Effluent Quality Assessment of Northwest Regional WRF Hillsborough County NPDES # FL0041670 Sampled January 23, 2023

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

All analytes measured in the effluent grab and 24-hour flow proportioned composite samples complied with Class III Water Quality Criteria for Fresh Waters and effluent permit limits. The nutrient and algal growth potential (AGP) results do not suggest a potential for nutrient enrichment of the receiving waters. There were four organic constituents detected in the effluent grab sample.

Facility Overview

The Northwest Regional Water Reclamation Facility (WRF) is an advanced domestic wastewater treatment facility. A Facility Summary, including a description of the facility, summary of permit limits, and any relevant Administrative Order (AO), Consent Order (CO), and Discharge Monitoring Report (DMR) information is provided in Appendix A. The facility was issued a warning letter on November 19, 2020 for a Sanitary Sewer Overflow. The effluent is continuously discharged into Rocky Creek, a Class III Fresh Water [waterbody identification (WBID) #1507] (Figure 1).

Rocky Creek falls within the Peninsular Nutrient Watershed Region for Numeric Nutrient Criteria (NNC). For this region, the NNC, expressed as annual geometric means, are 0.12 mg/L total phosphorus and 1.54 mg/L total nitrogen (Paragraph 62-302.531(2)(c), F.A.C.). Rocky Creek falls within the Peninsula bioregion; the daily average dissolved oxygen (DO) saturation shall not be below 38 percent in more than 10 percent of the values (Paragraph 62-302.533(1)(a), F.A.C.). This FYI event only provides single sample results. It should be noted that waterbody impairment assessments are based on longer-term data, and individual exceedances of a criterion do not indicate use impairment. http://ca.dep.state.fl.us/mapdirect/?focus=nutrientcriteria

Methods

Effluent grab and 24-hour flow proportioned composite samples were collected from monitoring site location EFD-01, for outfall D-001 on January 23, 2023. Most permit limits apply to upstream monitoring location EFA-01, after disinfection and prior to discharge to the reuse system and all permitted outfalls.

Samples were collected by Emmalise Hunter and Maryn Jones (Southwest district). Analyses were performed by Eurofins Environmental Testing in Orlando, Benchmark EnviroAnalytical, Inc. in Palmetto, and DEP Laboratory in Tallahassee. *Escherichia coli* (*E. coli*) analysis was scheduled but enterococci analysis was requested by the sampler.

All field and laboratory methods followed DEP Standard Operating Procedures (see https://floridadep.gov/dear/quality-assurance/content/dep-sops and https://floridadep.gov/dear/florida-dep-laboratory/content/dep-laboratory-quality-assurance-manual-and-sops for details) and met DEP quality assurance/quality control standards (see

https://floridadep.gov/dear/quality-assurance). Explanations of specific methods and measurements can be found in Appendix B.

Class III Water Quality Criteria for Fresh and Marine Waters are found in Chapter 62-302, F.A.C. All references to Rule 62-302.530, F.A.C. are to the surface water quality criteria table with an effective date of 02/17/2016 and a notice identification number of 17115667.

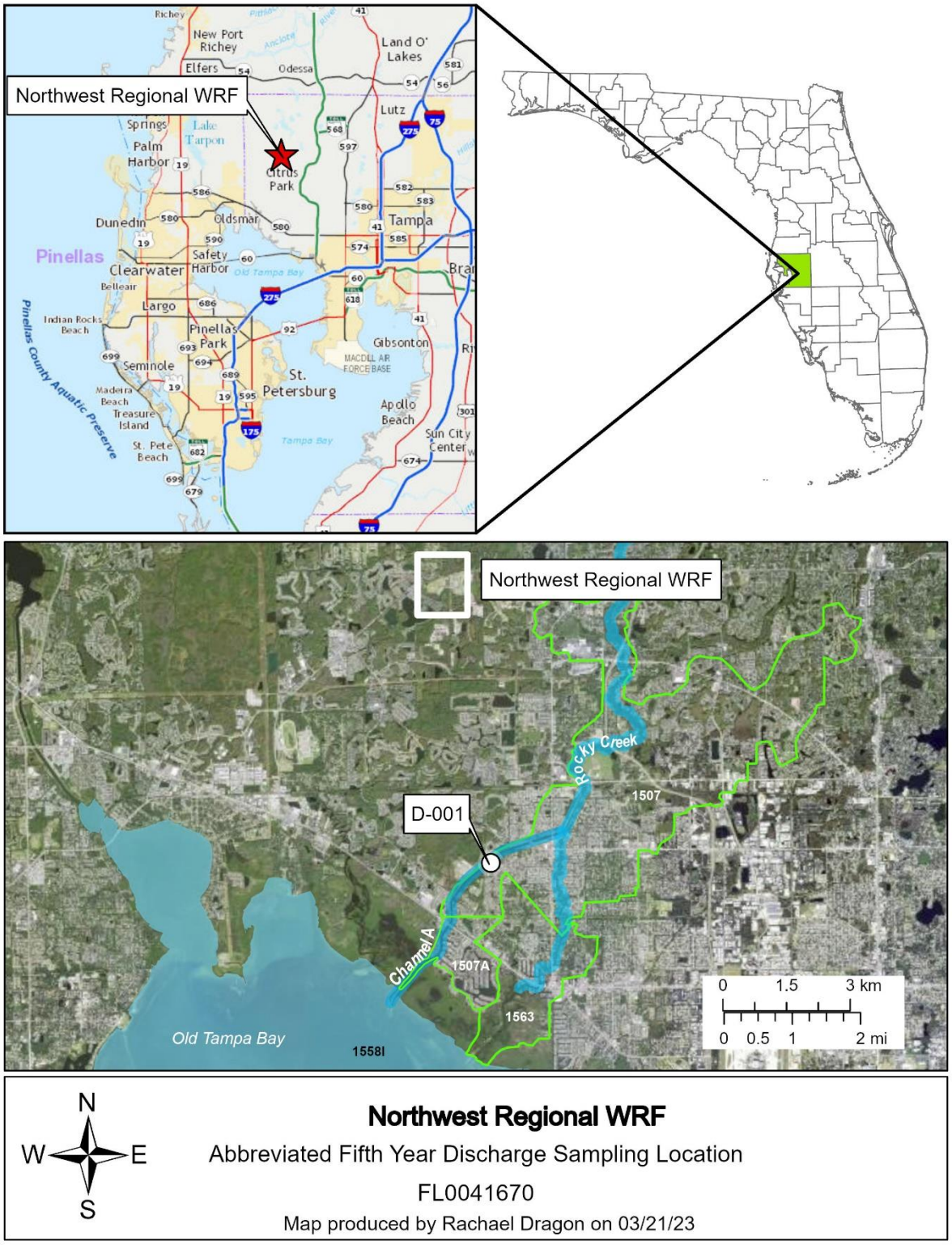


Figure 1. Map of Facility and Discharge Location

Results

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

- All effluent water quality parameters complied with Class III Water Quality Criteria for Fresh Waters and EFA-01 effluent permit limits.

Analytical Water Chemistry (See Table 2 and Appendix D)

- All water chemistry analytes detected in the effluent grab and composite samples complied with Class III Water Quality Criteria for Fresh Waters and EFA-01 effluent permit limits.

- The CBOD sample was received out of hold time and was Q-qualified. It was J-qualified due to standard recovery outside of acceptable limits.

- For comparative purposes only, total phosphorus and total nitrogen in the effluent composite and effluent grab samples was greater than the annual geometric mean limit for NNC in in Peninsular Nutrient Watershed Region.

Microbiology (See Table 2 and Appendix B)

- The effluent fecal coliform level complied with the EFA-01 effluent permit limit.

- *E. coli* analysis was scheduled but not performed. Enterococci analysis was requested and analyzed by the laboratory.

Toxicity Whole Effluent Test (See Table 2)

- The test for *Ceriodaphnia dubia* was performed January 24 through January 28, 2023.

- The test for *Pimephales promelas* was performed January 25 through January 29, 2023.

- The sample was aerated for 15 minutes at a rate of approximately 100 bubbles per minute to decrease the dissolved oxygen (DO) from 12.7 mg/L to 8.6 mg/L.

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

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

- For the 96-hour acute definitive test, the calculated LC50 for the water flea, *Ceriodaphnia dubia*, was >100% effluent with 0% mortality in 100% sample. The calculated LC50 for the fish, *Pimephales promelas*, was >100% effluent with 5%

mortality in 100% sample. The effluent sample was not toxic to either test species during the 96-hour acute definitive bioassays and, therefore, complied with EFA-01 effluent permit limits.

- Due to a shipping issue, the fish (*Pimephales promelas*) arrived a day later than initially planned. Because of this, the result was Q-qualified as the sample was held beyond the 36-hour hold time.

- Total residual chlorine (TRC) was detected in the bioassay sample in the laboratory at 0.51 mg/L. An aliquot of this sample was dechlorinated by the addition of sodium thiosulfate (0.025 N) at a rate of 0.3 mL per liter of sample to neutralize the chlorine. Bioassays were performed on the dechlorinated aliquot in addition to the bioassays performed on the original sample. The same concentration of sodium thiosulfate was added to the dechlorinated test controls. The purpose of the dechlorinated test controls was to confirm that there was no adverse effect of adding sodium thiosulfate to the sample. There was no mortality in the dechlorinated controls of either test species.

- 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 effluent grab sample AGP result of 5.89 mg dry wt/L is within the AGP range (0.81 to 6.0 mg dry wt/L) suggested to be representative of moderately high productivity for freshwater (Miller et al. 1978).

- An aliquot of the AGP sample was dechlorinated from 0.45 mg/L to 0.03 mg/L by the addition of sodium thiosulfate to neutralize the chlorine. An AGP test was performed on the dechlorinated aliquot in addition to the AGP performed on the original sample. The same concentration of sodium thiosulfate was added to the dechlorinated autoclaved DI water. The purpose of the dechlorinated autoclaved DI water was to confirm that there was no adverse effect of adding sodium thiosulfate to the sample.

- Differences greater than an order of magnitude between actual and predicted AGP values are considered sufficient evidence to warrant follow up testing with the algal growth inhibition bioassay. True algal growth inhibition can only be determined by performing an actual algal growth inhibition test. Should algal growth inhibition be suspected, the district should request that the algal growth inhibition test be performed as a follow-up to the inspection.

Organic Constituents (See Table 7 and Appendix D)

- Bromodichloromethane, chloroform, dibromochloromethane, and hexachlorocyclopentadiene were detected in the effluent grab sample. Three of these are byproducts of water disinfection and one is an intermediate in the manufacture of pesticides.

- The effluent grab level of dibromochloromethane is below the permit limit expressed as an annual average.

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 EFA-01	Effluent Grab EFD-01
Temperature	C	-	-	24
pH	SU	6.0 - 8.5	6.0 - 8.5 s	7.7
Specific Conductance	umhos/cm	≤ 1,275	-	997
Salinity	ppth	-	-	0.5 c
Dissolved Oxygen	% saturation	≥ 38	-	87.8
Dissolved Oxygen	mg/L	-	≥ 5.0 s	7.2

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 EFA-01	Effluent Composite EFD-01	Effluent Grab EFD-01
Ortho-phosphate	mg P/L	-	-	-	0.10
Total Phosphorus	mg P/L	≤ 0.12 g	≤ 2.0 s	0.16	0.16
Total Ammonia Nitrogen	mg N/L	≤ 2.21 s	-	-	0.035
Un-ionized Ammonia (calc salinity)	mg N/L	-	-	-	< 0.02 c
Nitrate and Nitrite	mg N/L	-	-	1.4	1.5
Total Kjeldahl Nitrogen	mg N/L	-	-	0.86	0.87
Organic Nitrogen	mg N/L	-	-	-	0.84 c
Total Nitrogen	mg N/L	≤ 1.54 g	≤ 6.0 sp	2.3 c	2.4 c
Total Organic Carbon	mg C/L	-	-	-	7.7
Chlorophyll *a* - Corrected	µg/L	-	-	-	0.89 U
Phaeophytin	µg/L	-	-	-	0.98 U
CBOD, 5 day, N - inhibited	mg/L	-	≤ 10.0 sp	1.2 IJQ	-
Hardness	mg CaCO3/L	-	-	-	262 c
Total Suspended Solids	mg/L	-	≤ 10.0 s	2 U	2 U
Turbidity	NTU	≤ 29 t	-	-	0.40 I
Color (true)	PCU	-	-	-	3.7 I
Alkalinity	mg CaCO3/L	≥ 20	-	-	201 A
Chloride	mg Cl/L	-	-	-	130
Fluoride	mg F/L	≤ 10.0	-	-	0.59
Sulfate	mg SO4/L	-	-	-	98
Fecal Coliforms	cfu/100 mL	-	≤ 25 s	-	1.0 U
Enterococci	MPN/100 mL	-	-	-	10.0 U
Bioassay - Water flea (*Ceriodaphnia dubia*) dechlorinated	% effluent	-	≥ 100 sp	> 100	-
Bioassay - Fish *(Pimephales promelas)* dechlorinated	% effluent	-	≥ 100 sp	> 100 Q	-

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.
c - Value is calculated
g - Value expressed as an annual geometric mean
p – 24-hour flow proportioned composite
s - Single sample
t - Shall not exceed 29 NTUs above background
A - Value reported is the mean of two or more determinations
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J - Estimated value
Q - Sample held beyond normal holding time
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	Class III Criteria Effluent Grab	Effluent Permit Limits	Effluent Grab EFD-01
Hardness	mg CaCO3/L	-	-	262 c
Aluminum	µg/L	-	-	8.4 I
Arsenic	µg/L	≤ 50	-	0.36
Cadmium	µg/L	≤ 0.553 b	-	0.020 U
Calcium	mg/L	-	-	80.6
Chromium, Total [1]	µg/L	≤ 190 b	-	1.0 U
Copper	µg/L	≤ 21.3 b	-	0.58 I
Iron	µg/L	≤ 1,000	-	34 I
Lead	µg/L	≤ 10.9 b	-	0.20 U
Magnesium	mg/L	-	-	14.8
Nickel	µg/L	≤ 118 b	-	1.4 I
Potassium	mg/L	-	-	12.9
Selenium	µg/L	≤ 5.0	-	0.20 U
Silver	µg/L	≤ 0.07	-	0.010 U
Sodium	mg/L	-	-	110
Zinc	µg/L	≤ 271 b	-	16 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))
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
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 EFD-01	*Pseudokirchneriella subcapitata*	5.89 A	58.3 ± 11.7	43 ± 8.6	90.1 ± 18	68.8 ± 13.8	15.4	14.8
Effluent Grab Dechlorinated EFD-01	*Pseudokirchneriella subcapitata*	3.84 A	58.3 ± 11.7	43 ± 8.6	90.1 ± 18	68.8 ± 13.8	15.4	14.8

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 EFD-01	Effluent Grab EFD-01
Bromodichloromethane	µg/L	-	-	36
Chloroform	µg/L	-	-	130
Dibromochloromethane	µg/L	-	≤ 22.0 a	6.2
Hexachlorocyclopentadiene	µg/L	-	-	0.69

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

Appendix A. Facility Summary

PART I: Information gathered prior to sampling event

Prepared By: Lauren Ballard	**Contact Number:** 813-470-5784
Facility Name (as it appears on permit): Northwest Regional Water Reclamation Facility (WRF)	**Former Names: N/A**
NPDES Permit Number: FL0041670	**Permit Expiration Date:** July 26, 2026
Physical Address: 10890 S Mobley Rd., Tampa, FL 33626-1500	
District: Southwest	**County:** Hillsborough
Function of Facility: A 30.0 Million Gallons per Day (MGD) Annual Average Daily Flow (AADF), Type I Five-Stage Bardenpho Process advanced domestic wastewater treatment plant**.**	
Facility Type: Domestic Wastewater	**Permitted Capacity (MGD):** 30.0

Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months):
FLW-04: 2.4095
FLW-06: NOD (calculated)
FLW-07: NOD
FLW-08: 2.31075 (calculated)

If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months):
FLW-05 (R-001): 12.60283

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):

Monitoring Site Number	Description of Monitoring Site
FLW-04	Flow Meter at the cascade aerator at Outfall D-001
FLW-06	Flow at Outfall D-004 calculated from shared flow meter with Outfall D-006
FLW-07	Flow meter at Outfall D-005
FLW-08	Flow meter at Outfall D-006 calculated from shared flow meter with D-004
FLW-11	Calculated flow total from D-001, D-004, D-005, and D-006
EFA-01	After disinfection and prior to discharge to reuse system R-001 or to all permitted outfalls
EFB-01	After filtration and prior to disinfection
EFD-01	After cascade aerator and prior to surface water discharge to D-001
EFD-02	Prior to surface water discharge to D-004
EFD-03	Prior to surface water discharge to D-005
EFD-04	Prior to surface water discharge to D-006
EFD-05	After dechlorination on the dedicated discharge piping to Outfalls D-001, D-004, D-005, and D-006
CAL-01	Calculated Total Nitrogen Loading for the discharges(including historic loads from the decommissioned Dale Mabry WWTF and River Oaks AWWTF)
FLW-12	Flow meter at UIC Well
FLW-09	Calculation of total flow to the Master Reuse System from all source plants
FLW-05	Calculated flow to R-001 from the NW Regional WRF
FLW-03	Influent Flow meter
INF-01	Influent at headworks, prior to addition of return activated sludge flows

Description of Permitted Outfall(s):

Surface Water Discharge D-001: An existing 5.0 MGD annual average daily flow (AADF) permitted discharge to Channel "A" located in the Rocky Creek WBID# 1507, Class III Fresh Waters. Based on historical hydraulic control structure operation or tidal influence, Channel A flows up to the confluence of Channel "A" and Rocky Creek, then down Rocky Creek (Lower Segment) WBID# 1563, Class II Marine Waters; then to Old Tampa Bay WBID# 1558I, Class II Marine waters. Under the present control structure operation Channel, A may flow down to Rocky Creek (Channel A) WBID# 1507A, Class II Marine Waters; then to Old Tampa Bay WBID# 1558I, Class II Marine Waters. Effluent is conveyed to Outfall D-001 through a dedicated disposal line under normal operation. The outfall structure includes a cascade aerator in the basin located at the outfall site, is approximately 1 foot in length and discharges at a depth of approximately 2 feet. The point of discharge is located approximately at latitude 28°1' 26" N, longitude 82°35' 54" W.

Surface Water Discharge D-004: An existing 10 MGD AADF discharge to Channel "A", located in the Rocky Creek WBID# 1507, Class III Fresh Waters. Based on historical hydraulic control structure operation or tidal influence, discharge may flow up Channel "A" and down Rocky Creek (Lower Segment) WBID# 1563, Class II Marine Waters; then to Old Tampa Bay WBID# 1558I, Class II Marine waters. Under the present control structure operation Channel "A" may flow down to Rocky Creek (Channel "A") WBID# 1507A, Class II Marine Waters; then to Old Tampa Bay WBID# 1558I, Class II Marine Waters. Effluent is conveyed to Outfall D-004 through a dedicated disposal line under normal operation. The outfall structure is approximately 30 inches in diameter, approximately 20 feet in length and discharges at a depth of approximately 2 feet. The point of discharge is located approximately at latitude 28°1' 45" N, longitude 82°34' 52" W. **Mixing Zone**: The permittee is granted a mixing zone at D-004 for Dichlorobromomethane consisting of a distance of 3.66 meters wide centered over the outfall and extending 6.1 meters into Channel A of Rocky Creek.

Surface Water Discharge D-005: An existing 6 MGD AADF permitted discharge to Brushy Creek (Class III Fresh Waters, WBID# 1498), which flows to Rocky Creek and/or Channel "A" thence to Old Tampa Bay. Effluent is conveyed to Outfall D-005 through the facility's Public Access Reuse System. The outfall is at the shoreline and discharges at a depth of approximately 3.85 feet. The point of discharge is located approximately at latitude 28°4' 11" N, longitude 82°31' 38" W.

Surface Water Discharge D-006: A existing 21 MGD AADF permitted discharge to Channel "A" located in the Rocky Creek WBID# 1507, Class III Fresh Waters. Flow may proceed down Rocky Creek (Lower Segment) WBID# 1563, Class II Marine Waters; then to Old Tampa Bay WBID# 1558I, Class II Marine waters or may flow directly down Channel "A" to Old Tampa Bay WBID# 1558I, Class II Marine Waters. Although Outfalls D-001, D-004 and D-005 may remain active after Outfall D-006 is constructed, the combined discharge to surface waters from all outfalls will be limited to 21.0 MGD annual average. The location of D-006 is in the channelized portion of WBID# 1507 at latitude 28°2' 8.7" N, longitude 82°34' 37" W.

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

A 30.0 MGD, AADF Five-Stage Bardenpho Process advanced domestic wastewater treatment plant consisting of: a headworks with three dual mechanical screening systems, a back-up manual bar screen, and two forced-vortex grit removal systems; a flow equalization basin without aeration; odor control systems; ten parallel Biological Nutrient Removal (BNR) treatment trains consisting of ten fermentation basins, ten first anoxic basins of, ten aeration basins, ten second anoxic basins, and ten reaeration basins of; eight final clarifiers; twenty dual-media deep-bed filters and a backwash basin; one sludge holding tank; two dual-chambered chlorine contact tanks; a sodium hypochlorite feed system including bulk storage vessels and chemical feed pumps; and a sodium bisulfite feed system including a bulk storage vessel and chemical feed pumps; effluent transfer pumps to transmit treated effluent to on-site storage tanks, surface water discharge locations, and groundwater injection wells: four reclaimed water storage tanks; three reject storage tanks; and one lined reject storage pond. Additional treatments include a carbon source for nitrogen control and a settling aid for solids and phosphorus control.

Biosolids handling facility includes: two holding tanks and four screw presses with polymer addition. Biosolids from the both the Northwest Regional Wastewater Reclamation Facility and the Van Dyke WWTF are processed at this location. Biosolids are transported to a permitted Biosolids Treatment Facility for treatment and disposal.

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**	**Limit**	**Statistical Basis**	**Frequency of Analysis**	**Sample Type**	**Monitoring Site Number**	**Notes**
Flow (D-001)	**MGD**	**Max**	**5.0**	**Annual Average**	**Monthly**	**Calculated**	**FLW-04**	
Flow (D-001)	**MGD**	**Max**	**Report**	**Monthly Average**	**Continuous**	**Recording Flow Meter with Totalizer**	**FLW-04**	**See I.A.4**
Flow (D-004)	**MGD**	**Max**	**10**	**Annual Average**	**Monthly**	**Calculated**	**FLW-06**	
Flow (D-004)	**MGD**	**Max**	**Report**	**Monthly Average**	**Continuous**	**Recording Flow Meter with Totalizer**	**FLW-06**	**See I.A.4**
Flow (D-005)	**MGD**	**Max**	**6.0**	**Annual Average**	**Monthly**	**Calculated**	**FLW-07**	
Flow (D-005)	**MGD**	**Max**	**Report**	**Monthly Average**	**Continuous**	**Recording Flow Meter with Totalizer**	**FLW-07**	**See I.A.4**
Flow (D-006)	**MGD**	**Max**	**21.0**	**Annual Average**	**Monthly**	**Calculated**	**FLW-08**	
Flow(D-006)	**MGD**	**Max**	**Report**	**Monthly Average**	**Continuous**	**Recording Flow Meter with Totalizer**	**FLW-08**	**See I.A.4**
Flow (from all surface water outfalls)	**MGD**	**Max**	**21.0**	**Annual Average**	**Monthly**	**Calculated**	**FLW-11**	**See I.A.14**
Flow (from all surface water outfalls)	**MGD**	**Max**	**Report**	**Monthly Average**	**Continuous**	**Recording Flow Meter with Totalizer**	**FLW-11**	**See I.A.4**
BOD, Carbonaceous 5 day, 20C	**mg/L**	**Max**	**5.0**	**Annual Average**	**Monthly**	**Calculated**	**EFA-01**	**See I.A.6**
BOD, Carbonaceous 5 day, 20C	**mg/L**	**Max Max Max**	**6.25 7.5 10.0**	**Monthly Average Weekly Average Single Sample**	**Daily; 24 hours**	**24-hr FPC**	**EFA-01**	**See I.A.6**
Solids, Total Suspended	**mg/L**	**Max**	**5.0**	**Annual Average**	**Monthly**	**Calculated**	**EFA-01**	**See I.A.6**

			Effluent Limitations		Monitoring Requirements			
Parameter	**Units**	**Max. /Min**	**Limit**	**Statistical Basis**	**Frequency of Analysis**	**Sample Type**	**Monitoring Site Number**	**Notes**
Solids, Total Suspended	**mg/L**	**Max** **Max** **Max**	**6.25** **7.5** **10.0**	**Monthly Average** **Weekly Average** **Single Sample**	**Daily; 24 hours**	**Grab**	**EFA-01**	**See I.A.6**
Solids, Total Suspended	**mg/L**	**Max**	**5.0**	**Single Sample**	**Daily; 24 hours**	**Grab**	**EFB-01**	**See I.A.6**
Nitrogen, Total	**mg/L**	**Max**	**3.0**	**Annual Average**	**Monthly**	**Calculated**	**EFA-01**	
Nitrogen, Total	**mg/L**	**Max** **Max** **Max**	**3.75** **4.5** **6.0**	**Monthly Average** **Weekly Average** **Single Sample**	**Daily; 24 hours**	**24-hr FPC**	**EFA-01**	
Phosphorus, Total (as P)	**mg/L**	**Max**	**1.0**	**Annual Average**	**Monthly**	**Calculated**	**EFA-01**	
Phosphorus, Total (as P)	**mg/L**	**Max** **Max** **Max**	**1.25** **1.5** **2.0**	**Monthly Average** **Weekly Average** **Single Sample**	**Daily; 24 hours**	**24-hr FPC**	**EFA-01**	
pH	**s.u.**	**Min** **Max**	**6.0** **8.5**	**Single Sample** **Single Sample**	**Continuous**	**Meter**	**EFA-01**	**See I.A.3**
Coliform, Fecal, % less than detection	**percent**	**Min**	**75**	**Monthly Total**	**Daily; 24 hours**	**Calculated**	**EFA-01**	**See I.A.7**
Coliform, Fecal	**#/100mL**	**Max**	**25**	**Single Sample**	**Daily; 24 hours**	**Grab**	**EFA-01**	
Chlorine, Total Residual (For Disinfection)	**mg/L**	**Min**	**1.0**	**Single Sample**	**Continuous**	**Meter**	**EFA-01**	**See I.A.3 and I.A.8**
Chlorine, Total Residual (For Dechlorination)	**mg/L**	**Max**	**0.01**	**Single Sample**	**Daily; 24 hours**	**Grab**	**EFD-05**	**See I.A.3 and I.A.8**
Chlorine, Total Residual	**mg/L**	**Max**	**0.01**	**Single Sample**	**Daily; 24 hours**	**Grab**	**EFD-03**	**See I.A.3 and I.A.8**
Oxygen, Dissolved (DO)	**mg/L**	**Min**	**5.0**	**Single Sample**	**Daily; 24 hours**	**Grab**	**EFA-01**	
Oxygen, Dissolved (DO)	**mg/L**	**Min**	**5.0**	**Single Sample**	**Daily; 24 hours**	**Grab**	**EFD-02**	
Oxygen, Dissolved (DO)	**mg/L**	**Min**	**4.6**	**Single Sample**	**Daily; 24 hours**	**Grab**	**EFD-03**	
Nitrogen, Total	**ton/mth**	**Max**	**Report**	**Monthly Total**	**Monthly**	**Calculated**	**EFA-01**	**See I.A.12**
Nitrogen, Total	**ton/yr**	**Max**	**Report**	**Annual Total**	**Monthly**	**Calculated**	**EFA-01**	**See I.A.12**
Nitrogen, Total	**ton/yr**	**Max**	**Report**	**5 Year Average**	**Monthly**	**Calculated**	**EFA-01**	**See I.A.12**
Nitrogen, Total	**ton/mth**	**Max**	**Report**	**Monthly Total**	**Monthly**	**Calculated**	**CAL-01**	**See I.A.12**
Nitrogen, Total	**ton/yr**	**Max**	**50.4**	**Annual Total**	**Monthly**	**Calculated**	**CAL-01**	**See I.A.12**
Nitrogen, Total	**ton/yr**	**Max**	**33.6**	**5 Year Average**	**Monthly**	**Calculated**	**CAL-01**	**See I.A.12**

			Effluent Limitations		Monitoring Requirements			
Parameter	**Units**	**Max. /Min**	**Limit**	**Statistical Basis**	**Frequency of Analysis**	**Sample Type**	**Monitoring Site Number**	**Notes**
Chronic Whole Effluent Toxicity, 7-Day IC25 (Pimephales promelas)	**percent**	**Min**	**100**	**Single Sample**	**Semi-Annually, twice per year**	**24-hr FPC**	**EFA-01**	**See I.A.9**
Acute Whole Effluent Toxicity, 96 Hour LC50 (Ceriodaphnia dubia)	**percent**	**Min**	**100**	**Single Sample**	**Semi-Annually, twice per year**	**24-hr FPC**	**EFA-01**	**See I.A.9**
Turbidity	**NTU**	**Max**	**Report**	**Single Sample**	**Continuous**	**Meter**	**EFB-01**	
Dichlorobromomethane	**ug/L**	**Max**	**Report**	**Single Sample**	**Monthly**	**Grab**	**EFD-01**	
Dichlorobromomethane	**ug/L**	**Max**	**22.0**	**Annual Average**	**Monthly**	**Calculated**	**EFD-01**	
Dichlorobromomethane	**ug/L**	**Max**	**Report**	**Single Sample**	**Monthly**	**Grab**	**EFD-02**	
Dichlorobromomethane	**ug/L**	**Max**	**47.0**	**Annual Average**	**Monthly**	**Calculated**	**EFD-02**	
Dichlorobromomethane	**ug/L**	**Max**	**Report**	**Single Sample**	**Monthly**	**Grab**	**EFD-03**	
Dichlorobromomethane	**ug/L**	**Max**	**22.0**	**Annual Average**	**Monthly**	**Calculated**	**EFD-03**	
Dichlorobromomethane	**ug/L**	**Max**	**Report**	**Single Sample**	**Monthly**	**Grab**	**EFD-04**	
Dichlorobromomethane	**ug/L**	**Max**	**22.0**	**Annual Average**	**Monthly**	**Calculated**	**EFD-04**	

PART I: Continued

Receiving Waters:	**Classification (indicate whether fresh or marine):**
Rocky Creek	Class III fresh waters
Rocky Creek (lower segment)	Class II marine waters
Brushy Creek	Class III fresh waters
Old Tampa Bay	Class II marine waters

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

The Southwest District requests that the toxicity tests performed for Northwest Regional WRF sampling event on January 23,2023 be freshwater acute rather than a chronic test (as stated below in the permit).

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(62) 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:
Florida Department of Environmental Protection
Southwest District Office
13051 N Telecom Pkwy, Suite 101,
Temple Terrace, Florida 33637-0926
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.**Error! Reference source not found.**.a.(1).

(2) Additional Follow-up Tests:

(a) If a routine test does not meet the chronic toxicity limitation in I.A.**Error! Reference source not found.**.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 **Error! Reference source not found.**.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.**Error! Reference source not found.**.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.**Error! Reference source not found.**.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.**Error! Reference source not found.**.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.**Error! Reference source not found.**.a.(2), the Department may revise this permit to require acute definitive whole effluent toxicity testing.

(5) The additional follow-up testing and the plan do not preclude the Department taking enforcement action for acute or chronic whole effluent toxicity failures.

Administrative or Consent Orders (date executed, specific requirements, interim limit dates-if applicable, etc.):

N/A

Facility Mixing Zone Details (if applicable):

The permittee is granted a mixing zone at D-004 for Dichlorobromomethane consisting of a distance of 3.66 meters wide centered over the outfall and extending 6.1 meters into Channel A of Rocky Creek.

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

Monitoring Group	Date	Monitoring Location	PCS Code	Parameter	Description	Result	Limit	Units	Statistical Base
D-001	10/31/2022	EFA-01	A	P 51005	Coliform, Fecal, % less than	67.7	75.0	percent	TM - Minimum Total
R-001	10/31/2022	EFA-01	A	P 51005	Coliform, Fecal, % less than	67.7	75.0	percent	TM - Minimum Total
D-001	9/30/2022	EFD-03	P	P 50060	Chlorine, Total Residual	0.78	0.01	mg/L	MB - Maximum
D-001	9/30/2022	EFD-03	S	P 32101	Dichlorobromomethane	52	22.0	ug/L	AB - Annual Average
MWC-DM1AR	6/30/2022	MWC-DM1AR		P 00978	Arsenic, Total Recoverable	11	10.0	ug/L	MB - Maximum
MWC-DM1AR	6/30/2022	MWC-DM1AR		P 00400	pH	4.5	6.5-8.5	s.u.	RG - Range
MWC-DM3AR	6/30/2022	MWC-DM3AR		P 70295	Solids, Total Dissolved (TDS)	535	500.0	mg/L	MB - Maximum
MWC-DM3AR	6/30/2022	MWC-DM3AR		P 00978	Arsenic, Total Recoverable	11	10.0	ug/L	MB - Maximum
MWC-DM3AR	6/30/2022	MWC-DM3AR		P 00400	pH	4.3	6.5-8.5	s.u.	RG - Range
MWC-DM5AR	6/30/2022	MWC-DM5AR		P 00978	Arsenic, Total Recoverable	34	10.0	ug/L	MB - Maximum

MWC-DM5AR	6/30/2022	MWC-DM5AR		P 00400	pH	4.9	6.5-8.5	s.u.	RG - Range

Describe previous FYI and WQBEL study:
N/A

Describe previous or current Enforcement Actions (including WLs):
A Warning Letter was sent to the facility on November 19, 2020 for a Sanitary Sewer Overflow (SSO).

Describe any violations or problems noted in previous inspection:
In the most previous inspection report from 10/13/2020, permit limit exceedances were addressed and all SSO's were properly addressed. No further violations were noted during the inspection.

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

DMR trends seem stable.

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

Appendix B. Explanations of Measurements

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

- **Chemical Analyses of the Effluent**

  The effluent was analyzed for nutrients, metals, organic constituents (base, neutral, and acid extractables) and pesticides following DEP SOPs. The results from these analyses were compared with Water Quality Criteria (Chapter 62-302, F.A.C.) and facility permit limits.

- **Toxicity Bioassays**

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

- **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-2023-01-09-21

FYI3 Northwest Regional WRF DW SWD Sampling Inspection

Customer: SW-DIST

Project ID: FYI3

Florida Department of Environmental Protection

Central Laboratory Submittal Form

last revised Jan 25, 2018

Requester: Benjamin Nomann

Field Report Prepared By: Emily Larson

Collected By: E. Hunter, M. Jones

Sampling Agency: FDEP - SWD

Location: NW Regional WRF EFD-01	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 01/23/2023 Time 9:35	Eastern / Central	Composite end Date Time	Bottle Group(s) (See pg 2): A						
Field ID	Matrix (type, e.g., Salt, Fresh, etc)			Diss. Oxygen 7.24 / 87.8	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)					
WIN/STORET #	Temp (C) 24	pH 7.67		Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm) 997					
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt) 0.49	Comments FC + ENQ to Benchmark								
Location: NW Regional WRF EFD-01	☒ Comp ☐ Grab	Collection (comp begin or grab) Date 01/23/2023 Time 7:00	Eastern / Central	Composite end Date 01/23/2023 Time 7:00	Bottle Group(s): B						
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 BOD to TestAmerica. Bottle times correspond when split happened.								
Location: ~~NW Regional WRF EFD-01~~ Field Blank E.C.	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 01/23/2023 Time 10:01	Eastern / Central	Composite end Date Time	Bottle Group(s): C						
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: NW Regional WRF EFD-01	☐ Comp ☐ Grab	Collection (comp begin or grab) Date 01/23/2023 Time	Eastern / Central	Composite end Date Time	Bottle Group(s): D						
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 Sampler was not used at time of collection; therefore no sample collected.								

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Emily L	01/23/2023 5:00p	FEDEX	4	Brian Kvlva	1/24/2023 0931

Request Number: RQ-2023-01-09-21

FYI3 Northwest Regional WRF DW SWD Sampling Inspection

Customer: SW-DIST

Project ID: FYI3

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Jan 25, 2018

Requester: Benjamin Nomann

Field Report Prepared By: Emily Larson

Collected By: E. Hunter, M. Jones

Sampling Agency: FDEP-SWD

Location: Trip Blank ~~NW Regional WRF EFD 01~~ E.L			☐ Comp ☒ Grab	Collection (comp begin or grab) Date 01/23/2023 Time 10:11 Eastern Central			Composite end Date Time		Bottle Group(s) (See pg 2): E
Field ID			Matrix (type, e.g., Salt, Fresh, etc)			Diss. Oxygen ☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)	
WIN/STORET #			Temp (C)	pH		Sample Depth ☐ ft ☐ m		Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments					
Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time Eastern Central			Composite end Date Time		Bottle Group(s)
Field ID			Matrix (type, e.g., Salt, Fresh, etc)			Diss. Oxygen ☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)	
WIN/STORET #			Temp (C)	pH		Sample Depth ☐ ft ☐ m		Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments					
Location			☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time Eastern Central			Composite end Date Time		Bottle Group(s)
Field ID			Matrix (type, e.g., Salt, Fresh, etc)			Diss. Oxygen ☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)	
WIN/STORET #			Temp (C)	pH		Sample Depth ☐ ft ☐ m		Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms	Longitude	☐ dd ☐ dms	Salinity (ppt)	Comments					
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
Em R	01/23/2023 5:00pm	FEDEX			

Request Number: RQ-2023-01-09-21

FYI3 Northwest Regional WRF DW SWD Sampling Inspection

Customer: SW-DIST

Project ID: FYI3

Florida Department of Environmental Protection

Central Laboratory Submittal Form

last revised Jan 25, 2018

Requester: Benjamin Nomann

Field Report Prepared By: Maryn Jones

Collected By: E. Hunter, M. Jones

Sampling Agency: FDEP - SWD

Location: NW Regional WRF EFD-01	☒ Comp ☐ Grab	Collection (comp begin or grab) Date 01/23/2023 Time 7:00	Eastern / Central	Composite end Date 01/23/2023 Time 7:00			Bottle Group(s) (See pg 2): B
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: COC for BOD to Test America				
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern / Central	Composite end Date Time			Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN/STORET #	Temp (C)	pH	Sample Depth ☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments				
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern / Central	Composite end Date Time			Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN/STORET #	Temp (C)	pH	Sample Depth ☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments				
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern / Central	Composite end Date Time			Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN/STORET #	Temp (C)	pH	Sample Depth ☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments				

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Em J	01/23/2023 5:00pm	FEDEX			

Benchmark EnviroAnalytical, Inc. **E84167** 1711 Twelfth Street East Palmetto, FL 34221 (941) 723-9986 / (941) 723-6061 fax Sample Temperature checked upon receipt at BEA with Temperature Gun ID #258	**Benchmark EA South E85086** 1001 Corporate Avenue, Suite 102 North Port, FL 34289 (941) 625-3137 (941) 423-7336 fax Sample Temperature checked upon receipt at BEAS with Temperature Gun ID #7

Client Information: **FDEP**

Address: 13051 N. Telecom Parkway
Tampa FL 33604

Phone # 815-470-5878

Report to: benjamin.paswater@dep.state.fl.us & Emily.Larson@FloridaDEP.gov

Invoice to: FDEP Micro Overflow

PO# C00EF5

Project Name: Northwest Regional WRF RQ-2023-01-09-21

Laboratory Submission # 230118212

Sample Name	Sample Type[1] / Sample Matrix[2]	Collection		Container			Preservative[4]	Parameters for Analysis	Laboratory Sample #
		Date	Time	Qty	Capacity	Type[3]			
NW Regional WRF - EFD-01 FC		01/23/2023	9:35am	1		P		Fecal Coliform	1
NW Regional WRF - EFD-01 ENTQ		01/23/2023	9:35am	1		P		Enterococci	2

1. "Sample Type" is used to indicate whether the sample was a grab (G) or whether it was a composite (C).
2. "Sample Matrix" is used to indicate whether the sample is being discharged to drinking water (DW), groundwater (GW), surface water (SW), fresh surface water (FSW), saline surface water (SSW), soil, sediment (SDMNT), or sludge (SLDG).
3. "Container Type" is used to indicate whether the container is plastic (P) or glass (G).
4. Sample must be refrigerated or stored in wet ice after collection. The temperature during storage should be less than or equal to 6°C (42.8°F).
5. Under "Preservative," list any preservatives that were added to the sample container. Lot Number of preservative used is specific to the bottles included in the kit. NaThio, H_2SO_4 and HNO_3 do not have expiration dates per the manufacturer. Micro bottles are pre-preserved at manufacturing stage. 40mL vials are pre-preserved at manufacturing stage.

Instructions:

1. Each bottle has a label identifying sample ID, premeasured preservative contained in the bottle, sample type, client ID, and parameters for analysis.
2. The following information should be added to each bottle label after collection with permanent black ink: date and time of collection, sampler's name or initials, and any field number or ID.
3. All bottles not containing preservative may be rinsed with appropriate sample prior to collection.
4. The client is responsible for documentation of the sampling event. Please note special sampling events on the sample custody form.
5. Sample kit has been created by BEA using new, certified bottles unless otherwise noted.

Laboratory Sample Acceptability:
pH <2 : ☑ BEA Temperature: 0.7°C
BEAS Temperature:

	Collected / Relinquished By & Affiliation: (Print & Sign)	Date	Time	Received By& Affiliation: (Print & Sign)	Date	Time
1	Maryn Jones	01/23/2023	11:44am	Nathan Hadsell	1-23-23	1144
2	Relinquished By& Affiliation: (Print & Sign)	Date	Time	Received By& Affiliation: (Print & Sign)	Date	Time

BW 3 of 3

Appendix D. Chemical Analysis of Effluent

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 7:00	Effluent Composite	Overflow	Carbonaceous Biochemical Oxygen Demand	1.2 IJQ	mg/L	1.0	2.0
1/23/2023 7:00	Effluent Composite	Toxicology	Bioassay-Acute-Def-FW-Fish, LC50	100 LQ	LC50		
1/23/2023 7:00	Effluent Composite	Toxicology	Bioassay-Acute-Def-FW-C.dubia, LC50	100 L	LC50		
1/23/2023 7:00	Effluent Composite	Nutrients	Total-P	0.16	mg P/L	0.010	0.050
1/23/2023 7:00	Effluent Composite	Nutrients	NO2NO3-N	1.4	mg N/L	0.040	0.10
1/23/2023 7:00	Effluent Composite	Nutrients	TSS	2 U	mg/L	2.0	10
1/23/2023 7:00	Effluent Composite	Nutrients	Kjeldahl Nitrogen	0.86	mg N/L	0.080	0.20
1/23/2023 9:35	Effluent Grab	AGP/LN	Algal Growth Potential-Dechlorinated	3.84 A	mg DryWt/L	0.300	0.900
1/23/2023 9:35	Effluent Grab	AGP/LN	Algal Growth Potential	5.89 A	mg DryWt/L	0.300	0.900
1/23/2023 9:35	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Uncorrected	0.65 U	ug/L	0.65	2.0
1/23/2023 9:35	Effluent Grab	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.98 U	ug/L	0.98	2.9
1/23/2023 9:35	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.89 U	ug/L	0.89	2.7
1/23/2023 9:35	Effluent Grab	Overflow	Enterococci-Quanti-Tray	10 U	MPN/100 mL	10	10
1/23/2023 9:35	Effluent Grab	Overflow	Fecal Coliform-Quanti-Tray	1 U	MPN/100 mL		
1/23/2023 9:35	Effluent Grab	Metals	Lead	0.20 U	ug/L	0.20	0.40
1/23/2023 9:35	Effluent Grab	Metals	Calcium	80.6	mg/L	0.075	0.30
1/23/2023 9:35	Effluent Grab	Metals	Sodium	110	mg/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Metals	Zinc	16 I	ug/L	5.0	20
1/23/2023 9:35	Effluent Grab	Metals	Selenium	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Metals	Potassium	12.9	mg/L	0.30	1.2
1/23/2023 9:35	Effluent Grab	Metals	Magnesium	14.8	mg/L	0.040	0.16
1/23/2023 9:35	Effluent Grab	Metals	Chromium	1.0 U	ug/L	1.0	4.0
1/23/2023 9:35	Effluent Grab	Metals	Iron	34 I	ug/L	30	120
1/23/2023 9:35	Effluent Grab	Metals	Copper	0.58 I	ug/L	0.40	0.80
1/23/2023 9:35	Effluent Grab	Metals	Silver	0.010 U	ug/L	0.010	0.040
1/23/2023 9:35	Effluent Grab	Metals	Nickel	1.4 I	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Metals	Cadmium	0.020 U	ug/L	0.020	0.080
1/23/2023 9:35	Effluent Grab	Metals	Arsenic	0.36	ug/L	0.050	0.20
1/23/2023 9:35	Effluent Grab	Metals	Aluminum	8.4 I	ug/L	5.0	20
1/23/2023 9:35	Effluent Grab	Nutrients	Ammonia-N	0.035	mg N/L	0.0020	0.0050
1/23/2023 9:35	Effluent Grab	Nutrients	Kjeldahl Nitrogen	0.87	mg N/L	0.080	0.20
1/23/2023 9:35	Effluent Grab	Nutrients	Total-P	0.16	mg P/L	0.010	0.050

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 9:35	Effluent Grab	Nutrients	Fluoride	0.59	mg F/L	0.025	0.10
1/23/2023 9:35	Effluent Grab	Nutrients	Organic Carbon	7.7	mg C/L	0.50	1.0
1/23/2023 9:35	Effluent Grab	Nutrients	NO2NO3-N	1.5	mg N/L	0.040	0.10
1/23/2023 9:35	Effluent Grab	Nutrients	TSS	2 U	mg/L	2.0	10
1/23/2023 9:35	Effluent Grab	Nutrients	Color (true)	3.7 I	PCU	2.5	6.0
1/23/2023 9:35	Effluent Grab	Nutrients	Chloride	130	mg Cl/L	0.40	1.0
1/23/2023 9:35	Effluent Grab	Nutrients	Turbidity	0.40 I	NTU	0.10	1.0
1/23/2023 9:35	Effluent Grab	Nutrients	Sulfate	98	mg SO4/L	0.40	1.0
1/23/2023 9:35	Effluent Grab	Nutrients	Total Alkalinity	201 A	mg CaCO3/L	0.65	2.5
1/23/2023 9:35	Effluent Grab	Nutrients	O-Phosphate-P	0.10	mg P/L	0.0040	0.010
1/23/2023 9:35	Effluent Grab	Pesticides	Ethion	0.15 U	ng/L	0.15	0.59
1/23/2023 9:35	Effluent Grab	Pesticides	Fipronil	0.24 U	ng/L	0.24	0.98
1/23/2023 9:35	Effluent Grab	Pesticides	Fipronil Sulfone	0.15 U	ng/L	0.15	0.59
1/23/2023 9:35	Effluent Grab	Pesticides	Flumioxazin	4.4 U	ng/L	4.4	18
1/23/2023 9:35	Effluent Grab	Pesticides	Triadimefon	0.24 U	ng/L	0.24	0.98
1/23/2023 9:35	Effluent Grab	Pesticides	Oxyfluorfen	0.15 U	ng/L	0.15	0.59
1/23/2023 9:35	Effluent Grab	Pesticides	Phenytoin	3.4 U	ng/L	3.4	14
1/23/2023 9:35	Effluent Grab	Pesticides	Tebuconazole	0.49 U	ng/L	0.49	2.0
1/23/2023 9:35	Effluent Grab	Pesticides	Hexazinone	0.49 U	ng/L	0.49	2.0
1/23/2023 9:35	Effluent Grab	Pesticides	Iprodione	0.59 U	ng/L	0.59	2.3
1/23/2023 9:35	Effluent Grab	Pesticides	Butylate	0.39 U	ng/L	0.39	1.6
1/23/2023 9:35	Effluent Grab	Pesticides	Chlorfenapyr	0.17 U	ng/L	0.17	0.68
1/23/2023 9:35	Effluent Grab	Pesticides	Cyanazine	3.2 U	ng/L	3.2	13
1/23/2023 9:35	Effluent Grab	Pesticides	Disulfoton	0.49 U	ng/L	0.49	2.0
1/23/2023 9:35	Effluent Grab	Pesticides	Ethoprop	0.098 U	ng/L	0.098	0.39
1/23/2023 9:35	Effluent Grab	Pesticides	Fipronil Sulfide	0.15 U	ng/L	0.15	0.59
1/23/2023 9:35	Effluent Grab	Pesticides	Metribuzin	1.5 U	ng/L	1.5	5.9
1/23/2023 9:35	Effluent Grab	Pesticides	Naled	1.5 U	ng/L	1.5	5.9
1/23/2023 9:35	Effluent Grab	Pesticides	Napropamide	0.39 U	ng/L	0.39	1.6
1/23/2023 9:35	Effluent Grab	Pesticides	Prodiamine	0.17 U	ng/L	0.17	0.68
1/23/2023 9:35	Effluent Grab	Pesticides	Terbuthylazine	0.42 U	ng/L	0.42	1.7
1/23/2023 9:35	Effluent Grab	Pesticides	Ibuprofen	0.080 U	ug/L	0.080	0.32
1/23/2023 9:35	Effluent Grab	Pesticides	Atrazine Desethyl	1.5 U	ng/L	1.5	5.9
1/23/2023 9:35	Effluent Grab	Pesticides	Fenamiphos	0.49 U	ng/L	0.49	2.0

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 9:35	Effluent Grab	Pesticides	Fludioxonil	0.12 U	ng/L	0.12	0.49
1/23/2023 9:35	Effluent Grab	Pesticides	Mevinphos	1.0 U	ng/L	1.0	4.1
1/23/2023 9:35	Effluent Grab	Pesticides	Myclobutanil	0.24 U	ng/L	0.24	0.98
1/23/2023 9:35	Effluent Grab	Pesticides	Norflurazon	0.49 U	ng/L	0.49	2.0
1/23/2023 9:35	Effluent Grab	Pesticides	Prometon	0.88 U	ng/L	0.88	3.5
1/23/2023 9:35	Effluent Grab	Pesticides	Naproxen	0.0080 U	ug/L	0.0080	0.032
1/23/2023 9:35	Effluent Grab	Pesticides	Flutolanil	0.098 U	ng/L	0.098	0.39
1/23/2023 9:35	Effluent Grab	Pesticides	Fluxapyroxad	0.098 U	ng/L	0.098	0.39
1/23/2023 9:35	Effluent Grab	Pesticides	Loratadine	0.34 U	ng/L	0.34	1.4
1/23/2023 9:35	Effluent Grab	Pesticides	Alachlor	0.24 U	ng/L	0.24	0.98
1/23/2023 9:35	Effluent Grab	Pesticides	Azinphos Methyl	2.0 U	ng/L	2.0	7.8
1/23/2023 9:35	Effluent Grab	Pesticides	Caffeine	7.3 U	ng/L	7.3	29
1/23/2023 9:35	Effluent Grab	Pesticides	Carfentrazone Ethyl	0.098 U	ng/L	0.098	0.39
1/23/2023 9:35	Effluent Grab	Pesticides	Chlorpyrifos Ethyl	0.24 U	ng/L	0.24	0.98
1/23/2023 9:35	Effluent Grab	Pesticides	Diazinon	0.12 U	ng/L	0.12	0.49
1/23/2023 9:35	Effluent Grab	Pesticides	Difenoconazole	0.59 U	ng/L	0.59	2.3
1/23/2023 9:35	Effluent Grab	Pesticides	Etridiazole	0.15 U	ng/L	0.15	0.59
1/23/2023 9:35	Effluent Grab	Pesticides	Pyridaben	0.44 U	ng/L	0.44	2.2
1/23/2023 9:35	Effluent Grab	Pesticides	Acetaminophen	0.0080 U	ug/L	0.0080	0.032
1/23/2023 9:35	Effluent Grab	Pesticides	Malathion	0.34 U	ng/L	0.34	1.4
1/23/2023 9:35	Effluent Grab	Pesticides	Dimethomorph	0.17 U	ng/L	0.17	1.0
1/23/2023 9:35	Effluent Grab	Pesticides	Parathion Ethyl	0.24 U	ng/L	0.24	0.98
1/23/2023 9:35	Effluent Grab	Pesticides	Pendimethalin	0.98 U	ng/L	0.98	3.9
1/23/2023 9:35	Effluent Grab	Pesticides	Propanil	0.12 U	ng/L	0.12	0.49
1/23/2023 9:35	Effluent Grab	Pesticides	Pyriproxyfen	0.12 U	ng/L	0.12	0.49
1/23/2023 9:35	Effluent Grab	Pesticides	Carbamazepine	0.0042	ug/L	8.0E-04	0.0032
1/23/2023 9:35	Effluent Grab	Pesticides	Fonofos	0.20 U	ng/L	0.20	0.78
1/23/2023 9:35	Effluent Grab	Pesticides	Imazalil	0.73 U	ng/L	0.73	2.9
1/23/2023 9:35	Effluent Grab	Pesticides	Metalaxyl	0.73 U	ng/L	0.73	2.9
1/23/2023 9:35	Effluent Grab	Pesticides	Atrazine	0.24 U	ng/L	0.24	0.98
1/23/2023 9:35	Effluent Grab	Pesticides	Dimethenamid	0.098 U	ng/L	0.098	0.39
1/23/2023 9:35	Effluent Grab	Pesticides	EPTC	1.2 U	ng/L	1.2	4.9
1/23/2023 9:35	Effluent Grab	Pesticides	Fluazifop-P-butyl	0.098 U	ng/L	0.098	0.39
1/23/2023 9:35	Effluent Grab	Pesticides	Thiobencarb	0.59 U	ng/L	0.59	2.3

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 9:35	Effluent Grab	Pesticides	Parathion Methyl	0.54 U	ng/L	0.54	2.2
1/23/2023 9:35	Effluent Grab	Pesticides	Phorate	0.51 U	ng/L	0.51	2.1
1/23/2023 9:35	Effluent Grab	Pesticides	Propargite	1.5 U	ng/L	1.5	5.9
1/23/2023 9:35	Effluent Grab	Pesticides	Azoxystrobin	0.49 U	ng/L	0.49	2.0
1/23/2023 9:35	Effluent Grab	Pesticides	Carbophenothion	0.20 U	ng/L	0.20	0.78
1/23/2023 9:35	Effluent Grab	Pesticides	Coumaphos	0.49 U	ng/L	0.49	2.0
1/23/2023 9:35	Effluent Grab	Pesticides	Cyprodinil	0.098 U	ng/L	0.098	0.49
1/23/2023 9:35	Effluent Grab	Pesticides	Fipronil Desulfinyl	0.12 U	ng/L	0.12	0.49
1/23/2023 9:35	Effluent Grab	Pesticides	Oxadiazon	0.29 U	ng/L	0.29	1.2
1/23/2023 9:35	Effluent Grab	Pesticides	Pronamide	0.15 U	ng/L	0.15	0.59
1/23/2023 9:35	Effluent Grab	Pesticides	Simazine	0.49 U	ng/L	0.49	2.0
1/23/2023 9:35	Effluent Grab	Pesticides	Stirophos	0.12 U	ng/L	0.12	0.49
1/23/2023 9:35	Effluent Grab	Pesticides	Terbufos	0.098 U	ng/L	0.098	0.39
1/23/2023 9:35	Effluent Grab	Pesticides	Sucralose	70	ug/L	0.10	0.40
1/23/2023 9:35	Effluent Grab	Pesticides	Metolachlor	0.34 U	ng/L	0.34	1.4
1/23/2023 9:35	Effluent Grab	Pesticides	Acetochlor	0.24 U	ng/L	0.24	0.98
1/23/2023 9:35	Effluent Grab	Pesticides	Chlorpyrifos Methyl	0.049 U	ng/L	0.049	0.20
1/23/2023 9:35	Effluent Grab	Pesticides	Demeton	1.5 U	ng/L	1.5	5.9
1/23/2023 9:35	Effluent Grab	Pesticides	Dithiopyr	0.61 U	ng/L	0.61	2.4
1/23/2023 9:35	Effluent Grab	Pesticides	Fenbuconazole	0.12 U	ng/L	0.12	0.49
1/23/2023 9:35	Effluent Grab	Pesticides	Molinate	0.29 U	ng/L	0.29	1.2
1/23/2023 9:35	Effluent Grab	Pesticides	Prometryn	0.20 U	ng/L	0.20	0.78
1/23/2023 9:35	Effluent Grab	Pesticides	Propiconazole	0.49 U	ng/L	0.49	2.0
1/23/2023 9:35	Effluent Grab	Pesticides	Pyraflufen Ethyl	0.24 U	ng/L	0.24	0.98
1/23/2023 9:35	Effluent Grab	Pesticides	Sulfentrazone	0.49 U	ng/L	0.49	2.0
1/23/2023 9:35	Effluent Grab	Pesticides	Ametryn	0.59 U	ng/L	0.59	2.3
1/23/2023 9:35	Effluent Grab	Pesticides	Bromacil	0.49 U	ng/L	0.49	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.2 U	ug/L	3.2	13
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Pentachlorophenol	0.53 U	ug/L	0.53	2.1
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Benzo(a)anthracene	0.027 U	ug/L	0.027	0.11
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Benzo(k)fluoranthene	0.027 U	ug/L	0.027	0.11

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	o-Xylene	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	1,1,2-Trichloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	1,1-Dichloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	1,3-Dichlorobenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Bromomethane	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Chlorobenzene	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Chloromethane	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	cis-1,2-Dichloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	2-Chlorophenol	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Hexachlorobenzene	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Hexachlorobutadiene	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Phenanthrene	0.11 U	ug/L	0.11	0.43
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Benzidine	11 U	ug/L	11	43
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Chrysene	0.027 U	ug/L	0.027	0.11
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Trichloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	1,2-Dichloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	2-Hexanone	3.0 U	ug/L	3.0	12
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	4-Methyl-2-Pentanone	2.0 U	ug/L	2.0	10
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	1,3,5-Trimethylbenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Acetone	3.0 U	ug/L	3.0	12
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Toluene	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Di-n-octyl phthalate	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.027 U	ug/L	0.027	0.11
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrotoluene	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	trans-1,3-Dichloropropene	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	m,p-Xylene	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	1,1-Dichloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Chloroethane	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Dibromochloromethane	6.2	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Fluoranthene	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Nitrobenzene	0.053 U	ug/L	0.053	0.21

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Pyrene	0.11 U	ug/L	0.11	0.43
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Benzo(b)fluoranthene	0.027 U	ug/L	0.027	0.11
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Trichlorofluoromethane	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Vinyl chloride	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Styrene	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Tetrachloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	2,4-Dichlorophenol	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Fluorene	0.027 U	ug/L	0.027	0.11
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Naphthalene	0.11 U	ug/L	0.11	0.43
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Phenol	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	2,6-Dinitrotoluene	0.053 UJ	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	4-Nitrophenol	11 U	ug/L	11	43
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Acenaphthene	0.027 U	ug/L	0.027	0.11
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.027 U	ug/L	0.027	0.11
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.3 U	ug/L	5.3	21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	1,2-Dichlorobenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	1,4-Dichlorobenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Benzene	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Carbon disulfide	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Carbon tetrachloride	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Isopropylbenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	cis-1,3-Dichloropropene	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	2-Chloronaphthalene	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	2-Nitrophenol	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	2,4-Dimethylphenol	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Dimethyl phthalate	0.21 U	ug/L	0.21	0.85
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.69	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.027 U	ug/L	0.027	0.11
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	N-Nitrosodimethylamine	2.1 U	ug/L	2.1	8.5
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrophenol	11 U	ug/L	11	43
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	3,3'-Dichlorobenzidine	11 U	ug/L	11	43
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Benzo(a)pyrene	0.027 U	ug/L	0.027	0.11

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Bromodichloromethane	36	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Bromoform	0.50 U	ug/L	0.50	2.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Ethylbenzene	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Diethyl phthalate	2.1 U	ug/L	2.1	8.5
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Hexachloroethane	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Butyl benzyl phthalate	1.1 U	ug/L	1.1	4.3
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Methyl-t-butyl ether	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	1,1,1-Trichloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	1,2-Dichloropropane	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Methylene chloride	1.0 U	ug/L	1.0	4.0
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Isophorone	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Acenaphthylene	0.027 U	ug/L	0.027	0.11
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Anthracene	0.053 U	ug/L	0.053	0.21
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Di-n-butyl phthalate	2.1 U	ug/L	2.1	8.5
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	o-Chlorotoluene	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	trans-1,2-Dichloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	2-Butanone	3.0 U	ug/L	3.0	12
1/23/2023 9:35	Effluent Grab	Priority Organic Pollutants	Chloroform	130	ug/L	0.20	0.80
1/23/2023 9:35	Effluent Grab	Nutrients	Specific Conductance	997	umhos/cm		
1/23/2023 9:35	Effluent Grab	Nutrients	Temperature	24	C		
1/23/2023 9:35	Effluent Grab	Nutrients	pH	7.67			
1/23/2023 9:35	Effluent Grab	Nutrients	Dissolved Oxygen %Sat	87.8	%Sat		
1/23/2023 10:01	Blank	Metals	Silver	0.010 U	ug/L	0.010	0.040
1/23/2023 10:01	Blank	Metals	Copper	0.40 U	ug/L	0.40	0.80
1/23/2023 10:01	Blank	Metals	Arsenic	0.050 U	ug/L	0.050	0.20
1/23/2023 10:01	Blank	Metals	Cadmium	0.020 U	ug/L	0.020	0.080
1/23/2023 10:01	Blank	Metals	Potassium	0.30 U	mg/L	0.30	1.2
1/23/2023 10:01	Blank	Metals	Iron	30 U	ug/L	30	120
1/23/2023 10:01	Blank	Metals	Selenium	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Metals	Zinc	5.0 U	ug/L	5.0	20
1/23/2023 10:01	Blank	Metals	Aluminum	5.0 U	ug/L	5.0	20
1/23/2023 10:01	Blank	Metals	Lead	0.20 U	ug/L	0.20	0.40

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 10:01	Blank	Metals	Chromium	1.0 U	ug/L	1.0	4.0
1/23/2023 10:01	Blank	Metals	Calcium	0.075 U	mg/L	0.075	0.30
1/23/2023 10:01	Blank	Metals	Nickel	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Metals	Magnesium	0.040 U	mg/L	0.040	0.16
1/23/2023 10:01	Blank	Metals	Sodium	0.50 U	mg/L	0.50	2.0
1/23/2023 10:01	Blank	Nutrients	O-Phosphate-P	0.004 U	mg P/L	0.0040	0.010
1/23/2023 10:01	Blank	Nutrients	Total-P	0.002 U	mg P/L	0.0020	0.0050
1/23/2023 10:01	Blank	Nutrients	Color (true)	2.5 U	PCU	2.5	6.0
1/23/2023 10:01	Blank	Nutrients	Organic Carbon	0.50 U	mg C/L	0.50	1.0
1/23/2023 10:01	Blank	Nutrients	Sulfate	0.20 U	mg SO4/L	0.20	0.50
1/23/2023 10:01	Blank	Nutrients	Fluoride	0.025 U	mg F/L	0.025	0.10
1/23/2023 10:01	Blank	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.080	0.20
1/23/2023 10:01	Blank	Nutrients	Total Alkalinity	0.65 U	mg CaCO3/L	0.65	2.5
1/23/2023 10:01	Blank	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.0040	0.010
1/23/2023 10:01	Blank	Nutrients	Chloride	0.20 U	mg Cl/L	0.20	0.50
1/23/2023 10:01	Blank	Nutrients	Ammonia-N	0.002 U	mg N/L	0.0020	0.0050
1/23/2023 10:01	Blank	Nutrients	Turbidity	0.10 U	NTU	0.10	1.0
1/23/2023 10:01	Blank	Pesticides	Carfentrazone Ethyl	0.10 U	ng/L	0.10	0.40
1/23/2023 10:01	Blank	Pesticides	Coumaphos	0.50 U	ng/L	0.50	2.0
1/23/2023 10:01	Blank	Pesticides	Demeton	1.5 U	ng/L	1.5	6.0
1/23/2023 10:01	Blank	Pesticides	Difenoconazole	0.60 U	ng/L	0.60	2.4
1/23/2023 10:01	Blank	Pesticides	Fluazifop-P-butyl	0.10 U	ng/L	0.10	0.40
1/23/2023 10:01	Blank	Pesticides	Fluxapyroxad	0.10 U	ng/L	0.10	0.40
1/23/2023 10:01	Blank	Pesticides	Imazalil	0.75 U	ng/L	0.75	3.0
1/23/2023 10:01	Blank	Pesticides	Parathion Ethyl	0.25 U	ng/L	0.25	1.0
1/23/2023 10:01	Blank	Pesticides	Propargite	1.5 U	ng/L	1.5	6.0
1/23/2023 10:01	Blank	Pesticides	Pyriproxyfen	0.12 U	ng/L	0.12	0.50
1/23/2023 10:01	Blank	Pesticides	Alachlor	0.25 U	ng/L	0.25	1.0
1/23/2023 10:01	Blank	Pesticides	Atrazine	0.25 U	ng/L	0.25	1.0
1/23/2023 10:01	Blank	Pesticides	Caffeine	7.5 U	ng/L	7.5	30
1/23/2023 10:01	Blank	Pesticides	Cyanazine	3.2 U	ng/L	3.2	13
1/23/2023 10:01	Blank	Pesticides	Ethoprop	0.10 U	ng/L	0.10	0.40
1/23/2023 10:01	Blank	Pesticides	Fludioxonil	0.12 U	ng/L	0.12	0.50
1/23/2023 10:01	Blank	Pesticides	Flutolanil	0.10 U	ng/L	0.10	0.40

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 10:01	Blank	Pesticides	Norflurazon	0.50 U	ng/L	0.50	2.0
1/23/2023 10:01	Blank	Pesticides	Naproxen	0.0080 UJ	ug/L	0.0080	0.032
1/23/2023 10:01	Blank	Pesticides	Ametryn	0.60 U	ng/L	0.60	2.4
1/23/2023 10:01	Blank	Pesticides	Azinphos Methyl	2.0 U	ng/L	2.0	8.0
1/23/2023 10:01	Blank	Pesticides	Butylate	0.40 U	ng/L	0.40	1.6
1/23/2023 10:01	Blank	Pesticides	Chlorpyrifos Ethyl	0.25 U	ng/L	0.25	1.0
1/23/2023 10:01	Blank	Pesticides	Dimethenamid	0.10 U	ng/L	0.10	0.40
1/23/2023 10:01	Blank	Pesticides	Metolachlor	0.35 U	ng/L	0.35	1.4
1/23/2023 10:01	Blank	Pesticides	Myclobutanil	0.25 U	ng/L	0.25	1.0
1/23/2023 10:01	Blank	Pesticides	Naled	1.5 U	ng/L	1.5	6.0
1/23/2023 10:01	Blank	Pesticides	Phorate	0.52 U	ng/L	0.52	2.1
1/23/2023 10:01	Blank	Pesticides	Ibuprofen	0.080 U	ug/L	0.080	0.32
1/23/2023 10:01	Blank	Pesticides	Acetochlor	0.25 U	ng/L	0.25	1.0
1/23/2023 10:01	Blank	Pesticides	Dithiopyr	0.62 U	ng/L	0.62	2.5
1/23/2023 10:01	Blank	Pesticides	Fenamiphos	0.50 U	ng/L	0.50	2.0
1/23/2023 10:01	Blank	Pesticides	Oxadiazon	0.30 U	ng/L	0.30	1.2
1/23/2023 10:01	Blank	Pesticides	Prometryn	0.20 U	ng/L	0.20	0.80
1/23/2023 10:01	Blank	Pesticides	Pyridaben	0.45 U	ng/L	0.45	2.2
1/23/2023 10:01	Blank	Pesticides	Terbufos	0.10 U	ng/L	0.10	0.40
1/23/2023 10:01	Blank	Pesticides	Thiobencarb	0.60 U	ng/L	0.60	2.4
1/23/2023 10:01	Blank	Pesticides	Acetaminophen	0.0080 U	ug/L	0.0080	0.032
1/23/2023 10:01	Blank	Pesticides	Atrazine Desethyl	1.5 U	ng/L	1.5	6.0
1/23/2023 10:01	Blank	Pesticides	Carbophenothion	0.20 U	ng/L	0.20	0.80
1/23/2023 10:01	Blank	Pesticides	Chlorfenapyr	0.18 U	ng/L	0.18	0.70
1/23/2023 10:01	Blank	Pesticides	Dimethomorph	0.18 U	ng/L	0.18	1.0
1/23/2023 10:01	Blank	Pesticides	Etridiazole	0.15 U	ng/L	0.15	0.60
1/23/2023 10:01	Blank	Pesticides	Fonofos	0.20 U	ng/L	0.20	0.80
1/23/2023 10:01	Blank	Pesticides	Metalaxyl	0.75 U	ng/L	0.75	3.0
1/23/2023 10:01	Blank	Pesticides	Parathion Methyl	0.55 U	ng/L	0.55	2.2
1/23/2023 10:01	Blank	Pesticides	Prometon	0.90 U	ng/L	0.90	3.6
1/23/2023 10:01	Blank	Pesticides	Pronamide	0.15 U	ng/L	0.15	0.60
1/23/2023 10:01	Blank	Pesticides	Propanil	0.12 U	ng/L	0.12	0.50
1/23/2023 10:01	Blank	Pesticides	Tebuconazole	0.50 U	ng/L	0.50	2.0
1/23/2023 10:01	Blank	Pesticides	Triadimefon	0.25 U	ng/L	0.25	1.0

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 10:01	Blank	Pesticides	Carbamazepine	8.0E-04 U	ug/L	8.0E-04	0.0032
1/23/2023 10:01	Blank	Pesticides	Sucralose	0.010 U	ug/L	0.010	0.040
1/23/2023 10:01	Blank	Pesticides	Bromacil	0.50 U	ng/L	0.50	2.0
1/23/2023 10:01	Blank	Pesticides	Chlorpyrifos Methyl	0.050 U	ng/L	0.050	0.20
1/23/2023 10:01	Blank	Pesticides	Fipronil Desulfinyl	0.12 U	ng/L	0.12	0.50
1/23/2023 10:01	Blank	Pesticides	Fipronil Sulfone	0.15 U	ng/L	0.15	0.60
1/23/2023 10:01	Blank	Pesticides	Hexazinone	0.50 U	ng/L	0.50	2.0
1/23/2023 10:01	Blank	Pesticides	Iprodione	0.60 U	ng/L	0.60	2.4
1/23/2023 10:01	Blank	Pesticides	Malathion	0.35 U	ng/L	0.35	1.4
1/23/2023 10:01	Blank	Pesticides	Mevinphos	1.0 U	ng/L	1.0	4.2
1/23/2023 10:01	Blank	Pesticides	Phenytoin	3.5 U	ng/L	3.5	14
1/23/2023 10:01	Blank	Pesticides	Propiconazole	0.50 U	ng/L	0.50	2.0
1/23/2023 10:01	Blank	Pesticides	Azoxystrobin	0.50 U	ng/L	0.50	2.0
1/23/2023 10:01	Blank	Pesticides	Diazinon	0.12 U	ng/L	0.12	0.50
1/23/2023 10:01	Blank	Pesticides	Ethion	0.15 U	ng/L	0.15	0.60
1/23/2023 10:01	Blank	Pesticides	Fipronil Sulfide	0.15 U	ng/L	0.15	0.60
1/23/2023 10:01	Blank	Pesticides	Flumioxazin	4.5 U	ng/L	4.5	18
1/23/2023 10:01	Blank	Pesticides	Loratadine	0.35 U	ng/L	0.35	1.4
1/23/2023 10:01	Blank	Pesticides	Napropamide	0.40 U	ng/L	0.40	1.6
1/23/2023 10:01	Blank	Pesticides	Pyraflufen Ethyl	0.25 U	ng/L	0.25	1.0
1/23/2023 10:01	Blank	Pesticides	Sulfentrazone	0.50 U	ng/L	0.50	2.0
1/23/2023 10:01	Blank	Pesticides	Terbuthylazine	0.42 U	ng/L	0.42	1.7
1/23/2023 10:01	Blank	Pesticides	Cyprodinil	0.10 U	ng/L	0.10	0.50
1/23/2023 10:01	Blank	Pesticides	Disulfoton	0.50 U	ng/L	0.50	2.0
1/23/2023 10:01	Blank	Pesticides	EPTC	1.2 U	ng/L	1.2	5.0
1/23/2023 10:01	Blank	Pesticides	Fenbuconazole	0.12 U	ng/L	0.12	0.50
1/23/2023 10:01	Blank	Pesticides	Fipronil	0.25 U	ng/L	0.25	1.0
1/23/2023 10:01	Blank	Pesticides	Metribuzin	1.5 U	ng/L	1.5	6.0
1/23/2023 10:01	Blank	Pesticides	Molinate	0.30 U	ng/L	0.30	1.2
1/23/2023 10:01	Blank	Pesticides	Oxyfluorfen	0.15 U	ng/L	0.15	0.60
1/23/2023 10:01	Blank	Pesticides	Pendimethalin	1.0 U	ng/L	1.0	4.0
1/23/2023 10:01	Blank	Pesticides	Prodiamine	0.18 U	ng/L	0.18	0.70
1/23/2023 10:01	Blank	Pesticides	Simazine	0.50 U	ng/L	0.50	2.0
1/23/2023 10:01	Blank	Pesticides	Stirophos	0.12 U	ng/L	0.12	0.50

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 10:01	Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.026 U	ug/L	0.026	0.10
1/23/2023 10:01	Blank	Priority Organic Pollutants	Naphthalene	0.10 U	ug/L	0.10	0.42
1/23/2023 10:01	Blank	Priority Organic Pollutants	Acenaphthylene	0.026 U	ug/L	0.026	0.10
1/23/2023 10:01	Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.026 U	ug/L	0.026	0.10
1/23/2023 10:01	Blank	Priority Organic Pollutants	Di-n-butyl phthalate	2.1 U	ug/L	2.1	8.3
1/23/2023 10:01	Blank	Priority Organic Pollutants	Bromodichloromethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	Isopropylbenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	1,2-Dichlorobenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	1,2-Dichloropropane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	Acetone	3.0 U	ug/L	3.0	12
1/23/2023 10:01	Blank	Priority Organic Pollutants	Benzene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	trans-1,2-Dichloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	Hexachloroethane	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Nitrobenzene	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Phenol	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Fluorene	0.026 U	ug/L	0.026	0.10
1/23/2023 10:01	Blank	Priority Organic Pollutants	1,1-Dichloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	Chlorobenzene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	Chloroethane	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	m,p-Xylene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	o-Xylene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	2-Chlorophenol	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	2-Nitrophenol	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	2,4-Dinitrophenol	10 U	ug/L	10	42
1/23/2023 10:01	Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Methylene chloride	1.0 U	ug/L	1.0	4.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	1,1-Dichloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	1,3,5-Trimethylbenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	Chloromethane	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	Toluene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	Pentachlorophenol	0.52 U	ug/L	0.52	2.1
1/23/2023 10:01	Blank	Priority Organic Pollutants	Pyrene	0.10 U	ug/L	0.10	0.42
1/23/2023 10:01	Blank	Priority Organic Pollutants	Acenaphthene	0.026 U	ug/L	0.026	0.10

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 10:01	Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.026 U	ug/L	0.026	0.10
1/23/2023 10:01	Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.2 U	ug/L	5.2	21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Ethylbenzene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	1,4-Dichlorobenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	2-Hexanone	3.0 U	ug/L	3.0	12
1/23/2023 10:01	Blank	Priority Organic Pollutants	Bromoform	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	Carbon disulfide	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Isophorone	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	2.1 U	ug/L	2.1	8.3
1/23/2023 10:01	Blank	Priority Organic Pollutants	4-Nitrophenol	10 U	ug/L	10	42
1/23/2023 10:01	Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Diethyl phthalate	2.1 U	ug/L	2.1	8.3
1/23/2023 10:01	Blank	Priority Organic Pollutants	Fluoranthene	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	2-Butanone	3.0 U	ug/L	3.0	12
1/23/2023 10:01	Blank	Priority Organic Pollutants	Trichlorofluoromethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.026 U	ug/L	0.026	0.10
1/23/2023 10:01	Blank	Priority Organic Pollutants	Chrysene	0.026 U	ug/L	0.026	0.10
1/23/2023 10:01	Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.026 U	ug/L	0.026	0.10
1/23/2023 10:01	Blank	Priority Organic Pollutants	Hexachlorobenzene	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	2,4-Dimethylphenol	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	1,1,2-Trichloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	1,2-Dichloroethane	0.97	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	Chloroform	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	Styrene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	Tetrachloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	Trichloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	cis-1,2-Dichloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.052 U	ug/L	0.052	0.21

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 10:01	Blank	Priority Organic Pollutants	Hexachlorobutadiene	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Phenanthrene	0.10 U	ug/L	0.10	0.42
1/23/2023 10:01	Blank	Priority Organic Pollutants	Benzidine	10 U	ug/L	10	42
1/23/2023 10:01	Blank	Priority Organic Pollutants	Anthracene	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.026 U	ug/L	0.026	0.10
1/23/2023 10:01	Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.1 U	ug/L	3.1	12
1/23/2023 10:01	Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	Methyl-t-butyl ether	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	1,1,1-Trichloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	4-Methyl-2-Pentanone	2.0 U	ug/L	2.0	10
1/23/2023 10:01	Blank	Priority Organic Pollutants	Bromomethane	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	Carbon tetrachloride	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	o-Chlorotoluene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.026 U	ug/L	0.026	0.10
1/23/2023 10:01	Blank	Priority Organic Pollutants	Butyl benzyl phthalate	1.0 U	ug/L	1.0	4.2
1/23/2023 10:01	Blank	Priority Organic Pollutants	Dimethyl phthalate	0.79 I	ug/L	0.21	0.83
1/23/2023 10:01	Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.052 U	ug/L	0.052	0.21
1/23/2023 10:01	Blank	Priority Organic Pollutants	1,3-Dichlorobenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	Dibromochloromethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	Vinyl chloride	1.4	ug/L	0.20	0.80
1/23/2023 10:01	Blank	Priority Organic Pollutants	cis-1,3-Dichloropropene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	trans-1,3-Dichloropropene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:01	Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	10 U	ug/L	10	42
1/23/2023 10:11	Blank	Priority Organic Pollutants	1,4-Dichlorobenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	2-Hexanone	3.0 U	ug/L	3.0	12
1/23/2023 10:11	Blank	Priority Organic Pollutants	Chloroethane	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	Vinyl chloride	1.2	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	Toluene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	Ethylbenzene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	1,3-Dichlorobenzene	0.50 U	ug/L	0.50	2.0

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 10:11	Blank	Priority Organic Pollutants	1,1,2-Trichloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	Benzene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	Trichlorofluoromethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	trans-1,2-Dichloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	1,1,1-Trichloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	1,1-Dichloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	2-Butanone	3.0 U	ug/L	3.0	12
1/23/2023 10:11	Blank	Priority Organic Pollutants	Chloromethane	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	Styrene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	Tetrachloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	cis-1,2-Dichloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	Bromomethane	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	1,2-Dichloropropane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	1,3,5-Trimethylbenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	Dibromochloromethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	Methylene chloride	1.0 U	ug/L	1.0	4.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	Chlorobenzene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	Carbon disulfide	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	4-Methyl-2-Pentanone	2.0 U	ug/L	2.0	10
1/23/2023 10:11	Blank	Priority Organic Pollutants	cis-1,3-Dichloropropene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	m,p-Xylene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	trans-1,3-Dichloropropene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	1,1,2,2-Tetrachloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	1,2-Dichlorobenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	Acetone	3.0 U	ug/L	3.0	12
1/23/2023 10:11	Blank	Priority Organic Pollutants	Methyl-t-butyl ether	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	Carbon tetrachloride	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	Bromoform	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	1,1-Dichloroethane	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	Isopropylbenzene	0.50 U	ug/L	0.50	2.0
1/23/2023 10:11	Blank	Priority Organic Pollutants	o-Chlorotoluene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	1,2-Dichloroethane	0.86	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	Trichloroethene	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	o-Xylene	0.50 U	ug/L	0.50	2.0

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/23/2023 10:11	Blank	Priority Organic Pollutants	Chloroform	0.20 U	ug/L	0.20	0.80
1/23/2023 10:11	Blank	Priority Organic Pollutants	Bromodichloromethane	0.20 U	ug/L	0.20	0.80