

Narragansett Bay Commission 2012 Data Report



**Prepared by the staff of the Environmental Monitoring &
Data Analysis Section**

April 1, 2013

Narragansett Bay Commission
Environmental Monitoring and Data Analysis Section 2012 Data Report

Introduction

The Narragansett Bay Commission	5
Environmental Monitoring and Data Analysis Program Overview	7
Acknowledgements	8

Field's Point and Bucklin Point Plant Data

Introduction	10
Collection of Samples at Field's Point and Bucklin Point	11
Composite Sampling at Field's Point	11
Composite Sampling at Bucklin Point	12
Sample collection of TSS/BOD and Fecal Coliform Analysis at Field's Point and Bucklin Point	13
Sample collection for Trace Metals and Cyanide Analysis at Field's Point and Bucklin Point	14
Sample collection for Nutrients Analysis at Field's Point and Bucklin Point	15
Sample collection for Oil and Grease at Field's Point and Bucklin Point	16
Sample collection for Effluent Dissolved Metals Analysis at Field's Point and Bucklin Point	17
Collection of final effluent for Quarterly Bioassay Analyses	17
Sample collection for Sludge Analysis at Field's Point and Bucklin Point	18
Sample collection for EPA Priority Pollutants/VOCs	19
Sanitary Manhole Sampling	19
Significant Industrial User (SIU) Sampling	20
Septage Sampling	21

<u>NBC Receiving Water Monitoring Activities</u>	22
River and Bay Nutrient Monitoring	23
Urban River Pathogen Monitoring	28
Bay Pathogen Monitoring	31
Combined Sewer Outfalls Monitoring	33
Narragansett Bay Fixed Site Water Quality Network	33

Figures

Figure 1: NBC River Nutrient Sampling Stations	26
Figure 2: NBC Bay Nutrient Sampling Stations	27
Figure 3: NBC River Bacteria Sampling Stations	30
Figure 4: NBC Bay Bacteria Sampling Stations	32
Figure 5: NBC Fixed Site Water Quality Monitoring Stations	35
Figure 6: NBC’s Snapshot of Upper Narragansett Bay Website	39

Tables

Table 1: Field’s Point TSS, BOD, and Fecal Coliform Data
Table 2: Bucklin Point TSS, BOD, and Fecal Coliform Data
Table 3: Field’s Point Enterococci Data
Table 4: Bucklin Point Enterococci Data
Table 5: Field’s Point Influent Metals and Cyanide (Cd-CN)
Table 6: Field’s Point Influent Metals (Al-Mo)
Table 7: Field’s Point Effluent Metals and Cyanide (Cd-CN)
Table 8: Field’s Point Effluent Metals (Al-Mo)
Table 9: Bucklin Point Influent Metals and Cyanide (Cd-CN)
Table 10: Bucklin Point Influent Metals (Al-Sn)
Table 11: Bucklin Point Effluent Metals and Cyanide (Cd-CN)
Table 12: Bucklin Point Effluent Metals (Al-Sn)
Table 13: Field’s Point Influent and Effluent Nutrients
Table 14: Bucklin Point Influent and Effluent Nutrients
Table 15: Bucklin Point and Field’s Point Oil and Grease Data
Table 16: Field’s Point Effluent Dissolved Metals

Table 17: Bucklin Point Effluent Dissolved Metals
Table 18: Field's Point Bioassay Data
Table 19: Bucklin Point Bioassay Data
Table 20: Field's Point Sludge Analysis
Table 21: Field's Point Sludge Summary
Table 22: Bucklin Point Sludge Analysis
Table 23: Bucklin Point Sludge Summary
Table 24: EPA Priority Pollutants Data Field's Point
Table 25: EPA Priority Pollutants Data Bucklin Point
Table 26: Sanitary Manhole Sampling Data
Table 27: NBC Significant Industrial User Sample Results
Table 28: Septage Sampling Data
Table 29: Septage Summary 1996-2012
Table 30: River and Bay Nutrients Data
Table 31: Woonasquatucket, West, Providence and Seekonk Rivers Fecal Coliform Data
Table 32: Moshassuck, Blackstone and Pawtuxet Rivers Fecal Coliform Data
Table 33: Bay Fecal Coliform Data
Table 34: Bay Enterococci Data
Table 35: CSO Wet Weather Overflow North Diversion Structure CSO 2A
Table 36: CSO Wet Weather Overflow Dorrance Street CSO 09
Table 37: CSO Wet Weather Overflow Bucklin Brook CSO 218

The Narragansett Bay Commission

The Narragansett Bay Commission, or the NBC, was created in 1980 by the R.I. General Assembly to reduce the amount of pollutants Providence's Field's Point Wastewater Treatment Facility was discharging into Narragansett Bay and its tributaries. At that time, nearly 65 million gallons of untreated sewage flowed into Rhode Island's waterways every day, resulting in temporary and permanent closures of shellfishing beds in Upper Narragansett Bay, violations of federal laws, and most importantly, a serious threat to public health and the region's environmental and economic well-being.



NBC EMDA staff Installing an Industrial Manhole Sampler

The NBC acquired the facility from the City of Providence in 1982 and with statewide voter approval of an \$87.7 million bond referendum; the NBC transformed this dilapidated facility, the third oldest wastewater treatment plant in the nation, into a state-of-the-art award winning facility. As the largest secondary wastewater treatment facility in Rhode Island and the second largest in New England, the Field's Point Wastewater Treatment Facility provides preliminary and primary treatment for up to 200 million gallons per day (MGD) of wastewater, secondary treatment for up to 91 MGD and had an average daily flow to the facility of 40.06 MGD in 2012.

Field's Point is currently completing construction on biological nutrient removal upgrades that will reduce effluent nitrogen to 5 mg/l.

In 1992, the R.I. General Assembly expanded the NBC's mission by placing it in charge of the Bucklin Point Wastewater Treatment Facility in East Providence. This facility is designed to provide preliminary and primary treatment for up to 116 million gallons per day, secondary treatment for up to 46 million gallons per day, and had an average daily flow to the facility of 17.78 MGD in 2012. During 1999, supervisory management of this plant was privatized to Professional Services Group (PSG), and is currently managed by Suez Environment/United Water. In the last several years the plant has undergone major upgrades to include new screening and grit facilities, wet weather facilities capable of providing primary treatment and disinfection, new fine bubble-diffusion aeration system, nutrients removal facilities, and ultraviolet disinfection of wastewater, eliminating the need to add chemicals to disinfect and dechlorinate wastewater prior to discharge.



NBC Laboratory staff Preparing Oil & Grease Samples for Analysis

The NBC now owns and operates the state's two largest wastewater treatment facilities and provides quality wastewater collection and treatment services to about 360,000 persons and 7,700 commercial and industrial customers located in Providence,

North Providence, Johnston, Pawtucket, Central Falls, Cumberland, Lincoln, the northern portion of East Providence, and small sections of Cranston and Smithfield.

Environmental Monitoring and Data Analysis Program Overview

The Environmental Monitoring and Data Analysis (EMDA) section evolved from the Pretreatment section, where prior to 1992, two Engineering Technicians, assisted by Pretreatment staff, implemented the industrial and manhole monitoring activities. With the acquisition of the Bucklin Point Wastewater Treatment Facility in 1992, there were two separate and distinct Pretreatment Programs, one for each treatment facility. Shortly thereafter, the two Pretreatment Programs were united and the Environmental Monitoring Program and Data Analysis section was created within the NBC Planning, Policy and Regulation Division. Over the years, the Environmental Monitoring and Data Analysis section has evolved and is now responsible not only for industrial and manhole monitoring activities, but for all aspects of environmental monitoring for the NBC. EMDA staff conduct compliance monitoring for both treatment plants, river monitoring to support NBC's Interceptors and Maintenance section in their efforts to quickly locate and stop dry weather discharges of Combined Sewer Overflows (CSO), monitoring the upper Bay for fecal coliform contamination to determine the effects of NBC CSOs on this area of the Bay and as support to NBC Engineering staff to assess the effectiveness of the CSO abatement tunnel project, river and upper Bay monitoring for nutrients to assess the impact of NBC nutrient removal upgrades, sampling of suspected hazardous waste found in sewers during routine line cleanings and in other NBC facilities during decommissioning and demolition activities, and other sampling as needed. EMDA staff also conducts many sampling initiatives to evaluate effectiveness of new technologies, such as nutrient removal and ultraviolet disinfection.

In 2002, the NBC was awarded an EPA grant to develop a website to provide real time data of the upper Bay receiving waters of the NBC plant outfalls. A fixed site station was constructed at an abandoned pier at Phillipsdale Landing in East Providence, and a state-of-the-art monitoring buoy was acquired and deployed at Bullock's Reach, just north of Conimicut Point in upper Narragansett Bay. These sites provided invaluable data to the RI DEM and the scientific community over the past several years and played a key role to these stakeholders in their investigation to understand the August 2003 fish kills associated with hypoxic events in Narragansett Bay. As a result of these fish kill events, the Governor established a Bays, Rivers and Watershed Coordination Team, of which the NBC is a member. The NBC is also a valuable contributing member of the Rhode Island Environmental Monitoring Collaborative, a subgroup of the Coordination team formed by Governor Carcieri. The NBC has coordinated monitoring activities with other agencies performing monitoring statewide, and as a result the NBC EMDA section's role in environmental monitoring and compliance issues continues to expand as compliance issues become ever more complex.

The Environmental Monitoring & Data Analysis Section continues to perform the following monitoring activities:

- Daily sampling of NBC's two plants to satisfy RIPDES requirements;
- Sampling of each Significant Industrial User at least twice annually to satisfy and exceed EPA Pretreatment Program mandates;
- Weekly monitoring of surveillance manholes to satisfy EPA mandates;
- Monitoring of sanitary manholes to obtain data required for local limits development;
- Weekly sampling of the urban rivers for bacteria analysis;
- Sampling of 19 locations in the NBC receiving waters of the Providence and Seekonk Rivers for bacteria analysis;
- Bimonthly sampling of rivers entering the upper Bay from Massachusetts and Rhode Island for nutrients;
- Sampling of 7 locations at surface and bottom in the Providence and Seekonk Rivers for nutrients;
- Mapping of the Providence and Seekonk Rivers for chlorophyll, DO, temperature and salinity
- Special project sampling for the NBC Engineering, Operations and other sections to assist in facilities planning, improvements to plant operations, etc;
- Routine maintenance of the Fixed Site Water Quality Monitoring buoy and land-based dock station to ensure accurate data to state partners and the public.

The NBC EMDA section has always done an excellent job of implementing monitoring initiatives; however in the past the public has had to specifically request data results of the NBC's sampling activities. In 2005 an annual report summarizing the 2004 monitoring data and activities of the Narragansett Bay Commission's Environmental Monitoring and Data Analysis section was published. This was a great accomplishment to be able to disseminate all of the monitoring data collected by EMDA and provide statistical analyses and discern trends and fluctuations in the data over time; however, because of the vast body of data collected and analysis that was done for each data set, this type of report became too large and cumbersome to create yearly. Therefore, in order to get the data to the public sooner, a more streamlined presentation of data without a formal analysis was created for monitoring results for each year since 2007. This report serves as a format for public dissemination of all 2012 EMDA monitoring data.

Acknowledgements

This report has been prepared by the staff of the Environmental Monitoring and Data Analysis section, under the general direction of Thomas P. Uva, Director of Planning, Policy and Regulation. This report is a summation of the collective efforts by the Environmental Monitors and Monitoring Field Supervisors that collected in excess of 27,436 samples during 2012. It represents the countless hours of processing, compiling, analyzing and interpreting all the data by the Environmental Scientists and Assistant Manager, and data entry and general assistance by clerical staff. The laboratory staff analyzed all of the samples collected by the EMDA section. In total, during 2012, the Laboratory generated 106,436 analyses from the samples delivered to it. A special acknowledgement and thank you to the NBC EMDA, Laboratory and other PP&R staffs that made this report possible:

John Motta
Environmental Monitoring Manager

James Kelly
Assistant Environmental Monitoring Manager

Catherine Oliver, Christine Comeau, Pamela Reitsma
Environmental Scientists

Sara Nadeau, Rebecca Songolo, Jeffrey Tortorella
Monitoring Field Supervisors

*Kevin Wilcox, Stephen DePasquale, Jared Urban, Michael Golenia, Jonathan Isaza,
Marcos Quinones, David Thacker, and Fern Johnson*
Environmental Monitors

Joanne Parker
Data Clerk

Jamie Cook
Data Clerk

Walter Palm
Laboratory Manager

Angelina Glater
Assistant Laboratory Manager

Lauren Lessuck
Senior Organic Chemist

Elizabeth Teixeira
Senior Environmental Chemist

Nora-Jean Lough
Biologist

Amanda Henry
Sample Coordinator

Kim Sandbach, Kara Taglianetti
Environmental Chemists

Janet Luu, Cheryl Manger
Chemists

Ralph Ruggiano, Edward Davies, Leslie Ahlborg, Robert Noonan, William Beaudry
Laboratory Technicians

Katherine Archambault
Laboratory Clerk

The NBC also acknowledges the support given to the EMDA section by the NBC Chairman, Commissioner Vincent J. Mesolella, the Board of Commissioners, the Executive Director, Raymond Marshall, and all the NBC Directors.

Field's Point and Bucklin Point POTW **Sample Collection Methodology and Practices**

Introduction

It is the Narragansett Bay Commission's (NBC) mission to protect and enhance the water quality of Narragansett Bay and its tributaries through careful collection and treatment of wastewater from residences, businesses and industries in the NBC District. The Environmental Monitoring and Data Analysis (EMDA) section's primary objective is to perform routine and adequate sampling of a wide variety of parameters to ensure that both the Field's Point and Bucklin Point Wastewater Treatment Facilities (WWTF) are effectively meeting operational and RIPDES permit requirements. An extensive sampling schedule employing composite and grab samples within the two wastewater treatment facilities at the raw influent, primary influent, primary effluent, mixed liquor, return activated sludge, final sludge, and final effluent are necessary to keep abreast of what is introduced to and discharged from each plant, and the removal efficiencies of all conventional and non-conventional pollutants. Synthesis of this data is a continuous and ongoing process with monthly evaluations required for RIPDES discharge monitoring reports as well as periodic evaluation of the local limits that the pretreatment section uses to regulate industrial and commercial users (SIU) and ensure that no upset, pollutant pass-through, process interference, or discharge permit limit violations occur. Clean sampling and sample-handling techniques, high quality laboratory measurements, and ease of access to this data are the necessary ingredients to providing accurate data to quickly identify potential problems within the plant, and to routinely reassess the removal efficiency of pollutants. All sample collection, preservation, and storage at the Field's Point and Bucklin Point WWTFs are performed with strict adherence to U.S. EPA protocols. The current RIPDES permits require sampling of the influent and effluent wastewater streams at the Field's Point and Bucklin Point WWTFs for toxic and conventional pollutants on a regular basis.

NBC's continuing goal is to improve receiving water quality by limiting the impact of WWTF effluent on Narragansett Bay. The NBC has analyzed and tracked the toxic pollutant loading trends at its treatment facilities since the creation of the agency. EMDA works in conjunction with the Pretreatment, Laboratory, Operations, and Engineering Sections of NBC to conduct sampling of wastewater from its sources, throughout its

collection and treatment systems, and ultimately to its final fate as either sludge or as effluent in Narragansett Bay. In support of NBC's mission and RIDPES requirements, the EMDA section collected 27,149 samples and the NBC lab analyzed these samples for 106,436 parameters during 2012. WWTF sampling data for 2012 is attached and can be found in Tables 1–37. Table numbers are also referred to in each section below.

Collection of Samples at Field's Point and Bucklin Point

Samples collected to evaluate the WWTF process are either composite samples collected over a particular time period or grab samples. Composite samples are formed by combining discrete samples taken at periodic points in time. Refrigerated ISCO autosamplers are used throughout Field's Point and Bucklin Point to collect composite samples on a regular predetermined basis. All refrigerated autosamplers are kept at 4°C. Grab samples are discrete samples collected at particular time periods but placed into separate sample bottles and are analyzed as individual samples. The differences in sampling between Field's Point and Bucklin Point mainly exist in the influent sampling at the interceptors into the facility and the retention time used to determine when influent and effluent samples are collected. Field's Point influent samples are collected on a time-paced basis at the single interceptor that feeds the facility, after bar screening and prior to grit removal tanks. Influent and effluent samples are collected 12-hours apart with the goal of sampling the same parcel of water as it enters the plant for treatment, and after treatment to evaluate the performance of the plant. Bucklin Point influent samples are collected on a time-paced basis from the two interceptors that feed the facility. Composite samples are collected from both interceptors, the Blackstone Valley Interceptor (BVI) and the East Providence Interceptor (EPI) and mixed flow proportionally. Influent and effluent samples are collected 17-hours apart with the goal of sampling the same parcel of water as it enters the plant for treatment, and after treatment to evaluate the performance of the plant. At both facilities final effluent sample collections are time-paced and downstream of all treatment processes. The final effluent represents wastewater after complete treatment just prior to entering the receiving waters of the Providence or Seekonk River. Collection of the final effluent sample at Field's Point takes place after chlorination and dechlorination of the wastewater, in the outfall channel downstream of the chlorine contact tank. The final effluent sample at Bucklin Point is collected downstream of the UV chamber in the UV building. The following are more detailed descriptions of composite sampling at both WWTFs.

Composite Sampling at Field's Point

Composite sampling at Field's Point is done on a time paced basis. All composite samplers sample the waste stream at 30-minute intervals and take a volume of 100 ml. The samples collected are time-paced 24-hour composites of the wastewater at a sampling location.

EMDA uses refrigerated ISCO 3700, ISCO 4700, and ISCO 6712 programmable samplers. The samplers are located at the Influent/Grit Building, Primary Influent, Primary Effluent, Mixed Liquor East and Mixed Liquor West, Wet Weather Tank

Influent and Effluent, and Final Effluent. Temperatures of the samplers are always maintained at 4 degrees centigrade (acceptable range is 1-6 degrees Centigrade). The Influent Daily/Metals, Primary Effluent, Effluent Daily, and Back-up samplers are configured for 24-hour time-paced composite sampling.

Two types of suction tubing are used for sampling at FPWWTF. Influent and Effluent peristaltic samplers collecting samples for trace metals use suction lines lined with Teflon®. Teflon® has characteristics that enable it to be cleaned to trace metal grade. Extra care is required in handling this tubing to prevent cracking due to its brittle nature. Peristaltic samplers not collecting trace metals samples use Tygon® tubing as suction lines. This tubing is much more resilient and pliable. The Teflon® and Tygon® suction lines both measure ½” in outer diameter and ⅜” in inner diameter. Sampler suction lines are changed semi-annually and pump tubing changed every month. A dilute sodium hypochlorite solution is used to clean both the Teflon® and Tygon® suction line and pump tubing of the automatic samplers weekly. This procedure takes place at the auto sampler collection site. The Teflon® tubing is also acid washed monthly.

The United States Environmental Protection Agency (USEPA) released an assessment of historically used trace metals sampling procedures. The report found that the levels of contamination from the sampling/vessel cleaning process resulted in metals levels higher than the bodies of water being sampled. Therefore, USEPA made a series of recommended sampling techniques for clean sampling that EMDA follows specifically. For Influent/ Grit Building and Final Effluent auto samplers that collect wastewater analyzed for trace metals and nutrients, special clean sampling methods are used to reduce contamination. The method requires acid cleaning of composite containers prior to use and acid cleaning of suction and pump tubing. Blanks are collected to monitor and verify proper cleaning. A Nalgene polyethylene carboy is used to collect composite samples for analyses of these parameters.

Composite sampling at Bucklin Point

Composite sampling at Bucklin Point is time paced. Composite sampling takes place at the Influent, Primary Effluent and Final Effluent (FE). Composite samples from the Blackstone Valley Interceptor (BVI) and the East Providence Interceptor (EPI) are combined and analyzed together for all parameters. The autosamplers sample the wastestream at 30 minute intervals and take a volume of 100 ml. The samples collected are time-paced, 24-hour composites of the wastewater at a sampling location.

All automatic samplers used at the Bucklin Point WWTF are refrigerated peristaltic pump samplers. Automatic samplers used include the ISCO sampler models 3700, 4700, 6712., and Sigma sampler model 9000. All sample locations use the ISCO samplers, except for the Primary Treatment Effluent which uses the Sigma sampler. The samplers are configured for 24-hour time paced composite sampling. Temperatures of the refrigerated samplers are always maintained at 4 degrees centigrade (acceptable range is 1-6 degrees centigrade) and their temperature is documented three times a day by EMDA staff. Each

composite carboy container has been marked with a permanent marker to identify the sampling location at which it is used.

Influent and effluent peristaltic samplers collecting samples for trace metals use special suction lines lined with Teflon®. Teflon® has characteristics that enable it to be cleaned to trace metal grade. Extra care is required in handling this tubing to prevent cracking due to its brittle nature. Peristaltic samplers not collecting trace metals samples use Tygon® tubing as suction lines. This tubing is much more resilient and pliable. The Teflon® and Tygon® suction lines both measure ½” in outer diameter and ⅜” in inner diameter. Sampler suction lines are changed semi-annually and pump tubing changed every month. A dilute sodium hypochlorite solution is used to clean both the Teflon® and Tygon® suction line and pump tubing of the automatic samplers weekly. This procedure takes place at the auto sampler collection site. The Teflon® tubing is also acid washed monthly.

As mentioned above for Field’s Point, Bucklin Point also uses the EPA recommended clean sampling techniques for sample collection of wastewater for metals and nutrients analyses. A Nalgene polyethylene carboy is used to collect these “clean” composite samples at Bucklin Point. The samplers are equipped with Teflon® (3/8” inner diameter) tubing and a suction line strainer is not employed to reduce contamination. The method requires acid cleaning of composite containers prior to use and acid cleaning of suction and pump tubing. Blanks are collected to monitor and verify proper cleaning. A Nalgene polyethylene carboy is used to collect composite samples for analyses of these parameters. Cleaning and handling of samplers, pump and suction tubing and composite carboys are also outlined in the following sections under the specific parameters analyzed.

Sample Collection for Total Suspended Solids (TSS), Biological Oxygen Demand (BOD) and Fecal Coliform

NBC’s RIPDES permits require sampling of TSS and BOD daily using 24-hour composites at both the influent and effluent. As stated above, the influent and effluent samplers collect samples from the waste stream at 30 minute intervals. Carboys with collected sample water are brought to the NBC laboratory for analyses every morning around 8:00 am. EMDA staff cleans sample carboys used for TSS and BOD collections in the dishwasher after each use and carboys are replaced as necessary. Tygon® tubing is used with these samplers. A dilute sodium hypochlorite solution is used to clean the suction line and pump tubing weekly. Sampler suction lines are changed semi-annually and pump tubing changed every month.

At Field’s Point WWTF two grab samples are taken at the effluent per flow day for fecal coliform bacteria analyses. EMDA staff takes the first fecal coliform sample at 08:00; operations staff takes the second sample in the time frame of 03:00-05:00. The final fecal coliform value for that day is a geomean of the two grab samples. At Bucklin Point WWTF four effluent grab samples are taken throughout the day for fecal coliform bacteria. A geomean is then determined from these results and is assigned as the fecal coliform value for that day.

The procedure for fecal coliform sampling at both WWTFs is as follows:

- Wearing new, clean Nitrile gloves place sample container in sampling device (an open-ended PVC cylinder with the bottle held in place by a small screw running through the cylinder body. A line is attached to the cylinder body for lowering into the water)
- Open the sterile 250-ml container. Do not use if seal is broken before opening. Make sure that the sodium thiosulfate pellet remains in the bottle throughout the collection process. This chemical neutralizes residual chlorine if present.
- Place sampling device into the center of the stream, 6 inches below surface, to collect sample.
- Container must be filled to the “EPA FILL LINE”.
- Remove coliform bottle from the sampling device and close container.
- Secure and seal the sample cover.
- Place label on container with time, date, collector’s initials and the operator collected TRC value in ppm.
- Place in cooler with ice and transport directly to NBC laboratory.

In 2010, based upon information from the DEM that our forthcoming new RIPDES permits are likely to include effluent limitations for enterococci rather than fecal coliform, a study was initiated to analyze every plant bacteria sample for both fecal coliform and enterococci in order to be able to evaluate plant performance against the new permit limits which are expected to be 35 MPN/100 ml monthly geomean and 276 MPN/100 mL for a daily maximum geomean. The daily maximum limit could vary considerably depending on how the DEM characterizes our receiving waters. If our receiving waters are deemed “Moderate full body contact recreation” then the limits would be 124 MPN/100 mL. If they are deemed “Lightly used full body contact recreation” then 276 MPN/100 mL would be the limit. If “Infrequently used full body contact recreation” is designated then the limit would be 500 MPN/mL. The study began at Field’s Point on May 28th and June 8th at Bucklin Point.

TSS, BOD and fecal coliform data for 2012 can be found in the attached Tables 1 and 2. Enterococci data can be found in Tables 3 and 4.

Sample Collection for Metals and Cyanide

Toxic pollutant monitoring requirements include 24-hour composite sample collections for the analysis of copper, mercury, nickel, silver, zinc and cyanide at Field’s Point and copper, lead, mercury, nickel, silver, zinc, hexavalent chromium and cyanide at Bucklin Point. Other metals that are analyzed for but are not required by the RIPDES permits include arsenic, aluminum, cadmium, iron, selenium, molybdenum, and tin. Metals and cyanide measurements are required twice-weekly at both plants except for arsenic, selenium, and molybdenum which are collected once per week in the influent and once per month in the effluent. Metals and cyanide data for 2012 can be found in the attached Tables 5-12.

The current method for collection of cyanide at both Field's Point and Bucklin Point mandates nine grab samples to be collected over a 24-hour period, separated by a minimum of two hours. The automated samplers collect discrete samples for CN analysis into one-liter containers that are pre-preserved with sodium hydroxide. These samplers collect a 300 mL sample every two hours for 48 hours, once a week. At Bucklin Point, composite samples for cyanide and metals at the influent are collected from both interceptors, the Blackstone Valley Interceptor (BVI) and the East Providence Interceptor (EPI) and are composites of nine separate grab samples at each location. These cyanide samples are mixed flow proportionally. At both plants, nine of the twelve grab samples from the twenty-four hour sampling period are composited into a 2 liter HDPE bottle. The pH is tested to insure it is greater than 12 before compositing. The composite is poured off into a 500 mL brown HDPE bottle.

For influent and final effluent auto samplers that collect wastewater analyzed for trace metals, special clean sampling methods are used to reduce contamination. The method requires acid cleaning of composite containers prior to use and acid cleaning of suction and pump tubing. Blanks are collected to monitor and verify proper cleaning. A 15-liter Nalgene polyethylene carboy is used to collect composite samples. Carboy cleaning procedures and quality assurance measures are in place to insure clean and proper sampling. Acid washed carboys are put into place twice weekly at the influent and effluent to collect samples to be tested for trace metals and nutrients; this is in conjunction with the samples collected for CN. Monthly post-cleaning blanks are collected from the acid washed carboys to ensure the success of the cleaning procedure. These blanks are collected by adding DI to a cleaned carboy, swirling the DI in the carboy, and letting it sit overnight refrigerated. The DI is then poured off into pre-labeled, pre-cleaned containers for analysis of parameters of interest.

Field blanks are taken each time an analysis is required for mercury at both Field's Point and Bucklin Point. The procedure for collecting a field blank consists of transporting sufficient DI water into the field and collecting a sample using identical sampling and preserving procedures that are used in collecting the mercury sample.

Sample Collection for WWTF Nutrients Analysis at Field's Point and Bucklin Point

Permit requirements for nutrients were modified by the Rhode Island Department of Environmental Management (RIDEM) during 2005 as part of new nutrient permit limits issued to reduce the amount of nitrogen discharged to Narragansett Bay. The permit requirements mandate monitoring of nitrate, nitrite, and total kjeldahl nitrogen (TKN) three times per week. Ammonia monitoring permit requirements remained at twice weekly, but NBC has sampled all nutrient parameters three times per week beginning August 1, 2005. Seasonal effluent discharge limits of 5 ppm for total nitrogen were proposed by the RIDEM in the 2005 RIPDES permit modification, and out of this proposed permit came the current nutrient consent agreement between the NBC and RIDEM. In June 2006, a consent agreement was signed, which imposes a seasonal interim effluent permit limit of 18.2 ppm on total effluent nitrogen at Field's Point and 10.0 ppm for Bucklin Point. In May 2009 the DEM modified the consent agreement for

Bucklin Point to impose a seasonal interim total effluent nitrogen limit of 8.5 ppm. NBC has worked diligently to maximize nitrogen removal at Bucklin Point and has achieved significant reductions in nitrogen loading. However, NBC determined that additional modifications were required to achieve compliance with the nitrogen limit of 5 mg/l as set forth in the Consent Agreement. Construction is currently underway at Bucklin Point to reduce nitrogen further. At Field's Point, major facility upgrades and renovations are necessary to implement BNR technology, and are currently taking place at the facility.

Nutrients are analyzed from 24-hour composite influent and effluent samples. Samplers automatically collect samples every 30 minutes and composites are delivered to the lab three times per week. EMDA staff regularly clean and replace suction and pump tubing as well as sample collection carboys as part of its clean sampling technique. A dilute sodium hypochlorite solution is used to clean the suction line and pump tubing of the automatic samplers monthly. Sample collection carboys are dishwasher cleaned, acid washed and DI rinsed before they are placed at their sampling location. Equipment blanks are collected every other month from the acid washed carboys and pump tubing and are used to verify the absence of sample contamination.

All nutrient samples are analyzed by the NBC Laboratory. The nutrients analyzed are total kjeldahl nitrogen (TKN), nitrite, nitrate, ammonia, and total phosphorus. TKN analyses determine both ammonia nitrogen and organic nitrogen in a sample. The organic nitrogen component is necessary to determine and monitor total nitrogen in WWTF effluent. Nitrate is determined by difference from a combined nitrite/nitrate measurement and a nitrite measurement. A new nutrient auto analyzer was acquired by NBC's Laboratory in 2004. This instrument shows improved analysis efficiency for nutrient measurements, and analytical results from the new equipment continue to produce better precision and accuracy than previous analyses. WWTF nutrients data for 2012 can be found in Tables 13 and 14.

Sample Collection for Oil and Grease at Field's Point and Bucklin Point

Based on RIPDES permit requirements, three grab samples are collected over the course of a 24-hour period, with one grab per shift, once a month at both the Field's Point and Bucklin Point influent and effluent for oil and grease. The grabs are analyzed separately and the maximum is reported. The RIPDES permit does not set a discharge limit.

Oil and grease samples are collected using a 10 foot telescoping Nasco swing sampler. A pre-cleaned bottle is labeled with collection time and date, site, and the parameter to be analyzed and attached to the Nasco swing sampler with a plastic strap. The cap is removed, taking care not to contaminate it, and the sampler is then lowered just below the surface. The bottle is filled and then recapped. Oil and grease grabs are preserved with hydrochloric acid to a pH < 2 by EMDA staff, as soon as possible after collection. These samples are then brought to the NBC lab for analysis. Oil and grease data results for 2012 can be found in the attached Table 15.

Sample Collection for Effluent Dissolved Metals Analysis at Field's Point and Bucklin Point

In 2000, the NBC began a study to monitor the dissolved metals fraction of the effluent discharged to the receiving waters of the Providence and Seekonk Rivers. During 2012, Field's Point and Bucklin Point effluent samples were analyzed monthly. The NBC and DEM use this data to better understand the fate, effect, and physical partitioning of metals discharged from the POTWs. Understanding the dissolved and total fractions for each metal, a measure of its phase partitioning, between dissolved and particulate, is important for the calculations of permit discharge limitations. POTWs are permitted in total metals. Therefore, the RIDEM must use a "metal translator conversion factor" to estimate the POTWs total metal fraction in the receiving waters that will be in the dissolved phase when writing a permit for a wastewater treatment plant.

Metals in the dissolved form are more readily absorbed by marine life than metals associated with particles. Resultantly, the EPA and DEM have established fresh and saltwater water quality criteria in dissolved metals concentrations. By sampling for total and dissolved metals, the NBC will be able to better assess the ratio of dissolved to total metals in POTW effluent and in the receiving waters.

Effluent dissolved metals samples are analyzed once a month and samples are taken from the effluent total metals composite sample on the first Tuesday of each month. The effluent metals sample is a 24-hour composite sample taken after treatment of the wastewater is complete just before entering the Providence River. As part of a quality assurance plan, the NBC lab analyzes laboratory equipment blank samples along with the dissolved metals to insure accurate results. Effluent dissolved metals data results for 2012 can be found in Tables 16 and 17.

Collection of Final Effluent for Quarterly Bioassay Tests

The two NBC Wastewater Treatment Facilities are required to conduct quarterly bioassay studies to determine whole effluent toxicity (WET) to test organisms. NBC conducts chemical analysis and aquatic toxicity testing, using the response of organisms to detect and measure the presence or effect of one or more substances, wastes, or environmental factors, alone or in combination. NBC met the quarterly bioassay sampling frequency requirements during 2012 for both facilities. At both facilities *Americamysis bahia* and *Arbacia punctulata* are tested. Effluent samples are collected only in dry weather, defined as 48 hours prior to or during sampling and are a composite sample collected over a 24 hour period. Composites consist of 195 mL of wastewater collected every 30 minutes over the course of 24 hours. The back-up automatic composite samplers are used for this sampling and are cleaned and maintained in the same way as those collecting samples for TSS and BOD. EMDA staff cleans the sample carboys in the dishwasher after each use and carboys are replaced yearly. A dilute sodium hypochlorite solution is used to clean the suction line and pump tubing of the automatic samplers weekly.

Two bioassay tests are performed as required by the NBC RIPDES permits; an acute toxicity test in which the whole effluent is tested to examine survivability of test organisms *Americanmysis bahia* in varying concentrations of effluent. The second test is a chronic toxicity test which examined the affect of effluent on the ability of the test organism *Arbacia punctulata* to fertilize eggs in varying concentrations of effluent. Both tests are conducted in five dilutions of effluent plus a control: 100% effluent; 50% effluent; 25% effluent; 12.5% effluent; and 6.25% effluent. The control and seawater used for the dilution is natural seawater.

Analysis of the acute toxicity data provided determination of the LC₅₀ and the A-NOEC. The LC₅₀ result is defined as the concentration of wastewater that causes mortality to 50% of the test organisms. A-NOEC or Acute-No Observable Effect Concentration is defined as the highest concentration of the effluent in which 90% or more of the test animals survive. The permit requirement limit of 100% or greater is defined as a sample which is composed of 100% effluent. In addition to the acute toxicity test, the chronic test is performed on *A. punctulata*, which examines for the sublethal effects of effluent concentration on the fertilization of eggs. The permit limit for Bucklin Point is 50% or greater for this parameter while at Field's Point the permit requires only monitoring.

The WET tests are designed to supplement effluent monitoring to determine whether the combination of chemical species present in a WWTFs effluent is toxic to test organisms. The monitoring for individual pollutants is targeted towards ensuring that the concentrations of the individual pollutants are at levels which do not pose harm to aquatic organisms. The WET tests are an attempt to determining the synergistic impact of NBC effluent on receiving waters. All bioassay analyses are performed by third party laboratories contracted by NBC and must be conducted in accordance with protocols listed in the EPA document: Cornelius I. Weber, et. al., 1991. Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, Fourth Edition (or the most recent edition). Bioassay data results for 2012 can be found in attached Tables 18 and 19.

Sample Collection for Sludge Analysis at Field's Point and Bucklin Point

Sludge from Field's Point WWTF is collected daily and sludge from Bucklin Point WWTFs is collected Monday through Saturday, due to the fact that the contractor processing the sludge is closed on Sundays. Sludge from both plants is analyzed for total solids (TS) and volatile solids (VS). Sludge samples are also analyzed one to two times per month for metals and cyanide. Field's Point WWTF sludge was dewatered on-site using a belt press until December 2005, and is now handled by an outside contractor. Grab samples are taken throughout the day by the contractor and composited in one 4 L container. EMDA staff then pours part of this composite into a 16 oz. container for delivery to the lab by 8:00 AM the next day. These containers are disposed after a single use. At the Bucklin Point WWTF an outside contractor also processes the sludge. Similar to Field's Point, the contractor staff takes grab samples throughout the day and composites these into a 4 L container at the end of the day. This is stored in the refrigerator until EMDA picks up the sample the next morning.

EMDA staff mix the sample and pour off approximately 500 mL into a smaller container to bring to the lab for analysis. Data results from sludge sampling for 2012 can be found in attached Tables 20-23.

Sample Collection for VOCs/Priority Pollutants

Grab samples are collected monthly at influent and effluent locations for volatile organic compounds (VOCs). The same type of glass jars used for oil and grease samples are used for the grab collection. The glass jar is fastened to the end of a pole and dipped in the wastewater to collect the sample. This sample is then poured off into three prepreserved 40 mL glass vials. The glass vials have been prepreserved with 3 drops of hydrochloric acid in each vial before collection. The glass vials are then transported to the laboratory for analysis. Priority pollutant data results for 2012 can be found in attached Tables 24 and 25.

Sanitary Manhole Monitoring

EPA and RIDPES permit regulations require the NBC Pretreatment Program to reevaluate local discharge limitations every five years. In order to complete this task, the NBC must monitor sanitary manholes to evaluate pollutant loadings from residential sources. One of the primary sources of information regarding the water quality of wastewater in the NBC collection system comes from sanitary and industrial manhole sampling. The NBC began sanitary and combined sewer manhole sampling in 1993, and in 2000, EMDA began to make these collections using EPA approved clean sampling techniques to quantify the background loadings of metals and cyanide from residential and non-industrial sources. As laboratory detection limits continue to decrease due to improved clean sampling handling techniques, these data become a more precise measure of the amount of uncontrolled toxic chemicals that enter the NBC collection system from residential, non-industrial sources.

Sanitary manholes have been identified in residential areas, upstream of any industrial or commercial facilities. These background loadings are outside the realm of control by the NBC regulatory Pretreatment program, but provide the setting for determining how much of a given pollutant that can be accepted and effectively removed at each of the treatment facilities. These samples reveal the composition of what is being introduced into the collection system in a more site-specific way than the influent composite samples.

During 2012, the NBC collected sanitary manhole samples. The collection of sanitary manhole samples works as follows: automated sampling devices suspended in the manholes are programmed to collect 100 mL of wastewater every fifteen minutes for a 24 hour time period during a given weekday starting early morning. The aliquots collect into a 10 L acid washed Nalgene jug over the 24 hour period, and the composite sample is later poured off into specified containers for each different parameter including total metals, cyanide, total suspended solids/biological oxygen demand, and mercury. The initial pH of the composite is taken and recorded on a chain of custody document, and for those parameters that require preserving, the preservative used is marked and the

final pH is recorded. After every use, the automated sampling device tubing and jug is acid cleaned, rinsed with DI water, and a cleaning blank is produced.

Biological oxygen demand (BOD), total suspended solids (TSS), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), nickel (Ni), Molybdenum (Mo), silver (Ag), zinc (Zn), cyanide (CN), mercury (Hg), arsenic (As), selenium (Se), and tin (Sn) were measured in both Field's Point and Bucklin Point sanitary manholes in 2012.

Sanitary manhole data is essential for providing a point of comparison and screening of collection system data to determine problem areas within the collection system. In addition, the sanitary manhole data is necessary for the calculation of the local limits that the NBC imposes on its industrial users. Sanitary manhole data results for 2012 can be found in Table 26.

Significant Industrial User (SIU) Sampling

The Environmental Protection Agency (EPA) requires that all significant industrial users be sampled at least once every twelve months. NBC has established a more stringent goal to sample each user twice per year. Information regarding what is introduced to NBC facilities is gathered through industrial user and industrial manhole sampling, in addition to the required user self-monitoring. The industrial manhole sampling is an additional means to track chemical spills, concentrated, or non-compliant discharges, as well as to ensure that industrial users are in compliance with the limits set by the Narragansett Bay Commission. The NBC collected 1,648 individual sample bottles from industrial users within both service districts during 2012. These 1,648 sample bottles were analyzed for numerous parameters and resulted in 231 sets of industrial user sample results. Industrial user data results for 2012 can be found in Table 27.

Industrial manhole sampling activities are designed to isolate a specific business within the collection system to surreptitiously determine the typical discharge from the business. Samples are taken upstream and downstream of a significant user's discharge point via manholes. The upstream sample serves to establish a background concentration with which to compare the results from the industry, as well as confirm that the source of any contaminants is from the permitted user, not additional sources. The distance between these two sampling locations is typically 150 feet, depending on the location of the nearest manhole.

ICSO 2700 samplers are used to perform both sanitary and industrial manhole sampling, as well as collect plant influent samples. This sampler can be programmed to collect samples every 15 minutes for 24 hours, thereby providing a composited representation of the average discharge for that time period. Samplers can disperse the water collected into up to 24 sample bottles, thereby allowing for an intensive analysis of the variations within the upstream and downstream sample locations, if necessary.

A Tygon suction line with a stainless steel strainer attached at the end is used to collect samples from the middle of the waste-stream. Samples are immediately checked for sulfides and chlorides using lead acetate and potassium iodide indicator paper, respectively, as these chemicals can interfere with cyanide measurements.

Cyanide sample pH is adjusted using sodium hydroxide to a pH above 12, and metals samples are acidified to a pH of less than 2 with trace metal grade nitric acid. Samples are analyzed for cadmium, chromium, copper, lead, nickel, silver, zinc, and cyanide. All metals were analyzed by Inductively Coupled Plasma – Mass Spectrometry (ICP-MS).

The implementation of clean sampling techniques at the NBC has provided additional means of confirming that industrial discharges do not exceed treatment capacity. The EMDA industrial user sampling supplements the self-monitoring activities, providing a means for enforcing local limits for the pollutants.

Septage Sampling

The NBC receives septage waste, waste pumped out of septic tanks, at the Lincoln Septage Receiving Station in Lincoln, RI. The Lincoln station input point is within the Bucklin Point service district, approximately 11 miles from the Bucklin Point facility. The septage is routinely monitored by the EMDA for toxic constituents to ensure that the material received does not contain toxics in concentrations that exceed NBC's Pretreatment Industrial Discharge Limitations for the Bucklin Point WWTF, to which the waste ultimately discharges. This sampling also helps NBC evaluate the percent of metals loading received from septage into the Bucklin Point WWTF. Septage samples are collected daily Monday-Saturday as composite samples of all of the septage trucked to the NBC Lincoln Septage Receiving Station. All six composite samples are kept refrigerated until they are picked up by EMDA staff on Mondays at the Lincoln Septage Station and are brought to the NBC lab on Tuesdays for analysis. Three daily samples are chosen at random and analyzed by the NBC Laboratory for trace metals and cyanide each week. Interceptor Maintenance staff sample and screen each septage truck's waste delivery for quality by looking at the physical characteristics and by measuring pH during the pump-out at the septage facility. Grit removal at the septage facility removes a portion of the metals loading prior to its introduction to the sewer system and the treatment plant. During 2012, 156 septage samples were analyzed for trace metals and cyanide.

New septage sample collection techniques and equipment were introduced in June of 2004. The new equipment allowed for easier, in-line sampling during septage delivery. A sample from each truck is collected after the sample port is flushed thoroughly, usually after the load has discharged, for approximately one minute. The sample from an individual truck is screened for pH, odor, and other unusual characteristics. If any anomaly is observed, the sample is targeted for individual analysis; otherwise it is combined with the day's delivery and sent to the laboratory for analysis. This new sampling protocol has helped to more quickly locate potential toxic inputs to the collection system. These more representative sampling techniques may partially explain the observed increase in septage metal loadings since 2004. Septage data results for 2012 can be found in Tables 28 and 29.

NBC Receiving Water Monitoring Activities

The NBC not only monitors wastewater from the source (industries and manholes) to the WWTFs and throughout the plant process, but also monitors the receiving waters, where treated effluent and combined sewer overflows enter. Receiving water monitoring conducted by the NBC includes sampling the surrounding urban rivers and upper Bay as well as some of the rivers that enter the upper Bay from Massachusetts. This monitoring data is vital to determining the impact of NBC effluent on the river and bay ecosystems. This data will be useful in evaluating the success of the CSO abatement project in the upper Bay and will provide insight into the response of the receiving waters to NBC WWTF upgrades. The NBC EMDA section's role in environmental monitoring and compliance issues also continues to expand as compliance issues become ever more complex.

In 2012, EMDA continued sampling for nutrients at several locations in Narragansett Bay and within the watershed at both local river stations and at border stations on the MA/RI border. These measurements are aimed at effectively characterizing the magnitude, composition and distribution of nutrient inputs to these rivers, and comparing these results to previous years to examine factors influencing nitrogen loading into the bay. The characterization of nutrient loadings and dynamics are an integral part of the nutrient issue. Determination of the background loadings, effluent discharge impacts, and fate of nutrients from the NBC facilities are necessary components of a sound environmental policy on nutrients. This study was undertaken to gain greater insight into the nutrient cycling within the rivers, and to help quantitatively define the amount of nitrogen that the WWTFs can safely discharge without adversely impacting water quality.

In addition to nutrient sampling, the NBC conducts routine field sampling for pathogens (disease-causing organisms) in the local freshwater rivers and the estuarine waters of the Providence and Seekonk Rivers. Fecal coliform has been widely accepted as a good indicator of pathogens in waterbodies. Although fecal coliform (composed of a number of similar species of bacteria) does not necessarily contain disease-causing organisms, it is used as an indicator of the *possible* presence of pathogens. Generally, if fecal coliform counts are high, there is a high potential for the presence of other bacteria that could be harmful to both humans and wildlife. Raw, undiluted sewage contains high levels of fecal coliform bacteria because this type of bacteria is found in the feces of all warm-blooded animals, including humans. The wastewater treatment process at NBC's facilities eliminates almost all of these bacteria after the waste passes through primary and secondary treatment and, ultimately, disinfection via chlorination or ultraviolet light. Final effluent wastewater discharged from the Field's Point and Bucklin Point WWTFs has very low levels of fecal coliform bacteria. During small rain events, the two treatment facilities use special wet weather treatment tanks to treat and disinfect the higher volumes of combined rainwater and sewage. However, during intense rain events, the NBC's combined sewer overflows (CSOs) can send untreated stormwater and sewage that the collection system cannot contain directly into the freshwater rivers and upper Bay. In recognizing the need to assess the impact that the NBC facilities can have on the water

quality of the local rivers and upper Bay, fecal coliform bacteria were measured at a number of locations throughout these receiving waters.

A new Water Quality Regulations document was published by the RIDEM in July 2006, which contained a change in the water quality criteria for bacteria. *Enterococci* measurements, considered a more accurate metric for potential human health impacts from primary contact, were adopted to replace fecal coliform as the primary bacteriological indicator for both fresh and saline waters. Fecal coliform is only applied when *Enterococci* data are not available. Therefore, the NBC also conducted *Enterococci* sampling at five of the bay stations. The NBC has been conducting fecal coliform sampling in the urban rivers and upper Bay for several years and with such a historical database we believe it is important to continue these measurements for as long as possible and as long as it takes to determine if there is a consistent relationship between *Enterococci* and fecal coliform results. EMDA also conducts monitoring of particular CSOs during wet weather events that cause these outfalls to discharge. The NBC has embarked on an historic public works project to eliminate the negative impact that CSOs can have on water quality, with a CSO Abatement Program in which Phase I began operation in the fall of 2008. Phase II is currently under construction and is expected to be completed in 2014.

As part of investigating the overall health of the Bay, the NBC also maintains two water quality monitoring stations located at a dock at Phillipsdale Landing in the Seekonk River and a buoy at Bullock's Reach in the Providence River. The monitoring sites are continuously collecting data on the conditions of the water such as temperature, dissolved oxygen, salinity, pH, and chlorophyll or turbidity.

River and Bay Nutrient Sampling

The NBC has been proactive in responding to the environmental concerns of Narragansett Bay and the state of Rhode Island. As a part of a continuing effort to both address and understand the magnitude of the impacts that facility operations have on our receiving waters, an intensive sampling program of the urban and local rivers that are part of the Narragansett Bay watershed has been developed for nutrient analysis and loading determination. This sampling program was designed to encompass two components: an evaluation of the loading in the urban rivers that empty into Narragansett Bay just upstream of tidal influence, and an evaluation of the nutrients entering Narragansett Bay from Massachusetts. Both components are important to accurately determine the nutrient inputs to Narragansett Bay as well as a means of determining the impact of sources outside of the NBC service district. By determining the magnitude and relative importance of these fluxes, the NBC will be able to more accurately determine the impact of biological nutrient removal (BNR) systems constructed at the Bucklin Point facility as well as planned future facility upgrades at both the Bucklin Point and Field's Point facilities. This data will also contribute to developing a thorough understanding of nutrient fluxes to Narragansett Bay.

The NBC initiated nutrient monitoring of the local urban rivers in 2005, and expanded the sampling locations and increased the frequency of sampling in 2006. An additional station was also added on the Ten Mile River in December 2011 to get a better representation of nutrient loadings from Massachusetts into this River. In 2012, there were sixteen sample stations monitored one to two times per month. The locations of sample stations can be found in Figure 1. Sample locations on the freshwater rivers are as close to the mouth of the river as possible without encountering tidal mixing. On CSO-affected rivers, additional station(s) are also sampled at a location upstream of all CSOs. Nutrient samples are taken using a peristaltic pump, Tygon tubing, and new plastic sample bottles. All tubing and sample bottles are acid washed and then rinsed with deionized water (DI) before the sampling event and tubing is rinsed with DI between sample stations. Deionized water field blanks, equipment blanks, and duplicates are collected in order to provide a means of determining the accuracy and reproducibility of sampling methods and sample handling techniques. In addition to sampling QA/QC measures, the NBC Laboratory has a rigorous analytical QA/QC program in place for all nutrient samples.

To measure any direct changes in nutrients in the upper Bay as a result of WWTF upgrades and the CSO Abatement Project, the Narragansett Bay Commission began sampling for nutrients in the Providence and Seekonk Rivers during the summer of 2005. The direct water column nutrient measurements provide an important look at the amount of nutrients in the upper Bay from all sources, including river loading, surrounding WWTFs, atmospheric deposition, groundwater, runoff, leaky septic systems and nutrients from the middle and lower Bay area as well as from offshore. Bay sampling stations in 2005 included five surface stations and one bottom station. These bay stations included Conimicut Point, Edgewood Yacht Club, Pomham Rocks, and India Point Park at the surface and Phillipsdale Landing at the surface and bottom. In July 2006, one additional bay station was added as well as bottom samples at all bay stations. The new bay station was located at the Bullock's Reach Buoy, where our fixed continuous water quality monitoring buoy is located. In 2012 NBC sampled surface and bottom at each of the six stations. In August of 2012 a seventh site was added near the mouth of the Pawtuxet River at the channel marker of Red Can #6. This site was added to observe the effects of the Pawtuxet River on upper Narragansett Bay. As seen in Figure 2, the Conimicut Point, Bullock's Reach Buoy, Pawtuxet River Red Can #6, Edgewood Yacht Club and Pomham Rocks stations are located in the Providence River. The Phillipsdale Landing station is located in the Seekonk River at our fixed continuous water quality monitoring dock site and the India Point Park station is located near the mouth of the Seekonk River estuary. All surface collections in bay waters were made at a depth of approximately 0.5-1 meter below the surface. Bottom collections were made approximately 0.5-1 meter above the sediment.

Bay samples were collected, filtered, and preserved on-board the NBC research vessel, the *R.V. Monitor*. Samples were collected using either an acid-washed and DI rinsed Niskin sampler attached to the boat davit or a Wheaton grab sampler and acid-washed, DI rinsed sample bottle. If the Niskin sampler was used, the sample water was poured off into a sample bottle. Using the water in the sample bottle, the same methods as described

above for the freshwater rivers was used for the estuarine samples. Sample splits were also submitted to both the NBC and URI/GSO MERL (MERL) facilities to assure data quality during 2005 and 2006. As with the river samples, deionized water field blanks and duplicates are collected during bay sampling as well. The NBC laboratory analyzes both freshwater and saltwater nutrient samples for nitrite/nitrate, nitrite, total dissolved nitrogen, ammonia, orthophosphate, silicate and as of November 2012 total nitrogen as well. All nutrient samples were filtered prior to analyses; therefore all results are measurements of the dissolved (or soluble) phase. Grab samples for TSS and chlorophyll are also taken at the same time as nutrient samples and analyzed by the NBC Laboratory. The instrument the Laboratory acquired in 2005 to measure nutrient parameters in saltwater can only measure nutrients in the dissolved phase. Total nitrogen was also determined to be an important piece of the picture when looking at potential changes in nitrogen in the Bay, therefore another new instrument was acquired in September 2012 to analyze fresh and salt water samples for this parameter. Method development took place in October for this new instrument and analyses then began in November 2012. All data for the 2012 River and Bay Nutrient sampling can be found in the attached Table 30.

Figure 1: NBC River Nutrient Sampling Stations

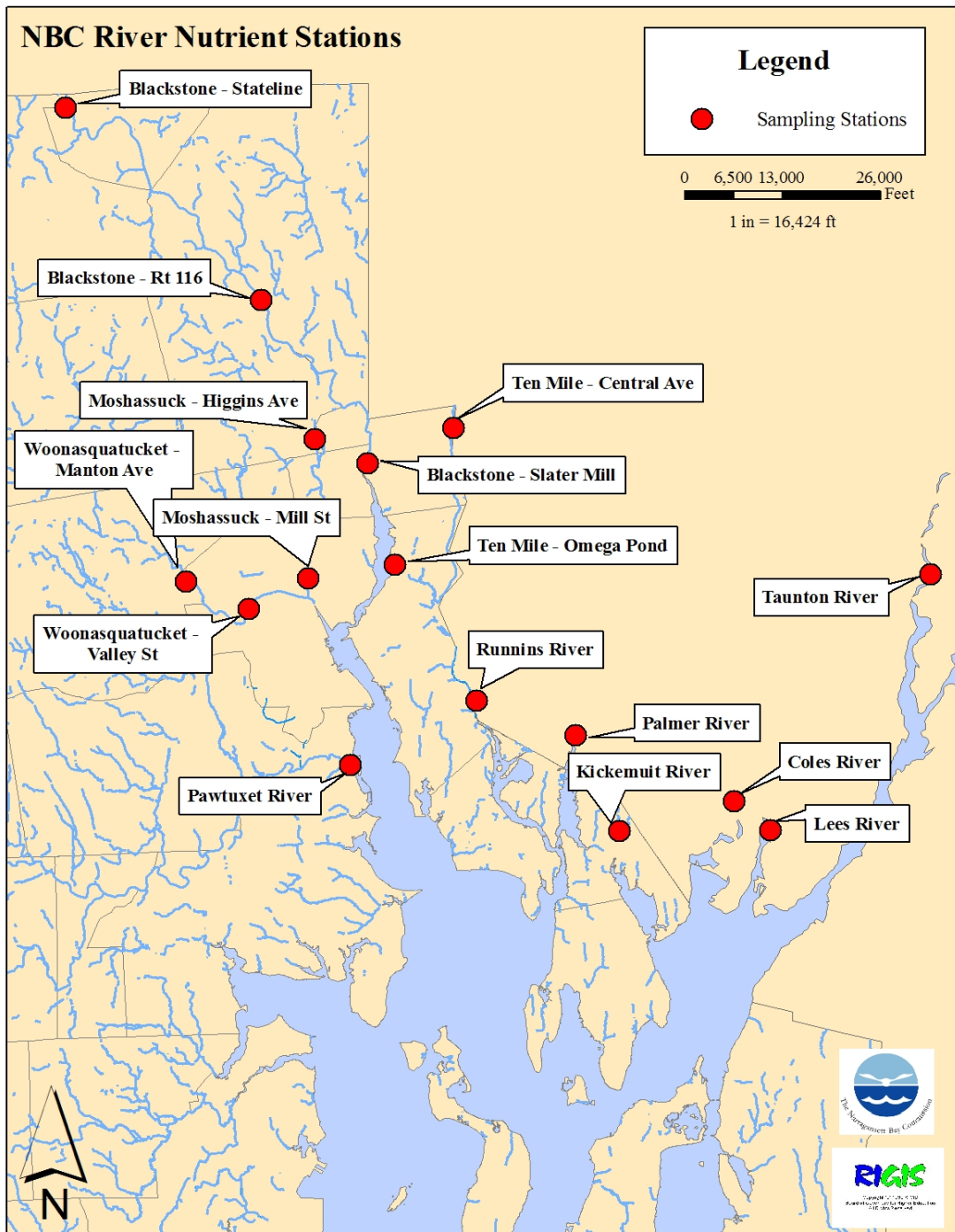
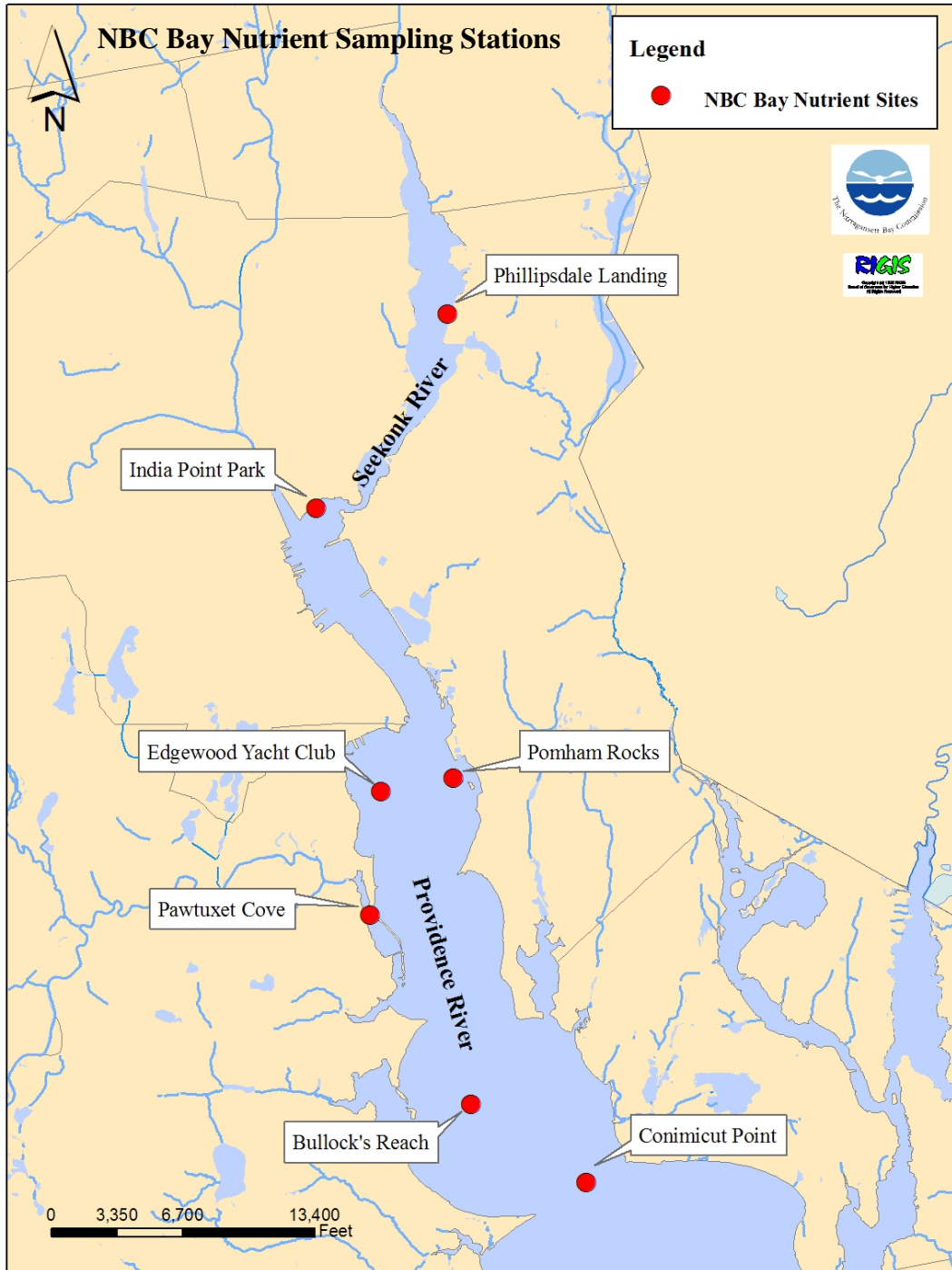


Figure 2: NBC Bay Nutrient Sampling Locations



Urban River Pathogen Monitoring

Consistent monitoring for fecal coliform analysis on the Providence area urban rivers began in 1997 and became the responsibility of EMDA in 1998. It was developed in conjunction with the CSO remediation stakeholders and has developed as a tool of the Interceptor Maintenance (IM) section as a check for potential problems occurring at any of the sixty-seven CSOs the Narragansett Bay Commission owns, operates, and maintains. Routine sample collections for analysis of fecal coliform are made each week, with stations on the Blackstone, Woonasquatucket, Moshassuck, Seekonk, Providence and Pawtuxet Rivers sampled on Mondays and stations on the West, Woonasquatucket, Moshassuck and Providence Rivers on Tuesdays. In the event of a holiday, or any other unforeseen circumstance arising that would prevent the regular schedule, the sampling routine will begin the next day sampling is possible. Samples are collected by Environmental Monitoring Staff in the morning, and delivered to the lab at Field's Point no later than 11:00 AM the day of sampling. All stations sampled on the same river on the same day are collected within a two-hour interval. NBC's Interceptor Maintenance and Construction (IMC), Environmental Monitoring and Data Analysis (EMDA) and Engineering departments determine locations to be added or omitted as needed.

On river sample collection days, samples are collected from six sites on the Woonasquatucket River, two sites on the Blackstone River, seven sites on the Moshassuck River, three sites on the West River, and one site each on the Pawtuxet, Providence, and Seekonk Rivers. After the Woonasquatucket River flooded in April of 2010, the sample location at Atwells Ave had to be changed to Eagle Street due to bridge damage at the original location. During 2012, 1,663 fecal coliform samples were collected and analyzed. Please see Figure 3 for sampling locations (the Seekonk River station is shown on the Bay Bacteria Sampling map in Figure 4).

In order to improve NBC's identification of dry weather discharges (DWO), in 2002 EMDA began resampling weekly collections when DWOs are suspected, and to identify other sources of bacterial contamination in the rivers. Rivers are not resampled when collections have occurred in times of wet weather, because analytical results are expected to be high due to the normal functioning of CSOs. When results from collections are high (greater than 1000 MPN per 100 mL) and there has been dry weather (no rain i.e. <0.1 inches in the preceding four days), EMDA will resample those stations a second time within the week. Resampling will also occur when results are very high (greater than 10,000 MPN per 100 mL) when no rain has occurred in the preceding two days. These general resampling criteria are subject to change based on river flow, fecal bacteria level at background stations, and staff availability.

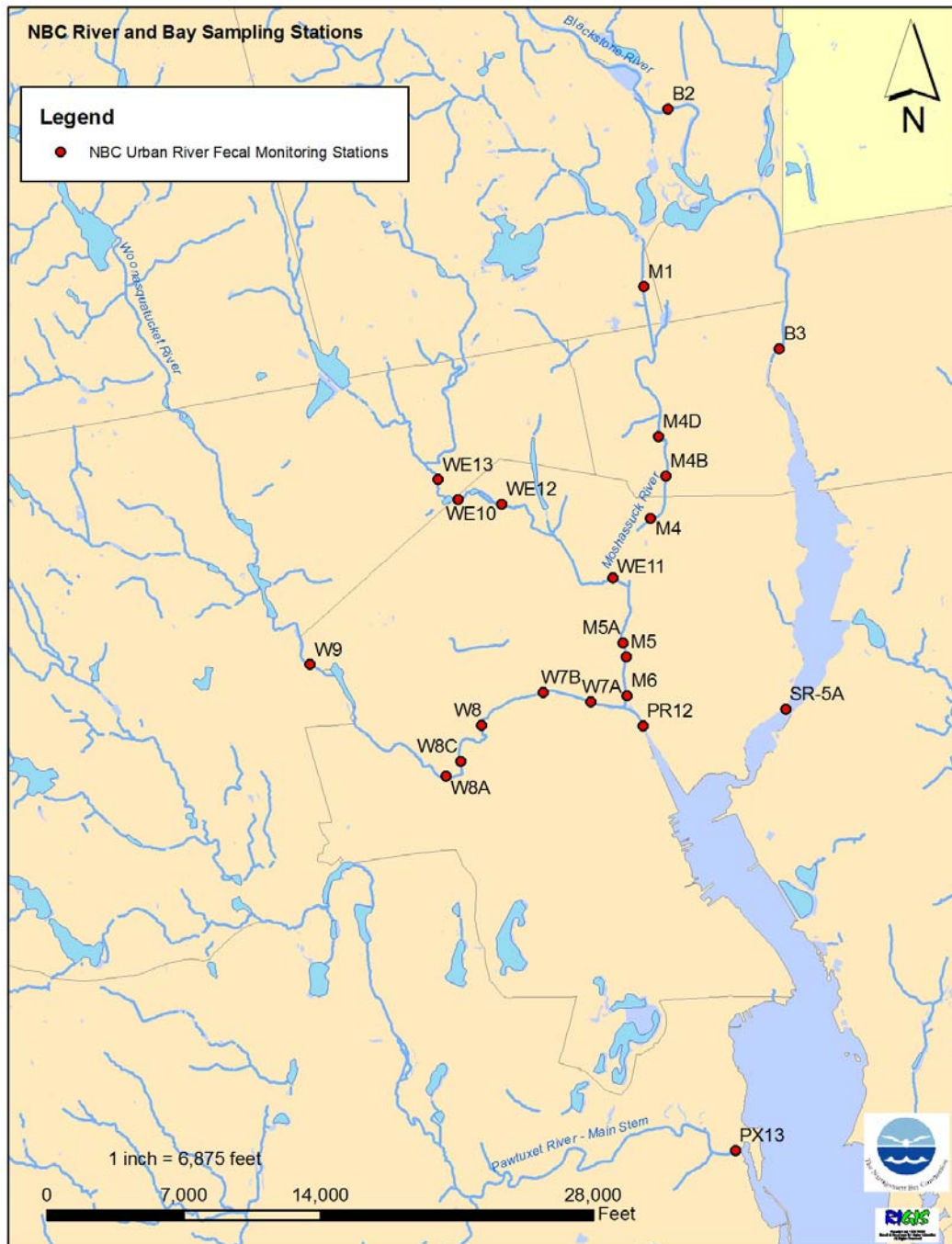
Water samples for fecal coliform analysis are collected from the center of a bridge or from a riverbank. A sterile, 120 mL fecal coliform sample container is used for the sample collection. Collections from bridges have the sample container placed in an open-ended brass cylinder and held in place with a small screw running through the cylinder body. A wire handle extends from the top of the cylinder with a line attached for lowering it into the water stream being sampled. Samples being collected from a riverbank are taken by dipping the sample container in the water stream by hand. The sample is taken as close to the center of the water stream as possible.

Once the sample has been collected, the sample container is sealed, and a label with site ID, sample number, date and time of collection and collector's initials is placed on the container. The samples are held in a portable cooler with ice packs (temperature held at 4 degrees Celsius) for transfer to the lab. All samples are brought to the laboratory within the holding time period (6 hours). If samples do not make it to the lab in time to be analyzed before the holding time, they are discarded and not analyzed.

As part of EMDA's quality assurance for this program, collection and analysis of duplicate fecal bacteria samples occurs on all regular sampling days. These collections and analyses are used to help determine general river variability, namely bacterial "patchiness" in the river, as well as analytical and sampling variability. The two sampling locations that have been chosen as replicate sites are Atwells Avenue (W-8) in Providence on the Woonasquatucket River and at the end of Moshassuck St. (M-4B) in Pawtucket on the Moshassuck River. The Atwells Avenue sampling is conducted from a bridge in the center of the main current flow; the end of Moshassuck Street site sampling is conducted from the riverbank in the center of the main current flow. The duplicate samples are taken simultaneously using a second 120 mL sterile bottle zip tied to the sampling device. Fecal and *Enterococci* data for the sampling stations located in the Woonasquatucket, West, Providence, and Seekonk Rivers can be found in the attached Table 31. Data for the Blackstone, Moshassuck, and Pawtucket Rivers can be found in the attached Table 32.

Another element of EMDA's quality assurance for this program is the collection and analysis of field blanks. Sample blanks are taken in the field during each fecal coliform sampling day to measure the ability of staff to maintain clean sampling techniques, and to rule out any potential contaminants from normal "open-air" exposure. These blanks are taken using deionized water in place of river water, with the same handling techniques as the actual river samples. The detection limit for these samples was <30 MPN/100 mL. The analytical method used by the NBC Laboratory is the 24-hour Fecal Coliform Determination by Multiple Tube Fermentation, using A-1 broth or media. The Standard Methods reference number is 9221E for this EPA approved methodology. Positive and negative controls are routinely run in the laboratory; in addition, tubes of un-inoculated, freshly prepared media are incubated and analyzed in order to confirm the sterility of the media. The NBC Laboratory is RIDOH certified. All samples are properly preserved prior to analysis at 4 degrees Celsius and holding times are kept to less than four hours, to avoid approaching the maximum six hour limit.

Figure 3: NBC Urban River Bacteria Sampling



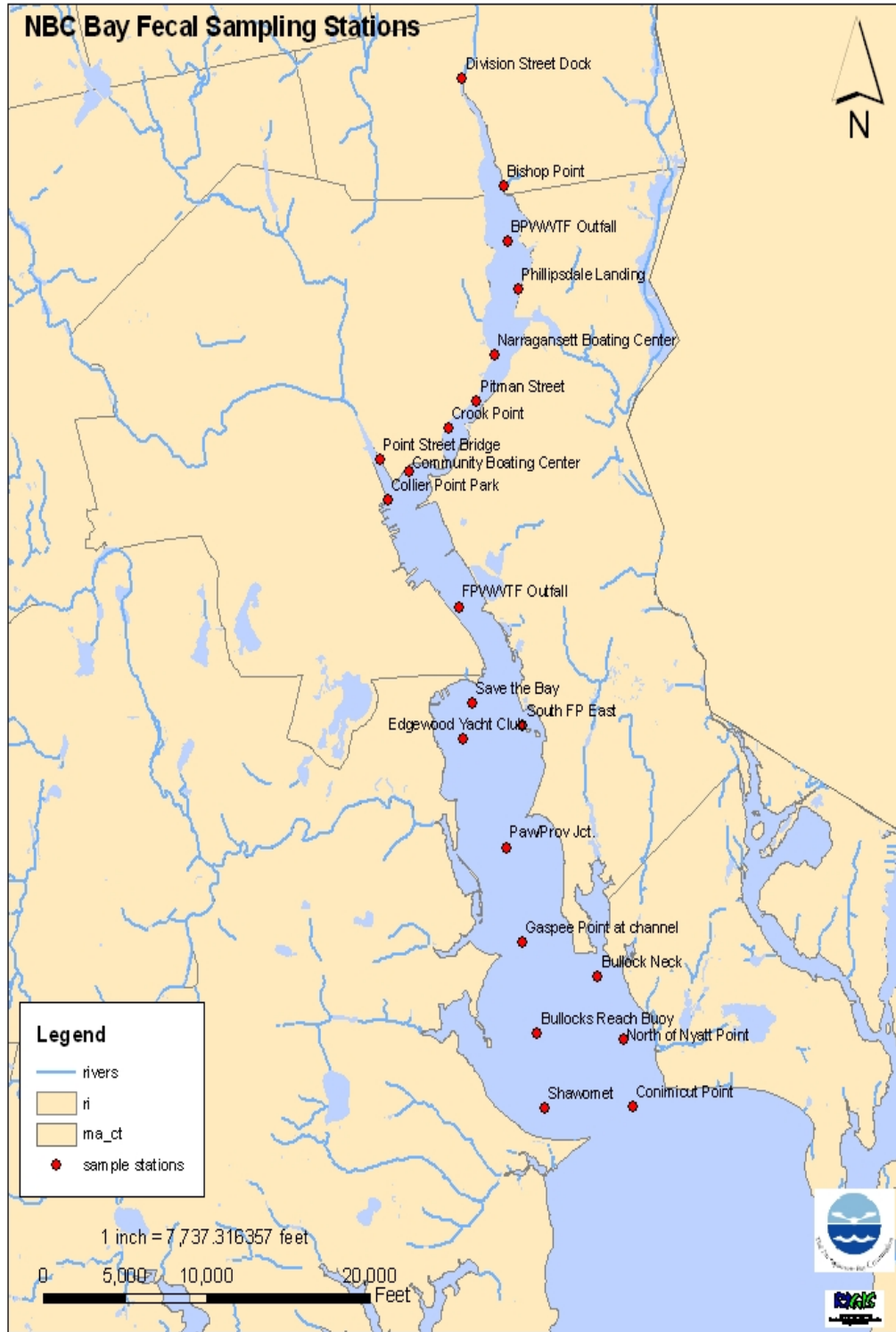
Bay Pathogen Monitoring

Fecal coliform sampling in the Providence and Seekonk Rivers began in 2003 in response to the need to understand the spatial and temporal impacts that discharges within these waterbodies have on Narragansett Bay as a whole. Routine sample collections for the analysis of fecal coliform are made biweekly, usually on Wednesdays or Thursdays, throughout the year, dependent on weather. All station samples are collected within a three-hour interval on the same day. In the event of a holiday, or any other unforeseen circumstance arising that would prevent the regular schedule, the sampling routine will be done the next regular work day. Samples are collected by Environmental Monitoring Staff, and delivered to the lab at Field's Point no later than 12:00 PM the day of sampling.

Bay fecal samples are collected at twenty locations in the Seekonk and Providence River. Fecal samples are collected from the NBC research vessel the *R/V Monitor* at six sites in the Seekonk River, four sites north of Field's Point WWTF, and ten sites south of Field's Point WWTF; please see Figure 4 for sampling locations. During special events, including after some heavy rainfalls, special sampling may take place that includes collecting bay fecal samples consecutively over several days. Depending on the event, the sample stations may include all of the usual stations, some of the usual stations and/or some additional stations further down the bay.

Water samples for bacteria analysis are collected from the port or starboard side of the EMDA research vessel. A sterile, 120 mL coliform sample container is used for the sample collection. Collections are made by placing the sample container in an open-ended plastic cylinder which is held in place with a small screw running through the cylinder body. A metal handle extends from the top of the cylinder with a vinyl line attached for lowering it into the water being sampled. Once the sample has been collected, the sample container is sealed, and a label with site ID, sample number, date and time of collection is placed on the container. The samples are held in a portable cooler with ice packs or a portable refrigerated cooler (temperature held at 4 degrees Celsius) for transfer to the lab. All samples are brought to the laboratory within the holding time period (6 hours). If samples do not make it to the lab in time to be analyzed before the holding time, they are discarded and not analyzed. Duplicate samples are taken at the Conimicut Point and Phillipsdale Landing stations. The duplicate samples for each site are collected simultaneously using a second 120 mL coliform bottle. A "blank" sample using deionized water is also taken and brought to the lab along with the fecal samples for quality assurance purposes. In addition to fecal monitoring, five sites are also analyzed for *Enterococci* bacteria. During 2012, 578 bay fecal coliform samples and 151 *Enterococci* samples were collected and analyzed. Additional fecal samples were taken in 2012 in the upper Bay Conditional Shellfish Areas to evaluate the effects of overflows and severe weather during the months of February, March, October, and November. Please refer to attached Table 33 for 2012 Bay fecal coliform data and to Table 34 for the Bay *Enterococci* data.

Figure 4: NBC Bay Bacteria Sampling Stations



Combined Sewer Overflows (CSO) Wet Weather Sampling

In implementing NBC's policy of protection of Narragansett Bay and its tributary rivers, and to fulfill the requirements of the EPA and RIDEM Nine Minimum Controls Program, the EMDA staff sampled CSO wet weather overflows during two rain events in 2012. The aim of these wet weather sampling events was to characterize the impact of CSO discharges and to evaluate the success of the NBC Pretreatment and Pollution Prevention Programs at controlling the discharge of toxics through CSOs. The CSO Remediation Project once fully implemented will effectively eliminate 98% of CSO discharges but all feasible controls are expected to be implemented until that project is completed and the EPA's Capacity, Management, Operations and Maintenance (CMOM) program for the NBC is fully implemented. The 2012 wet weather sampling was conducted on December 18th at Outfall 218, with approximately 0.49 inch of rain as measured at the National Weather Service at T.F.Green Airport; and again on December 21st at the North Diversion Structure, Outfall 2A and Outfall 09 with 0.68 inch of rain. Outfall 2A is within the Bucklin Point service area and discharges into the Seekonk River and is tied to a sewer collection drainage basin that includes a mix of residential, industrial, and commercial uses. Outfall 218 discharges into the Seekonk River and 09 discharges into the Providence River and is linked to a large sewer drainage basin that is predominantly residential with commercial and industrial inputs. The data for CSO 2A can be found in Table 35, the data for CSO 09 can be found in Table 36, and data for CSO 218 can be found in Table 37.

The sampling plan was designed to collect three samples at each outfall throughout the overflow event. The first sample would be collected during the initial overflow, or first flush, stage and was expected to contain wastewater with the least degree of rain water dilution and the highest concentrations of materials washed from street and land surfaces into the combined sewer system. A second sample would then be taken during the stage of highest overflow rate and a third sample taken near the conclusion of the event. This plan was fully implemented at Outfall 09 on December 21st, however due to the short duration of the Outfall 218 discharge on December 18th, samples were taken at the specified intervals but the event was short in duration, yielding low volume in the sampled bottles. Because of this samples were only analyzed for specific parameters. The sampling event at the North Diversion Structure on December 21st was analyzed for the first flush stage of the overflow only.

Narragansett Bay Fixed Site Water Quality Monitoring

The Narragansett Bay Commission (NBC) funds two fixed site water quality monitoring stations in the Providence and Seekonk Rivers. These stations were created in 2000 as part of the formerly EPA-grant funded Environmental Monitoring for Public Access and Community Tracking (EMPACT) Project. NBC has maintained full funding of these sites since federal grant funding ceased in 2002. The stations have been established in proximity to the Field's Point and Bucklin Point wastewater treatment plant outfalls. The Bullock's Reach station is a floating buoy located between Gaspee Point and Conimicut Point in the Providence River and the Phillipsdale Landing station is a dock site located

on the Seekonk River in East Providence. These monitoring stations directly benefit Narragansett Bay research by allowing for continuous, real-time water quality monitoring in the more urbanized portions of the upper bay. Through radio and land-based phone line telemetry systems, bay researchers can consistently track changes in the estuaries from remote locations, thus saving valuable resources and decreasing the response time to anomalous conditions. This data also provides a baseline of water quality across seasons and reveals yearly trends.

State-of-the-art technology at these sites collects measurements for depth, temperature, salinity, pH, dissolved oxygen, turbidity and fluorescence (a proxy for chlorophyll and phytoplankton activity). Data is collected by the use of water quality instruments called sondes, at both the Bullock's Reach buoy and Phillipsdale Landing stations every 15 minutes and is transmitted via radio signal from Bullock's Reach and via landline phone connection from Phillipsdale Landing to a base station at Field's Point every hour. During 2012 the Phillipsdale Landing station was upgraded to transmit data via a LAN connection every 15 minutes.

During 2001 and 2002, EMDA and URI-GSO worked together to service and maintain the Bullock's Reach buoy. In 2003, the NBC assumed all buoy maintenance activities and NBC EMDA staff has continued to maintain the buoy as well as the Phillipsdale Landing dock site through 2011. The EMDA staff is also continually making improvements to equipment, infrastructure and QA/QC protocols to ensure the reliability of data collected. Please see Figure 5 for the locations of both fixed site water quality monitoring stations.

EMDA works with the RIDEM, University of Rhode Island (URI) and Narragansett Bay National Estuarine Research Reserve (NBNERR) to coordinate maintenance and data handling efforts with each of these groups who are also maintaining buoy stations and dock sites with the same water quality instruments (YSI 6-series sondes) in other parts of the Bay. This group of statewide collaborators is collectively known as the Narragansett Bay Fixed Site Water Quality Monitoring Network (Fixed Site Network). Through the Fixed Site Network, a standard operating procedure for calibration and maintenance of the sondes as well as data handling has been developed so that each organization will be following the same protocols. The RIDEM maintains a website which allows easy access to data from all of these fixed sites in one central location. This can be accessed at <http://www.dem.ri.gov/bart/stations.htm>. The RIDEM BART website currently displays a map showing station locations, monthly graphs of summer data and all Fixed Site Network data from 2003 through 2010 in raw, edited and corrected formats.

At the end of 2002, uncorrected raw data from the NBC water quality stations became available for use by the general public via a link on the NBC website. In 2011, a brand new webpage was created by the NBC called Snapshot of Upper Narragansett Bay (<http://snapshot.narrabay.com/app/>; also see page 39 of this report for a full description). This website includes information and data for all of the NBC receiving water monitoring and presents monitoring station raw data in near real-time and in an easy-to-use and easy-to-understand format, including graphs and downloadable data tables.

Figure 5: NBC Fixed Site Water Quality Monitoring Stations



The fixed site water quality monitoring project is very important in understanding the overall health of NBC's receiving waters and will be useful in looking at the response of these waters to future WWTF upgrades. The NBC is also concerned about the issues of hypoxia and eutrophication occurring in the Bay. Hypoxia is the condition that occurs when dissolved oxygen concentrations in water fall below a critical level, negatively affecting biological organisms. As mentioned above, the water quality instruments (sondes) that NBC uses at these fixed sites have dissolved oxygen sensors on them, so the NBC can immediately determine when hypoxia is occurring and for how long. This data is extremely helpful for the NBC, RIDEM and other organizations in studying why these events happen and how the biological organisms in the bay react.

Data from the Bullock's Reach buoy has become very important to the RIDEM in monitoring for low dissolved oxygen events that may require a quick response by their staff. Data from 2012 was sent to the RIDEM weekly during the critical summer months to keep them updated on the water quality status at the Bullock's Reach site. Throughout the years, data from the Bullock's Reach buoy has been useful in RIDEM's analysis of water quality changes in the upper Bay, and for periodic fish kills occurring in the upper Bay and rivers. The data from these sondes is also being used in a joint NBC-URI hydrodynamic modeling project that will provide information on currents, flushing and predicted tracks of WWTF effluent in the Providence and Seekonk Rivers.

Sample Design

The Bullocks Reach buoy includes sondes at three depths: surface, mid and bottom. The Bullock's Reach site includes a YSI EMM 700 buoy with one YSI sonde at the surface at an approximate depth of 0.5-1 meter, one YSI sonde at a mid-depth of approximately 2-4 meters and one YSI sonde at the bottom at an approximate depth of 6-7.5 meters. Water quality data is recorded and transmitted at a 15 minute interval from all three depths. The buoy position is to the northwest of Conimicut Point at approximately 41° 43.944 North and 71° 22.214 West in about 26 feet of water (about 8 meters), west of the Providence River channel. The surface and mid depth sondes measure depth (m), water temperature (°C), specific conductance (salinity; mS/cm and ppt), pH, dissolved oxygen (% and mg/L), chlorophyll a, (µg/L) and fluorescence (%). The bottom sonde measures depth, water temperature, conductivity (salinity), pH, and dissolved oxygen with the same units as above, along with turbidity (NTU). The buoy is serviced using the NBC's 23-foot Parker research vessel the R/V Monitor, which is kept at the Port Edgewood Marina. A water quality profile is obtained at the buoy during each visit, if possible, using a YSI sonde that is brought out to the site, which measures temperature, salinity, pH and dissolved oxygen. Data from the buoy is transferred to the PC in the Field's Point WWTF Process Monitor Room via radio signal every hour and is then viewed by EMDA personnel utilizing the YSI software program, Loggernet, and Interactive Oceanographics software, Streamline. For the 2012 season, the buoy was deployed in the water in May and sondes began collecting data on May 17th until November 26th.

The second continuous monitoring site is a dock site located at Phillipsdale Landing on the east side of the channel of the Seekonk River in East Providence. This site is in about 11.5 feet of water (3.5 meters) and two YSI sondes collect water quality data from two levels, 0.3 m from the surface and 0.5 m off the bottom, at a 15 minute rate. The surface sonde measures depth, water temperature, specific conductance (salinity), pH, dissolved oxygen, chlorophyll a and fluorescence. The bottom sonde measures depth, water temperature, pH, and dissolved oxygen, with both surface and bottom sondes using the same units as noted above at Bullock's Reach. As with the Bullock's Reach data, Phillipsdale Landing data is transferred to the PC in the Field's Point WWTF Process Monitor Room every hour via phone line and is then viewed by EMDA personnel utilizing YSI software. A new state of the art datalogger was purchased and installed in September 2010 at this site, which also included a new software program for viewing the data files. Sondes were deployed at this site on March 13th 2012 and were removed on January 22nd 2013 due to concerns of ice build up at the site.

Lab/Field Procedures

Sondes are calibrated before each deployment at each site. All sondes are calibrated using YSI recommended methods in the YSI Operations Manual as well as agreed upon protocols from the Fixed Site Network. All calibrations used YSI standards and were conducted by NBC EMDA staff in the EMDA laboratory. Sondes are then deployed, retrieved after approximately two weeks in the water and then undergo post-deployment checks. Summer deployments are kept to a maximum of two weeks in the water due to fouling concerns. The post-deployment check involved placing the sonde probes in each calibration solution, as done during calibration, to check sonde readings when in that solution of known concentration, pH or NTUs. This data can be used in assessing how closely the sonde is reading to the actual solution levels, and therefore how far it has drifted from the original calibration or if there has been a probe failure. After the deployment period, new, clean, calibrated sondes are deployed at each site.

Data is viewed regularly while the sondes are deployed and if any problems are seen in the data, an attempt is made to change the sondes out sooner if staff time is available. All sonde swaps, including those done at Phillipsdale Landing, need to be done in dry weather so as not to get water in the sonde connectors.

Once at the site, a vertical profile is done using another YSI sonde instrument that measures depth, water temperature, pH, and dissolved oxygen. The sonde displays readings for these parameters on a small handheld computer and can be held at the same approximate depth as the sondes in the water to compare readings. During site visits, these measurements are compared to the readings from the sondes already in the water ('old') and those that were swapped into the water ('new') at the appropriate depths. If time allows, the profile sonde was also used to take measurements at various depths through the rest of the water column to determine the amount of stratification and differences in parameter values with varying depth.

All field work information is recorded on a Field Sheet, which is later placed in a Field Sheet binder in the EMDA office. All calibration, post-deployment and field information is provided in a metadata document to the Fixed Site Network for data editing purposes.

Phillipsdale Landing Dock Site

The Phillipsdale Landing (Phillipsdale) station is unique in that it is very close to large freshwater river sources and is also open to the tidal estuarine Providence River. Therefore, it receives seawater flushing during the tidal cycle and the transport of saltier bottom waters in the form of a salt wedge. This makes the Seekonk River a tidal estuary, defined as a place of fresh and saltwater mixing, in the truest sense. The Phillipsdale Landing site is located very close to shore and is on the edge of the shipping channel in the Seekonk River. The freshwater rivers feeding the Seekonk River include the Blackstone River which is north of the Phillipsdale site and feeds directly into the Seekonk River as its major source and the Ten Mile River which enters the Seekonk River just south of the Phillipsdale station. The Blackstone River streamflow averages approximately 700 cubic feet per second. For comparison, the next two largest freshwater inputs to Narragansett Bay are the Taunton River, averaging approximately 500 cubic feet per second, and the Pawtuxet River, averaging approximately 300 cubic feet per second. The fact that these instruments are fastened to a dock allows staff to have easy access to the water quality instruments from shore, allowing them to get to the instruments more quickly and attempt to remedy any problems.

Bullock's Reach Site

The Bullock's Reach Site sonde location is situated on a floating YSI buoy that is anchored near the edge of the shipping channel in the southern section of the Providence River. This location is in deeper, more saline waters than the Phillipsdale Landing station and is less proximate to fresh water sources and receives a greater degree of dilution by the saltier waters of the mid-Bay. The most proximate freshwater source would be the Pawtuxet River located to the northwest of the buoy site. The position of the buoy is to the northwest of Conimicut Point at approximately 41°43.944 North and 71°22.214 West in about 26 feet of water (about 8 meters), west of the Providence River channel. The bottom and mid depth sondes are attached to the buoy on one line with a mushroom anchor at the bottom and a float just above the sonde to keep it in an upright position. The surface sonde is placed in a PVC tube that is integrated into the buoy that allows protected but free flowing access to the surface water. Power to the buoy is maintained by a solar powered battery.

Data Management

Currently, the Bullock's Reach and Phillipsdale Landing sites are programmed to transmit data every hour to a computer at NBC. The data can be uploaded and viewed by EMDA staff anytime in order to assess and troubleshoot problems. The data is also available hourly to the public on the NBC Snapshot website.

During the summer months, the raw unedited data is also sent to the Fixed Site Network coordinator to determine if the Bay is experiencing hypoxic conditions and is then posted on the RIDEM's BART website. At the conclusion of the season, all data is sent to the Fixed Site Network coordinator for further editing and correcting. The data was not included in paper format as with the other tables due to the extensive nature of this sampling.

NBC Snapshot of Upper Narragansett Bay Website

In 2011, a new webpage was created by the NBC called “Snapshot of Upper Narragansett Bay” (<http://snapshot.narrabay.com/app/>) and was continually updated in 2012 with the most recent data from the receiving water monitoring program. The webpage includes information and data for all of the NBC receiving water monitoring, including a blog that is updated weekly with the most recent results of sampling events. Sampling procedures and charts showing data trends are presented for each monitoring initiative and tables with up-to-date monitoring results can be downloaded. The most recent data at the fixed water quality monitoring stations is displayed through dials and gauges (see Figure 6 below) that allow users to quickly assess current water quality conditions. An interactive chart wizard also allows users to choose which fixed site water quality parameters to chart and display and users can also choose parameters to display in table format, which can then be downloaded. The NBC Snapshot website represents a comprehensive look at water quality in upper Narragansett Bay by providing the general public with near real-time data and a wide range of information regarding water quality in Narragansett Bay. In 2012, the Narragansett Bay Commission received a National Association of Clean Water Agencies (NACWA) National Environmental Achievement Award Excellence in Public Information and Education for the Snapshot Website. NACWA's Public Information and Education Awards are presented for outstanding programs in video, printed publications, educational programs, or e-media.

Figure 6: NBC's Snapshot of Upper Narragansett Bay Website



Field's Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data

Date	Fecal Coliform		Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)
	Bacteria (MPN/100mL)	Influent Flow (MGD)				
1/1/2012	2	41.76	121	134.04	9	10.70
1/2/2012	3	39.88	119	157.22	7	10.78
1/3/2012	2	40.22	156	166.22	8	9.92
1/4/2012	2	39.48	140	142.01	5	9.84
1/5/2012	2	38.89	129	158.66	9	8.33
1/6/2012	2	38.55	129	161.80	5	12.69
1/7/2012	2	37.79	131	169.98	9	12.64
1/8/2012	2	37.66	139	148.25	9	12.03
1/9/2012	3	36.28	141	173.85	7	12.16
1/10/2012	2	38.77	135	145.04	8	8.91
1/11/2012	2	39.96	125	158.22	7	13.27
1/12/2012	2	66.31	161	117.01	12	12.18
1/13/2012	8	67.10	69	103.98	9	24.32
1/14/2012	3	54.45	78	105.40	9	13.59
1/15/2012	2	44.62	94	132.48	5	12.65
1/16/2012	2	41.95	126	161.21	8	8.59
1/17/2012	2	46.40	113	138.07	9	6.73
1/18/2012	2	38.87	102	170.93	9	12.19
1/19/2012	3	38.02	113	198.66	8	12.67
1/20/2012	2	40.29	117	150.92	8	11.59
1/21/2012	2	38.98	99	181.60	6	13.88
1/22/2012	2	39.10	122	159.12	7	5.87
1/23/2012	4	56.56	153	143.59	5	8.48
1/24/2012	6	50.36	102	132.38	12	12.80
1/25/2012	2	41.12	119	137.86	8	8.66
1/26/2012	2	51.69	117	116.87	8	8.64
1/27/2012	2	61.67	100	106.79	7	12.71
1/28/2012	2	45.36	99	159.42	9	12.04
1/29/2012	2	44.86	104	110.35	6	7.23
1/30/2012	3	41.43	97	146.83	8	10.29
1/31/2012	4	42.87	123	141.45	6	5.77
2/1/2012	3	41.50	117	138.43	8	10.90
2/2/2012	2	41.80	103	146.92	6	11.91
2/3/2012	2	40.65	133	167.47	5	10.82
2/4/2012	3	41.69	120	159.27	10	12.18
2/5/2012	2	39.15	155	192.86	7	12.94
2/6/2012	2	39.19	122	172.10	6	12.84
2/7/2012	2	39.68	123	190.20	6	11.27
2/8/2012	2	39.91	121	184.33	7	13.33
2/9/2012	2	37.90	138	200.20	10	12.95
2/10/2012	7	39.84	145	210.20	5	12.28
2/11/2012	2	39.29	126	159.72	7	9.93
2/12/2012	2	38.78	132	165.18	8	12.60
2/13/2012	2	35.99	144	191.80	7	10.74
2/14/2012	2	36.83	154	176.59	8	13.86
2/15/2012	2	37.03	144	163.26	11	9.16

Table 1: Field's Point TSS,BOD and Fecal Coliform Data

Field's Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data

Date	Fecal Coliform		Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)
	Bacteria (MPN/100mL)	Influent Flow (MGD)				
2/16/2012	2	38.36	163	178.03	12	12.21
2/17/2012	2	36.60	128	215.33	4	10.27
2/18/2012	2	35.48	121	196.17	9	11.61
2/19/2012	2	36.11	135	160.41	8	9.21
2/20/2012	2	34.86	133	207.78	8	10.40
2/21/2012	3	36.24	155	179.41	8	9.63
2/22/2012	2	36.57	156	205.09	11	13.47
2/23/2012	2	34.61	121	220.80	4	9.55
2/24/2012	3	50.24	177	192.83	6	14.65
2/25/2012	3	37.49	114	194.87	6	11.32
2/26/2012	2	35.50	130	177.59	8	11.62
2/27/2012	2	34.51	145	188.53	11	7.98
2/28/2012	2	34.72	139	186.51	5	13.10
2/29/2012	5	49.76	194	181.21	9	10.12
3/1/2012	11	61.08	87	124.46	15	18.41
3/2/2012	4	57.11	99	137.70	7	11.06
3/3/2012	2	47.79	102	163.59	7	13.14
3/4/2012	2	40.12	89	141.25	5	9.71
3/5/2012	2	37.79	105	185.69	4	12.27
3/6/2012	2	39.71	119	162.33	7	10.77
3/7/2012	4	39.57	110	169.23	4	8.96
3/8/2012	2	41.54	153	179.55	5	8.18
3/9/2012	4	39.77	125	201.62	6	9.53
3/10/2012	2	37.40	116	180.49	7	10.08
3/11/2012	2	36.77	114	163.25	5	8.83
3/12/2012	2	38.96	141	156.93	5	9.33
3/13/2012	3	37.68	140	197.75	5	9.43
3/14/2012	2	35.78	141	199.59	8	9.11
3/15/2012	2	37.34	156	164.48	9	7.83
3/16/2012	2	34.17	169	185.83	3	6.20
3/17/2012	2	36.18	144	203.57	6	8.68
3/18/2012	2	35.64	133	207.84	3	6.02
3/19/2012	2	36.30	185	196.08	9	7.96
3/20/2012	6	34.60	143	187.83	3	6.51
3/21/2012	2	36.26	130	191.29	3	10.56
3/22/2012	2	34.37	156	201.72	6	8.45
3/23/2012	2	35.99	128	199.48	6	8.29
3/24/2012	2	34.82	129	202.67	6	7.96
3/25/2012	3	33.62	114	210.38	3	3.27
3/26/2012	2	35.17	138	203.39	5	6.78
3/27/2012	2	32.31	145	190.08	3	8.34
3/28/2012	2	37.74	186	193.30	5	8.53
3/29/2012	2	36.38	154	172.31	10	8.82
3/30/2012	2	32.93	163	194.70	5	8.40
3/31/2012	2	35.95	133	185.98	8	7.82
4/1/2012	2	38.64	140	170.98	4	4.76
4/2/2012	4	33.85	149	220.82	7	10.41

Table 1: Field's Point TSS,BOD and Fecal Coliform Data

Field's Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data

Date	Fecal Coliform		Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)
	Bacteria (MPN/100mL)	Influent Flow (MGD)				
4/3/2012	2	35.13	134	180.76	7	11.88
4/4/2012	2	33.10	165	227.29	4	7.79
4/5/2012	2	35.19	161	184.66	12	8.34
4/6/2012	2	31.90	164	215.64	8	12.29
4/7/2012	2	35.39	139	181.91	13	8.89
4/8/2012	2	32.51	164	193.39	10	8.96
4/9/2012	2	33.79	155	194.81	8	10.74
4/10/2012	2	33.49	201	200.71	11	8.08
4/11/2012	2	31.91	153	194.71	6	8.20
4/12/2012	2	35.50	203	164.19	10	7.50
4/13/2012	2	33.63	140	211.43	5	8.34
4/14/2012	2	32.82	142	187.33	4	7.43
4/15/2012	3	31.73	117	189.17	4	7.55
4/16/2012	2	33.11	130	202.50	5	8.45
4/17/2012	2	31.59	153	224.36	8	8.53
4/18/2012	2	32.11	141	186.45	7	6.66
4/19/2012	2	32.30	167	227.96	9	7.52
4/20/2012	4	33.67	144	188.47	10	8.40
4/21/2012	2	31.46	149	204.60	4	7.82
4/22/2012	3	70.23	224	161.08	12	11.15
4/23/2012	2	54.66	106	133.48	11	8.01
4/24/2012	4	61.07	88	102.57	8	8.30
4/25/2012	7	61.57	74	116.07	6	11.03
4/26/2012	5	55.08	79	117.69	13	7.74
4/27/2012	2	44.49	103	148.91	6	7.17
4/28/2012	3	37.09	119	185.76	6	7.05
4/29/2012	3	35.51	130	170.47	9	8.17
4/30/2012	2	38.09	169	199.99	4	7.26
5/1/2012	3	50.42	115	130.59	5	8.24
5/2/2012	5	44.40	109	152.54	2	7.59
5/3/2012	7	38.59	121	177.71	3	10.01
5/4/2012	3	36.25	131	183.64	3	9.03
5/5/2012	2	36.26	131	186.82	4	7.26
5/6/2012	5	37.82	149	164.90	8	7.35
5/7/2012	3	37.45	139	173.30	6	9.82
5/8/2012	3	42.60	149	184.27	5	8.34
5/9/2012	8	64.01	194	165.81	9	12.04
5/10/2012	4	63.63	91	93.00	9	8.21
5/11/2012	4	62.83	73	100.00	7	10.26
5/12/2012	3	49.55	101	138.49	7	8.28
5/13/2012	4	38.07	107	145.10	6	6.16
5/14/2012	2	39.43	163	200.17	8	9.22
5/15/2012	2	50.28	151	161.25	11	15.49
5/16/2012	5	58.11	98	122.41	9	8.64
5/17/2012	2	55.60	101	120.54	9	9.64
5/18/2012	2	37.80	109	156.11	5	8.60
5/19/2012	3	39.81	111	158.11	3	10.66

Table 1: Field's Point TSS,BOD and Fecal Coliform Data

Field's Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data

Date	Fecal Coliform		Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)
	Bacteria (MPN/100mL)	Influent Flow (MGD)				
5/20/2012	2	36.68	112	189.44	7	8.38
5/21/2012	6	39.48	129	162.84	6	11.90
5/22/2012	2	52.78	117	132.85	9	8.29
5/23/2012	3	41.06	118	170.65	7	6.96
5/24/2012	2	38.04	115	153.86	7	6.01
5/25/2012	3	37.52	114	165.65	7	7.08
5/26/2012	2	36.82	118	195.50	3	6.82
5/27/2012	2	35.84	102	177.88	3	7.19
5/28/2012	2	37.90	123	175.84	4	5.03
5/29/2012	2	38.73	133	175.04	5	7.06
5/30/2012	3	35.60	115	159.35	3	6.66
5/31/2012	3	35.94	136	198.87	4	11.33
6/1/2012	2	36.97	137	168.04	7	6.00
6/2/2012	4	63.36	139	144.38	9	12.24
6/3/2012	2	59.75	78	97.07	5	6.59
6/4/2012	3	58.01	83	110.87	5	8.52
6/5/2012	2	36.36	147	194.60	12	8.62
6/6/2012	2	51.17	156	147.83	13	14.49
6/7/2012	5	45.79	145	142.45	10	8.82
6/8/2012	2	36.82	124	190.27	3	7.44
6/9/2012	2	36.68	103	154.34	4	7.64
6/10/2012	2	36.84	166	142.30	5	5.48
6/11/2012	4	36.04	153	224.20	10	7.54
6/12/2012	3	38.72	143	182.06	9	8.35
6/13/2012	3	49.11	123	149.44	8	7.18
6/14/2012	2	40.29	136	149.67	15	9.61
6/15/2012	2	34.59	124	193.59	6	6.89
6/16/2012	2	35.07	131	180.26	8	9.27
6/17/2012	2	33.84	151	172.68	15	9.40
6/18/2012	2	37.55	171	183.06	13	10.46
6/19/2012	5	34.33	121	183.28	10	12.49
6/20/2012	2	36.78	147	187.45	11	13.25
6/21/2012	3	37.12	124	189.69	5	8.18
6/22/2012	2	44.02	172	182.10	6	11.79
6/23/2012	2	38.86	103	152.24	7	8.31
6/24/2012	2	34.77	140	173.75	8	7.72
6/25/2012	6	57.27	123	119.01	12	8.13
6/26/2012	4	57.32	88	102.92	8	7.78
6/27/2012	3	48.98	93	120.40	7	7.24
6/28/2012	2	36.29	146	235.89	10	9.58
6/29/2012	2	36.79	164	170.35	12	9.52
6/30/2012	2	35.86	118	155.77	8	9.54
7/1/2012	2	45.76	155	145.75	11	9.28
7/2/2012	2	40.41	137	172.33	12	8.66
7/3/2012	3	36.90	120	181.64	8	8.97
7/4/2012	3	36.25	107	131.89	6	8.12
7/5/2012	5	34.74	135	173.47	8	8.27

Table 1: Field's Point TSS,BOD and Fecal Coliform Data

Field's Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data

Date	Fecal Coliform		Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)
	Bacteria (MPN/100mL)	Influent Flow (MGD)				
7/6/2012	7	36.28	150	188.28	7	10.08
7/7/2012	2	34.15	138	190.43	8	7.15
7/8/2012	2	33.78	143	152.65	5	7.87
7/9/2012	2	33.47	135	210.28	11	8.19
7/10/2012	3	35.02	173.3	207.55	13	12.98
7/11/2012	2	32.18	131	203.54	12	11.02
7/12/2012	2	33.26	152	182.99	11	11.06
7/13/2012	3	32.92	139	181.01	10	12.42
7/14/2012	3	33.14	142	190.82	8	16.59
7/15/2012	2	32.18	158	168.15	14	13.67
7/16/2012	2	40.23	191	180.93	11	11.90
7/17/2012	2	39.37	115	149.43	14	7.22
7/18/2012	3	48.67	173.3	145.77	12	10.84
7/19/2012	2	51.04	115	132.62	8	6.63
7/20/2012	2	35.85	135	164.61	6	8.72
7/21/2012	2	30.40	121	164.85	4	3.30
7/22/2012	2	32.78	145	169.80	7	4.74
7/23/2012	2	34.39	135.3	178.25	8	8.12
7/24/2012	2	38.73	175.3	206.14	8	9.29
7/25/2012	2	32.10	126	169.93	8	15.86
7/26/2012	2	32.81	157.3	195.05	10	5.12
7/27/2012	2	43.28	149	157.35	7	7.20
7/28/2012	2	52.76	118	124.77	5	8.30
7/29/2012	2	56.85	83.33	85.95	6	3.29
7/30/2012	3	53.63	97	101.26	5	4.36
7/31/2012	2	46.90	128.7	138.05	8	3.95
8/1/2012	2	35.38	145.3	162.50	7	9.22
8/2/2012	2	35.78	156	202.91	7	8.36
8/3/2012	2	34.65	116	162.90	5	4.94
8/4/2012	2	34.33	130.7	156.19	8	3.99
8/5/2012	2	35.64	150	165.73	7	4.07
8/6/2012	2	35.49	128.7	157.75	5	4.24
8/7/2012	2	33.02	105.3	173.58	8	6.32
8/8/2012	2	32.08	124.7	173.90	3	4.59
8/9/2012	2	34.85	130.7	180.91	4	8.00
8/10/2012	2	50.74	142.7	160.34	7	8.79
8/11/2012	4	57.47	58.67	97.12	4	5.95
8/12/2012	2	45.13	78	111.60	6	3.87
8/13/2012	2	34.67	120.7	163.49	6	3.92
8/14/2012	2	33.70	134.7	173.60	7	9.04
8/15/2012	7	63.52	114.7	179.95	8	8.13
8/16/2012	3	60.32	66.67	90.29	3	3.97
8/17/2012	2	55.50	71	114.50	4	5.34
8/18/2012	2	48.64	113.3	147.90	7	5.68
8/19/2012	2	33.02	106.7	153.90	4	3.63
8/20/2012	2	34.24	124	182.80	5	7.28
8/21/2012	3	34.60	149.3	161.60	7	5.32

Table 1: Field's Point TSS,BOD and Fecal Coliform Data

Field's Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data

Date	Fecal Coliform		Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)
	Bacteria (MPN/100mL)	Influent Flow (MGD)				
8/22/2012	2	32.96	142.7	182.30	6	4.98
8/23/2012	2	33.25	125.3	240.70	4	6.16
8/24/2012	2	34.32	122.7	186.88	4	6.15
8/25/2012	3	32.80	134.7	179.20	6	5.09
8/26/2012	3	31.77	135.3	168.90	5	6.08
8/27/2012	2	37.75	203.3	218.60	10	9.34
8/28/2012	2	40.42	156	159.00	8	5.87
8/29/2012	2	35.83	134	83.06	7	4.24
8/30/2012	2	31.93	137.3	163.70	6	4.80
8/31/2012	2	32.98	124.7	192.60	4	6.72
9/1/2012	2	31.34	170.7	217.86	5	5.01
9/2/2012	3	31.29	148.7	189.31	4	4.86
9/3/2012	2	31.88	140.7	229.26	4	10.71
9/4/2012	2	54.93	130	210.74	9	15.42
9/5/2012	3	52.41	130.7	150.42	7	9.32
9/6/2012	2	57.53	58.67	90.34	6	5.34
9/7/2012	2	58.17	52.67	93.49	3	7.44
9/8/2012	2	57.72	111.3	130.81	11	7.87
9/9/2012	4	37.99	122	185.30	7	4.32
9/10/2012	2	33.93	112.7	198.71	6	3.97
9/11/2012	2	32.97	128	198.89	3	<2
9/12/2012	2	33.63	131.3	222.66	5	7.89
9/13/2012	2	32.83	146.7	201.09	7	5.56
9/14/2012	2	33.60	125.3	204.89	7	4.70
9/15/2012	2	31.93	164.7	215.84	8	4.26
9/16/2012	2	31.19	142.7	217.70	11	6.23
9/17/2012	2	33.48	141.3	225.01	5	5.04
9/18/2012	3	45.86	176	233.96	9	8.34
9/19/2012	3	53.51	94.67	140.77	6	8.30
9/20/2012	2	40.10	112	183.05	6	7.86
9/21/2012	2	30.62	115.3	219.35	5	6.24
9/22/2012	2	36.20	148	193.83	5	5.69
9/23/2012	3	33.09	136	185.42	7	5.38
9/24/2012	2	30.83	120.7	201.81	6	6.67
9/25/2012	2	32.77	131.3	181.66	5	5.31
9/26/2012	2	32.76	172.7	225.63	7	4.79
9/27/2012	2	31.78	134.7	190.52	5	7.28
9/28/2012	2	53.02	184	182.04	12	14.32
9/29/2012	2	56.76	103.3	112.40	16	8.53
9/30/2012	2	38.54	124	162.46	10	7.43
10/1/2012	2	33.86	126.7	199.08	7	11.90
10/2/2012	2	43.21	136.7	159.83	7	11.47
10/3/2012	2	33.20	122	186.14	5	11.79
10/4/2012	2	34.83	158.7	202.66	8	9.82
10/5/2012	2	30.78	121.3	206.37	6	8.40
10/6/2012	2	32.80	134	222.74	5	8.44
10/7/2012	2	37.30	124.7	183.53	5	9.13

Table 1: Field's Point TSS,BOD and Fecal Coliform Data

Field's Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data

Date	Fecal Coliform	Influent Flow (MGD)	Raw Influent		Final Effluent	
	Bacteria (MPN/100mL)		TSS (mg/L)	BOD (mg/L)	TSS (mg/L)	BOD (mg/L)
10/8/2012	2	31.39	110.7	210.14	4	4.12
10/9/2012	4	31.96	168.7	204.66	13	5.26
10/10/2012	2	41.60	160.7	191.69	9	10.05
10/11/2012	5	32.77	129.3	183.09	7	6.08
10/12/2012	3	31.56	114	167.63	5	5.58
10/13/2012	2	31.80	136.7	194.17	5	4.92
10/14/2012	2	30.22	152	183.47	8	6.41
10/15/2012	2	35.58	240.7	240.32	8	7.76
10/16/2012	2	32.25	211.3	201.75	10	7.08
10/17/2012	2	31.77	139.3	221.31	7	7.44
10/18/2012	2	32.94	164.7	217.21	9	5.16
10/19/2012	6	46.92	318	224.14	11	10.85
10/20/2012	3	45.19	199.3	152.32	14	4.46
10/21/2012	2	52.91	96.67	117.47	10	6.23
10/22/2012	3	33.16	178.7	192.73	8	3.90
10/23/2012	2	33.61	172.7	227.99	5	6.74
10/24/2012	2	33.42	142.7	175.24	7	4.13
10/25/2012	3	33.53	138.7	211.45	2	4.94
10/26/2012	2	33.22	146	195.67	6	4.93
10/27/2012	2	32.74	172	217.40	6	4.98
10/28/2012	2	35.31	160.7	198.84	5	3.89
10/29/2012	2	57.41	165.3	126.03	15	7.99
10/30/2012	3	65.32	95.33	101.81	10	7.99
10/31/2012	6	62.39	71.33	117.67	7	6.97
11/1/2012	3	51.62	88.67	134.26	8	6.60
11/2/2012	2	50.72	88.67	166.39	3	6.11
11/3/2012	2	36.18	116.7	173.20	6	4.49
11/4/2012	3	35.51	118	207.45	<2.0	5.67
11/5/2012	2	35.64	136.7	204.66	5	7.61
11/6/2012	2	37.26	129.3	193.48	4	6.45
11/7/2012	2	46.92	142.7	179.25	5	8.98
11/8/2012	2	41.69	108	170.11	5	8.87
11/9/2012	2	35.22	116.7	184.68	5	6.10
11/10/2012	2	34.96	124.7	195.97	4	4.26
11/11/2012	2	33.58	117.3	176.94	5	3.29
11/12/2012	2	35.55	156.7	223.83	3	3.58
11/13/2012	3	48.11	162.7	201.25	5	7.02
11/14/2012	2	35.74	120	192.27	2	5.38
11/15/2012	2	34.23	118.7	188.26	4	4.11
11/16/2012	3	34.02	109.3	178.06	3	5.70
11/17/2012	2	33.00	135.3	180.96	5	4.97
11/18/2012	2	36.78	138.7	188.30	3	4.39
11/19/2012	2	32.81	193.3	237.56	7	5.78
11/20/2012	2	33.90	143.3	189.91	6	6.26
11/21/2012	2	31.63	179.3	203.04	4	4.09
11/22/2012	2	33.76	135.3	205.39	5	5.03
11/23/2012	2	31.16	131.3	181.82	6	7.46

Table 1: Field's Point TSS,BOD and Fecal Coliform Data

Field's Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data

Date	Fecal Coliform		Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)
	Bacteria (MPN/100mL)	Influent Flow (MGD)				
11/24/2012	2	30.66	138.7	214.04	7	11.36
11/25/2012	2	31.84	134.7	190.85	4	5.13
11/26/2012	2	32.70	145.3	216.43	4	5.00
11/27/2012	2	37.77	142.7	176.42	5	6.43
11/28/2012	2	31.52	124.7	193.26	5	7.95
11/29/2012	2	33.39	142	195.41	5	5.78
11/30/2012	2	31.48	127.3	198.41	3	6.97
12/1/2012	2	32.35	139.3	192.45	5	6.99
12/2/2012	2	32.33	176.7	233.10	8	10.99
12/3/2012	2	32.08	144.7	210.68	8	5.84
12/4/2012	2	32.58	132.7	208.91	5	8.98
12/5/2012	2	31.41	143.3	206.60	4	8.29
12/6/2012	2	32.14	168.7	218.46	6	10.52
12/7/2012	2	35.83	178	255.92	6	7.45
12/8/2012	3	41.90	152.7	219.98	5	9.71
12/9/2012	7	48.15	153.3	189.96	4	10.55
12/10/2012	3	59.46	96	113.66	8	14.01
12/11/2012	2	39.77	110	271.03	5	7.54
12/12/2012	2	33.57	123.3	190.80	5	7.78
12/13/2012	2	32.55	139.3	201.78	4	5.48
12/14/2012	2	35.32	143.3	193.49	5	8.59
12/15/2012	2	31.14	127.3	207.26	6	5.92
12/16/2012	2	42.66	163.3	160.41	7	6.27
12/17/2012	3	52.55	104	160.74	6	5.12
12/18/2012	4	58.26	97.33	138.07	6	6.66
12/19/2012	2	40.66	100.7	199.98	6	4.98
12/20/2012	2	35.59	113.3	152.49	7	3.15
12/21/2012	3	60.51	92	119.49	7	7.91
12/22/2012	2	56.24	93.33	109.51	7	11.62
12/23/2012	2	35.51	98.67	152.86	7	8.00
12/24/2012	2	37.98	111.3	174.57	6	5.62
12/25/2012	2	34.60	98	157.59	11	6.90
12/26/2012	4	46.87	139.3	176.99	8	9.79
12/27/2012	5	58.32	100	130.26	13	15.89
12/28/2012	2	62.86	67.33	115.91	5	11.46
12/29/2012	2	56.07	73.33	109.09	7	8.78
12/30/2012	2	46.70	85.33	113.53	8	10.04
12/31/2012	2	41.12	101.3	162.64	10	7.32

Table 1: Field's Point TSS,BOD and Fecal Coliform Data

**Bucklin Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data**

Date	Fecal Coliform		Influent Flow (MGD)	Raw Influent		Final Effluent	
	Bacteria (MPN/100 ml)			TSS (mg/L)	BOD (mg/L)	TSS (mg/L)	BOD (mg/L)
1/1/2012	9		19.12	151	185	10	2.99
1/2/2012	5		20.29	124	182	7	3.96
1/3/2012	5		18.88	129	200	8	4.40
1/4/2012	8		18.79	129	199	10	5.20
1/5/2012	7		19.25	137	175	10	3.60
1/6/2012	4		19.02	160	197	9	5.90
1/7/2012	5		18.61	139	221	10	5.40
1/8/2012	5		17.95	151	161	7	4.21
1/9/2012	5		18.30	136	197	6	4.80
1/10/2012	6		18.29	149	186	8	3.83
1/11/2012	9		17.50	137	221	7	4.24
1/12/2012	16		42.16	134	147	12	5.10
1/13/2012	6		20.44	105	190	7	6.33
1/14/2012	4		19.17	154	151	9	3.86
1/15/2012	8		17.85	109	175	9	3.75
1/16/2012	11		19.17	115	177	7	2.36
1/17/2012	13		24.25	126	159	6	2.75
1/18/2012	7		18.35	127	203	6	4.00
1/19/2012	4		17.88	126	145	8	4.70
1/20/2012	3		18.26	137	178	6	3.98
1/21/2012	4		18.47	122	204	8	4.69
1/22/2012	5		17.90	131	167	7	2.00
1/23/2012	4		23.26	129	168	7	4.29
1/24/2012	3		25.71	147	134	6	3.58
1/25/2012	9		18.43	114	157	8	2.48
1/26/2012	9		19.44	131	163	7	5.27
1/27/2012	12		35.39	135	158	6	4.27
1/28/2012	4		19.87	89	141	8	3.20
1/29/2012	3		19.38	135	147	6	2.00
1/30/2012	3		19.37	120	148	2	2.30
1/31/2012	3		19.09	123	153	5	2.00
2/1/2012	5		19.05	117	145	5	2.37
2/2/2012	2		18.83	130	180	5	2.56
2/3/2012	5		17.94	129	170	5	2.75
2/4/2012	3		18.48	141	170	8	2.83
2/5/2012	3		17.86	124	185	5	2.87
2/6/2012	5		18.05	144	203	4	2.56
2/7/2012	3		17.82	147	186	4	3.06
2/8/2012	3		17.54	145	194	2	2.80
2/9/2012	5		17.04	184	196	6	2.68
2/10/2012	3		17.46	139	216	4	3.00
2/11/2012	3		19.39	126	179	5	2.57
2/12/2012	2		16.92	155	184	7	2.88
2/13/2012	2		17.53	142	178	5	3.07
2/14/2012	3		18.10	159	214	6	2.99
2/15/2012	6		18.16	147	195	6	2.31

Table 2: Bucklin Point TSS,BOD and Fecal Coliform Data

**Bucklin Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data**

Date	Fecal Coliform		Influent Flow (MGD)	Raw Influent		Final Effluent	
	Bacteria (MPN/100 ml)			TSS (mg/L)	BOD (mg/L)	TSS (mg/L)	BOD (mg/L)
2/16/2012	5		18.43	181	213	4	2.26
2/17/2012	2		17.55	160	202	7	2.34
2/18/2012	3		16.84	145	216	7	2.44
2/19/2012	5		15.42	135	184	6	2.00
2/20/2012	3		15.94	155	202	4	2.70
2/21/2012	4		16.70	173	195	6	2.00
2/22/2012	2		16.65	183	198	8	2.00
2/23/2012	3		16.31	163	245	2	2.91
2/24/2012	6		23.31	212	240	6	3.46
2/25/2012	2		17.23	157	220	2	3.29
2/26/2012	2		14.53	157	191	3	2.50
2/27/2012	2		16.36	151	199	8	2.46
2/28/2012	2		15.44	147	195	5	2.18
2/29/2012	5		18.55	151	204	10	3.63
3/1/2012	12		35.95	149	158	17	4.03
3/2/2012	2		17.74	118	169	9	3.76
3/3/2012	4		26.46	113	164	4	2.95
3/4/2012	3		18.50	109	182	3	2.71
3/5/2012	3		17.30	118	189	5	2.35
3/6/2012	3		16.73	144	213	5	3.16
3/7/2012	4		17.36	119	155	7	2.38
3/8/2012	4		17.21	159	200	7	2.92
3/9/2012	3		17.70	141	208	6	2.61
3/10/2012	8		17.04	132	194	5	2.82
3/11/2012	3		16.53	126	222	4	2.91
3/12/2012	4		16.53	158	220	4	2.18
3/13/2012	4		16.93	157	212	6	2.28
3/14/2012	4		16.17	183	223	6	2.56
3/15/2012	5		16.13	140	202	6	2.82
3/16/2012	4		16.86	162	209	4	2.78
3/17/2012	5		16.25	159	219	3	2.74
3/18/2012	6		15.34	147	208	4	2.20
3/19/2012	4		15.26	154	203	8	2.18
3/20/2012	3		15.40	179	226	4	2.20
3/21/2012	3		15.41	205	221	3	2.43
3/22/2012	3		14.81	161	250	6	2.14
3/23/2012	2		14.81	165	233	5	2.40
3/24/2012	5		15.15	177	216	3	2.56
3/25/2012	4		15.30	144	237	4	2.00
3/26/2012	9		14.81	152	199	5	2.19
3/27/2012	6		14.35	193	230	2	2.92
3/28/2012	3		19.23	196	212	4	3.49
3/29/2012	4		15.48	165	212	7	2.86
3/30/2012	3		13.83	154	213	5	2.65
3/31/2012	8		17.56	145	185	6	2.20
4/1/2012	3		15.48	137	178	4	2.00

Table 2: Bucklin Point TSS,BOD and Fecal Coliform Data

**Bucklin Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data**

Date	Fecal Coliform		Influent Flow (MGD)	Raw Influent		Final Effluent	
	Bacteria (MPN/100 ml)			TSS (mg/L)	BOD (mg/L)	TSS (mg/L)	BOD (mg/L)
4/2/2012	7		16.90	141	184	3	2.84
4/3/2012	11		14.22	185	238	5	2.84
4/4/2012	12		14.33	172	249	4	2.71
4/5/2012	14		14.19	181	235	4	3.16
4/6/2012	7		14.12	173	250	5	3.70
4/7/2012	6		14.41	156	302	6	3.00
4/8/2012	4		14.14	191	237	5	3.26
4/9/2012	3		14.59	181	267	9	3.44
4/10/2012	4		14.65	189	220	7	3.86
4/11/2012	4		14.32	205	244	6	3.58
4/12/2012	5		15.49	173	248	8	3.40
4/13/2012	10		13.86	204	242	5	3.20
4/14/2012	3		14.10	146	183	4	2.79
4/15/2012	4		14.16	175	217	3	2.80
4/16/2012	4		13.72	150	222	3	3.03
4/17/2012	3		13.16	181	224	7	3.36
4/18/2012	6		13.81	181	229	8	3.11
4/19/2012	7		13.90	201	205	7	3.15
4/20/2012	8		13.88	245	227	4	2.87
4/21/2012	14		13.87	186	263	4	3.14
4/22/2012	4		30.54	172	219	28	10.60
4/23/2012	41		47.73	161	135	32	14.40
4/24/2012	5		18.45	139	168	5	2.57
4/25/2012	5		17.15	137	178	3	3.56
4/26/2012	4		16.71	143	190	10	2.67
4/27/2012	6		16.31	131	203	4	2.82
4/28/2012	3		16.07	141	180	3	2.69
4/29/2012	5		15.61	145	208	6	2.76
4/30/2012	4		16.01	136	205	10	4.15
5/1/2012	3		28.53	177	187	4	3.70
5/2/2012	3		17.25	122	185	3	3.06
5/3/2012	2		18.29	150	187	5	3.58
5/4/2012	8		17.08	149	241	6	3.16
5/5/2012	8		17.11	149	193	5	2.73
5/6/2012	5		15.71	167	203	9	2.83
5/7/2012	5		15.85	141	183	5	3.33
5/8/2012	2		16.93	188	219	11	3.44
5/9/2012	13		36.37	211	189	14	5.22
5/10/2012	17		38.84	118	114	10	4.30
5/11/2012	5		18.46	124	162	4	3.86
5/12/2012	3		17.32	146	186	8	3.35
5/13/2012	4		16.79	137	176	7	2.20
5/14/2012	17		17.92	150	200	5	2.59
5/15/2012	10		26.31	107	156	7	3.94
5/16/2012	21		26.39	245	226	5	2.98
5/17/2012	6		17.68	158	183	6	3.47

Table 2: Bucklin Point TSS,BOD and Fecal Coliform Data

**Bucklin Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data**

Date	Fecal Coliform	Influent Flow (MGD)	Raw Influent		Final Effluent	
	Bacteria (MPN/100 ml)		TSS (mg/L)	BOD (mg/L)	TSS (mg/L)	BOD (mg/L)
5/18/2012	8	17.22	145	219	4	2.80
5/19/2012	4	16.72	142	204	2	2.81
5/20/2012	4	16.28	147	177	4	2.44
5/21/2012	8	18.57	141	186	6	3.51
5/22/2012	15	29.45	196	191	6	4.19
5/23/2012	9	17.47	131	163	7	4.31
5/24/2012	30	17.35	155	185	6	3.11
5/25/2012	12	18.36	161	213	5	3.29
5/26/2012	5	16.95	171	202	3	3.28
5/27/2012	3	14.86	151	199	5	3.51
5/28/2012	259	15.88	163	164	7	2.92
5/29/2012	2	16.69	167	191	4	3.53
5/30/2012	2	16.55	169	202	4	3.85
5/31/2012	2	15.49	168	215	5	3.57
6/1/2012	2	15.28	189	225	5	3.54
6/2/2012	5	38.72	193	184	8	4.64
6/3/2012	3	16.86	121	193	4	2.90
6/4/2012	2	18.58	133	193	3	3.30
6/5/2012	2	17.49	151	187	5	3.90
6/6/2012	2	19.53	155	205	7	4.83
6/7/2012	2	22.36	177	189	8	3.91
6/8/2012	5	17.51	163	190	3	4.15
6/9/2012	2	16.18	164	192	5	3.86
6/10/2012	4	15.04	149	184	5	3.05
6/11/2012	4	16.02	160	198	6	3.56
6/12/2012	2	16.79	187	230	7	3.91
6/13/2012	5	28.36	167	174	8	4.12
6/14/2012	2	16.31	155	189	6	2.86
6/15/2012	3	15.80	123	176	5	2.95
6/16/2012	2	15.50	179	215	6	2.33
6/17/2012	2	14.85	159	212	5	2.47
6/18/2012	2	15.15	189	206	5	2.94
6/19/2012	2	15.92	198	219	7	3.00
6/20/2012	3	15.01	159	208	8	4.11
6/21/2012	2	13.92	174	203	3	2.81
6/22/2012	5	15.33	167	196	3	4.12
6/23/2012	5	14.95	206	217	8	3.06
6/24/2012	2	14.15	176	214	8	2.66
6/25/2012	3	32.48	167	170	9	3.05
6/26/2012	3	16.15	143	170	5	2.86
6/27/2012	3	15.61	176	213	9	2.45
6/28/2012	2	15.03	161	203	7	2.50
6/29/2012	2	16.34	195	222	11	3.07
6/30/2012	2	14.65	150	183	3	2.45
7/1/2012	3	16.06	147	168	5	2.00
7/2/2012	2	20.31	165	192	9	3.01

Table 2: Bucklin Point TSS,BOD and Fecal Coliform Data

**Bucklin Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data**

Date	Fecal Coliform		Influent Flow (MGD)	Raw Influent		Final Effluent	
	Bacteria (MPN/100 ml)			TSS (mg/L)	BOD (mg/L)	TSS (mg/L)	BOD (mg/L)
7/3/2012	2		14.83	153	180	4	2.16
7/4/2012	2		16.21	141	167	5	2.21
7/5/2012	2		14.71	134	192	3	2.08
7/6/2012	3		14.24	157	210	2	2.08
7/7/2012	2		14.71	148	182	2	2.00
7/8/2012	2		13.75	16	179	2	2.00
7/9/2012	2		13.86	152	194	2	2.06
7/10/2012	2		13.59	167	209	2	2.33
7/11/2012	2		14.24	172	195	5	2.12
7/12/2012	2		14.25	171	202	6	2.22
7/13/2012	2		14.41	114	168	5	2.12
7/14/2012	6		13.80	151	202	4	2.57
7/15/2012	3		13.73	156	176	5	2.00
7/16/2012	2		15.60	167	184	5	3.04
7/17/2012	7		13.74	195	193	3	2.50
7/18/2012	58		20.82	159	180	2.333	4.88
7/19/2012	2		14.45	185	180	6	3.10
7/20/2012	46		15.29	150	210	4	2.90
7/21/2012	2		13.47	129	204	4	2.81
7/22/2012	2		13.34	171	214	8	2.30
7/23/2012	4		14.62	178	180	8.667	2.52
7/24/2012	5		17.92	182	204	8.667	5.16
7/25/2012	2		13.41	182	215	5.333	2.41
7/26/2012	2		14.43	187	249	6	3.00
7/27/2012	2		15.05	196	226	5	3.24
7/28/2012	2		23.53	172	184	4	3.98
7/29/2012	2		16.87	145	155	6.333	2.27
7/30/2012	2		14.79	170	165	9	2.23
7/31/2012	2		16.89	168	175	8.667	2.52
8/1/2012	3		16.05	167	160	5.667	2.43
8/2/2012	4		14.75	163	193	7.333	2.89
8/3/2012	988		14.11	192	233	5.333	3.28
8/4/2012	2202		13.87	181	218	2.333	2.58
8/5/2012	188		14.59	163	212	2.667	2.65
8/6/2012	8		14.30	175	196	2	2.96
8/7/2012	2		13.53	193	240	7.667	3.29
8/8/2012	7		13.82	164	211	5.667	3.31
8/9/2012	3		13.63	227	245	5.333	3.77
8/10/2012	5		24.80	192	207	8.333	4.45
8/11/2012	10		14.95	165	172	7.667	3.40
8/12/2012	35		15.88	137	195	3.333	2.34
8/13/2012	7		13.37	185	198	6.333	3.23
8/14/2012	4		13.53	205	196	4	2.68
8/15/2012	31		32.21	193	182	6	4.78
8/16/2012	112		16.02	137	144	4.667	3.02
8/17/2012	9		15.03	169	193	3	3.01

Table 2: Bucklin Point TSS,BOD and Fecal Coliform Data

**Bucklin Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data**

Date	Fecal Coliform		Influent Flow (MGD)	Raw Influent		Final Effluent	
	Bacteria (MPN/100 ml)			TSS (mg/L)	BOD (mg/L)	TSS (mg/L)	BOD (mg/L)
8/18/2012	33		21.78	154	180	4.667	3.39
8/19/2012	10		14.17	142	158	3.333	2.80
8/20/2012	2		14.39	173	189	5.333	2.08
8/21/2012	4		14.27	189	221	7.333	2.26
8/22/2012	4		14.25	193	199	9.333	3.08
8/23/2012	7		14.30	194	233	3.333	3.56
8/24/2012	3		13.81	174	224	4.667	3.12
8/25/2012	2		13.51	171	215	6	2.35
8/26/2012	2		13.25	162	245	4.667	2.00
8/27/2012	12		14.42	192	210	8.333	2.24
8/28/2012	2		24.03	311	207	5.667	2.57
8/29/2012	3		14.38	170	174	6.333	2.30
8/30/2012	5		14.37	173	173	2.667	2.00
8/31/2012	5		14.23	173	219	2.667	2.00
9/1/2012	3		13.82	139	196	5.667	2.00
9/2/2012	2		13.29	159	186	2.333	2.00
9/3/2012	2		14.40	156	210	4.667	3.52
9/4/2012	2		24.24	287	315	4	3.46
9/5/2012	62		30.23	141	160	6.667	3.40
9/6/2012	3		15.83	134	179	4.333	2.00
9/7/2012	2		15.21	149	197	3.667	2.00
9/8/2012	2		20.36	167	189	6.333	2.15
9/9/2012	2		16.78	159	164	8.333	2.00
9/10/2012	3		15.46	134	198	4.333	2.40
9/11/2012	2		15.00	160	201	3.333	2.04
9/12/2012	2		14.91	176	277	4.667	2.47
9/13/2012	3		15.07	174	211	5	2.30
9/14/2012	126		14.99	197	247	5.667	4.37
9/15/2012	25		15.19	198	254	5.667	2.51
9/16/2012	186		14.46	169	225	5.333	2.33
9/17/2012	12		14.61	168	260	4.333	2.46
9/18/2012	16		15.90	190	225	9.333	4.44
9/19/2012	71		28.87	189	201	4	4.27
9/20/2012	3		14.53	148	187	4.667	2.42
9/21/2012	2		14.80	148	203	4.667	2.02
9/22/2012	2		15.07	188	228	4.333	2.08
9/23/2012	7		16.40	165	207	5.667	2.00
9/24/2012	4		14.74	143	207	2.667	2.17
9/25/2012	18		14.76	171	186	6.667	2.28
9/26/2012	12		15.30	175	205	4.333	2.09
9/27/2012	6		14.87	177	221	4	2.17
9/28/2012	7		31.60	196	238	9	5.10
9/29/2012	4		19.38	160	159	15.67	3.47
9/30/2012	10		18.01	154	204	4.333	2.28
10/1/2012	11		15.57	147	200	4.333	2.39
10/2/2012	4		20.05	187	256	4.333	3.64

Table 2: Bucklin Point TSS,BOD and Fecal Coliform Data

**Bucklin Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data**

Date	Fecal Coliform	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)
	Bacteria (MPN/100 ml)					
10/3/2012	2	17.04	152	197	5.667	2.50
10/4/2012	16	16.72	169	236	6.667	2.45
10/5/2012	71	15.63	169	242	5.333	2.09
10/6/2012	3	16.86	169	231	3.333	2.29
10/7/2012	2	17.27	152	226	5.333	2.61
10/8/2012	2	16.56	179	289	3.667	2.48
10/9/2012	3	16.36	167	215	9.333	2.12
10/10/2012	2	22.52	183	238	4	3.23
10/11/2012	2	15.56	133	186	4.667	2.38
10/12/2012	7	15.66	149	236	5	2.13
10/13/2012	2	14.53	177	215	5.667	2.07
10/14/2012	2	15.66	177	209	7.667	2.97
10/15/2012	2	16.52	180	265	2	2.00
10/16/2012	8	15.72	201	222	2.333	2.00
10/17/2012	2	15.11	201	226	4.667	2.15
10/18/2012	3	15.17	221	218	7	2.09
10/19/2012	7	19.32	201	244	7.333	3.05
10/20/2012	15	27.56	221	192	5.333	2.00
10/21/2012	17	15.23	153	193	8.333	2.22
10/22/2012	2	15.33	162	246	5	2.13
10/23/2012	4	15.51	267	335	5	2.45
10/24/2012	3	16.00	156	218	6.333	2.55
10/25/2012	2	15.79	170	218	2.667	2.85
10/26/2012	3	15.09	171	233	4	2.23
10/27/2012	2	15.01	195	240	5.333	2.41
10/28/2012	2	15.82	197	260	6.667	2.00
10/29/2012	4	50.00	194	214	25	20.41
10/30/2012	32	39.24	88	86	10	4.46
10/31/2012	4	20.96	131	159	6.667	2.78
11/1/2012	3	18.20	140	187	4	2.14
11/2/2012	2	17.70	149	211	4.333	3.25
11/3/2012	2	16.57	155	191	3.667	2.56
11/4/2012	2	15.91	135	191	3.667	2.34
11/5/2012	2	15.74	149	209	5.333	2.88
11/6/2012	2	15.50	157	214	3	2.47
11/7/2012	2	20.78	185	220	5.333	4.22
11/8/2012	3	22.46	141	201	6.667	4.18
11/9/2012	2	16.74	126	187	4.667	2.86
11/10/2012	2	15.95	139	204	5	2.20
11/11/2012	2	15.96	137	207	6.333	3.07
11/12/2012	2	16.62	146	215	2.667	2.52
11/13/2012	4	27.05	187	225	4.667	4.03
11/14/2012	5	16.25	112	137	4.667	3.50
11/15/2012	5	16.45	145	203	7.333	2.75
11/16/2012	2	15.89	135	243	3	2.99
11/17/2012	2	15.53	157	204	5.333	2.60

Table 2: Bucklin Point TSS,BOD and Fecal Coliform Data

**Bucklin Point 2012 Wastewater Treatment Plant
TSS, BOD and Fecal Coliform Data**

Date	Fecal Coliform	Influent Flow (MGD)	Raw Influent TSS (mg/L)	Raw Influent BOD (mg/L)	Final Effluent TSS (mg/L)	Final Effluent BOD (mg/L)
	Bacteria (MPN/100 ml)					
11/18/2012	2	15.37	146	204	6.333	2.48
11/19/2012	3	15.65	155	218	10	2.69
11/20/2012	10	15.55	199	243	14	5.18
11/21/2012	4	15.95	202	210	12.33	2.27
11/22/2012	3	15.55	140	236	3.333	2.08
11/23/2012	2	15.46	155	254	6	2.63
11/24/2012	2	15.26	123	197	7.333	2.99
11/25/2012	2	15.33	263	324	12	2.90
11/26/2012	2	15.02	177	242	7.667	2.69
11/27/2012	2	17.53	169	233	7.333	2.88
11/28/2012	2	15.26	151	234	8.333	3.17
11/29/2012	3	14.88	169	229	8.333	2.99
11/30/2012	3	14.25	174	255	6	2.98
12/1/2012	2	15.18	189	222	7.333	2.69
12/2/2012	2	15.37	154	209	5.333	2.90
12/3/2012	2	14.46	182	228	7.667	2.50
12/4/2012	4	15.49	185	221	5.667	2.72
12/5/2012	3	14.47	206	240	6	2.75
12/6/2012	2	13.85	173	219	6	2.76
12/7/2012	3	14.92	177	228	5.333	2.87
12/8/2012	3	28.06	227	298	6.667	4.29
12/9/2012	4	15.80	156	192	10.67	4.13
12/10/2012	11	36.84	129	170	10	7.87
12/11/2012	2	15.09	136	171	5.7	3.35
12/12/2012	2	15.16	141	204	6	3.44
12/13/2012	3	14.84	165	210	3.667	2.96
12/14/2012	3	14.99	163	247	5.667	3.56
12/15/2012	2	14.61	158	223	4.667	3.18
12/16/2012	2	15.91	146	186	4	2.50
12/17/2012	4	25.08	164	174	11	3.89
12/18/2012	49	31.61	148	196	11	4.14
12/19/2012	2	15.78	123	193	5.667	2.10
12/20/2012	2	15.58	166	229	5.333	2.02
12/21/2012	2	37.25	142	172	13	7.81
12/22/2012	2	17.78	133	165	9.667	3.53
12/23/2012	2	17.39	130	189	7	2.11
12/24/2012	2	17.45	145	202	6.333	2.76
12/25/2012	2	16.42	155	203	7.667	2.68
12/26/2012	2	16.70	163	202	30.67	19.80
12/27/2012	83	47.78	141	169	17	8.37
12/28/2012	3	19.95	105	169	6.333	3.50
12/29/2012	2	19.99	116	186	11	3.41
12/30/2012	2	19.68	106	148	6.667	3.34
12/31/2012	2	20.19	105.3	150	8.333	3

Table 2: Bucklin Point TSS,BOD and Fecal Coliform Data

Field's Point Enterococci Data 2012
all results are in MPN/100ml

Field's Point	Grab 1	Grab 2	Grab 2 Duplicate
1/1/2012			
1/2/2012	24	31	
1/3/2012			
1/4/2012	13	133	5
1/5/2012			
1/6/2012	21	41	
1/7/2012			
1/8/2012			
1/9/2012	89	11	
1/10/2012			
1/11/2012	13	69	12
1/12/2012			
1/13/2012	886	1046	
1/14/2012			
1/15/2012			
1/16/2012	93	210	
1/17/2012			
1/18/2012	54	130	48
1/19/2012			
1/20/2012	12	148	
1/21/2012			
1/22/2012			
1/23/2012	210	159	
1/24/2012			
1/25/2012			
1/26/2012			
1/27/2012	613	>2417	
1/28/2012			
1/29/2012			
1/30/2012	168	1203	
1/31/2012			
2/1/2012	199	1414	233
2/2/2012			
2/3/2012	4	39	
2/4/2012			
2/5/2012			
2/6/2012	173	11	
2/7/2012			
2/8/2012			
2/9/2012			
2/10/2012	517	13	
2/11/2012			
2/12/2012			
2/13/2012	5	328	
2/14/2012			
2/15/2012	365	272	387

Table 3: Field's Point Enterococci Data 2012

Field's Point Enterococci Data 2012
all results are in MPN/100ml

Field's Point	Grab 1	Grab 2	Grab 2 Duplicate
2/16/2012			
2/17/2012	5	649	
2/18/2012			
2/19/2012			
2/20/2012	6	112	
2/21/2012			
2/22/2012			
2/23/2012			
2/24/2012	14	435	
2/25/2012			
2/26/2012			
2/27/2012	6	66	
2/28/2012			
2/29/2012	548	579	488
3/1/2012			
3/2/2012	1553	>2420	
3/3/2012			
3/4/2012			
3/5/2012	13	980	
3/6/2012			
3/7/2012	59	687	51
3/8/2012			
3/9/2012	192	548	
3/10/2012			
3/11/2012			
3/12/2012	17	13	
3/13/2012			
3/14/2012	70	411	79
3/15/2012			
3/16/2012	3	29	
3/17/2012			
3/18/2012			
3/19/2012	13	21	
3/20/2012			
3/21/2012			
3/22/2012			
3/23/2012	12	17	
3/24/2012			
3/25/2012			
3/26/2012	6	9	
3/27/2012			
3/28/2012	16	12	13
3/29/2012			
3/30/2012	345	11	
3/31/2012			
4/1/2012			

Table 3: Field's Point Enterococci Data 2012

Field's Point Enterococci Data 2012
all results are in MPN/100ml

Field's Point	Grab 1	Grab 2	Grab 2 Duplicate
4/2/2012	68	159	
4/3/2012			
4/4/2012			
4/5/2012			
4/6/2012	9	19	
4/7/2012			
4/8/2012			
4/9/2012	6	5	
4/10/2012			
4/11/2012	17	5	8
4/12/2012			
4/13/2012	13	11	
4/14/2012			
4/15/2012			
4/16/2012	10	40	
4/17/2012			
4/18/2012			
4/19/2012			
4/20/2012	21	17	
4/21/2012			
4/22/2012			
4/23/2012	50	178	
4/24/2012			
4/25/2012			
4/26/2012			
4/27/2012	26	78	
4/28/2012			
4/29/2012			
4/30/2012	8	13	
5/1/2012			
5/2/2012	56	162	65
5/3/2012			
5/4/2012	5	11	
5/5/2012			
5/6/2012			
5/7/2012	10	13	
5/8/2012			
5/9/2012	107	33	107
5/10/2012			
5/11/2012	52	125	
5/12/2012			
5/13/2012			
5/14/2012	10	30	
5/15/2012			
5/16/2012			
5/17/2012			

Table 3: Field's Point Enterococci Data 2012

Field's Point Enterococci Data 2012
all results are in MPN/100ml

Field's Point	Grab 1	Grab 2	Grab 2 Duplicate
5/18/2012	5	162	
5/19/2012			
5/20/2012			
5/21/2012	9	17	
5/22/2012			
5/23/2012	10	12	11
5/24/2012			
5/25/2012	<1	2	
5/26/2012			
5/27/2012			
5/28/2012	6	33	
5/29/2012			
5/30/2012	5	11	3
5/31/2012			
6/1/2012	7	4	
6/2/2012			
6/3/2012			
6/4/2012	30	42	
6/5/2012			
6/6/2012	15	17	17
6/7/2012			
6/8/2012	6	8	
6/9/2012			
6/10/2012			
6/11/2012	5	8	
6/12/2012			
6/13/2012			
6/14/2012			
6/15/2012	12	36	
6/16/2012			
6/17/2012			
6/18/2012	10	13	
6/19/2012			
6/20/2012	5	24	7
6/21/2012			
6/22/2012	6	5	
6/23/2012			
6/24/2012			
6/25/2012	5	3	
6/26/2012			
6/27/2012			
6/28/2012			
6/29/2012	9	6	
6/30/2012			
7/1/2012			
7/2/2012	15	8	

Table 3: Field's Point Enterococci Data 2012

Field's Point Enterococci Data 2012
all results are in MPN/100ml

Field's Point	Grab 1	Grab 2	Grab 2 Duplicate
7/3/2012			
7/4/2012	16	23	15
7/5/2012			
7/6/2012	20	23	
7/7/2012			
7/8/2012			
7/9/2012	2	11	
7/10/2012			
7/11/2012			
7/12/2012			
7/13/2012	11	8	
7/14/2012			
7/15/2012			
7/16/2012	4	4	
7/17/2012			
7/18/2012	11	6	10
7/19/2012			
7/20/2012	3	4	
7/21/2012			
7/22/2012			
7/23/2012	2	4	
7/24/2012			
7/25/2012			
7/26/2012			
7/27/2012	2	1	
7/28/2012			
7/29/2012			
7/30/2012	8	10	
7/31/2012			
8/1/2012	5	6	3
8/2/2012			
8/3/2012	5	1	
8/4/2012			
8/5/2012			
8/6/2012	4	2	
8/7/2012			
8/8/2012			
8/9/2012			
8/10/2012	2	3	
8/11/2012			
8/12/2012			
8/13/2012	5	7	
8/14/2012			
8/15/2012	2	22	16
8/16/2012			
8/17/2012	5	3	

Table 3: Field's Point Enterococci Data 2012

Field's Point Enterococci Data 2012
all results are in MPN/100ml

Field's Point	Grab 1	Grab 2	Grab 2 Duplicate
8/18/2012			
8/19/2012			
8/20/2012	7	4	
8/21/2012			
8/22/2012			
8/23/2012			
8/24/2012	3	10	
8/25/2012			
8/26/2012			
8/27/2012	11	3	
8/28/2012			
8/29/2012	5	3	3
8/30/2012			
8/31/2012	3	4	
9/1/2012			
9/2/2012			
9/3/2012	9	<1	
9/4/2012			
9/5/2012	6	12	12
9/6/2012			
9/7/2012	4	6	
9/8/2012			
9/9/2012			
9/10/2012	8	3	
9/11/2012			
9/12/2012	1	5	3
9/13/2012			
9/14/2012	4	1	
9/15/2012			
9/16/2012			
9/17/2012	5	6	
9/18/2012			
9/19/2012			
9/20/2012			
9/21/2012	5	4	
9/22/2012			
9/23/2012			
9/24/2012	2	5	
9/25/2012			
9/26/2012	4	2	2
9/27/2012			
9/28/2012	1	2	
9/29/2012			
9/30/2012			
10/1/2012	8	7	
10/2/2012			

Table 3: Field's Point Enterococci Data 2012

Field's Point Enterococci Data 2012
all results are in MPN/100ml

Field's Point	Grab 1	Grab 2	Grab 2 Duplicate
10/3/2012			
10/4/2012			
10/5/2012	3	5	
10/6/2012			
10/7/2012			
10/8/2012			
10/9/2012			
10/10/2012	3	5	7
10/11/2012			
10/12/2012	5	2	
10/13/2012			
10/14/2012			
10/15/2012	3	2	
10/16/2012			
10/17/2012			
10/18/2012			
10/19/2012	6	5	
10/20/2012			
10/21/2012			
10/22/2012	9	3	
10/23/2012			
10/24/2012	8	2	5
10/25/2012			
10/26/2012	3	12	
10/27/2012			
10/28/2012			
10/29/2012	1	3	
10/30/2012			
10/31/2012			
11/1/2012			
11/2/2012	9	12	
11/3/2012			
11/4/2012			
11/5/2012	5	5	
11/6/2012			
11/7/2012	4	10	6
11/8/2012			
11/9/2012	6	7	
11/10/2012			
11/11/2012			
11/12/2012	6	3	
11/13/2012			
11/14/2012	10	4	7
11/15/2012			
11/16/2012	3	3	
11/17/2012			

Table 3: Field's Point Enterococci Data 2012

Field's Point Enterococci Data 2012
all results are in MPN/100ml

Field's Point	Grab 1	Grab 2	Grab 2 Duplicate
11/18/2012			
11/19/2012	13	3	
11/20/2012			
11/21/2012	4	12	11
11/22/2012			
11/23/2012	6	5	
11/24/2012			
11/25/2012			
11/26/2012	6	6	
11/27/2012			
11/28/2012			
11/29/2012			
11/30/2012	10	6	
12/1/2012			
12/2/2012			
12/3/2012	7	3	
12/4/2012			
12/5/2012	11	4	9
12/6/2012			
12/7/2012	3	4	
12/8/2012			
12/9/2012			
12/10/2012	134	91	
12/11/2012			
12/12/2012	12	7	6
12/13/2012			
12/14/2012	6	10	
12/15/2012			
12/16/2012			
12/17/2012	78	47	
12/18/2012			
12/19/2012	128	14	9
12/20/2012			
12/21/2012	6	1	
12/22/2012			
12/23/2012			
12/24/2012	7	6	
12/25/2012			
12/26/2012	10	5	4
12/27/2012			
12/28/2012	53	8	
12/29/2012			
12/30/2012			
12/31/2012	11	9	

Table 3: Field's Point Enterococci Data 2012

Bucklin Point Enterococci Data 2012

all results are in MPN/100ml

Bucklin Point	Grab 1	Grab 2	Grab 3	Grab 4	Grab 4 Duplicate
1/1/2012					
1/2/2012	6	10	8	8	
1/3/2012					
1/4/2012	8	9	8	6	12
1/5/2012					
1/6/2012	4	12	16	8	
1/7/2012					
1/8/2012					
1/9/2012	10	3	8	4	
1/10/2012					
1/11/2012	6	6	6	12	9
1/12/2012					
1/13/2012	5	6	6	10	
1/14/2012					
1/15/2012					
1/16/2012	10	17	6	9	
1/17/2012					
1/18/2012	6	3	5	5	13
1/19/2012					
1/20/2012	5	2	6	6	
1/21/2012					
1/22/2012					
1/23/2012	5	4	5	7	
1/24/2012					
1/25/2012					
1/26/2012					
1/27/2012	22	10	5	8	
1/28/2012					
1/29/2012					
1/30/2012	3	1	6	5	
1/31/2012					
2/1/2012	2	9	3	9	4
2/2/2012					
2/3/2012	4	5	2	5	
2/4/2012					
2/5/2012					
2/6/2012	2	5	3	5	
2/7/2012					
2/8/2012					
2/9/2012					
2/10/2012	6	8	5	3	
2/11/2012					
2/12/2012					
2/13/2012	3	2	4	4	
2/14/2012					
2/15/2012	8	1	24	6	1
2/16/2012					
2/17/2012	3	2	2	1	

Table 4: Bucklin Point Enterococci Data 2012

Bucklin Point Enterococci Data 2012
all results are in MPN/100ml

Bucklin Point	Grab 1	Grab 2	Grab 3	Grab 4	Grab 4 Duplicate
2/18/2012					
2/19/2012					
2/20/2012	5	1	6	3	
2/21/2012					
2/22/2012					
2/23/2012					
2/24/2012	4	2	6	1	
2/25/2012					
2/26/2012					
2/27/2012	6	2	6	4	
2/28/2012					
2/29/2012	8	5	3	5	4
3/1/2012					
3/2/2012	5	2	3	10	
3/3/2012					
3/4/2012					
3/5/2012	3	2	2	3	
3/6/2012					
3/7/2012	6	4	4	13	9
3/8/2012					
3/9/2012	6	8	2	6	
3/10/2012					
3/11/2012					
3/12/2012	6	9	6	8	
3/13/2012					
3/14/2012	<1	5	8	2	6
3/15/2012					
3/16/2012	8	4	6	3	
3/17/2012					
3/18/2012					
3/19/2012	3	8	6	4	
3/20/2012					
3/21/2012					
3/22/2012					
3/23/2012	4	5	3	3	
3/24/2012					
3/25/2012					
3/26/2012	6	19	4	16	
3/27/2012					
3/28/2012	5	6	9	5	5
3/29/2012					
3/30/2012	4	6	4	3	
3/31/2012					
4/1/2012					
4/2/2012	12	2	6	10	
4/3/2012					
4/4/2012					
4/5/2012					

Table 4: Bucklin Point Enterococci Data 2012

Bucklin Point Enterococci Data 2012

all results are in MPN/100ml

Bucklin Point	Grab 1	Grab 2	Grab 3	Grab 4	Grab 4 Duplicate
4/6/2012	9	10	13	11	
4/7/2012					
4/8/2012					
4/9/2012	4	6	11	9	
4/10/2012					
4/11/2012	9	5	14	12	3
4/12/2012					
4/13/2012	6	23	8	15	
4/14/2012					
4/15/2012					
4/16/2012	6	4	<1	9	
4/17/2012					
4/18/2012					
4/19/2012					
4/20/2012	3	5	4	3	
4/21/2012					
4/22/2012					
4/23/2012	21	16	7	5	
4/24/2012					
4/25/2012					
4/26/2012					
4/27/2012	3	11	4	3	
4/28/2012					
4/29/2012					
4/30/2012	5	13	<1	3	
5/1/2012					
5/2/2012	1	3	3	4	6
5/3/2012					
5/4/2012	6	7	4	2	
5/5/2012					
5/6/2012					
5/7/2012	4	4	<1	6	
5/8/2012					
5/9/2012	3	12	13	7	11
5/10/2012					
5/11/2012	2	2	4	3	
5/12/2012					
5/13/2012					
5/14/2012	6	5	11	<1	
5/15/2012					
5/16/2012					
5/17/2012					
5/18/2012	1	3	1	2	
5/19/2012					
5/20/2012					
5/21/2012	<1	5	1	1	
5/22/2012					
5/23/2012	5	<1	3	3	<1

Table 4: Bucklin Point Enterococci Data 2012

Bucklin Point Enterococci Data 2012
all results are in MPN/100ml

Bucklin Point	Grab 1	Grab 2	Grab 3	Grab 4	Grab 4 Duplicate
5/24/2012					
5/25/2012	6	1	4	1	
5/26/2012					
5/27/2012					
5/28/2012	53	35	28	3	
5/29/2012					
5/30/2012	1	<1	<1	<1	<1
5/31/2012					
6/1/2012	<1	3	2	1	
6/2/2012					
6/3/2012					
6/4/2012	<1	<1	<1	1	
6/5/2012					
6/6/2012	<1	<1	<1	1	<1
6/7/2012					
6/8/2012	1	1	1	1	
6/9/2012					
6/10/2012					
6/11/2012	1	<1	<1	<1	
6/12/2012					
6/13/2012					
6/14/2012					
6/15/2012	<1	1	<1	24	
6/16/2012					
6/17/2012					
6/18/2012	<1	<1	1	1	
6/19/2012					
6/20/2012	<1	<1	1	1	<1
6/21/2012					
6/22/2012	2	1	<1	<1	
6/23/2012					
6/24/2012					
6/25/2012	1	<1	<1	1	
6/26/2012					
6/27/2012					
6/28/2012					
6/29/2012	1	<1	2	2	
6/30/2012					
7/1/2012					
7/2/2012	<1	<1	<1	1	
7/3/2012					
7/4/2012	1	<1	<1	<1	<1
7/5/2012					
7/6/2012	1	<1	1	1	
7/7/2012					
7/8/2012					
7/9/2012	<1	<1	<1	2	
7/10/2012					

Table 4: Bucklin Point Enterococci Data 2012

Bucklin Point Enterococci Data 2012
all results are in MPN/100ml

Bucklin Point	Grab 1	Grab 2	Grab 3	Grab 4	Grab 4 Duplicate
7/11/2012					
7/12/2012					
7/13/2012	1	<1	<1	3	
7/14/2012					
7/15/2012					
7/16/2012	<1	1	<1	1	
7/17/2012					
7/18/2012	1	1	1	1	1
7/19/2012					
7/20/2012	1	1	1	1	
7/21/2012					
7/22/2012					
7/23/2012	<1	<1	<1	1	
7/24/2012					
7/25/2012					
7/26/2012					
7/27/2012	2	<1	<1	2	
7/28/2012					
7/29/2012					
7/30/2012	<1	<1	<1	<1	
7/31/2012					
8/1/2012	<1	<1	88	10	
8/2/2012					
8/3/2012	8	55	31	<1	
8/4/2012					
8/5/2012					
8/6/2012	<1	1	<1	<1	
8/7/2012					
8/8/2012					
8/9/2012					
8/10/2012	1	1	<1	2	
8/11/2012					
8/12/2012					
8/13/2012	1	<1	<1	1	
8/14/2012					
8/15/2012	2	2		21	
8/16/2012					
8/17/2012	1	2	1	6	
8/18/2012					
8/19/2012					
8/20/2012	<1	1	1	9	
8/21/2012					
8/22/2012					
8/23/2012					
8/24/2012	<1	<1	6	<1	
8/25/2012					
8/26/2012					
8/27/2012	<1	1	2	4	

Table 4: Bucklin Point Enterococci Data 2012

Bucklin Point Enterococci Data 2012

all results are in MPN/100ml

Bucklin Point	Grab 1	Grab 2	Grab 3	Grab 4	Grab 4 Duplicate
8/28/2012					
8/29/2012	5	3	<1	1	
8/30/2012					
8/31/2012	<1	<1	4	<1	
9/1/2012					
9/2/2012					
9/3/2012	1	<1	<1	<1	
9/4/2012					
9/5/2012	1	66	1	3	2
9/6/2012					
9/7/2012	<1	<1	<1	<1	
9/8/2012					
9/9/2012					
9/10/2012	<1	1	1	<1	
9/11/2012					
9/12/2012	<1	<1	1	1	<1
9/13/2012					
9/14/2012	<1	<1	1	<1	
9/15/2012					
9/16/2012					
9/17/2012	3	<1	2	<1	
9/18/2012					
9/19/2012					
9/20/2012					
9/21/2012	2	1	<1	2	
9/22/2012					
9/23/2012					
9/24/2012	<1	<1	1	1	
9/25/2012					
9/26/2012	1	<1	<1	<1	<1
9/27/2012					
9/28/2012	<1	1	<1	3	
9/29/2012					
9/30/2012					
10/1/2012	<1	1	<1	2	
10/2/2012					
10/3/2012					
10/4/2012					
10/5/2012	2	3	3	2	
10/6/2012					
10/7/2012					
10/8/2012					
10/9/2012					
10/10/2012	1	1	3	1	1
10/11/2012					
10/12/2012	1	13	19	3	
10/13/2012					
10/14/2012					

Table 4: Bucklin Point Enterococci Data 2012

Bucklin Point Enterococci Data 2012

all results are in MPN/100ml

Bucklin Point	Grab 1	Grab 2	Grab 3	Grab 4	Grab 4 Duplicate
10/15/2012	<1	13	<1	1	
10/16/2012					
10/17/2012					
10/18/2012					
10/19/2012	11	16	12	2	
10/20/2012					
10/21/2012					
10/22/2012	11	17	1	<1	
10/23/2012					
10/24/2012	11	16	9	2	1
10/25/2012					
10/26/2012	2	1	1	4	
10/27/2012					
10/28/2012					
10/29/2012	1	1	6	1	
10/30/2012					
10/31/2012					
11/1/2012					
11/2/2012	<1	2	4	<1	
11/3/2012					
11/4/2012					
11/5/2012	3	1	1	<1	
11/6/2012					
11/7/2012	1	1	1	1	<1
11/8/2012					
11/9/2012	<1	<1	<1	<1	
11/10/2012					
11/11/2012					
11/12/2012	<1	<1	<1	1	
11/13/2012					
11/14/2012	2	<1	1	5	2
11/15/2012					
11/16/2012	<1	2	1	2	
11/17/2012					
11/18/2012					
11/19/2012	1	3	<1	<1	
11/20/2012					
11/21/2012	1	12	5	12	11
11/22/2012					
11/23/2012	<1	<1	1	3	
11/24/2012					
11/25/2012					
11/26/2012	<1	<1	<1	<1	
11/27/2012					
11/28/2012					
11/29/2012					
11/30/2012	<1	<1	<1	<1	
12/1/2012					

Table 4: Bucklin Point Enterococci Data 2012

Bucklin Point Enterococci Data 2012

all results are in MPN/100ml

Bucklin Point	Grab 1	Grab 2	Grab 3	Grab 4	Grab 4 Duplicate
12/2/2012					
12/3/2012	3	8	3	<1	
12/4/2012					
12/5/2012	<1	<1	1	2	3
12/6/2012					
12/7/2012	<1	1	1	<1	
12/8/2012					
12/9/2012					
12/10/2012	8	6	2	1	
12/11/2012					
12/12/2012	2	2	2	3	2
12/13/2012					
12/14/2012	1	1	1	2	
12/15/2012					
12/16/2012					
12/17/2012	5	1	4	2	
12/18/2012					
12/19/2012					1
12/20/2012					
12/21/2012	1	2	1	1	
12/22/2012					
12/23/2012					
12/24/2012	<1	<1	<1	<1	
12/25/2012					
12/26/2012	<1	1	2	<1	<1
12/27/2012					
12/28/2012	1	<1	1	<1	
12/29/2012					
12/30/2012					
12/31/2012	2	2	1	1	

Table 4: Bucklin Point Enterococci Data 2012

Field's Point Influent Metals and Cyanide (Cd - CN) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Influent Flow (MG)	Cd	TTL Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
1/3/2012	Tuesday	40.22	<2.5	<10	29.2	<10	33.8	19.5	<4	81.9	6.6
1/4/2012	Wednesday	39.48	<2.5	<10	31	<10	29.9	15	<4	76.9	6.9
1/10/2012	Tuesday	38.77	<2.5	48.5	24.7	<10	28.0	16.9	<4	69.3	10.8
1/11/2012	Wednesday	39.96	<2.5	17.7	28	<10	37.8	19	<4	83.4	8.4
1/17/2012	Tuesday	46.40	<2.5	17.4	31.8	<10	35.6	19.2	<4	85.2	11.8
1/18/2012	Wednesday	38.87	<2.5	19.6	36.7	<10	40.4	23.9	<4	107.0	7.9
1/24/2012	Tuesday	50.36	<2.5	11	34.1	<10	26.9	20	<4	85.3	12.5
1/25/2012	Wednesday	41.12	<2.5	29.4	35.7	10.1	32.8	21.3	<4	87.6	10.0
1/31/2012	Tuesday	42.87	<2.5	11.9	36.8	<10	25.3	17.7	<4	82.9	9.8
2/1/2012	Wednesday	41.50	<2.5	<10	39.4	<10	26.0	20.6	<4	52.8	9.3
2/7/2012	Tuesday	39.68	<2.5	11.1	38.1	<10	34.0	26.4	<4	78.4	8.1
2/8/2012	Wednesday	39.91	<2.5	12.3	36.4	<10	54.1	31.3	<4	82.8	8.6
2/14/2012	Tuesday	36.83	<2.5	<10	37.6	<10	32.5	22.8	<4	72.5	5.5
2/15/2012	Wednesday	37.03	<2.5	<10	29.8	<10	79.7	23	<4	79.2	6.5
2/21/2012	Tuesday	36.24	<2.5	<10	37.1	<10	42.8	24.5	<4	92.2	11.5
2/22/2012	Wednesday	36.57	2.7	11.9	48.8	<10	45.2	48.8	<4	145.0	13.3
2/28/2012	Tuesday	34.72	<2.5	<10	28.6	<10	30.3	23.7	<4	65.0	7.0
2/29/2012	Wednesday	49.76	<2.5	17.7	40.4	<10	89.8	20.5	<4	110.0	20.7
3/6/2012	Tuesday	39.71	<2.5	14.2	32.2	<10	30.0	22.8	<4	71.1	8.7
3/7/2012	Wednesday	39.57	<2.5	12.9	32	<10	26.0	22.7	<4	72.7	10.8
3/13/2012	Tuesday	37.68	<2.5	<10	40	<10	180.0	41.2	<4	86.0	7.0
3/14/2012	Wednesday	35.78	<2.5	<10	31.8	<10	123.0	19.1	<4	76.4	8.0
3/20/2012	Tuesday	34.60	4.1	31.7	48.7	<10	62.0	37.2	<4	110.0	11.2
3/21/2012	Wednesday	36.26	3.8	16	44.7	<10	33.3	54.9	<4	118.0	14.5
3/27/2012	Tuesday	32.31	<2.5	<10	36.5	<10	34.7	38.7	<4	103.0	15.9
3/28/2012	Wednesday	37.74	<2.5	<10	42.9	11.7	60.1	29.3	<4	138.0	9.1
4/3/2012	Tuesday	35.13	<2.5	24.7	26.4	<10	35.5	24.6	<4	71.8	5.7
4/4/2012	Wednesday	33.10	<2.5	21.2	37.5	<10	49.6	34.5	<4	96.8	14.5
4/10/2012	Tuesday	33.49	<2.5	<10	56.7	<10	38.2	29.5	<4	102.0	10.8
4/11/2012	Wednesday	31.91	<2.5	12.5	48.4	<10	28.8	27	<4	100.0	9.0
4/17/2012	Tuesday	31.59	<2.5	10	43.1	<10	32.6	23.9	<4	88.9	9.2
4/18/2012	Wednesday	32.11	<2.5	<10	32.1	<10	29.7	23.9	<4	94.9	9.0
4/24/2012	Tuesday	61.07	<2.5	<10	26.5	<10	24.9	15.9	<4	62.0	8.4
4/25/2012	Wednesday	61.57	<2.5	<10	29.1	<10	23.6	21.6	<4	65.7	10.0
5/1/2012	Tuesday	50.42	<2.5	<10	71.9	14.7	34.5	15.3	<4	94.8	8.9
5/2/2012	Wednesday	44.40	<2.5	<10	35.7	<10	25.8	15.8	<4	68.5	7.1
5/8/2012	Tuesday	42.60	4.8	12.3	46.3	<10	33.3	34.2	<4	163.0	7.7
5/9/2012	Wednesday	64.01	<2.5	<10	48.3	22.5	44.7	18.5	<4	113.0	5.3

Table 5: Field's Point Influent Metals and Cyanide (Cd - CN)

Field's Point Influent Metals and Cyanide (Cd - CN) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Influent Flow (MG)	Cd	TTL Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
5/15/2012	Tuesday	50.28	<2.5	<10	39.4	11.2	33.1	19.0	<4	101.0	8.9
5/16/2012	Wednesday	58.11	<2.5	<10	32.5	12.2	34.8	20.6	<4	72.6	8.3
5/22/2012	Tuesday	52.78	<2.5	<10	34.7	<10	38.9	14.9	<4	96.9	8.0
5/23/2012	Wednesday	41.06	<2.5	<10	32.2	<10	85.0	22.0	<4	77.9	8.8
5/29/2012	Tuesday	38.73	<2.5	<10	32.2	<10	32.4	17.3	<4	87.2	7.0
5/30/2012	Wednesday	35.60	<2.5	<10	33.6	<10	57.7	17.2	<4	71.6	5.6
6/5/2012	Tuesday	36.36	<2.5	<10	25.9	<10	81.6	17.3	<4	55.5	8.5
6/6/2012	Wednesday	51.17	<2.5	<10	36	15.7	40.5	17.2	<4	95.2	4.8
6/12/2012	Tuesday	38.72	<2.5	<10	38.3	<10	123.0	17.9	<4	70.4	11.3
6/13/2012	Wednesday	49.11	<2.5	17.9	54.6	15.7	44.1	27	<4	101.0	11.1
6/19/2012	Tuesday	34.33	<2.5	<10	42.2	<10	46.1	25.9	<4	81.9	8.0
6/20/2012	Wednesday	36.78	<2.5	<10	43.5	<10	34.6	27.6	<4	94.1	10.3
6/26/2012	Tuesday	57.32	<2.5	<10	49.9	13.6	42.9	23.3	13.5	75.0	9.1
6/27/2012	Wednesday	48.98	<2.5	<10	39.4	<10	21.0	20.2	<4	90.6	8.0
7/3/2012	Tuesday	36.90	<2.5	<10	27.9	<10	37.6	19.5	<4	81.4	7.4
7/4/2012	Wednesday	36.25	<2.5	<10	34.1	<10	112.0	<10	<4	69.1	7.1
7/10/2012	Tuesday	35.02	<2.5	<10	45.1	12.1	93.4	16.3	<4	102.0	8.3
7/11/2012	Wednesday	32.18	<2.5	<10	40	<10	31.0	20	<4	110.0	9.0
7/17/2012	Tuesday	39.37	<2.5	<10	44.8	18.2	54.9	24.7	<4	103.0	5.7
7/18/2012	Wednesday	48.67	<2.5	<10	69.4	48	185.0	22.9	<4	163.0	7.1
7/24/2012	Tuesday	38.73	<2.5	14.5	47	20.5	42.7	19	<4	113.0	6.7
7/25/2012	Wednesday	32.10	<2.5	<10	36.8	<10	25.3	19.2	<4	96.4	6.0
7/31/2012	Tuesday	46.90	<2.5	13.3	27.6	<10	31.2	16.9	<4	109.0	5.2
8/1/2012	Wednesday	35.38	<2.5	13.1	37.6	<10	41.2	15.9	<4	108.3	6.6
8/7/2012	Tuesday	33.02	<2.5	23.2	47.8	11.3	47.1	28.4	<4	131.1	6.9
8/8/2012	Wednesday	32.08	<2.5	17.1	40.3	<10	27.7	16.8	<4	100.0	8.6
8/14/2012	Tuesday	33.70	<2.5	<10	36.7	<10	37.9	20.4	<4	88.0	8.5
8/15/2012	Wednesday	63.52	<2.5	<10	33.6	16.64	44.7	28.29	<4	71.4	5.4
8/21/2012	Tuesday	34.60	<2.5	<10	49.27	<10	29.9	29.75	<4	112.3	4.5
8/22/2012	Wednesday	32.96	<2.5	<10	44.39	<10	54.4	25.95	<4	120.8	6.1
8/28/2012	Tuesday	40.42	3.081	12.99	42.74	17.05	84.6	27.72	<4	130.5	8.5
8/29/2012	Wednesday	35.83	<2.5	<10	34.13	<10	31.1	21.81	<4	82.3	7.5
9/4/2012	Tuesday	54.93	<2.5	<10	41.54	12.17	86.9	13.33	<4	90.3	6.8
9/5/2012	Wednesday	56.17	<2.5	<10	43.35	22.84	47.4	27.91	6.383	98.1	10.1
9/11/2012	Tuesday	32.97	2.986	<10	45.25	<10	66.3	31.14	7.161	96.9	30.0
9/12/2012	Wednesday	33.63	3.41	<10	40	<10	23.4	42.78	<4	94.8	6.5
9/18/2012	Tuesday	45.86	<2.5	<10	50.44	14.54	59.6	23.57	<4	115.9	4.9
9/19/2012	Wednesday	53.51	<2.5	<10	35.27	11.29	31.8	15.99	<4	73.8	5.0

Table 5: Field's Point Influent Metals and Cyanide (Cd - CN)

Field's Point Influent Metals and Cyanide (Cd - CN) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Influent Flow (MG)	Cd	TTL Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
9/25/2012	Tuesday	32.77	<2.5	12.59	33.71	<10	30.8	57.31	<4	103.4	7.4
9/26/2012	Wednesday	32.76	<2.5	<10	37.65	<10	34.2	28.46	4.291	112.9	8.7
10/2/2012	Tuesday	43.21	<2.5	<10	43.7	<10	23.2	18.17	<4	92.6	5.8
10/3/2012	Wednesday	33.20	<2.5	<10	45.74	<10	23.5	25.22	<4	89.8	6.0
10/9/2012	Tuesday	31.96	<2.5	<10	43.4	<10	46.9	17.15	<4	96.9	9.6
10/10/2012	Wednesday	41.60	<2.5	<10	42.47	10.08	48.8	18.56	<4	105.2	9.7
10/16/2012	Tuesday	32.25	<2.5	<10	65.47	<10	83.4	25.47	<4	148.5	7.1
10/17/2012	Wednesday	31.77	<2.5	<10	47.9	<10	142.0	20.42	<4	98.8	7.4
10/23/2012	Tuesday	33.61	<2.5	<10	45.78	<10	70.1	20.35	<4	110.6	10.0
10/24/2012	Wednesday	33.42	<2.5	<10	36.98	<10	29.9	16.76	<4	102.3	7.6
10/30/2012	Tuesday	65.32	<2.5	<10	32.27	11.58	35.0	15.8	<4	94.3	7.2
10/31/2012	Wednesday	62.39	<2.5	<10	29.4	<10	33.6	18.86	<4	71.4	8.0
11/6/2012	Tuesday	37.26	<2.5	<10	29.88	<10	32.4	11.97	<4	74.8	12.3
11/7/2012	Wednesday	46.92	<2.5	10.21	34.89	<10	40.1	14.71	<4	89.1	5.2
11/13/2012	Tuesday	48.11	<2.5	10.31	49.36	15.24	39.4	34.14	<4	122.1	6.2
11/14/2012	Wednesday	35.74	<2.5	<10	53.12	<10	31.0	41.65	<4	111.7	9.1
11/20/2012	Tuesday	33.9	<2.5	<10	36.32	<10	35.1	15.89	<4	71.8	8.7
11/21/2012	Wednesday	31.63	<2.5	<10	43.69	<10	34.0	30.55	<4	92.2	6.7
11/27/2012	Tuesday	37.77	<2.5	<10	51.42	<10	44.7	22.5	<4	92.1	9.6
11/28/2012	Wednesday	31.52	<2.5	<10	37.8	<10	26.7	15.92	<4	69.0	8.6
11/29/2012	Thursday	33.39					39.6				
12/4/2012	Tuesday	32.58	<2.5	<10	36.42	<10	29.9	25.23	<4	82.6	10.6
12/5/2012	Wednesday	31.41	<2.5	13.24	45.29	<10	37.4	22.64	<4	121.5	16.8
12/11/2012	Tuesday	39.77	<2.5	<10	43.18	<10	32.4	19.74	<4	87.0	15.1
12/12/2012	Wednesday	33.57	<2.5	<10	29.5	<10	30.7	13.43	<4	63.6	22.4
12/18/2012	Tuesday	58.26	<2.5	<10	31.56	<10	33.8	11.52	<4	71.5	7.2
12/19/2012	Wednesday	40.66	<2.5	<10	39.42	<10	27.1	16	<4	67.0	30.0
12/25/2012	Tuesday	34.60	<2.5	<10	17.58	<10	19.7	<10	<4	45.6	7.6
12/26/2012	Wednesday	46.87	<2.5	<10	36.96	<10	52.8	15.97	<4	97.0	9.9

Table 5: Field's Point Influent Metals and Cyanide (Cd - CN)

Field's Point Influent Metals (Al - Mo) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Influent					
		Flow (MG)	Al	Fe	Se	As	Mo
1/3/2012	Tuesday	40.22	14.3	174			
1/4/2012	Wednesday	39.48	15	209			
1/10/2012	Tuesday	38.77	16.8	198	3.16	1.49	
1/11/2012	Wednesday	39.96	24.3	206			
1/17/2012	Tuesday	46.40	21.3	206			
1/18/2012	Wednesday	38.87	17.3	193			
1/24/2012	Tuesday	50.36	24.9	222			
1/25/2012	Wednesday	41.12	17.5	203			
1/31/2012	Tuesday	42.87	14.4	171			
2/1/2012	Wednesday	41.50	15.5	166			
2/7/2012	Tuesday	39.68	11.9	150	2.59	1.07	
2/8/2012	Wednesday	39.91	15.8	180			
2/14/2012	Tuesday	36.83	9.51	165			
2/15/2012	Wednesday	37.03	9.75	165			
2/21/2012	Tuesday	36.24	9.7	152			
2/22/2012	Wednesday	36.57	8.95	164			
2/28/2012	Tuesday	34.72	11.1	185			
2/29/2012	Wednesday	49.76	22.6	232			
3/6/2012	Tuesday	39.71	12	155	1.84	0.81	
3/7/2012	Wednesday	39.57	10.7	170			
3/13/2012	Tuesday	37.68	9.15	136			
3/14/2012	Wednesday	35.78	9.82	146			
3/20/2012	Tuesday	34.60	9.37	102			
3/21/2012	Wednesday	36.26	26.4	138			
3/27/2012	Tuesday	32.31	12.8	160			
3/28/2012	Wednesday	37.74	12.7	137			
4/3/2012	Tuesday	35.13	12.2	190	2.94	0.98	
4/4/2012	Wednesday	33.10	8.97	134			
4/10/2012	Tuesday	33.49	10.9	149			
4/11/2012	Wednesday	31.91	10.7	138			
4/17/2012	Tuesday	31.59	9.66	127			
4/18/2012	Wednesday	32.11	8.51	128			
4/24/2012	Tuesday	61.07	13.5	150			
4/25/2012	Wednesday	61.57	12.3	136			

Table 6: Field's Point Influent Metals (Al - Mo)

Field's Point Influent Metals (Al - Mo) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Influent					
		Flow (MG)	Al	Fe	Se	As	Mo
5/1/2012	Tuesday	50.42	11.3	132			
5/2/2012	Wednesday	44.40	9.87	130			
5/8/2012	Tuesday	42.60	14.6	156	3.53	0.96	
5/9/2012	Wednesday	64.01	12.2	97.2			
5/15/2012	Tuesday	50.28	18.5	187			
5/16/2012	Wednesday	58.11	11	130			
5/22/2012	Tuesday	52.78	8.12	122			
5/23/2012	Wednesday	41.06	8.8	144			
5/29/2012	Tuesday	38.73	8.41	142			
5/30/2012	Wednesday	35.60	6.71	132			
6/5/2012	Tuesday	36.36	13.6	162	2.28	1.05	
6/6/2012	Wednesday	51.17	14.7	154			
6/12/2012	Tuesday	38.72	9.45	138			
6/13/2012	Wednesday	49.11	7.82	135			
6/19/2012	Tuesday	34.33	12.4	204			
6/20/2012	Wednesday	36.78	8.47	200			
6/26/2012	Tuesday	57.32	10.3	291			
6/27/2012	Wednesday	48.98	10.1	402			
7/3/2012	Tuesday	36.90	9.16	346			
7/4/2012	Wednesday	36.25	10.2	365			
7/10/2012	Tuesday	35.02	11.5	320			
7/11/2012	Wednesday	32.18	11.4	385			
7/17/2012	Tuesday	39.37	7.56	435	2.24	1.26	
7/18/2012	Wednesday	48.67	12.5	328			
7/24/2012	Tuesday	38.73	8.3	226			
7/25/2012	Wednesday	32.10	7.84	172			
7/31/2012	Tuesday	46.90	8.847	222			
8/1/2012	Wednesday	35.38	7.631	181.9			
8/7/2012	Tuesday	33.02	7.558	237.9	1.891	1.085	5.499
8/8/2012	Wednesday	32.08	6.703	203			
8/14/2012	Tuesday	33.70	7.944	205.9			
8/15/2012	Wednesday	63.52	9.691	203.8			
8/21/2012	Tuesday	34.60	8.052	187.4			
8/22/2012	Wednesday	32.96	7.229	183.7			

Table 6: Field's Point Influent Metals (Al - Mo)

Field's Point Influent Metals (Al - Mo) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Influent					Mo
		Flow (MG)	Al	Fe	Se	As	
8/28/2012	Tuesday	40.42	7.928	184.8			
8/29/2012	Wednesday	35.83	6.875	213			
9/4/2012	Tuesday	54.93	17.7	346			
9/5/2012	Wednesday	52.41	8.807	168.6			
9/11/2012	Tuesday	32.97	7.235	208.7	2.686	1.157	3.016
9/12/2012	Wednesday	33.63	6.618	196.7			
9/18/2012	Tuesday	45.86	14.65	280.5			
9/19/2012	Wednesday	53.51	12.27	246.6			
9/25/2012	Tuesday	32.77	7.137	166.6			
9/26/2012	Wednesday	32.76	7.381	200.5			
10/2/2012	Tuesday	43.21	12.32	233.8	3.377	0.986	3.33
10/3/2012	Wednesday	33.20	7.997	230.6			
10/9/2012	Tuesday	31.96	9.753	183.9			
10/10/2012	Wednesday	41.60	10.81	171			
10/16/2012	Tuesday	32.25	7.234	166			
10/17/2012	Wednesday	31.77	7.635	154			
10/23/2012	Tuesday	33.61	8.812	185.2			
10/24/2012	Wednesday	33.42	8.211	163.5			
10/30/2012	Tuesday	65.32	20.65	194.3			
10/31/2012	Wednesday	62.39	14.49	168.3			
11/6/2012	Tuesday	37.26	13.92	221.7			
11/7/2012	Wednesday	46.92	15.03	190.8			
11/13/2012	Tuesday	48.11	11.5	158.3			
11/14/2012	Wednesday	35.74	10.2	143.4			
11/20/2012	Tuesday	33.90	8.72	141.6	2.92	0.902	4.92
11/21/2012	Wednesday	31.63	8.62	132.8			
11/27/2012	Tuesday	37.77	8.49	155.7			
11/28/2012	Wednesday	31.52	11.4	238.2			
12/4/2012	Tuesday	32.58	8.15	167.8	4.03	0.859	6.88
12/5/2012	Wednesday	31.41	8.54	140.6			
12/11/2012	Tuesday	39.77	11.7	165			
12/12/2012	Wednesday	33.57	8.71	332.4			
12/18/2012	Tuesday	58.26	13.9	131.8			
12/19/2012	Wednesday	40.66	11.5	175.5			

Table 6: Field's Point Influent Metals (Al - Mo)

Field's Point Influent Metals (Al - Mo) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Influent Flow (MG)	Al	Fe	Se	As	Mo
12/25/2012	Tuesday	34.60	11.3	173.3			
12/26/2012	Wednesday	46.87	27.7	306.2			

Table 6: Field's Point Influent Metals (Al - Mo)

Field's Point Effluent Metals and Cyanide (Cd - CN) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Effluent									
		Flow (MG)	Cd	TTL Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
1/3/2012	Tuesday	36.11	0.05	0.82	5.49	0.52	4.53	11.20	0.05	18.50	6.73
1/4/2012	Wednesday	36.64	0.05	0.80	4.43	0.52	3.28	10.80	0.07	19.70	5.23
1/10/2012	Tuesday	35.53	0.09	1.47	4.43	0.49	<2	13.10	0.07	20.90	8.65
1/11/2012	Wednesday	32.70	0.08	1.48	4.73	0.73	2.46	12.30	0.12	23.10	9.16
1/17/2012	Tuesday	56.80	0.05	8.40	5.47	0.76	2.29	14.60	0.10	23.60	8.14
1/18/2012	Wednesday	63.75	0.05	2.87	4.45	0.64	2.01	15.30	0.11	24.60	7.81
1/24/2012	Tuesday	50.64	0.06	1.42	4.98	1.03	3.03	12.00	0.13	25.30	10.64
1/25/2012	Wednesday	37.65	0.05	2.54	4.69	0.75	3.36	14.20	0.17	23.60	8.53
1/31/2012	Tuesday	36.02	0.27	1.14	5.84	0.63	<2	16.70	0.11	22.10	8.44
2/1/2012	Wednesday	36.49	0.18	1.03	6.32	0.64	2.71	19.00	0.11	21.80	8.13
2/7/2012	Tuesday	49.52	0.12	3.68	4.75	0.53	<2	15.60	0.09	22.40	9.08
2/8/2012	Wednesday	51.89	0.08	2.24	4.90	0.55	2.81	20.20	0.10	22.80	8.96
2/14/2012	Tuesday	40.88	0.17	0.61	4.39	0.41	4.84	15.50	0.07	22.60	8.08
2/15/2012	Wednesday	41.19	0.13	0.61	4.27	0.41	3.00	15.90	0.07	24.00	8.68
2/21/2012	Tuesday	39.29	0.11	0.72	4.92	0.47	4.37	15.30	0.05	26.60	11.50
2/22/2012	Wednesday	45.04	0.22	0.88	4.42	0.38	3.05	18.20	0.05	27.30	12.22
2/28/2012	Tuesday	47.96	0.13	1.18	4.13	0.50	2.86	19.40	0.08	29.00	10.29
2/29/2012	Wednesday	55.63	0.12	1.41	5.24	0.99	5.19	13.80	0.10	27.90	10.16
3/6/2012	Tuesday	46.14	0.12	2.33	4.04	0.50	4.76	15.40	0.07	29.70	9.23
3/7/2012	Wednesday	43.40	0.13	1.67	3.99	0.50	5.90	17.40	0.08	30.70	14.41
3/13/2012	Tuesday	69.83	0.09	1.06	3.38	0.48	7.32	37.10	0.07	28.40	9.14
3/14/2012	Wednesday	71.14	0.08	0.97	3.73	0.45	2.77	33.40	0.06	27.00	5.24
3/20/2012	Tuesday	71.00	0.45	1.72	4.37	0.48	2.75	28.00	0.08	33.60	15.08
3/21/2012	Wednesday	58.95	0.48	1.26	4.40	0.44	<2	32.60	0.08	29.70	10.89
3/27/2012	Tuesday	56.06	0.36	0.77	4.21	0.51	3.12	25.30	0.07	32.00	6.83
3/28/2012	Wednesday	49.17	0.23	1.26	4.55	0.63	3.68	26.20	0.07	30.00	5.64
4/3/2012	Tuesday	63.33	0.18	2.26	4.04	0.54	3.63	17.90	0.07	26.30	8.44
4/4/2012	Wednesday	46.83	0.17	1.86	3.72	0.49	2.15	25.20	0.07	25.80	8.01
4/10/2012	Tuesday	45.47	0.14	1.16	3.72	0.48	3.32	17.40	0.05	28.80	6.45
4/11/2012	Wednesday	41.05	0.14	1.74	3.86	0.52	3.63	17.90	0.05	27.10	6.38
4/17/2012	Tuesday	41.65	0.09	0.98	3.61	0.55	2.40	15.30	0.06	23.50	7.43
4/18/2012	Wednesday	44.98	0.10	0.72	3.61	0.54	4.38	16.00	0.07	24.00	9.15
4/24/2012	Tuesday	45.90	0.08	0.90	3.49	0.67	2.30	11.70	0.05	18.70	11.31
4/25/2012	Wednesday	38.84	0.18	0.87	3.35	0.71	6.47	14.50	0.05	19.70	8.76
5/1/2012	Tuesday	50.46	0.10	1.06	30.70	0.68	2.80	15.60	0.07	28.90	22.44
5/2/2012	Wednesday	65.19	0.11	0.84	4.73	0.59	<2	13.80	0.06	27.20	9.60

Table 7: Field's Point Effluent Metals and Cyanide (Cd - CN)

Field's Point Effluent Metals and Cyanide (Cd - CN) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Effluent									
		Flow (MG)	Cd	TTL Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
5/8/2012	Tuesday	67.53	0.23	0.92	3.97	0.70	2.04	16.50	0.07	25.30	8.81
5/9/2012	Wednesday	69.31	0.17	0.78	3.07	0.62	4.85	11.90	0.04	20.80	7.15
5/15/2012	Tuesday	48.35	0.09	0.85	4.25	0.88	5.48	11.00	0.06	19.80	8.28
5/16/2012	Wednesday	46.39	0.08	0.70	2.84	0.62	3.65	12.70	0.04	18.80	11.24
5/22/2012	Tuesday	41.95	0.06	0.59	2.93	0.55	4.43	11.20	0.05	18.30	7.81
5/23/2012	Wednesday	51.10	0.06	0.78	2.86	0.58	5.72	13.90	0.05	20.90	8.38
5/29/2012	Tuesday	40.61	0.04	2.40	3.22	0.53	2.42	11.30	0.05	21.80	4.78
5/30/2012	Wednesday	38.76	0.07	0.80	3.16	0.60	2.57	11.10	0.06	22.40	7.83
6/5/2012	Tuesday	38.76	0.03	0.95	3.48	0.77	3.18	12.60	0.09	23.30	5.88
6/6/2012	Wednesday	49.32	0.03	0.84	3.10	0.85	4.66	11.00	0.11	20.00	5.76
6/12/2012	Tuesday	48.34	0.03	0.72	3.82	0.63	2.41	12.10	0.33	17.90	12.05
6/13/2012	Wednesday	48.35	0.02	3.44	3.33	0.61	2.60	15.80	0.31	27.20	8.12
6/19/2012	Tuesday	42.98	0.09	0.94	4.63	0.66	3.29	18.60	0.24	17.90	6.85
6/20/2012	Wednesday	42.49	0.02	0.76	3.80	0.60	2.43	17.80	0.16	14.80	7.59
6/26/2012	Tuesday	37.64	0.03	0.78	3.47	0.85	3.77	16.80	0.25	10.80	8.85
6/27/2012	Wednesday	40.04	0.03	0.78	3.88	0.80	3.04	16.60	0.19	9.19	10.38
7/3/2012	Tuesday	37.76	0.02	0.64	3.11	0.71	2.56	11.80	0.10	11.30	6.79
7/4/2012	Wednesday	35.10	0.02	0.46	2.66	0.70	2.08	8.70	0.07	9.56	6.92
7/10/2012	Tuesday	44.14	0.02	1.00	3.18	0.60	<2	9.16	0.06	8.65	8.10
7/11/2012	Wednesday	53.68	<0.02	0.86	3.38	0.68	<2	10.50	0.06	8.80	7.72
7/17/2012	Tuesday	37.80	0.02	0.98	2.32	0.68	2.13	14.90	0.05	10.50	10.36
7/18/2012	Wednesday	35.84	0.03	1.36	2.90	0.90	<2	10.60	0.07	12.10	6.15
7/24/2012	Tuesday	55.25	0.03	0.68	2.27	0.81	<2	11.70	0.05	15.40	6.37
7/25/2012	Wednesday	37.72	0.03	0.57	2.45	0.70	2.00	11.70	0.04	15.80	5.12
7/31/2012	Tuesday	36.39	0.03	1.04	2.33	0.58	5.85	12.53	0.04	23.80	5.37
8/1/2012	Wednesday	35.45	0.03	0.90	2.69	0.67	5.12	13.34	0.05	14.39	4.05
8/7/2012	Tuesday	36.59	0.03	1.12	2.67	0.53	6.38	13.88	0.04	14.37	6.97
8/8/2012	Wednesday	41.77	0.03	0.98	2.66	0.57	3.31	15.73	0.04	12.10	6.58
8/14/2012	Tuesday	49.01	<0.02	0.48	2.49	0.53	3.19	11.79	0.03	13.31	5.14
8/15/2012	Wednesday	35.83	<0.02	0.52	2.43	0.61	<2.0	19.18	0.05	12.94	5.23
8/21/2012	Tuesday	36.82	0.05	0.65	2.51	0.57	3.59	18.59	0.03	15.71	6.65
8/22/2012	Wednesday	36.63	0.05	0.90	2.72	0.51	<2.0	17.00	0.03	14.96	10.69
8/28/2012	Tuesday	33.80	0.05	0.71	2.20	0.68	4.45	15.40	0.04	14.61	5.53
8/29/2012	Wednesday	33.92	0.05	0.71	2.26	0.49	<2.0	15.83	0.06	13.78	6.26
9/4/2012	Tuesday	33.39	0.04	1.01	4.17	0.94	6.65	9.42	0.09	13.65	5.72
9/5/2012	Wednesday	62.91	0.03	1.11	3.16	0.56	2.07	13.85	0.89	15.16	8.38

Table 7: Field's Point Effluent Metals and Cyanide (Cd - CN)

Field's Point Effluent Metals and Cyanide (Cd - CN) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Effluent									
		Flow (MG)	Cd	TTL Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
9/11/2012	Tuesday	57.30	0.07	0.88	3.29	0.46	<2.0	21.78	0.31	15.08	10.42
9/12/2012	Wednesday	65.94	0.07	0.64	2.73	0.45	<2.0	25.11	0.20	14.09	6.35
9/18/2012	Tuesday	61.59	0.07	1.08	4.84	0.68	2.55	16.00	0.16	11.56	9.54
9/19/2012	Wednesday	37.08	0.04	0.93	2.57	0.59	<2.0	14.73	0.11	10.55	7.52
9/25/2012	Tuesday	34.96	0.05	2.16	2.34	0.41	<2.0	33.30	0.08	12.62	5.67
9/26/2012	Wednesday	52.17	0.04	2.86	2.42	0.44	<2.0	27.07	0.08	12.90	5.14
10/2/2012	Tuesday	38.48	0.03	1.44	3.08	0.71	3.24	12.36	0.08	15.23	6.74
10/3/2012	Wednesday	66.56	0.03	0.85	2.73	0.53	<2.0	13.63	0.07	15.66	7.78
10/9/2012	Tuesday	67.99	0.03	0.67	3.00	0.50	<2.0	10.67	0.06	15.77	8.42
10/10/2012	Wednesday	46.13	0.02	0.68	3.11	0.53	<2.0	11.30	0.05	14.83	6.75
10/16/2012	Tuesday	43.86	0.04	0.86	2.91	0.43	2.94	12.61	0.06	17.63	8.42
10/17/2012	Wednesday	39.35	0.04	1.15	2.30	0.44	2.10	13.90	0.05	17.61	7.70
10/23/2012	Tuesday	40.54	0.05	1.23	2.58	0.51	2.28	13.89	0.06	19.58	5.83
10/24/2012	Wednesday	42.21	0.04	1.05	2.41	0.46	2.66	12.23	0.06	19.57	5.47
10/30/2012	Tuesday	49.58	0.06	0.79	3.12	0.80	3.58	10.29	0.07	21.30	5.56
10/31/2012	Wednesday	66.15	0.06	0.70	2.31	0.64	<2.0	13.58	0.07	19.82	5.22
11/6/2012	Tuesday	55.73	0.05	1.18	2.94	0.67	2.93	10.01	0.11	17.57	7.77
11/7/2012	Wednesday	41.40	0.06	2.91	3.05	0.72	2.43	9.95	0.10	18.75	5.23
11/13/2012	Tuesday	45.25	0.03	0.41	2.18	0.66	15.80	13.60	0.08	19.70	6.26
11/14/2012	Wednesday	41.58	0.03	0.36	2.38	0.52	2.02	19.30	0.10	18.80	10.30
11/20/2012	Tuesday	72.47	0.03	0.84	2.39	0.43	<2.0	15.20	0.09	19.60	5.20
11/21/2012	Wednesday	46.15	0.04	0.74	2.33	0.40	<2.0	15.30	0.07	19.90	8.11
11/27/2012	Tuesday	44.07	0.03	0.39	2.42	0.45	<2.0	13.20	0.08	20.80	6.44
11/28/2012	Wednesday	66.10	0.04	0.43	4.09	0.47	<2.0	12.30	0.11	21.80	7.28
11/29/2012	Thursday	60.51					<2.0				
12/4/2012	Tuesday	56.81	0.04	0.80	3.38	0.45	<2.0	17.70	0.14	20.60	7.67
12/5/2012	Wednesday	43.72	0.03	1.06	3.19	0.42	2.62	16.80	0.12	23.70	7.27
12/11/2012	Tuesday	46.18	0.03	0.63	2.86	0.56	2.13	12.10	0.11	26.00	7.95
12/12/2012	Wednesday	44.11	0.03	0.66	2.89	0.50	2.22	11.90	0.10	23.80	8.80
12/18/2012	Tuesday	57.47	0.02	0.67	3.06	0.58	2.65	9.04	0.17	19.10	8.18
12/19/2012	Wednesday	54.83	0.02	0.78	3.50	0.56	<2.0	10.90	0.23	20.50	6.98
12/25/2012	Tuesday	66.55	<0.02	0.31	7.20	0.52	<2.0	10.20	0.07	16.00	5.88
12/26/2012	Wednesday	55.59	0.03	0.72	5.04	0.96	3.24	10.20	0.19	18.60	8.29

Table 7: Field's Point Effluent Metals and Cyanide (Cd - CN)

Field's Point Effluent Metals (Al - Mo) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Effluent					
		Flow (MG)	Al	Fe	Se	As	Mo
1/3/2012	Tuesday	40.22	14.3	174			
1/4/2012	Wednesday	39.48	15	209			
1/10/2012	Tuesday	38.77	16.8	198	3.16	1.49	
1/11/2012	Wednesday	39.96	24.3	206			
1/17/2012	Tuesday	46.40	21.3	206			
1/18/2012	Wednesday	38.87	17.3	193			
1/24/2012	Tuesday	50.36	24.9	222			
1/25/2012	Wednesday	41.12	17.5	203			
1/31/2012	Tuesday	42.87	14.4	171			
2/1/2012	Wednesday	41.50	15.5	166			
2/7/2012	Tuesday	39.68	11.9	150	2.59	1.07	
2/8/2012	Wednesday	39.91	15.8	180			
2/14/2012	Tuesday	36.83	9.51	165			
2/15/2012	Wednesday	37.03	9.75	165			
2/21/2012	Tuesday	36.24	9.7	152			
2/22/2012	Wednesday	36.57	8.95	164			
2/28/2012	Tuesday	34.72	11.1	185			
2/29/2012	Wednesday	49.76	22.6	232			
3/6/2012	Tuesday	39.71	12	155	1.84	0.81	
3/7/2012	Wednesday	39.57	10.7	170			
3/13/2012	Tuesday	37.68	9.15	136			
3/14/2012	Wednesday	35.78	9.82	146			
3/20/2012	Tuesday	34.60	9.37	102			
3/21/2012	Wednesday	36.26	26.4	138			
3/27/2012	Tuesday	32.31	12.8	160			
3/28/2012	Wednesday	37.74	12.7	137			
4/3/2012	Tuesday	35.13	12.2	190	2.94	0.98	
4/4/2012	Wednesday	33.10	8.97	134			
4/10/2012	Tuesday	33.49	10.9	149			
4/11/2012	Wednesday	31.91	10.7	138			
4/17/2012	Tuesday	31.59	9.66	127			
4/18/2012	Wednesday	32.11	8.51	128			
4/24/2012	Tuesday	61.07	13.5	150			
4/25/2012	Wednesday	61.57	12.3	136			
5/1/2012	Tuesday	50.42	11.3	132			
5/2/2012	Wednesday	44.40	9.87	130			

Table 8: Field's Point Effluent Metals (Al - Mo)

Field's Point Effluent Metals (Al - Mo) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Effluent					
		Flow (MG)	Al	Fe	Se	As	Mo
5/8/2012	Tuesday	42.60	14.6	156	3.53	0.96	
5/9/2012	Wednesday	64.01	12.2	97.2			
5/15/2012	Tuesday	50.28	18.5	187			
5/16/2012	Wednesday	58.11	11	130			
5/22/2012	Tuesday	52.78	8.12	122			
5/23/2012	Wednesday	41.06	8.8	144			
5/29/2012	Tuesday	38.73	8.41	142			
5/30/2012	Wednesday	35.60	6.71	132			
6/5/2012	Tuesday	36.36	13.6	162	2.28	1.05	
6/6/2012	Wednesday	51.17	14.7	154			
6/12/2012	Tuesday	38.72	9.45	138			
6/13/2012	Wednesday	49.11	7.82	135			
6/19/2012	Tuesday	34.33	12.4	204			
6/20/2012	Wednesday	36.78	8.47	200			
6/26/2012	Tuesday	57.32	10.3	291			
6/27/2012	Wednesday	48.98	10.1	402			
7/3/2012	Tuesday	36.90	9.16	346			
7/4/2012	Wednesday	36.25	10.2	365			
7/10/2012	Tuesday	35.02	11.5	320			
7/11/2012	Wednesday	32.18	11.4	385			
7/17/2012	Tuesday	39.37	7.56	435	2.24	1.26	
7/18/2012	Wednesday	48.67	12.5	328			
7/24/2012	Tuesday	38.73	8.3	226			
7/25/2012	Wednesday	32.10	7.84	172			
7/31/2012	Tuesday	46.90	8.847	222			
8/1/2012	Wednesday	35.38	7.631	181.9			
8/7/2012	Tuesday	33.02	7.558	237.9	1.891	1.085	5.499
8/8/2012	Wednesday	32.08	6.703	203			
8/14/2012	Tuesday	33.70	7.944	205.9			
8/15/2012	Wednesday	63.52	9.691	203.8			
8/21/2012	Tuesday	34.60	8.052	187.4			
8/22/2012	Wednesday	32.96	7.229	183.7			
8/28/2012	Tuesday	40.42	7.928	184.8			
8/29/2012	Wednesday	35.83	6.875	213			
9/4/2012	Tuesday	54.93	17.7	346			
9/5/2012	Wednesday	52.41	8.807	168.6			

Table 8: Field's Point Effluent Metals (Al - Mo)

Field's Point Effluent Metals (Al - Mo) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Effluent					
		Flow (MG)	Al	Fe	Se	As	Mo
9/11/2012	Tuesday	32.97	7.235	208.7	2.686	1.157	3.016
9/12/2012	Wednesday	33.63	6.618	196.7			
9/18/2012	Tuesday	45.86	14.65	280.5			
9/19/2012	Wednesday	53.51	12.27	246.6			
9/25/2012	Tuesday	32.77	7.137	166.6			
9/26/2012	Wednesday	32.76	7.381	200.5			
10/2/2012	Tuesday	43.21	12.32	233.8	3.377	0.986	3.33
10/3/2012	Wednesday	33.20	7.997	230.6			
10/9/2012	Tuesday	31.96	9.753	183.9			
10/10/2012	Wednesday	41.60	10.81	171			
10/16/2012	Tuesday	32.25	7.234	166			
10/17/2012	Wednesday	31.77	7.635	154			
10/23/2012	Tuesday	33.61	8.812	185.2			
10/24/2012	Wednesday	33.42	8.211	163.5			
10/30/2012	Tuesday	65.32	20.65	194.3			
10/31/2012	Wednesday	62.39	14.49	168.3			
11/6/2012	Tuesday	37.26	13.92	221.7			
11/7/2012	Wednesday	46.92	15.03	190.8			
11/13/2012	Tuesday	48.11	11.5	158.3			
11/14/2012	Wednesday	35.74	10.2	143.4			
11/20/2012	Tuesday	33.90	8.72	141.6	2.92	0.902	4.92
11/21/2012	Wednesday	31.63	8.62	132.8			
11/27/2012	Tuesday	37.77	8.49	155.7			
11/28/2012	Wednesday	31.52	11.4	238.2			
12/4/2012	Tuesday	32.58	8.15	167.8	4.03	0.859	6.88
12/5/2012	Wednesday	31.41	8.54	140.6			
12/11/2012	Tuesday	39.77	11.7	165			
12/12/2012	Wednesday	33.57	8.71	332.4			
12/18/2012	Tuesday	58.26	13.9	131.8			
12/19/2012	Wednesday	40.66	11.5	175.5			
12/25/2012	Tuesday	34.60	11.3	173.3			
12/26/2012	Wednesday	46.87	27.7	306.2			

Table 8: Field's Point Effluent Metals (Al - Mo)

Bucklin Point Influent Metals and Cyanide (Cd - CN) 2012

all analyses in ppb unless otherwise noted

Date	Day of the Week	Influent Flow (MG)	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
1/3/2012	Tuesday	18.88	<2.5	<10.0	25	40.4	<10.0	0.0259	<10.0	<4.0	71.2	4.00
1/4/2012	Wednesday	18.79	<2.5	<10.0	26	50.3	<10.0	0.0319	<10.0	<4.0	86.8	4.83
1/10/2012	Tuesday	18.29	<2.5	<10.0	29	53.3	<10.0	0.0291	<10.0	<4.0	83.4	7.26
1/11/2012	Wednesday	17.50	<2.5	<10.0	26	39.1	<10.0	0.0424	<10.0	<4.0	70.2	6.77
1/17/2012	Tuesday	24.25	<2.5	<10.0	28	49.8	<10.0	0.0339	<10.0	<4.0	85.6	9.20
1/18/2012	Wednesday	18.35	<2.5	33.8	28	40.4	<10.0	0.0361	10.2	<4.0	77.8	7.30
1/24/2012	Tuesday	25.71	<2.5	<10.0	14	46.5	12.1	0.0302	<10.0	<4.0	114	13.96
1/25/2012	Wednesday	18.43	<2.5	<10.0	31	42.7	<10.0	0.0282	<10.0	5.1	72.7	13.42
1/31/2012	Tuesday	19.09	<2.5	<10.0	24	35.6	<10.0	0.0284	13.6	<4.0	67.3	5.48
2/1/2012	Wednesday	19.05	<2.5	<10.0	24	32.7	<10.0	0.0311	<10.0	<4.0	58.7	5.45
2/7/2012	Tuesday	17.82	<2.5	<10.0	29	49.8	<10.0	0.0399	<10.0	<4.0	80.5	5.48
2/8/2012	Wednesday	17.54	<2.5	<10.0	31	33.8	<10.0	0.034	<10.0	<4.0	66.7	5.02
2/14/2012	Tuesday	18.10	<2.5	<10.0	33	50.1	<10.0	0.041	<10.0	<4.0	97.5	7.25
2/15/2012	Wednesday	18.16	<2.5	<10.0	34	47.1	<10.0	0.0265	<10.0	<4.0	84	6.10
2/21/2012	Tuesday	16.70	<2.5	<10.0	49	50.9	<10.0	0.032	<10.0	<4.0	96.9	8.06
2/22/2012	Wednesday	16.65	<2.5	<10.0	45	58.1	<10.0	0.0496	<10.0	<4.0	104	9.51
2/28/2012	Tuesday	15.44	<2.5	<10.0	47	39.8	<10.0	0.0428	<10.0	<4.0	78	5.39
2/29/2012	Wednesday	18.55	<2.5	<10.0	48	53.9	<10.0	0.0347	<10.0	<4.0	84.2	6.34
3/6/2012	Tuesday	16.73	<2.5	<10.0	23	40.3	<10.0	0.0317	<10.0	<4.0	71.1	6.21
3/7/2012	Wednesday	17.36	<2.5	<10.0	17	28.5	<10.0	0.0299	<10.0	<4.0	60.9	6.88
3/13/2012	Tuesday	16.93	<2.5	<10.0	29	47.8	<10.0	0.0412	<10.0	<4.0	88.3	5.78
3/14/2012	Wednesday	16.17	<2.5	<10.0	27	51.3	<10.0	0.0779	<10.0	<4.0	96.5	6.12
3/20/2012	Tuesday	15.40	<2.5	<10.0	35	53.9	<10.0	0.0591	<10.0	<4.0	110	9.36
3/21/2012	Wednesday	15.41	<2.5	<10.0	40	59.7	<10.0	0.0546	10.2	<4.0	107	7.98
3/27/2012	Tuesday	14.35	<2.5	<10.0	37	56.4	11.5	0.185	12.4	<4.0	119	7.01
3/28/2012	Wednesday	19.23	<2.5	<10.0	32	53.3	<10.0	0.0862	16.6	<4.0	108	6.29
4/3/2012	Tuesday	14.22	<2.5	<10.0	44	73.6	<10.0	0.0504	19.4	<4.0	104	6.09
4/4/2012	Wednesday	14.33	<2.5	<10.0	42	44.8	<10.0	0.052	<10.0	<4.0	90.3	5.18
4/10/2012	Tuesday	14.65	<2.5	<10.0	46	65.9	<10.0	0.0683	13.5	<4.0	120	8.34
4/11/2012	Wednesday	14.32	<2.5	<10.0	28	69	<10.0	0.0556	18.9	<4.0	124	6.71
4/17/2012	Tuesday	13.16	<2.5	<10.0	51	53.7	<10.0	0.0394	11.1	<4.0	104	7.46
4/18/2012	Wednesday	13.81	<2.5	<10.0	36	52.7	<10.0	0.0514	11.7	<4.0	98.1	9.06
4/24/2012	Tuesday	18.45	<2.5	<10.0	33	43.7	<10.0	0.0416	<10.0	<4.0	102	8.37
4/25/2012	Wednesday	17.15	<2.5	<10.0	23	39.3	<10.0	0.0352	<10.0	<4.0	84.8	5.60
5/1/2012	Tuesday	28.53	<2.5	<10.0	25	56.5	<10.0	0.0631	<10.0	<4.0	92.9	6.57
5/2/2012	Wednesday	17.25	<2.5	<10.0	21	38.7	<10.0	0.0284	<10.0	<4.0	75.3	7.31
5/8/2012	Tuesday	16.93	<2.5	<10.0	29	67.3	<10.0	0.0401	10.9	<4.0	115	5.97
5/9/2012	Wednesday	36.37	<2.5	<10.0	38	61.6	11.6	0.0419	<10.0	<4.0	132	5.59
5/15/2012	Tuesday	26.31	<2.5	<10.0	48	42.8	<10.0	0.0287	<10.0	<4.0	70.5	7
5/16/2012	Wednesday	26.39	<2.5	<10.0	41	67.6	12.3	0.0508	11.9	<4.0	122	6.01
5/22/2012	Tuesday	29.45	<2.5	<10.0	29	52.5	<10.0	0.0431	<10.0	<4.0	106	6.43
5/23/2012	Wednesday	17.47	<2.5	<10.0	36	46.1	<10.0	0.0331	10.2	<4.0	78.8	5.73
5/29/2012	Tuesday	16.69	<2.5	<10.0	34	45.8	<10.0	0.0602	<10.0	<4.0	85.6	7.55
5/30/2012	Wednesday	16.55	<2.5	<10.0	35	62	<10.0	0.0376	12	<4.0	98.4	7.89

Table 9: Bucklin Point Influent Metals and Cyanide (Cd - CN)

Bucklin Point Influent Metals and Cyanide (Cd - CN) 2012

all analyses in ppb unless otherwise noted

Date	Day of the Week	Influent Flow (MG)	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
6/4/2012	Monday	18.58	<2.5	<10.0	30	40.3	<10.0	0.0382	19.5	<4.0	70.2	5.38
6/5/2012	Tuesday	17.49	<2.5	<10.0	31	45.6	<10.0	0.0355	10.5	<4.0	87.3	5.8
6/11/2012	Monday	16.02	<2.5	<10.0	30	55.9	<10.0	0.039	27.4	<4.0	97.3	6.84
6/12/2012	Tuesday	16.79	<2.5	<10.0	16	45.9	<10.0	0.0543	<10.0	<4.0	94.7	7.57
6/18/2012	Monday	15.15	<2.5	<10.0	34	54.7	<10.0	0.0561	<10.0	<4.0	106	5.02
6/19/2012	Tuesday	15.92	<2.5	<10.0	31	50.1	<10.0	0.0315	17.1	<4.0	79.5	6.06
6/25/2012	Monday	32.48	<2.5	<10.0	29	54.4	<10.0	0.0529	21.6	<4.0	120	5.27
6/26/2012	Tuesday	16.15	<2.5	<10.0	26	52	<10.0	0.228	12.6	<4.0	93.5	5.09
7/2/2012	Monday	20.31	<2.5	<10.0	30	47.2	<10.0	0.0343	<10.0	<4.0	98.7	0
7/4/2012	Wednesday	16.21	<2.5	<10.0	20	42.7	<10.0	0.0746	<10.0	<4.0	75.4	6.37
7/10/2012	Tuesday	13.59	<2.5	<10.0	47	64.1	<10.0	0.0472	10.5	<4.0	107	6.79
7/11/2012	Wednesday	14.24	<2.5	<10.0	47	58.2	<10.0	0.0425	<10.0	<4.0	90.6	4
7/17/2012	Tuesday	13.74	<2.5	<10.0	32	67	<10.0	0.0576	<10.0	<4.0	145	4.17
7/18/2012	Wednesday	20.82	<2.5	<10.0	41	64.2	<10.0	0.0634	10.3	<4.0	125	5.21
7/24/2012	Tuesday	17.92	<2.5	<10.0	45	85.9	<10.0	0.0586	11.8	<4.0	134	11.31
7/25/2012	Wednesday	13.41	<2.5	<10.0	40	93.3	<10.0	0.0536	16.7	<4.0	126	4.49
7/31/2012	Tuesday	16.89	<2.5	21.3	37	69.8	<10.0	0.0552	<10.0	<4.0	97.8	4.32
8/1/2012	Wednesday	16.05	<2.5	<10.0	32	73	<10.0	0.0417	<10.0	<4.0	102.8	5.225
8/7/2012	Tuesday	13.53	<2.5	<10.0	35	75.5	<10.0	0.0351	18.2	<4.0	106.1	5.479
8/8/2012	Wednesday	13.82	<2.5	<10.0	41	69.6	<10.0	0.0389	33.3	<4.0	111.4	4.189
8/14/2012	Tuesday	13.53	<2.5	<10.0	44	48.95	<10.0	0.0358	<10.0	<4.0	92.99	4.588
8/15/2012	Wednesday	32.21	<2.5	<10.0	36	66.35	<10.0	0.0605	13.45	<4.0	118.3	<4.0
8/21/2012	Tuesday	14.27	<2.5	<10.0	25	46.57	<10.0	0.0439	10.14	<4.0	102	6.168
8/22/2012	Wednesday	14.25	<2.5	<10.0	33	69.66	<10.0	0.0365	<10.0	<4.0	120	4.731
8/28/2012	Tuesday	24.03	<2.5	<10.0	26	107.1	13.07	0.0791	<10.0	<4.0	177.3	<4.0
8/29/2012	Wednesday	14.38	<2.5	33.52	36	55.31	<10.0	0.038	13.55	<4.0	102.5	4.137
9/4/2012	Tuesday	24.24	<2.5	<10.0	36	96.5	13.35	0.0849	<10.0	<4.0	178.1	4.972
9/5/2012	Wednesday	30.23	<2.5	<10.0	33	274.9	11.24	0.0488	233.1	<4.0	93.75	<4.0
9/11/2012	Tuesday	15.00	<2.5	<10.0	28	56.09	<10.0	0.0211	11.15	<4.0	92.41	4.101
9/12/2012	Wednesday	14.91	<2.5	<10.0	47.99	76.12	<10.0	0.0315	<10.0	<4.0	102.9	4.941
9/18/2012	Tuesday	15.90	<2.5	<10.0	10	48.74	<10.0	0.0572	<10.0	<4.0	98.02	<4.0
9/19/2012	Wednesday	28.87	<2.5	<10.0	35	52.88	<10.0	0.0475	<10.0	<4.0	97.65	<4.0
9/25/2012	Tuesday	14.76	<2.5	<10.0	41	62.59	<10.0	0.0453	<10.0	<4.0	93.03	4.57
9/26/2012	Wednesday	15.30	<2.5	<10.0	38	59.83	<10.0	0.0502	<10.0	<4.0	92.06	4.12
10/2/2012	Tuesday	20.05	<2.5	27.85	31	80.76	<10.0	0.0507	11.86	<4.0	138.9	4.3
10/3/2012	Wednesday	17.04	<2.5	<10.0	29	68.68	<10.0	0.0502	<10.0	<4.0	108.3	4.56
10/9/2012	Tuesday	16.36	<2.5	<10.0	45	46.94	<10.0	0.0305	<10.0	<4.0	77.78	6.46
10/10/2012	Wednesday	22.52	<2.5	<10.0	28	53.77	<10.0	0.0906	11.02	<4.0	103.7	<8.0
10/16/2012	Tuesday	15.72	<2.5	<10.0	40	83.82	<10.0	0.0557	13.05	<4.0	130.5	<4.0
10/17/2012	Wednesday	15.11	<2.5	39.96	43	81.47	<10.0	0.0474	14.23	<4.0	120.9	<4.0
10/23/2012	Tuesday	15.51	<2.5	<10.0	42	83.4	<10.0	0.0577	12.57	<4.0	158.4	4.32
10/24/2012	Wednesday	16.00	<2.5	<10.0	36	44.04	<10.0	0.0335	11.1	<4.0	86.48	4.41
10/30/2012	Tuesday	39.24	<2.5	<10.0	10	35.86	<10.0	0.0255	<10.0	<4.0	88.99	<4.0

Table 9: Bucklin Point Influent Metals and Cyanide (Cd - CN)

Bucklin Point Influent Metals and Cyanide (Cd - CN) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Influent Flow (MG)	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
10/31/2012	Wednesday	20.96	<2.5	<10.0	10	44.72	<10.0	0.0571	<10.0	<4.0	86.43	<4.0
11/6/2012	Tuesday	15.50	<2.5	<10.0	37	51.7	<10.0	0.0548	11.88	<4.0	98.41	5.69
11/7/2012	Wednesday	20.78	<2.5	<10.0	36	49.66	<10.0	0.0581	11.79	<4.0	96.9	<4.0
11/13/2012	Tuesday	27.05	<2.5	<10.0	30	69.65	<10.0	0.091	13.13	<4.0	122.8	5.2
11/14/2012	Wednesday	16.25	<2.5	<10.0	118	57.92	<10.0	0.0348	<10.0	<4.0	81.99	7.1
11/19/2012	Monday	15.65	<2.5	<10.0	41	37	<10.0	0.0295	<10.0	<4.0	74.09	5.52
11/20/2012	Tuesday	15.55	<2.5	<10.0	27	86.16	<10.0	0.0584	12.27	<4.0	139.4	5.22
11/27/2012	Tuesday	17.53	<2.5	21.65	31	57.84	<10.0	0.0541	15.17	<4.0	101.9	6.85
11/28/2012	Wednesday	15.26	<2.5	<10.0	116	51.95	<10.0	0.0429	<10.0	<4.0	92.89	5.77
12/4/2012	Tuesday	15.49	<2.5	<10.0	47	65.31	<10.0	0.0515	15.36	<4.0	113.3	<4.0
12/5/2012	Wednesday	14.47	<2.5	11.25	28	69.06	12.34	0.0432	16.42	4.629	125.2	4.74
12/11/2012	Tuesday	15.09	<2.5	<10.0	31	48.65	<10.0	0.0384	11.43	<4.0	95.24	4.83
12/12/2012	Wednesday	15.16	<2.5	<10.0	33	37.68	<10.0	0.0268	10.56	<4.0	79.62	5.96
12/18/2012	Tuesday	31.61	<2.5	<10.0	22	50.94	<10.0	0.0339	12.05	<4.0	101.3	4.59
12/19/2012	Wednesday	15.78	<2.5	<10.0	36	46.65	<10.0	0.0307	11.32	<4.0	83.1	<4.0
12/25/2012	Tuesday	16.42	<2.5	<10.0	33	31.97	<10.0	0.0285	<10.0	<4.0	80.68	<4.0
12/26/2012	Wednesday	16.70	<2.5	<10.0	19	30.9	<10.0	0.0667	<10.0	<4.0	75.33	4.36
12/28/2011	Wednesday	22.77	<2.5	<10	17	50.6	<10	35.7	14.8	<4.0	101	<4

Table 9: Bucklin Point Influent Metals and Cyanide (Cd - CN)

Bucklin Point Influent Metals (Al - Sn) 2012
all anayeses in ppb unless otherwise noted

Date	Day of the Week	Influent Flow (MG)	Al	Fe	Se	As	Mo	Sn
1/3/2012	Tuesday	18.88	386.0	907.0	0.59	1.15	0.99	<5.0
1/4/2012	Wednesday	18.79	302.0	1,080.0				<5.0
1/10/2012	Tuesday	18.29	282.0	992.0	0.67	1.24	1.57	<5.0
1/11/2012	Wednesday	17.50	268.0	779.0				<5.0
1/17/2012	Tuesday	24.25	339.0	952.0	0.62	1.17	1.94	<5.0
1/18/2012	Wednesday	18.35	286.0	977.0				<5.0
1/24/2012	Tuesday	25.71	800.0	1,720.0	1.15	1.45	4.46	<5.0
1/25/2012	Wednesday	18.43	264.0	975.0				<5.0
1/31/2012	Tuesday	19.09	242.0	836.0	0.72	1.04	1.74	80.50
2/1/2012	Wednesday	19.05	239.0	789.0				7.91
2/7/2012	Tuesday	17.82	709.0	972.0	0.75	1.17	1.85	<5.0
2/8/2012	Wednesday	17.54	331.0	909.0				<5.0
2/14/2012	Tuesday	18.10	312.0	1,220.0	0.68	1.12	1.84	<5.0
2/15/2012	Wednesday	18.16	295.0	1,100.0				<5.0
2/21/2012	Tuesday	16.70	349.0	1,170.0	0.74	1.25	5.40	9.09
2/22/2012	Wednesday	16.65	340.0	1,200.0				8.84
2/28/2012	Tuesday	15.44	254.0	939.0	0.63	1.19	2.02	<5.0
2/29/2012	Wednesday	18.55	255.0	969.0				<5.0
3/6/2012	Tuesday	16.73	263.0	878.0	0.64	1.12	1.28	<5.0
3/7/2012	Wednesday	17.36	640.0	853.0				6.23
3/13/2012	Tuesday	16.93	289.0	1,040.0	0.57	1.18	1.46	<5.0
3/14/2012	Wednesday	16.17	477.0	1,070.0				<5.0
3/20/2012	Tuesday	15.40	341.0	1,270.0	0.67	1.19	9.69	<5.0
3/21/2012	Wednesday	15.41	387.0	1,230.0				32.80
3/27/2012	Tuesday	14.35	402.0	1,270.0	0.85	1.32	3.42	<5.0
3/28/2012	Wednesday	19.23	423.0	1,270.0				<5.0
4/3/2012	Tuesday	14.22	412.0	1,270.0	0.66	1.23	2.36	<5.0
4/4/2012	Wednesday	14.33	332.0	1,110.0				<5.0
4/10/2012	Tuesday	14.65	442.0	1,300.0	0.77	1.30	1.83	<5.0
4/11/2012	Wednesday	14.32	907.0	1,390.0				<5.0

Table 10: Bucklin Point Influent Metals (Al - Sn)

Bucklin Point Influent Metals (Al - Sn) 2012
all anayeses in ppb unless otherwise noted

Date	Day of the Week	Influent Flow (MG)	Al	Fe	Se	As	Mo	Sn
4/17/2012	Tuesday	13.16	339.0	1,080.0	1.23	1.46	2.80	<5.0
4/18/2012	Wednesday	13.81	329.0	1,140.0				<5.0
4/24/2012	Tuesday	18.45	1,120.0	1,190.0	0.69	1.40	5.44	<5.0
4/25/2012	Wednesday	17.15	345.0	1,010.0				<5.0
5/1/2012	Tuesday	28.53	385.0	1,070.0	0.74	1.24	1.90	<5.0
5/2/2012	Wednesday	17.25	257.0	854.0				<5.0
5/8/2012	Tuesday	16.93	400.0	1,280.0	0.69	1.18	3.38	<5.0
5/9/2012	Wednesday	36.37	602.0	1,590.0				<5.0
5/15/2012	Tuesday	26.31	255.0	887.0	0.54	1.03	1.93	<5.0
5/16/2012	Wednesday	26.39	632.0	1,440.0				<5.0
5/22/2012	Tuesday	29.45	496.0	1,190.0	0.70	1.11	1.95	<5.0
5/23/2012	Wednesday	17.47	325.0	964.0				<5.0
5/29/2012	Tuesday	16.69	282.0	1,040.0	0.68	1.17	1.24	<5.0
5/30/2012	Wednesday	16.55	362.0	1,200.0				<5.0
6/4/2012	Monday	18.58	238.0	858.0	0.72	1.17	2.25	<5.0
6/5/2012	Tuesday	17.49	310.0	1,090.0				<5.0
6/11/2012	Monday	16.02	325.0	1,100.0	0.56	1.08	1.89	<5.0
6/12/2012	Tuesday	16.79	446.0	1,050.0				<5.0
6/18/2012	Monday	15.15	463.0	1,190.0	0.73	1.21	4.32	<5.0
6/19/2012	Tuesday	15.92	287.0	996.0				17.40
6/25/2012	Monday	32.48	338.0	1,150.0	0.63	1.28	6.93	<5.0
6/26/2012	Tuesday	16.15	543.0	1,160.0				<5.0
7/2/2012	Monday	20.31	388.0	1,240.0	0.78	1.30	1.86	<5.0
7/4/2012	Wednesday	16.21	264.0	999.0				<5.0
7/10/2012	Tuesday	13.59	560.0	1,250.0	0.65	1.22	1.78	<5.0
7/11/2012	Wednesday	14.24	255.0	989.0				<5.0
7/17/2012	Tuesday	13.74	568.0	1,570.0	0.72	1.37	2.16	<5.0
7/18/2012	Wednesday	20.82	365.0	1,180.0				<5.0
7/24/2012	Tuesday	17.92	465.0	1,230.0	0.79	1.31	3.54	<5.0
7/25/2012	Wednesday	13.41	339.0	1,160.0				<5.0

Table 10: Bucklin Point Influent Metals (Al - Sn)

Bucklin Point Influent Metals (Al - Sn) 2012
all anayeses in ppb unless otherwise noted

Date	Day of the Week	Influent Flow (MG)	Al	Fe	Se	As	Mo	Sn
7/31/2012	Tuesday	16.89	286.0	1,000.0	0.50	1.16	2.15	<5.0
8/1/2012	Wednesday	16.05	350.8	1,057.0				<5.0
8/7/2012	Tuesday	13.53	387.3	1,047.3	0.83	1.36	3.04	<5.0
8/8/2012	Wednesday	13.82	362.7	1,076.0				<5.0
8/14/2012	Tuesday	13.53	328.7	1,077.0	0.66	1.32	1.34	<5.0
8/15/2012	Wednesday	32.21	899.6	1,631.0				<5.0
8/21/2012	Tuesday	14.27	1,120.0	993.1	0.78	1.32	2.44	<5.0
8/22/2012	Wednesday	14.25	399.1	1,274.0				<5.0
8/28/2012	Tuesday	24.03	795.8	1,704.0	<0.5	1.37	2.27	<5.0
8/29/2012	Wednesday	14.38	331.0	1,230.0				<5.0
9/4/2012	Tuesday	24.24	856.2	1,706.0	0.73	1.44	2.71	<5.0
9/5/2012	Wednesday	30.23	628.9	1,437.0				<5.0
9/11/2012	Tuesday	15.00	294.9	1,063.0	0.55	1.17	2.07	<5.0
9/12/2012	Wednesday	14.91	335.0	1,185.0				<5.0
9/18/2012	Tuesday	15.90	336.7	1,104.0	0.53	1.26	3.62	<5.0
9/19/2012	Wednesday	28.87	423.7	1,121.0				<5.0
9/25/2012	Tuesday	14.76	352.2	1,041.0	0.77	1.43	8.50	<5.0
9/26/2012	Wednesday	15.30	346.9	1,029.0				<5.0
10/2/2012	Tuesday	20.05	416.6	1,454.0	1.03	1.53	3.92	<5.0
10/3/2012	Wednesday	17.04	405.3	1,231.0				<5.0
10/9/2012	Tuesday	16.36	284.7	978.4	0.62	1.44	1.69	<5.0
10/10/2012	Wednesday	22.52	409.2	1,138.0				<5.0
10/16/2012	Tuesday	15.72	448.9	1,467.0	0.75	1.43	2.15	<5.0
10/17/2012	Wednesday	15.11	1,001.0	1,404.0				<5.0
10/23/2012	Tuesday	15.51	513.4	1,447.0	0.75	1.40	2.21	<5.0
10/24/2012	Wednesday	16.00	250.0	926.1				<5.0
10/30/2012	Tuesday	39.24	313.7	844.9	<0.5	1.14	1.34	<5.0
10/31/2012	Wednesday	20.96	369.1	988.7				<5.0
11/6/2012	Tuesday	15.50	347.2	1,098.0	0.63	1.32	2.90	<5.0
11/7/2012	Wednesday	20.78	322.8	1,066.0				<5.0

Table 10: Bucklin Point Influent Metals (Al - Sn)

Bucklin Point Influent Metals (Al - Sn) 2012
all anayeses in ppb unless otherwise noted

Date	Day of the Week	Influent Flow (MG)	Al	Fe	Se	As	Mo	Sn
11/13/2012	Tuesday	27.05	555.3	1,401.0	0.55	1.18	1.56	<5.0
11/14/2012	Wednesday	16.25	345.6	990.7				<5.0
11/19/2012	Monday	15.65	255.7	942.9	<0.5	1.50	10.97	<5.0
11/20/2012	Tuesday	15.55	414.1	1,109.0				<5.0
11/27/2012	Tuesday	17.53	365.1	1,094.0	<0.5	1.20	3.11	<5.0
11/28/2012	Wednesday	15.26	340.4	1,003.0				<5.0
12/4/2012	Tuesday	15.49	386.6	1,179.0	0.72	1.35	2.97	<5.0
12/5/2012	Wednesday	14.47	658.3	1,549.0				<5.0
12/11/2012	Tuesday	15.09	1,894.0	1,364.0	0.55	1.35	1.93	<5.0
12/12/2012	Wednesday	15.16	336.5	1,066.0				<5.0
12/18/2012	Tuesday	31.61	537.1	1,336.0	0.73	1.46	4.94	<5.0
12/19/2012	Wednesday	15.78	300.2	1,008.0				<5.0
12/25/2012	Tuesday	16.42	218.9	1,042.0	0.71	1.25	0.83	<5.0
12/26/2012	Wednesday	16.70	657.7	1,098.0				<5.0

Table 10: Bucklin Point Influent Metals (Al - Sn)

Bucklin Point Effluent Metals and Cyanide (Cd - CN) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Effluent										
		Flow (MG)	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
1/3/2012	Tuesday	18.88	0.05	0.52	<10.00	10.50	0.55	0.0057	3.58	0.10	34.60	9.56
1/4/2012	Wednesday	18.79	0.06	0.57	<10.00	11.50	0.57	0.0060	4.52	0.12	36.30	8.21
1/10/2012	Tuesday	18.29	0.05	0.88	<10.00	9.84	0.40	0.0021	4.35	0.07	31.20	10.63
1/11/2012	Wednesday	17.50	0.05	1.45	<10.00	8.18	0.42	0.0021	4.56	0.08	31.80	11.54
1/17/2012	Tuesday	24.25	0.04	2.26	<10.00	5.38	0.40	0.0023	5.82	0.07	33.70	12.15
1/18/2012	Wednesday	18.35	0.04	2.76	<10.00	8.65	0.41	0.0025	5.94	0.09	31.90	11.24
1/24/2012	Tuesday	25.71	0.05	2.47	<10.00	6.42	0.43	0.0031	4.58	0.11	36.60	12.63
1/25/2012	Wednesday	18.43	0.05	0.73	<10.00	7.40	0.43	0.0024	5.25	0.17	38.40	11.65
1/31/2012	Tuesday	19.09	0.05	0.66	<10.00	12.60	0.49	<0.002	6.41	0.07	34.00	7.12
2/1/2012	Wednesday	19.05	0.04	0.59	<10.00	7.87	0.39	<0.002	6.22	0.07	30.60	6.50
2/7/2012	Tuesday	17.82	0.05	0.78	<10.00	8.74	0.37	<0.002	4.83	0.07	32.50	<4.00
2/8/2012	Wednesday	17.54	0.05	1.02	<10.00	8.43	0.37	0.0026	4.64	0.06	32.70	4.13
2/14/2012	Tuesday	18.10	0.05	0.95	<10.00	10.90	0.36	0.0026	4.50	0.06	36.30	5.87
2/15/2012	Wednesday	18.16	0.05	1.06	<10.00	10.30	0.76	0.0030	4.73	0.06	34.70	7.12
2/21/2012	Tuesday	16.70	0.06	1.05	<10.00	7.12	0.51	0.0054	3.61	0.10	34.10	7.74
2/22/2012	Wednesday	16.65	0.05	1.01	<10.00	6.99	0.33	0.0029	3.70	0.05	32.20	7.68
2/28/2012	Tuesday	15.44	0.03	0.41	<10.00	8.91	0.32	0.0038	4.26	0.10	33.50	8.81
2/29/2012	Wednesday	18.55	0.05	0.70	<10.00	9.36	0.44	0.0032	4.28	0.12	36.10	10.14
3/6/2012	Tuesday	16.73	0.12	0.50	<10.00	5.81	0.44	0.0039	6.12	0.07	37.60	7.56
3/7/2012	Wednesday	17.36	0.04	0.61	<10.00	5.84	0.46	0.0035	5.66	0.06	33.20	13.10
3/13/2012	Tuesday	16.93	0.04	1.37	<10.00	5.87	0.39	0.0024	8.34	0.05	41.10	13.49
3/14/2012	Wednesday	16.17	0.04	1.14	<10.00	6.40	0.40	0.0021	7.67	0.06	42.90	14.16
3/20/2012	Tuesday	15.40	0.05	0.51	<10.00	5.50	0.36	0.0024	6.54	0.04	36.90	12.90
3/21/2012	Wednesday	15.41	0.06	0.64	<10.00	6.84	0.34	<0.002	7.37	0.04	37.30	14.52
3/27/2012	Tuesday	14.35	0.04	0.78	<10.00	9.55	0.45	0.0026	10.00	0.06	39.10	5.99
3/28/2012	Wednesday	19.23	0.16	1.17	<10.00	10.60	0.41	0.0024	9.08	0.06	40.60	8.95
4/3/2012	Tuesday	14.22	0.03	1.09	<10.00	7.15	0.39	0.0039	7.07	0.06	38.40	5.01
4/4/2012	Wednesday	14.33	0.04	0.91	<10.00	7.14	0.41	0.0020	6.74	0.06	40.50	4.90
4/10/2012	Tuesday	14.65	0.04	0.58	<10.00	5.80	0.38	0.0038	5.56	0.06	35.10	10.88
4/11/2012	Wednesday	14.32	0.04	0.65	<10.00	7.21	0.43	0.0029	7.28	0.06	38.60	9.79
4/17/2012	Tuesday	13.16	0.03	0.69	<10.00	5.81	0.44	0.0029	6.17	0.06	36.50	8.66
4/18/2012	Wednesday	13.81	0.04	0.71	<10.00	6.80	0.43	0.0035	6.51	0.06	37.50	11.51
4/24/2012	Tuesday	18.45	0.03	1.67	<10.00	8.88	0.43	0.0043	8.40	0.03	41.50	8.39
4/25/2012	Wednesday	17.15	0.03	1.20	<10.00	8.30	0.44	0.0025	7.46	0.03	41.50	10.85

Table 11: Bucklin Point Effluent Metals and Cyanide (Cd - CN)

Bucklin Point Effluent Metals and Cyanide (Cd - CN) 2012
all analyses in ppb unless otherwise noted

		Effluent										
Date	Day of the Week	Flow (MG)	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
5/1/2012	Tuesday	26.79	0.04	0.97	<10.00	7.05	0.46	0.0036	4.92	0.05	34.80	9.06
5/2/2012	Wednesday	17.25	0.03	0.76	<10.00	9.97	0.38	<0.0020	5.28	0.04	35.40	5.52
5/8/2012	Tuesday	16.93	0.05	0.79	<10.00	8.59	0.42	0.0027	5.09	0.05	36.90	4.83
5/9/2012	Wednesday	33.06	0.03	0.92	<10.00	9.81	0.47	0.0033	4.06	0.07	31.30	6.39
5/15/2012	Tuesday	26.09	0.03	0.96	<10.00	6.87	0.47	0.0026	4.14	0.05	32.30	22.32
5/16/2012	Wednesday	24.39	0.02	2.27	<10.00	6.15	0.39	0.0025	5.85	0.04	30.40	13.51
5/22/2012	Tuesday	29.45	0.03	0.65	<10.00	6.26	0.45	0.0041	4.44	0.05	27.00	<8.00
5/23/2012	Wednesday	17.47	0.02	0.86	<10.00	6.85	0.39	0.0025	5.19	0.07	28.90	<8.00
5/29/2012	Tuesday	16.69	0.09	0.57	<10.00	6.67	0.45	0.0096	4.00	0.07	32.20	10.70
5/30/2012	Wednesday	16.55	0.04	0.59	<10.00	7.51	0.41	0.0028	6.40	0.07	36.40	13.03
6/5/2012	Tuesday	17.49	0.03	0.59	<10.00	7.20	0.36	0.0037	8.63	0.06	30.80	<8.00
6/6/2012	Wednesday	19.53	0.03	0.58	<10.00	6.80	0.37	0.0041	8.84	0.07	30.00	10.39
6/12/2012	Tuesday	16.79	0.03	0.58	<10.00	5.42	0.39	0.0023	10.80	0.06	29.80	11.51
6/13/2012	Wednesday	28.36	0.03	0.65	<10.00	5.91	0.39	0.0043	6.97	0.06	28.10	7.51
6/19/2012	Tuesday	15.92	0.04	0.56	<10.00	7.82	0.38	0.0025	5.20	0.06	30.30	5.46
6/20/2012	Wednesday	15.01	0.03	0.62	<10.00	8.06	0.38	0.0027	7.23	0.08	33.00	5.42
6/25/2012	Monday	25.12	0.03	0.79		10.60	0.35		57.70	0.08	23.20	
6/26/2012	Tuesday	16.15	0.04	0.60	<10.00	8.12	0.30	0.0025	75.70	0.06	28.60	10.22
6/27/2012	Wednesday	15.61	0.03	0.57	<10.00	7.82	0.34	<0.002	61.30	0.06	36.00	12.88
7/2/2012	Monday	20.31	0.03	0.52	<10.00	7.49	0.36	0.0035	10.55	0.05	31.76	
7/3/2012	Tuesday	14.83	0.04	0.57	<10.00	9.45	0.37	0.0028	8.62	0.05	43.21	10.61
7/4/2012	Wednesday	16.21										6.84
7/10/2012	Tuesday	13.59	0.04	0.64	<10.00	9.15	0.37	<0.002	5.99	0.05	34.41	4.67
7/11/2012	Wednesday	14.24	0.03	0.71	<10.00	7.69	0.38	0.0024	6.51	0.05	34.37	4.67
7/17/2012	Tuesday	13.74	0.04	0.87	<10.00	8.35	0.35	<0.002	5.06	0.05	35.03	12.43
7/18/2012	Wednesday	20.82	0.02	0.93	<10.00	7.83	0.41	0.0031	5.33	0.06	31.49	<8.00
7/24/2012	Tuesday	17.92	0.03	0.60	<10.00	7.08	0.42	0.0023	5.87	0.06	35.69	<8.00
7/25/2012	Wednesday	13.41	0.04	0.66	<10.00	8.31	0.46	0.0024	6.91	0.07	39.47	<4.00
7/31/2012	Tuesday	16.89	0.05	1.67	<10.00	9.18	0.55	0.0046	5.33	0.09	43.14	4.22
8/1/2012	Wednesday	16.05	0.06	1.02	<10.00	9.68	0.49	0.0049	5.84	0.09	45.76	4.90
8/7/2012	Tuesday	13.53	0.05	1.23	<10.00	10.98	0.51	0.0021	7.93	0.08	38.11	3.93
8/8/2012	Wednesday	13.82	0.05	1.27	<10.00	10.80	0.56	0.0028	7.86	0.07	42.12	4.54
8/14/2012	Tuesday	13.53	0.05	0.98	<10.00	9.82	0.77	0.0056	6.59	0.08	40.97	4.03
8/15/2012	Wednesday	27.23	0.03	0.99	<10.00	9.43	0.59	0.0525	5.86	0.06	34.94	<8.00

Table 11: Bucklin Point Effluent Metals and Cyanide (Cd - CN)

Bucklin Point Effluent Metals and Cyanide (Cd - CN) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Effluent										
		Flow (MG)	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
8/21/2012	Tuesday	14.27	0.03	1.45	<10.00	11.65	0.39	0.0031	6.23	0.05	41.93	<4.00
8/22/2012	Wednesday	14.25	0.03	1.17	<10.00	10.37	0.43	0.0028	6.31	0.07	32.63	5.47
8/28/2012	Tuesday	23.81	0.03	0.84	<10.00	7.47	0.36	0.0035	5.73	0.06	33.40	4.90
8/29/2012	Wednesday	14.38	0.04	3.52	<10.00	9.89	0.37	0.0029	9.64	0.06	35.40	<4.00
9/4/2012	Tuesday	24.11	0.04	0.74	<10.00	11.90	0.41	0.0027	74.54	0.07	28.59	5.31
9/5/2012	Wednesday	27.63	0.05	0.92	<10.00	20.94	0.46	0.0037	238.70	0.12	29.95	4.07
9/11/2012	Tuesday	15.00	0.05	1.19	<10.00	16.16	0.45	0.0026	37.62	0.08	34.80	6.51
9/12/2012	Wednesday	14.91	0.06	1.31	<10.00	22.99	0.59	0.0031	30.48	0.10	36.58	<4.00
9/18/2012	Tuesday	15.90	0.05	0.86	128.00	20.76	0.71	0.0054	10.76	0.11	34.11	4.25
9/19/2012	Wednesday	26.49	0.03	0.77	<10.00	11.64	0.45	0.0034	8.28	0.08	30.93	<4.00
9/25/2012	Tuesday	14.76	0.05	0.53	<10.00	11.68	0.39	0.0023	9.37	0.07	32.52	<8.00
9/26/2012	Wednesday	15.30	0.06	0.75	<10.00	12.89	0.37	<0.002	8.09	0.08	33.26	<8.00
10/2/2012	Tuesday	20.05	0.05	6.25	<10.00	12.45	0.44	0.0023	6.63	0.07	39.71	<8.00
10/3/2012	Wednesday	17.04	0.04	2.62	<10.00	13.08	0.41	<0.002	6.74	0.06	35.36	14.50
10/9/2012	Tuesday	16.36	0.05	0.93	<10.00	14.07	0.34	0.0033	4.96	0.06	34.27	<4.00
10/10/2012	Wednesday	22.52	0.04	0.96	<10.00	11.40	0.35	0.0022	5.19	0.06	35.03	4.46
10/16/2012	Tuesday	15.72	0.05	0.73	<10.00	9.95	<0.3	0.0030	6.43	0.04	38.00	<4.00
10/17/2012	Wednesday	15.11	0.06	2.19	<10.00	12.41	0.34	<0.002	7.90	0.05	38.54	4.30
10/23/2012	Tuesday	15.51	0.04	0.80	<10.00	11.60	0.38	0.0026	6.60	0.05	35.99	6.57
10/24/2012	Wednesday	16.00	0.05	0.83	<10.00	9.37	0.34	0.0028	7.04	0.05	34.00	5.59
10/30/2012	Tuesday	30.85	0.02	0.96	<10.00	6.76	0.41	0.0040	3.93	0.05	26.02	<4.00
10/31/2012	Wednesday	20.96	0.03	0.68	<10.00	6.94	0.36	0.0021	6.58	0.04	31.28	4.20
11/6/2012	Tuesday	15.50	0.05	0.52	<10.00	8.78	0.51	0.0025	5.99	0.06	36.61	<8.00
11/7/2012	Wednesday	20.78	0.04	0.71	<10.00	8.16	0.52	0.0029	5.65	0.08	36.57	6.10
11/13/2012	Tuesday	27.05	0.04	0.95	<10.00	7.77	0.49	0.0049	5.67	0.06	35.40	4.98
11/14/2012	Wednesday	16.25	0.04	0.91	<10.00	8.21	0.66	0.0035	5.65	0.05	39.30	5.39
11/19/2012	Monday	15.65	0.05	0.45	<10.00	7.98	0.52	0.0120	4.41	0.05	34.60	4.39
11/20/2012	Tuesday	15.55	0.08	1.02	<10.00	11.30	0.98	0.0052	6.30	0.12	47.50	7.08
11/27/2012	Tuesday	17.53	0.04	4.61	<10.00	8.41	0.40	0.0031	7.48	0.04	36.10	<8.00
11/28/2012	Wednesday	15.26	0.04	2.19	<10.00	9.38	0.41	0.0021	6.99	0.04	39.30	9.85
12/4/2012	Tuesday	15.49	0.04	1.44	<10.00	9.60	0.39	0.0029	7.38	0.06	38.60	10.80
12/5/2012	Wednesday	14.47	0.05	1.81	<10.00	8.14	0.38	<0.002	8.53	0.08	41.40	6.55
12/11/2012	Tuesday	15.09	0.04	1.13	<10.00	5.93	0.47	0.0026	5.67	0.05	40.50	<4.00
12/12/2012	Wednesday	15.16	0.04	1.75	<10.00	6.80	0.51	0.0035	6.92	0.06	49.10	<4.00

Table 11: Bucklin Point Effluent Metals and Cyanide (Cd - CN)

Bucklin Point Effluent Metals and Cyanide (Cd - CN) 2012
all analyses in ppb unless otherwise noted

		Effluent										
Date	Day of the Week	Flow (MG)	Cd	TTL Cr	Hex Cr	Cu	Pb	Hg	Ni	Ag	Zn	CN
12/18/2012	Tuesday	29.06	0.03	1.20	<10.00	5.99	0.55	0.0041	6.05	0.08	33.00	7.18
12/19/2012	Wednesday	15.78	0.03	1.16	<10.00	6.01	0.41	0.0027	8.33	0.04	39.90	6.52
12/25/2012	Tuesday	16.42	0.04	0.68	<10.00	5.82	0.43	0.0032	3.50	0.04	36.00	9.72
12/26/2012	Wednesday	16.70	0.07	2.29	<10.00	14.10	1.48	0.0063	4.54	0.25	42.80	9.02

Table 11: Bucklin Point Effluent Metals and Cyanide (Cd - CN)

Bucklin Point Effluent Metals (Al - Sn) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Effluent Flow (MG)	Al	Fe	Se	As	Mo	Sn
1/3/2012	Tuesday	18.88	38.5	186.0				<5.00
1/4/2012	Wednesday	18.79	43.4	174.0				<5.00
1/10/2012	Tuesday	18.29	23.7	134.0	0.72	1.20		<5.00
1/11/2012	Wednesday	17.50	24.2	133.0				<5.00
1/17/2012	Tuesday	24.25	22.1	122.0				<5.00
1/18/2012	Wednesday	18.35	23.1	129.0				<5.00
1/24/2012	Tuesday	25.71	24.2	141.0				<5.00
1/25/2012	Wednesday	18.43	43.0	115.0				<5.00
1/31/2012	Tuesday	19.09	21.4	104.0				<5.00
2/1/2012	Wednesday	19.05	19.4	101.0				<5.00
2/7/2012	Tuesday	17.82	18.7	90.4	<0.5	0.97		<5.00
2/8/2012	Wednesday	17.54	21.6	97.2				<5.00
2/14/2012	Tuesday	18.10	19.0	97.7				<5.00
2/15/2012	Wednesday	18.16	18.5	147.0				<5.00
2/21/2012	Tuesday	16.70	33.3	168.0				<5.00
2/22/2012	Wednesday	16.65	16.1	114.0				<5.00
2/28/2012	Tuesday	15.44	18.3	118.0				<5.00
2/29/2012	Wednesday	18.55	25.0	155.0				<5.00
3/6/2012	Tuesday	16.73	21.0	116.0	<0.5	0.85		<5.00
3/7/2012	Wednesday	17.36	20.6	145.0				<5.00
3/13/2012	Tuesday	16.93	22.4	138.0				<5.00
3/14/2012	Wednesday	16.17	23.6	142.0				<5.00
3/20/2012	Tuesday	15.40	17.0	101.0				<5.00
3/21/2012	Wednesday	15.41	19.3	98.7				<5.00
3/27/2012	Tuesday	14.35	18.5	114.0				<5.00
3/28/2012	Wednesday	19.23	28.4	127.0				<5.00
4/3/2012	Tuesday	14.22	17.8	120.0	<0.5	0.91		<5.00
4/4/2012	Wednesday	14.33	18.8	123.0				<5.00
4/10/2012	Tuesday	14.65	17.1	112.0				<5.00
4/11/2012	Wednesday	14.32	21.2	125.0				<5.00
4/17/2012	Tuesday	13.16	16.1	123.0				<5.00
4/18/2012	Wednesday	13.81	17.3	116.0				<5.00
4/24/2012	Tuesday	18.45	21.3	100.0				<5.00
4/25/2012	Wednesday	17.15	23.5	107.0				<5.00
5/1/2012	Tuesday	26.79	23.4	116.0				<5.00
5/2/2012	Wednesday	17.25	23.1	114.0				<5.00
5/8/2012	Tuesday	16.93	19.6	132.0	<0.5	1.07		<5.00
5/9/2012	Wednesday	33.06	25.7	154.0				<5.00
5/15/2012	Tuesday	26.09	23.0	136.0				<5.00
5/16/2012	Wednesday	24.39	20.3	109.0				<5.00
5/22/2012	Tuesday	29.45	23.0	142.0				<5.00

Table 12: Bucklin Point Effluent Metals (Al - Sn)

Bucklin Point Effluent Metals (Al - Sn) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Effluent Flow (MG)	Al	Fe	Se	As	Mo	Sn
5/23/2012	Wednesday	17.47	16.8	124.0				<5.00
5/29/2012	Tuesday	16.69	15.7	117.0				<5.00
5/30/2012	Wednesday	16.55	16.0	130.0				<5.00
6/5/2012	Tuesday	17.49	14.6	117.0	<0.5	1.02		<5.00
6/6/2012	Wednesday	19.53	17.7	119.0				<5.00
6/12/2012	Tuesday	16.79	14.2	124.0				<5.00
6/13/2012	Wednesday	28.36	18.9	118.0				<5.00
6/19/2012	Tuesday	15.92	12.6	119.0				<5.00
6/20/2012	Wednesday	15.01	13.3	113.0				<5.00
6/25/2012	Monday	25.12	22.0	118.0				<5.00
6/26/2012	Tuesday	16.15	13.5	82.5				<5.00
6/27/2012	Wednesday	15.61	14.4	91.1				<5.00
7/2/2012	Monday	20.31	17.9	103.3				<5.00
7/3/2012	Tuesday	14.83	15.2	101.8				<5.00
7/4/2012	Wednesday	16.21						<5.00
7/10/2012	Tuesday	13.59	12.9	93.0	0.52	1.00	1.16	<5.0
7/11/2012	Wednesday	14.24	14.6	103.9				<5.0
7/17/2012	Tuesday	13.74	11.7	100.4				<5.00
7/18/2012	Wednesday	20.82	16.8	117.2				<5.00
7/24/2012	Tuesday	17.92	14.6	110.2				<5.00
7/25/2012	Wednesday	13.41	14.7	112.0				<5.00
7/31/2012	Tuesday	16.89	17.4	121.7				<5.00
8/1/2012	Wednesday	16.05	15.0	116.2				<5.00
8/7/2012	Tuesday	13.53	16.3	131.8	<0.5	1.12	1.77	<5.00
8/8/2012	Wednesday	13.82	19.5	137.5				<5.00
8/14/2012	Tuesday	13.53	29.1	248.0				<5.00
8/15/2012	Wednesday	27.23	23.0	164.2				<5.00
8/21/2012	Tuesday	14.27	16.8	129.8				<5.00
8/22/2012	Wednesday	14.25	20.8	153.0				<5.00
8/28/2012	Tuesday	23.81	15.8	108.8				<5.00
8/29/2012	Wednesday	14.38	14.7	98.7				<5.00
9/4/2012	Tuesday	24.11	19.2	121.6				<5.00
9/5/2012	Wednesday	27.63	26.2	147.5				<5.00
9/11/2012	Tuesday	15.00	14.3	101.0	0.52	0.97	1.52	<5.00
9/12/2012	Wednesday	14.91	14.6	114.0				<5.00
9/18/2012	Tuesday	15.90	31.7	190.7				<5.00
9/19/2012	Wednesday	26.49	20.7	134.4				<5.00
9/25/2012	Tuesday	14.76	13.2	118.8				<5.00
9/26/2012	Wednesday	15.30	13.3	115.5				<5.00
10/2/2012	Tuesday	20.05	20.1	113.8	0.75	1.16	2.64	<5.00
10/3/2012	Wednesday	17.04	16.5	109.0				<5.00

Table 12: Bucklin Point Effluent Metals (Al - Sn)

Bucklin Point Effluent Metals (Al - Sn) 2012
all analyses in ppb unless otherwise noted

Date	Day of the Week	Effluent Flow (MG)	Al	Fe	Se	As	Mo	Sn
10/9/2012	Tuesday	16.36	15.9	115.8				<5.00
10/10/2012	Wednesday	22.52	21.3	115.3				<5.00
10/16/2012	Tuesday	15.72	12.8	88.1				<5.00
10/17/2012	Wednesday	15.11	17.5	107.2				<5.00
10/23/2012	Tuesday	15.51	16.3	103.3				<5.00
10/24/2012	Wednesday	16.00	16.5	102.8				<5.00
10/30/2012	Tuesday	30.85	22.3	110.9				<5.00
10/31/2012	Wednesday	20.96	20.3	103.5				<5.00
11/6/2012	Tuesday	15.50	18.7	137.9				<5.00
11/7/2012	Wednesday	20.78	17.8	135.5				<5.00
11/13/2012	Tuesday	27.05	18.8	121.1				<5.00
11/14/2012	Wednesday	16.25	24.0	186.9				<5.00
11/19/2012	Monday	15.65	17.1	120.1				<5.00
11/20/2012	Tuesday	15.55	47.1	280.9	<0.5	1.14	3.56	<5.00
11/27/2012	Tuesday	17.53	18.8	124.9				<5.00
11/28/2012	Wednesday	15.26	21.8	131.2				<5.00
12/4/2012	Tuesday	15.49	16.0	125.0	<0.5	1.08	1.67	<5.00
12/5/2012	Wednesday	14.47	17.7	122.7				<5.00
12/11/2012	Tuesday	15.09	22.2	104.3				<5.00
12/12/2012	Wednesday	15.16	27.5	136.5				<5.00
12/18/2012	Tuesday	29.06	32.2	163.0				<5.00
12/19/2012	Wednesday	15.78	24.3	132.6				<5.00
12/25/2012	Tuesday	16.42	19.9	127.2				<5.00
12/26/2012	Wednesday	16.70	40.9	474.6				<5.00

Table 12: Bucklin Point Effluent Metals (Al - Sn)

Field's Point Influent and Effluent Nutrients 2012

Field's Point Influent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
1/2/2012	0.1	0.118	14	22.4	3.59	22.62
1/3/2012	0.145	0.182	15.9	24.8	3.91	25.13
1/4/2012	0.137	0.193	14.8	16.2	3.64	16.53
1/9/2012	0.142	0.168	17.5	26.6	4.17	26.91
1/10/2012	0.129	0.144	14.2	23.7	4.1	23.97
1/11/2012	0.128	0.143	15.4	21.5	3.94	21.77
1/16/2012	0.0727	0.4853	12.8	20.2	4.19	20.76
1/17/2012	0.148	0.502	12	19.6	3.16	20.25
1/18/2012	0.184	0.421	15	22	3.73	22.61
1/23/2012	0.148	0.382	15.7	31.7	3.39	32.23
1/24/2012	0.138	0.667	11.6	17.4	3.09	18.21
1/25/2012	0.142	0.442	13.8	23.2	4.49	23.78
1/30/2012	0.104	0.738	14.8	23	3.43	23.84
1/31/2012	0.16	0.803	12.6	21.8	3.48	22.76
2/1/2012	0.156	0.445	15.2	20	3.34	20.60
2/6/2012	0.177	0.511	16.9	24.3	3.15	24.99
2/7/2012	0.18	0.505	16.3	22.3	3.07	22.99
2/8/2012	0.132	0.511	16.1	25	3.6	25.64
2/13/2012	0.0907	0.2713	15.9	22.1	3.79	22.46
2/14/2012	0.108	0.274	15.2	22.5	3.43	22.88
2/15/2012	0.098	0.199	16.6	29	4.14	29.30
2/20/2012	0.0919	0.2651	17.9	26.2	3.85	26.56
2/21/2012	0.108	0.318	18.6	32.4	3.76	32.83
2/22/2012	0.0878	0.2712	17.3	26.3	4.27	26.66
2/27/2012	0.101	0.739	16.1	25.1	4.16	25.94
2/28/2012	0.134	0.359	18.5	28.6	4.21	29.09
2/29/2012	0.0833	0.3807	15.9	21.5	3.59	21.96
3/5/2012	0.183	0.519	14.8	22.6	3.37	23.30
3/6/2012	0.184	0.432	15.5	22.1	3.02	22.72
3/7/2012	0.152	0.471	16.2	23	3.45	23.62
3/12/2012	0.0865	0.2745	16.2	24.3	4.24	24.66

Field's Point Effluent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
1/2/2012	0.267	3.433	5.20	7.95	1.16	11.65
1/3/2012	0.257	3.013	7.88	9.96	1.44	13.23
1/4/2012	0.244	2.756	8.69	10.80	1.49	13.80
1/9/2012	0.291	3.069	6.78	9.03	1.36	12.39
1/10/2012	0.238	2.102	8.33	10.10	1.74	12.44
1/11/2012	0.237	1.843	5.66	7.80	1.22	9.88
1/16/2012	0.246	1.624	7.76	9.82	0.86	11.69
1/17/2012	0.220	1.700	6.90	8.57	0.92	10.49
1/18/2012	0.256	1.694	8.26	10.10	1.04	12.05
1/23/2012	0.200	2.490	7.18	8.68	1.10	11.37
1/24/2012	0.213	2.247	6.05	9.13	1.19	11.59
1/25/2012	0.223	1.897	7.30	10.20	1.78	12.32
1/30/2012	0.196	0.684	9.76	11.50	1.46	12.38
1/31/2012	0.210	1.560	7.69	9.93	0.86	11.70
2/1/2012	0.267	1.713	8.34	9.62	1.10	11.60
2/6/2012	0.284	1.796	8.79	10.80	1.16	12.88
2/7/2012	0.268	2.242	8.91	11.00	1.22	13.51
2/8/2012	0.317	2.003	9.37	10.70	1.37	13.02
2/13/2012	0.295	2.855	6.29	7.99	1.58	11.14
2/14/2012	0.255	2.145	6.29	8.08	1.45	10.48
2/15/2012	0.341	2.809	6.07	8.39	1.22	11.54
2/20/2012	0.298	1.642	7.01	9.02	1.11	10.96
2/21/2012	0.292	1.368	8.14	9.39	1.30	11.05
2/22/2012	0.308	1.432	6.50	8.20	1.07	9.94
2/27/2012	0.351	1.079	6.64	9.29	1.40	10.72
2/28/2012	0.385	1.185	7.89	9.38	1.02	10.95
2/29/2012	0.258	1.952	7.51	9.39	1.69	11.60
3/5/2012	0.316	1.394	6.61	8.21	0.62	9.92
3/6/2012	0.279	1.081	8.34	9.96	0.83	11.32
3/7/2012	0.244	0.645	9.87	11.30	0.88	12.19
3/12/2012	0.105	0.373	10.30	11.90	1.36	12.38

Table 13: Field's Point Influent and Effluent Nutrients

Field's Point Influent and Effluent Nutrients 2012

Field's Point Influent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
3/13/2012	0.112	0.229	15.8	23.7	3.72	24.04
3/14/2012	0.106	0.237	17.7	26.8	3.99	27.14
3/19/2012	0.0895	<0.100	17.7	24.3	4.47	24.49
3/20/2012	0.033	0.224	16.4	24.9	4.14	25.16
3/21/2012	0.0433	0.1527	16.4	24.4	4.07	24.60
3/26/2012	0.0383	<0.100	17.4	25.4	5.02	25.54
3/27/2012	0.0508	<0.100	17.3	27.2	4.53	27.35
3/28/2012	0.0847	<0.100	16.5	19.5	4.21	19.68
4/2/2012	0.0647	<0.100	17.3	27.4	4.71	27.56
4/3/2012	0.0138	<0.100	17.4	23.5	3.98	23.61
4/4/2012	0.0119	<0.100	19.5	28.7	4.42	28.81
4/9/2012	0.0316	<0.100	20.5	23.7	4.67	23.83
4/10/2012	0.0324	<0.100	19.2	27.6	4.32	27.73
4/11/2012	0.0205	<0.100	17.9	24.3	5.04	24.42
4/16/2012	0.0182	<0.100	19.5	27.8	6.44	27.92
4/17/2012	0.0272	<0.100	19	26.8	5.23	26.93
4/18/2012	0.033	<0.100	18.7	26	4.4	26.13
4/23/2012	0.0973	0.9427	8.7	11	3.05	12.04
4/24/2012	0.102	0.646	9.76	13.9	2.83	14.65
4/25/2012	0.112	0.344	9.15	14.1	2.83	14.56
4/30/2012	0.15	<0.100	15.7	22.4	4.68	22.65
5/1/2012	0.0997	0.3123	11.4	16.3	3.19	16.71
5/2/2012	0.106	0.107	14	22.1	3.92	22.31
5/7/2012	0.012	<0.100	17.3	26.8	4.69	26.91
5/8/2012	0.0332	<0.100	16.2	27	4.52	27.13
5/9/2012	0.0565	0.3215	7.64	12.6	2.74	12.98
5/14/2012	0.0281	<0.100	17.3	26.6	4.62	26.73
5/15/2012	0.0393	0.1727	12.2	34.3	4.75	34.51
5/16/2012	0.0929	0.3441	9.76	18.4	2.81	18.84
5/21/2012	0.0403	<0.100	16.3	25.2	4.55	25.34
5/22/2012	0.0658	0.1372	11.3	19.1	3.3	19.30

Field's Point Effluent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
3/13/2012	0.110	0.490	8.57	9.31	1.13	9.91
3/14/2012	0.201	1.089	8.84	9.96	0.68	11.25
3/19/2012	0.173	0.459	10.40	11.60	1.85	12.23
3/20/2012	0.142	0.244	9.50	10.40	1.90	10.79
3/21/2012	0.175	0.473	10.50	11.60	1.42	12.25
3/26/2012	0.282	1.118	8.53	9.39	1.57	10.79
3/27/2012	0.270	1.220	8.51	10.40	1.60	11.89
3/28/2012	0.221	0.919	9.28	11.50	1.57	12.64
4/2/2012	0.140	0.653	8.97	12.10	2.93	12.89
4/3/2012	0.178	0.509	9.49	10.80	2.02	11.49
4/4/2012	0.100	0.177	10.80	12.10	1.57	12.38
4/9/2012	0.129	0.586	9.67	10.30	1.31	11.02
4/10/2012	0.118	0.721	7.84	9.29	1.37	10.13
4/11/2012	0.117	0.762	7.61	8.37	1.24	9.25
4/16/2012	0.093	0.532	10.60	10.80	2.23	11.43
4/17/2012	0.114	0.577	9.46	9.49	2.27	10.18
4/18/2012	0.161	0.929	9.49	9.51	1.63	10.60
4/23/2012	0.155	0.826	5.29	5.90	1.10	6.88
4/24/2012	0.228	0.912	6.59	6.68	0.74	7.82
4/25/2012	0.132	0.504	7.26	7.36	1.30	8.00
4/30/2012	0.099	0.311	10.80	11.20	1.56	11.61
5/1/2012	0.100	0.409	9.36	10.60	0.84	11.11
5/2/2012	0.088	0.383	9.32	11.30	0.77	11.77
5/7/2012	0.152	0.479	9.21	11.10	1.22	11.73
5/8/2012	0.182	0.898	8.50	10.70	1.39	11.78
5/9/2012	0.167	1.123	4.37	6.20	0.77	7.49
5/14/2012	0.102	0.416	9.53	11.70	1.69	12.22
5/15/2012	0.128	0.922	6.16	8.45	1.12	9.50
5/16/2012	0.137	0.558	5.71	6.78	0.87	7.48
5/21/2012	0.055	0.198	10.20	12.40	2.46	12.65
5/22/2012	0.140	0.673	5.88	7.70	0.41	8.51

Table 13: Field's Point Influent and Effluent Nutrients

Field's Point Influent and Effluent Nutrients 2012

Field's Point Influent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
5/23/2012	0.0435	<0.100	15.3	25.8	3.67	25.94
5/28/2012	0.0469	<0.100	14.2	22.1	3.65	22.25
5/29/2012	0.0172	<0.100	14.9	25.5	3.38	25.62
5/30/2012	0.0673	<0.100	16.8	25.8	3.52	25.97
6/4/2012	0.0706	<0.100	10.9	15.6	2.51	15.77
6/5/2012	0.0182	<0.100	14.5	23.3	3.29	23.42
6/6/2012	0.0503	<0.100	12.7	16.4	3.4	16.55
6/11/2012	0.0136	<0.100	18.2	23.6	4.18	23.71
6/12/2012	0.0132	<0.100	15.8	25.6	3.25	25.71
6/13/2012	0.0457	0.1353	12.1	18.7	2.95	18.88
6/18/2012	<0.01	<0.100	16.4	23.1	3.97	23.21
6/19/2012	0.0119	<0.100	18	28.8	4.66	28.91
6/20/2012	<0.01	<0.100	16	25.5	3.88	25.61
6/25/2012	0.24	0.156	9.44	12.2	2.35	12.60
6/26/2012	0.218	<0.100	8.89	15	2.26	15.32
6/27/2012	0.12	<0.100	10.7	16	2.8	16.22
7/2/2012	0.119	<0.100	14.7	22.2	3.63	22.42
7/3/2012	0.117	<0.100	13.3	21.9	4	22.12
7/4/2012	0.134	<0.100	12.1	19	3.26	19.23
7/9/2012	0.19	<0.100	18.7	27.9	4.08	28.19
7/10/2012	0.22	<0.100	16.2	21.5	3.62	21.82
7/11/2012	0.219	<0.100	14.9	22	4.25	22.32
7/16/2012	0.365	<0.100	13.7	24.5	4.11	24.97
7/17/2012	0.456	0.112	12.8	22	2.71	22.57
7/18/2012	0.0129	<0.100	12.9	20.9	3.56	21.01
7/23/2012	0.442	0.431	16.9	26.3	3.99	27.17
7/24/2012	0.313	0.337	14.4	27.6	4.19	28.25
7/25/2012	0.317	0.262	16.7	20.8	3.49	21.38
7/30/2012	0.298	0.431	9.74	15.5	1.94	16.23
7/31/2012	0.340	0.416	14.2	19.8	2.23	20.56
8/1/2012	0.331	<0.100	14.7	23.8	3.39	24.13

Field's Point Effluent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
5/23/2012	0.096	0.411	8.42	10.00	0.97	10.51
5/28/2012	0.049	0.248	6.24	8.24	2.60	8.54
5/29/2012	0.062	0.280	7.33	8.97	1.39	9.31
5/30/2012	0.097	0.650	6.08	7.79	0.39	8.54
6/4/2012	0.042	<0.100	7.04	7.98	0.91	8.12
6/5/2012	0.125	<0.100	7.07	8.49	1.14	8.72
6/6/2012	0.030	<0.100	6.69	8.72	0.95	8.85
6/11/2012	0.028	<0.100	12.00	12.90	2.18	13.03
6/12/2012	0.045	0.131	9.52	11.20	1.01	11.38
6/13/2012	0.180	<0.100	8.84	10.90	1.52	11.18
6/18/2012	0.089	0.197	10.70	12.80	3.49	13.09
6/19/2012	0.044	<0.100	11.30	13.00	2.72	13.14
6/20/2012	0.031	<0.100	10.40	11.70	2.03	11.83
6/25/2012	0.055	0.200	6.32	7.31	0.54	7.57
6/26/2012	0.021	<0.100	7.69	8.88	1.51	9.00
6/27/2012	0.022	<0.100	8.52	10.10	1.64	10.22
7/2/2012	0.031	<0.100	10.90	12.50	1.68	12.63
7/3/2012	0.026	<0.100	10.20	12.20	1.94	12.33
7/4/2012	0.031	<0.100	9.57	10.50	0.91	10.63
7/9/2012	0.036	<0.100	13.50	15.00	1.93	15.14
7/10/2012	0.028	<0.100	11.80	13.30	2.57	13.43
7/11/2012	0.032	<0.100	11.50	11.70	1.81	11.83
7/16/2012	0.032	<0.100	8.30	9.03	2.07	9.16
7/17/2012	0.040	<0.100	8.01	9.08	1.60	9.22
7/18/2012	0.130	0.265	5.93	6.72	0.66	7.12
7/23/2012	0.078	0.253	5.63	6.27	2.63	6.60
7/24/2012	0.098	0.287	3.89	4.25	1.17	4.64
7/25/2012	0.098	0.451	3.21	3.69	1.74	4.24
7/30/2012	0.091	0.900	2.83	3.17	1.67	4.16
7/31/2012	0.065	0.390	3.52	4.76	1.37	5.22
8/1/2012	0.064	0.775	1.53	2.79	0.90	3.63

Table 13: Field's Point Influent and Effluent Nutrients

Field's Point Influent and Effluent Nutrients 2012

Field's Point Influent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
8/6/2012	0.116	<0.100	15.4	25	3.55	25.12
8/7/2012	0.011	<0.100	19	28.8	3.33	28.81
8/8/2012	0.013	0.179	16.2	25.4	4.19	25.59
8/13/2012	0.012	<0.100	17.4	25.5	3.8	25.51
8/14/2012	<0.01	<0.100	14.4	27.5	4.15	27.50
8/15/2012	0.059	<0.100	8.53	15.3	1.64	15.36
8/20/2012	0.031	<0.100	17.7	27.7	2.99	27.73
8/21/2012	0.085	<0.100	16.4	26.5	2.96	26.59
8/22/2012	0.101	<0.100	17.1	25.2	3.19	25.30
8/27/2012	0.238	<0.100	16.6	27.4	4.16	27.64
8/28/2012	0.318	<0.100	13.8	18.5	2.88	18.82
8/29/2012	0.370	<0.1	17.4	22.7	3.41	23.07
9/3/2012	0.379	<0.100	18.4	24.6	4.87	24.98
9/4/2012	0.402	0.135	14.4	19.7	3.45	20.24
9/5/2012	0.488	0.110	9.36	18.3	2.7	18.90
9/10/2012	0.372	<0.100	18.2	27	3.91	27.40
9/11/2012	0.178	0.123	18	26.8	3.97	27.10
9/12/2012	0.266	0.111	20.3	32.5	4.49	32.90
9/17/2012	0.156	<0.100	20	29.5	4.89	29.70
9/18/2012			15.8	25	4.55	25.10
9/19/2012	0.346	0.193	11.1	19.4	2.98	19.90
9/24/2012	0.251	0.124	22.4	35.6	4.81	36.00
9/25/2012	0.386	<0.100	18.9	31.6	3.82	32.10
9/26/2012	0.420	<0.1	19.3	33.2	4.11	33.62
10/1/2012	0.418	<0.1	20.7	36.6	4.64	37.02
10/2/2012	0.080	<0.100	17.3	31.5	4.09	31.58
10/3/2012	0.021	<0.1	20.5	25	4.25	25.02
10/8/2012	0.010	<0.100	19.1	32.7	3.61	19.11
10/9/2012	<0.01	<0.100	21.1	35.2	4.72	21.10
10/10/2012	<0.01	<0.100	15.4	26.3	4.37	26.30
10/15/2012	0.012	< 0.1	22.2	45.3	5.22	45.31

Field's Point Effluent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
8/6/2012	0.056	0.386	2.98	4.67	2.21	5.11
8/7/2012	0.065	0.329	3.46	4.84	1.40	5.23
8/8/2012	0.042	0.317	1.80	2.91	1.70	3.27
8/13/2012	0.070	0.293	3.12	4.43	1.89	4.79
8/14/2012	0.039	0.849	1.06	1.63	0.73	2.52
8/15/2012	0.089	1.351	1.38	1.91	0.93	3.35
8/20/2012	0.085	0.914	2.82	3.43	1.58	4.43
8/21/2012	0.061	0.959	1.84	1.94	1.57	2.96
8/22/2012	0.056	0.822	2.33	2.46	1.24	3.34
8/27/2012	0.066	0.551	4.34	4.36	2.08	4.98
8/28/2012	0.068	0.781	1.78	3.26	0.98	4.11
8/29/2012	0.048	0.429	3.70	6.66	1.52	7.14
9/3/2012	0.054	0.403	4.45	6.85	2.96	7.31
9/4/2012	0.066	0.700	2.03	3.87	1.65	4.64
9/5/2012	0.038	0.792	1.78	3.11	1.30	3.94
9/10/2012	0.050	0.573	2.35	4.43	1.14	5.05
9/11/2012	0.031	0.465	1.89	4.11	1.61	4.61
9/12/2012	0.042	0.696	2.20	4.18	0.98	4.92
9/17/2012	0.055	0.460	3.19	5.43	2.39	5.95
9/18/2012	0.073	0.380	5.23	6.86	1.39	7.31
9/19/2012	0.164	0.590	2.68	4.42	0.78	5.17
9/24/2012	0.137	0.736	4.21	4.31	1.46	5.18
9/25/2012	0.132	1.088	3.29	6.61	1.47	7.83
9/26/2012	0.095	0.540	3.72	6.66	1.40	7.30
10/1/2012	0.080	0.319	4.64	7.87	1.63	8.27
10/2/2012	0.119	0.376	4.09	6.65	1.47	7.15
10/3/2012	0.147	1.030	4.65	6.17	1.05	7.35
10/8/2012	0.056	1.494	1.01	2.72	1.79	4.27
10/9/2012	0.101	1.239	2.70	3.87	1.78	5.21
10/10/2012	0.095	0.915	1.59	2.45	1.40	3.46
10/15/2012	0.099	0.650	4.39	5.60	2.64	6.35

Table 13: Field's Point Influent and Effluent Nutrients

Field's Point Influent and Effluent Nutrients 2012

Field's Point Influent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
10/16/2012	0.011	< 0.1	18.6	34.4	4.99	34.41
10/17/2012	0.016	<0.1	23.4	37.9	4.85	37.92
10/22/2012	0.076	<0.1	19.5	33.2	4.88	33.28
10/23/2012	0.087	<0.100	19.7	33.2	4.75	33.29
10/24/2012	0.046	<0.100	18.6	26.9	4.21	27.01
10/29/2012	0.177	0.192	9.49	14.9	3.69	15.30
10/30/2012	0.204	0.301	8.03	13.7	2.84	14.20
10/31/2012	0.281	0.115	9.77	16	2.21	16.40
11/5/2012	0.164	<0.100	19	29.4	3.38	29.56
11/6/2012	0.184	< 0.1	17.2	33.1	4.27	33.32
11/7/2012	0.253	< 0.1	16.5	27.7	3.54	28.00
11/12/2012	0.235	< 0.1	16.5	26.3	4.17	26.50
11/13/2012	0.272	< 0.1	12.6	21.6	4.2	21.87
11/14/2012	0.328	< 0.1	18.7	30	4.14	30.33
11/19/2012	0.055	< 0.1	17.1	27.8	4.84	27.85
11/20/2012	0.016	< 0.1	19	29.9	5.24	29.92
11/21/2012	0.013	< 0.1	18.1	35.9	4.44	35.91
11/26/2012	0.012	< 0.1	21.2	31.3	4.91	31.31
11/27/2012	0.017	< 0.1	18.2	29	4.17	29.02
11/28/2012	0.054	< 0.1	20.8	25.7	4.79	25.75
12/3/2012	0.027	< 0.1	22	34.3	4.72	34.33
12/4/2012	0.011	< 0.1	19.1	31.5	4.64	31.51
12/5/2012	0.014	< 0.1	21.7	37.4	4.69	37.41
12/10/2012	0.058	0.240	10.6	14.5	2.8	14.80
12/11/2012	0.072	< 0.1	17	21.1	3.9	21.20
12/12/2012	0.043	0.137	19.4	27.5	4.03	27.70
12/17/2012	0.064	0.356	12.6	38.2	3.6	38.56
12/18/2012	0.073	0.422	9.78	16	3.11	16.42
12/19/2012	0.091	0.178	15.3	17.5	2.71	17.80
12/24/2012	0.068	< 0.1	14.4	21.6	3.72	21.70
12/25/2012	0.044	< 0.1	14.1	16.2	3.42	16.20

Field's Point Effluent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
10/16/2012	0.179	1.361	2.86	5.33	1.11	6.87
10/17/2012	0.191	2.789	2.50	5.21	1.39	8.19
10/22/2012	0.111	0.774	3.65	4.59	1.38	5.48
10/23/2012	0.069	0.961	2.65	5.22	1.54	6.25
10/24/2012	0.074	1.326	1.84	4.08	1.37	5.48
10/29/2012	0.040	3.390	0.56	2.44	1.37	5.87
10/30/2012	0.078	2.682	0.75	3.56	0.90	6.32
10/31/2012	0.122	2.588	1.23	4.03	0.71	6.74
11/5/2012	0.091	0.989	2.58	5.57	1.58	6.65
11/6/2012	0.079	1.441	1.82	4.13	1.54	5.65
11/7/2012	0.187	3.043	2.68	4.60	1.38	7.83
11/12/2012	0.076	0.934	1.95	3.75	2.39	4.76
11/13/2012	0.138	1.060	1.59	3.56	1.34	4.76
11/14/2012	0.144	0.886	2.75	5.41	1.50	6.44
11/19/2012	0.180	0.647	2.83	4.62	1.79	5.45
11/20/2012	0.168	0.548	4.22	6.02	1.67	6.74
11/21/2012	0.112	0.797	2.42	4.01	1.92	4.92
11/26/2012	0.188	1.302	4.26	5.50	2.51	6.99
11/27/2012	0.208	1.410	3.57	5.14	1.63	6.76
11/28/2012	0.136	0.488	4.99	6.64	1.61	7.26
12/3/2012	0.184	0.591	5.71	7.13	1.66	7.91
12/4/2012	0.098	0.262	5.46	7.18	2.00	7.54
12/5/2012	0.136	0.448	5.22	7.21	1.29	7.79
12/10/2012	0.267	1.913	2.08	3.84	0.89	6.02
12/11/2012	0.195	0.682	3.84	5.46	0.98	6.34
12/12/2012	0.134	0.406	5.08	6.46	1.29	7.00
12/17/2012	0.174	1.606	3.80	5.14	1.39	6.92
12/18/2012	0.225	1.535	3.08	4.51	1.04	6.27
12/19/2012	0.191	0.458	5.35	7.05	1.01	7.70
12/24/2012	0.092	0.266	4.57	5.62	1.03	5.98
12/25/2012	0.134	0.685	3.90	5.23	0.45	6.05

Table 13: Field's Point Influent and Effluent Nutrients

Field's Point Influent and Effluent Nutrients 2012

Field's Point Influent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
12/26/2012	0.073	0.294	15.7	27.9	4.16	28.30
12/31/2012	0.184	0.177	12.9	22.4	3.31	22.80

Field's Point Effluent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
12/26/2012	0.069	1.051	5.83	9.48	1.33	10.60
12/31/2012	0.039	< 0.1	4.53	7.76	1.20	7.80

Table 13: Field's Point Influent and Effluent Nutrients

Bucklin Point Influent and Effluent Nutrients 2012

Bucklin Point Influent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
1/2/2012	0.132	0.463	15.60	26.50	4.40	27.10
1/3/2012	0.193	<0.100	16.10	22.40	5.41	22.69
1/4/2012	0.219	<0.100	16.00	27.30	4.78	27.62
1/9/2012	0.123	0.107	19.00	31.20	3.93	31.43
1/10/2012	0.098	0.118	17.80	28.10	4.65	28.32
1/11/2012	0.138	<0.100	18.40	29.90	4.53	30.14
1/16/2012	0.123	0.550	18.70	26.00	3.70	26.67
1/17/2012	0.113	0.408	15.10	22.90	3.81	23.42
1/18/2012	0.233	0.193	16.90	26.00	5.50	26.43
1/23/2012	0.173	0.116	18.00	29.20	4.08	29.49
1/24/2012	0.096	0.626	12.10	20.30	3.16	21.02
1/25/2012	0.240	0.227	15.70	25.70	3.49	26.17
1/30/2012	0.248	0.184	15.70	25.60	3.60	26.03
1/31/2012	0.231	0.244	15.50	23.80	3.83	24.28
2/1/2012	0.207	0.175	15.00	17.80	3.87	18.18
2/6/2012	0.240	0.126	16.10	20.70	4.06	21.07
2/7/2012	0.226	0.146	14.70	20.60	4.08	20.97
2/8/2012	0.334	0.117	15.50	27.00	3.75	27.45
2/13/2012	0.250	<0.100	17.10	24.60	4.42	24.95
2/14/2012	0.279	<0.100	17.20	25.70	4.61	26.08
2/15/2012	0.294	<0.100	17.20	27.90	4.67	28.29
2/20/2012	0.473	<0.100	19.10	29.30	4.60	29.87
2/21/2012	0.207	0.126	18.80	29.50	4.77	29.83
2/22/2012	0.052	0.172	19.40	30.90	5.19	31.12
2/27/2012	0.144	<0.100	20.30	30.20	4.35	30.44
2/28/2012	0.169	<0.100	20.00	30.50	4.92	30.77
2/29/2012	0.062	<0.100	20.30	30.70	4.39	30.86
3/5/2012	0.239	0.157	18.00	24.20	3.17	24.60
3/6/2012	0.175	0.111	18.10	23.90	3.87	24.19
3/7/2012	0.158	0.352	17.40	25.50	3.98	26.01
3/12/2012	0.040	<0.100	18.70	30.40	4.68	30.54

Bucklin Point Effluent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
1/2/2012	0.044	8.026	0.28	1.68	1.78	9.75
1/3/2012	0.035	9.385	0.34	1.84	2.41	11.26
1/4/2012	0.051	10.449	0.60	2.12	2.66	12.62
1/9/2012	0.053	7.218	0.26	1.57	1.94	8.84
1/10/2012	0.046	7.134	0.21	1.44	1.97	8.62
1/11/2012	0.061	6.990	0.25	1.63	2.00	8.68
1/16/2012	0.015	6.645	0.11	1.33	1.47	7.99
1/17/2012	0.041	6.859	0.29	1.19	1.68	8.09
1/18/2012	0.048	6.302	0.28	1.43	1.72	7.78
1/23/2012	0.091	4.329	0.79	1.85	1.81	6.27
1/24/2012	0.054	5.606	0.46	1.41	1.44	7.07
1/25/2012	0.048	5.882	0.25	1.49	1.76	7.42
1/30/2012	0.026	6.354	0.13	1.22	1.85	7.60
1/31/2012	0.028	7.412	0.12	1.10	2.11	8.54
2/1/2012	0.031	7.299	0.14	0.91	2.41	8.24
2/6/2012	0.023	6.307	0.13	0.54	2.11	6.87
2/7/2012	0.046	6.355	0.27	0.72	2.28	7.12
2/8/2012	0.019	7.151	0.13	1.01	2.45	8.18
2/13/2012	0.021	8.509	0.12	0.81	2.66	9.34
2/14/2012	0.016	7.174	0.11	0.89	2.90	8.08
2/15/2012	0.013	6.517	<0.1	0.99	2.70	7.52
2/20/2012	0.028	7.172	0.24	1.22	2.67	8.42
2/21/2012	0.022	5.988	0.22	1.40	2.76	7.41
2/22/2012	0.013	5.947	0.15	1.15	2.76	7.11
2/27/2012	0.014	6.926	0.12	1.15	2.77	8.09
2/28/2012	0.012	6.078	0.13	1.09	2.90	7.18
2/29/2012	0.029	5.171	0.30	1.38	2.76	6.58
3/5/2012	0.018	4.342	0.12	0.88	1.81	5.24
3/6/2012	0.037	4.223	0.43	1.52	2.02	5.78
3/7/2012	0.014	4.376	0.13	1.23	2.03	5.62
3/12/2012	0.012	5.379	0.10	1.00	2.41	6.39

Table 14: Bucklin Point Influent and Effluent Nutrients

Bucklin Point Influent and Effluent Nutrients 2012

Bucklin Point Influent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
3/13/2012	0.022	<0.100	19.10	30.50	4.47	30.62
3/14/2012	0.029	0.114	18.40	31.10	5.18	31.24
3/19/2012	0.039	0.139	19.40	30.80	4.76	30.98
3/20/2012	0.028	<0.100	20.10	32.90	4.87	33.03
3/21/2012	0.046	0.132	19.50	31.40	4.96	31.58
3/26/2012	0.050	<0.100	20.20	31.50	4.56	31.65
3/27/2012	0.043	<0.100	19.60	33.50	5.07	33.64
3/28/2012	0.033	<0.100	18.90	31.10	4.59	31.23
4/2/2012	0.267	<0.100	17.50	26.90	4.13	27.27
4/3/2012	0.040	<0.100	20.10	29.80	4.98	29.94
4/4/2012	0.038	<0.100	20.70	30.70	4.90	30.84
4/9/2012	0.064	<0.100	23.00	35.50	4.83	35.66
4/10/2012	0.037	<0.100	21.50	31.80	5.31	31.94
4/11/2012	0.052	<0.100	21.40	25.00	5.40	25.15
4/16/2012	0.038	0.134	20.70	30.50	4.95	30.67
4/17/2012	0.029	0.159	19.60	29.80	5.60	29.99
4/18/2012	0.041	0.180	22.10	33.50	6.65	33.72
4/23/2012	0.055	0.515	7.84	12.70	3.32	13.27
4/24/2012	0.300	0.367	15.60	17.90	5.37	18.57
4/25/2012	0.116	<0.100	16.70	24.80	5.10	25.02
4/30/2012	0.025	<0.100	19.90	22.70	5.08	22.82
5/1/2012	0.032	<0.100	16.90	23.40	6.44	23.53
5/2/2012	0.158	<0.100	18.00	25.90	4.00	26.16
5/7/2012	0.025	0.154	19.20	30.50	3.97	30.68
5/8/2012	0.025	0.133	19.50	32.70	4.82	32.86
5/9/2012	0.040	0.128	13.20	25.00	4.77	25.17
5/14/2012	0.134	<0.100	17.90	30.50	4.38	30.73
5/15/2012	0.608	0.159	15.20	24.00	3.49	24.77
5/16/2012	0.504	<0.100	13.00	29.40	4.19	30.00
5/21/2012	0.491	0.113	17.10	27.90	4.05	28.50
5/22/2012	0.429	0.263	13.60	25.80	4.33	26.49

Bucklin Point Effluent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
3/13/2012	0.013	5.338	0.11	1.26	2.72	6.61
3/14/2012	0.016	4.845	0.12	1.09	2.75	5.95
3/19/2012	0.011	4.439	0.13	1.09	2.34	5.54
3/20/2012	0.012	4.838	0.14	1.01	2.49	5.86
3/21/2012	0.013	5.247	0.13	1.19	2.79	6.45
3/26/2012	0.016	4.884	<0.1	1.18	2.63	6.08
3/27/2012	0.012	5.098	0.11	1.29	2.77	6.40
3/28/2012	0.029	5.221	0.20	2.42	3.07	7.67
4/2/2012	0.018	5.222	0.14	1.24	2.39	6.48
4/3/2012	0.020	4.800	0.14	1.24	2.70	6.06
4/4/2012	0.021	4.809	0.13	1.12	2.76	5.95
4/9/2012	0.020	4.820	<0.1	1.34	2.38	6.18
4/10/2012	0.041	4.999	0.34	1.56	2.61	6.60
4/11/2012	0.042	4.278	0.14	1.21	2.56	5.53
4/16/2012	0.057	3.793	0.19	1.39	2.71	5.24
4/17/2012	0.060	3.880	0.21	1.22	2.95	5.16
4/18/2012	0.042	4.288	0.17	1.23	3.04	5.56
4/23/2012	0.095	2.955	0.86	3.45	1.51	6.50
4/24/2012	0.080	3.740	0.16	1.04	1.13	4.86
4/25/2012	0.089	4.111	0.33	1.31	1.69	5.51
4/30/2012	0.033	5.157	0.14	1.66	2.59	6.85
5/1/2012	0.066	4.545	0.62	1.74	2.49	6.35
5/2/2012	0.051	5.780	0.17	1.41	2.59	7.24
5/7/2012	0.063	4.997	0.26	1.47	2.72	6.53
5/8/2012	0.066	5.314	0.23	1.62	3.31	7.00
5/9/2012	0.091	3.839	0.33	1.77	2.66	5.70
5/14/2012	0.086	4.724	0.35	1.60	2.47	6.41
5/15/2012	0.108	3.622	0.77	1.96	2.88	5.69
5/16/2012	0.070	3.640	0.22	1.26	1.72	4.97
5/21/2012	0.129	3.751	1.35	2.46	2.37	6.34
5/22/2012	0.132	4.248	0.64	1.90	2.39	6.28

Table 14: Bucklin Point Influent and Effluent Nutrients

Bucklin Point Influent and Effluent Nutrients 2012

Bucklin Point Influent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
5/23/2012	0.457	0.437	14.80	23.10	3.78	23.99
5/28/2012	0.491	0.809	17.20	20.60	3.73	21.90
5/29/2012	0.469	0.438	20.60	22.30	4.59	23.21
5/30/2012	0.063	<0.100	17.90	30.60	4.36	30.76
6/4/2012	0.074	<0.100	17.90	28.00	3.49	28.17
6/5/2012	0.091	<0.100	18.50	28.10	4.51	28.29
6/6/2012	0.030	<0.100	18.50	31.00	4.92	31.13
6/11/2012	0.427	<0.100	18.60	32.70	3.93	33.23
6/12/2012	0.142	<0.100	18.60	30.40	5.28	30.64
6/13/2012	0.220	0.679	14.10	23.70	3.84	24.60
6/18/2012	0.237	<0.100	19.30	31.50	4.33	31.84
6/19/2012	0.055	<0.100	19.60	32.60	4.91	32.76
6/20/2012	0.026	<0.100	19.50	28.30	5.33	28.43
6/25/2012	0.514	<0.100	15.40	26.00	3.85	26.61
6/26/2012	0.786	<0.100	15.60	24.50	3.84	25.39
6/27/2012	0.020	<0.100	17.70	29.30	4.54	29.42
7/2/2012	0.466	<0.100	16.10	27.70	4.36	28.27
7/3/2012	0.281	0.668	16.40	27.80	4.10	28.75
7/4/2012	0.172	0.505	15.80	23.50	3.55	24.18
7/9/2012	0.045	<0.100	18.90	29.70	4.19	29.84
7/10/2012	0.039	<0.100	19.00	31.50	4.96	31.64
7/11/2012	0.065	<0.100	19.20	29.50	5.69	29.67
7/16/2012	0.047	0.237	19.60	34.20	4.81	34.48
7/17/2012	0.032	0.158	17.20	29.70	5.05	29.89
7/18/2012	0.051	<0.100	18.90	30.10	5.33	30.25
7/23/2012	0.023	<0.100	19.70	33.80	4.32	33.90
7/24/2012	0.039	0.108	18.30	28.80	5.00	28.95
7/25/2012	0.350	0.297	18.50	30.90	4.73	31.55
7/30/2012	0.054	0.229	17.40	27.80	3.55	28.08
7/31/2012	0.046	0.215	17.00	29.20	3.92	29.46
8/1/2012	0.049	<0.100	16.00	28.00	4.04	28.14

Bucklin Point Effluent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
5/23/2012	0.150	3.410	2.23	3.53	2.60	7.09
5/28/2012	0.052	5.678	0.28	1.54	2.51	7.27
5/29/2012	0.073	5.437	0.34	1.87	2.77	7.38
5/30/2012	0.077	4.753	0.49	2.31	2.79	7.14
6/4/2012	0.113	4.497	1.72	2.77	1.86	7.38
6/5/2012	0.100	5.620	1.55	2.61	2.48	8.33
6/6/2012	0.106	5.054	1.81	3.23	2.75	8.39
6/11/2012	0.082	4.338	1.41	2.79	2.44	7.21
6/12/2012	0.065	4.015	1.89	3.07	2.84	7.15
6/13/2012	0.056	3.254	1.78	3.05	2.45	6.36
6/18/2012	0.045	4.535	1.05	2.23	2.39	6.81
6/19/2012	0.041	4.089	0.48	1.68	2.83	5.81
6/20/2012	0.039	3.751	0.34	1.47	2.61	5.26
6/25/2012	0.040	3.240	0.74	1.75	2.91	5.03
6/26/2012	0.067	3.573	0.51	1.48	1.82	5.12
6/27/2012	0.051	3.339	0.35	1.20	1.58	4.59
7/2/2012	0.070	3.480	0.54	1.51	2.07	5.06
7/3/2012	0.055	3.835	0.13	0.97	1.73	4.86
7/4/2012	0.042	4.558	<0.1	0.96	2.16	5.56
7/9/2012	0.028	4.702	0.16	1.10	2.43	5.83
7/10/2012	0.029	3.502	0.16	1.09	2.25	4.62
7/11/2012	0.085	6.095	0.71	1.78	2.79	7.96
7/16/2012	0.088	3.422	0.58	1.66	2.89	5.17
7/17/2012	0.097	3.313	0.30	1.36	2.02	4.77
7/18/2012	0.116	3.254	0.67	1.87	2.62	5.24
7/23/2012	0.081	3.909	0.58	1.47	2.16	5.46
7/24/2012	0.083	4.237	0.37	1.32	2.20	5.64
7/25/2012	0.062	3.820	0.29	1.12	2.05	5.00
7/30/2012	0.047	3.673	0.16	0.93	1.52	4.65
7/31/2012	0.067	4.350	0.22	1.22	2.61	5.64
8/1/2012	0.077	4.653	0.49	1.46	2.55	6.19

Table 14: Bucklin Point Influent and Effluent Nutrients

Bucklin Point Influent and Effluent Nutrients 2012

Bucklin Point Influent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
8/6/2012	0.032	0.155	17.90	30.30	4.31	30.49
8/7/2012	0.034	0.263	19.70	33.50	4.25	33.80
8/8/2012	0.025	<0.100	20.40	33.10	4.27	33.13
8/13/2012	0.031	0.335	19.50	33.70	4.30	34.07
8/14/2012	0.024	0.190	19.50	34.20	4.50	34.41
8/15/2012	0.022	<0.100	14.90	25.40	3.67	25.47
8/20/2012	0.020	<0.100	19.80	31.60	3.64	31.63
8/21/2012	0.017	<0.100	20.40	34.80	4.50	34.86
8/22/2012	0.023	<0.100	19.60	32.80	4.04	32.87
8/27/2012	0.030	0.120	20.60	29.50	4.33	29.65
8/28/2012	0.026	<0.100	14.40	28.70	5.83	28.78
8/29/2012	0.035	<0.100	17.60	24.30	4.12	24.34
9/3/2012	0.102	0.357	19.60	27.00	4.38	27.46
9/4/2012	0.014	<0.100	17.30	26.00	5.90	26.08
9/5/2012	0.518	0.313	11.60	26.90	3.77	27.73
9/10/2012	0.159	<0.5	19.90	33.80	3.92	33.92
9/11/2012	0.076	<0.100	20.40	35.20	4.37	35.40
9/12/2012	0.309	<0.100	18.80	32.90	5.31	33.20
9/17/2012	0.022	<0.100	20.30	36.40	4.59	36.40
9/18/2012	0.053	0.112	20.60	38.90	5.38	39.10
9/19/2012	0.369	<0.100	14.00	28.70	4.00	29.07
9/24/2012	0.149	<0.100	19.90	36.00	3.95	36.15
9/25/2012	0.015	<0.100	19.80	35.00	4.74	35.10
9/26/2012	0.080	<0.100	20.00	41.70	4.52	41.81
10/1/2012	0.344	<0.100	17.70	36.10	4.70	36.44
10/2/2012	0.147	<0.100	18.80	36.10	5.48	36.25
10/3/2012	0.316	0.115	16.00	30.30	4.82	30.73
10/8/2012	0.595	<0.100	17.70	34.40	4.51	18.30
10/9/2012	0.208	<0.100	19.70	35.70	4.30	20.43
10/10/2012	0.138	<0.100	18.80	33.70	5.24	33.84
10/15/2012	0.024	<0.1	21.10	39.00	4.78	39.02

Bucklin Point Effluent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
8/6/2012	0.080	5.150	0.31	1.53	2.99	6.76
8/7/2012	0.061	4.609	0.13	1.29	3.36	5.96
8/8/2012	0.059	4.961	0.33	1.57	3.51	6.59
8/13/2012	0.141	4.010	1.27	2.48	2.33	6.63
8/14/2012	0.107	4.530	0.30	1.86	3.04	6.50
8/15/2012	0.113	3.697	0.24	1.11	2.60	4.92
8/20/2012	0.052	6.288	0.10	1.06	2.64	7.40
8/21/2012	0.038	6.242	<0.1	1.10	2.88	7.38
8/22/2012	0.149	6.781	1.44	2.36	3.41	9.29
8/27/2012	0.119	5.381	0.41	1.02	2.85	6.52
8/28/2012	0.103	3.867	0.37	1.09	2.42	5.06
8/29/2012	0.067	4.443	0.19	0.74	1.91	5.25
9/3/2012	0.043	4.827	0.13	0.81	2.64	5.68
9/4/2012	0.084	5.026	0.64	1.40	2.96	6.51
9/5/2012	0.053	4.250	0.33	1.60	2.91	5.90
9/10/2012	0.044	5.240	<0.1	1.15	2.06	6.43
9/11/2012	0.053	5.490	0.15	1.21	2.66	6.75
9/12/2012	0.040	5.150	<0.1	1.44	2.93	6.63
9/17/2012	0.050	5.380	0.12	1.29	2.48	6.72
9/18/2012	0.061	5.560	0.13	1.88	3.00	7.50
9/19/2012	0.108	2.430	2.16	3.26	2.04	5.80
9/24/2012	0.051	5.350	<0.1	0.93	2.30	6.33
9/25/2012	0.053	5.720	0.10	1.05	2.65	6.82
9/26/2012	0.061	6.199	0.11	1.71	2.94	7.97
10/1/2012	0.070	5.100	<0.1	1.16	1.57	6.33
10/2/2012	0.078	5.012	<0.1	1.50	2.36	6.59
10/3/2012	0.060	6.270	0.11	1.32	2.16	7.65
10/8/2012	0.053	5.597	0.19	1.47	2.31	7.12
10/9/2012	0.044	5.786	0.15	1.51	2.78	7.34
10/10/2012	0.075	5.300	0.30	1.19	2.78	6.57
10/15/2012	0.045	5.846	0.10	1.00	2.45	6.89

Table 14: Bucklin Point Influent and Effluent Nutrients

Bucklin Point Influent and Effluent Nutrients 2012

Bucklin Point Influent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
10/16/2012	0.261	<0.1	19.50	36.40	5.43	36.66
10/17/2012	0.124	<0.1	21.30	35.10	10.70	35.33
10/22/2012	0.023	<0.100	19.50	35.30	4.75	35.32
10/23/2012	0.024	<0.100	20.00	36.50	6.50	36.52
10/24/2012	0.035	<0.100	22.50	36.40	4.99	42.84
10/29/2012	0.370	<0.100	16.00	30.10	4.33	30.47
10/30/2012	0.085	0.925	7.81	15.30	2.39	16.30
10/31/2012	0.124	0.966	10.80	22.40	3.20	23.50
11/5/2012	0.299	< 0.1	19.00	27.90	4.86	33.20
11/6/2012	0.334	<0.1	20.00	28.50	5.24	23.90
11/7/2012	0.149	<0.1	20.20	33.10	4.50	28.20
11/12/2012	0.532	< 0.1	19.10	23.40	4.32	28.82
11/13/2012	0.504	0.130	15.90	26.80	4.37	27.43
11/14/2012	0.339	< 0.1	15.00	27.00	3.37	27.34
11/19/2012	0.222	< 0.1	19.50	35.00	4.40	35.22
11/20/2012	0.416	<0.1	19.30	36.20	5.02	36.58
11/21/2012	0.357	< 0.1	19.50	36.70	5.06	37.06
11/26/2012	0.399	0.341	21.20	36.20	5.06	36.94
11/27/2012	0.334	< 0.1	20.70	37.20	5.77	37.53
11/28/2012	0.465	< 0.1	18.90	33.00	5.06	33.47
12/3/2012	0.106	< 0.1	20.40	36.40	4.42	36.51
12/4/2012	0.299	<0.1	20.70	41.50	4.65	41.80
12/5/2012	0.194	<0.1	21.20	35.10	4.89	35.29
12/10/2012	0.192	0.888	13.70	24.40	4.05	25.50
12/11/2012	0.194	1.126	14.90	26.80	4.08	28.10
12/12/2012	0.339	0.931	20.60	29.10	5.36	30.40
12/17/2012	0.162	0.796	14.30	25.30	3.78	26.10
12/18/2012	0.135	0.851	12.70	23.20	3.77	24.05
12/19/2012	0.043	0.104	18.70	29.50	5.20	29.60
12/24/2012	0.044	0.201	18.50	32.20	5.31	32.40
12/25/2012	0.021	0.186	20.10	35.40	9.23	35.60

Bucklin Point Effluent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
10/16/2012	0.045	4.785	0.12	1.09	2.52	5.92
10/17/2012	0.054	7.136	0.19	1.58	5.18	8.77
10/22/2012	0.047	5.503	0.20	1.18	2.09	6.73
10/23/2012	0.044	6.336	0.19	1.04	2.59	7.42
10/24/2012	0.035	6.405	0.17	1.37	2.68	7.81
10/29/2012	0.071	3.639	2.49	4.98	2.55	8.69
10/30/2012	0.116	4.120	0.46	1.77	1.14	6.01
10/31/2012	0.057	4.823	0.18	1.42	0.68	6.30
11/5/2012	0.059	6.031	0.48	2.06	2.34	8.15
11/6/2012	0.057	6.123	0.15	1.68	2.65	7.86
11/7/2012	0.098	3.842	2.39	5.20	2.75	9.14
11/12/2012	0.079	6.491	0.38	1.73	2.61	8.30
11/13/2012	0.107	5.413	0.58	1.99	2.41	7.51
11/14/2012	0.074	6.000	0.24	1.63	1.63	7.70
11/19/2012	0.061	6.140	0.17	1.57	2.77	7.77
11/20/2012	0.040	6.740	0.28	2.16	3.07	8.94
11/21/2012	0.029	5.490	0.12	1.32	2.88	6.84
11/26/2012	0.042	6.939	0.15	1.30	2.50	8.28
11/27/2012	0.052	6.398	0.22	1.46	2.84	7.91
11/28/2012	0.033	7.670	0.13	1.44	3.00	9.14
12/3/2012	0.044	7.716	0.13	1.32	2.97	9.08
12/4/2012	0.052	6.668	0.12	1.39	3.20	8.11
12/5/2012	0.043	5.197	0.11	1.45	3.17	6.69
12/10/2012	0.126	3.594	0.65	2.15	1.89	5.87
12/11/2012	0.104	4.326	0.31	1.37	1.62	5.80
12/12/2012	0.053	5.307	0.15	1.41	2.35	6.77
12/17/2012	0.091	5.820	1.44	2.74	2.39	8.65
12/18/2012	0.102	5.030	1.03	2.29	2.11	7.42
12/19/2012	0.050	7.590	0.15	1.15	2.34	8.79
12/24/2012	0.073	5.878	2.05	3.14	2.49	9.09
12/25/2012	0.040	6.420	0.23	1.21	2.40	7.67

Table 14: Bucklin Point Influent and Effluent Nutrients

Bucklin Point Influent and Effluent Nutrients 2012

Bucklin Point Influent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
12/26/2012	0.024	0.115	21.70	37.00	4.98	37.10
12/31/2012	0.158	0.629	15.70	22.50	3.54	23.30

Bucklin Point Effluent Nutrients

Date	Nitrite N-NO ₂ ppm	Nitrate N-NO ₃ ppm	Ammonia N-NH ₃ ppm	TKN N-TKN ppm	Total Phosphorus ppm	Total Nitrogen ppm
12/26/2012	0.066	8.244	0.80	3.86	3.42	12.20
12/31/2012	0.080	7.150	0.66	1.88	2.54	9.11

Table 14: Bucklin Point Influent and Effluent Nutrients

Field's Point Oil & Grease 2012

Date	Influent Flow MGD	Effluent Flow MGD	Influent Average ppm	Effluent Average ppm
1/10/2012	38.77	38.77	20.34	<4.0
2/7/2012	39.68	39.68	9.27	<4.0
3/6/2012	39.71	39.71	21.93	<4.0
4/3/2012	35.13	35.13	22.65	<4.0
5/8/2012	42.60	42.60	17.2	<4.0
6/5/2012	36.36	36.36	15.36	<4.0
7/17/2012	39.37	39.37	20.45	<4.0
8/7/2012	33.02	33.02	23.63	<4.0
9/11/2012	32.97	32.97	26.97	<4.0
10/3/2012	33.20	33.20	17.64	<4.0
11/20/2012	33.90	33.90	11.3	<4.0
12/4/2012	32.58	32.58	17.2	<4.0

Bucklin Point Oil & Grease 2012

Date	Influent Flow MGD	Effluent Flow MGD	Influent Average ppm	Effluent Average ppm
1/10/2012	18.29	18.29	43.37	<4.0
2/7/2012	17.82	17.82	22.57	<4.0
3/6/2012	16.73	16.73	26.61	<4.0
4/3/2012	14.22	14.22	40.77	<4.0
5/8/2012	16.93	16.93	28.6	<4.0
6/5/2012	17.49	17.49	21.29	<4.0
7/10/2012	13.59	13.59	26.6	<4.0
8/7/2012	13.53	13.53	32.66	<4.0
9/11/2012	15.00	15.00	22.99	<4.0
10/2/2012	20.05	20.05	14.05	<4.0
11/27/2012	17.53	17.53	34.08	<4.0
12/4/2012	15.49	15.49	23.06	<4.0

Field's Point Effluent Dissolved Metals 2012

all results in ppb

MDL = Method Detection Limit

Date	Cd	Cd MDL*	Cr	Cr MDL	Cu	Cu MDL	Pb	Pb MDL	Ni	Ni MDL	Ag	Ag MDL*	Zn	Zn MDL*	Al	Al MDL	Fe	Fe MDL
1/10/2012	0.08	0.01	1.05	0.30	3.56	0.30	<0.3	0.30	12.50	0.30	0.03	0.01	26.40	1.00	3.99	3.00	112.00	2.00
2/7/2012	0.10	0.01	3.59	0.30	3.87	0.30	0.35	0.30	14.80	0.30	0.05	0.01	22.70	1.00	3.19	3.00	96.80	2.00
3/6/2012	0.11	0.01	2.22	0.30	3.36	0.30	<0.3	0.30	14.60	0.30	0.03	0.01	28.20	1.00	<3.00	3.00	91.40	2.00
4/3/2012	0.17	0.02	2.12	0.30	3.42	0.30	0.32	0.30	18.00	0.30	0.03	0.02	25.30	4.00	<3.00	3.00	104.00	2.00
5/8/2012	0.19	0.02	0.65	0.30	2.97	0.30	0.32	0.30	15.40	0.30	0.02	0.02	26.10	4.00	7.52	3.00	75.90	2.00
6/5/2012	0.04	0.02	1.25	0.30	2.55	0.30	0.43	0.30	12.60	0.30	0.03	0.02	23.80	4.00	<3.00	3.00	85.70	2.00
7/17/2012	0.02	0.02	0.89	0.30	2.10	0.30	0.30	0.30	15.00	0.30	<0.02	0.02	8.69	4.00	<3.00	3.00	92.20	2.00
8/7/2012	0.02	0.02	1.18	0.30	2.44	0.30	<0.3	0.30	15.17	0.30	<0.02	0.02	11.84	4.00	<3.00	3.00	100.80	2.00
9/11/2012	0.08	0.02	1.10	0.30	2.94	0.30	<0.3	0.30	21.85	0.30	0.16	0.02	16.77	4.00	3.17	3.00	96.86	2.00
10/2/2012	0.03	0.02	1.70	0.30	2.32	0.30	<0.3	0.30	11.75	0.30	0.04	0.02	13.24	4.00	<3.00	3.00	91.04	2.00
11/20/2012	0.03	0.02	1.31	0.30	2.05	0.30	<0.3	0.30	14.33	0.30	0.03	0.02	19.23	4.00	6.65	3.00	87.80	2.00
12/4/2012	0.03	0.02	1.26	0.30	2.98	0.30	<0.3	0.30	17.55	0.30	0.05	0.02	20.85	4.00	<3.00	3.00	93.73	2.00

*MDL's for Cd, Ag, and Zn changed in March 2012

	Cd	Cr	Cu	Pb	Ni	Ag	Zn	Al	Fe
yearly average concentration	0.08	1.53	2.88	<0.32	15.30	<0.04	20.26	<3.79	94.02
yearly median concentration	0.06	1.25	2.96	0.30	14.90	0.03	21.78	3.00	92.97
yearly minimum concentration	0.02	0.65	2.05	<0.30	11.75	<0.02	8.69	<3.00	75.90
yearly maximum concentration	0.19	3.59	3.87	0.43	21.85	0.16	28.20	7.52	112.00

Table 16: Field's Point Effluent Dissolved Metals

Bucklin Point Dissolved Metals 2012

all results in ppb

MDL = Method Detection Limit

Date	Cd	Cd MDL*	Cr	Cr MDL	Cu	Cu MDL	Pb	Pb MDL	Ni	Ni MDL	Ag	Ag MDL*	Zn	Zn MDL*	Al	Al MDL	Fe	Fe MDL
1/10/2012	0.04	0.010	0.70	0.300	7.88	0.300	<0.3	0.300	4.29	0.300	0.02	0.010	44.00	1.000	9.90	3.000	74.20	2.000
2/7/2012	0.05	0.010	0.71	0.300	8.02	0.300	<0.3	0.300	4.63	0.300	0.03	0.010	35.40	1.000	10.50	3.000	60.30	2.000
3/6/2012	0.04	0.010	0.56	0.300	4.66	0.300	0.3	0.300	5.98	0.300	0.02	0.010	38.20	1.000	11.10	3.000	80.70	2.000
4/3/2012	0.03	0.020	1.06	0.300	6.05	0.300	<0.3	0.300	6.82	0.300	0.02	0.020	39.00	4.000	9.53	3.000	80.90	2.000
5/8/2012	0.04	0.020	0.67	0.300	6.87	0.300	0.3	0.300	4.65	0.300	0.02	0.020	36.10	4.000	10.40	3.000	86.50	2.000
6/5/2012	0.03	0.020	0.67	0.300	6.58	0.300	<0.3	0.300	8.53	0.300	0.04	0.020	33.50	4.000	8.27	3.000	72.90	2.000
7/10/2012	0.04	0.020	0.88	0.300	9.50	0.300	0.33	0.300	6.14	0.300	0.04	0.020	36.70	4.000	9.61	3.000	68.70	2.000
8/7/2012	0.05	0.020	1.42	0.300	9.75	0.300	0.364	0.300	7.92	0.300	0.04	0.020	40.60	4.000	8.53	3.000	68.91	2.000
9/11/2012	0.05	0.020	1.37	0.300	14.77	0.300	<0.3	0.300	37.93	0.300	0.06	0.020	37.82	4.000	7.83	3.000	68.82	2.000
10/2/2012	0.04	0.020	6.46	0.300	10.70	0.300	<0.3	0.300	6.30	0.300	0.03	0.020	37.84	4.000	7.74	3.000	72.54	2.000
11/20/2012	0.05	0.020	0.90	0.300	7.53	0.300	<0.3	0.300	5.74	0.300	0.02	0.020	35.84	4.000	6.29	3.000	76.11	2.000
12/4/2012	0.03	0.020	1.75	0.300	8.39	0.300	<0.3	0.300	7.07	0.300	0.03	0.020	37.26	4.000	9.01	3.000	90.24	2.000

*MDL's for Cd, Ag, and Zn changed in March 2012

	Cd	Cr	Cu	Pb	Ni	Ag	Zn	Al	Fe
yearly average concentration	0.04	1.43	8.39	<0.31	8.83	0.03	37.69	9.06	75.07
yearly median concentration	0.04	0.89	7.95	0.30	6.22	0.03	37.54	9.27	73.55
yearly minimum concentration	0.03	0.56	4.66	<0.3	4.29	0.02	33.50	6.29	60.30
yearly maximum concentration	0.05	6.46	14.77	0.36	37.93	0.06	44.00	11.10	90.24

Table 17: Bucklin Point Effluent Dissolved Metals

Field's Point Bioassay Data 2012

Field's Point WWTF Bioassay Results - 2012						
<i>Americamysis bahia</i>						
Acute	1st Quarter, 2012			2nd Quarter, 2012		
Test	Result	Permit Limit	Pass Y/N	Result	Permit Limit	Pass Y/N
LC ₅₀	>100%	>100%	Y	>100%	>100%	Y
A-NOEC	100%	N/A**	N/A	100%	N/A**	N/A
	3rd Quarter, 2012			4th Quarter, 2012		
Test	Result	Permit Limit	Pass Y/N	Result	Permit Limit	Pass Y/N
LC ₅₀	>100%	>100%	Y	>100%	>100%	Y
A-NOEC	100%	N/A**	N/A	100%	N/A**	N/A

* NOTE - % indicates Percent Effluent

** No permit limit exists for A-NOEC

LC₅₀ LC₅₀ is the effluent concentration that causes 50% mortality during the acute toxicity test duration.

A-NOEC No observable effect concentration: Highest concentration of the effluent in which 90% or more of the test animals survive

Acute Test continuous exposure to effluent for 48 hours

Field's Point WWTF Bioassay Results - 2012						
<i>Arbacia punctulata</i>						
Chronic	1st Quarter, 2012			2nd Quarter, 2012		
Test	Result	Permit Limit	Pass Y/N	Result	Permit Limit	Pass Y/N
C-NOEC	100%	Required monitoring: No Limit	Y	100%	Required monitoring: No Limit	Y
	3rd Quarter, 2012			4th Quarter, 2012		
Test	Result	Permit Limit	Pass Y/N	Result	Permit Limit	Pass Y/N
C-NOEC	100%	Required monitoring: No Limit	Y	100%	Required monitoring: No Limit	Y

* NOTE - % indicates Percent Effluent

C-NOEC Highest concentration of effluent with no observed effect on fertilization rates

Chronic test Tests for sublethal effects of effluent on specifically on fertilization rates of *A. punctulata* eggs. Exposure rate is 60 minutes

Table 18. Field's Point Bioassay Data

Bucklin Point Bioassay Data 2012

Bucklin Point WWTF Bioassay Results - 2012						
<i>Americamysis bahia</i>						
Acute	1st Quarter, 2012			2nd Quarter, 2012		
Test	Result	Permit Limit	Pass Y/N	Result	Permit Limit	Pass Y/N
LC ₅₀	>100%	>100%	Y	>100%	>100%	Y
A-NOEC	100%	N/A**	N/A	100%	N/A**	N/A
	3rd Quarter, 2012			4th Quarter, 2012		
Test	Result	Permit Limit	Pass Y/N	Result	Permit Limit	Pass Y/N
LC ₅₀	>100%	>100%	Y	>100%	>100%	Y
A-NOEC	100%	N/A**	N/A	100%	N/A**	N/A

* NOTE - % indicates Percent Effluent

** No permit limit exists for A-NOEC

LC₅₀ LC₅₀ is the effluent concentration that causes 50% mortality during the acute toxicity

A-NOEC No observable effect concentration: Highest concentration of the effluent in which 90% or more of the test animals survive

Acute Test continuous exposure to effluent for 48 hours

Bucklin Point WWTF Bioassay Results - 2012						
<i>Arbacia punctulata</i>						
Chronic	1st Quarter, 2012			2nd Quarter, 2012		
Test	Result	Permit Limit	Pass Y/N	Result	Permit Limit	Pass Y/N
C-NOEC	100%	50%	Y	100%	50%	Y
	3rd Quarter, 2012			4th Quarter, 2012		
Test	Result	Permit Limit	Pass Y/N	Result	Permit Limit	Pass Y/N
C-NOEC	100%	50%	Y	100%	50%	Y

* NOTE - % indicates Percent Effluent

C-NOEC Highest concentration of effluent with no observed effect on fertilization rates

Chronic test Tests for sublethal effects of effluent on specifically on fertilization rates of *A. punctulata* eggs. Exposure rate is 60 minutes

Table 19: Bucklin Point Bioassay Data

Field's Point Dry Sludge Analysis for Metals 2012

Date	Sludge	Silver		Arsenic		Beryllium		Cadmium		Chromium		Copper		Molybdenum		Nickel		Lead		Selenium		Zinc		Mercury		Cyanide		
	Tons	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	
1/10/2012	17.01	7.67		1.23		1.81		3.21		56.55		218.41		18.13		49.94		62.35		5.09		489.20		0.15		5.10		
1/24/2012	33.21	8.14		1.10		2.04		2.92		76.60		197.78		20.36		39.39		74.73		4.40		473.08		0.54		13.60		
Monthly Avg:	25.11	7.91		1.17		1.93		3.07		66.58		208.10		19.25		44.66		68.54		4.75		481.14		0.35		9.35		
Monthly Total in lbs.	1316381		10.41		1.53		2.53		4.04		87.64		273.93		25.33		58.79		90.22		6.25		633.37		0.45		12.31	
2/7/2012	22.70	9.21		1.14		2.27		5.38		88.74		270.81		22.72		60.39		69.77		7.22		491.19		0.33		11.17		
2/21/2012	17.93	6.37		0.80		1.59		3.77		49.94		188.14		15.93		47.55		61.30		5.38		423.59		1.90		6.37		
Monthly Avg:	20.32	7.79		0.97		1.93		4.57		69.34		229.47		19.33		53.97		65.54		6.30		457.39		1.12		8.77		
Monthly Total in lbs.	1341912		10.45		1.30		2.59		6.14		93.05		307.93		25.93		72.42		87.94		8.45		613.77		1.50		11.77	
3/6/2012	24.75	6.06		2.52		1.79		4.42		72.07		210.41		17.86		43.28		75.79		4.79		495.85		0.40		22.90		
3/20/2012	24.72	6.47		1.59		1.83		4.42		81.12		208.39		18.33		72.82		50.68		6.19		455.45		0.72		11.10		
Monthly Avg:	24.73	6.26		2.06		1.81		4.42		76.60		209.40		18.10		58.05		63.23		5.49		475.65		0.56		17.00		
Monthly Total in lbs.	1422997		8.91		2.92		2.58		6.30		109.00		297.98		25.75		82.60		89.98		7.81		676.84		0.80		24.19	
4/3/2012	37.53	5.17		1.80		1.55		7.50		72.21		194.59		15.53		52.21		47.71		3.76		414.33		0.43		7.66		
4/17/2012	34.04	7.59		2.49		1.76		5.37		81.66		274.07		17.64		56.90		61.73		6.88		499.65		0.43		18.48		
Monthly Avg:	35.78	6.38		2.15		1.66		6.43		76.93		234.33		16.59		54.55		54.72		5.32		456.99		0.43		13.07		
Monthly Total in lbs.	1456021		9.29		3.12		2.41		9.36		112.02		341.19		24.15		79.43		79.67		7.75		665.38		0.63		19.03	
5/8/2012	33.27	6.19		2.51		1.80		7.49		81.19		274.27		17.95		43.51		67.54		6.08		492.36		0.43		13.15		
5/22/2012	30.49	5.78		2.86		1.94		5.20		54.08		223.19		19.42		40.89		78.61		5.61		493.19		0.38		16.14		
Monthly Avg:	31.88	5.99		2.69		1.87		6.35		67.63		248.73		18.69		42.20		73.08		5.85		492.77		0.41		14.65		
Monthly Total in lbs.	1488393		8.91		4.00		2.78		9.45		100.66		370.21		27.81		62.81		108.77		8.70		733.44		0.60		21.80	
6/5/2012	25.15	7.93		3.06		1.79		4.08		57.85		271.74		17.88		44.78		107.05		4.34		577.98		0.48		7.21		
6/19/2012	26.82	61.76		3.36		1.77		4.01		63.43		320.70		17.67		74.23		103.77		5.87		620.03		0.49		32.87		
Monthly Avg:	25.99	34.84		3.21		1.78		4.04		60.64		296.22		17.78		59.51		105.41		5.11		599.00		0.49		20.04		
Monthly Total in lbs.	1518666		52.92		4.87		2.70		6.14		92.10		449.86		26.99		90.37		160.09		7.75		909.69		0.74		30.43	
7/11/2012	23.44	16.61		3.28		1.84		2.90		48.59		259.44		18.24		40.33		96.26		6.38		647.49		0.29		5.48		
7/24/2012	15.35	9.42		2.72		1.86		4.06		44.28		260.82		18.60		41.21		127.53		5.49		652.99		0.28		2.12		
Monthly Avg:	19.40	13.01		3.00		1.85		3.48		46.43		260.13		18.42		40.77		111.89		5.93		650.24		0.29		3.80		
Monthly Total in lbs.	1316275		17.13		3.95		2.44		4.59		61.12		342.40		24.25		53.67		147.28		7.81		855.90		0.38		5.00	
8/7/2012	24.13	8.29		0.89		1.77		4.26		60.69		258.24		17.73		38.47		102.82		8.49		710.87		1.20		19.14		
8/21/2012	25.03	7.08		1.26		1.53		5.01		49.95		265.92		15.38		49.52		107.71		8.16		650.96		0.58		43.83		
Monthly Avg:	24.58	7.69		1.07		1.65		4.64		55.32		262.08		16.56		44.00		105.26		8.33		680.92		0.89		31.49		
Monthly Total in lbs.	1205601		9.27		1.30		1.99		5.59		66.70		315.97		19.96		53.04		126.91		10.04		820.91		1.07		37.96	
9/11/2012	28.30	16.51		0.89		1.53		5.50		64.27		250.35		15.33		45.79		112.74		6.20		630.09		0.55		2.38		
9/25/2012	23.87	15.12		1.02		1.73		8.84		74.12		313.53		17.30		119.70		91.79		11.20		744.20		0.40		2.89		
Monthly Avg:	23.87	15.82		0.95		1.63		7.17		69.19		281.94		16.32		82.75		102.27		8.70		687.15		0.48		2.63		
Monthly Total in lbs.	1179362		18.65		1.12		1.92		8.46		81.60		332.51		19.24		97.59		120.61		10.26		810.39		0.56		3.11	
10/2/2012	24.06	10.99		3.28		1.84		6.26		73.97		264.51		18.49		58.49		101.51		10.19		652.58		0.38		15.87		
10/17/2012	23.08	7.45		2.42		1.33		4.07		41.09		173.34		13.35		31.93		53.19		5.38		436.83		0.56		5.54		
Monthly Avg:	23.57	9.22		2.85		1.59		5.16		57.53		218.93		15.92		45.21		77.35		7.79		544.70		0.47		10.71		
Monthly Total in lbs.	1418848		13.08		4.04		2.25		7.33		81.63		310.62		22.59		64.15		109.75		11.05		772.85		0.67		15.19	
11/6/2012	24.38	9.00		2.48		1.82		5.95		52.15		240.39		18.23		37.63		74.73		11.75		563.78		0.27		10.14		
11/20/2012	24.03	11.89		2.34		1.84		5.45		51.53		226.40		18.48		50.70		63.19		10.20		584.40		0.38		8.69		
Monthly Avg:	24.21	10.45		2.41		1.83		5.70		51.84		233.40		18.36		44.16		68.96		10.97		574.09		0.33		9.41		
Monthly Total in lbs.	1232955		12.88		2.97		2.26		7.03		63.91		287.77		22.63		54.45		85.02		13.53		707.82		0.40		11.61	
12/4/2012	26.81	11.69		2.46		1.81		3.64		38.33		231.23		18.12		50.83		49.65		14.45		509.02		0.30		4.86		
12/18/2012	24.54	11.08		2.10		1.74		2.96		39.19		215.20		17.43		33.22		57.57		11.32		443.82		0.23		6.52		
Monthly Avg:	25.67	11.38		2.28		1.78		3.30		38.76		223.21		17.78		42.03		53.61		12.89		476.42		0.27		5.69		
Monthly Total in lbs.	1174892		13.37		2.68		2.09		3.88		45.53		262.25		20.88		49.38		62.98		15.14		559.75		0.31		6.68	
YEARLY TOTAL LBS	16072304		185.27		33.82		28.53		78.28		994.96		3892.63		285.52		818.69		1269.22		114.53		8760.12		8.10		199.07	

Table 20: Field's Point Sludge Analysis

Field's Point Metals Loading from Final Sludge (lbs/yr)

Year	Arsenic	Beryllium	Cadmium	Copper	Chromium	Lead	Mercury	Molybdeum	Nickel	Selenium	Silver	Zinc	Cyanide
1994			202.7	13386.0	2628.1	4297.2	74.0		4626.2		1113.9	15683.7	281.0
1995			203.5	14962.8	2824.5	3700.2	55.0		4202.3		818.1	13071.5	189.3
1996	132.3	4.9	186.4	12461.8	3473.3	3389.6	47.8	205.1	3860.3		757.7	11615.1	239.8
1997			189.7	13674.5	3654.7	4122.1	53.9		3400.3		867.9	12323.5	189.6
1998	44.6		208.7	11207.8	2655.5	2879.9	36.9		2188.6		698.3	10101.5	127.1
1999	35.4		233.3	13490.2	2315.0	2516.8	28.8	164.7	1887.7	74.9	677.4	11549.1	90.1
2000	42.4	32.3	352.8	15019.4	1747.7	2544.9	12.0	84.1	1191.9	23.5	384.0	6482.0	49.6
2001	88.1	16.9	205.7	15120.0	2379.0	2611.1	26.3	204.6	2008.3	282.0	634.9	13297.6	111.0
2002	84.9	7.6	154.5	15758.0	1757.0	3156.0	27.9	190.1	1555.0	190.4	651.5	15148.0	79.6
2003	53.6	9.7	183.8	12993.4	1976.2	3008.8	28.4	98.1	1485.4	118.2	466.3	12773.9	60.8
2004	43.4	12.1	221.0	20910.1	3774.2	2608.5	23.8	103.2	2472.9	163.4	501.2	14645.1	95.9
2005	79.5	13.9	250.7	30477.9	4970.6	2867.9	29.6	190.3	3092.9	167.2	478.5	20592.3	78.6
2006	85.2	11.7	131.8	5889.2	1448.6	2616.6	16.7	193.4	1181.6	136.4	452.8	12290.6	56.9
2007	18.5	12.2	64.5	3862.6	612.1	1033.7	6.8	157.1	526.2	41.8	173.4	6833.0	67.5
2008	32.9	48.3	66.7	5426.0	856.5	1793.2	74.0	294.3	841.1	39.2	195.7	9914.5	113.8
2009	38.0	33.0	82.5	4792.0	919.6	1771.9	8.4	300.2	769.1	26.5	132.2	10442.8	121.1
2010	44.8	27.6	73.5	6111.0	928.9	1770.2	60.6	276.2	874.0	33.0	151.0	9897.7	94.6
2011	40.8	26.1	123.7	3795.4	1156.0	1613.2	7.5	261.0	790.7	43.0	115.9	9026.6	71.5
2012	33.8	28.5	78.3	3892.6	995.0	1269.2	8.1	285.5	818.7	114.5	185.3	8760.1	199.1

Table 21: Field's Point Sludge Summary

Bucklin Point Dry Sludge Analysis for Metals 2012

Date	Sludge Tons	Silver		Arsenic		Beryllium		Cadmium		Chromium		Copper		Molybdenum		Nickel		Lead		Selenium		Zinc		Mercury		Cyanide	
		ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs	ppm	lbs
1/10/2012	6.54	13.49		2.41		2.04		3.00		90.39		495.25		20.42		55.18		82.43		4.76		690.90		0.84		6.78	
1/24/2012	10.58	14.13		1.09		2.18		3.20		77.47		440.69		21.83		48.74		69.30		2.18		628.63		1.20		5.49	
Monthly Avg:	8.56	13.81		1.75		2.11		3.10		83.93		467.97		21.13		51.96		75.86		3.47		659.76		1.02		6.14	
Monthly Total in lbs.	348940		4.82		0.61		0.74		1.08		29.29		163.29		7.37		18.13		26.47		1.21		230.22		0.36		2.14
2/7/2012	6.66	17.07		2.33		2.43		3.64		89.71		463.58		24.27		52.35		81.70		3.18		711.14		0.73		5.78	
2/21/2012	7.05	17.42		1.30		2.10		3.61		90.41		525.37		21.02		52.62		80.89		3.78		745.82		1.20		11.30	
Monthly Avg:	6.86	17.24		1.82		2.27		3.63		90.06		494.48		22.65		52.49		81.29		3.48		728.48		0.97		8.54	
Monthly Total in lbs.	301380		5.20		0.55		0.68		1.09		27.14		149.03		6.82		15.82		24.50		1.05		219.55		0.29		2.57
3/6/2012	15.87			4.80		2.01		3.28		87.08		512.72		20.08		48.48		80.61		4.60		766.97		0.87		8.86	
3/20/2012	6.03	14.69		2.27		2.16		3.24		82.35		490.20		21.59		44.29		71.23		4.71		722.89		0.87		10.75	
Monthly Avg:	6.03	15.28		3.54		2.09		3.26		84.71		501.46		20.84		46.39		75.92		4.66		744.93		0.87		9.81	
Monthly Total in lbs.	337160		5.15		1.19		0.70		1.10		28.56		169.07		7.02		15.64		25.60		1.57		251.16		0.29		3.31
4/3/2012	5.93	15.61		4.28		2.14		3.10		85.51		509.40		21.40		47.04		73.33		2.91		757.25		1.10		8.56	
4/17/2012	6.49	13.03		4.56		2.14		3.21		80.04		491.54		21.42		51.87		69.67		3.92		726.70		1.10		9.82	
Monthly Avg:	6.21	14.32		4.42		2.14		3.16		82.77		500.47		21.41		49.46		71.50		3.42		741.98		1.10		9.19	
Monthly Total in lbs.	299220		4.29		1.32		0.64		0.94		24.77		149.75		6.41		14.80		21.39		1.02		222.01		0.33		2.75
5/8/2012	6.02	10.40		4.69		2.14		3.21		84.71		444.45		21.41		50.82		66.50		4.06		689.15		1.00		8.56	
5/22/2012	6.94	11.34		4.93		2.13		3.19		89.91		504.16		21.25		48.25		76.50		5.10		733.29		1.00		8.50	
Monthly Avg:	6.48	10.87		4.81		2.14		3.20		87.31		474.31		21.33		49.54		71.50		4.58		711.22		1.00		8.53	
Monthly Total in lbs.	348840		3.79		1.68		0.74		1.12		30.46		165.46		7.44		17.28		24.94		1.60		248.10		0.35		2.98
6/5/2012	7.08	12.16		4.97		2.08		3.20		87.71		532.43		20.80		47.40		84.92		2.79		784.92		0.93		8.32	
6/19/2012	8.09	13.13		4.88		2.08		3.11		79.77		530.26		20.76		47.09		91.58		3.80		795.60		0.78		8.00	
Monthly Avg:	7.59	12.65		4.93		2.08		3.16		83.74		531.35		20.78		47.24		88.25		3.30		790.26		0.86		8.16	
Monthly Total in lbs.	336240		4.25		1.66		0.70		1.06		28.16		178.66		6.99		15.89		29.67		1.11		265.72		0.29		2.74
7/11/2012	7.34	13.17		5.40		2.03		3.00		75.33		616.67		20.35		62.07		92.80		5.40		859.35		1.10		5.96	
7/24/2012	7.38	15.20		5.88		1.86		3.40		75.69		694.20		18.60		63.43		100.20		4.05		899.30		1.40		0.36	
Monthly Avg:	7.36	14.19		5.64		1.95		3.20		75.51		655.44		19.48		62.75		96.50		4.72		879.33		1.25		3.16	
Monthly Total in lbs.	350980		4.98		1.98		0.68		1.12		26.50		230.05		6.84		22.02		33.87		1.66		308.63		0.44		1.11
8/7/2012	7.41	15.34		4.04		1.96		3.35		80.33		717.84		19.63		66.72		107.68		4.24		946.39		0.87		1.45	
8/21/2012	6.75	18.25		5.00		2.00		4.81		106.13		849.60		20.08		89.86		132.55		5.77		1146.93		0.88		3.01	
Monthly Avg:	7.08	16.80		4.52		1.98		4.08		93.23		783.72		19.86		78.29		120.11		5.00		1046.66		0.88		2.23	
Monthly Total in lbs.	351460		5.90		1.59		0.70		1.43		32.77		275.45		6.98		27.52		42.22		1.76		367.86		0.31		0.78
9/11/2012	7.34	14.29		4.33		1.95		3.13		91.74		758.45		19.57		107.20		107.62		4.79		955.50		1.10		2.04	
9/25/2012	6.15	15.55		4.11		1.94		3.34		96.08		881.61		19.41		124.97		113.10		4.66		976.18		1.20		1.50	
Monthly Avg:	6.75	14.92		4.22		1.95		3.24		93.91		820.03		19.49		116.09		110.36		4.72		965.84		1.15		1.77	
Monthly Total in lbs.	354600		5.29		1.50		0.69		1.15		33.30		290.78		6.91		41.16		39.13		1.67		342.49		0.41		0.63
10/2/2012	7.46	13.04		6.06		1.94		2.98		85.63		801.03		19.47		105.67		100.40		2.73		895.68		1.80		2.84	
10/16/2012	6.76	12.78		6.13		1.92		2.92		105.32		743.97		19.20		87.63		97.31		2.24		910.89		0.77		10.33	
Monthly Avg:	7.11	12.91		6.10		1.93		2.95		95.48		772.50		19.34		96.65		98.85		2.48		903.29		1.29		6.59	
Monthly Total in lbs.	369320		4.77		2.25		0.71		1.09		35.26		285.30		7.14		35.70		36.51		0.92		333.60		0.47		2.43
11/6/2012	6.66	13.20		4.66		1.95		2.97		113.29		702.19		19.51		73.48		100.08		3.67		890.52		1.20		3.43	
11/20/2012	7.39	11.15		5.35		1.99		2.98		90.84		576.12		19.92		58.29		93.11		4.07		769.56		0.97		3.80	
Monthly Avg:	7.02	12.18		5.00		1.97		2.97		102.07		639.16		19.72		65.88		96.60		3.87		830.04		1.09		3.62	
Monthly Total in lbs.	368080		4.48		1.84		0.73		1.09		37.57		235.26		7.26		24.25		35.55		1.42		305.52		0.40		1.33
12/4/2012	7.44	11.36		5.75		1.97		3.10		98.17		595.17		19.79		57.38		88.55		2.01		826.55		1.10		5.56	
12/18/2012	6.24	10.72		5.75		2.00		3.92		109.00		587.99		20.08		60.79		84.98		3.59		828.36		1.00		6.58	
Monthly Avg:	6.84	11.04		5.75		1.99		3.51		103.59		591.58		19.94		59.08		86.77		2.80		827.45		1.05		6.07	
Monthly Total in lbs.	355180		3.92		2.04		0.71		1.25		36.79		210.12		7.08		20.99		30.82		0.99		293.89		0.37		2.16
YEARLY TOTAL LBS	4121400		56.84		18.21		8.42		13.53		370.56		2502.21		84.26		269.19		370.68		15.98		3388.75		4.31		24.93

Table 22: Bucklin Point Sludge Analysis

Bucklin Point Metals Loading from Final Sludge (lbs/yr)

Year	Arsenic	Beryllium	Cadmium	Copper	Chromium	Lead	Mercury	Molybdeum	Nickel	Selenium	Silver	Zinc	Cyanide
1994	16.2		35.4	3839.7	655.5	723.4	84.2		627.6		171.3	4234.5	64.3
1995			35.8	4306.7	681.0	551.8	55.9		539.8		126.2	3495.8	57.6
1996													
1997	16.0		52.9	4589.3	1177.6	1183.6	16.0		1074.4		339.8	4349.4	58.9
1998	12.2		44.8	4743.4	1263.0	1128.3	12.2		977.8		463.4	5838.9	27.7
1999	11.1		44.4	3906.8	993.6	930.3	11.1		716.9		473.0	5945.8	24.3
2000	38.3		60.8	5164.7	1304.1	1073.2	16.8	171.8	1345.4		467.7	7104.0	24.8
2001	57.8	13.6	38.6	4132.9	1003.3	900.1	12.0	167.4	985.3	44.4	371.2	6336.5	33.6
2002	43.7	6.1	27.1	4565.0	755.0	1034.3	18.0	148.9	840.7	37.6	385.8	7226.0	13.3
2003	30.2	6.6	29.2	3439.4	2669.3	772.3	10.0	69.3	868.1	32.1	273.0	5973.1	8.9
2004	27.6	7.3	45.5	3733.7	851.5	739.0	11.6	62.0	794.7	36.1	225.0	6759.2	7.6
2005	18.8	5.9	30.9	4468.6	969.5	682.1	8.9	77.4	781.5	32.5	153.0	5469.7	10.3
2006	25.5	2.0	24.4	3657.0	2398.8	713.0	6.8	37.1	1089.2	33.9	165.4	4953.9	12.0
2007	11.2	5.2	25.7	4676.1	4143.3	633.5	9.3	70.7	1389.7	14.4	177.5	5635.0	22.8
2008	8.9	14.1	23.3	4209.5	5594.6	585.4	36.0	84.7	1568.6	17.4	116.8	5519.0	27.4
2009	18.1	8.2	20.6	3132.4	1054.3	516.6	4.6	79.6	438.2	14.6	62.5	4895.0	19.3
2010	20.7	7.0	17.5	3075.2	619.0	445.7	14.4	74.3	318.1	14.6	58.1	3949.5	17.1
2011	19.3	9.0	13.9	2159.5	499.9	474.2	4.9	90.0	294.1	15.1	66.4	3583.1	14.5
2012	18.2	8.4	13.5	2502.2	370.6	370.7	4.3	84.3	269.2	16.0	56.8	3388.8	24.9

Table: 23 Bucklin Point Sludge Summary

Field's Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
1/10/2012	Chloroform	5.39	ppb
1/10/2012	TTO	5.39	ppb
1/10/2012	1,1-Dichloroethane	<2.0	ppb
1/10/2012	Benzene	<2.0	ppb
1/10/2012	Dibromochloromethane	<2.0	ppb
1/10/2012	Chloromethane	<2.0	ppb
1/10/2012	Chlorobenzene	<2.0	ppb
1/10/2012	Ethylbenzene	<2.0	ppb
1/10/2012	Bromodichloromethane	<2.0	ppb
1/10/2012	Chloroethane	<2.0	ppb
1/10/2012	1,4-Dichlorobenzene	<2.0	ppb
1/10/2012	1,3-Dichlorobenzene	<2.0	ppb
1/10/2012	1,2-Dichloropropane	<2.0	ppb
1/10/2012	1,2-Dichloroethane	<2.0	ppb
1/10/2012	1,2-Dichlorobenzene	<2.0	ppb
1/10/2012	1,1-Dichloroethene	<2.0	ppb
1/10/2012	1,1,2-Trichloroethane	<2.0	ppb
1/10/2012	o- xylene	<2.0	ppb
1/10/2012	Bromomethane	<2.0	ppb
1/10/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
1/10/2012	Methylene Chloride	<2.0	ppb
1/10/2012	Trans-1,3-Dichloroprope	<2.0	ppb
1/10/2012	cis-1,3-Dichloropropene	<2.0	ppb
1/10/2012	Carbon Tetrachloride	<2.0	ppb
1/10/2012	1,1,1-Trichloroethane	<2.0	ppb
1/10/2012	Trans-1,2-Dichloroethen	<2.0	ppb
1/10/2012	Trichlorofluoromethane	<2.0	ppb
1/10/2012	Vinyl Chloride	<2.0	ppb
1/10/2012	Tetrachlorethene	<2.0	ppb
1/10/2012	Toluene	<2.0	ppb
1/10/2012	Trichlorethene	<2.0	ppb
1/10/2012	p&m xylene	<4.0	ppb
1/10/2012	Bromoform	<5.0	ppb
1/10/2012	2-Chloroethylvinylether	<5.0	ppb
2/7/2012	TTO	3.7	ppb
2/7/2012	Chloroform	3.7	ppb
2/7/2012	cis-1,3-Dichloropropene	<2.0	ppb
2/7/2012	Tetrachlorethene	<2.0	ppb
2/7/2012	o- xylene	<2.0	ppb
2/7/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
2/7/2012	1,1,2-Trichloroethane	<2.0	ppb
2/7/2012	Trans-1,3-Dichloroprope	<2.0	ppb
2/7/2012	1,4-Dichlorobenzene	<2.0	ppb
2/7/2012	Trichlorethene	<2.0	ppb
2/7/2012	1,1-Dichloroethane	<2.0	ppb
2/7/2012	1,1-Dichloroethene	<2.0	ppb
2/7/2012	1,2-Dichlorobenzene	<2.0	ppb
2/7/2012	1,2-Dichloroethane	<2.0	ppb
2/7/2012	1,3-Dichlorobenzene	<2.0	ppb
2/7/2012	Benzene	<2.0	ppb
2/7/2012	Bromodichloromethane	<2.0	ppb
2/7/2012	Bromomethane	<2.0	ppb
2/7/2012	Chlorobenzene	<2.0	ppb
2/7/2012	Chloroethane	<2.0	ppb
2/7/2012	Carbon Tetrachloride	<2.0	ppb
2/7/2012	1,2-Dichloropropane	<2.0	ppb
2/7/2012	1,1,1-Trichloroethane	<2.0	ppb
2/7/2012	Trans-1,2-Dichloroethen	<2.0	ppb
2/7/2012	Trichlorofluoromethane	<2.0	ppb

Field's Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
1/10/2012	Bromomethane	16.06	ppb
1/10/2012	TTO	16.06	ppb
1/10/2012	1,1,1-Trichloroethane	<2.0	ppb
1/10/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
1/10/2012	1,1,2-Trichloroethane	<2.0	ppb
1/10/2012	1,1-Dichloroethane	<2.0	ppb
1/10/2012	1,1-Dichloroethene	<2.0	ppb
1/10/2012	1,2-Dichlorobenzene	<2.0	ppb
1/10/2012	1,2-Dichloroethane	<2.0	ppb
1/10/2012	1,2-Dichloropropane	<2.0	ppb
1/10/2012	1,3-Dichlorobenzene	<2.0	ppb
1/10/2012	1,4-Dichlorobenzene	<2.0	ppb
1/10/2012	Benzene	<2.0	ppb
1/10/2012	Bromodichloromethane	<2.0	ppb
1/10/2012	Carbon Tetrachloride	<2.0	ppb
1/10/2012	Chlorobenzene	<2.0	ppb
1/10/2012	Chloroethane	<2.0	ppb
1/10/2012	Chloroform	<2.0	ppb
1/10/2012	Chloromethane	<2.0	ppb
1/10/2012	cis-1,3-Dichloropropene	<2.0	ppb
1/10/2012	Dibromochloromethane	<2.0	ppb
1/10/2012	Ethylbenzene	<2.0	ppb
1/10/2012	Methylene Chloride	<2.0	ppb
1/10/2012	o- xylene	<2.0	ppb
1/10/2012	Toluene	<2.0	ppb
1/10/2012	Trans-1,2-Dichloroethen	<2.0	ppb
1/10/2012	Trans-1,3-Dichloroprope	<2.0	ppb
1/10/2012	Trichlorethene	<2.0	ppb
1/10/2012	Trichlorofluoromethane	<2.0	ppb
1/10/2012	Vinyl Chloride	<2.0	ppb
1/10/2012	p&m xylene	<4.0	ppb
1/10/2012	2-Chloroethylvinylether	<5.0	ppb
1/10/2012	Bromoform	<5.0	ppb
2/7/2012	1,1,1-Trichloroethane	<2.0	ppb
2/7/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
2/7/2012	1,1,2-Trichloroethane	<2.0	ppb
2/7/2012	1,1-Dichloroethane	<2.0	ppb
2/7/2012	1,1-Dichloroethene	<2.0	ppb
2/7/2012	1,2-Dichlorobenzene	<2.0	ppb
2/7/2012	1,2-Dichloroethane	<2.0	ppb
2/7/2012	1,2-Dichloropropane	<2.0	ppb
2/7/2012	1,3-Dichlorobenzene	<2.0	ppb
2/7/2012	1,4-Dichlorobenzene	<2.0	ppb
2/7/2012	Benzene	<2.0	ppb
2/7/2012	Bromodichloromethane	<2.0	ppb
2/7/2012	Bromomethane	<2.0	ppb
2/7/2012	Carbon Tetrachloride	<2.0	ppb
2/7/2012	Chlorobenzene	<2.0	ppb
2/7/2012	Chloroethane	<2.0	ppb
2/7/2012	Chloroform	<2.0	ppb
2/7/2012	Chloromethane	<2.0	ppb
2/7/2012	cis-1,3-Dichloropropene	<2.0	ppb
2/7/2012	Dibromochloromethane	<2.0	ppb
2/7/2012	Ethylbenzene	<2.0	ppb
2/7/2012	Methylene Chloride	<2.0	ppb
2/7/2012	o- xylene	<2.0	ppb
2/7/2012	Tetrachlorethene	<2.0	ppb
2/7/2012	Toluene	<2.0	ppb
2/7/2012	Trans-1,2-Dichloroethen	<2.0	ppb

Table 24: EPA Priority Pollutants Data Field's Point

Field's Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
2/7/2012	Vinyl Chloride	<2.0	ppb
2/7/2012	Toluene	<2.0	ppb
2/7/2012	Methylene Chloride	<2.0	ppb
2/7/2012	Ethylbenzene	<2.0	ppb
2/7/2012	Dibromochloromethane	<2.0	ppb
2/7/2012	Chloromethane	<2.0	ppb
2/7/2012	p&m xylene	<4.0	ppb
2/7/2012	2-Chloroethylvinylether	<5.0	ppb
2/7/2012	Bromoform	<5.0	ppb
3/6/2012	Toluene	3.25	ppb
3/6/2012	Chloroform	3.44	ppb
3/6/2012	TTO	6.69	ppb
3/6/2012	1,1,1-Trichloroethane	<2.0	ppb
3/6/2012	Trans-1,2-Dichloroethene	<2.0	ppb
3/6/2012	Trichlorofluoromethane	<2.0	ppb
3/6/2012	Vinyl Chloride	<2.0	ppb
3/6/2012	Trichlorethene	<2.0	ppb
3/6/2012	Tetrachlorethene	<2.0	ppb
3/6/2012	o- xylene	<2.0	ppb
3/6/2012	Carbon Tetrachloride	<2.0	ppb
3/6/2012	cis-1,3-Dichloropropene	<2.0	ppb
3/6/2012	Trans-1,3-Dichloropropene	<2.0	ppb
3/6/2012	1,1,2-Trichloroethane	<2.0	ppb
3/6/2012	Methylene Chloride	<2.0	ppb
3/6/2012	Benzene	<2.0	ppb
3/6/2012	1,1,2,2-Tetrachlorethene	<2.0	ppb
3/6/2012	Bromodichloromethane	<2.0	ppb
3/6/2012	1,1-Dichloroethane	<2.0	ppb
3/6/2012	1,1-Dichloroethene	<2.0	ppb
3/6/2012	1,2-Dichlorobenzene	<2.0	ppb
3/6/2012	1,2-Dichloroethane	<2.0	ppb
3/6/2012	1,2-Dichloropropane	<2.0	ppb
3/6/2012	1,4-Dichlorobenzene	<2.0	ppb
3/6/2012	Ethylbenzene	<2.0	ppb
3/6/2012	Bromomethane	<2.0	ppb
3/6/2012	Chlorobenzene	<2.0	ppb
3/6/2012	Chloroethane	<2.0	ppb
3/6/2012	Chloromethane	<2.0	ppb
3/6/2012	Dibromochloromethane	<2.0	ppb
3/6/2012	1,3-Dichlorobenzene	<2.0	ppb
3/6/2012	p&m xylene	<4.0	ppb
3/6/2012	2-Chloroethylvinylether	<5.0	ppb
3/6/2012	Bromoform	<5.0	ppb
4/3/2012	Toluene	2.02	ppb
4/3/2012	Chloroform	3.72	ppb
4/3/2012	TTO	5.74	ppb
4/3/2012	1,4-Dichlorobenzene	<2.0	ppb
4/3/2012	Chloromethane	<2.0	ppb
4/3/2012	Chloroethane	<2.0	ppb
4/3/2012	Chlorobenzene	<2.0	ppb
4/3/2012	Bromomethane	<2.0	ppb
4/3/2012	Dibromochloromethane	<2.0	ppb
4/3/2012	Benzene	<2.0	ppb
4/3/2012	1,2-Dichlorobenzene	<2.0	ppb
4/3/2012	1,3-Dichlorobenzene	<2.0	ppb
4/3/2012	1,2-Dichloropropane	<2.0	ppb
4/3/2012	1,2-Dichloroethane	<2.0	ppb
4/3/2012	1,1-Dichloroethene	<2.0	ppb
4/3/2012	1,1-Dichloroethane	<2.0	ppb

Field's Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
2/7/2012	Trans-1,3-Dichloropropene	<2.0	ppb
2/7/2012	Trichlorethene	<2.0	ppb
2/7/2012	Trichlorofluoromethane	<2.0	ppb
2/7/2012	Vinyl Chloride	<2.0	ppb
2/7/2012	p&m xylene	<4.0	ppb
2/7/2012	2-Chloroethylvinylether	<5.0	ppb
2/7/2012	Bromoform	<5.0	ppb
3/6/2012	1,1,1-Trichloroethane	<2.0	ppb
3/6/2012	1,1,2,2-Tetrachlorethene	<2.0	ppb
3/6/2012	1,1,2-Trichloroethane	<2.0	ppb
3/6/2012	1,1-Dichloroethane	<2.0	ppb
3/6/2012	1,1-Dichloroethene	<2.0	ppb
3/6/2012	1,2-Dichlorobenzene	<2.0	ppb
3/6/2012	1,2-Dichloroethane	<2.0	ppb
3/6/2012	1,2-Dichloropropane	<2.0	ppb
3/6/2012	1,3-Dichlorobenzene	<2.0	ppb
3/6/2012	1,4-Dichlorobenzene	<2.0	ppb
3/6/2012	Benzene	<2.0	ppb
3/6/2012	Bromodichloromethane	<2.0	ppb
3/6/2012	Bromomethane	<2.0	ppb
3/6/2012	Carbon Tetrachloride	<2.0	ppb
3/6/2012	Chlorobenzene	<2.0	ppb
3/6/2012	Chloroethane	<2.0	ppb
3/6/2012	Chloroform	<2.0	ppb
3/6/2012	Chloromethane	<2.0	ppb
3/6/2012	cis-1,3-Dichloropropene	<2.0	ppb
3/6/2012	Dibromochloromethane	<2.0	ppb
3/6/2012	Ethylbenzene	<2.0	ppb
3/6/2012	Methylene Chloride	<2.0	ppb
3/6/2012	o- xylene	<2.0	ppb
3/6/2012	Tetrachlorethene	<2.0	ppb
3/6/2012	Toluene	<2.0	ppb
3/6/2012	Trans-1,2-Dichloroethene	<2.0	ppb
3/6/2012	Trans-1,3-Dichloropropene	<2.0	ppb
3/6/2012	Trichlorethene	<2.0	ppb
3/6/2012	Trichlorofluoromethane	<2.0	ppb
3/6/2012	Vinyl Chloride	<2.0	ppb
3/6/2012	p&m xylene	<4.0	ppb
3/6/2012	2-Chloroethylvinylether	<5.0	ppb
3/6/2012	Bromoform	<5.0	ppb
4/3/2012	1,1,1-Trichloroethane	<2.0	ppb
4/3/2012	1,1,2,2-Tetrachlorethene	<2.0	ppb
4/3/2012	1,1,2-Trichloroethane	<2.0	ppb
4/3/2012	1,1-Dichloroethane	<2.0	ppb
4/3/2012	1,1-Dichloroethene	<2.0	ppb
4/3/2012	1,2-Dichlorobenzene	<2.0	ppb
4/3/2012	1,2-Dichloroethane	<2.0	ppb
4/3/2012	1,2-Dichloropropane	<2.0	ppb
4/3/2012	1,3-Dichlorobenzene	<2.0	ppb
4/3/2012	1,4-Dichlorobenzene	<2.0	ppb
4/3/2012	Benzene	<2.0	ppb
4/3/2012	Bromodichloromethane	<2.0	ppb
4/3/2012	Bromomethane	<2.0	ppb
4/3/2012	Carbon Tetrachloride	<2.0	ppb
4/3/2012	Chlorobenzene	<2.0	ppb
4/3/2012	Chloroethane	<2.0	ppb
4/3/2012	Chloroform	<2.0	ppb
4/3/2012	Chloromethane	<2.0	ppb
4/3/2012	cis-1,3-Dichloropropene	<2.0	ppb

Table 24: EPA Priority Pollutants Data Field's Point

Field's Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
4/3/2012	Bromodichloromethane	<2.0	ppb
4/3/2012	1,1,2-Trichloroethane	<2.0	ppb
4/3/2012	Ethylbenzene	<2.0	ppb
4/3/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
4/3/2012	Trans-1,3-Dichloropropene	<2.0	ppb
4/3/2012	cis-1,3-Dichloropropene	<2.0	ppb
4/3/2012	Carbon Tetrachloride	<2.0	ppb
4/3/2012	1,1,1-Trichloroethane	<2.0	ppb
4/3/2012	Trans-1,2-Dichloroethene	<2.0	ppb
4/3/2012	Vinyl Chloride	<2.0	ppb
4/3/2012	Trichlorethene	<2.0	ppb
4/3/2012	Tetrachlorethene	<2.0	ppb
4/3/2012	Methylene Chloride	<2.0	ppb
4/3/2012	o- xylene	<2.0	ppb
4/3/2012	Trichlorofluoromethane	<2.0	ppb
4/3/2012	p&m xylene	<4.0	ppb
4/3/2012	Bromoform	<5.0	ppb
4/3/2012	2-Chloroethylvinylether	<5.0	ppb
5/8/2012	Chloroform	7.19	ppb
5/8/2012	Trichlorofluoromethane	<2	ppb
5/8/2012	1,3-Dichlorobenzene	<2.00	ppb
5/8/2012	Carbon Tetrachloride	<2.00	ppb
5/8/2012	Bromomethane	<2.00	ppb
5/8/2012	Bromodichloromethane	<2.00	ppb
5/8/2012	Benzene	<2.00	ppb
5/8/2012	Chlorobenzene	<2.00	ppb
5/8/2012	1,4-Dichlorobenzene	<2.00	ppb
5/8/2012	1122Tetrachlorethane	<2.00	ppb
5/8/2012	1,2-Dichloropropane	<2.00	ppb
5/8/2012	1,2-Dichloroethane	<2.00	ppb
5/8/2012	1,2-Dichlorobenzene	<2.00	ppb
5/8/2012	1,1-Dichloroethene	<2.00	ppb
5/8/2012	1,1-Dichloroethane	<2.00	ppb
5/8/2012	112-Trichloroethane	<2.00	ppb
5/8/2012	Toluene	<2.00	ppb
5/8/2012	111-Trichloroethane	<2.00	ppb
5/8/2012	Chloroethane	<2.00	ppb
5/8/2012	cis13Dichloropropene	<2.00	ppb
5/8/2012	Vinyl Chloride	<2.00	ppb
5/8/2012	Trichlorethene	<2.00	ppb
5/8/2012	o-xylene	<2.00	ppb
5/8/2012	Tetrachlorethene	<2.00	ppb
5/8/2012	Dibromochloromethane	<2.00	ppb
5/8/2012	Chloromethane	<2.00	ppb
5/8/2012	cis13Dichloropropene	<2.00	ppb
5/8/2012	Dibromochloromethane	<2.00	ppb
5/8/2012	Ethylbenzene	<2.00	ppb
5/8/2012	Methylene Chloride	<2.00	ppb
5/8/2012	o-xylene	<2.00	ppb
5/8/2012	Tetrachlorethene	<2.00	ppb
5/8/2012	Toluene	<2.00	ppb
5/8/2012	T-1,2-Dichloroethene	<2.00	ppb
5/8/2012	T-13-Dichloropropene	<2.00	ppb
5/8/2012	Trichlorethene	<2.00	ppb
5/8/2012	Vinyl Chloride	<2.00	ppb
5/8/2012	p-m xylene	<4.00	ppb
5/8/2012	2chloroethylvinyleth	<5	ppb
5/8/2012	Bromoform	<5.00	ppb
6/5/2012	Bromomethane	2.16	ppb
6/5/2012	Chloroform	3.9	ppb
6/5/2012	Trichlorofluoromethane	<2	ppb
6/5/2012	111-Trichloroethane	<2.00	ppb
6/5/2012	1122Tetrachlorethane	<2.00	ppb
6/5/2012	112-Trichloroethane	<2.00	ppb
6/5/2012	1,1-Dichloroethane	<2.00	ppb
6/5/2012	1,1-Dichloroethene	<2.00	ppb
6/5/2012	1,2-Dichlorobenzene	<2.00	ppb
6/5/2012	1,2-Dichloroethane	<2.00	ppb
6/5/2012	1,2-Dichloropropane	<2.00	ppb
6/5/2012	1,3-Dichlorobenzene	<2.00	ppb

Field's Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
4/3/2012	Dibromochloromethane	<2.0	ppb
4/3/2012	Ethylbenzene	<2.0	ppb
4/3/2012	Methylene Chloride	<2.0	ppb
4/3/2012	o- xylene	<2.0	ppb
4/3/2012	Tetrachlorethene	<2.0	ppb
4/3/2012	Toluene	<2.0	ppb
4/3/2012	Trans-1,2-Dichloroethene	<2.0	ppb
4/3/2012	Trans-1,3-Dichloropropene	<2.0	ppb
4/3/2012	Trichlorethene	<2.0	ppb
4/3/2012	Trichlorofluoromethane	<2.0	ppb
4/3/2012	Vinyl Chloride	<2.0	ppb
4/3/2012	p&m xylene	<4.0	ppb
4/3/2012	2-Chloroethylvinylether	<5.0	ppb
4/3/2012	Bromoform	<5.0	ppb
5/8/2012	Chloroform	3.77	ppb
5/8/2012	Trichlorofluoromethane	<2	ppb
5/8/2012	111-Trichloroethane	<2.00	ppb
5/8/2012	1122Tetrachlorethane	<2.00	ppb
5/8/2012	112-Trichloroethane	<2.00	ppb
5/8/2012	1,1-Dichloroethane	<2.00	ppb
5/8/2012	1,1-Dichloroethene	<2.00	ppb
5/8/2012	1,2-Dichlorobenzene	<2.00	ppb
5/8/2012	1,2-Dichloroethane	<2.00	ppb
5/8/2012	1,2-Dichloropropane	<2.00	ppb
5/8/2012	1,3-Dichlorobenzene	<2.00	ppb
5/8/2012	1,4-Dichlorobenzene	<2.00	ppb
5/8/2012	Benzene	<2.00	ppb
5/8/2012	Bromodichloromethane	<2.00	ppb
5/8/2012	Bromomethane	<2.00	ppb
5/8/2012	Carbon Tetrachloride	<2.00	ppb
5/8/2012	Chlorobenzene	<2.00	ppb
5/8/2012	Chloroethane	<2.00	ppb
5/8/2012	Chloromethane	<2.00	ppb
5/8/2012	cis13Dichloropropene	<2.00	ppb
5/8/2012	Dibromochloromethane	<2.00	ppb
5/8/2012	Ethylbenzene	<2.00	ppb
5/8/2012	Methylene Chloride	<2.00	ppb
5/8/2012	o-xylene	<2.00	ppb
5/8/2012	Tetrachlorethene	<2.00	ppb
5/8/2012	Toluene	<2.00	ppb
5/8/2012	T-1,2-Dichloroethene	<2.00	ppb
5/8/2012	T-13-Dichloropropene	<2.00	ppb
5/8/2012	Trichlorethene	<2.00	ppb
5/8/2012	Vinyl Chloride	<2.00	ppb
5/8/2012	p-m xylene	<4.00	ppb
5/8/2012	2chloroethylvinyleth	<5	ppb
5/8/2012	Bromoform	<5.00	ppb
6/5/2012	Bromomethane	2.16	ppb
6/5/2012	Chloroform	3.9	ppb
6/5/2012	Trichlorofluoromethane	<2	ppb
6/5/2012	111-Trichloroethane	<2.00	ppb
6/5/2012	1122Tetrachlorethane	<2.00	ppb
6/5/2012	112-Trichloroethane	<2.00	ppb
6/5/2012	1,1-Dichloroethane	<2.00	ppb
6/5/2012	1,1-Dichloroethene	<2.00	ppb
6/5/2012	1,2-Dichlorobenzene	<2.00	ppb
6/5/2012	1,2-Dichloroethane	<2.00	ppb
6/5/2012	1,2-Dichloropropane	<2.00	ppb
6/5/2012	1,3-Dichlorobenzene	<2.00	ppb

Table 24: EPA Priority Pollutants Data Field's Point

Field's Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
6/5/2012	1,1-Dichloroethene	<2.00	ppb
6/5/2012	1,2-Dichlorobenzene	<2.00	ppb
6/5/2012	1,2-Dichloroethane	<2.00	ppb
6/5/2012	1,2-Dichloropropane	<2.00	ppb
6/5/2012	1,3-Dichlorobenzene	<2.00	ppb
6/5/2012	1,4-Dichlorobenzene	<2.00	ppb
6/5/2012	Benzene	<2.00	ppb
6/5/2012	Bromodichloromethane	<2.00	ppb
6/5/2012	Bromomethane	<2.00	ppb
6/5/2012	Carbon Tetrachloride	<2.00	ppb
6/5/2012	Chlorobenzene	<2.00	ppb
6/5/2012	Chloroethane	<2.00	ppb
6/5/2012	Chloromethane	<2.00	ppb
6/5/2012	cis-1,3-Dichloropropene	<2.00	ppb
6/5/2012	Dibromochloromethane	<2.00	ppb
6/5/2012	Ethylbenzene	<2.00	ppb
6/5/2012	Methylene Chloride	<2.00	ppb
6/5/2012	o-xylene	<2.00	ppb
6/5/2012	T-1,2-Dichloroethene	<2.00	ppb
6/5/2012	T-1,3-Dichloropropene	<2.00	ppb
6/5/2012	Trichlorethene	<2.00	ppb
6/5/2012	Vinyl Chloride	<2.00	ppb
6/5/2012	p-m xylene	<4.00	ppb
6/5/2012	2chloroethylvinyleth	<5	ppb
6/5/2012	Bromoform	<5.00	ppb
7/17/2012	Toluene	2.447	ppb
7/17/2012	Tetrachlorethene	3.093	ppb
7/17/2012	Chloroform	4.279	ppb
7/17/2012	Chloroethane	5.677	ppb
7/17/2012	1,1,1-Trichloroethane	<2.0	ppb
7/17/2012	1,1,2-Trichloroethane	<2.0	ppb
7/17/2012	1,1-Dichloroethane	<2.0	ppb
7/17/2012	1,1-Dichloroethene	<2.0	ppb
7/17/2012	1,2-dichlorobenzene	<2.0	ppb
7/17/2012	1,2-Dichloroethane	<2.0	ppb
7/17/2012	1,2-Dichloropropane	<2.0	ppb
7/17/2012	1,3-dichlorobenzene	<2.0	ppb
7/17/2012	1,4-dichlorobenzene	<2.0	ppb
7/17/2012	Benzene	<2.0	ppb
7/17/2012	Bromodichloromethane	<2.0	ppb
7/17/2012	Bromomethane	<2.0	ppb
7/17/2012	Carbon Tetrachloride	<2.0	ppb
7/17/2012	Chlorobenzene	<2.0	ppb
7/17/2012	Chloromethane	<2.0	ppb
7/17/2012	Dibromochloromethane	<2.0	ppb
7/17/2012	Ethylbenzene	<2.0	ppb
7/17/2012	Methylene Chloride	<2.0	ppb
7/17/2012	o-xylene	<2.0	ppb
7/17/2012	Trans-1,2-Dichloroethene	<2.0	ppb
7/17/2012	Trans-1,3-Dichloropropene	<2.0	ppb
7/17/2012	Trichlorethene	<2.0	ppb
7/17/2012	Vinyl Chloride	<2.0	ppb
7/17/2012	p&m xylene	<4.0	ppb
7/17/2012	Bromoform	<5.0	ppb
8/7/2012	Toluene	3.63	ppb
8/7/2012	Chloroform	5.16	ppb
8/7/2012	Methylene Chloride	29.55	ppb
8/7/2012	1,1,1-Trichloroethane	<2.0	ppb
8/7/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb

Field's Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
6/5/2012	1,4-Dichlorobenzene	<2.00	ppb
6/5/2012	Benzene	<2.00	ppb
6/5/2012	Bromodichloromethane	<2.00	ppb
6/5/2012	Carbon Tetrachloride	<2.00	ppb
6/5/2012	Chlorobenzene	<2.00	ppb
6/5/2012	Chloroethane	<2.00	ppb
6/5/2012	Chloromethane	<2.00	ppb
6/5/2012	cis-1,3-Dichloropropene	<2.00	ppb
6/5/2012	Dibromochloromethane	<2.00	ppb
6/5/2012	Ethylbenzene	<2.00	ppb
6/5/2012	Methylene Chloride	<2.00	ppb
6/5/2012	o-xylene	<2.00	ppb
6/5/2012	Tetrachlorethene	<2.00	ppb
6/5/2012	Toluene	<2.00	ppb
6/5/2012	T-1,2-Dichloroethene	<2.00	ppb
6/5/2012	T-1,3-Dichloropropene	<2.00	ppb
6/5/2012	Trichlorethene	<2.00	ppb
6/5/2012	Vinyl Chloride	<2.00	ppb
6/5/2012	p-m xylene	<4.00	ppb
6/5/2012	2chloroethylvinyleth	<5	ppb
6/5/2012	Bromoform	<5.00	ppb
7/17/2012	Chloroform	2.52	ppb
7/17/2012	Chloroethane	45.71	ppb
7/17/2012	TTO	48.23	ppb
7/17/2012	1,1,1-Trichloroethane	<2.0	ppb
7/17/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
7/17/2012	1,1,2-Trichloroethane	<2.0	ppb
7/17/2012	1,1-Dichloroethane	<2.0	ppb
7/17/2012	1,1-Dichloroethene	<2.0	ppb
7/17/2012	1,2-dichlorobenzene	<2.0	ppb
7/17/2012	1,2-Dichloroethane	<2.0	ppb
7/17/2012	1,2-Dichloropropane	<2.0	ppb
7/17/2012	1,3-dichlorobenzene	<2.0	ppb
7/17/2012	1,4-dichlorobenzene	<2.0	ppb
7/17/2012	Benzene	<2.0	ppb
7/17/2012	Bromodichloromethane	<2.0	ppb
7/17/2012	Bromomethane	<2.0	ppb
7/17/2012	Carbon Tetrachloride	<2.0	ppb
7/17/2012	Chlorobenzene	<2.0	ppb
7/17/2012	Chloromethane	<2.0	ppb
7/17/2012	cis-1,3-Dichloropropene	<2.0	ppb
7/17/2012	Dibromochloromethane	<2.0	ppb
7/17/2012	Ethylbenzene	<2.0	ppb
7/17/2012	Methylene Chloride	<2.0	ppb
7/17/2012	o-xylene	<2.0	ppb
7/17/2012	Tetrachlorethene	<2.0	ppb
7/17/2012	Toluene	<2.0	ppb
7/17/2012	Trans-1,2-Dichloroethene	<2.0	ppb
7/17/2012	Trans-1,3-Dichloropropene	<2.0	ppb
7/17/2012	Trichlorethene	<2.0	ppb
7/17/2012	Trichlorofluoromethane	<2.0	ppb
7/17/2012	Vinyl Chloride	<2.0	ppb
7/17/2012	p&m xylene	<4.0	ppb
7/17/2012	2-Chloroethylvinylether	<5.0	ppb
7/17/2012	Bromoform	<5.0	ppb
8/7/2012	Chloroethane	8.03	ppb
8/7/2012	1,1,1-Trichloroethane	<2.0	ppb
8/7/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
8/7/2012	1,1,2-Trichloroethane	<2.0	ppb

Table 24: EPA Priority Pollutants Data Field's Point

Field's Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
8/7/2012	1,1,2-Trichloroethane	<2.0	ppb
8/7/2012	1,1-Dichloroethane	<2.0	ppb
8/7/2012	1,1-Dichloroethene	<2.0	ppb
8/7/2012	1,2-dichlorobenzene	<2.0	ppb
8/7/2012	1,2-Dichloroethane	<2.0	ppb
8/7/2012	1,2-Dichloropropane	<2.0	ppb
8/7/2012	1,3-dichlorobenzene	<2.0	ppb
8/7/2012	1,4-dichlorobenzene	<2.0	ppb
8/7/2012	Benzene	<2.0	ppb
8/7/2012	Bromodichloromethane	<2.0	ppb
8/7/2012	Bromomethane	<2.0	ppb
8/7/2012	Carbon Tetrachloride	<2.0	ppb
8/7/2012	Chlorobenzene	<2.0	ppb
8/7/2012	Chloroethane	<2.0	ppb
8/7/2012	Chloromethane	<2.0	ppb
8/7/2012	cis-1,3-Dichloropropene	<2.0	ppb
8/7/2012	Dibromochloromethane	<2.0	ppb
8/7/2012	Ethylbenzene	<2.0	ppb
8/7/2012	o- xylene	<2.0	ppb
8/7/2012	Tetrachlorethene	<2.0	ppb
8/7/2012	Trans-1,2-Dichloroethene	<2.0	ppb
8/7/2012	Trans-1,3-Dichloropropene	<2.0	ppb
8/7/2012	Trichlorethene	<2.0	ppb
8/7/2012	Trichlorofluoromethane	<2.0	ppb
8/7/2012	Vinyl Chloride	<2.0	ppb
8/7/2012	p&m xylene	<4.0	ppb
8/7/2012	2-Chloroethylvinylether	<5.0	ppb
8/7/2012	Bromoform	<5.0	ppb
9/11/2012	Toluene	2.77	ppb
9/11/2012	Chloroform	4.56	ppb
9/11/2012	Methylene Chloride	8.86	ppb
9/11/2012	Chloroethane	45.22	ppb
9/11/2012	1,1,1-Trichloroethane	<2.0	ppb
9/11/2012	1,1,2,2-Tetrachlorethene	<2.0	ppb
9/11/2012	1,1,2-Trichloroethane	<2.0	ppb
9/11/2012	1,1-Dichloroethane	<2.0	ppb
9/11/2012	1,1-Dichloroethene	<2.0	ppb
9/11/2012	1,2-dichlorobenzene	<2.0	ppb
9/11/2012	1,2-Dichloroethane	<2.0	ppb
9/11/2012	1,2-Dichloropropane	<2.0	ppb
9/11/2012	1,3-dichlorobenzene	<2.0	ppb
9/11/2012	1,4-dichlorobenzene	<2.0	ppb
9/11/2012	Benzene	<2.0	ppb
9/11/2012	Bromodichloromethane	<2.0	ppb
9/11/2012	Bromomethane	<2.0	ppb
9/11/2012	Carbon Tetrachloride	<2.0	ppb
9/11/2012	Chlorobenzene	<2.0	ppb
9/11/2012	Chloromethane	<2.0	ppb
9/11/2012	cis-1,3-Dichloropropene	<2.0	ppb
9/11/2012	Dibromochloromethane	<2.0	ppb
9/11/2012	Ethylbenzene	<2.0	ppb
9/11/2012	o- xylene	<2.0	ppb
9/11/2012	Tetrachlorethene	<2.0	ppb
9/11/2012	Trans-1,2-Dichloroethene	<2.0	ppb
9/11/2012	Trans-1,3-Dichloropropene	<2.0	ppb
9/11/2012	Trichlorethene	<2.0	ppb
9/11/2012	Trichlorofluoromethane	<2.0	ppb
9/11/2012	Vinyl Chloride	<2.0	ppb
9/11/2012	p&m xylene	<4.0	ppb

Field's Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
8/7/2012	1,1-Dichloroethane	<2.0	ppb
8/7/2012	1,1-Dichloroethene	<2.0	ppb
8/7/2012	1,2-dichlorobenzene	<2.0	ppb
8/7/2012	1,2-Dichloroethane	<2.0	ppb
8/7/2012	1,2-Dichloropropane	<2.0	ppb
8/7/2012	1,3-dichlorobenzene	<2.0	ppb
8/7/2012	1,4-dichlorobenzene	<2.0	ppb
8/7/2012	Benzene	<2.0	ppb
8/7/2012	Bromodichloromethane	<2.0	ppb
8/7/2012	Bromomethane	<2.0	ppb
8/7/2012	Carbon Tetrachloride	<2.0	ppb
8/7/2012	Chlorobenzene	<2.0	ppb
8/7/2012	Chloroform	<2.0	ppb
8/7/2012	Chloromethane	<2.0	ppb
8/7/2012	cis-1,3-Dichloropropene	<2.0	ppb
8/7/2012	Dibromochloromethane	<2.0	ppb
8/7/2012	Ethylbenzene	<2.0	ppb
8/7/2012	Methylene Chloride	<2.0	ppb
8/7/2012	o- xylene	<2.0	ppb
8/7/2012	Tetrachlorethene	<2.0	ppb
8/7/2012	Toluene	<2.0	ppb
8/7/2012	Trans-1,2-Dichloroethene	<2.0	ppb
8/7/2012	Trans-1,3-Dichloropropene	<2.0	ppb
8/7/2012	Trichlorethene	<2.0	ppb
8/7/2012	Trichlorofluoromethane	<2.0	ppb
8/7/2012	Vinyl Chloride	<2.0	ppb
8/7/2012	p&m xylene	<4.0	ppb
8/7/2012	2-Chloroethylvinylether	<5.0	ppb
8/7/2012	Bromoform	<5.0	ppb
9/11/2012	Bromomethane	7.32	ppb
9/11/2012	Chloromethane	8.42	ppb
9/11/2012	1,1,1-Trichloroethane	<2.0	ppb
9/11/2012	1,1,2,2-Tetrachlorethene	<2.0	ppb
9/11/2012	1,1,2-Trichloroethane	<2.0	ppb
9/11/2012	1,1-Dichloroethane	<2.0	ppb
9/11/2012	1,1-Dichloroethene	<2.0	ppb
9/11/2012	1,2-dichlorobenzene	<2.0	ppb
9/11/2012	1,2-Dichloroethane	<2.0	ppb
9/11/2012	1,2-Dichloropropane	<2.0	ppb
9/11/2012	1,3-dichlorobenzene	<2.0	ppb
9/11/2012	1,4-dichlorobenzene	<2.0	ppb
9/11/2012	Benzene	<2.0	ppb
9/11/2012	Bromodichloromethane	<2.0	ppb
9/11/2012	Carbon Tetrachloride	<2.0	ppb
9/11/2012	Chlorobenzene	<2.0	ppb
9/11/2012	Chloroethane	<2.0	ppb
9/11/2012	Chloroform	<2.0	ppb
9/11/2012	cis-1,3-Dichloropropene	<2.0	ppb
9/11/2012	Dibromochloromethane	<2.0	ppb
9/11/2012	Ethylbenzene	<2.0	ppb
9/11/2012	Methylene Chloride	<2.0	ppb
9/11/2012	o- xylene	<2.0	ppb
9/11/2012	Tetrachlorethene	<2.0	ppb
9/11/2012	Toluene	<2.0	ppb
9/11/2012	Trans-1,2-Dichloroethene	<2.0	ppb
9/11/2012	Trans-1,3-Dichloropropene	<2.0	ppb
9/11/2012	Trichlorethene	<2.0	ppb
9/11/2012	Trichlorofluoromethane	<2.0	ppb
9/11/2012	Vinyl Chloride	<2.0	ppb

Table 24: EPA Priority Pollutants Data Field's Point

Field's Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
9/11/2012	2-Chloroethylvinylether	<5.0	ppb
9/11/2012	Bromoform	<5.0	ppb
10/3/2012	Chloroethane	3.11	ppb
10/3/2012	TTO	4.21	ppb
10/3/2012	Chloroform	4.21	ppb
10/3/2012	1,1,1-Trichloroethane	<2.0	ppb
10/3/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
10/3/2012	1,1,2-Trichloroethane	<2.0	ppb
10/3/2012	1,1-Dichloroethane	<2.0	ppb
10/3/2012	1,1-Dichloroethene	<2.0	ppb
10/3/2012	1,2-dichlorobenzene	<2.0	ppb
10/3/2012	1,2-Dichloroethane	<2.0	ppb
10/3/2012	1,2-Dichloropropane	<2.0	ppb
10/3/2012	1,3-dichlorobenzene	<2.0	ppb
10/3/2012	1,4-dichlorobenzene	<2.0	ppb
10/3/2012	Benzene	<2.0	ppb
10/3/2012	Bromodichloromethane	<2.0	ppb
10/3/2012	Bromomethane	<2.0	ppb
10/3/2012	Carbon Tetrachloride	<2.0	ppb
10/3/2012	Chlorobenzene	<2.0	ppb
10/3/2012	Chloromethane	<2.0	ppb
10/3/2012	cis-1,3-Dichloropropene	<2.0	ppb
10/3/2012	Dibromochloromethane	<2.0	ppb
10/3/2012	Ethylbenzene	<2.0	ppb
10/3/2012	Methylene Chloride	<2.0	ppb
10/3/2012	o- xylene	<2.0	ppb
10/3/2012	Tetrachlorethene	<2.0	ppb
10/3/2012	Toluene	<2.0	ppb
10/3/2012	Trans-1,2-Dichloroethene	<2.0	ppb
10/3/2012	Trans-1,3-Dichloropropene	<2.0	ppb
10/3/2012	Trichlorethene	<2.0	ppb
10/3/2012	Trichlorofluoromethane	<2.0	ppb
10/3/2012	Vinyl Chloride	<2.0	ppb
10/3/2012	p&m xylene	<4.0	ppb
10/3/2012	2-Chloroethylvinylether	<5.0	ppb
10/3/2012	Bromoform	<5.0	ppb
11/20/2012	Chloroform	3.09	ppb
11/20/2012	1,1,1-Trichloroethane	<2.0	ppb
11/20/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
11/20/2012	1,1,2-Trichloroethane	<2.0	ppb
11/20/2012	1,1-Dichloroethane	<2.0	ppb
11/20/2012	1,1-Dichloroethene	<2.0	ppb
11/20/2012	1,2-dichlorobenzene	<2.0	ppb
11/20/2012	1,2-Dichloroethane	<2.0	ppb
11/20/2012	1,2-Dichloropropane	<2.0	ppb
11/20/2012	1,3-dichlorobenzene	<2.0	ppb
11/20/2012	1,4-dichlorobenzene	<2.0	ppb
11/20/2012	Benzene	<2.0	ppb
11/20/2012	Bromodichloromethane	<2.0	ppb
11/20/2012	Bromomethane	<2.0	ppb
11/20/2012	Carbon Tetrachloride	<2.0	ppb
11/20/2012	Chlorobenzene	<2.0	ppb
11/20/2012	Chloroethane	<2.0	ppb
11/20/2012	Chloromethane	<2.0	ppb
11/20/2012	cis-1,3-Dichloropropene	<2.0	ppb
11/20/2012	Dibromochloromethane	<2.0	ppb
11/20/2012	Ethylbenzene	<2.0	ppb
11/20/2012	Methylene Chloride	<2.0	ppb
11/20/2012	o- xylene	<2.0	ppb

Field's Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
9/11/2012	p&m xylene	<4.0	ppb
9/11/2012	2-Chloroethylvinylether	<5.0	ppb
9/11/2012	Bromoform	<5.0	ppb
10/3/2012	Bromomethane	4.82	ppb
10/3/2012	Chloromethane	5.83	ppb
10/3/2012	TTO	10.65	ppb
10/3/2012	1,1,1-Trichloroethane	<2.0	ppb
10/3/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
10/3/2012	1,1,2-Trichloroethane	<2.0	ppb
10/3/2012	1,1-Dichloroethane	<2.0	ppb
10/3/2012	1,1-Dichloroethene	<2.0	ppb
10/3/2012	1,1-Dichloroethene	<2.0	ppb
10/3/2012	1,2-dichlorobenzene	<2.0	ppb
10/3/2012	1,2-Dichloroethane	<2.0	ppb
10/3/2012	1,2-Dichloropropane	<2.0	ppb
10/3/2012	1,3-dichlorobenzene	<2.0	ppb
10/3/2012	1,4-dichlorobenzene	<2.0	ppb
10/3/2012	Benzene	<2.0	ppb
10/3/2012	Bromodichloromethane	<2.0	ppb
10/3/2012	Carbon Tetrachloride	<2.0	ppb
10/3/2012	Chlorobenzene	<2.0	ppb
10/3/2012	Chloroethane	<2.0	ppb
10/3/2012	Chloroform	<2.0	ppb
10/3/2012	cis-1,3-Dichloropropene	<2.0	ppb
10/3/2012	Dibromochloromethane	<2.0	ppb
10/3/2012	Ethylbenzene	<2.0	ppb
10/3/2012	Methylene Chloride	<2.0	ppb
10/3/2012	o- xylene	<2.0	ppb
10/3/2012	Tetrachlorethene	<2.0	ppb
10/3/2012	Toluene	<2.0	ppb
10/3/2012	Trans-1,2-Dichloroethene	<2.0	ppb
10/3/2012	Trans-1,3-Dichloropropene	<2.0	ppb
10/3/2012	Trichlorethene	<2.0	ppb
10/3/2012	Trichlorofluoromethane	<2.0	ppb
10/3/2012	Vinyl Chloride	<2.0	ppb
10/3/2012	p&m xylene	<4.0	ppb
10/3/2012	2-Chloroethylvinylether	<5.0	ppb
10/3/2012	Bromoform	<5.0	ppb
11/20/2012	1,1,1-Trichloroethane	<2.0	ppb
11/20/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
11/20/2012	1,1,2-Trichloroethane	<2.0	ppb
11/20/2012	1,1-Dichloroethane	<2.0	ppb
11/20/2012	1,1-Dichloroethene	<2.0	ppb
11/20/2012	1,2-dichlorobenzene	<2.0	ppb
11/20/2012	1,2-Dichloroethane	<2.0	ppb
11/20/2012	1,2-Dichloropropane	<2.0	ppb
11/20/2012	1,3-dichlorobenzene	<2.0	ppb
11/20/2012	1,4-dichlorobenzene	<2.0	ppb
11/20/2012	Benzene	<2.0	ppb
11/20/2012	Bromodichloromethane	<2.0	ppb
11/20/2012	Bromomethane	<2.0	ppb
11/20/2012	Carbon Tetrachloride	<2.0	ppb
11/20/2012	Chlorobenzene	<2.0	ppb
11/20/2012	Chloroethane	<2.0	ppb
11/20/2012	Chloroform	<2.0	ppb
11/20/2012	Chloromethane	<2.0	ppb
11/20/2012	cis-1,3-Dichloropropene	<2.0	ppb
11/20/2012	Dibromochloromethane	<2.0	ppb
11/20/2012	Ethylbenzene	<2.0	ppb
11/20/2012	Methylene Chloride	<2.0	ppb

Table 24: EPA Priority Pollutants Data Field's Point

Field's Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
11/20/2012	Tetrachlorethene	<2.0	ppb
11/20/2012	Toluene	<2.0	ppb
11/20/2012	Trans-1,2-Dichloroethen	<2.0	ppb
11/20/2012	Trans-1,3-Dichloroprope	<2.0	ppb
11/20/2012	Trichlorethene	<2.0	ppb
11/20/2012	Trichlorofluoromethane	<2.0	ppb
11/20/2012	Vinyl Chloride	<2.0	ppb
11/20/2012	p&m xylene	<4.0	ppb
11/20/2012	2-Chloroethylvinylether	<5.0	ppb
11/20/2012	Bromoform	<5.0	ppb
12/4/2012	Toluene	2.25	ppb
12/4/2012	Chloroform	3.35	ppb
12/4/2012	1,1,1-Trichloroethane	<2.0	ppb
12/4/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
12/4/2012	1,1,2-Trichloroethane	<2.0	ppb
12/4/2012	1,1-Dichloroethane	<2.0	ppb
12/4/2012	1,1-Dichloroethene	<2.0	ppb
12/4/2012	1,2-dichlorobenzene	<2.0	ppb
12/4/2012	1,2-Dichloroethane	<2.0	ppb
12/4/2012	1,2-Dichloropropane	<2.0	ppb
12/4/2012	1,3-dichlorobenzene	<2.0	ppb
12/4/2012	1,4-dichlorobenzene	<2.0	ppb
12/4/2012	Benzene	<2.0	ppb
12/4/2012	Bromodichloromethane	<2.0	ppb
12/4/2012	Bromomethane	<2.0	ppb
12/4/2012	Carbon Tetrachloride	<2.0	ppb
12/4/2012	Chlorobenzene	<2.0	ppb
12/4/2012	Chloroethane	<2.0	ppb
12/4/2012	Chloromethane	<2.0	ppb
12/4/2012	cis-1,3-Dichloropropene	<2.0	ppb
12/4/2012	Dibromochloromethane	<2.0	ppb
12/4/2012	Ethylbenzene	<2.0	ppb
12/4/2012	Methylene Chloride	<2.0	ppb
12/4/2012	o- xylene	<2.0	ppb
12/4/2012	Tetrachlorethene	<2.0	ppb
12/4/2012	Trans-1,2-Dichloroethen	<2.0	ppb
12/4/2012	Trans-1,3-Dichloroprope	<2.0	ppb
12/4/2012	Trichlorethene	<2.0	ppb
12/4/2012	Trichlorofluoromethane	<2.0	ppb
12/4/2012	Vinyl Chloride	<2.0	ppb
12/4/2012	p&m xylene	<4.0	ppb
12/4/2012	2-Chloroethylvinylether	<5.0	ppb
12/4/2012	Bromoform	<5.0	ppb

Field's Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
11/20/2012	o- xylene	<2.0	ppb
11/20/2012	Tetrachlorethene	<2.0	ppb
11/20/2012	Toluene	<2.0	ppb
11/20/2012	Trans-1,2-Dichloroethen	<2.0	ppb
11/20/2012	Trans-1,3-Dichloroprope	<2.0	ppb
11/20/2012	Trichlorethene	<2.0	ppb
11/20/2012	Trichlorofluoromethane	<2.0	ppb
11/20/2012	Vinyl Chloride	<2.0	ppb
11/20/2012	p&m xylene	<4.0	ppb
11/20/2012	2-Chloroethylvinylether	<5.0	ppb
11/20/2012	Bromoform	<5.0	ppb
12/4/2012	1,1,1-Trichloroethane	<2.0	ppb
12/4/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
12/4/2012	1,1,2-Trichloroethane	<2.0	ppb
12/4/2012	1,1-Dichloroethane	<2.0	ppb
12/4/2012	1,1-Dichloroethene	<2.0	ppb
12/4/2012	1,2-dichlorobenzene	<2.0	ppb
12/4/2012	1,2-Dichloroethane	<2.0	ppb
12/4/2012	1,2-Dichloropropane	<2.0	ppb
12/4/2012	1,3-dichlorobenzene	<2.0	ppb
12/4/2012	1,4-dichlorobenzene	<2.0	ppb
12/4/2012	Benzene	<2.0	ppb
12/4/2012	Bromodichloromethane	<2.0	ppb
12/4/2012	Bromomethane	<2.0	ppb
12/4/2012	Carbon Tetrachloride	<2.0	ppb
12/4/2012	Chlorobenzene	<2.0	ppb
12/4/2012	Chloroethane	<2.0	ppb
12/4/2012	Chloroform	<2.0	ppb
12/4/2012	Chloromethane	<2.0	ppb
12/4/2012	cis-1,3-Dichloropropene	<2.0	ppb
12/4/2012	Dibromochloromethane	<2.0	ppb
12/4/2012	Ethylbenzene	<2.0	ppb
12/4/2012	Methylene Chloride	<2.0	ppb
12/4/2012	o- xylene	<2.0	ppb
12/4/2012	Tetrachlorethene	<2.0	ppb
12/4/2012	Toluene	<2.0	ppb
12/4/2012	Trans-1,2-Dichloroethen	<2.0	ppb
12/4/2012	Trans-1,3-Dichloroprope	<2.0	ppb
12/4/2012	Trichlorethene	<2.0	ppb
12/4/2012	Trichlorofluoromethane	<2.0	ppb
12/4/2012	Vinyl Chloride	<2.0	ppb
12/4/2012	p&m xylene	<4.0	ppb
12/4/2012	2-Chloroethylvinylether	<5.0	ppb
12/4/2012	Bromoform	<5.0	ppb

Table 24: EPA Priority Pollutants Data Field's Point

EPA Priority Pollutants Data Bucklin Point 2012

Bucklin Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
1/10/2012	1,1,1-Trichloroethane	<2.0	ppb
1/10/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
1/10/2012	1,1,2-Trichloroethane	<2.0	ppb
1/10/2012	1,1-Dichloroethane	<2.0	ppb
1/10/2012	1,1-Dichloroethene	<2.0	ppb
1/10/2012	1,2-Dichlorobenzene	<2.0	ppb
1/10/2012	1,2-Dichloroethane	<2.0	ppb
1/10/2012	1,2-Dichloropropane	<2.0	ppb
1/10/2012	1,3-Dichlorobenzene	<2.0	ppb
1/10/2012	1,4-Dichlorobenzene	<2.0	ppb
1/10/2012	2-Chloroethylvinylether	<5.0	ppb
1/10/2012	Benzene	<2.0	ppb
1/10/2012	Bromodichloromethane	<2.0	ppb
1/10/2012	Bromoform	<5.0	ppb
1/10/2012	Bromomethane	<2.0	ppb
1/10/2012	Carbon Tetrachloride	<2.0	ppb
1/10/2012	Chlorobenzene	<2.0	ppb
1/10/2012	Chloroethane	<2.0	ppb
1/10/2012	Chloroform	2.4	ppb
1/10/2012	Chloromethane	<2.0	ppb
1/10/2012	cis-1,3-Dichloropropene	<2.0	ppb
1/10/2012	Dibromochloromethane	<2.0	ppb
1/10/2012	Ethylbenzene	<2.0	ppb
1/10/2012	Methylene Chloride	<2.0	ppb
1/10/2012	o- xylene	<2.0	ppb
1/10/2012	p&m xylene	<4.0	ppb
1/10/2012	Tetrachlorethene	<2.0	ppb
1/10/2012	Toluene	11.78	ppb
1/10/2012	Trans-1,2-Dichloroethene	<2.0	ppb
1/10/2012	Trans-1,3-Dichloropropene	<2.0	ppb
1/10/2012	Trichlorethene	<2.0	ppb
1/10/2012	Trichlorofluoromethane	<2.0	ppb
1/10/2012	Vinyl Chloride	<2.0	ppb
1/10/2012	TTO	14.18	ppb
2/7/2012	1,1,1-Trichloroethane	<2.0	ppb
2/7/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
2/7/2012	1,1,2-Trichloroethane	<2.0	ppb
2/7/2012	1,1-Dichloroethane	<2.0	ppb
2/7/2012	1,1-Dichloroethene	<2.0	ppb
2/7/2012	1,1-Dichloroethene	<2.0	ppb
2/7/2012	1,2-Dichlorobenzene	<2.0	ppb
2/7/2012	1,2-Dichloroethane	<2.0	ppb
2/7/2012	1,2-Dichloropropane	<2.0	ppb
2/7/2012	1,3-Dichlorobenzene	<2.0	ppb
2/7/2012	1,4-Dichlorobenzene	<2.0	ppb
2/7/2012	2-Chloroethylvinylether	<5.0	ppb
2/7/2012	Benzene	<2.0	ppb
2/7/2012	Bromodichloromethane	<2.0	ppb
2/7/2012	Bromoform	<5.0	ppb
2/7/2012	Bromomethane	<2.0	ppb
2/7/2012	Carbon Tetrachloride	<2.0	ppb
2/7/2012	Chlorobenzene	<2.0	ppb
2/7/2012	Chloroethane	<2.0	ppb
2/7/2012	Chloroform	<2.0	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
1/10/2012	1,1,1-Trichloroethane	<2.0	ppb
1/10/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
1/10/2012	1,1,2-Trichloroethane	<2.0	ppb
1/10/2012	1,1-Dichloroethane	<2.0	ppb
1/10/2012	1,1-Dichloroethene	<2.0	ppb
1/10/2012	1,2-Dichlorobenzene	<2.0	ppb
1/10/2012	1,2-Dichloroethane	<2.0	ppb
1/10/2012	1,2-Dichloropropane	<2.0	ppb
1/10/2012	1,3-Dichlorobenzene	<2.0	ppb
1/10/2012	1,4-Dichlorobenzene	<2.0	ppb
1/10/2012	Benzene	<2.0	ppb
1/10/2012	Bromodichloromethane	<2.0	ppb
1/10/2012	Bromomethane	<2.0	ppb
1/10/2012	Carbon Tetrachloride	<2.0	ppb
1/10/2012	Chlorobenzene	<2.0	ppb
1/10/2012	Chloroethane	<2.0	ppb
1/10/2012	Chloroform	<2.0	ppb
1/10/2012	Chloromethane	<2.0	ppb
1/10/2012	cis-1,3-Dichloropropene	<2.0	ppb
1/10/2012	Dibromochloromethane	<2.0	ppb
1/10/2012	Ethylbenzene	<2.0	ppb
1/10/2012	Methylene Chloride	<2.0	ppb
1/10/2012	o- xylene	<2.0	ppb
1/10/2012	Tetrachlorethene	<2.0	ppb
1/10/2012	Toluene	<2.0	ppb
1/10/2012	Trans-1,2-Dichloroethene	<2.0	ppb
1/10/2012	Trans-1,3-Dichloropropene	<2.0	ppb
1/10/2012	Trichlorethene	<2.0	ppb
1/10/2012	Trichlorofluoromethane	<2.0	ppb
1/10/2012	Vinyl Chloride	<2.0	ppb
1/10/2012	p&m xylene	<4.0	ppb
1/10/2012	2-Chloroethylvinylether	<5.0	ppb
1/10/2012	Bromoform	<5.0	ppb
2/7/2012	1,1,1-Trichloroethane	<2.0	ppb
2/7/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
2/7/2012	1,1,2-Trichloroethane	<2.0	ppb
2/7/2012	1,1-Dichloroethane	<2.0	ppb
2/7/2012	1,1-Dichloroethene	<2.0	ppb
2/7/2012	1,2-Dichlorobenzene	<2.0	ppb
2/7/2012	1,2-Dichloroethane	<2.0	ppb
2/7/2012	1,2-Dichloropropane	<2.0	ppb
2/7/2012	1,3-Dichlorobenzene	<2.0	ppb
2/7/2012	1,4-Dichlorobenzene	<2.0	ppb
2/7/2012	Benzene	<2.0	ppb
2/7/2012	Bromodichloromethane	<2.0	ppb
2/7/2012	Bromomethane	<2.0	ppb
2/7/2012	Carbon Tetrachloride	<2.0	ppb
2/7/2012	Chlorobenzene	<2.0	ppb
2/7/2012	Chloroethane	<2.0	ppb
2/7/2012	Chloroform	<2.0	ppb

Table 25: EPA Priority Pollutants Data Bucklin Point

EPA Priority Pollutants Data Bucklin Point 2012

Bucklin Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
3/6/2012	Vinyl Chloride	<2.0	ppb
4/3/2012	1,1,1-Trichloroethane	<2.0	ppb
4/3/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
4/3/2012	1,1,2-Trichloroethane	<2.0	ppb
4/3/2012	1,1-Dichloroethane	<2.0	ppb
4/3/2012	1,1-Dichloroethene	<2.0	ppb
4/3/2012	1,2-Dichlorobenzene	<2.0	ppb
4/3/2012	1,2-Dichloroethane	<2.0	ppb
4/3/2012	1,2-Dichloropropane	<2.0	ppb
4/3/2012	1,3-Dichlorobenzene	<2.0	ppb
4/3/2012	1,4-Dichlorobenzene	<2.0	ppb
4/3/2012	2-Chloroethylvinylether	<5.0	ppb
4/3/2012	Benzene	<2.0	ppb
4/3/2012	Bromodichloromethane	<2.0	ppb
4/3/2012	Bromoform	<5.0	ppb
4/3/2012	Bromomethane	<2.0	ppb
4/3/2012	Carbon Tetrachloride	<2.0	ppb
4/3/2012	Chlorobenzene	<2.0	ppb
4/3/2012	Chloroethane	<2.0	ppb
4/3/2012	Chloroform	3.22	ppb
4/3/2012	Chloromethane	<2.0	ppb
4/3/2012	cis-1,3-Dichloropropene	<2.0	ppb
4/3/2012	Dibromochloromethane	<2.0	ppb
4/3/2012	Ethylbenzene	<2.0	ppb
4/3/2012	Methylene Chloride	<2.0	ppb
4/3/2012	o- xylene	<2.0	ppb
4/3/2012	p&m xylene	<4.0	ppb
4/3/2012	Tetrachlorethene	3.01	ppb
4/3/2012	Toluene	2.46	ppb
4/3/2012	Trans-1,2-Dichloroethene	<2.0	ppb
4/3/2012	Trans-1,3-Dichloropropene	<2.0	ppb
4/3/2012	Trichlorethene	<2.0	ppb
4/3/2012	Trichlorofluoromethane	<2.0	ppb
4/3/2012	Vinyl Chloride	<2.0	ppb
4/3/2012	TTO	8.69	ppb
5/8/2012	1,1,1-Trichloroethane	<2.00	ppb
5/8/2012	1,1,2,2-Tetrachlorethane	<2.00	ppb
5/8/2012	1,1,2-Trichloroethane	<2.00	ppb
5/8/2012	1,1-Dichloroethane	<2.00	ppb
5/8/2012	1,1-Dichloroethene	<2.00	ppb
5/8/2012	1,2-Dichlorobenzene	<2.00	ppb
5/8/2012	1,2-Dichloroethane	<2.00	ppb
5/8/2012	1,2-Dichloropropane	<2.00	ppb
5/8/2012	1,3-Dichlorobenzene	<2.00	ppb
5/8/2012	1,4-Dichlorobenzene	<2.00	ppb
5/8/2012	2-Chloroethylvinylether	<5	ppb
5/8/2012	Benzene	<2.00	ppb
5/8/2012	Bromodichloromethane	<2.00	ppb
5/8/2012	Bromoform	<5.00	ppb
5/8/2012	Bromomethane	<2.00	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
4/3/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
4/3/2012	1,1,2-Trichloroethane	<2.0	ppb
4/3/2012	1,1-Dichloroethane	<2.0	ppb
4/3/2012	1,1-Dichloroethene	<2.0	ppb
4/3/2012	1,2-Dichlorobenzene	<2.0	ppb
4/3/2012	1,2-Dichloroethane	<2.0	ppb
4/3/2012	1,2-Dichloropropane	<2.0	ppb
4/3/2012	1,3-Dichlorobenzene	<2.0	ppb
4/3/2012	1,4-Dichlorobenzene	<2.0	ppb
4/3/2012	Benzene	<2.0	ppb
4/3/2012	Bromodichloromethane	<2.0	ppb
4/3/2012	Bromomethane	<2.0	ppb
4/3/2012	Carbon Tetrachloride	<2.0	ppb
4/3/2012	Chlorobenzene	<2.0	ppb
4/3/2012	Chloroethane	<2.0	ppb
4/3/2012	Chloroform	<2.0	ppb
4/3/2012	Chloromethane	<2.0	ppb
4/3/2012	cis-1,3-Dichloropropene	<2.0	ppb
4/3/2012	Dibromochloromethane	<2.0	ppb
4/3/2012	Ethylbenzene	<2.0	ppb
4/3/2012	Methylene Chloride	<2.0	ppb
4/3/2012	o- xylene	<2.0	ppb
4/3/2012	Tetrachlorethene	<2.0	ppb
4/3/2012	Toluene	<2.0	ppb
4/3/2012	Trans-1,2-Dichloroethene	<2.0	ppb
4/3/2012	Trans-1,3-Dichloropropene	<2.0	ppb
4/3/2012	Trichlorethene	<2.0	ppb
4/3/2012	Trichlorofluoromethane	<2.0	ppb
4/3/2012	Vinyl Chloride	<2.0	ppb
4/3/2012	p&m xylene	<4.0	ppb
4/3/2012	2-Chloroethylvinylether	<5.0	ppb
4/3/2012	Bromoform	<5.0	ppb
5/8/2012	Chloroform	3.6	ppb
5/8/2012	Trichlorofluoromethane	<2	ppb
5/8/2012	1,1-Dichloroethane	<2.00	ppb
5/8/2012	1,1-Dichloroethene	<2.00	ppb
5/8/2012	1,2-Dichlorobenzene	<2.00	ppb
5/8/2012	1,2-Dichloroethane	<2.00	ppb
5/8/2012	1,2-Dichloropropane	<2.00	ppb
5/8/2012	1,3-Dichlorobenzene	<2.00	ppb
5/8/2012	1,4-Dichlorobenzene	<2.00	ppb
5/8/2012	111-Trichloroethane	<2.00	ppb
5/8/2012	1122Tetrachlorethane	<2.00	ppb
5/8/2012	112-Trichloroethane	<2.00	ppb
5/8/2012	Benzene	<2.00	ppb
5/8/2012	Bromodichloromethane	<2.00	ppb
5/8/2012	Bromomethane	<2.00	ppb
5/8/2012	CarbonTetrachloride	<2.00	ppb
5/8/2012	Chlorobenzene	<2.00	ppb
5/8/2012	Chloroethane	<2.00	ppb

Table 25: EPA Priority Pollutants Data Bucklin Point

EPA Priority Pollutants Data Bucklin Point 2012

Bucklin Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
5/8/2012	Carbon Tetrachloride	<2.00	ppb
5/8/2012	Chlorobenzene	<2.00	ppb
5/8/2012	Chloroethane	<2.00	ppb
5/8/2012	Chloroform	6.2	ppb
5/8/2012	Chloromethane	<2.00	ppb
5/8/2012	cis-1,3-Dichloropropene	<2.00	ppb
5/8/2012	Dibromochloromethane	<2.00	ppb
5/8/2012	Ethylbenzene	<2.00	ppb
5/8/2012	Methylene Chloride	<2.00	ppb
5/8/2012	o- xylene	<2.00	ppb
5/8/2012	p&m xylene	<4.00	ppb
5/8/2012	Tetrachlorethene	2.96	ppb
5/8/2012	Toluene	2.3	ppb
5/8/2012	Trans-1,2-Dichloroethene	<2.00	ppb
5/8/2012	Trans-1,3-Dichloropropene	<2.00	ppb
5/8/2012	Trichlorethene	<2.00	ppb
5/8/2012	Trichlorofluoromethane	<2	ppb
5/8/2012	Vinyl Chloride	<2.00	ppb
6/5/2012	1,1,1-Trichloroethane	<2.00	ppb
6/5/2012	1,1,2,2-Tetrachlorethene	<2.00	ppb
6/5/2012	1,1,2-Trichloroethane	<2.00	ppb
6/5/2012	1,1-Dichloroethane	<2.00	ppb
6/5/2012	1,1-Dichloroethene	<2.00	ppb
6/5/2012	1,2-Dichlorobenzene	3.19	ppb
6/5/2012	1,2-Dichloroethane	<2.00	ppb
6/5/2012	1,2-Dichloropropane	<2.00	ppb
6/5/2012	1,3-Dichlorobenzene	<2.00	ppb
6/5/2012	1,4-Dichlorobenzene	<2.00	ppb
6/5/2012	2-Chloroethylvinylether	<5	ppb
6/5/2012	Benzene	<2.00	ppb
6/5/2012	Bromodichloromethane	<2.00	ppb
6/5/2012	Bromoform	<5.00	ppb
6/5/2012	Bromomethane	<2.00	ppb
6/5/2012	Carbon Tetrachloride	<2.00	ppb
6/5/2012	Chlorobenzene	<2.00	ppb
6/5/2012	Chloroethane	<2.00	ppb
6/5/2012	Chloroform	4.74	ppb
6/5/2012	Chloromethane	<2.00	ppb
6/5/2012	cis-1,3-Dichloropropene	<2.00	ppb
6/5/2012	Dibromochloromethane	<2.00	ppb
6/5/2012	Ethylbenzene	<2.00	ppb
6/5/2012	Methylene Chloride	2.25	ppb
6/5/2012	o- xylene	<2.00	ppb
6/5/2012	p&m xylene	<4.00	ppb
6/5/2012	Tetrachlorethene	55.56	ppb
6/5/2012	Toluene	2.46	ppb
6/5/2012	Trans-1,2-Dichloroethene	<2.00	ppb
6/5/2012	Trans-1,3-Dichloropropene	<2.00	ppb
6/5/2012	Trichlorethene	<2.00	ppb
6/5/2012	Trichlorofluoromethane	<2	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
5/8/2012	Chloromethane	<2.00	ppb
5/8/2012	cis13Dichloropropene	<2.00	ppb
5/8/2012	Dibromochloromethane	<2.00	ppb
5/8/2012	Ethylbenzene	<2.00	ppb
5/8/2012	Methylene Chloride	<2.00	ppb
5/8/2012	o-xylene	<2.00	ppb
5/8/2012	T-1,2-Dichloroethene	<2.00	ppb
5/8/2012	T-13-Dichloropropene	<2.00	ppb
5/8/2012	Tetrachlorethene	<2.00	ppb
5/8/2012	Toluene	<2.00	ppb
5/8/2012	Trichlorethene	<2.00	ppb
5/8/2012	Vinyl Chloride	<2.00	ppb
5/8/2012	p-m xylene	<4.00	ppb
5/8/2012	2chloroethylvinyleth	<5	ppb
5/8/2012	Bromoform	<5.00	ppb
6/5/2012	Tetrachlorethene	2.73	ppb
6/5/2012	12-Dichloroethane-d4	100.56	ppb
6/5/2012	Toluene-d8	101.58	ppb
6/5/2012	Trichlorofluorometha	<2	ppb
6/5/2012	111-Trichloroethane	<2.00	ppb
6/5/2012	1122Tetrachlorethane	<2.00	ppb
6/5/2012	112-Trichloroethane	<2.00	ppb
6/5/2012	1,1-Dichloroethane	<2.00	ppb
6/5/2012	1,1-Dichloroethene	<2.00	ppb
6/5/2012	1,2-Dichlorobenzene	<2.00	ppb
6/5/2012	1,2-Dichloroethane	<2.00	ppb
6/5/2012	1,2-Dichloropropane	<2.00	ppb
6/5/2012	1,3-Dichlorobenzene	<2.00	ppb
6/5/2012	1,4-Dichlorobenzene	<2.00	ppb
6/5/2012	Benzene	<2.00	ppb
6/5/2012	Bromodichloromethane	<2.00	ppb
6/5/2012	Bromomethane	<2.00	ppb
6/5/2012	CarbonTetrachloride	<2.00	ppb
6/5/2012	Chlorobenzene	<2.00	ppb
6/5/2012	Chloroethane	<2.00	ppb
6/5/2012	Chloroform	<2.00	ppb
6/5/2012	Chloromethane	<2.00	ppb
6/5/2012	cis13Dichloropropene	<2.00	ppb
6/5/2012	Dibromochloromethane	<2.00	ppb
6/5/2012	Ethylbenzene	<2.00	ppb
6/5/2012	Methylene Chloride	<2.00	ppb
6/5/2012	o-xylene	<2.00	ppb
6/5/2012	Toluene	<2.00	ppb
6/5/2012	T-1,2-Dichloroethene	<2.00	ppb
6/5/2012	T-13-Dichloropropene	<2.00	ppb
6/5/2012	Trichlorethene	<2.00	ppb
6/5/2012	Vinyl Chloride	<2.00	ppb
6/5/2012	p-m xylene	<4.00	ppb
6/5/2012	2chloroethylvinyleth	<5	ppb
6/5/2012	Bromoform	<5.00	ppb

Table 25: EPA Priority Pollutants Data Bucklin Point

EPA Priority Pollutants Data Bucklin Point 2012

Bucklin Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
6/5/2012	Vinyl Chloride	<2.00	ppb
6/5/2012	TTO	68.2	ppb
7/10/2012	1,1,1-Trichloroethane	<2.0	ppb
7/10/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
7/10/2012	1,1,2-Trichloroethane	<2.0	ppb
7/10/2012	1,1-Dichloroethane	<2.0	ppb
7/10/2012	1,1-Dichloroethene	<2.0	ppb
7/10/2012	1,2-Dichlorobenzene	<2.0	ppb
7/10/2012	1,2-Dichloroethane	<2.0	ppb
7/10/2012	1,2-Dichloropropane	<2.0	ppb
7/10/2012	1,3-Dichlorobenzene	<2.0	ppb
7/10/2012	1,4-Dichlorobenzene	<2.0	ppb
7/10/2012	2-Chloroethylvinylether	<5.0	ppb
7/10/2012	Benzene	<2.0	ppb
7/10/2012	Bromodichloromethane	<2.0	ppb
7/10/2012	Bromoform	<5.0	ppb
7/10/2012	Bromomethane	<2.0	ppb
7/10/2012	Carbon Tetrachloride	<2.0	ppb
7/10/2012	Chlorobenzene	<2.0	ppb
7/10/2012	Chloroethane	<2.0	ppb
7/10/2012	Chloroform	2.33	ppb
7/10/2012	Chloromethane	<2.0	ppb
7/10/2012	cis-1,3-Dichloropropene	<2.0	ppb
7/10/2012	Dibromochloromethane	<2.0	ppb
7/10/2012	Ethylbenzene	<2.0	ppb
7/10/2012	Methylene Chloride	<2.0	ppb
7/10/2012	o- xylene	<2.0	ppb
7/10/2012	p&m xylene	<4.0	ppb
7/10/2012	Tetrachlorethene	<2.0	ppb
7/10/2012	Toluene	<2.0	ppb
7/10/2012	Trans-1,2-Dichloroethene	<2.0	ppb
7/10/2012	Trans-1,3-Dichloropropene	<2.0	ppb
7/10/2012	Trichlorethene	<2.0	ppb
7/10/2012	Trichlorofluoromethane	<2.0	ppb
7/10/2012	Vinyl Chloride	<2.0	ppb
8/7/2012	1,1,1-Trichloroethane	<2.0	ppb
8/7/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
8/7/2012	1,1,2-Trichloroethane	<2.0	ppb
8/7/2012	1,1-Dichloroethane	<2.0	ppb
8/7/2012	1,1-Dichloroethene	<2.0	ppb
8/7/2012	1,2-Dichlorobenzene	<2.0	ppb
8/7/2012	1,2-Dichloroethane	<2.0	ppb
8/7/2012	1,2-Dichloropropane	<2.0	ppb
8/7/2012	1,3-Dichlorobenzene	<2.0	ppb
8/7/2012	1,4-Dichlorobenzene	<2.0	ppb
8/7/2012	2-Chloroethylvinylether	<5.0	ppb
8/7/2012	Benzene	<2.0	ppb
8/7/2012	Bromodichloromethane	<2.0	ppb
8/7/2012	Bromoform	<5.0	ppb
8/7/2012	Bromomethane	<2.0	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
6/5/2012	Bromofluorobenzene	99.44	ppb
7/10/2012	Toluene	3.64	ppb
7/10/2012	Chloroform	4.14	ppb
7/10/2012	Bromofluorobenzene	107.1	ppb
7/10/2012	1,1,1-Trichloroethane	<2.0	ppb
7/10/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
7/10/2012	1,1,2-Trichloroethane	<2.0	ppb
7/10/2012	1,1-Dichloroethane	<2.0	ppb
7/10/2012	1,1-Dichloroethene	<2.0	ppb
7/10/2012	1,2-dichlorobenzene	<2.0	ppb
7/10/2012	1,2-Dichloroethane	<2.0	ppb
7/10/2012	1,2-Dichloropropane	<2.0	ppb
7/10/2012	1,3-dichlorobenzene	<2.0	ppb
7/10/2012	1,4-dichlorobenzene	<2.0	ppb
7/10/2012	Benzene	<2.0	ppb
7/10/2012	Bromodichloromethane	<2.0	ppb
7/10/2012	Bromomethane	<2.0	ppb
7/10/2012	Carbon Tetrachloride	<2.0	ppb
7/10/2012	Chlorobenzene	<2.0	ppb
7/10/2012	Chloroethane	<2.0	ppb
7/10/2012	Chloromethane	<2.0	ppb
7/10/2012	cis-1,3-Dichloropropene	<2.0	ppb
7/10/2012	Dibromochloromethane	<2.0	ppb
7/10/2012	Ethylbenzene	<2.0	ppb
7/10/2012	Methylene Chloride	<2.0	ppb
7/10/2012	o- xylene	<2.0	ppb
7/10/2012	Tetrachlorethene	<2.0	ppb
7/10/2012	Trans-1,2-Dichloroethene	<2.0	ppb
7/10/2012	Trans-1,3-Dichloropropene	<2.0	ppb
7/10/2012	Trichlorethene	<2.0	ppb
7/10/2012	Trichlorofluoromethane	<2.0	ppb
7/10/2012	Vinyl Chloride	<2.0	ppb
7/10/2012	p&m xylene	<4.0	ppb
7/10/2012	2-Chloroethylvinylether	<5.0	ppb
7/10/2012	Bromoform	<5.0	ppb
8/7/2012	1,1,1-Trichloroethane	<2.0	ppb
8/7/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
8/7/2012	1,1,2-Trichloroethane	<2.0	ppb
8/7/2012	1,1-Dichloroethane	<2.0	ppb
8/7/2012	1,1-Dichloroethene	<2.0	ppb
8/7/2012	1,2-dichlorobenzene	<2.0	ppb
8/7/2012	1,2-Dichloroethane	<2.0	ppb
8/7/2012	1,2-Dichloropropane	<2.0	ppb
8/7/2012	1,3-dichlorobenzene	<2.0	ppb
8/7/2012	1,4-dichlorobenzene	<2.0	ppb
8/7/2012	Benzene	<2.0	ppb
8/7/2012	Bromodichloromethane	<2.0	ppb
8/7/2012	Bromomethane	<2.0	ppb
8/7/2012	Carbon Tetrachloride	<2.0	ppb
8/7/2012	Chlorobenzene	<2.0	ppb

Table 25: EPA Priority Pollutants Data Bucklin Point

EPA Priority Pollutants Data Bucklin Point 2012

Bucklin Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
8/7/2012	Carbon Tetrachloride	<2.0	ppb
8/7/2012	Chlorobenzene	<2.0	ppb
8/7/2012	Chloroethane	<2.0	ppb
8/7/2012	Chloroform	3.64	ppb
8/7/2012	Chloromethane	<2.0	ppb
8/7/2012	cis-1,3-Dichloropropene	<2.0	ppb
8/7/2012	Dibromochloromethane	<2.0	ppb
8/7/2012	Ethylbenzene	<2.0	ppb
8/7/2012	Methylene Chloride	<2.0	ppb
8/7/2012	o- xylene	<2.0	ppb
8/7/2012	p&m xylene	<4.0	ppb
8/7/2012	Tetrachlorethene	<2.0	ppb
8/7/2012	Toluene	2.38	ppb
8/7/2012	Trans-1,2-Dichloroethene	<2.0	ppb
8/7/2012	Trans-1,3-Dichloropropene	<2.0	ppb
8/7/2012	Trichlorethene	<2.0	ppb
8/7/2012	Trichlorofluoromethane	<2.0	ppb
8/7/2012	Vinyl Chloride	<2.0	ppb
9/11/2012	1,1,1-Trichloroethane	<2.0	ppb
9/11/2012	1,1,2,2-Tetrachlorethene	<2.0	ppb
9/11/2012	1,1,2-Trichloroethane	<2.0	ppb
9/11/2012	1,1-Dichloroethane	<2.0	ppb
9/11/2012	1,1-Dichloroethene	<2.0	ppb
9/11/2012	1,2-Dichlorobenzene	<2.0	ppb
9/11/2012	1,2-Dichloroethane	<2.0	ppb
9/11/2012	1,2-Dichloropropane	<2.0	ppb
9/11/2012	1,3-Dichlorobenzene	<2.0	ppb
9/11/2012	1,4-Dichlorobenzene	<2.0	ppb
9/11/2012	2-Chloroethylvinylether	<5.0	ppb
9/11/2012	Benzene	<2.0	ppb
9/11/2012	Bromodichloromethane	<2.0	ppb
9/11/2012	Bromoform	<5.0	ppb
9/11/2012	Bromomethane	<2.0	ppb
9/11/2012	Carbon Tetrachloride	<2.0	ppb
9/11/2012	Chlorobenzene	<2.0	ppb
9/11/2012	Chloroethane	<2.0	ppb
9/11/2012	Chloroform	2.74	ppb
9/11/2012	Chloromethane	<2.0	ppb
9/11/2012	cis-1,3-Dichloropropene	<2.0	ppb
9/11/2012	Dibromochloromethane	<2.0	ppb
9/11/2012	Ethylbenzene	<2.0	ppb
9/11/2012	Methylene Chloride	<2.0	ppb
9/11/2012	o- xylene	<2.0	ppb
9/11/2012	p&m xylene	<4.0	ppb
9/11/2012	Tetrachlorethene	<2.0	ppb
9/11/2012	Toluene	<2.0	ppb
9/11/2012	Trans-1,2-Dichloroethene	<2.0	ppb
9/11/2012	Trans-1,3-Dichloropropene	<2.0	ppb
9/11/2012	Trichlorethene	<2.0	ppb
9/11/2012	Trichlorofluoromethane	<2.0	ppb
9/11/2012	Vinyl Chloride	<2.0	ppb
9/11/2012	p&m xylene	<4.0	ppb
9/11/2012	Trichlorofluoromethane	<2.0	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
8/7/2012	Chloroethane	<2.0	ppb
8/7/2012	Chloroform	<2.0	ppb
8/7/2012	Chloromethane	<2.0	ppb
8/7/2012	cis-1,3-Dichloropropene	<2.0	ppb
8/7/2012	Dibromochloromethane	<2.0	ppb
8/7/2012	Ethylbenzene	<2.0	ppb
8/7/2012	Methylene Chloride	<2.0	ppb
8/7/2012	o- xylene	<2.0	ppb
8/7/2012	Tetrachlorethene	<2.0	ppb
8/7/2012	Toluene	<2.0	ppb
8/7/2012	Trans-1,2-Dichloroethene	<2.0	ppb
8/7/2012	Trans-1,3-Dichloropropene	<2.0	ppb
8/7/2012	Trichlorethene	<2.0	ppb
8/7/2012	Trichlorofluoromethane	<2.0	ppb
8/7/2012	Vinyl Chloride	<2.0	ppb
8/7/2012	p&m xylene	<4.0	ppb
8/7/2012	2-Chloroethylvinylether	<5.0	ppb
8/7/2012	Bromoform	<5.0	ppb
9/11/2012	1,1,1-Trichloroethane	<2.0	ppb
9/11/2012	1,1,2,2-Tetrachlorethene	<2.0	ppb
9/11/2012	1,1,2-Trichloroethane	<2.0	ppb
9/11/2012	1,1-Dichloroethane	<2.0	ppb
9/11/2012	1,1-Dichloroethene	<2.0	ppb
9/11/2012	1,2-dichlorobenzene	<2.0	ppb
9/11/2012	1,2-Dichloroethane	<2.0	ppb
9/11/2012	1,2-Dichloropropane	<2.0	ppb
9/11/2012	1,3-dichlorobenzene	<2.0	ppb
9/11/2012	1,4-dichlorobenzene	<2.0	ppb
9/11/2012	Benzene	<2.0	ppb
9/11/2012	Bromodichloromethane	<2.0	ppb
9/11/2012	Bromomethane	<2.0	ppb
9/11/2012	Carbon Tetrachloride	<2.0	ppb
9/11/2012	Chlorobenzene	<2.0	ppb
9/11/2012	Chloroethane	<2.0	ppb
9/11/2012	Chloroform	<2.0	ppb
9/11/2012	Chloromethane	<2.0	ppb
9/11/2012	cis-1,3-Dichloropropene	<2.0	ppb
9/11/2012	Dibromochloromethane	<2.0	ppb
9/11/2012	Ethylbenzene	<2.0	ppb
9/11/2012	Methylene Chloride	<2.0	ppb
9/11/2012	o- xylene	<2.0	ppb
9/11/2012	Tetrachlorethene	<2.0	ppb
9/11/2012	Toluene	<2.0	ppb
9/11/2012	Trans-1,2-Dichloroethene	<2.0	ppb
9/11/2012	Trans-1,3-Dichloropropene	<2.0	ppb
9/11/2012	Trichlorethene	<2.0	ppb
9/11/2012	Trichlorofluoromethane	<2.0	ppb
9/11/2012	Vinyl Chloride	<2.0	ppb
9/11/2012	p&m xylene	<4.0	ppb
9/11/2012	2-Chloroethylvinylether	<5.0	ppb

Table 25: EPA Priority Pollutants Data Bucklin Point

EPA Priority Pollutants Data Bucklin Point 2012

Bucklin Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
9/11/2012	Vinyl Chloride	<2.0	ppb
10/2/2012	1,1,1-Trichloroethane	<2.0	ppb
10/2/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
10/2/2012	1,1,2-Trichloroethane	<2.0	ppb
10/2/2012	1,1-Dichloroethane	<2.0	ppb
10/2/2012	1,1-Dichloroethene	<2.0	ppb
10/2/2012	1,2-Dichlorobenzene	<2.0	ppb
10/2/2012	1,2-Dichloroethane	<2.0	ppb
10/2/2012	1,2-Dichloropropane	<2.0	ppb
10/2/2012	1,3-Dichlorobenzene	<2.0	ppb
10/2/2012	1,4-Dichlorobenzene	<2.0	ppb
10/2/2012	2-Chloroethylvinylether	<5.0	ppb
10/2/2012	Benzene	<2.0	ppb
10/2/2012	Bromodichloromethane	<2.0	ppb
10/2/2012	Bromoform	<5.0	ppb
10/2/2012	Bromomethane	<2.0	ppb
10/2/2012	Carbon Tetrachloride	<2.0	ppb
10/2/2012	Chlorobenzene	<2.0	ppb
10/2/2012	Chloroethane	<2.0	ppb
10/2/2012	Chloroform	2.79	ppb
10/2/2012	Chloromethane	<2.0	ppb
10/2/2012	cis-1,3-Dichloropropene	<2.0	ppb
10/2/2012	Dibromochloromethane	<2.0	ppb
10/2/2012	Ethylbenzene	<2.0	ppb
10/2/2012	Methylene Chloride	<2.0	ppb
10/2/2012	o- xylene	<2.0	ppb
10/2/2012	p&m xylene	<4.0	ppb
10/2/2012	Tetrachlorethane	<2.0	ppb
10/2/2012	Toluene	<2.0	ppb
10/2/2012	Trans-1,2-Dichloroethene	<2.0	ppb
10/2/2012	Trans-1,3-Dichloropropene	<2.0	ppb
10/2/2012	Trichlorethane	<2.0	ppb
10/2/2012	Trichlorofluoromethane	<2.0	ppb
10/2/2012	Vinyl Chloride	<2.0	ppb
11/20/2012	1,1,1-Trichloroethane	<2.0	ppb
11/20/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
11/20/2012	1,1,2-Trichloroethane	<2.0	ppb
11/20/2012	1,1-Dichloroethane	<2.0	ppb
11/20/2012	1,1-Dichloroethene	<2.0	ppb
11/20/2012	1,2-Dichlorobenzene	<2.0	ppb
11/20/2012	1,2-Dichloroethane	<2.0	ppb
11/20/2012	1,2-Dichloropropane	<2.0	ppb
11/20/2012	1,3-Dichlorobenzene	<2.0	ppb
11/20/2012	1,4-Dichlorobenzene	<2.0	ppb
11/20/2012	2-Chloroethylvinylether	<5.0	ppb
11/20/2012	Benzene	<2.0	ppb
11/20/2012	Bromodichloromethane	<2.0	ppb
11/20/2012	Bromoform	<5.0	ppb
11/20/2012	Bromomethane	<2.0	ppb
11/20/2012	Carbon Tetrachloride	<2.0	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
9/11/2012	Bromoform	<5.0	ppb
10/2/2012	1,1,1-Trichloroethane	<2.0	ppb
10/2/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
10/2/2012	1,1,2-Trichloroethane	<2.0	ppb
10/2/2012	1,1-Dichloroethane	<2.0	ppb
10/2/2012	1,1-Dichloroethene	<2.0	ppb
10/2/2012	1,2-dichlorobenzene	<2.0	ppb
10/2/2012	1,2-Dichloroethane	<2.0	ppb
10/2/2012	1,2-Dichloropropane	<2.0	ppb
10/2/2012	1,3-dichlorobenzene	<2.0	ppb
10/2/2012	1,4-dichlorobenzene	<2.0	ppb
10/2/2012	Benzene	<2.0	ppb
10/2/2012	Bromodichloromethane	<2.0	ppb
10/2/2012	Bromomethane	<2.0	ppb
10/2/2012	Carbon Tetrachloride	<2.0	ppb
10/2/2012	Chlorobenzene	<2.0	ppb
10/2/2012	Chloroethane	<2.0	ppb
10/2/2012	Chloroform	<2.0	ppb
10/2/2012	Chloromethane	<2.0	ppb
10/2/2012	cis-1,3-Dichloropropene	<2.0	ppb
10/2/2012	Dibromochloromethane	<2.0	ppb
10/2/2012	Ethylbenzene	<2.0	ppb
10/2/2012	Methylene Chloride	<2.0	ppb
10/2/2012	o- xylene	<2.0	ppb
10/2/2012	Tetrachlorethane	<2.0	ppb
10/2/2012	Toluene	<2.0	ppb
10/2/2012	Trans-1,2-Dichloroethene	<2.0	ppb
10/2/2012	Trans-1,3-Dichloropropene	<2.0	ppb
10/2/2012	Trichlorethane	<2.0	ppb
10/2/2012	Trichlorofluoromethane	<2.0	ppb
10/2/2012	Vinyl Chloride	<2.0	ppb
10/2/2012	p&m xylene	<4.0	ppb
10/2/2012	2-Chloroethylvinylether	<5.0	ppb
10/2/2012	Bromoform	<5.0	ppb
11/20/2012	1,1,1-Trichloroethane	<2.0	ppb
11/20/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
11/20/2012	1,1,2-Trichloroethane	<2.0	ppb
11/20/2012	1,1-Dichloroethane	<2.0	ppb
11/20/2012	1,1-Dichloroethene	<2.0	ppb
11/20/2012	1,2-dichlorobenzene	<2.0	ppb
11/20/2012	1,2-Dichloroethane	<2.0	ppb
11/20/2012	1,2-Dichloropropane	<2.0	ppb
11/20/2012	1,3-dichlorobenzene	<2.0	ppb
11/20/2012	1,4-dichlorobenzene	<2.0	ppb
11/20/2012	Benzene	<2.0	ppb
11/20/2012	Bromodichloromethane	<2.0	ppb
11/20/2012	Bromomethane	<2.0	ppb
11/20/2012	Carbon Tetrachloride	<2.0	ppb
11/20/2012	Chlorobenzene	<2.0	ppb
11/20/2012	Chloroethane	<2.0	ppb

Table 25: EPA Priority Pollutants Data Bucklin Point

EPA Priority Pollutants Data Bucklin Point 2012

Bucklin Point Influent Grab Samples			
Sample Date	Parameter	Result	Units
11/20/2012	Chlorobenzene	<2.0	ppb
11/20/2012	Chloroethane	<2.0	ppb
11/20/2012	Chloroform	3.71	ppb
11/20/2012	Chloromethane	<2.0	ppb
11/20/2012	cis-1,3-Dichloropropene	<2.0	ppb
11/20/2012	Dibromochloromethane	<2.0	ppb
11/20/2012	Ethylbenzene	<2.0	ppb
11/20/2012	Methylene Chloride	<2.0	ppb
11/20/2012	o- xylene	<2.0	ppb
11/20/2012	p&m xylene	<4.0	ppb
11/20/2012	Tetrachlorethene	2.57	ppb
11/20/2012	Toluene	13.9	ppb
11/20/2012	Trans-1,2-Dichloroethene	<2.0	ppb
11/20/2012	Trans-1,3-Dichloropropene	<2.0	ppb
11/20/2012	Trichlorethene	<2.0	ppb
11/20/2012	Trichlorofluoromethane	<2.0	ppb
11/20/2012	Vinyl Chloride	<2.0	ppb
12/4/2012	1,1,1-Trichloroethane	<2.0	ppb
12/4/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
12/4/2012	1,1,2-Trichloroethane	<2.0	ppb
12/4/2012	1,1-Dichloroethane	<2.0	ppb
12/4/2012	1,1-Dichloroethene	<2.0	ppb
12/4/2012	1,2-Dichlorobenzene	<2.0	ppb
12/4/2012	1,2-Dichloroethane	<2.0	ppb
12/4/2012	1,2-Dichloropropane	<2.0	ppb
12/4/2012	1,3-Dichlorobenzene	<2.0	ppb
12/4/2012	1,4-Dichlorobenzene	<2.0	ppb
12/4/2012	2-Chloroethylvinylether	<5.0	ppb
12/4/2012	Benzene	<2.0	ppb
12/4/2012	Bromodichloromethane	<2.0	ppb
12/4/2012	Bromoform	<5.0	ppb
12/4/2012	Bromomethane	<2.0	ppb
12/4/2012	Carbon Tetrachloride	<2.0	ppb
12/4/2012	Chlorobenzene	<2.0	ppb
12/4/2012	Chloroethane	<2.0	ppb
12/4/2012	Chloroform	3.5	ppb
12/4/2012	Chloromethane	<2.0	ppb
12/4/2012	cis-1,3-Dichloropropene	<2.0	ppb
12/4/2012	Dibromochloromethane	<2.0	ppb
12/4/2012	Ethylbenzene	<2.0	ppb
12/4/2012	Methylene Chloride	<2.0	ppb
12/4/2012	o- xylene	<2.0	ppb
12/4/2012	p&m xylene	<4.0	ppb
12/4/2012	Tetrachlorethene	<2.0	ppb
12/4/2012	Toluene	3.93	ppb
12/4/2012	Trans-1,2-Dichloroethene	<2.0	ppb
12/4/2012	Trans-1,3-Dichloropropene	<2.0	ppb
12/4/2012	Trichlorethene	<2.0	ppb
12/4/2012	Trichlorofluoromethane	<2.0	ppb
12/4/2012	Vinyl Chloride	<2.0	ppb
12/4/2012	p&m xylene	<4.0	ppb
12/4/2012	2-Chloroethylvinylether	<5.0	ppb
12/4/2012	Bromoform	<5.0	ppb

Bucklin Point Effluent Grab Samples			
Sample Date	Parameter	Result	Units
11/20/2012	Chloroform	<2.0	ppb
11/20/2012	Chloromethane	<2.0	ppb
11/20/2012	cis-1,3-Dichloropropene	<2.0	ppb
11/20/2012	Dibromochloromethane	<2.0	ppb
11/20/2012	Ethylbenzene	<2.0	ppb
11/20/2012	Methylene Chloride	<2.0	ppb
11/20/2012	o- xylene	<2.0	ppb
11/20/2012	Tetrachlorethene	<2.0	ppb
11/20/2012	Toluene	<2.0	ppb
11/20/2012	Trans-1,2-Dichloroethene	<2.0	ppb
11/20/2012	Trans-1,3-Dichloropropene	<2.0	ppb
11/20/2012	Trichlorethene	<2.0	ppb
11/20/2012	Trichlorofluoromethane	<2.0	ppb
11/20/2012	Vinyl Chloride	<2.0	ppb
11/20/2012	p&m xylene	<4.0	ppb
11/20/2012	2-Chloroethylvinylether	<5.0	ppb
11/20/2012	Bromoform	<5.0	ppb
12/4/2012	1,1,1-Trichloroethane	<2.0	ppb
12/4/2012	1,1,2,2-Tetrachlorethane	<2.0	ppb
12/4/2012	1,1,2-Trichloroethane	<2.0	ppb
12/4/2012	1,1-Dichloroethane	<2.0	ppb
12/4/2012	1,1-Dichloroethene	<2.0	ppb
12/4/2012	1,2-dichlorobenzene	<2.0	ppb
12/4/2012	1,2-Dichloroethane	<2.0	ppb
12/4/2012	1,2-Dichloropropane	<2.0	ppb
12/4/2012	1,3-dichlorobenzene	<2.0	ppb
12/4/2012	1,4-dichlorobenzene	<2.0	ppb
12/4/2012	Benzene	<2.0	ppb
12/4/2012	Bromodichloromethane	<2.0	ppb
12/4/2012	Bromomethane	<2.0	ppb
12/4/2012	Carbon Tetrachloride	<2.0	ppb
12/4/2012	Chlorobenzene	<2.0	ppb
12/4/2012	Chloroethane	<2.0	ppb
12/4/2012	Chloroform	<2.0	ppb
12/4/2012	Chloromethane	<2.0	ppb
12/4/2012	cis-1,3-Dichloropropene	<2.0	ppb
12/4/2012	Dibromochloromethane	<2.0	ppb
12/4/2012	Ethylbenzene	<2.0	ppb
12/4/2012	Methylene Chloride	<2.0	ppb
12/4/2012	o- xylene	<2.0	ppb
12/4/2012	Tetrachlorethene	<2.0	ppb
12/4/2012	Toluene	<2.0	ppb
12/4/2012	Trans-1,2-Dichloroethene	<2.0	ppb
12/4/2012	Trans-1,3-Dichloropropene	<2.0	ppb
12/4/2012	Trichlorethene	<2.0	ppb
12/4/2012	Trichlorofluoromethane	<2.0	ppb
12/4/2012	Vinyl Chloride	<2.0	ppb
12/4/2012	p&m xylene	<4.0	ppb
12/4/2012	2-Chloroethylvinylether	<5.0	ppb
12/4/2012	Bromoform	<5.0	ppb

Table 25: EPA Priority Pollutants Data Bucklin Point

Sanitary Manhole Sampling Data 2012

Date	Location	As (ppb)	BOD (ppm)	Cd (ppb)	Cr (ppb)	Cu (ppb)	CN (ppb)	Pb (ppb)	Hg (ppt)	Mo (ppb)	Ni (ppb)	Selenium	Silver	Tin	TSS	Zinc
1/5/2012	BS04 - Bucklin Point Sanitary Manhole	0.41	183	0.08	0.93	13.50	4	0.67	19.6	0.646	2.32	0.5	0.08	5	86	74.4
1/12/2012	FS21 - South Larchmont	0.44		0.1	0.71	8.17	6.06	0.76	4.71	0.3	1.32	0.5	0.03			33.1
1/19/2012	BS26 - Bucklin Point Sanitary Manhole	0.72	478	0.14	1.33	30.90	5.25	2.55	26.8	0.904	2.55	0.691	0.1	5	290	156
1/26/2012	FS24 - 180 Indiana Avenue	0.57		0.13	1.27	26.2	5.42	8.1	37.3	1.09	3.02	0.7	0.22			129
2/2/2012	FS19 - California Avenue	0.92		0.22	1.41	30.10	4	11.1	48.8	1.03	3.25	1.19	0.23			129
2/9/2012	FS14 - Teakwood Drive	0.42		0.06	0.38	15	4.00	0.97	32.3	0.36	1.3	0.51	0.13			36.3
2/16/2012	BS12 - Bucklin Point Sanitary Manhole	0.8	609.2	0.26	1.82	100.00	8	20.9	39.7	1.13	5.02	1.22	3.99	6.26	365	176
2/23/2012	FS16 - Chapin Street	0.6		0.1	0.81	27.2	5.14	4.93	23.7	0.85	2.36	0.57	0.24			87.6
3/1/2012	FS43 - Washington Avenue	0.9		0.32	2.48	69.40	6.79	80.4	84.9	1.51	3.81	0.56	0.31			278
3/8/2012	BS04 - Bucklin Point Sanitary Manhole	0.33	56.5	0.06	0.38	6.74	4.32	0.48	12.6	0.39	1.69	0.5	0.07	5	59	25.6
3/15/2012	FS01 - Regent Ave at Huron	0.56		0.17	2.72	20.50	4	9.77	35.8	0.87	3.44	0.62	0.31			122
3/22/2012	BS08 - Bucklin Point Sanitary Manhole	0.65	376.8	0.21	1.76	45.5	4.00	10	137	0.98	2.83	0.64	0.56	5	446	155
3/29/2012	FS13 - Gruptone Street	0.3		0.09	0.67	14.20	4	3.41	10.7	0.31	1.34	0.5	0.07			50.4
4/5/2012	BS23 - Bucklin Point Sanitary Manhole	0.65	413.2	0.23	2.29	60.9	7.98	18	85.2	1.58	3.67	0.83	0.23	5	444	283
4/12/2012	FS41 - Bellevue Avenue	0.69		0.2	2.43	21.60	10.73	9.3	16.9	0.7	2.69	0.5	1.21			107
4/26/2012	FS42 - Ford St	0.3		0.18	0.38	6.5	4.19	5.71	16	0.59	1.48	0.5	0.03			50.9
5/3/2012	BS03 - Bucklin Point Sanitary Manhole	0.4	231.2	0.15	0.98	22.40	4	1.13	33.5	0.84	2.44	0.73	0.16	20.6	282	118
5/10/2012	FS03 - New York Avenue	2.87		0.35	8	49.9	8.07	22.7	105	2	8.63	0.55	0.77			198
5/24/2012	BS24 - Bucklin Point Sanitary Manhole	0.41	227.5	0.12	0.68	95.60	4	2.48	30.6	0.47	2.1	0.53	0.23	5	220	58.5
5/31/2012	FS20 - Gillen Avenue	0.2		0.09	0.86	23.8		2.78	19.1	0.51	4.51	0.5	0.22			61.7
6/6/2012	BS10 - Bucklin Point Sanitary Manhole	0.628		0.07567	0.563	18.66		3.84	0.642	1.648	0.6493	0.1333	5			50.68
6/13/2012	FS34 - Oak Street	0.8263		0.2253	1.983	27.34		27.6		1	3.685	0.5	0.2467			264.7
6/20/2012	BS06 - Bucklin Point Sanitary Manhole	0.4937		0.1007	0.9403	32.75		6.752		0.8007	2.362	0.5	0.1307	5		69.28
7/18/2012	BS19 - Bucklin Point Sanitary Manhole	1.464	301.94	0.229	2.467	43.12	4.00	4.385	59.2	1.104	3.047	0.5657	0.4067	5	284	205.9
7/25/2012	FS37 - Whittier	0.5317		0.31	1.976	33.76	4	25.14	49.2	1.08	4.485	0.7043	5.106			159
8/1/2012	BS11 - Bucklin Point Sanitary Manhole	0.5473	438.86	0.525	2.799	88.19	4.00	24.66	1370	0.907	3.413	0.5	1.798	5	716	199.5
8/8/2012	FS26 - 167 Vermont Avenue	0.5347		0.077	0.9113	14.23	1.137	7.8	22.1	0.6857	2.121	0.5	0.8453			76.26
8/15/2012	BS09 - Bucklin Point Sanitary Manhole	0.7117	124.53	0.1203	1.443	30.39	4.00	6.826	28.6	0.6487	2.187	0.5	0.13	5	34	70.96
8/22/2012	FS17 - Ohio Avenue	0.495		0.1903	1.25	27.21	4	11.19	28.1	0.87	2.542	0.5	4.076			160.6
8/29/2012	BS12 - Bucklin Point Sanitary Manhole	0.6247	55.4	0.1737	5.019	28.86		10.88	110	1.152	4.064	0.562	0.216	5	194	223.6
9/5/2012	FS27 - Manchester at Farm Road	0.415		0.06367	1.024	36.99	4	1.371	15.6	0.628	2.98	0.57	0.09167			89.5
9/12/2012	BS14 - Bucklin Point Sanitary Manhole	0.5183	31.03	0.02	0.468	1.398	4.00	0.5783	2	0.3	1.351	0.5	0.02	5	18	8.719
9/19/2012	BS13 - Bucklin Point Sanitary Manhole	0.6363	392.6	0.2037	1.475	31.63	4	3.265	30.8	0.6987	2.678	0.5987	0.1367	5	568	146.1
9/21/2012	BS03 - Bucklin Point Sanitary Manhole	0.535		0.1823	1.159	25.24	5.63	3.119	29.5	0.751	2.37	0.82	0.2757	5	288	115.3
9/26/2012	BS16 - Bucklin Point Sanitary Manhole	0.5407	268	0.193	1.348	29.04	3.25	7.773	56	0.6963	2.289	0.5	0.3287	5	224	90.29
10/3/2012	FS04 - Academy Avenue	0.406		0.066	0.5443	7.384	4.00	3.715	21.1	0.3413	1.389	0.7257	0.1567			38.24
10/10/2012	BS17 - Bucklin Point Sanitary Manhole	0.5527	392.58	0.209	2.209	24.53	4	4.457	38.5	0.8933	5.437	0.5	0.4577	5	92	123.9
10/17/2012	FS02 - Pearl St	0.626		0.1017	5.568	19.7	4.00	5.333	37.5	0.873	2.556	0.7227	0.1373			88.43
10/24/2012	BS18 - Bucklin Point Sanitary Manhole	0.424	350.58	0.1577	1.55	30.41	8.53	13.36	39.7	0.9237	2.944	0.6003	0.5233	5	192	139.1
10/31/2012	FS24 - 180 Indiana Avenue	0.6437		0.4197	2.427	69.35	4.00	32.48	94.8	1.568	6.465	0.9537	0.4863			351.1
11/7/2012	FS31 - Gillen Avenue at Ambrose	0.5637		0.1403	1.375	48.44	4	1.948	40.1	1.146	2.493	0.7687	0.2103			127.5
11/12/2012	FS07 - Linton Street	0.3		0.104	0.965	9.613	4.00	12.46	7.16	0.4783	1.166	0.5	0.3587			57.15
11/20/2012	BS07 - Bucklin Point Sanitary Manhole	0.3957	223.82	0.102	0.781	27.26	4	4.042	32.3	3.02	2.098	0.5	0.07633	5	39	76.73
11/28/2012	FS05 - Farm Street	0.7223		0.4467	0.693	17.78	4.94	10.7	87.4	1.086	1.792	0.6833	0.6637			55.7
12/5/2012	BS02 - Bucklin Point Sanitary Manhole	0.4173	191	0.112	1.548	58.75	4	11.54	43.9	0.92	3.469	0.5	0.2823	5	162	103.3
12/12/2012	FS30 - Vermont Avenue	0.367		0.1157	1.235	19.83	6.18	6.115	35.9	0.6813	1.854	0.5	0.214			97.03
12/19/2012	BS21 - Bucklin Point Sanitary Manhole	0.6627	132.6	0.6453	3.787	96.12	4.71	36.08	115	2.206	5.138	1.002	0.3863	5	572	470.7

Table: 26 Sanitary Manhole Sampling Data

NBC Significant Industrial User Sample Results

User Name	Location	Cat. #	Sample Date	Type	Flow	Volume	CDF	Cd	Cr	Cu	Pb	Ni	Zn	Cn	Ag	BOD	TSS	TTO	Total O & G	Misc
A & F Plating Company	Sample Location # 1	11	2/7/2012	C	300			0.015	0.075	0.369	0.075	0.23	0.066	0.478	0.025					
A & F Plating Company	Sample Location # 1	11	8/27/2012	C	1788			0.045	0.075	0.145	0.075	0.281	0.212	0.101	0.025					
A. Harrison & Company, Inc.	Sample Location # 1	22	1/26/2012	G	0			0.015	0.075	0.02	0.075	0.05	0.06	0.005	0.025			0.076	11.3	
A. Harrison & Company, Inc.	Sample Location # 1	22	8/8/2012	G	0	0		0.015	0.075	0.075	0.075	0.05	0.06	0.002	0.025			0.039	4	
A.T. Cross Company	Sample Location # 3	59	4/18/2012	G				0.015	0.075	0.209	0.075	0.05	0.06		0.025					
A.T. Cross Company	Sample Location # 3	59	8/8/2012 10:25	C	0	1		0.015	0.075	0.121	0.075	0.05	0.06		0.025					
AG&G Incorporated	Sample Location # 1	11	7/30/2012	C	1346	1		0.015	0.268	0.36	0.075	0.195	0.076	0.004	0.025					
AG&G Incorporated	Sample Location # 1	11	2/29/2012	C	1346			0.015	0.779	0.234	0.075	0.141	0.062	0.006	0.025					
Accent Plating Company	Sample Location # 1	11	10/4/2012	C	2000			0.015	0.075	0.337	0.075	0.05	0.06	0.179	0.025					
Accent Plating Company	Sample Location # 1	11	5/23/2012	C	3905	1		0.015	0.075	0.02	0.075	0.05	0.06	0.067	0.044					
Al-Jac Produce	Sample Location # 1	81	10/25/2012	C	523											6442.71	8494			
Al-Jac Produce	Sample Location # 1	81	4/23/2012	C	269											8401.75	17250			
Al-Jac Produce	Sample Location # 1	81	3/12/2012	C	2768											16890.25	23488			
Angelica Textile Service	Sample Location # 1	25	1/18/2012	C	37250											534.44	36			22.2
Angelica Textile Service	Sample Location # 1	25	8/9/2012	C	81975											420.35	50			19.49
Armbrust International, Ltd.	Sample Location # 1	11	1/24/2012	C	8303			0.015	0.075	0.055	0.075	0.27	0.083	0.21	0.026					
Armbrust International, Ltd.	Sample Location # 1	11	7/16/2012	C	9200	1		0.015	0.075	1.41	0.075	0.41	0.582	0.013	0.336					
Aspen Aerogels Rhode Island, LLC	Sample Location # 1	27	9/24/2012	C	11000											14151.7	20	0.046		
Aspen Aerogels Rhode Island, LLC	Sample Location # 1	27	3/21/2012	C	10000											6927.38	2038	0.059		
Austin Metal Finishing Inc.	Sample Location # 1	11	4/23/2012	G	0	800		0.015	0.075	0.128	0.075	1.352	0.06	0.249	0.025					4
Austin Metal Finishing Inc.	Sample Location # 1	11	9/24/2012	G	0	800		0.015	0.273	0.112	0.075	0.202	0.178	0.442	0.025					
Autocrat, LLC	Sample Location # 1	34	9/25/2012	C												2575.3	562			
Autocrat, LLC	Sample Location # 1	34	4/4/2012	C	3000											1620.1	92			
B. Deltoro & Sons, Inc.	Sample Location # 1	81	8/20/2012	C	5236	0										1214	3954			
B. Deltoro & Sons, Inc.	Sample Location # 1	81	3/21/2012	C	5834											2949.1	24			
B. Deltoro & Sons, Inc.	Sample Location # 1	81	10/22/2012	C	0	0										5542	700			
Barletta Heavy Division, Inc.	Sample Location # 5	40	10/25/2012	G				0.015	0.075	0.047	0.075	0.05	0.06		0.025			384		AMMONIA = .296, ARSENIC = .004, NO3+NO2 = .154, SELENIUM = .5, TKN =
Barletta Heavy Division, Inc.	Sample Location # 6	40	10/3/2012	G				0.015	0.075	0.02	0.075	0.05	0.06		0.025			88		6.951, .894
Bliss Manufacturing	Sample Location # 1	11	2/27/2012	C				0.015	0.075	7.78	0.075	0.186	0.06	15.7	0.44					
Bliss Manufacturing	Sample Location # 1	11	4/16/2012	C	1555			0.015	0.075	0.252	0.075	0.05	0.06	0.069	0.038					
Bunge North America (East), LLC	Sample Location # 1	34	2/1/2012	C	29000															2.35
Bunge North America (East), LLC	Sample Location # 1	34	9/12/2012	C	36000	1										23.1	22			OIL & GREASE = 4
C&C Rhode Island, LLC	Sample Location # 1	11	1/6/2012	C	2020			0.015	0.075	11.77	0.075	2.857	0.161	0.004	0.025					T RES. CHLORINE = .006
C&C Rhode Island, LLC	Sample Location # 1	11	1/9/2012	C	1945			0.015	0.075	10.62	0.075	2.112	0.168	0.007	0.025					T RES. CHLORINE = .006
C.B. Utility Co., Inc.	Sample Location # 1	40	5/16/2012	G	0	1		0.015	0.075	0.02	0.075	0.05	0.06		0.025					ARSENIC = 0
Callico Metals, Inc.	Sample Location # 1	12	3/26/2012	C	299			0.015	0.075	0.02	0.075	0.05	0.06		0.025					4
Callico Metals, Inc.	Sample Location # 1	12	5/15/2012	C	45	1		0.015	0.075	0.02	0.075	0.05	0.06		0.025					4
Charisma Manufacturing	Sample Location # 1	11	4/4/2012	G	0	0		0.015	0.075	0.02	0.075	0.062	0.06	0.004	0.025					
Charisma Manufacturing	Sample Location # 1	11	9/17/2012	G	0	0		0.015	0.075	0.02	0.075	0.154	0.06	0.004	0.025					
Chemart Company	Sample Location # 1	11	7/30/2012	G		20		0.015	0.075	0.02	0.075	0.05	0.06	0.005	0.97					
Chemart Company	Sample Location # 1	11	7/30/2012	C	15100			0.015	0.075	0.609	0.075	0.116	0.06	0.041	0.025					
Chemart Company	Sample Location # 1	11	2/13/2012	G		25		0.015	0.075	0.02	0.075	0.05	0.06	0.004	0.286					
Chemart Company	Sample Location # 1	11	2/13/2012	C	13400			0.015	0.075	0.09	0.075	0.237	0.06	0.005	0.025					
Cintas, Inc.	Sample Location # 1	25	4/16/2012	C	42090	1		0.015	0.075	0.111	0.075	0.057	0.734	0.008	0.025	184.26	24	0.034		11
Cintas, Inc.	Sample Location # 1	25	10/3/2012	C	1248			0.015	0.075	0.101	0.075	0.05	0.438	0.008	0.025	345.26	62	0.042		
Clayton Company & Claverick Realty	Sample Location # 1	11	9/10/2012	C	10			0.015	0.075	0.06	0.075	0.05	0.06	0.004	0.025					
Clayton Company & Claverick Realty	Sample Location # 1	11	3/6/2012	C	486			0.015	0.075	0.02	0.075	0.05	0.06	0.004	0.025					
Conopco, Inc. (Site #1)	Sample Location # 1	40	5/14/2012	C	761															0.005
Contract Specialties, Inc.	Sample Location # 1	11	2/22/2012	C	3912			0.015	0.075	0.086	0.075	0.137	0.06	0.006	0.025					
Contract Specialties, Inc.	Sample Location # 1	11	8/27/2012	C	4395			0.015	0.075	0.704	0.075	0.075	0.118	0.006	0.025					
Crisloid, LLC	Sample Location # 1	21	4/23/2012	G	0	0		0.015	0.075	0.02	0.075	0.05	0.06		0.025	8.38	44			
Crisloid, LLC	Sample Location # 1	21	11/21/2012	G	100			0.015	0.075	0.02	0.075	0.05	0.06		0.025	2	180			
Darlene Group	Sample Location # 1	11	7/25/2012	C	314			0.015	0.075	0.08	0.075	0.05	0.06	0.005	0.025					
Darlene Group	Sample Location # 1	11	1/30/2012	C	159			0.015	0.075	0.024	0.075	0.05	0.06	0.003	0.025					
Denison Pharmaceuticals Inc.	Sample Location # 1	14	3/26/2012	G		500		0.015	0.075	0.02	0.075	0.05	0.152		0.025	740.56	10	0.011		ISOPROPYL ACETATE = .001, ACETONE = .27, N-AMYL ACETATE = .001, ETHYL ACETATE = .01
Denison Pharmaceuticals Inc.	Sample Location # 1	14	2/29/2012	G		500		0.015	0.234	2.914	0.147	0.17	6.199		0.025	3772	4062	20.65		43.8
Denison Pharmaceuticals, Inc. (Lincoln)	Sample Location # 1	14	7/26/2012	G		1100		0.015	0.075	0.104	0.075	0.05	3.15		0.025	2166.3	2272	25.085		10.42
Denison Pharmaceuticals, Inc. (Lincoln)	Sample Location # 1	14	5/23/2012	G		1000		0.015	0.075	0.069	0.075	0.05	2.7		0.025	980.6	162	12.187		9.6
DiFruscia Industries, Inc.	Sample Location # 1	11	4/23/2012	C	6508			0.015	0.112	0.695	0.075	0.276	0.356	0.008	0.025					
DiFruscia Industries, Inc.	Sample Location # 1	11	3/12/2012	C	4488			0.015	0.19	2.452	0.075	1.893	0.202	0.013	0.025					
DiGregorio Inc.	Sample Location # 4	40	5/16/2012	G	0	1		0.015	0.075	0.02	0.075	0.05	0.371		0.025					

Table: 27 NBC Significant Industrial User Sample Results

NBC Significant Industrial User Sample Results

User Name	Location	Cat. #	Sample Date	Type	Flow	Volume	CDF	Cd	Cr	Cu	Pb	Ni	Zn	Cn	Ag	BOD	TSS	TTO	Total O & G	Misc
DiGregorio Inc.	Sample Location # 5	40	10/12/2012	C	0	1		0.015	0.075	0.02	0.075	0.05	0.06		0.025		274		34.63	
Dominion Energy Manchester Street, Inc.	Sample Location # 1	27	11/19/2012	C		95870		0.015	0.075			0.05			0.025					
Dominion Energy Manchester Street, Inc.	Sample Location # 1	27	5/3/2012	C	95850			0.015	0.075			0.05			0.025					
E&M Enterprises, LTD	Sample Location # 1	11	9/5/2012	C	2760	1		0.015	0.075	0.064	0.075	0.05	0.06	0.01	0.025					
E&M Enterprises, LTD	Sample Location # 1	11	2/8/2012	C	2350			0.015	0.075	0.052	0.075	0.05	0.06	0.004	0.025					
Eagle Laundry Inc.	Sample Location # 1	25	5/21/2012	C	5012	1										288.74	30		25	
Eagle Laundry Inc.	Sample Location # 1	25	10/17/2012	C	4800	1										1613.56	120		263.3	

Table: 27 NBC Significant Industrial User Sample Results

NBC Significant Industrial User Sample Results

User Name	Location	Cat. #	Sample Date	Type	Flow	Volume	CDF	Cd	Cr	Cu	Pb	Ni	Zn	Cn	Ag	BOD	TSS	TTO	Total O & G	Misc
Eagle Plating Company, Inc.	Sample Location # 1	11	1/3/2012	C	5910			0.015	0.075	0.02	0.075	0.05	0.06	0.018	0.025					
Eagle Plating Company, Inc.	Sample Location # 1	11	8/20/2012	C	972			0.015	0.075	0.02	0.075	0.05	0.06	0.004	0.025					TOTAL METAL-EPA = .205
Eastern Color & Chemical Co.	Sample Location # 1	22	4/18/2012	C	11000	1		0.015	0.075	0.02	0.075	0.05	0.06		0.025	130.57	81	0.017	81.7	
Eastern Color & Chemical Co.	Sample Location # 1	22	9/20/2012	C	10600			0.015	0.075	0.02	0.075	0.05	0.06		0.025	108.7	13	0.728		
Ecological Fibers, Inc.	Sample Location # 1	24	10/18/2012	C	3300			0.015	0.075	0.032	0.075	0.063	2.19		0.025	167.37	32	0.184		
Ecological Fibers, Inc.	Sample Location # 1	24	11/13/2012	C	0	1		0.015	0.075	0.037	0.075	0.062	0.408		0.025	262.06	4	0.054		
Electrolizing, Inc.	Sample Location # 1	11	1/26/2012	C	374			0.015	0.184	0.02	0.075	0.05	1.015	0.008	0.025					
Electrolizing, Inc.	Sample Location # 1	11	7/10/2012	C	4413	1		0.015	0.094	0.02	0.075	0.05	0.689	0.005	0.025					
Evans Plating Corporation (N.P.)	Sample Location # 1	11	9/19/2012	C	301			1.22	0.46	3.54	0.075	6.18	17.1	0.493	0.047					
Evans Plating Corporation (N.P.)	Sample Location # 1	11	3/12/2012	C	1279			0.041	0.075	0.055	0.075	0.327	0.298	0.027	0.025					
Fujifilm Electronic Materials USA, Inc.	Sample Location # 2	22	5/24/2012	G		2000		0.015	0.075	0.199	0.075	0.05	0.502		0.025	2141	34	0.01	4	
Fujifilm Electronic Materials USA, Inc.	Sample Location # 2	22	3/26/2012	G		1950		0.015	0.075	0.268	0.075	0.05	0.33		0.025		28		4	
G. Tanury Plating Company	Sample Location # 1	11	3/19/2012	C	50266			0.015	0.075	3.444	0.075	0.463	0.294	0.366	0.099					
G. Tanury Plating Company	Sample Location # 1	11	5/24/2012	C	60289			0.015	0.075	0.837	0.075	0.358	0.086	0.264	0.044					TOTAL METAL-EPA = 1.356
General Cable Industries, LLC	Sample Location # 1	27	3/8/2012	C	10224			0.015	0.075	0.104	0.075	0.05	0.339		0.025	735.55	37		15.6	
General Cable Industries, LLC	Sample Location # 1	27	8/22/2012	C	2696			0.015	0.075	0.164	0.075	0.05	0.707		0.025	1088	72		4	
General Plating Company	Sample Location # 1	11	3/8/2012	C	449			0.015	0.075	0.43	0.075	0.05	0.06	0.011	0.025					
General Plating Company	Sample Location # 1	11	8/20/2012	C	374			0.015	0.075	0.443	0.075	0.069	0.06	0.014	0.025					
George H. Fuller & Son	Sample Location # 1	11	4/27/2012	C	344			0.015	0.075	0.682	0.075	0.441	0.117	0.611	0.324					
George H. Fuller & Son	Sample Location # 1	11	4/26/2012	C	374			0.015	0.075	0.125	0.075	0.521	0.06	0.028	0.038					
HP Services, Inc.	Sample Location # 1	11	10/1/2012	G		75		0.015	0.075	0.02	0.075	0.05	0.06	0.029	0.025			0.074	4	
HP Services, Inc.	Sample Location # 1	11	3/15/2012	G	0	0		0.015	0.075	0.327	0.075	0.14	0.06	0.004	0.025				4	
Herrf Jones, Inc.	Sample Location # 1	11	8/27/2012	C	3200			0.015	0.075	0.068	0.075	0.05	0.06	0.005	0.025					
Herrf Jones, Inc.	Sample Location # 1	11	2/8/2012	C	561			0.015	0.075	0.109	0.075	0.26	0.06	0.014	0.025					
Hillview Auto Body	Sample Location # 1	97	4/3/2012	G				0.015	0.075		0.075	0.05			0.025			0.025		
Hillview Auto Body	Sample Location # 1	97	10/11/2012	G				0.015	0.075	0.067	0.075	0.05	0.636		0.025				4.222	
Hord Crystal Corporation	Sample Location # 1	11	3/26/2012	G	0	300		0.015	0.075	0.294	0.075	0.05	0.094	0.027	0.025					
Hord Crystal Corporation	Sample Location # 1	11	9/10/2012	G	0	300		0.015	0.075	0.467	0.075	0.05	0.06	0.012	0.025					
Ideal Plating & Polishing Co., Inc.	Sample Location # 1	11	5/21/2012	C	3750			0.018	0.063	0.859					0.008					
Ideal Plating & Polishing Co., Inc.	Sample Location # 1	11	4/9/2012	C	2618			0.015	1.444	0.667	0.075	0.198	0.426	0.633	0.027					
Impco, Inc.	Sample Location # 1	27	10/17/2012	C				0.015	0.075	0.02	0.075	0.05	0.06		0.025			0.041		
Impco, Inc.	Sample Location # 1	27	4/12/2012	C	9495			0.015	0.075	0.02	0.075	0.05	0.06		0.025					
Induplate LLC	Sample Location # 1	11	2/20/2012	C	14163			0.015	0.075	0.072	0.075	0.113	0.374	0.004	0.025					
Induplate LLC	Sample Location # 1	11	8/22/2012	C	8280	1		0.015	0.429	0.065	0.075	0.05	0.608	0.004	0.025					
International Chromium Plating	Sample Location # 1	11	3/21/2012	C	1646			0.015	0.271	0.029	0.075	0.15	0.06	0.008	0.025					
International Chromium Plating	Sample Location # 1	11	10/17/2012	C	2020			0.015	0.145	0.02	0.075	0.115	0.072	0.016	0.025					
International Etching, Inc.	Sample Location # 1	11	4/30/2012	C	6134			0.015	0.075	0.02	0.075	0.05	0.06	0.005	0.025					
International Etching, Inc.	Sample Location # 1	11	9/19/2012	C	5860			0.015	0.075	0.02	0.075	0.05	0.06	0.004	0.025					
International Insignia Corporation	Sample Location # 1	11	4/2/2012	C	3700			0.015	0.075	2.036	0.075	1.46	0.474	0.618	0.025					
International Insignia Corporation	Sample Location # 1	11	5/30/2012	C	5600	1		0.015	0.075	0.275	0.075	0.571	0.093	0.018	0.025					
Interplex Engineered Products, Inc.	Sample Location # 1	11	2/14/2012	C	75067			0.015	0.075	0.02	0.075	0.171	0.06	0.029	0.025					
Interplex Engineered Products, Inc.	Sample Location # 1	11	9/11/2012	C	78061			0.015	0.075	0.02	0.075	0.12	0.06	0.088	0.087					
Ira Green, Inc.	Sample Location # 1	11	2/13/2012	C	18200			0.015	0.075	0.202	0.075	0.111	0.06	0.009	0.025					
Ira Green, Inc.	Sample Location # 1	11	8/14/2012	C	20200			0.015	0.075	0.06	0.075	0.09	0.06	0.008	0.025					
Ira Green, Inc.	Sample Location # 1	11	5/31/2012	G	0	1		0.015	0.075	0.02	0.075	0.05	0.06		0.025					
J.H. Lynch & Sons, Inc.	Sample Location # 1	40	10/15/2012	C	2415	1		0.015	0.075	0.02	0.075	0.05	0.06		0.025		10		4	POLYCHLORINATED BIPHENALS = 0
J.H. Lynch & Sons, Inc.	Sample Location # 1	40	9/24/2012	C	2679			0.015	0.075	0.02	0.075	0.05	0.06		0.025		2			
JRB Associates Inc.	Sample Location # 1	11	7/16/2012	C	10300			0.015	0.075	0.369					0.041					
JRB Associates Inc.	Sample Location # 1	11	1/30/2012	C	9830			0.015	0.075		0.075	0.278			0.174					
John H. Collins & Sons Company	Sample Location # 1	27	9/17/2012	C	1085			0.015	0.075	0.059	0.075	0.069	0.43	0.004	0.025				0.552	
John H. Collins & Sons Company	Sample Location # 1	27	2/27/2012	C	1167			0.015	0.075	0.02	0.075	0.05	0.06	0.013	0.025			0.118	4.1	
Kirks Folly	Sample Location # 1	11	10/15/2012	G	0	0		0.102	0.075	2.84	0.122	0.05	1.23	0.038	0.025			76		
Kirks Folly	Sample Location # 1	11	4/5/2012	G	0	0		0.126	0.075	4.261	0.075	0.064	2.224	0.052	0.025			24		
Lee's Manufacturing	Sample Location # 1	43	4/17/2012	G	0	1		0.015	0.075	0.02	0.075	0.05	0.06		0.025					
Lee's Manufacturing	Sample Location # 1	43	2/20/2012	C	7181			0.015	0.075	0.076	0.075	0.05	0.06		0.025					
Lee's Manufacturing	Sample Location # 1	43	8/6/2012	C	7929	1		0.015	0.075	0.152	0.075	0.05	0.113		0.025					
Liquid Blue	Sample Location # 1	23	9/19/2012	G	0	0		0.015	0.075	0.113	0.075	0.05	0.06		0.025	187.28	13			
Liquid Blue	Sample Location # 1	23	3/5/2012	G				0.015	0.075	0.02	0.075	0.05	0.06		0.025	197.1	32			
Liquid Blue	Sample Location # 2	23	3/5/2012	G				0.015	0.075	0.071	0.075	0.05	0.073		0.025	442.8	68			
Liquid Blue	Sample Location # 2	23	9/19/2012	G	0	0		0.015	0.075	0.407	0.075	0.05	0.062		0.025	533.93	19			
Mahr Federal Inc.	Sample Location # 1	11	9/19/2012	C	110			0.015	0.807	0.02	0.075	0.05	0.06	0.004	0.025					4
Mahr Federal Inc.	Sample Location # 1	11	3/5/2012	C	2551			0.015	0.877	0.032	0.075	0.05	0.06	0.004	0.025					4
Mahr Federal Inc.	Sample Location # 2	11	9/19/2012	G		25		0.015	0.075	0.024	0.075	0.05	0.06	0.007	0.025			0.005	4	
Mahr Federal Inc.	Sample Location # 2	11	3/5/2012	G		25		0.015	0.075	0.048	0.075	0.05	0.06	0.004	0.033			0.		

NBC Significant Industrial User Sample Results

User Name	Location	Cat. #	Sample Date	Type	Flow	Volume	CDF	Cd	Cr	Cu	Pb	Ni	Zn	Cn	Ag	BOD	TSS	TTO	Total O & G	Misc
Murdock Webbing Co., Inc.	Sample Location # 1	23	1/25/2012	C	4712			0.015	1.381	0.125	0.075	0.05	0.199		0.025	1586.5	146		26.4	
Murdock Webbing Co., Inc.	Sample Location # 1	23	7/23/2012	C	5610	0		0.015	0.075	0.101	0.075	0.05	0.109		0.025	1295.9	88		53	
NGC INC.	Sample Location # 1	81	9/10/2012 8:25	C		0	1									3681	166			
NGC INC.	Sample Location # 1	81	4/25/2012	C	13350											1626.55	87		10.4	
Narragansett Jewelry	Sample Location # 1	11	2/6/2012	C	1980			0.015	0.075	0.028	0.075	0.05	0.06	0.005	0.025					
Narragansett Jewelry	Sample Location # 1	11	8/14/2012	C	1370	1		0.015	0.075	0.034	0.075	0.05	0.06	0.004	0.025					
Narragansett Jewelry	Sample Location # 1	11	7/23/2012 15:30	G	0	1		0.015	0.075	0.02	0.075	0.05	0.06		0.025					

Table: 27 NBC Significant Industrial User Sample Results

NBC Significant Industrial User Sample Results

User Name	Location	Cat. #	Sample Date	Type	Flow	Volume	CDF	Cd	Cr	Cu	Pb	Ni	Zn	Cn	Ag	BOD	TSS	TTO	Total O & G	Misc
New England Linen Supply, Inc.	Sample Location # 1	25	8/8/2012	C	39876											620.415	235		198.375	
New England Linen Supply, Inc.	Sample Location # 1	25	2/14/2012	C	0	1										1366.9	502		307.6	
Ocean State Peeled Potatoes	Sample Location # 1	81	3/12/2012	C	524											1180.88	1372			
Ocean State Peeled Potatoes	Sample Location # 1	81	10/22/2012	C	150	0										1008.39	1036			
Ocean State Peeled Potatoes	Sample Location # 1	81	8/2/2012	C	748	0										914.63	334			
Ooram Sylvania, Inc.	Sample Location # 1	27	7/25/2012	G		2625		0.015	0.265	0.095		0.67								
Ooram Sylvania, Inc.	Sample Location # 1	27	1/23/2012	G		2625		0.015			0.075		0.06					72		
Pawtucket Power Associates	Sample Location # 1	16	1/31/2012	C	739			0.015			0.075									4
Pawtucket Power Associates	Sample Location # 1	16	4/23/2012	C	469			0.015	0.075		0.075									
Pawtucket Power Associates	Sample Location # 1	16	7/17/2012	C	1156			0.015	0.075	0.117										
Pawtucket Power Associates	Sample Location # 2	16	9/12/2012	G		50				0.187										
Pawtucket Power Associates	Sample Location # 2	16	4/19/2012	G		2400					0.075	0.05	0.06							
Pawtucket Power Associates	Sample Location # 3	16	8/22/2012	G		200		0.015	0.075				0.132							
Pawtucket Power Associates	Sample Location # 3	16	4/19/2012	C	0	1		0.015	0.075	0.02	0.075	0.05	0.06							
Pawtucket Power Associates	Sample Location # 3	16	4/23/2012	G	1500						0.075	0.05	0.06							
Pawtucket Power Associates	Sample Location # 4	16	7/17/2012 8:30	C	0	1		0.015	0.075	0.047	0.075	0.05	0.107							
Pawtucket Power Associates	Sample Location # 4	16	7/17/2012	C	271			0.015					0.107							
Pawtucket Power Associates	Sample Location # 4	16	4/23/2012	C	8300			0.015			0.075									
Pawtucket Power Associates	Sample Location # 4	16	1/31/2012	C	2020			0.015			0.075									
Pilgrim Screw Corporation	Sample Location # 1	11	7/18/2012	G		400		0.015		0.075				0.007						
Pilgrim Screw Corporation	Sample Location # 1	11	4/2/2012	G		400			0.075			0.05	0.06	0.023						46.1
Precision Dermatology	Sample Location # 1	14	9/10/2012	G				0.015	0.075	0.051	0.075	0.05	0.06	0.009	0.025	637.92	122	0.015	197.1	ACETONE = .01, ISOPROPYL ACETATE = .01, METHYLENE CHLORIDE = .002, N-AMYL ACETATE = .01
Precision Dermatology	Sample Location # 1	14	3/22/2012	G		516		0.015	0.075	0.113	0.075	0.05	0.06	0.004	0.025	779.28	41	2.229	44	METHYLENE CHLORIDE = .002, ACETONE = 2.2, N-AMYL ACETATE = .01, ISOPROPYL ACETATE = .01
Prov. Journal Co. - Production Facility	Sample Location # 1	24	5/23/2012	C	1000	1		0.015	0.075	0.02	0.075	0.05	0.06							52.3
Prov. Journal Co. - Production Facility	Sample Location # 1	24	9/25/2012	C	375			0.015	0.075	0.02	0.075	0.05	0.06							
Providence Metallizing Company, Inc.	Sample Location # 1	11	12/10/2012	C	25282	1		0.015	0.263	0.086	0.075	0.225	0.06	0.004	0.025					
Providence Metallizing Company, Inc.	Sample Location # 1	11	6/11/2012	C	30296			0.018	0.077	0.024				0.907						TOTAL METAL-EPA = .101
Providence Specialty Products	Sample Location # 1	34	5/21/2012	C	75	1										307.49	24			4
Providence Specialty Products	Sample Location # 1	34	10/15/2012 15:10	C	0	1										2	8			
Providence Specialty Products	Sample Location # 2	34	5/21/2012	C	0	1										20035	1440			25.1
Providence Specialty Products	Sample Location # 2	34	10/15/2012	C	0	1										24010	676			
R. E. Sturdy Company, Inc.	Sample Location # 1	11	1/5/2012	C	4414			0.015	0.075	0.381	0.075	0.148	0.06	0.2	0.137					
R. E. Sturdy Company, Inc.	Sample Location # 1	11	9/5/2012	C	3220			0.015	0.075	1.64	0.075	0.326	0.06	0.032	0.121					
Richline Group, Inc.	Sample Location # 1	11	1/23/2012	C	1077			0.015	0.075	0.025	0.075	0.443	0.06	0.009	0.025					
Richline Group, Inc.	Sample Location # 1	11	1/3/2012	C	1152			0.015	0.075	0.02	0.075	0.431	0.06	0.005	0.025					
Ronald Pratt Company, Inc.	Sample Location # 1	11	2/2/2012	C	960			0.015	0.075	2.14	0.075	0.05	0.543	0.071	0.216					
Ronald Pratt Company, Inc.	Sample Location # 1	11	1/13/2012	C	500			0.015	0.075	0.054	0.075	0.05	0.06	0.007	0.025					
Shank/Balfour Beatty	Sample Location # 1	40	11/21/2012	C	0	1		0.015	0.075	0.02	0.075	0.05	0.61		0.025					SELENIUM = .001, IRON = .265, ALUMINUM = .009
Shank/Balfour Beatty	Sample Location # 1	40	11/28/2012	C				0.015	0.075	0.02	0.075	0.05	0.375		0.025					ARSENIC = 0, MOLYBDENUM = 0, NO3+NO2 = .394, SELENIUM = .001, TKN = 4.5, ammonia = .218
Stackbin Corporation	Sample Location # 1	11	5/1/2012	G	0	1150		0.015	0.075	0.037	0.075	0.05	0.06	0.007	0.025					6.3
Stackbin Corporation	Sample Location # 1	11	11/27/2012	G	0	1150		0.015	0.075	0.071	0.075	0.05	0.222	0.046	0.025					
Stackbin Corporation	Sample Location # 2	11	11/27/2012	G	0	600		0.015	0.075	0.02	0.075	0.05	0.06	0.118	0.025					
Stackbin Corporation	Sample Location # 2	11	5/1/2012	G		600		0.015	0.075	0.02	0.075	0.05	0.06	0.022	0.025					4
Stackbin Corporation	Sample Location # 4	11	7/2/2012	G														0.158		
Summit Manufacturing Corporation	Sample Location # 1	11	4/4/2012	C	9051			0.015	0.218	0.543	0.075	0.117	0.06	0.014	0.025					
Summit Manufacturing Corporation	Sample Location # 1	11	2/6/2012	C	9051			0.015	0.974	1.62	0.075	0.185	0.108	0.007	0.025					
Surface Coatings Division, MFB LLC	Sample Location # 1	11	9/17/2012	C	3291	1		0.015	0.206	0.289	0.075	0.829	0.196	0.017	0.025					
Surface Coatings Division, MFB LLC	Sample Location # 1	11	4/2/2012	C	2992			0.015	0.08	0.167	0.075	0.669	0.093	0.004	0.025					
Tanury Industries	Sample Location # 1	11	7/30/2012	C	20520			0.015	0.175	1.78	0.075	0.715	0.06	0.582	0.037					
Tanury Industries	Sample Location # 1	11	2/16/2012	C	1254			0.015	0.365	0.223	0.075	0.689	0.06	0.004	0.036					
Tanury Industries PVD, Inc.	Sample Location # 1	11	8/3/2012	G	0	1		0	0	0	0	0	0	0	0					
Tanury Industries PVD, Inc.	Sample Location # 1	11	4/17/2012	G	0			0.01	0.126	0.487				0.027						
Technomic, Inc.	Sample Location # 1	11	7/16/2012	C	4563			0.015	0.369	0.071	0.075	0.05	0.06	0.017	0.025					TOTAL METAL-EPA = .665
Technomic, Inc.	Sample Location # 1	11	1/5/2012	C	3516			0.015	1.1	0.15	0.075	0.066	0.097	0.052	0.025					
Tedor Pharma Inc.	Sample Location # 1	14	1/12/2012	G		1190		0.015	0.075		0.075	0.05			0.025				0.398	ISOPROPYL ACETATE = .01, ACETONE = .232, N-AMYL ACETATE = .01, ETHYL ACETATE = .01
Tedor Pharma Inc.	Sample Location # 1	14	8/8/2012	G		1180		0.015	0.075	0.233	0.075	0.05	0.128		0.025	295.89	16			4.634
Teknicote, Inc. (Cumberland)	Sample Location # 1	11	1/25/2012	G		500		0.015	0.075	0.026	0.075	0.05	0.518	0.007	0.025					
Teknicote, Inc. (Cumberland)	Sample Location # 1	11	7/25/2012	G		900		0.015	0.075	0.02	0.075	0.05	0.485	0.016	0.025					
Tiffany and Company	Sample Location # 1	15	9/4/2012	C	547			0.015	0.075	0.045	0.075	0.05	0.06	0.004	0.025					
Tiffany and Company	Sample Location # 1	15	4/9/2012	C	16			0.015	0.075	0.051	0.075	0.05	0.06	0.004	0.025					
Tri-Jay Company	Sample Location # 1	11	4/2/2012	C	10622			0.015	0.075		0.075				0.061					
Tri-Jay Company	Sample Location # 1	11	7/9/2012	C	10322			0.015	0.075		0.075				0.025					

Table: 27 NBC Significant Industrial User Sample Results

NBC Significant Industrial User Sample Results

User Name	Location	Cat. #	Sample Date	Type	Flow	Volume	CDF	Cd	Cr	Cu	Pb	Ni	Zn	Cn	Ag	BOD	TSS	TTO	Total O & G	Misc
Truex, Inc.	Sample Location # 1	11	9/10/2012	C	3300			0.015	0.075	0.212	0.075	0.05	0.274	0.004	0.025				6.248	
Truex, Inc.	Sample Location # 1	11	4/18/2012	C	0	1		0.015	0.075	0.795	0.075	0.05	1.49	0.004	0.025				4	
Truex, Inc.	Sample Location # 1	11	4/17/2012	C	3366			0.015	0.075	0.795	0.075	0.05	1.49	0.004	0.025				4	
Umicore USA, Incorporated	Sample Location # 1	22	5/7/2012	G		2000		0.015	0.075	0.02	0.02	0.05	0.06		0.025					
Umicore USA, Incorporated	Sample Location # 2	22	5/7/2012	G		1400		0.015	0.075	0.02	0.075	0.05	0.06		0.025					
Umicore USA, Incorporated	Sample Location # 3	22	5/7/2012	C	15975			0.015	0.075	0.02	0.075	0.05	0.06		0.025					
Uncas Manufacturing Company	Sample Location # 1	11	8/6/2012	C	7256	1		0.015	0.075	0.02	0.075	0.05	0.06	0.004	0.025					
Uncas Manufacturing Company	Sample Location # 1	11	5/15/2012	C		0		0.015	0.075	0.02	0.075	0.05	0.06		0.025					
Uncas Manufacturing Company	Sample Location # 1	11	2/20/2012	C				0.015	0.075	0.02	0.075	0.05	0.06	0.006	0.025					
Unique Plating Company	Sample Location # 1	11	8/2/2012	C	1795			0.015	0.075		0.075		0.06		0.025					
Unique Plating Company	Sample Location # 1	11	5/25/2012 8:00	G	0	1		0.015	0.075	0.02	0.075	0.05	0.06		0.025					
Unique Plating Company	Sample Location # 1	11	3/19/2012	C	1720			0.015	0.075	0.554	0.075	1.99	0.06	0.111	0.025					
Unique Plating Company	Sample Location # 1	11	5/1/2012	C	823			0.015	0.075	0.46	0.075	1.793	0.06	0.141	0.025					
Univar USA, Inc.	Sample Location # 1	22	4/18/2012	C		7500		0.015	0.075					0.015	0.025			0.134		T.RES.CHLORINE = 2.95
Univar USA, Inc.	Sample Location # 1	22	10/1/2012	C		7500		0.015	0.075	0.239	0.075	0.125	0.673	0.004	0.025			0.039		MERCURY = 0, T.RES.CHLORINE = .006
Universal Plating Company, Inc.	Sample Location # 1	11	9/27/2012	C	822			0.015	0.075	0.203	0.075	0.05	0.06	0.01	0.025					
Universal Plating Company, Inc.	Sample Location # 1	11	4/25/2012	C	1645	0		0.015	0.075	0.093	0.075	0.05	0.06	0.006	0.025					
Vital Diagnostics, Inc.	Sample Location # 1	22	10/3/2012	G	0	200		0.015	0.075	0.02	0.075	0.05	0.06		0.025			0.249		
Vital Diagnostics, Inc.	Sample Location # 1	22	5/1/2012	C	0	1		0.015	0.075	0.02	0.075	0.05	0.356		0.025			0.002		
W.T. Wilson, Inc.	Sample Location # 1	11	1/12/2012	G		250		0.015	0.075	0.02	0.075	0.05	0.06	0.004	0.025					
W.T. Wilson, Inc.	Sample Location # 1	11	1/13/2012	G	0	250		0.015	0.075	0.02	0.075	0.05	0.06	0.004	0.025					
W.T. Wilson, Inc.	Sample Location # 1	11	1/18/2012	G		250		0.015	0.075	0.02	0.075	0.05	0.06	0.004	0.025					

Table: 27 NBC Significant Industrial User Sample Results

Septage Monitoring Data - 2012

Results in ppb dry weight

Sample NO.	DATE	Cd	Cd MDL	Cr	Cr MDL	Cu	Cu MDL	Pb	Pb MDL	Ni	Ni MDL	Ag	Ag MDL	Zn	Zn MDL
1201-0001	1/3/2012	19.8	15	210	75	10120	20	596	75	158	50	88	40	13690	60
1201-0002	1/4/2012	34.7	15	421	75	17830	20	610	75	329	50	40	40	21540	60
1201-0003	1/5/2012	38.8	15	246	75	11140	20	746	75	172	50	40	40	14230	60
1201-0008	1/11/2012	26.5	15	408	75	10860	20	815	75	924	50	56	40	19550	60
1201-0009	1/10/2012	17.7	15	206	75	10530	20	388	75	346	50	40	40	16600	60
1201-0010	1/9/2012	17.4	15	262	75	14720	20	559	75	398	50	40	40	7906	60
1201-0013	1/18/2012	32.2	15	402	75	16780	20	395	75	187	50	88	40	22750	60
1201-0014	1/19/2012	32.5	15	353	75	16500	20	475	75	235	50	48	40	24050	60
1201-0015	1/20/2012	15	15	75	75	1223	20	75	75	63	50	40	40	2245	60
1201-0019	1/24/2012	15	15	75	75	664.4	20	75	75	50	50	40	40	1849	60
1201-0020	1/25/2012	15	15	75	75	1115	20	75	75	50	50	40	40	2359	60
1201-0021	1/26/2012	15	15	75	75	1266	20	75	75	82	50	40	40	1950	60
1202-0001	1/30/2012	43	15	840	75	17320	20	1636	75	1312	50	97	40	28370	60
1202-0002	1/31/2012	69.1	15	1524	75	28940	20	2186	75	2362	50	219	40	44130	60
1202-0004	2/3/2012	15	15	75	75	241.3	20	75	75	50	50	40	40	215	60
1202-0007	2/7/2012	35.8	15	363	75	17670	20	1172	75	301	50	41	40	20060	60
1202-0008	2/8/2012	43.9	15	379	75	12870	20	2089	75	310	50	50	40	27130	60
1202-0009	2/9/2012	48.6	15	393	75	10060	20	1003	75	320	50	40	40	27820	60
1202-0014	2/16/2012	68.5	15	338	75	6169	20	494	75	153	50	40	40	9036	60
1202-0015	2/15/2012	15	15	105	75	6035	20	277	75	167	50	40	40	7810	60
1202-0016	2/14/2012	40.1	15	198	75	18200	20	829	75	234	50	40	40	14680	60
1202-0020	2/21/2012	16	15	157	75	2574	20	1479	75	132	50	40	40	7352	60
1202-0021	2/22/2012	15	15	125	75	5282	20	326	75	97	50	40	40	7331	60
1202-0022	2/23/2012	15	15	99	75	6300	20	158	75	95	50	40	40	8361	60
1203-0001	2/27/2012	15	15	75	75	1552	20	75	75	51	50	40	40	1948	60
1203-0002	2/28/2012	15	15	75	75	3213	20	114	75	51	50	40	40	4644	60
1203-0003	2/29/2012	15	15	75	75	1968	20	75	75	50	50	40	40	1706	60
1203-0009	3/7/2012	15	15	75	75	1432	20	80	75	50	50	40	40	1991	60
1203-0010	3/8/2012	15	15	75	75	619.3	20	75	75	50	50	40	40	1366	60
1203-0011	3/9/2012	15	15	88	75	18580	20	368	75	234	50	40	40	9023	60
1203-0015	3/14/2012	15	15	75	75	747.2	20	75	75	50	50	40	40	2665	60
1203-0016	3/15/2012	15	15	96	75	4329	20	145	75	100	50	40	40	7010	60
1203-0017	3/16/2012	24.4	15	275	75	8196	20	498	75	226	50	40	40	16570	60
1203-0019	3/21/2012	67.8	15	1128	75	64400	20	2444	75	602	50	148	40	36300	60
1203-0020	3/22/2012	15	15	143	75	8079	20	242	75	90	50	40	40	7338	60

All values that were at or below the detection limit were reported at the detection limit

Table 28: Septage Sampling Data

Septage Monitoring Data - 2012

Results in ppb dry weight

Sample NO.	DATE	Cd	Cd MDL	Cr	Cr MDL	Cu	Cu MDL	Pb	Pb MDL	Ni	Ni MDL	Ag	Ag MDL	Zn	Zn MDL
1203-0021	3/23/2012	15	15	98	75	3672	20	179	75	77	50	397	40	4812	60
1203-0027	3/28/2012	27.1	15	362	75	32840	20	686	75	294	50	117	40	23290	60
1203-0028	3/29/2012	18.3	15	190	75	18800	20	1210	75	141	50	40	40	14110	60
1203-0029	3/30/2012	15	15	131	75	14200	20	654	75	158	50	40	40	15370	60
1204-0003	4/4/2012	15	15	102	75	7575	20	446	75	146	50	40	40	8089	60
1204-0004	4/5/2012	15	15	163	75	2755	20	139	75	116	50	103	40	11360	60
1204-0005	4/6/2012	15	15	75	75	903.2	20	138	75	50	50	83	40	1783	60
1204-0009	4/11/2012	15	15	75	75	651.3	20	91	75	50	50	40	40	1351	60
1204-0010	4/12/2012	15	15	75	75	2696	20	105	75	54	50	40	40	3408	60
1204-0011	4/13/2012	15	15	125	75	3403	20	257	75	151	50	40	40	7559	60
1204-0015	4/18/2012	15	15	136	75	23700	20	270	75	327	50	40	40	6393	60
1204-0016	4/19/2012	18.6	15	470	75	30400	20	625	75	564	50	40	40	14400	60
1204-0017	4/20/2012	15	15	198	75	9980	20	262	75	187	50	40	40	4456	60
1204-0020	4/25/2012	20.3	15	182	75	16440	20	969	75	296	50	40	40	15040	60
1204-0021	4/26/2012	55.3	15	557	75	53590	20	1743	75	499	50	69	40	33880	60
1204-0022	4/27/2012	15	15	125	75	9538	20	338	75	151	50	40	40	8132	60
1205-0003	5/2/2012	51.9	15	452	75	22280	20	1486	75	357	50	100	40	28880	60
1205-0004	5/3/2012	25	15	278	75	9155	20	431	75	239	50	40	40	16780	60
1205-0005	5/4/2012	18.3	15	168	75	13900	20	415	75	268	50	40	40	15800	60
1205-0009	5/9/2012	45.3	15	576	75	20590	20	768	75	1627	50	49	40	31560	60
1205-0010	5/10/2012	22.4	15	204	75	16980	20	580	75	379	50	40	40	17700	60
1205-0011	5/11/2012	15	15	93	75	3076	20	155	75	106	50	40	40	5625	60
1205-0014	5/15/2012	66	15	690	75	51050	20	4301	75	1719	50	178	40	62200	60
1205-0016	5/17/2012	15	15	75	75	2915	20	133	75	50	50	40	40	3955	60
1205-0018	5/19/2012	15	15	75	75	1702	20	75	75	142	50	40	40	2420	60
1205-0019	5/21/2012	47.8	15	291	75	45960	20	1393	75	4583	50	62	40	99680	60
1205-0020	5/22/2012	43.1	15	323	75	28640	20	1168	75	2889	50	92	40	57800	60
1205-0021	5/23/2012	15	15	75	75	942.4	20	112	75	127	50	40	40	5179	60
1205-0028	5/31/2012	56.6	15	484	75	40690	20	1564	75	4583	50	64	40	112000	60
1205-0029	6/1/2012	15	15	75	75	4203	20	146	75	93	50	40	40	4320	60
1205-0030	6/2/2012	15	15	75	75	2290	20	258	75	124	50	40	40	5257	60
1205-0034	6/7/2012	15	15	157	75	9196	20	528	75	307	50	40	40	12900	60
1205-0035	6/8/2012	23	15	169	75	14880	20	465	75	300	50	40	40	20160	60
1205-0036	6/9/2012	24.1	15	216	75	18920	20	590	75	427	50	40	40	28730	60
1205-0040	6/14/2012	24.2	15	234	75	8379	20	417	75	238	50	40	40	15080	60

All values that were at or below the detection limit were reported at the detection limit

Table 28: Septage Sampling Data

Septage Monitoring Data - 2012

Results in ppb dry weight

Sample NO.	DATE	Cd	Cd MDL	Cr	Cr MDL	Cu	Cu MDL	Pb	Pb MDL	Ni	Ni MDL	Ag	Ag MDL	Zn	Zn MDL
1205-0041	6/15/2012	32.4	15	231	75	15250	20	600	75	277	50	40	40	21020	60
1205-0042	6/16/2012	37.1	15	501	75	11670	20	498	75	422	50	40	40	27690	60
1206-0004	6/25/2012	29.9	15	255	75	23960	20	907	75	969	50	40	40	37320	60
1206-0005	6/26/2012	90.5	15	842	75	82360	20	5486	75	700	50	224	40	44200	60
1206-0006	6/27/2012	24.1	15	174	75	15290	20	597	75	700	50	40	40	26280	60
1206-0007	6/21/2012	45.2	15	562	75	31060	20	667	75	1850	50	40	40	47090	60
1206-0008	6/22/2012	15	15	75	75	1119	20	75	75	73	50	40	40	2132	60
1206-0009	6/23/2012	22.6	15	185	75	15600	20	555	75	625	50	40	40	30040	60
BA00123	7/5/2012	15	15	75	75	2187	20	105.8	75	118.2	50	40	40	6771	60
BA00122	7/6/2012	23.12	15	151.2	75	9362	20	392.9	75	327.2	50	59.25	40	10190	60
BA00121	7/7/2012	29.83	15	166.6	75	14620	20	742.9	75	501.1	50	113.8	40	980	60
BA01521	7/12/2012	49.85	15	549.6	75	38600	20	1491	75	386.3	50	71.55	40	33000	60
BA01522	7/13/2012	15	15	75	75	2674	20	118.6	75	78.1	50	40	40	4013	60
BA01523	7/14/2012	15	15	75	75	1549	20	100.7	75	50	50	40	40	4144	60
BA01864	7/19/2012	23.9	15	236.1	75	9723	20	2130	75	304.1	50	40	40	14750	60
BA01865	7/20/2012	32.83	15	247.9	75	15090	20	1129	75	318	50	46.9	40	19170	60
BA01866	7/21/2012	70.28	15	631.6	75	37750	20	2000	75	615.3	50	152.8	40	45430	60
BA01524	7/26/2012	36.11	15	329.3	75	17050	20	1047	75	381.1	50	107.5	40	25070	60
BA01525	7/27/2012	48.66	15	628.8	75	40610	20	2146	75	517.4	50	143.8	40	45980	60
BA01526	7/28/2012	49.5	15	594.1	75	36310	20	3937	75	789.2	50	66.83	40	41800	60
BA03632	8/1/2012	50.55	15	892.8	75	21860	20	1405	75	734.2	50	109.9	40	43550	60
BA03633	8/2/2012	40.98	15	540.4	75	23040	20	1823	75	421.6	50	45.86	40	30010	60
BA03634	8/3/2012	15	15	75	75	999.6	20	75	75	131.8	50	40	40	2427	60
BA04150	8/9/2012	38.98	15	298.7	75	15110	20	1016	75	292.2	50	51.09	40	23410	60
BA04151	8/10/2012	23.57	15	209.6	75	16780	20	707.2	75	170.7	50	40	40	14520	60
BA04152	8/11/2012	35.22	15	333.1	75	28800	20	1222	75	1768	50	49.02	40	37780	60
BA04962	8/16/2012	15	15	75	75	1495	20	75	75	65.35	50	40	40	3270	60
BA04963	8/17/2012	23.87	15	240.8	75	13800	20	718.2	75	446.5	50	40	40	15740	60
BA04964	8/18/2012	15	15	75	75	2275	20	139.2	75	137.9	50	40	40	5140	60
BA05247	8/23/2012	15	15	154.4	75	6040	20	436.1	75	238.2	50	40	40	15750	60
BA05246	8/24/2012	15	15	75	75	484.3	20	75	75	50	50	40	40	1456	60
BA05245	8/25/2012	15	15	75	75	850.9	20	75	75	56.55	50	40	40	2316	60
BA05988	8/30/2012	36.22	15	293.5	75	14320	20	621.8	75	313.3	50	40	40	24900	60
BA05989	8/31/2012	31.58	15	249.3	75	16350	20	526.5	75	217.5	50	40	40	14170	60
BA05990	9/1/2012	24.9	15	260.3	75	9072	20	549.6	75	320.9	50	40	40	19900	60

All values that were at or below the detection limit were reported at the detection limit

Table 28: Septage Sampling Data

Septage Monitoring Data - 2012

Results in ppb dry weight

Sample NO.	DATE	Cd	Cd MDL	Cr	Cr MDL	Cu	Cu MDL	Pb	Pb MDL	Ni	Ni MDL	Ag	Ag MDL	Zn	Zn MDL
BA06741	9/6/2012	47.35	15	656.6	75	24210	20	4876	75	584.4	50	64.03	40	37570	60
BA06740	9/7/2012	22.13	15	220	75	8164	20	506.5	75	185	50	40	40	15800	60
BA06739	9/8/2012	15	15	90.19	75	2690	20	130.9	75	79.36	50	40	40	5950	60
BA07218	9/12/2012	33.67	15	366.2	75	21820	20	994.8	75	359.2	50	49.63	40	22970	60
BA07219	9/13/2012	15	15	75	75	1050	20	110.5	75	61.81	50	40	40	3911	60
BA07221	9/15/2012	15	15	75	75	1636	20	75	75	64.13	50	40	40	3465	60
BA08118	9/17/2012	15	15	75	75	1047	20	83.08	75	85.34	50	40	40	2358	60
BA08119	9/18/2012	19.68	15	298.3	75	9772	20	961.7	75	425.9	50	40	40	20580	60
BA08120	9/19/2012	15	15	75	75	2236	20	75	75	50	50	40	40	2788	60
BA08660	9/27/2012	15	15	75	75	4931	20	126.8	75	65.86	50	40	40	2832	60
BA08661	9/28/2012	30.34	15	298.4	75	19720	20	730.6	75	209	50	44.21	40	33090	60
BA08662	9/29/2012	15	15	110.5	75	10140	20	312.6	75	75.68	50	40	40	6977	60
BA09468	10/4/2012	15	15	75	75	4555	20	83.49	75	56	50	60.87	40	4807	60
BA09469	10/5/2012	15	15	75	75	918.7	20	79.08	75	50	50	40	40	2628	60
BA09470	10/6/2012	15	15	178.6	75	5229	20	497.3	75	322.8	50	40	40	11950	60
BA09975	10/9/2012	24.73	15	241.7	75	9436	20	886	75	204.3	50	40	40	16270	60
BA09976	10/10/2012	25.45	15	286.2	75	7667	20	593.1	75	247.6	50	111.8	40	19560	60
BA09977	10/11/2012	35.07	15	561.6	75	17130	20	954.5	75	525	50	41.71	40	23680	60
BA10342	10/18/2012	24.04	15	289.5	75	17330	20	634.8	75	280.3	50	40	40	17440	60
BA10341	10/19/2012	27.96	15	293.7	75	12950	20	608.4	75	223.7	50	48.98	40	18040	60
BA10340	10/20/2012	15.34	15	156.1	75	7569	20	340.2	75	308	50	40	40	12680	60
BA11351	10/25/2012	15	15	75	75	880.1	20	100.3	75	50	50	40	40	2587	60
BA11350	10/26/2012	15	15	75	75	650.6	20	75	75	50	50	40	40	2136	60
BA11349	10/27/2012	15	15	82.89	75	7102	20	272.4	75	166.7	50	40	40	8532	60
BA12024	10/29/2012	20.68	15	431.6	75	9057	20	440.2	75	317.5	50	41.78	40	25870	60
BA12023	10/30/2012	15	15	75	75	1776	20	75	75	50	50	40	40	4296	60
BA12022	10/31/2012	15.06	15	194.7	75	7806	20	239.3	75	129.1	50	40	40	20330	60
BA12710	11/8/2012	251.8	15	5406	75	14220	20	667.4	75	259.3	50	40	40	20140	60
BA12711	11/9/2012	38.93	15	453.9	75	13640	20	438.9	75	238.6	50	57.03	40	27720	60
BA12712	11/10/2012	15	15	170.9	75	11670	20	182.8	75	123.3	50	40	40	13390	60
BA13646	11/15/2012	65.89	15	733.1	75	37640	20	1657	75	711.2	50	412.4	40	29360	60
BA13647	11/16/2012	15	15	75	75	2014	20	81.35	75	50.68	50	40	40	3745	60
BA13648	11/17/2012	15	15	75	75	1039	20	75	75	83.63	50	40	40	1946	60
BA14249	11/19/2012	15	15	125.8	75	5729	20	357.9	75	148.5	50	40	40	9755	60
BA14251	11/20/2012	15	15	144.5	75	9102	20	444.2	75	140.5	50	40	40	14170	60

All values that were at or below the detection limit were reported at the detection limit

Table 28: Septage Sampling Data

Septage Monitoring Data - 2012

Results in ppb dry weight

Sample NO.	DATE	Cd	Cd MDL	Cr	Cr MDL	Cu	Cu MDL	Pb	Pb MDL	Ni	Ni MDL	Ag	Ag MDL	Zn	Zn MDL
BA14250	11/21/2012	18.77	15	479.2	75	9234	20	486.6	75	318.2	50	40	40	13830	60
BA14465	11/29/2012	35.96	15	198.4	75	17030	20	528.2	75	199	50	40	40	20070	60
BA14466	11/30/2012	24.51	15	261.6	75	15220	20	706.2	75	237.6	50	40	40	17450	60
BA14467	12/1/2012	22.39	15	219.3	75	12140	20	502.8	75	199.8	50	40	40	11930	60
BA15192	12/6/2012	15	15	118.6	75	3658	20	75	75	118.5	50	40	40	4671	60
BA15193	12/7/2012	15	15	75	75	2831	20	75	75	59.29	50	40	40	3558	60
BA15194	12/8/2012	52.74	15	635.7	75	28550	20	1039	75	382.1	50	74.22	40	26510	60
BA15792	12/10/2012	15	15	75	75	478.5	20	75	75	50	50	40	40	649.9	60
BA15793	12/11/2012	15	15	75	75	341.7	20	75	75	50	50	40	40	509.7	60
BA15794	12/12/2012	15	15	140.1	75	8226	20	264.8	75	226.5	50	40	40	8128	60
BA16472	12/20/2012	15	15	140	75	18180	20	968.2	75	446.1	50	40	40	14480	60
BA16471	12/21/2012	39.64	15	390.5	75	15270	20	951.9	75	291.4	50	53.57	40	24300	60
BA16470	12/22/2012	20.46	15	342.4	75	31650	20	626.3	75	432.2	50	40	40	26560	60
BA16890	12/26/2012	15	15	75	75	18810	20	248.8	75	346.1	50	40	40	7159	60
BA16889	12/27/2012	15	15	75	75	8890	20	130	75	255	50	40	40	3581	60
BA16888	12/28/2012	29.8	15	330.2	75	14500	20	536.5	75	262	50	40	40	15200	60

All values that were at or below the detection limit were reported at the detection limit

Table 28: Septage Sampling Data

Metals Loading to Bucklin Point from Septage (lbs/yr)

Year	Cadmium	Chromium	Copper	Lead	Nickel	Silver	Zinc	Total Metals	MGY
1996	4.5	77.6	946.0	167.0	33.9	19.6	1414	2663	14.76
1997	3.9	33.2	806.0	113.0	27.4	10.3	1060	2054	14.22
1998	4.5	29.2	830.0	93.0	31.0	5.7	1016	2009	17.53
1999	3.4	26.5	623.0	61.0	20.0	4.1	849	1587	21.50
2000	2.8	21.8	591.0	53.0	26.7	4.1	873	1572	23.34
2001	1.5	20.7	436.0	42.3	22.4	4.2	633	1160	17.39
2002	0.95	8.2	322.6	30.4	22.8	33.1	473	892	17.04
2003	0.89	3.8	196.4	15.9	7.1	4.2	299	527	13.03
2004	0.90	5.0	256.3	15.9	8.9	3.3	321	612	9.10
2005	0.93	7.9	349.9	25.5	11.3	1.9	458	855	8.96
2006	1.35	8.8	416.0	24.2	13.2	3.3	495	961	9.36
2007	1.5	11.5	532.3	28.2	14.8	4.2	605	1197	8.53
2008	2.8	10.5	440.3	19.8	9.5	5.3	508	996	9.30
2009	1.5	12.1	435.4	23.0	11.6	4.2	554	1042	9.08
2010	1.4	12.5	505.1	30.7	15.5	3.3	640	1208	8.02
2011	1.6	21.1	558.4	35.8	16.8	5.1	745	1384	7.07
2012	1.6	17.7	775.6	39.0	22.5	3.4	989	1848	7.08

Table 29: Septage Summary 1996-2012

River and Bay Nutrients Data 2012

Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeocophylin (ug/L)	Comments
BAY																	
01/04/12	12:35 PM	Phillipsdale Landing	BAY	0.4	6.14	2.48	7.40	989	10.10	85.00	115	3140	1330	16			Surface
01/04/12	1:00 PM	Phillipsdale Landing	BAY	1.6	7.98	2.94	7.21	996	10.20	86.80	114	3230	1280	14			Bottom
01/04/12	12:55 PM	Phillipsdale Landing	BAY	0.4	6.14										0.15	0.95	
02/01/12	10:00 AM	Phillipsdale Landing	BAY	0.5	3.24	3.99	7.69	749	8.55	53.7	36.8	2500	1110	8			
02/01/12	10:05 AM	Phillipsdale Landing	BAY	0.5	3.20	3.99	7.69	336	5.35	77	29.6	1480	564	50			
02/01/12	10:25 PM	India Point Park	BAY	0.5	6.42	11.29	7.91	756	7.76	55.4	56.2	2410	969	8			
02/01/12	10:30 AM	India Point Park	BAY	0.5	6.44	11.27	7.91	151	1.96	48.4	22.5	633	300	72			
02/01/12	1:05 PM	Pomham Rocks	BAY	0.5	13.42	5.56	7.85	536	9.13	171	35.8	2000	841	28			
02/01/12	1:10 PM	Pomham Rocks	BAY	0.5	13.48	5.56	7.85	117	<-1.5	28	18.8	517	256	58			
02/01/12	1:30 PM	Edgewood Yacht Club	BAY	0.5	14.91	5.65	7.97	506	9.51	179	37.2	1930	824	46			
02/01/12	1:35 PM	Edgewood Yacht Club	BAY	0.5	14.91	5.65	7.97	210	5.06	49.5	12.6	847	391	78			
02/01/12	1:30 PM	Edgewood Yacht Club	BAY	0.5	14.91	5.65	7.97	418	9.21	181	38.1	1920	821	44			
02/01/12	1:35 PM	Edgewood Yacht Club	BAY	0.5	14.91	5.65	7.97	234	4.91	50.2	13.7	852	385	78			
02/01/12	9:20 AM	Bullocks Reach Buoy	BAY	0.5	16.45	4.55	7.93	433	8	90.6	16.3	1650	684	56			
02/01/12	9:25 AM	Bullocks Reach Buoy	BAY	0.5	16.37	4.55	7.94	112	<-1.5	19.2	14.6	492	196	98			
02/01/12	8:55 AM	Conimicut Point	BAY	0.5	16.57	4.66	7.90	341	8.6	56.2	13.4	1450	523	52			
02/01/12	9:00 AM	Conimicut Point	BAY	0.5	16.57	4.66	7.90	99.8	<-1.5	16.8	14	439	294	90			
02/01/12	10:00 AM	Phillipsdale Landing	BAY	0.5	3.99										1.96	1.23	
02/01/12	10:25 AM	India Point Park	BAY	0.5	6.17										2.49	1.28	
02/01/12	10:05 AM	Pomham Rocks	BAY	0.5	13.42										2.52	1.25	
02/01/12	1:30 PM	Edgewood Yacht Club	BAY	0.5	14.94										3.57	1.44	
02/01/12	1:30 PM	Edgewood Yacht Club	BAY	0.5	14.94										4.01	1.42	
02/01/12	9:20 AM	Bullocks Reach Buoy	BAY	0.5	16.45										6.43	2.22	
02/01/12	8:55 AM	Conimicut Point	BAY	0.5	16.18										8.19	1.43	
02/15/12	12:55 PM	Phillipsdale Landing	BAY	-0.5				1110	7.97	28.5	76.5	2120	1340	42			
02/15/12	9:50 AM	India Point Park	BAY	-0.5				760	7.30	30.4	60.4	1830	1010	84			
02/15/12	9:25 AM	Pomham Rocks	BAY	-0.5				505	6.66	16.0	36.4	1140	663	158			
02/15/12	10:15 AM	Edgewood Yacht Club	BAY	-0.5				466	15.20	318	80.4	1160	950	160			
02/15/12	9:05 AM	Bullocks Reach Buoy	BAY	-0.5				311	12.20	83.9	13.2	574	578	214			
02/15/12	9:05 AM	Bullocks Reach Buoy	BAY	-0.5				304	11.90	82.5	12.2	580	556	220			
02/15/12	8:45 AM	Conimicut Point	BAY	-0.5				486	11.80	114	15.7	1040	753	148			
02/15/12	12:55 PM	Phillipsdale Landing	BAY	-0.5											1.81	1.28	
02/15/12	9:50 AM	India Point Park	BAY	-0.5											3.67	1.81	
02/15/12	9:25 AM	Pomham Rocks	BAY	-0.5											4.55	1.65	
02/15/12	10:15 AM	Edgewood Yacht Club	BAY	-0.5											7.69	3.08	
02/15/12	9:05 AM	Bullocks Reach Buoy	BAY	-0.5											5.05	1.80	
02/15/12	9:05 AM	Bullocks Reach Buoy	BAY	-0.5											9.08	2.99	
02/15/12	8:45 AM	Conimicut Point	BAY	-0.5											4.87	1.93	
03/07/12	2:10 PM	Phillipsdale Landing	BAY	0.5	8.96										6.93	6.04	
03/07/12	2:10 PM	Phillipsdale Landing	BAY	0.5	8.96	6.71	7.73	855	8.73	40.2	3706	1510	1070	28			
03/07/12	2:15 PM	Phillipsdale Landing	BAY	1.5	10.77	6.39	8.01	728	7.24	41.1	27.3	1050	927	18			
03/07/12	9:40 AM	Conimicut Point	BAY	-0.5	29.01	4.92	10.00	8.26	<-1.5	<7.0	<5.0	242	104	20			Surface
03/07/12	9:45 AM	Conimicut Point	BAY	bottom				<-6.0	<-1.5	7.2	<5.0	196	<-100	42			Bottom
03/07/12	10:10 AM	Bullocks Reach Buoy	BAY	-0.5	29.00	5.12	9.31	7.9	<-1.5	<7.0	<5.0	238	108	22			Surface
03/07/12	10:15 AM	Bullocks Reach Buoy	BAY	bottom				<-6.0	<-1.5	<7.0	<5.0	213	179	118			Bottom
03/07/12	1:00 PM	Edgewood Yacht Club	BAY	-0.5	26.18	6.02	8.95	63.5	<-1.5	<7.0	<5.0	502	186	26			Surface
03/07/12	1:05 PM	Edgewood Yacht Club	BAY	bottom				56.2	<-1.5	<7.0	<5.0	413	214	66			Surface
03/07/12	1:00 PM	Edgewood Yacht Club	BAY	-0.5	26.18	6.02	8.95	60.0	<-1.5	<7.0	<5.0	509	179	58			Surface
03/07/12	1:05 PM	Edgewood Yacht Club	BAY	bottom				55.5	<-1.5	<7.0	<5.0	420	224	56			Surface
03/07/12	1:35 PM	India Point Park	BAY	-0.5	17.47	5.97	8.88	436	4.72	26.8	13.9	1080	695	34			Surface
03/07/12	1:40 PM	India Point Park	BAY	bottom				32.1	<-1.5	10.1	<5.0	281	151	18			Bottom
03/07/12	1:35 PM	India Point Park	BAY	-0.5	17.47	5.97	8.88								4.08	2.64	
03/07/12	1:00 PM	Edgewood Yacht Club	BAY	-0.5	26.18	6.02	8.95								1.69	0.60	
03/07/12	1:00 PM	Edgewood Yacht Club	BAY	-0.5	26.18	6.02	8.95								20.79	4.80	
03/07/12	10:10 AM	Bullocks Reach Buoy	BAY	-0.5	29.00	5.12	9.31								7.93	1.92	
03/07/12	9:40 AM	Conimicut Point	BAY	-0.5	29.01	4.92	10.00								6.44	1.38	
03/14/12	9:10 AM	Conimicut Point	BAY	-0.5	21.16	8.83	9.27	186	2.34	<7.0	<5.0	784	448	40			38.07
03/14/12	9:40 AM	Bullocks Reach Buoy	BAY	-0.5	20.02	8.99	9.00	267	2.88	37.2	<5.0	903	580	22			17.27
03/14/12	9:40 AM	Bullocks Reach Buoy	BAY	-0.5	20.02	8.99	9.00	268	2.97	50.6	<5.0	906	582	26			48.73
03/14/12	10:10 AM	Edgewood Yacht Club	BAY	-0.5	18.18	9.06	8.91										32.86
03/14/12	12:55 PM	Pomham Rocks	BAY	-0.5	17.78	10.37	8.22	358	3.68	15.2	11.2	993	587	10			5.05
03/14/12	1:25 PM	India Point Park	BAY	-0.5	15.98	10.95	8.09	394	3.71	7.02	16.3	1010	653	20			2.34
03/14/12	1:45 PM	Phillipsdale Landing	BAY	-0.5	4.89	10.84	7.71	939	8.88	23.9	46.0	1590	1190	2			3.81
03/28/12	9:10 AM	Conimicut Point	BAY	0.5	28.17	7.90	8.05	21.5	<-1.5	17.8	6.98	266	196	30			3.74
03/28/12	9:25 AM	Conimicut Point	BAY	0.5	28.17	7.90	8.05	56.6	<-1.5	7.17	7.46	331	212	44			
03/28/12	9:30 AM	Bullocks Reach Buoy	BAY	0.5	28.27	8.02	8.42	18.2	<-1.5	22.7	6.29	265	144	18			3.07
03/28/12	9:30 AM	Bullocks Reach Buoy	BAY	0.5	28.27	8.02	8.42	37.5	<-1.5	<7.0	8.79	341	244	24			
03/28/12	9:40 AM	Bullocks Reach Buoy	BAY	0.5	28.27	8.02	8.42	18.3	<-1.5	23.2	6.54	268	147	218			3.08
03/28/12	9:40 AM	Bullocks Reach Buoy	BAY	0.5	28.27	8.02	8.42	57.4	<-1.5	<7.0	9.79	341	255	28			
03/28/12	10:00 AM	Edgewood Yacht Club	BAY	0.5	26.59	7.89	7.79	143	<-1.5	60.0	14.6	369	265	38			3.47
03/28/12	10:10 AM	Edgewood Yacht Club	BAY	0.5	26.59	7.89	7.79	59.6	2.01	61.7	18.0	467	326	44			
03/28/12	1:00 PM	Pomham Rocks	BAY	0.5	27.93	8.24	8.32	72.8	<-1.5	48.6	13.7	342	256	30			
03/28/12	1:10 PM	Pomham Rocks	BAY	0.5	27.93	8.24	8.32	75.8	<-1.5	58.9	16.4	349	265	34			
03/28/12	1:25 PM	India Point Park	BAY	0.5	24.78	8.84	8.22	201	<-1.5	39.1	14.2	326	240	28			2.66
03/28/12	1:35 PM	India Point Park	BAY	0.5	24.78	8.84	8.22	59.2	1.54	56.1	23.4	432	388	36			
03/28/12	2:50 PM																

River and Bay Nutrients Data 2012

Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeocophyin (ug/L)	Comments	
04/11/12	10:55 AM	Edgewood Yacht Club	BAY	0.5	25.96	10.57	7.96	171	4.26	58.6	34.8	429	413	266	6.29	2.84		
04/11/12	10:55 AM	Edgewood Yacht Club	BAY	0.5	25.96	10.57	7.96	172	4.38	59.1	35.0	436	471	324	6.51	2.95		
04/11/12	1:00 PM	India Point Park	BAY	0.5	25.73	11.57	7.94	164	3.63	24.1	28.2	426	913	248	7.93	3.18		
04/11/12	1:35 PM	Phillipsdale Landing	BAY	0.5	26.85	10.73	7.30	671	9.81	13.0	141	1010	903	184	5.16	2.67		
04/11/12	10:35 AM	Pomham Rocks	BAY	0.5	26.60	10.13	8.07	144	2.79	42.4	30.0	401	322	336	6.25	3.06		
04/11/12	10:10 AM	Bullocks Reach Buoy	BAY	0.5	28.22	9.75	7.96	68.4	1.92	17.4	19.2	308	225	322	5.46	2.44		
05/02/12	9:40 AM	Conimicut Point	BAY					8.64	<1.5	37.2	14.3	101	152	34	8.99	3.93		
05/02/12	9:45 AM	Conimicut Point	BAY					87.3	2.01	<7.0	<5.0	431	250	34				
05/02/12	1:30 PM	Edgewood Yacht Club	BAY	0.1	26.56	13.80	7.87	135	<1.5	220	<5.0	104	108	36	14.25	11.34		
05/02/12	1:35 PM	Edgewood Yacht Club	BAY					137	<1.5	223	<5.0	108	200	40				
05/02/12	1:30 PM	Edgewood Yacht Club	BAY	0.1	26.56	13.80	7.87	<6.0	3.36	<7.0	65.0	1990	506	44	7.22	7.35		
05/02/12	11:35 AM	Edgewood Yacht Club	BAY					8.03	3.52	<7.0	66.4	619	524	50				
05/02/12	1:00 PM	India Point Park	BAY	0.1	18.75	13.70	7.73	20.6	<1.5	<7.0	10.2	1090	156	102	1.12	10.58		
05/02/12	1:05 PM	India Point Park	BAY					420	8.69	79.6	54.3	289	712	32				
05/02/12	12:50 PM	Phillipsdale Landing	BAY	1.4	10.37	12.80	7.56	631	11.4	124	130	1390	1140	16	4.66	3.98		
05/02/12	12:45 PM	Phillipsdale Landing	BAY	0.6	8.66	12.90	7.51	767	12.5	130	89.6	1460	968	30				
05/02/12	10:30 AM	Pomham Rocks	BAY					107	<1.5	48.6	16.4	<20	122	32	1.91	21.86		
05/02/12	10:35 AM	Pomham Rocks	BAY					8.14	2.98	<7.0	<5.0	517	292	48				
05/02/12	10:00 AM	Bullocks Reach Buoy	BAY					169	<1.5	<7.0	30.4	609	109	28	11.65	7.77		
05/02/12	10:05 AM	Bullocks Reach Buoy	BAY					8.05	3.66	89.8	<5.0	97	358	32				
05/09/12	1:00 PM	Edgewood Yacht Club	BAY	0.5	20.58	14.54	8.16	174	7.59	175	35.4	631	516	190	8.17	9.02		
05/09/12	1:20 PM	India Point Park	BAY	0.5	18.50	14.56	8.13	265	7.36	77.2	26.5	597	524	102	10.56	9.33		
05/09/12	1:50 PM	Phillipsdale Landing	BAY	0.5	3.21	15.25	7.55	976	18.80	250	208	1930	1470	30	4.96	4.94		
05/09/12	10:30 AM	Pomham Rocks	BAY	0.5	23.34	13.99	8.09	105	4.45	111	17.0	521	388	108	11.62	7.86		
05/09/12	10:00 AM	Bullocks Reach Buoy	BAY	0.5	25.38	13.57	8.14	6.51	<1.5	<7.0	<5.0	182	166	240	10.98	5.94		
05/09/12	10:00 AM	Bullocks Reach Buoy	BAY	0.5	25.38	13.57	8.14	6.53	<1.5	<7.0	<5.0	260	191	6	13.77	6.55		
05/09/12	9:35 AM	Conimicut Point	BAY	0.5	27.28	13.05	8.05	8.17	<1.5	<7.0	<5.0	149	160	252	8.43	4.70		
05/23/12	8:55 AM	Conimicut Point	BAY	0.5	21.40	17.37	8.34	<6.0	<1.5	<7.0	16.9	186	<100	52	35.08	15.45		
05/23/12	9:05 AM	Conimicut Point	BAY					9.50	<1.5	<7.0	<5.0	49	203	62				
05/23/12	9:25 AM	Bullocks Reach Buoy	BAY	0.5	21.66	17.16	8.31	<6.0	<1.5	<7.0	17.9	204	114	42	2.91	16.18		
05/23/12	9:35 AM	Bullocks Reach Buoy	BAY					<6.0	<1.5	<7.0	<5.0	55	446	64	31.40	2.88		
05/23/12	1:40 PM	Edgewood Yacht Club	BAY	0.5	26.49	15.33	7.93	17.00	1.77	24.1	23.7	342	256	22	21.94	13.29		
05/23/12	1:50 PM	Edgewood Yacht Club	BAY					34.40	1.92	88.8	6.3	488	356	46				
05/23/12	1:40 PM	Edgewood Yacht Club	BAY	0.5	26.49	15.33	7.93	17.70	1.81	25.1	23.8	346	327	38	23.01	9.34		
05/23/12	1:50 PM	Edgewood Yacht Club	BAY					35.10	2.00	90.8	6.6	508	472	52				
05/23/12	10:05 AM	Pomham Rocks	BAY	0.5	21.81	16.28	7.76	10.20	<1.5	16.0	20.0	215	139	24	21.18	8.87		
05/23/12	10:10 AM	Pomham Rocks	BAY					152.00	5.28	58.7	22.8	635	390	48				
05/23/12	1:10 PM	India Point Park	BAY	0.5	15.72	17.36	7.71	30.50	12.10	130.0	40.9	1250	398	26	15.76	6.89		
05/23/12	1:15 PM	India Point Park	BAY					447.00	<1.5	60.8	59.8	469	736	34				
05/23/12	8:35 AM	Phillipsdale Landing	BAY	0.4	9.24	17.78	7.40	213.00	14.10	127.0	66.7	1330	566	26	13.15	6.64		
05/23/12	8:40 AM	Phillipsdale Landing	BAY	1.6	24.70	14.82	7.20	485.00	9.80	152.0	91.4	776	857	36				
05/23/12	9:40 AM	Bullocks Reach Buoy	BAY	0.5	21.26													
06/06/12	8:53 AM	Conimicut Point	BAY	0.1	29.59	16.30	7.65	8.61	<1.5	7.8	15.1	303	156	336	14.23	2.77		
06/06/12	10:30 AM	Edgewood Yacht Club	BAY	0.1	23.82	17.37	7.34	161.00	4.45	153.0	59.8	965	504	282	6.95	1.90		
06/06/12	9:20 AM	Bullocks Reach Buoy	BAY	0.1	29.44	16.33	7.67	77.90	2.42	62.9	29.6	574	294	292	12.49	1.70		
06/06/12	9:20 AM	Bullocks Reach Buoy	BAY	0.1	29.44	16.33	7.67	83.90	2.54	63.8	29.9	650	312	300	7.06	2.47		
06/06/12	9:20 AM	Bullocks Reach Buoy	BAY					148.00	4.35	180.0	56.0	1010	660	296	8.22	4.01		
06/20/12	8:15 AM	Conimicut Point	BAY	0.5	27.75	20.49	8.09	<6.0	<1.5	<7.0	38.7	398	189	394	9.36	1.74	Surface	
06/20/12	8:20 AM	Conimicut Point	BAY					7.94	<1.5	84.0	<5.0	646	356	414			Bottom	
06/20/12	8:45 AM	Bullocks Reach Buoy	BAY	0.5	27.42	20.81	8.13	13.40	<1.5	<7.0	<5.0	383	149	370	7.08	1.85	Surface	
06/20/12	8:55 AM	Bullocks Reach Buoy	BAY					<6.0	<1.5	<7.0	<5.0	409	184	430			Bottom	
06/20/12	9:03 AM	Bullocks Reach Buoy	BAY												10.75	1.66	Middle	
06/20/12	10:16 AM	Edgewood Yacht Club	BAY	0.5	24.56	21.19	8.39	<6.0	<1.5	30.2	12.1	459	230	330	36.88	2.76	Surface	
06/20/12	10:30 AM	Edgewood Yacht Club	BAY					<6.0	<1.5	<7.0	<5.0	689	349	360			Bottom	
06/20/12	10:37 AM	Pomham Rocks	BAY	0.5	24.60	21.02	8.40	<6.0	<1.5	<7.0	12.6	401	156	346	35.03	0.50	Surface	
06/20/12	10:45 AM	Pomham Rocks	BAY					<6.0	<1.5	<7.0	<5.0	450	183	396			Surface	
06/20/12	1:00 PM	India Point Park	BAY	0.5	17.11	22.38	8.08	174	10.4	<7.0	21.9	659	266	240	45.75	4.11	Surface	
06/20/12	1:15 PM	India Point Park	BAY					24.4	<1.5	97.6	37.6	913	303	394			Bottom	
06/20/12	1:00 PM	India Point Park	BAY	0.5	17.11	22.38	8.08	179	<1.5	<7.0	25.2	676	299	242	49.13	8.24	Surface	
06/20/12	1:15 PM	India Point Park	BAY					25.4	9.41	99.3	39.4	924	452	400			Bottom	
06/20/12	1:30 PM	Phillipsdale Landing	BAY	0.3	6.10	25.18	8.30	199	11.4	<7.0	56.8	1410	654	148	49.46	3.83	Surface	
06/20/12	1:35 PM	Phillipsdale Landing	BAY	1.8	21.51	20.85	7.54	523	12.0	78.5	61.6	986	839	164			bottom	
07/03/12	8:45 AM	Conimicut Point	BAY	0.5	27.72	22.64	7.68	8.22	<1.5	<7.0	10.3	835	227	42	13.767	8.267	surface	
07/03/12	2:20 PM	Edgewood Yacht Club	BAY	0.5	26.79	23.69	7.85		30.4	<1.5	<7.0	12.7	972	302	40	27.615	8.075	surface
07/03/12	9:15 AM	Bullocks Reach Buoy	BAY	0.5	26.81	22.94	7.81	<6.0	<1.5	<7.0	10.4	869	214	64	14.409	7.634	surface	
07/03/12	9:30 AM	Bullocks Reach Buoy	BAY	n/a	n/a	n/a	n/a								9.52	5.274	mid	
07/03/12	9:20 AM	Bullocks Reach Buoy	BAY	n/a	n/a	n/a	n/a								4.494	3.537	bottom	
07/03/12	2:05 PM	Pomham Rocks	BAY	0.5	26.21	23.52	7.79	<6.0	<1.5	<7.0	<5.0	975	1020	38	39.54	8.781	surface	
07/03/12	1:45 PM	India Point Park	BAY	0.5	19.70	23.93	7.79	161		7.85	<7.0	19.5	1170	405	40	56.106	14.258	surface
07/03/12	1:00 PM	Phillipsdale Landing	BAY	0.5	15.16	25.14	7.88	276		13.2	<7.0	160	1160	708	28	56.161	12.566	surface
07/18/12	8:25 AM	Conimicut Point	BAY	0.5	28.36	25.88	8.05	<6.0	<1.5	<7.0	42.3	744	261	388	5.739	3.212	surface	
07/18/12	8:35 AM	Conimicut Point	BAY	n/a	n/a	n/a	n/a		7.3	<1.5	98.6	66.5	1250	295	436		bottom	
07/18/12	10:30 AM	Edgewood Yacht Club	BAY	0.5	26.38	26.41	8.28	<6.0	<1.5	<7.0	49.1	210	274	378	370	22.934	7.109	surface
07/18/12	10:30 AM	Edgewood Yacht Club	BAY	0.5	26.38	26.41	8.28	<6.0	<1.5	<7.0	49.1	210	274	378	370	22.934	7.109	surface
07/18/12	10:45 AM	Edgewood Yacht Club	BAY	n/a	n/a	n/a	n/a		8.46	<1.5	61.3	113	1160	317			bottom	
07/18/12	10:45 AM	Edgewood Yacht Club	BAY	n/a	n/a	n/a	n/a		8.76	<1.5	57.4	114	1170	305	346		bottom	
07/18/12	10:10 AM	Pomham Rocks	BAY	0.5	26.36	26.27	8.26	<6.0	<1.5	<7.0	52.3	254	525	366	29.59	8.033	surface	
07/18/12	10:15 AM	Pomham Rocks	BAY	n/a	n/a	n/a	n/a		9.36	<1.5	8.91	71.1	681	275	396		bottom	

Table 30: River and Bay Nutrients Data 2012

River and Bay Nutrients Data 2012

Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeocystin (ug/L)	Comments	
07/18/12	9:45 AM	India Point Park	BAY	0.5	25.81	25.64	8.07	<6.0	<1.5	<7.0		77.5	458	304	334	46.045	10.139 surface	
07/18/12	9:55 AM	India Point Park	BAY	n/a	n/a	n/a	n/a	9.19	<1.5		172	138	1170	453	312		bottom	
07/18/12	1:10 PM	Phillipsdale Landing	BAY	0.5	20.50	27.02	7.89	14		1.78	<7.0	150	790	670	304	90.635	16.282 surface	
07/18/12	1:15 PM	Phillipsdale Landing	BAY	n/a	n/a	n/a	n/a	7.8	<1.5	7.69		149	800	364	318		bottom	
07/18/12	8:50 AM	Bullocks Reach Buoy	BAY	0.5	28.18	25.00	8.07	<6.0	<1.5	15.5		45.6	763	255	406	6.387	3.821 surface	
07/18/12	9:05 AM	Bullocks Reach Buoy	BAY	n/a	n/a	n/a	n/a	<6.0	<1.5	<7.0		54.6	1200	257	436	11.288	4.205 bottom	
07/18/12	9:00 AM	Bullocks Reach Buoy	BAY	n/a	n/a	n/a	n/a									9.429	4.368 mid	
07/24/12	10:20 AM	Bullocks Reach Buoy	BAY													7.575	4.645 surface	
07/24/12	10:20 AM	Bullocks Reach Buoy	BAY													6.983	3.741 surface	
07/24/12	10:25 AM	Bullocks Reach Buoy	BAY													11.681	5.633 surface	
08/01/12	9:35 AM	Conimicut Point	BAY	0.5	27.58	23.44	8.09	<6.0	<1.5	<7.0		65.60	1620.0	223		36.758	11.72 surface	
08/01/12	1:37 PM	Edgewood Yacht Club	BAY	0.5	25.33	24.56	8.05	74.30		9.50	<7.0	103.00	1820.0	362		49.187	10.73 surface	
08/01/12	1:55 PM	Pomham Rocks	BAY	0.5	25.83	24.42	7.83	120.00	8.44	74.40		125.00	1830.0	528		33.025	10.052 surface	
08/01/12	2:25 PM	India Point Park	BAY	0.5	20.96	24.28	7.50	293.00	13.90	252.00		187.00	1910.0	893		14.47	5.596 surface	
08/01/12	2:25 PM	India Point Park	BAY	0.5	20.96	24.28	7.50	274.00	13.20	250.00		128.00	1820.0	897		15.035	5.259 surface	
08/01/12	10:55 AM	Phillipsdale Landing	BAY	0.4	18.75	23.97	7.41	143.00	12.20	299.00		186.00	2050.0	776		6.379	4.458 surface	
08/01/12	10:20 AM	Bullocks Reach Buoy	BAY	0.5	25.39	23.36	7.89	125.00	8.33	24.20		103.00	1780.0	556		30.923	5.311 surface	
08/01/12	10:25 AM	Bullocks Reach Buoy	BAY													8.375	3.905 bottom	
08/01/12	10:30 AM	Bullocks Reach Buoy	BAY													32.937	6.485 mid	
08/01/12	1:05 PM	Pawtuxet River red can #6	BAY	0.5	13.46	24.26	7.84	482.00	17.90	170.00		124.00	2400.0	1040		12.45	4.079 surface	
08/01/12	1:10 PM	Pawtuxet River red can #6	BAY					157.00	13.00	207.00		145.00	2110.0	938			bottom	
08/15/12	10:05 AM	Conimicut Point	BAY	0.5	28.91	25.38	8.01	6.52	<1.5	<7.0		68.90	1560.0	234		270	14.844	4.382 surface
08/15/12	10:10 AM	Conimicut Point	BAY	n/a	n/a	n/a	n/a	7.34	<1.5		117.00	96.80	2070.0	347		306		bottom
08/15/12	2:50 AM	Edgewood Yacht Club	BAY	0.5	23.22	26.93	8.06	61.10	4.11	34.10		164.00	1700.0	398		216	43.641	11.504 surface
08/15/12	3:00 PM	Edgewood Yacht Club	BAY	n/a	n/a	n/a	n/a	13.20	<1.5		244.00	190.00	2460.0	711		268		bottom
08/15/12	2:25 PM	Pomham Rocks	BAY	0.5	22.15	26.34	8.00	93.10	5.99	55.30		169.00	1660.0	389		236	50.718	15.509 surface
08/15/12	2:35 PM	Pomham Rocks	BAY	n/a	n/a	n/a	n/a	26.30	3.21	252.00		207.00	2530.0	653		298		bottom
08/15/12	2:00 PM	India Point Park	BAY	0.5	18.69	25.85	7.87	204.00	8.34	139.00		216.00	1880.0	598		214	81.246	12.837 surface
08/15/12	2:05 PM	India Point Park	BAY	n/a	n/a	n/a	n/a	22.50	<1.5		319.00	240.00	2140.0	542		290		bottom
08/15/12	2:05 PM	Phillipsdale Landing	BAY	0.5	0.16	26.36	7.63	362.00	20.80	239.00		314.00	1880.0	956		154	24.643	8.173 surface
08/15/12	2:15 PM	Phillipsdale Landing	BAY	n/a	n/a	n/a	n/a	213.00	21.80	337.00		392.00	2060.0	855		192		bottom
08/15/12	10:30 AM	Bullocks Reach Buoy	BAY	7.7	24.93	0.50	8.07	30.10	<1.5	10.80		115.00	1620.0	298		246	15.699	9.132 surface
08/15/12	10:30 AM	Bullocks Reach Buoy	BAY	0.5	24.93	25.12	8.07	30.70	<1.5	9.86		113.00	1640.0	292		248	16.916	8.254 bottom
08/15/12	10:40 AM	Bullocks Reach Buoy	BAY	n/a	n/a	n/a	n/a	7.95	<1.5	130.00		110.00	2260.0	570		314	4.754	3.484 bottom
08/15/12	10:50 AM	Bullocks Reach Buoy	BAY													20.832	9.361 mid	
08/15/12	10:40 AM	Bullocks Reach Buoy	BAY	n/a	n/a	n/a	n/a	8.58	<1.5	133.00		111.00	2270.0	393		290	4.829	2.831 surface
08/15/12	1:30 PM	Pawtuxet @ Red Can	BAY	0.5	22.12	26.48	7.67	507.00	13.30	93.10		105.00	1940.0	933		112	21.061	7.165 surface
08/15/12	1:40 PM	Pawtuxet @ Red Can	BAY	n/a	n/a	n/a	n/a	144.00	2.98	30.90		89.80	1420.0	479		190		bottom
08/29/12	9:05 AM	Conimicut Point	BAY	0.5	27.98	22.98	7.64	11.20	<1.5	12.50		83.10	1530.0	231		240	19.45	3.656 surface
08/29/12	2:30 PM	Edgewood Yacht Club	BAY	0.5	27.28	24.06	7.72	38.70	4.23	183.00		160.00	1960.0	618		230	15.99	3.479 surface
08/29/12	2:30 PM	Edgewood Yacht Club	BAY	0.5	27.28	24.06	7.72	40.10	4.92	183.00		161.00	1960.0	449		250	16.76	3.503 surface
08/29/12	1:55 PM	Pomham Rocks	BAY	0.5	25.23	24.04	7.74	43.40	4.25	191.00		155.00	1850.0	673		264	11.14	3.341 surface
08/29/12	1:35 PM	India Point Park	BAY	0.5	21.42	24.24	7.55	163.00	10.30	286.00		206.00	1700.0	860		220	7.376	6.206 surface
08/29/12	1:05 PM	Phillipsdale Landing	BAY	0.5	18.27	25.01	7.55	232.00	10.50	291.00		220.00	1580.0	945		202	11.58	7.044 surface
08/29/12	9:35 AM	Bullocks Reach Buoy	BAY	0.5	27.90	23.43	7.68	36.10	2.63	135.00		128.00	1780.0	428		258	14.73	3.504 surface
08/29/12	9:40 AM	Bullocks Reach Buoy	BAY	2.5	27.90	23.43	7.68									11.41	3.506 mid	
08/29/12	9:42 AM	Bullocks Reach Buoy	BAY	6.0	27.90	23.43	7.68									4.799	2.227 bottom	
08/29/12	10:25 AM	Pawtuxet River red can #6	BAY	0.5	27.90	23.44	7.67	750.00	10.00	156.00		119.00	2710.0	1300		162	2.839	1.546 surface
08/29/12	10:30 AM	Pawtuxet River red can #6	BAY	3.0	27.90	23.44	7.67	116.00	7.37	241.00		178.00	2200.0	727		266	5.947	2.999 bottom
09/12/12	11:08 AM	Conimicut Point	BAY	0.5	28.46	21.34	7.94	30.10	3.63	<7.0		51.20	881.0	228		76	26.71	2.106 surface
09/12/12	11:17 AM	Conimicut Point	BAY					32.50	3.78	159.00		68.50	1310.0	360		94		bottom
09/12/12	10:38 AM	Edgewood Yacht Club	BAY	0.5	27.26	21.89	7.64	99.70	8.49	189.00		131.00	1690.0	581		70	8.654	1.852 surface
09/12/12	10:45 AM	Edgewood Yacht Club	BAY					52.55	6.63	221.00		116.00	1760.0	483		76		bottom
09/12/12	1:26 PM	Pomham Rocks	BAY	0.5	27.29	22.31	7.71	125.00	8.98	174.00		127.00	1600.0	512		46	15.2	2.264 surface
09/12/12	1:30 PM	Pomham Rocks	BAY					58.10	71.46	224.00		111.00	1850.0	544		224		bottom
09/12/12	2:31 PM	India Point Park	BAY	0.5	19.79	23.13	7.43	294.00	12.70	295.00		172.00	1640.0	843		62	13.38	2.004 surface
09/12/12	2:40 PM	India Point Park	BAY					51.40	5.28	225.00		111.00	1440.0	530		84		bottom
09/12/12	11:25 AM	Phillipsdale Landing	BAY	0.5				421.00	16.90	352.00		229.00	1860.0	1070		62	26.15	2.728 surface
09/12/12	11:30 AM	Phillipsdale Landing	BAY					498.00	18.50	332.00		250.00	1830.0	1100		60		bottom
09/12/12	9:41 AM	Bullocks Reach Buoy	BAY	0.5	27.60	20.84	7.77	71.50	5.89	103.00		87.10	1530.0	385		80	9.861	2.247 surface
09/12/12	9:45 AM	Bullocks Reach Buoy	BAY					48.90	4.75	160.00		89.50	1480.0	412		182	6.51	2.024 surface
09/12/12	9:50 AM	Bullocks Reach Buoy	BAY													13.83	2.783 mid	
09/12/12	1:50 PM	Pawtuxet River red can #6	BAY	0.5	13.72	21.83	7.36	166	9.92	171		124	1790	590		152	10.25	1.763 surface
09/12/12	1:57 PM	Pawtuxet River red can #6	BAY					122.00	9.43	162.00		120.00	1720.0	547		78		bottom
09/26/12	9:40 AM	Conimicut Point	BAY	0.5	29.32	19.09	7.90	42.30	6.06	32.20		36.70	696.0	260		94	10.61	2.212 surface
09/26/12	1:15 PM	Edgewood Yacht Club	BAY	0.5	27.24	19.64	7.81	132.00	11.60	68.00		54.20	1220.0	431		70	5.627	1.124 surface
09/26/12	10:20 AM	Pomham Rocks	BAY	0.5	27.61	19.20	7.85	126.00	14.00	83.70		56.10	1160.0	486		86	6.885	1.538 surface
09/26/12	1:35 PM	India Point Park	BAY	0.5	21.85	19.77	8.21	242.00	14.20	<7.00		71.00	1510.0	531		68	118.2	3.534 surface
09/26/12	1:35 PM	India Point Park	BAY	0.5	21.85	19.77	8.21	251.00	14.00	<7.00		72.00	1520.0	498		70	92.28	4.78 surface
09/26/12	2:10 PM	Phillipsdale Landing	BAY	0.5	15.37	19.38	8.24	460.00	18.70	33.00		141.00	1550.0	1200		100	74.91	10.87 surface
09/26/12	9:13 AM	Bullocks Reach Buoy	BAY	0.5	28.85	19.10	7.82	70.00	9.84	66.40		43.60	4330.0	347		76	8.901	1.49 surface
09/26/12	9:20 AM	Bullocks Reach Buoy	BAY													8.584	2.183 mid	
09/26/12	9:15 AM	Bullocks Reach Buoy	BAY													7.629	2.222 bottom	
09/26/12	12:45 PM	Pawtuxet River red can #6	BAY	0.5	23.42	19.05	7.67	807	25.5	119		70.6	4730	1270		44	7.974	2 surface
09/26/12	12:45 PM	Pawtuxet River red can #6	BAY					808	25.6	117		70.5	2250	1260		38	5.993	1.734 bottom
10/10/12	10:05 AM	Conimicut Point	BAY	0.5	27.02	16.32	7.89	160.00	11.20	51.00		62.20						

River and Bay Nutrients Data 2012

Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeocystin (ug/L)	Comments
10/10/12	11:05 AM	Edgewood Yacht Club	BAY					129.00	10.20	101.00	83.00	1200.00	464	422			bottom
10/10/12	1:30 PM	India Point Park	BAY	0.5	23.83	17.67	7.51	391.00	15.20	193.00	125.00	1450.00	874	284	2.679		1.345
10/10/12	1:30 PM	India Point Park	BAY	0.5	23.83	17.67	7.51	391.00	16.10	198.00	137.00	1460.00	927	248			surface
10/10/12	1:38 PM	India Point Park	BAY					61.30	8.41	192.00	77.40	1090.00	426	482			bottom
10/10/12	1:05 PM	Pomham Rocks	BAY	0.5	28.83	17.48	7.69	205.00	9.90	130.00	84.90	1170.00	556	424	34.98		1.358
10/10/12	1:10 PM	Pomham Rocks	BAY					71.40	9.75	144.00	60.80	1100.00	412	488			bottom
10/10/12	10:00 AM	Bullocks Reach Buoy	BAY												9.507		1.366
10/10/12	9:45 AM	Bullocks Reach Buoy	BAY	0.5	27.79	17.31	7.678	154.00	11.00	148.00	85.00	1190.00	519	390	15.06		2.047
10/10/12	9:55 AM	Bullocks Reach Buoy	BAY					69.30	9.85	138.00	59.50	1080.00	400	385.8	5.406		1.817
10/10/12	12:43 PM	Pawtuxet River red can #6	BAY	0.5	15.12	16.73	7.32	796	24.9	132	75.6	2590	1250	336	2.677		1.296
10/10/12	12:50 PM	Pawtuxet River red can #6	BAY					171.00	12.00	162.00	85.90	1300.00	535	44			bottom
10/10/12	9:50 AM	Phillipsdale Landing	Bay	0.5				677.00	15.30	169.00	213.00	1900.00	773	254	85.6		15.39
10/10/12	9:55 AM	Phillipsdale Landing	Bay					424.00	18.10	200.00	152.00	1730.00	856	294			bottom
10/24/12	9:00 AM	Conimicut Point	BAY	0.5	26.46	15.20	7.81	203.00	13.30	91.60	63.1	1130	726	334	6.229		1.75
10/24/12	3:00 PM	Edgewood Yacht Club	BAY	0.5	24.60	15.60	7.72	201.00	13.40	138.00	77	1200	679	340	5.582		2.344
10/24/12	3:00 PM	Edgewood Yacht Club	BAY	0.5	24.60	15.61	7.72	198.00	12.30	134.00	73.7	1200	651	342	5.87		2.042
10/24/12	2:30 PM	Pomham Rocks	BAY	0.5	25.38	15.50	7.72	199.00	13.30	120.00	66	1160	664	414	11.83		3.335
10/24/12	2:00 PM	India Point Park	BAY	0.5	21.67	15.42	7.54	472.00	15.70	151.00	83.3	1620	895	108	1.522		1.02
10/24/12	1:35 PM	Phillipsdale Landing	BAY	0.5	11.04	14.58	7.24	648.00	14.00	157.00	134	1780	1280	68	4.844		2.772
10/24/12	9:25 AM	Bullocks Reach Buoy	BAY	0.5	23.29	15.30	7.70	232.00	14.00	144.00	77.6	1260	571		5.189		2.117
10/24/12	9:30 AM	Bullocks Reach Buoy	BAY	3.0	23.29	15.30	7.70								9.695		2.568
10/24/12	9:35 AM	Bullocks Reach Buoy	BAY	7.0	23.29	15.30	7.70								4.271		2.333
10/24/12	10:30 AM	Pawtuxet River red can #6	BAY	0.5	9.69	15.01	7.24	788	15.6	110	66.4	2670	1330	120	1.489		1.581
10/24/12	10:40 AM	Pawtuxet River red can #6	BAY	3.0	9.69	15.01	7.24	269	15.7	152	73.4	1420	629	78	1.136		1.038
11/14/12	8:45 AM	Conimicut Point	BAY	0.5	27.45	10.43	7.81	176	6.82	88.5	52.2	885	606	14	3.194		1.444
11/14/12	9:00 AM	Conimicut Point	BAY					71.1	3.54	53.6	38.4	611	347	30			bottom
11/14/12	2:00 PM	Edgewood Yacht Club	BAY	0.5	26.83	10.95	7.82	195	9.13	111	65.5	993	525	30	3.015		2.055
11/14/12	2:15 PM	Edgewood Yacht Club	BAY					199	9.52	118	66.6	1000	546	46			bottom
11/14/12	1:40 PM	Pomham Rocks	BAY	0.5	26.52	10.94	7.82	199	8.46	113	61.1	1020	534	12	2.49		1.284
11/14/12	1:50 PM	Pomham Rocks	BAY					175	7.8	109	58.2	961	454	38			bottom
11/14/12	1:15 PM	India Point Park	BAY	0.5	18.96	10.48	7.70	436	12.4	127	73.6	1610	808	18	2.942		1.275
11/14/12	1:20 PM	India Point Park	BAY	0.5	18.96	10.48	7.70	144	7.06	106	53.6	945	413	18			bottom
11/14/12	12:40 PM	Phillipsdale Landing	BAY	0.5	15.97	11.00	7.60	437	12.2	141	61.9	1830	786	18	2.136		3.344
11/14/12	12:50 PM	Phillipsdale Landing	BAY	1.5	17.24	11.12	7.57	434	13.5	135	67.9	1790	802	6			bottom
11/14/12	9:15 AM	Bullocks Reach Buoy	BAY	0.5	26.90	10.56	7.81	196	8.06	101	55.6	941	475	28	3.133		1.836
11/14/12	9:25 AM	Bullocks Reach Buoy	BAY					117	5.31	70	45	735	464	24			bottom
11/14/12	9:45 AM	Bullocks Reach Buoy	BAY												3.081		0.9857
11/14/12	9:25 AM	Bullocks Reach Buoy	BAY	0.5	26.90	10.56	7.81								0.5178		1.731
11/14/12	10:30 AM	Pawtuxet @ Red Can	BAY	0.5	9.77	10.23	7.32	1160	17.9	215	63.7	2670	1680	2	1.095		1.331
11/14/12	10:40 AM	Pawtuxet @ Red Can	BAY					309	11.8	154	73.7	1260	636	4			bottom
11/20/12	9:45 AM	Conimicut Point	BAY	0.5	27.60	8.95	7.86	196.00	9.38	108.00	51.50	920.00	582	26	1.818		0.797
11/20/12	2:18 PM	Edgewood Yacht Club	BAY	0.5	26.74	9.57	7.88	220.00	8.99	106.00	59.70	998.00	648	28	2.921		1.357
11/20/12	2:06 PM	Pomham Rocks	BAY	0.5	27.90	9.55	7.89	218.00	8.45	98.80	63.70	905.00	482	40	3.895		0.9209
11/20/12	1:15 PM	India Point Park	BAY	0.5	25.23	9.89	7.83	269.00	10.30	108.00	51.50	1080.00	554	26	3.464		2.044
11/20/12	1:15 PM	India Point Park	BAY	0.5	25.23	9.89	7.83	267.00	8.18	105.00	52.30	1120.00	545	14	1.196		0.7886
11/20/12	1:40 PM	Phillipsdale Landing	BAY	0.5	15.18	8.35	7.70	754.00	11.70	92.80	76.00	1750.00	1060	8	0.8963		1.331
11/20/12	9:10 AM	Bullocks Reach Buoy	BAY	0.5	27.82	8.87	7.85	181.00	8.77	112.00	51.20	875.00	447	46	2.327		0.8789
11/20/12	9:15 AM	Bullocks Reach Buoy	BAY												2.974		0.5698
11/20/12	9:20 AM	Bullocks Reach Buoy	BAY												3.579		1.354
11/20/12	10:35 AM	Pawtuxet River red can #6	BAY					1230.00	17.40	193.00	68.00	1980.00	1650	6	0.6623		0.8031
11/20/12	10:40 AM	Pawtuxet River red can #6	BAY					165.00	9.47	110.00	53.90	853.00	443	6			Bottom
12/05/12	9:00 AM	Conimicut Point	BAY	0.5	28.73	7.77	7.92	167.00	8.27	84.50	42.30	584.00	419	62	2.525		0.6512
12/05/12	2:35 PM	Edgewood Yacht Club	BAY	0.5	26.70	8.52	7.94	275.00	10.10	145.00	63.90	765.00	702	28	1.194		0.587
12/05/12	1:50 PM	Pomham Rocks	BAY	0.5	26.11	8.54	7.90	285.00	10.50	151.00	71.00	812.00	633	48	1.372		0.8602
12/05/12	2:10 PM	India Point Park	BAY	0.5	19.08	8.86	7.83	624.00	11.30	90.40	94.50	1120.00	896	30	1.136		1.139
12/05/12	2:10 PM	India Point Park	BAY	0.5	19.08	8.86	7.83	632.00	11.50	90.40	95.90	1130.00	1160	24	0.8784		0.8234
12/05/12	1:40 PM	Phillipsdale Landing	BAY	0.5	7.53	8.94	7.46	1290.00	14.80	46.40	282.00	1650.00	1750	14	8.915		6.111
12/05/12	9:20 AM	Bullocks Reach Buoy	BAY	0.5	28.66	7.92	7.93	171.00	8.50	94.70	46.70	619.00	405	38	1.247		0.8028
12/05/12	9:25 AM	Bullocks Reach Buoy	BAY	3.0	28.66	7.92	7.93								0.8264		0.499
12/05/12	9:30 AM	Bullocks Reach Buoy	BAY	7.0	28.66	7.92	7.93								0.9922		0.7092
12/05/12	1:25 PM	Pawtuxet River red can #6	BAY	0.5	12.64	8.64	7.53	1270.00	23.20	255.00	39.90	1920.00	1630	14	1.379		0.9041
12/05/12	1:35 PM	Pawtuxet River red can #6	BAY	5.0	12.64	8.64	7.53	291.00	13.00	131.00	54.70	786.00	525	38			Bottom
12/19/12	9:20 AM	Conimicut Point	BAY	0.5	27.42	7.18	7.79	203.00	8.64	76.20	45.10	665.00	426	12	3.515		1.653
12/19/12	9:30 AM	Conimicut Point	BAY	10.0	27.42	7.18	7.79	146.00	6.27	54.30	39.00	557.00	326	16			Bottom
12/19/12	1:35 PM	Edgewood Yacht Club	BAY	0.5	26.50	7.40	7.84	230.00	8.21	81.60	48.20	718.00	466	20	4.233		2.804
12/19/12	1:40 PM	Edgewood Yacht Club	BAY	3.0	26.50	7.40	7.84	178.00	7.37	69.30	43.60	628.00	392	30			Bottom
12/19/12	9:45 AM	Bullocks Reach Buoy	BAY	0.5	27.42	7.19	7.80	199.00	7.78	75.60	46.00	647.00	424	36	3.01		1.65
12/19/12	10:00 AM	Bullocks Reach Buoy	BAY	9.0	27.42	7.19	7.80	183.00	7.35	69.80	43.40	621.00	426	32	1.95		1.119
12/19/12	9:55 AM	Bullocks Reach Buoy	BAY	3.0	27.42	7.19	7.80								3.676		1.666
12/19/12	1:05 PM	Pawtuxet @ Red Can	BAY	0.5	9.62	6.88	7.45	890.00	18.40	209.00	14.50	2170.00	1440	10	2.291		2.011
12/19/12	1:15 PM	Pawtuxet @ Red Can	BAY	5.0	9.62	6.38	7.45	235.00	8.54	85.00	47.60	713.00	576	34			Bottom
12/19/12	3:20 PM	Phillipsdale Landing	BAY	0.5	6.50	7.63		803.00	13.00	57.80	107.00	1650.00	1060	20	13.3		9.7
12/19/12	3:10 PM	Phillipsdale Landing	BAY	2.4	7.11	7.00		799.00	13.40	60.00	109.00	1780.00	1100	14			Bottom
RIVER																	
01/04/12	2:00 PM	Ten Mile @ Outlet of Omega Pond	RIVER			2.01	7.25	1860	6.10	32.6	17.5	3520	2230	4			
01/04/12	2:00 PM	Ten Mile @ Outlet of Omega Pond	RIVER			2.00	7.28	1890	6.44	32.9	16.6	3630	2250	2			
01/04/12	9:15 AM	Taunton River @ Berkeley Bridge	RIVER			1.99	7.22	873	13.50	53.4	37.2	2610	1220	4			
01/04/12	12:15 PM	Coles River @ Milford Rd	RIVER			2.26	7.76	416	2.97	30.2	13.6	880	803	2			

Table 30: River and Bay Nutrients Data 20

River and Bay Nutrients Data 2012

Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeocophyin (ug/L)	Comments
01/04/12	3:00 PM	Ten Mile River @ Central Ave.	RIVER			2.20	7.20	3000	10.30	76.4	29.2	3860	3280				
01/04/12	11:30 AM	Palmer River @ Route 6 in Rehoboth	RIVER			0.58	7.33	582	3.71	45.6	7.49	2310	914	4			
01/04/12	8:05 AM	Runnins River @ River Road	RIVER			0.35	6.35	1000	12.80	69.9	<5.0	4530	1300	2			
01/04/12	11:50 AM	Warren Reservoir/Kickemuit River	RIVER			0.95	7.85	847	12.40	211	10.1	2460	1500	12			
01/04/12	8:40 AM	Blackstone River @ Stateline	RIVER			0.95	8.00	651	15.10	120	39.4	2990	956	<2.0			
01/04/12	9:45 AM	Blackstone River @ Slater Dam	RIVER			1.46	8.50	708	14.50	108	25.0	3320	985	4			
01/04/12	10:40 AM	Pawtuxet River @ Broad Street	RIVER			2.54	7.81	1180	5.53	78.5	23.4	2850	1460	<2.0			
01/04/12	9:20 AM	Moshassuck River @ Higginson	RIVER			1.17	8.01	572	3.96	25.2	<5.0	3780	756	<2.0			
01/04/12	2:30 PM	Moshassuck River @ Mill St.	RIVER			1.85	7.46	860	8.25	119	<5.0	4280	1140	4			
01/04/12	1:30 PM	Woonasquacket River @ Manton Ave.	RIVER			1.24	8.26	539	2.51	21.0	<5.0	2710	725	2			
01/04/12	1:50 PM	Woonasquacket River @ Valley Street	RIVER			1.20	7.81	592	2.46	11.6	<5.0	2850	799	2			
01/04/12	1:50 PM	Woonasquacket River @ Valley Street	RIVER			1.20	7.81	591	2.61	12.3	<5.0	2760	780	<2.0			
01/18/12	10:15 AM	Blackstone River @ Slater Dam	RIVER			1.82	7.40	746	11.3	91.8	9.63	3090	1010	2			
01/18/12	9:20 AM	Blackstone River @ Rt. 116 Bikepath	RIVER			2.23	6.92	743	12.9	110	11	3140	1020	<2.0			
01/18/12	2:00 PM	Moshassuck River @ Mill St.	RIVER			3.42	7.24	626	5.74	82.2	<5.0	3220	898	4			
01/18/12	9:48 AM	Moshassuck River @ Higginson	RIVER			2.18	7.26	462	4.44	42	<5.0	2680	728	4			
01/18/12	10:53 AM	Pawtuxet @ Terminal Falls	RIVER			3.44	7.19	1040	7.53	189	12.3	3130	1400	<2.0			
01/18/12	10:53 AM	Pawtuxet @ Terminal Falls	RIVER			3.44	7.19	1040	7.46	187	11.4	2980	1370	2			
01/18/12	1:00 PM	Woonasquacket River @ Manton Ave.	RIVER			3.43	7.30	565	2.45	32.5	<5.0	2670	769	4			
01/18/12	1:33 PM	Woonasquacket River @ Valley Street	RIVER			3.48	7.37	630	2.72	22.3	<5.0	3610	878	<2.0			
02/01/12	8:10 AM	Pawtuxet @ Terminal Falls	RIVER			3.97	7.31	856	6.2	164	21	1670	1190	4			
02/01/12	12:35 PM	Blackstone River @ Slater Dam	RIVER			3.38	7.12	710	9.6	54	36.8	2580	907	2			
02/01/12	10:55 AM	Woonasquacket River @ Valley Street	RIVER			4.48	7.65	608	2.5	9.07	<5.0	2270	860	2			
02/01/12	12:05 PM	Moshassuck @ Mill Street	RIVER			4.88	7.48	642	8.7	61.4	<5.0	2920	868	2			
02/01/12	1:55 PM	Ten Mile @ Outlet of Omega Pond	RIVER			4.38	7.31	1400	7.2	21.1	11.2	2690	1650	6			
02/01/12	2:45 PM	Ten Mile @ Central Ave.	RIVER			5.98	7.40	2130	6.45	25.5	23	2970	2240	2			
02/01/12	2:45 PM	Ten Mile @ Central Ave.	RIVER			5.98	7.40	2130	7.65	25.3	23.3	3070	2340	4			
02/01/12	9:30 AM	Taunton River @ Berkeley Bridge	RIVER			3.08	7.45	682	8.34	35.4	22.2	1820	1020	<2.0			
02/01/12	8:25 AM	Runnins River @ River Road	RIVER			2.74	6.55	794	8.83	26.8	<5.0	3580	1190	2			
02/15/12	9:10 AM	Taunton River @ Berkeley Bridge	RIVER			2.24	7.52	1030	11.2	65.4	45	2560	1350	6			
02/15/12	9:10 AM	Taunton River @ Berkeley Bridge	RIVER			2.24	7.52	1030	11.0	64.8	44.8	2280	1350	6			
02/15/12	1:30 AM	Ten Mile @ Outlet of Omega Pond	RIVER			3.33	7.88	2010	7.63	<7.0	14.6	2600	2260	4			
02/15/12	10:00 AM	Coles River @ Milford Rd	RIVER			3.21	7.95	489	3.82	17.7	14.3	1300	756	6			
02/15/12	10:31 AM	Warren Reservoir/Kickemuit River	RIVER			3.46	7.79	818	13.6	54.2	<5.0	1980	1140	14			
02/15/12	12:50 PM	Palmer River @ Route 6 in Rehoboth	RIVER			2.23	7.06	561	3.43	49.1	<5.0	516	806	52			
02/15/12	2:50 PM	Pawtuxet River	RIVER			4.49	7.80	1450	11.2	212	13.2	3400	1890	14			
02/15/12	9:00 AM	Blackstone @ Slater Dam	RIVER			2.84	7.24	859	11.5	39.7	22.9	2590	1060	12			
02/15/12	9:00 AM	Blackstone @ Slater Dam	RIVER			2.84	7.24	855	11.3	38.7	23.6	2290	1050	10			
02/15/12	11:00 AM	Blackstone @ Stateline	RIVER			3.08	7.35	810	16.0	87.1	27.3	2440	1110	2			
02/15/12	10:00 AM	Blackstone River @ Rt. 116 Bikepath	RIVER			2.81	7.43	868	11.1	33.3	31.9	2670	1140	10			
02/15/12	9:25 AM	Moshassuck @ Higginson Ave.	RIVER			4.04	7.21	599	5.57	28.4	<5.0	3690	767	6			
02/15/12	2:30 AM	Moshassuck @ Mill Street	RIVER			5.51	7.21	818	7.67	87.9	<5.0	3580	1080	8			
02/15/12	1:05 PM	Woonasquacket @ Manton Ave	RIVER			3.91	7.31	581	2.54	14.3	<5.0	2480	761	4			
02/15/12	1:40 PM	Woonasquacket @ Valley Street	RIVER			4.27	7.33	627	3.28	7.97	<5.0	2280	775	4			
03/07/12	12:45 PM	Woonasquacket @ Valley Street	RIVER			6.02	7.56	667	3.06	8.80	<5.0	2100	867	<2.0			
03/07/12	1:05 PM	Moshassuck @ Mill Street	RIVER			6.55	7.41	678	7.15	69.1	<5.0	3340	1000	<2.0			
03/07/12	11:00 AM	Pawtuxet River	RIVER			4.65	7.59	1060	5.82	95.2	13.2	2650	1360	<2.0			
03/07/12	9:00 AM	Blackstone @ Slater Dam	RIVER			3.59	8.09	791	10.30	57.0	<5.0	2270	1040	4			
03/07/12	9:00 AM	Blackstone @ Slater Dam	RIVER			3.59	8.09	799	9.82	57.9	<5.0	2520	1020	6			
03/07/12	9:35 AM	Ten Mile @ Central Ave.	RIVER			4.12	7.42	2170	7.50	31.8	26.0	2540	2460	<2.0			
03/07/12	1:40 PM	Ten Mile @ Outlet of Omega Pond	RIVER			4.88	7.96	1880	10.70	7.00	5.14	2010	2190	4			
03/14/12	10:20 AM	Moshassuck @ Higginson Ave.	RIVER			10.46	7.65	441	5.01	16.5	<5.0	3320	591	<2.0			
03/14/12	2:00 PM	Pawtuxet @ Terminal Falls	RIVER			11.06	7.50	1410	12.10	109	18.8	2880	1740	2			
03/14/12	12:45 PM	Woonasquacket River @ Manton Ave.	RIVER			11.47	7.70	544	3.78	9.7	<5.0	2030	790	<2.0			
03/14/12	10:45 AM	Blackstone @ Slater Dam	RIVER			9.96	7.75	784	9.44	16.4	6.65	2040	985	<2.0			
03/14/12	1:30 PM	Moshassuck @ Mill Street	RIVER			12.07	7.50	651	9.96	58.8	<5.0	3200	890	<2.0			
03/14/12	1:05 PM	Woonasquacket @ Valley Street	RIVER			12.06	7.70	609	3.84	<7.0	<5.0	2160	841	6			
03/28/12	1:25 PM	Blackstone @ Stateline	RIVER			8.43	7.94	1040	27.3	59.7	18.5	2230	1360	<2.0			
03/28/12	9:10 AM	Taunton River @ Berkeley Bridge	RIVER			9.99	8.13	1030	8.73	36.9	60.1	1700	1370	2			
03/28/12	9:10 AM	Taunton River @ Berkeley Bridge	RIVER			9.99	8.13	1040	8.87	39.6	61.0	1790	1400	2			
03/28/12	2:30 PM	Ten Mile @ Outlet of Omega Pond	RIVER			11.44	8.02	379	16.3	<7.0	<5.0	1040	2160	2			
03/28/12	1:30 PM	Blackstone @ Slater Dam	RIVER			9.96	7.45	1000	15.0	28.1	9.17	2010	1260	<2.0			
03/28/12	1:30 PM	Blackstone @ Slater Dam	RIVER			9.96	7.45	995	15.1	28.8	9.72	2040	1260	<2.0			
03/28/12	11:00 AM	Moshassuck @ Mill Street	RIVER			9.00	7.23	642	9.36	96.8	<5.0	3330	996	<2.0			
03/28/12	8:13 AM	Pawtuxet River	RIVER			10.13	6.39	1530	22.3	363	75.3	2370	2280	<2.0			
03/28/12	2:45 PM	Woonasquacket @ Valley Street	RIVER			9.41	7.41	685	4.09	34.5	<5.0	1790	997	<2.0			
04/11/12	9:50 AM	Blackstone River @ Rt. 116 Bikepath	RIVER			10.97	7.93	1150	13.5	<7.0	26.4	1970	1370	14			
04/11/12	10:25 AM	Blackstone @ Stateline	RIVER			10.74	7.66	875	15.0	<7.0	22.4	1870	1240	28			
04/11/12	10:00 AM	Coles River @ Milford Rd	RIVER			10.75	7.45	235	6.30	9.15	6.1	819	724	10			
04/11/12	12:55 PM	Moshassuck @ Higginson Ave.	RIVER			13.82	7.91	137	3.59	<7.0	5.3	2350	300	4			
04/11/12	1:30 PM	Palmer River @ Route 6 in Rehoboth	RIVER			11.71	7.88	44	3.79	16.10	<5.0	527	503	190			
04/11/12	2:40 PM	Pawtuxet @ Terminal Falls	RIVER			12.13	7.28	1320	19.1	188	19.8	2310	1680	10			
04/11/12	2:40 PM	Pawtuxet @ Terminal Falls	RIVER			12.13	7.28	1320	19.2	192	19.9	2390	1740	20			
04/11/12	12:55 PM	Runnins River @ River Road	RIVER			10.26	7.16	640	3.50	<7.0	<5.0	2260	846	6			
04/11/12	8:40 AM	Taunton River @ Berkeley Bridge	RIVER			10.70	7.41	1160	11.5	<7.0	42.2	4260	1440	10			
04/11/12	2:20 PM	Ten Mile @ Central Ave.	RIVER			13.61	7.94	5120	33.6	224	14.1	2130	5650	20			
04/11/12	3:05 PM	Ten Mile @ Outlet of Omega Pond	RIVER			12.82	9.31	2290	18.5	<7.0	<5.0	427	2520	62			
04/11/12	10:25 AM	Warren Reservoir/Kickemuit River	RIVER			12.73	7.32	313	10.7	43.7	<5.0	323	762	30			

Table 30: River and Bay Nutrients Data 2012

River and Bay Nutrients Data 2012

Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeocophylin (ug/L)	Comments
04/11/12	9:10 AM	Blackstone @ Slater Dam	RIVER		11.47	8.09		962	11.4	<7.0	10.9	1910	1230	20			
04/11/12	2:10 PM	Moshassuck @ Mill Street	RIVER		12.49	7.54		520	7.41	36.0	<5.0	2620	730	14			
04/11/12	1:45 PM	Woomasquacket @ Valley Street	RIVER		12.78	7.64		652	4.14	<7.0	<5.0	1270	1010	12			
04/11/12	1:45 PM	Woomasquacket @ Valley Street	RIVER		12.78	7.64		788	4.24	<7.0	<5.0	1380	846	22			
05/02/12	2:30 PM	Pawtuxet @ Terminal Falls	RIVER		13.03	7.54		771	13.2	121	12.5	1940	1030	4			
05/02/12	2:30 PM	Pawtuxet @ Terminal Falls	RIVER		13.03	7.54		782	13.3	123	12.9	2040	1080	6			
05/02/12	8:28 AM	Ten Mile @ Central Ave.	RIVER		11.81	7.92		2330	18.6	96.3	21.6	2070	2510	<2.0			
05/02/12	11:03 AM	Ten Mile @ Outlet of Omega Pond	RIVER		13.56	7.72		1510	32.7	182	22.5	1490	1870	8			
05/02/12	9:25 AM	Blackstone @ Slater Dam	RIVER		12.77	7.93		874	10.2	56.9	56.0	2170	1140	<2.0			
05/02/12	2:00 PM	Moshassuck @ Mill Street	RIVER		12.19	7.66		370	5.65	68.3	6.1	2510	676	6			
05/02/12	1:35 PM	Woomasquacket @ Valley Street	RIVER		12.48	8.04		560	3.83	26.9	<5.0	1320	734	4			
05/09/12	9:15 AM	Blackstone River @ Rt. 116 Bikepath	RIVER		15.79	7.50		945	16.2	46.0	69.7	2400	1220	10			
05/09/12	10:00 AM	Blackstone @ Stateline	RIVER		15.00	7.40		890	21.0	59.0	40.9	2120	1240	16			
05/09/12	10:55 AM	Coles River @ Milford Rd	RIVER		14.41	7.42		185	3.70	46.2	14.1	491	719	26			
05/09/12	11:00 AM	Moshassuck @ Higginson Ave.	RIVER		15.60	7.40		178	5.76	61.8	9.49	2020	417	<2.0			
05/09/12	11:20 AM	Palmer River @ Route 6 in Rehoboth	RIVER		14.46	7.05		109	3.05	46.9	5.94	1320	407	28			
05/09/12	2:30 PM	Pawtuxet @ Terminal Falls	RIVER		15.48	7.00		965	11.8	89.5	15.3	2210	1320	4			
05/09/12	2:30 PM	Pawtuxet @ Terminal Falls	RIVER		15.48	7.00		969	12.0	91.7	15.4	2270	1350	48			
05/09/12	8:30 AM	Runnins River @ River Road	RIVER		13.49	7.25		559	7.10	44.2	7.58	2880	908	72			
05/09/12	10:05 AM	Taunton River @ Berkeley Bridge	RIVER		14.76	7.27		869	7.49	125	48.8	2130	1410	24			
05/09/12	1:35 PM	Ten Mile @ Central Ave.	RIVER		14.65	7.34		1050	23.8	117	17.7	2450	1460	58			
05/09/12	1:10 PM	Ten Mile @ Outlet of Omega Pond	RIVER		14.64	7.61		1950	28.3	80.8	17.7	1930	2330	2			
05/09/12	1:10 PM	Ten Mile @ Outlet of Omega Pond	RIVER		14.64	7.61		1960	28.9	87.5	18.0	1990	2430	6			
05/09/12	9:10 AM	Warren Reservoir/Kickemuit River	RIVER		15.25	7.42		262	17.0	172	8.54	1280	877	<2.0			
05/09/12	1:15 PM	Woomasquacket River @ Manton Ave.	RIVER		15.10	7.30		399	3.90	54.4	6.29	1200	746	4			
05/09/12	8:50 AM	Blackstone @ Slater Dam	RIVER		15.32	7.30		932	12.2	64.5	80.9	2260	1260	44			
05/09/12	1:00 PM	Moshassuck @ Mill Street	RIVER		15.38	7.20		289	10.8	164	24.2	1070	813	38			
05/09/12	1:45 PM	Woomasquacket @ Valley Street	RIVER		15.41	7.27		382	4.54	62.5	9.07	1070	641	22			
05/23/12	12:00 PM	Blackstone River @ Slater Dam	RIVER		19.27	7.37		832	12.60	55.6	23.60	2220	1100	12			
05/23/12	12:45 PM	Pawtuxet @ Broad Street	RIVER		18.21	7.35		774	15.70	169.0	26.60	2500	1080	8			
05/23/12	2:10 PM	Woomasquacket @ Valley Street	RIVER		19.18	7.22		442	4.54	92.6	335.00	1760	1110	4			
05/23/12	2:10 PM	Woomasquacket @ Valley Street	RIVER		19.18	7.22		447	5.16	92.7	339.00	1770	1190	8			
05/23/12	1:45 PM	Moshassuck @ Mill Street	RIVER		18.12	7.18		419	10.50	90.2	7.18	3010	951	6			
05/23/12	1:00 PM	Ten Mile @ Outlet of Omega Pond	RIVER		19.63	7.35		1010	22.00	123.0	33.20	2590	1540	10			
05/23/12	9:40 AM	Ten Mile @ Central Ave.	RIVER		17.35	7.73		1900	23.20	119.0	27.20	3100	2320	4			
06/06/12	2:35 PM	Woomasquacket @ Valley Street	RIVER		17.39	7.58		469	5.71	<7.0	8.89	1940	775	20			
06/06/12	2:00 PM	Woomasquacket @ Manton Ave	RIVER		17.30	7.35		405	5.09	54.1	7.24	1840	732	20			
06/06/12	3:00 PM	Moshassuck @ Mill Street	RIVER		17.34	7.56		440	16.90	237.0	21.10	1820	988	26			
06/06/12	1:15 AM	Moshassuck @ Higginson Ave.	RIVER		17.07	7.44		283	16.30	113.0	10.80	3460	614	182			
06/06/12	11:00 AM	Pawtuxet River	RIVER		16.30	7.23		1110	26.80	199.0	70.00	2920	1650	22			
06/06/12	11:00 AM	Pawtuxet River	RIVER		16.30	7.23		1120	26.80	202.0	70.80	3030	1670	24			
06/06/12	8:30 AM	Blackstone @ Slater Dam	RIVER		16.52	8.16		649	12.30	15.7	27.10	2090	985	30			
06/06/12	9:10 AM	Blackstone @ Rt 116 Bikepath	RIVER		16.59	7.69		706	16.70	53.6	29.60	2280	1090	22			
06/06/12	9:50 AM	Blackstone @ Stateline	RIVER		16.42	7.61		719	26.30	54.2	36.10	2270	1070	22			
06/06/12	3:11 PM	Ten Mile @ Outlet of Omega Pond	RIVER		17.68	7.22		1480	31.50	146.0	30.00	3390	1970	20			
06/06/12	3:11 PM	Ten Mile @ Outlet of Omega Pond	RIVER		17.68	7.22		1510	31.60	147.0	30.60	3950	1980	26			
06/06/12	2:26 PM	Ten Mile @ Central Ave.	RIVER		16.03	7.21		2930	40.70	147.0	25.30	3420	3430	22			
06/06/12	8:30 AM	Runnins River @ River Road	RIVER		13.42	6.70		500	7.88	16.4	12.50	4160	528	52			
06/06/12	1:00 PM	Palmer River at Route 6 in Rehoboth	RIVER		17.00	6.96		122	2.48	22.5	12.00	1820	970	172			
06/06/12	10:26 AM	Warren Reservoir/Kickemuit River	RIVER		16.13	7.22		284	18.30	84.8	11.70	3920	835	20			
06/06/12	10:00 AM	Coles River @ Milford Rd	RIVER		17.28	7.40		214	12.10	104.0	27.10	1830	1000	22			
06/06/12	9:20 AM	Taunton River @ Berkeley Bridge	RIVER		16.73	6.91		834	9.11	68.5	34.10	1760	1860	42			
06/20/12	8:55 AM	Blackstone River @ Slater Dam	RIVER		21.33	7.82		729	7.12	<7.0	7.04	1800	1050	16			
06/20/12	2:40 PM	Pawtuxet River @ Broad Street	RIVER		22.12	7.60		1210	18.2	56.0	20.0	2630	1630	14			
06/20/12	10:20 AM	Woomasquacket @ Valley Street	RIVER		20.86	7.79		461	3.00	<7.0	6.69	1560	721	12			
06/20/12	12:50 PM	Moshassuck River @ Mill Street Bridge	RIVER		20.15	7.65		542	15.8	41.4	5.11	3760	721	16			
06/20/12	2:00 PM	Ten Mile @ Outlet of Omega Pond	RIVER		20.61	8.08		1500	16.1	9.7	6.70	1880	1950	24			
06/20/12	8:20 AM	Moshassuck River @ Higginson Ave.	RIVER		19.78	7.53		233	14.1	64.6	11.8	3310	557	18			
06/20/12	9:50 AM	Woomasquacket @ Manton Ave	RIVER		21.19	7.71		349	3.53	22.8	5.29	1520	604	126			
06/20/12	9:50 AM	Woomasquacket @ Manton Ave	RIVER		21.19	7.71		349	3.73	24.3	6.15	1520	629	24			
07/03/12	2:30 PM	Ten Mile @ Outlet of Omega Pond	RIVER		24.52	7.70		1320	17	35	10.2	736	14	1940			
07/03/12	11:10 AM	Warren Reservoir/Kickemuit River	RIVER		24.24	7.39		<6.0	2.05	58.5	11.8	3230	604	16			
07/03/12	10:35 AM	Coles River @ Milford Rd	RIVER		24.52	8.09		107	2.36	39.1	16.2	2690	629	8			
07/03/12	11:40 AM	Palmer River at Route 6 in Rehoboth	RIVER		25.61	6.97		55.5	5.44	70.5	32.6	2040	590	22			
07/03/12	12:05 PM	Runnins River @ River Road	RIVER		20.78	7.29		483	4.77	27	7.77	4480	910	10			
07/03/12	9:05 AM	Taunton River @ Berkeley Bridge	RIVER		25.01	7.32		378	6.28	60	39.3	1700	999	10			
07/03/12	3:20 PM	Pawtuxet @ Broad Street	RIVER		24.74	7.71		1090	13.5	40.3	36.2	2590	1670	2			
07/03/12	1:35 PM	Ten Mile @ Central Ave.	RIVER		23.94	7.59		2520	9.03	22.6	22.8	2990	2870	2			
07/03/12	9:00 AM	Blackstone River @ Slater Dam	RIVER		24.36	7.92		758	6.3	10.3	13.6	1940	1060	6			
07/03/12	9:45 AM	Blackstone @ Rt 116 Bikepath	RIVER		24.47	7.86		824	7.29	<7.0	24.5	2210	1060	4			
07/03/12	10:40 AM	Blackstone River @ Stateline	RIVER		24.11	7.58		734	7.42	12.2	31.4	2340	1000	4			
07/03/12	2:00 PM	Moshassuck River @ Mill Street Bridge	RIVER		22.57	7.24		415	11.7	67.1	6.84	1480	736	12			
07/03/12	1:25 PM	Moshassuck River @ Higginson Ave.	RIVER		24.16	7.48		151	6.2	43.2	11.1	2370	456	2			
07/03/12	2:35 PM	Woomasquacket @ Manton Ave	RIVER		26.30	7.24		413	34.9	6.14	8.9	3460	763	2			
07/18/12	8:55 AM	Blackstone River @ Slater Dam	RIVER		26.60	7.64		602	11.5	90.7	63.6	522	1290	20			
07/18/12	2:05 PM	Pawtuxet River @ Broad Street	RIVER		27.15	7.55		1630	15.1	24	65.3	2310	2340	0			
07/18/12	1:15 PM	Woomasquacket @ Valley Street	RIVER		26.88	7.95		502	4.55	13.8	<5.00	1650	758	4			
07/18/12	1:15 PM	Woomasquacket @ Valley Street	RIVER		26.88	7.95		498	4.58	14.7	<5.00	1670	1040	12			

Table 30: River and Bay Nutrients Data 2012

River and Bay Nutrients Data 2012

Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeocophyin (ug/L)	Comments
07/18/12	10:20 AM	Moshassuck River @ Mill Street Bridge	RIVER			24.10	7.60	730	21.3	54.4	<5.00	4530	1230				
07/18/12	7:50 AM	Ten Mile @ Outlet of Omega Pond	RIVER			27.56	8.20	608	16.2	25	<5.00	1230	1370				
07/18/12	9:20 AM	Moshassuck River @ Higginson Ave	RIVER			22.19	7.41	317	7.24	70	17.9	4060	634				
07/18/12	12:30 PM	Woonasquacket @ Mantion Ave	RIVER			27.00	7.67	382	8.9	18.2	7.47	1180	777				
08/01/12	8:30 AM	Blackstone River @ Slater Dam	RIVER			22.80	7.47	867.00	7.90	36.10	22.80	1300.0	1270				
08/01/12	1:25 PM	Woonasquacket @ Valley Street	RIVER			23.38	7.63	403.00	3.31	8.44	7.98	1640.0	720				
08/01/12	10:00 AM	Blackstone River @ Stateline	RIVER			22.63	7.66	639.00	8.25	<7.0	28.00	1470.0	1030				
08/01/12	1:45 PM	Moshassuck River @ Mill Street Bridge	RIVER			22.43	7.38	412.00	6.87	52.50	7.01	3510.0	848				
08/01/12	9:15 AM	Blackstone River @ Bikepath	RIVER			22.94	7.52	944.00	11.90	35.50	28.40	1340.0	1320				
08/01/12	9:15 AM	Blackstone River @ Bikepath	RIVER			22.94	7.52	936.00	12.00	41.40	27.80	1390.0	1320				
08/01/12	10:55 AM	Moshassuck River @ Higginson Ave.	RIVER			22.84	7.49	124.00	4.95	17.90	7.03	2840.0	458				
08/01/12	1:05 PM	Woonasquacket @ Mantion Ave	RIVER			28.86	7.74	312.00	5.03	29.00	6.95	1480.0	631				
08/01/12	2:40 PM	Pawtuxet River @ Broad Street	RIVER			23.77	7.26	1390	47.3	136	116	2860	2010				
08/01/12	2:40 PM	Pawtuxet River @ Broad Street	RIVER			23.77	7.26	1350	48.1	136	112	3060	2110				
08/01/12	10:40 AM	Warren Reservoir/Kickemuit River	RIVER			22.46	6.81	<6.0	1.34	13.5	15.1	2200	508				
08/01/12	10:20 AM	Coles River @ Millford Rd	RIVER			22.13	7.22	639	8.25	<7.0	28	1470	1030				
08/01/12	12:40 PM	Palmer River at Route 6 in Rehoboth	RIVER			24.73	6.90	94.6	3.05	29.9	25.8	1810	532				
08/01/12	8:50 AM	Rumins River @ River Road	RIVER			19.92	8.03	435	3.53	27.2	6.5	3680	757				
08/01/12	9:45 AM	Taunton River @ Berkeley Bridge	RIVER			24.37	7.11	847	8.93	42.7	60	2230	1310				
08/01/12	1:50 PM	Ten Mile River @ Omega Pond	RIVER			24.14	7.80	1230	37.1	117	28.4	1950	1900				
08/01/12	1:20 PM	Ten Mile @ Central Ave.	RIVER			22.90	7.48	3420	7.9	44.7	21.3	2460	3950				
08/15/12	9:35 AM	Blackstone River @ Slater Dam	RIVER			23.35	7.57	588.00	8.58	362.00	97.30	1080.0	1300				
08/15/12	9:35 AM	Blackstone @ Slater Dam	RIVER			23.35	7.57	587.00	8.52	360.00	97.90	1070.0	1350				
08/15/12	3:30 PM	Pawtuxet River @ Broad Street	RIVER			23.98	7.07	780.00	15.50	52.50	54.20	1580.0	1230				
08/15/12	2:00 PM	Woonasquacket @ Mantion Ave	RIVER			26.26	7.54	393.00	6.22	9.72	7.56	895.0	657				
08/15/12	2:25 PM	Woonasquacket @ Valley Street	RIVER			24.35	7.52	427.00	4.84	<7.0	17.80	1060.0	686				
08/15/12	2:50 PM	Moshassuck River @ Mill Street Bridge	RIVER			23.17	7.28	279.00	5.31	43.80	8.80	1450.0	535				
08/15/12	1:30 PM	Moshassuck River @ Higginson Ave.	RIVER			24.79	7.37	121.00	3.99	92.50	12.00	2180.0	617				
08/15/12	1:50 PM	Ten Mile @ Outlet of Omega Pond	RIVER			23.79	7.97	935.00	23.20	272.00	43.40	859.0	1560				
08/29/12	8:45 AM	Blackstone River @ Slater Dam	RIVER			23.36	7.81	542	2.12	27.6	<5.00	512	879				
08/29/12	2:15 PM	Woonasquacket @ Valley Street	RIVER			23.22	7.86	517	4.69	20.7	6.08	1210	797				
08/29/12	2:15 PM	Woonasquacket @ Valley Street	RIVER			23.22	7.86	514	4.3	22.5	<5.00	1150	817				
08/29/12	1:45 PM	Moshassuck River @ Mill Street Bridge	RIVER			21.80	7.62	444	8.32	48.3	<5.00	3250	977				
08/29/12	10:15 AM	Blackstone River @ Stateline	RIVER			23.16	8.01	697	4.57	<7.0	10.1	1020	1080				
08/29/12	9:30 AM	Blackstone River @ Bikepath Bridge	RIVER			23.82	7.97	752	6.16	7.13	<5.00	239	1320				
08/29/12	3:00 PM	Pawtuxet River @ Broad Street	RIVER			23.81	7.61	1460	9.58	27.9	44.6	3230	2260				
08/29/12	1:10 PM	Ten Mile @ Outlet of Omega Pond	RIVER			23.73	7.73	1140	26.4	323	5.82	2280	2040				
08/29/12	1:00 PM	Warren Reservoir/Kickemuit River	RIVER			22.31	6.70	<6.0	-1.5	27.50	10.60	974.0	658				
08/29/12	11:50 AM	Coles River @ Millford Rd	RIVER			22.71	6.72	191.00	3.85	91.20	25.40	3790.0	1120				
08/29/12	1:25 PM	Palmer River at Route 6 in Rehoboth	RIVER			24.82	6.62	228.00	9.59	113.00	19.70	3700.0	1120				
08/29/12	10:05 AM	Rumins River @ River Road	RIVER			19.85	6.74	404.00	2.07	15.10	<5.00	5260.0	931				
08/29/12	11:05 AM	Taunton River @ Berkeley Bridge	RIVER			23.82	6.94	1030.00	10.10	91.90	98.50	4360.0	1640				
08/29/12	11:05 AM	Taunton River @ Berkeley Bridge	RIVER			23.82	6.94	1020.00	9.81	92.70	97.90	4380.0	1650				
9/12/2012	9:55 AM	Moshassuck River @ Higginson Ave.	RIVER			15.94	7.49	304	4.31	4.31	8.87	4380	616				
9/12/2012	10:45 AM	Ten Mile River @ Omega Pond	RIVER			21.08	7.8	1590	23.4	103	6.22	1180	2060				
9/12/2012	12:05 PM	Ten Mile @ Central Ave.	RIVER			16.52	7.29	4040	5.76	30.3	15.4	3520	4350				
9/12/2012	1:45 PM	Woonasquacket @ Mantion Ave	RIVER			20.45	7.45	494	4.75	41.6	<5.00	1360	764				
9/12/2012	8:40 AM	Blackstone @ Slater Dam	RIVER			20.18	7.19	684	5.52	197	22.2	1870	1070				
9/12/2012	8:40 AM	Blackstone @ Slater Dam	RIVER			20.18	7.19	671	5.5	179	22.6	1830	1130				
9/12/2012	2:30 PM	Moshassuck River @ Mill Street Bridge	RIVER			17.94	7.4	840	18.5	100	6.41	4870	1320				
9/12/2012	3:00 PM	Pawtuxet River @ Broad Street	RIVER			20.44	7.17	1580	59.6	19.4	48.9	3160	2270				
9/12/2012	2:10 PM	Woonasquacket @ Valley Street	RIVER			19.38	7.5	663	3.3	18	6.57	1840	986				
09/26/12	8:10 AM	Rumins River @ River Road	RIVER			14.90	7.90	554.00	2.09	16.90	5.23	4940.0	913				
09/26/12	8:30 AM	Blackstone @ Slater Mill	RIVER		0.19	17.12	8.07	818.00	6.88	23.00	27.80	1500.0	1130				
09/26/12	9:00 AM	Blackstone @ Bikepath Bridge	RIVER		0.19	17.14	7.81	960.00	6.61	<7.00	48.70	1600.0	1240				
09/26/12	9:00 AM	Blackstone @ Bikepath Bridge	RIVER		0.19	17.14	7.81	951.00	6.93	<7.00	48.00	1640.0	1260				
09/26/12	9:40 AM	Blackstone @ Stateline	RIVER		0.22	16.20	7.70	1270.00	7.46	10.30	104.00	2050.0	1590				
09/26/12	10:35 AM	Taunton River @ Berkeley Bridge	RIVER			17.85	7.73	1260.00	6.77	38.10	72.10	3680.0	1740				
09/26/12	11:15 AM	Moshassuck @ Higginson Ave.	RIVER		0.22	17.42	8.24	96.20	2.45	62.20	19.00	1350.0	948				
09/26/12	11:15 AM	Coles River @ Millford Rd	RIVER			17.59	8.08	207.00	3.92	38.20	10.50	2870.0	456				<2.0
09/26/12	11:45 AM	Warren Reservoir/Kickemuit River	RIVER			16.77	7.66	7.64	1.56	30.50	8.35	922.0	593				
09/26/12	12:45 PM	Palmer River at Route 6 in Rehoboth	RIVER			17.71	7.13	297.00	7.75	120.00	30.00	3960.0	817				
09/26/12	1:05 PM	Woonasquacket @ Valley Street	RIVER		0.19	17.16	7.98	513.00	2.98	25.20	4.03	982.0	780				
09/26/12	1:15 PM	Ten Mile @ Central Ave.	RIVER			17.12	8.01	4320.00	5.06	24.00	13.50	3170.0	4540				
09/26/12	1:25 PM	Woonasquacket @ Mantion Ave	RIVER		0.19	18.32	7.96	627.00	2.11	7.12	5.12	1540.0	883				<2.0
09/26/12	2:00 PM	Pawtuxet @ Broad Street	RIVER		0.20	18.32	7.34	1630.00	38.60	75.90	73.90	3300.0	2180				
09/26/12	2:10 PM	Ten Mile @ Outlet of Omega Pond	RIVER			18.77	8.22	1760.00	13.60	8.00	<5.00	213.0	2060				
09/26/12	2:10 PM	Ten Mile @ Outlet of Omega Pond	RIVER			18.77	8.22	1890.00	15.50	8.32	<5.00	246.0	2160				
10/10/12	12:30 PM	Moshassuck @ Mill Street	RIVER			14.74	7.99	122.00	2.92	24.00	5.78	3060.0	332				
10/10/12	9:40 AM	Ten Mile @ Outlet of Omega Pond	RIVER			16.9	8.74	1200.00	18.20	206.00	7.59	891.0	1750				
10/10/12	1:20 PM	Ten Mile @ Central Ave.	RIVER			14.5	7.92	2830.00	9.45	24.10	16.10	3620.0	3270				
10/10/12	3:10 PM	Woonasquacket @ Mantion Ave	RIVER			15.5	7.84	402.00	5.19	61.20	5.01	1500.0	662				
10/10/12	3:10 PM	Woonasquacket @ Mantion Ave	RIVER			15.5	7.84	401.00	5.16	56.80	5.33	1540.0	881				
10/10/12	1:00 PM	Blackstone @ Slater Mill	RIVER			15.32	8.29	1130.00	7.20	39.80	60.10	2160.0	1430				
10/10/12	1:50 PM	Moshassuck @ Mill Street	RIVER			14.74	7.99	354.00	10.50	109.00	14.20	2710.0	928				
10/10/12	2:15 PM	Pawtuxet @ Broad Street	RIVER			15.72	7.77	1530.00	39.10	83.40	54.40	3780.0	2010				
10/10/12	3:30 PM	Woonasquacket @ Valley Street	RIVER			15.48	7.82	554.00	4.79	27.70	5.20	1630.0	911				
10/24/12	8:35 AM	Blackstone @ Slater Mill	RIVER			13.75	7.82	634.00	6.13	29.50	25.3	1960	930				

Table 30: River and Bay Nutrients Data 2012

River and Bay Nutrients Data 2012

Collection Date	Collection Time	Station	Waterbody	Depth (meters)	Salinity (ppt)	Temp (°C)	pH	NO3+NO2 (ppb)	Nitrite (ppb)	NH3 (ppb)	Ortho-Phosphate (ppb)	Silicate (ppb)	Total Dissolved Nitrogen (ppb)	TSS (ppm)	Chl a (ug/L)	Phaeocophyin (ug/L)	Comments
10/24/12	2:25 PM	Pawtuxet @ Broad Street	RIVER			14.47	7.49	1030.00	13.70	67.60	68.6	2530	152				
10/24/12	12:55 PM	Woonasquatucket @ Valley Street	RIVER			14.09	7.66	269.00	<1.5	<7.0	5.59	1700	501	8			
10/24/12	12:55 PM	Woonasquatucket @ Valley Street	RIVER			14.09	7.66	474.00	<1.5	<7.0	5.59	1760	504	6			
10/24/12	1:25 PM	Moshassuck @ Mill Street	RIVER			13.28	7.38	588.00	9.11	17.20	7.04	4340	855	6			
10/24/12	10:25 AM	Blackstone @ Stateline	RIVER			13.51	7.59	618.00	6.14	13.80	24.5	1790	918	8			
10/24/12	9:30 AM	Blackstone River @ Bikepath	RIVER			14.03	7.58	588.00	9.11	17.20	24.5	2180	952	6			
10/24/12	3:00 PM	Ten Mile @ Outlet of Omega Pond	RIVER			14.21	7.31	1400.00	9.42	24.30	8.44	654	1800	12			
10/24/12	10:25 AM	Coles River @ Milford Rd	RIVER			13.68	7.30	61.00	4.28	20.90	17.5	2510	756	8			
10/24/12	1:15 PM	Palmer River at Route 6 in Rehoboth	RIVER			13.77	6.80	191.00	6.22	48.50	20.4	3940	745	28			
10/24/12	1:40 PM	Runnins River @ River Road	RIVER			13.80	6.91	329.00	2.03	12.10	6.02	4850	1810	4			
10/24/12	9:30 AM	Taunton River @ Berkeley Bridge	RIVER			13.64	7.11	1130.00	6.42	37.20	80.1	3710	362	12			
10/24/12	9:30 AM	Taunton River @ Berkeley Bridge	RIVER			13.64	7.11	1130.00	6.32	38.20	81	3850	668	18			
10/24/12	8:50 AM	Warren Reservoir/Kickemuit River	RIVER			13.56	7.70	64.90	3.14	33.30	9.6	2050	557	12			
11/14/12	10:05 AM	Blackstone @ Slater Mill	RIVER					783	16.7	85	25.5	2250	1110	2			
11/14/12	2:55 PM	Pawtuxet @ Broad Street	RIVER			10.27	7.89	1660	28.5	307	54	3490	2280	2			
11/14/12	2:55 PM	Pawtuxet @ Broad Street	RIVER			10.27	7.89	1640	28.4	307	54.6	3350	2240	2			
11/14/12	1:25 PM	Ten Mile @ Outlet of Omega Pond	RIVER			8.63	8.44	1740	8.19	93.8	57.5	3220	2180	2			
11/14/12	10:30 AM	Moshassuck @ Higginson Ave.	RIVER					226	4.74	16	6.95		495	2			
11/14/12	11:10 AM	Woonasquatucket River @ Manton Ave.	RIVER					498	2.84	7.64	5.25	1790	761	2			
11/14/12	9:30 AM	Ten Mile @ Central Ave.	RIVER					2250	8.72	58.2	38.2	3050	2670	2			
11/20/12	8:30 AM	Blackstone @ Slater Mill	RIVER			5.67	7.88	944.00	9.95	33.70	<5.0	2240.0	1220	10			
11/20/12	9:50 AM	Blackstone @ Stateline	RIVER			6.68	7.89	886.00	14.10	47.50	17.20	2420.0	1230	70			
11/20/12	3:35 PM	Pawtuxet @ Broad Street	RIVER					1790.00	20.40	153.00	49.80	3700.0	2530	6			
11/20/12	1:20 PM	Woonasquatucket River @ Manton Ave.	RIVER			7.84	7.84	461.00	2.13	<7.0	<5.0	1440.0	721	2			
11/20/12	12:55 PM	Woonasquatucket @ Valley Street	RIVER			7.24	7.68	506.00	2.05	<7.0	<5.0	1490.0	691	2			
11/20/12	10:25 AM	Moshassuck @ Higginson Ave.	RIVER			6.98	7.68	258.00	4.35	17.60	<5.0	3820.0	479	2			
11/20/12	1:45 PM	Moshassuck @ Mill Street	RIVER			7.21	7.98	492.00	4.24	84.70	6.48	3900.0	911	2			
11/20/12	2:55 PM	Ten Mile @ Central Ave.	RIVER			6.99	7.84	833.00	11.50	14.40	10.50	2690.0	1160	2			
11/20/12	1:15 PM	Ten Mile @ Outlet of Omega Pond	RIVER			6.98	8.06	2130.00	9.23	65.30	40.60	3490.0	2620	2			
11/20/12	1:15 PM	Ten Mile @ Outlet of Omega Pond	RIVER			6.98	8.06	2120.00	8.59	62.00	41.10	2880.0	2560	2			
11/20/12	10:30 AM	Warren Reservoir/Kickemuit River	RIVER			4.67	7.08	626.00	20.50	155.00	11.90	3830.0	1230	2			
11/20/12	10:05 AM	Coles River @ Milford Rd	RIVER			5.46	7.40	158.00	3.16	<7.0	17.60	791.0	637	2			
11/20/12	2:00 PM	Palmer River at Route 6 in Rehoboth	RIVER			7.62	7.32	127.00	5.75	39.80	23.30	1690.0	420	10			
11/20/12	2:30 PM	Runnins River @ River Road	RIVER			4.97	7.43	680.00	4.11	51.20	<5.0	4380.0	1040	2			
11/20/12	9:25 AM	Taunton River @ Berkeley Bridge	RIVER			5.54	7.87	820.00	7.32	110.00	23.30	3280.0	1330	2			
12/05/12	2:10 PM	Blackstone @ Slater Mill	RIVER			7.21	7.43	1070.00	13.20	25.80	139.00	2170.0	1410	2			
12/05/12	2:10 PM	Blackstone @ Slater Mill	RIVER			7.21	7.43	1130.00	12.70	20.80	140.00	2000.0	1400	2			
12/05/12	8:00 AM	Pawtuxet @ Broad Street	RIVER			8.83	7.62	2120.00	36.60	409.00	46.80	2220.0	3020	2			
12/05/12	9:45 AM	Woonasquatucket @ Valley Street	RIVER			7.70	7.51	542.00	2.25	<7	<5	1200.0	842	2			
12/05/12	8:40 AM	Moshassuck @ Mill Street	RIVER			9.26	7.40	625.00	11.60	70.60	<5	3390.0	867	4			
12/05/12	1:20 PM	Ten Mile @ Outlet of Omega Pond	RIVER			6.01	8.38	3040.00	7.55	<8.0	23.60	2970.0	3260	6			
12/05/12	1:45 PM	Moshassuck @ Higginson Ave.	RIVER			8.76	7.44	325.00	5.09	9.65	5.25	3790.0	554	6			
12/05/12	1:05 PM	Woonasquatucket @ Manton Ave	RIVER			7.95	7.70	527.00	2.41	<7	<5	1060.0	815	2			
12/05/12	9:15 AM	Ten Mile @ Central Ave.	RIVER			8.83	8.36	3690.00	13.70	107.00	12.50	3540.0	4290	6			
12/19/12	10:30 AM	Blackstone @ Slater Mill	RIVER			4.73	7.65	840.00	13.90	46.90	22.20	2650.0	1100	22			
12/19/12	2:20 PM	Pawtuxet @ Broad Street	RIVER			6.97	7.28	903.00	18.30	193.00	19.50	2460.0	1380	4			
12/19/12	1:15 PM	Woonasquatucket @ Valley Street	RIVER			6.31	7.44	437.00	2.53	<7	<5	1780.0	605	14			
12/19/12	1:40 PM	Moshassuck @ Mill Street	RIVER			6.14	7.28	478.00	5.52	42.80	6.62	3160.0	712	2			
12/19/12	1:40 PM	Moshassuck @ Mill Street	RIVER			6.14	7.28	474.00	6.95	44.30	6.54	2940.0	722	2			
12/19/12	9:50 AM	Moshassuck @ Higginson Ave.	RIVER			5.01	7.64	337.00	2.72	19.00	5.43	3050.0	511	2			
12/19/12	12:55 PM	Woonasquatucket @ Manton Ave	RIVER			4.92	7.63	461.00	1.95	15.60	5.37	1790.0	700	2			
12/19/12	9:00 AM	Blackstone @ Stateline	RIVER			5.08	7.70	737.00	26.70	148.00	13.60	2030.0	1230	184			
12/19/12	8:45 AM	Warren Reservoir/Kickemuit River	RIVER			6.67	8.60	321	6.87	75.2	12	1170	794	8			
12/19/12	10:20 AM	Coles River @ Milford Rd	RIVER			5.18	8.07	227	3.45	21.4	11.7	533	620	8			
12/19/12	10:45 AM	Palmer River	RIVER			5.86	7.55	244	4.35	33.9	21.3	748	721	10			
12/19/12	1:25 PM	Runnins River @ River Road	RIVER			6.11	7.70	384	4.68	15.6	10.1	2650	743	6			
12/19/12	9:35 AM	Taunton River @ Berkeley Bridge	RIVER			5.84	7.96	474	4.96	42.8	11	886	824	16			
12/19/12	2:50 PM	Ten Mile River at Outlet Omega Pond	RIVER			5.53	7.55	2610	7.88	20.1	15.2	2740	3060	8			
12/19/12	2:05 PM	Ten Mile River at Central Ave	RIVER			7.26	7.50	2530	15	56.9	17.2	2320	3240	2			
12/19/12	2:05 PM	Ten Mile River at Central Ave	RIVER			7.26	7.50	2480	15.2	56.6	17.2	3030	3420	4			

Table 30: River and Bay Nutrients Data 2012

River Fecal Results 2012
(MPN/100ML)

Date	Woonasquatucket River						West River			Providence River	Seekonk River
	S-9- Manton Ave.	S-8A - Footbridge Olneyville	S-8C- Delaine St.	S-7B- Pleasant Valley Pkwy.	S-7A- Kinsley St.	S-7C-Eagle Street*	S-10- Douglas Ave. Bridge	*S-10-B Veazie St. Bridge	S-11-West River St. Bridge	S-12- Crawford St. Bridge	SR-5A Pitman Street
1/3/2012	90	90	40	70	<30	30					90
1/4/2012					40	<30	90	<30	90	90	
1/9/2012	<30	40	40	<30	150	89				90	40
1/10/2012					40	<30	90	40	230	40	
1/17/2012	90	40	90	40	40	96				90	230
1/18/2012					230	40	230	<30	230	230	
1/23/2012	40	40	30	150	140	<30				90	<30
1/24/2012					230	230	230	430	430	430	
1/30/2012	90	<30	90	<30	<30	35				40	90
1/31/2012					<30	40	40	90	90	90	
2/6/2012	40	90	90	<30	70	52				90	40
2/7/2012					150	40	40	230	230	40	
2/13/2012	<30	40	70	40	<30	<30				90	<30
2/14/2012					40	<30	<30	<30	90	90	
2/20/2012	40	150	<30	<30	40	60				<30	<30
2/21/2012					90	90	40	40	40	40	
2/27/2012	<30	<30	<30	<30	230	40				230	430
2/29/2012							90		40		
3/5/2012	<30	<30	30	<30	<30	35		<30	230	230	90
3/6/2012					90	230	<30			90	
3/12/2012	<30	40	<30	<30	40	<30		<30	40	930	40
3/13/2012					40	70	<30			750	
3/16/2012										390	
3/19/2012	70	150	230	40	<30	60				90	40
3/20/2012					40	40	70	40	230	150	
3/26/2012	<30	40	<30	40	40	52				230	40
3/27/2012					<30	<30	90	90	90	90	
4/2/2012	40	<30	<30	40	390	<30				230	40
4/3/2012					40	40	<30	90	40	90	
4/5/2012								<30	40		
4/9/2012	<30	<30	930	<30	430	6,541				230	90
4/10/2012					230	110,000	230	90	90	430	
4/12/2013	<30	90	24,000	230	150	1,463					
4/16/2012	<30	40	430	90	90	230				230	40
4/17/2012		90	430	90	430	430	40	230	230	230	
4/23/2012	4,300	4,300	4,300	4,300	46,000	7,430				9,300	930
4/24/2012		930	930	230	930	430	4,300	430	930	430	
4/30/2012	230	230	90	90	230	220				430	30
5/1/2012					230	9,300	430	930	930	430	
5/7/2012	40	70	230	90	430	144				230	40
5/8/2012					930	430	430	930	2,300	1,500	
5/14/2012	230	90	90	40	90	230				90	40
5/15/2012					4,300	90	230	430	4,300	750	

Table 31: Woonasquatucket, West, Providence, and Seekonk Rivers Fecal coliform Data

River Fecal Results 2012
(MPN/100ML)

Date	Woonasquatucket River						West River			Providence River	Seekonk River
	S-9- Manton Ave.	S-8A - Footbridge Olneyville	S-8C- Delaine St.	S-7B- Pleasant Valley Pkwy.	S-7A- Kinsley St.	S-7C-Eagle Street*	S-10- Douglas Ave. Bridge	*S-10-B Veazie St. Bridge	S-11-West River St. Bridge	S-12- Crawford St. Bridge	SR-5A Pitman Street
5/21/2012	90	150	430	230	230	314				750	90
5/22/2012					2,300	7,500	24,000	2,300	24,000	15,000	
5/24/2012	230	2,200	430								
5/29/2012	930	430	430	430	230	314				2,300	40
5/30/2012					430	750	430	2,300	2,300	930	
6/4/2012	230	430	430	1,500	4,300	568				2,300	230
6/5/2012					1,500	430	150	430	4,300	930	
6/11/2012	930	90	930	430	930	462				430	230
6/12/2012					430	930	230	230	4,300	2,300	
6/18/2012	230	90	430	930	430	314				930	230
6/19/2012					930	430	930	230	430	430	
6/25/2012	930	930	930	2,300	4,300	1,463					
6/26/2012					4,300	2,300	2,300	2,300	9,300	9,300	
7/2/2012	2,300	1,500	3,900	24,000	9,300	4,300				24,000	4,300
7/9/2012		4,300	430		930	930				430	
7/10/2012	40			430	430	4,300	110,000	9,300	930	2,300	230
7/12/2012	430	2,300	430			230	4,153	930			
7/16/2012	430	430	930	2,300	4,300	930				930	<30
7/17/2012					46,000	46,000	24,000	21,000	110,000	46,000	
7/23/2012	2,300	4,300	2,300	930	930	1,463				930	40
7/24/2012					>240,000	110,000	9,300	24,000	110,000	110,000	
7/30/2012	230	930	2,300	4,300	4,300	4,300				2,300	930
7/31/2012					2,300	930	4,300	4,300	4,300	4,300	
8/6/2012	930	430	930	4,300	4,300	994				4,300	40
8/7/2012					4,300	2,300	4,300	230	4,300	4,300	
8/14/2012	230	230	430	2,300	2,300	462				2,300	90
8/15/2012					110,000	110,000	46,000	46,000	>240,000	110,000	
8/20/2012	930	930	430	430	2,300	314				2,300	430
8/21/2012					110,000	430	9,300	2,300	4,300	46,000	
8/23/2012	430	430	230	4,625	24,000	930				2,300	
8/27/2012	430	<30	230	>24,0000	>240,000	146				110,000	430

Table 31: Woonasquatucket, West, Providence, and Seekonk Rivers Fecal coliform Data

River Fecal Results 2012
(MPN/100ML)

Date	Woonasquatucket River						West River			Providence River	Seekonk River
	S-9- Manton Ave.	S-8A - Footbridge Olneyville	S-8C- Delaine St.	S-7B- Pleasant Valley Pkwy.	S-7A- Kinsley St.	S-7C-Eagle Street*	S-10- Douglas Ave. Bridge	*S-10-B Veazie St. Bridge	S-11-West River St. Bridge	S-12- Crawford St. Bridge	SR-5A Pitman Street
8/28/2012					>240,000	46,000	110,000	430	>24,0000	>24,0000	
8/29/2012				24,000	24,000	4,300					
8/30/2012				6,400	2,300	750					
9/4/2012	4,300	930	110	930	46,000	2,000				2,300	<30
9/5/2012					46,000	46,000	9,300	24,000	110,000	110,000	
9/10/2012	230	210	430	4,300	4,300	632				9,300	930
9/11/2012										1,500	
9/17/2012	430	230	930	430	230	314				230	<30
9/18/2012					930	430	9,300	4,300	2,300	930	
9/24/2012	90	430	230	930	4,300	1,463				1,500	90
9/25/2012					430	930	430	230	930	430	
10/1/2012	230	430	930	1,500	4,300	568				930	230
10/2/2012					2,300	930	430	150	230	930	
10/9/2012	90	40	150	430	430	116				430	90
10/10/2012					930	15,000	230	150	930	430	
10/15/2012	430	430	230	230	4,300	632				2,100	150
10/16/2012					2,300	930	430	70	4,300	430	
10/22/2012	430	230	90	230	430	430				930	430
10/23/2012					230	930	70	750	4,300	430	
10/30/2012					930	4,300				4,300	
10/31/2012	2,300			1,500			1,500	930	4,300	2,300	
11/5/2012										430	
11/7/2012	90			40	230	40	230	90	430	90	
11/13/2012	40	9,300	9,300	9,300	4,300	632				1,500	40
11/14/2012					230	430	150	90	1,500	43	
11/19/2012	<30	40	40	<30	90	60				430	40
11/20/2012					40	<30	40	40	230	430	
11/26/2012	<30	90	40	90	90	60				90	40
11/27/2012					90	40	<30	40	40	<30	
12/3/2012	<30	90	<30	90	90	35				930	40
12/4/2012					40	40	9,300	230	2,300	230	
12/6/2012							40		210		
12/10/2012	230	40	430	930	1,500	1,463				1,500	
12/11/2012					430	430	430	230	430	3,900	
12/17/2012	430	430	430	430	930	230				430	<30
12/18/2012					110,000	46,000	2,300	2,300	46,000	24,000	
12/24/2012	930	230	930	90	430	314				230	230
12/26/2012					230	40	40	<30	90	230	
12/31/2012	90	150	150	230	230	186				2,300	230

Table 31: Woonasquatucket, West, Providence, and Seekonk Rivers Fecal coliform Data

River Fecal Data 2012
(MPN/100 ML)

Date	Moshassuck River							Blackstone River		Pawtuxet River
	S-1- Higginson Ave. Bridge	S-4D- St. Francis Cemetery	S-4B- End of Moshassuck St.	S-5- Footbridge Mill St.	S-4- Cemetery St. Bridge	S-5A- Stevens St. Bridge	S-6- Park Row Bridge	S-2- Whipple Bridge	S-3- Slater Mill Dam	Pawtuxet River @ Broad Street
1/3/2012				114				90	40	52
1/4/2012	90	400	1,061	314	90	230	40			
1/9/2012				314				30	40	35
1/10/2012	<30	230	96	60	40	90	230			
1/17/2012				314				<30	90	40
1/18/2012	40	230	930	90	90	40	90			
1/23/2012				430				70	90	83
1/24/2012	<30	90	314	930	230	430	430			
1/30/2012				144				230	230	40
1/31/2012	90	430	230	144	930	<30	90			
2/6/2012				90				40	40	35
2/7/2012	430	90	96	314	40	230	430			
2/13/2012				373				40	90	52
2/14/2012	430	230	35	96	230	90	40			
2/20/2012				40				40	40	30
2/21/2012	40	<30	30	144	40	90	230			
2/27/2012				90				40	40	35
2/28/2012	<30		140	90						
3/5/2012				96				<30	90	90
3/6/2012	90	40	52	930	230	750	230			
3/12/2012				930				<30	<30	30
3/13/2012	<30	<30	144	144	<30	40	150			
3/16/2012				140		430	230			
3/19/2012				632				<30	40	35
3/20/2012	230	<30	35	144	150	430	230			
3/26/2012				197				30	<30	35
3/27/2012	90	<30	60	314	<30	90	150			
4/2/2012				254				230	40	30
4/3/2012	90	90	300	116	40	230	90			
4/9/2012				314				<30	<30	83
4/10/2012	230	40	96	1,360	40	90	430			
4/16/2012				90				<30	90	30
4/17/2012	90	230	52	197	90	40	90			
4/23/2012				6,324				930	2,300	1,463
4/24/2012	2,300	2,300	727	727	930	2,300	930			
4/30/2012				430				40	30	53
5/1/2012	40	930	314	1,775	930	930	430			
5/7/2012				6,324				40	40	46
5/8/2012	40	430	159	3,005	230	2,300	4,300			
5/14/2012				415				90	90	46
5/15/2012	<30	230	144	314	930	230	150			
5/21/2012				462				40	90	150
5/22/2012	930	2,300	162,481	9,300	2,300	2,300	46,000			
5/29/2012				1,463				<30	40	214
5/30/2012	230	2,300	90	1,857	230	430	2,300			
6/4/2012				2,000				430	230	430
6/5/2012	430		9,300	632	9,300	930	930			
6/11/2012				930				40	90	230
6/12/2012	90	930	2,540	1,463	930	430	1,500			

Table 32: Moshassuck, Blackstone, and Pawtuxet River Fecal Coliform Data

River Fecal Data 2012
(MPN/100 ML)

Date	Moshassuck River							Blackstone River		Pawtuxet River
	S-1- Higginson Ave. Bridge	S-4D- St. Francis Cemetery	S-4B- End of Moshassuck St.	S-5- Footbridge Mill St.	S-4- Cemetery St. Bridge	S-5A- Stevens St. Bridge	S-6- Park Row Bridge	S-2- Whipple Bridge	S-3- Slater Mill Dam	Pawtuxet River @ Broad Street
6/18/2012				430				230	90	52
6/19/2012	90		314	314	430	430	930			
6/25/2012									230	
6/26/2012	2,300	4,300	3,005	6,324	4,300	6,400	4,300			
7/2/2012				14,940					230	835
7/9/2012				1,463				430	90	230
7/10/2012	430	930	1,463	994	930	930	2,300			
7/12/2012							430			
7/16/2012				803				230	90	144
7/17/2012	230	4,300	24,000	46,000	9,300	110,000	>240,000		2,100	
7/23/2012				930	9,300			930		462
7/24/2012	430	4,300	24,000	>240,000		110,000	>240,000		930	
7/30/2012				14,940	4,300			2,300		462
7/31/2012	430	2,300	4,300	2,300		4,300	930		230	

Table 32: Moshassuck, Blackstone, and Pawtuxet River Fecal Coliform Data

River Fecal Data 2012
(MPN/100 ML)

Date	Moshassuck River							Blackstone River		Pawtuxet River
	S-1- Higginson Ave. Bridge	S-4D- St. Francis Cemetery	S-4B- End of Moshassuck St.	S-5- Footbridge Mill St.	S-4- Cemetery St. Bridge	S-5A- Stevens St. Bridge	S-6- Park Row Bridge	S-2- Whipple Bridge	S-3- Slater Mill Dam	Pawtuxet River @ Broad Street
8/6/2012				33,226	930			<30		230
8/7/2012	430	930	2,300	930		2,300	930		2,300	
8/14/2012				2,000				230		144
8/15/2012	>240,000	>240,000	75,895	46,000	46,000	>240,000	110,000		230	
8/20/2012				3,145				90		289
8/21/2012	430	2,300	2,300	4,625	930	2,300	430		90	
8/27/2012				2,000				<30		30
8/28/2012	430	46,000	33,226	>240,000	24,000	>240,000	>240,000		40	
9/4/2012				20,683				230		90
9/5/2012	24,000	9,300	46,000	71,134	110,000	110,000	15,000		930	
9/10/2012				2,000				430		145
9/11/2012	390								40	
9/17/2012				632				90		89
9/18/2012	90	430	1,463	314	2,300	430	4,300		430	
9/24/2012				1,463				930		116
9/25/2012	430	210	632	930	430	4,300	930		430	
10/1/2012				3,145				230		144
10/2/2012	230	1,500	1,500	4,300	4,300	230	930		430	
10/9/2012				314				40		35
10/10/2012	230	430	430	6,324	4,300	430	230		<30	
10/15/2012				2,540				40		60
10/16/2012	230	430	930	1,181	430	430	2,300		230	
10/22/2012				4,300				90		60
10/23/2012	40	90	462	994	430	1,500	2,300			
10/30/2012	430	4,300	1,463	4,625	2,300	9,300	2,300		930	254
10/31/2012									390	
11/5/2012										40
11/7/2012	230	210	230	462	150	430	230		70	
11/13/2012				33,226				90		35
11/14/2012	90	70	90	430	930	750	2,400		40	
11/19/2012				2,300				40		35
11/20/2012	40	150	144	994	230	430	930		90	
11/26/2012				2,000				140		40
11/27/2012	40	40	144	314	430	40	430		40	
12/3/2012				2,000				<30		116
12/4/2012	<30	40	230	430	90	430	430			
12/6/2012				430					150	
12/10/2012				6,324	230			430		144
12/11/2012	90	150	430	994		930	430		70	
12/17/2012				2,300				40		150
12/18/2012	230	2,300	11,811	18,974	9,300	15,000	46,000		430	
12/24/2012				254				90		186
12/26/2012	40	40	144	430	150	230	230		90	
12/31/2012				186				230		35

Table 32: Moshassuck, Blackstone, and Pawtuxet River Fecal Coliform Data

Results are in MPN/100 mL or Most Probable Number/100 ml																																			
	Date	1/11/2012	1/25/2012	2/8/2012	2/22/2012	2/28/2012	3/12/2012	3/21/2012	4/4/2012	4/18/2012	4/25/2012	5/16/2012	5/31/2012	6/13/2012	6/27/2012	7/5/2012	8/7/2012	8/20/2012	8/22/2012	9/6/2012	9/19/2012	10/3/2012	10/17/2012	10/24/2012	10/31/2012	11/1/2012	11/22/2012	11/5/2012	11/28/2012	Geomean	Min	Max			
Seabook River	Division St Dock	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23		
	Bishop Pt	93	43	43	23	43	23	43	23	9,300	43	21	230	430	230	150	230	230	230	43	230	1,500	4,300	150	43										
	BP Outfall	43	93	23	75	23	43	23	43	11	150	930		43	93	930	230		43	93	230	15,000	930	150											
	Phillipsdale Landing	93	43	43	23	93	9	930	43	23	150	930		230	93	930	230		9	93	24,000	9,300	230	150											
	Phillipsdale Landing Duplicate	93	43	230	23	23	43	23	750	93	43	230	230		150	23	230	230		43	93	4,300	4,300	430	93										
	Narr Boating Center	230	230	23	23	23	23	23	750	93	9	43	230	4,300	93	230	750	43		23	43	4,300	930	750	43										
	Crook Pt	43	23	93	43	93	9	750	43	93	23	430	4,300	150	230	930	230		9	230	15,000	230	430	43		7,500	1,500	150	93	150	181	9	15,000		
	Common Boating Center	23	43	4	43	23	43	230	20	23	23	430	430	93	230	2,100	230		23	230	4,300	430	1,500	15											
	Point St Bridge	430	93	9	75	4,300	230	150	430	930	2,300	2,300	230	4,300	4,300	2,300	230		230	2,300	1,500	15,000	430	93											
	Collier Pt Park	23	430	15	23				15	9	9	930	9,300	43	150	430	430		43	230	2,300	9,300	1,500	23			2,300	2,300	210	93	93	186	9	9,300	
Providence River	FP Outfall	23	230	9	4	93	9	75	3	23	43	430	2,300	23	75	200	23	23	9	43	4,300	93	430	9			4,300	4,300	430	43	9	72	3	4,300	
	South FP East	9	43	15	3	230	43	23	4	3	4	930	230	43	3	230	93		4	930	2,300	430	93	4		2,300	430	230	39	7	50	3	2,300		
	Save the Bay	43	93	3	4				23	3	4	430	230	23	9	230	23		9	93	4,300	230	430	9											
	Edgewood Yacht Club	23	230	23	7	9	9	23	4	9	7	430	93	9	4	43	23		9	230	2,300	43	43	9			2,100	930	430	93	93	45	4	2,300	
	PawProv Junction	43	43	15	23	23	15	23	43	7	9	430	930	23	230	230	93	93	15	93	930	43	230	9	43		4,300	750	430	93	43	74	7	4,300	
	Gaspee Pt	23	230	43	9	9	75	43	23	23	23	1,500	93	15	3	150	93		3	93	2,400	23	93	4											
	Gaspee Pt Duplicate																																		
	Bullock Neck	230	230	93	43	9	23	430	93	23	7	230	93	93	7	230	4		3	23	430	43	9	4		9	2,300	230	93	15	430	50	3	2,300	
	Bullocks Reach Buoy	230	43	21	15	43	15	93	9	23	4	430	93	93	3	150	43	9	4	43	2,300	23	4	4		43	1,500	930	93	7	23	39	3	2,300	
	Shawomet	93	93	230	4	43	23	23	23	3	43	230	4	150	4	200	9		4	93	930	9	4	15	23		430	230	430	3	15	33	3	930	
North of Nayatt Point	93	93	23	3	93	43	43	43	9	3	230	23	43	3	150	9	4	3	3	430	4	4	15	3		1,500	430	230	3	23	24	3	1,500		
Cominicut Pt	23	9	9	43	15	43	43	23	9	4	93	9	23	3	230	9	4	4	9	930	9	15	9	23		230	930	430	23	15	26	3	2,300		
Cominicut Pt Duplicate	93	23	7	9	43	23	9	9	3	430	4	43	3	230	9		3	43	2,300	9	9	15	23		23	230	2,300	430	9	15	45	9	900		
Conditional Areas	f-A																																		
	f-7																																		
	f-10																																		
	f-11A																																		
	f-1C																																		
	f-1C																																		
	f-2																																		
Rain Data	f-6A																																		
	SR Geomean	70	51	47	30	63	14	1485	49	21	196	410	4300	132	198	605	221		28	108	2449	2184	374	95		7500	1500	150	93	73	150	9	24,000		
	PR Geomean	51	83	17	12	31	25	72	19	12	11	434	145	43	17	272	42	13	8	86	1695	78	64	10	18	1263	908	310	19	41	56	3	15,000		
	CA Geomean																																		
	Daily Max	430	430	230	75	230	75	9,300	230	150	9,300	1,500	9,300	230	7,500	4,300	2,300	93	230	2,300	24,000	15,000	1,500	430	43	7,500	4,300	930	93	430					
	Final Geomean	57	71	23	16	35	18	127	20	14	27	427	216	62	36	351	72	13	12	92	1906	225	112	21	18	251	351	167	16	50	67	3	24,000		
	Percent Greater than 400 MPN/100 ml	5%	5%	0%	0%	0%	0%	29%	0%	0%	9%	68%	41%	0%	9%	36%	14%	0%	0%	9%	91%	45%	41%	5%	0%	55%	59%	36%	0%	14%					
	Number of Stations Sampled (including duplicates)	22	22	22	22	20	20	21	26	22	22	22	22	17	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	Bay Blank	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
	Rain total - 5 Days prior to sampling	T	0.02	T	0.02	T	0.48	T	T	0	0	T	0	T	0.03	0.73	0.16	T	0	0	0	0	1.64	0.01	0.23	0	0	0.04	0.07	0					
Rain total - 4 Days prior to sampling	0	0.41	0	0	0.48	T	0	0	0.25	0	0.01	0	0	0.02	0.04	0	0	0	0.52	T	T	0.13	0	0.46	0	0.04	0.76	T	T						
Rain total - 3 Days prior to sampling	0	0	0	0	T	0	0	0	0.11	0.02	1.59	0	T	0	0	0	0	0.09	0	0	0	0.18	0.01	0	0.04	0.76	0.58	T	0						
Rain total - 2 Days prior to sampling	0	0.18	0	0	0	0	0	0	0.06	0	1.6	T	T	0	1.34	0.01	0.09	T	0	0.74	0	0	0.23	0	0.76	0.58	0.07	0							
Rain total - 1 Day prior to sampling	0.01	0.02	0	0.06	0	0	0.7	0	0	0	0	T	0.53	T	0.08	T	0.3	T	0	0	1.59	0.19	0.36	0.03	0.06	0.58	0.07	T	0	0.31					
Rain total - Day of sampling (in time prior to sampling)	0	0	T	0	0	0.7	0.44	0	0	0	0	0.82	0	0.39	T	0	0	0	0	0	0.58	T	0	0	T	0.07	T	T	0	0	T				
Total Rainfall	0.01	0.63	0	0.98	0.48	1.18	1.14	0	0.42	0.02	3.2	1.35	0	0.52	2.11	0.47	0.09	0.09	0.52	2.33	0.77	2.31	0.28	0.75	1.45	1.45	1.45	0.							

Enterococci Results 2012																													
Results are in MPN/100 mL or Most Probable Number/100 ml																													
Date	1/11/2012	1/25/2012	2/8/2012	2/22/2012	2/28/2012	2/29/2012	3/1/2012	4/4/2012	4/18/2012	4/25/2012	5/16/2012	5/31/2012	6/27/2012	7/25/2012	8/8/2012	8/22/2012	9/6/2012	9/19/2012	10/3/2012	10/17/2012	10/31/2012	11/1/2012	11/2/2012	11/5/2012	11/28/2012	Min	Max	Geomean	
Phillipsdale Landing	41	30	10	10	10		10	10	10	10		41	10	10	10	10	169	1022	31	10					10	10	1022	19	
<i>Phillipsdale Landing Duplicate</i>	10	10	10	10	31		10	10	10	31		41	30	41	10	10	275	1178	20	10					10	10	1178	22	
Point St Bridge	10	146	10	31			10	10	74	75	5,172	63	379	10	10	10	173	8,297	820	10					169	10	8297	68	
South FP East	10	40	10	10	10	10	10	10	10	52	171	10	10	10	10	10	216	85	10	10					10	10	216	17	
Gaspee Pt	10	10	10	10	10	10	10	10	10	31	41	10	10	10	10	10	211	31	41	10	322	301	109		10	10	322	21	
Cominicut Pt	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	52	20	20	10	170	120	31	1	10	1	170	13	
<i>Cominicut Pt Duplicate</i>	10	10	10	10	10	10	10	10	10	10	10	10	20	10	10	10	30	20	31	10				75	31	10	10	75	13
Blank	<10	<10	<10	<10	<10		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
Geomean	12	21	10	12	12	10	10	10	13	23	82	19	22	12	10	10	128	194	39	10	234	139	47	3	15	3	234		

Table 34: Bay Enterococci Data

CSO Wet Weather Overflow North Diversion Structure NBC CSO 2A

All samples are from CSO Wet weather Overflow at North Dive

Sample Date	Sample Time	Parameter	Result	Units
12/21/2012	13:15	Trichlorofluoromethane	<2.0	ppb
12/21/2012	13:15	1,1-Dichloroethene	<2.0	ppb
12/21/2012	13:15	Methylene Chloride	<2.0	ppb
12/21/2012	13:15	Trans-1,2-Dichloroethene	<2.0	ppb
12/21/2012	13:15	1,1-Dichloroethane	<2.0	ppb
12/21/2012	13:15	Chloroform	<2.0	ppb
12/21/2012	13:15	1,1,1-Trichloroethane	<2.0	ppb
12/21/2012	13:15	Carbon Tetrachloride	<2.0	ppb
12/21/2012	13:15	Benzene	<2.0	ppb
12/21/2012	13:15	1,2-Dichloroethane	<2.0	ppb
12/21/2012	13:15	Oil and Grease EPA Method 1664	9.667	ppm
12/21/2012	13:15	BOD SM 5210B	42.15	ppm
12/21/2012	13:15	Acenaphthene	<5	ppb
12/21/2012	13:15	Acenaphthylene	<5	ppb
12/21/2012	13:15	Anthracene	<5	ppb
12/21/2012	13:15	Benzidine	<5	ppb
12/21/2012	13:15	Benzo(a)anthracene	<5	ppb
12/21/2012	13:15	Benzo(b)fluoranthene	<5	ppb
12/21/2012	13:15	Benzo(k)fluoranthene	<5	ppb
12/21/2012	13:15	Benzo(g,h,i)perylene	<5	ppb
12/21/2012	13:15	Benzo(a)pyrene	<5	ppb
12/21/2012	13:15	bis2chloroethylether	<5	ppb
12/21/2012	13:15	bis2chloroethoxymeth	<5	ppb
12/21/2012	13:15	bis2chloroisoprothe	<5	ppb
12/21/2012	13:15	bis2ethylhexylphthal	5	ppb
12/21/2012	13:15	4Bromophenphenether	<5	ppb
12/21/2012	13:15	Butylbenzylphthalate	<5	ppb
12/21/2012	13:15	2-Chloronaphthalene	<5	ppb
12/21/2012	13:15	4Chlorophenphenether	<5	ppb
12/21/2012	13:15	Chrysene	<5	ppb
12/21/2012	13:15	Dibenzoanthracene	<5	ppb
12/21/2012	13:15	di-n-butylphthalate	<5	ppb
12/21/2012	13:15	1,2-Dichlorobenzene	<5	ppb
12/21/2012	13:15	1,3-Dichlorobenzene	<5	ppb
12/21/2012	13:15	1,4-Dichlorobenzene	<5	ppb
12/21/2012	13:15	3,3-Dichlorobenzidine	<5	ppb
12/21/2012	13:15	Diethylphthalate	<5	ppb
12/21/2012	13:15	Dimethylphthalate	<5	ppb
12/21/2012	13:15	2,4-Dinitrotoluene	<5	ppb
12/21/2012	13:15	2,6-Dinitrotoluene	<5	ppb
12/21/2012	13:15	Di-n-octylphthalate	<5	ppb
12/21/2012	13:15	1,2-Diphenylhydrazine	<5	ppb
12/21/2012	13:15	Fluoranthene	<5	ppb
12/21/2012	13:15	Fluorene	<5	ppb
12/21/2012	13:15	Hexachlorobenzene	<5	ppb
12/21/2012	13:15	Hexachlorobutadiene	<5	ppb
12/21/2012	13:15	Hexacyclopentadien	<5	ppb
12/21/2012	13:15	Hexachloroethane	<5	ppb
12/21/2012	13:15	Indeno(123-cd)pyrene	<5	ppb
12/21/2012	13:15	Isophorone	<5	ppb

Table 35: CSO Wet Weather Overflow North Diversion Structure NBC CSO 2A

CSO Wet Weather Overflow North Diversion Structure NBC CSO 2A

All samples are from CSO Wet weather Overflow at North Dive

Sample Date	Sample Time	Parameter	Result	Units
12/21/2012	13:15	Naphthalene	<5	ppb
12/21/2012	13:15	Nitrobenzene	<5	ppb
12/21/2012	13:15	Nnitrosodimethylamin	<5	ppb
12/21/2012	13:15	Nnitrosodiphenylamin	<5	ppb
12/21/2012	13:15	Nnitrosodipropylami	<5	ppb
12/21/2012	13:15	Phenanthrene	<5	ppb
12/21/2012	13:15	Pyrene	<5	ppb
12/21/2012	13:15	124-Trichlorobenzene	<5	ppb
12/21/2012	13:15	4Chloro3methylphenol	<5	ppb
12/21/2012	13:15	2-Chlorophenol	<5	ppb
12/21/2012	13:15	2,4-Dichlorophenol	<5	ppb
12/21/2012	13:15	2,4-Dimethylphenol	<5	ppb
12/21/2012	13:15	2Methyl46dinitrophen	<5	ppb
12/21/2012	13:15	2,4-Dinitrophenol	<5	ppb
12/21/2012	13:15	4-Nitrophenol	<5	ppb
12/21/2012	13:15	Pentachlorophenol	<5	ppb
12/21/2012	13:15	Phenol	<5	ppb
12/21/2012	13:15	246-Trichlorophenol	<5	ppb
12/21/2012	13:15	2-Nitrophenol	<5	ppb
12/21/2012	13:15	Aluminum	1360	ppb
12/21/2012	13:15	Cadmium	<2.5	ppb
12/21/2012	13:15	Chromium	10.98	ppb
12/21/2012	13:15	Copper	29.81	ppb
12/21/2012	13:15	Iron	3043	ppb
12/21/2012	13:15	Nickel	<10	ppb
12/21/2012	13:15	Lead	37.47	ppb
12/21/2012	13:15	Zinc	105.7	ppb
12/21/2012	13:15	TSS SM 5240D - TSS	134	ppm
12/21/2012	13:15	Chloromethane	<2.0	ppb
12/21/2012	13:15	Vinyl Chloride	<2.0	ppb
12/21/2012	13:15	Bromomethane	<2.0	ppb
12/21/2012	13:15	Chloroethane	<2.0	ppb
12/21/2012	13:15	Trichlorethene	<2.0	ppb
12/21/2012	13:15	1,2-Dichloropropane	<2.0	ppb
12/21/2012	13:15	Bromodichloromethane	<2.0	ppb
12/21/2012	13:15	2-Chloroethylvinylether	<5.0	ppb
12/21/2012	13:15	cis-1,3-Dichloropropene	<2.0	ppb
12/21/2012	13:15	Toluene	<2.0	ppb
12/21/2012	13:15	Trans-1,3-Dichloropropene	<2.0	ppb
12/21/2012	13:15	1,1,2-Trichloroethane	<2.0	ppb
12/21/2012	13:15	Tetrachlorethene	<2.0	ppb
12/21/2012	13:15	Dibromochloromethane	<2.0	ppb
12/21/2012	13:15	Chlorobenzene	<2.0	ppb
12/21/2012	13:15	Ethylbenzene	<2.0	ppb
12/21/2012	13:15	Bromoform	<5.0	ppb
12/21/2012	13:15	1,1,2,2-Tetrachlorethane	<2.0	ppb
12/21/2012	13:15	1,3-dichlorobenzene	<2.0	ppb
12/21/2012	13:15	1,4-dichlorobenzene	<2.0	ppb
12/21/2012	13:15	1,2-dichlorobenzene	<2.0	ppb
12/21/2012	13:15	p&m xylene	<4.0	ppb

Table 35: CSO Wet Weather Overflow North Diversion Structure NBC CSO 2A

CSO Wet Weather Overflow North Diversion Structure NBC CSO 2A

All samples are from CSO Wet weather Overflow at North Dive

Sample Date	Sample Time	Parameter	Result	Units
12/21/2012	13:15	o- xylene	<2.0	ppb
12/21/2012	13:15	Mercury EPA Method 245.7 - Mercury	57.2	ppt
12/21/2012	13:15	TKN - Copper Sulfate Digestion - TKN	5.11	ppm-N
12/21/2012	13:15	Total_Phosphorus-P	0.866	ppm
12/21/2012	13:15	NH3-N EPA 351.2 - Ammonia	1.5	ppm-N
12/21/2012	13:15	NO3NO2 EPA Method 353.2	0.22	ppm
12/21/2012	13:15	Fecal Coliform (3 tube) SM 9221E - Fecal	90000	MPN/100 ml
12/21/2012	13:15	Cyanide	<4.0	ppb
12/21/2012	13:15	Silver	<4.0	ppb

Table 35: CSO Wet Weather Overflow North Diversion Structure NBC CSO 2A

CSO Wet Weather Overflow Dorrance Street NBC CSO 09

All samples are from CSO Wet weather Overflow at Dorrance Street (NBC CSO # 09)

Sample Date	Sample Time	Parameter	Result	Units	Sample Date	Sample Time	Parameter	Result	Units	Sample Date	Sample Time	Parameter	Result	Units
12/21/2012	6:00	Cyanide	<4.00	ppb	12/21/2012	10:00	Oil and Grease EPA Method 1664 (PLANT)	6.721	ppm	12/21/2012	13:15	o- xylene	<2.0	ppb
12/21/2012	6:00	TSS SM 5240D - TSS	48	ppm	12/21/2012	10:00	Cyanide	<4.00	ppb	12/21/2012	13:15	Total_Phosphorus-P	0.789	ppm
12/21/2012	6:00	Aluminum	407.7	ppb	12/21/2012	10:00	BOD SM 5210B	35.55	ppm	12/21/2012	13:15	Silver	<4.0	ppb
12/21/2012	6:00	Cadmium	<2.5	ppb	12/21/2012	10:00	TSS SM 5240D - TSS	86	ppm	12/21/2012	13:15	Oil and Grease EPA Method 1664 (SIU)	6.84	ppm
12/21/2012	6:00	Chromium	<10	ppb	12/21/2012	10:00	Aluminum	592.1	ppb	12/21/2012	13:15	Fresh Water Total Nitrogen	3.11	ppm
12/21/2012	6:00	Copper	10.73	ppb	12/21/2012	10:00	Cadmium	<2.5	ppb	12/21/2012	13:15	BOD SM 5210B	21.52	ppm
12/21/2012	6:00	Iron	609.2	ppb	12/21/2012	10:00	Chromium	<10	ppb	12/21/2012	13:15	Cyanide	<4.00	ppb
12/21/2012	6:00	Nickel	<10	ppb	12/21/2012	10:00	Copper	28.9	ppb	12/21/2012	13:15	TSS SM 5240D - TSS	250	ppm
12/21/2012	6:00	Lead	<10	ppb	12/21/2012	10:00	Iron	1174	ppb	12/21/2012	13:15	Aluminum	3186	ppb
12/21/2012	6:00	Zinc	80.05	ppb	12/21/2012	10:00	di-n-butylphthalate	<5	ppb	12/21/2012	13:15	Cadmium	<2.5	ppb
12/21/2012	6:00	TKN - Copper Sulfate Digestion - TKN	6.14	ppm-N	12/21/2012	10:00	1,2-Dichlorobenzene	<5	ppb	12/21/2012	13:15	Chromium	<10	ppb
12/21/2012	6:00	NH3-N EPA 351.2 - Ammonia	2.47	ppm-N	12/21/2012	10:00	1,3-Dichlorobenzene	<5	ppb	12/21/2012	13:15	Copper	70.58	ppb
12/21/2012	6:00	NO3NO2 EPA Method 353.2	0.295	ppm	12/21/2012	10:00	1,4-Dichlorobenzene	<5	ppb	12/21/2012	13:15	Iron	5332	ppb
12/21/2012	6:00	Total_Phosphorus-P	1.52	ppm	12/21/2012	10:00	3,3-Dichlorobenzidine	<5	ppb	12/21/2012	13:15	Nickel	<10	ppb
12/21/2012	6:00	Fresh Water Total Nitrogen	6.435	ppm	12/21/2012	10:00	Nickel	<10	ppb	12/21/2012	13:15	Lead	148.7	ppb
12/21/2012	6:00	Silver	<4.0	ppb	12/21/2012	10:00	Lead	36.75	ppb	12/21/2012	13:15	Zinc	260	ppb
					12/21/2012	10:00	Zinc	129.1	ppb	12/21/2012	13:15	Mercury EPA Method 245.7 - Mercury	64.6	ppt
					12/21/2012	10:00	NH3-N EPA 351.2 - Ammonia	1.62	ppm-N	12/21/2012	13:15	NH3-N EPA 351.2 - Ammonia	0.293	ppm-N
					12/21/2012	10:00	TKN - Copper Sulfate Digestion - TKN	4.63	ppm-N	12/21/2012	13:15	NO3NO2 EPA Method 353.2	0.13	ppm
					12/21/2012	10:00	Mercury EPA Method 245.7 - Mercury	83.9	ppt	12/21/2012	13:15	TKN - Copper Sulfate Digestion - TKN	2.98	ppm-N
					12/21/2012	10:00	Acenaphthene	<5	ppb	12/21/2012	13:15	Chloromethane	<2.0	ppb
					12/21/2012	10:00	Acenaphthylene	<5	ppb	12/21/2012	13:15	Vinyl Chloride	<2.0	ppb
					12/21/2012	10:00	Anthracene	<5	ppb	12/21/2012	13:15	Bromomethane	<2.0	ppb
					12/21/2012	10:00	Benzidine	<5	ppb	12/21/2012	13:15	Chloroethane	<2.0	ppb
					12/21/2012	10:00	Benzo(a)anthracene	<5	ppb	12/21/2012	13:15	Trichlorofluoromethane	<2.0	ppb
					12/21/2012	10:00	Benzo(b)fluoranthene	5	ppb	12/21/2012	13:15	1,1-Dichloroethene	<2.0	ppb
					12/21/2012	10:00	Benzo(k)fluoranthene	<5	ppb	12/21/2012	13:15	Methylene Chloride	<2.0	ppb
					12/21/2012	10:00	Benzo(g,h,i)perylene	<5	ppb	12/21/2012	13:15	Trans-1,2-Dichloroethene	<2.0	ppb
					12/21/2012	10:00	Benzo(a)pyrene	<5	ppb	12/21/2012	13:15	1,1-Dichloroethane	<2.0	ppb
					12/21/2012	10:00	bis2chloroethylether	<5	ppb	12/21/2012	13:15	Chloroform	<2.0	ppb
					12/21/2012	10:00	bis2chloroethoxymeth	<5	ppb	12/21/2012	13:15	1,1,1-Trichloroethane	<2.0	ppb
					12/21/2012	10:00	bis2chloroisoproethe	<5	ppb	12/21/2012	13:15	Carbon Tetrachloride	<2.0	ppb
					12/21/2012	10:00	bis2ethylhexylphthal	7	ppb	12/21/2012	13:15	Benzene	<2.0	ppb
					12/21/2012	10:00	4Bromophenphenether	<5	ppb	12/21/2012	13:15	1,2-Dichloroethane	<2.0	ppb
					12/21/2012	10:00	Butylbenzylphthalate	<5	ppb	12/21/2012	13:15	Trichlorethene	<2.0	ppb
					12/21/2012	10:00	2-Chloronaphthalene	<5	ppb	12/21/2012	13:15	1,2-Dichloropropane	<2.0	ppb
					12/21/2012	10:00	4Chlorophenphenether	<5	ppb	12/21/2012	13:15	Bromodichloromethane	<2.0	ppb
					12/21/2012	10:00	Chrysene	5	ppb	12/21/2012	13:15	2-Chloroethylvinylether	<5.0	ppb

Table 36: CSO Wet Weather Overflow Dorrance Street NBC CSO 09

All samples are from CSO Wet weather Overflow at Bucklin Brrok (NBC CSO # 218)

Sample Date	Sample Time	Parameter	Units	Result	Sample Date	Sample Time	Parameter	Units	Result	Sample Date	Sample Time	Parameter	Units	Result
12/18/2012	6:00	Aluminum	ppb	17130	12/18/2012	8:00	NH3-N EPA 351.2 - Ammonia	ppm-N	2.26	12/18/2012	9:00	NH3-N EPA 351.2 - Ammonia	ppm-N	2.81
12/18/2012	6:00	Cadmium	ppb	3.4	12/18/2012	8:00	NO2-N EPA 353.2 - Nitrite	ppm-N	0.0245	12/18/2012	9:00	NO2-N EPA 353.2 - Nitrite	ppm-N	0.0233
12/18/2012	6:00	Chromium	ppb	69.2	12/18/2012	8:00	NO3NO2 EPA Method 353.2	ppm	0.267	12/18/2012	9:00	NO3NO2 EPA Method 353.2	ppm	0.327
12/18/2012	6:00	Copper	ppb	605.7	12/18/2012	8:00	TKN - Copper Sulfate Digestion - TKN	ppm-N	5.26	12/18/2012	9:00	TKN - Copper Sulfate Digestion - TKN	ppm-N	4.61
12/18/2012	6:00	Iron	ppb	40480										
12/18/2012	6:00	Nickel	ppb	58.3										
12/18/2012	6:00	Lead	ppb	294.7										
12/18/2012	6:00	Zinc	ppb	2115										
12/18/2012	6:00	NH3-N EPA 351.2 - Ammonia	ppm-N	3.38										
12/18/2012	6:00	NO2-N EPA 353.2 - Nitrite	ppm-N	0.0313										
12/18/2012	6:00	NO3NO2 EPA Method 353.2	ppm	0.53										
12/18/2012	6:00	Total_Phosphorus-P	ppm	1.36										
12/18/2012	6:00	TKN - Copper Sulfate Digestion - TKN	ppm-N	6.74										
12/18/2012	6:00	Silver	ppb	4.105										