Effluent Quality Assessment of Daytona Beach/Bethune Point WRF Volusia County NPDES # FL0025984 Sampled April 17, 2023

Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection
June 2023

DEP Laboratory, Biology Program
2600 Blair Stone Road, MS 6515
Tallahassee, FL 32399-2400
www.floridadep.gov

Contents

Summary of Results 3
Facility Overview 3
Methods 3
Results 5
Literature Cited 7
Appendix A. Facility Summary 13
Appendix B. Explanations of Measurements 23
Appendix C. Chain of Custody 25
Appendix D. Chemical Analysis of Effluent 27

List of Tables

Table 1. Measured field parameters 8
Table 2. Analytical water chemistry and toxicological data 9
Table 3. Analytical metals data 10
Table 4. Algal Growth Potential (AGP) 11
Table 5. Detected Organic Constituents 12

List of Figures

Figure 1. Map of Facility and Discharge Location 4

Summary of Results

All analytes measured in the effluent grab samples complied with Class III Water Quality Criteria for Marine Waters and effluent permit limits. Some permit limits, however, apply to 24-hour flow-proportioned composite samples. The AGP and nutrient results do not suggest a potential for nutrient enrichment of the receiving waters. Eighteen organic constituents were detected in the effluent grab sample.

Facility Overview

The Daytona Beach/Bethune Point WRF is an advanced domestic wastewater treatment plant. 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 Halifax River, a Class III Marine Water [waterbody identification (WBID) 2363A] (Figure 1).

Receiving waters for this facility fall under the Estuary-Specific Numeric Interpretations of the Narrative Nutrient Criteria (NNC) for the Lower Halifax River Estuary region. For this region, the NNC, expressed as annual geometric means, are 0.142 mg/L total phosphorus, 0.72 mg/L total nitrogen, and 6.2 µg/L chlorophyll *a* (Subparagraph 62-302.532(1)(s)1., F.A.C.). 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 samples were collected from monitoring site location EFD-1 for outfall D-001 on April 17, 2023. The permit specifies 24-hour flow-proportioned composite samples for several analytes and only grab samples were collected. Samples were collected by Phil Kane and Carolyn Hall (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.

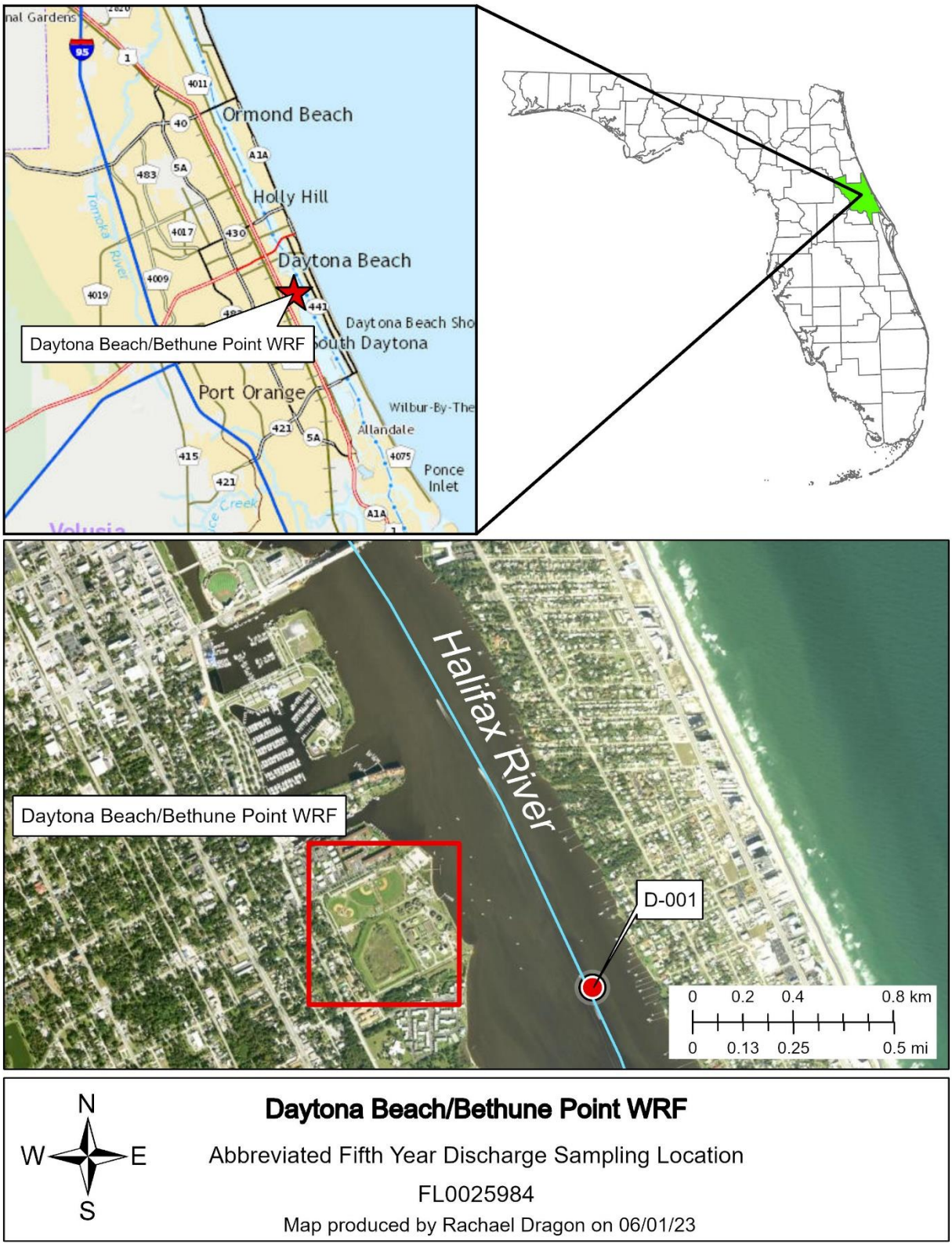


Figure 1. Map of Facility and Discharge Location

Results

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

- All 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)

- All water chemistry analytes detected in the effluent grab sample complied with effluent composite permit limits.

- For comparative purposes only, the effluent grab single sample values for total phosphorus and total nitrogen were greater than the Estuary-Specific Numeric Nutrient Criteria (NNC) annual geometric mean values for the region.

Toxicity Whole Effluent Test (See Table 2)

- Tests were performed April 18 through April 22, 2023.

- The sample was aerated for 10 minutes at a rate of approximately 100 bubbles per minute to decrease the dissolved oxygen (DO) from 9.1 mg/L to 8.5 mg/L.

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

- In a 96-hour acute definitive test of 100% effluent, mortality of <20% provides confidence that the effluent meets the acute toxicity criterion of Florida's Surface Water Quality Standards (Paragraph 62-302.500(1)(a), F.A.C.). Mortality between 20 and 50% indicates low to moderate levels of toxicity, and further action may be required. Mortality of >50% indicates that the effluent fails to meet the minimum requirement to discharge to waters of the state (Paragraph 62-4.244(3)(a), F.A.C.).

- 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, Pimephales 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 Marine Waters. There are no effluent permit limits for metals.

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 is nitrogen-limited (Miller et al. 1978).

- The effluent grab sample AGP result of 1.60 mg dry wt/L is within the AGP range (0.81 to 6.00 mg dry wt/L) suggested to be representative of moderately high productivity for freshwater (Miller et al. 1978).

- An aliquot of the AGP sample was salinity adjusted from an apparent salinity of approximately 0.372 parts per thousand (ppth) to a salinity of approximately 7.1 ppth by the addition of artificial sea salts to meet the salinity requirements of the test species *Dunaliella tertiolecta*.

- Differences greater than an order of magnitude between actual and predicted AGP values 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 5 and Appendix D)

- Atrazine, atrazine desethyl, azoxystrobin, bromacil, caffeine, chlorfenapyr, fipronil, fipronil desulfinyl, fipronil sulfide, fipronil sulfone, fludioxonil, hexazinone, loratadine, metribuzin, phenytoin, simazine, sulfentrazone, and tebuconazole were detected in the effluent grab sample.

- Some organic constituents were J-qualified because matrix spike accuracy was not assessed due to high content of these parameters in the sample spiked.

- These include 7 herbicides or metabolites, 5 insecticides or metabolites, 3 fungicides, 1 stimulant, 1 antihistamine, and 1 anti-seizure medication.

- 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 Grab EFD-1
Temperature	C	-	-	27.2
pH	SU	6.5 - 8.5	6.5 - 8.5	7.5
Specific Conductance	µmhos/cm	-	-	889
Salinity	ppt	-	-	0.4 c
Dissolved Oxygen	% saturation	≥ 42	-	100.6
Dissolved Oxygen	mg/L	-	≥ 2.0	8.0

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

Table 2. Analytical water chemistry and toxicological data

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

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab EFD-1
Ortho-phosphate	mg P/L	-	-	0.21
Total Phosphorus	mg P/L	≤ 0.142 g	≤ 2.0 sp	0.25
Total Ammonia Nitrogen	mg N/L	-	-	0.052
Un-ionized Ammonia (calculated salinity)	mg N/L	-	-	< 0.02 c
Nitrate and Nitrite	mg N/L	-	-	0.38
Total Kjeldahl Nitrogen	mg N/L	-	-	0.81
Organic Nitrogen	mg N/L	-	-	0.76 c
Total Nitrogen	mg N/L	≤ 0.72 g	≤ 6.0 sp	1.19 c
Total Organic Carbon	mg C/L	-	-	10 A
Chlorophyll *a* - Corrected	µg/L	≤ 6.2 g	-	1.4 I
Phaeophytin	µg/L	-	-	0.90 U
CBOD, 5 day, N - inhibited	mg/L	-	≤ 10.0 sp	1.0 U
Hardness	mg CaCO3/L	-	-	178 c
Total Suspended Solids	mg/L	-	≤ 10.0 sp	2 U
Turbidity	NTU	≤ 29 t	-	0.25 I
Color (true)	PCU	-	-	51
Alkalinity	mg CaCO3/L	-	-	133 A
Chloride	mg Cl/L	-	-	180
Fluoride	mg F/L	≤ 5.0	-	0.33
Sulfate	mg SO4/L	-	-	31
Bioassay - Water flea *(Ceriodaphnia dubia)*	% effluent	-	≥ 100 sp	> 100
Bioassay - Fish *(Pimephales 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
U - Material analyzed for but not detected; value reported is the method detection limit

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 EFD-1
Aluminum	µg/L	≤ 1500	-	6.9 I
Arsenic	µg/L	≤ 50	-	0.59
Cadmium	µg/L	≤ 8.8	-	0.020 U
Calcium	mg/L	-	-	51.4
Chromium, Total [1]	µg/L	≤ 50	-	0.40 U
Copper	µg/L	≤ 3.7	-	0.93
Iron	µg/L	≤ 300	-	31 I
Lead	µg/L	≤ 8.5	-	0.24 I
Magnesium	mg/L	-	-	12.1
Nickel	µg/L	≤ 8.3	-	2.3
Potassium	mg/L	-	-	9.9
Selenium	µg/L	≤ 71	-	0.20 U
Silver	µg/L	≤ 2.3	-	0.010 U
Sodium	mg/L	-	-	108
Zinc	µg/L	≤ 86	-	31

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
1- 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 EFD-1	*Dunaliella tertiolecta*	3.00 U *	not applicable [2]	not applicable [2]	not applicable [2]	not applicable [2]	2.1	4.8
Effluent Grab EFD-1	*Pseudokirchneriella subcapitata*	1.60 A	16 ± 3.3	90 ± 18	45 ± 9	110 ± 22	2.1	4.8

* - sample salinity adjusted to 7.1 ppth

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

2 - predictions not applicable to marine matrix

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 EFD-1
Atrazine	ng/L	-	-	20
Atrazine Desethyl	ng/L	-	-	5.4 I
Azoxystrobin	ng/L	-	-	3.3
Bromacil	ng/L	-	-	2.6 I
Caffeine	ng/L	-	-	47 J
Chlorfenapyr	ng/L	-	-	6.8 J
Fipronil	ng/L	-	-	28
Fipronil Desulfinyl	ng/L	-	-	12
Fipronil Sulfide	ng/L	-	-	8.7
Fipronil Sulfone	ng/L	-	-	8.7
Fludioxonil	ng/L	-	-	2.5
Hexazinone	ng/L	-	-	4.3
Loratadine	ng/L	-	-	3.6 J
Metribuzin	ng/L	-	-	1.0 I
Phenytoin	ng/L	-	-	46
Simazine	ng/L	-	-	11
Sulfentrazone	ng/L	-	-	11
Tebuconazole	ng/L	-	-	6.8 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
J - Estimated value

Appendix A. Facility Summary

PART I: Information gathered prior to sampling event	
Prepared By: Amanda Mahalek	**Contact Number:** (407) 897-4330
Facility Name (as it appears on permit): Daytona Beach/Bethune Point WRF	**Former Names:**
NPDES Permit Number: FL0025984	**Permit Expiration Date:** January 13, 2024
Physical Address: 1 Shady Place, Daytona Beach, FL 32114	
District: Central	**County:** Volusia
Function of Facility: Domestic Wastewater Treatment Facility	
Facility Type: Domestic Wastewater	**Permitted Capacity (MGD):** 13.0 MGD
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): D-001 outfall flow: 6.4 million gallons per day (MGD) annual average daily flow (AADF), as reported on the February 2023 DMR (March 2022 through February 2023 reporting period).	
If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months): R-001 public access reuse system: 0.718 MGD AADF; R-002 flow to Convergence Point: 4.1 MGD AADF, as reported on the February 2023 DMR (March 2022 through February 2023 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 Convergence point. The sampling location of R-001 is EFA-1, located at the sampling point at the outlet of the UV reactor channel. The sampling location of R-002 is EFA-1, located at the sampling point at the outlet of the UV reactor channel. Total suspended solids grab samples are collected from EFB-1, after filtration and prior to disinfection.

Description of Permitted Outfall(s):

The Discharge Location (D-001) outfall consists of the combined flow from the Bethune and Westside Regional Facilities, limited to 22.8 MGD maximum daily flow, and is monitored at the concrete sampling structure (Convergence Point) adjacent to the Bethune WWTF site. The outfall discharges to the Halifax River (Class III marine waters, WBID 2363A) at D-001 which is approximately 1029 feet in length and discharges at a depth of approximately 4 feet. Flow from the Bethune WRF only is described as R-002 for monitoring purposes, which is the discharge to Convergence Point, and has an existing capacity of 13.0 MGD. The point of discharge to the Halifax River is located approximately at latitude 29 o 11' 43" N, longitude 81 o 00' 05" W.

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

Daytona Beach/Bethune Point WRF is an advanced domestic wastewater treatment plant consisting of a biological nutrient removal system (5-stage Bardenpho system) with influent screening, grit removal, aeration, secondary clarification, chemical feed (including a new alum feed system and supplemental carbon feed system), filtration, ultraviolet (UV) disinfection, and pumping of biosolids to the Daytona Beach/Westside Regional WRF.

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)

			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 Halifax River)	MGD	Max	20.0	Report	-	-	Continuous	Recording Flow Meter with Totalizer	FLW-2	See I.**Error! Reference source not found..Error ! Reference source not found.**
BOD, Carbonaceous 5 day, 20C	mg/L	Max	5.0	6.25	7.5	10.0	5 Days/Week	24-hr FPC	EFD-1	See I.**Error! Reference source not found.**.5
Solids, Total Suspended	mg/L	Max	5.0	6.25	7.5	10.0	5 Days/Week	24-hr FPC	EFD-1	See I.**Error! Reference source not found.**.5
pH	s.u.	Max/Min	-	-	-	8.5/6.5	Continuous	Meter	EFD-1	See I.**Error! Reference source not found..Error ! Reference source not found.**

Chronic Whole Effluent Toxicity, 7-Day IC25 (Ceriodaphnia dubia)	percent	Min	-	-	-	100	Semi-Annually; twice per year	24-hr FPC	EFD-1	See I.**Error! Reference source not found.**.7
Chronic Whole Effluent Toxicity, 7-Day IC25 (Pimephales promelas)	percent	Min	-	-	-	100	Semi-Annually; twice per year	24-hr FPC	EFD-1	See I.**Error! Reference source not found.**.7
Nitrogen, Total	mg/L	Max	3.0	3.0	4.5	6.0	5 Days/Week	24-hr FPC	EFD-1	
Phosphorus, Total (as P)	mg/L	Max	1.0	1.0	1.5	2.0	5 Days/Week	24-hr FPC	EFD-1	
Nitrogen, Total	lb/yr	Max	182,777	Report	-	-	Monthly	Calculated	EFD-1	
Phosphorus, Total (as P)	lb/yr	Max	60,926	Report	-	-	Monthly	Calculated	EFD-1	
Oxygen, Dissolved (DO)	mg/L	Min	-	-	-	2.0	Daily; 24 hours	Grab	EFD-1	

PART I: Continued	
Receiving Waters:	**Classification (indicate whether fresh or marine):**
Halifax River	Class III marine waters, WBID 2363A

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

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

   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. [Rule 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 60 days of the issuance date of this permit 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-02-013, 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 a daphnid, Ceriodaphnia dubia, Survival and Reproduction Test and a fathead minnow, Pimephales promelas, Larval Survival and Growth Test, 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 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
   (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, 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 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.

(3) 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.

(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-02-013, Section 10.2.6., and the evaluation shall be included with the bioassay laboratory reports.

f. Reporting Requirements

(1) Results from all required tests shall be reported on the Discharge Monitoring Report (DMR) as follows:
(a) Routine and Additional Follow-up Test Results: The calculated IC25 for each test species shall be entered on the DMR.

(2) 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.

(3) 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.

(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 sent to:
Florida Department of Environmental Protection

Central District Office

3319 Maguire Blvd, Suite 232

Orlando, Florida 32803-3767

g. Test Failures

(1) A test fails when the test results do not meet the limits in 7.a.(1).

(2) Additional Follow-up Tests:

(a) If a routine test does not meet the chronic toxicity limitation in 7.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 7.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-02-013.

(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 7.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 7.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.

(f) Upon completion of four consecutive quarterly valid routine tests that demonstrate compliance with the effluent limitation in 7.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.

(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 7.a.(2), 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.):

No administrative or consent orders are active or have been issued during this current permit cycle.

Facility Mixing Zone Details (if applicable):

N/A

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

Date	Parameter and Units	Limit	Result
June 2022	BOD, Carbonaceous 5 day, 20C – Maximum, mg/L (D-001)	10.0	25.6
September 2022	Enterococci - Maximum, #/100mL (R-002)	104.0	20998
September 2022	Coliform, Fecal – Maximum, #/100mL (R-002)	800.0	50000
September 2022	Phosphorus, Total (as P) – Maximum, mg/L (D-001)	2.0	2.3
September 2022	pH – Minimum, s.u. (D-001)	6.5	6.4
November 2022	Coliform, Fecal – Maximum, #/100mL (R-001)	25.0	40

Describe previous FYI and WQBEL study:

The effluent sample collected from the EFD-1 NPDES sampling point for Outfall D-001 for this facility on July 9, 2018, was not acutely toxic to either test species during the 96-hour acute definitive bioassays. Isophorone was detected in the effluent grab sample between the method detection limit (MDL) and practical quantitation limit (PQL).

Describe previous or current Enforcement Actions (including WLs):

A Warning Letter was sent for the facility on March 7, 2023 as a follow up to sanitary sewer overflows the plant and collection system experienced during Hurricanes Ian and Nicole in 2022.

Describe any violations or problems noted in previous inspection:

Multiple effluent exceedances were noted during the DMR review period. In September of 2021, both R-001 and R-002 experienced Maximum Fecal Coliform exceedances. In October of 2021, R-001 experienced a Maximum Fecal Coliform exceedance and R-002 experienced a Maximum Enterococci exceedance.

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

Flow: Annual average flow for D-001 appears to be trending downward over the previous five years from 8.1 MGD in April of 2018 to 6.4 MGD in February of 2023.

CBOD: Annual average CBOD for D-001 appears to be consistently within the range of 0.5 to 0.7 mg/L over the previous five years.

TSS: Annual average TSS for D-001 appears to be consistently within the range of 0.2 to 0.9 mg/L over the previous five years.

pH: Minimum and maximum pH for D-001 has been consistently in the acceptable range of 6.5 to 8.5 s.u. over the previous five years.

Nitrogen, Total: Annual average Total Nitrogen for D-0001 appears to be trending downward over the previous five years from 2.1 mg/L in April of 2018 to 1.7 mg/L in February of 2023.

Phosphorus, Total (as P): Annual average Total Phosphorous for D-001 appears to be consistently within the range of 0.1 to 0.3 mg/L over the previous five years.

Oxygen, Dissolved: Results for Dissolved Oxygen for D-001 have an average of 6.3 mg/L over the previous 5 years.

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.

- **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-2023-04-03-43 **Florida Department of Environmental Protection** Page 1 of 3

FYI3 Daytona Beach-Bethune Point WRF Sampling Inspection **Central Laboratory Submittal Form** last revised Jan 25, 2018

Customer: CEN-DIST Requester: Benjamin Nomann Field Report Prepared By: Kane. VanBuren

Project ID: FYI3 Collected By: Kane. Hall Sampling Agency: FDEP Central

Location: Daytona Beach WRF 1 Shady Pl. Daytona Beach FL 32114	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 4/17/23 Time 829 AM	Eastern Central	Composite end Date Time					Bottle Group(s) (See pg 2): A
Field ID: DAYT	Matrix (type, e.g., Salt, Fresh, etc): Effluent			Diss. Oxygen 7.97	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L) N/A			
WIN/STORET #:	Temp (C) 27.2°	pH 7.5 S.U.		Sample Depth surface	☐ ft ☐ m	Sp. Conductance (umho/cm) 8840			
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt):	Comments:						
Location: Daytona Beach WRF 1 Shady Pl. Daytona Beach FL 32114	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 4/17/23 Time 935 AM	Eastern Central	Composite end Date Time					Bottle Group(s): B
Field ID: DAYT	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): A
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)			A
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt):	Comments:						

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Kane	4/17/23	FEDEX	Five	KK	4/18/23/0917

Request Number: RQ-2023-04-03-43

FY13 Daytona Beach-Bethune Point WRF Sampling Inspector

Customer: CEN-DIST

Project ID: FY13

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Jan 25, 2018

Requester: Benjamin Nomann

Field Report Prepared By: KANE, VANBUREN

Collected By: KANE, Hazel

Sampling Agency: FDEP Central

Location: Daytona Beach WRF 1 Shady Pl. Daytona Beach, FL 32114

Field ID: DAYT

WIN/STORET #:

Latitude: ☐ dd ☐ dms **Longitude:** ☐ dd ☐ dms

☐ Comp ☒ Grab | Collection (comp begin or grab) Date 4/17/23 Time 8:38a | Eastern Central | Composite end Date Time | Bottle Group(s) (See pg 2): A

Matrix (type, e.g., Salt, Fresh, etc): effluent

Diss. Oxygen: 7.97 ☒ mg/L ☐ % sat | Total Res. Chlorine (mg/L): n/a

Temp (C): 27.2°C | pH: 7.5 SU | Sample Depth: surface ☐ ft ☐ m | Sp. Conductance (umho/cm): 889

Salinity (ppt): | Comments:

Location: | **Field ID:** | **WIN/STORET #:**

☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | Eastern Central | Composite end Date Time | Bottle Group(s)

Matrix (type, e.g., Salt, Fresh, etc) | 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:** ☐ dd ☐ dms | Salinity (ppt) | Comments

---

Location: | **Field ID:** | **WIN/STORET #:**

☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | Eastern Central | Composite end Date Time | Bottle Group(s)

Matrix (type, e.g., Salt, Fresh, etc) | 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:** ☐ dd ☐ dms | Salinity (ppt) | Comments

---

Location: | **Field ID:** | **WIN/STORET #:**

☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | Eastern Central | Composite end Date Time | Bottle Group(s)

Matrix (type, e.g., Salt, Fresh, etc) | 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:** ☐ dd ☐ dms | Salinity (ppt) | Comments

---

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
KANE	4/17/23	FEDEX	one		

Appendix D. Chemical Analysis of Effluent

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/17/2023 8:29	Effluent Grab	AGP/LN	Algal Growth Potential	1.60 A	mg DryWt/L	0.300	0.900
4/17/2023 8:29	Effluent Grab	AGP/LN	Algal Growth Potential-Salinity Adjusted	3.00 U	mg DryWt/L	3.0	3.0
4/17/2023 8:29	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Uncorrected	1.3 I	µg/L	0.60	1.8
4/17/2023 8:29	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	1.4 I	µg/L	0.82	2.5
4/17/2023 8:29	Effluent Grab	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.90 U	µg/L	0.90	2.7
4/17/2023 8:29	Effluent Grab	Overflow	Carbonaceous Biochemical Oxygen Demand	1.0 U	mg/L	1.0	2.0
4/17/2023 8:29	Effluent Grab	Toxicology	Bioassay-Acute-Def-FW-C.dubia, LC50	100 L	LC50		
4/17/2023 8:29	Effluent Grab	Toxicology	Bioassay-Acute-Def-FW-Fish, LC50	100 L	LC50		
4/17/2023 8:29	Effluent Grab	Metals	Silver	0.010 U	µg/L	0.010	0.040
4/17/2023 8:29	Effluent Grab	Metals	Calcium	51.4	mg/L	0.075	0.30
4/17/2023 9:35	Field Blank	Metals	Cadmium	0.020 U	µg/L	0.020	0.080
4/17/2023 9:35	Field Blank	Metals	Copper	0.40 U	µg/L	0.40	0.80
4/17/2023 9:35	Field Blank	Metals	Calcium	0.075 U	mg/L	0.075	0.30
4/17/2023 8:29	Effluent Grab	Metals	Selenium	0.20 U	µg/L	0.20	0.80
4/17/2023 8:29	Effluent Grab	Metals	Lead	0.24 I	µg/L	0.20	0.40
4/17/2023 8:29	Effluent Grab	Metals	Sodium	108	mg/L	0.50	2.0
4/17/2023 9:35	Field Blank	Metals	Sodium	0.50 U	mg/L	0.50	2.0
4/17/2023 8:29	Effluent Grab	Metals	Cadmium	0.020 U	µg/L	0.020	0.080
4/17/2023 8:29	Effluent Grab	Metals	Zinc	31	µg/L	5.0	20
4/17/2023 8:29	Effluent Grab	Metals	Copper	0.93	µg/L	0.40	0.80
4/17/2023 9:35	Field Blank	Metals	Lead	0.20 U	µg/L	0.20	0.40
4/17/2023 9:35	Field Blank	Metals	Aluminum	5.0 U	µg/L	5.0	20
4/17/2023 9:35	Field Blank	Metals	Chromium	0.40 U	µg/L	0.40	1.6
4/17/2023 8:29	Effluent Grab	Metals	Magnesium	12.1	mg/L	0.040	0.16
4/17/2023 8:29	Effluent Grab	Metals	Potassium	9.9	mg/L	0.30	1.2
4/17/2023 8:29	Effluent Grab	Metals	Arsenic	0.59	µg/L	0.050	0.20
4/17/2023 8:29	Effluent Grab	Metals	Chromium	0.40 U	µg/L	0.40	1.6
4/17/2023 9:35	Field Blank	Metals	Zinc	5.0 U	µg/L	5.0	20
4/17/2023 9:35	Field Blank	Metals	Silver	0.010 U	µg/L	0.010	0.040
4/17/2023 9:35	Field Blank	Metals	Iron	30 U	µg/L	30	120
4/17/2023 9:35	Field Blank	Metals	Nickel	0.50 U	µg/L	0.50	2.0

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/17/2023 9:35	Field Blank	Metals	Selenium	0.20 U	µg/L	0.20	0.80
4/17/2023 9:35	Field Blank	Metals	Potassium	0.30 U	mg/L	0.30	1.2
4/17/2023 8:29	Effluent Grab	Metals	Aluminum	6.9 I	µg/L	5.0	20
4/17/2023 9:35	Field Blank	Metals	Magnesium	0.040 U	mg/L	0.040	0.16
4/17/2023 9:35	Field Blank	Metals	Arsenic	0.050 U	µg/L	0.050	0.20
4/17/2023 8:29	Effluent Grab	Metals	Nickel	2.3	µg/L	0.50	2.0
4/17/2023 8:29	Effluent Grab	Metals	Iron	31 I	µg/L	30	120
4/17/2023 9:35	Field Blank	Nutrients	Total-P	0.002 U	mg P/L	0.0020	0.0050
4/17/2023 9:35	Field Blank	Nutrients	Sulfate	0.20 U	mg SO4/L	0.20	0.50
4/17/2023 8:29	Effluent Grab	Nutrients	TSS	2 U	mg/L	2.0	10
4/17/2023 8:29	Effluent Grab	Nutrients	Chloride	180	mg Cl/L	0.40	1.0
4/17/2023 8:29	Effluent Grab	Nutrients	Total Alkalinity	133 A	mg CaCO3/L	0.65	2.5
4/17/2023 9:35	Field Blank	Nutrients	Fluoride	0.025 U	mg F/L	0.025	0.10
4/17/2023 9:35	Field Blank	Nutrients	Turbidity	0.10 U	NTU	0.10	1.0
4/17/2023 8:29	Effluent Grab	Nutrients	Organic Carbon	10 A	mg C/L	0.50	1.0
4/17/2023 8:29	Effluent Grab	Nutrients	Fluoride	0.33	mg F/L	0.025	0.10
4/17/2023 8:29	Effluent Grab	Nutrients	Turbidity	0.25 I	NTU	0.10	1.0
4/17/2023 9:35	Field Blank	Nutrients	O-Phosphate-P	0.004 U	mg P/L	0.0040	0.010
4/17/2023 8:29	Effluent Grab	Nutrients	Sulfate	31	mg SO4/L	0.40	1.0
4/17/2023 9:35	Field Blank	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.0040	0.010
4/17/2023 9:35	Field Blank	Nutrients	Chloride	0.20 U	mg Cl/L	0.20	0.50
4/17/2023 8:29	Effluent Grab	Nutrients	NO2NO3-N	0.38	mg N/L	0.0040	0.010
4/17/2023 9:35	Field Blank	Nutrients	Organic Carbon	0.50 U	mg C/L	0.50	1.0
4/17/2023 8:29	Effluent Grab	Nutrients	Kjeldahl Nitrogen	0.81	mg N/L	0.16	0.40
4/17/2023 8:29	Effluent Grab	Nutrients	Ammonia-N	0.052	mg N/L	0.0040	0.010
4/17/2023 9:35	Field Blank	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.080	0.20
4/17/2023 9:35	Field Blank	Nutrients	Ammonia-N	0.002 U	mg N/L	0.0020	0.0050
4/17/2023 9:35	Field Blank	Nutrients	Color (true)	2.5 U	PCU	2.5	6.0
4/17/2023 8:29	Effluent Grab	Nutrients	Total-P	0.25	mg P/L	0.010	0.050
4/17/2023 8:29	Effluent Grab	Nutrients	O-Phosphate-P	0.21	mg P/L	0.016	0.040
4/17/2023 8:29	Effluent Grab	Nutrients	Color (true)	51	PCU	2.5	6.0
4/17/2023 9:35	Field Blank	Nutrients	Total Alkalinity	0.65 U	mg CaCO3/L	0.65	2.5
4/17/2023 8:29	Effluent Grab	Pesticides	Ibuprofen	0.080 U	µg/L	0.080	0.32
4/17/2023 8:29	Effluent Grab	Pesticides	Atrazine	20	ng/L	0.20	1.0

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/17/2023 8:29	Effluent Grab	Pesticides	Carfentrazone Ethyl	0.15 U	ng/L	0.15	0.77
4/17/2023 8:29	Effluent Grab	Pesticides	Chlorpyrifos Methyl	0.10 U	ng/L	0.10	0.51
4/17/2023 8:29	Effluent Grab	Pesticides	Dimethomorph	0.31 U	ng/L	0.31	1.5
4/17/2023 8:29	Effluent Grab	Pesticides	Sulfentrazone	11	ng/L	1.4	7.2
4/17/2023 8:29	Effluent Grab	Pesticides	Terbuthylazine	0.20 U	ng/L	0.20	1.0
4/17/2023 8:29	Effluent Grab	Pesticides	EPTC	0.51 U	ng/L	0.51	2.6
4/17/2023 8:29	Effluent Grab	Pesticides	Fipronil	28	ng/L	0.20	1.0
4/17/2023 8:29	Effluent Grab	Pesticides	Fipronil Desulfinyl	12	ng/L	0.10	0.51
4/17/2023 8:29	Effluent Grab	Pesticides	Fluazifop-P-butyl	0.10 U	ng/L	0.10	0.51
4/17/2023 8:29	Effluent Grab	Pesticides	Prometon	3.1 U	ng/L	3.1	15
4/17/2023 9:35	Field Blank	Pesticides	Demeton	3.6 U	ng/L	3.6	18
4/17/2023 9:35	Field Blank	Pesticides	Difenoconazole	0.62 U	ng/L	0.62	3.1
4/17/2023 9:35	Field Blank	Pesticides	Dimethomorph	0.31 U	ng/L	0.31	1.5
4/17/2023 9:35	Field Blank	Pesticides	Disulfoton	0.62 U	ng/L	0.62	3.1
4/17/2023 9:35	Field Blank	Pesticides	Parathion Ethyl	0.15 U	ng/L	0.15	0.77
4/17/2023 9:35	Field Blank	Pesticides	Parathion Methyl	0.21 U	ng/L	0.21	1.0
4/17/2023 9:35	Field Blank	Pesticides	Ethoprop	0.13 U	ng/L	0.13	0.64
4/17/2023 9:35	Field Blank	Pesticides	Fluazifop-P-butyl	0.10 U	ng/L	0.10	0.52
4/17/2023 9:35	Field Blank	Pesticides	Flutolanil	0.10 U	ng/L	0.10	0.52
4/17/2023 9:35	Field Blank	Pesticides	Prometon	3.1 U	ng/L	3.1	15
4/17/2023 8:29	Effluent Grab	Pesticides	Azinphos Methyl	3.1 UJ	ng/L	3.1	15
4/17/2023 8:29	Effluent Grab	Pesticides	Cyprodinil	0.20 U	ng/L	0.20	1.0
4/17/2023 8:29	Effluent Grab	Pesticides	Dimethenamid	0.10 UJ	ng/L	0.10	0.51
4/17/2023 8:29	Effluent Grab	Pesticides	Propargite	0.82 U	ng/L	0.82	4.1
4/17/2023 8:29	Effluent Grab	Pesticides	Pyridaben	1.4 U	ng/L	1.4	7.2
4/17/2023 8:29	Effluent Grab	Pesticides	Stirophos	0.41 U	ng/L	0.41	3.3
4/17/2023 8:29	Effluent Grab	Pesticides	Etridiazole	0.10 U	ng/L	0.10	0.51
4/17/2023 8:29	Effluent Grab	Pesticides	Fipronil Sulfone	8.7	ng/L	0.10	0.51
4/17/2023 8:29	Effluent Grab	Pesticides	Flumioxazin	3.1 U	ng/L	3.1	15
4/17/2023 8:29	Effluent Grab	Pesticides	Fluxapyroxad	0.26 U	ng/L	0.26	1.3
4/17/2023 8:29	Effluent Grab	Pesticides	Pronamide	0.10 UJ	ng/L	0.10	0.51
4/17/2023 9:35	Field Blank	Pesticides	Alachlor	0.41 U	ng/L	0.41	2.1
4/17/2023 9:35	Field Blank	Pesticides	Azinphos Methyl	3.1 UJ	ng/L	3.1	15
4/17/2023 9:35	Field Blank	Pesticides	Carfentrazone Ethyl	0.15 U	ng/L	0.15	0.77

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/17/2023 9:35	Field Blank	Pesticides	Diazinon	0.13 U	ng/L	0.13	0.64
4/17/2023 9:35	Field Blank	Pesticides	Mevinphos	1.0 U	ng/L	1.0	5.2
4/17/2023 9:35	Field Blank	Pesticides	Propanil	0.10 U	ng/L	0.10	0.52
4/17/2023 9:35	Field Blank	Pesticides	Pyraflufen Ethyl	0.31 U	ng/L	0.31	1.5
4/17/2023 9:35	Field Blank	Pesticides	Sulfentrazone	1.4 U	ng/L	1.4	7.2
4/17/2023 9:35	Field Blank	Pesticides	Tebuconazole	1.4 U	ng/L	1.4	7.2
4/17/2023 9:35	Field Blank	Pesticides	Ibuprofen	0.080 U	µg/L	0.080	0.32
4/17/2023 9:35	Field Blank	Pesticides	Naproxen	0.0080 U	µg/L	0.0080	0.032
4/17/2023 8:29	Effluent Grab	Pesticides	Acetochlor	0.20 U	ng/L	0.20	1.0
4/17/2023 8:29	Effluent Grab	Pesticides	Propanil	0.10 U	ng/L	0.10	0.51
4/17/2023 8:29	Effluent Grab	Pesticides	Pyraflufen Ethyl	0.31 U	ng/L	0.31	1.5
4/17/2023 8:29	Effluent Grab	Pesticides	Pyriproxyfen	0.26 U	ng/L	0.26	1.6
4/17/2023 8:29	Effluent Grab	Pesticides	Fipronil Sulfide	8.7	ng/L	0.10	0.51
4/17/2023 8:29	Effluent Grab	Pesticides	Fonofos	0.15 UJ	ng/L	0.15	0.77
4/17/2023 8:29	Effluent Grab	Pesticides	Mevinphos	1.0 U	ng/L	1.0	5.1
4/17/2023 8:29	Effluent Grab	Pesticides	Oxyfluorfen	0.20 U	ng/L	0.20	1.0
4/17/2023 8:29	Effluent Grab	Pesticides	Phorate	0.26 U	ng/L	0.26	1.3
4/17/2023 9:35	Field Blank	Pesticides	Atrazine Desethyl	1.3 U	ng/L	1.3	6.7
4/17/2023 9:35	Field Blank	Pesticides	Chlorpyrifos Ethyl	0.31 U	ng/L	0.31	1.5
4/17/2023 9:35	Field Blank	Pesticides	Napropamide	0.72 U	ng/L	0.72	3.6
4/17/2023 9:35	Field Blank	Pesticides	Hexazinone	0.52 U	ng/L	0.52	2.6
4/17/2023 9:35	Field Blank	Pesticides	Loratadine	0.31 UJ	ng/L	0.31	1.5
4/17/2023 9:35	Field Blank	Pesticides	Pronamide	0.10 U	ng/L	0.10	0.52
4/17/2023 9:35	Field Blank	Pesticides	Terbuthylazine	0.21 U	ng/L	0.21	1.0
4/17/2023 8:29	Effluent Grab	Pesticides	Propiconazole	0.61 U	ng/L	0.61	3.1
4/17/2023 8:29	Effluent Grab	Pesticides	Loratadine	3.6 J	ng/L	0.31	1.5
4/17/2023 8:29	Effluent Grab	Pesticides	Metalaxyl	0.51 U	ng/L	0.51	2.6
4/17/2023 8:29	Effluent Grab	Pesticides	Metribuzin	1.0 I	ng/L	0.41	2.0
4/17/2023 8:29	Effluent Grab	Pesticides	Naled	2.6 U	ng/L	2.6	13
4/17/2023 8:29	Effluent Grab	Pesticides	Napropamide	0.72 U	ng/L	0.72	3.6
4/17/2023 8:29	Effluent Grab	Pesticides	Prodiamine	0.20 U	ng/L	0.20	1.0
4/17/2023 9:35	Field Blank	Pesticides	Acetochlor	0.21 U	ng/L	0.21	1.0
4/17/2023 9:35	Field Blank	Pesticides	Carbophenothion	0.52 U	ng/L	0.52	2.6
4/17/2023 9:35	Field Blank	Pesticides	Coumaphos	1.1 U	ng/L	1.1	5.7

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/17/2023 9:35	Field Blank	Pesticides	Cyprodinil	0.21 U	ng/L	0.21	1.0
4/17/2023 9:35	Field Blank	Pesticides	Dithiopyr	1.0 U	ng/L	1.0	5.2
4/17/2023 9:35	Field Blank	Pesticides	Ethion	0.31 U	ng/L	0.31	1.5
4/17/2023 9:35	Field Blank	Pesticides	Fludioxonil	0.10 U	ng/L	0.10	0.52
4/17/2023 9:35	Field Blank	Pesticides	Iprodione	0.52 U	ng/L	0.52	2.6
4/17/2023 9:35	Field Blank	Pesticides	Phorate	0.26 U	ng/L	0.26	1.3
4/17/2023 9:35	Field Blank	Pesticides	Pyriproxyfen	0.26 U	ng/L	0.26	1.6
4/17/2023 9:35	Field Blank	Pesticides	Simazine	0.26 U	ng/L	0.26	1.3
4/17/2023 8:29	Effluent Grab	Pesticides	Bromacil	2.6 I	ng/L	0.61	3.1
4/17/2023 8:29	Effluent Grab	Pesticides	Difenoconazole	0.61 U	ng/L	0.61	3.1
4/17/2023 8:29	Effluent Grab	Pesticides	Dithiopyr	1.0 U	ng/L	1.0	5.1
4/17/2023 8:29	Effluent Grab	Pesticides	Flutolanil	0.10 U	ng/L	0.10	0.51
4/17/2023 8:29	Effluent Grab	Pesticides	Imazalil	0.67 U	ng/L	0.67	3.3
4/17/2023 8:29	Effluent Grab	Pesticides	Parathion Methyl	0.20 U	ng/L	0.20	1.0
4/17/2023 8:29	Effluent Grab	Pesticides	Pendimethalin	0.77 UJ	ng/L	0.77	3.8
4/17/2023 9:35	Field Blank	Pesticides	Ametryn	1.1 U	ng/L	1.1	5.7
4/17/2023 9:35	Field Blank	Pesticides	Atrazine	0.21 U	ng/L	0.21	1.0
4/17/2023 9:35	Field Blank	Pesticides	Azoxystrobin	0.41 U	ng/L	0.41	2.1
4/17/2023 9:35	Field Blank	Pesticides	Cyanazine	5.2 U	ng/L	5.2	26
4/17/2023 9:35	Field Blank	Pesticides	Oxyfluorfen	0.21 U	ng/L	0.21	1.0
4/17/2023 9:35	Field Blank	Pesticides	Etridiazole	0.10 U	ng/L	0.10	0.52
4/17/2023 9:35	Field Blank	Pesticides	Fenamiphos	0.46 U	ng/L	0.46	2.3
4/17/2023 9:35	Field Blank	Pesticides	Malathion	0.36 U	ng/L	0.36	1.8
4/17/2023 9:35	Field Blank	Pesticides	Metribuzin	0.41 U	ng/L	0.41	2.1
4/17/2023 9:35	Field Blank	Pesticides	Phenytoin	5.5 U	ng/L	5.5	27
4/17/2023 9:35	Field Blank	Pesticides	Terbufos	0.21 U	ng/L	0.21	1.0
4/17/2023 8:29	Effluent Grab	Pesticides	Sucralose	57	µg/L	0.10	0.40
4/17/2023 8:29	Effluent Grab	Pesticides	Naproxen	0.0080 U	µg/L	0.0080	0.032
4/17/2023 8:29	Effluent Grab	Pesticides	Ametryn	1.1 U	ng/L	1.1	5.6
4/17/2023 8:29	Effluent Grab	Pesticides	Atrazine Desethyl	5.4 I	ng/L	1.3	6.7
4/17/2023 8:29	Effluent Grab	Pesticides	Azoxystrobin	3.3	ng/L	0.41	2.0
4/17/2023 8:29	Effluent Grab	Pesticides	Chlorfenapyr	6.8 J	ng/L	0.31	1.5
4/17/2023 8:29	Effluent Grab	Pesticides	Cyanazine	5.1 U	ng/L	5.1	26
4/17/2023 8:29	Effluent Grab	Pesticides	Triadimefon	0.15 U	ng/L	0.15	0.77

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/17/2023 8:29	Effluent Grab	Pesticides	Ethion	0.31 U	ng/L	0.31	1.5
4/17/2023 8:29	Effluent Grab	Pesticides	Molinate	0.26 U	ng/L	0.26	1.3
4/17/2023 8:29	Effluent Grab	Pesticides	Oxadiazon	0.36 U	ng/L	0.36	1.8
4/17/2023 9:35	Field Blank	Pesticides	Bromacil	0.62 U	ng/L	0.62	3.1
4/17/2023 9:35	Field Blank	Pesticides	Butylate	0.21 U	ng/L	0.21	1.0
4/17/2023 9:35	Field Blank	Pesticides	Chlorfenapyr	0.31 UJ	ng/L	0.31	1.5
4/17/2023 9:35	Field Blank	Pesticides	Myclobutanil	0.36 U	ng/L	0.36	1.8
4/17/2023 9:35	Field Blank	Pesticides	Naled	2.6 U	ng/L	2.6	13
4/17/2023 9:35	Field Blank	Pesticides	Norflurazon	1.0 U	ng/L	1.0	5.2
4/17/2023 9:35	Field Blank	Pesticides	Oxadiazon	0.36 U	ng/L	0.36	1.8
4/17/2023 9:35	Field Blank	Pesticides	Fipronil	0.21 U	ng/L	0.21	1.0
4/17/2023 9:35	Field Blank	Pesticides	Metolachlor	0.77 U	ng/L	0.77	3.9
4/17/2023 9:35	Field Blank	Pesticides	Sucralose	0.010 U	µg/L	0.010	0.040
4/17/2023 8:29	Effluent Grab	Pesticides	Alachlor	0.41 U	ng/L	0.41	2.0
4/17/2023 8:29	Effluent Grab	Pesticides	Butylate	0.20 U	ng/L	0.20	1.0
4/17/2023 8:29	Effluent Grab	Pesticides	Carbophenothion	0.51 U	ng/L	0.51	2.6
4/17/2023 8:29	Effluent Grab	Pesticides	Tebuconazole	6.8 I	ng/L	1.4	7.2
4/17/2023 8:29	Effluent Grab	Pesticides	Terbufos	0.20 U	ng/L	0.20	1.0
4/17/2023 8:29	Effluent Grab	Pesticides	Thiobencarb	0.51 U	ng/L	0.51	2.6
4/17/2023 8:29	Effluent Grab	Pesticides	Fenamiphos	0.46 U	ng/L	0.46	2.3
4/17/2023 8:29	Effluent Grab	Pesticides	Fludioxonil	2.5	ng/L	0.10	0.51
4/17/2023 8:29	Effluent Grab	Pesticides	Hexazinone	4.3	ng/L	0.51	2.6
4/17/2023 8:29	Effluent Grab	Pesticides	Norflurazon	1.0 U	ng/L	1.0	5.1
4/17/2023 8:29	Effluent Grab	Pesticides	Prometryn	0.36 U	ng/L	0.36	1.8
4/17/2023 9:35	Field Blank	Pesticides	Pendimethalin	0.77 UJ	ng/L	0.77	3.9
4/17/2023 9:35	Field Blank	Pesticides	Fenbuconazole	0.52 U	ng/L	0.52	2.6
4/17/2023 9:35	Field Blank	Pesticides	Fipronil Desulfinyl	0.10 U	ng/L	0.10	0.52
4/17/2023 9:35	Field Blank	Pesticides	Fipronil Sulfone	0.10 U	ng/L	0.10	0.52
4/17/2023 9:35	Field Blank	Pesticides	Flumioxazin	3.1 U	ng/L	3.1	15
4/17/2023 9:35	Field Blank	Pesticides	Fluxapyroxad	0.26 U	ng/L	0.26	1.3
4/17/2023 9:35	Field Blank	Pesticides	Metalaxyl	0.52 U	ng/L	0.52	2.6
4/17/2023 9:35	Field Blank	Pesticides	Prodiamine	0.21 U	ng/L	0.21	1.0
4/17/2023 9:35	Field Blank	Pesticides	Prometryn	0.36 U	ng/L	0.36	1.8
4/17/2023 9:35	Field Blank	Pesticides	Propargite	0.82 U	ng/L	0.82	4.1

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/17/2023 9:35	Field Blank	Pesticides	Propiconazole	0.62 U	ng/L	0.62	3.1
4/17/2023 9:35	Field Blank	Pesticides	Stirophos	0.41 U	ng/L	0.41	3.3
4/17/2023 8:29	Effluent Grab	Pesticides	Caffeine	47 J	ng/L	7.7	38
4/17/2023 8:29	Effluent Grab	Pesticides	Chlorpyrifos Ethyl	0.31 U	ng/L	0.31	1.5
4/17/2023 8:29	Effluent Grab	Pesticides	Coumaphos	1.1 U	ng/L	1.1	5.6
4/17/2023 8:29	Effluent Grab	Pesticides	Demeton	3.6 U	ng/L	3.6	18
4/17/2023 8:29	Effluent Grab	Pesticides	Diazinon	0.13 U	ng/L	0.13	0.64
4/17/2023 8:29	Effluent Grab	Pesticides	Disulfoton	0.61 U	ng/L	0.61	3.1
4/17/2023 8:29	Effluent Grab	Pesticides	Simazine	11	ng/L	0.26	1.3
4/17/2023 8:29	Effluent Grab	Pesticides	Ethoprop	0.13 U	ng/L	0.13	0.64
4/17/2023 8:29	Effluent Grab	Pesticides	Fenbuconazole	0.51 U	ng/L	0.51	2.6
4/17/2023 8:29	Effluent Grab	Pesticides	Iprodione	0.51 U	ng/L	0.51	2.6
4/17/2023 8:29	Effluent Grab	Pesticides	Malathion	0.36 U	ng/L	0.36	1.8
4/17/2023 8:29	Effluent Grab	Pesticides	Metolachlor	0.77 U	ng/L	0.77	3.8
4/17/2023 8:29	Effluent Grab	Pesticides	Myclobutanil	0.36 U	ng/L	0.36	1.8
4/17/2023 8:29	Effluent Grab	Pesticides	Parathion Ethyl	0.15 U	ng/L	0.15	0.77
4/17/2023 8:29	Effluent Grab	Pesticides	Phenytoin	46	ng/L	5.4	27
4/17/2023 9:35	Field Blank	Pesticides	Caffeine	7.7 U	ng/L	7.7	39
4/17/2023 9:35	Field Blank	Pesticides	Chlorpyrifos Methyl	0.10 U	ng/L	0.10	0.52
4/17/2023 9:35	Field Blank	Pesticides	Dimethenamid	0.10 U	ng/L	0.10	0.52
4/17/2023 9:35	Field Blank	Pesticides	EPTC	0.52 U	ng/L	0.52	2.6
4/17/2023 9:35	Field Blank	Pesticides	Molinate	0.26 U	ng/L	0.26	1.3
4/17/2023 9:35	Field Blank	Pesticides	Fipronil Sulfide	0.10 U	ng/L	0.10	0.52
4/17/2023 9:35	Field Blank	Pesticides	Fonofos	0.15 U	ng/L	0.15	0.77
4/17/2023 9:35	Field Blank	Pesticides	Imazalil	0.67 U	ng/L	0.67	3.4
4/17/2023 9:35	Field Blank	Pesticides	Thiobencarb	0.52 U	ng/L	0.52	2.6
4/17/2023 9:35	Field Blank	Pesticides	Triadimefon	0.15 U	ng/L	0.15	0.77
4/17/2023 9:35	Field Blank	Pesticides	Pyridaben	1.4 U	ng/L	1.4	7.2
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	4-Nitrophenol	11 U	µg/L	11	45
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Anthracene	0.057 U	µg/L	0.057	0.23
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	2,4-Dichlorophenol	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	2,6-Dinitrotoluene	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Azobenzene/1,2-Diphenylhydrazine	0.052 U	µg/L	0.052	0.21

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Benzidine	10 U	µg/L	10	42
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Benzo(a)anthracene	0.026 U	µg/L	0.026	0.10
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Butyl benzyl phthalate	1.0 U	µg/L	1.0	4.2
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.026 U	µg/L	0.026	0.10
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Phenanthrene	0.10 U	µg/L	0.10	0.42
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Pyrene	0.10 U	µg/L	0.10	0.42
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	2.3 U	µg/L	2.3	9.1
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Phenol	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Pyrene	0.11 U	µg/L	0.11	0.45
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	2,4-Dimethylphenol	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.028 U	µg/L	0.028	0.11
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	2-Chloronaphthalene	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.2 U	µg/L	5.2	21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Hexachlorobutadiene	0.052 U	µg/L	0.052	0.21
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Diethyl phthalate	2.3 U	µg/L	2.3	9.1
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Dimethyl phthalate	0.23 U	µg/L	0.23	0.91
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Isophorone	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	0.11 U	µg/L	0.11	0.45
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	2-Chlorophenol	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Acenaphthene	0.028 U	µg/L	0.028	0.11
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.028 U	µg/L	0.028	0.11
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrophenol	10 U	µg/L	10	42
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Anthracene	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Benzo(a)pyrene	0.026 U	µg/L	0.026	0.10
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	4-Nitrophenol	10 U	µg/L	10	42
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Fluoranthene	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Hexachlorobenzene	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	N-Nitrosodimethylamine	2.1 U	µg/L	2.1	8.3

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.028 U	µg/L	0.028	0.11
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Nitrobenzene	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.057 U	µg/L	0.057	0.23
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	2-Nitrophenol	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Benzo(b)fluoranthene	0.026 U	µg/L	0.026	0.10
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Chrysene	0.026 U	µg/L	0.026	0.10
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.026 U	µg/L	0.026	0.10
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Isophorone	0.052 U	µg/L	0.052	0.21
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.028 U	µg/L	0.028	0.11
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.7 U	µg/L	5.7	23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Hexachloroethane	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Pentachlorophenol	0.57 U	µg/L	0.57	2.3
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Acenaphthylene	0.028 U	µg/L	0.028	0.11
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Fluorene	0.026 U	µg/L	0.026	0.10
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.052 U	µg/L	0.052	0.21
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.028 U	µg/L	0.028	0.11
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Butyl benzyl phthalate	1.1 U	µg/L	1.1	4.5
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Di-n-butyl phthalate	2.3 U	µg/L	2.3	9.1
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Fluorene	0.028 U	µg/L	0.028	0.11
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Hexachlorobenzene	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Hexachlorobutadiene	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Naphthalene	0.11 U	µg/L	0.11	0.45
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.4 U	µg/L	3.4	14
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	11 U	µg/L	11	45
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	2,4-Dimethylphenol	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.026 U	µg/L	0.026	0.10
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.052 U	µg/L	0.052	0.21

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Diethyl phthalate	2.1 U	µg/L	2.1	8.3
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Pentachlorophenol	0.52 U	µg/L	0.52	2.1
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Phenol	0.052 U	µg/L	0.052	0.21
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Chrysene	0.028 U	µg/L	0.028	0.11
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Fluoranthene	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Phenanthrene	0.11 U	µg/L	0.11	0.45
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Azobenzene/1,2-Diphenylhydrazine	0.057 U	µg/L	0.057	0.23
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	2-Chlorophenol	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.1 U	µg/L	3.1	12
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Acenaphthene	0.026 U	µg/L	0.026	0.10
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Di-n-butyl phthalate	2.1 U	µg/L	2.1	8.3
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Dimethyl phthalate	0.21 U	µg/L	0.21	0.83
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Naphthalene	0.10 U	µg/L	0.10	0.42
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.028 U	µg/L	0.028	0.11
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	2-Nitrophenol	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Benzidine	11 U	µg/L	11	45
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrotoluene	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	3,3'-Dichlorobenzidine	10 U	µg/L	10	42
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Acenaphthylene	0.026 U	µg/L	0.026	0.10
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Benzo(k)fluoranthene	0.026 U	µg/L	0.026	0.10
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Di-n-octyl phthalate	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Hexachloroethane	0.052 U	µg/L	0.052	0.21
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	0.10 U	µg/L	0.10	0.42
4/17/2023 8:29	Effluent Grab	Priority Organic Pollutants	Nitrobenzene	0.052 U	µg/L	0.052	0.21
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.057 U	µg/L	0.057	0.23
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.028 U	µg/L	0.028	0.11
4/17/2023 9:35	Field Blank	Priority Organic Pollutants	2,4-Dinitrophenol	11 U	µg/L	11	45

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
4/17/2023 8:29	Effluent Grab	Nutrients	Temperature	27.2	C		
4/17/2023 8:29	Effluent Grab	Nutrients	Specific Conductance	889	µmhos/cm		
4/17/2023 8:29	Effluent Grab	Nutrients	pH	7.5			
4/17/2023 8:29	Effluent Grab	Nutrients	Dissolved Oxygen %Sat	7.97	%Sat		