Effluent Quality Assessment of Valrico Advanced Wastewater Treatment Facility Hillsborough County NPDES # FL0040983 Sampled January 22, 2024

Division of Environmental Assessment and Restoration
Florida Department of Environmental Protection
April 2024

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Summary of Results

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

Facility Overview

The Valrico Advanced Wastewater Treatment Facility is a domestic wastewater treatment facility. A Facility Summary, including a description of the facility, summary of permit limits, and any relevant Administrative Order (AO), Consent Order (CO), and Discharge Monitoring Report (DMR) information is provided in Appendix A. The effluent is continuously discharged to reuse outfalls. The external outfall flows into Turkey Creek, a Class III Fresh Water [waterbody identification (WBID) 1578B] (Figure 1). For the past 12 months, the facility has discharged all effluent to a reuse outfall.

Turkey Creek falls within the West Central Nutrient Watershed Region for Numeric Nutrient Criteria (NNC). For this region, the NNC, expressed as annual geometric means, are 0.49 mg/L total phosphorus and 1.65 mg/L total nitrogen (Paragraph 62-302.531(2)(c), F.A.C.). Turkey 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 EFA-01 for outfall D-001 on January 22, 2024.

Samples were collected by Emmalise Hunter, Lauren Ballard, and Coral Evans (Southwest District). Analyses were performed by Benchmark EnvironAnalytical in Palmetto, Eurofins Orlando, Eurofins Pensacola, and DEP Laboratory in Tallahassee.

All field and laboratory methods followed DEP Standard Operating Procedures (see https://floridadep.gov/dear/quality-assurance/content/dep-sops and https://floridadep.gov/dear/florida-dep-laboratory/content/dep-laboratory-quality-assurance-manual-and-sops for details) and met DEP quality assurance/quality control standards (see https://floridadep.gov/dear/quality-assurance). Explanations of specific methods and measurements can be found in Appendix B.

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

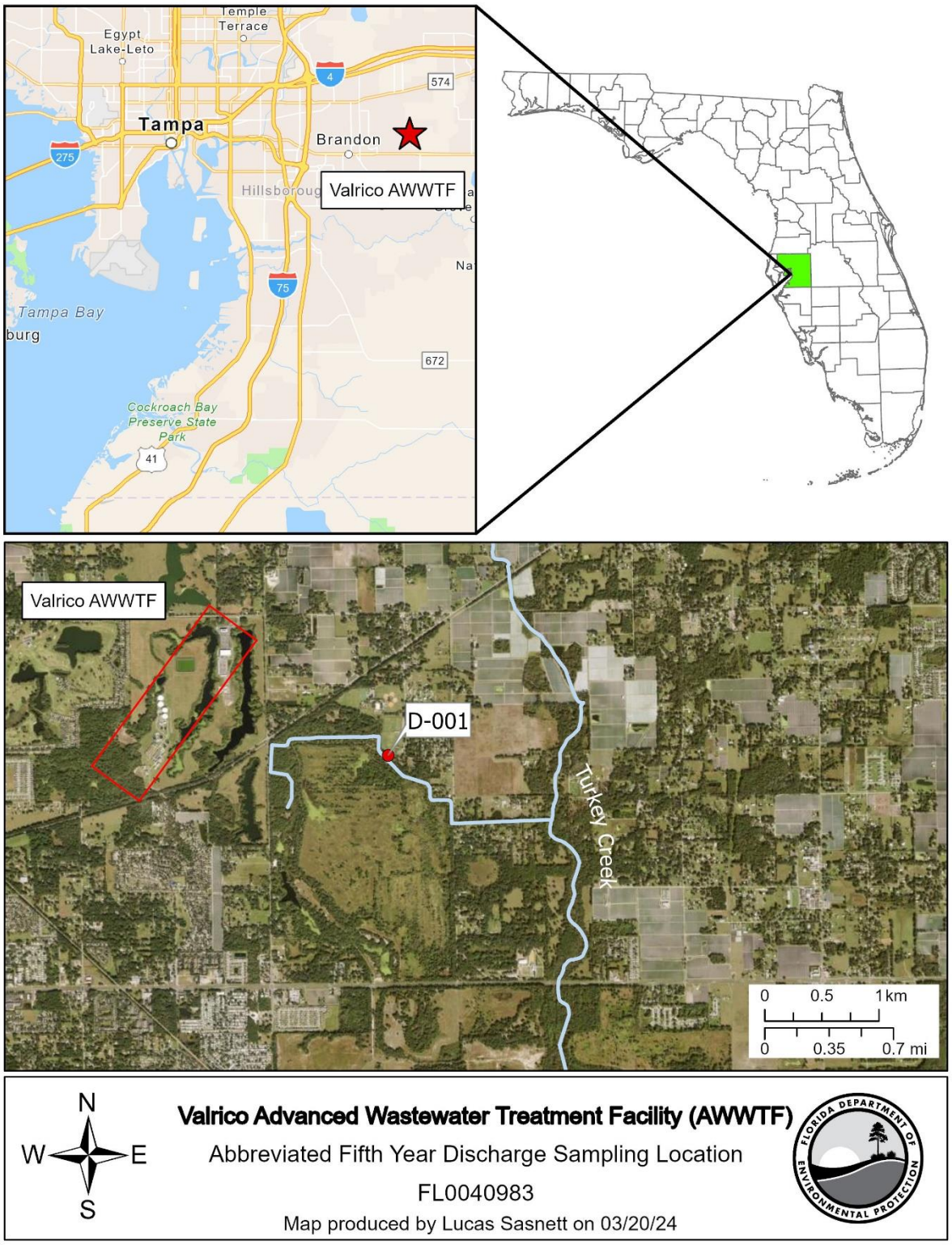


Figure 1. Map of Facility and Discharge Location

Results

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

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

- For comparative purposes only, total phosphorus in the effluent composite sample was greater than the annual geometric mean limit for NNC in the West Central Nutrient Watershed Region.

- Total organic carbon was detected in the equipment blank and field blank between the method detection limit (MDL) and practical quantitation limit (PQL).

Microbiology (See Table 2 and Appendix B)

- Effluent *Escherichia coli* (*E. coli*) levels complied with the Class III Water Quality Criterion for Fresh Waters and effluent permit limit. Effluent fecal coliform levels complied with the effluent permit limit.

Toxicity Whole Effluent Test (See Table 2)

- Tests were performed January 23 through January 27, 2024.

- The sample was aerated for 30 minutes at a rate of approximately 100 bubbles per minute to decrease the dissolved oxygen (DO) from 9.6 mg/L to 8.9 mg/L.

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

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

- For the 96-hour acute definitive test, the calculated LC50 for the water flea, *Ceriodaphnia dubia*, was >100% effluent with 0% mortality in 100% sample. The calculated LC50 for the fish, *Cyprinella leedsi*, was >100% effluent with 0% mortality in 100% sample. The effluent sample was not toxic to either test species during the 96-hour acute definitive bioassays and therefore, complied with effluent permit limits.

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

Metals (See Table 3 and Appendix D)

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

- Mercury was detected in the field blank between the MDL and PQL.

Algal Growth Potential (See Table 4 and Appendix B)

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

- The effluent grab sample AGP result of 3.53 AJ mg dry wt/L is within the AGP range (0.81 to 6.00 mg dry wt/L) suggested to be representative of moderately high productivity for freshwater (Miller et al. 1978).

- The AGP result was J-qualified because Day 10 counts were not completed as required by the method. The actual result may be as low as 3.26 mgDryWt/L but not higher than the reported value.

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

Organic Constituents (See Table 5 and Appendix D)

- Atrazine, azoxystrobin, caffeine, chlorfenapyr, cyprodinil, difenoconazole, fipronil, fipronil desulfinyl, fipronil sulfide, fipronil sulfone, fludioxonil, fluxapyroxad, loratadine, metribuzin, propiconazole, simazine, sulfentrazone, and tebuconazole were detected in the effluent grab sample.

- These organic constituents include 7 fungicides, 5 insecticides, 4 herbicides, 1 stimulant, and 1 antihistamine. The various pesticides may account for measured AGP results being lower than predicted AGP values.

- Caffeine was detected in the field blank between the MDL and PQL.

- There are no effluent permit limits for organic constituents.

Literature Cited

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

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

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

Table 1. Measured field parameters

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

Parameter	Units	Class III Criteria	Effluent Permit Limits	Effluent EFA-1
Temperature	C	-	-	19.7
pH	SU	6.0 - 8.5	6.0 - 8.5	7.3
Specific Conductance	µmhos/cm	≤ 1,275	-	1,066
Salinity	ppth	-	-	0.6 c
Dissolved Oxygen	% saturation	≥ 38	-	81.1
Dissolved Oxygen	mg/L	-	≥ 4.9	7.3

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

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

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

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab	Effluent Composite
Ortho-phosphate	mg P/L	-	-	0.22	-
Total Phosphorus	mg P/L	≤ 0.49 g	≤ 2.0 sp	0.29	0.16
Total Ammonia Nitrogen	mg N/L	≤ 4.13 s	-	0.011	0.032
Un-ionized Ammonia (calc salinity)	mg N/L	-	-	-	< 0.02 c
Nitrate and Nitrite	mg N/L	-	-	0.76	1.1
Total Kjeldahl Nitrogen	mg N/L	-	-	0.89	0.94
Organic Nitrogen	mg N/L	-	-	0.88 c	0.91 c
Total Nitrogen	mg N/L	≤ 1.65 g	≤ 6.0 sp	1.65 c	2 c
Total Organic Carbon [1,2]	mg C/L	-	-	6.1	6.4
Chlorophyll *a* - Corrected	µg/L	-	-	0.82 U	-
Phaeophytin	µg/L	-	-	0.90 U	-
CBOD, 5 day, N - inhibited	mg/L	-	≤ 10 sp	-	2.0 U
Total Suspended Solids	mg/L	-	≤ 10.0 sp	3 I	2 U
Turbidity	NTU	≤ 29 t	-	0.70 I	-
Color (true)	PCU	-	-	21	-
Alkalinity	mg CaCO3/L	≥ 20	-	176	-
Chloride	mg Cl/L	-	-	120	-
Fluoride	mg F/L	≤ 10.0	-	0.65	-
Sulfate	mg SO4/L	-	-	160	-
Fecal Coliforms	cfu/100 mL	-	≤ 25 s	10 U	-
Escherichia coli	MPN/100 mL	≤ 410	≤ 410	10 U	-
Bioassay - Water flea *(C. dubia)*	% effluent	-	≥ 100	>100	-
Bioassay - Fish *(C. leedsi)*	% effluent	-	≥ 100	>100	-

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.
c - Value is calculated
g- Value expressed as annual geometric mean.
p - 24 hour flow proportioned composite
s - Single sample
t - Shall not exceed 29 NTUs above background
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 - Analyte detected in the equipment blank
2 - Analyte detected in the field blank

Table 3. Analytical metals data

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

Analyte	Units	Effluent Grab Class III Criteria	Effluent Permit Limits	Effluent Grab
Hardness	mg CaCO3/L	-	-	312 c
Aluminum	µg/L	-	-	75
Arsenic	µg/L	≤ 50	-	0.18 I
Cadmium	µg/L	≤ 0.629 b	-	0.020 U
Calcium	mg/L	-	-	87.7
Chromium, Total [2]	µg/L	≤ 219 b	-	3.9
Copper	µg/L	≤ 24.7 b	-	0.73 I
Iron	µg/L	≤ 1,000	-	30 U
Lead	µg/L	≤ 13.6 b	-	0.22 I
Magnesium	mg/L	-	-	22.7
Mercury [1]	ng/L	≤ 12	≤ 12	1.5
Nickel	µg/L	≤ 137 b	-	1.5 I
Potassium	mg/L	-	-	13.5
Selenium	µg/L	≤ 5.0	-	0.20 U
Silver	µg/L	≤ 0.07	-	0.010 U
Sodium	mg/L	-	-	104
Zinc	µg/L	≤ 315 b	-	9.2 I

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.
b - Value is calculated based on hardness, (62-302.530(3))
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
2 - Analyte detected in the field blank
3 - 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	*P. subcapitata*	3.53 AJ	29 ± 5.9	95 ± 19	63 ± 13	120 ± 25	3.5	5.7

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

J - Estimated value

Table 5. Detected Organic Constituents

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

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab
Atrazine	ng/L	-	-	67
Azoxystrobin	ng/L	-	-	5.7 J
Caffeine [1]	ng/L	-	-	50
Chlorfenapyr	ng/L	-	-	4.3
Cyprodinil	ng/L	-	-	1.7
Difenoconazole	ng/L	-	-	0.73 I
Fipronil	ng/L	-	-	28
Fipronil Desulfinyl	ng/L	-	-	6.1
Fipronil Sulfide	ng/L	-	-	5.0
Fipronil Sulfone	ng/L	-	-	4.3
Fludioxonil	ng/L	-	-	7.5
Fluxapyroxad	ng/L	-	-	0.53 I
Loratadine	ng/L	-	-	8.8 J
Metribuzin	ng/L	-	-	1.1 I
Propiconazole	ng/L	-	-	2.7 I
Simazine	ng/L	-	-	6.0
Sulfentrazone	ng/L	-	-	3.1 I
Tebuconazole	ng/L	-	-	6.6 I

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
J - Estimated value
2 - Analyte detected in the field blank

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): Valrico Advanced Wastewater Treatment Facility (AWWTF)	**Former Names: N/A**
NPDES Permit Number: FL0040983	**Permit Expiration Date:** September 30, 2024
Physical Address: 1167 North Dover Road, Dover FL, 33527	
District: Southwest	**County:** Hillsborough
Function of Facility: A 12.0 million gallons per day (MGD) annual average daily flow (AADF), Type I oxidation ditch domestic AWWTF.	
Facility Type: Domestic Wastewater	**Permitted Capacity (MGD):** 25.4

Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months):
FLW-03 (D-001): NOD
FLW-05 (D-001): NOD

If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months):
FLW-01: 8.45 MGD
FLW-05 (R-001): 13,9240 gal/min

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-03	Flow meter to outfall D001
EFA-01	After disinfection and prior to discharge to surface water D001
EFB-01	After filters and prior to disinfection
FLW-05	flow rate through the UV system
PPI-01	UV system monitoring location
FLW-01	Flow to Reuse System R-001
FLW-04	Plant flow measured at headworks
INF-01	At headworks prior to treatment and ahead of return activated sludge line

Monitoring Location Site Number	Description of Monitoring Location
PRT-I	INF-01, influent monitoring ahead of the treatment process.
PRT-E	Sample point after treatment.
PRT-R	After centrifuges.

Description of Permitted Outfall(s):

Surface Water Discharge D-001: an existing 3.0 MGD AADF outfall discharging to an unnamed ditch which flows to Turkey Creek (a Class III freshwater body, WBID No. 1578B) thence to the Alafia River, thence to Tampa Bay. The outfall consists of three 30-inch reinforced concrete pipes anchored to an energy dissipater structure and a concrete headwall, discharging approximately one foot below water surface. The point of discharge is located approximately at latitude 27°57' 21" N, longitude 82°12' 32" W.

Land Application R-001: The Valrico AWWTF serves as a source plant for up to 12.0 MGD AADF of reclaimed water, which is transferred to the South-Central Hillsborough County Master Reuse System (SCHCMRS) (R-001) at a transfer point located immediately downstream of the distribution flow meter at the source plant. The South-Central Hillsborough County Master Reuse System is a Part III slow rate public access land application system serving the southern and central portions of eastern Hillsborough County for use on residential lawns, golf courses, common areas, roadway medians and right of ways, the Valrico spray field, agriculture sites, and industrial reuse. The South-Central Hillsborough County Master Reuse System is located in the service areas of the Valrico AWWTF, the Falkenburg AWWTF and the South County Regional AWWTF. The general reuse service area is illustrated on the map titled South Central Reclaimed Water Master Plan (2025), prepared by the Hillsborough County Public Utilities Department, updated in January 2019. The current capacity of the system including existing, proposed, and potential users is 25.4 mgd as an AADF. Reclaimed water meeting Part III Public Access standards is provided by three existing separately permitted Hillsborough County Public Utilities Department operated wastewater treatment facilities as follows:

- **Valrico AWWTF – FL0040983 – up to 12.0 mgd AADF**
- Falkenburg AWWTF – FL0040614 – up to 12.0 mgd AADF
- South County Regional AWWTF – FL0028061 – up to 10.0 mgd AADF

Underground Injection (UIC) Wells:

U-001: An existing underground injection well system consisting of one Class V, Group 2 recharge well (RW-1) and three monitoring wells (RZMW-1, TPW-1 and SMW-1) permitted under Department permit number 0309328-002-UC/5R (WACS ID 100344). U-001 is located at intersection Route 41 & Pembroke Road, Apollo Beach, Florida and approximately at latitude 27°48' 30.1" N, longitude 82°23' 27.8" W.

U-002: An existing underground injection well system consisting of one Class V, Group 2 recharge well (SRWD-2) and two monitoring wells (SMWD-2 and SMWC-2) permitted under Department permit number 0359430-001-UC/5R (WACS ID 105056). U-002 is located at 6078 South 78th Street, Riverview, Florida 33578 and approximately at latitude 27°53' 27.75" N, longitude 82°22' 4.93" W.

U-003: An existing underground injection well system consisting of one Class V, Group 2 recharge well (SRWD-3) and two monitoring wells (SMWD-3 and SMWC-3) permitted under Department permit number 0359435-001-UC/5R (WACS ID 105057). U-003 is located at 7710 Old Big Bend Road, Gibsonton, Florida 33578 and approximately at latitude 27°47' 50.73" N, longitude 82°21' 53.99" W.

U-004: An existing underground injection well system consisting of one Class V, Group 2 recharge well (SRWD-4) and two monitoring wells (SMWD-4 and SMWC-4) permitted under Department permit number 0359436-001-UC/5R (WACS ID 105058). U-004 is located at 6600 Covington Garden Drive, Apollo Beach, Florida 33572 and approximately at latitude 27°45' 47.23" N, longitude 82°22' 09.97" W.

U-005: An existing underground injection well system consisting of one Class V, Group 2 recharge well (SRWD-5) and two monitoring wells (SMWD-5 and SMWC-5) permitted under Department permit number 0359437-001-UC/5R (WACS ID 105059). U-005 is located 520 TECO Road, Ruskin, Florida 33570 and approximately at latitude 27°43' 34.54" N, longitude 82°23' 02.27" W.

U-006: An existing underground injection well system consisting of one Class V, Group 2 recharge well (SRWD-6) and two monitoring wells (SMWD-6 and SMWC-6) permitted under Department permit number 0359438-001-UC/5R (WACS ID 105060). U-006 is located at 230 TECO Road, Ruskin, Florida 33570 and approximately at latitude 27°43' 01.67" N, longitude 82°23' 03.97" W.

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

Operation of an existing 12.0 (MGD) (AADF), Type I oxidation ditch domestic AWWTF. The facility includes the following units: a leachate and septage receiving station; a headwork consisting of two mechanically cleaned perforated screens, each with its own solids washer/compactor unit, a bypass center channel featuring a manually cleaned bar screen, two cyclone de-gritter/classifier units, a biological odor control system and a mechanically mixed effluent box combining flows from all three channels, two flow equalization basins, two parallel anaerobic selector tanks with mixers connecting to two oxidation ditches and two parallel anaerobic selector tanks with mixers connecting to two oxidation ditches; two in-line nutrient analyzer systems; two clarifier splitter boxes; an alum feed system; six clarifiers including associated return activated sludge (RAS) pumps; an intermediate pump station with five pumps; eight deep bed de-nitrification sand filters; one effluent mud-well; one effluent clear well; two disinfection channels utilizing an ultraviolet light disinfection system; a bulk liquid sodium hypochlorite system for emergency dosing of the RAS system, alternate disinfection and for use as a maintenance disinfection system on the reclaimed water distribution system; an effluent pump station with four pumps; four effluent storage tanks; and two effluent basins; four reclaimed water pump station high service pumps; one reclaimed pump station jockey pump; and one 12 MG lined reject pond.

This facility accepts biosolids transported by truck from several Hillsborough County school WWTFs. Biosolids are transferred to three aerated holding tanks. The biosolids are then transferred to three centrifuges for dewatering prior to being conveyed to the Truck Loading Station. The biosolids are then transported to a Class I landfill or transported to a biosolids management facility.

Filter backwash is returned to the headworks. Alum is used in the treatment process for phosphorus removal and is available on a standby status for solids control. Effluent quality is continuously monitored for turbidity as a measure of total suspended solids (TSS). There are two AutoStart generators available as an alternative power source.

Effluent failing to meet Part III public access quality standards is directed by means of an automated valve system and bypass line to a 12.0 MG lined reject storage pond. The reject pond has a pump station to return reject water to the headworks of the treatment facility. Additional reject capability is provided by using the alternative disposal system D-001, a 3.0 MGD AADF permitted surface water discharge

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 to D-001	MGD	Max Max	3.0 Report	Annual Average Monthly Average	Continuous	Flow Meter	FLW-03	See I.**Error! Reference source not found.**.**Error! Reference source not found.**
BOD, Carbonaceous 5 day, 20C	mg/L	Max Max Max Max	5.0 6.25 7.5 10	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFA-01	See I.**Error! Reference source not found.**.**Error! Reference source not found.**
Solids, Total Suspended	mg/L	Max Max Max Max	5.0 6.25 7.5 10.0	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFA-01	See I.**Error! Reference source not found.**.**Error! Reference source not found.**
Solids, Total Suspended	mg/L	Max	5.0	Single Sample	5 Days/Week	Grab	EFB-01	
Nitrogen, Total	mg/L	Max Max Max Max	3.0 3.75 4.5 6.0	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFA-01	
Phosphorus, Total (as P)	mg/L	Max Max Max Max	1.0 1.25 1.5 2.0	Annual Average Monthly Average Weekly Average Single Sample	5 Days/Week	24-hr FPC	EFA-01	
pH	s.u.	Min Max	6.0 8.5	Single Sample Single Sample	Continuous	Meter	EFA-01	See I.**Error! Reference source not found.**.**Error! Reference source not found.**
Coliform, Fecal, % less than detection	percent	Min	75	Monthly Average	Monthly	Calculated	EFA-01	See I.**Error! Reference source not found.**.**Error! Reference source not found.**
Coliform, Fecal	#/100mL	Max	25	Single Sample	5 Days/Week	Grab	EFA-01	
E. coli (Escherichia coli Bacteria)	#/100mL	Max	126	Monthly Geometric Mean	5 Days/Week	Grab	EFA-01	See I.**Error! Reference source not found.**.8
		Max	410	90th Percentile	5 Days/Week	Grab	EFA-01	See I.**Error! Reference source not found.**.8
Oxygen Dissolved (DO)	mg/L	Min	4.9	Single Sample	Daily; 24 hours	Grab	EFA-01	See I.**Error! Reference source not found.**.9

			Effluent Limitations		Monitoring Requirements			
Parameter	**Units**	**Max./ Min**	**Limit**	**Statistical Basis**	**Frequency of Analysis**	**Sample Type**	**Monitoring Site Number**	**Notes**
Mercury, Total Recoverable	ug/L	Max	0.012	Single Sample	Quarterly	Grab	EFA-01	See VII.4
Acute Whole Effluent Toxicity, 96 Hour LC50 (Ceriodaphnia dubia)	percent	Min	100	Single Sample	Semi-Annually	4 grabs/24 hr. period	EFA-01	See I.**Error! Reference source not found.**.10
Acute Whole Effluent Toxicity, 96 Hour LC50 (Cyprinella leedsi)	percent	Min	100	Single Sample	Semi-Annually	4 grabs/24 hr. period	EFA-01	See I.**Error! Reference source not found.**.10
Nitrogen, Total	ton/yr	Max Max	Report Report	5 Year Average Annual Total	Monthly	Calculated	EFA-01	See I.**Error! Reference source not found.**.11
Nitrogen, Total	ton/mth	Max	Report	Monthly Total	Monthly	Calculated	EFA-01	See I.**Error! Reference source not found.**.11
Flow rate (flow through ultraviolet system)	gal/min	Max	Report	Daily Maximum	Continuous	Meter	FLW-05	
Ultraviolet Light Dosage	mW-s/sqcm	Min	100	Single Sample	Continuous	Meter	PPI-01	See I.**Error! Reference source not found.**.22
Ultraviolet Light Transmittance	percent	Min	55	Single Sample	Continuous	Meter	PPI-01	See I.**Error! Reference source not found.**.21
Ultraviolet Light Intensity	mW/sqcm	Min	Report	Single Sample	Continuous	Meter	PPI-01	See I.**Error! Reference source not found.**.20
Turbidity	NTU	Max	Report	Single Sample	Continuous	Meter	EFB-01	See I.**Error! Reference source not found.**.14
Water Level in Reactors	in	Max	Report	Single Sample	Continuous	Meter	PPI-01	See I.**Error! Reference source not found.**.24
Reactor Status[1]	On/Off	Record			Continuous			See I.A.15
Lamp Status[1]	On/Off	Record			Continuous			See I.A.16
Lamp Age[1]	Hrs	Record			Continuous			See I.A.17
Reactor On/Off Cycles[1]	Total Number	Record			Continuous			See I.A.15
Reactor Power Setpoint[1]	Setting Level	Record			Continuous			See I.A.18
Ground Fault Interrupt Status[1]	Yes/No	Record			Continuous			See I.A.19

Notes:

[1]These Parameters are not included in the discharge monitoring reports (DMR) but are to be monitored and operated as described in the approved operating protocol for the facility.

FPC – Flow proportional composite

PART I: Continued

Receiving Waters:	**Classification (indicate whether fresh or marine):**
Turkey Creek (tributary to Alafia River then Tampa Bay)	Class III fresh waters

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

1. The permittee shall comply with the following requirements to evaluate acute whole effluent toxicity of the discharge from outfall D-001.
   a. Effluent Limitation
      (1) In any routine or additional follow-up test for acute whole effluent toxicity, the 96-hour LC50 shall not be less than 100% effluent. *[Rules 62-302.200(1), 62-302.500(1)(a)4., 62-4.244(3)(a), and 62-4.241, F.A.C.]*
   b. Monitoring Frequency
      (1) Routine toxicity tests shall be conducted 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) Routine tests shall be conducted on four separate grab samples collected at evenly spaced (6-hr) intervals over a 24-hour period. The four grab samples shall be used in eight bioassays (four bioassays for each species) and shall represent one test. If the duration of the discharge is less than 24-hours, the duration of discharge shall be documented on the chain of custody.
      (2) For additional follow-up tests, the first test shall be conducted on four separate grab samples collected at evenly spaced (6-hr) intervals over a 24-hour period. The four grab samples shall be used in four separate bioassays for each species that failed the routine test. The four grab samples represent one test. The second follow-up test shall be run on a single grab sample collected on the day and time when the greatest toxicity was identified in the routine or first additional follow-up test.
   d. Test Requirements
      (1) Routine Tests: All routine tests shall be conducted using a control (0% effluent) and a minimum of five dilutions: **100%, 75%, 50%, 25%**, and **12.5%** effluent.
      (2) The permittee shall conduct 96-hour acute static renewal multi-concentration toxicity tests using the daphnid, **Ceriodaphnia dubia**, and the bannerfin shiner, **Cyprinella leedsi**, concurrently.
      (3) All test species, procedures and quality assurance criteria used shall be in accordance with **Methods for Measuring Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms**, 5th Edition, EPA-821-R-02-012. Any deviation of the bioassay procedures outlined herein shall be submitted in writing to the Department for review and approval prior to use. In the event the above method is revised, the permittee shall conduct acute toxicity testing in accordance with the revised method.
      (4) The control water and dilution water shall be moderately hard water as described in EPA-821-R-02-012, Table 7.
   e. Quality Assurance Requirements
      (1) A standard reference toxicant (SRT) quality assurance (QA) acute toxicity test shall be conducted with each species used in the required toxicity tests either concurrently or initiated no more than 30 days before the date of each routine or additional follow-up test conducted. Additionally, the SRT test must be conducted concurrently if the test organisms are obtained from outside the test laboratory unless the test organism supplier provides control chart data from at least the last five monthly acute toxicity tests using the same reference toxicant and test conditions. If the organism supplier provides the required SRT data, the organism supplier's SRT data and the test laboratory's monthly SRT-QA data shall be included in the reports for each companion routine or additional follow-up test required.
      (2) If the mortality in the control (0% effluent) exceeds 10% for either species in any test, the test for that species (including the control) shall be invalidated and the test repeated. The repeat test shall begin within 14 days after the last day of the invalid test.
      (3) If 100% mortality occurs in all effluent concentrations for either species prior to the end of any test and the control mortality is less than 10% at that time, the test (including the control) for that species shall be terminated with the conclusion that the test fails and constitutes non-compliance.

(4) Routine and additional follow-up tests shall be evaluated for acceptability based on the concentration-response relationship, as required by EPA-821-R-02-012, Section 12.2.6.2., and included with the bioassay laboratory reports.

f. Reporting Requirements

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

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

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

(2) A bioassay laboratory report for the routine test shall be prepared according to EPA-821-R-02-012, Section 12, Report Preparation and Test Review, and mailed to the Department at the address below within 30 days after the last day of the test.

(3) For additional follow-up tests, a single bioassay laboratory report shall be prepared according to EPA-821-R-02-012, Section 12, and mailed within 30 days after the last day of the second valid additional follow-up test.

(4) Data for invalid tests shall be included in the bioassay laboratory report for the repeat test.

(5) The same bioassay data shall not be reported as the results of more than one test.

(6) All bioassay laboratory reports shall be sent to:
Florida Department of Environmental Protection
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 10.a.(1).

(2) Additional Follow-up Tests:

(a) If a routine test does not meet the acute toxicity limitation in 10.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 10.d.

(b) The first test shall be initiated within 28 days after the last day of the failed routine test. The remaining additional follow-up tests shall be conducted weekly thereafter until a total of two valid additional follow-up tests are completed.

(c) The first additional follow-up test shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 75%, 50%, 25%, and 12.5% effluent. The permittee may modify the dilution series in the second additional follow-up test to more accurately bracket the toxicity such that at least two dilutions above and two dilutions below the target concentration and a control (0% effluent) are run. All test results shall be statistically analyzed according to the procedures in EPA-821-R-02-012.

(3) In the event of three valid test failures (whether routine or additional follow-up tests) within a 12-month period, the permittee shall notify the Department within 21 days after the last day of the third test failure.

(a) The permittee shall submit a plan for correction of the effluent toxicity within 60 days after the last day of the third test failure.

(b) The Department shall review and approve the plan before initiation.

(c) The plan shall be initiated within 30 days following the Department's written approval of the plan.

(d) Progress reports shall be submitted quarterly to the Department at the address above.

(e) During the implementation of the plan, the permittee shall conduct quarterly routine whole effluent toxicity tests in accordance with 10.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 10.b.(1). If a routine test is invalid according to the acceptance criteria in EPA-821-R-02-012, a repeat test shall be initiated within 14 days after the last day of the invalid routine test.

(f) Upon completion of four consecutive quarterly valid routine tests that demonstrate compliance with the effluent limitation in 10.a.(1) above, the permittee may submit a written request to the Department to terminate the plan. The plan shall be terminated upon written verification by the

Department that the facility has passed at least four consecutive quarterly valid routine whole effluent toxicity tests. If a test within the sequence of the four is deemed invalid, but is replaced by a repeat valid test initiated within 14 days after the last day of the invalid test, the invalid test will not be counted against the requirement for four consecutive quarterly valid routine tests for the purpose of terminating the plan.

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

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

N/A

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

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

Facility Name	County	Monitoring Group	Date	Monitoring Location	Parameter	Description	Result	Limit	Units	Statistical Base
Valrico AWWTF	HILLSBOROUGH	R-001	11/30/2023	EFB-01	P 00530	Solids, Total Suspended	5.4	5.0	mg/L	MB - Maximum
Valrico AWWTF	HILLSBOROUGH	R-001	6/30/2023	EFB-01	P 00530	Solids, Total Suspended	5.5	5.0	mg/L	MB - Maximum
Valrico AWWTF	HILLSBOROUGH	R-001	2/28/2023	EFA-01	P 51005	Coliform, Fecal, % less than	57.14	75.0	percen	TM - Minimum Total

Describe previous FYI and WQBEL study:
N/A

Describe previous or current Enforcement Actions (including WLs):
N/A

Describe any violations or problems noted in previous inspection:
In the most previous inspection report from 2/16/2022, effluent exceedances were addressed with comments in the facility's DMR for the associated month. 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-2024-01-08-19

FYI3 Valrico AWWTF (FL0040983)

Customer: SW-DIST

Project ID: FYI3

Florida Department of Environmental Protection

Central Laboratory Submittal Form

Page 1 of 4

last revised Jan 25, 2018

Requester: Benjamin Nomann

Field Report Prepared By: Lauren Bellard

Collected By: E. Hunter, L. Bellard, C. Evans

Sampling Agency: SWD-FDEP

Location: Valrico AWWTF	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 1/22/24 Time 9:00am	Eastern / Central	Composite end Date Time					Bottle Group(s) (See pg 2): A
Field ID: EFA-01 ~~D-003~~	Matrix (type, e.g., Salt, Fresh, etc): Fresh			Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L): NA			
WIN/STORET #	Temp (C)	pH		Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt) ~~33.2~~	Comments						
Location: Valrico AWWTF	☒ Comp ☐ Grab	Collection (comp begin or grab) Date 1/21/24 Time 7:00am	Eastern / Central	Composite end Date 1/22/24 Time 7:00am					Bottle Group(s): B
Field ID: EFA-01	Matrix (type, e.g., Salt, Fresh, etc): Fresh			Diss. Oxygen 7.34 81.1	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L): NA			
WIN/STORET #	Temp (C) 19.7	pH 7.30		Sample Depth Point of discharge	☐ ft ☐ m	Sp. Conductance (umho/cm) 1066			
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt) 0.53	Comments						
Location: Field Blank	☐ Comp ☐ Grab	Collection (comp begin or grab) Date 1/22/24 Time 9:30am	Eastern / Central	Composite end Date Time					Bottle Group(s): C
Field ID	Matrix (type, e.g., Salt, Fresh, etc): DI			Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L): NA			
WIN/STORET #	Temp (C)	pH		Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments						
Location: Equipment Blank	☐ Comp ☐ Grab	Collection (comp begin or grab) Date 1/22/24 Time 9:30am	Eastern / Central	Composite end Date Time					Bottle Group(s): D
Field ID	Matrix (type, e.g., Salt, Fresh, etc): DI			Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L): NA			
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
Emalise Hunter	1/22/24 2:49pm	FEDEX	~~4~~ 5		0918 1·23·24

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 emmalise.c.hunter@FloridaDEP.gov
Invoice to: FDEP Micro Overflow

PO# COO EFS

Project Name: Valrico AWWTF RQ-2024-01-08-19

Laboratory Submission # 24011141

Sample Name	Sample Type[1] / Sample Matrix[2]	Collection Date	Collection Time	Container Qty	Container Capacity	Container Type[3]	Preservative[4]	Parameters for Analysis	Laboratory Sample #
~~Valrico AWWTF EFD-01FC~~ EFA-01		1/22/24	~~11:07~~ 9:27 am EF	1				E. Coli .	1
~~Valrico AWWTF EFD-01 END~~		1/22/24	~~11:07~~ 9:27 am EF	1				Fecal Coliform .	1

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	Emmalise Hunter FDEPSWD	1/22/24	11:08	Nathan Hudsell	1-22-24	1109
2	Relinquished By& Affiliation: (Print & Sign)	Date	Time	Received By& Affiliation. (Print & Sign)	Date	Time

Pg 3 of 3

670-33515

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
TASK ASSIGNMENT/NOTIFICATION FORM: LAB145

Contract Manager: Linda Allen/Devan Cobb (850)-245-8084 / (850) 245-8078
2600 Blair Stone Rd., MS 6512
Tallahassee, FL 32399-2400

Contractor: Eurofins Environmental Testing Southeast, LLC
5102 LaRoche Ave
Savannah, GA 31404
ATTN: Noel Savoie

DEP Approval By: Devan R. Cobb-Williams Contractor Approval By: Noel Savoie
Project Manager

Contractor Representatives Contacted: Noel Savoie

Date: 12/19/2023
Means of Contact: Email

Task Assignment Number: OV500 Maximum Cost: **$41.50** Turnaround Time: 5 BD

Sample Delivery Date: 1/23/2024

Project Name/Description:
RQ-2024-01-08-19; FYI3 Valrico AWWTF (FL0040983)

Deliverable Number/ Parameter Group/ Method	**Sample Matrix**	**# of Samples**	**# of Containers**	**DEP ID #**	**Unit Cost**	**% Mark-up (if any)**	**Cost**
Quote/OV-CBOD-IN CBOD, nitrogen-inhibited 5210B-2011	W	1	1		$39.00		$39.00
217/Sample Disposal Fee:	1				$2.50		$2.50
Total Number of Containers Shipped:	1					**Total:**	**$41.50**

QC Instructions:

Comments: Quote #

Samples released to Contract Lab by: _____ Date/Time: _____

Delivery Method: _____ Shipping _____

Samples Accepted by: Orlando Date/Time 1-23-2024 0950

* **Please sign and return by email to** Linda.S.Allen@FloridaDEP.gov and Devan.R.Cobb@dep.state.fl.us

640-Tallahassee

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
TASK ASSIGNMENT/NOTIFICATION FORM: LAB145

Contract Manager: Linda Allen /Devan Cobb
2600 Blair Stone Rd., MS 6512
Tallahassee, FL 32399-2400
(850) 245-8084/ (850) 245-8078

Contractor: Eurofins Environmental Testing Southeast, LLC
5102 LaRoche Ave
Savannah, GA 31404
ATTN: Noel Savoie

400-250195 COC

DEP Approval By: Devan R. Cobb-Williams Contractor Approval By: Project Manager

Contractor Representatives Contacted: Noel Savoie

Date: 1/23/2024
Means of Contact: Email

Task Assignment Number: OV517 Maximum Cost: **$145.00** Turnaround Time: 10 BD

Sample Delivery Date: 1/23/2024

Project Name/Description:
RQ-2024-01-08-19;SW-DIST-2024-01-23-03;FYI3 Valrico AWWTF (FL0040983);TLH-2024-01-23-81

Deliverable Number/ Parameter Group/ Method	**Sample Matrix**	**# of Samples**	**# of Containers**	**DEP ID #**	**Unit Cost**	**% Mark-up (if any)**	**Cost**
65/mercury, Low Level (LL CVAFS)1631E 65	W	2	8 vials	2462700, 2462701	~~$70.00~~ 105.00 1-26-2024		~~$140.00~~ 210.00 1-26-2024
217/Sample Disposal Fee:		2			$2.50		$5.00
Total Number of Containers Shipped:		8				**Total:**	~~$145.00~~ 215.00 1-26-2024

QC Instructions:

Comments:

Samples released to Contract Lab by: Date/Time: 1-23-24 / 11:24

Delivery Method: HD

Samples Accepted by: Date/Time 1-23-24 / 11:24
Rel. 1-24-24 1600

* **Please sign and return by email to** Linda.S.Allen@FloridaDEP.gov and Devan.R.Cobb@dep.state.fl.us

2 1/26/24 945 0.0°C IR8

Appendix D. Chemical Analysis of Effluent

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/22/2024 9:00	Effluent Grab	AGP/LN	Algal Growth Potential	3.53 AJ	mg DryWt/L	0.300	0.900
1/22/2024 9:00	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Uncorrected	0.60 U	µg/L	0.60	1.8
1/22/2024 9:00	Effluent Grab	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.90 U	µg/L	0.90	2.7
1/22/2024 9:00	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.82 U	µg/L	0.82	2.5
1/22/2024 9:00	Effluent Grab	Overflow	Fecal Coliforms-Membrane Filter	10 U	cfu/100 mL	10	10
1/22/2024 9:00	Effluent Grab	Overflow	Escherichia Coli-Quanti-Tray	10 U	MPN/100 mL	10	10
1/22/2024 9:00	Effluent Grab	Toxicology	Bioassay-Acute-Def-FW-C.dubia, LC50	100 L	LC50		
1/22/2024 9:00	Effluent Grab	Toxicology	Bioassay-Acute-Def-FW-Fish, LC50	100 L	LC50		
1/22/2024 9:00	Effluent Grab	Metals	Magnesium	22.7	mg/L	0.040	0.16
1/22/2024 9:00	Effluent Grab	Metals	Sodium	104	mg/L	0.50	2.0
1/22/2024 9:00	Effluent Grab	Metals	Zinc	9.2 I	µg/L	5.0	20
1/22/2024 9:00	Effluent Grab	Metals	Arsenic	0.18 I	µg/L	0.050	0.20
1/22/2024 9:00	Effluent Grab	Metals	Cadmium	0.020 U	µg/L	0.020	0.080
1/22/2024 9:00	Effluent Grab	Metals	Chromium	3.9	µg/L	0.40	1.6
1/22/2024 9:00	Effluent Grab	Metals	Calcium	87.7	mg/L	0.075	0.30
1/22/2024 9:00	Effluent Grab	Metals	Nickel	1.5 I	µg/L	0.50	2.0
1/22/2024 9:00	Effluent Grab	Metals	Silver	0.010 U	µg/L	0.010	0.040
1/22/2024 9:00	Effluent Grab	Metals	Copper	0.73 I	µg/L	0.40	0.80
1/22/2024 9:00	Effluent Grab	Metals	Lead	0.22 I	µg/L	0.20	0.40
1/22/2024 9:00	Effluent Grab	Metals	Iron	30 U	µg/L	30	120
1/22/2024 9:00	Effluent Grab	Metals	Potassium	13.5	mg/L	0.30	1.2
1/22/2024 9:00	Effluent Grab	Metals	Selenium	0.20 U	µg/L	0.20	0.80
1/22/2024 9:00	Effluent Grab	Metals	Aluminum	75	µg/L	5.0	20
1/22/2024 9:00	Effluent Grab	Nutrients	Fluoride	0.65	mg F/L	0.025	0.10
1/22/2024 9:00	Effluent Grab	Nutrients	Kjeldahl Nitrogen	0.89	mg N/L	0.080	0.20
1/22/2024 9:00	Effluent Grab	Nutrients	TSS	3 I	mg/L	2.0	10
1/22/2024 9:00	Effluent Grab	Nutrients	O-Phosphate-P	0.22	mg P/L	0.0080	0.020
1/22/2024 9:00	Effluent Grab	Nutrients	Organic Carbon	6.1	mg C/L	0.50	1.0
1/22/2024 9:00	Effluent Grab	Nutrients	Total-P	0.29	mg P/L	0.010	0.050
1/22/2024 9:00	Effluent Grab	Nutrients	NO2NO3-N	0.76	mg N/L	0.0040	0.010

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/22/2024 9:00	Effluent Grab	Nutrients	Total Alkalinity	176	mg CaCO3/L	0.65	2.5
1/22/2024 9:00	Effluent Grab	Nutrients	Sulfate	160	mg SO4/L	2.0	5.0
1/22/2024 9:00	Effluent Grab	Nutrients	Ammonia-N	0.011	mg N/L	0.0020	0.0050
1/22/2024 9:00	Effluent Grab	Nutrients	Chloride	120	mg Cl/L	0.20	0.50
1/22/2024 9:00	Effluent Grab	Nutrients	Color (true)	21	PCU	2.5	6.0
1/22/2024 9:00	Effluent Grab	Nutrients	Turbidity	0.70 I	NTU	0.10	1.0
1/22/2024 9:00	Effluent Grab	Overflow	Mercury	1.5	ng/L	0.20	0.50
1/22/2024 9:00	Effluent Grab	Pesticides	Butylate	0.48 U	ng/L	0.48	2.4
1/22/2024 9:00	Effluent Grab	Pesticides	Carfentrazone Ethyl	0.16 U	ng/L	0.16	0.80
1/22/2024 9:00	Effluent Grab	Pesticides	Cyprodinil	1.7	ng/L	0.21	1.1
1/22/2024 9:00	Effluent Grab	Pesticides	Pendimethalin	1.8 U	ng/L	1.8	9.1
1/22/2024 9:00	Effluent Grab	Pesticides	Pyraflufen Ethyl	0.32 U	ng/L	0.32	1.6
1/22/2024 9:00	Effluent Grab	Pesticides	Dimethenamid	0.11 U	ng/L	0.11	0.54
1/22/2024 9:00	Effluent Grab	Pesticides	Ethion	0.32 U	ng/L	0.32	1.6
1/22/2024 9:00	Effluent Grab	Pesticides	Mevinphos	1.1 U	ng/L	1.1	5.4
1/22/2024 9:00	Effluent Grab	Pesticides	Napropamide	0.75 U	ng/L	0.75	3.8
1/22/2024 9:00	Effluent Grab	Pesticides	Azinphos Methyl	3.2 UJ	ng/L	3.2	16
1/22/2024 9:00	Effluent Grab	Pesticides	Carbophenothion	0.54 U	ng/L	0.54	2.7
1/22/2024 9:00	Effluent Grab	Pesticides	Demeton	3.8 U	ng/L	3.8	19
1/22/2024 9:00	Effluent Grab	Pesticides	Ametryn	1.2 U	ng/L	1.2	5.9
1/22/2024 9:00	Effluent Grab	Pesticides	Atrazine	67	ng/L	0.21	1.1
1/22/2024 9:00	Effluent Grab	Pesticides	Pyriproxyfen	0.27 U	ng/L	0.27	1.7
1/22/2024 9:00	Effluent Grab	Pesticides	Terbufos	0.21 U	ng/L	0.21	1.1
1/22/2024 9:00	Effluent Grab	Pesticides	Thiobencarb	0.54 U	ng/L	0.54	2.7
1/22/2024 9:00	Effluent Grab	Pesticides	Fenamiphos	0.48 U	ng/L	0.48	2.4
1/22/2024 9:00	Effluent Grab	Pesticides	Fipronil Desulfinyl	6.1	ng/L	0.11	0.54
1/22/2024 9:00	Effluent Grab	Pesticides	Iprodione	0.54 U	ng/L	0.54	2.7
1/22/2024 9:00	Effluent Grab	Pesticides	Molinate	0.27 U	ng/L	0.27	1.3
1/22/2024 9:00	Effluent Grab	Pesticides	Alachlor	0.43 U	ng/L	0.43	2.1
1/22/2024 9:00	Effluent Grab	Pesticides	Parathion Methyl	0.21 U	ng/L	0.21	1.1
1/22/2024 9:00	Effluent Grab	Pesticides	Phorate	0.27 U	ng/L	0.27	1.3
1/22/2024 9:00	Effluent Grab	Pesticides	Flumioxazin	3.2 U	ng/L	3.2	16
1/22/2024 9:00	Effluent Grab	Pesticides	Fluazifop-P-butyl	0.11 UJ	ng/L	0.11	0.54
1/22/2024 9:00	Effluent Grab	Pesticides	Propanil	0.11 U	ng/L	0.11	0.54

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/22/2024 9:00	Effluent Grab	Pesticides	Propargite	0.86 U	ng/L	0.86	4.3
1/22/2024 9:00	Effluent Grab	Pesticides	Pyridaben	1.5 U	ng/L	1.5	7.5
1/22/2024 9:00	Effluent Grab	Pesticides	Stirophos	0.43 U	ng/L	0.43	3.4
1/22/2024 9:00	Effluent Grab	Pesticides	Tebuconazole	6.6 I	ng/L	1.5	7.5
1/22/2024 9:00	Effluent Grab	Pesticides	Terbuthylazine	0.21 U	ng/L	0.21	1.1
1/22/2024 9:00	Effluent Grab	Pesticides	Disulfoton	0.64 U	ng/L	0.64	3.2
1/22/2024 9:00	Effluent Grab	Pesticides	Fluxapyroxad	0.53 I	ng/L	0.27	1.3
1/22/2024 9:00	Effluent Grab	Pesticides	Acetochlor	0.21 U	ng/L	0.21	1.1
1/22/2024 9:00	Effluent Grab	Pesticides	Atrazine Desethyl	1.4 U	ng/L	1.4	7.0
1/22/2024 9:00	Effluent Grab	Pesticides	Prodiamine	0.21 U	ng/L	0.21	1.1
1/22/2024 9:00	Effluent Grab	Pesticides	Prometryn	0.38 U	ng/L	0.38	1.9
1/22/2024 9:00	Effluent Grab	Pesticides	Simazine	6.0	ng/L	0.27	1.3
1/22/2024 9:00	Effluent Grab	Pesticides	Fipronil	28	ng/L	0.21	1.1
1/22/2024 9:00	Effluent Grab	Pesticides	Loratadine	8.8 J	ng/L	0.32	1.6
1/22/2024 9:00	Effluent Grab	Pesticides	Myclobutanil	0.38 U	ng/L	0.38	1.9
1/22/2024 9:00	Effluent Grab	Pesticides	Norflurazon	1.1 U	ng/L	1.1	5.4
1/22/2024 9:00	Effluent Grab	Pesticides	Ibuprofen	0.080 U	µg/L	0.080	0.32
1/22/2024 9:00	Effluent Grab	Pesticides	Bromacil	0.64 U	ng/L	0.64	3.2
1/22/2024 9:00	Effluent Grab	Pesticides	Caffeine	50	ng/L	8.0	40
1/22/2024 9:00	Effluent Grab	Pesticides	Chlorpyrifos Ethyl	0.32 U	ng/L	0.32	1.6
1/22/2024 9:00	Effluent Grab	Pesticides	Oxadiazon	0.38 U	ng/L	0.38	1.9
1/22/2024 9:00	Effluent Grab	Pesticides	Oxyfluorfen	0.21 U	ng/L	0.21	1.1
1/22/2024 9:00	Effluent Grab	Pesticides	Prometon	3.2 U	ng/L	3.2	16
1/22/2024 9:00	Effluent Grab	Pesticides	Pronamide	0.11 U	ng/L	0.11	0.54
1/22/2024 9:00	Effluent Grab	Pesticides	Propiconazole	2.7 I	ng/L	0.64	3.2
1/22/2024 9:00	Effluent Grab	Pesticides	Sulfentrazone	3.1 I	ng/L	1.5	7.5
1/22/2024 9:00	Effluent Grab	Pesticides	Dithiopyr	1.1 U	ng/L	1.1	5.4
1/22/2024 9:00	Effluent Grab	Pesticides	Dimethomorph	0.32 UJ	ng/L	0.32	1.6
1/22/2024 9:00	Effluent Grab	Pesticides	EPTC	0.54 U	ng/L	0.54	2.7
1/22/2024 9:00	Effluent Grab	Pesticides	Fonofos	0.16 U	ng/L	0.16	0.80
1/22/2024 9:00	Effluent Grab	Pesticides	Naled	2.7 U	ng/L	2.7	13
1/22/2024 9:00	Effluent Grab	Pesticides	Sucralose	100	µg/L	0.10	0.40
1/22/2024 9:00	Effluent Grab	Pesticides	Naproxen	0.0080 U	µg/L	0.0080	0.032
1/22/2024 9:00	Effluent Grab	Pesticides	Azoxystrobin	5.7 J	ng/L	0.43	2.1

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/22/2024 9:00	Effluent Grab	Pesticides	Chlorfenapyr	4.3	ng/L	0.32	1.6
1/22/2024 9:00	Effluent Grab	Pesticides	Cyanazine	5.4 U	ng/L	5.4	27
1/22/2024 9:00	Effluent Grab	Pesticides	Diazinon	0.13 U	ng/L	0.13	0.67
1/22/2024 9:00	Effluent Grab	Pesticides	Parathion Ethyl	0.16 U	ng/L	0.16	0.80
1/22/2024 9:00	Effluent Grab	Pesticides	Triadimefon	0.16 U	ng/L	0.16	0.80
1/22/2024 9:00	Effluent Grab	Pesticides	Fipronil Sulfide	5.0	ng/L	0.11	0.54
1/22/2024 9:00	Effluent Grab	Pesticides	Hexazinone	0.54 U	ng/L	0.54	2.7
1/22/2024 9:00	Effluent Grab	Pesticides	Imazalil	0.70 U	ng/L	0.70	3.5
1/22/2024 9:00	Effluent Grab	Pesticides	Metalaxyl	0.54 U	ng/L	0.54	2.7
1/22/2024 9:00	Effluent Grab	Pesticides	Metolachlor	0.80 U	ng/L	0.80	4.0
1/22/2024 9:00	Effluent Grab	Pesticides	Metribuzin	1.1 I	ng/L	0.43	2.1
1/22/2024 9:00	Effluent Grab	Pesticides	Chlorpyrifos Methyl	0.11 U	ng/L	0.11	0.54
1/22/2024 9:00	Effluent Grab	Pesticides	Coumaphos	1.1 UJ	ng/L	1.1	5.9
1/22/2024 9:00	Effluent Grab	Pesticides	Difenoconazole	0.73 I	ng/L	0.64	3.2
1/22/2024 9:00	Effluent Grab	Pesticides	Phenytoin	5.7 U	ng/L	5.7	28
1/22/2024 9:00	Effluent Grab	Pesticides	Ethoprop	0.13 U	ng/L	0.13	0.67
1/22/2024 9:00	Effluent Grab	Pesticides	Etridiazole	0.11 U	ng/L	0.11	0.54
1/22/2024 9:00	Effluent Grab	Pesticides	Fenbuconazole	0.54 U	ng/L	0.54	2.7
1/22/2024 9:00	Effluent Grab	Pesticides	Fipronil Sulfone	4.3	ng/L	0.11	0.54
1/22/2024 9:00	Effluent Grab	Pesticides	Fludioxonil	7.5	ng/L	0.11	0.54
1/22/2024 9:00	Effluent Grab	Pesticides	Flutolanil	0.11 UJ	ng/L	0.11	0.54
1/22/2024 9:00	Effluent Grab	Pesticides	Malathion	0.38 U	ng/L	0.38	1.9
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	2,4-Dichlorophenol	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrophenol	11 U	µg/L	11	45
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Phenanthrene	0.11 U	µg/L	0.11	0.45
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	N-Nitrosodimethylamine	2.3 U	µg/L	2.3	9.1
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Hexachlorobutadiene	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Benzo(a)anthracene	0.028 U	µg/L	0.028	0.11
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	3,3'-Dichlorobenzidine	11 U	µg/L	11	45
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Acenaphthylene	0.028 U	µg/L	0.028	0.11
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Butyl benzyl phthalate	1.1 U	µg/L	1.1	4.5
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Hexachlorobenzene	0.057 U	µg/L	0.057	0.23

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	2-Chlorophenol	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.4 U	µg/L	3.4	14
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrotoluene	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.028 U	µg/L	0.028	0.11
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.7 U	µg/L	5.7	23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.028 U	µg/L	0.028	0.11
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Phenol	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	2,6-Dinitrotoluene	0.057 UJ	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Pentachlorophenol	0.57 U	µg/L	0.57	2.3
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Acenaphthene	0.028 U	µg/L	0.028	0.11
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Benzo(b)fluoranthene	0.028 U	µg/L	0.028	0.11
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Di-n-octyl phthalate	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.028 U	µg/L	0.028	0.11
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Fluoranthene	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Hexachloroethane	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Benzidine	11 UJ	µg/L	11	45
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Benzo(k)fluoranthene	0.028 U	µg/L	0.028	0.11
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Diethyl phthalate	2.3 U	µg/L	2.3	9.1
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Dimethyl phthalate	0.23 U	µg/L	0.23	0.91
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Nitrobenzene	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	2-Chloronaphthalene	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	2-Nitrophenol	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	2,4-Dimethylphenol	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	4-Nitrophenol	11 U	µg/L	11	45
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Anthracene	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Chrysene	0.028 U	µg/L	0.028	0.11

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Di-n-butyl phthalate	2.3 U	µg/L	2.3	9.1
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Fluorene	0.028 U	µg/L	0.028	0.11
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Isophorone	0.057 U	µg/L	0.057	0.23
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Pyrene	0.11 U	µg/L	0.11	0.45
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Benzo(a)pyrene	0.028 U	µg/L	0.028	0.11
1/22/2024 9:00	Effluent Grab	Priority Organic Pollutants	Naphthalene	0.11 U	µg/L	0.11	0.45
1/22/2024 7:00	Effluent Composite	Overflow	Carbonaceous Biochemical Oxygen Demand	2.0 U	mg/L	2.0	2.0
1/22/2024 7:00	Effluent Composite	Nutrients	Ammonia-N	0.032	mg N/L	0.0020	0.0050
1/22/2024 7:00	Effluent Composite	Nutrients	Total-P	0.16	mg P/L	0.010	0.050
1/22/2024 7:00	Effluent Composite	Nutrients	TSS	2 U	mg/L	2.0	10
1/22/2024 7:00	Effluent Composite	Nutrients	Organic Carbon	6.4	mg C/L	0.50	1.0
1/22/2024 7:00	Effluent Composite	Nutrients	Kjeldahl Nitrogen	0.94	mg N/L	0.080	0.20
1/22/2024 7:00	Effluent Composite	Nutrients	NO2NO3-N	1.1	mg N/L	0.040	0.10
1/22/2024 7:00	Effluent Composite	Nutrients	Temperature	19.7	C		
1/22/2024 7:00	Effluent Composite	Nutrients	Specific Conductance	1066	µmhos/cm		
1/22/2024 7:00	Effluent Composite	Nutrients	Dissolved Oxygen %Sat	81.1	%Sat		
1/22/2024 7:00	Effluent Composite	Nutrients	pH	7.30			
1/22/2024 9:30	Equipment Blank	Nutrients	Organic Carbon	0.57 I	mg C/L	0.50	1.0
1/22/2024 9:30	Equipment Blank	Nutrients	Ammonia-N	0.002 U	mg N/L	0.0020	0.0050
1/22/2024 9:30	Equipment Blank	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.080	0.20
1/22/2024 9:30	Equipment Blank	Nutrients	Total-P	0.002 U	mg P/L	0.0020	0.0050
1/22/2024 9:30	Equipment Blank	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.0040	0.010
1/22/2024 9:30	Field Blank	Metals	Iron	30 U	µg/L	30	120
1/22/2024 9:30	Field Blank	Metals	Arsenic	0.050 U	µg/L	0.050	0.20
1/22/2024 9:30	Field Blank	Metals	Lead	0.20 U	µg/L	0.20	0.40
1/22/2024 9:30	Field Blank	Metals	Sodium	0.50 U	mg/L	0.50	2.0
1/22/2024 9:30	Field Blank	Metals	Zinc	5.0 U	µg/L	5.0	20
1/22/2024 9:30	Field Blank	Metals	Selenium	0.20 U	µg/L	0.20	0.80
1/22/2024 9:30	Field Blank	Metals	Nickel	0.50 U	µg/L	0.50	2.0
1/22/2024 9:30	Field Blank	Metals	Magnesium	0.040 U	mg/L	0.040	0.16
1/22/2024 9:30	Field Blank	Metals	Chromium	0.40 U	µg/L	0.40	1.6
1/22/2024 9:30	Field Blank	Metals	Potassium	0.30 U	mg/L	0.30	1.2
1/22/2024 9:30	Field Blank	Metals	Silver	0.010 U	µg/L	0.010	0.040
1/22/2024 9:30	Field Blank	Metals	Aluminum	5.0 U	µg/L	5.0	20

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/22/2024 9:30	Field Blank	Metals	Copper	0.40 U	µg/L	0.40	0.80
1/22/2024 9:30	Field Blank	Metals	Cadmium	0.020 U	µg/L	0.020	0.080
1/22/2024 9:30	Field Blank	Metals	Calcium	0.075 U	mg/L	0.075	0.30
1/22/2024 9:30	Field Blank	Nutrients	Organic Carbon	0.55 I	mg C/L	0.50	1.0
1/22/2024 9:30	Field Blank	Nutrients	Total-P	0.002 U	mg P/L	0.0020	0.0050
1/22/2024 9:30	Field Blank	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.0040	0.010
1/22/2024 9:30	Field Blank	Nutrients	Ammonia-N	0.002 U	mg N/L	0.0020	0.0050
1/22/2024 9:30	Field Blank	Nutrients	Color (true)	2.5 U	PCU	2.5	6.0
1/22/2024 9:30	Field Blank	Nutrients	Total Alkalinity	0.65 U	mg CaCO3/L	0.65	2.5
1/22/2024 9:30	Field Blank	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.080	0.20
1/22/2024 9:30	Field Blank	Nutrients	Sulfate	0.20 U	mg SO4/L	0.20	0.50
1/22/2024 9:30	Field Blank	Nutrients	Fluoride	0.025 U	mg F/L	0.025	0.10
1/22/2024 9:30	Field Blank	Nutrients	Chloride	0.20 U	mg Cl/L	0.20	0.50
1/22/2024 9:30	Field Blank	Nutrients	O-Phosphate-P	0.004 U	mg P/L	0.0040	0.010
1/22/2024 9:30	Field Blank	Nutrients	Turbidity	0.10 U	NTU	0.10	1.0
1/22/2024 9:30	Field Blank	Overflow	Mercury	0.46 I	ng/L	0.20	0.50
1/22/2024 9:30	Field Blank	Pesticides	Difenoconazole	0.66 U	ng/L	0.66	3.3
1/22/2024 9:30	Field Blank	Pesticides	Etridiazole	0.11 U	ng/L	0.11	0.55
1/22/2024 9:30	Field Blank	Pesticides	Fluazifop-P-butyl	0.11 UJ	ng/L	0.11	0.55
1/22/2024 9:30	Field Blank	Pesticides	Fonofos	0.17 U	ng/L	0.17	0.83
1/22/2024 9:30	Field Blank	Pesticides	Metolachlor	0.83 U	ng/L	0.83	4.1
1/22/2024 9:30	Field Blank	Pesticides	Carfentrazone Ethyl	0.17 U	ng/L	0.17	0.83
1/22/2024 9:30	Field Blank	Pesticides	Chlorpyrifos Methyl	0.11 U	ng/L	0.11	0.55
1/22/2024 9:30	Field Blank	Pesticides	Cyprodinil	0.22 U	ng/L	0.22	1.1
1/22/2024 9:30	Field Blank	Pesticides	Demeton	3.9 U	ng/L	3.9	19
1/22/2024 9:30	Field Blank	Pesticides	Phorate	0.28 U	ng/L	0.28	1.4
1/22/2024 9:30	Field Blank	Pesticides	Pronamide	0.11 U	ng/L	0.11	0.55
1/22/2024 9:30	Field Blank	Pesticides	Stirophos	0.44 U	ng/L	0.44	3.5
1/22/2024 9:30	Field Blank	Pesticides	Terbufos	0.22 U	ng/L	0.22	1.1
1/22/2024 9:30	Field Blank	Pesticides	Terbuthylazine	0.22 U	ng/L	0.22	1.1
1/22/2024 9:30	Field Blank	Pesticides	Ethion	0.33 U	ng/L	0.33	1.7
1/22/2024 9:30	Field Blank	Pesticides	Fipronil Sulfide	0.11 U	ng/L	0.11	0.55
1/22/2024 9:30	Field Blank	Pesticides	Metalaxyl	0.55 U	ng/L	0.55	2.8
1/22/2024 9:30	Field Blank	Pesticides	Molinate	0.28 U	ng/L	0.28	1.4

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/22/2024 9:30	Field Blank	Pesticides	Atrazine Desethyl	1.4 U	ng/L	1.4	7.2
1/22/2024 9:30	Field Blank	Pesticides	Chlorpyrifos Ethyl	0.33 U	ng/L	0.33	1.7
1/22/2024 9:30	Field Blank	Pesticides	Myclobutanil	0.39 U	ng/L	0.39	1.9
1/22/2024 9:30	Field Blank	Pesticides	Norflurazon	1.1 U	ng/L	1.1	5.5
1/22/2024 9:30	Field Blank	Pesticides	Parathion Methyl	0.22 U	ng/L	0.22	1.1
1/22/2024 9:30	Field Blank	Pesticides	Sulfentrazone	1.5 U	ng/L	1.5	7.7
1/22/2024 9:30	Field Blank	Pesticides	Tebuconazole	1.5 U	ng/L	1.5	7.7
1/22/2024 9:30	Field Blank	Pesticides	Thiobencarb	0.55 U	ng/L	0.55	2.8
1/22/2024 9:30	Field Blank	Pesticides	Naproxen	0.0080 U	µg/L	0.0080	0.032
1/22/2024 9:30	Field Blank	Pesticides	Dimethenamid	0.11 U	ng/L	0.11	0.55
1/22/2024 9:30	Field Blank	Pesticides	Flumioxazin	3.3 U	ng/L	3.3	17
1/22/2024 9:30	Field Blank	Pesticides	Mevinphos	1.1 U	ng/L	1.1	5.5
1/22/2024 9:30	Field Blank	Pesticides	Ametryn	1.2 U	ng/L	1.2	6.1
1/22/2024 9:30	Field Blank	Pesticides	Azinphos Methyl	3.3 UJ	ng/L	3.3	17
1/22/2024 9:30	Field Blank	Pesticides	Propargite	0.88 U	ng/L	0.88	4.4
1/22/2024 9:30	Field Blank	Pesticides	Propiconazole	0.66 U	ng/L	0.66	3.3
1/22/2024 9:30	Field Blank	Pesticides	Simazine	0.28 U	ng/L	0.28	1.4
1/22/2024 9:30	Field Blank	Pesticides	Triadimefon	0.17 U	ng/L	0.17	0.83
1/22/2024 9:30	Field Blank	Pesticides	Fipronil	0.22 U	ng/L	0.22	1.1
1/22/2024 9:30	Field Blank	Pesticides	Flutolanil	0.11 UJ	ng/L	0.11	0.55
1/22/2024 9:30	Field Blank	Pesticides	Fluxapyroxad	0.28 U	ng/L	0.28	1.4
1/22/2024 9:30	Field Blank	Pesticides	Coumaphos	1.2 UJ	ng/L	1.2	6.1
1/22/2024 9:30	Field Blank	Pesticides	Cyanazine	5.5 U	ng/L	5.5	28
1/22/2024 9:30	Field Blank	Pesticides	Prometryn	0.39 U	ng/L	0.39	1.9
1/22/2024 9:30	Field Blank	Pesticides	Dimethomorph	0.33 UJ	ng/L	0.33	1.7
1/22/2024 9:30	Field Blank	Pesticides	EPTC	0.55 U	ng/L	0.55	2.8
1/22/2024 9:30	Field Blank	Pesticides	Iprodione	0.55 U	ng/L	0.55	2.8
1/22/2024 9:30	Field Blank	Pesticides	Malathion	0.39 U	ng/L	0.39	1.9
1/22/2024 9:30	Field Blank	Pesticides	Atrazine	0.22 U	ng/L	0.22	1.1
1/22/2024 9:30	Field Blank	Pesticides	Bromacil	0.66 U	ng/L	0.66	3.3
1/22/2024 9:30	Field Blank	Pesticides	Oxyfluorfen	0.22 U	ng/L	0.22	1.1
1/22/2024 9:30	Field Blank	Pesticides	Prodiamine	0.22 U	ng/L	0.22	1.1
1/22/2024 9:30	Field Blank	Pesticides	Pyriproxyfen	0.28 U	ng/L	0.28	1.8
1/22/2024 9:30	Field Blank	Pesticides	Ibuprofen	0.080 U	µg/L	0.080	0.32

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/22/2024 9:30	Field Blank	Pesticides	Dithiopyr	1.1 U	ng/L	1.1	5.5
1/22/2024 9:30	Field Blank	Pesticides	Hexazinone	0.55 U	ng/L	0.55	2.8
1/22/2024 9:30	Field Blank	Pesticides	Carbophenothion	0.55 U	ng/L	0.55	2.8
1/22/2024 9:30	Field Blank	Pesticides	Chlorfenapyr	0.33 U	ng/L	0.33	1.7
1/22/2024 9:30	Field Blank	Pesticides	Naled	2.8 U	ng/L	2.8	14
1/22/2024 9:30	Field Blank	Pesticides	Napropamide	0.77 U	ng/L	0.77	3.9
1/22/2024 9:30	Field Blank	Pesticides	Parathion Ethyl	0.17 U	ng/L	0.17	0.83
1/22/2024 9:30	Field Blank	Pesticides	Propanil	0.11 U	ng/L	0.11	0.55
1/22/2024 9:30	Field Blank	Pesticides	Pyraflufen Ethyl	0.33 U	ng/L	0.33	1.7
1/22/2024 9:30	Field Blank	Pesticides	Sucralose	0.010 U	µg/L	0.010	0.040
1/22/2024 9:30	Field Blank	Pesticides	Diazinon	0.14 U	ng/L	0.14	0.69
1/22/2024 9:30	Field Blank	Pesticides	Ethoprop	0.14 U	ng/L	0.14	0.69
1/22/2024 9:30	Field Blank	Pesticides	Fipronil Desulfinyl	0.11 U	ng/L	0.11	0.55
1/22/2024 9:30	Field Blank	Pesticides	Imazalil	0.72 U	ng/L	0.72	3.6
1/22/2024 9:30	Field Blank	Pesticides	Loratadine	0.33 UJ	ng/L	0.33	1.7
1/22/2024 9:30	Field Blank	Pesticides	Azoxystrobin	0.44 U	ng/L	0.44	2.2
1/22/2024 9:30	Field Blank	Pesticides	Oxadiazon	0.39 U	ng/L	0.39	1.9
1/22/2024 9:30	Field Blank	Pesticides	Pendimethalin	1.9 U	ng/L	1.9	9.4
1/22/2024 9:30	Field Blank	Pesticides	Prometon	3.3 U	ng/L	3.3	17
1/22/2024 9:30	Field Blank	Pesticides	Disulfoton	0.66 U	ng/L	0.66	3.3
1/22/2024 9:30	Field Blank	Pesticides	Fenamiphos	0.50 U	ng/L	0.50	2.5
1/22/2024 9:30	Field Blank	Pesticides	Fenbuconazole	0.55 U	ng/L	0.55	2.8
1/22/2024 9:30	Field Blank	Pesticides	Fipronil Sulfone	0.11 U	ng/L	0.11	0.55
1/22/2024 9:30	Field Blank	Pesticides	Fludioxonil	0.11 U	ng/L	0.11	0.55
1/22/2024 9:30	Field Blank	Pesticides	Metribuzin	0.44 U	ng/L	0.44	2.2
1/22/2024 9:30	Field Blank	Pesticides	Acetochlor	0.22 U	ng/L	0.22	1.1
1/22/2024 9:30	Field Blank	Pesticides	Alachlor	0.44 U	ng/L	0.44	2.2
1/22/2024 9:30	Field Blank	Pesticides	Butylate	0.50 U	ng/L	0.50	2.5
1/22/2024 9:30	Field Blank	Pesticides	Caffeine	18 I	ng/L	8.3	41
1/22/2024 9:30	Field Blank	Pesticides	Phenytoin	5.9 U	ng/L	5.9	29
1/22/2024 9:30	Field Blank	Pesticides	Pyridaben	1.5 U	ng/L	1.5	7.7
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Nitrobenzene	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Dimethyl phthalate	0.37 I	µg/L	0.22	0.87
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Acenaphthene	0.027 U	µg/L	0.027	0.11

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.027 U	µg/L	0.027	0.11
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.027 U	µg/L	0.027	0.11
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Hexachlorobutadiene	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	2,4-Dimethylphenol	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Benzidine	11 U	µg/L	11	43
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.027 U	µg/L	0.027	0.11
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.4 U	µg/L	5.4	22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Di-n-butyl phthalate	2.2 U	µg/L	2.2	8.7
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Fluoranthene	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	4-Nitrophenol	11 U	µg/L	11	43
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	2-Chlorophenol	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Phenanthrene	0.11 U	µg/L	0.11	0.43
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.027 U	µg/L	0.027	0.11
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	2.2 U	µg/L	2.2	8.7
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Pyrene	0.11 U	µg/L	0.11	0.43
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	2-Nitrophenol	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	2,4-Dinitrophenol	11 U	µg/L	11	43
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Diethyl phthalate	2.2 U	µg/L	2.2	8.7
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Hexachlorobenzene	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Pentachlorophenol	0.54 U	µg/L	0.54	2.2
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Anthracene	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.027 U	µg/L	0.027	0.11
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Butyl benzyl phthalate	1.1 U	µg/L	1.1	4.3
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Chrysene	0.027 U	µg/L	0.027	0.11
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.054 U	µg/L	0.054	0.22

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Hexachloroethane	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Isophorone	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.3 U	µg/L	3.3	13
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	11 U	µg/L	11	43
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Acenaphthylene	0.027 U	µg/L	0.027	0.11
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Fluorene	0.027 U	µg/L	0.027	0.11
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.027 U	µg/L	0.027	0.11
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Naphthalene	0.11 U	µg/L	0.11	0.43
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.027 U	µg/L	0.027	0.11
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.054 U	µg/L	0.054	0.22
1/22/2024 9:30	Field Blank	Priority Organic Pollutants	Phenol	0.054 U	µg/L	0.054	0.22