

Effluent Quality Assessment

Trademark Nitrogen Corporation

Hillsborough County

NPDES #FL0000647

Sampled November 18, 2013

January 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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EPA End Sheet

Trademark Nitrogen Corporation, 1216 Old Hopewell Rd., Tampa, Hillsborough County, Florida, 34677. NPDES #FL0000647

Facility Overview

Trademark Nitrogen Corporation treats its industrial wastewater, with the exception of non contact cooling water, in an unlined, vegetated detention ditch. Non contact cooling water is piped directly to a basin downstream of the vegetated ditch. 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 and composite samples for biological and chemical analyses for this facility were collected on November 18, 2013. All samples were collected from the EFF-1 NPDES sampling point for Outfall D-001 by Ramandeep Kaur and Gitta Schmitt (FDEP Southwest District) following DEP-SOP-001/01 FS 2400 Wastewater Sampling (see Appendix B).

The 96-hour acute definitive toxicity tests and algal growth potential test were performed following internal DEP SOPs TA07_01, TA07_02, and TA08_01 through TA08_09 (see Appendix B).

Results

Chemistry Results (See Table 1 and Appendix C)

- The total ammonia concentration in the composite sample collected and preserved for chemical analysis was 0.17 mg N/L. Based on the pH, salinity, and temperature of the effluent as collected, the calculated unionized ammonia concentration was <0.02 mg/L.
- Arsenic, copper, iron, total nitrogen, turbidity, and fluoride 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. Total chromium, nickel, zinc, and total suspended solids (TSS) were detected between the laboratory method detection limits (MDL) and practical quantitation limits (PQL).

Algal Growth Potential (See Table 2 and Appendix C)

- The effluent Algal Growth Potential (AGP) was 5.47 A (A - Value reported is the mean of two or more determinations) mg dry wt/L of the unicellular green alga, *Pseudokirchneriella subcapitata*, formerly known as *Selenastrum capricornutum*. Raschke and Schultz (1987) determined that AGP values above 5.0 mg dry weight/L represent a “problem” threshold for fresh receiving waters, implying nutrient enrichment. The analytical chemistry suggests that the effluent is nitrogen–limited (Miller et al. 1978).

Toxicity Test Results (See Appendix C)

- Tests were performed November 19 - 23, 2013.

Ceriodaphnia dubia 96-hour acute definitive bioassay –	LC_{50} > 100%, 0%* mortality in 100% sample at 96 hours
Cyprinella leedsi 96-hour acute definitive bioassay –	LC_{50} > 100%, 5%* 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 bioassay samples were not acutely toxic to the test organisms.
- The sample was aerated for 30 minutes at a rate of approximately 100 bubbles per minute to decrease the dissolved oxygen (DO) from 10.9 mg/L to 8.0 mg/L.

Conclusion

The effluent sample collected from the EFF-1 NPDES sampling point for this facility on November 18, 2013, was not acutely toxic to either test species during the 96-hour acute definitive bioassays. The effluent AGP result was greater than the "problem" threshold for fresh receiving waters suggesting that nutrient enrichment may be an issue. Effluent water quality samples collected on November 18, 2013, did not exceed any applicable water quality standards or violate any permit conditions.

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

Literature Cited

Miller, W. E., T. E. Maloney, and J. C. Greene. 1978. The *Selenastrum capricornutum* Printz algal assay bottle test. EPA-600/9-78-018. U. S. EPA, Cincinnati, Ohio. 126 p.

Raschke, R. L. and D. A. Schultz. 1987. The use of the algal growth potential test for data assessment. J. Wat. Poll. Cont. Fed. 59(4): 222-227.

Table 1. Effluent limits, Class III Freshwater Criteria, chemical data, and qualifiers

Trademark Nitrogen Corporation	Class III Criteria	Effluent Limits	Effluent
Organic Constituents (µg/L)			
Acenaphthene	-	-	3.0
Metals (µg/L unless otherwise noted)			
Aluminum	-	-	62
Arsenic	≤ 50	-	2.51
Cadmium	≤ 0.563 b	-	0.050 U
Calcium (mg/L)	-	-	88.4
Chromium, total ψ	≤ 194 b	-	1.2 I
Copper	≤ 21.7 b	-	1.12
Iron	≤ 1,000	-	420
Lead	≤ 11.2 b	-	0.20 U
Magnesium (mg/L)	-	-	11.7
Nickel	≤ 120 b	-	0.27 I
Selenium	≤ 5.0	-	0.20 U
Silver	≤ 0.07	-	0.025 U
Sodium	-	-	16.9
Zinc	≤ 277 b	-	5.1 I
Nutrients (mg/L)			
Ortho-phosphate	-	-	0.034
Total Phosphorus	-	-	0.080
Total Ammonia	-	Report	0.17
Un-ionized Ammonia	≤ 0.02 s	< 0.02	< 0.02 c
Nitrate and Nitrite	-	Report	0.009 I
Total Kjeldahl Nitrogen	-	Report	0.38
Organic Nitrogen	-	-	0.21 c
Total Nitrogen	-	≤ 5.0 p	0.389 c
Total Organic Carbon	-	-	3.2
General Physical and Chemical Parameters			
Dissolved Oxygen (mg/L)	≥ 5.0	≥ 5.0	7.84
pH (SU)	6.0 - 8.5	6.0 - 8.5	7.17
Specific Conductance (µmhos/cm)	≤ 1,275	≤ 1,275	564
Temperature (°C)	-	-	24.53
Salinity	-	-	≤ 0.28 c
Total Residual Chlorine (mg/L)	≤ 0.01	-	< 0.03 QU£
Chlorophyll *a* (µg/L) - Corrected	-	-	1.2 I
Phaeophytin (µg/L)	-	-	1.2
Total Suspended Solids (mg/L)	-	≤ 12.0 p	3.0 I
Turbidity (NTU)	< 29 t	-	3.3
Color (true, PCU)	-	-	6.1
Alkalinity (mg CaCO3/L)	-	-	153
CBOD, 5 day (mg/L), N - inhibited	-	-	0.97 IJ
Chloride (mg/L)	-	-	28
Fluoride (mg/L)	≤ 10.0	-	0.27
Sulfate (mg/L)	-	-	86
Flow (MGD)	-	-	Report
Hardness (mg $CaCO_3$)	-	-	268.9 c

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

Value exceeds the Class III Water Quality Criteria or permit limits

a - Annual average

b - Value is calculated based on hardness

c - Value is calculated

p - 24 hour flow proportioned composite

t - Shall not exceed 29 NTUs above background

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

J - Estimated value

Q - Sample held beyond normal holding time

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

£ - measurement taken in the FDEP laboratory

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

Table 2. Measured and predicted algal growth potential (AGP; mg dry weight/L) for total soluble inorganic nitrogen (TSIN) and total nitrogen (TN) limitation of the freshwater species *Pseudokirchneriella subcapitata* and ratios of nitrogen to phosphorus

Trademark Nitrogen Corporation					
Location	AGP (measured)	Predicted AGP (TSIN) ± 20%	Predicted AGP (TN) ± 20%	Inorganic N:P ratio	Total N:P ratio
Effluent	5.47 A	6.8 ± 1.4	14.8 ± 3.0	5.3	4.9

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

Appendix A
Facility Summary

State of Florida
Department of Environmental Protection
Facility Introduction & Summary

PART I: Information gathered prior to sampling event	
Prepared By: Ramandeep Kaur	Contact Number: (813)-470-5771
Facility Name (as it appears on permit): *Trademark Nitrogen Corporation*	Former Names:
NPDES Permit Number: FL0000647	Permit Expiration Date: August 9, 2014
Physical Address: 1216 Old Hopewell Rd., Tampa, FL 34677	
District: SWD	County: Hillsborough
Function of Facility: Industrial Wastewater Treatment Plant	
Facility Type: Industrial Wastewater	Permitted Capacity (MGD):
Mean Flow for previous 12 months for all EXTERNAL outfalls listed in permit (list date range including months): 0.124 MGD (Sept. 2012- Sept. 2013)	
If applicable, Mean Flow for previous 12 months for REUSE outfall(s) (list date range including months): NA	
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):

Sample Point	Description of Monitoring Location
FLW-1	**Effluent flow monitoring location [Recorder located prior to weir discharge]**
EFF-1	**Effluent sampling location just upstream of the weir.**

Description of Permitted Outfall(s):

Surface Water Discharge:

An existing discharge to an Unnamed Ditch to Palm River and ultimately to McKay Bay (Class III Fresh waters WBID #1536A), D-001. The point of discharge is located approximately at Latitude 27° 57' 15.4" N, and Longitude 82° 21' 1.5" W.

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

WASTEWATER TREATMENT:

The wastewater generated consists of boiler blowdown, boiler water softener backwash, cooling tower blowdown, once-through non-contact cooling water, and storm water run-off from the facility. All the wastewater except the cooling water is treated in an unlined, hyacinths vegetated, detention ditch. Non contact cooling water is piped directly to a basin downstream of the vegetated ditch (located between the control structure and the outfall). The ditch system provides for uptake of nutrients and settling of solids. Water is also re-circulated upstream in the ditch system via a manually controlled pump. Aeration and optional pH adjustment are performed prior to discharge at Outfall D-001. Source water for the non-contact cooling water is from an onsite well. Any water from the containment and production areas (storm water) is captured in sumps, stored in tanks and pumped back into in the process.

PART I: Continued

Receiving Waters:	Classification (indicate whether fresh or marine):
McKay Bay through Palm River	Class III Fresh water body

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

Facility ID	Monitoring Date	Outfall Indicator	Parameter Description	Data	Limit	Statistical Base	Units
FL0000647	5/31/2013	001-1	AMMONIA, UNIONIZED (AS NH3)	0.3	0.02	DAILY MX	mg/L

Describe previous FYI and WQBEL study:
2008 FYI report submitted as separate email attachment.

Describe previous or current Enforcement Actions (including WLs):
On April 25 , 2012, settlement of January 27, 2012 WN- 11- 0033-IW- 29-SWD was finalized. The Warning Notice was for missing toxicity test and the un- ionized ammonia exceedances in the discharge. Facility personnel contended that the un- ionized exceedances were associated with the ammonia in the City of Tampa water that was being used at the time due to the failure of the facility's onsite production well .

Describe any violations or problems noted in previous inspection:
None

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

Toxicity Test requirements:

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

a. **Effluent Limitation**
   (1) **Whole effluent chronic toxicity shall not exceed a 25 percent inhibition concentration (IC25) of less than 100% effluent in any test. [Rules 62-302.530(61) and 62-4.241(1)(b), F.A.C.]**
   (2) **Whole effluent acute toxicity shall not exceed a 96 hour LC50 of less than 100% effluent in any test. [Rule 62-302.500(1)(a)4. and 62-4.241(1)(a), F.A.C.]**

b. **Monitoring Frequency**
   (1) **Routine toxicity tests shall be conducted once every three months, the first starting the first day of the second month following permit issuance 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 24-hour composite samples of final effluent shall be collected and used in accordance with the sampling protocol discussed in EPA-821-R-02-013, Section 8.**
   (2) **The first sample shall be used to initiate the test. The remaining two samples shall be collected according to the protocol and used as renewal solutions on Day 3 (48 hours) and Day 5 (96 hours) of the test.**
   (3) **Samples for routine and additional follow-up tests shall not be collected on the same day.**

d. **Test Requirements**
   (1) **Routine Tests: All routine tests shall be conducted using a control (0% effluent) and a minimum of five test dilutions:** 100%, 50%, 25%, 12.5%, **and** 6.25% **final effluent.**
   (2) **The permittee shall conduct a daphnid,** Ceriodaphnia dubia, **Survival and Reproduction Test and a fathead minnow,** Pimephales promelas, **Larval Survival and Growth Test, concurrently.**
   (3) **All test species, procedures and quality assurance criteria used shall be in accordance with** Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, **4th ed., EPA-821-R-02-013. Any deviation of the bioassay procedures outlined herein shall be submitted in writing to the Department for review and approval prior to use. In the event the above method is revised, the permittee shall conduct chronic toxicity testing in accordance with the revised method.**
   (4) **The control water and dilution water shall be moderately hard water as described in EPA-821-R-02-013, Section 7.**

PART I: Continued

List current 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)

	Discharge Limitations			Monitoring Requirements		
Parameters (units)	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Flow (MGD)	**Report**	**Report**	--	**Continuous**	**Recorder**	**FLW-1**
Nitrogen, Total (MG/L)	**3.0**	**5.0**	--	**Weekly**	**24-hour flow proportioned composite**	**EFF-1**
Nitrogen, Total (LBS/Year)	**See Permit Conditions I.A.7 and 8**			**Monthly**	**Calculated**	**EFF-1**
Nitrogen, Nitrate, Total (as N) (MG/L)	**Report**	**Report**	--	**Weekly**	**24-hour flow proportioned composite**	**EFF-1**
Nitrogen, Kjeldahl, Total (as N) (MG/L)	**Report**	**Report**	--	**Weekly**	**24-hour flow proportioned composite**	**EFF-1**
Ammonia, Unionized (MG/L)	**Report**	**0.02 See Permit Cond. I.A.9**	--	**Weekly**	**Calculated**	**EFF-1**
Solids, Total Suspended (MG/L)	**8**	**12**	--	**Weekly**	**24-hour flow proportioned composite**	**EFF-1**
Nitrogen, Ammonia, Total (as N) (MG/L)	**Report**	**Report**	--	**Weekly**	**Grab**	**EFF-1**
Oxygen, Dissolved (DO) (MG/L)	--	--	**5.0**	**Weekly**	**Instantaneous**	**EFF-1**
pH (SU)	--	**8.5**	**6.0**	**Weekly**	**Instantaneous**	**EFF-1**
Specific Conductance (UMHO/CM)	**Report**	**1275 See Permit Cond. I.A.3**	--	**Weekly**	**Instantaneous**	**EFF-1**

PART I: Continued

List current 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)

	Discharge Limitations			Monitoring Requirements		
Parameters (units)	Monthly Average	Daily Maximum	Daily Minimum	Monitoring Frequency	Sample Type	Sample Point
Temperature (F), Water (DEG.F)	**Report**	**92**		**Weekly**	**Instantaneous**	**EFF-1**
Temperature (C), Water (DEG.C)	**See Permit Condition I.A.9**			**Weekly**	**Instantaneous**	**EFF-1**
Whole Effluent Toxicity (Chronic)	**See Permit Condition I.A.4**					**EFF-1**

Trademark Nitrogen Corporation, Permit #: FL0000647; FYI3 PART II: Sampling Event Information	
Date(s) sample collected: November 18, 2013	**Sampler(s):** Ramandeep Kaur, Gitta Schmitt
Temperature (Deg C): 24.53	**pH (SU):** 7.17
Dissolved Oxygen (mg/L): 7.84 (DO% 94.3)	**Conductivity (umhos/cm):** Salinity: 0.27 PPTh
Total Residual Chlorine (mg/L): N/A	**Total Residual Chlorine - after Disinfection (mg/L):** N/A
Method of Chlorination: N/A	**Method of De-chlorination:** N/A
Flow During Sample Collection for each outfall(MGD): 0.029 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): 0.124 MGD	
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: Grab samples were collected from EFF-1- Discharge sampling point.	



Discharge sampling point for EFF-1

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.floridadep.org/labs/sop/index.htm and/or http://www.floridadep.org/labs/qa/index.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. Exceedances of Water Quality Criteria may constitute violations of specific provisions of Chapter 62-302 (F.A.C.) and/ or 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 a violation of 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 a violation of 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 a violation of facility permit limits. Standard reference toxicant (SRT) tests are conducted monthly to ensure quality in toxicity testing.

(4) 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. Raschke and Shultz (1987) found that an AGP above 5.0 mg dry weight/L represents a “problem” threshold for fresh receiving waters, implying nutrient enrichment. High AGP values 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.

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 $\pm$ 20%. When the ratio of nitrogen to phosphorus (N: P) is less than 10:1, nitrogen limitation of algal production is likely. When the N: P ratio is 20:1 or greater, phosphorus limitation is likely (USEPA 2000). For ratios in-between, co-limitation may occur. Production of lower biomass than expected may be evidence of growth inhibition related to toxic compounds present in the water sample tested and may constitute an exceedance of 62-302.530(61), F.A.C.

(5) Chlorophyll *a* Content

Chlorophyll a content is an estimate of algal biomass. High algal biomass implies nutrient stress (Stevenson and Bahls 1999) and may be constitute exceedances of 62-302.530(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	Components	Result	Remark	Units	MDL	PQL
11/18/2013 8:30	COMPOSITE	Chlorophyll/Grain Size/BOD	Biochemical Oxygen Demand-5 Day,N-Inhib	0.97	IJ	mg/L	0.2	2
11/18/2013 8:30	COMPOSITE	Toxicology	Bioassay-Acute-Def-FW-Fish, LC50	100	L	LC50		
11/18/2013 8:30	COMPOSITE	Toxicology	Bioassay-Acute-Def-FW-C.dubia, LC50	100	L	LC50		
11/18/2013 8:30	COMPOSITE	Metals	Nickel	0.27	I	ug/L	0.25	1
11/18/2013 8:30	COMPOSITE	Metals	Aluminum	62		ug/L	5	20
11/18/2013 8:30	COMPOSITE	Metals	Potassium	1.2		mg/L	0.3	1.2
11/18/2013 8:30	COMPOSITE	Metals	Magnesium	11.7		mg/L	0.04	0.16
11/18/2013 8:30	COMPOSITE	Metals	Zinc	5.1	I	ug/L	5	20
11/18/2013 8:30	COMPOSITE	Metals	Silver	0.025	U	ug/L	0.025	0.1
11/18/2013 8:30	COMPOSITE	Metals	Selenium	0.20	U	ug/L	0.2	0.8
11/18/2013 8:30	COMPOSITE	Metals	Cadmium	0.050	U	ug/L	0.05	0.2
11/18/2013 8:30	COMPOSITE	Metals	Arsenic	2.51		ug/L	0.25	1
11/18/2013 8:30	COMPOSITE	Metals	Lead	0.20	U	ug/L	0.2	0.8
11/18/2013 8:30	COMPOSITE	Metals	Copper	1.12		ug/L	0.5	1
11/18/2013 8:30	COMPOSITE	Metals	Sodium	16.9		mg/L	0.5	2
11/18/2013 8:30	COMPOSITE	Metals	Iron	420		ug/L	30	120
11/18/2013 8:30	COMPOSITE	Metals	Chromium	1.2	I	ug/L	0.3	1.2
11/18/2013 8:30	COMPOSITE	Metals	Calcium	88.4		mg/L	0.075	0.3
11/18/2013 8:30	COMPOSITE	Nutrients	Total-P	0.080		mg P/L	0.005	0.05
11/18/2013 8:30	COMPOSITE	Nutrients	NO2NO3-N	0.009	I	mg N/L	0.004	0.01
11/18/2013 8:30	COMPOSITE	Nutrients	Organic Carbon	3.2		mg C/L	0.5	1
11/18/2013 8:30	COMPOSITE	Nutrients	Ammonia-N	0.17		mg N/L	0.002	0.005
11/18/2013 8:30	COMPOSITE	Nutrients	Kjeldahl Nitrogen	0.38		mg N/L	0.08	0.2
11/18/2013 8:30	COMPOSITE	Nutrients	TSS	3	I	mg/L	2	10
11/18/2013 10:15	EFF-1	AGP/LN	Algal Growth Potential	5.47	A	mg DryWt/L	0.3	0.9
11/18/2013 10:15	EFF-1	Chlorophyll/Grain Size/BOD	Chlorophyll-a, Corrected	1.2	I	ug/L	0.55	1.7
11/18/2013 10:15	EFF-1	Chlorophyll/Grain Size/BOD	Phaeophytin-a	1.2		ug/L	0.4	1.2
11/18/2013 10:15	EFF-1	Nutrients	Alkalinity	153		mg CaCO3/L	0.65	2.5
11/18/2013 10:15	EFF-1	Nutrients	Turbidity	3.3		NTU	0.1	0.1
11/18/2013 10:15	EFF-1	Nutrients	Sulfate	86		mg SO4/L	0.4	1
11/18/2013 10:15	EFF-1	Nutrients	O-Phosphate-P	0.034		mg P/L	0.004	0.01
11/18/2013 10:15	EFF-1	Nutrients	Fluoride	0.27		mg F/L	0.035	0.1
11/18/2013 10:15	EFF-1	Nutrients	Chloride	28		mg Cl/L	0.4	1
11/18/2013 10:15	EFF-1	Nutrients	Color (true)	6.1		PCU	2.5	6
11/18/2013 10:15	EFF-1	Pesticides	Norflurazon	0.030	U	ug/L	0.03	0.12
11/18/2013 10:15	EFF-1	Pesticides	Simazine	0.0099	U	ug/L	0.0099	0.04
11/18/2013 10:15	EFF-1	Pesticides	Chlorpyrifos Ethyl	0.0099	UJ	ug/L	0.0099	0.04

Date Sampled	Field ID	Analysis Group	Components	Result	Remark	Units	MDL	PQL
11/18/2013 10:15	EFF-1	Pesticides	Chlorpyrifos Methyl	0.0099	UJ	ug/L	0.0099	0.04
11/18/2013 10:15	EFF-1	Pesticides	Ethion	0.0099	U	ug/L	0.0099	0.04
11/18/2013 10:15	EFF-1	Pesticides	Malathion	0.0099	UJ	ug/L	0.0099	0.04
11/18/2013 10:15	EFF-1	Pesticides	Metribuzin	0.020	U	ug/L	0.02	0.079
11/18/2013 10:15	EFF-1	Pesticides	Mevinphos	0.0099	UJ	ug/L	0.0099	0.04
11/18/2013 10:15	EFF-1	Pesticides	Naled	0.040	U	ug/L	0.04	0.16
11/18/2013 10:15	EFF-1	Pesticides	Prometon	0.020	U	ug/L	0.02	0.079
11/18/2013 10:15	EFF-1	Pesticides	Butylate	0.020	U	ug/L	0.02	0.079
11/18/2013 10:15	EFF-1	Pesticides	Demeton	0.024	UJ	ug/L	0.024	0.095
11/18/2013 10:15	EFF-1	Pesticides	Fonofos	0.0099	UJ	ug/L	0.0099	0.04
11/18/2013 10:15	EFF-1	Pesticides	Parathion Methyl	0.0099	U	ug/L	0.0099	0.04
11/18/2013 10:15	EFF-1	Pesticides	Alachlor	0.059	U	ug/L	0.059	0.24
11/18/2013 10:15	EFF-1	Pesticides	Atrazine Desisopropyl	0.0099	U	ug/L	0.0099	0.04
11/18/2013 10:15	EFF-1	Pesticides	Azinphos Methyl	0.020	U	ug/L	0.02	0.079
11/18/2013 10:15	EFF-1	Pesticides	Metalaxyl	0.040	U	ug/L	0.04	0.16
11/18/2013 10:15	EFF-1	Pesticides	Parathion Ethyl	0.020	U	ug/L	0.02	0.079
11/18/2013 10:15	EFF-1	Pesticides	Bromacil	0.040	U	ug/L	0.04	0.16
11/18/2013 10:15	EFF-1	Pesticides	Ethoprop	0.0050	U	ug/L	0.005	0.02
11/18/2013 10:15	EFF-1	Pesticides	Prometryn	0.020	U	ug/L	0.02	0.079
11/18/2013 10:15	EFF-1	Pesticides	Atrazine	0.0099	U	ug/L	0.0099	0.04
11/18/2013 10:15	EFF-1	Pesticides	Disulfoton	0.0050	UJ	ug/L	0.005	0.02
11/18/2013 10:15	EFF-1	Pesticides	Atrazine Desethyl	0.0099	U	ug/L	0.0099	0.04
11/18/2013 10:15	EFF-1	Pesticides	Diazinon	0.0099	U	ug/L	0.0099	0.04
11/18/2013 10:15	EFF-1	Pesticides	Fenamiphos	0.030	U	ug/L	0.03	0.12
11/18/2013 10:15	EFF-1	Pesticides	Ametryn	0.0099	U	ug/L	0.0099	0.04
11/18/2013 10:15	EFF-1	Pesticides	Hexazinone	0.030	U	ug/L	0.03	0.12
11/18/2013 10:15	EFF-1	Pesticides	Metolachlor	0.059	UJ	ug/L	0.059	0.24
11/18/2013 10:15	EFF-1	Pesticides	Phorate	0.0050	UJ	ug/L	0.005	0.02
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Benzo(k)fluoranthene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Hexachlorobutadiene	2.9	U	ug/L	2.9	12
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Benzo(b)fluoranthene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Anthracene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	4-Nitrophenol	15	U	ug/L	15	58
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9	U	ug/L	1.9	7.8
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Hexachloroethane	2.9	U	ug/L	2.9	12
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Naphthalene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Pyrene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Dimethyl phthalate	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Phenanthrene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	2-Chloronaphthalene	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	2-Chlorophenol	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Acenaphthene	3.0		ug/L	0.19	0.78

Date Sampled	Field ID	Analysis Group	Components	Result	Remark	Units	MDL	PQL
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.9	U	ug/L	2.9	12
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Di-n-butyl phthalate	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Di-n-octyl phthalate	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.9	U	ug/L	2.9	12
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Pentachlorophenol	2.9	U	ug/L	2.9	12
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	2,4-Dichlorophenol	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	2,4-Dimethylphenol	9.7	U	ug/L	9.7	39
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	2,4-Dinitrotoluene	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Benzo(a)anthracene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Butyl benzyl phthalate	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9	U	ug/L	2.9	12
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	2,4-Dinitrophenol	15	UJ	ug/L	15	58
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	3,3'-Dichlorobenzidine	39	U	ug/L	39	160
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9	U	ug/L	1.9	7.8
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Fluorene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9	U	ug/L	1.9	7.8
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Nitrobenzene	1.9	U	ug/L	1.9	7.8
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Phenol	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	2-Nitrophenol	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Acenaphthylene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Diethyl phthalate	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Fluoranthene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Hexachlorobenzene	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.9	U	ug/L	2.9	12
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Benzo(a)pyrene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	2,6-Dinitrotoluene	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Benzidine	97	U	ug/L	97	390
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	1.9	U	ug/L	1.9	7.8
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Chrysene	0.19	U	ug/L	0.19	0.78
11/18/2013 10:15	EFF-1	Priority Organic Pollutants	Isophorone	0.97	U	ug/L	0.97	3.9
11/18/2013 10:15	EFF-1	Field Parameter	Specific Conductance	564		umhos/cm		
11/18/2013 10:15	EFF-1	Field Parameter	Dissolved Oxygen	7.84		mg/L		
11/18/2013 10:15	EFF-1	Field Parameter	Temperature	24.53		C		
11/18/2013 10:15	EFF-1	Field Parameter	pH	7.17				
11/18/2013 10:15	EFF-1	Field Parameter	Sample Depth	0.203		m		

Date Sampled	Field ID	Analysis Group	Components	Result	Remark	Units	MDL	PQL
11/18/2013 10:50	FIELD BLANK	Metals	Magnesium	0.040	U	mg/L	0.04	0.16
11/18/2013 10:50	FIELD BLANK	Metals	Silver	0.025	U	ug/L	0.025	0.1
11/18/2013 10:50	FIELD BLANK	Metals	Arsenic	0.25	U	ug/L	0.25	1
11/18/2013 10:50	FIELD BLANK	Metals	Cadmium	0.050	U	ug/L	0.05	0.2
11/18/2013 10:50	FIELD BLANK	Metals	Selenium	0.20	U	ug/L	0.2	0.8
11/18/2013 10:50	FIELD BLANK	Metals	Potassium	0.30	U	mg/L	0.3	1.2
11/18/2013 10:50	FIELD BLANK	Metals	Sodium	0.50	U	mg/L	0.5	2
11/18/2013 10:50	FIELD BLANK	Metals	Chromium	0.30	U	ug/L	0.3	1.2
11/18/2013 10:50	FIELD BLANK	Metals	Calcium	0.075	U	mg/L	0.075	0.3
11/18/2013 10:50	FIELD BLANK	Metals	Copper	0.50	U	ug/L	0.5	1
11/18/2013 10:50	FIELD BLANK	Metals	Lead	0.20	U	ug/L	0.2	0.8
11/18/2013 10:50	FIELD BLANK	Metals	Iron	30	U	ug/L	30	120
11/18/2013 10:50	FIELD BLANK	Metals	Aluminum	5.0	U	ug/L	5	20
11/18/2013 10:50	FIELD BLANK	Metals	Nickel	0.25	U	ug/L	0.25	1
11/18/2013 10:50	FIELD BLANK	Metals	Zinc	5.0	U	ug/L	5	20
11/18/2013 10:50	FIELD BLANK	Nutrients	NO2NO3-N	0.004	U	mg N/L	0.004	0.01
11/18/2013 10:50	FIELD BLANK	Nutrients	Total-P	0.002	U	mg P/L	0.002	0.005
11/18/2013 10:50	FIELD BLANK	Nutrients	Color (true)	2.5	U	PCU	2.5	6
11/18/2013 10:50	FIELD BLANK	Nutrients	Organic Carbon	0.62	I	mg C/L	0.5	1
11/18/2013 10:50	FIELD BLANK	Nutrients	Alkalinity	0.65	U	mg CaCO3/L	0.65	2.5
11/18/2013 10:50	FIELD BLANK	Nutrients	Chloride	0.20	U	mg Cl/L	0.2	0.5
11/18/2013 10:50	FIELD BLANK	Nutrients	Fluoride	0.035	U	mg F/L	0.035	0.1
11/18/2013 10:50	FIELD BLANK	Nutrients	Sulfate	0.20	U	mg SO4/L	0.2	0.5
11/18/2013 10:50	FIELD BLANK	Nutrients	Ammonia-N	0.002	U	mg N/L	0.002	0.005
11/18/2013 10:50	FIELD BLANK	Nutrients	Kjeldahl Nitrogen	0.080	U	mg N/L	0.08	0.2
11/18/2013 10:50	FIELD BLANK	Nutrients	Turbidity	0.10	U	NTU	0.1	0.1
11/18/2013 10:50	FIELD BLANK	Pesticides	Chlorpyrifos Ethyl	0.0097	UJ	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Pesticides	Parathion Ethyl	0.019	U	ug/L	0.019	0.078
11/18/2013 10:50	FIELD BLANK	Pesticides	Parathion Methyl	0.0097	U	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Pesticides	Atrazine	0.0097	U	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Pesticides	Ethion	0.0097	U	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Pesticides	Metalaxyl	0.039	U	ug/L	0.039	0.16
11/18/2013 10:50	FIELD BLANK	Pesticides	Simazine	0.0097	U	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Pesticides	Atrazine Desisopropyl	0.0097	U	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Pesticides	Demeton	0.023	UJ	ug/L	0.023	0.093
11/18/2013 10:50	FIELD BLANK	Pesticides	Ethoprop	0.0049	U	ug/L	0.0049	0.019
11/18/2013 10:50	FIELD BLANK	Pesticides	Malathion	0.0097	UJ	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Pesticides	Naled	0.039	U	ug/L	0.039	0.16
11/18/2013 10:50	FIELD BLANK	Pesticides	Phorate	0.0049	UJ	ug/L	0.0049	0.019
11/18/2013 10:50	FIELD BLANK	Pesticides	Ametryn	0.0097	U	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Pesticides	Bromacil	0.039	U	ug/L	0.039	0.16
11/18/2013 10:50	FIELD BLANK	Pesticides	Hexazinone	0.029	U	ug/L	0.029	0.12
11/18/2013 10:50	FIELD BLANK	Pesticides	Fenamiphos	0.029	U	ug/L	0.029	0.12

Date Sampled	Field ID	Analysis Group	Components	Result	Remark	Units	MDL	PQL
11/18/2013 10:50	FIELD BLANK	Pesticides	Metolachlor	0.058	UJ	ug/L	0.058	0.23
11/18/2013 10:50	FIELD BLANK	Pesticides	Metribuzin	0.019	U	ug/L	0.019	0.078
11/18/2013 10:50	FIELD BLANK	Pesticides	Prometon	0.019	U	ug/L	0.019	0.078
11/18/2013 10:50	FIELD BLANK	Pesticides	Atrazine Desethyl	0.0097	U	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Pesticides	Azinphos Methyl	0.019	U	ug/L	0.019	0.078
11/18/2013 10:50	FIELD BLANK	Pesticides	Fonofos	0.0097	UJ	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Pesticides	Norflurazon	0.029	U	ug/L	0.029	0.12
11/18/2013 10:50	FIELD BLANK	Pesticides	Butylate	0.019	U	ug/L	0.019	0.078
11/18/2013 10:50	FIELD BLANK	Pesticides	Chlorpyrifos Methyl	0.0097	UJ	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Pesticides	Prometryn	0.019	U	ug/L	0.019	0.078
11/18/2013 10:50	FIELD BLANK	Pesticides	Alachlor	0.058	U	ug/L	0.058	0.23
11/18/2013 10:50	FIELD BLANK	Pesticides	Disulfoton	0.0049	UJ	ug/L	0.0049	0.019
11/18/2013 10:50	FIELD BLANK	Pesticides	Mevinphos	0.0097	UJ	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Pesticides	Diazinon	0.0097	U	ug/L	0.0097	0.039
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	2,4-Dichlorophenol	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	2-Chloronaphthalene	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	2-Methyl-4,6-dinitrophenol	2.9	U	ug/L	2.9	12
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Benzo(b)fluoranthene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Bis(2-ethylhexyl)phthalate	1.9	U	ug/L	1.9	7.7
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Hexachlorocyclopentadiene	2.9	U	ug/L	2.9	12
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Indeno(1,2,3-cd)pyrene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	N-Nitrosodiphenylamine/ Diphenylamine	2.9	U	ug/L	2.9	12
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	2,4,6-Trichlorophenol	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	3,3'-Dichlorobenzidine	38	U	ug/L	38	150
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	4-Bromophenyl phenyl ether	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Isophorone	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Phenol	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	2,4-Dinitrophenol	14	UJ	ug/L	14	58
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	2-Chlorophenol	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	4-Nitrophenol	14	U	ug/L	14	58
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Hexachlorobenzene	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	1,2,4-Trichlorobenzene	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Acenaphthylene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Bis(2-chloroethyl)ether	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Dimethyl phthalate	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	N-Nitrosodimethylamine	1.9	U	ug/L	1.9	7.7
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	2-Nitrophenol	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Anthracene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Benzo(a)anthracene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Benzo(g,h,i)perylene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Bis(2-chloroethoxy)methane	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Di-n-octyl phthalate	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	N-Nitrosodi-n-propylamine	1.9	U	ug/L	1.9	7.7

Date Sampled	Field ID	Analysis Group	Components	Result	Remark	Units	MDL	PQL
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Phenanthrene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Pyrene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	2,6-Dinitrotoluene	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Benzidine	96	U	ug/L	96	380
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Benzo(a)pyrene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Dibenzo(a,h)anthracene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Diethyl phthalate	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Nitrobenzene	1.9	U	ug/L	1.9	7.7
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	2,4-Dinitrotoluene	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Benzo(k)fluoranthene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Butyl benzyl phthalate	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Fluoranthene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Hexachloroethane	2.9	U	ug/L	2.9	12
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Naphthalene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Pentachlorophenol	2.9	U	ug/L	2.9	12
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	2,4-Dimethylphenol	9.6	U	ug/L	9.6	38
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	4-Chloro-3-methylphenol	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	4-Chlorophenyl phenyl ether	1.9	U	ug/L	1.9	7.7
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Acenaphthene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Bis(2-chloroisopropyl)ether	2.9	U	ug/L	2.9	12
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Chrysene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Di-n-butyl phthalate	0.96	U	ug/L	0.96	3.8
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Fluorene	0.19	U	ug/L	0.19	0.77
11/18/2013 10:50	FIELD BLANK	Priority Organic Pollutants	Hexachlorobutadiene	2.9	U	ug/L	2.9	12

EPA End Sheet

The Bioassay of Trademark Nitrogen Corporation effluent sampled on November 18, 2013. NPDES #FL0000647.

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	FL0000647	11 12	131118	18	B	19 S	20 2

Remarks

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The Priority Pollutants Analysis of Trademark Nitrogen Corporation effluent sampled on November 18, 2013. NPDES #FL0000647.

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	FL0000647	11 12	131118	18	X	19 S	20 2

Remarks

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Biological Analyses of Trademark Nitrogen Corporation effluent sampled on November 18, 2013. NPDES #FL0000647.

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	FL0000647	11 12	131118	18	S	19 S	20 2

Remarks

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