# *Effluent Quality Assessment of Edgewater WRF Volusia County NPDES # FL0021431 Sampled February 07, 2022*

**Division of Environmental Assessment and Restoration**
**Florida Department of Environmental Protection**
**April 2022**

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# Summary of Results

The facility was not discharging at the time of inspection. All analytes measured in the effluent grab sample complied with Class III Water Quality Criteria for Marine Waters and effluent permit limits. There were eighteen organic constituents detected in the effluent sample.

# Facility Overview

The Edgewater WRF Facility is a domestic wastewater treatment facility. A Facility Summary, including a description of the facility, summary of permit limits, and any relevant Administrative Order (AO), Consent Order (CO), and Discharge Monitoring Report (DMR) information is provided in Appendix A. The effluent is intermittently discharged into Mosquito Lagoon, a Class III Marine Water [waterbody identification (WBID) 2924B2] (Figure 1).

Receiving waters for this facility fall under the Estuary-Specific Numeric Interpretations of the Narrative Nutrient Criteria for Mosquito Lagoon: Ponce de Leon to Edgewater. For this region, the NNC, expressed as annual geometric means, are 0.049 mg/L total phosphorus, 0.51 mg/L total nitrogen, and 4.0 µg/L chlorophyll *a* (Subparagraph 62-302.532(1)(aa)13., 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 EFA-1, for outfall D-001 on February 7, 2022. Most permit limits apply to EFD-1 or EFD-2 and are included in the tables for reference. There are effluent permit limits for fecal coliforms, enterococci, and acute definitive toxicity bioassay. These tests were not performed because the facility was not discharging at the time of collection. The permit specifies composite samples for carbonaceous biochemical oxygen demand, total suspended solids, total nitrogen, total phosphorus, and total copper analyses and only grab samples were collected.

Samples were collected by Phil Kane and Cory Roick (Central District Office). Analyses were performed by Eurofins Test America Laboratories in Tampa 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.

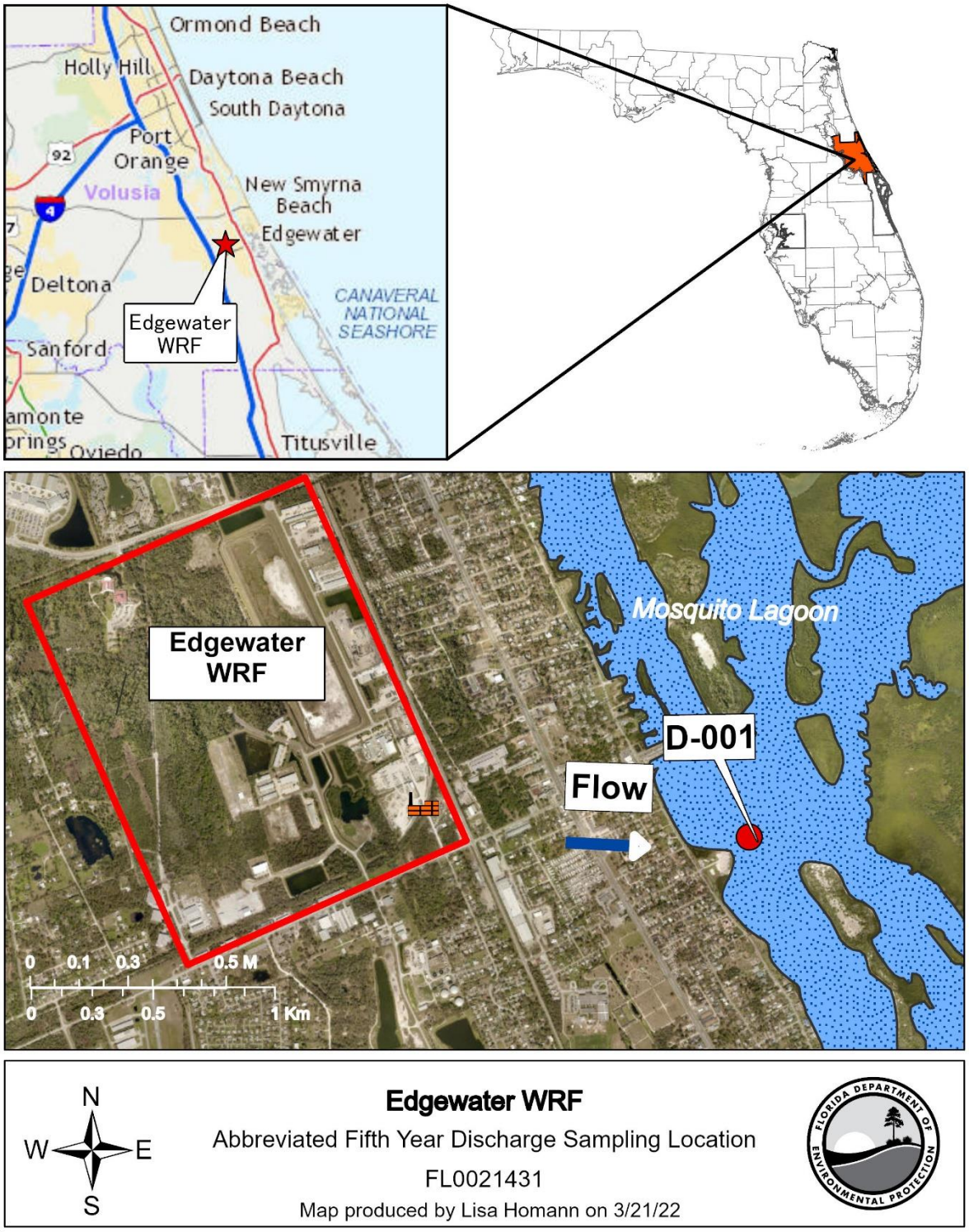



**Figure 1. Map of Facility and Discharge Location**

# Results

## Physical and Chemical Parameters (See Table 1 and Appendices C and 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 Class III Water Quality Criteria for Marine Waters and effluent 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.

## Metals (See Table 3 and Appendix D)

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

- Nickel was detected in the blank.

## Organic Constituents (See Table 4 and Appendix D)

- Atrazine, atrazine desethyl, azinphos methyl, azoxystrobin, chlorfenapyr, fipronil desulfinyl, fludioxonil, flutolanil, fluxapyroxad, hexazinone, loratadine, phenytoin, prodiamine, propiconazole, simazine, sulfentrazone, tebuconazole, and hexachlorocyclopentadiene 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.

## 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 EFA-1 |
|---|---|---|---|---|
| Temperature | C | - | - | 20.7 |
| pH | SU | 6.5 - 8.5 | 6.0 - 8.5 s (EFD-2) | 7.4 |
| Specific Conductance | µmhos/cm | - | - | 763 |
| Salinity | ppt | - | - | 0.4 c |
| Dissolved Oxygen | % saturation | ≥ 42 | - | 85.6 c |
| Dissolved Oxygen | mg/L | - | ≥ 5.0 s (EFD-2) | 7.7 |
| Total Residual Chlorine - After Disinfection | mg/L | - | ≥ 1.0 s (EFA-1) | 3.1 |
| Total Residual Chlorine - After Dechlorination [1] | mg/L | - | ≤ 0.01 s (EFD-2) | 0.01 U |

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

## Table 2. Analytical water chemistry data

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

| Analyte | Units | Class III Criteria | Effluent Permit Limits | Effluent Grab EFA-1 |
|---|---|---|---|---|
| Ortho-phosphate | mg P/L | - | - | 0.021 |
| Total Phosphorus | mg P/L | ≤ 0.049 g | ≤ 2.0 s (EFD-1) | 0.088 |
| Total Ammonia | mg N/L | - | - | 0.048 |
| Un-ionized Ammonia (calculated salinity) | mg N/L | - | - | < 0.02 c |
| Nitrate and Nitrite | mg N/L | - | - | 1.4 |
| Total Kjeldahl Nitrogen | mg N/L | - | - | 1.1 |
| Organic Nitrogen | mg N/L | - | - | 1.1 c |
| Total Nitrogen | mg N/L | ≤ 0.51 g | ≤ 6.0 s (EFD-1) | 2.5 c |
| Total Organic Carbon | mg C/L | - | - | 14 |
| Chlorophyll *a* - Corrected | µg/L | ≤ 4.0 g | - | 0.96 U |
| Phaeophytin | µg/L | - | - | 1.0 U |
| CBOD, 5 day, N - inhibited | mg/L | - | ≤ 10.0 s (EFD-1) | 2.0 U |
| Hardness | mg CaCO3/L | - | - | 157 c |
| Total Suspended Solids | mg/L | - | ≤ 10.0 s (EFD-1) | 2 I |
| Turbidity | NTU | ≤ 29 t | - | 1.1 A |
| Color (true) | PCU | - | - | 6.1 A |
| Alkalinity | mg CaCO3/L | - | - | 125 A |
| Chloride | mg Cl/L | - | - | 130 A |
| Fluoride | mg F/L | ≤ 5.0 | - | 0.11 |
| Sulfate | mg SO4/L | - | - | 46 A |

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
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 EFA-1 |
|---|---|---|---|---|
| Aluminum | µg/L | ≤ 1500 | - | 157 |
| Arsenic | µg/L | ≤ 50 | - | 0.17 I |
| Cadmium | µg/L | ≤ 8.8 | - | 0.023 I |
| Calcium | mg/L | - | - | 53.4 |
| Chromium, Total [2] | µg/L | ≤ 50 | - | 2.6 |
| Copper | µg/L | ≤ 3.7 | ≤ 7.7 s (EFD-1) | 1.61 |
| Iron | µg/L | ≤ 300 | - | 36 I |
| Lead | µg/L | ≤ 8.5 | - | 0.20 U |
| Magnesium | mg/L | - | - | 5.82 |
| Nickel [3] | µg/L | ≤ 8.3 | - | 6.5 |
| Potassium | mg/L | - | - | 12.0 |
| Selenium | µg/L | ≤ 71 | - | 0.20 U |
| Silver | µg/L | ≤ 2.3 | - | 0.010 U |
| Sodium | mg/L | - | - | 89.2 |
| Zinc | µg/L | ≤ 86 | - | 48 |

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.
s - Single sample
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
U - Material analyzed for but not detected; value reported is the method detection limit
2 - Class III Marine Water Quality Criterion (Paragrapah 62-302.530(19)(b), F.A.C.) is for chromium-VI
3 - Analyte detected in the blank

## Table 4. 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 EFA-1 |
|---|---|---|---|---|
| Atrazine | ng/L | - | - | 48 |
| Atrazine Desethyl | ng/L | - | - | 2.7 I |
| Azinphos Methyl | ng/L | - | - | 3.7 IJ |
| Azoxystrobin | ng/L | - | - | 6.5 |
| Chlorfenapyr | ng/L | - | - | 5.5 |
| Fipronil Desulfinyl | ng/L | - | - | 0.40 I |
| Fludioxonil | ng/L | - | - | 0.21 I |
| Flutolanil | ng/L | - | - | 0.33 I |
| Fluxapyroxad | ng/L | - | - | 0.26 I |
| Hexazinone | ng/L | - | - | 2.4 |
| Loratadine | ng/L | - | - | 6.7 |
| Phenytoin | ng/L | - | - | 63 |
| Prodiamine | ng/L | - | - | 0.18 I |
| Propiconazole | ng/L | - | - | 1.0 I |
| Simazine | ng/L | - | - | 22 |
| Sulfentrazone | ng/L | - | - | 9.7 |
| Tebuconazole | ng/L | - | - | 17 |
| Hexachlorocyclopentadiene | µµg/L | - | - | 0.30 |

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:** Jenny E. Farrell | **Contact Number:** 407-897-4173 |
| **Facility Name (as it appears on permit):** Edgewater WRF | **Former Names:** N/A |
| **NPDES Permit Number:** FL0021431 | **Permit Expiration Date:** 06/10/2022 |
| **Physical Address:** 500 W Ocean Avenue, Edgewater, FL 32132-100 | |
| **District:** Central | **County:** Volusia |
| **Function of Facility:** Domestic Wastewater Treatment Facility | |
| **Facility Type:** Domestic Wastewater | **Permitted Capacity (MGD):** 2.75 MGD AADF |
| **Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months):** D-001 outfall flow: 0.254 MGD annual average reported on the December 2021 DMR (January 2021 through December 2021 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: 1.181 MGD AADF as reported on the December 2021 DMR (January 2021 through December 2021 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, automatic sampler located at post aeration tank and EFD-2 – Sample point located at post aeration tank. The sampling location of R-001 is EFA-1, located at the chlorine contact chamber effluent. Total suspended solids grab samples are collected from EFB-1, after filtration and prior to disinfection and OTH-1, supplemental surface water (borrow pit). | |
| **Description of Permitted Outfall:** An existing 0.83 MGD annual average daily flow discharge to Indian River North (Mosquito Lagoon), Class III Marine waters, (WBID# 2924B2) which is approximately 150 feet in length and discharges at a depth of approximately 6.5 feet. The point of discharge is located approximately at latitude 28°59' 23" N, longitude 80°53' 59" W. | |
| **Description of Treatment Process (if multiple discharge points, include a detailed map or diagram of facility):** The plant consists of influent screening, grit removal, biological nutrient removal (Bardenpho Process), chemical feed facilities, secondary clarification, tertiary filtration, high level disinfection, with dechlorination and post aeration for surface water discharge, and with aerobic digestion of biosolids to provide Class B stabilization. | |

| 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 Surface Water) | MGD | Max | 6.0 | Report | -- | -- | Continuous | Recording Flow Meter with Totalizer | FLW-1 | See I.Error! Reference source not found..Error! Reference source not found. |
| BOD, Carbonaceous 5 day, 20C | mg/L | Max | 5.0 | 6.25 | 7.50 | 10.0 | Weekly | 16-hr FPC | EFD-1 | |
| Solids, Total Suspended | mg/L | Max | 5.0 | 6.25 | 7.50 | 10.0 | Weekly | 16-hr FPC | EFD-1 | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Coliform, Fecal | #/100mL | Max | 14 | 14 | -- | 86 | Weekly | Grab | EFA-1 | See I.A.5 |
| Enterococci | #/100mL | Max | -- | 35 | -- | 104 | 5 days/month | Grab | EFA-1 | See I.Error! Reference source not found..7 |
| pH | s.u. | Min<br>Max | -- | -- | -- | 6.0<br>8.5 | Continuous | Meter | EFD-2 | See I.Error! Reference source not found..Error! Reference source not found. |
| Chlorine, Total Residual (for Disinfection) | mg/L | Min | -- | -- | -- | 1.0 | Continuous | Meter | EFA-1 | See I.A.3 and I.A.6 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Chlorine, Total Residual (for Dechlorination) | mg/L | Max | -- | -- | -- | 0.01 | Daily; 24 hours | Grab | EFD-2 | |
| Nitrogen, Total | mg/L | Max | -- | 3.75 | 4.5 | 6.0 | Weekly | 16-hr FPCC | EFD-1 | |
| Nitrogen, Total | lb/yr | Max | 7580 | -- | -- | -- | Monthly | Calculated | EFD-1 | |
| Phosphorus, Total (as P) | mg/L | Max | -- | 1.25 | 1.5 | 2.0 | Weekly | 16-hr FPC | EFD-1 | |
| Phosphorus, Total (as P) | lb/yr | Max | 2530 | -- | -- | -- | Monthly | Calculated | EFD-1 | |
| Oxygen, Dissolved (DO) | mg/L | Min | -- | -- | -- | 5.0 | Daily; 24 hours | Grab | EFD-2 | |
| Copper, Total Recoverable | µg/L | Max | -- | -- | -- | 7.7 | Monthly | 16-hr FPC | EFD-1 | Mixing Zone added 9/14/2018 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Acute Whole Effluent Toxicity, 96 Hour LC50 (Ceriodaphnia dubia) | percent | Min | -- | -- | -- | 100 | Annually | 4 grabs/24 hr. period | EFD-2 | See I.Error! Reference source not found..8 |
| Acute Whole Effluent Toxicity, 96 Hour LC50 (Cyprinella leedsi) | percent | Min | -- | -- | -- | 100 | Annually | 4 grabs/24 hr. period | EFD-2 | See I.Error! Reference source not found..8 |

| **PART I: Continued** | |
|---|---|
| **Receiving Waters:**<br>Indian River North (Mosquito Lagoon) | **Classification (indicate whether fresh or marine):**<br>Class III Marine Waters, (WBID#2924B2) |

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

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

a. Effluent Limitation
   (1) In any routine or additional follow-up test for acute whole effluent toxicity, the 96-hour LC50 shall not be less than 100% effluent. [Rules 62-302.200(1), 62-302.500(1)(a)4., 62-4.244(3)(a), and 62-4.241, F.A.C.]

b. Monitoring Frequency
   (1) Routine toxicity tests shall be conducted annually, within twelve month of the last test, if there is a surface water discharge during the twelve month period.

c. Sampling Requirements
   (1) Routine tests shall be conducted on four separate grab samples collected at evenly-spaced (6-hr) intervals over a 24-hour period. The four grab samples shall be used in eight bioassays (four bioassays for each species) and shall represent one test. If the duration of the discharge is less than 24-hours, the duration of discharge shall be documented on the chain of custody.
   (2) For additional follow-up tests, the first test shall be conducted on four separate grab samples collected at evenly-spaced (6-hr) intervals over a 24-hour period. The four grab samples shall be used in four separate bioassays for each species that failed the routine test. The four grab samples represent one test. The second follow-up test shall be run on a single grab sample collected on the day and time when the greatest toxicity was identified in the routine or first additional follow-up test.

d. Test Requirements
   (1) Routine Tests: All routine tests shall be conducted using a control (0% effluent) and a minimum of five dilutions: **100%, 75%, 50%, 25%**, and **12.5%** effluent.
   (2) The permittee shall conduct 96-hour acute static renewal multi-concentration toxicity tests using the daphnid, **Ceriodaphnia dubia**, and the bannerfin shiner, **Cyprinella leedsi**, concurrently.
   (3) All test species, procedures and quality assurance criteria used shall be in accordance with **Methods for Measuring Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms**, 5th Edition, EPA-821-R-02-012. 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 acute 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-02-012, Table 7.

e. Quality Assurance Requirements
   (1) A standard reference toxicant (SRT) quality assurance (QA) acute 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 acute 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 10% for either species in any test, the test for that species (including the control) shall be invalidated and the test repeated. The repeat test shall begin within 14 days after the last day of the invalid test.
   (3) If 100% mortality occurs in all effluent concentrations for either species prior to the end of any test and the control mortality is less than 10% 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 concentration-response relationship, as required by EPA-821-R-02-012, Section 12.2.6.2., and 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 Test Results: If an LC50 >100% effluent occurs in all four separate grab sample tests for

the test species, ">100%" shall be entered on the DMR for that test species. If in any of the four separate grab sample tests for the test species an LC50 <100% effluent occurs, the lowest calculated LC50 effluent concentration shall be entered on the DMR for that test species.

(b) Additional Follow-up Test Results: For each additional test required, the calculated LC50 value shall be entered on the DMR for that test species.

(2) A bioassay laboratory report for the routine test shall be prepared according to EPA-821-R-02-012, Section 12, 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-02-012, Section 12, 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 0.a.(1).

(2) Additional Follow-up Tests:

(a) If a routine test does not meet the acute toxicity limitation in 0.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 0.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%, 75%, 50%, 25%, and 12.5% 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 statistically analyzed according to the procedures in EPA-821-R-02-012.

(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 0.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 0.b.(1). If a routine test is invalid according to the acceptance criteria in EPA-821-R-02-012, a repeat test shall be initiated within 14 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 0.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 14 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)** The additional follow-up testing and the plan do not preclude the Department taking enforcement action

for whole effluent toxicity failures.

**Administrative or Consent Orders (date executed, specific requirements, interim limit dates-if applicable, etc.):** No open Administrative or Consent Orders.

**Facility Mixing Zone Details (if applicable):**

A permit revision for a mixing zone for Copper was issued on 9/14/2018. Below are the details of this revision:

1. The mixing zone for copper is an irregular shape surrounding the point of discharge with an area of 0.90 acre (39,204 square feet or 3,642 square meters), as shown on the attached map (Attachment A).
2. The concentration of copper in the effluent shall not exceed 7.70 µg/L on a single sample maximum basis.
3. The effluent shall be sampled monthly at monitoring location EFD-1, after dechlorination and prior to discharge.
4. Continue efforts to reduce copper concentrations in the facility's effluent, whether the effluent is discharged to the receiving waterbody or not.
5. Conduct subaqueous soil sampling near the outfall within the next six months to determine a base line for copper in the sediment. An additional sample will be required within one-year preceding submittal of the application for permit renewal for comparison. Future sampling requirements will be determined based on these results but will be required at a minimum of every 5 years, conducted in the year preceding submittal of subsequent permit renewal applications.
6. Include with the next renewal application an analysis of the ambient data for copper. Monitoring shall be conducted to ensure there is adequate ambient concentration data to assess the renewal in a timely fashion. At a minimum, collect one sample each quarter of the year (four samples in total) prior to submittal of the application for permit renewal to support the assessment.

**List Permit Violations (DMR data) and plant upsets that occurred at the plant within the last year:** 1/2021 to 12/2021 – No permit limit exceedances were reported during this review period.

| Date | Parameter and Units | Limit | Result |
|---|---|---|---|
| N/A | | | |
| | | | |
| | | | |

**Describe previous FYI and WQBEL study:**

An abbreviated FYI was performed on 12/7/1987, to evaluate toxicity in this facilities discharge. An acute toxicity bioassay and Microtox Assay was performed. The sample collected was not found to be acutely toxic to the test organisms (Ceriodaphnia dubia, Daphnia pulex, Notropis leedsi, or Pimephales promelas). The Microtox Assay exhibited minimal toxicity, which supported the conclusion that this sample collected was essentially non-toxic. No other sampling data was provided for this sampling event.

A FYI was performed on May 17, 1994, the following conclusions were noted:

- Atrazine detected (0.14 µg/L), below toxic level of 2 µg/L
- Calcium, Iron, Magnesium, and Zinc were detected but within Class III standards for marine waters
- Sample collected was not acutely toxic
- TP and Ortho-P levels were elevated for nutrients, but lower than surrounding estuaries
- AGP levels measured lower than the "problem threshold" limit
- There was no evident that the facility was responsible for adverse changes in algal communities

**Describe previous or current Enforcement Actions (including WLs):**
A warning letter was issued on 10/2/2012 for copper permit limit exceedances. This resulted in a LFCO OGC #12-1658 which provided interim limits for copper until appropriate corrective actions could be completed. This LFCO was amended several times, which included the completion of a mixing zone study for copper. The mixing zone study resulted in an increase in the copper limit to 7.7 µg/L, which was added as a permit revision to the current permit for copper on 9/14/2018. This enforcement action was closed on 10/12/2018.

**Describe any violations or problems noted in previous inspection:**
The incorrect pathogen reduction requirement for Biosolids stabilization to a Class B product was listed in the current permit. An elevated fecal coliform result was reported for MWC-3 groundwater well. Several sanitary sewer overflows were noted during the review period. All items had been addressed and a return to compliance letter was issued on 01/27/2020.

**Discuss whether DMR trends within previous five years are improving or declining:**
TSS and CBOD appear to be stable throughout the last five years. Total Nitrogen appears to be stable throughout the last five years. Total Phosphorus results appear to be improving slighting with a downward trend noted from 2017 to 2021. Enterococci and fecal coliform data appear to be stable. Copper values appear to have remained stable.

**Additional Comments (this should include a trend of the Effluent, i.e. if the facility is now Reuse):**
Flow to D001 appeared to increase towards the end of 2017 and increased in 2018 but appears to be on a downward trend towards the end of 2021.

**PART II: Sampling Event Information**

| | |
|---|---|
| **Date(s) sample collected:** 2/7/2022 | **Sampler(s):** KANE, ROICK |
| **Temperature (Deg C):** 20.7 | **pH (SU):** 7.38 |
| **Dissolved Oxygen (mg/L):** 7.68 | **Conductivity (umhos/cm):** 763 |
| **Total Residual Chlorine (mg/L):** 3.05 | **Total Residual Chlorine - after Disinfection (mg/L):** <0.01 |
| **Method of Chlorination:** NaHYPOCHLORITE | **Method of De-chlorination:** BISULPHITE |

**Flow During Sample Collection for each outfall(MGD):** 1521 AT

**Mean Flow for each outfall for previous 12 months based on sampling date (If samples are taken on more than one day, indicate Mean Flow for each day):** N/A

**Describe Discharge during Sampling Event:**
☐ Continuous ☐ Intermittent ☐ Seasonal ☐ Rainfall Dependent
☑ Other, please specify:

**Describe any conditions, difficulties or abnormal events that occurred during the sample collection and any other additional comments here:** NO DISCHARGE DURING SAMPLE EVENT.

# 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.

- **Chlorophyll *a* Content:**
  - 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-2022-01-24-10**

FYI3 FL0021431 Edgewater, City of Sampling Inspection

**Florida Department of Environmental Protection**
**Central Laboratory Submittal Form**

Page 1 of 3
last revised Jan 25, 2018

**Customer: CEN-DIST**
**Project ID: FYI3**

Requester: Elaine Ignacio
Collected By: KANE, ROICK
Field Report Prepared By: FARRELL
Sampling Agency: FDEP

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Location: CITY OF EDGEWATER WWTP ROUTE 1 P.O. BOX 100 EDGEWATER, FL 32132 | ☐ Comp ☑ Grab | Collection (comp begin or grab) Date 2/7/22 Time 912 AM | Eastern Central | Composite end Date PK Time | Bottle Group(s) (See pg 2): A | | | | | | |
| Field ID: EDGE | Matrix (type, e.g., Salt, Fresh, etc): EFFLUENT | | | Diss. Oxygen 7.68 ☑ mg/L ☐ % sat | Total Res. Chlorine (mg/L) 3.05 | | | | | | |
| WIN/STORET # | Temp (C) 20.7 | pH 7.38 | | Sample Depth SURFACE ☐ ft ☐ m | Sp. Conductance (umho/cm) 763 | | | | | | |
| Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Salinity (ppt) | Comments: NO DISCHARGE, NO BIOASSAY AND NO AGP. CL2 3.05 pH CHECKED & GOOD EFAL POINT | | | | | | | | |
| Location: CITY OF EDGEWATER WWTP ROUTE 1 P.O. BOX 100 EDGEWATER, FL 32132 | ☐ Comp ☑ Grab | Collection (comp begin or grab) Date 2/7/22 Time 956 AM | Eastern Central | Composite end Date PK Time | Bottle Group(s): B | | | | | | |
| Field ID: EDGE | 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 | ☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | Eastern Central | Composite end Date Time | Bottle Group(s) | | | | | | |
| Field ID | Matrix (type, e.g., Salt, Fresh, etc) | | | Diss. Oxygen ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L) | | | | | | |
| WIN/STORET # | Temp (C) | pH | | Sample Depth ☐ ft ☐ m | Sp. Conductance (umho/cm) | | | | | | |
| Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Salinity (ppt) | Comments | | | | | | | | |
| Location | ☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | Eastern Central | Composite end Date Time | Bottle Group(s) | | | | | | |
| Field ID | Matrix (type, e.g., Salt, Fresh, etc) | | | Diss. Oxygen ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L) | | | | | | |
| WIN/STORET # | Temp (C) | pH | | Sample Depth ☐ ft ☐ m | Sp. Conductance (umho/cm) | | | | | | |
| Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Salinity (ppt) | Comments | | | | | | | | |

| Relinquished By: | Date/Time | Shipping Method | Number of Coolers Shipped: | Received By: | Date/Time |
|---|---|---|---|---|---|
| KANE | 2/7/2022 | FEDEX | | IM | 2/8/22 10:30 |

**Request Number: RQ-2022-01-24-10**

FYI3 FL0021431 Edgewater, City of Sampling Inspection

**Florida Department of Environmental Protection**

**Central Laboratory Submittal Form**



last revised Jan 25, 2018

**Customer: CEN-DIST**

**Project ID: FYI3**

Requester: Elaine Ignacio

Collected By: KANE, ROICK

Field Report Prepared By: FARRELL

Sampling Agency: FDEP CENTRAL

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Location CITY OF EDGEWATER WWTF EDGEWATER, FL. 32132 ROUTE 1 | ☐ Comp ☑ Grab | Collection (comp begin or grab) Date 2/7/22 Time 912 | Eastern Central | ~~Composite end~~ PK ~~Date~~ Time | Bottle Group(s) (See pg 2) A 1 | | | | |
| Field ID EDGE | Matrix (type, e.g., Salt, Fresh, etc) EFFLUENT | Diss. Oxygen 7.68 ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L) 3.05 | | | | | | |
| WIN/STORET # | Temp (C) 20.7 | pH 7.38 | Sample Depth SURFACE ☐ ft ☐ m | Sp. Conductance (umho/cm) 763 | | | | | |
| Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Salinity (ppt) | Comments NOT DISCHARGING EFA 1 | | | | | | |
| Location | ☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | Eastern Central | Composite end Date Time | Bottle Group(s) | | | | |
| Field ID | Matrix (type, e.g., Salt, Fresh, etc) | Diss. Oxygen ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L) | | | | | | |
| WIN/STORET # | Temp (C) | pH | Sample Depth ☐ ft ☐ m | Sp. Conductance (umho/cm) | | | | | |
| Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Salinity (ppt) | Comments | | | | | | |
| Location | ☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | Eastern Central | Composite end Date Time | Bottle Group(s) | | | | |
| Field ID | Matrix (type, e.g., Salt, Fresh, etc) | Diss. Oxygen ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L) | | | | | | |
| WIN/STORET # | Temp (C) | pH | Sample Depth ☐ ft ☐ m | Sp. Conductance (umho/cm) | | | | | |
| Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Salinity (ppt) | Comments | | | | | | |
| Location | ☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | Eastern Central | Composite end Date Time | Bottle Group(s) | | | | |
| Field ID | Matrix (type, e.g., Salt, Fresh, etc) | Diss. Oxygen ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L) | | | | | | |
| WIN/STORET # | Temp (C) | pH | Sample Depth ☐ ft ☐ m | Sp. Conductance (umho/cm) | | | | | |
| Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | Salinity (ppt) | Comments | | | | | | |

| Relinquished By: | Date/Time | Shipping Method | Number of Coolers Shipped: | Received By: | Date/Time |
|---|---|---|---|---|---|
| KANE | 2/7/2022 | FEDEX | | | |

# Appendix D. Chemical Analysis of Effluent

| Date Sampled | Site ID | Analysis Group | Component | Result | Units | MDL | PQL |
|---|---|---|---|---|---|---|---|
| 2/7/2022 9:12 | Effluent Grab | Chlorophyll/Grain Size/BOD | Chlorophyll-a, Uncorrected | 0.70 U | µg/L | 0.70 | 2.1 |
| 2/7/2022 9:12 | Effluent Grab | Chlorophyll/Grain Size/BOD | Phaeophytin-a | 1.0 U | µg/L | 1.0 | 3.2 |
| 2/7/2022 9:12 | Effluent Grab | Chlorophyll/Grain Size/BOD | Chlorophyll-a, Corrected | 0.96 U | µg/L | 0.96 | 2.9 |
| 2/7/2022 9:12 | Effluent Grab | Overflow | Carbonaceous Biochemical Oxygen Demand | 2.0 U | mg/L | 2.0 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Selenium | 0.20 U | µg/L | 0.20 | 0.80 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Iron | 36 I | µg/L | 30 | 120 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Calcium | 53.4 | mg/L | 0.075 | 0.30 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Copper | 1.61 | µg/L | 0.40 | 0.80 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Lead | 0.20 U | µg/L | 0.20 | 0.40 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Cadmium | 0.023 I | µg/L | 0.020 | 0.080 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Nickel | 6.5 | µg/L | 0.50 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Chromium | 2.6 | µg/L | 0.40 | 1.6 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Sodium | 89.2 | mg/L | 0.50 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Potassium | 12.0 | mg/L | 0.30 | 1.2 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Aluminum | 157 | µg/L | 5.0 | 20 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Arsenic | 0.17 I | µg/L | 0.050 | 0.20 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Zinc | 48 | µg/L | 5.0 | 20 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Magnesium | 5.82 | mg/L | 0.040 | 0.16 |
| 2/7/2022 9:12 | Effluent Grab | Metals | Silver | 0.010 U | µg/L | 0.010 | 0.040 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Fluoride | 0.11 | mg F/L | 0.035 | 0.10 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Kjeldahl Nitrogen | 1.1 | mg N/L | 0.080 | 0.20 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Sulfate | 46 A | mg SO4/L | 0.40 | 1.0 |
| 2/7/2022 9:56 | Effluent Grab | Nutrients | Sulfate | 0.20 U | mg SO4/L | 0.20 | 0.50 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Total-P | 0.088 | mg P/L | 0.0050 | 0.050 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Ammonia-N | 0.048 | mg N/L | 0.0040 | 0.010 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Turbidity | 1.1 A | NTU | 0.10 | 1.0 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | O-Phosphate-P | 0.021 | mg P/L | 0.0040 | 0.010 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | TSS | 2 I | mg/L | 2.0 | 10 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Color (true) | 6.1 A | PCU | 2.5 | 6.0 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | NO2NO3-N | 1.4 | mg N/L | 0.040 | 0.10 |

| Date Sampled | Site ID | Analysis Group | Component | Result | Units | MDL | PQL |
|---|---|---|---|---|---|---|---|
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Chloride | 130 A | mg Cl/L | 0.40 | 1.0 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Total Alkalinity | 125 A | mg CaCO3/L | 0.65 | 2.5 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Organic Carbon | 14 | mg C/L | 2.5 | 5.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Ibuprofen | 0.020 U | µg/L | 0.020 | 0.080 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Cyprodinil | 0.099 U | ng/L | 0.099 | 0.49 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Azinphos Methyl | 3.7 IJ | ng/L | 2.0 | 7.9 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Carbophenothion | 0.20 UJ | ng/L | 0.20 | 0.79 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Cyanazine | 3.2 U | ng/L | 3.2 | 13 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Difenoconazole | 0.59 U | ng/L | 0.59 | 2.4 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Fipronil Desulfinyl | 0.40 I | ng/L | 0.12 | 0.49 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Fipronil Sulfide | 0.15 U | ng/L | 0.15 | 0.59 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Phorate | 0.52 UJ | ng/L | 0.52 | 2.1 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Pronamide | 0.15 U | ng/L | 0.15 | 0.59 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Simazine | 22 | ng/L | 0.49 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Terbufos | 0.099 UJ | ng/L | 0.099 | 0.39 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Sucralose | 62 | µg/L | 0.20 | 0.80 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Loratadine | 6.7 | ng/L | 0.099 | 0.39 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Ametryn | 0.59 U | ng/L | 0.59 | 2.4 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Azoxystrobin | 6.5 | ng/L | 0.49 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | EPTC | 1.2 U | ng/L | 1.2 | 4.9 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Fipronil | 0.25 U | ng/L | 0.25 | 0.99 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Metolachlor | 0.34 U | ng/L | 0.34 | 1.4 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Prometon | 0.89 U | ng/L | 0.89 | 3.5 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Sulfentrazone | 9.7 | ng/L | 0.49 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Tebuconazole | 17 | ng/L | 0.49 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Naproxen | 0.0080 U | µg/L | 0.0080 | 0.032 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Chlorfenapyr | 5.5 | ng/L | 0.17 | 0.69 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Alachlor | 0.25 U | ng/L | 0.25 | 0.99 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Bromacil | 0.49 U | ng/L | 0.49 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Carfentrazone Ethyl | 0.099 U | ng/L | 0.099 | 0.39 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Demeton | 1.5 UJ | ng/L | 1.5 | 5.9 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Fenbuconazole | 0.12 U | ng/L | 0.12 | 0.49 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Flutolanil | 0.33 I | ng/L | 0.099 | 0.39 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Propiconazole | 1.0 I | ng/L | 0.49 | 2.0 |

| Date Sampled | Site ID | Analysis Group | Component | Result | Units | MDL | PQL |
|---|---|---|---|---|---|---|---|
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Stirophos | 0.12 UJ | ng/L | 0.12 | 0.49 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Acetochlor | 0.25 U | ng/L | 0.25 | 0.99 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Diazinon | 0.12 UJ | ng/L | 0.12 | 0.49 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Ethoprop | 0.099 UJ | ng/L | 0.099 | 0.39 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Flumioxazin | 1.7 U | ng/L | 1.7 | 6.9 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Imazalil | 0.74 U | ng/L | 0.74 | 3.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Norflurazon | 0.49 U | ng/L | 0.49 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Oxadiazon | 0.30 U | ng/L | 0.30 | 1.2 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Parathion Ethyl | 0.25 UJ | ng/L | 0.25 | 0.99 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Napropamide | 0.39 U | ng/L | 0.39 | 1.6 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Propargite | 1.5 U | ng/L | 1.5 | 5.9 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Fipronil Sulfone | 0.15 U | ng/L | 0.15 | 0.59 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Fludioxonil | 0.21 I | ng/L | 0.12 | 0.49 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Hexazinone | 2.4 | ng/L | 0.49 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Iprodione | 0.59 U | ng/L | 0.59 | 2.4 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Parathion Methyl | 0.54 UJ | ng/L | 0.54 | 2.2 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Prometryn | 0.20 U | ng/L | 0.20 | 0.79 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Dimethomorph | 0.17 U | ng/L | 0.17 | 1.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Etridiazole | 0.15 U | ng/L | 0.15 | 0.59 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Phenytoin | 63 | ng/L | 3.4 | 14 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Pyridaben | 0.44 U | ng/L | 0.44 | 2.2 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Triadimefon | 0.25 U | ng/L | 0.25 | 0.99 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Atrazine | 48 | ng/L | 0.25 | 0.99 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Ethion | 0.15 UJ | ng/L | 0.15 | 0.59 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Fenamiphos | 0.49 UJ | ng/L | 0.49 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Fonofos | 0.20 UJ | ng/L | 0.20 | 0.79 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Malathion | 0.34 UJ | ng/L | 0.34 | 1.4 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Metribuzin | 2.5 U | ng/L | 2.5 | 9.9 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Mevinphos | 1.0 UJ | ng/L | 1.0 | 4.1 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Molinate | 0.30 U | ng/L | 0.30 | 1.2 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Myclobutanil | 0.25 U | ng/L | 0.25 | 0.99 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Pyriproxyfen | 0.12 U | ng/L | 0.12 | 0.49 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Pyraflufen Ethyl | 0.25 U | ng/L | 0.25 | 0.99 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Atrazine Desethyl | 2.7 I | ng/L | 1.5 | 5.9 |

| Date Sampled | Site ID | Analysis Group | Component | Result | Units | MDL | PQL |
|---|---|---|---|---|---|---|---|
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Disulfoton | 0.49 UJ | ng/L | 0.49 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Dithiopyr | 0.17 U | ng/L | 0.17 | 0.69 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Pendimethalin | 0.99 U | ng/L | 0.99 | 3.9 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Prodiamine | 0.18 I | ng/L | 0.17 | 0.69 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Caffeine | 7.4 U | ng/L | 7.4 | 30 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Coumaphos | 0.49 UJ | ng/L | 0.49 | 2.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Propanil | 0.12 U | ng/L | 0.12 | 0.49 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Thiobencarb | 0.59 U | ng/L | 0.59 | 2.4 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Butylate | 0.39 U | ng/L | 0.39 | 1.6 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Chlorpyrifos Ethyl | 0.25 UJ | ng/L | 0.25 | 0.99 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Chlorpyrifos Methyl | 0.049 UJ | ng/L | 0.049 | 0.20 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Dimethenamid | 0.099 U | ng/L | 0.099 | 0.39 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Fluazifop-P-butyl | 0.099 U | ng/L | 0.099 | 0.39 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Fluxapyroxad | 0.26 I | ng/L | 0.099 | 0.39 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Metalaxyl | 0.74 U | ng/L | 0.74 | 3.0 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Naled | 1.5 UJ | ng/L | 1.5 | 5.9 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Oxyfluorfen | 0.15 U | ng/L | 0.15 | 0.59 |
| 2/7/2022 9:12 | Effluent Grab | Pesticides | Terbuthylazine | 0.42 U | ng/L | 0.42 | 1.7 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 2,4-Dinitrophenol | 11 U | µg/L | 11 | 44 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Indeno(1,2,3-cd)pyrene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Benzo(a)pyrene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Bis(2-chloroethoxy)methane | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Bis(2-chloroethyl)ether | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Bis(2-chloroisopropyl)ether | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Dimethyl phthalate | 0.22 U | µg/L | 0.22 | 0.89 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Hexachlorobenzene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Hexachlorobutadiene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Isophorone | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Nitrobenzene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Phenanthrene | 0.11 U | µg/L | 0.11 | 0.44 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Phenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 2-Nitrophenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 2,4-Dichlorophenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Benzidine | 11 U | µg/L | 11 | 44 |

| Date Sampled | Site ID | Analysis Group | Component | Result | Units | MDL | PQL |
|---|---|---|---|---|---|---|---|
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Benzo(k)fluoranthene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Di-n-butyl phthalate | 2.2 U | µg/L | 2.2 | 8.9 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Dibenzo(a,h)anthracene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Hexachlorocyclopentadiene | 0.30 | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Pentachlorophenol | 0.56 U | µg/L | 0.56 | 2.2 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 1,2,4-Trichlorobenzene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 2,4-Dinitrotoluene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 2,6-Dinitrotoluene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 3,3'-Dichlorobenzidine | 11 U | µg/L | 11 | 44 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Acenaphthene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Benzo(a)anthracene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Bis(2-ethylhexyl)phthalate | 5.6 U | µg/L | 5.6 | 22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Fluoranthene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 2-Methyl-4,6-dinitrophenol | 3.3 U | µg/L | 3.3 | 13 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 4-Chlorophenyl phenyl ether | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Benzo(b)fluoranthene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Benzo(g,h,i)perylene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Butyl benzyl phthalate | 1.1 U | µg/L | 1.1 | 4.4 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Di-n-octyl phthalate | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | N-Nitrosodi-n-propylamine | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Naphthalene | 0.11 U | µg/L | 0.11 | 0.44 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 2-Chlorophenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 2,4-Dimethylphenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Diethyl phthalate | 2.2 U | µg/L | 2.2 | 8.9 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | N-Nitrosodimethylamine | 2.2 U | µg/L | 2.2 | 8.9 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 4-Nitrophenol | 11 U | µg/L | 11 | 44 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Acenaphthylene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Anthracene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Pyrene | 0.11 U | µg/L | 0.11 | 0.44 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 2-Chloronaphthalene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 2,4,6-Trichlorophenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 4-Bromophenyl phenyl ether | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | 4-Chloro-3-methylphenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Chrysene | 0.028 U | µg/L | 0.028 | 0.11 |

| Date Sampled | Site ID | Analysis Group | Component | Result | Units | MDL | PQL |
|---|---|---|---|---|---|---|---|
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Fluorene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:12 | Effluent Grab | Priority Organic Pollutants | Hexachloroethane | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Specific Conductance | 763 | µmhos/cm | | |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | pH | 7.38 | | | |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Dissolved Oxygen mg/L | 7.68 | mg/L | | |
| 2/7/2022 9:12 | Effluent Grab | Nutrients | Temperature | 20.7 | C | | |
| 2/7/2022 9:56 | Blank | Metals | Cadmium | 0.020 U | µg/L | 0.020 | 0.080 |
| 2/7/2022 9:56 | Blank | Metals | Copper | 0.40 U | µg/L | 0.40 | 0.80 |
| 2/7/2022 9:56 | Blank | Metals | Magnesium | 0.040 U | mg/L | 0.040 | 0.16 |
| 2/7/2022 9:56 | Blank | Metals | Arsenic | 0.050 U | µg/L | 0.050 | 0.20 |
| 2/7/2022 9:56 | Blank | Metals | Selenium | 0.20 U | µg/L | 0.20 | 0.80 |
| 2/7/2022 9:56 | Blank | Metals | Lead | 0.20 U | µg/L | 0.20 | 0.40 |
| 2/7/2022 9:56 | Blank | Metals | Iron | 30 U | µg/L | 30 | 120 |
| 2/7/2022 9:56 | Blank | Metals | Sodium | 0.50 U | mg/L | 0.50 | 2.0 |
| 2/7/2022 9:56 | Blank | Metals | Silver | 0.010 U | µg/L | 0.010 | 0.040 |
| 2/7/2022 9:56 | Blank | Metals | Aluminum | 5.0 U | µg/L | 5.0 | 20 |
| 2/7/2022 9:56 | Blank | Metals | Calcium | 0.075 U | mg/L | 0.075 | 0.30 |
| 2/7/2022 9:56 | Blank | Metals | Zinc | 5.0 U | µg/L | 5.0 | 20 |
| 2/7/2022 9:56 | Blank | Metals | Nickel | 5.8 | µg/L | 0.50 | 2.0 |
| 2/7/2022 9:56 | Blank | Metals | Chromium | 0.40 U | µg/L | 0.40 | 1.6 |
| 2/7/2022 9:56 | Blank | Nutrients | Kjeldahl Nitrogen | 0.080 U | mg N/L | 0.080 | 0.20 |
| 2/7/2022 9:56 | Blank | Nutrients | Color (true) | 2.5 U | PCU | 2.5 | 6.0 |
| 2/7/2022 9:56 | Blank | Nutrients | Total-P | 0.002 U | mg P/L | 0.0020 | 0.0050 |
| 2/7/2022 9:56 | Blank | Nutrients | Chloride | 0.20 U | mg Cl/L | 0.20 | 0.50 |
| 2/7/2022 9:56 | Blank | Nutrients | Total Alkalinity | 0.65 U | mg CaCO3/L | 0.65 | 2.5 |
| 2/7/2022 9:56 | Blank | Nutrients | NO2NO3-N | 0.004 U | mg N/L | 0.0040 | 0.010 |
| 2/7/2022 9:56 | Blank | Nutrients | Fluoride | 0.035 U | mg F/L | 0.035 | 0.10 |
| 2/7/2022 9:56 | Blank | Nutrients | O-Phosphate-P | 0.004 U | mg P/L | 0.0040 | 0.010 |
| 2/7/2022 9:56 | Blank | Nutrients | Organic Carbon | 0.50 U | mg C/L | 0.50 | 1.0 |
| 2/7/2022 9:56 | Blank | Nutrients | Ammonia-N | 0.002 U | mg N/L | 0.0020 | 0.0050 |
| 2/7/2022 9:56 | Blank | Nutrients | Turbidity | 0.10 U | NTU | 0.10 | 1.0 |
| 2/7/2022 9:56 | Blank | Pesticides | Naproxen | 0.0080 U | µg/L | 0.0080 | 0.032 |
| 2/7/2022 9:56 | Blank | Pesticides | Caffeine | 7.2 U | ng/L | 7.2 | 29 |
| 2/7/2022 9:56 | Blank | Pesticides | Propanil | 0.12 U | ng/L | 0.12 | 0.48 |

| Date Sampled | Site ID | Analysis Group | Component | Result | Units | MDL | PQL |
|---|---|---|---|---|---|---|---|
| 2/7/2022 9:56 | Blank | Pesticides | Acetochlor | 0.24 U | ng/L | 0.24 | 0.96 |
| 2/7/2022 9:56 | Blank | Pesticides | Ametryn | 0.57 U | ng/L | 0.57 | 2.3 |
| 2/7/2022 9:56 | Blank | Pesticides | Azinphos Methyl | 1.9 U | ng/L | 1.9 | 7.7 |
| 2/7/2022 9:56 | Blank | Pesticides | Hexazinone | 0.48 U | ng/L | 0.48 | 1.9 |
| 2/7/2022 9:56 | Blank | Pesticides | Metolachlor | 0.33 U | ng/L | 0.33 | 1.3 |
| 2/7/2022 9:56 | Blank | Pesticides | Molinate | 0.29 U | ng/L | 0.29 | 1.1 |
| 2/7/2022 9:56 | Blank | Pesticides | Oxadiazon | 0.29 U | ng/L | 0.29 | 1.1 |
| 2/7/2022 9:56 | Blank | Pesticides | Demeton | 1.4 U | ng/L | 1.4 | 5.7 |
| 2/7/2022 9:56 | Blank | Pesticides | Diazinon | 0.12 U | ng/L | 0.12 | 0.48 |
| 2/7/2022 9:56 | Blank | Pesticides | Fluxapyroxad | 0.096 U | ng/L | 0.096 | 0.38 |
| 2/7/2022 9:56 | Blank | Pesticides | Fonofos | 0.19 U | ng/L | 0.19 | 0.77 |
| 2/7/2022 9:56 | Blank | Pesticides | Iprodione | 0.57 U | ng/L | 0.57 | 2.3 |
| 2/7/2022 9:56 | Blank | Pesticides | Malathion | 0.33 U | ng/L | 0.33 | 1.3 |
| 2/7/2022 9:56 | Blank | Pesticides | Metalaxyl | 0.72 U | ng/L | 0.72 | 2.9 |
| 2/7/2022 9:56 | Blank | Pesticides | Parathion Methyl | 0.53 U | ng/L | 0.53 | 2.1 |
| 2/7/2022 9:56 | Blank | Pesticides | Coumaphos | 0.48 U | ng/L | 0.48 | 1.9 |
| 2/7/2022 9:56 | Blank | Pesticides | Pyraflufen Ethyl | 0.24 U | ng/L | 0.24 | 0.96 |
| 2/7/2022 9:56 | Blank | Pesticides | Azoxystrobin | 0.48 U | ng/L | 0.48 | 1.9 |
| 2/7/2022 9:56 | Blank | Pesticides | Bromacil | 0.48 U | ng/L | 0.48 | 1.9 |
| 2/7/2022 9:56 | Blank | Pesticides | Carbophenothion | 0.19 U | ng/L | 0.19 | 0.77 |
| 2/7/2022 9:56 | Blank | Pesticides | Chlorpyrifos Methyl | 0.048 U | ng/L | 0.048 | 0.19 |
| 2/7/2022 9:56 | Blank | Pesticides | Naled | 1.4 UJ | ng/L | 1.4 | 5.7 |
| 2/7/2022 9:56 | Blank | Pesticides | Norflurazon | 0.48 U | ng/L | 0.48 | 1.9 |
| 2/7/2022 9:56 | Blank | Pesticides | Oxyfluorfen | 0.14 U | ng/L | 0.14 | 0.57 |
| 2/7/2022 9:56 | Blank | Pesticides | Phorate | 0.50 U | ng/L | 0.50 | 2.0 |
| 2/7/2022 9:56 | Blank | Pesticides | Propiconazole | 0.48 U | ng/L | 0.48 | 1.9 |
| 2/7/2022 9:56 | Blank | Pesticides | Ibuprofen | 0.020 U | µg/L | 0.020 | 0.080 |
| 2/7/2022 9:56 | Blank | Pesticides | Dimethomorph | 0.17 U | ng/L | 0.17 | 1.0 |
| 2/7/2022 9:56 | Blank | Pesticides | Phenytoin | 3.3 U | ng/L | 3.3 | 13 |
| 2/7/2022 9:56 | Blank | Pesticides | Propargite | 1.4 U | ng/L | 1.4 | 5.7 |
| 2/7/2022 9:56 | Blank | Pesticides | Stirophos | 0.12 U | ng/L | 0.12 | 0.48 |
| 2/7/2022 9:56 | Blank | Pesticides | Triadimefon | 0.24 U | ng/L | 0.24 | 0.96 |
| 2/7/2022 9:56 | Blank | Pesticides | Carfentrazone Ethyl | 0.096 U | ng/L | 0.096 | 0.38 |
| 2/7/2022 9:56 | Blank | Pesticides | Fenamiphos | 0.48 U | ng/L | 0.48 | 1.9 |

| Date Sampled | Site ID | Analysis Group | Component | Result | Units | MDL | PQL |
|---|---|---|---|---|---|---|---|
| 2/7/2022 9:56 | Blank | Pesticides | Fipronil Sulfide | 0.14 U | ng/L | 0.14 | 0.57 |
| 2/7/2022 9:56 | Blank | Pesticides | Metribuzin | 2.4 U | ng/L | 2.4 | 9.6 |
| 2/7/2022 9:56 | Blank | Pesticides | Pendimethalin | 0.96 U | ng/L | 0.96 | 3.8 |
| 2/7/2022 9:56 | Blank | Pesticides | Sulfentrazone | 0.48 U | ng/L | 0.48 | 1.9 |
| 2/7/2022 9:56 | Blank | Pesticides | Tebuconazole | 0.48 U | ng/L | 0.48 | 1.9 |
| 2/7/2022 9:56 | Blank | Pesticides | Terbufos | 0.096 U | ng/L | 0.096 | 0.38 |
| 2/7/2022 9:56 | Blank | Pesticides | Chlorfenapyr | 0.17 U | ng/L | 0.17 | 0.67 |
| 2/7/2022 9:56 | Blank | Pesticides | Atrazine | 0.24 U | ng/L | 0.24 | 0.96 |
| 2/7/2022 9:56 | Blank | Pesticides | Atrazine Desethyl | 1.4 U | ng/L | 1.4 | 5.7 |
| 2/7/2022 9:56 | Blank | Pesticides | Fipronil Desulfinyl | 0.12 U | ng/L | 0.12 | 0.48 |
| 2/7/2022 9:56 | Blank | Pesticides | Fluazifop-P-butyl | 0.096 U | ng/L | 0.096 | 0.38 |
| 2/7/2022 9:56 | Blank | Pesticides | Flumioxazin | 1.7 U | ng/L | 1.7 | 6.7 |
| 2/7/2022 9:56 | Blank | Pesticides | Flutolanil | 0.096 U | ng/L | 0.096 | 0.38 |
| 2/7/2022 9:56 | Blank | Pesticides | Imazalil | 0.72 U | ng/L | 0.72 | 2.9 |
| 2/7/2022 9:56 | Blank | Pesticides | Mevinphos | 1.0 U | ng/L | 1.0 | 4.0 |
| 2/7/2022 9:56 | Blank | Pesticides | Terbuthylazine | 0.41 U | ng/L | 0.41 | 1.6 |
| 2/7/2022 9:56 | Blank | Pesticides | Sucralose | 0.010 U | µg/L | 0.010 | 0.040 |
| 2/7/2022 9:56 | Blank | Pesticides | Cyprodinil | 0.096 U | ng/L | 0.096 | 0.48 |
| 2/7/2022 9:56 | Blank | Pesticides | Pyridaben | 0.43 U | ng/L | 0.43 | 2.2 |
| 2/7/2022 9:56 | Blank | Pesticides | Alachlor | 0.24 U | ng/L | 0.24 | 0.96 |
| 2/7/2022 9:56 | Blank | Pesticides | Butylate | 0.38 U | ng/L | 0.38 | 1.5 |
| 2/7/2022 9:56 | Blank | Pesticides | Disulfoton | 0.48 U | ng/L | 0.48 | 1.9 |
| 2/7/2022 9:56 | Blank | Pesticides | Parathion Ethyl | 0.24 U | ng/L | 0.24 | 0.96 |
| 2/7/2022 9:56 | Blank | Pesticides | Prodiamine | 0.17 U | ng/L | 0.17 | 0.67 |
| 2/7/2022 9:56 | Blank | Pesticides | Pronamide | 0.14 U | ng/L | 0.14 | 0.57 |
| 2/7/2022 9:56 | Blank | Pesticides | Napropamide | 0.38 U | ng/L | 0.38 | 1.5 |
| 2/7/2022 9:56 | Blank | Pesticides | Thiobencarb | 0.57 U | ng/L | 0.57 | 2.3 |
| 2/7/2022 9:56 | Blank | Pesticides | Chlorpyrifos Ethyl | 0.24 U | ng/L | 0.24 | 0.96 |
| 2/7/2022 9:56 | Blank | Pesticides | Cyanazine | 3.1 U | ng/L | 3.1 | 12 |
| 2/7/2022 9:56 | Blank | Pesticides | Dimethenamid | 0.096 U | ng/L | 0.096 | 0.38 |
| 2/7/2022 9:56 | Blank | Pesticides | Ethion | 0.14 U | ng/L | 0.14 | 0.57 |
| 2/7/2022 9:56 | Blank | Pesticides | Fenbuconazole | 0.12 U | ng/L | 0.12 | 0.48 |
| 2/7/2022 9:56 | Blank | Pesticides | Fipronil Sulfone | 0.14 U | ng/L | 0.14 | 0.57 |
| 2/7/2022 9:56 | Blank | Pesticides | Prometon | 0.86 U | ng/L | 0.86 | 3.4 |

| Date Sampled | Site ID | Analysis Group | Component | Result | Units | MDL | PQL |
|---|---|---|---|---|---|---|---|
| 2/7/2022 9:56 | Blank | Pesticides | Pyriproxyfen | 0.12 U | ng/L | 0.12 | 0.48 |
| 2/7/2022 9:56 | Blank | Pesticides | Etridiazole | 0.14 U | ng/L | 0.14 | 0.57 |
| 2/7/2022 9:56 | Blank | Pesticides | Loratadine | 0.096 U | ng/L | 0.096 | 0.38 |
| 2/7/2022 9:56 | Blank | Pesticides | Difenoconazole | 0.57 U | ng/L | 0.57 | 2.3 |
| 2/7/2022 9:56 | Blank | Pesticides | Dithiopyr | 0.17 U | ng/L | 0.17 | 0.67 |
| 2/7/2022 9:56 | Blank | Pesticides | EPTC | 1.2 U | ng/L | 1.2 | 4.8 |
| 2/7/2022 9:56 | Blank | Pesticides | Ethoprop | 0.096 U | ng/L | 0.096 | 0.38 |
| 2/7/2022 9:56 | Blank | Pesticides | Fipronil | 0.24 U | ng/L | 0.24 | 0.96 |
| 2/7/2022 9:56 | Blank | Pesticides | Fludioxonil | 0.12 U | ng/L | 0.12 | 0.48 |
| 2/7/2022 9:56 | Blank | Pesticides | Myclobutanil | 0.24 U | ng/L | 0.24 | 0.96 |
| 2/7/2022 9:56 | Blank | Pesticides | Prometryn | 0.19 U | ng/L | 0.19 | 0.77 |
| 2/7/2022 9:56 | Blank | Pesticides | Simazine | 0.48 U | ng/L | 0.48 | 1.9 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Benzidine | 11 U | µg/L | 11 | 43 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | N-Nitrosodimethylamine | 2.2 U | µg/L | 2.2 | 8.7 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 4-Chloro-3-methylphenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Acenaphthene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Benzo(b)fluoranthene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Benzo(k)fluoranthene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Chrysene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Di-n-butyl phthalate | 2.2 U | µg/L | 2.2 | 8.7 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Dibenzo(a,h)anthracene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Hexachloroethane | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Pyrene | 0.11 U | µg/L | 0.11 | 0.44 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Naphthalene | 0.11 U | µg/L | 0.11 | 0.44 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 2,4-Dinitrotoluene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 4-Bromophenyl phenyl ether | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 4-Nitrophenol | 11 U | µg/L | 11 | 43 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Bis(2-chloroethyl)ether | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Bis(2-ethylhexyl)phthalate | 5.4 U | µg/L | 5.4 | 22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Hexachlorobutadiene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Isophorone | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 1,2,4-Trichlorobenzene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 2,4-Dimethylphenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Acenaphthylene | 0.028 U | µg/L | 0.028 | 0.11 |

| Date Sampled | Site ID | Analysis Group | Component | Result | Units | MDL | PQL |
|---|---|---|---|---|---|---|---|
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Benzo(a)pyrene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Fluoranthene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Phenanthrene | 0.11 U | µg/L | 0.11 | 0.44 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 2-Chloronaphthalene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 2,4-Dinitrophenol | 11 U | µg/L | 11 | 43 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 2,4,6-Trichlorophenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 4-Chlorophenyl phenyl ether | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Benzo(a)anthracene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Butyl benzyl phthalate | 1.1 U | µg/L | 1.1 | 4.3 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Fluorene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Hexachlorocyclopentadiene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Indeno(1,2,3-cd)pyrene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Pentachlorophenol | 0.54 U | µg/L | 0.54 | 2.2 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 2-Chlorophenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Anthracene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Bis(2-chloroethoxy)methane | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | N-Nitrosodi-n-propylamine | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 2,4-Dichlorophenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 2,6-Dinitrotoluene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 3,3'-Dichlorobenzidine | 11 U | µg/L | 11 | 43 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Benzo(g,h,i)perylene | 0.028 U | µg/L | 0.028 | 0.11 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Bis(2-chloroisopropyl)ether | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Di-n-octyl phthalate | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Diethyl phthalate | 2.2 U | µg/L | 2.2 | 8.7 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Dimethyl phthalate | 0.22 U | µg/L | 0.22 | 0.89 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Hexachlorobenzene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Nitrobenzene | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | Phenol | 0.056 U | µg/L | 0.056 | 0.22 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 2-Methyl-4,6-dinitrophenol | 3.3 U | µg/L | 3.3 | 13 |
| 2/7/2022 9:56 | Blank | Priority Organic Pollutants | 2-Nitrophenol | 0.056 U | µg/L | 0.056 | 0.22 |