1.1	4.5
8/19/2024 10:50	Field Blank	Priority Organic Pollutants	Diethyl phthalate	2.3 U	µg/L	2.3	9.0