

Effluent Quality Assessment

Goodbread Mobile Home Park Wastewater Treatment Facility

Nassau County

NPDES #FL0032662

Sampled June 2, 2014

August 2014

Biology Section
Bureau of Laboratories
Division of Environmental Assessment and Restoration
2014 FDEP Bureau of Labs Quality Manual
NELAC Certification No. E31780

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Goodbread Mobile Home Park Wastewater Treatment Facility, Goodbread Rd., Yulee, Nassau County, Florida, 32034. NPDES #FL0032662.

Facility Overview

Goodbread Mobile Home Park Wastewater Treatment Facility uses the extended aeration process to treat domestic wastewater. See Appendix A for a description of the facility, summary of permit limits, Administrative Order (AO) and Discharge Monitoring Report (DMR) information.

Methods

Effluent grab samples were collected on June 2, 2014, for toxicity testing and biological and chemical analyses. All samples were collected from the EFD-1 NPDES sampling point for Outfall D-001 by Sharon Piltz and Max Schwartz (FDEP Northeast District) following DEP-SOP-001/01 FS 2400 Wastewater Sampling (see Appendix B).

The 96-hour acute definitive toxicity tests were performed following internal DEP SOPs TA-07.01 and TA-07.02 (see Appendix B). The bioassay tests were performed with de-chlorinated aliquots of sample. Tests with the original (chlorinated) sample were not performed since the total residual chlorine (TRC) (5.2 mg/L) greatly exceeded TRC concentrations) found to be acutely toxic to some freshwater fish and invertebrates (0.028 mg/L; EPA *Quality Criteria for Water* 1986, EPA 44015-86-001, 1986) and previously shown in the lab to be acutely toxic to both test species.

Results

Chemistry Results (See Table 1, Table 2, Table 3 and Appendix C)

- Total residual chlorine (TRC) reported by the facility for the day of collection was 2.20 mg/L. The TRC detected in the bioassay sample in the laboratory was 5.2 mg/L. The cause of this discrepancy has not been determined. The value reported by the facility exceeds the facility's permitted value (≤ 0.01 mg/L) for the EFD-1 sample collection point. The sampling team noted that the collection point was immediately adjacent to the de-chlorination point and that there was an additional approximately 50 feet of pipe for potential de-chlorination to occur prior to effluent discharge into the surface water. The total ammonia concentration in the composite sample collected and preserved for chemical analysis was 1.8 mg N/L. Based on the pH, salinity, and temperature of the effluent as collected, the calculated unionized ammonia concentration was 0.10 mg/L. This value exceeds the permitted limit of ≤ 0.07 mg/L and the Class III Freshwater Criterion of ≤ 0.02 mg/L.
- The effluent dissolved oxygen concentration (4.2 mg/L) was less than the facility's NPDES permit limit of ≥ 5.0 mg/L; however, the dissolved oxygen percent saturation (48.1%) was greater than the bioregion minimum of 38% saturation.
- Carbonaceous biochemical oxygen demand (CBOD), total suspended solids (TSS), turbidity, alkalinity, fluoride, fecal coliforms, copper and iron were detected in the effluent at levels that comply with Class III Freshwater Quality Criteria (62-302.530, F.A.C.) and/or permitted limits. Chromium, nickel and zinc were detected between the laboratory method detection limits (MDL) and practical quantitation limits (PQL).

Toxicity Test Results (See Appendix C)

- Tests were performed June 3 - 7, 2014.

Ceriodaphnia dubia 96-hour acute definitive bioassay – (dechlorinated sample)	LC_{50} > 100%, 0%* mortality in 100% sample at 96 hours
Pimephales promelas 96-hour acute definitive bioassay – (dechlorinated sample)	LC_{50} > 100%, 10%* mortality in 100% sample at 96 hours

*NOTE: 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 (Rule 62-302.500 (1) (a) 4, F.A.C.). Mortality between 20-50% 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 (Rule 62-4.244(3) (a), F.A.C.).

- The de-chlorinated aliquots of the bioassay samples were not acutely toxic to the test organisms.

- Total residual chlorine (TRC) (5.2 mg/L) was detected in the bioassay sample (LIMS # 1606701) in the laboratory. An aliquot of this sample was de-chlorinated by the addition of sodium thiosulfate (0.025 N) at a rate of 5.5 mL per liter of sample to neutralize the chlorine. The same concentration of sodium thiosulfate was added to the de-chlorinated test controls. The purpose of the de-chlorinated test controls was to confirm that there was no adverse effect of adding sodium thiosulfate to the sample. There was no mortality in the de-chlorinated controls of either test species.

Conclusion

The effluent sample collected from the EFD-1 NPDES sampling point for this facility on June 2, 2014, after de-chlorination in the laboratory by the addition of sodium thiosulfate, was not acutely toxic to either test species during the 96-hour acute definitive bioassays. Had the effluent sample not been de-chlorinated in the lab prior to running the toxicity tests, it is likely that it would have been toxic to both test species, since the TRC of the sample as received greatly exceeded TRC concentrations found to be acutely toxic to some freshwater fish and invertebrates (0.028 mg/L; EPA *Quality Criteria for Water* 1986, EPA 44015-86-001, 1986) and previously shown in the lab to be acutely toxic to both test species. Effluent water quality samples collected on June 2, 2014, exceeded Class III Freshwater Quality Criterion for total residual chlorine and unionized ammonia. These values may also represent excursions from the permitted limits for TRC and unionized ammonia. The effluent dissolved oxygen was less than the facility's permitted minimum but was greater than the bioregion minimum. Additional effluent water quality samples did not exceed any other applicable water quality standards or permit conditions.

For additional information concerning this sampling event, including bioassay bench sheets and SRT data, please contact Diane.Power@dep.state.fl.us and/or Joseph.Faircloth@dep.state.fl.us.

Literature Cited

Miller, D.C., S. Poucher, J.A. Cardin, and D. Hansen. 1990. The Acute and Chronic Toxicity of Ammonia to Marine Fish and Invertebrates. *Archives of Environmental Contamination and Toxicology* 19: 40-48.

Manahan, S. E. 1994. Environmental Chemistry, 6th edition. Lewis Publishers, USA. 811 pp.

Stevenson, R. J. and L. L. Bahls. 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. 2002. Methods for measuring the acute toxicity of effluents to freshwater and marine organisms. 5th edition. EPA-821-R-02-012.

Table 1. Effluent limits, Class III Freshwater Criteria and field parameters

Goodbread Mobile Home Park WWTF	Units	Class III Criteria	Effluent Permit Limits	Effluent 6/2/2014
Temperature	C	-	Report	22.47
pH	SU	6.0 - 8.5	6.0 - 8.5	7.99
Specific Conductance	umhos/cm	≤ 1,275	-	776
Salinity	ppt	-	-	0.38
Dissolved Oxygen	% saturation	≥34.0	-	48.1
Dissolved Oxygen	mg/L	≥5.0	≥5.0	4.2 e
Flow	MGD	-	≤0.005 a	0.004 a
Total Residual Chlorine	mg/L	≤0.01	≤0.01 s	2.20 e

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

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

a - Annual average

s - Single sample

Table 2. Effluent limits, Class III Freshwater Criteria and analytical water chemistry data

Goodbread Mobile Home Park WWTF	Units	Class III Criteria	Effluent Permit Limits	Effluent 6/2/2014
Ortho-phosphate	mg P/L	-	Report	1.5
Total Phosphorus	mg P/L	-	Report	2.2
Total Ammonia	mg N/L	-	Report	1.8
Un-ionized Ammonia (measured salinity)	mg/L	≤ 0.02 s	≤0.07	0.10 ce
Nitrate and Nitrite	mg N/L	-	Report	0.03
Total Kjeldahl Nitrogen	mg N/L	-	Report	6.3
Organic Nitrogen	mg N/L	-	-	4.5 c
Total Nitrogen	mg N/L	-	Report	6.3 c
Total Organic Carbon	mg C/L	-	-	11
Chlorophyll *a* - Corrected	ug/L	-	-	0.55 U
Phaeophytin	ug/L	-	-	0.40 U
CBOD, 5 day, N - inhibited	mg/L	-	≤60.0 s	2.7
Total Suspended Solids	mg/L	-	≤60.0 s	7 I
Turbidity	NTU	< 29 t	-	4.2
Color (true)	PCU	-	-	18 A
Alkalinity	mg CaCO3/L	≥ 20	-	237
Chloride	mg Cl/L	-	-	50
Fluoride	mg F/L	≤ 10.0	-	0.17
Sulfate	mg SO4/L	-	-	15
Microbiology				
Fecal Coliforms ¥	cfu/100 mL	≤ 400 s #	≤800 s	7
Toxicity (Acute Definitive, LC50)				
Bioassay - Water flea dechlorinated (Ceriodaphnia dubia)	%	≥ 100	≥ 100	100 L
Bioassay - Fish dechlorinated (Pimephales promelas)	%	≥ 100	≥ 100	100 L

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

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

c - Value is calculated

s - Single sample

t - Shall not exceed 29 NTUs above background

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

I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

L - Actual value is known to be greater than value given

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

¥ - Fecal coliform analysis performed by Columbia Analytical Services, Jacksonville (E82502)

- If 10 or fewer samples are taken within a month, the single sample limit is 400 CFU (62-302.530(6), F.A.C.)

Table 3. Effluent limits, Class III Freshwater Criteria and analytical metals data

Goodbread Mobile Home Park WWTF	Units	Class III Criteria	Effluent Permit Limits	Effluent 6/2/2014
Hardness	mg CaCO3/L	-	-	229 c
Aluminum	ug/L	-	-	29
Arsenic	ug/L	≤ 50	-	0.25 U
Cadmium	ug/L	≤0.5 b	-	0.050 U
Calcium	mg/L	-	-	83.8
Chromium, Total [1]	ug/L	≤170 b	-	0.38 I
Copper	ug/L	≤18.9 b	-	1.2
Iron	ug/L	≤ 1,000	-	420
Lead	ug/L	≤9.14 b	-	0.20 U
Magnesium	mg/L	-	-	4.83
Nickel	ug/L	≤105 b	-	0.60 I
Potassium	mg/L	-	-	6.3
Selenium	ug/L	≤ 5.0	-	0.20 U
Silver	ug/L	≤ 0.07	-	0.025 U
Sodium	mg/L	-	-	44.7
Zinc	ug/L	≤242 b	-	18 I

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

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

1 - Class III Freshwater Quality Criterion (62-302.530(19)(a), F.A.C.) is for chromium-III

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

Appendix A
Facility Summary

State of Florida
Department of Environmental Protection
Facility Introduction & Summary

PART I: Information gathered prior to sampling event	
Prepared By: Kyle Watson	**Contact Number:** 904-256-1624
Facility Name (as it appears on permit): Goodbread Mobile Home Park WWTF	**Former Names:**
NPDES Permit Number: FL0032662	**Permit Expiration Date:** 5/16/2015
Physical Address: Goodbread Rd Yulee, FL 32034	
District: Northeast	**County:** Nassau
Function of Facility: Collect and treat domestic wastewater prior to discharge to surface waters of the state.	
Facility Type: Domestic	**Permitted Capacity (MGD):** 0.005
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): 01/01/2013 – 12/31/2013 Flow = 0.004 MGD	
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): EFA-1 Sample point after disinfection and prior to dechlorination EFD-1 Sample point after dechlorination and prior to discharge to surface water	
Description of Permitted Outfall(s): Permitted discharge to an on-site pond at discharge location D-001. The pond intermittently discharges to a ditch that flows into an unnamed tributary of Lofton Creek (Class III freshwaters, WBID 2142). The D-001 outfall line is 4 inches in diameter, extends approximately 6 feet over the pond, and discharges approximately 4 inches above the pond surface. The point of discharge (Outfall D-001) is located approximately at latitude 30° 38' 48" N, longitude 81° 37' 0" W.	
Description of Treatment Process (if multiple discharge points, include a detailed map or diagram of facility): Extended aeration domestic wastewater treatment facility (WWTF) consisting of two interconnected 55-gallon drums with a screening device (serves as a surge tank), one aeration basin with a volume of approximately 5,000 gallons, one secondary clarifier with a volume of approximately 2,000 gallons and a surface area of 37.5 square feet, one chlorine contact chamber with a volume of approximately 350 gallons, tablet feeder equipment for dechlorination, and one aerobic digester with a volume of approximately 1,260 gallons. Treated effluent is discharged to an onsite pond that intermittently overflows into a ditch. Domestic wastewater residuals are transported to the JEA Buckman Residual Management Facility for treatment.	

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
BOD, Carbonaceous 5 day, 20C	mg/L	Max Max Max Max	20.0 25.0 40.0 60.0	Annual Average Monthly Average Weekly Average Single Sample	Monthly	Grab(1)	EFD-1	
CBOD, % Removal, 5-day	percent	Min	85	Monthly Average	Monthly	Calculated	CAL-1	See I.**Error! Reference source not found.**.7
Solids, Total Suspended	mg/L	Max Max Max Max	20.0 30.0 45.0 60.0	Annual Average Monthly Average Weekly Average Single Sample	Monthly	Grab(1)	EFD-1	
Solids, Total Suspended, % Removal	percent	Min	85	Monthly Average	Monthly	Calculated	CAL-1	See I.**Error! Reference source not found.**.7
Coliform, Fecal	#/100 mL	Max Max Max	200 200 800	Annual Average Monthly Geometric Mean Single Sample	Monthly	Grab	EFD-1	See I.A.3
pH	s.u.	Min Max	6.0 8.5	Single Sample Single Sample	5 Days/Week	Grab(1)	EFD-1	See I.**Error! Reference source not found.**.5
Chlorine, Total Residual (For Disinfection)	mg/L	Min	0.5	Single Sample	5 Days/Week	Grab(1)	EFA-1	See I.A.4
Chlorine, Total Residual (For Dechlorination)	mg/L	Max	0.01	Single Sample	Monthly	Grab	EFD-1	
Oxygen, Dissolved (DO)	mg/L	Min	5.0	Single Sample	5 Days/Week	Grab(1)	EFD-1	See I.**Error! Reference source not found.**.6
Nitrogen, Ammonia, Total (as N)	mg/L	Max	Report	Single Sample	Monthly	Grab	EFD-1	

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
Nitrogen, Ammonia, Total unionized (as N)	mg/L	Max	0.02	Single Sample	Monthly	Grab	EFD-1	See I.**Error! Reference source not found.**.5
Temperature (C), Water	Deg C	Max	Report	Single Sample	Monthly	Grab	EFD-1	See I.**Error! Reference source not found.**.5
Nitrogen, Total	mg/L	Max	Report	Single Sample	Semi-Annually	Grab	EFD-1	
Nitrogen, Kjeldahl, Total (as N)	mg/L	Max	Report	Single Sample	Semi-Annually	Grab	EFD-1	
Nitrite plus Nitrate, Total 1 det. (as N)	mg/L	Max	Report	Single Sample	Semi-Annually	Grab	EFD-1	
Phosphorus, Total (as P)	mg/L	Max	Report	Single Sample	Semi-Annually	Grab	EFD-1	
Phosphate, Ortho (as P)	mg/L	Max	Report	Single Sample	Semi-Annually	Grab	EFD-1	

			Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Flow through the WWTF	MGD	Max Max Max	0.005 Report Report	Annual Average Monthly Average Quarterly Average	5 Days/Week	Elapsed Time Measurement on Pump	INF-1	See I.B.4
Percent Capacity, (TMADF/Permitted Capacity) x 100	percent	Max	Report	Monthly Average	Monthly	Calculated	CAL-1	
BOD, Carbonaceous 5 day, 20C (Influent)	mg/L	Max	Report	Single Sample	Monthly	Grab	INF-1	See I.B.3
Solids, Total Suspended (Influent)	mg/L	Max	Report	Single Sample	Monthly	Grab	INF-1	See I.B.3

PART I: Continued

Receiving Waters:	**Classification (indicate whether fresh or marine):**
Lofton Creek	(Class III freshwaters, WBID 2142).

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

Administrative or Consent Orders (date executed, specific requirements, interim limit dates-if applicable, etc.):
Co 13-0815

Parameter	Units	Limit	Monitoring Frequency	Sample Type
Total Unionized Ammonia	mg/L	0.07	Maximum	Calculation

Devise and submit a plan to resolve Total Unionized Ammonia problems and submit quarterly updates. All actions should be completed by April 1, 2014. All actions have been completed but a recent exceedance has kept the Dep't from closing the CO.

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

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

Date	Parameter and Units	Limit	Result
2/28/2013	Total unionized ammonia, max	0.02 mg/L	0.025 mg/L
3/31/2013	Total unionized ammonia, max	0.02 mg/L	0.035 mg/L
4/30/2013	Fecal Coliform, max	800 #/mL	20000 #/mL
4/30/2013	Fecal Coliform, annual average	200 #/mL	1145 #/mL
9/30/2013	TSS Removal %	85%	69.5%
11/30/2013	TSS Removal %	85%	68.8%
11/30/2013	CBOD Removal %	85%	83.3%
12/31/2013	Fecal Coliform, monthly geometric mean	704 #/mL	200 #/mL
1/31/2014	Total unionized ammonia, max	0.07 mg/L	0.24 mg/L

Describe previous FYI and WQBEL study:
Last FYI occurred on 1/25/2008 and was rated SNC because of the following items;

- Change of ownership form was not submitted to the Department.
- Samples for dissolved oxygen were being taken only two times a week. The permit required monitoring of this parameter five times a week.
- Mr. Jon Stuch, the operator, was signing the Discharge Monitoring Reports (DMRs) as the authorized representative. The Department had not received a letter stating that Mr. Jon Stuch had been given the authority to sign the DMRs as the authorized agent.
- Samples taken for fecal coliforms during the inspection were recorded as 50 Z number per 100 mL or too numerous to count. This exceeded the permit limit of 800 number per 100.
- Four unionized ammonium exceedances during 2007.

Describe previous or current Enforcement Actions (including WLs):
There are currently stipulated penalties being assessed for Total unionized ammonium exceedance on 1/31/2014.

Describe any violations or problems noted in previous inspection:
Only the DMR violations previously noted in this report.

Discuss whether DMR trends within previous five years are improving or declining:
Better, especially with regards to CBOD within the last year.

Additional Comments (this should include a trend of the Effluent, i.e. if the facility is now Reuse):
CO 13-0815 was scheduled to end 4/1/2014. All corrective actions have been met but recent exceedance may force an extension.

PART II: Sampling Event Information

Date(s) sample collected:	**Sampler(s):**
Temperature (Deg C):	**pH (SU):**
Dissolved Oxygen (mg/L):	**Conductivity (umhos/cm):**
Total Residual Chlorine (mg/L):	**Total Residual Chlorine - after Disinfection (mg/L):**
Method of Chlorination:	**Method of De-chlorination:**

Flow During Sample Collection for each outfall(MGD):

Mean Flow for each outfall for previous 12 months based on sampling date (If samples are taken on more than one day, indicate Mean Flow for each day):

Describe Discharge during Sampling Event:
☐ **Continuous** ☐ **Intermittent** ☐ **Seasonal** ☐ **Rainfall Dependent** ☐ **Other, please specify**

Describe any conditions, difficulties or abnormal events that occurred during the sample collection and any other additional comments here:

Appendix B
Explanation of measurements

(1) Quality Assurance and Quality Control

FDEP's quality assurance requirements for analytical laboratories and field activities are codified in Chapter 62-160, F.A.C., Quality Assurance (QA Rule) and in internal Standard Operating Procedures (FDEP SOPs). Methods for all analyses are on file at the FDEP Central Laboratory in Tallahassee and may be viewed on the web at http://www.dep.state.fl.us/labs/library/lab_sops.htm and/or http://www.dep.state.fl.us/water/sas/sop/sops.htm.

(2) Chemical Analyses of the Effluent

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

(3) Toxicity Bioassays

Greater than 50% mortality in an acute toxicity test may constitute an exceedance of 62-302.500(1)a and/or facility permit limits. A 25% inhibition concentration (IC25) is the effluent concentration causing a 25% reduction in a biological response such as biomass or reproduction when compared to a control population. An IC25 of less than 100% in a chronic test may constitute exceedances of 62-302.530(20), 62-302.530(61) and/or facility permit limits. A no observed effect concentration (NOEC) less than 100% effluent in a chronic test may constitute an exceedance of 62-302.530(61) and/or facility permit limits. Standard reference toxicant (SRT) tests are conducted monthly to ensure quality in toxicity testing.

(4) Bacteriological Testing

High levels of fecal coliform bacteria may constitute an exceedance of 62-302.530(6) and/or facility permit limits. Fecal coliform and enterococci 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.

(5) Chlorophyll *a* Content

Chlorophyll *a* content is an estimate algal biomass. High algal biomass implies nutrient stress (Stevenson and Bahls 1999) and may constitute exceedances of 62-302.530(46), F.A.C., 62-302.530(47)(a), F.A.C., and/or 62-302.530(47)(b), F.A.C.

(6) Definition of Qualifiers

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

Appendix C
Chemical Analyses of Effluent

Date Sampled	Field ID	Analysis Group	Component	Result	Units	MDL	PQL
6/2/2014 8:25	Effluent	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	2.7	mg/L	0.2	2
6/2/2014 8:25	Effluent	Chlorophyll/Grain Size/BOD	Phaeophytin-a	0.40 U	ug/L	0.4	1.2
6/2/2014 8:25	Effluent	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	0.55 U	ug/L	0.55	1.7
6/2/2014 8:25	Effluent	Overflow	Fecal Coliforms-Membrane Filter	7	cfu/100 mL	1	1
6/2/2014 8:25	Effluent	Toxicology	Bioassay-Acute-Def-FW-C.dubia, LC50	100 L	LC50		
6/2/2014 8:25	Effluent	Toxicology	Bioassay-Acute-Def-FW-Fish, LC50	100 L	LC50		
6/2/2014 8:25	Effluent	Metals	Nickel	0.60 I	ug/L	0.25	1
6/2/2014 8:25	Effluent	Metals	Copper	1.2	ug/L	0.5	1
6/2/2014 8:25	Effluent	Metals	Selenium	0.20 U	ug/L	0.2	0.8
6/2/2014 8:25	Effluent	Metals	Arsenic	0.25 U	ug/L	0.25	1
6/2/2014 8:25	Effluent	Metals	Lead	0.20 U	ug/L	0.2	0.8
6/2/2014 8:25	Effluent	Metals	Magnesium	4.83	mg/L	0.04	0.16
6/2/2014 8:25	Effluent	Metals	Potassium	6.3	mg/L	0.3	1.2
6/2/2014 8:25	Effluent	Metals	Calcium	83.8	mg/L	0.075	0.3
6/2/2014 8:25	Effluent	Metals	Zinc	18 I	ug/L	5	20
6/2/2014 8:25	Effluent	Metals	Aluminum	29	ug/L	5	20
6/2/2014 8:25	Effluent	Metals	Chromium	0.38 I	ug/L	0.3	1.2
6/2/2014 8:25	Effluent	Metals	Silver	0.025 U	ug/L	0.025	0.1
6/2/2014 8:25	Effluent	Metals	Iron	420	ug/L	30	120
6/2/2014 8:25	Effluent	Metals	Sodium	44.7	mg/L	0.5	2
6/2/2014 8:25	Effluent	Metals	Cadmium	0.050 U	ug/L	0.05	0.2
6/2/2014 8:25	Effluent	Nutrients	Chloride	50	mg Cl/L	0.4	1
6/2/2014 8:25	Effluent	Nutrients	TSS	7 I	mg/L	2	10
6/2/2014 8:25	Effluent	Nutrients	Organic Carbon	11	mg C/L	0.5	1
6/2/2014 8:25	Effluent	Nutrients	O-Phosphate-P	1.5	mg P/L	0.04	0.1
6/2/2014 8:25	Effluent	Nutrients	Sulfate	15	mg SO4/L	0.4	1
6/2/2014 8:25	Effluent	Nutrients	Kjeldahl Nitrogen	6.3	mg N/L	0.4	1
6/2/2014 8:25	Effluent	Nutrients	Total-P	2.2	mg P/L	0.025	0.25
6/2/2014 8:25	Effluent	Nutrients	Fluoride	0.17	mg F/L	0.035	0.1
6/2/2014 8:25	Effluent	Nutrients	Ammonia-N	1.8	mg N/L	0.02	0.05
6/2/2014 8:25	Effluent	Nutrients	Alkalinity	237	mg CaCO3/L	0.65	2.5
6/2/2014 8:25	Effluent	Nutrients	Turbidity	4.2	NTU	0.1	0.1
6/2/2014 8:25	Effluent	Nutrients	NO2NO3-N	0.03	mg N/L	0.004	0.01
6/2/2014 8:25	Effluent	Nutrients	Color (true)	18 A	PCU	2.5	6

Date Sampled	Field ID	Analysis Group	Component	Result	Units	MDL	PQL
6/2/2014 8:25	Effluent	Pesticides	Simazine	0.010 U	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Ethoprop	0.0050 U	ug/L	0.005	0.02
6/2/2014 8:25	Effluent	Pesticides	Mevinphos	0.010 U	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Metolachlor	0.060 U	ug/L	0.06	0.24
6/2/2014 8:25	Effluent	Pesticides	Chlorpyrifos Methyl	0.010 U	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Bromacil	0.040 U	ug/L	0.04	0.16
6/2/2014 8:25	Effluent	Pesticides	Atrazine Desethyl	0.010 UJ	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Diazinon	0.010 UJ	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Ametryn	0.010 U	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Atrazine Desisopropyl	0.010 U	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Malathion	0.010 U	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Prometon	0.020 U	ug/L	0.02	0.08
6/2/2014 8:25	Effluent	Pesticides	Parathion Methyl	0.010 U	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Naled	0.040 UJ	ug/L	0.04	0.16
6/2/2014 8:25	Effluent	Pesticides	Metribuzin	0.020 UJ	ug/L	0.02	0.08
6/2/2014 8:25	Effluent	Pesticides	Prometryn	0.020 U	ug/L	0.02	0.08
6/2/2014 8:25	Effluent	Pesticides	Fonofos	0.010 U	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Disulfoton	0.0050 UJ	ug/L	0.005	0.02
6/2/2014 8:25	Effluent	Pesticides	Chlorpyrifos Ethyl	0.010 U	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Azinphos Methyl	0.020 U	ug/L	0.02	0.08
6/2/2014 8:25	Effluent	Pesticides	Atrazine	0.010 U	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Phorate	0.0050 UJ	ug/L	0.005	0.02
6/2/2014 8:25	Effluent	Pesticides	Hexazinone	0.030 U	ug/L	0.03	0.12
6/2/2014 8:25	Effluent	Pesticides	Fenamiphos	0.030 U	ug/L	0.03	0.12
6/2/2014 8:25	Effluent	Pesticides	Ethion	0.010 U	ug/L	0.01	0.04
6/2/2014 8:25	Effluent	Pesticides	Demeton	0.024 U	ug/L	0.024	0.096
6/2/2014 8:25	Effluent	Pesticides	Parathion Ethyl	0.020 U	ug/L	0.02	0.08
6/2/2014 8:25	Effluent	Pesticides	Norflurazon	0.030 U	ug/L	0.03	0.12
6/2/2014 8:25	Effluent	Pesticides	Butylate	0.020 U	ug/L	0.02	0.08
6/2/2014 8:25	Effluent	Pesticides	Alachlor	0.060 U	ug/L	0.06	0.24
6/2/2014 8:25	Effluent	Pesticides	Metalaxyl	0.040 U	ug/L	0.04	0.16
6/2/2014 8:25	Effluent	Priority Organic Pollutants	4-Nitrophenol	15 UJ	ug/L	15	59
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Benzidine	98 UJ	ug/L	98	390
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Diethyl phthalate	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	2,4-Dinitrophenol	15 UJ	ug/L	15	59
6/2/2014 8:25	Effluent	Priority Organic Pollutants	2,4-Dinitrotoluene	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	2,6-Dinitrotoluene	0.98 U	ug/L	0.98	3.9

Date Sampled	Field ID	Analysis Group	Component	Result	Units	MDL	PQL
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Acenaphthene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Di-n-butyl phthalate	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Fluorene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Hexachlorobutadiene	2.9 U	ug/L	2.9	12
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Naphthalene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Nitrobenzene	2.0 U	ug/L	2	7.8
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Phenanthrene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9 U	ug/L	2.9	12
6/2/2014 8:25	Effluent	Priority Organic Pollutants	2,4-Dichlorophenol	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	2-Nitrophenol	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Anthracene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Benzo(a)anthracene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Benzo(b)fluoranthene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Butyl benzyl phthalate	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Dimethyl phthalate	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	2.0 U	ug/L	2	7.8
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Pentachlorophenol	2.9 U	ug/L	2.9	12
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Phenol	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	2,4-Dimethylphenol	9.8 UJ	ug/L	9.8	39
6/2/2014 8:25	Effluent	Priority Organic Pollutants	2-Chloronaphthalene	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	2-Chlorophenol	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Benzo(a)pyrene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Benzo(k)fluoranthene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Hexachlorobenzene	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.9 UJ	ug/L	2.9	12
6/2/2014 8:25	Effluent	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.39 U	ug/L	0.39	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	3,3'-Dichlorobenzidine	39 U	ug/L	39	160
6/2/2014 8:25	Effluent	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.9 U	ug/L	2.9	12
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Chrysene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.9 U	ug/L	2.9	12
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Pyrene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Fluoranthene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Hexachloroethane	2.9 U	ug/L	2.9	12

Date Sampled	Field ID	Analysis Group	Component	Result	Units	MDL	PQL
6/2/2014 8:25	Effluent	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	2.0 U	ug/L	2	7.8
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Acenaphthylene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.20 U	ug/L	0.2	0.78
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	2.0 U	ug/L	2	7.8
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Di-n-octyl phthalate	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	Isophorone	0.98 U	ug/L	0.98	3.9
6/2/2014 8:25	Effluent	Priority Organic Pollutants	N-Nitrosodimethylamine	2.0 U	ug/L	2	7.8
6/2/2014 8:25	Effluent	Nutrients	Specific Conductance	776	umhos/cm		
6/2/2014 8:25	Effluent	Nutrients	Dissolved Oxygen	4.16	mg/L		
6/2/2014 8:25	Field Blank	Metals	Cadmium	0.050 U	ug/L	0.05	0.2
6/2/2014 8:25	Field Blank	Metals	Calcium	0.075 U	mg/L	0.075	0.3
6/2/2014 8:25	Field Blank	Metals	Zinc	5.0 U	ug/L	5	20
6/2/2014 8:25	Field Blank	Metals	Iron	30 U	ug/L	30	120
6/2/2014 8:25	Field Blank	Metals	Sodium	0.50 U	mg/L	0.5	2
6/2/2014 8:25	Field Blank	Metals	Silver	0.025 U	ug/L	0.025	0.1
6/2/2014 8:25	Field Blank	Metals	Magnesium	0.040 U	mg/L	0.04	0.16
6/2/2014 8:25	Field Blank	Metals	Lead	0.20 U	ug/L	0.2	0.8
6/2/2014 8:25	Field Blank	Metals	Aluminum	5.0 U	ug/L	5	20
6/2/2014 8:25	Field Blank	Metals	Copper	0.50 U	ug/L	0.5	1
6/2/2014 8:25	Field Blank	Metals	Potassium	0.30 U	mg/L	0.3	1.2
6/2/2014 8:25	Field Blank	Metals	Chromium	0.30 U	ug/L	0.3	1.2
6/2/2014 8:25	Field Blank	Metals	Nickel	0.25 U	ug/L	0.25	1
6/2/2014 8:25	Field Blank	Metals	Selenium	0.20 U	ug/L	0.2	0.8
6/2/2014 8:25	Field Blank	Metals	Arsenic	0.25 U	ug/L	0.25	1
6/2/2014 8:25	Field Blank	Nutrients	Chloride	0.20 U	mg Cl/L	0.2	0.5
6/2/2014 8:25	Field Blank	Nutrients	Turbidity	0.10 U	NTU	0.1	0.1
6/2/2014 8:25	Field Blank	Nutrients	Alkalinity	0.65 U	mg CaCO3/L	0.65	2.5
6/2/2014 8:25	Field Blank	Nutrients	O-Phosphate-P	0.004 U	mg P/L	0.004	0.01
6/2/2014 8:25	Field Blank	Nutrients	Sulfate	0.20 U	mg SO4/L	0.2	0.5
6/2/2014 8:25	Field Blank	Nutrients	Ammonia-N	0.002 I	mg N/L	0.002	0.005
6/2/2014 8:25	Field Blank	Nutrients	Total-P	0.002 U	mg P/L	0.002	0.005
6/2/2014 8:25	Field Blank	Nutrients	Color (true)	2.5 U	PCU	2.5	6
6/2/2014 8:25	Field Blank	Nutrients	Kjeldahl Nitrogen	0.080 U	mg N/L	0.08	0.2
6/2/2014 8:25	Field Blank	Nutrients	Organic Carbon	0.50 U	mg C/L	0.5	1
6/2/2014 8:25	Field Blank	Nutrients	Fluoride	0.035 U	mg F/L	0.035	0.1
6/2/2014 8:25	Field Blank	Nutrients	NO2NO3-N	0.004 U	mg N/L	0.004	0.01
6/2/2014 8:25	Field Blank	Pesticides	Alachlor	0.058 U	ug/L	0.058	0.23

Date Sampled	Field ID	Analysis Group	Component	Result	Units	MDL	PQL
6/2/2014 8:25	Field Blank	Pesticides	Butylate	0.019 U	ug/L	0.019	0.077
6/2/2014 8:25	Field Blank	Pesticides	Chlorpyrifos Ethyl	0.0096 U	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Pesticides	Disulfoton	0.0048 U	ug/L	0.0048	0.019
6/2/2014 8:25	Field Blank	Pesticides	Fenamiphos	0.029 U	ug/L	0.029	0.12
6/2/2014 8:25	Field Blank	Pesticides	Parathion Methyl	0.0096 U	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Pesticides	Prometon	0.019 U	ug/L	0.019	0.077
6/2/2014 8:25	Field Blank	Pesticides	Ethion	0.0096 U	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Pesticides	Fonofos	0.0096 U	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Pesticides	Phorate	0.0048 U	ug/L	0.0048	0.019
6/2/2014 8:25	Field Blank	Pesticides	Atrazine	0.0096 U	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Pesticides	Atrazine Desisopropyl	0.0096 U	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Pesticides	Demeton	0.023 U	ug/L	0.023	0.092
6/2/2014 8:25	Field Blank	Pesticides	Ethoprop	0.0048 U	ug/L	0.0048	0.019
6/2/2014 8:25	Field Blank	Pesticides	Ametryn	0.0096 U	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Pesticides	Azinphos Methyl	0.019 U	ug/L	0.019	0.077
6/2/2014 8:25	Field Blank	Pesticides	Atrazine Desethyl	0.0096 U	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Pesticides	Chlorpyrifos Methyl	0.0096 U	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Pesticides	Prometryn	0.019 U	ug/L	0.019	0.077
6/2/2014 8:25	Field Blank	Pesticides	Bromacil	0.038 U	ug/L	0.038	0.15
6/2/2014 8:25	Field Blank	Pesticides	Hexazinone	0.029 U	ug/L	0.029	0.12
6/2/2014 8:25	Field Blank	Pesticides	Metolachlor	0.058 U	ug/L	0.058	0.23
6/2/2014 8:25	Field Blank	Pesticides	Mevinphos	0.0096 U	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Pesticides	Metribuzin	0.019 U	ug/L	0.019	0.077
6/2/2014 8:25	Field Blank	Pesticides	Naled	0.038 UJ	ug/L	0.038	0.15
6/2/2014 8:25	Field Blank	Pesticides	Diazinon	0.0096 UJ	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Pesticides	Malathion	0.0096 U	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Pesticides	Metalaxyl	0.038 U	ug/L	0.038	0.15
6/2/2014 8:25	Field Blank	Pesticides	Norflurazon	0.029 U	ug/L	0.029	0.12
6/2/2014 8:25	Field Blank	Pesticides	Parathion Ethyl	0.019 U	ug/L	0.019	0.077
6/2/2014 8:25	Field Blank	Pesticides	Simazine	0.0096 U	ug/L	0.0096	0.038
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Benzo(k)fluoranthene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Pyrene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Di-n-octyl phthalate	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Fluoranthene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Di-n-butyl phthalate	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Isophorone	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Hexachlorobenzene	0.97 U	ug/L	0.97	3.9

Date Sampled	Field ID	Analysis Group	Component	Result	Units	MDL	PQL
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Anthracene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	3,3'-Dichlorobenzidine	39 U	ug/L	39	160
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.39 U	ug/L	0.39	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	2-Nitrophenol	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Acenaphthene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Benzo(a)anthracene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Benzo(b)fluoranthene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Butyl benzyl phthalate	1.2 I	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Hexachlorobutadiene	2.9 U	ug/L	2.9	12
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9 U	ug/L	1.9	7.8
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Benzidine	97 U	ug/L	97	390
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Hexachloroethane	2.9 U	ug/L	2.9	12
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Pentachlorophenol	2.9 U	ug/L	2.9	12
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Phenanthrene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Phenol	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	2-Chloronaphthalene	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Acenaphthylene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Chrysene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.9 U	ug/L	2.9	12
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Nitrobenzene	1.9 U	ug/L	1.9	7.8
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	2,6-Dinitrotoluene	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	2-Chlorophenol	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	1.9 U	ug/L	1.9	7.8
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Diethyl phthalate	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Dimethyl phthalate	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Fluorene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.9 U	ug/L	2.9	12
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Naphthalene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	4-Nitrophenol	15 U	ug/L	15	58
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	2,4-Dichlorophenol	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	2,4-Dimethylphenol	9.7 U	ug/L	9.7	39

Date Sampled	Field ID	Analysis Grroup	Component	Result	Units	MDL	PQL
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Benzo(a)pyrene	0.19 U	ug/L	0.19	0.78
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.9 U	ug/L	2.9	12
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9 U	ug/L	1.9	7.8
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9 U	ug/L	1.9	7.8
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	2,4-Dinitrophenol	15 UJ	ug/L	15	58
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	2,4-Dinitrotoluene	0.97 U	ug/L	0.97	3.9
6/2/2014 8:25	Field Blank	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9 U	ug/L	2.9	12

EPA End Sheet

The Bioassay of Goodbread Mobile Home Park WWTF effluent sampled on June 2, 2014. NPDES #FL0032662.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

Transaction Code		NPDES NUMBER		YR/MO/DA		Insp Type	Inspector	Fac Type
1	N	3 FL0032662	11 12	140602		18 B	19 S	20 1

Remarks

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The Priority Pollutants Analysis of Goodbread Mobile Home Park WWTF effluent sampled on June 2, 2014. NPDES #FL0032662.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

Transaction Code		NPDES NUMBER		YR/MO/DA		Insp Type	Inspector	Fac Type
1	N	3 FL0032662	11 12	140602		18 X	19 S	20 1

Remarks

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Biological Analyses of Goodbread Mobile Home Park WWTF effluent sampled on June 2, 2014. NPDES #FL0032662.

Fill Out This Section For All Surface Water Discharger Inspections(CEI, CSI, CBI, PAI, XSI-RI Optional)

Transaction Code		NPDES NUMBER		YR/MO/DA		Insp Type	Inspector	Fac Type
1	N	3 FL0032662	11 12	140602		18 S	19 S	20 1

Remarks

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