Effluent Quality Assessment of Winter Garden WWTF Orange County NPDES # FL0020109 Sampled March 8, 2021

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

Dissolved oxygen of the effluent did not meet the Class III Water Quality Criterion for Fresh Waters (Paragraph 62-302.533(1)(a), F.A.C.) or the effluent permit limit. Fifteen organic constituents were detected in the effluent grab sample. The nutrients and algal growth potential results do not indicate a potential for nutrient enrichment of the receiving waters due to effluent discharge.

Facility Overview

The Winter Garden WWTF is a domestic wastewater treatment facility. A Facility Summary, including a description of the facility, summary of permit limits, and any relevant Administrative Order (AO), Consent Order (CO), and Discharge Monitoring Report (DMR) information is provided in Appendix A. The effluent is continuously discharged into an unnamed ditch [waterbody identification (WBID) 2861] which flows to Lake Apopka (WBID 2835D), a Class III Fresh Water (Figure 1).

The Numeric Nutrient Criteria (NNC) include limits for lakes based on water quality parameters measured at the site. For Lake Apopka, the NNC, expressed as annual geometric means, are 1.05 mg/L total nitrogen and 20 µg/L chlorophyll *a* (Paragraph 62-302.531(2)(b), F.A.C.). Lake Apopka has a total maximum daily load (TMDL) for total phosphorus of 15.9 metric tons per year, which replaces the total phosphorus criterion. A TMDL target concentration of 0.051 mg/L total phosphorus as a long-term average never to be exceeded is used to determine progress toward the TMDL. The wasteload allocation for the Winter Garden WWTF is 1.21 metric tons per year. Lake Apopka falls within the Peninsula bioregion; the daily average dissolved oxygen (DO) saturation shall not be below 38 percent in more than 10 percent of the values (Paragraph 62-302.533(1)(a), F.A.C.). This FYI event only provides single sample results. It should be noted that waterbody impairment assessments are based on longer-term data, and individual exceedances of a criterion do not indicate use impairment.
http://ca.dep.state.fl.us/mapdirect/?focus=nutrientcriteria

Methods

Effluent samples were taken as grab samples from monitoring site location EFD-01 for outfall D-001 on March 8, 2021 (Figure 1). The permit specifies 24-hour flow proportioned composite samples for total nitrogen and total phosphorus and 24-hour time proportioned composite samples for whole effluent toxicity testing; only grab samples were scheduled and collected for this sampling event. An acute definitive toxicity test was scheduled and performed instead of the chronic whole effluent toxicity test required by the permit. The permit limit for *E. coli* applies to monitoring location EFA-1. Samples were collected for cyanide analysis but were shipped to the wrong location and the samples were cancelled.

Samples were collected by Phil Kane and Anthony LaFon (Central District Office). Analyses were performed by Eurofins Test America Laboratories in Tampa, Flowers Chemical Laboratories in Altamonte Springs, 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 Rule 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.

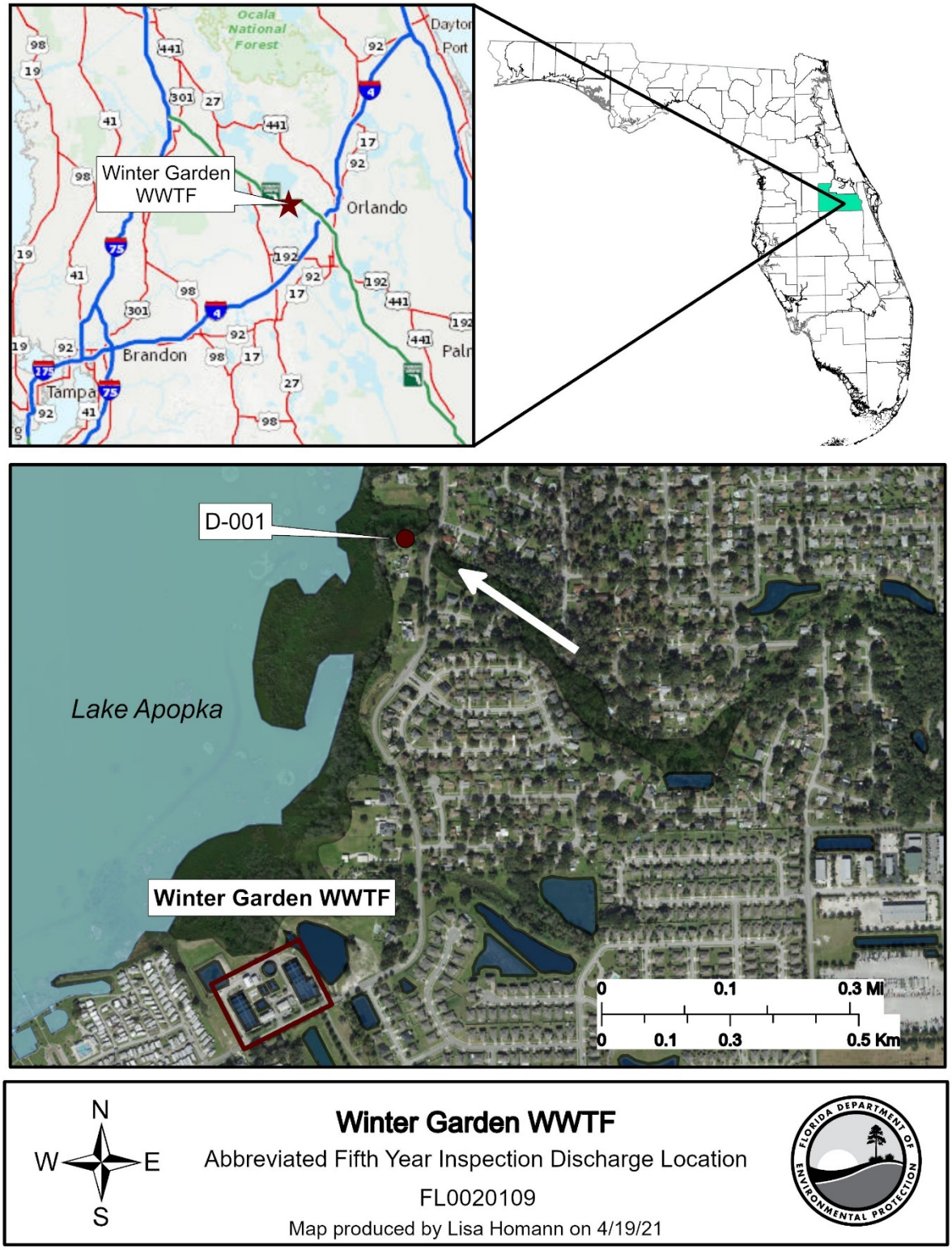


Figure 1. Map of Facility and Discharge Location

Results

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

- Dissolved oxygen of the effluent did not meet the Class III Water Quality Criterion for Fresh Waters (Paragraph 62-302.533(1)(a), F.A.C.) or the effluent permit limit.

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 Fresh 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 NNC annual geometric mean values for the receiving water.

Microbiology (See Table 2 and Appendix B)

- The effluent *Escherichia coli* (*E. coli*) level from the sample collected at EFD-1 complied with Class III Water Quality Criteria for Fresh Waters and effluent permit limit for EFA-1.

Toxicity Whole Effluent Test (See Table 2)

- Tests were performed March 9 through March 13, 2021.

- Acute bioassay results are reported as the Concentration Lethal to 50% of the test organisms (LC50). For the 96-hour acute definitive test, the calculated LC50 for the water flea, *Ceriodaphnia dubia*, was >100% effluent with 10% 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. The chronic whole effluent toxicity test required in the permit was not scheduled.

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

Metals (See Table 3 and Appendix D)

- Effluent metals complied with Class III Water Quality Criteria for Fresh Waters. There are no effluent permit limits for metals.

Algal Growth Potential (See Table 4 and Appendix B)

- The freshwater unicellular green alga, *Pseudokirchneriella subcapitata*, was used to determine the AGP values in the effluent grab sample. The analytical chemistry suggests that the effluent is nitrogen-limited (Miller et al. 1978).

- The effluent grab sample AGP result of 26.2 mg dry wt/L is greater than the AGP range (6.10 to 20.0 mg dry wt/L) suggested to be representative of high productivity for freshwater (Miller et al. 1978).

Organic Constituents (See Table 5 and Appendix D)

- Atrazine, atrazine desethyl, azoxystrobin, bromacil, fenbuconazole, fipronil desulfinyl, fipronil sulfide, fipronil sulfone, fluxapyroxad, myclobutanil, oxadiazon, propiconazole, simazine, sulfentrazone, and tebuconazole were detected in the effluent grab sample.

- There are no effluent permit limits for organic constituents.

Literature Cited

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

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

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

Table 1. Measured field parameters

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

Parameter	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab
Temperature	C	-	-	22.8
pH	SU	6.0 - 8.5	6.0 - 8.5 s	6.7
Specific Conductance	µmhos/cm	≤ 1,275	-	404.7
Salinity	ppt	-	-	0.2 c
Dissolved Oxygen	% saturation	≥ 38	-	31.6 e
Dissolved Oxygen	mg/L	-	≥ 5.0 s	2.72 e

e - Value exceeds the Class III Water Quality Criteria or permit limits

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

c - Value is calculated

s - Single sample

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

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

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab EFD-01
Ortho-phosphate	mg P/L	-	-	0.27
Total Phosphorus	mg P/L	≤ 0.051 g	≤ 1.0 s p	0.31
Total Ammonia	mg N/L	≤ 4.31 s c	-	0.15
Un-ionized Ammonia (calculated salinity)	mg N/L	-	-	< 0.02 c
Nitrate and Nitrite	mg N/L	-	-	0.78
Total Kjeldahl Nitrogen	mg N/L	-	-	0.60
Organic Nitrogen	mg N/L	-	-	0.45 c
Total Nitrogen	mg N/L	≤ 1.05 g	≤ 18.3 s p	1.38 c
Total Organic Carbon	mg C/L	-	-	8.4
Chlorophyll *a* - Corrected	µg/L	≤ 20 g	-	0.82 U
Phaeophytin	µg/L	-	-	0.90 U
CBOD, 5 day, N - inhibited	mg/L	-	-	2.0 U
Total Suspended Solids	mg/L	-	-	2 U
Turbidity	NTU	≤ 29 t	-	1.6
Color (true)	PCU	-	-	45 A
Alkalinity	mg CaCO3/L	≥ 20	-	134 A
Chloride	mg Cl/L	-	-	88
Fluoride	mg F/L	≤ 10.0	-	0.13
Sulfate	mg SO4/L	-	-	34
Escherichia coli	MPN/100 mL	≤ 410 s	≤ 410 (EFA-1)	1.00
Bioassay - Water flea *(Ceriodaphnia dubia)*	% effluent	-	≥ 100 p	> 100
Bioassay - Fish *(Pimephales promelas)*	% effluent	-	≥ 100 p	> 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 for total nitrogen and total phosphorus; 24 hour timed composite for toxicity testing
s - Single sample
t - Shall not exceed 29 NTUs above background
A - Value reported is the mean of two or more determinations
U - Material analyzed for but not detected; value reported is the method detection limit

Table 3. Analytical metals data

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

Analyte	Units	Effluent Grab Class III Criteria	Effluent Permit Limits	Effluent Grab
Hardness	mg CaCO3/L	-	-	142 c
Aluminum	µg/L	-	-	98
Arsenic	µg/L	≤ 50	-	0.84
Cadmium	µg/L	≤ 0.352 b	-	0.026 I
Calcium	mg/L	-	-	43.2
Chromium, Total	µg/L	≤ 115[1] b	-	0.58 I
Copper	µg/L	≤ 12.6 b	-	1.80
Iron	µg/L	≤ 1,000	-	190
Lead	µg/L	≤ 4.99 b	-	0.20 U
Magnesium	mg/L	-	-	8.39
Nickel	µg/L	≤ 70.4 b	-	2.1
Selenium	µg/L	≤ 5.0	-	0.20 U
Silver	µg/L	≤ 0.07	-	0.010 U
Sodium	mg/L	-	-	73.3
Zinc	µg/L	≤ 162 b	-	7.2 I

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.
b - Value is calculated based on hardness, (62-302.530(3))
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
U - Material analyzed for but not detected; value reported is the method detection limit
1 - Class III Freshwater Quality Criterion (62-302.530(19)(a), F.A.C.) is for chromium-III

Table 4. Algal Growth Potential (AGP)

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

Location	Test Species	AGP (measured)	Predicted AGP (TSIN) ± 20%	Predicted AGP (OP) ± 20%	Predicted AGP (TN) ± 20%	Predicted AGP (TP) ± 20%	Inorganic N:P ratio	Total N:P ratio
Effluent Grab	*Pseudokirchneriella subcapitata*	26.2 A	35 ± 7.1	120 ± 23	52 ± 10	130 ± 27	3.4	4.5

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

Table 5. Detected Organic Constituents

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

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab
Atrazine	ng/L	-	-	70
Atrazine Desethyl	ng/L	-	-	6.5
Azoxystrobin	ng/L	-	-	2.9
Bromacil	ng/L	-	-	5.6
Fenbuconazole	ng/L	-	-	0.50
Fipronil Desulfinyl	ng/L	-	-	0.19 I
Fipronil Sulfide	ng/L	-	-	1.0 J
Fipronil Sulfone	ng/L	-	-	0.80 J
Fluxapyroxad	ng/L	-	-	0.12 I
Myclobutanil	ng/L	-	-	0.35 I
Oxadiazon	ng/L	-	-	1.5
Propiconazole	ng/L	-	-	510
Simazine	ng/L	-	-	4.8 J
Sulfentrazone	ng/L	-	-	370
Tebuconazole	ng/L	-	-	1.4 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: Jenny E. Farrell	**Contact Number:** (407) 897-4173
Facility Name (as it appears on permit): Winter Garden WWTF	**Former Names:** N/A
NPDES Permit Number: FL0020109	**Permit Expiration Date:** May 29, 2023
Physical Address: 101 E Crest Avenue, Winter Garden, FL 34787	
District: Central	**County:** Orange
Function of Facility: Domestic Wastewater Treatment Facility	
Facility Type: Domestic Wastewater	**Permitted Capacity (MGD):** 4.75 MGD AADF
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): D-001 outfall flow: 0.96 MGD AADF on the January 2021 DMR (February 2020 through January 2021 reporting period).	
If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months): R-001 flow to rapid infiltration basin system: 2.2 MGD AADF; R-002 flow to Public Access Reuse System: 1.91 MGD AADF as reported on the January 2021 DMR (February 2002 through January 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, located at the outfall to the unnamed ditch/wetland system to Lake Apopka. The sampling location of R-001 and R-002 is EFA-1, located at the sampling point after the Chlorine Contact Chamber. Total suspended solids grab samples are collected from EFB-1, after filtration and prior to disinfection.	
Description of Permitted Outfall(s): D-001 outfall is a 1.75 MGD aafd to Lake Apopka (Class III fresh waters, WBID# 2861) via an underdrain system of land application system R-001 to an unnamed ditch at outfall D-001, thence through approximately one (1) mile of wetlands and swamp to Lake Apopka. Outfall D-001 discharged through a concrete flume approximately 9 feet in length, discharges at ground level and the point of discharge (D-001) is located approximately at latitude 28° 36' 27" N, longitude 81° 32' 53" W.	
Description of Treatment Process (if multiple discharge points, include a detailed map or diagram of facility): The facility is an existing 4.75 million gallon per day (MGD) annual average daily flow (AADF) design capacity advanced domestic wastewater treatment facility consisting of 0.75 MG flow equalization, influent screening, grit removal, biological nutrient removal (via a 5-stage Bardenpho process advanced waste water treatment system) with two aeration zones within the existing aerobic zone, chemical feed facilities for total suspended solids control, clarification, filtration, disinfection by chlorination, with thickening, aerobic digestion, and dewatering of biosolids. This permit includes construction previously authorized in permit revision FL0020109-024. This revision included replacing four (4) existing multi-stage centrifugal blowers with five (5) new variable speed positive displacement blowers. Replacing four (4) existing traveling bridge filters with three (3) new self-contained disk filters. Phase 1 of the filter replacement will include construction of a filter structure to install three (3) disk filters, installation of two (2) of the three (3) disk filters, and removal of two (2) of the four (4) traveling bridge filters from service. The	

remaining two (2) traveling bridge filters will stay in service until Phase 2. In Phase 2, the third disk filter will be installed, and the remaining traveling bridge filters will be removed from service. During both phases the new disk filters will be brought on-line prior to taking the traveling bridge filters offline.
(See Attachments A).

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 (D-001)	MGD	Max	1.75	Report	--	--	Continuous	Recording with Flow Meter with Totalizer	FLW-2	See I.A.4
pH	s.u.	Min/Max	--	--	--	6.0/8.5	Continuous	Meter	EFD-1	See I.A.3
Chronic Whole Effluent Toxicity, 7-Day IC25(Ceriodaphnia dubia)	Percent	Min	--	--	--	100	Semi-Annually; twice per year	24-hr TPC	EFD-1	See I.A.6
Chronic Whole Effluent Toxicity, 7-Day IC25(Pimephales promelas)	Percent	Min	--	--	--	100	Semi-Annually; twice per year	24-hr TPC	EFD-1	See I.A.6
Nitrogen, Total	mg/L	Max	9.17	9.17	13.8	18.3	Weekly	24-hr FPC	EFD-1	
Nitrogen, Total	lb/day	Max	--	153.00	--	--	Weekly	24-hr FPC	EFD-1	See I.A.8
Phosphorus, Total (as P)	mg/L	Max	0.5	0.5	0.75	1.0	Weekly	24-hr FPC	EFD-1	
Phosphorus, Total (as P)	lb/day	Max	--	8.34	--	--	Weekly	24-hr FPC	EFD-1	See I.A.8

Phosphorus, Total (as P)	lb/yr	Max	2668	--	--	--	Weekly	24-hr FPC	EFD-1	See I.A.8
Oxygen, Dissolved (DO)	mg/L	Min	--	--	--	5.0	Daily; 24 hours	Grab	EFD-1	
E. coli *(Escherichia coli*)	#/100mL	Max	--	126 (Geo Mean)	--	410 (90th Percentile)	Weekly	Grab	EFA-1	
Cyanide, Total (as CN)	µg/L	Max	--	--	--	Report	Monthly	Grab	EFD-1	

PART I: Continued	
Receiving Waters: Lake Apopka	**Classification (indicate whether fresh or marine):** Class III Fresh Water (WBID #2861)

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

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

a. Effluent Limitation
   (1) In any routine or additional follow-up test for chronic whole effluent toxicity, the 25 percent inhibition concentration (IC25) for reproduction or growth shall not be less than 100% effluent. [Rules 62-302.530(61) and 62-4.241(1)(b), F.A.C.]
   (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 effective 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 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 reproduction or growth 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
DEP_CD@dep.state.fl.us

g. Test Failures

(1) A test fails when the test results do not meet the limits in 6.a.(1).

(2) Additional Follow-up Tests:

(a) If a routine test does not meet the chronic toxicity limitation in 6.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 6.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 6.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 6.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 6.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 6.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.

[62-4.241, 62-620.620(3)]

Administrative or Consent Orders (date executed, specific requirements, interim limit dates-if applicable, etc.): A short form consent order (OGC #20-0764) was executed on 4/28/2020 for fecal coliform, total suspended solids, and total phosphorus exceedances from May 2019 to September 2019. Since corrective actions were conducted in timely manner no interim limits were needed for this case. This enforcement case was closed on 5/26/2020.

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
October 2020	Phosphorus, Total (as P), Weekly Average, mg/L	0.75 mg/L	0.97 mg/L
October 2020	Phosphorus, Total (as P), Monthly Average, mg/L	8.34 lb/day	10.2 lb/day
November 2020	Flow, Annual Average, MGD	2.0 MGD	2.1 MGD
December 2020	Flow, Annual Average, MGD	2.0 MGD	2.1 MGD
January 2021	Flow, Annual Average, MGD	2.0 MGD	2.2 MGD

Describe previous FYI and WQBEL study:
A third-year inspection and bioassay was performed August 22, 2011. The effluent sample collected from EFD-1 NPDES sampling point for Outfall D-001 for this facility was not acutely toxic to either test species during the 96-hour acute definitive bioassays. The effluent freshwater AGP result exceeded the "problem" threshold for fresh receiving waters, suggesting nutrient enrichment may be an issue. Effluent water quality samples did not violate Class III freshwater quality criteria nor exceed any permit limits.

Describe previous or current Enforcement Actions (including WLs):
See Comments in the Consent Order section above. Additionally, on 2/12/2021 a WL was issued for a sanitary sewer overflow that potentially impacted a surface water within the Winter Garden WRF collection/transmission system.

Describe any violations or problems noted in previous inspection:
During an the most recent inspections on April 16, 2019 and October 30, 2019, solids were noted in the clarifier, exceedances were noted for the following parameters: Fecal Coliform, Total Residual Chlorine, Total Phosphorus, and Total Suspended Solids, the flow annual average for D001 was exceeded in May 2019, and fecal coliforms were noted in the groundwater monitoring well, MWC-A-W-20. These violations were resolved with a short form consent order. See additional information noted in the Consent Order section above.

Discuss whether DMR trends within previous five years are improving or declining:
Flow to D-001 has increased and decreased since January 2015. Flow remained steady throughout 2015 then increased in 2016, then decreased in 2017 to below 1.0 MGD, then increased in 2018 and 2019. The beginning of 2019 showed another decrease below 1.0 MGD, but then increased again towards the end of 2020.

The Total Nitrogen annual average was decreasing in 2015 to 2018 then a slight increase was noted, then in 2019 the numbers decrease to around 1.5 mg/L and they have remained steady. Total Nitrogen monthly loading has seen increases/decreases throughout this five-year period, but it appears that values have decreased in 2020.

The Total Phosphorus annual average appears to be trending upward, in January 2015 it was reported as 0.2 mg/L and on the December 2020 DMR, it was reported as 0.34 mg/L, the permitted limit is 0.5 mg/L. The Total Phosphorus annual loadings have increased/decreased over the five years, but in December 2020 the annual loading appears to be decreasing from where it was in December 2019.

E. Coli values have remained steady for several years since 2018 but in August 2020 through October 2020 a slight increase was noted but in December 2020 it appears levels have returned to normal.

Additional Comments (this should include a trend of the Effluent, i.e. if the facility is now Reuse):
The facility has seen an increase in Total Plant Flow (FLW-1), in January 2015 the annual average was 2.76 MGD and in January 2021 the annual average was 4.09 MGD, the permitted capacity is currently 4.75 MGD AADF. Flow to the annual average flow to the public access reuse system was reported as 1.91 MGD, with a limit of 4.75 MGD permitted capacity. Flow to the rapid infiltration basins has increased an exceeded the annual average for the last three months. January 2021 this annual average flow was reported as 2.20 MGD and the permit limit is 2.0 MGD AADF.

PART II: Sampling Event Information	
Date(s) sample collected: 3/8/2021	**Sampler(s): Kane, LaFon**
Temperature (Deg C): 22.8	**pH (SU): 6.68**
Dissolved Oxygen (mg/L): 2.72	**Conductivity (µmhos/cm): 404.7**
Total Residual Chlorine (mg/L):	**Total Residual Chlorine - after Disinfection (mg/L):**
Method of Chlorination: NaOCL	**Method of De-chlorination: underdrains**
Flow During Sample Collection for each outfall(MGD):	
Mean Flow for each outfall for previous 12 months based on sampling date (If samples are taken on more than one day, indicate Mean Flow for each day):	
Describe Discharge during Sampling Event: **☒ Continuous ☐ Intermittent ☐ Seasonal ☐ Rainfall Dependent** **☐ Other, please specify:**	
Describe any conditions, difficulties or abnormal events that occurred during the sample collection and any other additional comments here:	

Appendix 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 (62-302, F.A.C.) and facility permit limits.

- **Toxicity Bioassays**

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

- **Bacteriological Testing**

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

- **Algal Growth Potential (AGP)**

  The algal growth potential (AGP) value is the peak growth of the alga within that 14-day period, recorded as mg dry weight/L. AGP results within the range 6.10 to 20.0 mg dry wt/L are suggested to be representative of high productivity for freshwaters (Miller et al. 1978). High AGP values may constitute exceedances of Subsection 62-302.530(47), F.A.C., Paragraph 62-302.530(48)(a), F.A.C. and/or Paragraph 62-302.530(48)(b), F.A.C.

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

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

- **Chlorophyll *a* Content**

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

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

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

Appendix C. Chain of Custody

Request Number: RQ-2021-03-01-16

FYI3 FL0020109 Winter Garden WWTF Sampling Inspection

Customer: CEN-DIST

Project ID: FYI3

Florida Department of Environmental Protection
Central Laboratory Submittal Form

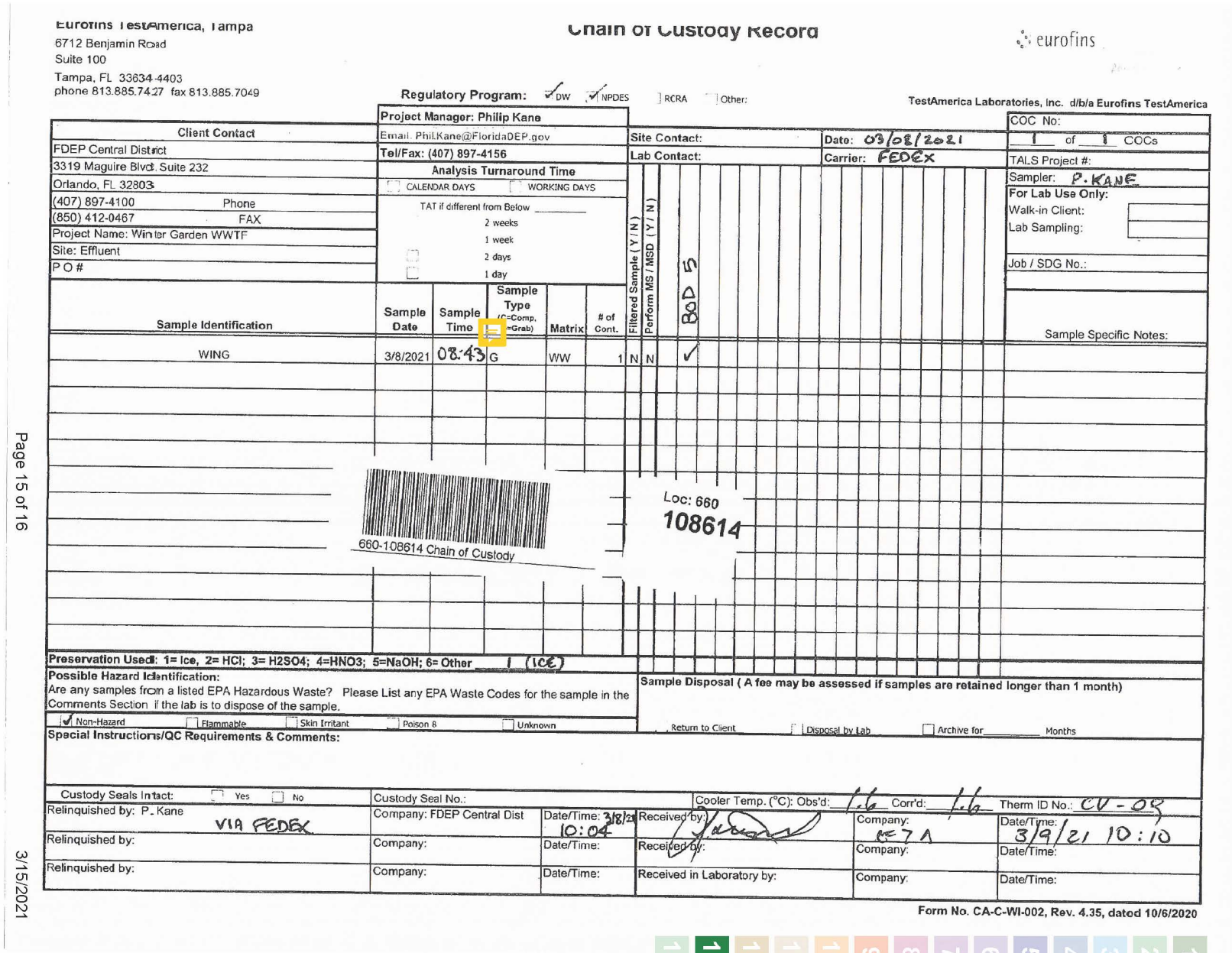
Page 1 of 4
last revised Jan 25, 2018

Requester: Elaine Ignacio
Collected By: KANE, LAFON
Field Report Prepared By: KANE, LAFON
Sampling Agency: FDEP CENTRAL DISTRICT

Location: WINTER GARDEN WWTF 101 E CREST AVE, WINTER GARDEN, FL 34787	☐ Comp ☑ Grab	Collection (comp begin or grab) Date 03/08/2021 Time 08:46	Eastern Central	~~Composite end~~ AL Date Time	Bottle Group(s) (See pg 2): A
Field ID: WING	Matrix (type, e.g., Salt, Fresh, etc): EFFLUENT	Diss. Oxygen: 2.72 ☑ mg/L ☐ % sat	Total Res. Chlorine (mg/L): NA		
WIN/STORET #	Temp (C): 22.8	pH: 6.68	Sample Depth: SURFACE ☐ ft ☐ m	Sp. Conductance (umho/cm): 404.7	
Latitude: 28°36'27" ☐ dd ☑ dms	Longitude: 81°32'53" ☐ dd ☑ dms	Salinity (ppt): NA	Comments		
Location: ~~WING~~ WINTER GARDEN WWTF 101 E CREST AVE, WINTER GARDEN FL 34787	☐ Comp ☑ Grab	Collection (comp begin or grab) Date 03/08/2021 Time 09:27	Eastern Central	~~Composite end~~ AL Date Time	Bottle Group(s): B
Field ID: WING	Matrix (type, e.g., Salt, Fresh, etc): DI WATER BLANK	Diss. Oxygen: NA ☑ mg/L ☐ % sat	Total Res. Chlorine (mg/L): NA		
WIN/STORET #	Temp (C): NA	pH: NA	Sample Depth: SURFACE ☐ ft ☐ m	Sp. Conductance (umho/cm): NA	
Latitude: 28°36'27" ☐ dd ☑ dms	Longitude: 81°32'53" ☐ dd ☑ dms	Salinity (ppt): NA	Comments: BLANK		
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/LAFON	03/08/2021 10:05	FEDEX	5	KK	3-9-21/1100

Lauren Dauria 3.9.21 1110



Eurofins TestAmerica, Tampa
6712 Benjamin Road
Suite 100
Tampa, FL 33634-4403
phone 813.885.7427 fax 813.885.7049

Chain of Custody Record

eurofins

Regulatory Program: ☑ DW ☑ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact	Project Manager: Philip Kane	Site Contact:	Date: 03/08/2021	COC No:
FDEP Central District	Email: PhilKane@FloridaDEP.gov	Lab Contact:	Carrier: FEDEX	1 of 1 COCs
3319 Maguire Blvd. Suite 232	Tel/Fax: (407) 897-4156			TALS Project #:
Orlando, FL 32803	Analysis Turnaround Time			Sampler: P. KANE
(407) 897-4100 Phone	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
(850) 412-0467 FAX	TAT if different from Below			Walk-in Client:
Project Name: Winter Garden WWTF	☐ 2 weeks			Lab Sampling:
Site: Effluent	☐ 1 week			Job / SDG No.:
PO #	☐ 2 days			
	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	BOD 5	Sample Specific Notes:
WING	3/8/2021	08:43	G	WW	1	N	N	✓	

660-108614 Chain of Custody

Loc: 660
108614

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 1 (ICE)

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

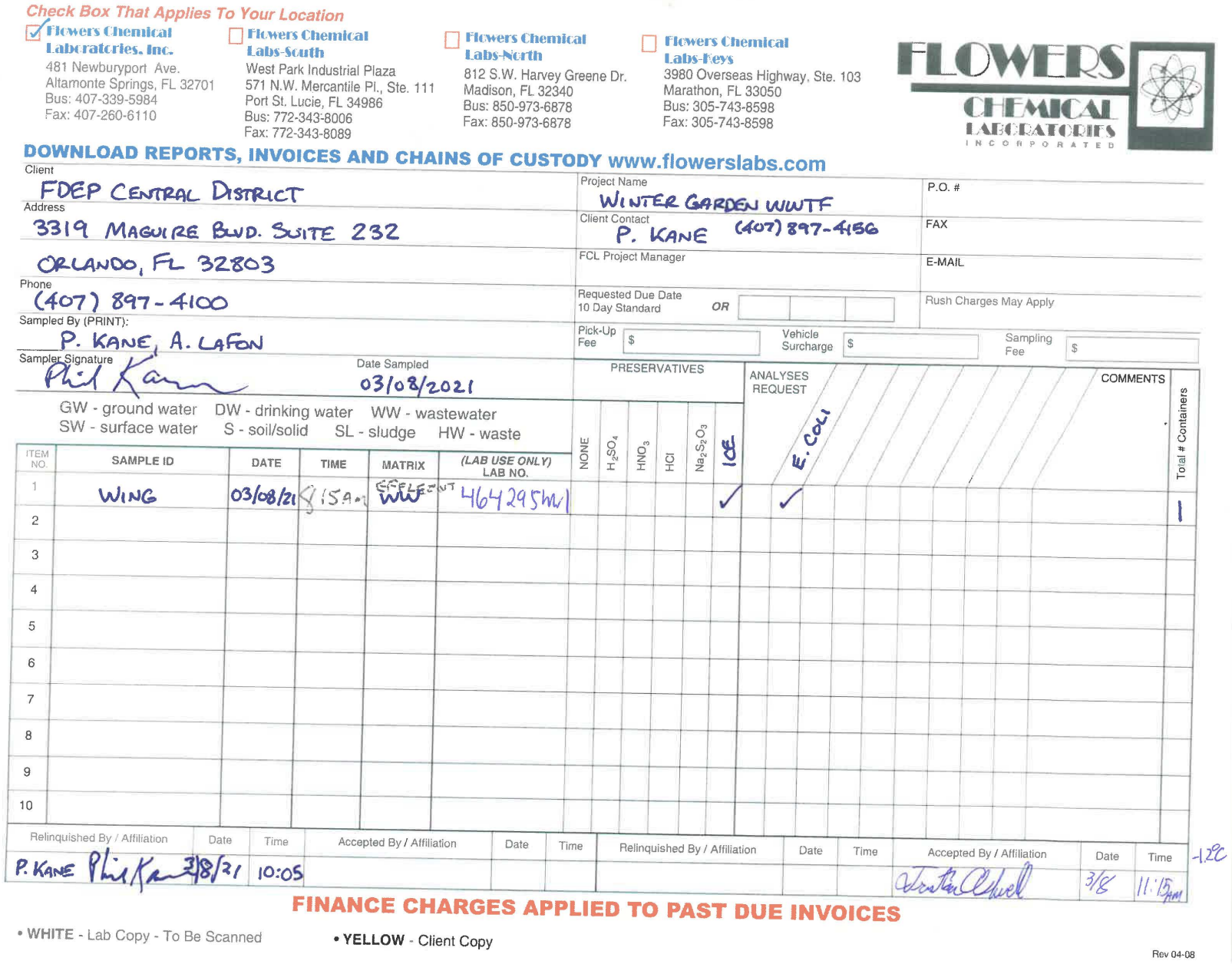
Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: 1.6 Corr'd: 1.6		Therm ID No.: CV-09
Relinquished by: P. Kane VIA FEDEX	Company: FDEP Central Dist	Date/Time: 3/8/21 10:04	Received by:	Company:	Date/Time: 3/9/21 10:10
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.35, dated 10/6/2020

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3/15/2021



Check Box That Applies To Your Location

☑ **Flowers Chemical Laboratories, Inc.**
481 Newburyport Ave.
Altamonte Springs, FL 32701
Bus: 407-339-5984
Fax: 407-260-6110

☐ **Flowers Chemical Labs-South**
West Park Industrial Plaza
571 N.W. Mercantile Pl., Ste. 111
Port St. Lucie, FL 34986
Bus: 772-343-8006
Fax: 772-343-8089

☐ **Flowers Chemical Labs-North**
812 S.W. Harvey Greene Dr.
Madison, FL 32340
Bus: 850-973-6878
Fax: 850-973-6878

☐ **Flowers Chemical Labs-Keys**
3980 Overseas Highway, Ste. 103
Marathon, FL 33050
Bus: 305-743-8598
Fax: 305-743-8598

FLOWERS CHEMICAL LABORATORIES INCORPORATED

DOWNLOAD REPORTS, INVOICES AND CHAINS OF CUSTODY www.flowerslabs.com

Client: FDEP CENTRAL DISTRICT
Address: 3319 MAGUIRE BLVD. SUITE 232
ORLANDO, FL 32803
Phone: (407) 897-4100
Sampled By (PRINT): P. KANE, A. LAFON
Sampler Signature: Phil Kane
Date Sampled: 03/08/2021

Project Name: WINTER GARDEN WWTF
Client Contact: P. KANE (407) 897-4156
FCL Project Manager:
Requested Due Date 10 Day Standard OR
Pick-Up Fee $
Vehicle Surcharge $
Sampling Fee $
P.O. #
FAX
E-MAIL
Rush Charges May Apply

GW - ground water DW - drinking water WW - wastewater
SW - surface water S - soil/solid SL - sludge HW - waste

ITEM NO.	SAMPLE ID	DATE	TIME	MATRIX	(LAB USE ONLY) LAB NO.	PRESERVATIVES: NONE	H_2SO_4	HNO_3	HCl	$Na_2S_2O_3$	ICE	ANALYSES REQUEST: E. COLI	COMMENTS	Total # Containers
1	WING	03/08/21	8:15A	EFFLUENT WW	464295W1						✓	✓		1
2														
3														
4														
5														
6														
7														
8														
9														
10														

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
P. KANE Phil Kane	3/8/21	10:05								3/8	11:15 AM

-1.2C

FINANCE CHARGES APPLIED TO PAST DUE INVOICES

• **WHITE** - Lab Copy - To Be Scanned • **YELLOW** - Client Copy

Rev 04-08

Appendix D. Chemical Analysis of Effluent and Receiving Water

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
3/8/2021 8:46	Effluent Grab	AGP/LN	Algal Growth Potential	26.2 A	mg DryWt/L	0.300	0.900
3/8/2021 8:46	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.82 U	µg/L	0.82	2.5
3/8/2021 8:46	Effluent Grab	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.90 U	µg/L	0.90	2.7
3/8/2021 8:46	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Uncorrected	0.60 U	µg/L	0.60	1.8
3/8/2021 8:46	Effluent Grab	Overflow	Carbonaceous Biochemical Oxygen Demand	2.0 U	mg/L	2.0	2.0
3/8/2021 8:46	Effluent Grab	Toxicology	Bioassay-Acute-Def-FW-C.dubia, LC50	100 L	LC50		
3/8/2021 8:46	Effluent Grab	Toxicology	Bioassay-Acute-Def-FW-Fish, LC50	100 L	LC50		
3/8/2021 8:46	Effluent Grab	Metals	Selenium	0.20 U	µg/L	0.20	0.80
3/8/2021 8:46	Effluent Grab	Metals	Copper	1.80	µg/L	0.40	0.80
3/8/2021 8:46	Effluent Grab	Metals	Aluminum	98	µg/L	5.0	20
3/8/2021 8:46	Effluent Grab	Metals	Zinc	7.2 I	µg/L	5.0	20
3/8/2021 8:46	Effluent Grab	Metals	Lead	0.20 U	µg/L	0.20	0.40
3/8/2021 8:46	Effluent Grab	Metals	Iron	190	µg/L	30	120
3/8/2021 8:46	Effluent Grab	Metals	Sodium	73.3	mg/L	0.50	2.0
3/8/2021 8:46	Effluent Grab	Metals	Silver	0.010 U	µg/L	0.010	0.040
3/8/2021 8:46	Effluent Grab	Metals	Chromium	0.58 I	µg/L	0.40	1.6
3/8/2021 8:46	Effluent Grab	Metals	Calcium	43.2	mg/L	0.075	0.30
3/8/2021 8:46	Effluent Grab	Metals	Nickel	2.1	µg/L	0.50	2.0
3/8/2021 8:46	Effluent Grab	Metals	Cadmium	0.026 I	µg/L	0.020	0.080
3/8/2021 8:46	Effluent Grab	Metals	Arsenic	0.84	µg/L	0.050	0.20
3/8/2021 8:46	Effluent Grab	Metals	Magnesium	8.39	mg/L	0.040	0.16
3/8/2021 8:46	Effluent Grab	Nutrients	Organic Carbon	8.4	mg C/L	0.50	1.0
3/8/2021 8:46	Effluent Grab	Nutrients	Fluoride	0.13	mg F/L	0.035	0.10
3/8/2021 8:46	Effluent Grab	Nutrients	Total Alkalinity	134 A	mg CaCO3/L	0.65	2.5
3/8/2021 8:46	Effluent Grab	Nutrients	Turbidity	1.6	NTU	0.10	0.13
3/8/2021 8:46	Effluent Grab	Nutrients	Chloride	88	mg Cl/L	0.20	0.50
3/8/2021 8:46	Effluent Grab	Nutrients	TSS	2 U	mg/L	2.0	10
3/8/2021 8:46	Effluent Grab	Nutrients	Color (true)	45 A	PCU	2.5	6.0
3/8/2021 8:46	Effluent Grab	Nutrients	Sulfate	34	mg SO4/L	0.20	0.50
3/8/2021 8:46	Effluent Grab	Nutrients	Ammonia-N	0.15	mg N/L	0.020	0.050

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
3/8/2021 8:46	Effluent Grab	Nutrients	Total-P	0.31	mg P/L	0.0050	0.050
3/8/2021 8:46	Effluent Grab	Nutrients	NO2NO3-N	0.78	mg N/L	0.0080	0.020
3/8/2021 8:46	Effluent Grab	Nutrients	O-Phosphate-P	0.27	mg P/L	0.040	0.10
3/8/2021 8:46	Effluent Grab	Nutrients	Kjeldahl Nitrogen	0.60	mg N/L	0.080	0.20
3/8/2021 8:46	Effluent Grab	Pesticides	Mevinphos	1.0 U	ng/L	1.0	4.2
3/8/2021 8:46	Effluent Grab	Pesticides	Naled	1.5 U	ng/L	1.5	6.0
3/8/2021 8:46	Effluent Grab	Pesticides	Oxadiazon	1.5	ng/L	0.30	1.2
3/8/2021 8:46	Effluent Grab	Pesticides	Acetochlor	0.25 U	ng/L	0.25	1.0
3/8/2021 8:46	Effluent Grab	Pesticides	Butylate	0.40 U	ng/L	0.40	1.6
3/8/2021 8:46	Effluent Grab	Pesticides	Demeton	1.5 U	ng/L	1.5	6.0
3/8/2021 8:46	Effluent Grab	Pesticides	Malathion	0.35 U	ng/L	0.35	1.4
3/8/2021 8:46	Effluent Grab	Pesticides	Norflurazon	0.50 U	ng/L	0.50	2.0
3/8/2021 8:46	Effluent Grab	Pesticides	Parathion Ethyl	0.25 U	ng/L	0.25	1.0
3/8/2021 8:46	Effluent Grab	Pesticides	Pendimethalin	1.0 U	ng/L	1.0	4.0
3/8/2021 8:46	Effluent Grab	Pesticides	Ametryn	0.60 U	ng/L	0.60	2.4
3/8/2021 8:46	Effluent Grab	Pesticides	Chlorpyrifos Ethyl	0.25 UJ	ng/L	0.25	1.0
3/8/2021 8:46	Effluent Grab	Pesticides	Diazinon	0.12 U	ng/L	0.12	0.50
3/8/2021 8:46	Effluent Grab	Pesticides	Fluazifop-P-butyl	0.10 U	ng/L	0.10	0.40
3/8/2021 8:46	Effluent Grab	Pesticides	Fonofos	0.20 U	ng/L	0.20	0.80
3/8/2021 8:46	Effluent Grab	Pesticides	Iprodione	0.60 U	ng/L	0.60	2.4
3/8/2021 8:46	Effluent Grab	Pesticides	Phorate	0.52 U	ng/L	0.52	2.1
3/8/2021 8:46	Effluent Grab	Pesticides	Carbophenothion	0.50 U	ng/L	0.50	2.0
3/8/2021 8:46	Effluent Grab	Pesticides	Fipronil Sulfide	1.0 J	ng/L	0.15	0.60
3/8/2021 8:46	Effluent Grab	Pesticides	Fipronil Sulfone	0.80 J	ng/L	0.15	0.60
3/8/2021 8:46	Effluent Grab	Pesticides	Atrazine	70	ng/L	1.2	5.0
3/8/2021 8:46	Effluent Grab	Pesticides	Dimethenamid	0.10 U	ng/L	0.10	0.40
3/8/2021 8:46	Effluent Grab	Pesticides	Fipronil	0.25 U	ng/L	0.25	1.0
3/8/2021 8:46	Effluent Grab	Pesticides	Fludioxonil	0.12 U	ng/L	0.12	0.50
3/8/2021 8:46	Effluent Grab	Pesticides	Flutolanil	0.10 U	ng/L	0.10	0.40
3/8/2021 8:46	Effluent Grab	Pesticides	Fluxapyroxad	0.12 I	ng/L	0.10	0.40
3/8/2021 8:46	Effluent Grab	Pesticides	Metribuzin	3.2 U	ng/L	3.2	13
3/8/2021 8:46	Effluent Grab	Pesticides	Prodiamine	0.17 U	ng/L	0.17	0.70
3/8/2021 8:46	Effluent Grab	Pesticides	Prometon	0.90 U	ng/L	0.90	3.5
3/8/2021 8:46	Effluent Grab	Pesticides	Pronamide	0.15 UJ	ng/L	0.15	0.60

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
3/8/2021 8:46	Effluent Grab	Pesticides	Propiconazole	510	ng/L	12	50
3/8/2021 8:46	Effluent Grab	Pesticides	Atrazine Desethyl	6.5	ng/L	1.5	6.0
3/8/2021 8:46	Effluent Grab	Pesticides	Chlorpyrifos Methyl	0.050 U	ng/L	0.050	0.20
3/8/2021 8:46	Effluent Grab	Pesticides	Cyanazine	3.2 U	ng/L	3.2	13
3/8/2021 8:46	Effluent Grab	Pesticides	Difenoconazole	0.60 U	ng/L	0.60	2.4
3/8/2021 8:46	Effluent Grab	Pesticides	Fipronil Desulfinyl	0.19 I	ng/L	0.12	0.50
3/8/2021 8:46	Effluent Grab	Pesticides	Metalaxyl	0.75 U	ng/L	0.75	3.0
3/8/2021 8:46	Effluent Grab	Pesticides	Terbufos	0.10 U	ng/L	0.10	0.40
3/8/2021 8:46	Effluent Grab	Pesticides	Sucralose	59	µg/L	0.10	0.40
3/8/2021 8:46	Effluent Grab	Pesticides	Oxyfluorfen	0.15 U	ng/L	0.15	0.60
3/8/2021 8:46	Effluent Grab	Pesticides	Pyriproxyfen	0.12 UJ	ng/L	0.12	0.50
3/8/2021 8:46	Effluent Grab	Pesticides	Alachlor	0.25 U	ng/L	0.25	1.0
3/8/2021 8:46	Effluent Grab	Pesticides	Bromacil	5.6	ng/L	0.50	2.0
3/8/2021 8:46	Effluent Grab	Pesticides	Dithiopyr	0.17 UJ	ng/L	0.17	0.70
3/8/2021 8:46	Effluent Grab	Pesticides	Ethion	0.15 U	ng/L	0.15	0.60
3/8/2021 8:46	Effluent Grab	Pesticides	Fenamiphos	0.50 U	ng/L	0.50	2.0
3/8/2021 8:46	Effluent Grab	Pesticides	Fenbuconazole	0.50	ng/L	0.12	0.50
3/8/2021 8:46	Effluent Grab	Pesticides	Terbuthylazine	0.42 UJ	ng/L	0.42	1.7
3/8/2021 8:46	Effluent Grab	Pesticides	Ibuprofen	0.020 U	µg/L	0.020	0.080
3/8/2021 8:46	Effluent Grab	Pesticides	Naproxen	0.0080 U	µg/L	0.0080	0.032
3/8/2021 8:46	Effluent Grab	Pesticides	Myclobutanil	0.35 I	ng/L	0.25	1.0
3/8/2021 8:46	Effluent Grab	Pesticides	Parathion Methyl	0.55 U	ng/L	0.55	2.2
3/8/2021 8:46	Effluent Grab	Pesticides	Simazine	4.8 J	ng/L	0.50	2.0
3/8/2021 8:46	Effluent Grab	Pesticides	Sulfentrazone	370	ng/L	2.5	10
3/8/2021 8:46	Effluent Grab	Pesticides	Metolachlor	0.35 U	ng/L	0.35	1.4
3/8/2021 8:46	Effluent Grab	Pesticides	Molinate	0.30 U	ng/L	0.30	1.2
3/8/2021 8:46	Effluent Grab	Pesticides	Prometryn	0.20 U	ng/L	0.20	0.80
3/8/2021 8:46	Effluent Grab	Pesticides	Azinphos Methyl	2.0 U	ng/L	2.0	8.0
3/8/2021 8:46	Effluent Grab	Pesticides	Azoxystrobin	2.9	ng/L	0.50	2.0
3/8/2021 8:46	Effluent Grab	Pesticides	Caffeine	7.5 UJ	ng/L	7.5	30
3/8/2021 8:46	Effluent Grab	Pesticides	Carfentrazone Ethyl	0.10 U	ng/L	0.10	0.40
3/8/2021 8:46	Effluent Grab	Pesticides	Disulfoton	0.50 U	ng/L	0.50	2.0
3/8/2021 8:46	Effluent Grab	Pesticides	EPTC	1.2 U	ng/L	1.2	5.0
3/8/2021 8:46	Effluent Grab	Pesticides	Ethoprop	0.10 U	ng/L	0.10	0.40

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
3/8/2021 8:46	Effluent Grab	Pesticides	Flumioxazin	1.7 U	ng/L	1.7	7.0
3/8/2021 8:46	Effluent Grab	Pesticides	Hexazinone	0.50 U	ng/L	0.50	2.0
3/8/2021 8:46	Effluent Grab	Pesticides	Imazalil	0.75 U	ng/L	0.75	3.0
3/8/2021 8:46	Effluent Grab	Pesticides	Tebuconazole	1.4 I	ng/L	0.50	2.0
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	3,3'-Dichlorobenzidine	10 UJ	µg/L	10	41
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Nitrobenzene	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Dimethyl phthalate	0.20 U	µg/L	0.20	0.82
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Benzo(k)fluoranthene	0.026 U	µg/L	0.026	0.10
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	2,4-Dichlorophenol	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrotoluene	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Benzo(a)pyrene	0.026 U	µg/L	0.026	0.10
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.026 U	µg/L	0.026	0.10
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.1 U	µg/L	5.1	20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Di-n-butyl phthalate	2.0 U	µg/L	2.0	8.2
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Diethyl phthalate	2.0 U	µg/L	2.0	8.2
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Pentachlorophenol	0.51 U	µg/L	0.51	2.0
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	2-Chloronaphthalene	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Anthracene	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Benzo(b)fluoranthene	0.026 U	µg/L	0.026	0.10
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Fluorene	0.026 U	µg/L	0.026	0.10
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Hexachloroethane	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Isophorone	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Pyrene	0.10 U	µg/L	0.10	0.41
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.1 U	µg/L	3.1	12
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Acenaphthene	0.026 U	µg/L	0.026	0.10
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Benzidine	10 U	µg/L	10	41
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.026 U	µg/L	0.026	0.10
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	N-Nitrosodimethylamine	2.0 U	µg/L	2.0	8.2
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Chrysene	0.026 U	µg/L	0.026	0.10

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Hexachlorobutadiene	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Phenanthrene	0.10 U	µg/L	0.10	0.41
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	4-Nitrophenol	10 U	µg/L	10	41
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Benzo(a)anthracene	0.026 U	µg/L	0.026	0.10
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.026 U	µg/L	0.026	0.10
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Fluoranthene	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Naphthalene	0.10 U	µg/L	0.10	0.41
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrophenol	10 U	µg/L	10	41
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	2,6-Dinitrotoluene	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Acenaphthylene	0.026 U	µg/L	0.026	0.10
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Butyl benzyl phthalate	1.0 U	µg/L	1.0	4.1
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Di-n-octyl phthalate	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Hexachlorobenzene	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	Phenol	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	2-Chlorophenol	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	2-Nitrophenol	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Priority Organic Pollutants	2,4-Dimethylphenol	0.051 U	µg/L	0.051	0.20
3/8/2021 8:46	Effluent Grab	Nutrients	Temperature	22.8	C		
3/8/2021 8:46	Effluent Grab	Nutrients	Specific Conductance	404.7	µmhos/cm		
3/8/2021 8:46	Effluent Grab	Nutrients	pH	6.68			
3/8/2021 8:46	Effluent Grab	Nutrients	Dissolved Oxygen mg/L	2.72	mg/L		
3/8/2021 9:27	Blank	Metals	Chromium	0.40 U	µg/L	0.40	1.6
3/8/2021 9:27	Blank	Metals	Silver	0.010 U	µg/L	0.010	0.040
3/8/2021 9:27	Blank	Metals	Selenium	0.20 U	µg/L	0.20	0.80
3/8/2021 9:27	Blank	Metals	Nickel	0.50 U	µg/L	0.50	2.0
3/8/2021 9:27	Blank	Metals	Arsenic	0.050 U	µg/L	0.050	0.20
3/8/2021 9:27	Blank	Metals	Zinc	5.0 U	µg/L	5.0	20
3/8/2021 9:27	Blank	Metals	Magnesium	0.040 U	mg/L	0.040	0.16
3/8/2021 9:27	Blank	Metals	Lead	0.20 U	µg/L	0.20	0.40

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
3/8/2021 9:27	Blank	Metals	Aluminum	5.0 U	µg/L	5.0	20
3/8/2021 9:27	Blank	Metals	Iron	30 U	µg/L	30	120
3/8/2021 9:27	Blank	Metals	Sodium	0.50 U	mg/L	0.50	2.0
3/8/2021 9:27	Blank	Metals	Cadmium	0.020 U	µg/L	0.020	0.080
3/8/2021 9:27	Blank	Metals	Copper	0.40 U	µg/L	0.40	0.80
3/8/2021 9:27	Blank	Metals	Calcium	0.075 U	mg/L	0.075	0.30
3/8/2021 9:27	Blank	Nutrients	Total-P	0.002 U	mg P/L	0.0020	0.0050
3/8/2021 9:27	Blank	Nutrients	Color (true)	2.5 U	PCU	2.5	6.0
3/8/2021 9:27	Blank	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.0040	0.010
3/8/2021 9:27	Blank	Nutrients	Chloride	0.20 U	mg Cl/L	0.20	0.50
3/8/2021 9:27	Blank	Nutrients	O-Phosphate-P	0.004 U	mg P/L	0.0040	0.010
3/8/2021 9:27	Blank	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.080	0.20
3/8/2021 9:27	Blank	Nutrients	Ammonia-N	0.002 U	mg N/L	0.0020	0.0050
3/8/2021 9:27	Blank	Nutrients	Sulfate	0.20 U	mg SO4/L	0.20	0.50
3/8/2021 9:27	Blank	Nutrients	Turbidity	0.10 U	NTU	0.10	0.13
3/8/2021 9:27	Blank	Nutrients	Organic Carbon	0.50 U	mg C/L	0.50	1.0
3/8/2021 9:27	Blank	Nutrients	Total Alkalinity	0.65 U	mg CaCO3/L	0.65	2.5
3/8/2021 9:27	Blank	Nutrients	Fluoride	0.035 U	mg F/L	0.035	0.10
3/8/2021 9:27	Blank	Pesticides	Butylate	0.40 U	ng/L	0.40	1.6
3/8/2021 9:27	Blank	Pesticides	Caffeine	7.4 UJ	ng/L	7.4	30
3/8/2021 9:27	Blank	Pesticides	Carbophenothion	0.49 U	ng/L	0.49	2.0
3/8/2021 9:27	Blank	Pesticides	Chlorpyrifos Ethyl	0.25 UJ	ng/L	0.25	0.99
3/8/2021 9:27	Blank	Pesticides	Dithiopyr	0.17 UJ	ng/L	0.17	0.69
3/8/2021 9:27	Blank	Pesticides	Fenbuconazole	0.12 U	ng/L	0.12	0.49
3/8/2021 9:27	Blank	Pesticides	Fipronil Sulfone	0.15 UJ	ng/L	0.15	0.59
3/8/2021 9:27	Blank	Pesticides	Fluxapyroxad	0.099 U	ng/L	0.099	0.40
3/8/2021 9:27	Blank	Pesticides	Oxadiazon	0.30 U	ng/L	0.30	1.2
3/8/2021 9:27	Blank	Pesticides	Pyriproxyfen	0.12 UJ	ng/L	0.12	0.49
3/8/2021 9:27	Blank	Pesticides	Simazine	0.49 UJ	ng/L	0.49	2.0
3/8/2021 9:27	Blank	Pesticides	Cyanazine	3.2 U	ng/L	3.2	13
3/8/2021 9:27	Blank	Pesticides	Dimethenamid	0.099 U	ng/L	0.099	0.40
3/8/2021 9:27	Blank	Pesticides	Disulfoton	0.49 U	ng/L	0.49	2.0
3/8/2021 9:27	Blank	Pesticides	Ethion	0.15 U	ng/L	0.15	0.59
3/8/2021 9:27	Blank	Pesticides	Fluazifop-P-butyl	0.099 U	ng/L	0.099	0.40

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
3/8/2021 9:27	Blank	Pesticides	Iprodione	0.59 U	ng/L	0.59	2.4
3/8/2021 9:27	Blank	Pesticides	Metalaxyl	0.74 U	ng/L	0.74	3.0
3/8/2021 9:27	Blank	Pesticides	Metribuzin	3.2 U	ng/L	3.2	13
3/8/2021 9:27	Blank	Pesticides	Mevinphos	1.0 U	ng/L	1.0	4.2
3/8/2021 9:27	Blank	Pesticides	Molinate	0.30 U	ng/L	0.30	1.2
3/8/2021 9:27	Blank	Pesticides	Oxyfluorfen	0.15 U	ng/L	0.15	0.59
3/8/2021 9:27	Blank	Pesticides	Pendimethalin	0.99 U	ng/L	0.99	4.0
3/8/2021 9:27	Blank	Pesticides	Propiconazole	0.49 U	ng/L	0.49	2.0
3/8/2021 9:27	Blank	Pesticides	Terbufos	0.099 U	ng/L	0.099	0.40
3/8/2021 9:27	Blank	Pesticides	Sucralose	0.010 U	µg/L	0.010	0.040
3/8/2021 9:27	Blank	Pesticides	Bromacil	0.49 U	ng/L	0.49	2.0
3/8/2021 9:27	Blank	Pesticides	Chlorpyrifos Methyl	0.049 U	ng/L	0.049	0.20
3/8/2021 9:27	Blank	Pesticides	Flutolanil	0.099 U	ng/L	0.099	0.40
3/8/2021 9:27	Blank	Pesticides	Hexazinone	0.49 U	ng/L	0.49	2.0
3/8/2021 9:27	Blank	Pesticides	Malathion	0.35 U	ng/L	0.35	1.4
3/8/2021 9:27	Blank	Pesticides	Naled	1.5 U	ng/L	1.5	5.9
3/8/2021 9:27	Blank	Pesticides	Parathion Ethyl	0.25 U	ng/L	0.25	0.99
3/8/2021 9:27	Blank	Pesticides	Terbuthylazine	0.42 UJ	ng/L	0.42	1.7
3/8/2021 9:27	Blank	Pesticides	Ametryn	0.59 U	ng/L	0.59	2.4
3/8/2021 9:27	Blank	Pesticides	Atrazine	0.25 U	ng/L	0.25	0.99
3/8/2021 9:27	Blank	Pesticides	Atrazine Desethyl	1.5 U	ng/L	1.5	5.9
3/8/2021 9:27	Blank	Pesticides	Azoxystrobin	0.49 U	ng/L	0.49	2.0
3/8/2021 9:27	Blank	Pesticides	Fenamiphos	0.49 U	ng/L	0.49	2.0
3/8/2021 9:27	Blank	Pesticides	Fipronil Sulfide	0.15 UJ	ng/L	0.15	0.59
3/8/2021 9:27	Blank	Pesticides	Imazalil	0.74 U	ng/L	0.74	3.0
3/8/2021 9:27	Blank	Pesticides	Myclobutanil	0.25 U	ng/L	0.25	0.99
3/8/2021 9:27	Blank	Pesticides	Norflurazon	0.49 U	ng/L	0.49	2.0
3/8/2021 9:27	Blank	Pesticides	Parathion Methyl	0.54 U	ng/L	0.54	2.2
3/8/2021 9:27	Blank	Pesticides	Phorate	0.52 U	ng/L	0.52	2.1
3/8/2021 9:27	Blank	Pesticides	Prometon	0.89 U	ng/L	0.89	3.5
3/8/2021 9:27	Blank	Pesticides	Naproxen	0.0080 U	µg/L	0.0080	0.032
3/8/2021 9:27	Blank	Pesticides	Flumioxazin	1.7 U	ng/L	1.7	6.9
3/8/2021 9:27	Blank	Pesticides	Sulfentrazone	0.49 U	ng/L	0.49	2.0
3/8/2021 9:27	Blank	Pesticides	Ibuprofen	0.020 U	µg/L	0.020	0.080

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
3/8/2021 9:27	Blank	Pesticides	EPTC	1.2 U	ng/L	1.2	4.9
3/8/2021 9:27	Blank	Pesticides	Fludioxonil	0.12 U	ng/L	0.12	0.49
3/8/2021 9:27	Blank	Pesticides	Fonofos	0.20 U	ng/L	0.20	0.79
3/8/2021 9:27	Blank	Pesticides	Pronamide	0.15 UJ	ng/L	0.15	0.59
3/8/2021 9:27	Blank	Pesticides	Difenoconazole	0.59 U	ng/L	0.59	2.4
3/8/2021 9:27	Blank	Pesticides	Ethoprop	0.099 U	ng/L	0.099	0.40
3/8/2021 9:27	Blank	Pesticides	Fipronil Desulfinyl	0.12 U	ng/L	0.12	0.49
3/8/2021 9:27	Blank	Pesticides	Acetochlor	0.25 U	ng/L	0.25	0.99
3/8/2021 9:27	Blank	Pesticides	Alachlor	0.25 U	ng/L	0.25	0.99
3/8/2021 9:27	Blank	Pesticides	Azinphos Methyl	2.0 U	ng/L	2.0	7.9
3/8/2021 9:27	Blank	Pesticides	Carfentrazone Ethyl	0.099 U	ng/L	0.099	0.40
3/8/2021 9:27	Blank	Pesticides	Demeton	1.5 U	ng/L	1.5	5.9
3/8/2021 9:27	Blank	Pesticides	Diazinon	0.12 U	ng/L	0.12	0.49
3/8/2021 9:27	Blank	Pesticides	Fipronil	0.25 U	ng/L	0.25	0.99
3/8/2021 9:27	Blank	Pesticides	Metolachlor	0.35 U	ng/L	0.35	1.4
3/8/2021 9:27	Blank	Pesticides	Prodiamine	0.17 U	ng/L	0.17	0.69
3/8/2021 9:27	Blank	Pesticides	Prometryn	0.20 U	ng/L	0.20	0.79
3/8/2021 9:27	Blank	Pesticides	Tebuconazole	0.49 U	ng/L	0.49	2.0
3/8/2021 9:27	Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	4-Nitrophenol	9.8 U	µg/L	9.8	39
3/8/2021 9:27	Blank	Priority Organic Pollutants	Pentachlorophenol	0.49 U	µg/L	0.49	2.0
3/8/2021 9:27	Blank	Priority Organic Pollutants	Hexachloroethane	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.025 U	µg/L	0.025	0.098
3/8/2021 9:27	Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	2-Chlorophenol	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.025 U	µg/L	0.025	0.098
3/8/2021 9:27	Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.025 U	µg/L	0.025	0.098
3/8/2021 9:27	Blank	Priority Organic Pollutants	Pyrene	0.098 U	µg/L	0.098	0.39
3/8/2021 9:27	Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9 U	µg/L	2.9	12
3/8/2021 9:27	Blank	Priority Organic Pollutants	Benzidine	9.8 U	µg/L	9.8	39
3/8/2021 9:27	Blank	Priority Organic Pollutants	Diethyl phthalate	2.0 U	µg/L	2.0	7.8

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
3/8/2021 9:27	Blank	Priority Organic Pollutants	Nitrobenzene	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Acenaphthene	0.025 U	µg/L	0.025	0.098
3/8/2021 9:27	Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.025 U	µg/L	0.025	0.098
3/8/2021 9:27	Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	4.9 U	µg/L	4.9	20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.025 U	µg/L	0.025	0.098
3/8/2021 9:27	Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Phenol	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.025 U	µg/L	0.025	0.098
3/8/2021 9:27	Blank	Priority Organic Pollutants	Chrysene	0.025 U	µg/L	0.025	0.098
3/8/2021 9:27	Blank	Priority Organic Pollutants	Dimethyl phthalate	0.20 U	µg/L	0.20	0.78
3/8/2021 9:27	Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	2,4-Dimethylphenol	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	2,4-Dinitrophenol	9.8 U	µg/L	9.8	39
3/8/2021 9:27	Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	9.8 U	µg/L	9.8	39
3/8/2021 9:27	Blank	Priority Organic Pollutants	Acenaphthylene	0.025 U	µg/L	0.025	0.098
3/8/2021 9:27	Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Di-n-butyl phthalate	2.0 U	µg/L	2.0	7.8
3/8/2021 9:27	Blank	Priority Organic Pollutants	Fluoranthene	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Hexachlorobenzene	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Phenanthrene	0.098 U	µg/L	0.098	0.39
3/8/2021 9:27	Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	2-Nitrophenol	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Isophorone	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Anthracene	0.049 U	µg/L	0.049	0.20
3/8/2021 9:27	Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.025 U	µg/L	0.025	0.098
3/8/2021 9:27	Blank	Priority Organic Pollutants	Butyl benzyl phthalate	0.98 U	µg/L	0.98	3.9
3/8/2021 9:27	Blank	Priority Organic Pollutants	Fluorene	0.025 U	µg/L	0.025	0.098
3/8/2021 9:27	Blank	Priority Organic Pollutants	Hexachlorobutadiene	0.049 U	µg/L	0.049	0.20

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
3/8/2021 9:27	Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	2.0 U	µg/L	2.0	7.8
3/8/2021 9:27	Blank	Priority Organic Pollutants	Naphthalene	0.098 U	µg/L	0.098	0.39