Effluent Quality Assessment of Orlando/Iron Bridge Regional WRF Seminole County NPDES # FL0037966 Sampled April 22, 2024

Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection
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Summary of Results

Several analytes were Y-qualified, including ortho-phosphate, chlorophyll *a*-corrected, phaeophytin, total suspended solids, turbidity, color, alkalinity, sulfate, fecal coliforms, and *Escherichia coli* (*E. coli*). Permit compliance for those analytes cannot be determined. All other analytes complied with effluent permit limits and Class III Water Quality Criteria for Fresh Waters. Algal growth potential (AGP) analysis was not performed due to malfunctioning laboratory equipment. There were eleven organic constituents detected in the effluent grab sample.

Facility Overview

The Orlando/Iron Bridge Regional WRF 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 facility has had two consent orders issued within the last 5 years. The first is OGC #20-1500 issued on 12/04/2020 for a large raw sewage spill with no interim limits; the second is OGC #21-0558 issued on 08/23/2021 as a long form consent order for sewage spills with no interim limits. The effluent is continuously discharged into Little Econlockhatchee River, a Class III Fresh Water [waterbody identification (WBID) 3001] (Figure 1).

The Little Econlockhatchee River falls within the Peninsular Nutrient Watershed Region for Numeric Nutrient Criteria (NNC). For this region, the NNC, expressed as annual geometric means, are 0.12 mg/L total phosphorus and 1.54 mg/L total nitrogen (Paragraph 62-302.531(2)(c), F.A.C.). The Little Econlockhatchee River falls within the Peninsula bioregion; the daily average dissolved oxygen (DO) saturation shall not be below 38 percent in more than 10 percent of the values (Paragraph 62-302.533(1)(a), 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 flow proportioned composite samples were collected from monitoring site location EFD-1, for outfall D-001 on April 22, 2024.

Samples were collected by Phil Kane, Kevin Kacperowski, and Robert Hill (Central District). Analyses were performed by Eurofins Environmental Testing, Orlando and 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.

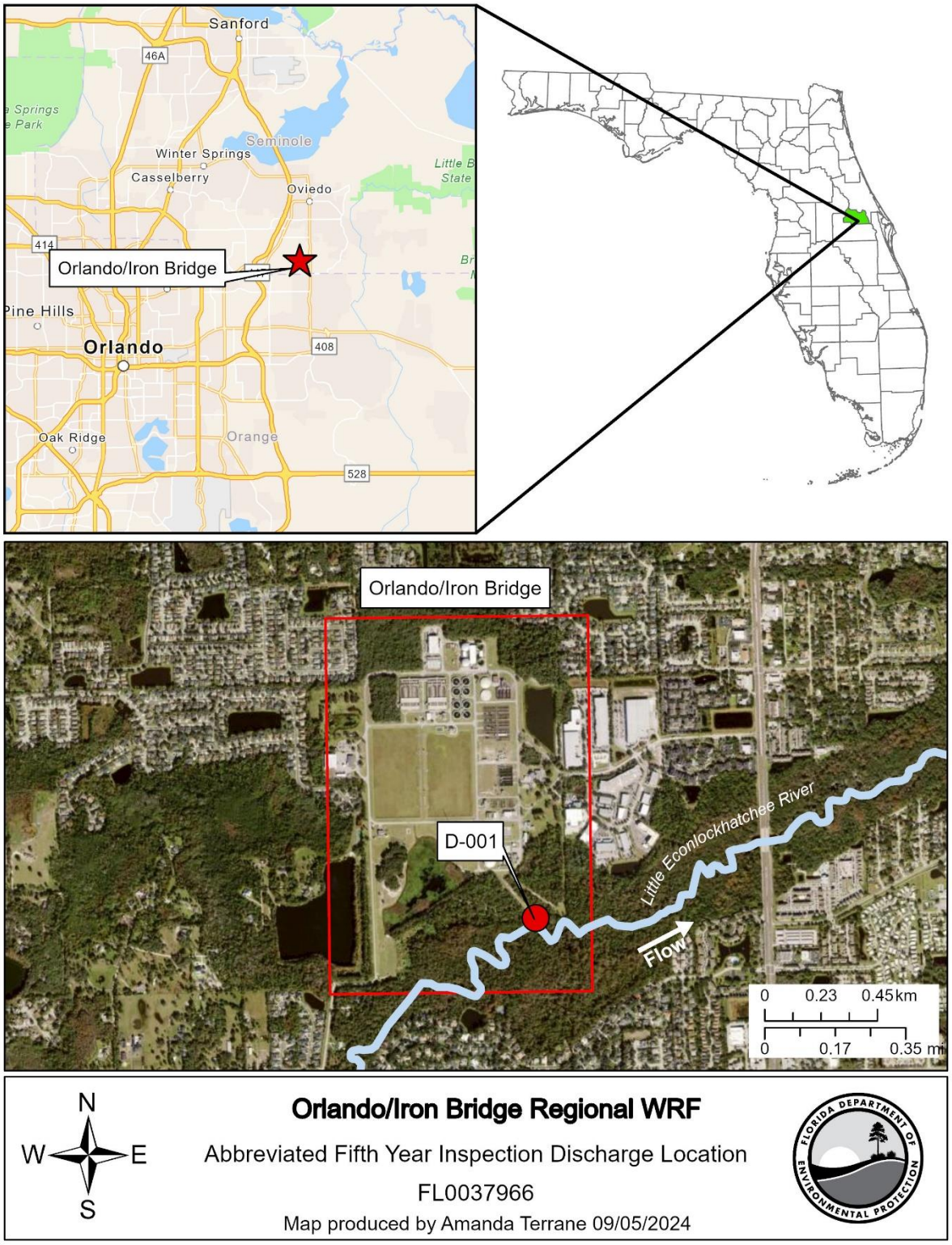


Figure 1. Map of Facility and Discharge Location

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 Fresh Waters and effluent permit limits.

Analytical Water Chemistry (See Table 2 and Appendix D)

- Results for ortho-phosphate, chlorophyll *a* – corrected, phaeophytin, total suspended solids, turbidity, color, alkalinity and sulfate analysis were Y-qualified because the samples were received outside the acceptable temperature range.

- Total phosphorus was detected in the equipment blank between the MDL and PQL.

- For comparative purposes only, the effluent grab and composite single sample values for total phosphorus and the effluent grab single sample value for total nitrogen were greater than the annual geometric mean limit for NNC in the Peninsular Nutrient Region.

Microbiology (See Table 2 and Appendix B)

- Effluent *E. coli* levels complied with the Class III Water Quality Criterion for Fresh Waters and effluent permit limits.

- Effluent fecal coliform levels complied with effluent permit limits.

- *E. coli* and fecal coliform results were Y-qualified because the samples were received outside the acceptable temperature range and Q-qualified because the samples were held beyond the normal holding time.

Toxicity Whole Effluent Test (See Table 2)

- Tests were performed April 23 through April 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 9.5 mg/L to 8.8 mg/L.

- Acute bioassay results are reported as the Concentration Lethal to 50% of the test organisms (LC50).

- For the 96-hour acute definitive test, the calculated LC50 for the water flea, *Ceriodaphnia dubia*, was >100% effluent with 0% mortality in 100% sample. The calculated LC50 for the fish, *Pimeohales promelas*, was >100% effluent with 0% mortality in 100% sample. The effluent sample was not toxic to either test species during the 96-hour acute definitive bioassays and therefore, complied with effluent permit limits.

- 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 Fresh Waters. There are no effluent permit limits for metals.

Organic Constituents (See Table 4 and Appendix D)

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

- There are no effluent permit limits for organic constituents.

Literature Cited

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 Fresh Waters, and field parameters.

Parameter	Units	Class III Criteria	Effluent Permit Limits	Effluent EFD-1
Temperature	C	-	Report	26.2
pH	SU	6.0 - 8.5	6.0 - 8.5 s (EFD-3)	7.3
Specific Conductance	µmhos/cm	≤ 1,275	-	609
Salinity	ppth	-	-	0.3 c
Total Residual Chlorine	mg/L	-	≤ 0.01 (EFD-4)	0.02 U
Dissolved Oxygen	mg/L	-	≥ 6.1 s (CAL-2)	7.4
Dissolved Oxygen	% saturation	≥ 38	-	91.7

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.
c - Value is calculated
s - Single sample
U - Material analyzed for but not detected; value reported is the method detection limit

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

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

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab	Effluent Composite
Ortho-phosphate	mg P/L	-	-	0.20 Y	-
Total Phosphorus	mg P/L	≤ 0.12 g	≤ 1.88 sp	0.28	0.22
Total Ammonia Nitrogen	mg N/L	≤ 2.72 sc	-	0.037	-
Nitrate and Nitrite	mg N/L	-	-	0.86	0.66
Total Kjeldahl Nitrogen	mg N/L	-	≤ 4.28 sp	0.94	0.81
Organic Nitrogen	mg N/L	-	-	0.9 c	-
Total Nitrogen	mg N/L	≤ 1.54 g	≤ 6.16 sp	1.8 c	1.47 c
Total Organic Carbon	mg C/L	-	-	6.7	-
Chlorophyll *a* - Corrected	µg/L	-	-	1.6 IY	-
Phaeophytin	µg/L	-	-	1.5 IY	-
CBOD, 5 day, N - inhibited	mg/L	-	≤ 8.56 sp	-	2.0 U
Total Suspended Solids	mg/L	-	≤ 34.4 sp	3 IY	2 U
Turbidity	NTU	≤ 29 t	-	0.70 IY	-
Color (true)	PCU	-	-	7.1 Y	-
Alkalinity	mg CaCO3/L	≥ 20	-	79 AY	-
Chloride	mg Cl/L	-	-	92	-
Fluoride	mg F/L	≤ 10.0	-	0.56	-
Sulfate	mg SO4/L	-	-	77 Y	-
Fecal Coliforms	cfu/100 mL	-	≤ 800 s (EFA-3)	2 UYQ	-
Escherichia coli	MPN/100 mL	≤ 410	≤ 410 (EFA-3)	1.0 YQ	-
Bioassay - Water flea *(C. dubia)*	% effluent	-	≥100 sp	> 100	-
Bioassay - Fish *(P. promelas)*	% effluent	-	≥ 100 sp	> 100	-

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

c - Value is calculated

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 method detection limit and the laboratory practical quantitation limit

Q - Sample held beyond normal holding time

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

Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.

Table 3. Analytical metals data

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

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab
Hardness	mg CaCO3/L	-	-	143 c
Aluminum	µg/L	-	-	9.0 I
Arsenic	µg/L	≤ 50	-	0.13 I
Cadmium	µg/L	≤ 0.353 b	-	0.020 U
Calcium	mg/L	-	-	42.0
Chromium, Total [1]	µg/L	≤ 115 b	-	0.40 U
Copper	µg/L	≤ 12.7 b	-	1.33
Iron	µg/L	≤ 1,000	-	74 I
Lead	µg/L	≤ 5.01 b	-	0.20 U
Magnesium	mg/L	-	-	9.25
Nickel	µg/L	≤ 70.6 b	-	0.89 I
Potassium	mg/L	-	-	10.9
Selenium	µg/L	≤ 5.0	-	0.20 U
Silver	µg/L	≤ 0.07	-	0.010 U
Sodium	mg/L	-	-	58.6
Zinc	µg/L	≤ 162 b	-	18 I

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

c - Value is calculated

b - Value is calculated based on hardness

I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

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

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

Table 4. Detected Organic Constituents

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

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab
Atrazine	ng/L	-	-	19
Azoxystrobin	ng/L	-	-	7.5 J
Caffeine	ng/L	-	-	19 I
Fipronil Desulfinyl	ng/L	-	-	0.46 I
Fipronil Sulfide	ng/L	-	-	1.6
Fluxapyroxad	ng/L	-	-	0.56 I
Loratadine	ng/L	-	-	7.0 J
Oxadiazon	ng/L	-	-	0.76 I
Propiconazole	ng/L	-	-	2.9 I
Sulfentrazone	ng/L	-	-	2.7 I
Tebuconazole	ng/L	-	-	4.9 I

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

J - Estimated value

I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

Appendix A. Facility Summary

PART I: Information gathered prior to sampling event	
Prepared By: Phil Kane and David Smicherko	**Contact Number:** (407) 897-4156
Facility Name (as it appears on permit): Orlando/Iron Bridge Regional WRF	**Former Names:** N/A
NPDES Permit Number: FL0037966	**Permit Expiration Date:** October 21, 2025
Physical Address: 601 Iron Bridge Circle, Oviedo, FL 32765	
District: Central	**County:** Seminole
Function of Facility: Domestic Wastewater Treatment Facility	
Facility Type: Municipal	**Permitted Capacity (MGD):** 40.0 MGD
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): D-001 outfall flow: 2.43 MGD AADF, as reported on the February 2024 DMR (March 2023 through February 2024 reporting period). D-002 outfall flow: 16.51 MGD AADF, as reported on the February 2024 DMR (March 2023 through February 2024 reporting period)). D-003 outfall flow: NOD, as reported on the February 2024 DMR (March 2023 through February 2024 reporting period).	
If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months): R-001 flow: 17.37 MGD AADF, as reported on the February 2024 DMR (March 2023 through February 2024 reporting period). R-002 flow: 3.64 MGD AADF, as reported on the February 2024 DMR (March 2023 through February 2024 reporting period).	
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): **The sampling location of D-001** is EFD-1, located at the sample point after post aeration basin. CBOD, TSS, TKN, TN, TP, and TOX are sampled at this location. EFD-3, is the analyzer after post aeration basin, which analyzes for pH. EFA-1 is the analyzer at the end of the CCC, TRC is monitored at this location. EFA-3 is the final effluent junction box, FC is sampled at this location. EFD-4, is the analyzer located just before the concrete channel outfall, dechlorination is analyzed at this location. CAL-2, is calculated using the daily average of 3 samples taken 8 hours apart (taken at EFD-4), calculated for DO and Temperature. **The sampling location of D-002** is EFD-5, the automatic sampler at D-002 outfall structure, which collects CBOD, TSS, TN, and TP. EFD-6, is the sampling point located at the D-002 outfall structure, where pH and DO are collected. **The sampling location of D-003** is EFD-7, the automatic sampler at D-003 outfall structure, which collects CBOD, TSS, TN, and TP. EFD-8, is the sampling point located at the D-003 outfall structure, where pH and DO are collected. **The sampling location of R-001** is EFA-2, the compositor is located at Junction Box "D", which collects CBOD, TSS, pH, TRC, TN, and TP samples. EFA-3 is located at the manhole that distributes effluent flows to D-001, R-001, & R-002, FC is collected there. EFD-9 is located at the influent structure to the wetlands pumping station, DO is collected. **The sampling location of R-002,** EFA-3 is located at the manhole that distributes effluent flows to D-001, R-001, & R-002, CBOD, FC, pH, TRC, TN, and TP. EFB-1 is located prior to disinfection after filtration, TSS and Turbidity.	

Description of Permitted Outfall(s):

Surface Water Discharge D-001 is a 28 MGD annual average daily flow discharge approximately 670 feet in length and discharges at a depth of approximately 2.5 feet. The point of discharge is located approximately at latitude 28°37' 4" N, longitude 81°13' 2" W.

Land Application R-001: An existing 35.0 mgd AADF permitted capacity created treatment/reuse wetland system (R-001) consisting of 1,640± acres, including berms and buffer zones (1,220± acres wetted area) and consisting of seventeen (17) cells. Reclaimed water from wetland system R-001 overflows via two 48-inch reinforced concrete pipes (outfalls D-002 and D-003) to an unnamed ditch thence to the St. Johns River (Class III fresh waters, WBID 28931), or sheet flows across an adjacent 640± acre natural wetlands (Seminole Ranch) thence to the St. Johns River, in accordance with Condition I.A.18. of this permit. No chemical dechlorination is applied to the reclaimed water. Reclaimed water is pumped through a 48-inch forcemain for approximately 16 miles from the wastewater treatment facility to the influent structure of the created wetlands.

Surface Water Outfall D-002 is approximately 118 feet in length and discharges at a depth of approximately 2.5 feet, to an unnamed ditch thence to the St. Johns River. The point of discharge is located approximately at latitude 28°35' 02" N, longitude 81°0' 17" W.

Surface Water Outfall D-003 is approximately 118 feet in length and discharges at a depth of approximately 2.5 feet, to an unnamed ditch thence to the St. Johns River. The point of discharge is located approximately at latitude 28°35' 02" N, longitude 81°00' 16" W.

Land Application R-002: An existing permitted 20.3 MGD annual average daily flow capacity slow-rate public access system. R-002 is a reuse system which consists of an existing permitted 20.3 MGD annual average daily flow capacity slow rate public access system. R-002 is a reuse system consisting of public access irrigation of residential lawns, golf courses, cemeteries, parks, landscape areas, highway medians, right-of-ways within the Eastern Regional Reclaimed Water Distribution System (ERRWDS) service area. The major users identified in the attached table. The reuse system also includes an onsite 4 mg concrete ground storage tank, high service pump station, an offsite in-line booster pump station, reclaimed water transmission system, and 29.0 MG of reject storage, provided by two existing pond structures (formerly the hyacinth ponds).

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

An existing 40 mgd annual average daily flow (AADF) wastewater treatment facility consisting of mechanical influent screening, grit removal, flow equalization, two (2) 20 mgd AADF biological nutrient removal (5-stage Bardenpho) treatment units with chemical feed facilities, secondary clarification, tertiary filtration, chlorination and a chlorine contact chamber with two chlorine contact chambers common to both treatment trains, dechlorination and post aeration facilities, with thickening, dewatering of biosolids to either a DEP approved biosolid treatment facility (BTF) or Class 1 landfill. Lime stabilization was retained as a back-up to produce Class B biosolids for land application. Biosolids storage is available onsite for wet weather events.

This facility has a collection transmission system interconnected with Orlando Conserv I WWTF. Flows can be diverted to the Iron Bridge Regional Water Reclamation Facility (WRF) from service areas for both the Water Conserv I and Water Conserv II WRFs.

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	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Flow (To Little Econ River)	MGD	Max	28	Report	--	--	Continuous	Recording flow meter with totalizer	FLW-1	See I.A.4
BOD, Carbonaceous 5 day, 20C	mg/L	Max	4.28	4.28	6.42	8.56	Daily; 24 hours	24-hr FPC	EFD-1	See I.A.6
Total Suspended Solids	mg/L	Max	17.2	17.2	25.8	34.4	Daily; 24 hours	24-hr FPC	EFD-1	See I.A.6
Coliform, Fecal	#/100mL	Max	200	200	--	800	Daily; 24 hours	Grab	EFA-3	See I.A.7
E.coli	#/100mL	Max	--	126	--	410 (90^{th} percentile)	Daily; 24 hours	Grab	EFA-3	See I.A.7 and I.A.8
pH	s.u.	Min Max	--	--	--	6.0 8.5	Continuous	Meter	EFD-3	See I.A.3
Chlorine, Total Residual (For Disinfection)	mg/L	Min	--	--	--	0.5	Continuous	Meter	EFA-1	See I.A.3 and I.A.9
Chlorine, Total Residual (For Dechlorination)	mg/L	Max	--	--	--	0.01	Continuous	Meter	EFD-4	
Chronic Whole Effluent Toxicity, 7-Day IC25 (Ceriodaphnia dubia)	percent	Min	--	--	--	100	Semi-Annually; twice per year	24-hr TPC	EFD-1	See I.A.10

			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
Chronic Whole Effluent Toxicity, 7-Day IC25 (Pimephales promelas)	percent	Min	--	--	--	100	Semi-Annually; twice per year	24-hr TPC	EFD-1	See I.A.10
Nitrogen, Total	mg/L	Max	3.08	3.08	4.62	6.16	Daily; 24 hours	24-hr FPC	EFD-1	
Nitrogen, Kjeldahl, Total (as N)	mg/L	Max	2.14	2.14	3.21	4.28	Daily; 24 hours	24-hr FPC	EFD-1	
Phosphorus, Total (as P)	mg/L	Max	0.94	0.94	1.41	1.88	Daily; 24 hours	24-hr FPC	EFD-1	
Oxygen, Dissolved (DO)	mg/L	Min	--	--	--	6.1	Daily; 24 hours	Calculated	EFD-2	
Temperature (C), Water	Deg C	Max	--	--	--	Report	Daily; 24 hours	Calculated	CAL-2	
Oxygen demand*, Ultimate	lb/day	Max	--	3718	--	--	Monthly	Calculated	EFD-1	
BOD**, Carbonaceous 5 day, 20C	lb/day	Max	--	1000.0	--	--	Monthly	Calculated	EFD-1	See I.A.6
Solids**, Total Suspended	lb/day	Max	--	4000.0	--	--	Monthly	Calculated	EFD-1	See I.A.6
Nitrogen**, Kjeldahl, Total (as N)	lb/day	Max	--	500.0	--	--	Monthly	Calculated	EFD-1	
*Nitrogen, Total	lb/day	Max	--	720.0	--	--	Monthly	Calculated	EFD-1	
*Phosphorus, Total (as P)	lb/day	Max	--	220.0	--	--	Monthly	Calculated	EFD-1	

Receiving Waters: Little Econlockhatchee River (for D-001) and an un-named ditch to the St. Johns River (for D-002 & D-003)	**Classification (indicate whether fresh or marine):** Class III Fresh Water

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

The permittee shall comply with the following requirements to evaluate chronic whole effluent toxicity of the discharge from outfall D-001.

a. Effluent Limitation

In any routine or additional follow-up test for chronic whole effluent toxicity, the 25 percent inhibition concentration (IC25) for reproduction or growth shall not be less than 100% effluent. [Rules 62-302.530(61) and 62-4.241(1)(b), F.A.C.]
For acute whole effluent toxicity, the 96-hour LC50 shall not be less than 100% effluent in any test. [Rule 62-302.500(1)(a)4. and 62-4.241(1)(a), F.A.C.]

b. Monitoring Frequency

Routine toxicity tests shall be conducted once every six months, the first starting within 60 days of the effective date of this permit and lasting for the duration of this permit.

Sampling Requirements

For each routine test or additional follow-up test conducted, a total of three 24-hr composite samples of final effluent shall be collected and used in accordance with the sampling protocol discussed in EPA-821-R-02-013, Section 8.
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.
Samples for routine and additional follow-up tests shall not be collected on the same day.

Test Requirements

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.
The permittee shall conduct a daphnid, **Ceriodaphnia dubia**, Survival and Reproduction Test and a fathead minnow, **Pimephales promelas**, Larval Survival and Growth Test, concurrently.
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 Freshwater Organisms**, 4th Edition, EPA-821-R-02-013. 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 shall be moderately hard water as described in EPA-821-R-02-013, Section 7.2.3.

e. Quality Assurance Requirements

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, 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.
If the mortality in the control (0% effluent) exceeds 20% for either species in any test or the "test acceptability criteria" are not met, 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- 013, Section 13.12 (**Ceriodaphnia dubia**) and Section 11.11 (**Pimephales promelas**). The repeat test shall begin within 21 days after the last day of the invalid test.
If 100% mortality occurs in all effluent concentrations for either test species prior to the end of any test and the control mortality is less than 20% at that time, the test (including the control) for that species shall be terminated with the conclusion that the test fails and constitutes non-compliance.

Routine and additional follow-up tests shall be evaluated for acceptability based on the observed dose-response relationship as required by EPA- 821-R-02-013, Section 10.2.6., and the evaluation shall be included with the bioassay laboratory reports.
Reporting Requirements
Results from all required tests shall be reported on the Discharge Monitoring Report (DMR) as follows:
Routine and Additional Follow-up Test Results: The calculated IC25 for reproduction or growth for each test species shall be entered on the DMR.
A bioassay laboratory report for each routine test shall be prepared according to EPA-821-R-02-013, Section 10, Report Preparation and Test Review, and mailed to the Department at the address below within 30 days after the last day of the test.
For additional follow-up tests, a single bioassay laboratory report shall be prepared according to EPA-821-R-02-013, Section 10, and mailed within 30 days after the last day of the second valid additional follow-up test.
Data for invalid tests shall be included in the bioassay laboratory report for the repeat test.
The same bioassay data shall not be reported as the results of more than one test.
All bioassay laboratory reports shall be sent to: Florida Department of Environmental Protection
Central District Office

3319 Maguire Blvd, Suite 232

Orlando, Florida 32803-3767
Test Failures
A test fails when the test results do not meet the limits in 10.a.(1).
Additional Follow-up Tests:
If a routine test does not meet the chronic toxicity limitation in 10.a.(1) above, 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 10.d. 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.
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-02-013.
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.
The permittee shall submit a plan for correction of the effluent toxicity within 60 days after the last day of the third test failure.
The Department shall review and approve the plan before initiation.
The plan shall be initiated within 30 days following the Department's written approval of the plan.
Progress reports shall be submitted quarterly to the Department at the address above.
During the implementation of the plan, the permittee shall conduct quarterly routine whole effluent toxicity tests in accordance with 10.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 10.b.(1). If a routine test is invalid according to the acceptance criteria in EPA-821-R-02-013, a repeat test shall be initiated within 21 days after the last day of the invalid routine test.
Upon completion of four consecutive quarterly valid routine tests that demonstrate compliance with the effluent limitation in 10.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. 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, the invalid test will not be counted against the requirement for four consecutive quarterly valid routine tests for the purpose of terminating the plan.

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 10.a.(2), the Department may revise this permit to require acute definitive whole effluent toxicity testing.
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.): This facility has had two consent orders issued within the last 5 years. The first was executed (OGC #20-1500) on 12/4/2020, it was a short form consent order for a large raw sewage spill, no interim limits. The second was executed (OGC #21-0558) on 8/23/2021, it was a long form consent order for sewage spills within the collection system and facility, no interim limits.

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	Monitoring Group	Permit Limit mg/L,	Result mg/L,
11/30/2023	Nitrogen, Kjeldahl, Total (as N)	D-001	4.28	4.3
11/30/2023	Coliform, Fecal, % less than detection	R-002	75 %	63 %
09/30/2023	Oxygen, Dissolved (DO)	D-003	3.8	3.725
07/31/2023	Nitrogen, Total	D-001	6.16	6.8
07/31/2023	Nitrogen, Total	D-001	3.08	3.23
07/31/2023	Nitrogen, Total	D-001	4.62	5.32
07/31/2023	Nitrogen, Kjeldahl, Total (as N)	D-001	4.28	5.85
07/31/2023	Nitrogen, Kjeldahl, Total (as N)	D-001	3.21	4
07/31/2023	Phosphorus, Total (as P)	D-001	1.88	2.1
07/31/2023	Phosphorus, Total (as P)	D-001	0.94	0.97
07/31/2023	Phosphorus, Total (as P)	R-001	1.13	1.201
07/31/2023	Phosphorus, Total (as P)	R-001	1.5	1.91
07/31/2023	Phosphorus, Total (as P)	R-001	0.75	0.979
05/31/2023	IC25 Statre 7day Chr Ceriodaphnia	D-001	100 %	90.2 %
05/31/2023	IC25 Statre 7day Chr Ceriodaphnia	D-001	100 %	68.3 %
05/31/2023	Nitrogen, Kjeldahl, Total (as N)	D-001	3.21	3.25

05/31/2023	Nitrogen, Kjeldahl, Total (as N)	D-001	4.28	4.57
05/31/2023	Phosphorus, Total (as P)	R-001	1.13	1.177
05/31/2023	Phosphorus, Total (as P)	R-001	1.5	1.54
03/31/2023	Solids, Total Suspended	D-002	30	44.2
02/28/2023	Phosphorus, Total (as P)	R-001	1.5	1.53

Describe previous FYI and WQBEL study:
Iron Bridge WRF had a Third Year Inspection on October 6, 2014. The following results were reached:
The effluent sample collected was not acutely toxic to either test species during the 96-hour acute definitive bioassays. The effluent AGP result was greater than the "problem" threshold for fresh receiving waters, suggesting that nutrient enrichment may be an issue. The effluent water quality samples collected did not exceed any applicable water quality standards or violate any permit conditions.

Describe previous or current Enforcement Actions (including WLs):
Within the last five years all enforcement actions have been for spills within the collection/transmission system or at the facility. The current LFCO (OGC #21-0558) will remain open until some corrective actions included in the order have been completed as spelled out in the current LFCO. See the consent order section above for additional details.

Describe any violations or problems noted in previous inspection: The last compliance inspection conducted at this facility was on 6/13/2022. Exceedances were noted at the time of inspection. February 2022 CBOD and April 2022 TSS.

Discuss whether DMR trends within previous five years are improving or declining:
For the last five years for D-001: Flow to D-001 has decreased over the last 5 years. TP has been trending up. TN and CBOD have remained stable.

Additional Comments (this should include a trend of the Effluent, i.e. if the facility is now Reuse):
Flows from D-001 have decreased over the past five years. Flows to R-001 has increased. Flows to R-002 have decreased.

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.

- 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-2024-04-08-51

FYI3 Orlando-Iron Bridge Regional WRF (FL0037966) CD

Customer: CEN-DIST

Project ID: FYI3

Florida Department of Environmental Protection

Central Laboratory Submittal Form

last revised Jan 25, 2018

Requester: Benjamin Nomann

Field Report Prepared By: Kane, Kacperowski, Hill

Collected By: Kane, Kacperowski, Hill

Sampling Agency: FDEP Central

Location: 601 Iron Bridge Circle, Orlando, FL 32765	☐ Comp ☑ Grab	Collection (comp begin or grab) Date 4/22/24 Time 8:33am Eastern Central	Composite end Date 4/22/24 Time	Bottle Group(s) (See pg 2): A					
Field ID: IRONB	Matrix (type, e.g., Salt, Fresh, etc): Effluent		Diss. Oxygen: 7.38 ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L): 0					
WIN/STORET #	Temp (C): 26.2	pH: 7.28	Sample Depth: Surface ☐ ft ☐ m	Sp. Conductance (umho/cm): 609					
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments: pH checked						
Location: 601 Iron Bridge Circle Orlando, FL 32765	☑ Comp ☐ Grab	Collection (comp begin or grab) Date 4/22/24 Time 8:57am Eastern Central	Composite end Date 4/22/24 Time	Bottle Group(s): B					
Field ID: IRONB	Matrix (type, e.g., Salt, Fresh, etc): Effluent		Diss. Oxygen: 7.38 ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L): 0					
WIN/STORET #	Temp (C): 26.2	pH: 7.28	Sample Depth: Surface ☐ ft ☐ m	Sp. Conductance (umho/cm): 609					
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments: pH checked						
Location: 601 Iron Bridge Circle Orlando, FL 32765	☑ Comp ☐ Grab	Collection (comp begin or grab) Date 4/22/24 Time 9:08am Eastern Central	Composite end Date 4/22/24 Time	Bottle Group(s): C					
Field ID: IRONB	Matrix (type, e.g., Salt, Fresh, etc): Blank		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: pH checked						
Location: 601 Iron Bridge Circle Orlando, FL 32765	☑ Comp ☐ Grab	Collection (comp begin or grab) Date 4/22/24 Time 9:26am Eastern Central	Composite end Date 4/22/24 Time	Bottle Group(s): D					
Field ID: IRONB	Matrix (type, e.g., Salt, Fresh, etc): Blank		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: purged sampler, pH checked						

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
KANE	4/22/24	FEDEX		MB	4/23/24 8:58

Orlando-Iron Bridge Regional WRF (FL0037966)

670-38612

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

Contractor Representatives Contacted: Noel Savoie

Date: 3/25/2024
Means of Contact: Email

Task Assignment Number: OV547 Maximum Cost: **$41.50** Turnaround Time: 5 BD

Sample Delivery Date: 4/23/2024

Project Name/Description:
RQ-2024-04-08-51;FYI3 Orlando-Iron Bridge Regional WRF (FL0037966) CD

Deliverable Number/ Parameter Group/ Method	**Sample Matrix**	**# of Samples**	**# of Containers**	**DEP ID #**	**Unit Cost**	**% Mark-up (if any)**	**Cost**
Quote/OV-CBOD-IN CBOD, nitrogen-inhibited 5210B-2011	W	1	1		$39.00		$39.00
217/Sample Disposal Fee:	1				$2.50		$2.50
Total Number of Containers Shipped:	**1**					**Total:**	**$41.50**

QC Instructions:

Comments: Quote #

Samples released to Contract Lab by: _____ Date/Time: _____

Delivery Method: _____ Shipping _____

Samples Accepted by: Orlando Date/Time 4-23-2024 0930

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

Appendix D. Chemical Analysis of Effluent

Date_Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/22/2024 8:33	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Uncorrected	2.6 Y	µg/L	0.68	2.0
4/22/2024 8:33	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	1.6 IY	µg/L	0.93	2.8
4/22/2024 8:33	Effluent Grab	Chlorophyll/Grain Size/BOD	Phaeophytin-a	1.5 IY	µg/L	1.0	3.0
4/22/2024 8:33	Effluent Grab	Microbiology	Fecal Coliforms-Membrane Filter	2 UYQ	cfu/100 mL	2.0	2.0
4/22/2024 8:33	Effluent Grab	Microbiology	Escherichia Coli-Quanti-Tray	1.0 YQ	MPN/100 mL	1.0	1.0
4/22/2024 8:33	Effluent Grab	Toxicology	Bioassay-Acute-Def-FW-Fish, LC50	100 L	LC50		
4/22/2024 8:33	Effluent Grab	Toxicology	Bioassay-Acute-Def-FW-C.dubia, LC50	100 L	LC50		
4/22/2024 8:33	Effluent Grab	Metals	Nickel	0.89 I	µg/L	0.50	2.0
4/22/2024 8:33	Effluent Grab	Metals	Cadmium	0.020 U	µg/L	0.020	0.080
4/22/2024 8:33	Effluent Grab	Metals	Silver	0.010 U	µg/L	0.010	0.040
4/22/2024 8:33	Effluent Grab	Metals	Copper	1.33	µg/L	0.40	0.80
4/22/2024 8:33	Effluent Grab	Metals	Chromium	0.40 U	µg/L	0.40	1.6
4/22/2024 8:33	Effluent Grab	Metals	Zinc	18 I	µg/L	5.0	20
4/22/2024 8:33	Effluent Grab	Metals	Sodium	58.6	mg/L	0.50	2.0
4/22/2024 8:33	Effluent Grab	Metals	Selenium	0.20 U	µg/L	0.20	0.80
4/22/2024 8:33	Effluent Grab	Metals	Iron	74 I	µg/L	30	120
4/22/2024 8:33	Effluent Grab	Metals	Magnesium	9.25	mg/L	0.040	0.16
4/22/2024 8:33	Effluent Grab	Metals	Calcium	42.0	mg/L	0.075	0.30
4/22/2024 8:33	Effluent Grab	Metals	Aluminum	9.0 I	µg/L	5.0	20
4/22/2024 8:33	Effluent Grab	Metals	Lead	0.20 U	µg/L	0.20	0.40
4/22/2024 8:33	Effluent Grab	Metals	Arsenic	0.13 I	µg/L	0.050	0.20
4/22/2024 8:33	Effluent Grab	Metals	Potassium	10.9	mg/L	0.30	1.2
4/22/2024 8:33	Effluent Grab	Nutrients	Kjeldahl Nitrogen	0.94	mg N/L	0.080	0.20
4/22/2024 8:33	Effluent Grab	Nutrients	Chloride	92	mg Cl/L	0.40	1.0
4/22/2024 8:33	Effluent Grab	Nutrients	Turbidity	0.70 IY	NTU	0.10	1.0
4/22/2024 8:33	Effluent Grab	Nutrients	TSS	3 IY	mg/L	2.0	10
4/22/2024 8:33	Effluent Grab	Nutrients	NO2NO3-N	0.86	mg N/L	0.020	0.050
4/22/2024 8:33	Effluent Grab	Nutrients	Ammonia-N	0.037	mg N/L	0.0020	0.0050
4/22/2024 8:33	Effluent Grab	Nutrients	Total-P	0.28	mg P/L	0.010	0.050
4/22/2024 8:33	Effluent Grab	Nutrients	Organic Carbon	6.7	mg C/L	0.50	1.0
4/22/2024 8:33	Effluent Grab	Nutrients	Color (true)	7.1 Y	PCU	2.5	6.0
4/22/2024 8:33	Effluent Grab	Nutrients	Sulfate	77 Y	mg SO4/L	0.40	1.0

Date_Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/22/2024 8:33	Effluent Grab	Nutrients	Total Alkalinity	79 AY	mg CaCO3/L	0.65	2.5
4/22/2024 8:33	Effluent Grab	Nutrients	O-Phosphate-P	0.20 Y	mg P/L	0.0080	0.020
4/22/2024 8:33	Effluent Grab	Nutrients	Fluoride	0.56	mg F/L	0.025	0.10
4/22/2024 8:33	Effluent Grab	Pesticides	Acetochlor	0.21 U	ng/L	0.21	1.0
4/22/2024 8:33	Effluent Grab	Pesticides	Alachlor	0.41 U	ng/L	0.41	2.1
4/22/2024 8:33	Effluent Grab	Pesticides	Atrazine Desethyl	1.3 U	ng/L	1.3	6.7
4/22/2024 8:33	Effluent Grab	Pesticides	Ethoprop	0.13 U	ng/L	0.13	0.65
4/22/2024 8:33	Effluent Grab	Pesticides	Metolachlor	0.77 U	ng/L	0.77	3.9
4/22/2024 8:33	Effluent Grab	Pesticides	Metribuzin	0.41 U	ng/L	0.41	2.1
4/22/2024 8:33	Effluent Grab	Pesticides	Parathion Ethyl	0.15 U	ng/L	0.15	0.77
4/22/2024 8:33	Effluent Grab	Pesticides	Propiconazole	2.9 I	ng/L	0.62	3.1
4/22/2024 8:33	Effluent Grab	Pesticides	Ibuprofen	0.080 U	µg/L	0.080	0.32
4/22/2024 8:33	Effluent Grab	Pesticides	Ametryn	1.1 U	ng/L	1.1	5.7
4/22/2024 8:33	Effluent Grab	Pesticides	Fipronil Sulfone	0.10 U	ng/L	0.10	0.52
4/22/2024 8:33	Effluent Grab	Pesticides	Flutolanil	0.10 U	ng/L	0.10	0.52
4/22/2024 8:33	Effluent Grab	Pesticides	Malathion	0.36 U	ng/L	0.36	1.8
4/22/2024 8:33	Effluent Grab	Pesticides	Molinate	0.26 U	ng/L	0.26	1.3
4/22/2024 8:33	Effluent Grab	Pesticides	Myclobutanil	0.36 U	ng/L	0.36	1.8
4/22/2024 8:33	Effluent Grab	Pesticides	Norflurazon	1.0 U	ng/L	1.0	5.2
4/22/2024 8:33	Effluent Grab	Pesticides	Propargite	0.83 U	ng/L	0.83	4.1
4/22/2024 8:33	Effluent Grab	Pesticides	Thiobencarb	0.52 U	ng/L	0.52	2.6
4/22/2024 8:33	Effluent Grab	Pesticides	Difenoconazole	0.62 U	ng/L	0.62	3.1
4/22/2024 8:33	Effluent Grab	Pesticides	Fenbuconazole	0.52 U	ng/L	0.52	2.6
4/22/2024 8:33	Effluent Grab	Pesticides	Pronamide	0.10 U	ng/L	0.10	0.52
4/22/2024 8:33	Effluent Grab	Pesticides	Tebuconazole	4.9 I	ng/L	1.4	7.2
4/22/2024 8:33	Effluent Grab	Pesticides	Sucralose	83	µg/L	0.10	0.40
4/22/2024 8:33	Effluent Grab	Pesticides	Bromacil	0.62 U	ng/L	0.62	3.1
4/22/2024 8:33	Effluent Grab	Pesticides	Carbophenothion	0.52 U	ng/L	0.52	2.6
4/22/2024 8:33	Effluent Grab	Pesticides	Carfentrazone Ethyl	0.15 U	ng/L	0.15	0.77
4/22/2024 8:33	Effluent Grab	Pesticides	Diazinon	0.13 U	ng/L	0.13	0.65
4/22/2024 8:33	Effluent Grab	Pesticides	Fipronil Desulfinyl	0.46 I	ng/L	0.10	0.52
4/22/2024 8:33	Effluent Grab	Pesticides	Fipronil Sulfide	1.6	ng/L	0.10	0.52
4/22/2024 8:33	Effluent Grab	Pesticides	Fluxapyroxad	0.56 I	ng/L	0.26	1.3
4/22/2024 8:33	Effluent Grab	Pesticides	Fonofos	0.15 U	ng/L	0.15	0.77

Date_Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/22/2024 8:33	Effluent Grab	Pesticides	Metalaxyl	0.52 U	ng/L	0.52	2.6
4/22/2024 8:33	Effluent Grab	Pesticides	Simazine	0.26 U	ng/L	0.26	1.3
4/22/2024 8:33	Effluent Grab	Pesticides	Triadimefon	0.15 U	ng/L	0.15	0.77
4/22/2024 8:33	Effluent Grab	Pesticides	Atrazine	19	ng/L	0.21	1.0
4/22/2024 8:33	Effluent Grab	Pesticides	Butylate	0.46 U	ng/L	0.46	2.3
4/22/2024 8:33	Effluent Grab	Pesticides	Chlorpyrifos Ethyl	0.31 U	ng/L	0.31	1.5
4/22/2024 8:33	Effluent Grab	Pesticides	Coumaphos	1.1 U	ng/L	1.1	5.7
4/22/2024 8:33	Effluent Grab	Pesticides	Cyprodinil	0.21 U	ng/L	0.21	1.0
4/22/2024 8:33	Effluent Grab	Pesticides	Demeton	3.6 U	ng/L	3.6	18
4/22/2024 8:33	Effluent Grab	Pesticides	Dimethomorph	0.31 U	ng/L	0.31	1.5
4/22/2024 8:33	Effluent Grab	Pesticides	Hexazinone	0.52 U	ng/L	0.52	2.6
4/22/2024 8:33	Effluent Grab	Pesticides	Imazalil	0.67 U	ng/L	0.67	3.4
4/22/2024 8:33	Effluent Grab	Pesticides	Mevinphos	1.0 U	ng/L	1.0	5.2
4/22/2024 8:33	Effluent Grab	Pesticides	Oxadiazon	0.76 I	ng/L	0.36	1.8
4/22/2024 8:33	Effluent Grab	Pesticides	Pendimethalin	1.8 U	ng/L	1.8	8.8
4/22/2024 8:33	Effluent Grab	Pesticides	Phenytoin	5.5 U	ng/L	5.5	27
4/22/2024 8:33	Effluent Grab	Pesticides	Pyridaben	1.4 U	ng/L	1.4	7.2
4/22/2024 8:33	Effluent Grab	Pesticides	Terbuthylazine	0.21 U	ng/L	0.21	1.0
4/22/2024 8:33	Effluent Grab	Pesticides	Naproxen	0.0080 U	µg/L	0.0080	0.032
4/22/2024 8:33	Effluent Grab	Pesticides	Caffeine	19 I	ng/L	7.7	39
4/22/2024 8:33	Effluent Grab	Pesticides	EPTC	0.52 U	ng/L	0.52	2.6
4/22/2024 8:33	Effluent Grab	Pesticides	Etridiazole	0.10 U	ng/L	0.10	0.52
4/22/2024 8:33	Effluent Grab	Pesticides	Fenamiphos	0.46 U	ng/L	0.46	2.3
4/22/2024 8:33	Effluent Grab	Pesticides	Flumioxazin	3.1 U	ng/L	3.1	15
4/22/2024 8:33	Effluent Grab	Pesticides	Naled	2.6 U	ng/L	2.6	13
4/22/2024 8:33	Effluent Grab	Pesticides	Napropamide	0.72 U	ng/L	0.72	3.6
4/22/2024 8:33	Effluent Grab	Pesticides	Parathion Methyl	0.21 U	ng/L	0.21	1.0
4/22/2024 8:33	Effluent Grab	Pesticides	Prodiamine	0.21 U	ng/L	0.21	1.0
4/22/2024 8:33	Effluent Grab	Pesticides	Propanil	0.10 U	ng/L	0.10	0.52
4/22/2024 8:33	Effluent Grab	Pesticides	Pyraflufen Ethyl	0.31 U	ng/L	0.31	1.5
4/22/2024 8:33	Effluent Grab	Pesticides	Azinphos Methyl	3.1 U	ng/L	3.1	15
4/22/2024 8:33	Effluent Grab	Pesticides	Chlorfenapyr	0.31 U	ng/L	0.31	1.5
4/22/2024 8:33	Effluent Grab	Pesticides	Chlorpyrifos Methyl	0.10 U	ng/L	0.10	0.52
4/22/2024 8:33	Effluent Grab	Pesticides	Dimethenamid	0.10 U	ng/L	0.10	0.52

Date_Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/22/2024 8:33	Effluent Grab	Pesticides	Dithiopyr	1.0 U	ng/L	1.0	5.2
4/22/2024 8:33	Effluent Grab	Pesticides	Ethion	0.31 U	ng/L	0.31	1.5
4/22/2024 8:33	Effluent Grab	Pesticides	Fipronil	0.21 U	ng/L	0.21	1.0
4/22/2024 8:33	Effluent Grab	Pesticides	Fludioxonil	0.10 U	ng/L	0.10	0.52
4/22/2024 8:33	Effluent Grab	Pesticides	Loratadine	7.0 J	ng/L	0.31	1.5
4/22/2024 8:33	Effluent Grab	Pesticides	Oxyfluorfen	0.21 U	ng/L	0.21	1.0
4/22/2024 8:33	Effluent Grab	Pesticides	Prometryn	0.36 U	ng/L	0.36	1.8
4/22/2024 8:33	Effluent Grab	Pesticides	Sulfentrazone	2.7 I	ng/L	1.4	7.2
4/22/2024 8:33	Effluent Grab	Pesticides	Azoxystrobin	7.5 J	ng/L	0.41	2.1
4/22/2024 8:33	Effluent Grab	Pesticides	Cyanazine	5.2 U	ng/L	5.2	26
4/22/2024 8:33	Effluent Grab	Pesticides	Disulfoton	0.62 U	ng/L	0.62	3.1
4/22/2024 8:33	Effluent Grab	Pesticides	Fluazifop-P-butyl	0.10 U	ng/L	0.10	0.52
4/22/2024 8:33	Effluent Grab	Pesticides	Iprodione	0.52 U	ng/L	0.52	2.6
4/22/2024 8:33	Effluent Grab	Pesticides	Phorate	0.26 U	ng/L	0.26	1.3
4/22/2024 8:33	Effluent Grab	Pesticides	Prometon	3.1 U	ng/L	3.1	15
4/22/2024 8:33	Effluent Grab	Pesticides	Pyriproxyfen	0.26 U	ng/L	0.26	1.7
4/22/2024 8:33	Effluent Grab	Pesticides	Stirophos	0.41 U	ng/L	0.41	3.3
4/22/2024 8:33	Effluent Grab	Pesticides	Terbufos	0.21 U	ng/L	0.21	1.0
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Di-n-butyl phthalate	2.1 U	µg/L	2.1	8.2
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Hexachlorobenzene	0.052 UJ	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Naphthalene	0.10 U	µg/L	0.10	0.41
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Acenaphthylene	0.026 U	µg/L	0.026	0.10
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Benzo(b)fluoranthene	0.026 U	µg/L	0.026	0.10
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Benzo(k)fluoranthene	0.026 U	µg/L	0.026	0.10
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Di-n-octyl phthalate	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Phenol	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	2-Chloronaphthalene	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.1 U	µg/L	3.1	12
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	2,6-Dinitrotoluene	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.026 U	µg/L	0.026	0.10
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Hexachloroethane	0.052 U	µg/L	0.052	0.21

Date_Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Phenanthrene	0.10 U	µg/L	0.10	0.41
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	2,4-Dichlorophenol	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrotoluene	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Benzidine	10 U	µg/L	10	41
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Isophorone	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Nitrobenzene	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Pyrene	0.10 U	µg/L	0.10	0.41
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	2-Nitrophenol	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Fluoranthene	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	N-Nitrosodimethylamine	2.1 U	µg/L	2.1	8.2
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Acenaphthene	0.026 U	µg/L	0.026	0.10
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Anthracene	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Fluorene	0.026 U	µg/L	0.026	0.10
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Pentachlorophenol	0.52 U	µg/L	0.52	2.1
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	2-Chlorophenol	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	3,3'-Dichlorobenzidine	10 U	µg/L	10	41
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.052 UJ	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	4-Nitrophenol	10 U	µg/L	10	41
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Benzo(a)pyrene	0.026 U	µg/L	0.026	0.10
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.026 U	µg/L	0.026	0.10
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.2 U	µg/L	5.2	21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Chrysene	0.026 U	µg/L	0.026	0.10
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Hexachlorobutadiene	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.026 U	µg/L	0.026	0.10
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Diethyl phthalate	2.1 U	µg/L	2.1	8.2
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Dimethyl phthalate	0.21 U	µg/L	0.21	0.82
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.052 U	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	2,4-Dimethylphenol	0.052 UJ	µg/L	0.052	0.21
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrophenol	10 U	µg/L	10	41

Date_Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Benzo(a)anthracene	0.026 U	µg/L	0.026	0.10
4/22/2024 8:33	Effluent Grab	Priority Organic Pollutants	Butyl benzyl phthalate	1.0 U	µg/L	1.0	4.1
4/22/2024 8:33	Effluent Grab	Nutrients	Temperature	26.2	C		
4/22/2024 8:33	Effluent Grab	Nutrients	Specific Conductance	609	µmhos/cm		
4/22/2024 8:33	Effluent Grab	Nutrients	pH	7.28			
4/22/2024 8:33	Effluent Grab	Nutrients	Dissolved Oxygen mg/L	7.38	mg/L		
4/22/2024 8:57	Effluent Composite	Overflow	Carbonaceous Biochemical Oxygen Demand	2.0 U	mg/L	2.0	2.0
4/22/2024 8:57	Effluent Composite	Nutrients	Total-P	0.22	mg P/L	0.010	0.050
4/22/2024 8:57	Effluent Composite	Nutrients	TSS	2 U	mg/L	2.0	10
4/22/2024 8:57	Effluent Composite	Nutrients	NO2NO3-N	0.66	mg N/L	0.020	0.050
4/22/2024 8:57	Effluent Composite	Nutrients	Kjeldahl Nitrogen	0.81	mg N/L	0.080	0.20
4/22/2024 8:57	Effluent Composite	Nutrients	pH	7.28			
4/22/2024 8:57	Effluent Composite	Nutrients	Specific Conductance	609	µmhos/cm		
4/22/2024 8:57	Effluent Composite	Nutrients	Dissolved Oxygen mg/L	7.38	mg/L		
4/22/2024 8:57	Effluent Composite	Nutrients	Temperature	26.2	C		
4/22/2024 9:08	Field Blank	Metals	Chromium	0.40 U	µg/L	0.40	1.6
4/22/2024 9:08	Field Blank	Metals	Aluminum	5.0 U	µg/L	5.0	20
4/22/2024 9:08	Field Blank	Metals	Calcium	0.075 U	mg/L	0.075	0.30
4/22/2024 9:08	Field Blank	Metals	Sodium	0.50 U	mg/L	0.50	2.0
4/22/2024 9:08	Field Blank	Metals	Potassium	0.30 U	mg/L	0.30	1.2
4/22/2024 9:08	Field Blank	Metals	Iron	30 U	µg/L	30	120
4/22/2024 9:08	Field Blank	Metals	Silver	0.010 U	µg/L	0.010	0.040
4/22/2024 9:08	Field Blank	Metals	Nickel	0.50 U	µg/L	0.50	2.0
4/22/2024 9:08	Field Blank	Metals	Cadmium	0.020 U	µg/L	0.020	0.080
4/22/2024 9:08	Field Blank	Metals	Selenium	0.20 U	µg/L	0.20	0.80
4/22/2024 9:08	Field Blank	Metals	Lead	0.20 U	µg/L	0.20	0.40
4/22/2024 9:08	Field Blank	Metals	Copper	0.40 U	µg/L	0.40	0.80
4/22/2024 9:08	Field Blank	Metals	Zinc	5.0 U	µg/L	5.0	20
4/22/2024 9:08	Field Blank	Metals	Magnesium	0.040 U	mg/L	0.040	0.16
4/22/2024 9:08	Field Blank	Metals	Arsenic	0.050 U	ug/L	0.050	0.20
4/22/2024 9:08	Field Blank	Nutrients	Organic Carbon	0.50 U	mg C/L	0.50	1.0
4/22/2024 9:08	Field Blank	Nutrients	Turbidity	0.10 U	NTU	0.10	1.0
4/22/2024 9:08	Field Blank	Nutrients	Sulfate	0.20 U	mg SO4/L	0.20	0.50
4/22/2024 9:08	Field Blank	Nutrients	Fluoride	0.025 U	mg F/L	0.025	0.10

Date_Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/22/2024 9:08	Field Blank	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.080	0.20
4/22/2024 9:08	Field Blank	Nutrients	O-Phosphate-P	0.004 U	mg P/L	0.0040	0.010
4/22/2024 9:08	Field Blank	Nutrients	Total-P	0.002 U	mg P/L	0.0020	0.0050
4/22/2024 9:08	Field Blank	Nutrients	Color (true)	2.5 U	PCU	2.5	6.0
4/22/2024 9:08	Field Blank	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.0040	0.010
4/22/2024 9:08	Field Blank	Nutrients	Ammonia-N	0.002 U	mg N/L	0.0020	0.0050
4/22/2024 9:08	Field Blank	Nutrients	Total Alkalinity	0.65 U	mg CaCO3/L	0.65	2.5
4/22/2024 9:08	Field Blank	Nutrients	Chloride	0.20 U	mg Cl/L	0.20	0.50
4/22/2024 9:08	Field Blank	Pesticides	Atrazine	0.22 U	ng/L	0.22	1.1
4/22/2024 9:08	Field Blank	Pesticides	Atrazine Desethyl	1.5 U	ng/L	1.5	7.3
4/22/2024 9:08	Field Blank	Pesticides	Azinphos Methyl	3.4 U	ng/L	3.4	17
4/22/2024 9:08	Field Blank	Pesticides	Coumaphos	1.2 U	ng/L	1.2	6.2
4/22/2024 9:08	Field Blank	Pesticides	Diazinon	0.14 U	ng/L	0.14	0.70
4/22/2024 9:08	Field Blank	Pesticides	EPTC	0.56 U	ng/L	0.56	2.8
4/22/2024 9:08	Field Blank	Pesticides	Fenbuconazole	0.56 U	ng/L	0.56	2.8
4/22/2024 9:08	Field Blank	Pesticides	Fipronil	0.22 U	ng/L	0.22	1.1
4/22/2024 9:08	Field Blank	Pesticides	Flumioxazin	3.4 U	ng/L	3.4	17
4/22/2024 9:08	Field Blank	Pesticides	Pendimethalin	1.9 U	ng/L	1.9	9.5
4/22/2024 9:08	Field Blank	Pesticides	Propargite	0.90 U	ng/L	0.90	4.5
4/22/2024 9:08	Field Blank	Pesticides	Sulfentrazone	1.6 U	ng/L	1.6	7.8
4/22/2024 9:08	Field Blank	Pesticides	Terbufos	0.22 U	ng/L	0.22	1.1
4/22/2024 9:08	Field Blank	Pesticides	Naproxen	0.0080 U	ug/L	0.0080	0.032
4/22/2024 9:08	Field Blank	Pesticides	Carfentrazone Ethyl	0.17 U	ng/L	0.17	0.84
4/22/2024 9:08	Field Blank	Pesticides	Chlorpyrifos Methyl	0.11 U	ng/L	0.11	0.56
4/22/2024 9:08	Field Blank	Pesticides	Dimethomorph	0.34 U	ng/L	0.34	1.7
4/22/2024 9:08	Field Blank	Pesticides	Fipronil Sulfone	0.11 U	ng/L	0.11	0.56
4/22/2024 9:08	Field Blank	Pesticides	Mevinphos	1.1 U	ng/L	1.1	5.6
4/22/2024 9:08	Field Blank	Pesticides	Molinate	0.28 U	ng/L	0.28	1.4
4/22/2024 9:08	Field Blank	Pesticides	Parathion Methyl	0.22 U	ng/L	0.22	1.1
4/22/2024 9:08	Field Blank	Pesticides	Prodiamine	0.22 U	ng/L	0.22	1.1
4/22/2024 9:08	Field Blank	Pesticides	Propiconazole	0.67 U	ng/L	0.67	3.4
4/22/2024 9:08	Field Blank	Pesticides	Terbuthylazine	0.22 U	ng/L	0.22	1.1
4/22/2024 9:08	Field Blank	Pesticides	Chlorfenapyr	0.34 U	ng/L	0.34	1.7
4/22/2024 9:08	Field Blank	Pesticides	Metolachlor	0.84 U	ng/L	0.84	4.2

Date_Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/22/2024 9:08	Field Blank	Pesticides	Pronamide	0.11 U	ng/L	0.11	0.56
4/22/2024 9:08	Field Blank	Pesticides	Pyridaben	1.6 U	ng/L	1.6	7.8
4/22/2024 9:08	Field Blank	Pesticides	Ametryn	1.2 U	ng/L	1.2	6.2
4/22/2024 9:08	Field Blank	Pesticides	Caffeine	8.4 U	ng/L	8.4	42
4/22/2024 9:08	Field Blank	Pesticides	Cyprodinil	0.22 U	ng/L	0.22	1.1
4/22/2024 9:08	Field Blank	Pesticides	Ethoprop	0.14 U	ng/L	0.14	0.70
4/22/2024 9:08	Field Blank	Pesticides	Fenamiphos	0.50 U	ng/L	0.50	2.5
4/22/2024 9:08	Field Blank	Pesticides	Fluxapyroxad	0.28 U	ng/L	0.28	1.4
4/22/2024 9:08	Field Blank	Pesticides	Iprodione	0.56 U	ng/L	0.56	2.8
4/22/2024 9:08	Field Blank	Pesticides	Metalaxyl	0.56 U	ng/L	0.56	2.8
4/22/2024 9:08	Field Blank	Pesticides	Myclobutanil	0.39 U	ng/L	0.39	2.0
4/22/2024 9:08	Field Blank	Pesticides	Naled	2.8 U	ng/L	2.8	14
4/22/2024 9:08	Field Blank	Pesticides	Norflurazon	1.1 U	ng/L	1.1	5.6
4/22/2024 9:08	Field Blank	Pesticides	Oxadiazon	0.39 U	ng/L	0.39	2.0
4/22/2024 9:08	Field Blank	Pesticides	Parathion Ethyl	0.17 U	ng/L	0.17	0.84
4/22/2024 9:08	Field Blank	Pesticides	Dimethenamid	0.11 U	ng/L	0.11	0.56
4/22/2024 9:08	Field Blank	Pesticides	Dithiopyr	1.1 U	ng/L	1.1	5.6
4/22/2024 9:08	Field Blank	Pesticides	Imazalil	0.73 U	ng/L	0.73	3.6
4/22/2024 9:08	Field Blank	Pesticides	Metribuzin	0.45 U	ng/L	0.45	2.2
4/22/2024 9:08	Field Blank	Pesticides	Phenytoin	5.9 U	ng/L	5.9	30
4/22/2024 9:08	Field Blank	Pesticides	Phorate	0.28 U	ng/L	0.28	1.4
4/22/2024 9:08	Field Blank	Pesticides	Triadimefon	0.17 U	ng/L	0.17	0.84
4/22/2024 9:08	Field Blank	Pesticides	Ibuprofen	0.080 U	µg/L	0.080	0.32
4/22/2024 9:08	Field Blank	Pesticides	Butylate	0.50 U	ng/L	0.50	2.5
4/22/2024 9:08	Field Blank	Pesticides	Carbophenothion	0.56 U	ng/L	0.56	2.8
4/22/2024 9:08	Field Blank	Pesticides	Chlorpyrifos Ethyl	0.34 U	ng/L	0.34	1.7
4/22/2024 9:08	Field Blank	Pesticides	Cyanazine	5.6 U	ng/L	5.6	28
4/22/2024 9:08	Field Blank	Pesticides	Difenoconazole	0.67 U	ng/L	0.67	3.4
4/22/2024 9:08	Field Blank	Pesticides	Disulfoton	0.67 U	ng/L	0.67	3.4
4/22/2024 9:08	Field Blank	Pesticides	Ethion	0.34 U	ng/L	0.34	1.7
4/22/2024 9:08	Field Blank	Pesticides	Etridiazole	0.11 U	ng/L	0.11	0.56
4/22/2024 9:08	Field Blank	Pesticides	Fonofos	0.17 U	ng/L	0.17	0.84
4/22/2024 9:08	Field Blank	Pesticides	Hexazinone	0.56 U	ng/L	0.56	2.8
4/22/2024 9:08	Field Blank	Pesticides	Loratadine	0.34 U	ng/L	0.34	1.7

Date_Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/22/2024 9:08	Field Blank	Pesticides	Malathion	0.39 U	ng/L	0.39	2.0
4/22/2024 9:08	Field Blank	Pesticides	Pyraflufen Ethyl	0.34 U	ng/L	0.34	1.7
4/22/2024 9:08	Field Blank	Pesticides	Simazine	0.28 U	ng/L	0.28	1.4
4/22/2024 9:08	Field Blank	Pesticides	Sucralose	0.010 U	ug/L	0.010	0.040
4/22/2024 9:08	Field Blank	Pesticides	Alachlor	0.45 U	ng/L	0.45	2.2
4/22/2024 9:08	Field Blank	Pesticides	Azoxystrobin	0.45 U	ng/L	0.45	2.2
4/22/2024 9:08	Field Blank	Pesticides	Demeton	3.9 U	ng/L	3.9	20
4/22/2024 9:08	Field Blank	Pesticides	Fipronil Desulfinyl	0.11 U	ng/L	0.11	0.56
4/22/2024 9:08	Field Blank	Pesticides	Fluazifop-P-butyl	0.11 U	ng/L	0.11	0.56
4/22/2024 9:08	Field Blank	Pesticides	Flutolanil	0.11 U	ng/L	0.11	0.56
4/22/2024 9:08	Field Blank	Pesticides	Oxyfluorfen	0.22 U	ng/L	0.22	1.1
4/22/2024 9:08	Field Blank	Pesticides	Prometon	3.4 U	ng/L	3.4	17
4/22/2024 9:08	Field Blank	Pesticides	Prometryn	0.39 U	ng/L	0.39	2.0
4/22/2024 9:08	Field Blank	Pesticides	Propanil	0.11 U	ng/L	0.11	0.56
4/22/2024 9:08	Field Blank	Pesticides	Pyriproxyfen	0.28 U	ng/L	0.28	1.8
4/22/2024 9:08	Field Blank	Pesticides	Stirophos	0.45 U	ng/L	0.45	3.6
4/22/2024 9:08	Field Blank	Pesticides	Tebuconazole	1.6 U	ng/L	1.6	7.8
4/22/2024 9:08	Field Blank	Pesticides	Acetochlor	0.22 U	ng/L	0.22	1.1
4/22/2024 9:08	Field Blank	Pesticides	Bromacil	0.67 U	ng/L	0.67	3.4
4/22/2024 9:08	Field Blank	Pesticides	Fipronil Sulfide	0.11 U	ng/L	0.11	0.56
4/22/2024 9:08	Field Blank	Pesticides	Fludioxonil	0.11 U	ng/L	0.11	0.56
4/22/2024 9:08	Field Blank	Pesticides	Napropamide	0.78 U	ng/L	0.78	3.9
4/22/2024 9:08	Field Blank	Pesticides	Thiobencarb	0.56 U	ng/L	0.56	2.8
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	2-Chlorophenol	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	2,4-Dimethylphenol	0.052 UJ	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Chrysene	0.026 U	µg/L	0.026	0.10
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Dimethyl phthalate	0.21 U	µg/L	0.21	0.83
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Isophorone	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Pentachlorophenol	0.52 U	µg/L	0.52	2.1
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.1 U	µg/L	3.1	12
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	10 U	µg/L	10	42

Date_Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.026 U	µg/L	0.026	0.10
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Di-n-butyl phthalate	2.1 U	µg/L	2.1	8.3
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	2.1 U	µg/L	2.1	8.3
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Naphthalene	0.10 U	µg/L	0.10	0.42
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Phenanthrene	0.10 U	µg/L	0.10	0.42
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Anthracene	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Benzidine	10 U	µg/L	10	42
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.026 U	µg/L	0.026	0.10
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Hexachlorobenzene	0.052 UJ	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.026 U	µg/L	0.026	0.10
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Phenol	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.026 U	µg/L	0.026	0.10
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	4-Nitrophenol	10 U	µg/L	10	42
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.026 U	µg/L	0.026	0.10
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Fluorene	0.026 U	µg/L	0.026	0.10
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Nitrobenzene	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	2,4-Dinitrophenol	10 U	µg/L	10	42
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.026 U	µg/L	0.026	0.10
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Diethyl phthalate	2.1 U	µg/L	2.1	8.3
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Hexachlorobutadiene	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.052 UJ	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.2 U	µg/L	5.2	21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Butyl benzyl phthalate	1.0 U	µg/L	1.0	4.2
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Pyrene	0.10 U	µg/L	0.10	0.42

Date_Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	2-Nitrophenol	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Acenaphthene	0.026 U	µg/L	0.026	0.10
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Acenaphthylene	0.026 U	µg/L	0.026	0.10
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.026 U	µg/L	0.026	0.10
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Fluoranthene	0.052 U	µg/L	0.052	0.21
4/22/2024 9:08	Field Blank	Priority Organic Pollutants	Hexachloroethane	0.052 U	µg/L	0.052	0.21
4/22/2024 9:26	Field Blank	Nutrients	NO2NO3-N	0.004 UY	mg N/L	0.0040	0.010
4/22/2024 9:26	Field Blank	Nutrients	Kjeldahl Nitrogen	0.080 UY	mg N/L	0.080	0.20
4/22/2024 9:26	Field Blank	Nutrients	Total-P	0.003 IY	mg P/L	0.0020	0.0050