

Holland & Knight

315 South Calhoun Street, Suite 600 | Tallahassee, FL 32301 | T 850.224.7000 | F 850.224.8832
Holland & Knight LLP | www.hklaw.com

D. Bruce May, Jr.
(850) 425-5607
bruce.may@hklaw.com

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February 28, 2011

Via Hand Delivery

Ms. Ann Cole
Florida Public Service Commission
2540 Shumard Oak Boulevard
Betty Easley Conference Center, Room 110
Tallahassee, FL 32399-0850

Re: *In Re: Application for increase in water and wastewater rates in Alachua, Brevard, DeSoto, Highlands, Lake, Lee, Marion, Orange, Palm Beach, Pasco, Polk, Putnam, Seminole, Sumter, Volusia, and Washington Counties by Aqua Utilities Florida, Inc., Docket No. 080121-WS*

Dear Ms. Cole:

Pursuant to Order No. PSC-10-0297-PAA-WS, enclosed for filing are the original and four (4) copies of Aqua Utilities Florida, Inc.'s Final Phase II Quality of Service Monitoring Report ("Final Report"). Also included for your convenience is a CD containing the electronic Word version of the Final Report without attachments.

Please acknowledge receipt of this filing by stamping the extra copy of this letter "filed" and returning the copy to me. Thank you for your assistance.

Sincerely,

HOLLAND & KNIGHT LLP

J. Bruce May Jr.
D. Bruce May, Jr.

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Ann Cole
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cc: Ralph Jaeger, Esq. (w/enclosure)
Patricia Christensen, Esq. (w/enclosure)
Cecilia Bradley, Esq. (w/enclosure)
Kimberly A. Joyce, Esq.
Troy Rendell

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Application for increase in water and wastewater rates in Alachua, Brevard, DeSoto, Highlands, Lake, Lee, Marion, Orange, Palm Beach, Pasco, Polk, Putnam, Seminole, Sumter, Volusia, and Washington Counties by Aqua Utilities Florida, Inc.

DOCKET NO. 080121-WS

FILED: February 28, 2011

FINAL PHASE II QUALITY OF SERVICE MONITORING REPORT

OF

AQUA UTILITIES FLORIDA, INC.

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I. Background

A. The Prior Rate Case

Aqua Utilities Florida, Inc. ("AUF") is a wholly-owned subsidiary of Aqua America, Inc., one of the largest publicly traded water and wastewater utilities in the United States with operations in 13 states. AUF began doing business in Florida in 2003 and, since that time, has acquired a number of water and wastewater utilities throughout the state. AUF currently operates 109 water and wastewater utility systems in Florida, 101 of which are under the jurisdiction of the Florida Public Service Commission ("FPSC" or "Commission"). Currently, AUF has FPSC jurisdictional systems in the following Florida counties: Alachua, Brevard, Desoto, Highlands, Lake, Lee, Marion, Orange, Palm Beach, Pasco, Polk, Putnam, Seminole, Sumter, Volusia, and Washington. At the time AUF acquired these systems, the vast majority had not had a rate case or undergone system improvements for many years. Therefore, in order to continue to make needed system improvements and to maintain its financial integrity, AUF sought rate relief from the Commission in 2008. See FPSC Docket No. 080121-WS.

After conducting a formal hearing, the Commission ultimately granted rate relief for all of AUF's systems, except for the Chuluota water and wastewater systems. Order No. PSC-09-0385-FOF-WS issued May 29, 2009 ("Final Order").

B. Initial Monitoring Plan (May 2009 through October 2009)

In addition to granting rate relief, the Final Order established a monitoring plan ("Initial Monitoring Plan") to enable the Commission to monitor AUF's customer service

in three areas: the general handling of customer complaints, the specific handling of complaints at AUF's call centers, and the accuracy of AUF's metering readings and resulting bills. The Commission's Initial Monitoring Plan required AUF to file the following information for the six-month period from May 2009 through October 2009:

1. AUF shall submit a monthly report to this Commission for the first six months after this order is issued. The report will list all customer complaints for each system for the month. The report shall include the customer name, address, phone number, account number, a description of the complaint, and how the complaint was resolved. We will audit a sample (sample will be chosen to determine with a 90 percent confidence level and a maximum error rate of 5 percent) of the reported customer complaints to determine whether the complaints were resolved appropriately ("appropriately" will be defined as any errors made by AUF are corrected and all issues in the complaint are addressed).

2. AUF shall submit to this Commission on a monthly basis all sound recordings of customer complaints from customers to this Commission for the first six months after this order is issued. Our staff will listen to a sample of these to determine if the customer complaints are handled in a professional and courteous manner.

3. AUF will provide our staff with route schedules that identify the day that meters will be read for AUF's regulated systems for the six months after this order is issued. The route schedules will be due to our staff by May 1, 2009. AUF shall also provide staff with the meter reading logs for the same six-month period. Based on the meter reading schedule, our staff will manually read a sample of AUF's meters on the same day that the Utility is scheduled to read them to verify the accuracy of the meter readings and resulting customer bills.

Upon the completion of these reporting requirements, our staff will present their conclusions regarding AUF's performance to us. If AUF is not performing adequately, we may initiate show cause proceedings, or take such other action as we may deem appropriate.

Final Order at p. 22.

AUF complied with the Commission's Initial Monitoring Plan in all respects. During that six month monitoring period, AUF timely submitted extensive complaint logs for each month. The logs listed all customer complaints for each system for the month and, in accordance with the Commission's directives, set forth (i) the customer name, address, phone number, account number;¹ (ii) described the nature of the complaint; and (iii) reported on how the complaint was resolved. In addition, AUF recorded each and every customer call it received at its call centers from Florida customers and provided those sound recordings to Commission staff on a monthly basis during the entire monitoring period. In this way, the Commission staff was able to objectively review first-hand all customer calls to determine the quality of service provided by AUF's customer service representatives ("CSRs"). AUF also provided Commission staff with all of its meter reading route schedules for the entire six month monitoring period along with the actual meter reading logs for all of those systems for each month during the monitoring period. Commission staff, in turn, personally visited AUF systems soon after AUF's meter readers had completed their reads and documented the usage on the meter. Commission staff compared its volumetric reads to the AUF meter reading log to independently test for meter accuracy. Commission staff further audited AUF customer bills with the meter reading information to test for billing accuracy.

¹Because the Commission directed AUF to provide proprietary customer specific information, AUF was required to request confidential classification of that information to prevent identity theft and other harm to the customer.

Although the above reporting requirements were extensive and required many hours of the utility's time, not once did AUF miss a reporting deadline or request that any reporting deadline be extended.

During the course of Initial Monitoring Plan, Commission staff thoroughly evaluated all of the monthly reports and data provided by AUF, and conducted its own independent analysis of AUF's quality of service. At the end of that intensive independent review process, Commission staff filed a nineteen page recommendation on March 4, 2010, which concluded:

Based on staff's review of AUF's processes for handling customer complaints, meter reading, and customer billing, as well as its environmental compliance, staff recommends that AUF's performance as specified in the Monitoring Plan detailed in the Final Order is **adequate**.

Staff Recommendation at p. 13 (emphasis added).

On March 16, 2010, the Commission considered staff's recommendation at its regularly-scheduled Agenda Conference, and heard from staff, the parties and several customers. The Commission observed that its staff had spent an extraordinary amount of time objectively reviewing the quality of AUF's customer service and had independently evaluated of sound recordings for "635 randomly selected customer calls" to AUF's call centers, as well as 103 specific recordings, for a total of 738 recordings. Order No. PSC-10-0218-PAA-WS at p. 4. The Commission further found that:

the most reasonable means at our disposal for determining if AUF is performing adequately are the actual sound recordings of interactions between consumer and AUF's CSR. Unlike the logs, which captured only complaints and certain inquiries, the sound recordings captured all Florida calls made to AUF call centers. By having all types of Florida calls available for review, our staff evaluated not only customers calling with a

complaint, but also customers that were calling for more routine issues, such as making a payment by telephone.

Id. at p. 5. The Commission went on to affirm that, "[o]ut of the 738 total sound recordings reviewed, our staff thought that the majority were handled in a courteous and professional manner and the representatives were taking the appropriate action to resolve all issues in the call." *Id.* at p. 6.

The Commission also acknowledged that AUF had implemented measures to improve its customer service including:

- Forming a "Complaint Analysis and Remediation Team" (CART). The CART consists of all call center supervisors and their managers, as well as the Supervisor of Compliance. This team addresses all executive escalations and meets biweekly to review all accounts where further coaching and training issues are identified for follow-up.
- Implementing a Call Escalation Process. The process was developed in April 2009 and was reviewed with all supervisors and the Compliance Team. This escalation process was then communicated to all CSRs in each of AUF's three call centers.
- Developing a detailed Supervisor Audit. This involves the Training Team pulling all supervisor callbacks from the three call centers. These are placed in a folder on AUF's internal network and are reviewed by all management in the call centers. The data is used for coaching and feedback to the CSRs to reduce the number of customer call backs.
- Auditing all its replaced meters in Florida. AUF found that there were some transitional issues that occurred with this change and has audited nearly every meter replaced to ensure that the meter is coded properly to its billing system.
- Standardizing its service order processing system for its field technicians. This change was implemented to improve the communication between the field technicians and the call centers.

- Refining the tracking of customer on-site meter and bench test procedures, since this is a common request.
- Providing an informational brochure to remind customers about contacting the call center when they leave or return to their Florida home. Many of AUF's customers use their Florida home as second residence, and the mailer was designed to encourage customers to contact the call center when they leave for the summer so that their account is properly noted.

Id. at pp. 6-7.

The Commission ultimately concluded that "while preliminary results show substantial improvement in AUF's customer service, additional monitoring was required to ultimately render a determination as to the adequacy of AUF's quality of service". *Id.* at p. 12 (emphasis added). In so ruling, the Commission recognized that its Initial Monitoring Plan had imposed substantial cost on AUF and required many hours of both utility staff and Commission staff time. Thus, the Commission directed staff to continue to monitor AUF's customer service through the end of 2010 on a more limited basis and ordered AUF to collaborate with the OPC and other parties to "develop a cost-effective, efficient, and meaningful monitoring plan, and to bring the supplemental monitoring plan to us within 45 days." *Id.* at p. 13.

C. Phase II Monitoring (May 2010 through December 2010)

Pursuant to the directives of the Commission, AUF, OPC and the parties ultimately agreed to a proposed Phase II Monitoring Plan which eliminated the requirements that AUF produce sound recordings, meter reading information, and complaint logs, but continued more limited monitoring of customer service and certain

aesthetic water quality issues. To ensure that this Phase II Monitoring Plan was cost-effective and efficient, the reporting requirements agreed upon by OPC and AUF were structured around (i) non-proprietary reports that AUF was already using internally to monitor and ensure quality of service, and (ii) an aesthetic water quality improvement program that AUF already had underway.

Specifically, the Phase II Monitoring Plan required AUF to provide on a monthly basis the following customer service-related reports:

- A Management Quality Performance ("MQP") Report which tracks on a monthly basis the reasons for customer calls. This report is used by AUF management to understand recent performance and identify any adverse trends.
- A Florida Complaint Support Information Report which provides non-proprietary information for each of the complaint-related calls that underlies the MQP Report for each month.
- A Florida Scorecard which includes quality of service metrics for each month.
- A Call Center Monitoring Statistics Report which tracks the key performance indicators of AUF's call centers on a monthly basis, and is used by AUF to ascertain whether it is meeting its targeted service performance levels.
- A Call Quality Report for all call centers formatted such that monthly data can be tracked for each of the call centers separately.

- A Service Order Status Report which tracks AUF's service order log and the timeliness of closing service order requests.
- An Estimated Read Report which allows staff and the parties to track the number of estimated reads and investigate any adverse trends.

With respect to aesthetic water quality, the Phase II Monitoring Plan agreed upon by OPC and AUF required that AUF to monitor the aesthetic (secondary) drinking water constituents for seven of its water systems: Lake Josephine, Leisure Lakes, Sebring Lakes, Rosalie Oaks, Tangerine, Tomoka View, and Zephyr Shores. OPC and AUF also agreed that AUF would conduct a series of meetings with customer representatives from the seven systems to provide updates on the monitoring, discuss aesthetic water quality concerns, and identify possible solutions and associated costs.

By Order No. PSC-10-0297-PAA-WS dated May 10, 2010 ("Phase II Monitoring Order"), the Commission approved the Phase II Monitoring Plan agreed to by the OPC and AUF. In so ruling, the Commission acknowledged that many of its concerns that led to the Initial Monitoring Plan had been addressed. For example, the Commission noted that during the Initial Monitoring Plan, its staff had

. . . randomly sampled 358 meter readings taken by AUF and compared those readings to a corresponding set of meter readings taken by Commission staff. Of these 358 meter readings taken by AUF, none were found to be significantly different from the meter readings taken by our staff. Therefore, we find that no further testing of AUF's meter reading accuracy is necessary.

Phase II Monitoring Order at p. 6. The Phase II Monitoring Order also recognized that staff had randomly sampled 50 customer bills which showed that all of those bills were

appropriately based upon the usage indicated by the meter readings taken by AUF. *Id.* However, at the March 16 Agenda Conference, a former Commissioner insisted that the sample size of 50 may not be sufficient to provide adequate assurance that all customer bills are appropriately based on actual meter readings. The Commission therefore instructed staff to expand this sample to the same sample size of 358 used to determine the accuracy of AUF's meter reading. *Id.* at p. 7.

In addition to the monitoring requirements agreed upon by OPC and AUF, the Commission required AUF to provide quarterly reports on environmental compliance and directed staff to review enforcement actions taken by the FDEP, the County Health Departments, and the Water Management Districts ("WMDs") through the end of 2010 for each of AUF's jurisdictional water and wastewater systems. The Commission also directed AUF to report on capital projects designed to improve the water quality at the Chuluota system. Finally, the Phase III Monitoring Order instructed AUF to file a final report by the end of February, 2011, summarizing the results of AUF's Phase II reporting requirements. AUF is filing this final report pursuant to the Commission's instruction.

II. Summary of Phase II Monitoring Reports

A. Management Quality Performance Report

The Management Quality Performance Report is a high level report used by AUF to track the reasons for customer calls to the call centers. AUF management relies on the information contained in this report to identify customer service trends from month to month and prepare responsive actions where needed. A sample report is provided in

Exhibit "A". Data derived from Management Quality Performance Reports shows that the vast majority of the calls received by AUF's CSRs during the Phase II monitoring period involved routine day-to-day issues such as move in/move out requests, payment questions, requests to pay over the phone, and requests to verify account balances.

The data gathered in these reports during the Phase II monitoring period was consistent with AUF's expectations and there does not appear to be abnormal variances or trends for Florida calls. Of course, any call related to a water quality complaint, a boil water notice or an emergency repair is immediately addressed by a customer service technician through the issuance of a service order.

B. Florida Complaint Support Information Report

The Florida Complaint Support Information Report consists of more granular non-proprietary information for each of the complaint-related calls identified in the Management Quality Performance Report. This report provides AUF management with additional call information by system and thus enhances AUF's ability to identify customer service trends and to more effectively tailor responsive actions where needed.

The report also enables AUF management to investigate unexplained increases in call volume. For example, these reports reveal that call volumes increased:

- from the Jasmine Lakes system in August 2010 when one of AUF's water mains was damaged by Verizon and a boil water notice was sent out to customers.

- from the Jasmine Lakes system in September 2010 when Pasco County damaged one of AUF's water mains and a boil water notice was sent out to customers.
- from the Lake Gibson Estates system in September 2010 when the system was shut down during a tank replacement project.
- from the Lake Gibson Estates system In November 2010 when a well went off line and a boil water notice was issued.
- from the Lake Osborne Estates system in November when there was an unexpected main break.
- from the Palm Terrace system in November 2010 when a broken valve caused system outages.

Unlike the Initial Monitoring Plan, the Phase II Monitoring Order did not require AUF to file extensive complaint logs with the Commission. Instead, the Commission staff was directed to produce monthly reports that track complaints filed at the Commission Call Center. AUF has closely reviewed the complaint reports filed by Commission staff in this docket. On average, approximately thirteen complaints were registered with the Commission Call Center each month during the Phase II monitoring period. Based on AUF's analysis, it appears that the overwhelming majority of complaints listed in the staff reports relate directly to customer concerns about the utility's approved rates and bills.² Furthermore, staff's reports show that AUF acts promptly and properly to resolve

² It is also noteworthy that a group advocating government takeover of private water utilities like AUF has aggressively encouraged AUF customers to file complaints and write letters to the Commission and other public officials. See Exhibit "B".

complaints filed at the Commission's Call Center. Indeed, AUF has a Customer Field Service Manager dedicated to investigating and responding to all Florida customer complaints in accordance with Commission regulations.

C. Florida Score Card

The Florida Score Card is a performance-based report structured around AUF's own quality of service metrics. Management meets with AUF employees on a weekly basis to review this data. This report applies to all jurisdictional and non-jurisdictional systems in Florida. Notably, while the Commission has not adopted customer service metrics for water and wastewater utilities, AUF has been proactive in this area and has adopted its own aggressive service quality metrics. See **Exhibit "C"**.

AUF's customer service metrics address service-related issues including: meter read rates; percentage of meter reading cycles completed by a scheduled date; overall estimation rates; accounts estimated for over 90 days; and percentage of active accounts not billed. The Florida Score Card reports filed during the Phase II monitoring period show that AUF is committed to good customer service and has done an excellent job in meeting its service quality goals with some limited and expected exceptions.

AUF met its targeted goals in all but the following instances over the eight month Phase II monitoring period. In June 2010, AUF was slightly below its targeted meter read rate due to a downloading glitch which required AUF to "re-read" 115 meters. This "re-read" of the 115 meters also caused AUF to be slightly below its targeted goal for Percentage of Cycles Completed in June. In July, AUF was slightly over its target of

.15% for Accounts Estimated > 90 days. The achieved metric was slightly higher in July (.16%) because of a meter change out in AUF's Sarasota County system which resulted in customers receiving estimated bills. AUF's Sarasota County system is not regulated by the Commission.

AUF was slightly outside of its target goal for Percentage of Active Accounts Not Billed target in July, September, October, and November. This is an expected result for these months when there are higher volumes of "move ins" by seasonal customers. For example, when a seasonal customer moves back in, the report will reflect that the last time the account was billed was when the customer moved out several months prior. The extended period of time between bills is to be expected under this scenario.

In summary, the Florida Scorecard Reports show that AUF has been proactive in adopting aggressive quality control metrics, and has done an excellent job in meeting those service quality goals.

D. Call Center Monitoring Statistics Report

The Call Center Monitoring Statistics Report was provided to Commission staff and the OPC on a monthly basis during the Phase II monitoring period. Please see **Exhibit "D"**. This report is based on Call Center performance indicators which provide AUF management with insights into:

- proper staffing of the call center;
- how quickly customers are connecting to a CSR ("calls answered in < 90 seconds");

- how many calls are coming into the call centers each day ("average calls/day"); and,
- the time a customer waits on the phone before speaking with a CSR ("average speed to answer").

AUF has established aggressive performance goals for its call centers. With respect to answer time, AUF's goal is to have 80% of all calls answered in less than 90 seconds, AUF has consistently met this goal with the minor exceptions in June (74%), July (73%) and October (79%) when there was an unexpected increase in the number of calls into the call center. AUF also has a goal to achieve an average answer time of 60 seconds. AUF met this goal every month with the exception of July where the average answer time was 61 seconds.

Another of AUF's goals is to limit the number of abandoned calls to 5%. AUF met this goal every month during the Phase II monitoring period with minor exceptions in June (5.4%) and July (5.6%).

E. Customer Service Representative ("CSR") Call Quality Scores Report

AUF provided its CSR Call Quality Reports on a historical basis (2007 through 2010), as well as on a monthly basis throughout the monitoring period. See **Exhibit "E"**. This report is utilized by AUF management to evaluate performance of CSRs in answering customer calls at the call centers. AUF call center managers randomly sample CSR calls and evaluate them on a monthly basis. The evaluation addresses the CSR's

soft skills such as tone and demeanor and focuses on whether the CSR has fully satisfied the customer's inquiry.

The reports supplied for the months of May through December 2010 shows that the call center performance has improved dramatically when compared to the period January 2008 through November 2008. The reports also demonstrate that from December 2008 through December 2010, the Call Centers have consistently exceeded AUF's targeted service performance goals.

F. Service Order Report

The Service Order Reports are designed and used by AUF management to track pending service order requests and to ensure that those requests are properly addressed as soon as practicable. The service order reports were provided to Commission staff, OPC and the parties on a monthly basis throughout the Phase II monitoring period. In reviewing these reports it is important to understand that service orders are created by CSRs for a myriad of different reasons, including but not limited to: requests for bench tests to evaluate meter accuracy; requests to repair a broken meter, and requests to investigate a water main break. These service orders may involve issues that can be resolved in one visit or may require several visits to achieve final resolution. For purposes of the tracking reports, a service order is not closed until there is complete and final resolution. AUF strives to address customer concerns within 14 days of the service order, with 7 days being the goal. The service order reports show that the overwhelming majority of service order requests are addressed within these timelines. However, despite

AUF's best efforts, there are anomalies and some customer issues are not completely resolved within 14 days.

During the Phase II monitoring period, AUF processed 510 service orders, 460 of which were closed within 14 days. There were no service orders open over 14 days in May or August. Only three service orders were open over 14 days in June, one over 14 days in July, one over 14 days in September, and two over 14 days in October. In November, there was an anomalous incident which resulted in an abnormally high number of open service orders. This was due to a computer interface malfunction which temporarily interrupted the transmission of CSR generated service orders to field service representatives. The delay resulting from this computer interface interruption caused service orders to remain open beyond AUF's timeline targets. This incident was an anomaly and accounted for almost all of the November service orders that were closed beyond the 14 day goal. When AUF discovered the issue, AUF moved promptly to rectify the problem. Indeed, reports show that in December there was only 1 service order open over 14 days.

In summary, the Service Order Reports show that AUF vigilantly tracks, and consistently follows through on, service order requests.

G. Estimated Read Report

Unlike the Florida Score Card (which is Florida specific), this report provides the estimated read rates for all states where Aqua America subsidiaries operate. The Estimated Read Reports show that the estimation rate for Florida has been consistently

below the target goal of 1% for some time now. During the Phase II Monitoring Period, the Florida estimation rate has improved even more. In fact, the estimated reads have been consistently at or below 0.5%, with the past 6 months being between 0.1% to 0.3%.

The results of this report confirm the benefits of the new radio frequency meters which have now been installed at all of AUF's systems in Florida.

III. AUF'S Secondary Water Quality Project

A. Background

Aesthetic water quality involves non-health related characteristics of water such as taste, color, odor, hardness and turbidity. The United States Environmental Protection Agency ("EPA") has developed secondary drinking water standards that pertain to aesthetic water quality, which standards have been adopted by the FDEP. Unlike primary drinking water standards, typically secondary standards are not enforced by EPA and FDEP, but simply function as guidelines.

The Phase II Monitoring Plan approved by the Commission includes an aesthetic water quality component, which was based on a aesthetic water quality improvement program that AUF already initiated ("Original Aesthetic Program"). AUF initiated its Original Aesthetic Program in 2008 to address customer comments related to aesthetic water quality made during the last rate case. While aesthetic water quality standards are not typically enforced by environmental agencies, AUF proactively developed its Original Aesthetic Program as a plan to effectively address its customers' aesthetic water quality concerns. As part of its Original Aesthetic Program, AUF reviewed: comments

from customers at the public hearings; complaints dealing with aesthetic water quality issues; aesthetic water quality sampling data; and, feedback from area coordinators. AUF also surveyed customers on aesthetic water quality. As a result of this process, AUF identified seven (7) water systems where customers had expressed the most concern regarding aesthetic water quality issues: Lake Josephine, Leisure Lakes, Sebring Lakes, Rosalie Oaks, Tangerine, Tomoka View, and Zephyr Shores. OPC and AUF agreed that these same seven (7) systems would be the focus of the Phase II Monitoring Plan's aesthetic water quality component.

B. Aesthetic Monitoring

Pursuant to the Phase II Monitoring Plan, AUF monitored the secondary (aesthetic) drinking water constituents for the seven water systems listed above. The results of that monitoring are appended as **Exhibit "F"**.

C. Joint Secondary Water Quality Task Force Meetings

During the summer of 2010, in accordance with the Joint Monitoring Plan, AUF met twice at each of the seven system locations with OPC and designated customer representatives to discuss aesthetic concerns, possible solutions to those concerns, and associated costs. AUF also participated in a mid-point meeting on January 20, 2011 with Commission staff, the OPC, and other interested persons to discuss the status of the customer meetings on aesthetic issues. Handouts distributed at the customer meeting are attached as Composite **Exhibit "G"**. The results of those meetings are summarized below.

Lake Josephine / Sebring Lakes

Through its Original Aesthetic Program, AUF had identified the Lake Josephine and Sebring Lakes systems as having experienced aesthetic water issues concerning taste and odor which stem from naturally occurring hydrogen sulfide in the water.

Because these two systems are interconnected, the customer meetings for Lake Josephine and Sebring Lakes were combined and took place on July 7, 2010 and again on September 21, 2010. Representatives from Lake Josephine were invited but did not attend.

At the meeting on July 7, 2010, AUF representatives and Sebring customer representatives discussed the water having a sulfur taste and odor. The Sebring representatives expressed the desire to address the aesthetic water quality issues. AUF shared its water quality test results and discussed treatment options for these facilities. AUF then explained its experience with the AdEdge treatment system and the positive impacts it had on sulfur issues in AUF's other pilot programs. AUF informed the customers that an RFP/RFQ was being prepared to design and permit the AdEdge treatment system, and explained that this bid process allowed for bidding firms to recommend alternative treatment for these facilities.

At this meeting, Sebring customer representatives suggested that would it be a better alternative to loop the distribution lines within the system to help address the water quality issues rather than installing treatment at what may be a higher cost. The customers asked AUF to consider this alternative. AUF representatives stated that they would do so and report back at the follow-up meeting.

At the follow-up meeting on September 21, 2010, AUF representatives presented a cost/benefit analysis regarding the customers' looping suggestion. This analysis showed that the cost of looping was considerably more expensive than the AdEdge alternative and that "looping" would not effectively address the sulfur issue. At this meeting, the customer representatives appeared to be satisfied with the improvements AUF was making in the system. Currently, AdEdge is constructing the filters for the treatment system, and AUF and its engineers have had a pre-submittal meeting with FDEP to inform the agency that a permit filing is forthcoming.

Leisure Lakes

Through its Original Aesthetic Program, AUF had identified the Leisure Lakes system as experiencing aesthetic water issues concerning odor and taste which stem from naturally occurring hydrogen sulfide, calcium, and sediment in the water. AUF and OPC representatives met with Leisure Lakes representatives on July 7, 2010 and again on September 21, 2010.³

At the first meeting on July 7, 2010, AUF representatives and customers discussed that, despite the flushing plan implemented in 2009, customers were still experiencing odor issues related to sulfur in the water. After sharing the water quality testing results with the Leisure Lake representatives, AUF discussed treatment options needed to address the sulfur related odor issues. Specifically, AUF representatives discussed the AdEdge treatment system with the customer representatives, who expressed a particular

³AUF representatives had previously met with the homeowner's association (HOA) in April 2009 to discuss aesthetic water quality issues. At that time, AUF developed a flushing plan that continues to this day.

interest in the design and inquired if any buildings needed to be constructed. The customer representatives indicated that they would like to review the design and wanted information about the colors of the storage tank and building. The customer representatives shared that they wanted AUF to address the odor issues. Furthermore, the customer representatives advised AUF that the HOA board had conducted its own independent survey of the residents concerning the water quality, and the results of that survey indicate that residents want AUF to resolve the sulfur issue.

At the follow-up meeting on September 21, 2010, AUF representatives provided an update on the status, design and permitting of the AdEdge system. AUF also provided an overview of the additional capital costs related to the project. The customers generally seemed satisfied with this plan. Currently, AdEdge is constructing the filters and AUF and its engineers have had a pre-submittal meeting with FDEP to inform the agency of the forthcoming permit filing.

Rosalie Oaks

Through its Original Aesthetic Program, AUF had identified the Rosalie Oaks system as experiencing aesthetic water issues concerning taste, odor and clarity which stem from sporadic flows and naturally occurring sediment in the water. AUF and OPC representatives met with Rosalie representatives on July 8, 2010 and again on September 22, 2010.

The Rosalie Oaks system is a weekend and holiday get-away for the residents; thus, system usage is intermittent and sporadic. This intermittent and sporadic usage

pattern presents challenges for AUF to maintain aesthetic water quality for the system. Therefore, as part of its Original Aesthetic Program, AUF had evaluated the water quality, the distribution system and frequency in which the system was flushed.

Prior to being included in Original Aesthetic Program, the Rosalie Oaks system lacked critical valves and flushing hydrants. Thus, AUF devised a directional flushing program for Rosalie Oaks by installing a short water main extension and flushing hydrant to flush the system properly. A flushing protocol was developed to address the weekend and holiday customers' usage patterns. The protocol calls for the operator to flush the water mains before a weekend or holiday to assure that customers have quality water.

At the first meeting on July 8, 2010, AUF representatives shared the water quality test results and discussed water quality in the system. Two customers represented the system. One was satisfied with the water quality and stated she never had issues with the water quality. The other expressed issues with the water quality and was unaware of the flushing program that AUF had already put in place. Based on the feedback, AUF representatives stated they would continue address aesthetic water quality by flushing prior to weekends and holidays.

At the follow up meeting on September 22, 2010, the customer representative present was unaware when flushing occurred. AUF representatives agreed to keep this customer apprised when flushing occurred. AUF has since followed up with this customer who has indicated that personal notification is no longer needed when flushing activities occur. Currently, AUF has continued with its systematic flushing plan. Based on the customer base and intermittent use of this system, AUF determined that systematic

flushing was the most appropriate and cost effective solution to address the aesthetic water quality issues.

Tangerine

Through its Original Aesthetic Program, AUF had identified the Tangerine system as experiencing aesthetic water issues concerning color, odor, and turbidity, which stem from naturally occurring iron, hydrogen sulfide, calcium and sediment in the water. AUF and OPC representatives met with customers of this system on July 9, 2010 and again on September 23, 2010.

At the July 9, 2010 meeting, AUF representatives and Tangerine customer representatives discussed discolored water concerns. The customers generally expressed their desire for the Company to address the aesthetic water quality issues. AUF discussed the sequestering process and the looping initiative in the system, which it had previously designed, permitted and installed to address the iron and hardness issue in the water. The sequestering system was operational in the summer of 2010.

At the follow up meeting on September 23, 2010, the Company reviewed the costs of the sequestration and looping projects with the customers who seemed satisfied with the course of action AUF was taking to address the aesthetic water quality concerns.

In addition, a customer raised the issue concerning a fire she previously had at her home. She stated that there was not a fire hydrant in the vicinity. After the meeting, AUF representatives met with the customer to determine where she lived in relationship

to the nearest fire hydrant. As a result of this meeting, AUF had a contractor install the fire hydrant in the customer's vicinity.

Currently, a sequestering treatment system is in place and operating in Tangerine. Furthermore, AUF has installed various water main extensions in order to connect dead ends. These initiatives have improved pressure problems, given the water a "softer" taste, removed sediment from the system.

Tomoka View

Through its Original Aesthetic Program, AUF had identified the Tomoka View system as experiencing aesthetic water issues concerning taste and odor, which stem from naturally occurring hydrogen sulfide, calcium and sediment in the water. The system also experienced a primary water quality issue involving Trihalomethanes ("TTHMs").⁴ AUF signed a consent order on December 18, 2009, which was discussed in AUF's last rate case. In accordance with that consent order, AUF completed construction of the chloramination system, which was placed in service in December 2009. The results from the quarterly samples taken from December 2009 to June 2010 and the rolling annual average ("RAA") for the second quarter of 2010 were all well below the TTHM standards. AUF has received notification from the Volusia County Health Department that the system has been put on reduced monitoring for TTHMs. The consent order is now closed.

⁴ Trihalomethanes are disinfection by-products ("DBPs") created when water containing even trace amounts of natural organic carbon is disinfected with chlorine. Water sources with relatively higher levels of total organic carbon or high chlorine demand can generate elevated levels of TTHMs when disinfected with chlorine.

The first meeting with Tomoka View took place on July 9, 2010 with a follow up meeting on September 23, 2010. At the July 9th meeting, AUF representatives discussed the chloramination system. Tomoka View representatives were very satisfied that the TTHM issue was resolved and the water quality had improved since additional treatment and flushing programs were initiated. The customers were also informed of the storage tank project to install a new liner preventing leakage through the deteriorating concrete block walls of a storage tank. AUF representatives explained that the project has been delayed due to Volusia County requiring engineering documents detailing the installation of the temporary hydropneumatic tank the contractor will be installing. The current estimated date of completion is March 30, 2011.

Customer representatives also discussed the issue of dark rings in the toilet bowl and pink film in shower stalls or bath tubs. AUF representatives provided the customers with information on these issues and made customers aware that the cause was related to airborne bacteria. The customers had previously attributed this occurrence to poor water quality.

At the follow-up meeting on September 23, 2010, AUF representatives primarily discussed a temporary nitrification issue that had arisen in July of 2010. (The American Water Works Association estimates that nitrification occurs to some degree in two-thirds of the public drinking water systems that use chloramines as a means of disinfection.) AUF explained that it has a vigorous nitrification surveillance protocol and when nitrification was detected, it moved promptly to remedy the situation. After public notice was issued, the system was converted to free chlorine for disinfection and directionally

flushed. The system remained on free chlorine for approximately 30 days. After public notice, the disinfection process was converted back to chloramines. The distribution system has not had any nitrification issues since then, and AUF is planning to convert to free chlorine again in June 2011 for 30 days as a preventative measure.

Zephyr Shores

Through its Original Aesthetic Program, AUF had identified the Zephyr Shores system as experiencing aesthetic water issues concerning color, hardness and turbidity, which stem from naturally occurring manganese, calcium, iron and sediment in the water. AUF designed, permitted and installed a sequestering agent to address these aesthetic issue and that sequestering system was operational in March of 2010.

AUF representatives and the OPC met with Zephyr Shores representatives on July 9, 2010 and again on September 22, 2010. Both meetings were attended by many customers who expressed concern about rates and the desire for AUF to be taken over by either the FGUA or Pasco County.

At the July 9 meeting, AUF representatives discussed the status of utilizing a sequestering agent to address the aesthetic water quality issues, and further reported that to properly flush this system, critical valves needed to be installed and additional flushing hydrants were needed. AUF explained that a contractor was hired and the valves and flushing hydrants had been installed. Furthermore, a written flushing plan was developed to instruct the operator how to flush the system.

During the meeting some customers raised concerns about low water pressure in a specific area of the development. AUF committed to analyze the system and present solutions for the next meeting.

At the follow-up meeting on September 22, 2010, AUF's engineer presented two solutions to the pressure issue. The first involved installing a water main through an easement between 2 properties. This option was objected to by a customer that owned the intervening property impacted by the easement. The second option involved installing the water main alongside the roadway. This option would involve a longer route than the first option but would accomplish the same results. Currently, the main is being designed along the roadway and AUF is preparing to meet with the HOA board to discuss the location and obtain any necessary utility easements.

IV. Quarterly Environmental Compliance Reports

A. Background

The Phase II Monitoring Order required AUF to file quarterly "environmental compliance" updates describing the status of outstanding warning letters, consent orders and notices of violation. See Phase II Monitoring Order at p. 6. The updates were to include information concerning enforcement actions identified in the Final Order, additional warning letters, consent orders, and notices of violation issued during the period, and AUF's plan to resolve each alleged violation. In accordance with those requirements, AUF filed quarterly updates with the Commission on July 10, 2010 and

again on October 11, 2010.⁵ AUF's final quarterly update for the fourth quarter of 2010 is attached as **Exhibit "H"**. Before addressing the quarterly compliance updates that AUF provided, it is important to understand the terminology used by the Commission with respect to environmental compliance. As the Commission explained in this docket:

DEP conducts periodic inspections of all water and wastewater facilities and, if environmental compliance violations are found, a "noncompliance letter" is sent describing the violation. The utility is given time to respond and correct the violation. If the utility fails to respond or if the response is insufficient, the utility is sent a "warning letter" which describes the outstanding violation and DEP's recourse if the violation is not resolved. If the utility and DEP agree on a resolution, a "consent order" is issued describing the resolution. If an agreement is not reached, DEP issues a "notice of violation" which may result in a hearing.

Order No. PSC-10-0281-PAA-WS at 10.

It is also important to note that, when the Commission instructed OPC and AUF to agree upon a Phase II Monitoring Plan, the Commission and its staff had thoroughly evaluated AUF's environmental compliance up to that point. The Commission expressly found that:

It appears that AUF has been responsive to DEP and the County Health Departments in attempting to resolve compliance issues. In some cases, compliance involves complicated and difficult issues which can take significant time to resolve. To date, five of the nine outstanding consent orders and warning letters referred to in the Final Order have been resolved. No notices of violation have been issued. Although two new consent orders and three warning letters have been issued, we note that AUF is responsible for more than 80 water and wastewater systems regulated by us.

Id. at p. 12.

⁵ In its quarterly update filed on October 11, 2010, AUF explained that because the previous quarterly update was filed on July 10, 2010, the next quarterly update would have to have been due in October not September as indicated in the Phase II Monitoring Order.

B. Overview of Quarterly Environmental Compliance Updates

The quarterly environmental compliance updates which AUF has submitted show that AUF continues to be extremely responsive to FDEP and County Health Departments concerning environmental compliance. Indeed, the information and activities described in those reports confirm that AUF's top priority is to ensure that all of AUF's systems comply with applicable water and wastewater standards and regulations. Furthermore, as of the date of this report, AUF has no notices of violation from FDEP or the Department of Health. Moreover, as shown in the attached **Exhibit "I"**, AUF has taken aggressive steps to resolve all of the environmental compliance issues which had been identified in the Final Order during the last rate case.

While AUF is proud of its environmental compliance for all of its systems, it is particularly pleased to report that it has made significant improvements to the Chuluota water system. The Commission removed the Chuluota water and wastewater system from the last rate case primarily because it found that the quality of service for that particular system was unsatisfactory. That finding with respect to AUF's Chuluota system was based primarily on water quality issues involving disinfection byproducts (TTHMs), which were the subject of an open consent order with the FDEP at the time of the last rate case.

Since the last rate case, AUF has made significant improvements to the Chuluota system and has invested over \$2.3 million dollars in a state-of-the-art ion exchange system to address the TTHM issue. As a result of those improvements, the Chuluota

system has been in compliance with TTHM standards for all of 2010, and FDEP has closed out the consent order.

V. Conclusion

For almost two years now, AUF's customer service has been the focus of a rigorous and unprecedented review by the Commission, its staff, the OPC, and other parties. AUF has timely complied in all respects with the monitoring and reporting requirements imposed by the Commission and, in so doing, has incurred significant costs. During the course of this intensive monitoring, AUF has supplied the Commission, the OPC and the parties with thousands of pages of data, documents, audio tapes, and reports. That information clearly shows that AUF has good customer service and consistently complies with environmental requirements. The information in this report further shows that AUF has been proactive in establishing quality of service performance goals to ensure that its good customer service will be maintained into the future.

EXHIBIT A

Exhibit A**Aqua Florida
Quality Performance Report**

	June 2010	
	%	Total
Move in or Move out	18	1051
Pay by Phone - Speedpay	14	803
Verify Account Balance	11	632
Customer Account Changes	9	504
Shut-Off Notice	5	285
Explain Bill	5	279
Payment Arrangement	5	263
Restore Service	4	236
Payment Confirmation Number	4	230
High Bill Complaint	3	174
No Water	2	140
Verify Receipt of Payment	2	132
Dispute Bill	2	107
Turn On or Turn Off Service	2	96
Service Line Leak	2	90
Zip Check Sign Up	1	64
Meter Problem	1	57
Leak Adjustment	1	54
Payment Location Inquiry	1	45
Boil Water Notice Inquiry	1	45
All Other Calls	8	453

EXHIBIT B

Agenda Conference May 24 Tallahassee

Exhibit B

No commentsEventsFebruary 22nd, 2011FReams

We are planning to repeat our Bus trip to Tallahassee and to attend and hopefully speak at this hearing which will be held on Aqua's latest request for an increase in rates and Single Tariff Pricing. Also, discussed will be Aqua's level of customer service based on the order issued at the last Agenda conference March 16, 2010 at that conference the commission ordered Aqua to continue submitting monthly reports on Customer Contacts as well as delays in service requests by system and percent of customers billed in the normal cycles.

If you would like to attend this upcoming meeting in Tallahassee please submit your requests via the website, we will be emailing updated information to all who are signed up for our Newsletter sent each week. As we receive requests we will be determining boarding locations for the busses.

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Feb
16

Charolette Observer Aqua NC rate case

No commentsUncategorizedFebruary 16th, 2011FReams

Aqua North Carolina, the state's largest private water utility, is asking state regulators for a hefty rate increase for the second time in three years.

The move has riled homeowners who already pay Aqua about \$100 for typical monthly usage, twice as much as residents of Raleigh, Charlotte and other municipal utility departments. Aqua is asking for 20.4 percent more for water service and 16.4 percent more for sewer service, which would add \$13 to monthly bills. In 2009 those fees went up 12.5 percent and 29.7 percent.

This time, homeowners are organizing and plan to stage a rally outside the N.C. Utilities Commission office in Raleigh the day of the public hearing on the rates. The hearing date has not yet been set but could draw protesters from much of the state.

For the rest of the story copy and paste link below

<http://www.charlotteobserver.com/2011/02/15/2063459/privatewater-utilitywants-heftyrate.html#ixzz1E2dkX8r4>

[Click to Email, Share or Bookmark This](#)

Feb
15

Send AUF Complaints to:

No commentsUncategorizedFebruary 15th, 2011Dbussey

Office of Governor Rick Scott

State of Florida

The Capital

400 S. Monroe St.

Tallahassee, Fl 32399-0001

Rick.Scott@eog.myflorida.com

Kurt S. Browning

Florida Secretary of State

500 S. Bronough St.

R.A. Gray Building

Tallahassee, Fl 32399-0250

secretaryofstate@dos.state.fl.us

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Feb

15

Complain! Complain! Complain!

[No commentsUncategorizedFebruary 15th, 2011Dbussey](#)

Our voices are getting stronger..... keep filing complaints with the PSC..... write your senator and representative..... don't forget to let our new governor know about our problems with Aqua Utilities Florida..... let the Secretary of State know about it, too.

Let everyone know how upset you are with the PSC and AUF.

Are your rates too high? Tell them!

Should AUF be allowed to acquire more utilities? Tell them!

Is your Customer Service lousy? Tell them!

Do you want AUF kicked out of Florida? Tell them!

Do you want the PSC to do what's right, instead of "business as usual"? Tell them! And keep on telling them until they do something about it!!!!

Dave Bussey

[Click to Email, Share or Bookmark This](#)

Feb

11

EXHIBIT C

Exhibit C

Score Card -Customer Service									
		May	June	July	August	September	October	November	December
	Target	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual
Read Rate of Metered Accounts	99.00%	99.30%	98.90%	99.30%	99.20%	99.20%	99.30%	99.20%	99.30%
% of cycles completed on scheduled date (+ or - 1 Day)	100.00%	100.00%	99.10%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Overall Estimate Rate	0.80%	0.30%	0.50%	0.30%	0.20%	0.10%	0.02%	0.02%	0.10%
Accounts Estimated>90 days	.15%	0.12%	0.10%	0.16%	0.10%	0.07%	0.11%	0.11%	0.08%
Percentage of Active Accounts Not Billed	0.06%	0.04%	0.03%	0.13%	0.06%	0.07%	0.19%	0.26%	0.04%

EXHIBIT D

Exhibit D

Call Center Stats	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Explanation of Statistics
Customers (approx)	858,041	858,041	858,041	893,261	893,261	893,261	893,261	940,279	940,279	940,279	Refers to the approximate number of customers being serviced by the call centers
Total Calls	83,798	82,069	76,066	95,841	91,194	95,975	92,000	92,755	90,823	83,950	The number fo total calls that were received through the toll-free number that went into a service queue (does not include customers
Days Open	23	22	20	22	21	22	21	21	21	21	Days in month that call centers were open for business
Average Calls/Day	3,643	3,730	3,803	4,356	4,343	4,363	4,381	4,417	4,325	3,998	Calculated by dividing Total Calls by Days Open
Abandon Rate	2.10%	1.40%	1.40%	5.40%	5.60%	2.90%	3.10%	4.20%	2.70%	2.00%	Percentage of Total Calls where customers disconnected (abandoned) prior to a CSR answering
Calls Answered in < 90 Seconds	91%	95%	95%	74%	73%	86%	85%	79%	87%	92%	Percentage of calls where a CSR answered in 90 seconds or less
Average Speed to Answer	22 sec	14 sec	15 sec	57 sec	61 sec	32 sec	33 sec	44 sec	28 sec	21 sec	The average time in seconds that a customer waited before their call was answered by a CSR
Average Handle Time	4:37	4:26	4:31	4:35	4:39	4:34	4:31	4:35	4:26	4:25	The average for all answered calls of tatl talk time plus total hold time plus any time for after call work completed by the CSR
Average #CSR/Day	65.6	66.7	66.6	63.5	62.7	64.7	65.6	65.1	65.3	63.2	The average number of CSRs who logged in each day during the stated month
Calls Answered	82,038	80,920	75,001	90,666	86,087	93,192	89,148	88,859	88,371	82,271	Total Calls less abandoned calls

EXHIBIT E

Exhibit E

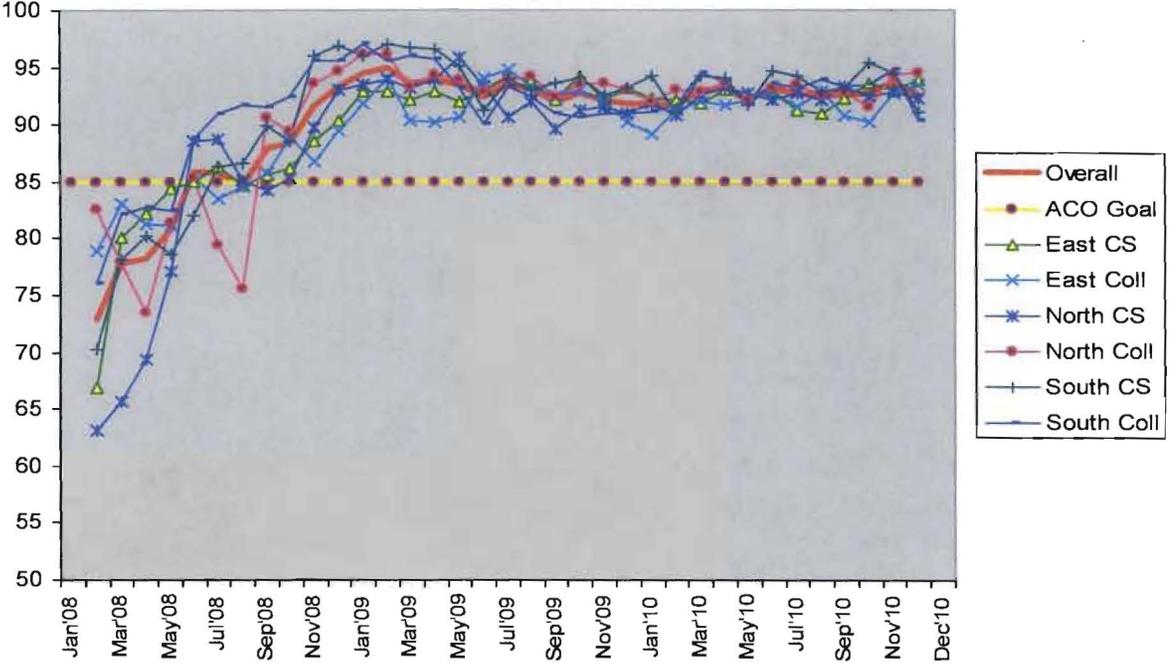


EXHIBIT F

Lake Rosalie Oaks

		6/28/10	7/27/10	8/16/10	9/21/10	10/26/10	10/26/10	10/26/10	11/3/10	11/3/10	11/3/10	11/17/10	11/17/10	11/17/10	12/13/10	12/13/10	12/13/10	12/27/10	12/27/10	12/27/10	
		12:45	12:15	12:20	12:15	12:40	12:15	12:25	12:00	12:15	12:25	11:30	11:40	11:45	12:40	12:20	12:30	11:50	11:35	11:25	
		POE	POE	POE	POE	Well-Raw	Lot #22	Lot #106	Lot #34	Lot #67	Well	Lot #10	Lot #67	Well	Well	Lot #55	Lot #63	Well	Lot #53	Lot #10	
Aluminum	mg/L	0.061 U	0.061 U	0.061 U	0.061 U																
Chloride	mg/L	14	4.4 I	15	64																
Copper	mg/L	0.0032	0.00036 I	0.00095	0.00087																
fluoride	mg/L	0.082 I	0.081 I	0.066 I	0.065 I																
Iron	mg/L	0.049 I	0.09 I	0.043 I	0.05 I	0.057 I	0.12 I	0.044 I	0.05 I	0.12 I	0.038 U	0.079 I	0.044 I	0.038 U	0.038 I	0.055 I	0.055 I	0.038 U	0.2	0.4	
Manganese	mg/L	0.00073 I	0.0041	0.00095 I	0.0011																
Silver	mg/L	0.000086 U	0.000086 U	0.000086 U	0.000086 U																
Sulfate	mg/L	2.1 U	2.1 U	2.1 U	2.1 U																
Zinc	mg/L	0.0072	0.011	0.0068	0.0093																
Color	color units	3	3 U	3 U	3	3 U	3 U	3.7	10	11	9	3 U	3.1	3 U	3.4	3 U	3 U	2.7 U	2.7 U	2.7 U	
	T.O.N.@4																				
Odor	0c	1 U	1 U	1 U	1 U	2	1 U	1 U	1 U	1 U	2	1 U	1 I	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
pH	pH unit	8.09	7.61	7.52	8.3	7.81	7.75	7.71	7.85	6.94	7.85	7.58	7.67	7.67	7.81	7.87	7.94	7.46	7.53	7.45	
TDS	mg/L	110	86	110	210	98	100	110	82	82	80	120	110	96	78	94	96	100	120	130	
Surfactants - MBAS	mg/L	0.14 I	0.12 I	0.066 I	0.057 I																
Calcium Hardness	mg/L					49	49	52	53	43	46	45	45	44	48	49	49	46	45	44	
Total Hardness (as CaCO3)						77	77	81	82	68	73	70	70	69	75	76	76	73	72	69	
Alkalinity, Total	mg/L					44	75	75	75	76	49	74	73	74	75	76	76	75	71	77	

Tangerine

		7/15/09 10:30	5/30/10 8:10	7/14/10 10:00	8/24/10 10:20	9/8/10 9:30	9/24/10 9:14	9/24/10 9:29	9/24/10 9:36	9/24/10 8:54	9/29/10 11:12	9/29/10 11:04	9/29/10 10:35	9/29/10 11:42	10/6/10 10:00	10/6/10 10:00	10/6/10 10:00	10/21/10 10:56	10/21/10 11:05	10/21/10 11:43	10/21/10 11:25	10/28/10 10:04	10/28/10 9:56	10/28/10 10:30	10/28/10 9:39		
		Base Line Data		POE	POE	POE	POE	WQP-1	Well #1 Raw	Well #2 Raw	S/P-2	Well #1 Raw	Well #2 Raw	S/P-2	S/P-2	POE	POE	POE	Well #1	Well #2	WQP Site 1	S/P-2	Well #1	Well #2	WQP Site 1	S/P-2	
pH	pH unit	8.16	7.3		8.08	8.24	7.7	7.8	7.8	7.7	7.8	7.8	7.8	7.8	8.1				7.9	8	8	7.9	8	7.9	7.9	7.9	
Temp							27.3	24.7	24.6	27.3	24.5	24.7	26.1	26.1					24.1	24.1	24.4	23.6	24	23.8	24.5	24.2	
chloride	mg/L	18	8.8		19	19	0.8	0	0	0.9	0	0	1.9	1.9	21				0	0	1.7	1.5	0	0	1.9	2	
Color	color units	4	21		3	2						21	5	1 U	1 U	3			5	7	1 U	1 U	21	21	1 U	2	
PO4							0.8				0.8			1	1				0	0	1	1	0	0	0.8	0.8	
Total Hardness (as CaCO3)							110	127	110	140	130	107	113	113					119	113	123	141	130	108	116	117	
Alkalinity, Total Calcium	mg/L						115	117	118	117	107	113	113	113					102	108	110	111	112	109	107	108	
Hardness Calcium	mg/L						46.8	50.3	46.2	53.7	52	44.6	45.6	45.6					47.4	45.7	48.6	55.6	51.6	44.2	46.4	46.8	
Odor	T.O.N. @40c		21		1 U	1 U						21	21	1 U	1 U			1 U	21	11	11	11	21	1 U	1 U		
TDS	mg/L	180	192		170	190					140	128	45.6	160	170				176	156	180	190	180	160	188	196	
Iron	mg/L	0.017	0.031		0.028	0.026	0.025	0.028	0.039	0.029	0.026	0.022	0.02	0.02	U				0.026	0.031	0.027	0.02	0.02	0.051	0.024	0.029	0.032
Manganese	mg/L	0.0005	U	0.001	0.0005	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U			0.00065	0.001	U	0.001	U	0.001	U	0.001	U
Aluminum	mg/L	0.0036	0.05	U	0.0088	0.0024													0.011								
Copper	mg/L	0.0009	0.0075	U	0.0007	U	0.0014												0.0015								
Silver	mg/L	0.0005	U	0.001	U	0.0005	U	0.0005	U										0.0025	U							
Zinc	mg/L	0.002	U	0.003	U	0.0032	U	0.003											0.0023								
fluoride	mg/L	0.11	0.17		0.14	0.17												0.13									
Sulfate	mg/L	7.3	1 U		5.3	6.6																					
foaming agents	mg/L	0.023	0.05	U	0.076	0.044													0.022	U							

		11/3/10 10:00	11/16/10 10:37	11/16/10 10:27	11/16/10 10:14	11/16/10 10:58	11/23/10 10:27	11/23/10 11:22	11/23/10 11:05	11/23/10 11:56	12/2/10 10:20	12/14/10 9:58	12/14/10 10:10	12/14/10 9:43	12/14/10 10:28	12/28/10 10:20	12/28/10 10:28	12/28/10 11:00	12/28/10 10:42	
		POE	Well #1	Well #2	WQP Site 1	S/P-2	Well #2	Well #1	WQP Site	S/P-2	Well #1	Well #2	WQP Site	S/P-2	Well #1	Well #2	WQP Site	S/P-2		
pH	pH unit	8	7.9	7.9	7.8	8	7.9	8	7.9	8	8.12	7.8	7.9	7.9	8.2	8.1	8	8.1	8.1	
Temp			23.8	23.8	23.7	22.9	23.9	24	23.1	22.9	21.8	21.5	23.9	26.7	20.5	20.5	15.2	14.7		
chloride	mg/L	22	0	0	1.2	1.3	0	0	1.4	0.9	20	0	0	2.1	1.8	0	0	2.1	1.7	
Color	color units	2	21	11	11	1 U	11	5	21	1 U	3	5	3	21	1 U	3	5	21	1 U	
PO4			0	0	0.8	0.8	0	0	0.9	0.9	0	0	0.8	0.8	0	0	0.8	0.8		
Total Hardness (as CaCO3)			120	103	106	107	119	118	112	115		110	112	107	104	119	115	110	116	
Alkalinity, Total Calcium	mg/L		103	108	110	110	110	104	113	109		114	109	112	110	96.8	105	109	109	
Hardness Calcium	mg/L		48.2	41.8	43.2	42.6	47.2	47.6	45.2	46.8		44	44.2	43.6	41.8	47.6	45.8	44.6	45.8	
Odor	T.O.N. @40c	1	21	11	11	1 U	41	21	1 U	1 U	1 U	21	11	1 U	1 U	21	11	1 U	1 U	
TDS	mg/L	160	182	166	184	194	154	170	176	186	10000	172	156	176	184	188	180	160	182	
Iron	mg/L	0.024	0.043	0.027	0.029	0.035	0.3	0.03	0.031	0.21	0.024	0.031	0.02	0.022	0.074	0.065	0.059	0.033		
Manganese	mg/L	0.0005	U	7.3	7.6	8.2	9.7	7.7	8.2	9.1	8.6	7E-04	0.87	0.78	0.86	0.86	0.84	0.78	0.87	0.82
Aluminum	mg/L	0.0034									0.015									
Copper	mg/L	0.0007	U								0.002									
Silver	mg/L	0.0005	U								5E-04	U								
Zinc	mg/L	0.002	U								0.002	U								
fluoride	mg/L	0.16									0.13									
Sulfate	mg/L										8.5									
foaming agents	mg/L	0.022	U								0.05	U								

Zephyr Shores

		6/29/10	7/28/10	8/17/10	9/22/10	9/24/10	9/24/10	9/24/10	9/24/10	9/24/10	9/24/10	9/24/10	9/24/10	10/12/10	10/12/10	10/12/10	10/12/10	10/12/10	10/12/10	10/27/10	10/27/10	10/26/10	10/26/10	11/2/10	
		7:45	7:30	7:30	7:40	7:45	7:47	7:55	7:57	8:30	8:35	9:05	9:00	14:30	14:48	15:05	15:20	14:51	7:35	7:45	17:30	18:00	18:00	7:30	
		POE	POE	POE	POE	Well 1	Well 1	Well 2	Well 2	4625	4625	4803	4803	Well 1	Well 2	4643 Six	Lot 38	POE	Well 1	Well 2	Lot 5	34834 Cari	POE		
Aluminum	mg/L	0.061 U	0.061 U	0.061 U	0.061 U													0.061 U						0.061 U	
Chloride	mg/L	12	14	13	13													15						11	
Copper	mg/L	0.003	0.0026	0.0035	0.0017													0.0026						0.0031	
fluoride	mg/L	0.14 I	0.18 I	0.17 I	0.12 I													0.14 I						0.15 I	
Iron	mg/L	0.42	0.13	0.084 I	0.34	0.15 I		0.73		0.14		0.22		0.12 I	0.56	0.038 U	0.038 U	0.19 I	0.14 I	0.42	0.19 I	0.094 I		0.25	
Manganese	mg/L	0.0046	0.0013	0.0012	0.0038													0.002						0.0027	
Silver	mg/L	0.000086 U	0.000086 U	0.000086 U	0.000086 U													0.000086 U						0.000086 U	
Sulfate	mg/L	2.1 U	2.9 I	2.1 U	2.1 U													2.1 U						2.1 U	
Zinc	mg/L	0.042	0.11	0.056	0.066													0.12						0.071	
Color	color units	10	3 U	3 U	3 U								4.2	3.6	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	8.9
Odor	T.O.N.@40c	1 U	1 U	1 U	1 U								1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
pH	pH unit	7.12	6.88	6.85	7.22		7.52		7.07		7.08		7.07	6.96	6.8	6.95	6.84	6.9	6.95	6.74	6.78	6.88	6.88	7.95	
TDS	mg/L	260	290	280	260								260	220	250	260	260	260	300	230	270	270	270	270	
Surfactants - MBAS	mg/L	0.21	0.15	0.09 I	0.05 I													0.055						0.055	
Calcium Hardness	mg/L					210		200		200		200		220	200	200	200			210	200	200	200		
Magnesium Hardness	mg/L						45		17		31		31												
Total Hardness (as CaCO3)						250		210		230		230		260	210	220	230			260	220	240	230		
Alkalinity, Total	mg/L						240		190		220		220	250	180	220	220			240	200	220	220	220	

		11/3/10	11/3/10	11/5/10	11/5/10	12/9/10	12/13/10	12/13/10	12/13/10	12/13/10	12/27/10	12/27/10	12/27/10	12/27/10
		13:00	14:00	7:45	8:00	7:48	16:45	17:00	16:00	16:25	16:35	16:45	16:00	16:10
		4813 Bobby	34944 Carl	Well 1 Raw	Well 2 Raw	POE	Well 1	Well 2	Lot 87	35055	Well 1	Well 2	Lot 38	3491
Aluminum	mg/L					0.061 U								
Chloride	mg/L					12								
Copper	mg/L					0.017								
fluoride	mg/L					0.17 U								
Iron	mg/L	0.18 I	0.24	0.1 I	0.21	0.23	0.17 I	0.32	0.48	0.46	0.14 I	0.32	0.058 I	0.12 I
Manganese	mg/L					0.0025								
Silver	mg/L					9E-05 U								
Sulfate	mg/L					0.99 U								
Zinc	mg/L					0.067								
Color	color units	7.4	9.2	8.4	9.3	3 U	5.9	3.1	3 U	3.3	3.9 I	2.7 U	4.8 I	2.7 U
Odor	T.O.N.@40c	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
pH	pH unit	7.26	7.17	7	7.85	6.92	6.99	6.75	6.88	6.93	6.88	6.75	6.7	6.77
TDS	mg/L	260	260	280	230	260	270	240	280	280	290	260	280	280
Surfactants - MBAS	mg/L					0.05 U								
Calcium Hardness	mg/L	210	220	200	180		220	200	220	220	200	190	200	190
Magnesium Hardness	mg/L													
Total Hardness (as CaCO3)		250	260	250	200		230	200	240	240	250	210	230	230
Alkalinity, Total	mg/L	230	140	250	200		250	200	250	240	250	210	220	220

**COMPOSITE
EXHIBIT G**

		Zephyr Shores	Rosalie Oaks	Lake Josephine	Sebring Lakes	Leisure Lakes	Tomoka View	Tangerine	
System Stats	Number of Customers	468	89	538	75	273	263	269	
	Current Type Of Treatment	Chlorination	Chlorination	Aeration & Chlorination	Aeration & Chlorination	Aeration & Chlorination	Aeration & Chlorination	Chlorination	
	Capacity (GPD)	200,000	100,000	300,000	280,000	72,000	193,000	360,000	
	Age of System	~1975	~ 1977	2008 WTP - Distribution ~ 30yr old	~ 1981	Built 1974	Built 1965	Built 1945	
	Aqua Supervisor	Gene DeMayo	Gene DeMayo	Gene DeMayo	Gene DeMayo	Gene DeMayo	Paul Thompson	Will Fontaine	
	Aqua System Facility Operator	Steve Fuller	Steve Fuller	Eddie Christmas	Eddie Christmas	Eddie Christmas	David Haring	Terry McCarthy	
Water Quality Complaints	# of Complaints 6/1/09-3/22/10	30	2	6	1	9	20	16	
	Water Quality Issues	Sulfur			X	X	X	X	X
		Manganese	X	X					
		Calcification	X	X	X	X	X	X	X
		Iron	X						X
Particles	X	X	X	X	X	X	X		
Plan of Action	Type Of Treatment Identified	Unidirectional Flushing Program; Sequestering with Aqua Mag	None, adjust flushing to coincide w/ vacancies	AdEdge, merge with Sebring Lakes	AdEdge Pilot, merge with Lake Josephine	Unidirectional Flushing Program; AdEdge	Unidirectional Flushing Program; Chloramination	Sequestering with Aqua Mag. Install chlorine analyser & autodialer, looping deadend mains	
	Unidirectional Flushing Upgrades Needed	Install Isolation Valves & Blow Offs	Extend water line and install additional Blow Offs	None identified prior to merge with Sebring Lakes	None identified prior to merge with Lake Josephine	No additional installation work identified	Install Isolation Valves & Blow Offs	Install Isolation Valves & Blow Offs	
	DEP permitting necessary	Yes, for sequestration	No	Yes, to merge systems & installation of AdEdge	Yes, to merge systems & installation of AdEdge	Yes, for AdEdge	Yes, for chloramination	Yes, for sequestration	
	WMD permitting necessary	N/A	N/A	Yes	Yes	N/A	N/A	N/A	
	Distribution System Improvements	\$ 500	\$ 6,600	\$ 6,139.00		\$ 14,788.00	\$ 39,382.00		
	Cost of additional treatment	\$10,000		\$150,000	\$150,000	\$ 150,000	\$ 13,610	\$ 9,500	
	Cost of additional line looping							\$ 90,000	
	Expected Results of Solution	Remove Iron & sediments from distribution system, give water "soft" appearance	Provide fresher water to customers prior to return to system	Improve pressure problems, remove hydrogen sulfide	Improve pressure problems, remove hydrogen sulfide	Remove sediment and scour distribution system, remove hydrogen sulfide	Remove sediment and scour distribution system, Chloramination to control TTHMs	Improve pressure problems, give water "soft" appearance, remove sediment from distribution system	

Note: Sebring Lakes & Lake Josephine systems have been combined into one system



**Aqua Utilities Florida
Secondary Water Quality Project Report
July 2010**

Lake Josephine & Sebring Lakes

Aqua Utilities Florida (Aqua) owns and operates dozens of separate small water and wastewater systems throughout the state that are not interconnected. When Aqua acquired these systems, we focused first on full environmental compliance, now nearly completed. IN an effort to further improve our customer service, Aqua has been assessing ways to enhance the “secondary” or aesthetic characteristics of our water.

Lake Josephine and Sebring Lakes is a community of about 553 and 76 customer respectively in Highlands County. Aqua surveyed customers in Lake Josephine and Sebring Lakes in December 2009.

Aqua determined that the aesthetic water quality issue in Lake Josephine and Sebring Lakes primarily involved a sulfur odor. Aqua plans to install an AdEdge treatment system at Lake Josephine and Sebring Lakes to eliminate the naturally occurring sulfur in the water. We expect that this project will be operational by December 31st.

Aqua also received customer complaints from Lake Josephine RV Park and Camp Ground of low water pressure. Aqua’s field personnel and engineering conducted a review of the distribution system and determine an Interconnection between Sebring Lakes with Lake Josephine was necessary to improve water pressure. Aqua permitted the interconnection with DEP and the Water Management District and the interconnection was opened permanently and water pressure complaints have been eliminated.

SEBRING LAKES WELL#1

Company Address: Aqua Utilities Florida, Inc.
 1616 Wendel Kent Road
 Sarasota, FL 34240
Phone # : 941-377-9456

Collection Date: 4/20/09
Collection Time: 10:20
PWS I.D. :
Entry Pt. # :
Sample ID : AC17018

Analyte Name	Result	Units	Analysis Date	Reporting Limit	Method Reference
Analysis Group: PH_TURBIDITY					
Turbidity	0.24	NTU	4/21/09	0.10	SM 2130B
Analysis Group: ANIONS					
Sulfate	N.D.	mg/L	4/22/09	10	EPA 300.0
Analysis Group: METALS					
Iron	0.18	mg/L	4/22/09	0.10	EPA 200.8
Iron-Dissolved	N.D.	mg/L	4/22/09	0.10	EPA 200.8
Manganese	N.D.	mg/L	4/22/09	0.01	EPA 200.8
Manganese_Dissolved	N.D.	mg/L	4/22/09	0.01	EPA 200.8
Analysis Group: INORGANIC_COMPOUNDS					
Alkalinity	108	mg/L	4/22/09	5.0	SM 2320B
Hardness	113	mg/L	4/22/09	10	SM 2340C
Total Organic Carbon	1.2	mg/L	4/22/09	1.0	SM 5310C
Analysis Group: SOLIDS					
Total Dissolved Solids	122	mg/L	4/22/09	20	SM 2540C
Total Solids	138	mg/L	4/22/09	20	SM 2540 B

N. D. = Not Detected

Approved By: _____ **Date:** _____

Laboratory Report

LAKE JOSEPHINE WELL#2

Company Address: Aqua Utilities Florida, Inc.
 1616 Wendel Kent Road
 Sarasota, FL 34240
Phone # : 941-377-9456

Collection Date: 4/20/09
Collection Time: 10:55
PWS I.D :
Entry Pt. # :
Sample ID : AC17017

Analyte Name	Result	Units	Analysis Date	Reporting Limit	Method Reference
Analysis Group: PH_TURBIDITY					
Turbidity	1.2	NTU	4/21/09	0.10	SM 2130B
Analysis Group: ANIONS					
Sulfate	N.D.	mg/L	4/22/09	10	EPA 300.0
Analysis Group: METALS					
Iron	0.60	mg/L	4/22/09	0.10	EPA 200.8
Iron-Dissolved	N.D.	mg/L	4/22/09	0.10	EPA 200.8
Manganese	0.01	mg/L	4/22/09	0.01	EPA 200.8
Manganese_Dissolved	0.03	mg/L	4/22/09	0.01	EPA 200.8
Analysis Group: INORGANIC_COMPOUNDS					
Alkalinity	170	mg/L	4/22/09	5.0	SM 2320B
Hardness	185	mg/L	4/22/09	10	SM 2340C
Total Organic Carbon	2.9	mg/L	4/22/09	1.0	SM 5310C
Analysis Group: SOLIDS					
Total Dissolved Solids	192	mg/L	4/22/09	20	SM 2540C
Total Solids	238	mg/L	4/22/09	20	SM 2540 B

N. D. = Not Detected

Approved By: _____ **Date:** _____



**Aqua Utilities Florida
Secondary Water Quality Project Report
July 2010**

Leisure Lakes

Background

Aqua Utilities Florida (Aqua) owns and operates dozens of separate small water and wastewater systems throughout the state that are not interconnected. When Aqua acquired these systems, we focused first on full environmental compliance, now nearly completed. In an effort to further improve our customer service, Aqua has been assessing ways to enhance the “secondary”, or aesthetic characteristics of our water.

Leisure Lakes is a community of about 273 Aqua customers in Highlands County. Aqua surveyed customers in Leisure Lakes in December 2009.

Solution

Aqua determined that the aesthetic water quality issues in Leisure Lakes primarily involved a sulfur odor. Aqua plans to install an AdEdge treatment system at Leisure Lakes to eliminate the naturally occurring sulfur in the water. We expect that this project will be operational by December 31st.

We also enhanced our existing flushing plan. Directional flushing takes place on a monthly basis.

SHORT Environmental Laboratories, Inc.

10405 U.S. 27 S Sebring, FL 33876 (863) 655-4022
800 833-4022 Shortlah@strato.net fax (863) 655-5820



Report Cover Page

Client: **Short Utility Service, Inc.**
Address: **P.O. Box 1088**

City, St, Zip: **Sebring, FL 33871-1088**
Attention: **Wendell Faircloth**

Report #: **2009050167**
Report Date: **5/15/2009**

Project: **Leisure Lakes**

Inorganics, Secondaries, VOCs, SOCs, Radiologicals

Sample date: **April 13, 2009**
Sample #'s: **331699**

This report package includes the following contents and attachments.

Commonly used Qualifiers with explanations:

	Item	Pages	Qualifier	Explanation
Cover Page:		1		
Report of Analysis:	DW Original	7	U	Compound was analyzed for but not detected.
Attachments:	Chain of Custody	1	I	Result is between the PQL and the MDL.
	Sampler cert	1	Q	Sample was analyzed out of holding time.
			J	Estimated value; value may not be accurate.

Total Pages: **10**

The results contained in this report meet all requirements of the NELAP standards. All results are representative of the sample as collected. Direct all questions to the signatory below at the phone number above.

Respectfully Submitted,

David W. Murto
Laboratory Director

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**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

Secondary Contaminants

62-550.320

Report Number/Job ID: 331699

PWS ID (From Page 1): 6280064

Contam ID	Contaminant Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification#
1002	Aluminum	0.20	mg/L	0.02	U	EPA 200.7	0.02	4/16/2009	0832	E85458
1017	Chloride	250	mg/L	37		EPA 325.3	0.5	4/15/2009	0921	E85458
1022	Copper	1	mg/L	0.007	I	EPA 200.7	0.002	4/16/2009	0832	E85458
1025	Fluoride	2.00	mg/L	0.15	I	SM4500F-C	0.05	5/6/2009	1015	E85458
1028	Iron	0.30	mg/L	0.094		EPA 200.7	0.005	4/16/2009	0832	E85458
1032	Manganese	0.05	mg/L	0.0053		EPA 200.7	0.0005	4/16/2009	0832	E85458
1050	Silver	0.10	mg/L	0.001	U	EPA 200.7	0.001	4/23/2009	0755	E85458
1055	Sulfate	250	mg/L	45.		EPA 375.4	1.	4/16/2009	1013	E85458
1095	Zinc	5	mg/L	0.004	U	EPA 200.7	0.004	4/16/2009	0832	E85458
1905	Color	15	CU	1.	U	SM 2120 B	1.	4/14/2009	1545	E85458
1920	Odor	3	TON	0.		SM 2150 B	1.	4/13/2009	1614	E85458
1925	pH (field pH from page 1)	6.5 - 8.5	SU	7.4		EPA 150.1	0.1	4/13/2009	0730	E85458
1930	Total Dissolved Solids	500	mg/L	298.		SM 2540 C	10.	4/17/2009	1158	E85458
2905	Foaming Agents	0.50	mg/L	0.03	I	SM 5540 C	0.02	4/15/2009	0700	E85458

All results meet the requirements of NELAC.

*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62.550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Reporting Format 62-550.730

Effective January 1995, Revised January 2004

**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

Inorganic Contaminants

Report Number/Job ID: 331699

62-550.310(1)

PWS ID (from page 1): 6280064

Contam ID	Contaminant Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
1040	Nitrate (as N)	10	mg/L	0.12		EPA 353.2	0.02	4/15/2009	1111	E85458
1041	Nitrite (as N)	1	mg/L	0.01	U	EPA 353.2	0.01	4/14/2009	1150	E85458
1005	Arsenic	0.01	mg/L	0.003	U	SM 3113 B	0.002	4/28/2009	1131	E85458
1010	Barium	2	mg/L	0.113		EPA 200.7	0.002	4/16/2009	0832	E85458
1015	Cadmium	0.005	mg/L	0.001	U	EPA 200.7	0.001	4/16/2009	0832	E85458
1020	Chromium	0.10	mg/L	0.001	U	EPA 200.7	0.001	4/16/2009	0832	E85458
1024	Cyanide	0.20	mg/L	0.005	U	EPA 335.4	0.005	4/20/2009	0805	E85458
1025	Fluoride	4.0	mg/L	0.15	I	SM4500F-C	0.05	5/6/2009	1015	E85458
1030	Lead	0.015	mg/L	0.001	U	SM 3113 B	0.001	4/16/2009	0730	E85458
1035	Mercury	0.002	mg/L	0.0002	U	EPA 245.1	0.0002	4/23/2009	0731	E85458
1036	Nickel	0.10	mg/L	0.002	U	EPA 200.7	0.002	4/16/2009	0832	E85458
1045	Selenium	0.05	mg/L	0.005	U	SM 3113 B	0.005	4/20/2009	0816	E85458
1052	Sodium	160	mg/L	9.33		EPA 200.7	0.05	4/23/2009	0755	E85458
1074	Antimony	0.006	mg/L	0.003	U	SM 3113 B	0.003	4/28/2009	1131	E85458
1075	Beryllium	0.004	mg/L	0.0005	U	EPA 200.7	0.0005	4/16/2009	0832	E85458
1085	Thallium	0.002	mg/L	0.001	U	EPA 200.9	0.001	4/22/2009	0753	E85458
1094	Asbestos	7 MFL	MFL							

All results meet the requirements of NELAC.

*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62.160, Table 1. Results qualified with A, F, H, N, O, T, Z, ? are unacceptable for compliance with 62.550. Results qualified with J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Reporting Format 62-550.730

Effective January 1995, Revised January 2004

**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

Volatile Organics

Report Number/Job ID: 331699

62-550.310(4)(a)

PWS ID (from page 1): 6280064

Contam ID	Contaminant Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	RDL	Analysis Date	Analysis Time	DOH Lab Certification #
2378	1,2,4-Trichlorobenzene	70	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129
2380	cis-1,2-Dichloroethylene	70	ug/L	0.2	U	EPA 502.2	0.2	0.50	4/16/2009	1346	E84129
2955	Xylenes (total)	10,000	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129
2964	Dichloromethane	5	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129
2968	o-Dichlorobenzene	600	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129
2969	para-Dichlorobenzene	75	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129
2976	Vinyl Chloride	1	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129
2977	1,1-Dichloroethylene	7	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129
2979	trans-1,2-Dichloroethylene	100	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129
2980	1,2-Dichloroethane	3	ug/L	0.2	U	EPA 502.2	0.2	0.50	4/16/2009	1346	E84129
2981	1,1,1-Trichloroethane	200	ug/L	0.3	U	EPA 502.2	0.3	0.50	4/16/2009	1346	E84129
2982	Carbon tetrachloride	3	ug/L	0.3	U	EPA 502.2	0.3	0.50	4/16/2009	1346	E84129
2983	1,2-Dichloropropane	5	ug/L	0.3	U	EPA 502.2	0.3	0.50	4/16/2009	1346	E84129
2984	Trichloroethylene	3	ug/L	0.2	U	EPA 502.2	0.2	0.50	4/16/2009	1346	E84129
2985	1,1,2-Trichloroethane	5	ug/L	0.3	U	EPA 502.2	0.3	0.50	4/16/2009	1346	E84129
2987	Tetrachloroethylene	3	ug/L	0.2	U	EPA 502.2	0.2	0.50	4/16/2009	1346	E84129
2989	Monochlorobenzene	100	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129
2990	Benzene	1	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129
2991	Toluene	1,000	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129
2992	Ethylbenzene	700	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129
2996	Styrene	100	ug/L	0.5	U	EPA 502.2	0.5	0.50	4/16/2009	1346	E84129

All results meet the requirements of NELAC.

* Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with a A, F, H, N, O, T, Z, ?,*, are unacceptable for compliance with 65.550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples during the same monitoring period.

Reporting Format 62-550730

Effective January 1995, Revised January 2004

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Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

Radionuclides

Report Number / Job ID: 331699

62-550.310(6)

PWS ID (From Page 1): 6280064

Contam ID	Contaminant Name	MCL	Units	Analysis Results	Qualifier*	Analytical Method	Lab MDL	RDL	Analysis Error	Analysis Date	Analysis Time	DOH Lab Certification #
4000	Gross Alpha (Excl Uranium)	15**	pCi/L	2.0	U	900.0 - D5174	2	3	1.9	4/28/2009	1729	E84129
4002	Gross Alpha (Incl Uranium)	***	pCi/L	2.0	U	EPA 900.0	2	3	1.9	4/20/2009	1459	E84129
4006	Combined Uranium (U-234, U-235, & U-238)	****	pCi/L	0.04	U	ASTM D5174	0.04	0.667		4/28/2009	1729	E84129
		30	ug/L					1				E84129
4020	Radium - 226	5	pCi/L	1.0		EPA 903.1	0.05	1	0.2	4/23/2009	1545	E84129
4030	Radium - 228			0.2	U	EPA Ra-05	0.2	1	0.2	4/27/2009	1634	E84129

** If the results exceed 5 pCi/L, a measurement for radium-226 is required.

*** If the results exceed 5 pCi/L, a measurement for radium-226 is required. If the results exceed 15 pCi/L, measurements for radium-226 and uranium are required.

**** If uranium (U) is reported as a measurement of activity (pCi/L) it will be converted to a mass measurement (ug/L) by multiplying the result by 1.5.

All results meet the requirements of NELAC, except as noted.

*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62.160, Table 1. Results qualified with A, F, H, M, D, T, Z, ?, * are unacceptable for compliance with 62.550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Reporting Format 62-550.730

Effective January 1995, Revised January 2004

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

Synthetic Organics
62-550.310(4)(b)

Report Number/Job ID: 331699
PWS ID (From Page 1): 6280064

Contam ID	Contaminant Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	RDL	Extraction Date	Analysis Date	Analysis Time	DOH Lab Certification#
2005	Endrin	2	ug/L	0.1	U	EPA 525.2	0.1	0.01	4/17/2009	4/17/2009	1634	E84129
2010	Lindane	0.20	ug/L	0.06	U	EPA 525.2	0.06	0.02	4/17/2009	4/17/2009	1634	E84129
2015	Methoxychlor	40	ug/L	0.05	U	EPA 525.2	0.05	0.10	4/17/2009	4/17/2009	1634	E84129
2020	Toxaphene	3	ug/L	0.5	U	EPA 508.1	0.5	1	4/17/2009	4/20/2009	1945	E84129
2031	Delapron	200	ug/L	1.	U	EPA 515.3	1.	1	4/17/2009	4/20/2009	1543	E84129
2032	Diquat	20	ug/L	1.	U	EPA 549.2	1.	0.4	4/18/2009	4/20/2009	1413	E84129
2033	Endosulf	100	ug/L	20.	U	EPA 548.1	20.	9	4/18/2009	4/22/2009	1943	E84129
2034	Glyphosate	700	ug/L	10.	U	EPA 547	10.	6		4/20/2009	1227	E84129
2035	Di(2-ethylhexyl)adipate	400	ug/L	0.3	U	EPA 525.2	0.3	0.6	4/17/2009	4/17/2009	1634	E84129
2036	Oxamyl (Vydate)	200	ug/L	0.5	U	EPA 531.1	0.5	2		4/17/2009	2352	E84129
2037	Simazine	4	ug/L	0.07	U	EPA 525.2	0.07	0.07	4/17/2009	4/17/2009	1634	E84129
2039	Di(2-ethylhexyl)phthalate	6	ug/L	1.	U	EPA 525.2	1.	0.6	4/17/2009	4/17/2009	1634	E84129
2040	Picloram	500	ug/L	0.75	U	EPA 515.3	0.75	0.1	4/17/2009	4/20/2009	1543	E84129
2041	Dinoseb	7	ug/L	0.5	U	EPA 515.3	0.5	0.2	4/17/2009	4/20/2009	1543	E84129
2042	Hexachlorocyclopentadiene	50	ug/L	0.2	U	EPA 525.2	0.2	0.1	4/17/2009	4/17/2009	1634	E84129
2046	Carbofuran	40	ug/L	0.5	U	EPA 531.1	0.5	0.9		4/17/2009	2352	E84129
2050	Atrazine	3	ug/L	0.06	U	EPA 525.2	0.06	0.1	4/17/2009	4/17/2009	1634	E84129
2051	Alachlor	2	ug/L	0.2	U	EPA 525.2	0.2	0.2	4/17/2009	4/17/2009	1634	E84129
2063	2,3,7,8-TCDD (Dioxin)	0.03	ng/L			EPA 1613B	0.0028	0.005				
2065	Hepachlor	0.40	ug/L	0.08	U	EPA 525.2	0.08	0.04	4/17/2009	4/17/2009	1634	E84129
2067	Hepachlor Epoxide	0.20	ug/L	0.1	U	EPA 525.2	0.1	0.02	4/17/2009	4/17/2009	1634	E84129
2105	2,4-D	70	ug/L	1.	U	EPA 515.3	1.	0.1	4/17/2009	4/20/2009	1543	E84129
2110	2,4,5-TP (Silvex)	50	ug/L	0.25	U	EPA 515.3	0.25	0.2	4/17/2009	4/20/2009	1543	E84129
2274	Hexachlorobenzene	1	ug/L	0.05	U	EPA 525.2	0.05	0.1	4/17/2009	4/17/2009	1634	E84129
2306	Benzo(a)pyrene	0.20	ug/L	0.1	U	EPA 525.2	0.1	0.02	4/17/2009	4/17/2009	1634	E84129
2326	Pentachlorophenol	1	ug/L	0.1	U	EPA 515.3	0.1	0.04	4/17/2009	4/20/2009	1543	E84129
2383	Polychlorinated biphenyls (PCBS)	0.50	ug/L	0.2	U	EPA 508.1	0.2	0.1	4/17/2009	4/20/2009	1945	E84129
2931	Dibromochloropropane	0.20	ug/L	0.005	U	EPA 504.1	0.005	0.02	4/24/2009	4/25/2009	0225	E84129
2946	Ethylene Dibromide (EDB)	0.02	ug/L	0.005	U	EPA 504.1	0.005	0.01	4/24/2009	4/25/2009	0225	E84129
2959	Chlordane	2	ug/L	0.05	U	EPA 508.1	0.05	0.2	4/17/2009	4/20/2009	1945	E84129

All results meet the requirements of NELAC unless otherwise noted.

* Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62.550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Reporting Format 62-550.730

Effective January 1995, Revised January 2004



**Aqua Utilities Florida
Secondary Water Quality Project Report
July 2010**

Rosalie Oaks Water System

Rosalie Oaks is a community of about 89 Aqua Utilities Florida customers in Polk County.

In the past year, Aqua has worked to tackle the aesthetic qualities — the look, smell and taste — of tap water in the system. Although these aesthetic qualities are considered “secondary” water quality standards, and Aqua has not exceeded the secondary standards for iron, manganese, alkalinity, and hardness. Aqua has moved forward with initiatives to address customer concerns.

Minerals and sediments in the Rosalie Oaks water sometimes can cause a black ring to form in toilets. These sediments can accumulate when water rests in pipes — a particular problem when weekend and seasonal customers are away for long periods of time. Aqua determined that an extensive new water main flushing program should keep the water moving more consistently and improve its smell and appearance. Aqua’s contractor installed two new flushing valves last fall, and the local operator launched an aggressive new flushing schedule in October. At first, Aqua flushed the system weekly to clean the pipes thoroughly. Currently, operators flush the system monthly and before holidays.

Many Rosalie Oaks residents are “seasonal customers” — they live elsewhere during the summer months and return to Florida for the winter. That means water can sit in their service line or household plumbing for months, creating odors and discolored water. Customers might need to flush water through their fixtures and household plumbing after water has been standing in the pipes for an extended period of time.

Florida Department of Environmental Protection Safe Drinking Water Program Laboratory Reporting Format

PUBLIC WATER SYSTEM INFORMATION (to be completed by sampler -- Please type or print legibly)

System Name: Rosalie Oaks PWS I.D.#:

3	5	3	1	5	4	6
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System Type (check one): Community Nontransient Noncommunity Transient Noncommunity

Address: _____

City: _____ State: _____ ZIP Code: _____

Phone #: _____ Fax #: _____

E-Mail Address: _____

SAMPLE INFORMATION (to be completed by sampler)

Sample Number: T0913508001 Location Code (if known) : _____

Sample Date: 08/31/2009 Sample Time: 11:00

AM

 PM (circle one)

Sample Location (be specific): POE

Disinfectant Residual (Required when reporting results for trihalomethanes and haloacetic acids): _____ mg/L Field pH: 8.18

Sample Type (Check Only One)

- Distribution
- Entry Point (to Distribution)
- Plant Tap (not for compliance with 62-550)
- Raw (at well or intake)
- Max Residence Time
- Ave Residence Time
- Near First Customer

Reason(s) for Sample (Check all that apply)

- Routine Compliance (with 62-550) Quarterly (Which Quarter? _____)
- Confirmation of MCL Exceedance * Special (not for compliance with 62-550)
- Composite of Multiple Sites ** Violation Resolution
- Clearance (permitting) Replacement (of Invalidated Sample)
- Other: _____

Sampling Procedure Used or Other Comments: _____

*See 62-550.500(6) for requirements and
NOTE: See 62-550.512(3) for additional
for nitrate or nitrite MCL exceedances.

**See 62-550.550(4) for requirements and
attach a results page for each site.

Sampler's Name: _____

Sampler's Phone #: _____ Sampler's Fax #: _____

Sampler's E-Mail Address: _____

CERTIFICATION (to be completed by sampler)

I, _____, _____
(Print Name) (Print Title)

do HEREBY CERTIFY that the above public water system and sample collection information is complete and correct.

Signature: _____ Date: _____

Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format

SECONDARY CONTAMINANTS
 62-550.320

Report Number / Job ID: T0913508001

PWS ID (From Page 1): 3531546

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
1002	Aluminum	0.2	mg/L							E
1017	Chloride	250	mg/L							E
1022	Copper	1	mg/L							E
1025	Fluoride	2.0	mg/L							E
1028	Iron	0.3	mg/L							E
1032	Manganese	0.05	mg/L							E
1050	Silver	0.1	mg/L							E
1055	Sulfate	250	mg/L							E
1095	Zinc	5	mg/L							E
1905	Color	15	CU							E
1920	Odor	3	TON							E
1925	pH (field pH from page 1)	6.5 - 8.5								E
1930	Total Dissolved Solids	500	mg/L							E
2905	Foaming Agents	0.5	mg/L	0.075	I	EPA 425.1	0.05	09/02/09	09:45	E82001

Reporting Format 62-550.730
 Effective January 1995, Revised January 2007

*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

INORGANIC CONTAMINANTS

62-550.310(1)

Report Number / Job ID: T0913508001

PWS ID (From Page 1): 3531546

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification
1040	Nitrate	10	mg/L	0.13	I	SM 4500NO3-F	0.039	09/02/2009	09:24	E84589
1041	Nitrite	1	mg/L	0.022	U	SM 4500NO3-F	0.022	09/02/2009	09:24	E84589
1005	Arsenic	0.010	mg/L	0.00012	I	EPA 200.8	0.00012	09/15/2009	20:56	E82574
1010	Barium	2	mg/L	0.02		EPA 200.8	0.00027	09/13/2009	22:01	E82574
1015	Cadmium	0.005	mg/L	0.00020	U	EPA 200.8	0.00020	09/13/2009	22:01	E82574
1020	Chromium	0.1	mg/L	0.00050	U	EPA 200.7	0.00050	09/15/2009	10:54	E82574
1024	Cyanide	0.2	mg/L	0.0017	I	SM 4500-CN-E	0.00097	09/08/2009	14:49	E84589
1025	Fluoride	4.0	mg/L	0.075	I	EPA 300.0	0.055	09/02/2009	17:13	E84589
1030	Lead	0.015	mg/L	0.0025		EPA 200.8	0.000037	09/13/2009	22:01	E82574
1035	Mercury	0.002	mg/L	0.000014	U	EPA 245.1	0.000014	09/10/2009	14:53	E82574
1036	Nickel	0.1	mg/L	0.0011	U	EPA 200.7	0.0011	09/15/2009	10:54	E82574
1045	Selenium	0.05	mg/L	0.00063	U	EPA 200.8	0.00063	09/13/2009	22:01	E82574
1052	Sodium	160	mg/L	4		EPA 200.7	0.026	09/15/2009	10:54	E82574
1074	Antimony	0.006	mg/L	0.000091	U	EPA 200.8	0.000091	09/13/2009	22:01	E82574
1075	Beryllium	0.004	mg/L	0.00013	U	EPA 200.7	0.00013	09/15/2009	10:54	E82574
1085	Thallium	0.002	mg/L	0.000026	U	EPA 200.8	0.000026	09/13/2009	22:01	E82574

*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

SECONDARY CONTAMINANTS
62-550.320

Report Number / Job ID: T0913508001

PWS ID (From Page 1): 3531546

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
1002	Aluminum	0.2	mg/L	0.061	U	EPA 200.7	0.061	09/15/2009	10:54	E82574
1017	Chloride	250	mg/L	4.9	I	EPA 300.0	2.3	09/02/2009	17:13	E84589
1022	Copper	1	mg/L	0.0096	I	EPA 200.8	0.000085	09/13/2009	22:01	E82574
1025	Fluoride	2.0	mg/L	0.075	I	EPA 300.0	0.055	09/02/2009	17:13	E84589
1028	Iron	0.3	mg/L	0.038	U	EPA 200.7	0.038	09/15/2009	10:54	E82574
1032	Manganese	0.05	mg/L	0.0076		EPA 200.8	0.000073	09/13/2009	22:01	E82574
1050	Silver	0.1	mg/L	0.000086	U	EPA 200.8	0.000086	09/13/2009	22:01	E82574
1055	Sulfate	250	mg/L	2.1	U	EPA 300.0	2.1	09/02/2009	17:13	E84589
1095	Zinc	5	mg/L	0.018		EPA 200.8	0.00041	09/15/2009	20:56	E82574
1905	Color	15	Color Units	4.5	I	SM 2120B	3.2	09/02/2009	10:36	E84589
1920	Odor	3	TON@40°C	1	I	SM 2150B	1.0	09/01/2009	10:15	E84589
1925	pH	6.5 - 8.5	pH unit	8.18		EPA 150.1		09/02/2009	15:15	E84589
1930	Total Dissolved Solids	500	mg/L	110		EPA 160.1	10	09/04/2009	08:31	E84589

Reporting Format 62-550.730
Effective January 1995. Revised January 2004

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*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160. Table 1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

RADIONUCLIDES
62-550.310(6)

Report Number / Job T0913508001

PWS ID (From Page 1): 3531546

Contam ID	Contam-Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	RDL	Analysis Error	Analysis Date	Analysis Time	DOH Lab Certification #
4006	Combined Uranium (U-234, U-235, & U-238)	30	ug/L	0.031	U	EPA 200.8	0.031	0.031		09/13/2009	22:01	E82574

** If the results exceed 5 pCi/L, a measurement for radium-226 is required.

*** If the results exceed 5 pCi/L, a measurement for radium-226 is required. If the results exceed 15 pCi/L, measurements for radium-226 and uranium are required.

**** If uranium (U) is reported as a measurement of activity (pCi/L) it will be converted to a mass measurement (µg/L) by multiplying the result by 1.5.

***** Reserved

**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

VOLATILE ORGANICS
62-550.310(4)(a)

Report Number / Job ID: T0913508001

PWS ID (From Page 1): 3531546

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier	Analytical Method	Lab MDL	RDL	Analysis Date	Analysis Time	DOH Lab Certification #
2378	1,2,4-Trichlorobenzene	70	ug/L	0.22	U	EPA 524.2	0.22	0.5	09/06/2009	06:26	E82574
2380	cis-1,2-Dichloroethylene	70	ug/L	0.12	U	EPA 524.2	0.12	0.5	09/06/2009	06:26	E82574
2955	Xylenes (total)	10,000	ug/L	0.37	U	EPA 524.2	0.37	0.5	09/06/2009	06:26	E82574
2964	Methylene Chloride	5	ug/L	0.32	U	EPA 524.2	0.32	0.5	09/06/2009	06:26	E82574
2968	o-Dichlorobenzene	600	ug/L	0.15	U	EPA 524.2	0.15	0.5	09/06/2009	06:26	E82574
2969	para-Dichlorobenzene	75	ug/L	0.26	U	EPA 524.2	0.26	0.5	09/06/2009	06:26	E82574
2976	Vinyl Chloride	1	ug/L	0.46	I	EPA 524.2	0.20	0.5	09/06/2009	06:26	E82574
2977	1,1-Dichloroethylene	7	ug/L	0.17	U	EPA 524.2	0.17	0.5	09/06/2009	06:26	E82574
2979	trans-1,2-Dichloroethylene	100	ug/L	0.27	U	EPA 524.2	0.27	0.5	09/06/2009	06:26	E82574
2980	1,2-Dichloroethane	3	ug/L	0.18	U	EPA 524.2	0.18	0.5	09/06/2009	06:26	E82574
2981	1,1,1-Trichloroethane	200	ug/L	0.20	U	EPA 524.2	0.20	0.5	09/06/2009	06:26	E82574
2982	Carbon tetrachloride	3	ug/L	0.24	U	EPA 524.2	0.24	0.5	09/06/2009	06:26	E82574
2983	1,2-Dichloropropane	5	ug/L	0.21	U	EPA 524.2	0.21	0.5	09/06/2009	06:26	E82574
2984	Trichloroethylene	3	ug/L	0.14	U	EPA 524.2	0.14	0.5	09/06/2009	06:26	E82574
2985	1,1,2-Trichloroethane	5	ug/L	0.28	U	EPA 524.2	0.28	0.5	09/06/2009	06:26	E82574
2987	Tetrachloroethylene	3	ug/L	0.24	U	EPA 524.2	0.24	0.5	09/06/2009	06:26	E82574
2989	Chlorobenzene	100	ug/L	0.19	U	EPA 524.2	0.19	0.5	09/06/2009	06:26	E82574
2990	Benzene	1	ug/L	0.17	U	EPA 524.2	0.17	0.5	09/06/2009	06:26	E82574
2991	Toluene	1,000	ug/L	0.21	U	EPA 524.2	0.21	0.5	09/06/2009	06:26	E82574
2992	Ethylbenzene	700	ug/L	0.13	U	EPA 524.2	0.13	0.5	09/06/2009	06:26	E82574
2996	Styrene	100	ug/L	0.11	U	EPA 524.2	0.11	0.5	09/06/2009	06:26	E82574

Reporting Format 62-550.730
Effective January 1995. Revised January 2004

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*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with A, F, H, N, O, T, Z, ? , * are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

SYNTHETIC ORGANICS
62-550.310(4)(b)

Report Number / Job ID: T0913508001

PWS ID (From Page 1): 3531546

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifie	Analytical Method	Lab MDL	RDL	Extraction Date	Analysis Date	Analysis Time	DOH Lab Certification
2005	Endrin	2	ug/L	0.0016	U	EPA 508	0.0016	0.01	09/05/2009	09/07/2009	18:16	E82574
2010	gamma-BHC (Lindane)	0.2	ug/L	0.0033	U	EPA 508	0.0033	0.02	09/05/2009	09/07/2009	18:16	E82574
2015	Methoxychlor	40	ug/L	0.011	U	EPA 508	0.011	0.1	09/05/2009	09/07/2009	18:16	E82574
2020	Toxaphene	3	ug/L	0.091	U	EPA 508	0.091	1	09/05/2009	09/07/2009	18:16	E82574
2031	Dalapon	200	ug/L	1.0	U	EPA 515.3	1.0	1	09/03/2009	09/05/2009	15:05	E82574
2032	Diquat	20	ug/L	7.6	U	EPA 549.2	7.6	0.4	09/03/2009	09/08/2009	11:36	E82574
2033	Endothall	100	ug/L	2.8	U	EPA 548.1	2.8	9	09/02/2009	09/04/2009	10:20	E82574
2034	Glyphosate	700	ug/L	6.5	U	EPA 547	6.5	6	09/03/2009	09/03/2009	15:25	E82574
2035	Di(2-ethylhexyl)adipate	400	ug/L	0.95	U	EPA 525.2	0.95	0.6	09/08/2009	09/08/2009	19:10	E82574
2036	Oxamyl (Vydate)	200	ug/L	0.57	U	EPA 531.1	0.57	2	09/04/2009	09/04/2009	21:46	E82574
2037	Simazine	4	ug/L	0.19	U	EPA 525.2	0.19	0.07	09/08/2009	08/08/2009	19:10	E82574
2039	bis(2-Ethylhexyl) phthalate	6	ug/L	1.5	U	EPA 525.2	1.5	0.6	09/08/2009	09/08/2009	19:10	E82574
2040	Picloram	500	ug/L	0.23	U	EPA 515.3	0.23	0.1	09/03/2009	09/05/2009	15:05	E82574
2041	Dinoseb	7	ug/L	0.86	U	EPA 515.3	0.86	0.2	09/03/2009	09/05/2009	15:05	E82574
2042	Hexachlorocyclopentadiene	50	ug/L	0.014	U	EPA 508	0.014	0.1	09/05/2009	09/07/2009	18:16	E82574
2046	Carbofuran	40	ug/L	0.28	U	EPA 531.1	0.28	0.9	09/04/2009	09/04/2009	21:46	E82574
2050	Atrazine	3	ug/L	0.16	U	EPA 525.2	0.16	0.1	09/08/2009	09/08/2009	19:10	E82574
2051	Alachlor	2	ug/L	0.26	U	EPA 525.2	0.26	0.2	09/08/2009	09/08/2009	19:10	E82574
2065	Heptachlor	0.4	ug/L	0.0063	U	EPA 508	0.0063	0.04	09/05/2009	09/07/2009	18:16	E82574
2067	Heptachlor Epoxide	0.2	ug/L	0.0031	U	EPA 508	0.0031	0.02	09/05/2009	09/07/2009	18:16	E82574
2105	2,4-D	70	ug/L	1.5	U	EPA 515.3	1.5	0.1	09/03/2009	09/05/2009	15:05	E82574
2110	2,4,5-TP (Silvex)	50	ug/L	0.32	U	EPA 515.3	0.32	0.2	09/03/2009	09/05/2009	15:05	E82574
2274	Hexachlorobenzene	1	ug/L	0.0058	U	EPA 508	0.0058	0.1	09/05/2009	09/07/2009	18:16	E82574
2306	Benzo(a)pyrene	0.2	ug/L	0.096	U	EPA 525.2	0.096	0.02	09/08/2009	09/08/2009	19:10	E82574
2326	Pentachlorophenol	1	ug/L	0.069	U	EPA 515.3	0.069	0.04	09/03/2009	09/05/2009	15:05	E82574
2383	Polychlorinated biphenyls(PCB)	0.5	ug/L	0.11	U	EPA 508	0.11	0.1	09/05/2009	09/07/2009	18:16	E82574
2931	Dibromochloropropane	0.2	ug/L	0.0082	U	EPA 504.1	0.0082	0.02	09/03/2009	09/03/2009	21:00	E82574
2946	Ethylene Dibromide (EDB)	0.02	ug/L	0.0091	U	EPA 504.1	0.0091	0.01	09/03/2009	09/03/2009	21:00	E82574
2959	Chlordane	2	ug/L	0.048	U	EPA 508	0.048	0.2	09/05/2009	09/07/2009	18:16	E82574

NOTE: Effective January 1, 2004, results indicating non-detection with a reported lab MDL >50% of the MCL will not be accepted for compliance with 62-550.310(4)(b).

Reporting Format 62-550.730

Effective January 1995, Revised January 2004

*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with A, F, H, N, O, T, Z, ? , are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.



**Aqua Utilities Florida
Secondary Water Quality Project Report
July 2010**

Tangerine Water System

Tangerine is a community of about 278 Aqua Utilities Florida customers in Orange County.

In the past year, Aqua has worked to tackle the aesthetic qualities – the look, smell and taste – of the tap water in the Tangerine system. Although these aesthetic qualities are considered “secondary” water quality standards, and Aqua has not exceeded the secondary standards for iron and manganese, Aqua has moved forward with initiatives to address customer concerns.

Aqua will be installing 2,000 feet of new water main in July to connect dead ends and areas that now experience low water pressure, primarily along Huron Street, Scott Avenue, Section Street, Pine Street, and Orange Blossom Train. We also replaced 1,100 feet of old main along Orange Blossom Train and Pine Street.

Aqua also applied for a state permit to install a “sequestration” treatment system in Tangerine, and contractors installed the system in March awaiting DEP issuance of the clearance to operate the system. This system will bind the naturally occurring calcium and manganese in the system’s well water, which should reduce the residue customers might see on their dishes and fixtures.

HBEL, Inc.

5600 U.S. 1 North, Fort Pierce, FL 34946
Phone: (772) 465-8584 Fax: (772) 467-1584

SECONDARY CONTAMINANTS

62 - 550.320

Client: Aqua Utilities Florida, Inc.
Sample Location: Tangerine POE Grab
Sampling Date: 7/15/09 10:30
Date Received: 7/15/09 12:36

Workorder: Tangerine Triannual
Sample Number: 2135265001
PWS ID (From Page 1): _____

Contam ID	Contam Name	MCL	Units	Analysis Result	Qual.*	Analytical Method	Lab MDL	Analysis Date/Time	DOH Lab Cert #
1002	Aluminum	[0.2]	mg/L	0.0036		EPA 200.7	0.0024	7/31/09 12:06	E96080
1017	Chloride	[250]	mg/L	18		EPA 300.0	5.0	7/21/09 11:19	E96080
1022	Copper	[1]	mg/L	0.00090		EPA 200.7	0.00070	7/31/09 12:06	E96080
1025	Fluoride	[2]	mg/L	0.11		EPA 300.0	0.011	7/16/09/16/09	E96080
1028	Iron	[0.3]	mg/L	0.017		EPA 200.7	0.0050	7/31/09 12:06	E96080
1032	Manganese	[0.05]	mg/L	0.00050 U		EPA 200.7	0.00050	7/31/09 12:06	E96080
1050	Silver	[0.1]	mg/L	0.00050 U		EPA 200.7	0.00050	7/31/09 12:06	E96080
1055	Sulfate	[250]	mg/L	7.3		EPA 300.0	1.4	7/21/09 11:19	E96080
1095	Zinc	[5]	mg/L	0.0020 U		EPA 200.7	0.0020	7/31/09 12:06	E96080
1905	Color	[15]	CU	4.0		SM2120 B	1.8	7/16/09 16:30	E96080
1925	pH	[6.5-8.5]	SU	8.16	Q	EPA 150.1	0.200	7/18/09 12:07	E96080
1930	Total Dissolved Solids	[500]	mg/L	180		SM2540 C	16	7/17/09 14:30	E96080
2905	Foaming Agents	[0.5]	mg/L	0.023		SM5540 C	0.022	7/17/09 9:54	E96080

Reporting Format 62-550.730
Effective January 1995, Revised January 2007

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5600 US 1 North
Fort Pierce, FL 34946
DOH # E96080

4155 St. Johns Pkwy Suite 1300
Sanford, FL 32771
DOH # E83509

Printed: 8/7/09



HBEL, Inc.

5600 U.S. 1 North, Fort Pierce, FL 34946
Phone (772) 465-8584 Fax: (772) 467-1584

INORGANIC CONTAMINANTS

62 - 550.310 (1)

Client: Aqua Utilities Florida, Inc. Workorder: Tangerine Triannual
Sample Location: Tangerine POE Grab Sample Number: 2135265001
Sampling Date: 7/15/09 10:30 PWS ID (From Page 1): _____
Date Received: 7/15/09 12:36

Contam ID	Contam Name	MCL	Units	Analysis Result	Qual. [†]	Analytical Method	Lab MDL	Analysis Date/Time	DOH Lab Cert #
1040	Nitrate as N	[10]	mg/L	0.0081		EPA 300.0	0.0030	7/16/09 13:24	E96080
1041	Nitrite as N	[1]	mg/L	0.0022 U		EPA 300.0	0.0022	7/16/09 13:24	E96080
1005	Arsenic	[0.01]	mg/L	0.0010 U		EPA 200.9	0.0010	7/23/09 10:00	E84129
1010	Barium	[2]	mg/L	0.020		EPA 200.7	0.00050	7/31/09 12:06	E96080
1015	Cadmium	[0.005]	mg/L	0.00030 U		EPA 200.7	0.00030	7/31/09 12:06	E96080
1020	Chromium	[0.1]	mg/L	0.00040 U		EPA 200.7	0.00040	7/31/09 12:06	E96080
1024	Cyanide	[0.2]	mg/L	0.0047 U		SM4500CN E	0.0047	7/24/09 10:10	E96080
1025	Fluoride	[4]	mg/L	0.11		EPA 300.0	0.011	7/16/09 13:24	E96080
1030	Lead	[0.015]	mg/L	0.00070 U		EPA 200.9	0.00070	7/31/09 15:45	E96080
1035	Mercury	[0.002]	mg/L	0.000060 U		EPA 245.1	0.000060	7/21/09 17:44	E96080
1036	Nickel	[0.1]	mg/L	0.00050 U		EPA 200.7	0.00050	7/31/09 12:06	E96080
1045	Selenium	[0.05]	mg/L	0.0022 U		EPA 200.9	0.0022	7/22/09 19:12	E96080
1052	Sodium	[160]	mg/L	13		EPA 200.7	0.50	7/31/09 12:06	E96080
1074	Antimony	[0.006]	mg/L	0.00082 U		EPA 200.9	0.00082	7/23/09 12:23	E96080
1075	Beryllium	[0.004]	mg/L	0.00050 U		EPA 200.7	0.00050	7/31/09 12:06	E96080
1085	Thallium	[0.002]	mg/L	0.0010 U		EPA 200.9	0.0010	7/23/09 15:33	E96080

Reporting Format 62-550.730
Effective January 1995, Revised January 2007

Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results Qualified with A, F, H, N, O, T, Z, *, are acceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

500 US 1 North
Fort Pierce, FL 34946
DOH # E96080

4155 St. Johns Pkwy Suite 1300
Sanford, FL 32771
FDCH # E83509

Printed: 8/7/09



HBEL, Inc.

5600 U.S. 1 North, Fort Pierce, FL 34946
Phone: (772) 465-8584 Fax: (772) 467-584

SYNTHETIC ORGANICS 62 - 550.310 (4) (b)

Client: Aqua Utilities Florida, Inc.
Sample Location: Tangerine POE Grab
Sampling Date: 7/15/09 10:30
Date Received: 7/15/09 12:36

Workorder: Tangerine Triannual
Sample Number: 2135265001
PWS ID (From Page 1): _____

Contam ID	Contam Name	MCL	Units	Analysis Result	Qual.*	Analytical Method	Lab MDL	RDL	Extraction Date	Analysis Date/Time	DOH Lab Cert #
2005	Endrin	[2]	ug/L	0.10 U		EPA 505	0.10	0.01	7/21/09	7/21/09 21:58	E96080
2010	gamma-BHC (Lindane)	[0.2]	ug/L	0.020 U		EPA 505	0.020	0.02	7/21/09	7/21/09 21:58	E96080
2015	Methoxychlor	[40]	ug/L	0.044 U		EPA 505	0.044	0.1	7/21/09	7/21/09 21:58	E96080
2020	Toxaphene	[3]	ug/L	0.61 U		EPA 505	0.61	1	7/21/09	7/21/09 21:58	E96080
2031	Dalapon	[200]	ug/L	2.3 U		EPA 515.1	2.3	1	7/27/09	7/28/09 18:04	E96080
2032	Diquat	[20]	ug/L	1.9 U		EPA 549.2	1.9	0.4	7/22/09	7/29/09 12:35	E96080
2033	Endothal	[100]	ug/L	2.8 U		EPA 548.1	2.8	9	7/22/09	7/24/09 23:02	E96080
2034	Glyphosate	[700]	ug/L	13 U		EPA 547	13	6		7/22/09 12:40	E96080
2035	Di(2-ethylhexyl)adipate	[400]	ug/L	0.68 U		EPA 525.2	0.68	0.6	7/23/09	7/29/09 15:37	E96080
2036	Oxamyl	[200]	ug/L	0.13 U		EPA 531.1	0.13	2		7/21/09 17:45	E96080
2037	Simazine	[4]	ug/L	0.63 U		EPA 525.2	0.63	0.07	7/23/09	7/29/09 15:37	E96080
2039	bis(2-ethylhexyl)phthalate	[6]	ug/L	0.85 U		EPA 525.2	0.85	0.6	7/23/09	7/29/09 15:37	E96080
2040	Picloram	[500]	ug/L	0.23 U		EPA 515.1	0.23	0.1	7/27/09	7/28/09 18:04	E96080
2041	Dinoseb	[7]	ug/L	0.23 U		EPA 515.1	0.23	0.2	7/27/09	7/28/09 18:04	E96080
2042	Hexachlorocyclopentadiene	[50]	ug/L	0.24 U		EPA 525.2	0.24	0.1	7/23/09	7/29/09 15:37	E96080
2046	Carbofuran	[40]	ug/L	0.41 U		EPA 531.1	0.41	0.9		7/21/09 17:45	E96080
2050	Atrazine	[3]	ug/L	0.48 U		EPA 525.2	0.48	0.1	7/23/09	7/29/09 15:37	E96080
2051	Alachlor	[2]	ug/L	0.61 U		EPA 525.2	0.61	0.2	7/23/09	7/29/09 15:37	E96080
2065	Heptachlor	[0.4]	ug/L	0.036 U		EPA 505	0.036	0.04	7/21/09	7/21/09 21:58	E96080
2067	Heptachlor epoxide	[.2]	ug/L	0.028 U		EPA 505	0.028	0.02	7/21/09	7/21/09 21:58	E96080
2105	2,4-D	[70]	ug/L	0.22 U		EPA 515.1	0.22	0.1	7/27/09	7/28/09 18:04	E96080
2110	2,4,5-TP	[50]	ug/L	0.19 U		EPA 515.1	0.19	0.2	7/27/09	7/28/09 18:04	E96080
2274	Hexachlorobenzene	[1]	ug/L	0.31 U		EPA 525.2	0.31	0.1	7/23/09	7/29/09 15:37	E96080
2306	Benzo(a)pyrene	[.2]	ug/L	0.070 U		EPA 525.2	0.070	0.02	7/23/09	7/29/09 15:37	E96080
2326	Pentachlorophenol	[1]	ug/L	0.39 U		EPA 515.1	0.39	0.04	7/27/09	7/28/09 18:04	E96080
2383	PCB	[.5]	ug/L	0.14 U		EPA 505	0.14	0.1	7/21/09	7/21/09 21:58	E96080
2931	1,2-Dibromo-3-chloropropane	[.2]	ug/L	0.0036 U		EPA 504.1	0.0036	0.02	7/27/09	7/27/09 22:30	E96080
2946	1,2-Dibromoethane	[.02]	ug/L	0.0047 U		EPA 504.1	0.0047	0.01	7/27/09	7/27/09 22:30	E96080
2959	Chlordane	[2]	ug/L	0.13 U		EPA 505	0.13	0.2	7/21/09	7/21/09 21:58	E96080

Reporting Format 62-550.730
Effective January 1995, Revised January 2007

NOTE: Results indicating non-detection with a reported lab MDL >50% of the MCL will not be accepted for compliance with 62-550.310(4)(b).

Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

600 US 1 North
Fort Pierce, FL 34946
DOH # E96080

4155 St. Johns Pkwy Suite 1300
Sanford, FL 32771
FDCH # E83509

Printed: 8/7/09



HBEL, Inc.

5600 U.S. 1 North, Fort Pierce, FL 34946
Phone: (772) 465-8584 Fax: (772) 467-4584

VOLATILE ORGANICS 62 - 550.310 (4) (a)

Client: Aqua Utilities Florida, Inc.

Workorder: Tangerine Triannual

Sample Location: Tangerine POE Grab

Sample Number: 2135265001

Sampling Date: 7/15/09 10:30

PWS ID (From Page 1): _____

Date Received: 7/15/09 12:36

Contam ID	Contam Name	MCL	Units	Analysis Result	Qual.*	Analytical Method	Lab MDL	RDL	Analysis Date/Time	DOH Lab Cert #
2378	1,2,4-Trichlorobenzene	[70]	ug/L	0.12 U		EPA 524.2	0.12	0.5	7/28/09 1:39	E96080
2380	cis-1,2-Dichloroethene	[70]	ug/L	0.25 U		EPA 524.2	0.25	0.5	7/28/09 1:39	E96080
2955	Total Xylenes	[10000]	ug/L	0.41 U		EPA 524.2	0.41	0.5	7/28/09 1:39	E96080
2964	Dichloromethane	[5]	ug/L	0.43 U		EPA 524.2	0.43	0.5	7/28/09 1:39	E96080
2968	1,2-Dichlorobenzene	[600]	ug/L	0.15 U		EPA 524.2	0.15	0.5	7/28/09 1:39	E96080
2969	1,4-Dichlorobenzene	[75]	ug/L	0.18 U		EPA 524.2	0.18	0.5	7/28/09 1:39	E96080
2976	Vinyl chloride	[1]	ug/L	0.25 U		EPA 524.2	0.25	0.5	7/28/09 1:39	E96080
2977	1,1-Dichloroethene	[7]	ug/L	0.35 U		EPA 524.2	0.35	0.5	7/28/09 1:39	E96080
2979	trans-1,2-Dichloroethene	[100]	ug/L	0.30 U		EPA 524.2	0.30	0.5	7/28/09 1:39	E96080
2980	1,2-Dichloroethane	[3]	ug/L	0.21 U		EPA 524.2	0.21	0.5	7/28/09 1:39	E96080
2981	1,1,1-Trichloroethane	[200]	ug/L	0.31 U		EPA 524.2	0.31	0.5	7/28/09 1:39	E96080
2982	Carbon tetrachloride	[3]	ug/L	0.36 U		EPA 524.2	0.36	0.5	7/28/09 1:39	E96080
2983	1,2-Dichloropropane	[5]	ug/L	0.24 U		EPA 524.2	0.24	0.5	7/28/09 1:39	E96080
2984	Trichloroethene	[3]	ug/L	0.17 U		EPA 524.2	0.17	0.5	7/28/09 1:39	E96080
2985	1,1,2-Trichloroethane	[5]	ug/L	0.22 U		EPA 524.2	0.22	0.5	7/28/09 1:39	E96080
2987	Tetrachloroethene	[3]	ug/L	0.26 U		EPA 524.2	0.26	0.5	7/28/09 1:39	E96080
2989	Chlorobenzene	[100]	ug/L	0.17 U		EPA 524.2	0.17	0.5	7/28/09 1:39	E96080
2990	Benzene	[1]	ug/L	0.15 U		EPA 524.2	0.15	0.5	7/28/09 1:39	E96080
2991	Toluene	[1000]	ug/L	0.26 U		EPA 524.2	0.26	0.5	7/28/09 1:39	E96080
2992	Ethylbenzene	[700]	ug/L	0.17 U		EPA 524.2	0.17	0.5	7/28/09 1:39	E96080
2996	Styrene	[70]	ug/L	0.17 U		EPA 524.2	0.17	0.5	7/28/09 1:39	E96080

Reporting Format 62-550.730
Effective January 1995, Revised January 2007

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5600 US 1 North
Fort Pierce, FL 34946
DOH # E96080

4165 St. Johns Pkwy Suite 1300
Sanford, FL 32771
FDOH # E83509

Printed: 8/7/09



SOUTHERN ANALYTICAL LABORATORIES, INC.

110 BAYVIEW BOULEVARD, OLDSMAR, FL 34677 B13-855-1844 fax B13-855-2218



Harbor Branch Environmental Laboratory

2135265

Sample ID: 2135265 001EF

August 3, 2009

Sample No.: 93623.01

PWS ID: _____

**Radionuclides
62-550.310(6)**

Contaminant ID	Contaminant Name	MCL	Units	Analysis Result	Qualifier	Analytical Method	Lab MDL	RDL **	Analysis Error	Analysis Date	Analysis Time	DOH Lab Certification #
4002	Gross Alpha (Incl. Uranium)	***	pCi/L	2.0	U1	EPA 900.0	2.0	3	1.7	07/28/09	08:19	E84129
4006	Combined Uranium	30	ug/L	0.2	U,S32	EPA 200.8	0.2	---	---	07/22/09		E87604
4006	Combined Uranium	20	pCi/L	0.1	U,S32	EPA 200.8	0.1	---	---	07/22/09		E87604
4020	Radium-226	5*	pCi/L	0.6		EPA 903.1	0.03	1	0.2	07/28/09	14:51	E84129
4030	Radium-228	5*	pCi/L	0.3	U1	EPA RA-05	0.3	1	0.2	07/30/09	16:22	E84129

* Combined Limit

*** If the results exceed 5 pCi/L, a measurement for radium-226 is required.

If the results exceed 15 pCi/L, measurements for radium-226 and uranium are required.

* Qualifiers:

U,S32 Analysis was undetected. Indicated concentration is MDL. Analysis subcontracted to Katesth Analytical Services, FDOH Cert. No. E87604. Uranium analysis run by EPA 200.8.
U1 Analysis was not detected. Indicated concentration is method detection limit. Radiochemistry MDL is sample specific and matrix dependent.



**Aqua Utilities Florida
Secondary Water Quality Project Report
July 2010**

Tomoka View Water System

Aqua's primary focus in Tomoka View has been to develop options to resolve the total trihalomethane (TTHM) problem in the water system. Aqua received a permit from the Volusia County Health Department of Health in December 2009 to install new chloramination treatment equipment, and we Tangerine is a community of about 263 Aqua Utilities Florida customers in Volusia County.

Aqua's installed and launched the system later that month to reduce elevated TTHM's. Chloramination – the use of chloramines – has been used as a disinfectant in water distribution systems for many years in many communities throughout the U.S, and Canada. This new treatment system is working: TTHM levels have dropped, and the water now meets federal standards. We will continue to closely monitor the situation.

In the past year, Aqua also has worked to tackle the aesthetic qualities – the look, smell and taste of tap water in Tomoka View. Although these aesthetic qualities are considered "secondary" water quality standards, and Aqua has not exceeded these secondary standards, we have moved forward with initiatives to address customer concerns.

In July 2009, Aqua determined that a new flushing program would help improve the appearance of Tomoka View's water. The water can contain natural minerals that can accumulate in distribution system pipes, and sudden changes in flow in distribution system can disturb deposits in the mains and cause discolored water. Aqua installed eight new isolation valves, and blow-off assemblies in strategic areas so that we can target more aggressive flushing where it's needed most. Aqua also devised a systematic schedule that involves operating valves in a specific sequence to maximize the effectiveness of the flushing. The plan cleaned up accumulated natural deposits in the mains and should reduce discolored water in the future. Field operations employees take regular samples from the distribution system and, if the water quality begins to degrade, they will adjust the automatic flushing devices to operate more often and for a longer duration.

The water in Tomoka View also contains naturally occurring copper, which Aqua determined could be removed by a "sequestration" treatment system. Aqua contracted with AquaMag, which installed the system in December 2009. AquaMag samples water from the distribution system monthly to monitor the effects of the sequestering program.

Aqua management has met with Tomoka View customers regularly to discuss customer concerns and create strategies to improve the look, taste and smell of their water. We will continue to talk with our customers and keep them informed as our plans progress.

Tomoka View

ITEMS:	Dollars/numbers	Comments
	185	connections
capacity fees:	\$ 2,063.00	per home
Total Fees:	\$ 381,655.00	Total capacity fees
2 X 8" meters:	\$ 17,000.00	(based on Ormond's cost
Labor:	\$ 1,000.00	(\$100/hr X 8 hrs plus misc materials)
Tie in:	\$ 150,000.00	Guestimate
Misc 15%of total	\$ 25,200.00	Does not include capacity fees (guess)
Total Project:	\$ 574,855.00	
Current Rate Base:	\$75,000.00	estimate based on current rate base
Abandonment:	\$20,000.00	of capital assoc. with the plant cost given we reduce rate base
Sub-Total:	\$ 669,855.00	
Sale of Land:	\$ (20,000.00)	
Grand Total:	\$ 649,855.00	which equals \$4,119.29 per connection

Purchase Water: \$ 48,000.00 Annually
 \$ 4,000.00 Monthly

Above based on \$2.50/1000 gallons
 (From the City of Ormond Beach)

O&M - there is really no difference given
 Twin Rivers/Tomoka are together and one will
 take on all costs of travel and assoc. expense
 that would be made up by a reduction in
 operator costs.

DISINFECTION BYPRODUCTS
62-550.310(3)

Report Number/ Job ID:
Disinfectant Residual (mg/L) (From Page 1):
PWS ID (from Page 1):

355866002 - Tomoka View

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
2450	Monochloroacetic Acid	N/A	ug/L	0.61	U	EPA 552.2	0.61	01/14/2010	22:15	E83079
2451	Dichloroacetic Acid	N/A	ug/L	6.0		EPA 552.2	0.61	01/14/2010	22:15	E83079
2452	Trichloroacetic Acid	N/A	ug/L	2.1		EPA 552.2	0.61	01/14/2010	22:15	E83079
2453	Monobromoacetic Acid	N/A	ug/L	0.61	U	EPA 552.2	0.61	01/14/2010	22:15	E83079
2454	Dibromoacetic Acid	N/A	ug/L	0.61	U	EPA 552.2	0.61	01/14/2010	22:15	E83079
2456	Total Haloacetic Acids (HAA5)	60	ug/L	8.1		EPA 552.2	0.61	01/14/2010	22:15	E83079
2941	Chloroform	N/A	ug/L	5.1		EPA 524.2	0.25	01/15/2010	09:20	E83079
2942	Bromoform	N/A	ug/L	0.25	U	EPA 524.2	0.25	01/15/2010	09:20	E83079
2943	Bromodichloromethane	N/A	ug/L	1.5		EPA 524.2	0.25	01/15/2010	09:20	E83079
2944	Dibromochloromethane	N/A	ug/L	0.33	I	EPA 524.2	0.25	01/15/2010	09:20	E83079
2950	Total Trihalomethanes	80	ug/L	6.9		EPA 524.2	0.25	01/15/2010	09:20	E83079

NOTE: Do not round values. Report results to the accuracy, precision, and sensitivity of the analytical

Method: EPA 552.2
 Method: EPA 524.2
 Method: EPA 524.2
 Method: EPA 524.2
 Method: EPA 524.2

Florida Department of Environmental Protection

Safe Drinking Water Program Laboratory Reporting Format

DISINFECTION BYPRODUCTS
62-550.310(3)

Report Number/ Job ID: 357223002
Disinfectant Residual (mg/L) (From Page 1): _____
PWS ID (from Page 1): _____

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
2450	Monochloroacetic Acid	N/A	ug/L	0.61	U	EPA 552.2	0.61	02/17/2010	01:47	E83079
2451	Dichloroacetic Acid	N/A	ug/L	4.9		EPA 552.2	0.61	02/17/2010	01:47	E83079
2452	Trichloroacetic Acid	N/A	ug/L	1.8		EPA 552.2	0.61	02/17/2010	01:47	E83079
2453	Monobromoacetic Acid	N/A	ug/L	0.61	U	EPA 552.2	0.61	02/17/2010	01:47	E83079
2454	Dibromoacetic Acid	N/A	ug/L	0.61	U	EPA 552.2	0.61	02/17/2010	01:47	E83079
2456	Total Haloacetic Acids (HAA5)	60	ug/L	6.6		EPA 552.2	0.61	02/17/2010	01:47	E83079
2941	Chloroform	N/A	ug/L	6.1		EPA 524.2	0.25	02/18/2010	01:16	E83079
2942	Bromoform	N/A	ug/L	0.25	U	EPA 524.2	0.25	02/18/2010	01:16	E83079
2943	Bromodichloromethane	N/A	ug/L	1.3		EPA 524.2	0.25	02/18/2010	01:16	E83079
2944	Dibromochloromethane	N/A	ug/L	0.31	I	EPA 524.2	0.25	02/18/2010	01:16	E83079
2950	Total Trihalomethanes	80	ug/L	7.7		EPA 524.2	0.25	02/18/2010	01:16	E83079

NOTE: Do not round values. Report results to the accuracy, precision, and sensitivity of the analytical

Reporting Format 62-
Effective January 1995, Revised January 2007

*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with A, F, H, N, O, T, Z, P, or S are unacceptable for compliance with 62-160. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

Florida Department of Environmental Protection
 Safe Drinking Water Program Laboratory Reporting Format

DISINFECTION BYPRODUCTS
 62-550.310(3)

Report Number/ Job ID:

358452001

Disinfectant Residual (mg/L) (From Page 1):

PWS ID (from Page 1):

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier*	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
2941	Chloroform	N/A	ug/L	5.2		EPA 524.2	0.25	03/12/2010	02:30	E83079
2942	Bromoform	N/A	ug/L	0.25	U	EPA 524.2	0.25	03/12/2010	02:30	E83079
2943	Bromodichloromethane	N/A	ug/L	1.5		EPA 524.2	0.25	03/12/2010	02:30	E83079
2944	Dibromodichloromethane	N/A	ug/L	0.25	U	EPA 524.2	0.25	03/12/2010	02:30	E83079
2960	Total Trihalomethanes	N/A	ug/L	8.7		EPA 524.2	0.25	03/12/2010	02:30	E83079

NOTE: Do not round values. Report results to the accuracy, precision, and sensitivity of the analytical

Florida Department of Environmental Protection
 Drinking Water Program Laboratory Reporting Form

DISINFECTION BYPRODUCTS
 82-550.310(3)

Report Number/ Job ID: 359681001
 Disinfectant Residual (mg/L) (From Page 1): _____
 PWS ID (from Page 1): _____

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
2450	Monochloroacetic Acid	N/A	ug/L	1.9		EPA 552.2	0.61	04/09/2010	15:34	E83079
2451	Dichloroacetic Acid	N/A	ug/L	5.8		EPA 552.2	0.61	04/09/2010	15:34	E83079
2452	Trichloroacetic Acid	N/A	ug/L	0.61	U	EPA 552.2	0.61	04/09/2010	15:34	E83079
2453	Monobromoacetic Acid	N/A	ug/L	0.61	U	EPA 552.2	0.61	04/09/2010	15:34	E83079
2454	Dibromoacetic Acid	N/A	ug/L	0.61	U	EPA 552.2	0.61	04/09/2010	15:34	E83079
2456	Total Haloacetic Acids (HAA5)	60	ug/L	7.8		EPA 552.2	0.61	04/09/2010	15:34	E83079
2941	Chloroform	N/A	ug/L	5.2		EPA 524.2	0.25	04/19/2010	06:19	E83079
2942	Bromoform	N/A	ug/L	0.25	U	EPA 524.2	0.25	04/19/2010	06:19	E83079
2943	Bromodichloromethane	N/A	ug/L	0.97		EPA 524.2	0.25	04/19/2010	06:19	E83079
2944	Dibromochloromethane	N/A	ug/L	0.25	U	EPA 524.2	0.25	04/19/2010	06:19	E83079
2950	Total Trihalomethanes	60	ug/L	6.1		EPA 524.2	0.25	04/19/2010	06:19	E83079

NOTE: Do not round values. Report results to the accuracy, precision, and sensitivity of the analytical

ANALYTICAL RESULTS

Project: 3641373/Tomoka View
Pace Project No.: 3511299

Sample: 160 Green Briar Ln Lab ID: 3511299003 Collected: 05/10/10 13:20 Received: 05/10/10 14:00 Matrix: Drinking Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
552.2 Haloacetic Acids		Analytical Method: EPA 552.2 Preparation Method: EPA 552.2							
Monochloroacetic Acid	1.6 ug/L		1.0	0.61	1	05/20/10 15:30	05/22/10 03:43	79-11-8	
Monobromoacetic Acid	0.61U ug/L		1.0	0.61	1	05/20/10 15:30	05/22/10 03:43	79-08-3	
Dichloroacetic Acid	13.7 ug/L		1.0	0.61	1	05/20/10 15:30	05/22/10 03:43	79-43-6	1p,F5
Trichloroacetic Acid	6.0 ug/L		1.0	0.61	1	05/20/10 15:30	05/22/10 03:43	76-03-9	
Dibromoacetic Acid	2.9 ug/L		1.0	0.61	1	05/20/10 15:30	05/22/10 03:43	631-64-1	
Haloacetic Acids (Total)	24.1 ug/L		1.0	0.61	1	05/20/10 15:30	05/22/10 03:43		
2,3-Dibromopropanoic Acid (S)	101 %		70-130		1	05/20/10 15:30	05/22/10 03:43	600-05-5	
524.2 THM		Analytical Method: EPA 524.2							
Bromodichloromethane	13.9 ug/L		0.50	0.25	1		05/13/10 09:38	75-27-4	
Bromoform	2.9 ug/L		0.50	0.25	1		05/13/10 09:38	75-25-2	
Chloroform	19.4 ug/L		0.50	0.25	1		05/13/10 09:38	67-66-3	
Dibromochloromethane	6.1 ug/L		0.50	0.25	1		05/13/10 09:38	124-48-1	
Total Trihalomethanes (Calc.)	42.2 ug/L		0.50	0.25	1		05/13/10 09:38		
4-Bromofluorobenzene (S)	92 %		70-130		1		05/13/10 09:38	460-00-4	
Dibromofluoromethane (S)	100 %		70-130		1		05/13/10 09:38	1868-53-7	
Toluene-d8 (S)	99 %		70-130		1		05/13/10 09:38	2037-26-5	
1,2-Dichloroethane-d4 (S)	101 %		70-130		1		05/13/10 09:38	17060-07-0	



ANALYTICAL RESULTS

Project: 3641373/Tomoka View TTHM
Pace Project No.: 3512742

Sample: 160 Greenbriar Ln Lab ID: 3512742001 Collected: 06/08/10 15:00 Received: 06/08/10 15:20 Matrix: Drinking Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
552.2 Haloacetic Acids									
Analytical Method: EPA 552.2 Preparation Method: EPA 552.2									
Dibromoacetic Acid	2.2 ug/L		1.0	0.61	1	06/14/10 16:30	06/17/10 01:45	631-64-1	
Dichloroacetic Acid	8.6 ug/L		1.0	0.61	1	06/14/10 16:30	06/17/10 01:45	79-43-6	
Haloacetic Acids (Total)	21.5 ug/L		1.0	0.61	1	06/14/10 16:30	06/17/10 01:45		
Monobromoacetic Acid	0.61U ug/L		1.0	0.61	1	06/14/10 16:30	06/17/10 01:45	79-08-3	
Monochloroacetic Acid	4.8 ug/L		1.0	0.61	1	06/14/10 16:30	06/17/10 01:45	79-11-8	F5
Trichloroacetic Acid	5.9 ug/L		1.0	0.61	1	06/14/10 16:30	06/17/10 01:45	76-03-9	
2,3-Dibromopropanoic Acid (S)	109 %		70-130		1	06/14/10 16:30	06/17/10 01:45	600-05-5	2p
524.2 THM									
Analytical Method: EPA 524.2									
Bromodichloromethane	12.6 ug/L		0.50	0.25	1		06/15/10 20:38	75-27-4	
Bromoform	1.4 ug/L		0.50	0.25	1		06/15/10 20:38	75-25-2	
Chloroform	16.0 ug/L		0.50	0.25	1		06/15/10 20:38	67-66-3	
Dibromochloromethane	9.6 ug/L		0.50	0.25	1		06/15/10 20:38	124-48-1	
Total Trihalomethanes (Calc.)	39.6 ug/L		0.50	0.25	1		06/15/10 20:38		
4-Bromofluorobenzene (S)	100 %		70-130		1		06/15/10 20:38	460-00-4	
Dibromofluoromethane (S)	96 %		70-130		1		06/15/10 20:38	1868-53-7	
Toluene-d8 (S)	124 %		70-130		1		06/15/10 20:38	2037-26-5	
1,2-Dichloroethane-d4 (S)	101 %		70-130		1		06/15/10 20:38	17060-07-0	



HBEL, Inc.

5600 U.S. 1 North, Fort Pierce, FL 34946
Phone: (772) 465-8584 Fax: (772) 467-1584

Date issued: March 31, 2009

To: Will Fontaine
Aqua Utilities Florida, Inc.
930 S South State Road 19
Palatka, FL 321779394

Client: Aqua Utilities Florida, Inc.

Workorder ID: Tomoka View Triannual Pri/Sec

[2134204]

Received: 3/11/09 12:22

Dear Will Fontaine;

Analytical results presented in this report have been reviewed for compliance with the HBEL, Inc. Quality Systems Manual and have been determined to meet applicable Method guidelines and Standards referenced in the July 2003 National Environmental Laboratory Accreditation Program (NELAP) Quality Manual unless otherwise noted. The Analytical Results within these report pages reflect the values obtained from tests performed on Samples As Received by the laboratory unless indicated differently.

FDOH Safe Drinking Water Act, Clean Water Act and RCRA Certification #'s:
E96080, E83509

Questions regarding this report should be directed to the Report Signatory at (772) 465-8584 referencing the HBEL Workorder ID [Number].

Respectfully submitted,



Eric Charest
HBEL, Inc. Laboratory Manager

Note: This report is not to be copied, except in full, without the expressed written consent of HBEL, Inc.

5600 US 1 North
Fort Pierce, FL 34946
FDOH # E96080

4165 St. Johns Pkwy Suite 1300
Sanford, FL 32771
FDOH # E83509

Printed: 3/31/09



Page 1 of 6

HBEL, Inc.

5600 U.S. 1 North, Fort Pierce, FL 34946
 Phone: (772) 465-8584 Fax: (772) 467-1584

CERTIFICATE OF ANALYSIS

[2134204]

Client: Aqua Utilities Florida, Inc.

Workorder ID: Tomoka View Triannual Pri/Sec

Parameter	Qualifier	Result ¹	Units	Reporting Limit	Method	Laboratory Batch	Prep Date/Time	Analyzed Date/Time	Analyst	Lab ID	
Laboratory ID: 2134204001						Sampled: 03/10/09 13:45		Received: 03/11/09 12:22			
Sample ID: P.O.E. Grab						Matrix: Water		Results reported on Wet Weight Basis			
Odor - Dechlorinated		1.0 U	T.O.N.	1.0	EPA 140.1	WCDE18749		03/11/09 13:41	PA	E83509	
pH	Q	7.86	SU	0.200	EPA 150.1	WCGE30741		03/12/09 18:38	GS	E96080	
Aluminum		0.0030 U	mg/L	0.0030	EPA 200.7	META9279		03/17/09 20:22	DM	E96080	
Barium		0.017	mg/L	0.0018	EPA 200.7	META9279		03/17/09 20:22	DM	E96080	
Beryllium		0.00010 U	mg/L	0.00010	EPA 200.7	META9279		03/17/09 20:22	DM	E96080	
Cadmium		0.00070 U	mg/L	0.00070	EPA 200.7	META9279		03/17/09 20:22	DM	E96080	
Chromium		0.0018 U	mg/L	0.0018	EPA 200.7	META9279		03/17/09 20:22	DM	E96080	
Copper		0.0034	mg/L	0.0014	EPA 200.7	META9279		03/17/09 20:22	DM	E96080	
Iron		0.025 U	mg/L	0.025	EPA 200.7	META9279		03/17/09 20:22	DM	E96080	
Manganese		0.026	mg/L	0.0037	EPA 200.7	META9279		03/17/09 20:22	DM	E96080	
Nickel		0.0020 U	mg/L	0.0020	EPA 200.7	META9279		03/17/09 20:22	DM	E96080	
Silver		0.0010 U	mg/L	0.0010	EPA 200.7	META9279		03/17/09 20:22	DM	E96080	
Sodium		63	mg/L	0.50	EPA 200.7	META9279		03/17/09 20:22	DM	E96080	
Zinc		0.010 U	mg/L	0.010	EPA 200.7	META9279		03/17/09 20:22	DM	E96080	
Antimony		0.0011	mg/L	0.00082	EPA 200.9	META9283		03/18/09 21:22	DM	E96080	
Arsenic		0.0010 U	mg/L	0.0010	EPA 200.9	META9281		03/18/09 16:19	DM	E96080	
Lead		0.00061 U	mg/L	0.00061	EPA 200.9	META9273		03/13/09 11:53	DM	E96080	
Selenium		0.0022 U	mg/L	0.0022	EPA 200.9	META9294		03/26/09 17:25	DM	E96080	
Thallium		0.0010 U	mg/L	0.0010	EPA 200.9	META9298		03/27/09 11:48	DM	E96080	
Mercury		0.00015	mg/L	0.000060	EPA 245.1	META9275	03/13/09 13:10	03/16/09 18:30	DM	E96080	
Chloride		110	mg/L	5.0	EPA 300.0	IC7989		03/16/09 13:08	SP	E96080	
Fluoride		0.12	mg/L	0.011	EPA 300.0	IC7987		03/12/09 12:12	JL	E96080	
Nitrate as N		0.011	mg/L	0.0030	EPA 300.0	IC7987		03/12/09 12:12	JL	E96080	
Nitrite as N		0.0022 U	mg/L	0.0022	EPA 300.0	IC7987		03/12/09 12:12	JL	E96080	
Sulfate		4.7	mg/L	1.4	EPA 300.0	IC7989		03/16/09 13:08	SP	E96080	
1,2-Dibromo-3-chloropropane		0.0036 U	ug/L	0.0036	EPA 504.1	PEST5303	03/18/09 12:00	03/19/09 1:06	JL	E96080	
1,2-Dibromoethane		0.0047 U	ug/L	0.0047	EPA 504.1	PEST5303	03/18/09 12:00	03/19/09 1:06	JL	E96080	
Chlordane		0.13 U	ug/L	0.13	EPA 505	PEST5302	03/17/09 12:00	03/18/09 0:41	JL	E96080	
Endrin		0.10 U	ug/L	0.10	EPA 505	PEST5302	03/17/09 12:00	03/18/09 0:41	JL	E96080	
gamma-BHC (Lindane)		0.020 U	ug/L	0.020	EPA 505	PEST5302	03/17/09 12:00	03/18/09 0:41	JL	E96080	
Heptachlor		0.036 U	ug/L	0.036	EPA 505	PEST5302	03/17/09 12:00	03/18/09 0:41	JL	E96080	
Heptachlor epoxide		0.027 U	ug/L	0.027	EPA 505	PEST5302	03/17/09 12:00	03/18/09 0:41	JL	E96080	
Methoxychlor		0.044 U	ug/L	0.044	EPA 505	PEST5302	03/17/09 12:00	03/18/09 0:41	JL	E96080	
PCB		0.14 U	ug/L	0.14	EPA 505	PEST5302	03/17/09 12:00	03/18/09 0:41	JL	E96080	
Toxaphene		0.60 U	ug/L	0.60	EPA 505	PEST5302	03/17/09 12:00	03/18/09 0:41	JL	E96080	
2,4,5-TP		0.19 U	ug/L	0.19	EPA 515.1	PEST5300	03/15/09 8:00	03/17/09 0:53	JL	E96080	
2,4-D		0.22 U	ug/L	0.22	EPA 515.1	PEST5300	03/15/09 8:00	03/17/09 0:53	JL	E96080	
Dalapon		2.3 U	ug/L	2.3	EPA 515.1	PEST5300	03/15/09 8:00	03/17/09 0:53	JL	E96080	
Dinoseb		0.23 U	ug/L	0.23	EPA 515.1	PEST5300	03/15/09 8:00	03/17/09 0:53	JL	E96080	
Heptachlorophenol		0.39 U	ug/L	0.39	EPA 515.1	PEST5300	03/15/09 8:00	03/17/09 0:53	JL	E96080	

5600 US 1 North
 Fort Pierce, FL 34946
 FDOH # E96080

4155 St. Johns Pkwy Suite 1300
 Sanford, FL 32771
 FDOH # E83509



HBEL, Inc.

5600 U.S. 1 North, Fort Pierce, FL 34946
Phone: (772) 465-8584 Fax: (772) 467-1584

CERTIFICATE OF ANALYSIS

[2134204]

Client: Aqua Utilities Florida, Inc.

Workorder ID: Tomoka View Triannual Pri/Sec

Parameter	Qualifier	Result ¹	Units	Reporting Limit	Method	Laboratory Batch	Prep Date/Time	Analyzed Date/Time	Analyst	Lab ID
Picloram		0.23 U	ug/L	0.23	EPA 515.1	PEST5300	03/15/09 8:00	03/17/09 0:53	JL	E96080
1,1,1-Trichloroethane		0.21 U	ug/L	0.21	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
1,1,2-Trichloroethane		0.44 U	ug/L	0.44	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
1,1-Dichloroethene		0.23 U	ug/L	0.23	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
1,2,4-Trichlorobenzene		0.41 U	ug/L	0.41	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
1,2-Dichlorobenzene		0.21 U	ug/L	0.21	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
1,2-Dichloroethane		0.29 U	ug/L	0.29	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
1,2-Dichloropropane		0.40 U	ug/L	0.40	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
1,4-Dichlorobenzene		0.23 U	ug/L	0.23	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
Benzene		0.20 U	ug/L	0.20	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
Carbon tetrachloride		0.24 U	ug/L	0.24	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
Chlorobenzene		0.30 U	ug/L	0.30	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
cis-1,2-Dichloroethene		0.21 U	ug/L	0.21	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
Ethylbenzene		0.21 U	ug/L	0.21	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
Methylene chloride		0.23 U	ug/L	0.23	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
Styrene		0.21 U	ug/L	0.21	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
Tetrachloroethene		0.24 U	ug/L	0.24	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
Toluene		0.22 U	ug/L	0.22	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
Total Xylenes		0.46 U	ug/L	0.46	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
trans-1,2-Dichloroethene		0.35 U	ug/L	0.35	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
Trichloroethene		0.36 U	ug/L	0.36	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
Vinyl chloride		0.32 U	ug/L	0.32	EPA 524.2	VOC3057		03/14/09 2:04	WR	E96080
Alachlor		0.61 U	ug/L	0.61	EPA 525.2	SVOC2746	03/14/09 8:00	03/17/09 16:29	CG	E96080
Atrazine		0.48 U	ug/L	0.48	EPA 525.2	SVOC2746	03/14/09 8:00	03/17/09 16:29	CG	E96080
Benzo(a)pyrene		0.070 U	ug/L	0.070	EPA 525.2	SVOC2746	03/14/09 8:00	03/17/09 16:29	CG	E96080
bis(2-ethylhexyl)phthalate		0.85 U	ug/L	0.85	EPA 525.2	SVOC2746	03/14/09 8:00	03/17/09 16:29	CG	E96080
Di(2-ethylhexyl)adipate		0.68 U	ug/L	0.68	EPA 525.2	SVOC2746	03/14/09 8:00	03/17/09 16:29	CG	E96080
Hexachlorobenzene		0.31 U	ug/L	0.31	EPA 525.2	SVOC2746	03/14/09 8:00	03/17/09 16:29	CG	E96080
Hexachlorocyclopentadiene		0.24 U	ug/L	0.24	EPA 525.2	SVOC2746	03/14/09 8:00	03/17/09 16:29	CG	E96080
Simazine		0.63 U	ug/L	0.63	EPA 525.2	SVOC2746	03/14/09 8:00	03/17/09 16:29	CG	E96080
Carboluran		0.41 U	ug/L	0.41	EPA 531.1	HPLC2570		03/12/09 19:20	JJM	E96080
Oxamyl		0.13 U	ug/L	0.13	EPA 531.1	HPLC2570		03/12/09 19:20	JJM	E96080
Glyphosate		13 U	ug/L	13	EPA 547	HPLC2571		03/16/09 13:22	JJM	E96080
Endothalif		2.8 U	ug/L	2.8	EPA 548.1	SVOC2745	03/14/09 8:00	03/15/09 22:29	CG	E96080
Diquat		1.9 U	ug/L	1.9	EPA 549.2	HPLC2573	03/17/09 13:00	03/24/09 14:29	JJM	E96080
Gross Alpha		2.0 U +/- 1.4	pCi/L		EPA 900.0	SAL1111		03/27/09 16:55	SAL	E84129
Radium 226		0.9 +/- 0.2	pCi/L		EPA 903.1	SAL1111		03/23/09 12:00	SAL	E84129
Radium 228		0.3 U +/- 0.2	pCi/L		EPA Alter.	SAL1111		03/26/09 12:01	SAL	E84129
Color		20	CU	1.8	SM2120 B	WCGE30739		03/12/09 13:15	SP	E96080
Total Dissolved Solids		550	mg/L	16	SM2540 C	WCGE30733		03/12/09 12:25	SP	E96080
Cyanide		0.063	mg/L	0.0047	SM4500CN E	WCGE30755	03/16/09 11:00	03/17/09 10:46	GG	E96080
Surfactants as LAS, Mol.wt.340		0.035	mg/L	0.022	SM5540 C	WCGE30747	03/12/09 13:15	03/13/09 14:17	GG	E96080

5600 US 1 North
Fort Pierce, FL 34946
FDOH # E96080

4155 St. Johns Pkwy Suite 1300
Sanford, FL 32771
FDOH # E83509



Printed: 3/31/09

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Client: Aqua Utilities Florida, Inc.

Workorder ID: Tomoka View Triannual Pri/Sec

Parameter	Qualifier	Result ¹	Units	Reporting Limit	Method	Laboratory Batch	Prep Date/Time	Analyzed Date/Time	Analyst	Lab ID
Laboratory ID: 2134204002						Sampled:		Received: 03/11/09 12:22		
Sample ID: VOC TRIP BLANK						Matrix: Water		Results reported on Wet Weight Basis		
1,1,1-Trichloroethane		0.21 U	ug/L	0.21	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
1,1,2-Trichloroethane		0.44 U	ug/L	0.44	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
1,1-Dichloroethene		0.23 U	ug/L	0.23	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
1,2,4-Trichlorobenzene		0.41 U	ug/L	0.41	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
1,2-Dichlorobenzene		0.21 U	ug/L	0.21	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
1,2-Dichloroethane		0.29 U	ug/L	0.29	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
1,2-Dichloropropane		0.40 U	ug/L	0.40	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
1,4-Dichlorobenzene		0.23 U	ug/L	0.23	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
Benzene		0.20 U	ug/L	0.20	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
Carbon tetrachloride		0.24 U	ug/L	0.24	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
Chlorobenzene		0.30 U	ug/L	0.30	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
cis-1,2-Dichloroethene		0.21 U	ug/L	0.21	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
Ethylbenzene		0.21 U	ug/L	0.21	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
Methylene chloride		0.23 U	ug/L	0.23	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
Styrene		0.21 U	ug/L	0.21	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
Tetrachloroethene		0.24 U	ug/L	0.24	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
oluene		0.22 U	ug/L	0.22	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
Total Xylenes		0.46 U	ug/L	0.46	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
trans-1,2-Dichloroethene		0.35 U	ug/L	0.35	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
Trichloroethene		0.36 U	ug/L	0.36	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080
Vinyl chloride		0.32 U	ug/L	0.32	EPA 524.2	VOC3057		03/14/09 2:38	WR	E96080

¹Result Qualifiers: U = Not Detected I = Analyte detected between the Laboratory Method Detection Limit and Laboratory Reporting Limit
Applicable Florida Department of Environmental Protection Qualifiers defined below. Statement of Estimated Uncertainty available upon request.
Q Sample held beyond the accepted holding time.



**Aqua Utilities Florida
Secondary Water Quality Project Report
July 2010**

Zephyr Shores Water System

Zephyr Shores is a community of about 500 Aqua Utilities Florida customers in Pasco County.

Aqua has worked diligently over the past several years to improve the operation and reliability of the Zephyr Shores system. As the Florida Public Service Commission noted in Aqua's last rate case decision, Aqua installed a second well and a generator to the system and entered a consent order with the Florida Department of Environmental Protection (FDEP) to address reliability and permitting issues. That consent order was closed on October 29, 2007. A consent order was issued in April 2009 for the late submittal of Quarterly Arsenic Samples, and that order was satisfied on August 24, 2009.

In the past year, Aqua has worked to tackle the aesthetic qualities — the look, smell and taste — of tap water in the system. Although these aesthetic qualities are considered “secondary” water quality standards, and Aqua has not exceeded the secondary standards for iron and manganese, Aqua has moved forward with initiatives to address customer concerns.

Aqua surveyed customers in Zephyr Shores in October 2009.

Like many Floridians, customers in Zephyr Shores get their water from the Floridan aquifer. The water can contain natural minerals that can accumulate in distribution system pipes. Sudden changes in flow in the distribution system can disturb deposits in the mains and cause discolored water. To address this issue, Aqua recently installed new flushing equipment and devised a systematic flushing schedule to clean the water mains. The program involves operating valves in a specific sequence to maximize the effectiveness of the flushing. This plan will address accumulated natural deposits in the mains and will reduce the incidents of discolored water.

Natural minerals in the water can also cause staining or deposit scale on fixtures over time and leave spots on glasses and dishes. Aqua has designed, permitted and installed a “sequestration” treatment system that will reduce the effects of natural minerals in the water. The FDEP has scheduled a clearance inspection for March 16, 2010, and Aqua expects to place the new treatment system in service shortly thereafter.

Many Zephyr Shores residents are “seasonal customers” — they live elsewhere during the summer months and return to Florida for the winter. That means water can sit in their service line or household plumbing for months, creating odors and discolored water. Customers might need to flush water through their fixtures and household plumbing after water has been standing in the pipes for an extended period of time.

Aqua management has been meeting with Zephyr Shores customers regularly to discuss customer concerns and create strategies to improve the look, taste and smell of their water. We will continue to talk with our customers and keep them informed as our plans progress.

Zephyrhills

- 71% of respondents rated Aqua's overall water service 1 or 2 on a scale of 1-5
- 68% of respondents are not satisfied with the taste of their water
- 64% of respondents are not satisfied with the odor of their water
- 46% of respondents are not satisfied with the color of their water
- 59% of respondents are not satisfied with the hardness of their water
- 48% of respondents are not satisfied with the reliability of their service
- 45% of respondents are not satisfied with Aqua's customer service
- 92% of respondents are not satisfied with the value of their water service for the money
- 65% of respondents rated Aqua's attention and response to water quality issues involved in providing water service 1 or 2 on a scale of 1-5

Florida Department of Environmental Protection Safe Drinking Water Program Laboratory Reporting Format

LABORATORY CERTIFICATION INFORMATION (to be completed by lab - Please type or print legibly)

ATTACH CURRENT DOH ANALYTE SHEET *

Lab Name: Advanced Environmental Laboratories, Inc Florida Certification #: E84589
 Address: 9610 Princess Palm Avenue Certification Expiration Date: 06/30/2010
Tampa, FL 33619 Phone #: (813)630-9616

ANALYSIS INFORMATION (to be completed by lab) Date Sample(s) Received: 09/02/2009

PWS ID (From Page 1): 691201B - Zephyr-Shores Sample Number (From Page 1): T0913617001

Lab Assigned Report Number or Job ID: T0913617001

Group(s) Analyzed & Results attached for compliance with Chapter 62-550, F.A.C. (Check all that apply):

- | | | | |
|---|---|--|---|
| <p><u>Inorganics</u></p> <input checked="" type="checkbox"/> All 17
<input type="checkbox"/> Partial
<input type="checkbox"/> Nitrate
<input type="checkbox"/> Nitrite
<input type="checkbox"/> Asbestos Only | <p><u>Synthetic Organics</u></p> <input type="checkbox"/> All 30
<input checked="" type="checkbox"/> All Except Dioxin
<input type="checkbox"/> Partial
<input type="checkbox"/> Dioxin Only | <p><u>Volatile Organics</u></p> <input checked="" type="checkbox"/> All 21
<input type="checkbox"/> Partial <p><u>Radionuclides</u></p> <input checked="" type="checkbox"/> Single Sample
<input type="checkbox"/> Qtrly Composite** | <p><u>Disinfection Byproducts</u></p> <input type="checkbox"/> Trihalomethanes
<input type="checkbox"/> Haloacetic Acids
<input type="checkbox"/> Bromate
<input type="checkbox"/> Chlorite <p><u>Secondaries</u></p> <input checked="" type="checkbox"/> All 14
<input type="checkbox"/> Partial |
|---|---|--|---|

Were any analyses subcontracted? Yes No

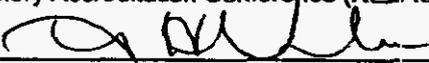
If yes, please provide DOH certification numbers: E82574, E82001, E83033

ATTACH DOH ANALYTE SHEET FOR EACH SUBCONTRACTED LAB *

CERTIFICATION

I, Tammie Heslin , Project Manager
 (Print Name) (Print Title)

do HEREBY CERTIFY that all attached analytical data are correct and unless noted meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Signature:  Date: 09/29/2009

* Failure to provide a valid and current Florida DOH lab certification number and a current Analyte Sheet for the attached analysis results will result in rejection of the report, possible enforcement against the public water system for failure to sample, and may result in notification of the DOH Bureau of Laboratory Services.

** Please provide radiological sample dates & locations for each quarter.

COMPLIANCE DETERMINATION (to be completed by DEP or DOH)

Sample Collection Info Satisfactory: Yes No Sample Analysis Info Satisfactory: Yes No

Replacement Sample(s) Requested (circle or highlight group(s) above) Revised Report Requested (circle or highlight group(s) above)

Additional Monitoring Required (circle or highlight group(s) above)

- Reason(s): MCL(s) Exceeded Detection(s) Incomplete Report
 Missing Analyte Sheet(s) Location Unsatisfactory Analysis Unsatisfactory
 Other: _____

Person Notified: _____ Date Notified: _____

Comments: _____

Date Reviewed: _____ DEP/DOH Reviewing Official: _____

**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

INORGANIC CONSTITUENTS
62-550.310(1)

Report Number / Job ID: T0913617001

PWS ID (From Page 1): 6512018

Contam ID	Contam Name	MGL	Units	Analysis Result	Qualifier	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification
1040	Nitrate	10	mg/L	0.039	U	SM 4500NO3-F	0.039	09/03/2009	11:04	E84589
1041	Nitrite	1	mg/L	0.022	U	SM 4500NO3-F	0.022	09/03/2009	11:04	E84589
1005	Arsenic	0.010	mg/L	0.0042		EPA 200.8	0.00012	09/15/2009	22:45	E82574
1010	Barium	2	mg/L	0.013		EPA 200.8	0.00027	09/15/2009	22:45	E82574
1015	Cadmium	0.005	mg/L	0.00020	U	EPA 200.8	0.00020	09/15/2009	22:45	E82574
1020	Chromium	0.1	mg/L	0.00050	U	EPA 200.7	0.00050	09/16/2009	15:08	E82574
1024	Cyanide	0.2	mg/L	0.00097	U	SM 4500-CN-E	0.00097	09/08/2009	14:49	E84589
1025	Fluoride	4.0	mg/L	0.15	I	EPA 300.0	0.055	09/08/2009	13:01	E84589
1030	Lead	0.015	mg/L	0.00013	I	EPA 200.8	0.000037	09/15/2009	22:45	E82574
1035	Mercury	0.002	mg/L	0.000014	U	EPA 245.1	0.000014	09/16/2009	13:23	E82574
1036	Nickel	0.1	mg/L	0.0011	U	EPA 200.7	0.0011	09/16/2009	15:08	E82574
1045	Selenium	0.05	mg/L	0.00063	U	EPA 200.8	0.00063	09/15/2009	22:45	E82574
1052	Sodium	160	mg/L	8.8		EPA 200.7	0.026	09/16/2009	15:08	E82574
1074	Antimony	0.006	mg/L	0.000091	U	EPA 200.8	0.000091	09/15/2009	22:45	E82574
1075	Beryllium	0.004	mg/L	0.00013	U	EPA 200.7	0.00013	09/16/2009	15:08	E82574
1085	Thallium	0.002	mg/L	0.000026	U	EPA 200.8	0.000026	09/15/2009	22:45	E82574

Reporting Format 62-550.730
Effective January 1995, Revised January 2004

Page 3 of 7

*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with A, F, H, N, O, T, Z, ? *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

SECONDARY CONTAMINANTS

62-550.320

Report Number / Job ID: T0913617001

PWS ID (From Page 1): 6512018

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier	Analytical Method	Lab MDL	Analysis Date	Analysis Time	DOH Lab Certification #
1002	Aluminum	0.2	mg/L	0.061	U	EPA 200.7	0.061	09/16/2009	15:08	E82574
1017	Chloride	250	mg/L	11		EPA 300.0	2.3	09/08/2009	13:01	E84589
1022	Copper	1	mg/L	0.0046		EPA 200.8	0.000085	09/15/2009	22:45	E82574
1025	Fluoride	2.0	mg/L	0.15	I	EPA 300.0	0.055	09/08/2009	13:01	E84589
1028	Iron	0.3	mg/L	0.29		EPA 200.7	0.038	09/16/2009	15:08	E82574
1032	Manganese	0.05	mg/L	0.0031		EPA 200.8	0.000073	09/15/2009	22:45	E82574
1050	Silver	0.1	mg/L	0.000086	U	EPA 200.8	0.000086	09/15/2009	22:45	E82574
1055	Sulfate	250	mg/L	2.1	U	EPA 300.0	2.1	09/08/2009	13:01	E84589
1095	Zinc	5	mg/L	0.039		EPA 200.8	0.00041	09/15/2009	22:45	E82574
1905	Color	15	Color Units	7.2		SM 2120B	3.2	09/03/2009	16:54	E84589
1920	Odor	3	TON@40°C	1		SM 2150B	1.0	09/03/2009	08:30	E84589
1925	pH	6.5 - 8.5	pH unit	7.7		EPA 150.1		09/03/2009	16:20	E84589
1930	Total Dissolved Solids	500	mg/L	270		EPA 160.1	10	09/04/2009	08:31	E84589

*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

REGIONS NUMBER
62-550.310(6)

Report Number / Job T0913617001

PWS ID (From Page 1): 6512018

Contam ID	Contam Name	MGL	Units	Analysis Result	Qualifier	Analytical Method	Lab MDL	RDL	Analysis Error	Analysis Date	Analysis Time	DOH Lab Certification #
4006	Combined Uranium (U-234, U-235, & U-238)	30	ug/L	0.18	I	EPA 200.8	0.031	0.031		09/15/2009	22:45	E82574

** If the results exceed 5 pCi/L, a measurement for radium-226 is required.

*** If the results exceed 5 pCi/L, a measurement for radium-226 is required. If the results exceed 15 pCi/L, measurements for radium-226 and uranium are required.

**** If uranium (U) is reported as a measurement of activity (pCi/L) it will be converted to a mass measurement (ug/L) by multiplying the result by 1.5.

***** Reserved

*Results must be reported with appropriate qualifiers in accordance with Florida Administrative Code Rule 62-160, Table 1. Results qualified with A, F, H, N, O, T, Z, ?, *, are unacceptable for compliance with 62-550. Results qualified with a J, Q, R, or Y must be accompanied by written justification and will be evaluated on a case by case basis. To avoid a monitoring violation, unacceptable results must be replaced with acceptable results from samples collected during the same monitoring period.

**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

~~VOLATILES ORGANICS~~

62-550.310(4)(a)

Report Number / Job ID: T0913617001

PWS ID (From Page 1): 6512018

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifier	Analytical Method	Lab MDL	RDL	Analysis Date	Analysis Time	DOH Lab Certification #
2378	1,2,4-Trichlorobenzene	70	ug/L	0.22	U	EPA 524.2	0.22	0.5	09/06/2009	11:33	E82574
2380	cis-1,2-Dichloroethylene	70	ug/L	0.12	U	EPA 524.2	0.12	0.5	09/06/2009	11:33	E82574
2955	Xylenes (total)	10,000	ug/L	0.37	U	EPA 524.2	0.37	0.5	09/06/2009	11:33	E82574
2964	Methylene Chloride	5	ug/L	0.32	U	EPA 524.2	0.32	0.5	09/06/2009	11:33	E82574
2968	o-Dichlorobenzene	600	ug/L	0.15	U	EPA 524.2	0.15	0.5	09/06/2009	11:33	E82574
2969	para-Dichlorobenzene	75	ug/L	0.26	U	EPA 524.2	0.26	0.5	09/06/2009	11:33	E82574
2976	Vinyl Chloride	1	ug/L	0.20	U	EPA 524.2	0.20	0.5	09/06/2009	11:33	E82574
2977	1,1-Dichloroethylene	7	ug/L	0.17	U	EPA 524.2	0.17	0.5	09/06/2009	11:33	E82574
2979	trans-1,2-Dichloroethylene	100	ug/L	0.27	U	EPA 524.2	0.27	0.5	09/06/2009	11:33	E82574
2980	1,2-Dichloroethane	3	ug/L	0.18	U	EPA 524.2	0.18	0.5	09/06/2009	11:33	E82574
2981	1,1,1-Trichloroethane	200	ug/L	0.20	U	EPA 524.2	0.20	0.5	09/06/2009	11:33	E82574
2982	Carbon tetrachloride	3	ug/L	0.24	U	EPA 524.2	0.24	0.5	09/06/2009	11:33	E82574
2983	1,2-Dichloropropane	5	ug/L	0.21	U	EPA 524.2	0.21	0.5	09/06/2009	11:33	E82574
2984	Trichloroethylene	3	ug/L	0.14	U	EPA 524.2	0.14	0.5	09/06/2009	11:33	E82574
2985	1,1,2-Trichloroethane	5	ug/L	0.28	U	EPA 524.2	0.28	0.5	09/06/2009	11:33	E82574
2987	Tetrachloroethylene	3	ug/L	0.24	U	EPA 524.2	0.24	0.5	09/06/2009	11:33	E82574
2989	Chlorobenzene	100	ug/L	0.19	U	EPA 524.2	0.19	0.5	09/06/2009	11:33	E82574
2990	Benzene	1	ug/L	0.17	U	EPA 524.2	0.17	0.5	09/06/2009	11:33	E82574
2991	Toluene	1,000	ug/L	0.21	U	EPA 524.2	0.21	0.5	09/06/2009	11:33	E82574
2992	Ethylbenzene	700	ug/L	0.13	U	EPA 524.2	0.13	0.5	09/06/2009	11:33	E82574
2996	Styrene	100	ug/L	0.11	U	EPA 524.2	0.11	0.5	09/06/2009	11:33	E82574

Reporting Format 62-550.730
Effective January 1995, Revised January 2004

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**Florida Department of Environmental Protection
Safe Drinking Water Program Laboratory Reporting Format**

SYNTHETIC ORGANICS
62-550.310(4)(b)

Report Number / Job ID: T0913617001

PWS ID (From Page 1): 6512018

Contam ID	Contam Name	MCL	Units	Analysis Result	Qualifie	Analytical Method	Lab MDL	RDL	Extraction Date	Analysis Date	Analysis Time	DOH Lab Certification
2005	Endrin	2	ug/L	0.0017	U	EPA 508	0.0017	0.01	09/05/2009	09/07/2009	20:36	E82574
2010	gamma-BHC (Lindane)	0.2	ug/L	0.0036	U	EPA 508	0.0036	0.02	09/05/2009	09/07/2009	20:36	E82574
2015	Methoxychlor	40	ug/L	0.011	U	EPA 508	0.011	0.1	09/05/2009	09/07/2009	20:36	E82574
2020	Toxaphene	3	ug/L	0.098	U	EPA 508	0.098	1	09/05/2009	09/07/2009	20:36	E82574
2031	Dalapon	200	ug/L	1.0	U	EPA 515.3	1.0	1	09/03/2009	09/07/2009	20:36	E82574
2032	Diquat	20	ug/L	7.6	U	EPA 549.2	7.6	0.4	09/03/2009	09/08/2009	09:01	E82574
2033	Endothall	100	ug/L	2.8	U	EPA 548.1	2.8	9	09/03/2009	09/08/2009	11:51	E82574
2034	Glyphosate	700	ug/L	6.5	U	EPA 547	6.5	6	09/08/2009	09/16/2009	09:34	E82574
2035	Di(2-ethylhexyl)adipate	400	ug/L	0.95	U	EPA 525.2	0.95	0.6	09/15/2009	09/15/2009	14:06	E82574
2036	Oxamyl (Vydate)	200	ug/L	0.57	U	EPA 531.1	0.57	2	09/08/2009	09/08/2009	22:05	E82574
2037	Simazine	4	ug/L	0.19	U	EPA 525.2	0.19	0.07	09/04/2009	09/04/2009	23:41	E82574
2039	bis(2-Ethylhexyl) phthalate	6	ug/L	1.5	U	EPA 525.2	1.5	0.6	09/08/2009	09/08/2009	22:05	E82574
2040	Picloram	500	ug/L	0.23	U	EPA 515.3	0.23	0.1	09/08/2009	09/08/2009	22:05	E82574
2041	Dinoseb	7	ug/L	0.86	U	EPA 515.3	0.86	0.2	09/03/2009	09/08/2009	09:01	E82574
2042	Hexachlorocyclopentadiene	50	ug/L	0.016	U	EPA 508	0.016	0.1	09/03/2009	09/08/2009	09:01	E82574
2046	Carbofuran	40	ug/L	0.28	U	EPA 508	0.28	0.9	09/05/2009	09/07/2009	20:36	E82574
2050	Atrazine	3	ug/L	0.16	U	EPA 531.1	0.28	0.9	09/04/2009	09/04/2009	23:41	E82574
2051	Alachlor	2	ug/L	0.26	U	EPA 525.2	0.16	0.1	09/08/2009	09/08/2009	22:05	E82574
2065	Heptachlor	0.4	ug/L	0.0068	U	EPA 525.2	0.26	0.2	09/08/2009	09/08/2009	22:05	E82574
2066	Heptachlor Epoxide	0.2	ug/L	0.0033	U	EPA 508	0.0068	0.04	09/05/2009	09/07/2009	20:36	E82574
2067	Heptachlor Epoxide	0.2	ug/L	0.0033	U	EPA 508	0.0033	0.02	09/05/2009	09/07/2009	20:36	E82574
2105	2,4-D	70	ug/L	1.5	U	EPA 508	0.0033	0.02	09/05/2009	09/07/2009	20:36	E82574
2110	2,4,5-TP (Silvex)	50	ug/L	0.32	U	EPA 515.3	1.5	0.1	09/03/2009	09/08/2009	09:01	E82574
2110	2,4,5-TP (Silvex)	50	ug/L	0.32	U	EPA 515.3	0.32	0.2	09/03/2009	09/08/2009	09:01	E82574
2274	Hexachlorobenzene	1	ug/L	0.0063	U	EPA 515.3	0.32	0.2	09/03/2009	09/08/2009	09:01	E82574
2306	Benzo(a)pyrene	0.2	ug/L	0.096	U	EPA 508	0.0063	0.1	09/05/2009	09/07/2009	20:36	E82574
2326	Pentachlorophenol	1	ug/L	0.069	U	EPA 525.2	0.096	0.02	09/08/2009	09/08/2009	22:05	E82574
2383	Polychlorinated biphenyls(PCB)	0.5	ug/L	0.12	U	EPA 515.3	0.069	0.04	09/03/2009	09/08/2009	09:01	E82574
2931	Dibromochloropropane	0.2	ug/L	0.0082	U	EPA 508	0.12	0.1	09/05/2009	09/07/2009	20:36	E82574
2946	Ethylene Dibromide (EDB)	0.02	ug/L	0.0091	U	EPA 504.1	0.0082	0.02	09/11/2009	09/14/2009	10:18	E82574
2959	Chlordane	2	ug/L	0.052	U	EPA 504.1	0.0091	0.01	09/11/2009	09/14/2009	10:18	E82574
2959	Chlordane	2	ug/L	0.052	U	EPA 508	0.052	0.2	09/05/2009	09/07/2009	20:36	E82574

NOTE: Effective January 1, 2004, results indicating non-detection with a reported lab MDL >50% of the MCL will not be accepted for compliance with 62-550.310(4)(b).

Reporting Format 62-550.730
Effective January 1995. Revised January 2004

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Tomoka View PWS Flushing Plan

January 2010

Purpose:

The purpose of this flushing program is to maintain quality and appearance of the water in the Tomoka View water distribution system.

Intent:

The intent of this plan is to provide guidelines to operations personnel in daily operations. Specific conditions in the distribution system may dictate additional flushing and monitoring.

Distribution System Monitoring, Action Levels, & Actions:

Manual conventional flushing may be necessary should conditions dictate in response to water quality parameters approaching the trigger in Table 1, or in response to customer complaints of black or discolored water or taste and odor. In these cases, flushing will be conducted to achieve and maintain goals for the water quality parameters specified in Table 1. The water quality parameters should be tested twice per week at the point of entry and at least two locations in the distribution system and the MRT for a total of four locations.

Table 1. Distribution System Action Levels and Actions

Parameter	Goals	Action Level	Action
Total Cl ₂ Residual	>2 mg/L as Cl ₂	<2 mg/L as Cl ₂	Flush until residual >2 mg/L as Cl ₂
Free NH ₃ -N	<0.5 mg/L as N	>0.5 mg/L as N	Increase plant Cl ₂ /NH ₃ ratio, start daily monitoring, if not <0.5 mg/L after 2 days flush until <0.5 mg/L as N
pH	7.9-8.3	N/A	Monitor
NO ₂ -N	<0.1 mg/L as N	>0.1 mg/L as N	Monitor daily if 0.1 – 0.3 mg/L as N If >0.3 mg/L as N, revert to free chlorine

Automatic Flushing:

The following locations currently have automatic flushing devices installed and shall continue to be programmed to run/flush as indicated:

Table 2. Automatic Flushing Device Location and Schedule

Location	Frequency	Duration per Event
265 Cherokee Ave	2 per day	1 hour
380 Seminole Dr.	2 per day	1 hour
109 Seminole Dr.	2 per day	1 hour
160 Greenbriar Ln.	2 per day	1 hour

Unidirectional Flushing:

The following locations shall be manually flushed (unidirectionally) as indicated below until water is visibly clear and an acceptable total chlorine residual is achieved. Flush each section in its entirety before moving to the next section. Refer to the system flushing map for locations of flush points and valves. The system should be unidirectionally flushed twice per year. Additional manual flushing should be performed by section in response to customer complaints or water quality parameter triggers in a particular section.

Section	Open and Close Valves in this Order Left to Right	Valves to Close	Hydrant # or B/O # to open	Time to Flush (minute)	Minimum Gallons Flushed	Hydrant # or B/O # to Close	Valves to Open	Special Notes: GPM & PSI
NORTH	Flush Point #1	#11	#1	6	700	#1	#11	Flushing should be at 120 GPM or higher. Plant Not to go Below 35 PSI or Water Storage level to drop too low.
	Flush Point #2	#5, #6	#9	3	300	#9	#6	
	Flush Point #3	#3	#2	3	350	#2	#5, #3	
	Flush Point #4	#16, #7	#2	4	450	#2	#7, #16	
CENTER	Flush Point #5	#14, #18	#36	1	150	#36	#14, #18	
	Flush Point #6	#12, #23, #24	#33	2	200	#33	#12, #23	
	Flush Point #7	#13, #19, #22	#33	5	600	#33	#24	
	Flush Point #9	#28	#34	1	100	#34	#13, #19, #22 #28	
	Flush Point #10	#23, #27	#34	1	150	#34	#23	
	Flush Point #8	#14, #20, #25	#34	5	650	#34	#14, #20, #25 #27	
SOUTH	Flush Point #12	#14, #16, #18	#32	1	150	#31	#14, #16, #18	
	Flush Point #11	#20, #25, #27 #28	#31	3	350	#32	#20, #25, #27 #28	

Implementation:

The flushing program will be implemented at the time chloramination goes online in the Tomoka View water system and shall remain in effect while the system is on chloramination.

Rosalie Oaks Flushing Plan

Purpose:

The purpose of this program is to insure the quality of the potable water provided to the Aqua Utility Florida, Inc. customers in the Rosalie Oaks service area. The population consists of seasonal/weekend customers, therefore proper flushing is important to provide quality water.

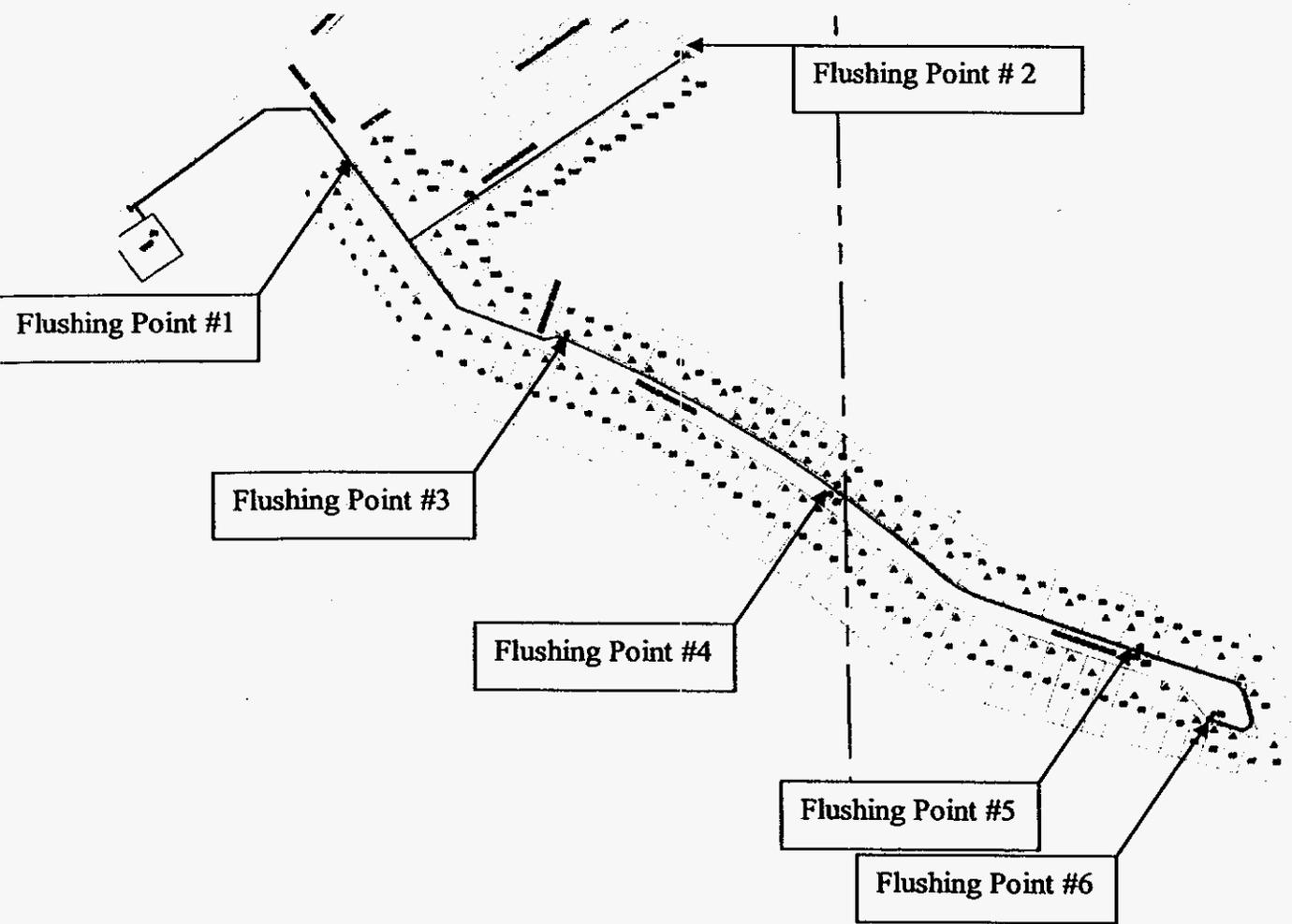
Intent:

The intent of this program is to provide minimum guidelines to operations personnel in daily operations. Specific conditions in the distribution system and customer complaints may dictate additional flushing and monitoring.

Flushing:

The system shall be flushed directionally in the order below every Thursday. At a minimum, each flush point shall flush the volume of water specified.

Rosalie Oaks Flushing Plan				
Street Name	Lin. Ft. from POE, Blow off or Last Line change	Line Diameter (in)	Gallons of water	Total Gallons
Flush Point # 1	675	8	1762	1762
Flush Point # 2	250 875	6 4	367 571	938
Flush Point # 3	500	6	734	734
Flush Point # 4	800	6	1174	1174
Flush Point # 5	900	6	1321	1321
Flush Point # 6	500	2	82	82





Zephyr Shores PWS Flushing Plan

Purpose:

The purpose of this flushing program is to maintain quality and appearance of the water in the Zephyr Shores water distribution system.

Intent:

The intent of this plan is to provide guidelines to operations personnel in daily operations. Specific conditions in the distribution system may dictate additional flushing and monitoring.

Distribution System Monitoring, Action Levels, & Actions:

Manual conventional flushing may be necessary at any time should conditions dictate in response to water quality parameters approaching the trigger in Table 1, or in response to customer complaints of black or discolored water or taste and odor. In these cases, flushing will be conducted to achieve and maintain chlorine residuals at or above the minimums in Table 1.

Table 1. Distribution System Action Levels and Actions

Parameter	Goals	Action Level	Action
Free Chlorine Residual	>0.2 mg/L as Cl ₂	<0.2 mg/L as Cl ₂	Flush until residual >0.5 mg/L as Cl ₂

Unidirectional Flushing:

The following locations shall be manually unidirectionally flushed as indicated below until water is visibly clear and an acceptable chlorine residual is achieved. Completely flush each section in its entirety before moving to the next section. Refer to the system flushing map for locations of flush points and valves. The system should be unidirectionally flushed twice per year or more often as customer complaints or water quality dictates.

FLUSH POINT TYPE	FLUSH POINT #	VALVES TO CLOSE	HYDRANT # OR BLOW OFF # TO OPEN	HYDRANT # OR BLOW OFF # TO CLOSE	VALVES TO OPEN
BLOW OFF	ZEPHYR SHORES - 1	6, 8, 13	12 (4541 WINDY)	12	6 L/C, 8 L/C, 13
BLOW OFF	2	6 A/C, 7, 8 A/C, 19, 20	12 (4541 WINDY)	12	6, 7 L/C, 8 L/C, 19, 20 L/C
BLOW OFF	3	7 A/C, 8 A/C, 13, 20 A/C	12 (4541 WINDY)	12	7, 8, 13, 20
BLOW OFF	4	10, 11, 61	23 (4600 CLARICE)	23	11, 10 L/C, 61
BLOW OFF	5	6, 10 A/C, 13, 14	9 (34834 CARL - BACK YARD)	9	6, 10 L/C, 13, 14
BLOW OFF	6	8, 10 A/C, 16	59 (34824 CARL - ACROSS STREET)	59	8, 10 L/C, 16
BLOW OFF	7	10 A/C, 14	17 (SIX MILE POND - END OF STREET)	17	10, 14
BLOW OFF	8	11, 16	64 (4625 WINDY - BACK YARD)	64	11, 16
BLOW OFF	9	18, 20, 21, 22, 24	58 (4722 WINDY - END OF STREET)	58	18, 20, 21, 22, 24 L/C
BLOW OFF	10	24 A/C, 25 ALWAYS CLOSED	65 (ZEPHYR SHORES)	65	24, 25 STAYS CLOSED
BLOW OFF	11	26	62 (ADA - END OF STREET - BACK)	62	26
FIRE HYDRANT	AMERICAN CONDOS - 12	31, 32, 33, 39	36 (JADE - CORNER OF POND)	36	31, 32, 33 L/C, 39 L/C
FIRE HYDRANT	13	33 A/C, 39 A/C, 45	66 (ELWANA)	66	33, 39, 45
BLOW OFF	14	37, 38, 45	54 (BOBBY)	54	37, 38, 46
FIRE HYDRANT	15	41, 45	40 (CYNTHIA)	40	41, 45 L/C
FIRE HYDRANT	16	32, 45 A/C, 46	47 (GARBER)	47	32, 45, 46 L/C
FIRE HYDRANT	17	46 A/C	60 (DANNY)	60	46
BLOW OFF	18	52	67 (BRITINI)	67	52
FIRE HYDRANT	19	48	50 (BRITINI)	50	48 L/C
BLOW OFF	20	48 A/C	55 (TIFFANI)	55	48 L/C

FIRE HYDRANT	21	29, 33, 34, 48 A/C	30 (CONDOMINIUM)	30	29, 33 L/C, 34, 48
BLOW OFF	22	31, 32, 33 A/C, 39	56 (AC ENTRY)	56	31, 32, 33, 39

Implementation:

The flushing program is currently being implemented in the Zephyr Shores water system and shall remain in effect until the system is on chloramination.



Leisure Lakes PWS Flushing Plan

Purpose:

The purpose of this flushing program is to maintain quality and appearance of the water in the Leisure Lakes water distribution system.

Intent:

The intent of this plan is to provide guidelines to operations personnel in daily operations. Specific conditions in the distribution system may dictate additional flushing and monitoring.

Distribution System Monitoring, Action Levels, & Actions:

Manual conventional flushing may be necessary at any time should conditions dictate in response to water quality parameters approaching the trigger in Table 1, or in response to customer complaints of black or discolored water or taste and odor. In these cases, flushing will be conducted to achieve and maintain chlorine residuals at or above the minimums in Table 1.

Table 1. Distribution System Action Levels and Actions

Parameter	Goals	Action Level	Action
Free Chlorine Residual	>0.2 mg/L as Cl ₂	<0.2 mg/L as Cl ₂	Flush until residual >0.5 mg/L as Cl ₂

Unidirectional Flushing:

The following locations shall be manually unidirectionally flushed as indicated below until water is visibly clear and an acceptable chlorine residual is achieved. Completely flush each section in its entirety before moving to the next section. Refer to the system flushing map for locations of flush points and valves. The system should be unidirectionally flushed twice per year or more often as customer complaints or water quality dictates.

Flushing Plan - Leisure Lakes

Open and Close Valves in this Order Left to Right	Valves to Close	Hydrant # or B/O # to open	Time to Flush (minute)	Minimum Gallons Flushed	Hydrant # or B/O # to Close	Valves to Open	Special Notes: GPM & PSI
Flush Point #1	N/A	FH 13	10		FH 13	N/A	Flushing should be at 120 GPM or higher.
Flush Point #2	V20	FH 12	30		FH 12	N/A	
Flush Point #3	V29	FH 10	30		N/A	V20	
Flush Point #4	V37, V36, V31	FH 10	30		FH 10	V29	
Flush Point #5	N/A	FH 7	30		FH 7	N/A	
Flush Point #6	N/A	FH 8	30		FH 8	NA	
Flush Point #7	V3	FH 9	30		-	NA	
Flush Point #8	V4	"	30		-	NA	Plant Not to go Below 35 PSI or Water Storage level to drop to low.
Flush Point #9	V5	"	30		FH 9	N/A	
Flush Point #10	N/A	FH 6	30			V3	
Flush Point #11	V2	"	30		FH 6	V2, V3, V4, V31, V36, V37	
Flush Point #12	V15	FH 4	30		FH 4	N/A	
Flush Point #13	V10	FH 2	30		FH 2	N/A	
Flush Point #14	N/A	FH 3	30		FH 3	V10, V15	

Implementation:

The flushing program is currently being implemented in the Leisure Lakes water system and shall remain in effect until the system is on chloramination.

Serratia marcescens

From Wikipedia, the free encyclopedia

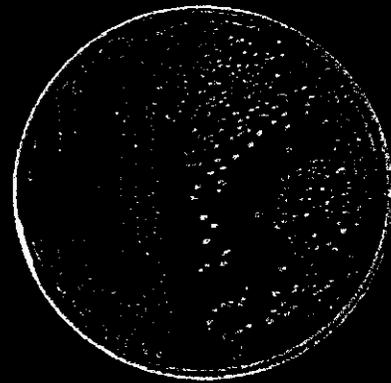
Serratia marcescens is a species of Gram-negative, rod-shaped bacterium in the family Enterobacteriaceae. A human pathogen, *S. marcescens* is involved in nosocomial infections, particularly catheter-associated bacteremia, urinary tract infections and wound infections,^{[1][2]} and is responsible for 1.4% of nosocomial bacteremia cases in the United States.^[3] It is commonly found in the respiratory and urinary tracts of hospitalized adults and in the gastrointestinal system of children.

Due to its ubiquitous presence in the environment, and its preference for damp conditions, *S. marcescens* is commonly found growing in bathrooms (especially on tile grout, shower corners, toilet water line, and basin), where it manifests as a pink discoloration and slimy film feeding off phosphorus-containing materials or fatty substances such as soap and shampoo residue. Once established, complete eradication of the organism is often difficult, but can be accomplished by application of a bleach-based disinfectant. Rinsing and drying surfaces after use can also prevent the establishment of the bacteria by removing its food source and making the environment less hospitable.

S. marcescens may also be found in environments such as dirt, supposedly "sterile" places, and the subgingival biofilm of teeth. Due to this, and the fact that *S. marcescens* produces a reddish-orange tripyrrole pigment called prodigiosin, *S. marcescens* may cause extrinsic staining of the teeth. The biochemical pathway illustrating the production of prodigiosin by *S. marcescens* is unknown except for the final two steps. In these steps, a monopyrrole (MAD) and a bipyrrrole (MBC) undergo a condensation reaction by way of a condensing enzyme to ultimately form prodigiosin.

Serratia marcescens

Serratia marcescens



S. marcescens on an XLD agar plate.

Scientific classification

Kingdom:	Bacteria
Phylum:	Proteobacteria
Class:	Gamma Proteobacteria
Order:	Enterobacteriales
Family:	Enterobacteriaceae
Genus:	<i>Serratia</i>
Species:	<i>S. marcescens</i>

Binomial name

Serratia marcescens
Bizio 1823

Contents

- 1 Identification
- 2 Pathogenesis
- 3 History
- 4 References
- 5 External links

Identification

S. marcescens is a motile organism and can grow in temperatures ranging from 5–40°C and in pH levels

ranging from 5 to 9. It is differentiated from other Gram-negative bacteria by its ability to perform casein hydrolysis, which allows it to produce extracellular metalloproteinases which are believed to function in cell-to-extracellular matrix interactions. *S. marcescens* also exhibits tryptophan and citrate degradation. One of the end products of tryptophan degradation is pyruvic acid, which is then incorporated into different metabolic processes of *S. marcescens*. A final product of citrate degradation is carbon. Thus, *S. marcescens* can rely on citrate as a carbon source. In identifying the organism one may also perform a *methyl red test*, which determines if a microorganism performs mixed-acid fermentation. *S. marcescens* results in a negative test. Another determination of *S. marcescens* is its capability to produce lactic acid via oxidative and fermentative metabolism. Therefore, it is said that *S. marcescens* is lactose O/F+.^[4]

Pathogenesis

S. marcescens can cause infection in several sites, including the urinary tract, respiratory tract, wounds,^[3] and the eye, where it may cause conjunctivitis, keratitis, endophthalmitis, and tear duct infections.^[5] It is also a rare cause of endocarditis and osteomyelitis (particularly in people who use intravenous drugs recreationally), pneumonia, and meningitis.^{[2][3]} Most *S. marcescens* strains are resistant to several antibiotics because of the presence of R-factors, which are a type of plasmid that carry one or more genes that encode resistance; all are considered intrinsically resistant to ampicillin, macrolides, and first-generation cephalosporins (such as cefalexin).^[2]

In elkhorn coral, *S. marcescens* is the cause of the disease known as white pox disease.^[6] In silkworms, it sometimes occurs as a secondary pathogen in viral flacherie disease.^[citation needed]

Also in *Drosophila* research laboratories, infection with *S. marcescens* is common. It manifests itself as a pink discoloration or plaque in or on larvae, pupae, or the usually starch and sugar-based food (especially when improperly prepared).

History

Serratia marcescens was discovered in 1819 by Venetian pharmacist Bartolomeo Bizio, as the cause of an episode of blood-red discoloration of polenta in the city of Padua.^[7] Bizio named the organism four years later in honor of Serafino Serrati, a physicist who developed an early steamboat; the epithet *marcescens* (Latin for "decaying") was chosen because of the pigment's rapid deterioration (Bizio's observations led him to believe that the organism decayed into a mucilage-like substance upon reaching maturity).^[8] *Serratia* was later renamed *Monas prodigiosus* and *Bacillus prodigiosus* before Bizio's original name was restored in the 1920s.^[7]

Until the 1950s, *S. marcescens* was erroneously believed to be a non-pathogenic "saprophyte",^[3] and its reddish coloration was used in school experiments to track infections. It has also been used as a simulant in biological warfare tests by the United States Military.^{[9][10]} On September 26 and 27, 1950, the United States Navy conducted a secret experiment named "Operation Sea-Spray" in which some *S. marcescens* was released by bursting balloons of it over urban areas of the San Francisco Bay Area in California. Although the Navy later claimed the bacteria were harmless, beginning on September 29 eleven patients at a local hospital developed very rare, serious urinary tract infections and one of these individuals, Edward J. Nevin, died. Cases of pneumonia in San Francisco also increased after *S. marcescens* was released.^{[11],[12]}

Since 1950, *S. marcescens* has steadily increased as a cause of human infection, with many strains resistant to multiple antibiotics.^[1] The first indications of problems with the influenza vaccine produced by Chiron Corporation in 2004 involved *S. marcescens* contamination.

Because of its red pigmentation, caused by expression of the pigment prodigiosin,^[13] and its ability to grow on bread, *S. marcescens* has been evoked as a naturalistic explanation of Medieval accounts of the "miraculous" appearance of blood on the Eucharist that led to Pope Urban IV instituting the Feast of Corpus Christi in 1264. This followed celebration of a Mass at Bolsena in 1263, led by a Bohemian priest who had doubts concerning transubstantiation, or the turning of bread and wine into the Body and Blood of Christ during the Mass. During the Mass, the Eucharist appeared to bleed and each time the priest wiped away the blood, more would appear. While it is possible that *Serratia* could generate a single appearance of red pigment, it is unclear how it could have generated more pigment after each wiping, leaving this proposed explanation open to doubt. This event is celebrated in a fresco in the Apostolic Palace in the Vatican City, painted by Raphael.^[14]

In early 2008 the U.S. Food and Drug Administration (FDA) issued a nationwide recall of one lot of Pre-Filled Heparin Lock Flush Solution USP^[15]. The heparin IV flush syringes had been found to be contaminated with *Serratia marcescens*, which resulted in patient infections. The Centers for Disease Control (CDC) confirmed growth of *Serratia marcescens* from several unopened syringes of this product.

References

- ^{a b} Hejazi A, Falkiner FR (1997). "Serratia marcescens". *J Med Microbiol* 46 (11): 903–12. doi:10.1099/00222615-46-11-903. PMID 9368530.
- ^{a b c} Auwaerter P (October 8, 2007). "Serratia species". *Point-of-Care Information Technology ABX Guide*. Johns Hopkins University. http://prod.hopkins-abxguide.org/pathogens/bacteria/serratia_species.html. Retrieved on December 13, 2008. Freely available with registration.
- ^{a b c d} Ania BJ (October 1, 2008). "Serratia: Overview". *eMedicine*. WebMD. <http://emedicine.medscape.com/article/228495-overview>. Retrieved on December 13, 2008.
- ^[1]
- ^a "Serratia Marcescens seton implant infection & orbital cellulitis". *EyeRounds.org*. <http://webeye.ophth.uiowa.edu/eyeforum/cases/case34-setoninfection.htm>. Retrieved 2006-04-06.
- ^a Patterson KL, Porter JW, Ritchie KB, *et al.* (June 2002). "The etiology of white pox, a lethal disease of the Caribbean elkhorn coral, *Acropora palmata*". *Proc Natl Acad Sci USA* 99 (13): 8725–30. doi:10.1073/pnas.092260099. PMID 12077296.
- ^{a b} Sehdev PS, Donnenberg MS (October 1999). "Arcanum: The 19th-century Italian pharmacist pictured here was the first to characterize what are now known to be bacteria of the genus Serratia". *Clin Infect Dis* 29 (4): 770, 925. doi:10.1086/520431. PMID 10589885. <http://www.journals.uchicago.edu/doi/pdf/10.1086/520459>.
- ^a Bizio's original report was translated into English in 1924, and published in the *Journal of Bacteriology*. See Merlino CP (November 1924). "Bartolomeo Bizio's Letter to the most Eminent Priest, Angelo Bellani, Concerning the Phenomenon of the Red Colored Polenta". *J Bacteriol* 9 (6): 527–43. PMID 16559067. PMC 379088. <http://jb.asm.org/cgi/pmidlookup?view=long&pmid=16559067>.
- ^a Democracy Now! | How the U.S. Government Exposed Thousands of Americans to Lethal Bacteria to Test Biological Warfare
- ^a <http://archive.webactive.com/pacifica/demnow/dn980220.html>
- ^a Cole, Leonard A. (1988). *Clouds of Secrecy: The Army's Germ-Warfare Tests Over Populated Areas*. (Foreword by Alan Cranston.). Totowa, New Jersey: Rowman & Littlefield.. ISBN 0-8476-7579-3.
- ^a Regis, Ed. *The Biology of Doom : America's Secret Germ Warfare Project*.. Diane Publishing Company.. ISBN 0-7567-5686-3.

13. ^ Bennett JW, Bentley R (2000). "Seeing red: The story of prodigiosin". *Adv Appl Microbiol* 47: 1–32. doi:10.1016/S0065-2164(00)47000-0. PMID 12876793.
14. ^ "The Mass at Bolsena by Raphael". *Vatican Museums*. http://mv.vatican.va/3_EN/pages/x-Schede/SDRs/SDRs_02_01_012.html. Retrieved 2006-05-03.
15. ^ AM2 PAT, Inc. Issues Nationwide Recall of Pre-Filled Heparin Lock Flush Solution USP (5 mL in 12 mL Syringes)

External links

- *med/2103* at eMedicine

Retrieved from "http://en.wikipedia.org/wiki/Serratia_marcescens"

Categories: [Enterobacteria](#) | [Microbiology](#) | [Gram negative bacteria](#)

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Northshore Utility District

ADDRESS

6830 NE 185th Street
Kenmore WA 98028-2684
PO Box 82489
Kenmore WA 98028-0489

TELEPHONES

Engineering: (425) 398-4401
Administration: (425) 398-4402
Operations: (425) 398-4403
Information: (425) 398-4400

FAX NUMBERS

Administration: (425) 398-4430
Operations: (425) 398-4432
Purchasing: (425) 398-4434
Website: www.nud.net

What is that black "stuff" in my toilet, shower or pet's dish?

Each year, a few Northshore Utility District customers call to ask about a black slimy substance that occasionally forms in moist areas around their home. Customers most frequently observe it in toilet bowls, on the surfaces in shower stalls and bathtub enclosures, in sinks and pet water dishes.

A black fungus or mold is thought to be the cause of the black stuff. The fungus or mold is common inhabitants of our environment. They can be found in many places, including human and animal feces, dust soil, and surface water. The fungus or mold will grow in any moist location where phosphorous containing materials or fatty substances accumulate. Sources of these substances include soap residue in bathing areas, feces in toilets, soap and food residues in pet dishes. The fungus or mold can also grow in locations such as toilets. The chlorine residual will dissipate from the toilet where water is left standing for an extended period of time. The black fungus or mold is not known to cause any waterborne diseases.

Once the fungus or mold is established, it cannot be eliminated entirely. However, periodic and thorough cleaning of the surfaces followed by disinfection with chlorine bleach can control the fungus or mold. Scrub the surfaces with a brush and household cleaner. Disinfect the surfaces with a strong chlorine bleach solution, let stand for 10-20 minutes and thoroughly rinse away with clean water.

To control the growth in the toilet, thoroughly clean the toilet bowl with a brush and a toilet bowl cleaner. Disinfect the toilet bowl rim with a chlorine solution. You may also add a ¼ cup of chlorine bleach to the toilet tank. Let the solution stand for 10-20 minutes. Flush the toilet a couple of times to rinse the disinfectant out of the toilet tank and the toilet bowl.

If you have any questions regarding this mold, please contact Mick Holte our Water Quality Coordinator at (425) 398-4417.

Accountable Management - Responsible Usage



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Water Use Efficiency

Water Quality

Drinking Water Protection

BackFlow Prevention

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Homeowner Tips

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FAQs

FAQs

What is the source of our water?

Our customers receive water purchased from the city of Hamilton, supplemented with water purchased from the Cincinnati Waterworks. Both cities use and treat water from the Great Miami Buried Valley Aquifer, an underground water basin. The city of Cincinnati also uses and treats water from the Ohio River.

The water is treated to meet stringent water quality standards. It is pumped into storage tanks located throughout Butler County until it is sent into our distribution system to be delivered to your home or business.

Is bottled water safer than tap water?

Not necessarily. Check the bottled water label or contact the bottled water supplier for test results on their product. Under special circumstances, such as during an emergency, bottled water can be a good choice.

The U.S. Environmental Protection Agency regulates public water systems. As shown in our [Consumer Confidence Report \(CCR\)](#), BCWS's water supply meets all federal and state EPA drinking water standards. Bottled water must comply with Food and Drug Administration regulations. Most required monitoring under the FDA regulations is not as frequent as the monitoring done on BCWS's water under EPA regulations.

Depending on the source of the water and the treatment process, some bottled waters may contain more or less amounts of substances than tap water. Some studies have shown that microbial growth may occur in bottled water during storage due to the lack of residual disinfectant. BCWS adds chlorine to its system to control microbial growth.

People with compromised immune systems should check the water quality test results for BCWS and the bottled water supplier, and consult their doctor before deciding which source is best for them.

Why did I get a Water System Maintenance Notice "Green Tag" on my door?

When part of the water system has a specified loss in pressure because of a main break or other problem, the Ohio EPA recommends issuing a precautionary boil advisory to all affected customers. It usually takes us about 24-48 hours to fix main breaks and analyze water samples. We will notify you with a new door tag if the advisory continues longer than 48 hours.

How do I get information about pharmaceuticals in drinking water?

How do I get information about water quality?

Water quality standards for safe drinking water are set by the USEPA and Ohio EPA. The water we serve you meets or exceeds all of these requirements.

Our [Consumer Confidence Report \(CCR\)](#) provides a summary of our water testing for the previous year.

If you have other questions about your water quality, please call our Customer Care Department at (513) 887-3066.

Why is there chlorine in the water?

Tap Water	Bottled Water
Regulated by EPA	Regulated by FDA
Costs pennies a day—about \$.0004 per gallon	Costs \$.80 - \$4.00 per gallon
Contains essential nutrients such as calcium and iron	Some bottlers filter out nutrients- Check the label or contact the supplier.
Residual chlorine prevents bacterial growth	Some do not have a residual disinfectant to prevent bacterial growth as water ages

BCWS adds chlorine to the water to ensure the water is free from harmful bacteria. The department has installed several chlorine pump stations throughout our service area. On average there are about 0.6 parts per million of chlorine in our water.

How do I decrease the amount of chlorine in my water (for fish tanks, plant watering, etc.)?

Fill a clean container and leaving it slightly uncovered, allow it to stand overnight. The chlorine will evaporate. To speed up the process, warm the water. Store the dechlorinated water in the refrigerator.

Is there is lead in my water?

BCWS follows EPA regulations and guidelines for water system lead testing. Our tests indicate that, system-wide, the lead levels in BCWS's water are below the EPA limits.

However, lead from your home's plumbing can leach into your water. Lead pipes are easily scratched with a house key, leaving a shiny streak. A private laboratory can test a sample of your water to test for lead.

For more information, see:

- EPA's website
- BCWS's [Lead and Copper Fact Sheet](#)

Why is there fluoride in the water?

Fluoride prevents tooth decay and is essential for proper development of bones and teeth. On average there is 1 part per million of fluoride in our drinking water.

What is the hardness level of BCWS's water?

The hardness of the water is usually between 145 and 170 parts per million. This equals 8-9 grains per gallon.

What is the pH level of BCWS's water?

The pH of our water usually ranges between 8.8 and 9.4.

If my water has an odor, what should I do?

Often odors that appear to be coming from running water are coming from the drain. If it seems that your water has a "sewer gas" odor, fill a glass with water and take it to another room. If the water has no odor in the other room, then the odor is probably coming from the drain. Cleaning the drain will usually correct the problem.

Chlorine odors occur when the residual chlorine disinfectant gases (ClO₂) combine with gases given off by common household items. New carpets, paint, flowers, pine wreaths, upholstery, scented soaps and other household products produce gases called VOCs. When the chlorine gas and VOCs combine, you may get a smell that does not smell like either chlorine or the source of the VOC. Some of the most common descriptions of the odors are cat urine, fuel oil or chemicals.

To reduce these odors, try putting a fan in your window to air out your home to reduce the level of VOCs or use a carbon filter to reduce the level of ClO₂.

If you are unable to determine the origin of the odor; please call our Customer Care Department at (513) 887-3066.

Why is my water sometimes rusty?

Rusty or yellow water comes from mineral deposits stirred up during hydrant flushing, fire-fighting, line breaks or maintenance. The local fire department lists scheduled hydrant flushing in the newspaper. Try not to use water during these times to avoid pulling deposits into your home's plumbing.

Rusty water will generally clear up within 2-3 hours after the line is repaired or hydrant closed. You will need to run your cold water for several minutes to flush the rusty water from the lines in your house. Try not to run the hot water because that can deposit rust in your hot water tank.

If your laundry gets stained by rusty water, keep it moist. Buy a rust remover and follow the directions on the package.

Why does my water look cloudy?

Cloudy or milky-looking water is usually caused by dissolved air bubbles in the water. Air bubbles are harmless and are caused by pressure changes, temperature changes, water that is too hot (above 140° F) and faucet aerators. To check for air bubbles, fill a glass container with water: if

the cloudiness is caused by air bubbles, it will clear from the bottom of the container toward the top.

Why are there particles floating in my water?

Black, brown or rusty particles can be caused by minerals breaking loose during hydrant flushing, line breaks or line maintenance. Flush your lines by running the cold water for several minutes. If the water does not clear, the particles could be coming from breakthroughs in your hot water heater or filter system. Call a licensed plumber to investigate the problem.

If white or tan particles are floating on the surface of the water, the problem may be coming from your hot water heater. The plastic dip tubes in water heaters often disintegrate with pieces going through the plumbing and being trapped in faucet aerators. Call a licensed plumber to investigate the problem.

Why is there a pink or black ring in my toilet?

Bacteria, fungus and mold spores normally found in the air can cause rings in your toilet bowl. Wet surfaces provide ideal conditions, and the organisms reproduce rapidly, growing together to form a ring. The color of the ring depends on the species of bacteria, mold or fungus.

You can easily remove the rings with a toilet bowl brush and household cleaners. Close the toilet lid to reduce the number of spores and reduce the light needed for growth.

What causes pinhole leaks?

Scientists have not yet discovered why pinhole leaks occur. National experts currently think that pitting in pipes can start from many factors, including:

- substandard pipe manufacturing
- improper installation
- improper electrical grounding
- excess plumbing flux

For more information, [click here](#)

Where can I find more information about drinking water?

EPA publications contain more information about drinking water and your health
<http://www.epa.gov/safewater/dwh/index.html>

BCWS 130 High Street, Hamilton Ohio 45011 • (513) 887-3066

Board of Commissioners: Gregory V. Jolivet, Charles R. Furmon, Donald L. Dixon
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WATER

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Water Quality

1. [My water appears milky, cloudy or white, when poured in a glass it clears from bottom to top, is it safe to drink?](#)
2. [Why does my water appear brown or orange, when it is not used for a while?](#)
3. [Why is our whole neighborhood experiencing brown or orange water coming out of the tap?](#)
4. [Why is there a black ring inside my toilet bowl?](#)
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7. [Why does my water taste and smell like algae, or grass or dirt?](#)
8. [Why did all my fish die, after I put fresh water in my aquarium?](#)
9. [Why does my water smell like bleach?](#)

My water appears milky, cloudy or white, when poured in a glass it clears from bottom to top, is it safe to drink?

Yes, your water is safe to drink. The cloudiness is simply air. Air-bound water is most frequently seen when the water temperature is colder than the ambient air. This effect may be enhanced when an aerator is attached to the faucet's tap. The presence of air-bound water is not harmful and no action needs to be taken to correct this phenomenon.

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Why does my water appear brown or orange, when it is not used for a while?

This is probably due to rust within your internal plumbing at your residence. We suggest you let the water run for a few minutes, until it clears, before use.

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Why is our whole neighborhood experiencing brown or orange water coming out of the tap?

Call the water department at 851-4704 or 851-4747. We will check to see if work is being done in your neighborhood. Often, when a nearby hydrant is being used, or vibration from construction activity is occurring, the flow of water in the main is upset or interrupted. This may cause minerals deposited on the walls of the main, to detach and become suspended in the water.

We suggest that you, and your neighbors, run the water for a time. The greater the water usage in your area, the faster the minerals deposited in your water will clear. If possible, run the water from the cold-water tap closest to your water meter. This may prevent these minerals from traveling to other faucets farther along your water pipes. Once the water clears, it may be necessary to remove, and clean any aerators that are attached to your faucets.

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Why is there a black ring inside my toilet bowl?

This is something that will water be delivered to your household. This is made of iron and iron sulfide. It is a common problem in areas with iron in the water. We suggest a chlorine-based bowl cleaner, and the ventilation of the shower.

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What are the particles that are clogging my aerator, dishwasher hoses, etc.?

Let's do a quick test to see what these particles are. Collect some of these particles and place them in a small cup. Slowly and carefully pour a small amount of household vinegar in this cup. If these particles dissolve in the vinegar, they are probably mineral deposits. It is quite natural

to see small amounts of minerals coming from your water pipes.

But if the particles do not dissolve in vinegar, they may be plastic coming from the "dip tube" in your hot water tank. This broken down "dip tube" material closely resembles mineral deposits, but are much more abundant. When the plastic "dip tube" in a hot water tank begins to disintegrate it may wreak havoc in your plumbing. You will eventually notice a loss of hot water pressure, along with blocked aerators and hoses. The "dip tube" or perhaps the entire hot water tank may need to be replaced.

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I have a skin rash, is the water to blame?

You may have dry skin, or any number of different skin ailments (e.g. eczema), that become irritated when in contact with water. Water does not create these ailments, but the ailments may become worse when it comes in contact with water because instead of hydrating the skin, water may draw moisture away from your skin. Talk to your doctor or pharmacist regarding a remedy.

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Why does my water taste and smell like algae, or grass or dirt?

During the end of summer through fall you may notice a foul taste and odor in your water. This is an after taste do to the presence of algae in Lake Erie. We do remove, filter and disinfect algae in the production of finished water, but often the aftertaste will remain (see Aesthetic Qualities for details). Despite the taste & odor, your water is perfectly safe to consume. We suggest you place a container of water in your refrigerator. The colder the water, the less noticeable the taste.

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Why did all my fish die, after I put fresh water in my aquarium?

Tap water contains residual chlorine to keep it disinfected. This residual chlorine is deadly to fish. Before adding tap water to a fish tank it is necessary to dechlorinate the water. This can be achieved by adding a dechlorination agent, available at any pet supply store. You can also collect a quantity of water in an open container, and allow the chlorine to dissipate naturally.

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Why does my water smell like bleach?

This is a normal smell when using tap water. We add chlorine to water to keep it disinfected. At certain times of the year the chlorine smell is more noticeable. This is especially apparent when the water temperature is warmer than air temperature.

Chlorine, like all gases, will travel from a warm environment to a colder one. This phenomenon is the driving force of lake effect snow as well as chlorine gas in water.

If you find the chlorine smell objectionable, try placing a container of water in your refrigerator overnight. The chlorine will escape and the chlorine odor will be gone. This water should be kept in your refrigerator because it will no longer have chlorine in it to keep it disinfected.

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Contact Information

Customer / Utility:	Lake Josephine	Date:	1/6/2010
Site or Well Identity / Location:	Canary Way	Site Contact:	Johnny Chamberlin
Local Engineer / Firm:	Tricia Williams	Contact Phone:	941-915-7688
Other Pertinent Notes:		Rep Contact:	Tricia Williams
Operator:	Johnny Chamberlin	Fax:	352-787-6333
Target Date for Installation:	2010	Email:	prwilliams@aguaamerica.com
Treatment Goals or Target Parameters:	Hydrogen Sulfur		

System Parameters / Site Specific Info

System Type / Application:	Subdivision	(utility, school, MHP, other)	Site Specific Notes:
Population Served:	1250	(estimated)	
Number of Connections:	536		
Number of Wells to be treated:	2	(# wells to be treated)	
Design Flow (GPM):	222	(Max design flow rate)	
Ave Flow (GPM):	65	(Typical demand)	
Adedge Sizing Basis (max GPM):	0	(Sizing Basis - Adedge)	
Gallons per day:	93,800	(Avg throughput per day)	
Est. Usage (Gals / Year):	34,237,000	(Best estimate)	
Existing Pretreatment or disinfection:	Sodium Hypochlorite		
Equipment available for offloading:		Site Shipping Address:	
Pump Operation / Pressure:	45-65 psi	Canary Way	
Electrical Power Availability:		Sebring, FL	
Air Storage Tank Present / Size:	17,000 gal	33875	
Hydropneumatic Tank Present / Size:	3,000 gal		
Building present/ available space:			
Any additives ie, phosphates, fluoride:	Flouride		
Discharge Options available:	Lake Josephine Store and Haul		

Water Analysis

Codes	Parameters	Units	Codes	Parameters	Units
All	pH	7.67	All	Total Org. Carbon	2.9 mg/L TOC
1, 2	Total As		All	Sulfate	28.0 mg/L as SO4
1, 2	As(III)		4, 5	Nitrates	0.03 mg/L as NO3
All	Sulfides		4, 5	Chlorides	33.0 mg/L Cl
All	Hardness	185.0	4	Boron	
All	Alkalinity	170.0	4	Gross Alpha	11.0 pCi/L
All	Silica		3, 4, 5	TDS:	288 mg/L
All	Phosphate		3	Fluoride	0.15 mg/L F
3, 4, 5	Bicarbonate	0.60	All	Turbidity	1.2 NTU
All	Iron	0.04	All	Suspended Solids	238 mg/L TSS
All	Manganese	0.03	All	Temperature	degrees F

Project Specific Parameters

- Codes:
- 1 = Arsenic project
 - 2 = Arsenic, Iron / Mn / S project
 - 3 = Fluoride project
 - 4 = Uranium, Radium project
 - 5 = Nitrate project
 - 6 = General Filtration
 - 7 = Other



Contact Information

Customer / Utility:	Leisure Lakes	Date:	1/6/2010
Site or Well Identity / Location:	101 Park View Cir. S	Site Contact:	Johnny Chamberlin
Local Engineer / Firm:	Tricia Williams	Contact Phone:	941-915-7688
Other Pertinent Notes:		Rep Contact:	Tricia Williams
Operator:	Johnny Chamberlin	Fax:	352-787-6333
Target Date for Installation:	2010	Email:	prwilliams@aquaaamerica.com
Treatment Goals or Target Parameters:	Hydrogen Sulfur		

System Parameters / Site Specific Info

System Type / Application:	Subdivision (utility, school, MHP, other)	Site Specific Notes:
Population Served:	632 (estimated)	
Number of Connections:	276	
Number of Wells to be treated:	2 (# wells to be treated)	
Design Flow (GPM):	50 (Max design flow rate)	
Ave Flow (GPM):	23 (Typical demand)	
Adedge Sizing Basis (max GPM):	(Sizing Basis - Adedge)	
Gallons per day:	33,645 (Ave throughput per day)	
Est. Usage (Gals / Year):	12,280,425 (Best estimate)	
Existing Pretreatment or disinfection:	Gas Cl2	
Equipment available for offloading:		Site Shipping Address:
Pump Operation / Pressure:	45-65 psi	101 Park View Cir. S
Electrical Power Availability:	10,000	Lake Placid, FL
Atm Storage Tank Present / Size:		33852
Hydropneumatic Tank Present / Size:		
Building present/ available space:		
Any additives ie, phosphates, fluoride:	Flouride	
Discharge Options available:	Wastewater Treatment Facility	

Water Analysis

Codes	Parameters	Units	Codes	Parameters	Units
All	pH	7.40	All	Total Org. Carbon	2.5 mg/L TOC
1, 2	Total As	mg/L As	All	Sulfate	45.0 mg/L as SO4
1, 2	As(III)	mg/L (if known)	4, 5	Nitrates	0.12 mg/L as NO3
All	Sulfides	mg/L	4, 5	Chlorides	37.0 mg/L Cl
All	Hardness	180.0 mg/L @ CaCO3	4	Boron	mg/L B
All	Alkalinity	154.0 mg/L @ CaCO3	4	Gross Alpha	2.0 pCi/L
All	Silica	mg/L SiO2	3, 4, 5	TDS:	298 mg/L
All	Phosphate	mg/L P04	3	Fluoride	0.15 mg/L F
All	Bicarbonate	mg/L HCO3	All	Turbidity	2.0 NTU
All	Iron	0.170 mg/L Fe	All	Suspended Solids	212 mg/L TSS
All	Manganese	0.005 mg/L Mn	All	Temperature	degrees F

Project Specific Parameters

Codes: 1 = Arsenic project
 2 = Arsenic, Iron / Mn / S project
 3 = Fluoride project
 4 = Uranium, Radium project
 5 = Nitrate project
 6 = General Filtration
 7 = Other



Contact Information

Customer / Utility:	Sebring Lakes	Date:	1/6/2010
Site or Well Identity / Location:	5313 Knight Ave	Site Contact:	Johnny Chamberlin
Local Engineer / Firm:	Tricia Williams	Contact Phone:	941-915-7688
Other Pertinent Notes:		Rep Contact:	Tricia Williams
Operator:	Johnny Chamberlin	Fax:	352-787-6333
Target Date for Installation:	2010	Email:	prwilliams@equaamerica.com
Treatment Goals or Target Parameters:	Hydrogen Sulfur		

System Parameters / Site Specific Info

System Type / Application:	Subdivision	(util ty, school, MHP, other)	Site Specific Notes:	
Population Served:	298	(estimated)		
Number of Connections:	85			
Number of Wells to be treated:	1	(# wells to be treated)		
Design Flow (GPM):	194	(Max design flow rate)		
Ave Flow (GPM):	48	(Typical demand)		
Adedge Sizing Basis (max GPM):	0	(Sizing Basis - Adedge)		
Gallons per day:	69,667	(Av: throughput per day)		
Est. Usage (Gals / Year):	25,428,455	(Best estimate)		
Existing Pretreatment or disinfection:	Sodium Hypochlorite			
Equipment available for offloading:			Site Shipping Address:	
Pump Operation / Pressure:	45-65 psi			
Electrical Power Availability:				
Atm Storage Tank Present / Size:	25,000 gal			
Hydropneumatic Tank Present / Size:				
Building present/ available space:				
Any additives ie, phosphates, fluoride:	Flouride			
Discharge Options available:	Sebring Sprayfield (industrial waste permit)			
				101 Park View Cir. S
				Lake Placid, FL
			33852	

Water Analysis

Codes	Parameters	Units	Codes	Parameters	Units
All	pH	7.62	All	Total Org. Carbon	1.2 mg/L TOC
1, 2	Total As		All	Sulfate	1.7 mg/L as SO4
1, 2	As(III)		4, 5	Nitrates	0.18 mg/L as NO3
All	Sulfides		4, 5	Chlorides	41.0 mg/L Cl
All	Hardness	113.0	4	Boron	
All	Alkalinity	108.0	4	Gross Alpha	7.1 pCi/L
All	Silica		3, 4, 5	TDS:	346 mg/L
All	Phosphate		3	Fluoride	0.14 mg/L F
3, 4, 5	Bicarbonate		All	Turbidity	0.24 NTU
All	Iron	0.180	All	Suspended Solids	138 mg/L TSS
All	Manganese	0.0036	All	Temperature	degrees F

Project Specific Parameters

- Codes: 1 = Arsenic project
 2 = Arsenic, Iron / Mn / S project
 3 = Fluoride project
 4 = Uranium, Radium project
 5 = Nitrate project
 6 = General Filtration
 7 = Other

Lake Josephine, Leisure Lakes, Rosalie Oaks and Zephyr Shores were all included in Group 4 by the Public Service Commission. This was the highest rates approved. AUF opposed this rate structure. Tangerine was placed in Group 1.

	Calculated Statewide Uniform Rate		Lake Josephine Leisure Lakes Rosalie Oaks Zephyr Shores	Tangerine		Aqua Requested
	No W/W allocation Max gall factor = 2	With W/W Alloc Max gall factor = 2	Approved Group 4	Approved Group 1		
BFC	\$ 14.82	\$ 15.45	\$ 15.52	\$ 13.92	\$ 21.92	
1st Tier	\$ 4.11	\$ 4.72	\$ 6.59	\$ 1.97	\$ 3.80	
2nd Tier	\$ 5.13	\$ 5.91	\$ 8.24	\$ 2.47	\$ 4.76	
3rd Tier	\$ 8.21	\$ 9.45	\$ 19.78	\$ 5.92	\$ 4.76	

Bills at:										
3,000 gal	\$	27.14	\$	29.62	\$	35.29	\$	19.83	\$	33.32
5,000 gal	\$	40.71	\$	44.95	\$	56.72	\$	28.24	\$	40.72
10,000 gal	\$	61.01	\$	68.60	\$	89.67	\$	36.12	\$	64.72
Average Usage (7,000 gal)	\$	45.61	\$	50.88	\$	64.95	\$	28.71	\$	50.44

Rate Structure

In an effort to address affordability in its rate case, Aqua proposed a state-wide uniform rate for both water and wastewater. Also, Aqua proposed a two-tier inclining block rate structure for water, with the second block having a factor of 1.25 times the first block. Under its proposed rate structure, customers throughout the state of Florida would have paid approximately \$40.92 for water and \$88.91 for wastewater for 5,000 gallons. However, the FPSC staff recommended a different rate structure using a grouping of systems. The Commission approved this recommended rate structure which included the most aggressive three-tier inclining block gallonage charges ever approved. The third block begins at 10,000 and has a factor of 3 times the first block. This has caused a great amount of concern on the part of customers throughout the state of Florida. Further, the FPSC created the gallonage charges with 65% of the approved revenue requirement included. Thus, only 35% of the revenue requirement is recovered through the BFC. Finally, the FPSC also took some of the revenue requirement from the wastewater systems and again spread this over the water rates. These three factors taken together, has created very high gallonage charges for Aqua's customers.

EXHIBIT H

Final Quarterly Environmental Compliance Update

(Report on Warning Letters, Consent Orders and NOV's for the Period October, 2010 through December 2010)

Chuluota WTP – The water in the Chuluota region originates in the Floridan aquifer. The water is characteristically difficult to treat for public drinking water purposes due to naturally occurring total organic carbon (TOC) and hydrogen sulfides, which are indigenous in the local water table. As a consequence, residents in the Chuluota area have struggled with water quality issues for more than 30 years.

AUF bought the Chuluota system in 2004 as part of its purchase of Florida Water. Since that time, AUF has collaborated with the FDEP and worked closely with the agency to resolve issues stemming from TOCs and hydrogen sulfides.

In 2009, AUF hired Dr. James Taylor who recommended AUF pilot two treatment systems to address the removal of hydrogen sulfides and TOC. Based on the results of this pilot study, AUF ultimately selected an ion exchange system manufactured by Tonka Water Systems. This system was selected based on its cost effectiveness as well as the effectiveness of the treatment process. The pilot testing showed the process to be very effective in removing both the natural precursors that form TTHMs and the sulfides that contribute to taste and odor in the water. The ion exchange system will not only result in lower TTHMs, it also will reduce the hydrogen sulfide in the well water and improve the taste and odor of the drinking water.

To expedite the construction and meet the consent order timelines, AUF divided the work into two phases. As part of Phase 1, AUF modified the pipe configuration, installed new pumps, and placed into service a 50,000 gallon ground storage tank. The project was designed to add chlorine into the smaller storage tank, reducing the time it has to react with the organics in the water before ammonia is added thereby reducing the formation of TTHMs in the distribution system. Phase 1 was placed in service at the end of February 2010.

Phase 2 consisted of the installation of the ion exchange treatment units and the raw water pipeline from plant 1 to plant 2. Construction began in March 2010. In accordance with the consent order, construction was timely completed with FDEP clearance received June 24, 2010. Thereafter, the new treatment facilities were placed into service.

Once the treatment was optimized, flushing was reduced and the residual disinfection in the distribution system was changed to free chlorine. Sampling shows that the Chuluota water system was in compliance with the TTHM standards for all of 2010.

FDEP closed-out the consent order on December 23, 2010. The closure letter from FDEP is appended as Attachment "1". A follow up inspection by FDEP in January 2011 found no deficiencies. A copy of the inspection report is appended as Attachment "2".

The total cost of the project, including the ion exchange units, the raw water main from plant 1, converting plant 1 to a storage/booster station and all of the modification needed at plant 2 was \$2.3 million.

Tomoka View Estates WTP – AUF signed a consent order for this system on December 18, 2009. As indicated in previous reports, AUF completed construction of the Chloramination system which was placed in service in December 2009. The results from the quarterly samples taken from December 2009 to June 2010 and the RAA for the 2nd quarter of 2010 were all well below the TTHM standards. AUF has received notification from the Volusia County Health Department that the system has been put on reduced monitoring for TTHMs. The consent order is closed.

Village Water WWTF – Village Water effluent ponds were constructed such that the bottom of the ponds were below ground water table and appear to receive extra ground water associated with the relatively new Polk County Parkway. Pursuant to the consent order, AUF is obligated to identify alternative disposal options for the effluent by May 2011. Before identifying a viable solution, AUF explored a number of potential options including connecting with Polk County and the City of Lakeland for effluent disposal. Although AUF has had multiple meetings with the City of Lakeland and Polk County officials, it could not overcome the political, engineering, high cost challenges of delivering the treated effluent to either entity.

Following those efforts, AUF has now identified a viable solution for effluent reuse and is negotiating an agreement with a nearby property owner. AUF expects the site will accommodate all of the treated effluent and has drafted a proposed 20 year agreement for the use of the land. AUF has also engaged Andreyev Engineering Inc. to conduct and analyze soil borings and BESH Engineering Inc to design and permit the spray field. AUF anticipates having the spray field operational by November 2011. Meanwhile, AUF has installed monitoring wells around the percolation ponds and is monitoring in accordance with consent Order. To date, that monitoring has revealed no adverse impacts.

Jasmine Lakes WWTF – Three of the four effluent disposal ponds at Jasmine Lakes were constructed prior to the regulations requiring separation from the prevailing ground water table and periodic drying and scarifying. Such ponds are routinely “grandfathered”

under the old regulations. In December of 2002 FDEP began citing the previous owners for the ponds not drying. The previous owners and AUF explored several strategies to dry the ponds, none of which were successful. AUF agreed to dredge the ponds in 2009 to remove accumulated sediment as an alternative to drying and scarifying. A careful review of Rule 62-610.100(9), F.A.C. supported Aqua's position that the ponds were "grandfathered" under the prior rules and thus were not required to be dried. AUF and FDEP have completed extensive hydrogeologic studies of ponds that demonstrate that they are performing as designed. After prolonged negotiations, FDEP and AUF entered into a settlement agreement whereby FDEP has issued a short form consent order. This case is closed. A copy of the FDEP consent order closure letter is appended as Attachment "3".

Palm Terrace WWTF – Similar to the Jasmine Lakes ponds discussed above, the Palm Terrace ponds were constructed around the same time with the same disposal strategies. FDEP initially issued a warning letter asserting that the percolation ponds in this system needed to comply with new FDEP rules. However, a consent order was never issued because FDEP now understands that these ponds were "grandfathered" under the prior rules similar to the Jasmine Lakes matter. As a result, this issue has been resolved and is considered closed.

Subsequently, FDEP has issued a new 5 year permit renewal for operating the WWTP, which included language indicating that this system is "grandfathered", thus remedying the issue identified in the previous warning letter. The newly issued permit includes language that does not require the drying of the ponds. As part of the permit conditions, AUF installed a cross-over pipe between ponds 1 & 2. The two percolation ponds and the spray field are permitted and designed to take the permitted flows from this facility.

Sunny Hills WTP – On December 2, 2010, AUF and FDEP executed a consent order for this system which addresses ground storage capacity, system configuration and other issues. See Attachment "4". When AUF became aware of the issues that prompted the consent order, it retained the services of Hatch Mott McDonald Consulting Engineers ("Hatch Mott") to inspect the tanks for compliance and evaluate the current ground storage capacity. Hatch Mott completed its evaluation, finalized design, and submitted to the FDEP a permit application to interconnect plant 1 and plant 4 with the storage tank. In the event either well is out of service the storage tank will remain in service thus continuing to improve reliability to the customer. The consent order provides that the project is to be completed within 120 days of issuance of permits by FDEP. AUF is complying with all terms and timelines in the consent order. AUF fully expects to complete the storage tank project this year.

While not part of the consent order, as part of AUF's Original Aesthetics Program, it directed Hatch Mott to conduct a pilot sequestering study to determine whether the addition of a sequestering agent to the treatment process will reduce aesthetic concerns

related to iron in the water. The study proved that levels of iron in the water can be sequestered so Hatch Mott prepared a design and permit package for FDEP's approval. AUF received project clearance from FDEP on June 21, 2010. This sequestering treatment is working very well.

Peace River Heights WTP – AUF met with FDEP staff on November 9, 2009 to discuss the warning letter regarding an alleged gross alpha exceedance. Since that meeting, AUF sent split samples to several independent laboratories and had Wisconsin State Laboratory for Hygiene conduct a very thorough analysis of samples from this system. AUF's testing conducted by independent laboratories demonstrated that the original exceedance of the Gross Alpha MCL was an artifact of the analytical method. The system has been in compliance with all radiological limits for all of 2010. However, levels of naturally occurring Combined Radium are close to the MCL. FDEP issued a consent order requiring special bi-monthly sampling for Gross Alpha and Combined Radium for two years. The consent order set a trigger for implementation of treatment if two of twelve individual test results exceeded the trigger. AUF signed the consent order on June 24, 2010.

AUF has been performing the required bi-monthly monitoring while also conducting a pilot study with ion exchange for radium treatment. The pilot testing has been completed and demonstrated that the treatment would work if the conditions of the consent order are triggered requiring installation of treatment. AUF is proceeding with preliminary design for treatment so that plans can be filed expeditiously if the trigger is exceeded. Part of the engineering evaluation has been the installation of a flow chart recorder to gather information on system demand to optimize the sizing of treatment, storage and pumps if treatment is needed. The bi-monthly sampling began July of 2010 with the results currently not triggering treatment. The bi-monthly sampling is required to continue for two years.

South Seas WWTF – This facility was constructed with four bolted glass-lined steel tanks - one for flow equalization and three for reject water tanks. Because of the very aggressive environment (from the wastewater and salt spray from the Gulf), these tanks had deteriorated in the years since the plant was built. Hurricane Charlie in 2004 also cause substantial damage at the plant and the golf course used for disposal.

AUF made repairs to the tanks on several occasions, and installed disk filters to replace old sand filters and improve the quality of the effluent for reuse.

AUF received a warning letter on February 25, 2010 regarding a leak at the facility's reject storage tanks, which AUF had previously reported to the FDEP. Prior to receiving the warning letter, AUF had already contacted contractors to evaluate the flow equalization tank and the 3 reject storage tanks at the facility. Subsequently, the flow equalization tank failed resulting in a spill of raw wastewater. Aqua had temporary

repairs made to the tank and initiated plans to replace all four tanks. FDEP issued a proposed draft Consent Order to replace the tanks and make other upgrades. That draft consent order has not been finalized, but Aqua has replaced all four storage tanks at a cost of over \$400,000.

Jungle Den WTF - This is a consecutive water system that purchases bulk water from St. John's River Utility("SJRU"). SJRU was required to install a new chloramination treatment system and AUF was required to notify customers that it's bulk supplier was moving to a new treatment system. AUF provided that notice to customers after SJRU's new treatment system became operational. In November of 2010 FDEP emailed AUF that it had failed to issued notice before SJRU placed its new system into service. AUF is working with FDEP and expects the agency to issue a short form consent order in the first part of 2011.

Other: Except as set forth herein, as of December 31, 2010 AUF has no NOV's from the FDEP or FDOH, and no new consent orders from those agencies.

Attachment 1



Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Mimi A. Drew
Secretary

VIA E-MAIL

jmlihvarcik@aquaamerica.com

Mr. Jack Lihvarcik
Aqua Utilities Florida, Inc.
P.O. Box 2480
Lady Lake, FL 32158-2480

OCD-PW-CE-10-0972

Seminole County - PW
Chuluota Water System
PWS ID # 3590186
Consent Order – OGC Case No. 06-2432
Case Closure

Dear Mr. Lihvarcik:

The above-referenced enforcement case is closed by this office effective December 22, 2010. Department records indicate that the Consent Order requirements have been met. Our records show that the last two quarters of total trihalomethanes (TTHMs) and haloacetic acids (five) (HAA5s), and odor results were below the maximum contaminant levels (MCLs).

Public notice is no longer required, because the running annual average for TTHMs and HAA5s is currently below the MCLs. Please continue to conduct routine (annual) monitoring for TTHMs and HAA5s. The next annual compliance monitoring for TTHMS and HAA5s shall be conducted during **July through September 2011**. Odor sampling shall be conducted during 2012.

Thank you for your cooperation. You may email Nathan Hess at Nathan.Hess@dep.state.fl.us, or contact him by phone at (407) 893-3988, should you have any further questions.

Sincerely,

Christianne C. Ferraro, P.E.
Program Administrator
Water Resource Management

December 23, 2010

Date

CCF/kmd/njh

cc: Tricia Williams, Aqua Utilities Florida Inc. [prwilliams@aquaamerica.com]
Jay Williams, Public Service Commission [jewillia@psc.state.fl.us]
Karl Henry, Seminole County Health Department [karl_henry@doh.state.fl.us]
Lea Crandall, DEP Agency Clerk, DEP Office of General Counsel
Nathan Hess, DEP Drinking Water Compliance and Enforcement

Attachment 2



Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard, Jr.
Secretary

VIA E-MAIL

jmlihvarcik@aguaamerica.com

January 28, 2011

Mr. Jack Lihvarcik
Aqua Utilities Florida, Inc.
P.O. Box 2480
Lady Lake, FL 32158-2480

OCD-PW-SS-11-0078

Seminole County – PW
Chuluota Water System
PWS ID Number 3590186

Dear Mr. Lihvarcik:

This confirms a visit to the subject public water system on January 25, 2011, by Nathan Hess to conduct a sanitary survey inspection. A copy of the sanitary survey inspection report is attached for your reference and records.

There were no deficiencies at your water plant at the time of our visit. The overall operation of the water plant was good, which is a credit to both you and your operator. The Department appreciates the excellent work being done on your water system and values your continued spirit of cooperation in complying with Department rules.

If you have any questions, please contact Nathan Hess by e-mail at Nathan.Hess@dep.state.fl.us or by phone at (407) 894-7555, extension 2276.

Sincerely,

Kim Dodson, Program Manager
Drinking Water Compliance and Enforcement

KMD/njh
Attachment

cc: Tricia Williams, Aqua Utilities Florida Inc. [prwilliams@aguaamerica.com]
Jay Williams, Public Service Commission [jewillia@psc.state.fl.us]
Karl Henry, Seminole County Health Department [karl_henry@doh.state.fl.us]
Nathan Hess, DEP Drinking Water Compliance and Enforcement

State of Florida
 Department of Environmental Protection
 Central District
SANITARY SURVEY REPORT

Plant Name CHULUOTA WATER SYSTEM - WTP 2 County Seminole PWS ID # 3590186-2
 Plant Location Brumley Road and Avenue H, Chuluota, FL 32766 Phone 352-266-0608
 Owner Name Aqua Utilities Florida Inc. Phone 352-266-0608
 Owner Address P.O. Box 2480, Lady Lake, FL 32158-2480
 Contact Person Tricia Williams Title Environmental Compliance Phone 352-266-0608
 This Survey Date 1/25/11 Last Survey Date 2/26/08 Last Compliance Inspection Date 3/19/10

PWS TYPE: Community

PLANT CATEGORY & CLASS: 4C

MAX-DAY DESIGN CAPACITY: 1,080,000 gpd

PWS STATUS: Approved

TREATMENT PROCESSES IN USE

Iron removal/sequestration, aeration, anion exchange, hypochlorination.

SERVICE AREA CHARACTERISTICS

Subdivision
 Food Service: Yes No N/A
 Number of Service Connections 1,410
 Population Served 3,863 Basis: Operator

OPERATION & MAINTENANCE LOG: Yes

Location Water Treatment Plant
 Comments _____

CERTIFIED OPERATOR: Yes

Operator(s) & Certification Class-Number:
C-6411 William Trendel

Hrs/day: Required 1 Actual 1
 Days/wk: Required 5+2 Actual 5+2
 Non-consecutive Days? Yes No N/A
 Comments _____

MONTHLY OPERATION REPORTS (MORs)

MORs submitted regularly? Yes No N/A
 Data missing from MORs? No Yes N/A
 Average Day (from MORs) 422,201 gpd
 Maximum Day (from MORs) 1,028,000 gpd 08/2010
 Comments _____

Flow Measuring Device Flow Meter
 Meter Size & Type 6" McCrometer (each well)
 Date Last Calibrated 1/12/10

RAW WATER SOURCE

GROUND; Number of Wells 4
 PURCHASED from PWS ID # _____
 Emergency Water Source _____
 Emergency Water Capacity _____

STANDBY POWER SOURCE: Yes

Source Caterpillar Diesel
 Capacity of Standby (kW) 200
 Switchover: Automatic Manual
 Hrs Operated Under Load 4 hr/wk.

What equipment does it operate?

Well Pumps All
 High Service Pumps All
 Treatment Equipment All

Satisfy avg. daily demand? Yes No Unknown
 Audio-visual alarm? Yes No
 Comments _____

PLANS AND MAPS

Coliform Sampling Plan Yes No N/A
 D/DBP Monitoring Plan Yes No N/A
 Lead and Copper Plan Yes No N/A
 Distribution System Map Yes No N/A
 Emergency Response Plan Yes No N/A
 Comments _____

PREVENTIVE MAINTENANCE/O&M

Operation & Maintenance Manual Yes No
 Preventive Maintenance Program Yes No
 Flushing Program Yes No N/A
 Records Yes No N/A
 Isolation Valve Exercise Yes No N/A
 Records Yes No N/A
 Comments _____

CROSS CONNECTION CONTROL

BFPAs Unknown # Tested 10
 WWTP RPZ Yes Date Tested 10/8/10
 Written Plan Yes Date 8/2007
 Comments N/A

GROUND WATER SOURCE

Well Number (Florida Unique Well ID #)	3 (AAH7321)	5	1 (AAH7322)	2 (AAH7323)
Year Drilled	1987	2002	1961	1966
Depth Drilled	218'	250'	240'	235'
Drilling Method	Cable tool	Rotary	Unknown	Unknown
Type of Grout	Unknown	Neat cement	Unknown	Unknown
Static Water Level	30'	31'	Unknown	Unknown
Pumping Water Level	55'	52'	Unknown	Unknown
Design Well Yield	500 gpm	500 gpm	Unknown	Unknown
Test Yield	800 gpm	550 gpm	Unknown	Unknown
Actual Yield (if different than rated capacity)	Unknown	Unknown	Unknown	Unknown
Strainer	Open hole	Open hole	Unknown	Unknown
Length (outside casing)	122'	40'	122'	128'
Diameter (outside casing)	10"	18"	10"	8"
Material (outside casing)	Black steel	Black steel	Black steel	Black steel
Well Contamination History	None	None	None	None
Is inundation of well possible?	No	No	No	No
6' X 6' X 4" Concrete Pad	Yes	Yes	Yes	Yes
SET BACKS	Septic Tank	>200'	N/A	N/A
	Reuse Water	N/A	N/A	N/A
	WW Plumbing	>100'	>100'	>100'
	Other Sanitary Hazard	None observed	None observed	None observed
PUMP	Type	Vertical turbine	Vertical turbine	Vertical turbine
	Manufacturer Name	Flosense	Goulds	Goulds
	Model Number	Unknown	Unknown	Unknown
	Rated Capacity (gpm)	500	250	500
	Motor Horsepower	20	60	Unknown
Well casing 12" above grade?	Yes	Yes	Yes	Yes
Well Casing Sanitary Seal	OK	OK	OK	OK
Raw Water Sampling Tap	Yes	Yes	Yes	Yes
Above Ground Check Valve	Yes	Yes	Yes	Yes
Security	Yes	Yes	Yes	Yes
Well Vent Protection	Yes	Yes	Yes	Yes

COMMENTS Wells 1 and 2 are at plant #1 - repump station and feed raw water directly to water treatment plant #2.

CHLORINATION (Disinfection)

Type: Gas Hypo
 Make Iwaki (each well) Capacity 5.5 gph
 Chlorine Feed Rate 100%
 Chlorine Residuals: Plant 2.10 Remote 1.82
 Remote tap location 803 Mazurka
 DPD Test Kit: On-site With operator
 Injection Points Transfer from G1 to G2

AERATION (Gases, Fe, & Mn Removal)

Type Cascade - G1 Capacity 650 gpm
 Aerator Condition Good
 Visible Algae Growth None
 Protective Screen Condition Intact
 Frequency of Cleaning Quarterly
 Date Last Inspected/Cleaned 4th Quarter 2010

AERATION (Gases, Fe, & Mn Removal)

Type Cascade - G2 Capacity 1,300 gpm
 Aerator Condition Good
 Visible Algae Growth None
 Protective Screen Condition Intact
 Frequency of Cleaning Quarterly
 Date Last Inspected/Cleaned 4th Quarter 2010

IRON REMOVAL/SEQUESTRATION

Make Stenner (2) Capacity 10 gpd
 Injection Points: Well discharge piping.
 Comments: Orthopolyphosphate

ANION EXCHANGE PROCESS:

Make Tonka Model _____
 Capacity 1.08 MGD
 Grade of Salt for Regeneration _____
 Backwash Effluent Destination: Wastewater plant
 Comments: Process installed as corrective action for disinfection byproduct formation. Permit 59-0080853-029, cleared 6/24/10.

WATER PLANT PUMPS

Pump Number	Transfer (2)	Backwash (2)
Type	Centrifugal	Centrifugal
Make	Peerless	Peerless
Model	F2-1050	F2-10258
Capacity (gpm)	750	285
Motor HP	30	15
Date Installed	2010	2010

STORAGE FACILITIES

(G) Ground (C) Clearwell (E) Elevated
 (B) Bladder (H) Hydropneumatic / flow-through

Tank Type/Number	G1	G2	H1
Capacity (gal)	50,000	300,000	10,000
Material	Concrete	Concrete	Steel
Gravity Drain	Yes	Yes	Yes
By-Pass Piping	Yes	Yes	Yes
Protected Openings	Yes	Yes	Yes
Sight Glass or Level Indicator	Yes	Yes	Yes
PRV/ARV	N/A	N/A	PRV
Pressure Gauge	N/A	N/A	Yes
On/Off Pressure	N/A	N/A	60/80
Access Secured	Yes	Yes	Yes
Access Manhole	Yes	Yes	Yes
Tank Sample Tap Location	Discharge piping	Discharge piping	On tank
Date of Inspection	9/17/08	11/4/10	*
Date of Cleaning	9/17/08	11/4/10	*

Comments: *Tank installed April 2009

HIGH SERVICE PUMPS

Pump Number	1	2	3
Type	Centrifugal	Centrifugal	Centrifugal
Make	Worthington	Worthington	Worthington
Model	3LR9	3LR9	3LR9
Capacity (gpm)	500	500	500
Motor HP	30	30	30
Date Installed	1996	1996	2003

PLANT 1 REPUMP STATION

CHLORINATION (Disinfection)

Type: Gas Hypo
 Make Iwaki (2) Capacity 1.3 gpd
 Chlorine Feed Rate 50%
 Avg. Amount of Cl₂ gas used N/A
 Chlorine Residuals: Plant 1.30 Remote 1.82
 Remote tap location 803 Mazurka
 DPD Test Kit: On-site With operator
 None Not Used Daily
 Injection Points Into G1
 Booster Pump Info _____
 Comments _____

IRON REMOVAL/SEQUESTRATION

Make Stenner (2) Capacity 17 gpd
 Injection Points Well discharge piping.

 Comments _____

STORAGE FACILITIES

(G) Ground (C) Clearwell (E) Elevated
 (B) Bladder (H) Hydropneumatic / flow-through

Tank Type/Number	G1	H1
Capacity (gal)	100,000	10,000
Material	Steel	Steel
Gravity Drain	Yes	Yes
By-Pass Piping	Yes	Yes
Protected Openings	Yes	Yes
Sight Glass or Level Indicator	Yes	Yes
PRV/ARV	N/A	PRV
Pressure Gauge	N/A	Yes
On/Off Pressure	N/A	60/80
Access Secured	Yes	Yes
Access Manhole	Yes	Yes
Tank Sample Tap Location	Discharge piping	On tank
Date of Inspection	10/2009	*
Date of Cleaning	10/2009	*

Comments: *Tank installed April 2009

HIGH SERVICE PUMPS

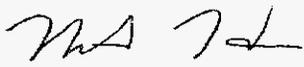
Pump Number	1	2
Type	Centrifugal	Centrifugal
Make	Goulds	Goulds
Model	Unknown	Unknown
Capacity (gpm)	450	500
Motor HP	25	25
Date Installed	Unknown	Unknown

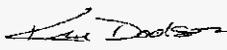
Comments _____

COMMENTS/REMINDERS:

1. Water treatment plant one is no longer viewed by the Department as an active water treatment plant:
 - Submission of monthly operation reports (MORs) for water treatment plant one and the MOR summation page are no longer required.
 - All point of entry (POE) sampling is to be conducted at the POE for water treatment plant two.
 - Only one maximum residence time (MRT) location is required to be sampled for Stage 1 Disinfectant/Disinfection Byproduct Rule sampling.

2. Water Treatment plant two has been approved for four log virus removal/inactivation. Beginning with the February 2011 MOR, CT calculations will be required. Failure to meet the required CT for more than four hours will result in a treatment technique violation.

Inspector  Title Env. Supervisor II Date 1/26/11

Approved by  Title Environmental Manager Date 1/28/11

Attachment 3



Florida Department of Environmental Protection

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

September 10, 2010

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Mimi A. Drew
Interim Secretary

Certified Mail No.: 7010 1670 000 0770 0756
RETURN RECEIPT REQUESTED

Mr. Jack Lihvarcik, President
Aqua Utilities Florida, Inc.
P. O. Box 490310
Leesburg, FL 34749-0310
jmlihvarcik@aquaamerica.com

Re: Settlement of Aqua Utilities Florida, Inc.
OGC File No. 07-1021
Jasmine Lake S/D WWTF
Facility ID No. FLA012768
Pasco County

Dear Mr. Lihvarcik:

The Department is in receipt of the \$23,000.00 in Department costs and penalties in this matter. Enclosed please find a copy of the executed Consent Order OGC File No. 07-1021 regarding the above-referenced facility

The Department shall, therefore, close the case on this matter. Your efforts to return to compliance are greatly appreciated. Should you have any questions, please contact Frank L. Fulghum III at (813) 632-7600, extension 411, or via e-mail: frank.fulghum@dep.state.fl.us.

Sincerely,

Frank L. Fulghum III
Environmental Specialist
Domestic Wastewater Program

cc: Patricia Williams, Aqua Utilities Fla, Inc., prwilliams@aquaamerica.com
Patrick Farris, Aqua Utilities Fla, Inc., pafarris@aquaamerica.com
Christine Francescani, FDEP, christine.francescani@dep.state.fl.us
Michele Duggan, FDEP, michele.duggan@dep.state.fl.us

"More Protection, Less Process"



Florida Department of Environmental Protection

Southwest District
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

August 20, 2010

RECEIVED

AUG 30 2010

Aqua Utilities
Florida Inc.

Mr. Jack Lihvarcik, President
Aqua Utilities Florida, Inc.
P. O. Box 490310
Leesburg, FL 34749-0310

Re: Proposed Settlement of Aqua Utilities Florida, Inc.
OGC File No. 07-1021
Jasmine Lake S/D WWTF
Facility ID No. FLA012768
Pasco County

Dear Mr. Lihvarcik:

The purpose of this letter is to complete the resolution of the matter previously identified by the Department in the Warning Letter No. WL07-0002DW51SWD, dated March 8, 2007, a copy of which is attached. The Department finds that Aqua Utilities Florida, Inc. was in violation of Florida Rules and Statutes. In order to resolve the matters identified, Aqua Utilities Florida, Inc. is assessed civil penalties in the amount of \$21,500.00 for violation of Rules 62-520.400 and 62-601.500(2), Florida Administrative Code, in accordance with Section 403.141(1), Florida Statutes, along with \$1,500.00 to reimburse the Department costs, for a total of \$23,000.00.

The Department is not assessing civil penalties for violations of Rule 62-600.410(6) or Rule 62-610.523(4), Florida Administrative Code. Pursuant to Rule 62-610.100(9)(b), Florida Administrative Code, the Facility is an "existing installation" since the facility had on file with the Department an approved permit on or before April 5, 1989. Existing installations are not required to comply with Rules 62-610.523(4), (6) and (7), Florida Administrative Code. Furthermore, pursuant to Rule 62-522.200(1), Florida Administrative Code, the Facility is an "existing installation" since the Facility had on file with the Department a complete application for a permit on or before January 1, 1983. Pursuant to Rule 62-522.300(8), Florida Administrative Code, existing installations discharging to Class G-II ground water are exempt from compliance with secondary drinking water standards outside of a zone of discharge obtained by Department permit.

The Department acknowledges that the payment of these civil penalties by Aqua Utilities Florida, Inc. does not constitute an admission of liability. This payment must be made payable to the Department of Environmental Protection by cashier's check or money order and shall include the OGC File Number assigned above and the notation "Ecosystem Management and Restoration Trust Fund". Payment shall be sent to the Department of Environmental Protection, 13051 North Telecom Parkway, Temple Terrace, Florida, 33637-0926, within 30 days of your signing this letter.

"More Protection, Less Process"
www.dep.state.fl.us

Your signing this letter constitutes Aqua Utilities Florida, Inc.'s acceptance of the Department's offer to resolve this matter on these terms. If you elect to sign this letter, please return it to the Department at the address indicated. The Department will then countersign the letter and file it with the Clerk of the Department. When the signed letter is filed with the Clerk, the letter shall constitute final agency action of the Department, which shall be enforceable pursuant to Sections 120.69 and 403.121, Florida Statutes.

If you do not sign and return this letter to the Department at the District address by September 15, 2010, the Department will assume that Aqua Utilities Florida, Inc. is not interested in settling this matter on the above-described terms, and will proceed accordingly. None of Aqua Utilities Florida, Inc.'s rights or substantial interests are determined by this letter unless you sign it and it is filed with the Department Clerk.

Sincerely,



Deborah A. Getzoff
District Director
Southwest District

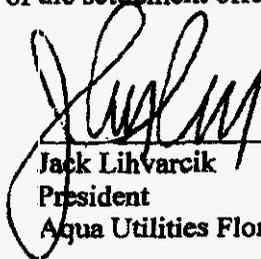
DAG/mdd

Attachment

FOR THE RESPONDENT:

I, Jack Lihvarcik, hereby accept the terms of the settlement offer identified above.

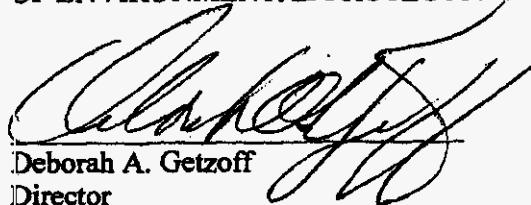
September 1, 2010
Date



Jack Lihvarcik
President
Aqua Utilities Florida, Inc.

DONE AND ENTERED this 7th day of September, 2010.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Deborah A. Getzoff
Director
Southwest District

Filed, on this date, pursuant to Section 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

9/10/2010
Date



Clerk

NOTICE OF RIGHTS

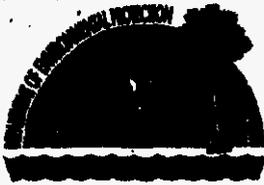
Persons who are not parties to this Consent Order but whose substantial interests are affected by this Consent Order have a right, pursuant to Sections 120.569 and 120.57, Florida Statutes, to petition for an administrative hearing on it. The Petition must contain the information set forth below and must be filed (received) at the Department's Office of General Counsel, 3900 Commonwealth Boulevard, MS-35, Tallahassee, Florida 32399-3000, within 21 days of receipt of this notice. A copy of the Petition must also be mailed at the time of filing to the District Office named above at the address indicated. Failure to file a petition within the 21 days constitutes a waiver of any right such person has to an administrative hearing pursuant to Sections 120.569 and 120.57, Florida Statutes.

The petition shall contain the following information:

(a) The Department's Consent Order identification number and the county in which the subject matter or activity is located; (b) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; (c) An explanation of how the petitioner's substantial interests will be affected by the Consent Order; (d) A statement of when and how the petitioner received notice of the Consent Order; (e) A statement of all material facts disputed by petitioner, if any; (f) A statement of the specific facts the petitioner contends warrant reversal or modification of the Consent Order; (g) A statement of which rules or statutes the petitioner contends require reversal or modification of the Consent Order; and (h) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Consent Order.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the subject Consent Order have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 21 days of receipt of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Sections 120.569 and 120.57, Florida Statutes, and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-106.205, Florida Administrative Code.

Mediation under Section 120.573, Florida Statutes, is not available in this proceeding.



Florida Department of Environmental Protection

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

March 8, 2007

Mr. John Lihvarcik, President/COO
Aqua Utilities Florida, Inc.
P. O. Box 490310
Leesburg, FL 34749-0310

Re: Warning Letter No. WL07-0002DW51SWD
Jasmine Lakes WWTF
Facility ID No. FLA012768
Pasco County

Dear Mr. Lihvarcik:

The purpose of this letter is to advise you of possible violations of law for which you may be responsible and to seek your cooperation in resolving the matter. A field inspection conducted on February 22, 2007 and a subsequent file review of the Jasmine Lakes Wastewater Treatment Facility ("Facility") indicates that a violation of Florida Statutes and Rules may exist at the above-referenced facility. Department of Environmental Protection personnel observed the following:

1. The Part IV rapid-rate percolation pond system was not being operated properly. The four percolation ponds were hydraulically loaded to the point that prevents the ponds from functioning as intended. Rule 62-600.410(6), Florida Administrative Code (F.A.C.), provides that all facilities and equipment necessary for the treatment, reuse and disposal of domestic wastewater and domestic wastewater residuals shall be maintained, at a minimum, so as to function as intended.
2. The operator's log indicated that two of the four percolation ponds had not received any effluent over the past 12 months, yet both ponds remained wet. Rule 62-610.523 (4), F.A.C., provides that hydraulic loading periods of one to seven days, with resting periods of five to 14 days to dry the ponds are required.
3. Ground water monitoring data submitted from the first quarter 2005 through the fourth quarter 2006 indicated that compliance well limit values were exceeded for sodium, in MWC-02, from the third quarter 2005 through the fourth quarter 2006 and for chloride in the fourth quarter 2005 and third quarter 2006. In addition, MWC-02 exceeded the ammonia value in the fourth quarter 2006. Rule 62-520.400, F.A.C., provides that ground water minimum criteria shall be met within the zone of discharge.
4. Ground water monitoring data submitted from the first quarter 2005 through the fourth quarter 2006 indicated that compliance well limit values were exceeded for sodium, in MWC-03, in the second and fourth quarters 2005, and the first, second and third quarters 2006 and for chloride in the second and fourth quarters 2005 and third quarter 2006. In addition, MWC-03 exceeded the

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www.dep.state.fl.us

Southwest District

DAG/jn

cc: Jerry Nichols, FDEP

Attachment 4



Florida Department of Environmental Protection

Northwest District
160 Governmental Center
Pensacola, Florida 32502-5794

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Mimi A. Drew
Secretary

December 2, 2010

BY ELECTRONIC MAIL
PRWilliams@aquaamerica.com

Ms. Patricia Williams,
Utility Engineer
Aqua Utilities Florida, Inc.
P.O. Box 2480
Lady Lake, Florida 32158-2480

Dear Ms. Williams:

Enclosed, please find a copy of the executed Consent Order (OGC File No. 10-2288-67-PW) aimed at addressing a storage capacity shortage and other violations noted for the Sunny Hills Utilities public water system (PWS ID No. 1670647) in Washington County.

Please note the timelines for corrective actions contained within the document. Also, please forward your payment for penalties and Department costs within 30 days as directed in the Order.

Thank you for your assistance in this matter. For questions, please contact David Hines, Potable Water Enforcement, at (850) 595-0593, or by email at david.hines@dep.state.fl.us.

Sincerely,

Kenneth W. Prest, Jr.
District Director

KWP/dh
Enclosure

c: Harry Householder, Area Manager, Aqua Utilities Florida (hhouseholder@aquaamerica.com)
Paul Thompson, Aqua Utilities Florida (PDThompson@aquaamerica.com)
FDEP NW District Panama City Office
Lea Crandall, FDEP Office of General Counsel (lea.crandall@dep.state.fl.us)

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OF FLORIDA DEPARTMENT)	IN THE OFFICE OF THE
OF ENVIRONMENTAL PROTECTION)	NORTHWEST DISTRICT
vs.)	OGC FILE NO. 10-2288-67-PW
Aqua Utilities Florida, Inc.)	
(Respondent))	
_____)	

CONSENT ORDER

This Consent Order ("Order") is entered into between the State of Florida Department of Environmental Protection ("Department") and Aqua Utilities Florida, Inc. ("Respondent") to reach settlement of certain matters at issue between the Department and Respondent.

The Department finds and Respondent admits the following:

1. The Department is the administrative agency of the State of Florida having the power and duty to protect Florida's water resources and to administer and enforce the provisions of the Florida Safe Drinking Water Act, Sections 403.850, et seq., Florida Statutes ("F.S."), and the rules promulgated and authorized in Title 62, Florida Administrative Code ("F.A.C."). The Department has jurisdiction over the matters addressed in this Order.
2. Respondent is a person within the meaning of Section 403.852(5), F.S.
3. Respondent is the owner and operator of a community water system, Sunny Hills Utilities (PWS ID No. 1670647), located at 3810 Gables Boulevard, Sunny Hills, Washington County, Florida ("System"). The System is comprised mainly of two groundwater wells (Well 1 and Well 4), which discharge to separate treatment, but which supply a common distribution system ("Well 1/Well 4 System"). Another well (Well 5) and treatment plant also supply a distant portion of the Sunny Hills community via an entirely separate distribution system ("Well 5 System"). The Well 5 System is regulated by the Department under the same PWS ID number as the Well 1/Well 4 System, but is separate from it and is not the subject of this Order.
4. The Department finds that the following violations occurred:

a) Failure to provide a total useful finished-water storage capacity of at least 25 percent of the system's maximum-day water demand as required under Section 62-555.320(19)(a), F.A.C. Contributing to the violation are two factors: 1) insufficient total storage tank volume, and 2) the inability of Well 4 to fill tanks located at Well 1 due to current system configuration;

b) Failure to provide satisfactory results of a 20 sample bacteriological well survey before placing Well 1 into permanent service after having been out of operation for more than six months, as required under Section 62-555. 315(6)(b), F.A.C.;

c) Failure to perform routine and nitrate/nitrite monitoring and raw bacteriological monitoring of the water produced by Well 1 when it was producing water for public consumption in July 2007 and August 2007, as required under Rules 62-550.500, 62-550.512, and 62-550.518(2), F.A.C..

Having reached a resolution of the matter Respondent and the Department mutually agree and it is

ORDERED:

5. Respondent shall comply with the following corrective actions within the stated time periods:

a) By October 1, 2010, Respondent shall retain the services of a professional engineer, registered in the State of Florida, to evaluate the System and make recommendations that would correct the system configuration in order to allow Well 4 to fill any tanks within the Well 1/Well 4 System, and shall submit an application, along with any required application fees, to the Department for a permit for construction needed to implement the recommendations of the engineer.

b) By February 15, 2011, Respondent shall retain the services of a professional engineer, registered in the State of Florida, to evaluate the System and make recommendations for modifications to the system that would address the storage capacity violation by increasing total Well 1/Well 4 storage capacity to a level which at a minimum

complies with the requirements noted in Rule 62-555.320(19)(a) and (b), F.A.C., and shall submit an application, along with any required application fees, to the Department for a permit for construction needed to implement the recommendations of the engineer.

c) If the Department requires additional information, modifications, or specifications to process the permit applications described in subparagraphs (5)(a) and (5)(b), above, the Department will issue a written request for information (“RFI”) to Respondent. Respondent shall submit the requested information in writing to the Department within 15 days of receipt of the request. Respondent shall provide all information requested in any additional RFIs issued by the Department within 15 days of receipt of each request. Within 60 days of the Department’s receipt of the applications described in subparagraphs (5)(a) and (5)(b), above, Respondent shall provide all information necessary to complete the application.

d) Within 120 days of issuance of any required permits described in subparagraphs (5)(a) and (5)(b), above, Respondent shall complete the permitted modifications and submit a Certification of Completion for each permit, prepared and sealed by a professional engineer registered in the State of Florida, along with all supporting documentation. Respondent shall not place the system modifications into service until Respondent receives written Department clearance.

6. Within 30 days of the effective date of this Order, Respondent shall pay the Department \$2,095.00 in settlement of the regulatory matters addressed in this Order. This amount includes \$1,595.00 for civil penalties and \$500.00 for costs and expenses incurred by the Department during the investigation of this matter and the preparation and tracking of this Order. The civil penalties are apportioned as follows: \$500.00 for violation of Rule 62-555.315(6)(b), F.A.C.; \$500.00 for violation of Rules 62-550.500, 62-550.512, and 62-550.518(2), F.A.C.; and \$595.00 for the value of the economic benefit of non-compliance for missed sampling.

7. Respondent agrees to pay the Department stipulated penalties in the amount of \$100.00 per day for each and every day Respondent fails to timely comply with any of the requirements of paragraph 5 of this Order. The Department may demand stipulated penalties

at any time after violations occur. Respondent shall pay stipulated penalties owed within 30 days of the Department's issuance of written demand for payment, and shall do so as further described in paragraphs 8 and 9, below. Nothing in this paragraph shall prevent the Department from filing suit to specifically enforce any terms of this Order. Any stipulated penalties assessed under this paragraph shall be in addition to the civil penalties agreed to in paragraph 6 of this Order.

8. Respondent shall make all payments required by this Order by cashier's check or money order. Payment instruments shall be made payable to the "Department of Environmental Protection" and shall include both the OGC number assigned to this Order and the notation "Ecosystem Management and Restoration Trust Fund."

9. Except as otherwise provided, all submittals and payments required by this Order shall be sent to Department of Environmental Protection, Northwest District Office, 160 Governmental Center, Pensacola, Florida 32502-5794.

10. Respondent shall allow all authorized representatives of the Department access to the Facility and the Property at reasonable times for the purpose of determining compliance with the terms of this Order and the rules and statutes administered by the Department.

11. In the event of a sale or conveyance of the Facility or of the Property upon which the Facility is located, if all of the requirements of this Order have not been fully satisfied, Respondent shall, at least 30 days prior to the sale or conveyance of the Facility or Property, (a) notify the Department of such sale or conveyance, (b) provide the name and address of the purchaser, operator, or person(s) in control of the Facility, and (c) provide a copy of this Order with all attachments to the purchaser, operator, or person(s) in control of the Facility. The sale or conveyance of the Facility or the Property does not relieve Respondent of the obligations imposed in this Order.

12. If any event, including administrative or judicial challenges by third parties unrelated to Respondent, occurs which causes delay or the reasonable likelihood of delay in complying with the requirements of this Order, Respondent shall have the burden of proving the delay was or will be caused by circumstances beyond the reasonable control of Respondent

and could not have been or cannot be overcome by Respondent's due diligence. Neither economic circumstances nor the failure of a contractor, subcontractor, materialman, or other agent (collectively referred to as "contractor") to whom responsibility for performance is delegated to meet contractually imposed deadlines shall be considered circumstances beyond the control of Respondent (unless the cause of the contractor's late performance was also beyond the contractor's control). Upon occurrence of an event causing delay, or upon becoming aware of a potential for delay, Respondent shall notify the Department by the next working day and shall, within seven calendar days notify the Department in writing of (a) the anticipated length and cause of the delay, (b) the measures taken or to be taken to prevent or minimize the delay, and (c) the timetable by which Respondent intends to implement these measures. If the parties can agree that the delay or anticipated delay has been or will be caused by circumstances beyond the reasonable control of Respondent, the time for performance hereunder shall be extended. The agreement to extend compliance must identify the provision or provisions extended, the new compliance date or dates, and the additional measures Respondent must take to avoid or minimize the delay, if any. Failure of Respondent to comply with the notice requirements of this paragraph in a timely manner constitutes a waiver of Respondent's right to request an extension of time for compliance for those circumstances.

13. The Department, for and in consideration of the complete and timely performance by Respondent of all the obligations agreed to in this Order, hereby conditionally waives its right to seek judicial imposition of damages or civil penalties for the violations described above up to the date of the filing of this Order. This waiver is conditioned upon Respondent's complete compliance with all of the terms of this Order.

14. This Order is a settlement of the Department's civil and administrative authority arising under Florida law to resolve the matters addressed herein. This Order is not a settlement of any criminal liabilities which may arise under Florida law, nor is it a settlement of any violation which may be prosecuted criminally or civilly under federal law. Entry of this

Order does not relieve Respondent of the need to comply with applicable federal, state, or local laws, rules, or ordinances.

15. The Department hereby expressly reserves the right to initiate appropriate legal action to address any violations of statutes or rules administered by the Department that are not specifically resolved by this Order.

16. Respondent is fully aware that a violation of the terms of this Order may subject Respondent to judicial imposition of damages, civil penalties up to \$10,000.00 per day per violation, and criminal penalties.

17. Respondent acknowledges and waives its right to an administrative hearing pursuant to sections 120.569 and 120.57, F.S., on the terms of this Order. Respondent also acknowledges and waives its right to appeal the terms of this Order pursuant to section 120.68, F.S.

18. No modifications of the terms of this Order will be effective until reduced to writing, executed by both Respondent and the Department, and filed with the clerk of the Department.

19. The terms and conditions set forth in this Order may be enforced in a court of competent jurisdiction pursuant to sections 120.69 and 403.121, F.S. Failure to comply with the terms of this Order constitutes a violation of section 403.161(1)(b), F.S.

20. This Consent Order is a final order of the Department pursuant to section 120.52(7), F.S., and it is final and effective on the date filed with the Clerk of the Department unless a Petition for Administrative Hearing is filed in accordance with Chapter 120, F.S. Upon the timely filing of a petition, this Consent Order will not be effective until further order of the Department.

21. Persons who are not parties to this Consent Order, but whose substantial interests are affected by it, have a right to petition for an administrative hearing under sections 120.569 and 120.57, Florida Statutes. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition concerning this Consent Order means that

the Department's final action may be different from the position it has taken in the Consent Order.

The petition for administrative hearing must contain all of the following information:

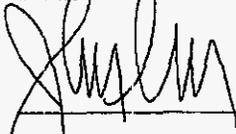
- a) The OGC Number assigned to this Consent Order;
- b) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding;
- c) An explanation of how the petitioner's substantial interests will be affected by the Consent Order;
- d) A statement of when and how the petitioner received notice of the Consent Order;
- e) Either a statement of all material facts disputed by the petitioner or a statement that the petitioner does not dispute any material facts;
- f) A statement of the specific facts the petitioner contends warrant reversal or modification of the Consent Order;
- g) A statement of the rules or statutes the petitioner contends require reversal or modification of the Consent Order; and
- h) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Consent Order.

The petition must be filed (received) at the Department's Office of General Counsel, 3900 Commonwealth Boulevard, MS# 35, Tallahassee, Florida 32399-3000 within 21 days of receipt of this notice. A copy of the petition must also be mailed at the time of filing to the District Office at 160 Governmental Center, Pensacola, Florida 32502-5794. Failure to file a petition within the 21-day period constitutes a person's waiver of the right to request an administrative hearing and to participate as a party to this proceeding under sections 120.569 and 120.57, Florida Statutes. Before the deadline for filing a petition, a person whose substantial interests are affected by this Consent Order may choose to pursue mediation as an

alternative remedy under section 120.573, Florida Statutes. Choosing mediation will not adversely affect such person's right to request an administrative hearing if mediation does not result in a settlement. Additional information about mediation is provided in section 120.573, Florida Statutes and Rule 62-110.106(12), Florida Administrative Code.

22. Rules referenced in this Order are available at
<http://www.dep.state.fl.us/legal/Rules/rulelistnum.htm>.

FOR THE RESPONDENT:



11-19-2010
Date

JOAN M. LIHVARCİK

Print Name

PRESIDENT

Print Title

DONE AND ORDERED this 2nd day of DECEMBER, 2010, in Escambia County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Kenneth W. Prest, Jr.
District Director
Northwest District

Filed, on this date, pursuant to section 120.52, F.S., with the designated Department Clerk,
receipt of which is hereby acknowledged.

Ashley Livingston
Clerk

November 02, 2010
Date

Copies furnished to:

Lea Crandall, Agency Clerk
Mail Station 35

EXHIBIT I

Report on Environmental Issues in Prior Rate Case

Consent Orders

- **Chuluota Water System** - As explained in detail in the Final Report and in the Fourth Quarter Environmental Compliance Update, all obligations under the consent order have been met and FDEP closed out the consent order on December 23, 2010.
- **The Woods Water System** - FDEP issued a consent order closure letter on Jan 14, 2009. (See Attachment "1".)
- **Zephyr Shores Water System** - FDEP issued a consent order closure letter on August 24, 2009. (See Attachment "2".)
- **The Village Water Wastewater System** - As explained in detail in the Fourth Quarter Environmental Compliance Update, AUF was required to identify alternative disposal for the effluent from this facility by May 2011. AUF has already identified a viable solution for effluent reuse and is negotiating an agreement with a nearby property owner. AUF expects the site will accommodate all of the treated effluent and has drafted a proposed 20 year agreement for the use of the land. AUF has already engaged Andreyev Engineering Inc. to conduct and analyze soil borings and BESH Engineering Inc to design and permit a spray field. AUF anticipates having the spray field operational by November 2011. AUF also has installed monitoring wells around the percolation ponds and is monitoring in accordance with the consent order. To date, that monitoring has revealed no adverse impacts.
- **South Seas Wastewater System** - As explained in detail in the Fourth Quarter Environmental Compliance Update, AUF received a warning letter on February 25, 2010 regarding a leak at the facility's reject storage tanks which AUF had previously reported to the FDEP. Prior to the warning letter, AUF had already contacted contractors to evaluate the flow equalization tank and the 3 reject storage tanks at the facility. Subsequently, the flow equalization tank failed resulting in a spill of raw wastewater. AUF had temporary repairs made to the tank and initiated plans to replace all four tanks. A consent order to replace the tanks and make other upgrades has not been finalized. However, AUF has replaced all four storage tanks at a cost of over \$400,000. (See photograph appended as Attachment "3".)

Outstanding Warning Letters

- **Pomona Park** - FDEP issued a case closure letter on this matter on April 17, 2009 (See Attachment "4"). The system was inspected on June 16, 2010 and no violations or deficiencies were noted. (See Attachment "5".)
- **Jasmine Lakes** - As explained in detail in the Fourth Quarter Environmental Compliance Update, this matter has been successfully closed.
- **Palm Terrace** - As explained in detail in the Fourth Quarter Environmental Compliance Update, this matter has been successfully closed.
- **Arredondo Farms** - A warning letter was issued June 12, 2008 alleging effluent violations for AUF's wastewater system in Alachua County. It was determined during the permit renewal process that although the facility was permitted at 0.06 mgd its actual design capacity was no more than 0.045 mgd. The facility had been treating 0.044 mgd Annual Average Daily Flow and experienced peak days of 0.56 mgd. FDEP issued a two year permit which gave AUF time to design and construct improvements including a new head works, additional surge capacity, additional aeration volume and two digesters. The construction was completed and FDEP issued a clearance letter on August 27, 2010. (See Attachment "6".) The FDEP consent order closure letter is appended as Attachment "7".

Outstanding Noncompliance Letters

- **Silver Lake Oaks Wastewater System** for alleged effluent violations relating to total dissolved solids, nitrates and fecal coliforms. With adjustments to the air flow, new diffusers, and diligent monitoring, the plant has returned to compliance and the matter is closed.
- **Florida Central Commerce Park** for alleged failure to submit pathogen monitoring results every 5 years for wastewater system in Seminole County. This wastewater system is required to monitor for pathogens and submit results every five years. This is typically completed in the years when the permit renewal application is required. Accordingly, AUF monitored for pathogens and submitted the report with the renewal application. Unfortunately the FDEP permitting section did not make the FDEP compliance section aware that the report had been received. This miscommunication was quickly resolved and the matter is closed.
- **Valencia Terrace Wastewater System** for alleged failure to satisfy requirement to install a new bar screen and splitter box. The new splitter box and bar screen were installed on June 9, 2009. The matter is closed.

- **Morning View Wastewater System** for allegedly not meeting minimum chlorine contact time and 2 reporting deficiencies. Baffles were installed to meet the minimum contact time. The reporting deficiencies arose from a misunderstanding by the operator that was cleared up. The matter is closed. A subsequent inspection letter cited no deficiencies at the plant. (See Attachment "8".)
- **South Seas Wastewater System** for alleged effluent violations. This matter is discussed in the Consent Order section above. Improvements have been completed and the system is currently operating in compliance with effluent limits.

Other

- **Chuluota Wastewater System** - Discharge monitoring reports allegedly showed that average daily flow to the facility had exceeded permitted capacity. FDEP requested additional information from AUF regarding permit application which was filed on December 6, 2007. AUF entered into a reuse agreement with Utilities, Inc. (subsequently acquired by the City of Oviedo) to accept treated wastewater effluent for reuse. AUF submitted plans and specifications to FDEP for the facilities to implement this agreement. FDEP issued a renewed 5-year permit for the Chuluota wastewater system on April 6, 2010. AUF has completed the installation of the reuse main and expects to begin delivering reuse water to the City of Oviedo by March 1, 2011.

Attachment 1



Florida Department of Environmental Protection

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

January 14, 2009

Charlie Crist
Governor

Jeff Kottkamp
U. Governor

Michael W. Sale
Secretary

RECEIVED

JAN 16 2009

Aqua Utilities
Florida Inc.

Mr. John Lihvarcik, President
Aqua Utilities Florida, Inc.
P.O. Box 490310
Leesburg, FL 34749

Re: Consent Order Closure
The Woods
PWS-ID No. 660-0347
OGC File No. 07-0466-60-PW
Sumter County

Dear Mr. Lihvarcik:

This letter is to notify you that the provisions of the above-referenced Consent Order have been met. The Department, therefore, considers this case closed.

Your continued cooperation to comply with applicable Department regulations is appreciated. If you have any questions, please contact Kim Woodhouse at (813) 632-7600, extension 401. Kim is our new Environmental Specialist (in Drinking Water) for Sumter County.

Sincerely,

A handwritten signature in black ink, appearing to read "Gerald B. Foster".

Gerald B. Foster
Environmental Manager
Drinking Water Section

GBF/kw/dm

Attachment 2



Florida Department of Environmental Protection

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Charlie Crist
Governor

R. H. Kottkamp
U. Governor

Michael W. Sole
Secretary

August 24, 2009

RECEIVED

AUG 26 2009

Aqua Utilities
Florida Inc.

Mr. John M. Lihvarcik, President and COO
Aqua Utilities Florida, Inc.
1100 Thomas Avenue
Leesburg, FL 34748

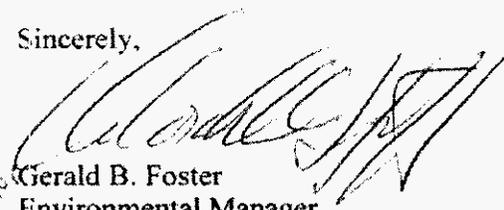
Re: Consent Order Closure
Zephyr Shores Mobile Home Estates
PWS-ID No. 651-2018
OGC File No. 09-0737-51-PW
Pasco County

Dear Mr. Lihvarcik:

This letter is to notify you that the provisions of the referenced Consent Order have been met, and the Department has received your payment of \$500.00. A copy of the Consent Order is enclosed that was executed by the District Director. The Department, therefore, considers this case closed.

Your continued cooperation to comply with applicable Department regulations is appreciated. If you have any questions, please contact Nick Noreika at (813) 632-7600, extension 314.

Sincerely,


Gerald B. Foster
Environmental Manager
Drinking Water Section

GBF/nn/dm

Enclosure

cc: Lea Crandall, Agency Clerk, OGC, lea.crandall@dep.state.fl.us

Attachment 3



Attachment 4



Florida Department of Environmental Protection

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590
Phone: 904/807-3300 • Fax: 904/448-4366

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

April 17, 2009

SENT BY MAIL

Corporate Service Company
Registered Agent for
Aqua Utilities Florida, Inc.
1201 Hays Street
Tallahassee, FL 32301

Putnam County – Potable Water
OGC File No. 08-2364 – CASE CLOSURE
Pomona Park WTP // PWS ID: 2540905

Dear Registered Agent:

The Department has received the documentation for Items 2(a-i) and the payment of the fine listed in Item 3. The system has now completed all items in the Final Order and the Department considers this case closed. Thank you for your cooperation in resolving this matter.

Should you have any questions concerning the Final Order, please feel free to contact Ben Piltz at (904) 807-3334 or Benjamin.Piltz@dep.state.fl.us. Your continued cooperation is appreciated.

Sincerely,

Melissa M. Long, P.E.
Water Facilities Administrator

Enforcement File

cc: Ms. Alik Moncrief, OGC
Ms. Mary Wilson, OGC
Ms. Ollie Henderson, Data Processing FDEP, NED
Ms. Candice McClure, Aqua Utilities Florida, Inc. (cmmclure@aquaamerica.com)
Ms. Tricia Williams, Aqua Utilities Florida, Inc. (prwilliams@aquaamerica.com)
Mr. Paul Thompson, Aqua Utilities Florida, Inc. (pdthompson@aquaamerica.com)

"More Protection. Less Process"
<http://www.dep.state.fl.us/>

Attachment 5



Florida Department of Environmental Protection

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590
Phone: 904/807-3300 ♦ Fax: 904/448-4366

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

July 2, 2010

SENT VIA MAIL

Mr. John Lihvarcik, President
Aqua Utilities Florida, Inc.
Post Office Box 490310
Leesburg, FL 34749

Putnam County - Potable Water
Sanitary Survey 2010
Pomona Park WTP // PWS ID: 2540905

Dear Mr. Lihvarcik:

On June 16, 2010, a Sanitary Survey of the above referenced Community water system was conducted with the courteous assistance of Mr. David Haring. The Department is pleased to inform you that the above referenced facility is in compliance with the Florida Safe Drinking Water Act, Sections 403, Florida Statutes (FS), and the rules promulgated thereunder, Florida Administrative Code (FAC) Title 62.

Please note that the Disinfection Byproducts sampled in 2008 was low enough whereby the system was able to reduce to triennial monitoring. Normally, the next set would be due in 2011. Due to the fact that this would put Pomona Park monitoring for Disinfection Byproducts in the same compliance year as Large Community systems, the schedule has been adjusted so that the system should sample in 2012 with the other small community water systems.

As a reminder, this system is required to monitor for the following parameters during 2010: Total Coliform Bacteria with Residual Disinfectant Levels on a monthly basis.

A copy of the Sanitary Survey is enclosed for your records. If you have any questions, please contact me by telephone at (904) 807-3334 or e-mail at Benjamin.Piltz@dep.state.fl.us. Thank you for your cooperation with Florida's Safe Water Drinking Act.

Sincerely,

Ben Piltz
Environmental Specialist I

BRR: BLP: bp

cc: Mr. Paul Thompson, Operator, Aqua Utilities Florida via pdthompson@aquaamerica.com

RECEIVED

JUL - 2 2010

Aqua Utilities
Florida Inc.

State of Florida
Department of Environmental Protection
Central/Northeast District
SANITARY SURVEY REPORT

Plant Name Pomona Park WTP County Putnam PWS ID # 2540905
Plant Location 110 Church Street, Pomona Park, FL 32181 Phone -
Owner Name Aqua Utilities Florida, Inc. // Mr. John Lihvarcik, President Phone 352-732-6027
Owner Address Post Office Box 490310, Leesburg, FL 34749
Designated Rep. John Lihvarcik Title President Phone 352-732-6027
Facility Contact Mr. Paul Thompson Title Operator Phone 386-937-1143
This Survey Date 6/16/10 Last Survey Date 8/2/07 Last C.I. Date 6/18/09

PWS TYPE & CLASS: Community - (5D)---

SERVICE AREA CHARACTERISTICS

Municipality _____

Food Service: Yes No N/A

GENERAL INFORMATION

Number of Service Connections 192
Population Served 672 Basis Operator
Plant Design Capacity 170,000 gpd
Basis Well capacity
Average Day (from MORs) 29,339 gpd
Max. Day (from MORs) 55,003 gpd
Total Storage Capacity 2,500 gallons
Comments MOR data is based upon the last 12 month average.

LOCATION

Latitude 29° 29' 44.68" North
Longitude 81° 35' 45.27" West
GPS: Yes Date: 7/97
Directions US Hwy 17 south to Main Street in Pomona Park.
Turn left on Church Street and the plant is on the left.

OPERATION & MAINTENANCE

Certified Operator: Yes No Not required
Operator(s) & Certification Class-Number
Mr. Paul Thompson

O&M Log: Yes No O&M Manual: Yes No
Operator Visitation Frequency
Hrs/day: Required _____ Actual _____
Days/wk: Required 3 Actual 5
Non-consecutive Days? Yes No N/A
MORs submitted regularly? Yes No N/A
Data missing from MORs? No Yes N/A

RAW WATER SOURCE

GROUND; Number of Wells 2
 SURFACE/UDI; Source _____
 PURCHASED from PWS ID # _____
 Emergency Water Source _____
Emergency Water Capacity _____

AUXILIARY POWER SOURCE

Yes None Not Required
Source Onan Generator
Capacity of Standby (kW) 30
Switchover: Automatic Manual
Standby Plan: Yes No
Hrs Operated Under Load 4 hr/mo.
What equipment does it operate?
 Well pumps _____
 High Service Pumps _____
 Treatment Equipment _____
Satisfy 1/2 max-day demand? Yes No Unk
Comments Satisfactory

TREATMENT PROCESSES IN USE

Hypochlorination
What additional treatment is needed?
No additional treatment is required.
For control of what deficiencies?
-

DISTRIBUTION SYSTEM

Flow Measuring Device Flow Meter
Meter Size & Type 4" Neptune Meter
Backflow Prevention Devices: Yes No
Cross-connections No cross connections observed.
Written Cross-connection Control Program: Yes
Coliform Sampling Plan: Yes No
Comments Plans, Manuals, and Logs are kept on site at the plant.

GROUND WATER SOURCE

Well Number (PWS Identification)	2540905	2540905	
Well Name (System Identification)	2	3	
Year Drilled	1962	2007	
Depth Drilled	180'	200	
Latitude	29° 29' 44.68" N	29° 29' 44.68" N	
Longitude	81° 35' 45.27" W	81° 35' 45.27" W	
GPS (Y or N) / Date (if applicable)	Y - 7/97	Y- 08/07	
Florida Well ID	AAC1867		
Static Water Level	28'	1' above ground surface	
Actual Yield (if different than rated capacity)	-	-	
Strainer	Unknown	Unknown	
Length (outside casing)	126'	160'	
Diameter (outside casing)	4"	5"	
Material (outside casing)	Steel	Steel	
Well Contamination History	OK	OK	
Is inundation of well possible?	OK	OK	
6' X 6' X 4" Concrete Pad	OK	PL	
SET BACKS	Septic Tank	~150'	~150'
	Reuse Water	OK	OK
	WW Plumbing	OK	OK
	Other Sanitary Hazard	OK	OK
PUMP	Type	Submersible	Submersible
	Manufacturer Name	Sta-Rite	Sta-Rite
	Model Number	Unknown	Unknown
	Rated Capacity (gpm)	~158	~158
	Motor Horsepower	5	5
Well casing 12" above grade?	OK	OK	
Well Casing Sanitary Seal	OK	OK	
Raw Water Sampling Tap	Smooth/downturned	Smooth/downturned	
Above Ground Check Valve	OK	OK	
Fence/Housing	Locked fencing	Locked fence	
Well Vent Protection	OK	OK	

COMMENTS _____

CHLORINATION (Disinfection)

Type: Hypo-Chlorination
 Make Stenner Capacity 10 gpd
 Chlorine Feed Rate 45%
 Avg. Amount of Cl₂ gas used N/A
 Chlorine Residuals: Plant - Remote .064
 Remote tap location Bacti Sampling Point
 DPD Test Kit: On-site With operator
 None Not Used Daily
 Injection Points Pre hydro tank
 Booster Pump Info Booster pumps not installed.
 Comments _____

STORAGE FACILITIES

(B) Bladder (CW) Clearwell (C) Contact (E) Elevated
 (G) Ground (H) Hydropneumatic (S.C.) See Comments

Tank Type/Number	H		
Capacity (gal)	5,000		
Material	Steel		
Gravity Drain	Yes		
By-pass Piping	Yes		
Pressure Gauge	Yes		
Sight Glass or Level Indicator	S.G.		
Fittings for Sight Glass	Yes		
Protected Openings	N/A		
PRV/ARV	PRV		
On/Off Pressure	60/70		
Access Padlocked	Yes		
Height to Bottom of Elevated Tank	N/A		
Height to Max. Water Level	N/A		
Last Inspection Date (for tanks with access manholes)	2008		

Comments _____

Chlorine Gas Use Requirements	YES	NO	Comments
Dual System	<input type="checkbox"/>	<input type="checkbox"/>	
Auto-switchover	<input type="checkbox"/>	<input type="checkbox"/>	
Alarms:			
Loss of Cl ₂ capability	<input type="checkbox"/>	<input type="checkbox"/>	
Loss of Cl ₂ residual	<input type="checkbox"/>	<input type="checkbox"/>	
Cl ₂ leak detection	<input type="checkbox"/>	<input type="checkbox"/>	
Scale	<input type="checkbox"/>	<input type="checkbox"/>	
Chained Cylinders	<input type="checkbox"/>	<input type="checkbox"/>	
Reserve Supply	<input type="checkbox"/>	<input type="checkbox"/>	
Adequate Air-pak	<input type="checkbox"/>	<input type="checkbox"/>	
Sign of Leaks	<input type="checkbox"/>	<input type="checkbox"/>	
Fresh Ammonia	<input type="checkbox"/>	<input type="checkbox"/>	
Ventilation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Room Lighting	<input type="checkbox"/>	<input type="checkbox"/>	
Warning Signs	<input type="checkbox"/>	<input type="checkbox"/>	
Repair Kits	<input type="checkbox"/>	<input type="checkbox"/>	
Fitted Wrench	<input type="checkbox"/>	<input type="checkbox"/>	
Housing/Protection	<input type="checkbox"/>	<input type="checkbox"/>	

AERATION (Gases, Fe, & Mn Removal)

Type _____ Capacity _____
 Aerator Condition _____
 Bloodworm Presence _____
 Visible Algae Growth _____
 Protective Screen Condition _____
 Comments _____

HIGH SERVICE PUMPS

Pump Number			
Type			
Make			
Model			
Capacity (gpm)			
Motor HP			
Date Installed			
Maintenance			

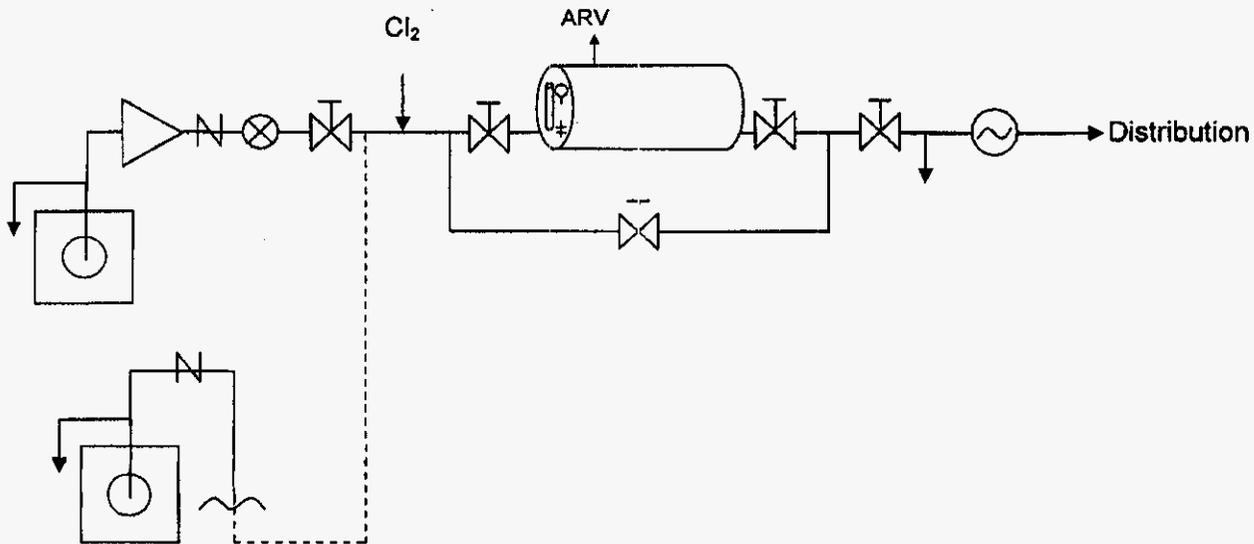
Comments _____

COMPLIANCE MONITORING COMMUNITY PUBLIC WATER SYSTEMS

CONTAMINANT	Last Sampled	Due Date	COMMENTS
Microbiological (Bacteria)	xxxxxxx	Monthly	2 distribution samples + 1 from <u>each</u> raw source (distribution number based upon the population served)
Disinfectant Levels	xxxxxxx	Monthly	2 field readings (i.e. one taken with each microbiological sample that is taken from the distribution system). Only report the quarterly averages of the monthly readings.
Disinfection Byproducts (DBPs)	2008	2012	Total Trihalomethanes (TTHMs) & Haloacetic Acids (HAA5s) taken in accordance with your D/DBPR Monitoring Plan.
Nitrate & Nitrite (as N)	2010	2011	Taken from <u>each</u> Point of Entry to the distribution system (i.e. from each plant's effluent)
Inorganic Contaminants	2009	2012	Taken from <u>each</u> Point of Entry to the distribution system (i.e. from each plant's effluent)
Volatile Organic Contaminants	2009	2012	Taken from <u>each</u> Point of Entry to the distribution system (i.e. from each plant's effluent)
Synthetic Organic Contaminants	2009	2012	Taken from <u>each</u> Point of Entry to the distribution system (i.e. from each plant's effluent). 2 quarterly samples required if >3,300 people served.
Radionuclides	2009	2018	Taken from <u>each</u> Point of Entry to the distribution system (i.e. from each plant's effluent)
Secondary Standards	2009	2012	Taken from <u>each</u> Point of Entry to the distribution system (i.e. from each plant's effluent)
Lead and Copper	2008	2011	Samples taken from pre-approved sample plan sites.
Asbestos	Waiver	2012 / Waiver	Samples taken from distribution. Waiver available if there is no asbestos pipe in the distribution system.

Unless otherwise noted, all samples shall be representative of each source after treatment.

SCHEMATIC (not to scale):



Attachment 6



Florida Department of Environmental Protection

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590
Phone: 904/807-3300 ♦ Fax: 904/448-4366

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

August 27, 2010

Mr. John M Lihvarcik
President
Aqua Utility Florida Inc
P.O. Box 490310
Leesburg, Florida 34749-310
(941) 907-7400

**Re: Alachua County - Wastewater
Certification of Completion
Arredondo Farms Mobile Home Park WWTF - FLA011315**

Dear Ms. Lihvarcik:

The Florida Department of Environmental Protection (FDEP) acknowledges receipt of DEP Form 62-620.910(12), Notification of Completion of Construction of:

- Hydrasieve Model 554-2-48 influent static fine screen which is 304 stainless steel traverse bar screen that is 48 inches wide by 54 inches long with 0.060 inches (1.5 mm) openings.
- An 8,500 gallons flow equalization tank. The equalization tank that has one Roots U-RAI 36 blower with a 5 hp motor. The tank also has a duplex pumping system with a capacity of 100 gpm @ 20feet total dynamic head.
- An additional 8,500 gallons aeration basin tank. The tank is set approximately 2 feet above existing tank top elevation.
- A flow splitter box to capture all the flow from aeration basin AT-4 and equally distribute flow between aeration AT-5 and AT-6 and in turn to clarifier 1 and 2. The box has adjustable aluminum weir gates.
- Two 8,500 gallons digester tanks. Aeration and mixing is provided by one Roots U-RAI 36 blower with a 5 hp motor.
- Replacement of existing diffusers with membrane type coarse bubble diffusers and replacement of some deteriorated galvanized steel aeration piping.
- Replacement of the existing outlet baffle and concrete weirs in both existing clarifiers with new outlet baffles and V-notch adjustable aluminum weirs. Remove and replace existing 4 inch return activated sludge airlift in existing clarifiers and replace with 3 inch schedule 40 PVC airlifts and 6 inch PCV gravity return piping to the head of the plant and to the new sludge holding tanks.

There were not significant changes in the design and related materials approved by the Department under Permit Number FLA011305 issued on December 15, 2009. Based on information provided, the Department accepts the project for service. If you have any questions, please contact Joseph Emery at (904) 807-3342 or Joseph.Emery@dep.state.fl.us. Your continued cooperation in our wastewater program is appreciated.

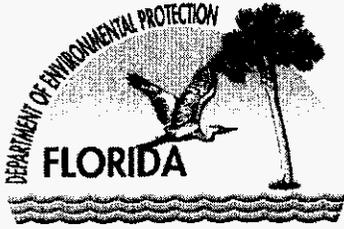
Sincerely,

D. Vo, P.E.
Wastewater Permitting Section

cc :

Mark Bubel, P.E. - Aqua Utility Florida Inc
Patricia Williams, P.E. - Aqua Utility Florida Inc

Attachment 7



Florida Department of Environmental Protection

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590
Phone: 904/807-3300 ♦ Fax: 904/448-4366

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Mimi A. Drew
Secretary

October 20, 2010

Mr. John M. Lihvarcik, President
Aqua Utilities Florida, Inc.
110 Thomas Avenue
Leesburg, FL 34748

**Re: Alachua County - Domestic Wastewater Enforcement
OGC File Number 10-1903
Arredondo Farms MHP - FLA011315**

Dear Mr. Lihvarcik:

This letter is to inform you that the above-referenced enforcement project has been closed by the Florida Department of Environmental Protection. All conditions of the Consent Order have been satisfied.

Should you have any questions concerning this Consent Order, please contact Heather Webber at Heather.Webber@dep.state.fl.us or at 904-807-3316. Your cooperation is appreciated.

Sincerely,

Tom Kallemeyn
Wastewater C & E Supervisor

cc: Paul Thomas, Aqua Utilities
Tricia Williams, Aqua Utilities
Stacie Greco, Alachua County
Ollie Henderson, FDEP - Jacksonville
Diana Thurman, FDEP - Tallahassee
Lea Crandall, Agency Clerk, Mail Station 35

Attachment 8



Florida Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

SENT VIA E-MAIL TO: jmlihvarcik@aquaaamerica.com

August 20, 2010

AQUA UTILITIES FLORIDA INC
PO BOX 2480
LADY LAKE FL 32158

OCD-C-WW-10-0624

ATTENTION JOHN LIHVARCIK
PRESIDENT

Lake County - DW
Morningview WWTF
Wastewater Facility - Permit No. FLA010610

Dear Mr. Lihvarcik:

On July 29, 2010, Department personnel conducted a routine inspection of your wastewater facility. At the time of the inspection, the overall operation of your facility was found to be in substantial compliance with the terms and conditions in Permit Number FLA010610. Please review the enclosed inspection report and correct any deficiencies, which have been noted.

Your continued cooperation with our wastewater program is appreciated. If you have any questions, please contact me at (407) 893-3313 or via e-mail: jenny.e.farrell@dep.state.fl.us.

Sincerely,

Jenny Farrell
Environmental Specialist
Wastewater Compliance/Enforcement

JF/ar

Enclosure: Inspection Report

cc: Lake County Water Resource Management, scatusus@lakecountyfl.gov
Patrick Farris, Aqua Utilities Inc, pafarris@aquaaamerica.com
Edward Pellenz, Aqua Utilities Inc, ejpellenz@aquaaamerica.com

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION @ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
Morningview WWTF	FLA010610	Lake	7/29/2010 11:45:00 AM
1322 English Road		Phone	@ Exit Date/Time
Leesburg, FL 34749 - 310			7/29/2010 12:08:00 PM

Name(s) of Field Representatives(s)	Title	Email	Phone
Adam Michaelsen	Aqua Utilities Operator		

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
John M Lihvarcik	President		
Aqua Utilities Florida Inc.			
1100 Thomas Avenue	Email		
Leesburg, FL 34749			

Inspection Type	<input type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> I	Samples Taken(Y/N): N	@ Sample ID#: N	Samples Split (Y/N): N
<input checked="" type="checkbox"/> Domestic	<input type="checkbox"/> Industrial	Were Photos Taken(Y/N): N		@ Log book Volume : EIP	@ Page N/A	

FACILITY COMPLIANCE AREAS EVALUATED

IC = In Compliance; NC = Out of Compliance; SC = Significant out of Compliance; NA = Not Applicable; NE = Not Evaluated
 Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a "♦"

	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
IC	1. ♦ Permit	NE	3. Laboratory	IC	6. Facility Site Review	IC	9. ♦ Effluent Quality
NA	2. ♦ Compliance Schedules	NE	4. Sampling	IC	7. Flow Measurement	IC	10. ♦ Effluent Disposal
		NC	5. ♦ Records & Reports	IC	8. ♦ Operation & Maintenance	IC	11. Residuals/Sludge
NA	13. Other:					NA	12. Groundwater

Facility and/or Order Compliance Status:	<input type="checkbox"/> In-Compliance	<input checked="" type="checkbox"/> Out-Of-Compliance	<input type="checkbox"/> Significant-Out-Of-Compliance
--	--	---	--

Recommended Actions: Letter

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Jenny Farrell <i>Jenny E. Farrell</i>	CD/ (407)893-3313	08/17/2010
@ Signature of Reviewer	District Office/Phone Number	Date
David Smicherko <i>David Smicherko</i>	CD/ (407)893-3313	August 19, 2010

INSPECTION SUMMARY

Facility Name: Morningview WWTF
Facility ID: FLA010610
Inspection Type: CEI
Date: 7/29/2010 12:08:00 PM

FACILITY BACKGROUND:

Address: 1322 English Road, Leesburg, FL 34749 - 310, Lake County
Permit Information: Wastewater Permit issued: 3/2/2007, and expires: 2/19/2012
Treatment Summary: Extended Aeration Sewage Treatment Plant W/Effluent To A Percolation Pond
Permitted Capacity: 0.02

1. Permit: IN COMPLIANCE

1.1 Observation: A copy of the permit was onsite and available to plant personnel.

2. Compliance Schedules: NOT APPLICABLE

3. Laboratory: NOT EVALUATED

4. Sampling: NOT EVALUATED

5. Records and Reports: OUT OF COMPLIANCE

5.1 Observation: *General* - A copy of the current laboratory certification was available at the time of the inspection (62-620.350(1) F.A.C.).

Additional Comments: Samples are analyzed by Plant Technicians Laboratory.

5.2 Observation: *General* - Operators' certifications were current and available on-site.

5.3 Observation: *General* - The certified operator's daily logbook was complete.

Additional Comments: The logbook was pre-numbered, bound, and contained sufficient operation/maintenance entries.

5.4 Observation: *General* - A copy of the Operation and Maintenance Manual as required by Chapter 62-600, F.A.C. was available to plant personnel.

5.5 Observation: *General* - Please see specific comment

Additional Comments: The RPZ was last inspected and tested on 4/8/10, according to on-site records.

5.6 Observation: *General* - Please see specific comment

Additional Comments: The DMR paperwork review period was from July 2009 through May 2010, **all DMRs were not submitted in a timely manner, see below:**

The January 2010 DMR was received by the Department on March 1, 2010, this DMR was due on or before February 28, 2010.

On the August 2009 DMR the number of exceedance column was left blank. Also, the TSS maximum result reported on Part A was 1.0 mg/L and this did not match the result reported on Part B of 6.4 mg/L.

The influent and effluent annual samples are routinely reported more often than required.

6. Facility Site Review: IN COMPLIANCE

6.1 Observation: *General* - The facility grounds were secured properly.

6.2 Observation: *Backflow Prevention* - A reduced pressure zone backflow prevention device was in place on the potable water supply line.

Additional Comments: No leaks or problems were noted.

6.3 Observation: *Lift Stations* - No problems or deficiencies noted.

Additional Comments: Two liftstations are connected to this system one master located at the plant and then one in the community.

INSPECTION FINDINGS

- 6.4 Observation: Headworks - Please see specific comment
Additional Comments: The liftstation pumps influent directly into the first aeration chamber.
- 6.5 Observation: Aeration Basins/Act. Sludge - The contents in the aeration chambers appeared to be adequately mixed.
- 6.6 Observation: Blowers/Motors - The blower was operational at the time of the inspection.
Additional Comments: Two blowers were onsite and covered.
- 6.7 Observation: Clarifiers - Please see specific comment
Additional Comments: The stilling well was good. The clarifier contained pin floc. The skimmer was not on. The weir appeared level, no flow was entering it at the time of inspection.
- 6.8 Observation: Disinfection - Please see specific comment
Additional Comments: Sodium hypochlorite is dripped into the parshall flume area. No flow was passing through at the time of inspection. The chlorine contact chamber contained clear effluent and baffles.
- 6.9 Observation: Digesters - The tank contents in the aerobic digester were well mixed.
Additional Comments: There was room for wasting.
7. **Flow Measurement:** IN COMPLIANCE
7.1 Observation: The copy of the flow calibration report is current and satisfactory.
Additional Comments: This flow meter was last calibrated on January 26, 2010 by Central Florida Controls, Inc.
8. **Operation and Maintenance:** IN COMPLIANCE
8.1 Observation: General - Please see specific comment
Additional Comments: The facility grounds were well maintained.
9. **Effluent Quality:** IN COMPLIANCE
9.1 Observation: No exceedances were reported during this DMR review period.
Additional Comments: The DMR review period was from July 2009 through March 2010.
10. **Effluent Disposal:** IN COMPLIANCE
10.1 Observation: General - At the time of the inspection, no flow was entering the rapid infiltration basin (RIB).
10.2 Observation: General - The RIBs appeared to be well maintained
10.3 Observation: General - Advisory signs were posted around the disposal site indicating the nature of the project area.
10.4 Observation: General - The fence surrounding the effluent disposal site provided adequate access control (62-610.518(10) F.A.C.)
11. **Residuals/Sludge:** IN COMPLIANCE
11.1 Observation: General - Please see specific comment
Additional Comments: Residuals are hauled to 412 Biosolids RMF; sludge was last hauled on July 28, 2010.
12. **Groundwater Quality:** NOT APPLICABLE
13. **Other:** NOT APPLICABLE