Effluent Quality Assessment of City of Winter Haven #3 WWTF Polk County NPDES # FL0036048 Sampled October 28, 2019

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

Both measured physical and chemical parameters of the effluent and analytical water chemistry for the effluent grab and composite samples complied with permit limits and/or Class III Freshwater Quality Criteria (62-302.530, F.A.C.). The effluent sample was not acutely toxic to the water flea, *Ceriodaphnia dubia.* The *Cyprinella leedsi* freshwater fish toxicity test was invalidated due to excessive control mortality. The analytical chemistry suggests that the effluent is nitrogen-phosphorus co-limited.

Facility Overview

The City of Winter Haven #3 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 that ultimately flows to the Pace River, a Class III Fresh Water (Figure 1).

The Peace River falls within the Stream Nutrient Region for Numeric Nutrient Criteria (NNC). For this region, the NNC thresholds, expressed as annual geometric means, are 0.49 mg/L total phosphorus and 1.65 mg/L total nitrogen. This FYI event only provides single sample results. It should be noted that waterbody impairment assessments are based on longer-term data, and individual exceedances of a criterion do not indicate use impairment.
http://ca.dep.state.fl.us/mapdirect/?focus=nutrientcriteria

Methods

Effluent grab and composite samples were taken from monitoring site location EFD-01, located at the discharge from the reaeration basin before discharge to outfall D-001. Samples were collected by Southwest District staff Margaret Dorge, Lance Kautz, and Emily Larson. The flow measured at outfall D-001 at the time of sampling was 4.70 MGD.

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.

All references to 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.

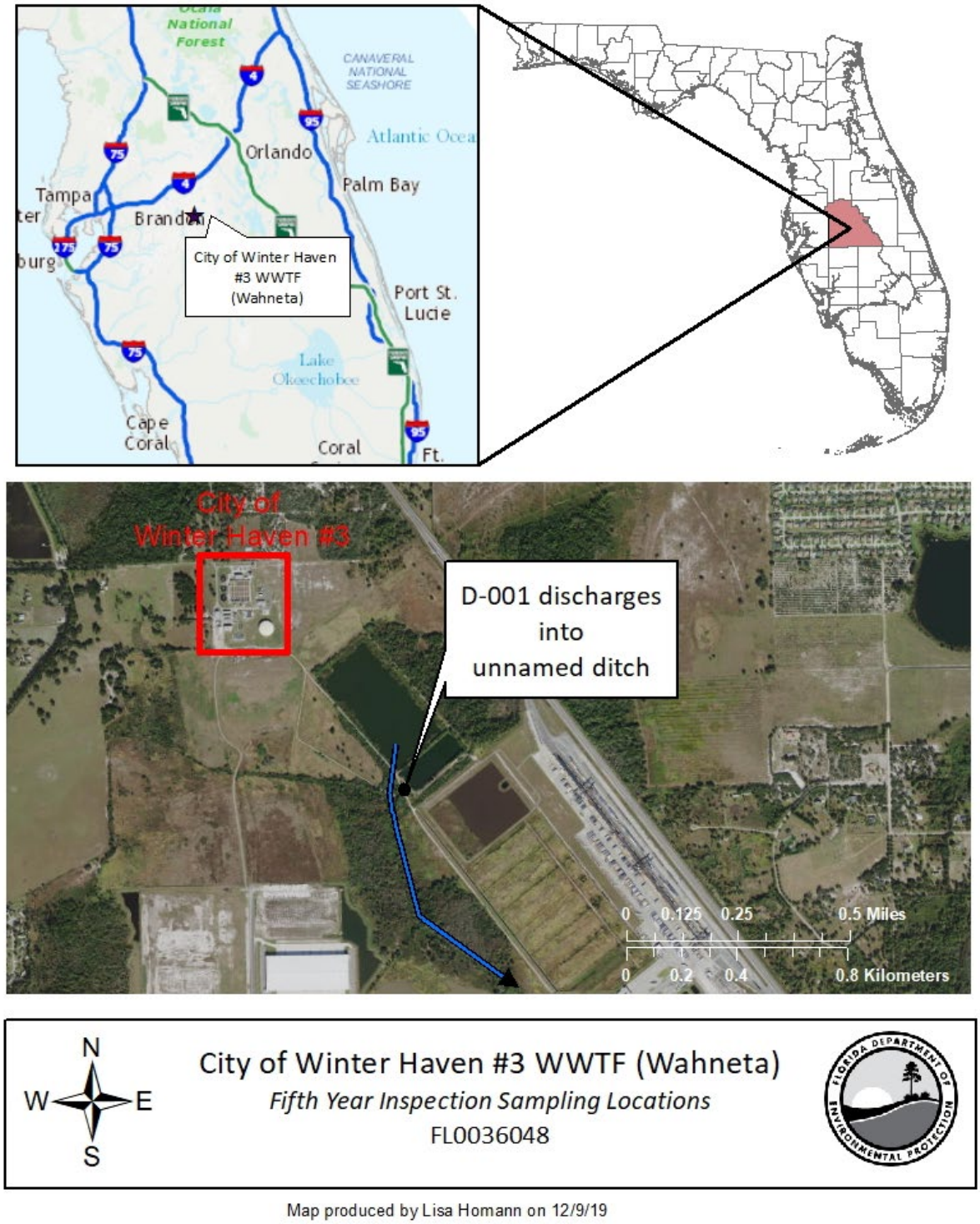


Figure 1. Map of Facility and Sampling Locations

Results

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

- Compliance for effluent total residual chlorine after dechlorination could not be determined because the detection limit for the meter used is 0.05 mg/L.

- All other measured physical and chemical parameters of the effluent complied with permit limits and/or Class III Freshwater Quality Criteria (62-302.530, F.A.C.).

Analytical Water Chemistry (See Table 2 and Appendix D)

- All analytical water chemistry parameters measured in the effluent grab and composite samples complied with permit limits and/or Class III Freshwater Quality Criteria (62-302.530, F.A.C.).

- Chlorophyll *a* (corrected) was undetected in the effluent grab sample.

Microbiology (See Table 2 and Appendix B)

- Fecal coliforms were not detected in the effluent grab sample and therefore complied with facility permit limits. *Escherichia coli* was not detected in the effluent grab sample and therefore met the Class III Freshwater Quality Criterion (62-302.530(6)(b), F.A.C.).

Toxicity Whole Effluent Test (See Table 2)

- Acute definitive toxicity tests were performed October 29 through November 2, 2019.

- The sample was aerated for 15 minutes at a rate of approximately 100 bubbles per minute to decrease the dissolved oxygen (DO) from 11.3 mg/L to 8.9 mg/L.

- For the 96-hour acute definitive test, the calculated LC50 for the water flea, *Ceriodaphnia dubia*, was >100% effluent with 0% mortality in 100% sample. The effluent sample was not acutely toxic to the water flea, *Ceriodaphnia dubia.*

- The *Cyprinella leedsi* freshwater fish test was invalidated due to excessive control mortality and resulted as No Result. The facility permit lists *Pimephales promelas* as the freshwater fish test species to be used for toxicity testing.

- 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)

- All metals detected in the effluent grab samples were present at levels that complied with Class III Freshwater Quality Criteria (62-302.530, F. A. C.). 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 value in the effluent sample. The analytical chemistry suggests that the effluent is nitrogen-phosphorus co-limited (Miller et al. 1978).

- The effluent AGP result 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).

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 Freshwater Criteria, and field parameters

Parameter	Units	Class III Criteria	Effluent Permit Limits	Effluent
Temperature	C	-	-	29.9
pH	SU	6.0 - 8.5	6.0 - 8.5	7.4
Specific Conductance	umhos/cm	≤ 1,275	-	710
Salinity	ppt	-	-	0.3 c
Dissolved Oxygen	mg/L	-	≥ 5.0	8.1
Dissolved Oxygen	% saturation	≥ 38	-	107.6
Total Residual Chlorine (disinfection)	mg/L	-	≥ 0.5 (EFA-01)	5.6
Total Residual Chlorine (dechlorination)	mg/L	-	≤ 0.01	< 0.05 [1]

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

c - Value is calculated

1 - a meter was used with a minimum detect limit of 0.05 mg/L. The value was below this limit.

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

Effluent limits, Class III Freshwater Criteria, and analytical water chemistry, microbiological, and toxicological data

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab	Effluent Composite
Ortho-phosphate	mg P/L	-	Report	0.12	-
Total Phosphorus	mg P/L	≤ 0.49 [2]	≤ 2.0 p	0.22	0.19
Total Ammonia Nitrogen	mg N/L	≤ 2.03 c	-	0.046	0.048
Un-ionized Ammonia (calculated salinity)	mg NH3/L	≤ 0.02 s	≤ 0.02 s	< 0.02 c	-
Nitrate and Nitrite	mg N/L	-	Report	1.1	2.0
Total Kjeldahl Nitrogen	mg N/L	-	Report	1.1	1.0
Organic Nitrogen	mg N/L	-	-	1.1 c	1 c
Total Nitrogen	mg N/L	≤ 1.65 [2]	≤ 6.0 p	2.2 c	3 c
Total Organic Carbon	mg C/L	-	-	8.6	9.3
Chlorophyll *a* - Corrected	ug/L	-	-	0.89 U	-
Phaeophytin	ug/L	-	-	0.98 U	-
CBOD, 5 day, N - inhibited	mg/L	-	≤ 3.0 p [3]	-	2.9
Total Suspended Solids	mg/L	-	≤ 60.0 p	-	2 U
Turbidity	NTU	< 29 t	-	0.80	-
Color (true)	PCU	-	-	8.5	-
Alkalinity	mg CaCO3/L	≥ 20	-	132 A	-
Chloride	mg Cl/L	-	-	97 A	-
Fluoride	mg F/L	≤ 10.0	-	0.50	-
Sulfate	mg SO4/L	-	-	75 A	-
Fecal Coliforms	cfu/100 mL	-	≤ 800 (EFA-01)	4 U	-
Escherichia coli	MPN/100 mL	≤ 410	-	10 U	-
Bioassay - Water flea *(Ceriodaphnia dubia)*, LC50	% effluent	-	≥ 100 p	-	> 100
Bioassay - Fish *(Cyprinella leedsi)*, LC50	% effluent	-	≥ 100 p [4]	-	No result O

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.
c - Value is calculated
p - 24-hour flow proportioned composite
s - Single sample
t - Shall not exceed 29 NTUs above background
A - Value reported is the mean of two or more determinations
O - Sampled, but analysis lost or not performed
U - Material analyzed for but not detected; value reported is the method detection limit
2 - Stream Nutrient Criteria of the NNC expressed as annual geometric means
3 - Monthly average effluent limit for CBOD for October; limits vary by month
4 - permit lists *Pimephales promelas* as freshwater fish test species for toxicity testing

Table 3. Analytical metals data

Effluent limits, Class III Freshwater Criteria, and analytical metals data

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab
Hardness	mg CaCO3/L	-	-	137 c
Aluminum	ug/L	-	-	365
Arsenic	ug/L	≤ 50	-	0.46
Cadmium	ug/L	≤ 0.341 b	-	0.027 I
Calcium	mg/L	-	-	42.8
Chromium, Total [5]	ug/L	≤ 111 b	-	0.40 U
Copper	ug/L	≤ 12.2 b	-	1.74
Iron	ug/L	≤ 1,000	-	30 U
Lead	ug/L	≤ 4.73 b	-	0.28 I
Magnesium	mg/L	-	-	7.20
Nickel	ug/L	≤ 67.9 b	-	1.4 I
Potassium	mg/L	-	-	11.6
Selenium	ug/L	≤ 5.0	-	0.20 U
Silver	ug/L	≤ 0.07	-	0.010 U
Sodium	mg/L	-	-	90.4
Zinc	ug/L	≤ 156 b	-	60

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

b - Value is calculated based on hardness

c - Value is calculated

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

5 - 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*	30.1 A	43.5 ± 8.7	51.6 ± 10.3	83.6 ± 16.7	94.6 ± 18.9	9.6	10

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

Appendix A. Facility Summary

State of Florida
Department of Environmental Protection
Facility Introduction & Summary

PART I: Information gathered prior to sampling event	
Prepared By: Kimberly Cruz	**Contact Number:** (813) 470-5865
Facility Name (as it appears on permit): City of Winter Haven #3 WWTF (Wahneta)	**Former Names:** N/A
NPDES Permit Number: FL0036048	**Permit Expiration Date:** April 4, 2021
Physical Address: 4400 Pollard Road Winter Haven, Florida 33884	
District: Southwest	**County:** Polk
Function of Facility: Wastewater Treatment Facility	
Facility Type: Domestic Wastewater	**Permitted Capacity (MGD): 7.5**
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): From 08/01/2018 to 07/31/2019: D-001: 4.08 MGD	
If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months): From 08/01/2018 to 07/31/2019: R-002: 0.18 MGD	
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):

Surface Water Sample Locations (D-001)

Monitoring Site Number	Description of Monitoring Site
FLW-02	From the flow measuring device at the discharge from the reaeration basin.
EFD-01	At the discharge from the reaeration basin, before discharge to D-001.
EFA-01	After disinfection, before discharge to R-001.

Reclaimed Water SampleLocations (R-001)

Monitoring Site Number	Description of Monitoring Site
FLW-02	From the flow measuring device at the discharge from the reaeration basin.
EFA-01	After disinfection.
EFB-01	After filtration and prior to disinfection.

Description of Permitted Outfall(s):

Surface Water Discharge D-001: An existing 7.5 MGD AADF permitted discharge to an unnamed ditch (Class III fresh waters, WBID No. 1602) that flows into an unnamed tributary of the Peace Creek Drainage Canal and ultimately to the Peace River (Class III fresh waters) at Discharge Location D-001. The outfall is located approximately at latitude 27° 56' 42.07" N, longitude 81° 42' 09.80" W.

Land Application R-002: An existing 4.3 MGD AADF permitted capacity slow-rate public access system. The City of Winter Haven #3 WWTF serves as a source facility for the City of Winter Haven #2 WWTF Master Reuse System (MRS), Permit No. FLA129747.

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

An existing 7.5 MGD Annual Average Daily Flow (AADF) Type I activated sludge domestic wastewater treatment facility, operating as a Four-Stage Bardenpho process, consisting of: two mechanical bar screens, one manual bar screen, one aerated grit chamber of 60,318 gallons, two anoxic basins of 600,000 gallons total volume, three aeration basins of 3.62 million gallons total volume, one post-anoxic basin of 430,000 gallons, one post-aeration basin of 100,000 gallons, three clarifiers of 1.41 MG total volume with a total surface area of 15,239 square feet, two traveling bridge sand filters of 2,432 square feet total filtration area, two chlorine contact chambers of 380,000 gallons total volume, and two dechlorination/reaeration basins of 187,500 gallons total volume.

Effluent for surface water discharge (D-001) is conveyed to a 30-acre polishing pond. From the polishing pond, effluent is discharged into an unnamed ditch which flows into an unnamed tributary of the Peace Creek Drainage Canal, and thence the Peace River.

Effluent for the public access reuse system (R-002) is discharged to a 5 million gallon storage tank which pumps into the master reuse system.

Biosolids treatment consists of: one gravity sludge thickener of 79,300 gallons, two disk thickeners with a maximum feed rate 70 Gallons per Minute (GPM), two digesters of 1.582 MG total volume, and two belt presses. This facility may accept biosolids from the Winter Haven #2 WWTF for stabilization (if needed) and land application.

MODIFICATION:
Construction and installation of a new mechanical bar screen and a traveling bridge filter of 1,216 square feet square feet total filtration area.

AFTER MODIFICATION:
An existing 7.5 MGD Annual Average Daily Flow (AADF) Type I activated sludge domestic wastewater treatment facility, operating as a Four-Stage Bardenpho process, consisting of: three mechanical bar screens, one manual bar screen, one aerated grit chamber of 60,318 gallons, two anoxic basins of 600,000 gallons total volume, three aeration basins of 3.62 Million Gallons (MG) total volume, one post-anoxic basin of 430,000 gallons, one post-aeration basin of 100,000 gallons, three clarifiers of 1.41 MG total volume with a total surface area of 15,239 square feet, three traveling bridge filters of 3,648 square feet total filtration area, two chlorine contact chambers of 380,000 gallons total volume, and two dechlorination/reaeration basins of 187,500 gallons total volume.

Effluent for surface water discharge (D-001) is conveyed to a 30-acre polishing pond. From the polishing pond, effluent is discharged into an unnamed ditch which flows into an unnamed tributary of the Peace Creek Drainage Canal, and thence the Peace River.

Effluent for the public access reuse system (R-002) is discharged to a 5 million gallon (MG) storage tank which pumps into the master reuse system.

Biosolids treatment consists of: one gravity sludge thickener of 79,300 gallons, two disk thickeners with a maximum feed rate 70 Gallons per Minute (GPM), two digesters of 1.582 MG total volume, and two belt presses. This facility may accept biosolids from the Winter Haven #2 WWTF for stabilization (if needed) and land application.

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)

D-001:

			Effluent Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow	MGD	Max Max	7.5 Report	Annual Average Monthly Average	Continuous	Recording Flow Meter with Totalizer	FLW-02	See I.A.4
BOD, Carbonaceous 5 day, 20C	mg/L	Max Max	(1) (1)	Monthly Average Weekly Average	5 Days/Week	24-hr FPC	EFD-01	See I.A.8
Solids, Total Suspended	mg/L	Max Max Max Max	20.0 30.0 45.0 60.0	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFD-01	
Nitrogen, Total	mg/L	Max Max Max Max	3.0 3.75 4.5 6.0	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFD-01	
Phosphorus, Total (as P)	mg/L	Max Max Max Max	1.0 1.25 1.5 2.0	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFD-01	
pH	s.u.	Min Max	6.0 8.5	Single Sample Single Sample	Continuous	Meter	EFD-01	See I.A.3 and I.A.7
Coliform, Fecal	#/100mL	Max Max Max	200 200 800	Monthly Geometric Mean Annual Average Single Sample	5 Days/Week	Grab	EFA-01	See I.A.5
Chlorine, Total Residual (For Disinfection)	mg/L	Min	0.5	Single Sample	Continuous	Meter	EFA-01	See I.A.3 and I.A.6
Chlorine, Total Residual (For Dechlorination)	mg/L	Max	0.01	Single Sample	7 Days/Week	Grab	EFD-01	
Oxygen, Dissolved (DO)	mg/L	Min	5.0	Single Sample	7 Days/Week	Grab	EFD-01	
Ammonia, Unionized (as NH3)	mg/L	Max	0.02	Single Sample	5 Days/Week	Calculated	EFD-01	See I.A.7
Temperature (C), Water	Deg C	Max	Report	Single Sample	5 Days/Week	Grab	EFD-01	See I.A.7
Nitrogen, Ammonia, Total (as N)	mg/L	Max	Report	Single Sample	5 Days/Week	Grab	EFD-01	See I.A.7

			Effluent Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Phosphate, Ortho (as P)	mg/L	Max	Report	Single Sample	5 Days/Week	Grab	EFD-01	
Nitrogen, Kjeldahl, Total (as N)	mg/L	Max	Report	Single Sample	5 Days/Week	Grab	EFD-01	
Nitrogen, Nitrite, Total (as N)	mg/L	Max	Report	Single Sample	5 Days/Week	Grab	EFD-01	
Nitrogen, Nitrate, Total (as N)	mg/L	Max	Report	Single Sample	5 Days/Week	Grab	EFD-01	
Chronic Whole Effluent Toxicity, 7-Day IC25 (Ceriodaphnia dubia)	percent	Min	100	Single Sample	Semi-Annually; twice per year	24-hr FPC	EFD-01	See I.A.9
Chronic Whole Effluent Toxicity, 7-Day IC25 (Pimephales promelas)	percent	Min	100	Single Sample	Semi-Annually; twice per year	24-hr FPC	EFD-01	See I.A.9

Receiving Waters:	Classification (indicate whether fresh or marine):
unnamed tributary to the Peace Creek Drainage Canal to the Peace River	Class III fresh waters (WBID No. 1602)

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

   a. Effluent Limitation
      (1) In any routine or additional follow-up test for chronic whole effluent toxicity, the 25 percent inhibition concentration (IC25) 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 flow proportional 24-hr composite samples of final effluent shall be collected and used in accordance with the sampling protocol discussed in EPA-821-R-02-013, Section 8.
      (2) The first sample shall be used to initiate the test. The remaining two samples shall be collected according to the protocol and used as renewal solutions on Day 3 (48 hours) and Day 5 (96 hours) of the test.
      (3) Samples for routine and additional follow-up tests shall not be collected on the same day.

   d. Test Requirements
      (1) Routine Tests: All routine tests shall be conducted using a control (0% effluent) and a minimum of five test dilutions: 100%, 50%, 25%, 12.5%, and 6.25% final effluent.
      (2) The permittee shall conduct a daphnid, Ceriodaphnia dubia, Survival and Reproduction Test and a fathead minnow, Pimephales promelas, Larval Survival and Growth Test, concurrently.
      (3) All test species, procedures and quality assurance criteria used shall be in accordance with Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th Edition, EPA-821-R-02-013. Any deviation of the bioassay procedures outlined herein shall be submitted in writing to the Department for review and approval prior to use. In the event the above method is revised, the permittee shall conduct chronic toxicity testing in accordance with the revised method.
      (4) The control water and dilution water shall be moderately hard water as described in EPA-821-R-02-013, Section 7.2.3.

   e. Quality Assurance Requirements
      (1) A standard reference toxicant (SRT) quality assurance (QA) chronic toxicity test shall be conducted with each species used in the required toxicity tests either concurrently or initiated no

more than 30 days before the date of each routine or additional follow-up test conducted. Additionally, the SRT test must be conducted concurrently if the test organisms are obtained from outside the test laboratory unless the test organism supplier provides control chart data from at least the last five monthly chronic toxicity tests using the same reference toxicant and test conditions. If the organism supplier provides the required SRT data, the organism supplier's SRT data and the test laboratory's monthly SRT-QA data shall be included in the reports for each companion routine or additional follow-up test required.

(2) If the mortality in the control (0% effluent) exceeds 20% for either species in any test or the "test acceptability criteria" are not met, the test for that species (including the control) shall be invalidated and the test repeated. Test acceptability criteria for each species are defined in EPA-821-R-02-013, Section 13.12 (Ceriodaphnia dubia) and Section 11.11 (Pimephales promelas). The repeat test shall begin within 21 days after the last day of the invalid test.

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

(4) Routine and additional follow-up tests shall be evaluated for acceptability based on the observed dose-response relationship as required by EPA-821-R-02-013, Section 10.2.6., and the evaluation shall be included with the bioassay laboratory reports.

f. Reporting Requirements

(1) Results from all required tests shall be reported on the Discharge Monitoring Report (DMR) as follows:

(a) Routine and Additional Follow-up Test Results: The calculated IC25 for 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:
Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Telephone No.: (813) 632-7600
email: swd_dw@dep.state.fl.us

g. Test Failures
   (1) A test fails when the test results do not meet the limits in I.A.9.a.(1)
   (2) Additional Follow-up Tests:
      (a) If a routine test does not meet the chronic toxicity limitation in I.A.9.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 I.A.9.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 I.A.9.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 I.A.9.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 I.A.9.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 I.A.9.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.):
N/A

Facility Mixing Zone Details (if applicable):
N/A

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

Monitoring Site	Date	Monitoring	Description	Result	Limit	Units	Statistical Base
R-002	4/30/2019	EFB-01	Solids, Total Suspended	6.6	5.0	mg/L	MB - Maximum
R-002	12/31/2018	EFB-01	Solids, Total Suspended	6	5.0	mg/L	MB - Maximum
D-001	11/30/2018	EFD-01	Nitrogen, Total	6.84	6.0	mg/L	MB - Maximum
D-001	10/31/2018	EFD-01	Nitrogen, Total	7.57	6.0	mg/L	MB - Maximum
R-002	10/31/2018	EFB-01	Solids, Total Suspended	5.2	5.0	mg/L	MB - Maximum
R-002	9/30/2018	EFB-01	Solids, Total Suspended	5.6	5.0	mg/L	MB - Maximum
R-002	8/31/2018	EFB-01	Solids, Total Suspended	6	5.0	mg/L	MB - Maximum

Describe previous FYI and WQBEL study:
N/A

Describe previous or current Enforcement Actions (including WLs):

1. Consent Order executed in 04/30/1998 for TSS Exceedances. Enforcement project is closed.
2. Enforcement project initiated on03/08/1995 for an unpermitted Lift Station in Saddle Oaks Subdivision. The enforcement project was closed in 1998.

Describe any violations or problems noted in previous inspection:
12/07/2018 CEI/SSOP: The facility reported the following exceedances from 12/07/17 to 12/07/18:

Monitoring Site	Period End Date	Monitoring Location	Parameter	Result (mg/L)	Limit (mg/L)
D-001	10/31/2018	EFD-01	BOD, Carbonaceous 5 Day, 20C weekly Avg.	5.72	3.6
D-001	10/31/2018	EFD-01	BOD, Carbonaceous 5 Day, 20C 3-Month Avg.	5.03	3.0
D-001	10/31/2018	EFD-01	Nitrogen, Total - Max	7.57	6.0
D-001	7/31/2018	EFD-01	Phosphorus, Total (as P) – weekly average	1.69	1.5
D-001	7/31/2018	EFD-01	Phosphorus, Total (as P) - Max	2.99	2.0
D-001	4/30/2018	EFD-01	BOD, Carbonaceous 5 Day, 20C weekly Avg.	4.58	3.0
D-001	4/30/2018	EFD-01	BOD, Carbonaceous 5 Day, 20C 3-Month Avg	3.88	3.0
D-001	11/30/2017	EFD-01	Nitrogen, Total - Max	16.7	6.0
D-001	11/30/2017	EFD-01	Ammonia, Unionized (as NH3) - Max	0.466	0.2
D-001	10/31/2018	EFD-01	BOD, Carbonaceous 5 Day, 20C weekly Avg.	4.6	3.6
D-001	10/31/2018	EFD-01	BOD, Carbonaceous 5 Day, 20C 3-Month Avg.	3.16	3.0
D-001	10/31/2017	EFD-01	Phosphorus, Total (as P) - Max	3.81	2.0

Monitoring Site	Period End Date	Monitoring Location	Description	Result (mg/L)	Limit (mg/L)

R-002	10/31/2018	EFB-01	Solids, Total Suspended	5.2	5.0
R-002	9/30/2018	EFB-01	Solids, Total Suspended	5.6	5.0
R-002	8/31/2018	EFB-01	Solids, Total Suspended	6	5.0
R-002	4/30/2018	EFB-01	Solids, Total Suspended	5.2	5.0
R-002	3/31/2018	EFB-01	Solids, Total Suspended	7.4	5.0
R-002	1/31/2018	EFB-01	Solids, Total Suspended	11	5.0
R-002	10/31/2017	EFB-01	Solids, Total Suspended	6.4	5.0

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

D-001: EFD-01 and EFA-01

Four Total Nitrogen exceedances from D-001 starting in Sept. 2016 to Nov. 2018. There appears to be no trend; just periodic exceedances.

BOD, Carbonaceous 5 Day, 20C weekly Avg. and Monthly Average data from D-001 reveals an exceedance trend during the months of April and October each year since April 2017.

Unionized Ammonia exceeded the D-001 limit during April 2016 and Nov. 2017. No trends revealed.

Total Chlorine Residual exceedances at EFD-01/D-001 occurred Sept. 2017 and Oct. 2014. No trends apparaent.

One Total Chlorine Residual exceedance at EFA-01/D-001 occurred on March 2015.

Toxicity failures were reported as the following: IC25 Statre 7day Chr Ceriodaphnia in Feb. 2015 and IC25 Statre 7Day Chr Pimephales during Nov. 2014 and Sept. 2014. No trends apparaent.

Dissolved oxygen exceedances was reported May 2015. No trends apparaent.

Five Single Sample maximum exceedances of Total Phospohorus from D-001 starting in Sept. 2014 to July 2018. One weekly Average exceedance of Total phosphorus was reported for July 2018. There appears to be no trend; typically relatively low results with periodic exceedances.

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

PART II: Sampling Event Information	
Date(s) sample collected: 10/28/2019	**Sampler(s):** **Lance Kautz, Margaret Dorge, Emily Larson**
Temperature (Deg C): **29.9**	**pH (SU):** **7.38**
Dissolved Oxygen (mg/L): **8.12**	**Conductivity (umhos/cm):** **710**
Total Residual Chlorine (mg/L): **0.0 (meter detection limit 0.05)**	**Total Residual Chlorine - after Disinfection (mg/L):** **5.58**
Method of Chlorination: **Sodium hypochlorite**	**Method of De-chlorination:** **Sodium bisulfite**
Flow During Sample Collection for each outfall(MGD): **D-001:4.70MGD**	
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): **D-001: 4.12MGD** **R-002: 0.17MGD**	
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: N/a	

Appendix B. Explanations of Measurements

Biological assessments are prepared by DEP staff to provide information for review of NPDES permit renewal applications. Biological assessments, in conjunction with other information concerning the subject facility and its receiving-water body, are used to determine appropriate permit conditions. References to Rule 62-302.530, F.A.C., are to the currently applicable surface water quality criteria table with an effective date of 02/17/2016 and a notice identification number of 17115667.

- **Chemical Analyses of the Effluent**

  The effluent was analyzed for nutrients, metals, organic constituents (base, neutral, and acid extractables) and pesticides following DEP SOPs. The results from these analyses were compared with Water Quality Criteria (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 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 62-302.530(20), 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 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 coliform bacteria may constitute an exceedance of 62-302.530(6) and/or facility permit limits. Fecal coliform results often are based on colony counts outside the acceptable range (B-qualifier). The dilutions performed on the sample did not yield results within the method acceptable range of 20- 60 colony forming units per plate. The B-qualifier does not affect data quality.

- **Chlorophyll *a* Content**

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

- **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 62-302.530(47), F.A.C., 62-302.530(48)(a), F.A.C. and/or 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 62-302.530(62), F.A.C.

- **Definition of Qualifiers**

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-2019-10-21-09

FYI3 City of Winter Haven FL0036048 Sampling Inspection

Customer: SW-DIST

Project ID: FYI3

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Page 1 of 4
last revised Jan 25, 2018

Requester: Tanya Welborn
Collected By: M. Dorge, L. Kautz, E. Larson
Field Report Prepared By: Margaret Dorge / Lance Kautz
Sampling Agency: FDEP / SWD

Location: EFD-01	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 10/28/19 Time 1032	Eastern / Central	Composite end Date	Time	Matrix (type, e.g., Salt, Fresh, etc): DW Effluent (Fresh)	Diss. Oxygen 8.12 mg/L / 107.6 % sat	Total Res. Chlorine (mg/L)	Temp (C) 29.9	pH 7.38	Sample Depth ☐ ft ☐ m	Sp. Conductance (umho/cm) 710	Salinity (ppt)	Comments	Bottle Group(s) (See pg 2): A
Location: EFD-01	☒ Comp ☐ Grab	Collection (comp begin or grab) Date 10/27/19 Time 900	Eastern / Central	Composite end Date 10/27/19 Time 9:15		Matrix (type, e.g., Salt, Fresh, etc): DW Effluent (Fresh)	Diss. Oxygen ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	Temp (C)	pH	Sample Depth ☐ ft ☐ m	Sp. Conductance (umho/cm)	Salinity (ppt)	Comments: Samples were bottled at 1130 on 10/28/19	Bottle Group(s): B
Location: Field Blank	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 10/28/19 Time 1055	Eastern / Central	Composite end Date	Time	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	Temp (C)	pH	Sample Depth ☐ ft ☐ m	Sp. Conductance (umho/cm)	Salinity (ppt)	Comments	Bottle Group(s): C
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date 10/28/19 Time	Eastern / Central	Composite end Date	Time	Matrix (type, e.g., Salt, Fresh, etc)	Diss. Oxygen ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	Temp (C)	pH	Sample Depth ☐ ft ☐ m	Sp. Conductance (umho/cm)	Salinity (ppt)	Comments	Bottle Group(s): D
Field ID: Trip Blank															

Latitude ☐ dd ☐ dms | Longitude ☐ dd ☐ dms | WIN/STORET #

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Lance Kautz	10/29/19 1700	FEDEX	5	Lauren Gouffred	10.29.19 1055

4 jugs

Advanced Environmental Laboratories, Inc.

☐ Altamonte Springs: 330 Northlake Blvd., Ste. 1048, FL 32701 • 407.037.1594 • Lab ID: ES3078
☐ Fort Myers: 13100 Westlinks Terrace, Ste. 10, FL 33913 • 239.674.8130 • Lab ID: EB4492
☐ Jacksonville: 6881 Southpoint Pkwy., FL 32216 • 904.363.9350 • Lab ID: EB2574
☐ Tallahassee: 2639 North Monroe St., Suite D, FL 32303 • 850.219.8274 • Lab ID: EB11095
☐ Gainesville: 4955 SW 41st Blvd., FL 32608 • 352.377.2349 • Lab ID: EB2001
☐ Miramar: 10200 USA Today Way, FL 33025 • 954.889.2288 • Lab ID: EB2535
☐ Tampa: 9610 Princess Palm Ave., FL 33619 • 813.630.9616 • Lab ID: EB4589

Page_____ of _____

Client Name: FDEP SW Dist.	Project Name: FYI3
Address: 13051 N. Telecom Parkway Temple Terrace, FL 33637	Project Number:
Phone: 813-470-5903	PO Number: B5A496
FAX:	FDEP Facility No: FL0036048
Contact: Lance Kautz	FDEP Facility Address: 4400 Pollard Road Winter Haven, FL 33884
Sampled By: Lance Kautz	Special Instructions: RQ-2019-10-21-19
Turn Around Time: ☑ STANDARD ☐ RUSH	☐ ADaPT ☐ EQuIS ☐ Other
AEL Profile #:	

SAMPLE ID	SAMPLE DESCRIPTION	Grab Comp	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. COUNT	BOTTLE SIZE & TYPE	ANALYSIS REQUIRED: E. Coli	Fecal Coliform	LABORATORY I.D. NUMBER
							Preservation	Ice	Ice	
							Field-Filtered?			
RQ20191024	Effluent	Grab	10/28	10:32	WW	4		X	X	

Matrix Code: WW = wastewater SW = surface water GW = ground water DW = drinking water O = oil A = air SO = soil SL = sludge

Preservation Code: I = ice H=(HCl) S = (H_2SO_4) N = (HNO_3) T = (Sodium Thiosulfate)

Received on ice ☐ Yes ☐ No ☐ Temp taken from sample ☐ Temp from blank ☐ Where required, pH checked

Temp. when received (observed)_____ °C Temp. when received (corrected)_____ °C

DCN: AD-051 Form last revised 08/07/2019

Device used for measuring Temp by unique identifier (circle IR temp gun used) J: 9A G: LT-1 LT-2 T: 10A A: 3A M: 3A S: 1V F: 1A

	Relinquished by:	Date	Time	Received by:	Date	Time
1	Lance Kautz	10/28	1311		10/28/19	1311
2						
3						
4						

FOR DRINKING WATER USE:

(When PWS Information not otherwise supplied) PWS ID:_____

Contact Person:_____ Phone :_____

Supplier of Water:_____

Site-Address:_____

Appendix D. Chemical Analysis of Effluent and Receiving Water

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
10/28/2019 10:32	Effluent Grab	AGP/LN	Algal Growth Potential	30.1 A	mg DryWt/L	0.3	0.9
10/28/2019 10:32	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Uncorrected	0.76 I	ug/L	0.65	2
10/28/2019 10:32	Effluent Grab	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.98 U	ug/L	0.98	2.9
10/28/2019 11:30	Effluent Composite	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	2.9	mg/L	0.2	2
10/28/2019 10:32	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.89 U	ug/L	0.89	2.7
10/28/2019 10:32	Effluent Grab	Overflow	Escherichia Coli-Quanti-Tray	10 U	MPN/100 mL	10	10
10/28/2019 10:32	Effluent Grab	Overflow	Fecal Coliforms-Membrane Filter	4 U	cfu/100 mL	4	4
10/28/2019 11:30	Effluent Composite	Toxicology	Bioassay-Acute-Def-FW-C.dubia, LC50	100 L	LC50		
10/28/2019 11:30	Effluent Composite	Toxicology	Bioassay-Acute-Def-FW-Fish, LC50	No result O	LC50		
10/28/2019 10:32	Effluent Grab	Metals	Sodium	90.4	mg/L	0.5	2
10/28/2019 10:32	Effluent Grab	Metals	Potassium	11.6	mg/L	0.3	1.2
10/28/2019 10:32	Effluent Grab	Metals	Iron	30 U	ug/L	30	120
10/28/2019 10:32	Effluent Grab	Metals	Zinc	60	ug/L	5	20
10/28/2019 10:32	Effluent Grab	Metals	Selenium	0.20 U	ug/L	0.2	0.8
10/28/2019 10:32	Effluent Grab	Metals	Cadmium	0.027 I	ug/L	0.02	0.08
10/28/2019 10:32	Effluent Grab	Metals	Chromium	0.40 U	ug/L	0.4	1.6
10/28/2019 10:32	Effluent Grab	Metals	Aluminum	365	ug/L	5	20
10/28/2019 10:32	Effluent Grab	Metals	Copper	1.74	ug/L	0.4	0.8
10/28/2019 10:32	Effluent Grab	Metals	Silver	0.010 U	ug/L	0.01	0.04
10/28/2019 10:32	Effluent Grab	Metals	Nickel	1.4 I	ug/L	0.5	2
10/28/2019 10:32	Effluent Grab	Metals	Calcium	42.8	mg/L	0.075	0.3
10/28/2019 10:32	Effluent Grab	Metals	Arsenic	0.46	ug/L	0.05	0.2
10/28/2019 10:32	Effluent Grab	Metals	Magnesium	7.20	mg/L	0.04	0.16
10/28/2019 10:32	Effluent Grab	Metals	Lead	0.28 I	ug/L	0.2	0.4
10/28/2019 11:30	Effluent Composite	Nutrients	Ammonia-N	0.048	mg N/L	0.002	0.005
10/28/2019 10:32	Effluent Grab	Nutrients	Turbidity	0.80	NTU	0.1	0.13
10/28/2019 10:32	Effluent Grab	Nutrients	Kjeldahl Nitrogen	1.1	mg N/L	0.08	0.2
10/28/2019 10:32	Effluent Grab	Nutrients	Total Alkalinity	132 A	mg CaCO3/L	0.65	2.5
10/28/2019 10:32	Effluent Grab	Nutrients	Total-P	0.22	mg P/L	0.005	0.05
10/28/2019 10:32	Effluent Grab	Nutrients	Organic Carbon	8.6	mg C/L	0.5	1
10/28/2019 11:30	Effluent Composite	Nutrients	NO2NO3-N	2.0	mg N/L	0.04	0.1

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
10/28/2019 10:32	Effluent Grab	Nutrients	Color (true)	8.5	PCU	2.5	6
10/28/2019 11:30	Effluent Composite	Nutrients	TSS	2 U	mg/L	2	10
10/28/2019 10:32	Effluent Grab	Nutrients	Chloride	97 A	mg Cl/L	0.4	1.2
10/28/2019 10:32	Effluent Grab	Nutrients	O-Phosphate-P	0.12	mg P/L	0.02	0.05
10/28/2019 10:32	Effluent Grab	Nutrients	NO2NO3-N	1.1	mg N/L	0.04	0.1
10/28/2019 11:30	Effluent Composite	Nutrients	Organic Carbon	9.3	mg C/L	0.5	1
10/28/2019 10:32	Effluent Grab	Nutrients	Sulfate	75 A	mg SO4/L	0.4	1.2
10/28/2019 10:32	Effluent Grab	Nutrients	Ammonia-N	0.046	mg N/L	0.002	0.005
10/28/2019 11:30	Effluent Composite	Nutrients	Total-P	0.19	mg P/L	0.005	0.05
10/28/2019 10:32	Effluent Grab	Nutrients	Fluoride	0.50	mg F/L	0.035	0.1
10/28/2019 11:30	Effluent Composite	Nutrients	Kjeldahl Nitrogen	1.0	mg N/L	0.08	0.2
10/28/2019 10:32	Effluent Grab	Pesticides	Atrazine	0.011 U	ug/L	0.011	0.043
10/28/2019 10:32	Effluent Grab	Pesticides	Demeton	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Pesticides	Parathion Ethyl	0.021 U	ug/L	0.021	0.085
10/28/2019 10:32	Effluent Grab	Pesticides	Alachlor	0.17 U	ug/L	0.17	0.68
10/28/2019 10:32	Effluent Grab	Pesticides	Metalaxyl	0.19 U	ug/L	0.19	0.77
10/28/2019 10:32	Effluent Grab	Pesticides	Malathion	0.011 U	ug/L	0.011	0.043
10/28/2019 10:32	Effluent Grab	Pesticides	Bromacil	0.085 U	ug/L	0.085	0.34
10/28/2019 10:32	Effluent Grab	Pesticides	Chlorpyrifos Ethyl	0.011 U	ug/L	0.011	0.043
10/28/2019 10:32	Effluent Grab	Pesticides	Chlorpyrifos Methyl	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Pesticides	Ethoprop	0.0053 U	ug/L	0.0053	0.021
10/28/2019 10:32	Effluent Grab	Pesticides	Naled	0.085 U	ug/L	0.085	0.34
10/28/2019 10:32	Effluent Grab	Pesticides	Phorate	0.0053 U	ug/L	0.0053	0.021
10/28/2019 10:32	Effluent Grab	Pesticides	Naproxen	0.0080 U	ug/L	0.008	0.032
10/28/2019 10:32	Effluent Grab	Pesticides	Diazinon	0.032 U	ug/L	0.032	0.13
10/28/2019 10:32	Effluent Grab	Pesticides	Fenamiphos	0.081 U	ug/L	0.081	0.32
10/28/2019 10:32	Effluent Grab	Pesticides	Metolachlor	0.13 U	ug/L	0.13	0.51
10/28/2019 10:32	Effluent Grab	Pesticides	Mevinphos	0.032 U	ug/L	0.032	0.13
10/28/2019 10:32	Effluent Grab	Pesticides	Parathion Methyl	0.011 U	ug/L	0.011	0.043
10/28/2019 10:32	Effluent Grab	Pesticides	Simazine	0.011 U	ug/L	0.011	0.043
10/28/2019 10:32	Effluent Grab	Pesticides	Ibuprofen	0.020 U	ug/L	0.02	0.08
10/28/2019 10:32	Effluent Grab	Pesticides	Butylate	0.053 U	ug/L	0.053	0.21
10/28/2019 10:32	Effluent Grab	Pesticides	Ethion	0.011 U	ug/L	0.011	0.043
10/28/2019 10:32	Effluent Grab	Pesticides	Fonofos	0.011 U	ug/L	0.011	0.043

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
10/28/2019 10:32	Effluent Grab	Pesticides	Hexazinone	0.074 U	ug/L	0.074	0.3
10/28/2019 10:32	Effluent Grab	Pesticides	Metribuzin	0.053 U	ug/L	0.053	0.21
10/28/2019 10:32	Effluent Grab	Pesticides	Prometon	0.064 U	ug/L	0.064	0.26
10/28/2019 10:32	Effluent Grab	Pesticides	Ametryn	0.011 U	ug/L	0.011	0.043
10/28/2019 10:32	Effluent Grab	Pesticides	Azinphos Methyl	0.096 U	ug/L	0.096	0.38
10/28/2019 10:32	Effluent Grab	Pesticides	Disulfoton	0.0053 U	ug/L	0.0053	0.021
10/28/2019 10:32	Effluent Grab	Pesticides	Atrazine Desethyl	0.011 U	ug/L	0.011	0.043
10/28/2019 10:32	Effluent Grab	Pesticides	Atrazine Desisopropyl	0.011 U	ug/L	0.011	0.043
10/28/2019 10:32	Effluent Grab	Pesticides	Norflurazon	0.053 U	ug/L	0.053	0.21
10/28/2019 10:32	Effluent Grab	Pesticides	Prometryn	0.064 U	ug/L	0.064	0.26
10/28/2019 10:32	Effluent Grab	Pesticides	Sucralose	47	ug/L	0.1	0.4
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	2,4-Dichlorophenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Pentachlorophenol	0.52 U	ug/L	0.52	2.1
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.1 U	ug/L	3.1	12
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Chrysene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	2,4-Dimethylphenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Benzo(a)pyrene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Butyl benzyl phthalate	1.0 U	ug/L	1	4.2
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Hexachlorobutadiene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Hexachloroethane	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Phenanthrene	0.10 U	ug/L	0.1	0.42
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	2-Nitrophenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Di-n-octyl phthalate	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Diethyl phthalate	2.1 U	ug/L	2.1	8.3
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	N-Nitrosodimethylamine	2.1 U	ug/L	2.1	8.3
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Naphthalene	0.10 U	ug/L	0.1	0.42
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Nitrobenzene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Anthracene	0.052 U	ug/L	0.052	0.21

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Benzo(a)anthracene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Benzo(b)fluoranthene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Benzo(k)fluoranthene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrophenol	10 U	ug/L	10	42
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	2-Chlorophenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	3,3'-Dichlorobenzidine	10 U	ug/L	10	42
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.2 U	ug/L	5.2	21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	4-Nitrophenol	10 U	ug/L	10	42
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Acenaphthene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Di-n-butyl phthalate	2.1 U	ug/L	2.1	8.3
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Dimethyl phthalate	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Isophorone	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Pyrene	0.10 U	ug/L	0.1	0.42
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrotoluene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Hexachlorobenzene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Phenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	2,6-Dinitrotoluene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Acenaphthylene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Benzidine	10 U	ug/L	10	42
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Fluoranthene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	Fluorene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:32	Effluent Grab	Priority Organic Pollutants	2-Chloronaphthalene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:32	Effluent Grab	Nutrients	Temperature	29.9	C		
10/28/2019 10:32	Effluent Grab	Nutrients	Dissolved Oxygen	107.6	%Sat		
10/28/2019 10:32	Effluent Grab	Nutrients	Specific Conductance	710	umhos/cm		
10/28/2019 10:32	Effluent Grab	Nutrients	pH	7.38			
10/28/2019 10:55	Blank	Metals	Zinc	5.0 U	ug/L	5	20

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
10/28/2019 10:55	Blank	Metals	Chromium	0.40 U	ug/L	0.4	1.6
10/28/2019 10:55	Blank	Metals	Copper	0.40 U	ug/L	0.4	0.8
10/28/2019 10:55	Blank	Metals	Selenium	0.20 U	ug/L	0.2	0.8
10/28/2019 10:55	Blank	Metals	Aluminum	5.0 U	ug/L	5	20
10/28/2019 10:55	Blank	Metals	Sodium	0.50 U	mg/L	0.5	2
10/28/2019 10:55	Blank	Metals	Cadmium	0.020 U	ug/L	0.02	0.08
10/28/2019 10:55	Blank	Metals	Arsenic	0.050 U	ug/L	0.05	0.2
10/28/2019 10:55	Blank	Metals	Iron	30 U	ug/L	30	120
10/28/2019 10:55	Blank	Metals	Silver	0.010 U	ug/L	0.01	0.04
10/28/2019 10:55	Blank	Metals	Calcium	0.075 U	mg/L	0.075	0.3
10/28/2019 10:55	Blank	Metals	Lead	0.20 U	ug/L	0.2	0.4
10/28/2019 10:55	Blank	Metals	Nickel	0.50 U	ug/L	0.5	2
10/28/2019 10:55	Blank	Metals	Magnesium	0.040 U	mg/L	0.04	0.16
10/28/2019 10:55	Blank	Metals	Potassium	0.30 U	mg/L	0.3	1.2
10/28/2019 10:55	Blank	Nutrients	Chloride	0.20 U	mg Cl/L	0.2	0.6
10/28/2019 10:55	Blank	Nutrients	Organic Carbon	0.50 U	mg C/L	0.5	1
10/28/2019 10:55	Blank	Nutrients	Color (true)	2.5 U	PCU	2.5	6
10/28/2019 10:55	Blank	Nutrients	Sulfate	0.20 U	mg SO4/L	0.2	0.6
10/28/2019 10:55	Blank	Nutrients	O-Phosphate-P	0.004 U	mg P/L	0.004	0.01
10/28/2019 10:55	Blank	Nutrients	Total-P	0.002 U	mg P/L	0.002	0.005
10/28/2019 10:55	Blank	Nutrients	Fluoride	0.035 U	mg F/L	0.035	0.1
10/28/2019 10:55	Blank	Nutrients	Total Alkalinity	0.65 U	mg CaCO3/L	0.65	2.5
10/28/2019 10:55	Blank	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.08	0.2
10/28/2019 10:55	Blank	Nutrients	Ammonia-N	0.002 U	mg N/L	0.002	0.005
10/28/2019 10:55	Blank	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.004	0.01
10/28/2019 10:55	Blank	Nutrients	Turbidity	0.10 U	NTU	0.1	0.13
10/28/2019 10:55	Blank	Pesticides	Alachlor	0.17 U	ug/L	0.17	0.67
10/28/2019 10:55	Blank	Pesticides	Bromacil	0.083 U	ug/L	0.083	0.33
10/28/2019 10:55	Blank	Pesticides	Diazinon	0.031 U	ug/L	0.031	0.12
10/28/2019 10:55	Blank	Pesticides	Atrazine Desisopropyl	0.010 U	ug/L	0.01	0.042
10/28/2019 10:55	Blank	Pesticides	Fonofos	0.010 U	ug/L	0.01	0.042
10/28/2019 10:55	Blank	Pesticides	Naled	0.083 U	ug/L	0.083	0.33
10/28/2019 10:55	Blank	Pesticides	Ametryn	0.010 U	ug/L	0.01	0.042
10/28/2019 10:55	Blank	Pesticides	Atrazine Desethyl	0.010 U	ug/L	0.01	0.042

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
10/28/2019 10:55	Blank	Pesticides	Azinphos Methyl	0.094 U	ug/L	0.094	0.38
10/28/2019 10:55	Blank	Pesticides	Chlorpyrifos Ethyl	0.010 U	ug/L	0.01	0.042
10/28/2019 10:55	Blank	Pesticides	Ethion	0.010 U	ug/L	0.01	0.042
10/28/2019 10:55	Blank	Pesticides	Mevinphos	0.031 U	ug/L	0.031	0.12
10/28/2019 10:55	Blank	Pesticides	Norflurazon	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Pesticides	Prometryn	0.062 U	ug/L	0.062	0.25
10/28/2019 10:55	Blank	Pesticides	Demeton	0.025 U	ug/L	0.025	0.1
10/28/2019 10:55	Blank	Pesticides	Metolachlor	0.12 U	ug/L	0.12	0.5
10/28/2019 10:55	Blank	Pesticides	Simazine	0.010 U	ug/L	0.01	0.042
10/28/2019 10:55	Blank	Pesticides	Sucralose	0.010 U	ug/L	0.01	0.04
10/28/2019 10:55	Blank	Pesticides	Butylate	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Pesticides	Chlorpyrifos Methyl	0.025 U	ug/L	0.025	0.1
10/28/2019 10:55	Blank	Pesticides	Disulfoton	0.0052 U	ug/L	0.0052	0.021
10/28/2019 10:55	Blank	Pesticides	Metribuzin	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Pesticides	Parathion Methyl	0.010 U	ug/L	0.01	0.042
10/28/2019 10:55	Blank	Pesticides	Atrazine	0.010 U	ug/L	0.01	0.042
10/28/2019 10:55	Blank	Pesticides	Ethoprop	0.0052 U	ug/L	0.0052	0.021
10/28/2019 10:55	Blank	Pesticides	Hexazinone	0.073 U	ug/L	0.073	0.29
10/28/2019 10:55	Blank	Pesticides	Malathion	0.010 U	ug/L	0.01	0.042
10/28/2019 10:55	Blank	Pesticides	Metalaxyl	0.19 U	ug/L	0.19	0.75
10/28/2019 10:55	Blank	Pesticides	Ibuprofen	0.020 U	ug/L	0.02	0.08
10/28/2019 10:55	Blank	Pesticides	Parathion Ethyl	0.021 U	ug/L	0.021	0.083
10/28/2019 10:55	Blank	Pesticides	Prometon	0.062 U	ug/L	0.062	0.25
10/28/2019 10:55	Blank	Pesticides	Fenamiphos	0.079 U	ug/L	0.079	0.32
10/28/2019 10:55	Blank	Pesticides	Phorate	0.0052 U	ug/L	0.0052	0.021
10/28/2019 10:55	Blank	Pesticides	Naproxen	0.0080 U	ug/L	0.008	0.032
10/28/2019 10:55	Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Pyrene	0.10 U	ug/L	0.1	0.42
10/28/2019 10:55	Blank	Priority Organic Pollutants	Phenanthrene	0.10 U	ug/L	0.1	0.42
10/28/2019 10:55	Blank	Priority Organic Pollutants	Nitrobenzene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Isophorone	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Fluorene	0.026 U	ug/L	0.026	0.1

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
10/28/2019 10:55	Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	10 U	ug/L	10	42
10/28/2019 10:55	Blank	Priority Organic Pollutants	Acenaphthene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:55	Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:55	Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:55	Blank	Priority Organic Pollutants	Fluoranthene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Hexachloroethane	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Naphthalene	0.10 U	ug/L	0.1	0.42
10/28/2019 10:55	Blank	Priority Organic Pollutants	2,4-Dimethylphenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	2,4-Dinitrophenol	10 U	ug/L	10	42
10/28/2019 10:55	Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.1 U	ug/L	3.1	12
10/28/2019 10:55	Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.2 U	ug/L	5.2	21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Butyl benzyl phthalate	1.0 U	ug/L	1	4.2
10/28/2019 10:55	Blank	Priority Organic Pollutants	Chrysene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:55	Blank	Priority Organic Pollutants	Diethyl phthalate	2.1 U	ug/L	2.1	8.3
10/28/2019 10:55	Blank	Priority Organic Pollutants	Pentachlorophenol	0.52 U	ug/L	0.52	2.1
10/28/2019 10:55	Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	2-Chlorophenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:55	Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:55	Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Hexachlorobenzene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	2.1 U	ug/L	2.1	8.3
10/28/2019 10:55	Blank	Priority Organic Pollutants	Phenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	2-Nitrophenol	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Acenaphthylene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:55	Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.052 U	ug/L	0.052	0.21

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
10/28/2019 10:55	Blank	Priority Organic Pollutants	Di-n-butyl phthalate	2.1 U	ug/L	2.1	8.3
10/28/2019 10:55	Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	4-Nitrophenol	10 U	ug/L	10	42
10/28/2019 10:55	Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:55	Blank	Priority Organic Pollutants	Hexachlorobutadiene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:55	Blank	Priority Organic Pollutants	Anthracene	0.052 U	ug/L	0.052	0.21
10/28/2019 10:55	Blank	Priority Organic Pollutants	Benzidine	10 U	ug/L	10	42
10/28/2019 10:55	Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.026 U	ug/L	0.026	0.1
10/28/2019 10:55	Blank	Priority Organic Pollutants	Dimethyl phthalate	0.052 U	ug/L	0.052	0.21