Effluent Quality Assessment of Melbourne - Joe Mullins RO WTP Demineralization Concentrate Brevard County NPDES # FL0043443 Sampled December 13, 2021

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

The effluent sample was not acutely toxic to the fish, *Menidia beryllina*, but was acutely toxic to the mysid shrimp, *Americamysis bahia*, during the 96-hour bioassays. All other analytes measured in the effluent grab samples complied with Class III Water Quality Criteria for Marine Waters and effluent permit limits. The algal growth potential (AGP) results for the effluent grab sample do not suggest a potential for nutrient enrichment. No organic constituents were detected in the effluent grab sample.

Facility Overview

The Melbourne - Joe Mullins RO WTP/Demineralization Concentrate is an industrial wastewater treatment facility that treats and disposes of demineralization concentrate generated as a by-product of reverse osmosis filtration used to produce potable water. A Facility Summary, including a description of the facility, summary of permit limits, and any relevant Administrative Order (AO), Consent Order (CO), and Discharge Monitoring Report (DMR) information is provided in Appendix A. The effluent is continuously discharged into the Eau Gallie River, a Class III Marine Water [waterbody identification (WBID) 3082] (Figure 1).

Receiving waters for this facility fall under the Total Maximum Daily Load (TMDL) for the Indian River Lagoon. For the Eau Gallie River, the TMDL, expressed as an annual load, for the Melbourne Reverse Osmosis Facility is 195 lb/yr total phosphorus and 9,170 lb/yr total nitrogen (Paragraph 62-304.520(6)(a), F.A.C.). For Class III predominantly marine waters, the daily average dissolved oxygen (DO) saturation shall not be below 42 percent in more than 10 percent of the values (Subsection 62-302.533(2), F.A.C.). This FYI event only provides single sample results. It should be noted that waterbody impairment assessments are based on longer-term data, and individual exceedances of a criterion do not indicate use impairment. http://ca.dep.state.fl.us/mapdirect/?focus=nutrientcriteria

Methods

Effluent grab samples were collected from monitoring site locations OTH-2 and EFF-02 for outfall D-002 on December 13, 2021. OTH-2 was used for toxicity sampling and EFF-02 was used for all other analytes. Acute definitive toxicity bioassays were scheduled and performed instead of the chronic whole effluent toxicity test required by the permit.

Samples were collected by Phil Kane and Carolyn Hall (Central District Office). Analyses were performed by Eurofins Test America Laboratories in Tampa and DEP Laboratory in Tallahassee.

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

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

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

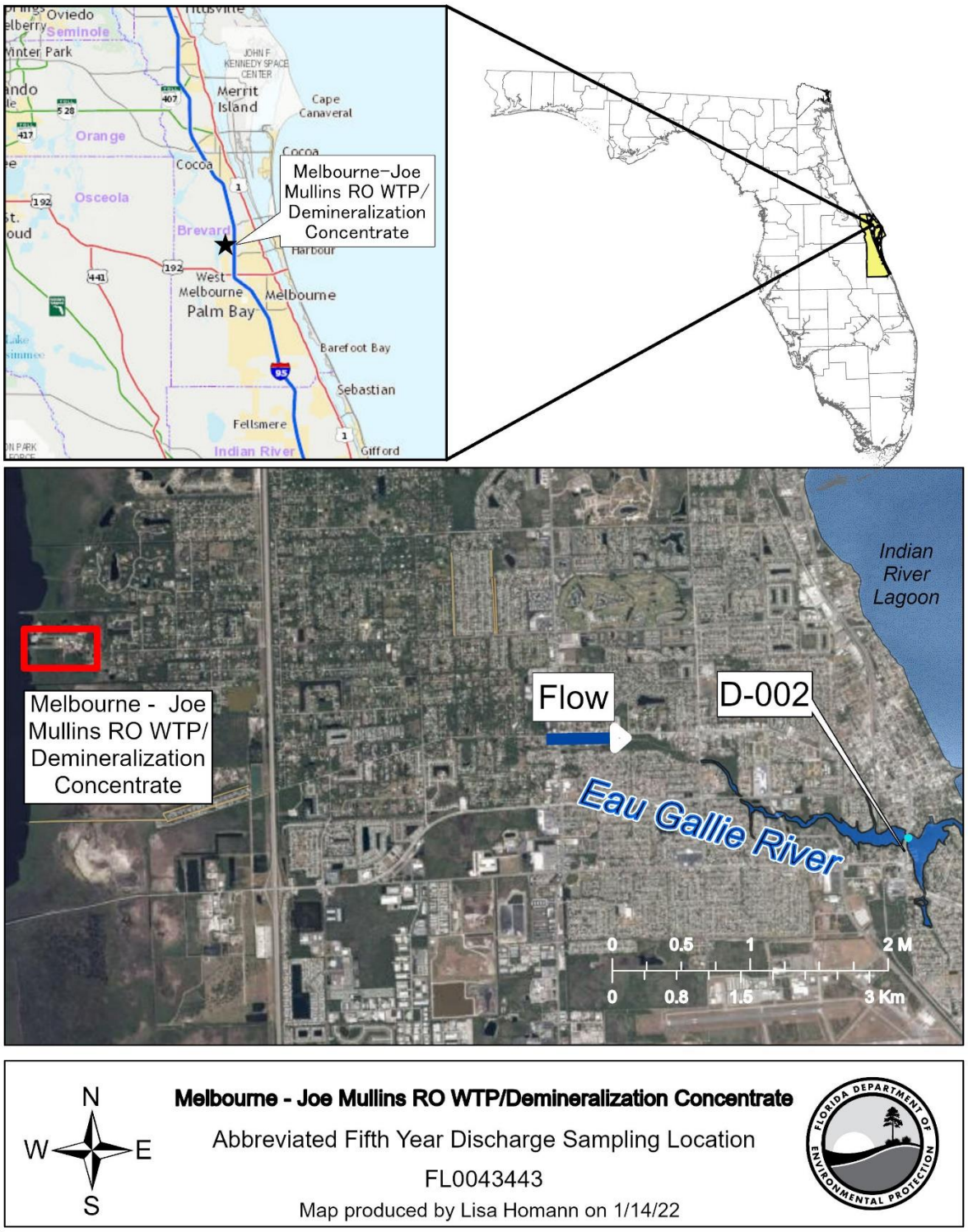


Figure 1. Map of Facility and Discharge Location

Results

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

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

Analytical Water Chemistry (See Table 2 and Appendix D)

- All water chemistry analytes detected in the effluent grab sample complied with Class III Water Quality Criteria for Marine Waters and effluent permit limits.

Toxicity Whole Effluent Test (See Table 2)

- Tests were performed December 14 through December 18, 2021.

- The sample was aerated for 15 minutes at a rate of approximately 100 bubbles per minute to decrease the dissolved oxygen (DO) from 9.2 mg/L to 8.4 mg/L.

- Aliquots of the bioassay sample were salinity-adjusted according to method requirements from an apparent salinity of approximately 6.5 parts per thousand (ppth) to a salinity of approximately 20 ppth for the *Americamysis bahia* test. Control mortality, for both the test controls and salt-adjusted control, were within method acceptance criteria.

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

- For the 96-hour acute definitive test, the calculated LC50 for the mysid shrimp, *Americamysis bahia*, was 87.7% effluent with 85% mortality in 100% sample. The calculated LC50 for the fish, *Menidia beryllina*, was >100% effluent with 0% mortality in 100% sample. The effluent sample was toxic to the mysid shrimp, *Americamysis bahia*, during the 96-hour acute definitive bioassays and therefore, did not comply with effluent permit limits.

- In a previous FYI3 sampling event in 2004, toxicity was attributed, at least in part, to elevated concentrations of calcium in the sample causing a seawater-ion imbalance of the effluent. In the 2004 sampling, the calcium levels in the effluent sample were 669 mg/L and in this sampling the calcium levels were 654 mg/L. This is approximately eight times the normal concentration for calcium in seawater of this salinity. The elevated calcium is a potential source of toxicity in this sample; other unidentified sources of toxicity cannot be ruled out without performing additional tests.

- 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 Marine 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* and the marine species, *Dunaliella tertiolecta*, were used to determine the AGP values in the effluent grab samples. The analytical chemistry suggests that the effluent is ortho-phosphate limited (Miller et al. 1978).

- An aliquot of the AGP sample was salinity adjusted from an apparent salinity of approximately 5 parts per thousand (ppth) to a salinity of approximately 7 ppth by the addition of artificial sea salts to meet the salinity requirements of the test species *Dunaliella tertiolecta*.

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 Marine Waters, and field parameters

Parameter	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab
Temperature	C	-	Report	25.4
pH	SU	6.5 - 8.5	6.5 - 8.5	7.5
Specific Conductance	µmhos/cm	-	Report	1,062
Salinity	ppt	-	-	0.5 c
Dissolved Oxygen	% saturation	≥ 42	-	105.2 c
Dissolved Oxygen	mg/L	-	≥ 5.0	8.6
Flow	MGD	-	≤ 1.25	1.21

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 Marine Waters, and analytical water chemistry, microbiological, and toxicological data

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab
Ortho-phosphate	mg P/L	-	-	0.017
Total Phosphorus	mg P/L	-	≤ 1.0	0.010
Total Ammonia	mg N/L	-	-	0.002 U
Un-ionized Ammonia (calculated salinity)	mg N/L	-	-	< 0.02 c
Nitrate and Nitrite	mg N/L	-	-	2.1
Total Kjeldahl Nitrogen	mg N/L	-	-	0.56
Organic Nitrogen	mg N/L	-	-	0.56 c
Total Nitrogen	mg N/L	-	≤ 3.0	2.7 c
Total Organic Carbon	mg C/L	-	-	11
Chlorophyll *a* - Corrected	µg/L	-	-	0.82 U
Phaeophytin	µg/L	-	-	0.90 U
CBOD, 5 day, N - inhibited	mg/L	-	-	2.0 U
Hardness	mg CaCO3/L	-	-	2,960 c
Total Suspended Solids	mg/L	-	-	2 U
Turbidity	NTU	≤ 29 t	-	0.40 A
Color (true)	PCU	-	-	16
Alkalinity	mg CaCO3/L	-	-	358 A
Chloride	mg Cl/L	-	-	3,200
Fluoride	mg F/L	≤ 5.0	-	1.7
Sulfate	mg SO4/L	-	-	1,000
Alpha, Total	pCi/L	-	≤ 86.0	28.9
Alpha-Counting Error	pCi/L	-	-	7.3
Radium 226	pCi/L	-	-	18.4
Radium 226-Counting Error	pCi/L	-	-	0.792
Radium 228	pCi/L	-	-	1.51 VJ
Radium 228-Counting Error	pCi/L	-	-	0.406
Radium 226 + 228	pCi/L	-	≤ 36.0	19.9 c
Bioassay - Mysid Shrimp *(Americamysis bahia)*	% effluent	-	≥ 100 s (OTH-2)	87.7 e
Bioassay - Fish *(Menidia beryllina)*	% effluent	-	≥ 100 s (OTH-2)	> 100

A dash (-) indicates sample/measurement was not collected or criterion/limit does not exist.
c - Value is calculated
e - Value exceeds the Class III Water Quality Criteria or permit limits
s - Single sample
t - Shall not exceed 29 NTUs above background

A - Value reported is the mean of two or more determinations
J - Estimated value
U - Material analyzed for but not detected; value reported is the method detection limit
V - Analyte was detected in both sample and method blank

Table 3. Analytical metals data

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

Analyte	Units	Class III Criteria	Effluent Permit Limits	Effluent Grab
Aluminum	µµg/L	≤ 1,500	-	5.0 U
Arsenic	µµg/L	≤ 50	-	0.64
Cadmium	µµg/L	≤ 8.8	-	0.020 U
Calcium	mg/L	-	-	654
Chromium, Total [1]	µµg/L	≤ 50	-	8.2
Copper	µµg/L	≤ 3.7	-	0.40 U
Iron	µµg/L	≤ 300	-	30 U
Lead	µµg/L	≤ 8.5	-	0.40 U
Magnesium	mg/L	-	-	323
Nickel	µµg/L	≤ 8.3	-	3.8
Selenium	µµg/L	≤ 71	-	0.20 U
Silver	µµg/L	≤ 2.3	-	0.010 U
Sodium	mg/L	-	-	1,450
Zinc	µµg/L	≤ 86	-	5.2 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
U - Material analyzed for but not detected; value reported is the method detection limit
1 - Class III Marine Water Quality Criterion (Paragraph 62-302.530(19)(b), F.A.C.) is for chromium-VI

Table 4. Algal Growth Potential (AGP)

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

Location	Test Species	AGP (measured)	Predicted AGP (TSIN) ± 20%	Predicted AGP (OP) ± 20%	Predicted AGP (TN) ± 20%	Predicted AGP (TP) ± 20%	Inorganic N:P ratio	Total N:P ratio
Effluent Grab	*Pseudokirchneriella subcapitata*	0.300 U	80 ± 20 [2]	7.3 ± 1.5	100 ± 20	4.3 ± 0.9	120 [2]	270
Effluent Grab	*Dunaliella tertiolecta*	4.20 A *	not applicable [3]	not applicable [3]	not applicable [3]	not applicable [3]	120 [2]	270

* - sample salinity adjusted to 7 ppth

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

U - Material analyzed for but not detected; value reported is the method detection limit

2 - non-detect in the analytical chemistry; predictions and ratios were calculated using 1/2 MDL for non-detect analytes

3 - predictions not applicable to marine matrix

Appendix A. Facility Summary

PART I: Information gathered prior to sampling event	
Prepared By: Jenny E. Farrell	**Contact Number:** 407-897-4173
Facility Name (as it appears on permit): Melbourne – Joe Mullins Demin Concentrate	**Former Names:** N/A
NPDES Permit Number: FL0043443	**Permit Expiration Date:** April 8, 2026
Physical Address: 6055 Lake Washington Road, Melbourne, FL 32934-7890	
District: Central	**County:** Brevard
Function of Facility: Industrial Wastewater Treatment Facility	
Facility Type: Industrial Wastewater	**Permitted Capacity (MGD):** 1.25 MGD
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): D-002 Eau Gallie River outfall flow: approximately 1.17 MGD (averaged monthly average flows reported from November 2020 to October 2021).	
If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months): N/A	
Description of type of Discharge: ☒ **Continuous** ☐ **Intermittent** ☐ **Seasonal** ☐ **Rainfall Dependent** ☐ **Other, please specify:**	
Description of Sampling Location(s) - actual permit designation of permitted sampling point(s): The sampling location for **D-002** is **EFF-02** is located on the existing port on the effluent forcemain and **OTH-2** is for the toxicity sampling point at the plant concentrate clear well after all wastewater treatment of the concentrate.	
Description of Permitted Outfall(s): The D-002 outfall is a discharge to the Eau Gallie River, Class III Marine Water, (WBID# 3082) which is approximately 50 feet in length and discharges at a depth of approximately 3 feet. The point of discharge is located approximately at latitude 28°7' 27" N, longitude 80°37' 50" W.	
Description of Treatment Process (if multiple discharge points, include a detailed map or diagram of facility): The facility uses a degasifier to improve the level of Dissolved Oxygen and to oxidize Hydrogen Sulfide in the demineralization concentrate. Air is injected into the discharge line approximately 2 miles upgradient of the outfall, D-002. Valves in the pipeline near D-002 allow the air and Hydrogen Sulfide to be released to the atmosphere. A multi-port diffuser at Outfall D-002 provides improved mixing in the receiving water.	

PART I: Continued										
List <u>current</u> Effluent Limits of Outfall(s) to be Sampled: This should include any AO or CO limits the facility may be under (Leave cell blank if not applicable)										
			Effluent Limitations				Monitoring Requirements			
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Chronic Whole Effluent Toxicity, 7-Day IC25 (Americamysis (Mysidopsis) bahia)	Percent	Min				40	Semi-Annually: twice per year	24-hr FPC	OTH-2	See I.A.4
Chronic Whole Effluent Toxicity, 7-Day IC25 (Menidia beryllina)	Percent	Min				40	Semi-Annually: twice per year	24-hr FPC	OTH-2	See I.A.4
Flow	MGD	Max Max		1.25		1.25	Daily, when discharging	Meter	FLW-02	
pH	s.u.	Min Max				6.5 8.5	Monthly	Meter	EFF-02	
Hydrogen sulfide un-ionized	mg/L	Max				Report	Monthly	Calculated	EFF-02	
Oxygen, Dissolved (DO)	mg/L	Min				5.0	Monthly	Meter	EFF-02	

Phosphorus, Total (as P)	mg/L	Max Max		1.0		1.0	Monthly	Grab	EFF-02	
Phosphorus, Total (as P)	lb/mth	Max		Report			Monthly	Calculated	EFF-02	
Phosphorus, Total (as P)	lb/yr	Max	195				Annually	Calculated	EFF-02	
Nitrogen, Total	mg/L	Max Max		3.0		3.0	Monthly	Grab	EFF-02	
Nitrogen, Total	lb/mth	Max		Report			Monthly	Calculated	EFF-02	
Nitrogen, Total	lb/yr	Max	9170				Annually	Calculated	EFF-02	
Temperature (C), Water	Deg C	Max		Report			Monthly	Meter	EFF-02	
Alpha, Gross Particle Activity	pCi/L	Max				86.0	Monthly	Grab	EFF-02	
Radium 226 + Radium 228, Total	pCi/L	Max				36.0	Monthly	Grab	EFF-02	
Specific Conductance	µmhos/cm	Max		Report			Monthly	Grab	EFF-02	

PART I: Continued	
Receiving Waters: Eau Gallie River	**Classification (indicate whether fresh or marine):** Class III Marine Water (WBID #3082)

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 chronic whole effluent toxicity of the discharge from outfall D-002.
   a. Effluent Limitation
      (1) In any routine or additional follow-up test for chronic whole effluent toxicity, the 25 percent inhibition concentration (IC25) for growth shall not be less than 40% effluent. [Rules 62-302.530(62) and 62-4.241(2)(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(2)(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-hour composite samples of final effluent shall be collected and used in accordance with the sampling protocol discussed in EPA-821-R-02-014, 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%, 80%, 40%, 20%, and 10% final effluent.
      (2) The permittee shall conduct 7-day survival and growth chronic toxicity tests with a mysid shrimp, Americamysis (Mysidopsis) bahia, Method 1007.0, and an inland silverside, Menidia beryllina, Method 1006.0, 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 Marine and Estuarine Organisms, 3rd Edition, EPA-821-R-02-014. 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 prepared with artificial sea salts as described in EPA-821-R-02-014, Section 7.2. The test salinity shall be determined as follows:
         (a) For the Americamysis bahia bioassays, the effluent shall be adjusted to a salinity of 20 parts per thousand (ppt) with artificial sea salts. The salinity of the control/dilution water (0% effluent) shall be 20 ppt. If the salinity of the effluent is greater than 20 ppt, no salinity adjustment shall be made to the effluent and the test shall be run at the effluent salinity. The salinity of the control/dilution water shall match the salinity of the effluent.
         (b) For the Menidia beryllina bioassays, if the effluent salinity is less than 5 ppt, the salinity shall be adjusted to 5 ppt with artificial sea salts. The salinity of the control/dilution water (0% effluent) shall be 5 ppt. If the salinity of the effluent is greater than 5 ppt, no salinity adjustment shall be made to the effluent and the test shall be run at the effluent salinity. The salinity of the control/dilution water shall match the salinity of the effluent.
         (c) If the salinity of the effluent requires adjustment, a salinity adjustment control should be

prepared and included with each bioassay. The salinity adjustment control is intended to identify toxicity resulting from adjusting the effluent salinity with artificial sea salts. To prepare the salinity adjustment control, dilute the control/dilution water to the salinity of the effluent and adjust the salinity of the salinity adjustment control at the same time and to the same salinity that the salinity of the effluent is adjusted using the same artificial sea salts.

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-02-014, Section 14.12 (Americamysis bahia) and Section 13.12 (Menidia beryllina). 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 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-02-014, 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 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-02-014, 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-02-014, Section 10, and mailed within 30 days after the last day of the second valid additional follow-up test.

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

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

(6) All bioassay laboratory reports shall be sent to:
Florida Department of Environmental Protection
Central District Office
3319 Maguire Blvd, Suite 232
Orlando, Florida 32803-3767

g. Test Failures

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

(2) Additional Follow-up Tests:

(a) If a routine test does not meet the chronic toxicity limitation in 1.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 1.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%, 80%, 40%, 20%, and 10% 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-02-014.

(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 1.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 1.b.(1). If a routine test is invalid according to the acceptance criteria in EPA-821-R-02-014, 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 1.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 1.(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.): No enforcement cases in the last five years.

Facility Mixing Zone Details (if applicable):

The permit authorizes a mixing zone at Outfall D-002 location for Radionuclides (Combined Radium and Gross Alpha Particle Activity.) The areas of these mixing zones are 47,400 square meters for combined Radium and 2,030 square meters for Gross Alpha Particle Activity.

A Mixing Zone has also been approved for Acute and Chronic Toxicity under Rule 62-4.244(3)(d), F.A.C. The Rule requires a demonstration of Ionic Imbalance Toxicity according to the FDEP Major Seawater Ionic Imbalance Test (MSIIT) protocol, which has been previously completed by the Permittee. As provided for by this Rule, the Mixing Zone for both Acute and Chronic Toxicity is 24.384 meters (80 feet) long, which is the linear length of the new multi-port diffuser, with a radius of 2.68 meters (8.79 ft) from diffuser, which is twice the natural depth of water at that location.

The following mixing zones and final permit limits are effective at Outfall D-002 with issuance of this permit and expire with the expiration date of this permit.

Parameter	Final Permit Conditions	
	Effluent limit at the end of pipe	Mixing zone
Gross Alpha	86.0 pCi/L	2,030 square meters ($m^{2)}$
Combined Radium 226 & 228	36.0 pCi/L	47,400 square meters (m^2)
Chronic Toxicity	IC25>40% Effluent.	24.384 meters by a radius of 2.68 meters.
Acute Toxicity	LC50>40%Effluent.	24.384 meters by a radius of 2.68 meters.

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

Date	Parameter and Units	Limit	Result
None Reported			

Describe previous FYI and WQBEL study:
The last FYI3 sampling was conducted on June 14-15, 2004. Samples were collected from the D-001 sampling point. The samples collected for this facility were not acutely toxic to the fish, *Menidia beryllina*, but was acutely toxic to the mysid, *Americanmysis bahia*, during the 96-hour bioassys. The cause of toxicity was attributed, in part to elevated concentrations of calcium in the sample. Additional testing would be needed to determine if other parameters were contributing to the toxicity issue. The effluent freshwater AGP result was less than the "problem" threshold for marine receiving waters. Effluent total alpha and radium 226+228 exceeded water quality standards for Class III marine waters.

Describe previous or current Enforcement Actions (including WLs): No enforcement cases in the last five years.
Describe any violations or problems noted in previous inspection: A radium 226 + radium 228, Total exceedance was reported in April 2019. No other deficiencies were noted.
Discuss whether DMR trends within previous five years are improving or declining: The flow has remained steady over the last five years. The TN has remained steady over the last five years. The TP increased in 2019 and has remained steady in 2020 and 2021. Radium 226 & 228 decreased in 2020 and 2021.
Additional Comments (this should include a trend of the Effluent, i.e. if the facility is now Reuse):

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.

- **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.

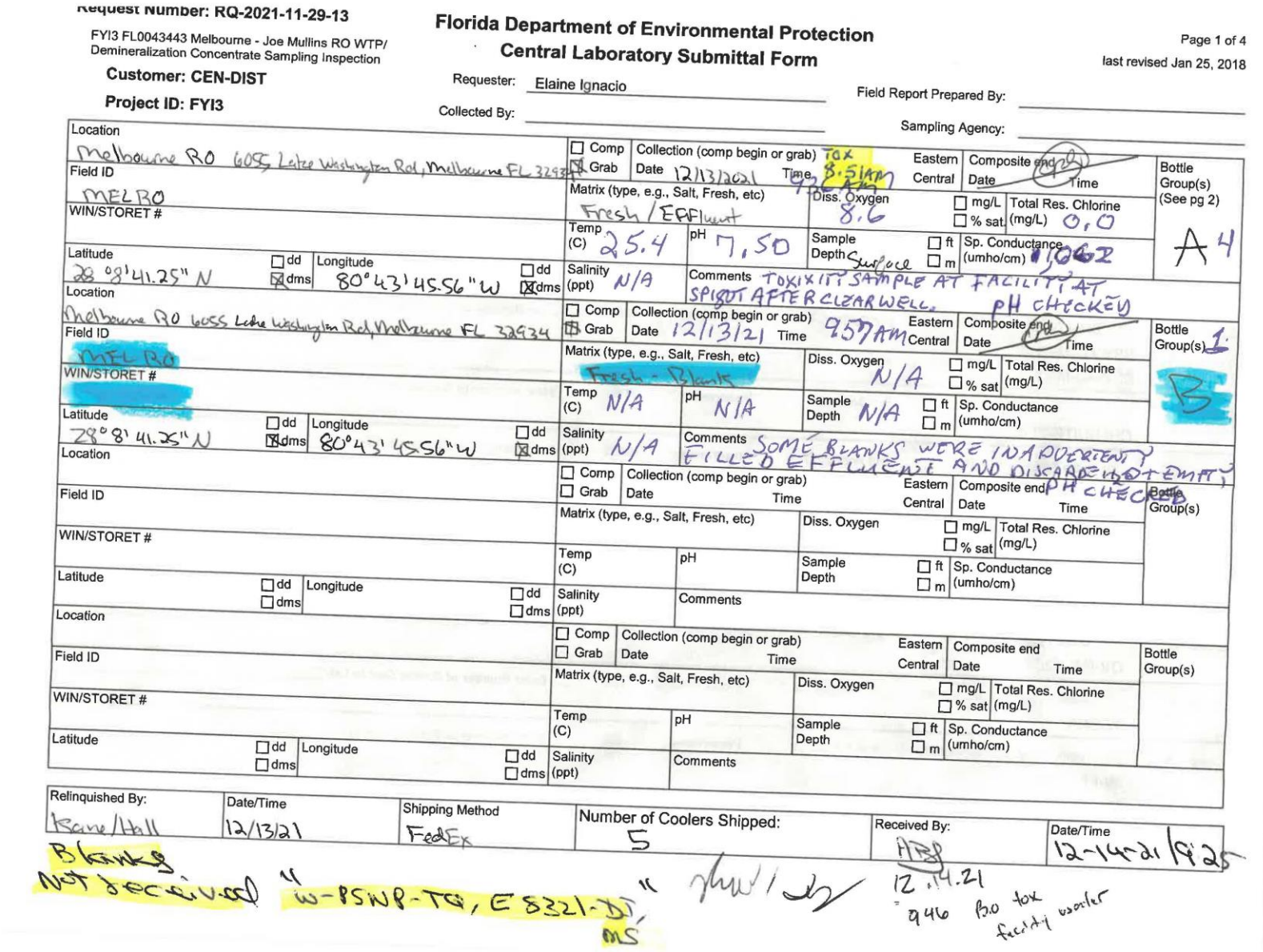
- **Chlorophyll a Content**

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

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

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

Appendix C. Chain of Custody



Request Number: RQ-2021-11-29-13

FYI3 FL0043443 Melbourne - Joe Mullins RO WTP/ Demineralization Concentrate Sampling Inspection

Customer: CEN-DIST

Project ID: FYI3

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Page 1 of 4
last revised Jan 25, 2018

Requester: Elaine Ignacio
Collected By:
Field Report Prepared By:
Sampling Agency:

Location: Melbourne RO 6055 Lake Washington Rd, Melbourne FL 32934
Field ID: MELRO
WIN/STORET #:
Latitude: 28°8'41.25" N (dms) **Longitude:** 80°43'45.56" W (dms)
☐ Comp ☒ Grab | Collection (comp begin or grab) Date 12/13/2021 Time TOX 8:51AM 9:26 AM | Eastern Central | Composite end Date Time
Matrix (type, e.g., Salt, Fresh, etc): Fresh / Effluent
Diss. Oxygen: 8.6 ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L): 0.0
Temp (C): 25.4 | pH: 7.50 | Sample Depth: Surface ☐ ft ☐ m | Sp. Conductance (umho/cm): 1,062
Salinity (ppt): N/A
Comments: TOXICITY SAMPLE AT FACILITY AT SPIGOT AFTER CLEARWELL. pH CHECKED
Bottle Group(s) (See pg 2): A4

Location: Melbourne RO 6055 Lake Washington Rd, Melbourne FL 32934
Field ID: MEL RO
WIN/STORET #:
Latitude: 28°8'41.25" N (dms) **Longitude:** 80°43'45.56" W (dms)
☐ Comp ☒ Grab | Collection (comp begin or grab) Date 12/13/21 Time 9:57AM | Eastern Central | Composite end Date Time
Matrix (type, e.g., Salt, Fresh, etc): Fresh - Blanks
Diss. Oxygen: N/A ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L)
Temp (C): N/A | pH: N/A | Sample Depth: N/A ☐ ft ☐ m | Sp. Conductance (umho/cm)
Salinity (ppt): N/A
Comments: SOME BLANKS WERE INADVERTENTLY FILLED EFFLUENT AND DISCARDED NOT EMPTY; pH CHECKED
Bottle Group(s): 1 B

Location:
Field ID:
WIN/STORET #:
Latitude: ☐ dd ☐ dms **Longitude:** ☐ dd ☐ dms
☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | Eastern Central | Composite end Date Time
Matrix (type, e.g., Salt, Fresh, etc)
Diss. Oxygen: ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L)
Temp (C) | pH | Sample Depth: ☐ ft ☐ m | Sp. Conductance (umho/cm)
Salinity (ppt)
Comments
Bottle Group(s)

Location:
Field ID:
WIN/STORET #:
Latitude: ☐ dd ☐ dms **Longitude:** ☐ dd ☐ dms
☐ Comp ☐ Grab | Collection (comp begin or grab) Date Time | Eastern Central | Composite end Date Time
Matrix (type, e.g., Salt, Fresh, etc)
Diss. Oxygen: ☐ mg/L ☐ % sat | Total Res. Chlorine (mg/L)
Temp (C) | pH | Sample Depth: ☐ ft ☐ m | Sp. Conductance (umho/cm)
Salinity (ppt)
Comments
Bottle Group(s)

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Kane/Hall	12/13/21	FedEx	5	ARP	12-14-21 9:25

Blanks Not Received
"W-PSNP-TG, E8321-DJ"
MS
12.14.21
946 Bio tox facility water

Request Number: RQ-2021-11-29-13

FYI3 FL0043443 Melbourne - Joe Mullins RO WTP/ Demineralization Concentrate Sampling Inspection

Customer: CEN-DIST

Project ID: FYI3

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Jan 25, 2018

Requester: Elaine Ignacio

Collected By: KANE, HAIC

Field Report Prepared By:

Sampling Agency: FDEP CENTRAL

Location: Melbourne RO 6055 Lake Washington Rd, Melbourne FL 32934	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 12/13/2021 Time 9:57am	Eastern Central	Composite end Date	Time				Bottle Group(s) (See pg 2): A1
Field ID: MELRO	Matrix (type, e.g., Salt, Fresh, etc): Fresh Effluent			Diss. Oxygen: 8.6	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN/STORET #	Temp (C): 25.4	pH: 7.5		Sample Depth: SURFACE	☐ ft ☐ m	Sp. Conductance (umho/cm): 11,062			
Latitude: 28°8'41.25"N ☐ dd ☒ dms	Longitude: 80°43'45.56"W ☐ 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/STORE 660-116173 Field Sheet	Temp (C)	pH		Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments						
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern Central	Composite end Date	Time				Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)			Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)			
WIN/STORET #	Temp (C)	pH		Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments						

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Kane/Hall	12/13/2021	Fed-Ex	1		

JOB # 400-213603

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

Contract Manager: Linda Allen/Magan Bowden
2600 Blair Stone Rd., MS 6512
Tallahassee, FL 32399-2400
(850)-245-8084 / (850) 245-8095

Contractor: Eurofins/TestAmerica Laboratories, Inc
5102 LaRoche Ave
Savannah, GA 31404
ATTN: Noel Savoie

DEP Approval By: Linda S. Allen Contractor Approval By: _____ Project Manager

Contractor Representatives Contacted: Noel Savoie

Date: 1/4/2022
Means of Contact: Email

Task Assignment Number: OV318 Maximum Cost: **$370.00** Turnaround Time: 21 BD

Sample Delivery Date: 1/4/2022

Project Name/Description:
RQ-2021-11-29-13;CEN-DIST-2021-12-14-03 FY13 FL0043443 Melbourne;TLH-2021-12-14-53

Deliverable Number/ Parameter Group/ Method	**Sample Matrix**	**# of Samples**	**# of Containers**	**DEP ID #**	**Unit Cost**	**% Mark-up (if any)**	**Cost**
205/Radium-226 EPA 903.1	W	2	2	2295049, 2295052	$90.00		$180.00
203/Radium-228 EPA 904.0	W	2	2	2295050, 2295053	$90.00		$180.00
217/Sample Disposal Fee:	4				$2.50		$10.00
Total Number of Containers Shipped:		4				**Total:**	**$370.00**

400-213603 Chain of Custody

QC Instructions:

Comments:

Samples released to Contract Lab by: Kyle Klug Date/Time: 1-4-22 / 16:46

Delivery Method: Hand Delivery

Samples Accepted by: _____ Date/Time 1-4-22 1646

* **Please sign and return by email to** [illegible] **and** Magan.Bowden@dep.state.fl.us

JAN 04 2022 1030

Appendix D. Chemical Analysis of Effluent

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
12/13/2021 9:36	Effluent Grab	AGP/LN	Algal Growth Potential-Salinity Adjusted	4.20 A	mg DryWt/L	3.00	3.00
12/13/2021 9:36	Effluent Grab	AGP/LN	Algal Grfowth Potential	0.300 U	mg DryWt/L	0.300	0.900
12/13/2021 9:36	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Uncorrected	0.60 U	µg/L	0.60	1.8
12/13/2021 9:36	Effluent Grab	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.90 U	µg/L	0.90	2.7
12/13/2021 9:36	Effluent Grab	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.82 U	µg/L	0.82	2.5
12/13/2021 9:36	Effluent Grab	Overflow	Carbonaceous Biochemical Oxygen Demand	2.0 U	mg/L	2.0	2.0
12/13/2021 8:51	Effluent Grab	Toxicology	Bioassay-Acute-Def-SW-Fish, LC50	100 L	LC50		
12/13/2021 8:51	Effluent Grab	Toxicology	Bioassay-Acute-Def-SW-Mysid, LC50	87.7	LC50		
12/13/2021 9:36	Effluent Grab	Metals	Silver	0.010 U	µg/L	0.010	0.040
12/13/2021 9:36	Effluent Grab	Metals	Iron	30 U	µg/L	30	120
12/13/2021 9:36	Effluent Grab	Metals	Magnesium	323	mg/L	0.40	1.6
12/13/2021 9:36	Effluent Grab	Metals	Aluminum	5.0 U	µg/L	5.0	20
12/13/2021 9:36	Effluent Grab	Metals	Chromium	8.2	µg/L	0.40	1.6
12/13/2021 9:36	Effluent Grab	Metals	Cadmium	0.020 U	µg/L	0.020	0.080
12/13/2021 9:36	Effluent Grab	Metals	Sodium	1.45E+03	mg/L	5.0	20
12/13/2021 9:36	Effluent Grab	Metals	Calcium	654	mg/L	0.75	3.0
12/13/2021 9:36	Effluent Grab	Metals	Zinc	5.2 I	µg/L	5.0	20
12/13/2021 9:36	Effluent Grab	Metals	Selenium	0.20 U	µg/L	0.20	0.80
12/13/2021 9:36	Effluent Grab	Metals	Arsenic	0.64	µg/L	0.050	0.20
12/13/2021 9:36	Effluent Grab	Metals	Lead	0.40 U	µg/L	0.40	0.80
12/13/2021 9:36	Effluent Grab	Metals	Copper	0.40 U	µg/L	0.40	0.80
12/13/2021 9:36	Effluent Grab	Metals	Nickel	3.8	µg/L	0.50	2.0
12/13/2021 9:36	Effluent Grab	Nutrients	Kjeldahl Nitrogen	0.56	mg N/L	0.080	0.20
12/13/2021 9:36	Effluent Grab	Nutrients	Turbidity	0.40 A	NTU	0.10	0.13
12/13/2021 9:36	Effluent Grab	Nutrients	NO2NO3-N	2.1	mg N/L	0.040	0.10
12/13/2021 9:36	Effluent Grab	Nutrients	Fluoride	1.7	mg F/L	0.070	0.20
12/13/2021 9:36	Effluent Grab	Nutrients	TSS	2 U	mg/L	2.0	10
12/13/2021 9:36	Effluent Grab	Nutrients	Chloride	3.2E+03	mg Cl/L	8.0	20
12/13/2021 9:36	Effluent Grab	Nutrients	Sulfate	1.0E+03	mg SO4/L	8.0	20
12/13/2021 9:36	Effluent Grab	Nutrients	Color (true)	16	PCU	2.5	6.0
12/13/2021 9:36	Effluent Grab	Nutrients	Organic Carbon	11	mg C/L	1.0	2.0

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
12/13/2021 9:36	Effluent Grab	Nutrients	Total Alkalinity	358 A	mg CaCO3/L	0.65	2.5
12/13/2021 9:36	Effluent Grab	Nutrients	Ammonia-N	0.002 U	mg N/L	0.0020	0.0050
12/13/2021 9:36	Effluent Grab	Nutrients	O-Phosphate-P	0.017	mg P/L	0.0040	0.010
12/13/2021 9:36	Effluent Grab	Nutrients	Total-P	0.010	mg P/L	0.0020	0.0050
12/13/2021 9:36	Effluent Grab	Overflow	Alpha-Counting Error	7.3	pCi/L		
12/13/2021 9:36	Effluent Grab	Overflow	Radium 228-Counting Error	0.406	pCi/L	0.502	
12/13/2021 9:36	Effluent Grab	Overflow	Radium 228	1.51 VJ	pCi/L	0.502	
12/13/2021 9:36	Effluent Grab	Overflow	Alpha, Total	28.9	pCi/L	8.7	
12/13/2021 9:36	Effluent Grab	Overflow	Radium 226	18.4	pCi/L	0.150	
12/13/2021 9:36	Effluent Grab	Overflow	Radium 226-Counting Error	0.792	pCi/L	0.150	
12/13/2021 9:36	Effluent Grab	Pesticides	Alachlor	0.29 U	ng/L	0.29	1.1
12/13/2021 9:36	Effluent Grab	Pesticides	Carfentrazone Ethyl	0.11 U	ng/L	0.11	0.46
12/13/2021 9:36	Effluent Grab	Pesticides	Chlorpyrifos Methyl	0.057 U	ng/L	0.057	0.23
12/13/2021 9:36	Effluent Grab	Pesticides	Flutolanil	0.11 U	ng/L	0.11	0.46
12/13/2021 9:36	Effluent Grab	Pesticides	Imazalil	0.86 U	ng/L	0.86	3.4
12/13/2021 9:36	Effluent Grab	Pesticides	Malathion	0.40 U	ng/L	0.40	1.6
12/13/2021 9:36	Effluent Grab	Pesticides	Mevinphos	1.2 U	ng/L	1.2	4.8
12/13/2021 9:36	Effluent Grab	Pesticides	Pendimethalin	1.1 U	ng/L	1.1	4.6
12/13/2021 9:36	Effluent Grab	Pesticides	Prometon	1.0 U	ng/L	1.0	4.1
12/13/2021 9:36	Effluent Grab	Pesticides	Caffeine	8.6 U	ng/L	8.6	34
12/13/2021 9:36	Effluent Grab	Pesticides	Ametryn	0.69 U	ng/L	0.69	2.8
12/13/2021 9:36	Effluent Grab	Pesticides	Carbophenothion	0.57 U	ng/L	0.57	2.3
12/13/2021 9:36	Effluent Grab	Pesticides	Cyanazine	3.7 U	ng/L	3.7	15
12/13/2021 9:36	Effluent Grab	Pesticides	Dimethenamid	0.11 U	ng/L	0.11	0.46
12/13/2021 9:36	Effluent Grab	Pesticides	Fluxapyroxad	0.11 U	ng/L	0.11	0.46
12/13/2021 9:36	Effluent Grab	Pesticides	Metribuzin	3.7 U	ng/L	3.7	15
12/13/2021 9:36	Effluent Grab	Pesticides	Sulfentrazone	0.57 U	ng/L	0.57	2.3
12/13/2021 9:36	Effluent Grab	Pesticides	Pyridaben	0.52 U	ng/L	0.52	2.6
12/13/2021 9:36	Effluent Grab	Pesticides	Diazinon	0.14 U	ng/L	0.14	0.57
12/13/2021 9:36	Effluent Grab	Pesticides	Difenoconazole	0.69 U	ng/L	0.69	2.8
12/13/2021 9:36	Effluent Grab	Pesticides	Dithiopyr	0.20 U	ng/L	0.20	0.80
12/13/2021 9:36	Effluent Grab	Pesticides	Ethion	0.17 U	ng/L	0.17	0.69
12/13/2021 9:36	Effluent Grab	Pesticides	Fipronil Desulfinyl	0.14 U	ng/L	0.14	0.57
12/13/2021 9:36	Effluent Grab	Pesticides	Iprodione	0.69 U	ng/L	0.69	2.8

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
12/13/2021 9:36	Effluent Grab	Pesticides	Oxadiazon	0.34 U	ng/L	0.34	1.4
12/13/2021 9:36	Effluent Grab	Pesticides	Cyprodinil	0.11 U	ng/L	0.11	0.57
12/13/2021 9:36	Effluent Grab	Pesticides	Dimethomorph	0.20 U	ng/L	0.20	1.2
12/13/2021 9:36	Effluent Grab	Pesticides	Napropamide	0.46 U	ng/L	0.46	1.8
12/13/2021 9:36	Effluent Grab	Pesticides	Propargite	1.7 U	ng/L	1.7	6.9
12/13/2021 9:36	Effluent Grab	Pesticides	Triadimefon	0.29 U	ng/L	0.29	1.1
12/13/2021 9:36	Effluent Grab	Pesticides	Atrazine	0.29 U	ng/L	0.29	1.1
12/13/2021 9:36	Effluent Grab	Pesticides	Atrazine Desethyl	1.7 U	ng/L	1.7	6.9
12/13/2021 9:36	Effluent Grab	Pesticides	EPTC	1.4 U	ng/L	1.4	5.7
12/13/2021 9:36	Effluent Grab	Pesticides	Naled	1.7 U	ng/L	1.7	6.9
12/13/2021 9:36	Effluent Grab	Pesticides	Phenytoin	4.0 U	ng/L	4.0	16
12/13/2021 9:36	Effluent Grab	Pesticides	Propanil	0.14 U	ng/L	0.14	0.57
12/13/2021 9:36	Effluent Grab	Pesticides	Butylate	0.46 U	ng/L	0.46	1.8
12/13/2021 9:36	Effluent Grab	Pesticides	Chlorpyrifos Ethyl	0.29 U	ng/L	0.29	1.1
12/13/2021 9:36	Effluent Grab	Pesticides	Fenbuconazole	0.14 U	ng/L	0.14	0.57
12/13/2021 9:36	Effluent Grab	Pesticides	Fipronil Sulfide	0.17 U	ng/L	0.17	0.69
12/13/2021 9:36	Effluent Grab	Pesticides	Hexazinone	0.57 U	ng/L	0.57	2.3
12/13/2021 9:36	Effluent Grab	Pesticides	Myclobutanil	0.29 U	ng/L	0.29	1.1
12/13/2021 9:36	Effluent Grab	Pesticides	Parathion Methyl	0.63 U	ng/L	0.63	2.5
12/13/2021 9:36	Effluent Grab	Pesticides	Coumaphos	0.57 U	ng/L	0.57	2.3
12/13/2021 9:36	Effluent Grab	Pesticides	Pyraflufen Ethyl	0.29 U	ng/L	0.29	1.1
12/13/2021 9:36	Effluent Grab	Pesticides	Demeton	1.7 U	ng/L	1.7	6.9
12/13/2021 9:36	Effluent Grab	Pesticides	Disulfoton	0.57 U	ng/L	0.57	2.3
12/13/2021 9:36	Effluent Grab	Pesticides	Fipronil	0.29 U	ng/L	0.29	1.1
12/13/2021 9:36	Effluent Grab	Pesticides	Fludioxonil	0.14 U	ng/L	0.14	0.57
12/13/2021 9:36	Effluent Grab	Pesticides	Oxyfluorfen	0.17 U	ng/L	0.17	0.69
12/13/2021 9:36	Effluent Grab	Pesticides	Prodiamine	0.20 U	ng/L	0.20	0.80
12/13/2021 9:36	Effluent Grab	Pesticides	Propiconazole	0.57 U	ng/L	0.57	2.3
12/13/2021 9:36	Effluent Grab	Pesticides	Terbufos	0.11 U	ng/L	0.11	0.46
12/13/2021 9:36	Effluent Grab	Pesticides	Etridiazole	0.17 U	ng/L	0.17	0.69
12/13/2021 9:36	Effluent Grab	Pesticides	Stirophos	0.14 U	ng/L	0.14	0.57
12/13/2021 9:36	Effluent Grab	Pesticides	Thiobencarb	0.69 U	ng/L	0.69	2.8
12/13/2021 9:36	Effluent Grab	Pesticides	Naproxen	0.0080 U	µg/L	0.0080	0.032
12/13/2021 9:36	Effluent Grab	Pesticides	Azinphos Methyl	2.3 U	ng/L	2.3	9.2

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
12/13/2021 9:36	Effluent Grab	Pesticides	Azoxystrobin	0.57 U	ng/L	0.57	2.3
12/13/2021 9:36	Effluent Grab	Pesticides	Bromacil	0.57 U	ng/L	0.57	2.3
12/13/2021 9:36	Effluent Grab	Pesticides	Fenamiphos	0.57 U	ng/L	0.57	2.3
12/13/2021 9:36	Effluent Grab	Pesticides	Flumioxazin	2.0 U	ng/L	2.0	8.0
12/13/2021 9:36	Effluent Grab	Pesticides	Metolachlor	0.40 U	ng/L	0.40	1.6
12/13/2021 9:36	Effluent Grab	Pesticides	Phorate	0.60 U	ng/L	0.60	2.4
12/13/2021 9:36	Effluent Grab	Pesticides	Prometryn	0.23 U	ng/L	0.23	0.92
12/13/2021 9:36	Effluent Grab	Pesticides	Pyriproxyfen	0.14 U	ng/L	0.14	0.57
12/13/2021 9:36	Effluent Grab	Pesticides	Loratadine	0.11 U	ng/L	0.11	0.46
12/13/2021 9:36	Effluent Grab	Pesticides	Sucralose	0.010 U	µg/L	0.010	0.040
12/13/2021 9:36	Effluent Grab	Pesticides	Ibuprofen	0.020 U	µg/L	0.020	0.080
12/13/2021 9:36	Effluent Grab	Pesticides	Acetochlor	0.29 U	ng/L	0.29	1.1
12/13/2021 9:36	Effluent Grab	Pesticides	Ethoprop	0.11 U	ng/L	0.11	0.46
12/13/2021 9:36	Effluent Grab	Pesticides	Fipronil Sulfone	0.17 U	ng/L	0.17	0.69
12/13/2021 9:36	Effluent Grab	Pesticides	Fluazifop-P-butyl	0.11 U	ng/L	0.11	0.46
12/13/2021 9:36	Effluent Grab	Pesticides	Fonofos	0.23 U	ng/L	0.23	0.92
12/13/2021 9:36	Effluent Grab	Pesticides	Metalaxyl	0.86 U	ng/L	0.86	3.4
12/13/2021 9:36	Effluent Grab	Pesticides	Molinate	0.34 U	ng/L	0.34	1.4
12/13/2021 9:36	Effluent Grab	Pesticides	Norflurazon	0.57 U	ng/L	0.57	2.3
12/13/2021 9:36	Effluent Grab	Pesticides	Parathion Ethyl	0.29 U	ng/L	0.29	1.1
12/13/2021 9:36	Effluent Grab	Pesticides	Pronamide	0.17 U	ng/L	0.17	0.69
12/13/2021 9:36	Effluent Grab	Pesticides	Simazine	0.57 U	ng/L	0.57	2.3
12/13/2021 9:36	Effluent Grab	Pesticides	Tebuconazole	0.57 U	ng/L	0.57	2.3
12/13/2021 9:36	Effluent Grab	Pesticides	Terbuthylazine	0.49 U	ng/L	0.49	2.0
12/13/2021 9:36	Effluent Grab	Pesticides	Chlorfenapyr	0.20 U	ng/L	0.20	0.80
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Benzo(b)fluoranthene	0.027 U	µg/L	0.027	0.11
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.3 U	µg/L	3.3	13
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Diethyl phthalate	2.2 U	µg/L	2.2	8.7
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Pentachlorophenol	0.54 U	µg/L	0.54	2.2
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Benzidine	11 U	µg/L	11	43
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	2-Chloronaphthalene	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.4 U	µg/L	5.4	22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Chrysene	0.027 U	µg/L	0.027	0.11

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Di-n-butyl phthalate	2.2 U	µg/L	2.2	8.7
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Acenaphthylene	0.027 U	µg/L	0.027	0.11
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Anthracene	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	2,6-Dinitrotoluene	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	3,3'-Dichlorobenzidine	11 U	µg/L	11	43
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Fluorene	0.027 U	µg/L	0.027	0.11
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Hexachlorobutadiene	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Hexachloroethane	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	4-Nitrophenol	11 U	µg/L	11	43
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	2,4-Dichlorophenol	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	2,4-Dimethylphenol	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Benzo(k)fluoranthene	0.027 U	µg/L	0.027	0.11
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Butyl benzyl phthalate	1.1 U	µg/L	1.1	4.3
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Dimethyl phthalate	0.22 U	µg/L	0.22	0.87
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Naphthalene	0.11 U	µg/L	0.11	0.43
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Acenaphthene	0.027 U	µg/L	0.027	0.11
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrophenol	11 U	µg/L	11	43
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.027 U	µg/L	0.027	0.11
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Phenol	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Benzo(a)anthracene	0.027 U	µg/L	0.027	0.11
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	2,4-Dinitrotoluene	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.027 U	µg/L	0.027	0.11
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Hexachlorobenzene	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	N-Nitrosodimethylamine	2.2 U	µg/L	2.2	8.7
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Nitrobenzene	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Fluoranthene	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Phenanthrene	0.11 U	µg/L	0.11	0.43
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Benzo(a)pyrene	0.027 U	µg/L	0.027	0.11

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	2-Chlorophenol	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	2-Nitrophenol	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.027 U	µg/L	0.027	0.11
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Isophorone	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.054 U	µg/L	0.054	0.22
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Pyrene	0.11 U	µg/L	0.11	0.43
12/13/2021 9:36	Effluent Grab	Priority Organic Pollutants	Di-n-octyl phthalate	0.054 U	µg/L	0.054	0.22
12/13/2021 8:51	Effluent Grab	Nutrients	Dissolved Oxygen %Sat	8.6	%Sat		
12/13/2021 8:51	Effluent Grab	Nutrients	Specific Conductance	1062	µmhos/cm		
12/13/2021 9:36	Effluent Grab	Nutrients	pH	7.50	SU		
12/13/2021 8:51	Effluent Grab	Nutrients	pH	7.50	SU		
12/13/2021 8:51	Effluent Grab	Nutrients	Temperature	25.4	C		
12/13/2021 9:36	Effluent Grab	Nutrients	Dissolved Oxygen %Sat	8.6	%Sat		
12/13/2021 9:36	Effluent Grab	Nutrients	Temperature	25.4	C		
12/13/2021 9:36	Effluent Grab	Nutrients	Specific Conductance	1062	µmhos/cm		
12/13/2021 9:57	Blank	Metals	Magnesium	0.040 U	mg/L	0.040	0.16
12/13/2021 9:57	Blank	Metals	Aluminum	5.0 U	µg/L	5.0	20
12/13/2021 9:57	Blank	Metals	Silver	0.010 U	µg/L	0.010	0.040
12/13/2021 9:57	Blank	Metals	Nickel	0.50 U	µg/L	0.50	2.0
12/13/2021 9:57	Blank	Metals	Sodium	0.50 U	mg/L	0.50	2.0
12/13/2021 9:57	Blank	Metals	Cadmium	0.020 U	µg/L	0.020	0.080
12/13/2021 9:57	Blank	Metals	Copper	0.40 U	µg/L	0.40	0.80
12/13/2021 9:57	Blank	Metals	Lead	0.20 U	µg/L	0.20	0.40
12/13/2021 9:57	Blank	Metals	Arsenic	0.050 U	µg/L	0.050	0.20
12/13/2021 9:57	Blank	Metals	Calcium	0.075 U	mg/L	0.075	0.30
12/13/2021 9:57	Blank	Metals	Iron	30 U	µg/L	30	120
12/13/2021 9:57	Blank	Metals	Selenium	0.20 U	µg/L	0.20	0.80
12/13/2021 9:57	Blank	Metals	Zinc	5.0 U	µg/L	5.0	20
12/13/2021 9:57	Blank	Metals	Chromium	0.40 U	µg/L	0.40	1.6
12/13/2021 9:57	Blank	Nutrients	Chloride	0.20 U	mg Cl/L	0.20	0.50
12/13/2021 9:57	Blank	Nutrients	Ammonia-N	0.002 U	mg N/L	0.0020	0.0050
12/13/2021 9:57	Blank	Nutrients	Sulfate	0.20 U	mg SO4/L	0.20	0.50

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
12/13/2021 9:57	Blank	Nutrients	Color (true)	2.5 U	PCU	2.5	6.0
12/13/2021 9:57	Blank	Nutrients	Fluoride	0.035 U	mg F/L	0.035	0.10
12/13/2021 9:57	Blank	Nutrients	Turbidity	0.10 U	NTU	0.10	0.13
12/13/2021 9:57	Blank	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.0040	0.010
12/13/2021 9:57	Blank	Nutrients	Organic Carbon	0.50 U	mg C/L	0.50	1.0
12/13/2021 9:57	Blank	Nutrients	Total-P	0.002 U	mg P/L	0.0020	0.0050
12/13/2021 9:57	Blank	Nutrients	Total Alkalinity	0.65 U	mg CaCO3/L	0.65	2.5
12/13/2021 9:57	Blank	Nutrients	O-Phosphate-P	0.004 U	mg P/L	0.0040	0.010
12/13/2021 9:57	Blank	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.080	0.20
12/13/2021 9:57	Blank	Overflow	Radium 228	0.541 U	pCi/L	0.541	
12/13/2021 9:57	Blank	Overflow	Radium 226-Counting Error	0.0730	pCi/L	0.130	
12/13/2021 9:57	Blank	Overflow	Alpha-Counting Error	0.6	pCi/L		
12/13/2021 9:57	Blank	Overflow	Radium 226	0.130 U	pCi/L	0.130	
12/13/2021 9:57	Blank	Overflow	Alpha, Total	0.7 U	pCi/L	0.7	
12/13/2021 9:57	Blank	Overflow	Radium 228-Counting Error	0.317	pCi/L	0.541	
12/13/2021 9:57	Blank	Priority Organic Pollutants	Di-n-butyl phthalate	2.0 U	µg/L	2.0	8.2
12/13/2021 9:57	Blank	Priority Organic Pollutants	Phenol	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	2,4-Dimethylphenol	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	4-Nitrophenol	10 U	µg/L	10	41
12/13/2021 9:57	Blank	Priority Organic Pollutants	Acenaphthylene	0.026 U	µg/L	0.026	0.10
12/13/2021 9:57	Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.026 U	µg/L	0.026	0.10
12/13/2021 9:57	Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Anthracene	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.026 U	µg/L	0.026	0.10
12/13/2021 9:57	Blank	Priority Organic Pollutants	Pyrene	0.10 U	µg/L	0.10	0.41
12/13/2021 9:57	Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.026 U	µg/L	0.026	0.10
12/13/2021 9:57	Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Diethyl phthalate	2.0 U	µg/L	2.0	8.2
12/13/2021 9:57	Blank	Priority Organic Pollutants	Hexachlorobutadiene	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Acenaphthene	0.026 U	µg/L	0.026	0.10
12/13/2021 9:57	Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.026 U	µg/L	0.026	0.10

Date Sampled	Site ID	Analysis Group	Component	Result	Units	MDL	PQL
12/13/2021 9:57	Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.026 U	µg/L	0.026	0.10
12/13/2021 9:57	Blank	Priority Organic Pollutants	Isophorone	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Naphthalene	0.10 U	µg/L	0.10	0.41
12/13/2021 9:57	Blank	Priority Organic Pollutants	Phenanthrene	0.10 U	µg/L	0.10	0.41
12/13/2021 9:57	Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.026 U	µg/L	0.026	0.10
12/13/2021 9:57	Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Butyl benzyl phthalate	1.0 U	µg/L	1.0	4.1
12/13/2021 9:57	Blank	Priority Organic Pollutants	Chrysene	0.026 U	µg/L	0.026	0.10
12/13/2021 9:57	Blank	Priority Organic Pollutants	Dimethyl phthalate	0.20 U	µg/L	0.20	0.82
12/13/2021 9:57	Blank	Priority Organic Pollutants	Fluorene	0.026 U	µg/L	0.026	0.10
12/13/2021 9:57	Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	3.1 U	µg/L	3.1	12
12/13/2021 9:57	Blank	Priority Organic Pollutants	2,4-Dinitrophenol	10 U	µg/L	10	41
12/13/2021 9:57	Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.026 U	µg/L	0.026	0.10
12/13/2021 9:57	Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	5.1 U	µg/L	5.1	20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Fluoranthene	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Hexachloroethane	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	2.0 U	µg/L	2.0	8.2
12/13/2021 9:57	Blank	Priority Organic Pollutants	Nitrobenzene	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Pentachlorophenol	0.51 U	µg/L	0.51	2.0
12/13/2021 9:57	Blank	Priority Organic Pollutants	2-Nitrophenol	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Benzidine	10 U	µg/L	10	41
12/13/2021 9:57	Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	10 U	µg/L	10	41
12/13/2021 9:57	Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	Hexachlorobenzene	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.051 U	µg/L	0.051	0.20
12/13/2021 9:57	Blank	Priority Organic Pollutants	2-Chlorophenol	0.051 U	µg/L	0.051	0.20