

ORIGINAL FILE COPY

Before the Florida Public Service Commission

Docket No. 960444-WU

In the Matter of

Application for rate increase and for increase in service availability charges in Lake County by Lake Utility Services, Inc.

Direct Testimony of

Don Rasmussen Vice President and Regional Director of Operations

for

Lake Utility Services, Inc.

July 11, 1997

DOCUMENT NUMBER-DATE

08970 JUL 115

FPSC-RECORDS/REPORTING

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Q. Would you please state your name and business address?

 A. My name is Donald W. Rasmussen, and my business address is 200 Weathersfield Avenue, Altamonte Springs, Florida.

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Q. By whom are you employed and in what capacity?

A. I am employed by Utilities, Inc., the parent company which
owns 100% of the stock of Lake Utility Services, Inc. (LUSI).
Presently, I serve as Vice President and Regional Director of
Operations and am responsible for the administration and
operation of all water and wastewater systems in Florida owned
and operated by subsidiaries of Utilities, Inc.

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Q. Please summarize your background and experience in the industry of providing water and sewer service to the public.

I was hired by Utilities, Inc. in 1970. I was soon promoted to 16 Α. the position of Area Manager, where I was responsible for the 17 operations of several water and wastewater plants. During this 18 time I acquired the highest Illinois licenses awarded in the 19 water and wastewater fields and continue to hold a Class A 20 certificate in water and a Class 1 certificate in wastewater. I 21 also conducted safety seminars for the company and was a 22 licensed paramedic. 23

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In 1982, I was transferred to Altamonte Springs and accepted
the position of Regional Director for Utilities, Inc. of Florida. In

1990, I was given the title of Vice President of the Utilities, Inc. of Florida systems. I currently maintain a Grade A certificate in water and a Grade C certificate in wastewater in the State of Florida. I have attended numerous seminars dealing with operations and maintenance of water and wastewater systems and serve on the Board of Directors of the FWWA.

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Q. What is the purpose of your testimony in this proceeding?

I have come before the Commission to explain Lake Utility 9 Α. Services, Inc.'s (LUSI) philosophy in providing high quality 10 customer service. My testimony will include an explanation of 11 the operation of our systems including the improvements made 12 to provide service to customers having homes with Ethylene 13 Dibromide (EDB) contaminated wells. Additionally, I will 14 discuss the Staff's alleged excessive unaccounted for water in 15 the system. Finally, I will discuss the extensive program we 16 have embarked upon to interconnect the majority of our 17 systems. 18

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Q. Are you sponsoring any exhibits in this proceeding?

A. Yes. I am sponsoring the four volumes of engineering
 information and system maps that were filed as part of the
 Minimum Filing Requirements for the test year ending
 December 31, 1995 that were submitted to the Commission on
 June 3, 1996. In addition, I have attached five exhibits to my
 testimony.

2 Customer Service

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Q. Please provide a summary of the qualifications of your operating Staff responsible for LUSI.

A. The following operators are responsible for the operation and maintenance of the Clermont systems.

9 Bryan Gongre - Area Manager

Bryan is the Area Manager for all our LUSI systems. He is responsible for overseeing the day-to-day operation of these systems. Bryan began employment with Utilities Inc. of Florida in 1992 and presently holds a Class "B" certificate in water.

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Howard J. Aldrich

"Jay" Aldrich began employment with us in 1990. He is
responsible for the day-to-day operations of some of these
systems. He holds a Class C certificate in both water and
wastewater.

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21 Robert Risner

Robert Risner began employment with us in 1995. He holds a
Class "A" certificate in water. He is responsible for the day-today operations of some of the Clermont area systems.

- Q. Please explain LUSI's philosophy in treating and serving its customers as well as the procedures associated with handling customer calls.
- Our customer service philosophy is based upon the premise Α. 4 that each customer is an individual and should be treated as 5 such. In addition, we emphasize that 100% customer 6 satisfaction is our goal and nothing less. Accordingly, we adapt 7 our procedures to take into account the individual needs and 8 requirements of our customers. And, service quality is closely 9 monitored for each system by our Florida staff, myself, as well 10 as by our corporate office. 11
- Finally, our organization has maintained a system whereby individual employees are held accountable for service quality. Throughout our organization, service quality is utilized as a primary factor in all employee performance reviews, including my own.
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Q. Please explain how a typical customer service call is handled.

A. Customer calls, regardless of their nature, come into the branch office in Altamonte Springs. Customers located out of the area are furnished with a toll free number. During office hours each call is answered by a customer service representative.

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If there is a problem related to field operations, a computer 1 generated service order is issued and directed to the operator 2 responsible for that particular system. The service orders are 3 immediately relayed to the operator by means of a fax machine 4 or radio communications. Depending on the nature of the 5 service concern, the operator will include the service order in 6 his schedule and respond to it as necessary. Emergencies--7 such as water leaks or water quality complaints--are always 8 given immediate attention. After the problem is rectified, the 9 operator relays information as to how the problem was resolved 10 to the customer service representative, and the resolution is 11 entered into the computer system as a permanent record of the 12 call. 13

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Billing inquiries are handled much in the same way as service calls. All inquiries are recorded on the customer's account by entering the information into the computer system. Any billing inquiries or complaints are resolved as soon as possible.

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Q. Does your organization provide customer service 24 hours per day?

A. Yes. Customers calling after office hours are forwarded to our answering service. An operator is assigned to be "on call" during the hours the office is closed. If an emergency should arise, the on-call operator will handle the situation.

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Q. How do you rate your Company's quality of service?

A. As a Company we are never completely satisfied with customer
service or quality of service and, therefore, we continue to
strive to improve every facet of service. Based upon my 27
years of experience in the industry, I would rate our overall
quality of service as compared to other private and municipal
service providers as very good.

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quality of service? If so, please explain.

Did the Staff have a different opinion of your Company's

Yes the Staff rated the quality of service as marginal at best. Α. 11 However, I disagree with this analysis. The Staff based the 12 overall quality of service on three separate components. These 13 are: (1) The quality of the utility's product; (2) The operating 14 conditions of the utility's plant and facilities; and, (3)15 Customer satisfaction. I would like to discuss each of these 16 components individually. 17

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First, I will address the quality of the utility's product. The Staff stated that the quality is marginal at best. The <u>quality of</u> <u>water meets or exceeds all DEP and health department</u> <u>standards.</u>

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The Staff's concerns are prompted by customers who stated, at the customer meeting, that their chlorine level varied. While we certainly recognize that some customers have experienced

variations, this phenomenon is attributable to the expanse of 1 the system, as well as the system configuration. The system 2 consists of approximately 14 miles of water main. Because 3 DEP standards require that we maintain a chlorine residual at 4 the far ends of the system to ensure sanitary conditions, our 5 operators flush on an as needed basis to assure a chlorine 6 residual at the ends of our system. When this is done, the 7 level of chlorine in the water may be more noticeable at homes 8 near the well sites for a brief period of time. This is normal 9 and recurring in this type of system and is certainly not 10 indicative of water quality problems. 11

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According to the DEP and the US Health Department, both independent governmental agencies, LUSI meets or exceeds all guidelines for water quality. If the Staff believes the measures established by the DEP are inadequate, the Florida Public Service Commission should issue their own set of guidelines as opposed to relying solely on the testimony of a very few customers.

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Clearly, based on the guidelines that are established for LUSI to abide by and measure its performance, the quality of the product furnished by LUSI is adequate.

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25 Second, I will discuss the operating condition of the water 26 utility's facilities. Staff referred to a number of minor

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deficiencies noted by DEP in their inspection of the facilities. Most of these deficiencies were operational reporting requirements or lack of proper signs and had no effect on the quality of the water or the overall condition of the facilities. The report is attached as Exhibit ___ (DR-1).

Recently, on June 19, 1997, the DEP completed an inspection 7 of all the systems. They found no facility deficiencies. The 8 minor problems cited were corrected the day of the inspection. 9 I have attached the DEP inspection report, Exhibit ___ (DR-2) 10 demonstrating that our facilities are kept in the best possible 11 operating condition. Consequently, based on the inspection of 12 a third party regulatory agency, the operating condition of the 13 facilities is adequate. 14

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Finally, the Staff felt that customer satisfaction was lacking. 16 The Staff stated that their assessment was because 10 of 918 17 total customers spoke at the customer meeting indicating 18 problems with chlorine level, sediment, or service problems. Of 19 the 10 customers, only 5 had prior contact with the company 20 to report any problems with the quality of the water. One of 21 the five customers was a former disgruntled employee. While 22 we are never satisfied until all customer problems are 23 corrected, I do not believe that the small percentage of 24 customers who expressed problems is indicative of overall 25 customer dissatisfaction. Furthermore, based on (1) our efforts 26

to turn a series of stand-alone systems into a regional water
system serving all customers in the service territory, including
those affected by EDB; (2) Our ongoing involvement in the
community; (3) Our immediate response to customer concerns;
LUSI provides excellent customer service.

- In short, the Staff's characterization of LUSI's customer service
 is unfair and not in keeping with established guidelines.
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10 System Operation

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Q. What water treatment plants are located in LUSI's service area and are involved in this rate case?

Α. There are 12 separate water treatment plants located in this 14 service area. This area was granted under Order #920174-WU 15 and is referred to as our Clermont systems. They are identified 16 in the LUSI tariff territorial descriptions as Clermont I, 17 Clermont II, Amber Hill, Lake Ridge, Oranges, Crescent Bay, 18 Crescent West, Lake Crescent Hills, Highland Point and Vistas. 19 Also included in the rate case is Lake Saunders and Four 20 Lakes which are remote from the above systems. 21

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Q. Please describe the improvements made by Lake Utility Services, Inc.

A. LUSI has installed new water mains in its certificated territory
 for the purposes of interconnecting the majority of its Clermont

In doing so, we have extended our service to many systems. new residential developments and individual homes in the area. Many of the these homes have wells that have been contaminated with EDB which posed a significant health hazard to residents, along with negatively impacting property values.

- Additionally, we have installed a second well (well #2) at the 8 Vistas which is waiting for clearance from the Department of 9 Environmental Protection (DEP). We have also replaced the 10 well in the Crescent Bay subdivision. 11
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How much was spent on the installation of the mains to Q. interconnect the various systems? 14

From a review of our company's records, LUSI spent over 15 Α. \$900,000 on interconnecting the systems. Attached is a list of 16 invoices supporting the interconnecting mains as Exhibit 17 These invoices have been reviewed by me and (DR-3). 18 represent all of the money spent on the interconnection 19 through December 31, 1995. These balances are utilized in Mr. 20 Kramer's schedules (Exhibit (MFK-3)) for preparation of test 21 year rate base. 22

Unaccounted For Water

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- Q. Staff concluded that there was excessive unaccounted for water. Do you disagree with that conclusion? If so, why?
 A. Yes, I disagree with that conclusion. Staff concluded that there were excessive amounts of unaccounted for water in 4 groups of systems. The amounts, by system, are: (1) The Oranges Vistas / 2,057 GPD; (2) Highland Point Crescent Bay Crescent West Lake Crescent Hills / 16,744 GPD; (3) Lake
- 10 Saunders / 782 GPD, and (4) Four Lakes / 3,795 GPD.
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In the system of Highland Point - Crescent Bay - Crescent West 12 - Lake Crescent Hills, I feel there are factors which should 13 allow for more unaccountable water than the arbitrary 10% the 14 Staff allows as an acceptable level. During 1995 there were 15 26,588 feet of water main added to this system. This 16 represents approximately a 40% increase in the area served. 17 The Staff concluded that the excessive amount for this system 18 Under these circumstances, with an amounted to 6%. 19 unusually large amount of construction and flushing of new 20 mains, I don't believe that the 6% was excessive. We have 21 initiated several procedures to measure construction water 22 amounts in the future. 23

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Lake Saunders and Four Lakes are both older systems.
 Recently, Staff has allowed 12.5% as an acceptable level of

unaccountable water for these older systems. This would
 reduce the excessive unaccountable water to 245 GPD and 567
 GPD respectively.

- When these factors are applied to these systems, none of the unaccountable water is excessive.
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Q. Is the Staff's use of 10% as an acceptable level of unaccountable water widely accepted in the industry?

A. No. The 10% level in which the Staff relies upon is a general guideline, but not a steadfast rule. Attached as Exhibit _____
(DR-4) is a reprint from an American Water Works Association (AWWA) publication entitled "Water Distribution Training Course." This publication is quite clear that the amount of unaccounted for water is entirely dependent on the system involved and its characteristics. Specifically it states,

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"The proper amount of unaccounted for water in any given 18 system is a function of that system alone. It might range, in a 19 substantially fully metered system, from as much as 35 20 percent to as little as 5 percent. The former percentage may 21 apply if pressures are very high and variable, leakage is 22 difficult to detect and remedy, the pipe system is extensive and 23 old, or practically all customers use water only in small 24 amounts (a principal cause of under registration of meters). 25 The smaller percentage may be the result of low pressures, the 26

existence of only a few customers who each take a considerable
percentage of the total water, and a small mileage of mains. A
fair average of unaccounted for water might be 10 - 20 percent
for fully metered systems with good meter maintenance
programs and average conditions of service."

Thus the AWWA document does not speak of specific limits for all heterogeneous systems, but instead describes only a "fair average" for systems which meet certain general descriptions.

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11Q. Based on the AWWA's guidelines for unaccounted for12water, would you characterize the LUSI systems'13unaccounted for water as excessive?

A. No. On the contrary, considering the tremendous amount of
 growth in the area, and the length of main installed between
 systems LUSI has a minimal amount of unaccounted for water.

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18 The Interconnection Program

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Q. The Staff based its used and useful calculations for the
 distribution systems on lot counts and lots served. Do you
 agree with their calculations?

A. No, not with all the systems. Please refer to my Exhibit _____
(DR-5). I do not agree with the number of lots and number of
lots served in the Clermont II area. The correct number of lots

served is 35 instead of 70. The correct total number of lots is 70 instead of 121.

The Highland Point - Crescent Bay - Crescent West and Lake 4 Crescent Hills, system includes the South Clermont area and 5 Preston Cove. In the South Clermont area, mains were 6 extended to serve homes with EDB many of the mains passed 7 existing homes with wells. These homes will probably never 8 connect to the water system and therefore they should not be 9 included in the calculation. There were 44 of these homes in 10 the South Clermont area. 11

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The total number of lots in this area is 918. The number of lots serviced in this area is 433. These figures are represented in Exhibit ___ (DR-5).

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Q. Where did you obtain your lot counts and number of connections as of December 31, 1995?

A. I counted the number of potential lots served from maps of
 each individual subdivision. The maps are provided to the
 utility from the developers and previous owners.

The number of connections are simply the number of customers tapped into our system at December 31, 1995.

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Q. Will the interconnected systems be able to serve other residences?

A. Yes, the interconnected systems will be able to serve existing
and future residences along the routes where mains have been
installed.

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Q. Are all the plants presently in compliance with the Department of Environmental Protection's regulations?

9 A. Yes, At the present time there are no known compliance
10 problems with any of the systems.

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Q. Please describe the EDB contamination of the individual wells.

Years ago the Clermont area was primarily made up of orange Α. 14 groves. Many of the groves were treated with a carcinogen, 15 unknowingly at the time, called EDB. This chemical does not 16 break down as it seeps into the ground. Therefore, once it 17 reached the shallow aquifer many of the residential wells 18 became contaminated thereby endangering the public health. 19 As a solution to the health problem, both the DEP and the 20 County Health Department recommended that these homes be 21 connected to a central potable water system. Accordingly, we 22 were asked to work closely with these departments to 23 accomplish this goal and to provide quality water service to all 24 the area residents. In the past few years the DEP has also 25

- discovered high levels of nitrate, another contaminant, in some
 of the shallow residential wells.
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Q. Please describe the program to interconnect the water systems.

When we were granted the service area in Order #920174-WU, Α. 6 and in cooperation with DEP, we immediately began an 7 aggressive program to interconnect our systems. At present, 8 the Clermont I, Amber Hill and Lake Ridge systems are all 9 interconnected to each other. The Vistas and Oranges systems 10 are also interconnected to each other, as are the Crescent Bay, 11 Crescent West, Lake Crescent Hills and Highland Point 12 systems. 13

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Q. Please describe any future interconnection plans.

A. We plan to interconnect the Clermont II system to the
 interconnected systems of Clermont I, Amber Hill and Lake
 Ridge. We are also planning to connect the Oranges and Vistas
 systems to this group. Once these interconnections have been
 completed, we will have two large groups of interconnected
 systems. Our goal is to eventually have one large system.

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Q. Do these systems have well capacity available to serve the certificated service area?

A. Yes. The combined pumping capacity of LUSI's existing wells is in excess of 6,000 GPM. Each system except Clermont II

was individually capable of providing peak service 1 requirements plus its own fire flow capacity. As we continue to 2 interconnect these systems, the diversified peak demand will 3 be less than the sum of the nine separate peak demands. The 4 fire flow requirements for the interconnected systems will not 5 have to be duplicated. Therefore, the capacity of the 6 interconnected systems should be adequate to serve the service 7 area. 8

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Q. Will additional capital investment by the utility to serve the interconnected systems?

A. Yes. Depending on future growth, the system will potentially require the installation of an elevated storage tank, pressure boosters, pressure reducers, and reconfiguration of sections of distribution and transmission mains.

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Q. Are there other benefits to interconnecting these utility systems besides solving the EDB problem?

- 19 A. Yes. The interconnected systems will assure the following:
- Improved reliability of service.
- Lower operating costs.
- Better service for the customers.
- Improved water quality.
- A safer supply.
- Insures consistent monitoring.

Q. Does this conclude your testimony?

2 A. Yes it does.

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Department of Environmental Protection



Docket 960444-WU Exhibit ____ (DR-1)

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

Virginia B. Wetherell Secretary

November 5, 1996

OCD-PW-CE-96-1522

Utilities, Inc. of Florida 200 Weathersfield Avenue Altamonte Springs, FL 32714

Attention: Donald Rasmussen

Lake County - PW		
* Crescent Bay S/D - 3354686	6 Amberhill S/D	- 3354648
* Crescent West S/D - 3354690	D Lake Ridge Club	- 3354884
* Highland Point - 3354652	2 Clermont #1/Four Winds	- 3351582
* Lake Crescent Hills - 3354883	3 Four Lakes & Harbor Oaks	- 3354647
* Oranges S/D, The - 3354683	5 Clermont #2/Carr Water	- 3350153
*Vistas S/I	D, The - 3354773	

Dear Mr. Rasmussen:

The Department conducted inspections of your public water systems on October 22, 1996. These inspections were conducted by me in the presence of Mr. David Zusi. *Copies of the Sanitary Survey Reports and/or Water Treatment Plant Compliance Inspection Reports are enclosed for your reference and records.

Deficiencies found during these inspections and/or in Department records are indicated below. These deficiencies shall be corrected in order to return to compliance with Florida Administrative Code (F.A.C.) Rules 62-550, 62-555, 62-560 and 61E12.

Please correct the indicated deficiencies, and notify the Department in writing that the deficiencies have been corrected, no later than <u>December 5, 1996</u>. (You may use the enclosed response form to indicate the corrective actions taken.)

DEFICIENCIES

Crescent Bay S/D--3354686

- 1. MOR reporting--The number of service connections is not being reported.
- 2. Maintenance-- Algal growth in the pump head bowl.
- 3. Warning sign-- Need to post Chlorine gas use by the fence.

NOTE: For Chemical Monitoring, please call DEP.

DOCUMENT NUMBER-DATE

"Protect, Conserve and Manage Florida's Environment and Natural Resources" JUL 11 5

Printed on recycled paper.

FPAC-RECORDS/REFORTING

Donald Rasmussen OCD-PW-CE-96-1522 November 5, 1996 Page Two

Crescent West S/D--3354690

- 1. MOR reporting-- The number of service connections is not being reported.
- 2. Well vent needed a screen.
- 3. Chlorine room needed a cross-ventilation.

NOTE: For Chemical Monitoring, please call DEP.

Highland Point--3354652

1. MOR reporting--The number of service connections is not being reported. NOTE: The system is off-line at the time of visit.

Lake Crescent Hills--3354883

- 1. Clean Algal growth in the pump head bowl.
- 2. There was no auxiliary generator plan on-site. The generator was not tested at the time of visit, Mr. Zusi did not have the key to operate the generator.
- 3. MOR reporting--The number of service connections is not being reported.
- NOTE: For Chemical Monitoring, please call DEP.

Oranges S/D, The--3354685

- 1. MOR reporting-- The number of service connections is not being reported.
- 2. Need a screen on well vent.
- NOTE: For Chemical Monitoring, please call DEP.

Vistas S/D, The--3354773

- 1. MOR reporting--The number of service connections is not being reported.
- 2. Need a screen on well vent.
- 3. The screen on the air release valve was torn.
- NOTE: For Chemical Monitoring, please call DEP.

Clermont #1/FourWinds--3351582

- 1. MOR reporting--The number of service connections is not being reported/updated.
- 2. Chlorine line was broken at the time of visit. The line was being fixed during the inspection.
- 3. The escape hatch was rusted.

NOTE:For Chemical Monitoring, please call DEP.

Donald Rasmussen OCD-PW-CE-96-1522 November 5, 1996 Page Three

Amberhill S/D--3354648

- 1. MOR reporting--The number of service connections is not being reported/updated.
- 2 Clean Algal growth in the pump head bowl.
- 3. Need a cross ventilation in the Chlorine room.
- 4. Provide adequate air-pak.

NOTE:For Chemical Monitoring, please call DEP.

Lake Ridge Club--3354884

- 1. MOR reporting--The number of service connections is not being reported.
- 2. No physical deficiencies noted at the time of visit.

NOTE: For Chemical Monintoring, please call DEP.

Four Lakes & Harbor Oaks--3354647

- 1. MOR reporting-- The number of service connections are not being reported.
- 2. No physical deficiencies noted at the time of visit.

NOTE: For Chemical Monitoring, please call DEP.

Clermont #2/ Carr Water System---3350153

- MOR reporting-- The number of service connections are not being reported/ updated.
- 2. Check pin hole leaks on the pressure tank.

NOTE: For Chemical Monitoring, please call DEP.

The Department values your continued cooperation in operating and maintaining your water system, and appreciates the assistance provided during the sanitary survey.

If you have any questions concerning this letter, please contact me at the above address or by phone at (407) 893-3319.

Sincerely,

Roberto C. Ansag, Supervisor Drinking Water Compliance/Enforcement

cc: Lake County Public Health Unit Lee Munroe, PSC (via fax)

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

Plant Name	HIGHLAND POINT	County	Lake	PWS ID #	3354652
Plant Location	Bronson Rd. Off S.R. 561 South ,Clermont			Phone	407/869-1919
Owner Name	Utilities,Inc. of Florida			Phone	407/869-1919
Owner Address	200 Weathersfield Ave., Altamonte Springs	, Fl 32714			
Contact Person	David Zusi T	itle <u>Reg. Op</u>	<u>s. Mgr.</u>	Phone	407/869-1919
This Survey Date	e10/22/96 Last Survey Date	3/3/93	Las	st C.I. Date	10/11/95
PWS TYPE & CI □ Community □ Non-transien □ Non-Commu PWS STATUS □ Approved system □ Unapproved SERVICE AREA Residential S/D Food Service:	LASS t Non-community nity stem with approval number & date 2/5/87 system CHARACTERISTICS	RAW WAT GROUN SURFA PURCH Emerge Emerge AUXILIARY Yes Capacity of Switchover Standby Pla Hrs Operate What equip Well r	ER SOURC ND; Number CE/UDI; Sc ASED from ncy Water ncy Water POWER None Standby (k Autom an:Yes ed Under Lo ment does Sumps	Capacity Source Sourcek Capacity SOURCE Not Requesting Matic Man No oad it operate?	1 crescent Hills ** uired ual
OPERATION & I Certified Operato Operator(s) & Ce Jay Aldrich "C".	MAINTENANCE pr: Xes No Not required ertification Class-Number -6368	High Satisfy 1/2	Service Pur ment Equip max-day de	mps ment emand?Ye	s 🗌 No 🗌 Unk
O & M Log: Y Operator Visitatio Hrs/day: Require Days/wk: Require	Yes No Not required on Frequency ed N/A Actual N/A red 6 Actual 6	TREATMEI Chlorinatio	NT PROCE	SSES IN USI	E
MORs submitted	regularly? ⊠ Yes ⊡ No ⊠ N/A	What additi	onal treatm	ent is needeo	!?
Data missing from	m MORs? 📋 No 🖂 Yes 🛄 N/A	For control	of what def	iciencies?	
Number of Servic Population Serve Average Day (fro	ce Connections <u>Unk</u> ed <u>Unk</u> Basis <u></u> om MORs) 135,903 gpd	DISTRIBUT Flow Measu Meter Size	TION SYST uring Devic & Type	EM e <u>Flow</u> 3" Hersev	v Meter
Max. Day (from N	MORs) <u>358,000 gpd</u>	Backflow P	revention D)evices: 🛛 Y	es 🔲 No
Max-day Design	Capacity <u>432,000 gpd</u>	Cross-conn	ections <u>N</u>	None Observed	
Comments		Written Cro Coliform Sa Comments	ss-connect mpling Pla <u>**Crescen</u>	ion Control P n: ⊠ Yes It Bay, Crescen	rogram: <u>Yes</u>]No
COMET: SITE ID					······
	I NOULOT ID <u>100207</u>				

PWS ID # <u>3354652</u> Date <u>10/22/96</u>

GROUND WATER SOURCE

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Well Numb	ber	1			
Year Drille	d .	1986			
Depth Drill	ed	520'			
Drilling Me	thod	Rotary			
Type of Gr	rout	Unk			
Static Wat	er Level	32'		1	
Pumping V	Vater Level				
Design We	ell Yield				
Test Yield					
Actual Yiel	d (if different than rated capacity)				
Strainer		Unk			
Length (ou	itside casing)	71'			
Diameter (outside casing)	10"			
Material (o	utside casing)	Blk. Iron	······································	· · · · · · · · · · · · · · · · · · ·	
Well Conta	amination History	Unk			
ls inundation	on of well possible?	No			
6' X 6' X 4'	' Concrete Pad	Yes			
	Septic Tank	>200'			
SET	Reuse Water				
BACKS	WW Plumbing	>200'			
	Other Sanitary Hazard				
	Туре	V.T.			
	Manufacturer Name	Goulds			
PUMP	Model Number	10DHL-7			
	Rated Capacity (gpm)	600			
Motor Horsepower		60			
Well casin	g 12" above grade?	Yes			
Well Casin	g Sanitary Seal	Yes			
Raw Wate	r Sampling Tap	Yes			
Above Gro	und Check Valve	Yes			
Fence/Hou	using	Yes			
Well Vent	Protection	None			

COMMENTS _____

- PWS ID # <u>3354652</u> Date <u>10/22/96</u>

CHLORINATION (Disinfecti	on)
Make	Capacitygpd
Chlorine Feed Rate	
Avg. Amount of Cl ₂ gas used	d <u>N/A</u>
Chlorine Residuals: Plant _	Remote
Remote tap location	
DPD Test Kit: On-site	With operator
🗖 None	Not Used Daily
Injection Points	
Booster Pump Info	·
Comments	

. ..

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

STORAGE FACILITIES (G) Ground (H) Hydropneumatic (E) Elevated

(B) Bladder (C) Clearwell						
Tank Type/Number	H /1					
Capacity (gal)	5,000		•			
Material	Steel					
Gravity Drain	Yes					
By-pass Piping	Yes					
Pressure Gauge	Yes					
Sight Glass or Level Indicator	Yes					
Fittings for Sight Glass	N/A					
Protected Openings	Yes					
PRV/ARV	ARV					
On/Off Pressure	38/55					
Access Padlocked						
Height to Bottom of Elevated Tank	N/A					
Height to Max. Water Level	N/A					
Comments <u>Did not inspect, the plant. Well was</u> off line.						

HIGH SERVICE PUMPS

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

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AERATION (Gases, Fe, & Mn Removal)

Туре	Capacity
Aerator Condition	
Bloodworm Presence	
Visible Algae Growth	
Protective Screen Condition	I
Comments <u>Well is off line.</u>	Water was being
provided by the other three	systems.

COMPLIANCE MONITORING										
COMMUNITY PUBLIC WATER SYSTEMS										
	PWS	# Samples	Sampling		C > 3300	- · · · · · · · · · · · · · · · · · · ·		C ≤ 3300		
CONTAMINANT	Screen	Required	Location	Frequency	Sample Date	Due Date	Frequency	Sample Date	Due Date	
Microbiological (Bacte)	024	1	Each well	monthly			monthly	9/96	Monthly	
		2	Distribution							
Volatile Organics	028	(Note A)	(Note H)	(Notes A, 1)			(Notes A, 2)	8/31/95	1997	
Pesticides & PCBs	029	(Notes B, E)	(Note H)	3 years (Note 1)			3 years (Note 2)	2/21/91	1997	
Nitrate & Nitrite (as N)	030	1	POE	annually			annually	8/31/95	1996	
Inorganics	030	1	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997	
Asbestos	030	1 (Note F)	Distribution	9 years (Note 7)			9 years (Note 8)	12/23/93	waiver 12/31/01	
Secondaries	031	1	POE	3 years (Note 1)			3 years (Note 2)	10/3/94	1997	
Radionuclides	033	(Note C)	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997	
Group I UOCs	035	(Notes B, E, G)	POE	(Note 4)			(Note 5)	12/14/93	waiver	
Group II UOCs	034	1 (Notes E,G)	POE	3 years (Note 1)			3 years (Note 2)	12/14/93	waiver	
Group III UOCs	036, 037	1 (Note G)	POE	(Note 4)	· ·		(Note 5)	12/14/93	waiver	
Lead and Copper	047	(Note D)						9/95	1996	
TTHM (≥ 10,000 persons)	027	4/plant	Distribution	Quarterly			N/A	N/A	N/A	

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POE = Point of Entry (Samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.)

See Page 5 for description of italicized notes.

PWS ID # _____

Date

NOTES:

SAMPLES REQUIRED/SAMPLING LOCATION:

Note A See Rule 62-550.515(1), F.A.C. Each system shall take four consecutive quarterly samples during its assigned year in the system's first compliance period. If no contaminant is detected, the system shall monitor annually during the next three-year compliance period. If still no contaminants are detected, systems shall take one sample during each subsequent three-year compliance period.

> If the initial monitoring for contaminants listed in Rule 62-550.310(2)(b), F.A.C., was completed prior to December 31, 1992, then each system shall take one sample annually beginning January 1, 1993.

- **Note B** 4 consecutive quarterly samples. Credit will be given for samples taken before January 1, 1993.
- **Note C** See Rule 62-550.519, F.A.C. Compliance shall be based on the average of analyses of four consecutive quarterly samples. A maximum of two quarterly samples may be composited. Subsequent samples shall be collected once every three years.
- **Note D** Contact the Central District's Drinking Water Program at (407) 894-7555 or contact the Florida Rural Water Association.

- *Note E* Contact Ms. Marie Carrasquillo of the Central District's Drinking Water Program at (407) 894-7555, extension 2242, to obtain an application for reduced monitoring.
- Note F See Rule 62-550.511(4), F.A.C. A system without asbestos-containing components shall certify to the Department in writing, using DEP Form No. 62-555.910(10), that it is asbestos free. Certification shall satisfy subsections (1), (2), and (3) of the referenced rule, and shall be submitted each nine-year compliance cycle during the specified year the system is required to monitor.
- Note G See Rule 62-550.521(4), F.A.C. Systems serving less than 150 service connections and serving fewer than 350 persons should notify the Department, by submitting DEP Form No. 62-555.910(11), that their system is available for testing. Normally, these small systems will not be required to monitor for UOCs. Do not send such samples to the Department unless required to do so by the Department.
- **Note H** First quarter samples shall be representative of each well. Subsequent samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.

FREQUENCY:

Note 1	First year of each three-year compliance period (calendar years 1993, 1996, 1999, etc.)
Note 2	Second year of each three-year compliance period (calendar years 1994, 1997, 2000, etc.)
Note 3	Third year of each three-year compliance period (calendar years 1995, 1998, 2001, etc.)
Note 4	First year of the first three-year compliance period (i.e. calendar year 1993)
Note 5	Second year of the first three-year compliance period (i.e. calendar year 1994)

- *Note 6* Third year of the first three-year compliance period (i.e. calendar year 1995)
- *Note* 7 First year of each nine-year compliance cycle (calendar years 1993, 2002, etc.)
- *Note 8* Second year of each nine-year compliance cycle (calendar years 1994, 2003, etc.)
- *Note 9* Third year of each nine-year compliance cycle (calendar years 1995, 2004, etc.)

- PWS ID # ____<u>3354652</u> Date _____<u>10/22/96</u>

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MONITORING VIOLATIONS	MCL VIOLATIONS
	-+

DEFICIENCIES:

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1. MOR reporting- Number of service connection is not being reported.

NOTE: Plant was off line at the time of visit.

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Inspector Loborto c. ancy	Title	Env. Supervisor II	Date <u>/0/22/96</u>
Approved by	Title		Date

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

Plant Name	CRESCENT WEST S/D	County	Lake	_ PWS ID #	3354690
Plant Location _	South Lakeshore Dr., Clermont, F1 32711	·····		Phone	407/869-1919
Owner Name	Utilities, Inc. of Florida	EL 20714		Phone	407/869-1919
Contact Baraan	200 Weathersheld Ave. Allamonte Sprin	<u>gs, F1 32/14</u>	a Mar	Phone	407/960 1010
This Survey Det	David Zusi	The <u>Keg. Op</u>	s. Mgr.	Prione	40//869-1919
This Survey Dat	$e _ 10/22/96 _$ Last Survey Date		Last		10/11/95
PWS TYPE & C Community Non-transier	LASS nt Non-community unity		ER SOURC ND; Number CE/UD1; So IASED from	E of Wells urce PWS ID # _	1
PWS STATUS			ency water a	Source <u>Lk.</u>	Crescent Hills
Approved sv	stem with approval number & date	Emerge	ency water C	Japacity	32,000 gpd ***
WC35-2112	3/16/88	AUXILIARY		OURCE	
WD35-18827	70, 11/21/90	☐ Yes	X None	Not Rea	uired
	system	Source			
		Capacity of	Standby (k)	W)	
SERVICE AREA		Switchover	: 🗌 Automa	atic 🔲 Man	ual
<u>Residential S/D</u>	·	Standby Pla	an: 🗌 Yes		
<u>5C</u>		Hrs Operat	ed Under Lo	oad	
Food Service: [L]Yes L]No ⊠N/A	What equip	ment does i	t operate?	
		🔲 Well p	oumps		
Certified Operation		High :	Service Pun	nps	
Operator(s) & C	ertification Class-Number		ment Equipr	nent	
Jav Aldrich "C"	'- 6368	Satisfy 1/2	max-day de	mand? [] Ye	
		Comments	<u>+++-1 his sy</u>	<u>Stem is interc</u>	connected with
O & M Log: 🛛	Yes No Not required		- systems.Lk.	Crescent Hill	s, Crescent Bay
Operator Visitati	on Frequency	TREATME		SSES IN US	E
Hrs/day: Requir	red <u>N/A</u> Actual <u>N/A</u>	Chlorinati	on		
Days/wk: Requ	ired6Actual6				
Non-consecuti MORs submitted	ive Days? ☐Yes ☐No ⊠N/A d regularly? ⊠Yes ☐No ☐N/A	What additi	onal treatme	ent is needed	1?
Data missing fro Number of serv	m MORs? 🗌 No 🛛 Yes 🗌 N/A	For control	of what defi	ciencies?	
Number of Servi Population Serve	ice Connections <u>Unk</u> ed <u>Unk</u> Basis	DISTRIBU Flow Measu	FION SYSTI uring Device	EM Flov	v <u>M</u> eter
Average Day (fro	om MORs) <u>207,000 gpd</u>	Meter Size	& Type <u>3</u>	"Hersey	
Max. Day (from I	MORs) <u>405,000 gpd</u>	Backflow P	revention D	evices: 🛛 Y	′es 🔲 No
Max-day Design	Capacity 432,000 gpd	Cross-conr	ections <u>N</u>	one Observed	
		Written Cro Coliform Sa Comments	ss-connecti ampling Plar ***-Highla	on Control P n: 🔲 Yes 🛛 and Point	rogram: <u>Yes</u>]No ∏N/A
	······································				
COMET: SITE ID	PROJECT ID <u>100205</u>				

- PWS ID # <u>3354690</u> Date <u>10/22/96</u>

GROUND WATER SOURCE

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Well Numb	per	1		
Year Drille	d	1987		
Depth Drill	ed	400'		
Drilling Me	thod	Cable Tool		
Type of Gr	out	Unk		
Static Wate	er Level	50'		
Pumping V	Vater Level			
Design We	ell Yield			
Test Yield				
Actual Yiel	d (if different than rated capacity)			
Strainer		Unk		
Length (ou	tside casing)	105'		
Diameter (outside casing)	10"		
Material (o	utside casing)	Blk. Iron		
Well Conta	amination History	Unk		
Is inundation	on of well possible?	No		
6' X 6' X 4'	" Concrete Pad	Yes		
	Septic Tank	>200'		
SET	Reuse Water			
BACKS	WW Plumbing	>200'		
	Other Sanitary Hazard			
	Туре	V.T.		
	Manufacturer Name	Goulds		
PUMP	Model Number	8ЈН0-3		
	Rated Capacity (gpm)	600		
Motor Horsepower		50		
Well casing	g 12" above grade?	Yes		
Well Casin	g Sanitary Seal	Ok		
Raw Wate	r Sampling Tap	Yes		
Above Gro	und Check Valve	Yes		
Fence/Hou	using	Yes		
Well Vent	Protection	None		

COMMENTS _____

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- PWS ID # <u>3354690</u> Date <u>10/22/96</u>

CHLORINATION (Disinfection)							
Type: 🖾 Gas 🔲 Hypo							
Make W&T Capacity 150 gpd							
Chlorine Feed Rate2lbs./day							
Avg. Amount of Cl ₂ gas usedunk							
Chlorine Residuals: Plant <u>1.8</u> Remote <u>1.5</u>							
Remote tap location							
DPD Test Kit: On-site With operator							
🗌 None 🛛 🗍 Not Used Daily							
Injection Points							
Booster Pump Info Goulds 3/4 Hp							
Comments							

• . •

Chlorine Gas Use	YES	NO	Comments
Dual System		\boxtimes	N/A
Auto-switchover		\boxtimes	N/A
Alarms: Loss of Cl ₂ capability Loss of Cl ₂ residual Cl ₂ leak detection			
Scale	\boxtimes		
Chained Cylinders	\boxtimes		
Reserve Supply	\square		
Adequate Air-pak	\boxtimes		w/ operator
Sign of Leaks		\boxtimes	
Fresh Ammonia	\boxtimes		·····
Ventilation		\boxtimes	need cross vent
Room Lighting	\square		
Warning Signs		\boxtimes	
Repair Kits		\boxtimes	
Fitted Wrench	\boxtimes		
Housing/Protection	\boxtimes		

AERATION (Gas	es, Fe, 8	& Mn	Removal)
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Type <u>N/A</u>	Capacity
Aerator Condition	
Bloodworm Presence	
Visible Algae Growth	
Protective Screen Condition	
Comments	

STORAGE FACILITIES

(G)	Ground	(H) H	ydropneuma	tic (E)	Elevated
(B)	Bladder	(C) C	earwell		
Tai	nk Type/N	umber	H/1		
~	1 / 1	<u></u>	10.000		

Capacity (gal)	10,000	
Material	Steel	
Gravity Drain	Yes	
By-pass Piping	Yes	
Pressure Gauge	Yes	
Sight Glass or Level Indicator	Yes	
Fittings for Sight Glass	N/A	
Protected Openings	Yes	
PRV/ARV	ARV	
On/Off Pressure	38/55	
Access Padlocked	Yes	
Height to Bottom of Elevated Tank		
Height to Max. Water Level		
Comments		

HIGH SERVICE PUMPS

Pump Number		
Туре	· ·	
Make		
Model		
Capacity (gpm)		
Motor HP		
Date Installed		
Maintenance		
Comments		 ······································

COMPLIANCE MONITORING									
COMMUNITY PUBLIC WATER SYSTEMS									
	PWS	# Samples	Sampling		C > 3300			C ≤ 3300	
CONTAMINANT	Screen	Required	Location	Frequency	Sample Date	Due Date	Frequency	Sample Date	Due Date
Microbiological (Bacte)	024	1	Each well	monthly			monthly	9/96	Monthly
		2	Distribution						
Volatile Organics	028	(Note A)	(Note H)	(Notes A, 1)			(Notes A, 2)	8/31/95	1997
Pesticides & PCBs	029	(Notes B, E)	(Note H)	3 years (Note 1)			3 years (Note 2)	10/30/90	1997
Nitrate & Nitrite (as N)	030	1	POE	annually			annually	8/31/95	1996
Inorganics	030	1	POE	3 years (Note 1)			3 years (Note 2)	8/6/94	1997
Asbestos	030	1 (Note F)	Distribution	9 years (Note 7)			9 years (Note 8)	12/23/93	waiver 12/31/01
Secondaries	031	1	POE	3 years (Note 1)			3 years (Note 2)	10/3/94	1997
Radionuclides	033	(Note C)	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997
Group I UOCs	035	(Notes B, E, G)	POE	(Note 4)			(Note 5)	12/14/93	waiver
Group II UOCs	034	1 (Notes E,G)	POE	3 years (Note 1)			3 years (Note 2)	12/14/93	waiver
Group III UOCs	036, 037	1 (Note G)	POE	(Note 4)			(Note 5)	12/14/93	waiver
Lead and Copper	047	(Note D)						1995	9/96
TTHM (≥ 10,000 persons)	027	4/plant	Distribution	Quarterly			N/A	N/A	N/A

POE = Point of Entry (Samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.)

See Page 5 for description of italicized notes.

- PWS ID # _____ Date

NOTES:

SAMPLES REQUIRED/SAMPLING LOCATION:

Note A See Rule 62-550.515(1), F.A.C. Each system shall take four consecutive quarterly samples during its assigned year in the system's first compliance period. If no contaminant is detected, the system shall monitor annually during the next three-year compliance period. If still no contaminants are detected, systems shall take one sample during each subsequent three-year compliance period.

> If the initial monitoring for contaminants listed in Rule 62-550.310(2)(b), F.A.C., was completed prior to December 31, 1992, then each system shall take one sample annually beginning January 1, 1993.

- **Note B** 4 consecutive quarterly samples. Credit will be given for samples taken before January 1, 1993.
- Note C See Rule 62-550.519, F.A.C. Compliance shall be based on the average of analyses of four consecutive quarterly samples. A maximum of two quarterly samples may be composited. Subsequent samples shall be collected once every three years.
- **Note D** Contact the Central District's Drinking Water Program at (407) 894-7555 or contact the Florida Rural Water Association.

- *Note E* Contact Ms. Marie Carrasquillo of the Central District's Drinking Water Program at (407) 894-7555, extension 2242, to obtain an application for reduced monitoring.
- Note F See Rule 62-550.511(4), F.A.C. A system without asbestos-containing components shall certify to the Department in writing, using DEP Form No. 62-555.910(10), that it is asbestos free. Certification shall satisfy subsections (1), (2), and (3) of the referenced rule, and shall be submitted each nine-year compliance cycle during the specified year the system is required to monitor.
- Note G See Rule 62-550.521(4), F.A.C. Systems serving less than 150 service connections and serving fewer than 350 persons should notify the Department, by submitting DEP Form No. 62-555.910(11), that their system is available for testing. Normally, these small systems will not be required to monitor for UOCs. Do not send such samples to the Department unless required to do so by the Department.
- **Note H** First quarter samples shall be representative of each well. Subsequent samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.

FREQUENCY:

- Note 1 First year of each three-year compliance period (calendar years 1993, 1996, 1999, etc.)
 Note 2 Second year of each three-year compliance period (calendar years 1994, 1997, 2000, etc.)
 Note 3 Third year of each three-year compliance period (calendar years 1995, 1998, 2001, etc.)
 Note 4 First year of the first three-year compliance period (i.e. calendar year 1993)
 Note 5 Second year of the first three-year compliance period (i.e. calendar year 1994)
- *Note 6* Third year of the first three-year compliance period (i.e. calendar year 1995)
- *Note* 7 First year of each nine-year compliance cycle (calendar years 1993, 2002, etc.)
- *Note 8* Second year of each nine-year compliance cycle (calendar years 1994, 2003, etc.)
- *Note 9* Third year of each nine-year compliance cycle (calendar years 1995, 2004, etc.)

PWS ID # <u>3354690</u> Date <u>10/22/96</u>

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MONITORING VIOLATIONS	MCL VIOLATIONS

DEFICIENCIES:

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- <u>1. Need well vent screen.</u>
- 2. Data reporting on the MOR(service connection).
- 3. Need a cross ventilation in the chlorine room.
- 4. Need warning signs for gas chlorine use.
- 5. Need a loss of chlorination alarm.

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				· · · · · · · · · · · · · · · · · · ·
Inspector 16 Conto C. Unice	Title	Env. Supervisor II	Date	10/22/96
			·	

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

Plant Name Plant Location	ORANGES S/D, THE Lake Louisa Rd., Clermont, Fl 32711	_ County	Lake	_ PWS ID # _ Phone	<u>3354685</u> 407/869-1919		
Owner Name	Utilities Inc. of Florida			Phone	407/8691919		
Owner Address	200 Weathersfield Ave., Altamonte Spring	s, Fl 32714					
Contact Person	David Zusi T	itle <u>Reg. Op</u>	<u>s. Mgr.</u>	Phone	407/8691919		
This Survey Dat	te <u>10/22/96</u> Last Survey Date _	3/3/93	Las	st C.I. Date	10/6/95		
PWS TYPE & C	LASS			CE Cof Wells	1		
	nt Non-community	SURFACE/UDI: Source					
	PURCHASED from PWS ID #						
		Emergency Water Source Vistas S/D					
PWS STATUS		Emerge	ency Water	Capacity			
Approved sy	ystem with approval number & date						
<u>WC35-2106,</u>	<u>-7/7/87</u>	AUXILIARY POWER SOURCE					
	system	Capacity of Standby (k/M)					
SERVICE ARE	Switchover		atic Man	ual			
Residential S/D)	Standby Plan: TYes TNo					
5C		Hrs Operat	ed Under L	oad			
Food Service:	Yes No X/A	What equip	ment does	it operate?			
		🗌 Well	oumps				
OPERATION &	ter: MAINTENANCE	High Service Pumps					
Operator(s) & C							
Iav Aldrich "C	6368	Satisfy 1/2	Satisfy 1/2 max-day demand? UYes No Unk				
U		Comments			<u> </u>		
0 & M Log: 🛛	Yes 🗋 No 🔲 Not required			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		
Operator Visitat	tion Frequency	TREATMENT PROCESSES IN USE					
Hrs/day: <i>Requi</i>	<u>Chlorinati</u>	Chlorination					
Days/wk: Requ							
Non-consecut	What additional treatment is needed?						
MORS Submitte	For control of what deficiencies?						
Number of serv	For control of what deliciencies?						
				· · · · · · · · · · · · · · · · ·			
Number of Serv	vice Connections Unk	DISTRIBU	TION SYST	EM			
Population Serv	Flow Measuring Device Flow Meter						
Average Day (fr	Meter Size & Type <u>3" Hersey</u>						
Max. Day (from							
Max-day Design	Written Cross connection Control Program: Vac						
Comments	Coliform Sampling Plan: \square Vec \square No \square N/A						
		Comments					
		e e i i i i i i i i i i i i i i i i i i					
COMET: SITE ID PROJECT ID 100204							

PWS ID # <u>3354685</u> Date <u>10/22/96</u>

GROUND WATER SOURCE

.

Well Number		1		
Year Drilled		1986		
Depth Drilled		392'		
Drilling Method		combo		
Type of Grout		Unk		
Static Water Level		59'		
Pumping Water Level				
Design Well Yield				
Test Yield				
Actual Yield (if different than rated capacity)				
Strainer		Unk		
Length (outside casing)		237'		
Diameter (outside casing)		10"		
Material (outside casing)		Blk Iron		
Well Conta	amination History	Unk		
ls inundati	on of well possible?	No		
6' X 6' X 4" Concrete Pad		Yes		
	Septic Tank	>200'		
SET	Reuse Water			
BACKS	WW Plumbing	>200'		
	Other Sanitary Hazard			
	Туре	V.T.		
	Manufacturer Name	Berkley		
PUMP	Model Number	6-16		
	Rated Capacity (gpm)	550		
	Motor Horsepower	40		
Well casing 12" above grade?		Yes		
Well Casing Sanitary Seal		Ok		
Raw Water Sampling Tap		Yes		
Above Ground Check Valve		Yes		
Fence/Housing		Yes		
Well Vent Protection		no screen	· · · · · · · · · · · · · · · · · · ·	

COMMENTS _____

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PWS ID #
 3354685

 Date
 10/22/96

CHLORINATION (Disinfecti	ion)
Type: 🛛 Gas 🗌 Hypo	
Make <u>Regal</u>	Capacity <u>150 gpd</u>
Chlorine Feed Rate	
Avg. Amount of Cl ₂ gas use	d <u>unk</u>
Chlorine Residuals: Plant _	<u>1.6</u> Remote <u>1.3</u>
Remote tap location	
DPD Test Kit: On-site	With operator
🗌 None	🔲 Not Used Daily
Injection Points	
Booster Pump Info	
Comments	

Chlorine Gas Use Requirements	YES	NO	Comments
Dual System		\boxtimes	
Auto-switchover		\boxtimes	
Alarms: Loss of Cl ₂ capability Loss of Cl ₂ residual Cl ₂ leak detection		\boxtimes	
Scale	\square		
Chained Cylinders	\square		
Reserve Supply	\square		
Adequate Air-pak	\boxtimes		w/operator
Sign of Leaks		\boxtimes	
Fresh Ammonia	\square		
Ventilation	\square		
Room Lighting	\square		
Warning Signs	\square		
Repair Kits		\boxtimes	fresh lead wash
Fitted Wrench	\square		
Housing/Protection	\square		· · · · · · · · · · · · · · · · · · ·

STO	DRAGE F	ACIL	ITIES
(G)	Ground	(H)	Hydropneu

(G) Ground (H) Hy (B) Bladder (C) Cle	dropneum earwell	atic (E) Elevated
Tank Type/Number	H/1	
Capacity (gal)	5,000	
Material	Steel	
Gravity Drain	Yes	
By-pass Piping	Yes	
Pressure Gauge	Yes	
Sight Glass or Level Indicator	Yes	
Fittings for Sight Glass	N/A	
Protected Openings	Yes	
PRV/ARV	ARV	
On/Off Pressure	38/58	
Access Padlocked	Yes	
Height to Bottom of Elevated Tank	N/A	
Height to Max. Water Level	N/A	
Comments		

HIGH SERVICE PUMPS

Pump Number			
Туре			
Make			
Model			
Capacity (gpm)			
Motor HP			
Date Installed			
Maintenance			
Comments	<u></u>	<u></u>	

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AERATION (Gases, Fe, & Mn Removal)

Type <u>N/A</u>	Capacity
Aerator Condition	
Bloodworm Presence	
Visible Algae Growth	
Protective Screen Con	dition
Comments	

COMPLIANCE MONITORING									
	COMMUNITY PUBLIC WATER SYSTEMS								
	PWS	# Samples	Sampling		C > 3300			C ≤ 3300	
CONTAMINANT	Screen	Required	Location	Frequency	Sample Date	Due Date	Frequency	Sample Date	Due Date
Microbiological (Bacte)	024	1	Each well	monthly			monthly	9/96	Monthly
		2	Distribution						
Volatile Organics	028	(Note A)	(Note H)	(Notes A, 1)			(Notes A, 2)	8/31/95	1997
Pesticides & PCBs	029	(Notes B, E)	(Note H)	3 years (Note 1)			3 years (Note 2)	4/22/92	1997
Nitrate & Nitrite (as N)	030	1	POE	annually			annually	8/31/95	1996
Inorganics	030	1	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997
Asbestos	030	1 (Note F)	Distribution	9 years (Note 7)			9 years (Note 8)	12/23/93	waiver 12/31/01
Secondaries	031	1	POE	3 years (Note 1)			3 years (Note 2)	10/3/94	1997
Radionuclides	033	(Note C)	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997
Group I UOCs	035	(Notes B, E, G)	POE	(Note 4)			(Note 5)	12/14/93	waiver
Group II UOCs	034	1 (Notes E,G)	POE	3 years (Note 1)			3 years (Note 2)	12/14/93	waiver,
Group III UOCs	036, 037	1 (Note G)	POE	(Note 4)			(Note 5)	12/14/93	waiver
Lead and Copper	047	(Note D)						9/95	1996
TTHM (≥ 10,000 persons)	027	4/plant	Distribution	Quarterly			N/A	N/A	N/A

POE = Point of Entry (Samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.)

See Page 5 for description of italicized notes.

_ PWS ID # _____ Date _____

NOTES:

SAMPLES REQUIRED/SAMPLING LOCATION:

Note A See Rule 62-550.515(1), F.A.C. Each system shall take four consecutive quarterly samples during its assigned year in the system's first compliance period. If no contaminant is detected, the system shall monitor annually during the next three-year compliance period. If still no contaminants are detected, systems shall take one sample during each subsequent three-year compliance period.

> If the initial monitoring for contaminants listed in Rule 62-550.310(2)(b), F.A.C., was completed prior to December 31, 1992, then each system shall take one sample annually beginning January 1, 1993.

- **Note B** 4 consecutive quarterly samples. Credit will be given for samples taken before January 1, 1993.
- Note C See Rule 62-550.519, F.A.C. Compliance shall be based on the average of analyses of four consecutive quarterly samples. A maximum of two quarterly samples may be composited. Subsequent samples shall be collected once every three years.
- **Note D** Contact the Central District's Drinking Water Program at (407) 894-7555 or contact the Florida Rural Water Association.

- *Note E* Contact Ms. Marie Carrasquillo of the Central District's Drinking Water Program at (407) 894-7555, extension 2242, to obtain an application for reduced monitoring.
- Note F See Rule 62-550.511(4), F.A.C. A system without asbestos-containing components shall certify to the Department in writing, using DEP Form No. 62-555.910(10), that it is asbestos free. Certification shall satisfy subsections (1), (2), and (3) of the referenced rule, and shall be submitted each nine-year compliance cycle during the specified year the system is required to monitor.
- Note G See Rule 62-550.521(4), F.A.C. Systems serving less than 150 service connections and serving fewer than 350 persons should notify the Department, by submitting DEP Form No. 62-555.910(11), that their system is available for testing. Normally, these small systems will not be required to monitor for UOCs. Do not send such samples to the Department unless required to do so by the Department.
- **Note H** First quarter samples shall be representative of each well. Subsequent samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.

FREQUENCY:

Note 1	First year of each three-year compliance period (calendar years 1993, 1996, 1999, etc.)
Note 2	Second year of each three-year compliance period (calendar years 1994, 1997, 2000, etc.)
Note 3	Third year of each three-year compliance period (calendar years 1995, 1998, 2001, etc.)
Note 4	First year of the first three-year compliance period (i.e. calendar year 1993)
Note 5	Second year of the first three-year compliance period (i.e. calendar year 1994)

- *Note 6* Third year of the first three-year compliance period (i.e. calendar year 1995)
- *Note* 7 First year of each nine-year compliance cycle (calendar years 1993, 2002, etc.)
- *Note 8* Second year of each nine-year compliance cycle (calendar years 1994, 2003, etc.)
- Note 9 Third year of each nine-year compliance cycle (calendar years 1995, 2004, etc.)

PWS ID # <u>3354685</u> Date <u>10/22/96</u>

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MONITORING VIOLATIONS	MCL VIOLATIONS

DEFICIENCIES:

- 1. MOR reporting--The number of the service connections is not being reported.
- 2. Need a screen on the well vent.

Inspector Roberts C. Grucay Title Env. Supervisor II Date <u>10/22/96</u> Approved by _____ Title Date _____

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

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Plant Name	VISTAS S/D, THE	County	Lake	_ PWS ID #	3354773
Plant Location	US Highway 27, Clermont			Phone	407/869-1919
Owner Name	Utilities Inc., Florida			Phone	407/869-1919
Owner Address	200 Weathersfield Ave. Altamonte Sprin	gs, Fl 32714			
Contact Person	David Zusi	Title Reg. Op	s. Mgr.	Phone	407/869-1919
This Survey Date	e <u>10/22/96</u> Last Survey Date	3/3/93	Las	st C.I. Date	10/6/95
DWS TYPE & CI	224 1			` E	
	LASS			r of Wells	1
	nt Non-community				<u>l</u>
	in Non-continuanty		ASED from		
	in itty		ncv Water	Source Ora	nges S/D
PWS STATUS		Emerge	ncy Water	Canacity	
Approved sys	stem with approval number & date	Emerge	ney water		
WC35-159600	09, 5/30/89	AUXILIARY	POWER	SOURCE	
		🗌 Yes [🛛 None	Not Requ	uired
Unapproved	system	Source			
		Capacity of	Standby (k	(W)	
SERVICE AREA	CHARACTERISTICS	Switchover:	Autom	nat <u>ic</u> 🗌 Man	ual
Residential S/D		Standby Pla	an: 🔲 Yes	No No	
<u>_5C</u>		Hrs Operate	ed Under L	oad	
Food Service:	_ Yes L No 🖂 N/A	What equip	ment does	it operate?	
ODEDATION &		🔲 Well p	oumps		
Certified Operate		🔲 High S	Service Pur	mps	<u> </u>
Operator(s) & Co	artification Class Number	Treat	ment Equip	ment	
Inv Aldrich "C"		Satisfy 1/2	max-day de	emand?	sNoUnk
Jay Aldrich C	-0508	Comments			
O&MLog. X	Yes No Not required				
Operator Visitatio	on Frequency	TDEATME		SSES IN LIS	F
Hrs/day: Require	red N/A Actual N/A	Chlorinatio		.33L3 IN 03	haa
Days/wk: Regui	ired 6 Actual 6	_ Chiormatic	511		
Non-consecutiv	ve Days? Yes No XN/A	What additi	onal treatm	ent is needed	12
MORs submitted	i regularly? 🛛 Yes 🚺 No 🗍 N/A	Triat addition	ondra daun		
Data missing from	m MORs? 🗍 No 🛛 Yes 🗍 N/A	For control	of what def	ficiencies?	
Number of servi	ice connections missing.				
Number of Servi	ce Connections <u>Unk</u>	DISTRIBUT	TION SYST	EM	
Population Serve	ed <u>Unk</u> Basis	Flow Measu	uring Devic	e <u>Flov</u>	v Meter
Average Day (fro	om MORs) <u>39,322 gpd</u>	Meter Size	& Type	<u>3" Hersey</u>	
Max. Day (from I	MORs) <u>156,000 gpd</u>	Backflow P	revention D	Devices: 🖂 Y	es 🛄 No
Max-day Design	Capacity 720,000 gpd	Cross-conn	ections <u>1</u>	None Observed	37
		Written Cro	ss-connect		
		Contorm Sa	impling Pla	in: 🖂 res 🗋	
		Comments			
COMET: SITE ID	PROJECT ID 100203				

⁻ PWS ID # <u>3354773</u> Date <u>10/22/96</u>

GROUND WATER SOURCE

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Well Numb	ber	1		
Year Drille	d	1988		
Depth Drill	ed	346'		
Drilling Me	thod	Rotary		
Type of Gr	rout	Unk		
Static Wate	er Level	100'		
Pumping V	Vater Level			
Design We	ell Yield			
Test Yield				
Actual Yiel	d (if different than rated capacity)			
Strainer		Unk		
Length (ou	itside casing)	103'		
Diameter (outside casing)	10"		
Material (o	utside casing)	Blk Iron		
Well Conta	amination History	Unk		
Is inundation	on of well possible?	No		
6' X 6' X 4" Concrete Pad		Yes		
	Septic Tank	>200'		
SET	Reuse Water			
BACKS	WW Plumbing			
	Other Sanitary Hazard			
	Туре	V.T.		
	Manufacturer Name	Goulds		
PUMP	Model Number	10DHH0		
	Rated Capacity (gpm)	1,000		
	Motor Horsepower	100		
Well casing 12" above grade?		Yes		
Well Casin	ig Sanitary Seal	Ok		
Raw Wate	r Sampling Tap	Yes		
Above Gro	ound Check Valve	Yes		
Fence/Hou	using	Yes		
Well Vent	Protection	No screen		

COMMENTS _____

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PWS ID # <u>3354773</u> Date <u>10/22/96</u>

CHLORINATION (Disinfection	ion)					
Type: 🛛 Gas 🗌 Hypo						
Make <u>Regal</u>	Capacity 150 gpd					
Chlorine Feed Rate Unk						
Avg. Amount of Cl ₂ gas use	dunk					
Chlorine Residuals: Plant _	<u>1.5</u> Remote <u>1.5</u>					
Remote tap location						
DPD Test Kit: On-site	🖾 With operator					
🗋 None	🗌 Not Used Daily					
Injection Points						
Booster Pump Info Goulds 1Hp						
Comments Plant is intercon	nected with Oranges S/D					

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Chlorine Gas Use Requirements	YES	NO	Comments
Dual System		\boxtimes	
Auto-switchover		\boxtimes	
Alarms: Loss of Cl ₂ capability Loss of Cl ₂ residual Cl ₂ leak detection		\boxtimes	
Scale	\square		
Chained Cylinders	\square		
Reserve Supply	\square		
Adequate Air-pak	\square		w/operator
Sign of Leaks		\boxtimes	
Fresh Ammonia	\square		
Ventilation	\square		
Room Lighting			
Warning Signs	\square		
Repair Kits	\boxtimes		Lead wash
Fitted Wrench	\square		
Housing/Protection	\square		

AERATION (G	ases, Fe, &	، Mn ۱	Removal)
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Type <u>N/A</u>	Capacity
Aerator Condition	
Bloodworm Presence	
Visible Algae Growth	
Protective Screen Conc	lition
Comments	

STORAGE FACILITIES

(G) Ground (H) Hydropneumatic (E) Elevated (B) Bladder (C) Clearwell					
Tank Type/Number	H/1				
Capacity (gal)	10,000				
Material	Steel				
Gravity Drain	Yes				
By-pass Piping	Yes				
Pressure Gauge	Yes				
Sight Glass or Level Indicator	Yes				
Fittings for Sight Glass	N/A				
Protected Openings	Yes				
PRV/ARV	ARV				
On/Off Pressure	42/50				
Access Padlocked	Yes				
Height to Bottom of Elevated Tank	N/A				
Height to Max. Water Level	N/A				
Comments <u>The scree on the air release valve was</u> torn, need to be replaced.					

HIGH SERVICE PUMPS

Pump Number			
Туре			
Make			
Model			
Capacity (gpm)			
Motor HP			
Date Installed			
Maintenance	. :	-	
Comments		• • • • • • • • •	· · · · · · · · · · · · · · · · · · ·

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COMPLIANCE MONITORING									
		<u> </u>	OMMUNITY F	UBLIC WA	TER SYST	TEMS			
	PWS	# Samples	Sampling		C > 3300		C ≤ 3300		
CONTAMINANT	Screen	Required	Location	Frequency	Sample Date	Due Date	Frequency	Sample Date	Due Date
Microbiological (Bacte)	024	1	Each well	monthly			monthly	9/96	Monthly
		2	Distribution						
Volatile Organics	028	(Note A)	(Note H)	(Notes A, 1)			(Notes A, 2)	8/31/95	1997
Pesticides & PCBs	029	(Notes B, E)	(Note H)	3 years (Note 1)			3 years (Note 2)	5/20/92	1997
Nitrate & Nitrite (as N)	030	1	POE	annually			annually	8/31/95	1996
Inorganics	030	1	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997
Asbestos	030	1 (Note F)	Distribution	9 years (Note 7)			9 years (Note 8)	12/23/93	waiver 12/31/01
Secondaries	031	1	POE	3 years (Note 1)			3 years (Note 2)	10/03/94	1997
Radionuclides	033	(Note C)	POE	3 years (Note 1)			3 years (Note 2)	10/3/94	1997
Group I UOCs	035	(Notes B, E, G)	POE	(Note 4)			(Note 5)	12/14/93	waiver
Group II UOCs	034	1 (Notes E,G)	POE	3 years (Note 1)			3 years (Note 2)	12/14/93	waiver
Group III UOCs	036, 037	1 (Note G)	POE	(Note 4)			(Note 5)	12/14/93	waiver
Lead and Copper	047	(Note D)						9/95	1996
TTHM (≥ 10,000 persons)	027	4/plant	Distribution	Quarterly			N/A	N/A	N/A

POE = Point of Entry (Samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.)

See Page 5 for description of italicized notes.

. PWS ID # _____ Date

NOTES:

SAMPLES REQUIRED/SAMPLING LOCATION:

Note A See Rule 62-550.515(1), F.A.C. Each system shall take four consecutive quarterly samples during its assigned year in the system's first compliance period. If no contaminant is detected, the system shall monitor annually during the next three-year compliance period. If still no contaminants are detected, systems shall take one sample during each subsequent three-year compliance period.

> If the initial monitoring for contaminants listed in Rule 62-550.310(2)(b), F.A.C., was completed prior to December 31, 1992, then each system shall take one sample annually beginning January 1, 1993.

- **Note B** 4 consecutive quarterly samples. Credit will be given for samples taken before January 1, 1993.
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- **Note D** Contact the Central District's Drinking Water Program at (407) 894-7555 or contact the Florida Rural Water Association.

- **Note E** Contact Ms. Marie Carrasquillo of the Central District's Drinking Water Program at (407) 894-7555, extension 2242, to obtain an application for reduced monitoring.
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- Note G See Rule 62-550.521(4), F.A.C. Systems serving less than 150 service connections and serving fewer than 350 persons should notify the Department, by submitting DEP Form No. 62-555.910(11), that their system is available for testing. Normally, these small systems will not be required to monitor for UOCs. Do not send such samples to the Department unless required to do so by the Department.
- **Note H** First quarter samples shall be representative of each well. Subsequent samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.

FREQUENCY:

Note 1	First year of each three-year compliance period (calendar years 1993, 1996, 1999, etc.)
Note 2	Second year of each three-year compliance period (calendar years 1994, 1997, 2000, etc.)
Note 3	Third year of each three-year compliance period (calendar years 1995, 1998, 2001, etc.)
Note 4	First year of the first three-year compliance period (i.e. calendar year 1993)
Note 5	Second year of the first three-year compliance period (i.e. calendar year 1994)

- *Note 6* Third year of the first three-year compliance period (i.e. calendar year 1995)
- Note 7 First year of each nine-year compliance cycle (calendar years 1993, 2002, etc.)
- *Note 8* Second year of each nine-year compliance cycle (calendar years 1994, 2003, etc.)
- *Note 9* Third year of each nine-year compliance cycle (calendar years 1995, 2004, etc.)

- PWS ID # <u>3354773</u> Date <u>10/22/96</u>

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MONITORING VIOLATIONS	MCL VIOLATIONS
	· · · · · · · · · · · · · · · · · · ·

DEFICIENCIES:

- 1. MOR reporting-- The number of service connections is not being reported.
- 2. Need a screen on the well vent.
- 3. The screen on the air release valve was torn, replace.

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Inspector Roberto C. Curci	Title	Env. Supervisor II	Date <u>/0/22/56</u>
Approved by	Title	10	Date

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

Plant Name	CRESCENT BAY S/D	County	Lake	PWS ID # _	3354686
Plant Location	South Lakeshore Dr., Clermont 32711			Phone	407/869-1919
Owner Name	Utilities Inc.of Florida			Phone	407/869-1919
Owner Address	200 Weathersfield Ave., Altamonte Spring	<u>s, Fl 32714</u>	. <u></u>		
Contact Person	David Zusi	Title <u>Reg. Op</u>	<u>s. Mgr.</u>	Phone	407/869-1919
This Survey Dat	e <u>10/22/96</u> Last Survey Date _	3/3/93	Las	st C.I. Date	10/11/95
	1.400			CE	
PWS ITPE & C	LASS		JD: Numbe	er of Wells	1
	nt Non-community		CE/UDI: S	ource	
	inity		ASED from	n PWS ID #	
		Emerge	ency Water	Source ***	
PWS STATUS		Emerge	ency Water	Capacity	
Approved sy	stem with approval number & date	Ū	•		
<u>WC35-2105</u> ,	2/1/88	AUXILIAR	Y POWER	SOURCE	
		Yes	X None		uired
Unapproved	system	Source	(Olan dhu (
		Capacity of		RVV)	
Decidential S/D	A CHARACTERISTICS	Stondby Pl			luai
<u>SC</u>		Hrs Operat		oad	
Food Service:	Yes No XN/A	What equir	ment does	it operate?	
1 000 0011100.			numps	,	
OPERATION &	MAINTENANCE	T High	Service Pu	imps	
Certified Operat	or: 🛛 Yes 🗌 No 🔲 Not required	Treat	ment Equip	oment	
Operator(s) & C	ertification Class-Number	Satisfy 1/2	max-day d	lemand? 🗌 Ye	es 🗌 No 🗍 Unk
Jay Aldrich "C"	"-6368	Comments			
	Ver Die Networkingd			<u></u>	
					c .
Uperator Visitat	$\frac{1}{1000} \frac{1}{1000} \frac{1}{1000} \frac{1}{1000} \frac{1}{1000} \frac{1}{1000} \frac{1}{10000} \frac{1}{10000000000000000000000000000000000$	Chloringt		E33E3 IN U3	E .
Davs/wk: Regu	vired 6 Actual 6	Chlorinati			
Non-consecut	ive Days? Yes No XN/A	What addit	ional treatr	nent is neede	d?
MORs submitte	d regularly? X Yes No N/A	What addit			
Data missing fro	m MORs? No XYes N/A	For control	of what de	eficiencies?	
Number of serv	vice connections is not being reported.				<u></u>
Number of Serv	vice Connections Unk	DISTRIBU	TION SYS	TEM	
Population Serv	ved <u>Unk</u> Basis	Flow Meas	suring Devi	Ce <u>F10</u>	w Meter
Average Day (fr	rom MORs) *** gpd	Meter Size	e & Type	<u>3 Hersey</u>	
Max. Day (from	MORS) <u>+++ gpd</u>	Cross con	nections	None Observer	
Iviax-uay Design	a plant was off line at he time of	Written Cr		ction Control F	Program: Yes
visit Water wa	s being provided by I'k Crescent Hills	Coliform S	ampling Pl	an: 🛛 Yes T	∃ No □ N/A
Crescent West	Highland Point. ***	Comments	Lake Cre	scent Hills has	the Auxiliary
		Generator	r(Propane g	gas)	
COMET: SITE II	D PROJECT ID <u>100208</u>				

⁻ PWS ID # <u>3354686</u> Date <u>10/22/96</u>

GROUND WATER SOURCE

Well Numb	per	1		
Year Drille	d	1987		
Depth Drill	ed	210'		
Drilling Me	thod	Combo		
Type of Gr	out	Neat Cement		
Static Wat	er Level	33'	. '	
Pumping V	Vater Level			
Design We	ell Yield			
Test Yield				
Actual Yiel	d (if different than rated capacity)			
Strainer		Unk		
Length (ou	tside casing)	64'		
Diameter (outside casing)	10"	· · · · ·	
Material (o	utside casing)	Blk. Iron		
Well Conta	amination History	Unk		
Is inundation	on of well possible?	No		
6' X 6' X 4'	" Concrete Pad	Yes		
	Septic Tank	* >200'		
SET	Reuse Water			
BACKS	WW Plumbing	>200'		
	Other Sanitary Hazard			
	Туре	V.T.		
	Manufacturer Name	Goulds		
PUMP	Model Number	105L05		
	Rated Capacity (gpm)	550		
	Motor Horsepower	30		
Well casin	g 12" above grade?	Yes		
Well Casir	ng Sanitary Seal	Ok		
Raw Wate	r Sampling Tap	Yes		
Above Gro	ound Check Valve	Yes		
Fence/Hou	using	Yes		
Well Vent	Protection	No screen		

COMMENTS Algal growth in the pump head bowl.

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⁻ PWS ID # <u>3354686</u> Date <u>10/22/96</u>

CHLORINATION (Disinfection	on)
Type: 🖾 Gas 🔲 Hypo	
Make <u>Regal</u>	Capacity <u>150 gpd</u>
Chlorine Feed Rate Unk	
Avg. Amount of Cl ₂ gas use	dunk
Chlorine Residuals: Plant _	<u>2.0</u> Remote <u>1.6</u>
Remote tap location	
DPD Test Kit: On-site	🛛 With operator
🗍 None	Not Used Daily
Injection Points	
Booster Pump Info Goulds	1Hp
Comments	

e e

Chlorine Gas Use Requirements	YES	NO	Comments
Dual System		\boxtimes	
Auto-switchover		\boxtimes	
Alarms: Loss of Cl ₂ capability Loss of Cl ₂ residual Cl ₂ leak detection			
Scale	\bowtie		
Chained Cylinders	\square		
Reserve Supply	\square		
Adequate Air-pak	\boxtimes		w/operator
Sign of Leaks		\boxtimes	
Fresh Ammonia	\boxtimes		
Ventilation	\boxtimes		
Room Lighting	\boxtimes		
Warning Signs		\boxtimes	need signs
Repair Kits	\boxtimes		lead wash
Fitted Wrench	\square		
Housing/Protection	\square		

AERA	TION	(Gases,	Fe,	&	Mn	Removal)
					-	

Type <u>N/A</u>	Capacity
Aerator Condition	-
Bloodworm Presence	
Visible Algae Growth	
Protective Screen Condition	
Comments	

STORAGE FACILITIES

STORAGE FACILITIE	_0			
(G) Ground (H) Hy (B) Bladder (C) Cle	dropneum earwell	atic (E	E) Elev	vated
Tank Type/Number	H/1			
Capacity (gal)	10,000			
Material	Steel			
Gravity Drain	Yes			
By-pass Piping	Yes			
Pressure Gauge	Yes			
Sight Glass or Level Indicator	Yes			
Fittings for Sight Glass	N/A			
Protected Openings	Yes			
PRV/ARV	ARV			
On/Off Pressure	48/55			
Access Padlocked	Yes			
Height to Bottom of Elevated Tank	N/A			
Height to Max. Water Level	N/A			

Comments _____

HIGH SERVICE PUMPS

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

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COMPLIANCE MONITORING									
COMMUNITY PUBLIC WATER SYSTEMS									
	PWS	# Samples	Sampling		C > 3300		C ≤ 3300		
CONTAMINANT	Screen	Required	Location	Frequency	Sample Date	Due Date	Frequency	Sample Date	Due Date
Microbiological (Bacte)	024	1	Each well	monthly			monthly	9/96	Monthly
		2	Distribution						
Volatile Organics	028	(Note A)	(Note H)	(Notes A, 1)			(Notes A, 2)	1996	1997
Pesticides & PCBs	029	(Notes B, E)	(Note H)	3 years (Note 1)	· · · ·		3 years (Note 2)	10/30/90	1997
Nitrate & Nitrite (as N)	030	1	POE	annually			annually	1995 Non 1	1996
Inorganics	030	1	POE	3 years (Note 1)			3 years (Note 2)	1994	1997
Asbestos	030	1 (Note F)	Distribution	9 years (Note 7)			9 years (Note 8)	12/23/93	waiver 12/31/01
Secondaries	031	1	POE	3 years (Note 1)			3 years (Note 2)	10/03/94	1997
Radionuclides	033	(Note C)	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997
Group I UOCs	035	(Notes B, E, G)	POE	(Note 4)			(Note 5)	12/14/93	waiver
Group II UOCs	034	1 (Notes E,G)	POE	3 years (Note 1)			3 years (Note 2)	12/14/93	waiver
Group III UOCs	036, 037	1 (Note G)	POE	(Note 4)			(Note 5)	12/14/93	waiver
Lead and Copper	047	(Note D)						1995	9/1996
TTHM (≥ 10,000 persons)	027	4/plant	Distribution	Quarterly			N/A	N/A	N/A

POE = Point of Entry (Samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.)

See Page 5 for description of italicized notes.

- PWS ID # _____ Date

NOTES:

SAMPLES REQUIRED/SAMPLING LOCATION:

Note A See Rule 62-550.515(1), F.A.C. Each system shall take four consecutive quarterly samples during its assigned year in the system's first compliance period. If no contaminant is detected, the system shall monitor annually during the next three-year compliance period. If still no contaminants are detected, systems shall take one sample during each subsequent three-year compliance period.

> If the initial monitoring for contaminants listed in Rule 62-550.310(2)(b), F.A.C., was completed prior to December 31, 1992, then each system shall take one sample annually beginning January 1, 1993.

- **Note B** 4 consecutive quarterly samples. Credit will be given for samples taken before January 1, 1993.
- Note C See Rule 62-550.519, F.A.C. Compliance shall be based on the average of analyses of four consecutive quarterly samples. A maximum of two quarterly samples may be composited. Subsequent samples shall be collected once every three years.
- **Note D** Contact the Central District's Drinking Water Program at (407) 894-7555 or contact the Florida Rural Water Association.

- *Note E* Contact Ms. Marie Carrasquillo of the Central District's Drinking Water Program at (407) 894-7555, extension 2242, to obtain an application for reduced monitoring.
- Note F See Rule 62-550.511(4), F.A.C. A system without asbestos-containing components shall certify to the Department in writing, using DEP Form No. 62-555.910(10), that it is asbestos free. Certification shall satisfy subsections (1), (2), and (3) of the referenced rule, and shall be submitted each nine-year compliance cycle during the specified year the system is required to monitor.
- Note G See Rule 62-550.521(4), F.A.C. Systems serving less than 150 service connections and serving fewer than 350 persons should notify the Department, by submitting DEP Form No. 62-555.910(11), that their system is available for testing. Normally, these small systems will not be required to monitor for UOCs. Do not send such samples to the Department unless required to do so by the Department.
- **Note H** First quarter samples shall be representative of each well. Subsequent samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.

FREQUENCY:

Note 1	First year of each three-year compliance period (calendar years 1993, 1996, 1999, etc.)
Note 2	Second year of each three-year compliance period (calendar years 1994, 1997, 2000, etc.)
Note 3	Third year of each three-year compliance period (calendar years 1995, 1998, 2001, etc.)
Note 4	First year of the first three-year compliance period (i.e. calendar year 1993)
Note 5	Second year of the first three-year compliance

period (i.e. calendar year 1994)

- *Note 6* Third year of the first three-year compliance period (i.e. calendar year 1995)
- Note 7 First year of each nine-year compliance cycle (calendar years 1993, 2002, etc.)
- *Note 8* Second year of each nine-year compliance cycle (calendar years 1994, 2003, etc.)
- *Note 9* Third year of each nine-year compliance cycle (calendar years 1995, 2004, etc.)

PWS ID # <u>3354686</u> Date <u>10/22/96</u>

MONITORING VIOLATIONS	MCL VIOLATIONS
vocs for 1995	
Quarterly monitoring for NO2 & NO3 for	
the new well (refer to WL 96-0077	
Nitrate and Nitrite for 1995	,

DEFICIENCIES:

- 1. MOR reporting-- The number of service connections is not being reported.
- 2 Algal growth in the pump head bowl.
- 3. Need to post Chlorine gas use by the fence.
- 4. Chemical Monitoring violations:
- A) VOCs for 1995.
- B) Nitrate and Nitrite for 1995.
- C) Lead and Copper sampling for 1996
 - D) Quarterly monitoring forNitrate from the Well as per CLEARANCE condition.

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				· · · · · · · · · · · · · · · · · · ·
Inspector <u>Roberto</u>	C. Curry	Title <u> </u>	nv. Supervisor II	Date 10/22/56
Approved by		Title		Date



Department of Ext Ext Environmental Protection

Docket 960444-WU Exhibit ____ (DR-2)

. S. A. 3 A 2537

Virginia B. Wetherell

Secretary

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

June 23, 1997



OCD-PW-SS-97-1180

Utilities, Inc. of Florida 200 Weathersfield Avenue Altamonte Springs, FL 32714

Attention: Donald Rasmussen

Lake County - PW			
Crescent Bay S/D	- 3354686	Amberhill S/D	- 3354648
Crescent West S/D	- 3354690	Lake Ridge Club	- 3354884
Highland Point	- 3354652	Clermont #1/Four Winds	- 3351582
Lake Crescent Hills	- 3354883	Four Lakes & Harbor Oaks	- 3354647
Oranges S/D, The	- 3354685	Clermont #2/Carr Water	- 3350153
-	Vistas S/D. The -	3354773	

Dear Mr. Rasmussen:

The Department conducted inspections of your public water systems on June 19, 1997. These inspections were conducted by me in the presence of Mr. Bryan Gongre. Copies of the Sanitary Survey Reports and/or Water Treatment Plant Compliance Inspection Reports are enclosed for your reference and records.

Deficiencies found during these inspections and/or in Department records are indicated below. These deficiencies shall be corrected in order to return to compliance with Florida Administrative Code (F.A.C.) Rules 62-550, 62-555, 62-560 and 61E12.

Please correct the indicated deficiencies, and notify the Department in writing that the deficiencies have been corrected, no later than July 23, 1997. (You may use the enclosed response form to indicate the corrective actions taken.)

DEFICIENCIES

Crescent West S/D--3354690

1. Properly abandon the 3" well.

Lake Crescent Hills--3354883

1. Clean Algal growth in the pump head discharge.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Clermont #2/Carr Water System--3350153

1. Pressure Tank has pin hole leak. This was noted during the last inspection.

The Department values your continued cooperation in operating and maintaining your water system, and appreciates the assistance provided during the sanitary survey.

If you have any questions concerning this letter, please contact me at the above address or by phone at (407) 893-3319.

Sincerely,

Roberto C. Ansag, Supervisor Drinking Water Compliance/Enforcement

Enclosures

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

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Plant Name CLERMONT #2/CARR WATER SYSTEM	County	Lake	_ PWS ID #	3350153
Plant Location East Lakeshore Drive, Clermont, FL 34711			Phone	407/869-1919
Owner Name Utlities, Inc. of Florida			Phone	407/869-1919
Owner Address 200 Weathersfield Avenue, Altamonte Sprin	ngs, FL_32714	4		· · · · · · · · · · · · · · · · · · ·
Contact Person Don Rasmussen T	itle <u>Vice Pre</u>	esident	Phone	407/869-1919
This Survey Date Last Survey Date	10/14/94	4La	st C.I. Date	10/22/96
PWS ITPE & CLASS		ND: Numbe	or of Wells	2
				<u>L</u>
Non-Community		ency Water	Source	······
PWS STATUS	Emerge	ency Water	Capacity	
Approved system with approval number & date	Litterg			
	AUXILIAR	Y POWER	SOURCE	
	🗌 Yes	None	🔀 Not Req	uired
Unapproved system	Source	·		· · · · · · · · · · · · · · · · · · ·
	Capacity o	of Standby (kW)	·····
SERVICE AREA CHARACTERISTICS	Switchove	r: 🗋 Autor	natic 📋 Mar	lual
Residential	Standby P	lan: 📋 Ye	s 📋 No	
	Hrs Opera	ted Under l		
Food Service: Yes No XIN/A	What equi	pment does	s it operate?	
OPERATION & MAINTENANCE		pumps		
Certified Operator: X Yes No Not required		Service Pu	imps	
Operator(s) & Certification Class-Number	Sotisfy 1/2	ment Equip		
A L Aldrich "C"6368	Commont	max-uay u		
	Commenta	>		
O & M Log: X Yes No Not required	<u></u>	,		
Operator Visitation Frequency	TREATME	ENT PROCE	ESSES IN US	E
Hrs/day: RequiredActual	Disinfecti	ion(Chlorinat	tion)	
Days/wk: Required <u>Three</u> Actual Three				
Non-consecutive Days? 🛛 Yes 🗌 No 🗌 N/A	What add	itional treati	ment is neede	d?
MORs submitted regularly? 🛛 Yes 🗌 No 🛄 N/A				<u></u>
Data missing from MORs? 🔀 No 📋 Yes 📋 N/A	For contro	l of what de	eficiencies?	
Number of Service Connections 37	DISTRIBU	TION SYS		
Population Served 129 Basis	Flow Mea	suring Devi		w Meter
Average Day (from MORs) <u>35.933 gpd</u>	Nieter Size	e a Type Provention	<u>2 Badger</u>	
Max day Dasian Canacity 86 400 and			None Observed	
Niax-day Design Capacity <u>86,400 gpd</u>	Written C		tion Control F	Program: Yes
Club Ambashill S/D and Clamont #1	Coliform	Sampling DI	an M Yes I	
Ciuo, Ambernini S/D, and Clennont #1.	Comment	S		
	Connon	•	·····	
COMET: SITE ID 80465 PROJECT ID 100222	·····			

PWS ID # <u>3351053</u> Date <u>6/19/97</u>

GROUND WATER SOURCE

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Well Numb	ber	1	2	
Year Drille	d	unk	unk	
Depth Drill	ed	332'	243'	
Drilling Me	thod	unk	unk	
Type of Gr	rout	unk	unk	
Static Wat	er Level	unk	, unk	
Pumping V	Vater Level			
Design We	ell Yield			
Test Yield				
Actual Yiel	d (if different than rated capacity)			
Strainer		unk	unk	
Length (ou	itside casing)	212'	206'	
Diameter (outside casing)	6"	4"	
Material (o	utside casing)	Blk. Steel	Blk. Steel	
Well Conta	amination History	unk	unk	
Is inundati	Is inundation of well possible?		no	
6' X 6' X 4	" Concrete Pad	yes	yes	
	Septic Tank	unk	unk	
SET	Reuse Water			
BACKS	WW Plumbing	>100'	>100'	
	Other Sanitary Hazard			
	Туре	Subm.	Subm.	
	Manufacturer Name	unk	unk	
PUMP	Model Number	unk	unk	
	Rated Capacity (gpm)	75	45	
Motor Horsepower		5	3	
Well casin	g 12" above grade?	yes	yes	
Well Casir	ng Sanitary Seal	ok	 ok	
Raw Wate	er Sampling Tap	yes	yes	
Above Gro	ound Check Valve	yes	yes	
Fence/Hou	using	yes	yes	
Well Vent	Protection	yes	-	

COMMENTS _____

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PWS ID #	3350153
Date	6/19/97

CHLORINATION (Disinfection Type: Gas Hypo Make Pulsa Feeder	ion) Capacity	30 ond
Chlorine Feed Rate		<u> </u>
Avg. Amount of Cl ₂ gas use	ed	N/A
Chlorine Residuals: Plant	3.0 Rer	note <u>.7ppm</u>
Remote tap location		
DPD Test Kit: On-site	🛛 With o	perator
🗌 None	🗌 Not Us	ed Daily
Injection Points		
Booster Pump Info		
Comments Has two feed pu	mps at 30 gp	d each.

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

AERATION (Gases, Fe	e, & Mn Removal)
Туре	Capacity
Aerator Condition	
Bloodworm Presence	
Visible Algae Growth	
Protective Screen Con	dition
Comments	
A CONTRACT OF	

STORAGE FACILITIES

(G) Ground	(H) Hy	/dropneumatic	(E)	Elevated
(B) Bladder	(C) Cl	earwell		

Tank Type/Number	H/1				
Capacity (gal)	3,000	•			
Material	Steel				
Gravity Drain	Yes				
By-pass Piping	Yes				
Pressure Gauge	Yes				
Sight Glass or Level Indicator	Yes				
Fittings for Sight Glass	N/A				
Protected Openings	Yes				
PRV/ARV	ARV				
On/Off Pressure	50/62				
Access Padlocked	Yes				
Height to Bottom of Elevated Tank					
Height to Max. Water Level					
Comments Pin Hole leak on the Pressure Tank.					

HIGH SERVICE PUMPS

Pump Number		
Туре		
Make		
Model		
Capacity (gpm)		
Motor HP		
Date Installed		
Maintenance		
Comments	<u></u>	 <u></u>

COMPLIANCE MONITORING									
COMMUNITY PUBLIC WATER SYSTEMS									
	PWS	# Samples	Sampling		C > 3300			C ≤ 3300	
CONTAMINANT	Screen	Required	Location	Frequency	Sample Date	Due Date	Frequency	Sample Date	Due Date
Microbiological (Bacte)	024	1	Each well	monthly	<u>_</u>		monthly	5/97	6.97
		2	Distribution				monthly	5/97	6/97
Volatile Organics	028	(Note A)	(Note H)	(Notes A, 1)			(Notes A, 2)	3rd annual 8/31/95	1997
Pesticides & PCBs	029	(Notes B, E)	(Note H)	3 years (Note 1)			3 years (Note 2)	2/21/91	1997
Nitrate & Nitrite (as N)	030	1	POE	annually			annually	12/12/96	1997
Inorganics	030	1	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997
Asbestos	030	1 (Note F)	Distribution	9 years (Note 7)			9 years (Note 8)	Waiver 12/23/93	2003
Secondaries	031	1	POE	3 years (Note 1)			3 years (Note 2)	10/3/94	1997
Radionuclides	033	(Note C)	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997
Group I UOCs	035	(Notes B, E, G)	POE	(Note 4)			(Note 5)	12/14/93	Waiver
Group II UOCs	034	1 (Notes E,G)	POE	3 years (Note 1)			3 ⁻ years (Note 2)	12/14/93	1997
Group III UOCs	036, 037	1 (Note G)	POE	(Note 4)			(Note 5)	12/14/93	Waiver
Lead and Copper	047	(Note D)						Call DEP	
TTHM (≥ 10,000 persons)	027	4/plant	Distribution	Quarterly			N/A	. N/A	N/A

POE = Point of Entry (Samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.)

See Page 5 for description of italicized notes.

PWS ID # <u>3350153</u> Date 6/19/97

NOTES:

SAMPLES REQUIRED/SAMPLING LOCATION:

Note A See Rule 62-550.515(1), F.A.C. Each system shall take four consecutive quarterly samples during its assigned year in the system's first compliance period. If no contaminant is detected, the system shall monitor annually during the next three-year compliance period. If still no contaminants are detected, systems shall take one sample during each subsequent three-year compliance period.

> If the initial monitoring for contaminants listed in Rule 62-550.310(2)(b), F.A.C., was completed prior to December 31, 1992, then each system shall take one sample annually beginning January 1, 1993.

- *Note B* 4 consecutive quarterly samples. Credit will be given for samples taken before January 1, 1993.
- Note C See Rule 62-550.519, F.A.C. Compliance shall be based on the average of analyses of four consecutive quarterly samples. A maximum of two quarterly samples may be composited. Subsequent samples shall be collected once every three years.
- **Note D** Contact the Central District's Drinking Water Program at (407) 894-7555 or contact the Florida Rural Water Association.

- Note E Contact Ms. Marie Carrasquillo of the Central District's Drinking Water Program at (407) 894-7555, extension 2242, to obtain an application for reduced monitoring.
- Note F See Rule 62-550.511(4), F.A.C. A system without asbestos-containing components shall certify to the Department in writing, using DEP Form No. 62-555.910(10), that it is asbestos free. Certification shall satisfy subsections (1), (2), and (3) of the referenced rule, and shall be submitted each nine-year compliance cycle during the specified year the system is required to monitor.
- Note G See Rule 62-550.521(4), F.A.C. Systems serving less than 150 service connections and serving fewer than 350 persons should notify the Department, by submitting DEP Form No. 62-555.910(11), that their system is available for testing. Normally, these small systems will not be required to monitor for UOCs. Do not send such samples to the Department unless required to do so by the Department.
- **Note H** First quarter samples shall be representative of each well. Subsequent samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.

FREQUENCY:

- Note 1 First year of each three-year compliance period (calendar years 1993, 1996, 1999, etc.)
 Note 2 Second year of each three-year compliance period (calendar years 1994, 1997, 2000, etc.)
 Note 3 Third year of each three-year compliance period (calendar years 1995, 1998, 2001, etc.)
 Note 4 First year of the first three-year compliance period (i.e. calendar year 1993)
- *Note 5* Second year of the first three-year compliance period (i.e. calendar year 1994)

- *Note* 6 Third year of the first three-year compliance period (i.e. calendar year 1995)
- Note 7 First year of each nine-year compliance cycle (calendar years 1993, 2002, etc.)
- *Note 8* Second year of each nine-year compliance cycle (calendar years 1994, 2003, etc.)
- *Note 9* Third year of each nine-year compliance cycle (calendar years 1995, 2004, etc.)

PWS ID #	3350153
Date	6/19/97

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MONITORING VIOLATIONS	MCL VIOLATIONS			
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DEFICIENCIES:

1...Pressure tank has pin hole leak. This was noted during last year's inspection.

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2		<u> </u>		
Inspector Kolanto Comer	Title	Env. Supervisor II	Date	6/19/97
Approved by	Title		Date	

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

1

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Plant Name	CLERMONT #1/FOUR WINDS S/D	County	Lake	_ PWS ID #	3351582
Plant Location	East Lakeshore Dr., Clermont, FL 34711			Phone	407/869-1919
Owner Name	Utilities, Inc. of Florida			Phone	407/869-1919
Owner Address	200 Weathersfield Ave., Altamonte Spring	gs, FL 32714			
Contact Person	Don Rasmussen	Title Vice Pre	sident	Phone	407/869-1919
This Survey Date	e 6/19/97 Last Survey Date	10/14/94	Las	t C.I. Date	10/22/96
,			······································		
PWS TYPE & C	LASS	RAW WATE	ER SOURC	E	
🛛 Community		🗌 GROUN	ID; Number	r of Wells	
Non-transien	t Non-community	SURFA	CE/UDI; So	ource	
🗌 Non-Commu	nity	🗌 PURCH	ASED from	PWSID#_	
	-	🗌 Emerge	ncy Water	Source	
PWS STATUS		Emerge	ncy Water	Capacity	
Approved sy	stem with approval number & date	-	-		
		AUXILIARY	POWER S	SOURCE	
		🗌 Yes [None	🔲 Not Req	uired
Unapproved	system	Source			
		Capacity of	Standby (H	<w)< td=""><td></td></w)<>	
SERVICE AREA		Switchover:	: 🔲 Autom	natic 🗌 Man	ual
Residential		Standby Pla	an: 🗌 Yes	i 🗌 No	
C5C		Hrs Operate	ed Under L	oad	
Food Service:	🗌 Yes 🔲 No 🖾 N/A	What equip	ment does	it operate?	
		🗌 Well p	oumps		
OPERATION &	MAINTENANCE	🗌 High	Service Pur	mps	
Certified Operate	or: 🛛 Yes 📋 No 📋 Not required	🗌 Treati	ment Equip	ment	
Operator(s) & C	ertification Class-Number	Satisfy 1/2	max-day de	emand? 🗌 Ye	es 🗌 No 🗍 Unk
A.J. Aldrich "(<u>C"6368</u>	Comments			
0 & M Log: 🔟 `	Yes 📋 No 📋 Not required				
Operator Visitati	on Frequency	TREATME	NT PROCE	SSES IN US	E
Hrs/day: Requir	redActual	Disinfectio	on(Chlorinati	ion)	
Days/wk: Requ	ired <u>Three</u> Actual	·		· · · · · · · · · · · · · · · · · · ·	
Non-consecuti	ve Days? 🛛 Yes 📋 No 📋 N/A	What addit	ional treatm	nent is neede	d?
MORs submittee	regularly? X Yes V No VA				
Data missing fro	m MORs? 🖾 No 📋 Yes 📋 N/A	For control	of what de	ficiencies?	
<u> </u>	<u></u>				
		DIGTOIDU			
Number of Servi		DISTRIBU	IIUN STSI		Mate
Population Serv	ed Basis	Flow Meas	uring Devic	e <u>Flov</u>	v Meter
Average Day (fr	om MORs) gpd	Meter Size	& Type		
Max. Day (from	MORS) gpd	Backflow P	revention L		res 📋 No
Max-day Design	Capacity gpd	Cross-conr	nections		
Comments		vvritten Cro	ss-connec		rogram: Yes
		Coliform Sa	ampling Pla	an: 🖂 Yes 🗋	JNO UN/A
		Comments			
				·····	· · · · · · · · · · · · · · · · · · ·
COMET. SHELL					

PWS ID # <u>3351582</u> Date <u>6/19/97</u>

GROUND WATER SOURCE

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Well Number		1	2	
Year Drilled		unk	unk	
Depth Drill	ed	445'	387'	
Drilling Me	thod	unk	unk	
Type of Gr	out	unk	unk	
Static Wat	er Level		. '	
Pumping V	Vater Level			
Design We	ell Yield			
Test Yield				
Actual Yiel	d (if different than rated capacity)			
Strainer		unk	unk	
Length (ou	itside casing)	125'	159'	
Diameter (outside casing)	8"	4"	
Material (o	utside casing)	Blk.Steel	Blk.Steel	
Well Conta	amination History	unk	unk	
Is inundati	on of well possible?	no	no	
6' X 6' X 4	" Concrete Pad	yes	yes	
Septic Tank		>100'	>100'	
SET	Reuse Water			
BACKS	WW Plumbing	>100'	>100'	
	Other Sanitary Hazard			
	Туре	Subm.	Subm.	
	Manufacturer Name	unk	unk	
PUMP	Model Number	unk	unk	
	Rated Capacity (gpm)	236	54	
	Motor Horsepower	20	5	
Well casing 12" above grade?		yes	yes	
Well Casing Sanitary Seal		ok	ok	
Raw Water Sampling Tap		yes	yes	
Above Ground Check Valve		yes	yes	
Fence/Housing		yes	yes	
Well Vent Protection		yes	yes	

COMMENTS System is interconnected to Amberhill S/D, Lake Ridge Club.

PWS ID #	3351582
Date	6/19/97

CHLORINATION (Disinfecti	on)
Type: 🗌 Gas 🛛 Hypo	
Make Chem-Tech	Capacity <u>30 gpd</u>
Chlorine Feed Rate	
Avg. Amount of Cl2 gas use	ed <u>N/A</u>
Chlorine Residuals: Plant _	<u>3.0</u> Remote <u>1.5</u>
Remote tap location	
DPD Test Kit: 🗌 On-site	🔀 With operator
🗌 None	🗌 Not Used Daily
Injection Points	
Booster Pump Info	
Comments	1.1.2.2

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

AERATION (Gases,	Fe, & Mn Removal)
T	Operative

on

STORAGE FACILITIES

(G)	Ground	(H)	Hydropneumatic	(E)	Elevated
(B)	Bladder	(C)	Clearwell		_

Tank Type/Number	H/1	H/2
Capacity (gal)	1,000	900
Material	Steel	
Gravity Drain	Yes	Yes
By-pass Piping	Yes	N/A
Pressure Gauge	Yes	Yes
Sight Glass or Level Indicator	Yes	N/A
Fittings for Sight Glass	N/A	N/A
Protected Openings	Yes	N/A
PRV/ARV	ARV	None
On/Off Pressure	40/55	
Access Padlocked		
Height to Bottom of Elevated Tank		
Height to Max. Water Level		
Comments		

HIGH SERVICE PUMPS

morrourthe	•	
Pump Number		
Туре		
Make		
Model		
Capacity (gpm)		
Motor HP		
Date Installed		
Maintenance		
Comments		

7

PWS ID #	3351582
Date	6/19/97

COMPLIANCE MONITORING									
	COMMUNITY PUBLIC WATER SYSTEMS								
	PWS	# Samples	Sampling		C > 3300			$C \leq 3300$	
CONTAMINANT	Screen	Required	Location	Frequency	Sample Date	Due Date	Frequency	Sample Date	Due Date
Microbiological (Bacte)	024	1	Each well	monthly			monthly	5/97	6/97
		2	Distribution				monthly	5/97	6/97
Volatile Organics	028	(Note A)	(Note H)	(Notes A, 1)			(Notes A, 2)	8/31/95	1997
Pesticides & PCBs	029	(Notes B, E)	(Note H)	3 years (Note 1)			3 years (Note 2)	4/22/92	once in 1997
Nitrate & Nitrite (as N)	030	1	POE	annually			annually	*12/12/96	*1997
Inorganics	030	1	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997
Asbestos	030	1 (Note F)	Distribution	9 years (Note 7)			9 years (Note 8)	Waiver 12/23/93	2003
Secondaries	031	1	POE	3 years (Note 1)			3 years (Note 2)	10/03/94	1997
Radionuclides	033	(Note C)	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997
Group I UOCs	035	(Notes B, E, G)	POE	(Note 4)			(Note 5)		
Group II UOCs	034	1 (Notes E,G)	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997
Group III UOCs	036, 037	1 (Note G)	POE	(Note 4)	·		(Note 5)		
Lead and Copper	047	(Note D)						contact dep.	
TTHM (≥ 10,000 persons)	027	4/plant	Distribution	Quarterly			N/A	N/A	N/A

POE = Point of Entry (Samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.)

See Page 5 for description of italicized notes.

PWS ID # <u>3351582</u> Date <u>6/19/97</u>

NOTES:

SAMPLES REQUIRED/SAMPLING LOCATION:

Note A See Rule 62-550.515(1), F.A.C. Each system shall take four consecutive quarterly samples during its assigned year in the system's first compliance period. If no contaminant is detected, the system shall monitor annually during the next three-year compliance period. If still no contaminants are detected, systems shall take one sample during each subsequent three-year compliance period.

> If the initial monitoring for contaminants listed in Rule 62-550.310(2)(b), F.A.C., was completed prior to December 31, 1992, then each system shall take one sample annually beginning January 1, 1993.

- *Note B* 4 consecutive quarterly samples. Credit will be given for samples taken before January 1, 1993.
- Note C See Rule 62-550.519, F.A.C. Compliance shall be based on the average of analyses of four consecutive quarterly samples. A maximum of two quarterly samples may be composited. Subsequent samples shall be collected once every three years.
- **Note D** Contact the Central District's Drinking Water Program at (407) 894-7555 or contact the Florida Rural Water Association.

- *Note E* Contact Ms. Marie Carrasquillo of the Central District's Drinking Water Program at (407) 894-7555, extension 2242, to obtain an application for reduced monitoring.
- Note F See Rule 62-550.511(4), F.A.C. A system without asbestos-containing components shall certify to the Department in writing, using DEP Form No. 62-555.910(10), that it is asbestos free. Certification shall satisfy subsections (1), (2), and (3) of the referenced rule, and shall be submitted each nine-year compliance cycle during the specified year the system is required to monitor.
- Note G See Rule 62-550.521(4), F.A.C. Systems serving less than 150 service connections and serving fewer than 350 persons should notify the Department, by submitting DEP Form No. 62-555.910(11), that their system is available for testing. Normally, these small systems will not be required to monitor for UOCs. Do not send such samples to the Department unless required to do so by the Department.
- *Note H* First quarter samples shall be representative of each well. Subsequent samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.

FREQUENCY:

Note 1	First year of each three-year compliance period (calendar years 1993, 1996, 1999, etc.)
Note 2	Second year of each three-year compliance period (calendar years 1994, 1997, 2000, etc.)
Note 3	Third year of each three-year compliance period (calendar years 1995, 1998, 2001, etc.)
Note 4	First year of the first three-year compliance period (i.e. calendar year 1993)
Note 5	Second year of the first three-year compliance

period (i.e. calendar year 1994)

- *Note* 6 Third year of the first three-year compliance period (i.e. calendar year 1995)
- *Note* 7 First year of each nine-year compliance cycle (calendar years 1993, 2002, etc.)
- *Note 8* Second year of each nine-year compliance cycle (calendar years 1994, 2003, etc.)
- *Note 9* Third year of each nine-year compliance cycle (calendar years 1995, 2004, etc.)

PWS ID # <u>3351582</u> Date <u>6/19/97</u>

MONITORING VIOLATIONS	MCL VIOLATIONS
	·

DEFICIENCIES:

NOTE:

· , r

THERE WERE NO DEFICIENCIES NOTED. THANK YOU FOR A JOB WELL DONE.

NITRATE NITRITE QUARTERLY. FIRST QUARTER WAS DUE 3/31?97.

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		- <u> </u>	·····	<u>_</u>
			<u></u>	
				<u></u>
		<u>,</u>		
Inspector Roberto C. Comog	Title	Env. Supervisor II	Date	6/19/97
Approved by	Title	×	Date	
		······································		

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

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Plant Name	AMBERHI	LL S/D	County	Lake	PWS ID # _	3354648
Plant Location _	East Lakeshore Dr., Cle	rmont, FL 34711			Phone	407/869-1919
Owner Name	Utilities, Inc. of Florida				Phone	407/869-1919
Owner Address	200 Weathersfield Av	enue, Altamonte Spri	ngs, FL 32714			
Contact Person	Don Rasmussen	1	itle <u>Vice Pres</u>	ident	Phone	407/869-1919
This Survey Date	e <u>6/19/97</u>	_ast Survey Date _	10/14/94	La	st C.I. Date	10/22/96
This Survey Date PWS TYPE & Cl Community Non-transien Non-Commu PWS STATUS Approved sys Unapproved SERVICE AREA Residential C5C Food Service: OPERATION & I Certified Operator Operator(s) & Ce A.J.Aldrich Coperator Visitatio Hrs/day: Require Days/w/: Beauire	e 6/19/97 I LASS It Non-community nity stem with approval nu system CHARACTERISTICS CHARACTERISTICS CHARACTERISTICS Yes □ No ☑ N/ MAINTENANCE for: ☑ Yes □ No □ ertification Class-Num 2"6368 Yes □ No □ Not ru on Frequency ed Actual	Last Survey Date		La R SOUR D; Number CE/UDI; S ASED from CE/UDI; S ASED from CE/UDI; S ASED from CE/UDI; S ASED from None Standby of Autor n: Ye d Under I ment does umps Service Put nax-day of ACCHIORINATION CE/UDI; S ASED from None CE/UDI; S ASED from CE/UDI; S ASED from CE/UDI; S ASED from CE/UDI; S ASED from CE/UDI; S ASED from CE/CHORING CE/CHORING CE/CHORING	st C.I. Date CE er of Wells m PWS ID # r Source r Capacity SOURCE SOURCE Not Req (kW) matic Man s No Load s it operate? Jumps pment demand?Ye	uired
Non-consecutiv	ve Days? 🗌 Yes 📋	No 🛛 N/A	What addition	onal treat	ment is neede	d?
MORs submitted	regularly? 🛛 Yes [m MORe2 Man					
		Yes 🔄 N/A	For control of	of what de	eficiencies?	
Number of Servic Population Serve Average Day (fro Max. Day (from M Max-day Design Comments <u>Syst</u> Lake Ridge Club	ce Connections ed157 Basis om MORs)241,000 MORs) <u>390,000 gpd</u> Capacity540,000 eem is interconnected to 0	45) gpd) gpd Clermont #1,	DISTRIBUT Flow Measu Meter Size & Backflow Pr Cross-conne Written Cros Coliform Sau Coliform Sau	ION SYS ring Device & Type evention ections ss-connece mpling Pl	TEM ce <u>Flow</u> 6" Devices: X Y <u>None Observed.</u> ction Control P an: X Yes	v Meter ´es □ No Program: Yes] No □ N/A
COMET: SITE ID	80566 PROJECT	ID 100216	·····			

PWS ID # <u>3354648</u> Date <u>6/19/97</u>

GROUND WATER SOURCE

,

Well Numb	per	1			
Year Drilled		unk	· · · · · · · · · · · · · · · · · · ·		
Depth Drill	ed	600'			
Drilling Me	thod	unk			
Type of Gr	out	unk			
Static Wate	er Level	unk			
Pumping V	Vater Level				
Design We	ell Yield				
Test Yield					
Actual Yiel	d (if different than rated capacity)				
Strainer	<u></u>	unk			
Length (ou	tside casing)	160'			
Diameter (outside casing)	10"			
Material (o	utside casing)	Blk.Steel			
Well Conta	amination History	unk			
Is inundation of well possible?		no			
6' X 6' X 4'	" Concrete Pad	yes			
Septic Tank		>200'			
SET	Reuse Water				
BACKS	WW Plumbing	>200'			
	Other Sanitary Hazard				
	Туре	V.T.			
	Manufacturer Name	Goulds			
PUMP	Model Number	unk			
	Rated Capacity (gpm)	750			
Motor Horsepower		60			
Well casin	g 12" above grade?	yes			
Well Casir	ng Sanitary Seal	ok			
Raw Wate	r Sampling Tap	yes			
Above Gro	ound Check Valve	yes			
Fence/Hou	using	yeses			
Well Vent	Protection			}	

COMMENTS _____

1

PWS ID # <u>3354648</u> Date <u>6/19/97</u>

CHLORINATION (Disinfection)
Type: 🖾 Gas 🔲 Hypo
Make Regal Capacity 150 ppd
Chlorine Feed Rate 20lbs/day
Avg. Amount of Cl ₂ gas used <u>8 ppd</u>
Chlorine Residuals: Plant 3.0 Remote 1.5
Remote tap location
DPD Test Kit: 🗌 On-site 🛛 With operator
🗌 None 📃 Not Used Daily
Injection Points
Booster Pump Info Goulds 2HP
Comments System is using less than 10 lbs.of
chlorine per day .

`**`**,

Chlorine Gas Use Requirements	YES	NO	Comments
Dual System	\boxtimes		
Auto-switchover	\square		
Alarms: Loss of Cl ₂ capability Loss of Cl ₂ residual Cl ₂ leak detection		\mathbb{X}	using less than 10lbs per day.
Scale	\boxtimes		
Chained Cylinders	\boxtimes		
Reserve Supply	\boxtimes		
Adequate Air-pak	\boxtimes		
Sign of Leaks		\boxtimes	
Fresh Ammonia			
Ventilation	\boxtimes		
Room Lighting	\boxtimes		
Warning Signs	\boxtimes		
Repair Kits	\boxtimes		
Fitted Wrench	\boxtimes		
Housing/Protection			

AERATION (Gases, F	e, & Mn Removal)
Туре	Capacity
Aerator Condition	•
Bloodworm Presence	
Visible Algae Growth	
Protective Screen Cor	ndition
Comments	

STORAGE FACILITIES

(G) Ground (H) Hy (B) Bladder (C) Clo	dropneum earwell	atic	(E)	Elevated
Tank Type/Number	H/1			
Capacity (gal)	7,500		•	
Material	Steel			
Gravity Drain	Yes			
By-pass Piping	Yes			
Pressure Gauge	Yes			
Sight Glass or Level Indicator	Yes			
Fittings for Sight Glass	N/A			
Protected Openings	Yes			
PRV/ARV	ARV			
On/Off Pressure	40/50			
Access Padlocked	Yes			
Height to Bottom of Elevated Tank				
Height to Max. Water Level				
Comments				

HIGH SERVICE PUMPS

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

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COMPLIANCE MONITORING									
COMMUNITY PUBLIC WATER SYSTEMS									
	PWS	# Samples	Sampling		C > 3300			C < 3300	
CONTAMINANT	Screen	Required	Location	Frequency	Sample Date	Due Date	Frequency	Sample Date	Due Date
Microbiological (Bacte)	024	1	Each well	monthly			monthly	5/97	6.97
		2	Distribution				monthly	5/97	6/97
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Nitrate & Nitrite (as N)	030	1	POE	annually			annually	12/12/96	1997
Inorganics	030	1	POE	3 years (Note 1)			3 years (Note 2)	8/16/94	1997
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Group I UOCs	035	(Notes B, E, G)	POE	(Note 4)			(Note 5)	12/14/93	Waiver
Group`ll UOCs	034	1 (Notes E,G)	POE	3 years (Note 1)			3 y ears (Note 2)	12/14/93	1997
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Lead and Copper	047	(Note D)			<u></u>			Call DEP	
TTHM (≥ 10,000 persons)	027	4/plant	Distribution	Quarterly			N/A	N/A	N/A

POE = Point of Entry (Samples shall be taken at each entry point to the distribution system that is representative of each source after treatment.)

See Page 5 for description of italicized notes.

PWS ID # <u>3354648</u> Date <u>6/19/97</u>

NOTES:

SAMPLES REQUIRED/SAMPLING LOCATION:

Note A See Rule 62-550.515(1), F.A.C. Each system shall take four consecutive quarterly samples during its assigned year in the system's first compliance period. If no contaminant is detected, the system shall monitor annually during the next three-year compliance period. If still no contaminants are detected, systems shall take one sample during each subsequent three-year compliance period.

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- *Note E* Contact Ms. Marie Carrasquillo of the Central District's Drinking Water Program at (407) 894-7555, extension 2242, to obtain an application for reduced monitoring.
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period (i.e. calendar year 1994)

- *Note* 6 Third year of the first three-year compliance period (i.e. calendar year 1995)
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- *Note 9* Third year of each nine-year compliance cycle (calendar years 1995, 2004, etc.)

PWS ID # <u>3354648</u> Date <u>6/19/97</u>

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MONITORING VIOLATIONS	MCL VIOLATIONS

DEFICIENCIES:

NOTE: THERE WERE NO DEFICIENCIES NOTED. THANK YOU FOR A JOB WELL DONE.

		<u>,</u>	<u></u>	
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				····
			········	
Inspector Kiberto C Grucy	Title	Env. Supervisor II	Date	6/19/97
Approved by	Title		Date	
PWS Name CRESCI	ENT WEST S/D			
-------------------------	--	--		
Mailing Address				
Date				
Elorida Doportmont o	f Environmental Brotection			
3319 Maguire Blvd.,	Suite 232			
Orlando, FL 32803				
Attention BOB ANS	AG			
In response to the Dep	partment's sanitary survey letter/compliance	e inspection report for the subject pu		
listed deficiencies:	<u> </u>	lowing actions were done to correct		
Deficiency		Dat		
Item No.	Corrective Action Done	Don		
<u></u>				
<u> </u>		·		
<u> </u>				
······				
<u> </u>				
·				
(Attach concerts -t	t if pacement)			
(Allach separate shee	t if necessary)			
	e correctness of the above information:			
I hereby certify to the				

WS Name_	LAKE CRESCENT HILLS	
Mailing Add	ress	
Date		
Florida Dep 3319 Magui Orlando, FL	artment of Environmental Protection re Blvd., Suite 232 32803	
Attention:	BOB ANSAG	
In response t water system isted deficie	o the Department's sanitary survey letter/compliance inspection report for th dated <u>6-19-97</u> , the following actions were don encies:	e subject publi e to correct th
Deficiencv		Date
Item No.	Corrective Action Done	Done
<u>, , , , , , , , , , , , , , , , , , , </u>	•	. <u>.</u>
	· · · · · · · · · · · · · · · · · · ·	•
	· · · · · · · · · · · · · · · · · · ·	
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
(Attach sep	arate sheet if necessary)	
I harehu co	tify to the correctness of the above information.	
r nereby ce	tury to the contectness of the above information.	

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10/06/93 dd

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PWS ID Number 3350153	J	
PWS Name <u>CLERMONT #2/C</u>	CARR WATER SYSTEM	
Mailing Address		
Date		
Florida Department of Enviro	nmental Protection	
3319 Maguire Blvd., Suite 23	52	
Ullando, FL 32803		. • .
Attention: BOB ANSAG		
In response to the Department water system dated <u>6-19</u> listed deficiencies:	's sanitary survey letter/compliance inspection and the following	ion report for the subject public ctions were done to correct the
Deficiency		Date
Item No.	Corrective Action Done	Done
		•
(Attach separate sheet if nece	ssary)	
I hereby certify to the correc	tness of the above information:	
5 5		
PWS Owner/Representative S	Signature	
Typed or printed Name of P	WS Owner/Representative_	
	-	
10/06/93 00		

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Plant name <u>Crescenit west S/A</u> Address <u>So. LAKishore Dr. Clermonit</u> Owner name <u>willities Inic. of FL.</u>	County LAKE FL 32711	PW	SID <u>3354690</u> Dine <u>407/869-1919</u> ntact Dony 12asmusson
Dwner address too weat the field Ave. This inspection date 6/19/9 Last C.I. PWS Type: 10 Community Don-Transient 1 Service area characteristics Residential Food service? Dyes 12 No	date <u>10/11/95</u> Non-Community	Last surve Non-Comm o. of service of Served	one_ <u>407/861-7474</u> ey date_ <u>10/12/96</u> nunity connections population
OPERATION & MAINTENANCE Certified operator: ▷ Yes □ No □ N/A Operator & certification class-number: A. J. ALbrick ° C ° 67 67 O&M log: □ yes □ no LK Crescent WELL Number of wells _ Standby well? Auxiliary power □ yes ○ no □ N/A 6' x 6' x 4" pad ○ yes □ no Sanitary seal ○ OK □ Raw water tap: ○ yes □ no □ not smooth nosed Check valve ○ Yes □ no Sanitary hazards CHLORINATION Chlorinator type: ○ Gas □ Hypo Cl₂ residual: Plant <u>°</u> C ^P Remote <u>S PP</u> DPD-type test kit ○ yes □ no Gas cylinder scale ○ yes □ no Adequate air-pak ○ yes □ no Adequate ventilation	STORAGE TANKS (G) Ground (C) ((B) Bladder (H) I Tank type Capacity Gravity drain By-pass piping Pressure gauge On/Off pressure Sight glass Fittings for sight glass Air release valve Pressure relief valve Access padlocked DEFICIENCIES / C I - P P24 N d ON	S Clearwell (E) Hydropneuma H/I IO, OOU 7CS	
PLEASE CORRECT THE INDICATED, DEFICIENC DEPARTMENT NO LATER THAN 7/19/97 HAVE BEEN CORRECTED; FAILURE TO DO ENFORCEMENT ACTION BY THE DEPARTMENT Protection, 3319 Maguire Blvd., Suite 232, Orla	CIES AND PROVIDI STA SO WILL RESULT G. Send your responded Indo, Florida 32803	E A WRITTEN TING THAT A IN THE TAI onse to: Depa 3. Phone:(407	I STATEMENT TO THE LL LISTED DEFICIENCIES KING OF APPROPRIATE Intment of Environmental 7)894-7555
Inspector Roberto C. anay	Title Univ Sup.	ĪI	Date <u>6 / 19 / 97</u>
Received by 75 1 13	Title <u>Area Mar</u>	·	Date <u>6 // 187</u>
Form left: pon site with water plant	t operator y wit	th water pur	Veyor Romy 02/15/94

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s is Bo .1

Plant name Crescenit BAY S/A Address So. LAKeshore br., CLermonit	County LAK 6- FL 32711	P	WS ID 3354686 hone 407/869-1919
Owner name willities, Fric. of Florid	¢	(Contact Don Rasmuss my
Owner address 200 weathersfield Aue.	ALTAMONTE Spr	inge_ F	phone 407/869-1919
This inspection date <u>611717</u> Last C.I. (date 10/11/95	Last su	rvey date 10/22/96
PWS Type: D. Community D. Non-Transient N	on-Community	U Non-Con	
Service area characteristics <u>resterning</u>	<u>s</u> N	o. of service	
FOOD SERVICE: LI TES LE NO		Serve	
OPERATION & MAINTENANCE	STORAGE TANKS		
Certified operator: 🛛 Yes 🗆 No 🗆 N/A	(G) Ground (C) (, Clearwell (F) Elevated
Operator & certification class-number:	(B) Bladder (H) I	Hvdronneum	atic/flow-through
A.J. ALDRICH " L" - G3CF			
O&M log: Dyes D no Lk. crecu,		HII	
WELL HILLS,	Capacity	10 000	
Number of wells 1 Standby well? High land P	Gravity drain	42S	
Auxiliary power 🗆 yes 🛛 no 🗆 N/A	By-pass piping	Jes_	
6' x 6' x 4" pad ⊉ryes ∐ no	Pressure gauge	yes	
Sanitary seal KOK LI -	On/Off pressure	45 66	
Raw water tap: U yes U no	Sight gloss		
		723	
Encer valve Dryes I no	Fittings for sight glass		
Sepitary bazarda	Air release valve	yes	
CHI ORINATION	Pressure relief valve		
\neq Chlorinator type: \square Gas \square Hypo	Access padlocked	78.5	
Cl. residual: Plant D. S. PPY Remote . 5 MPK		*	
DPD-type test kit Dy yes no	DEFICIENCIES / C	OMMENTS	
Gas cylinder scale ⊠yes □ no			
🗸 Gas cylinder chained 🖾 yes 🛛 no		1	
🗝 Adequate air-pak 💢 yes 🗆 no 👘		<u></u>	
😙 Fresh ammonia solution 🛛 🖾 yes 🛛 no	$ \lambda' $		<u>\</u>
2 Adequate ventilation 🖾 yes 🗆 no	λ'	,o	T .
J Dual chlorination 🗋 yes 🖾 no	N PELL	5	0
○ Auto-switchover			<u>↓</u>
Alarm	1 2/ 00		
Goodition Aucho of	V X D	The.	
OTHER TREATMENT PROCESSES:	/ . U	<u> </u>	
	/	\times	
OTHER			
Flow measuring device:			· · · · · · · · · · · · · · · · · · ·
X meter I elapsed time clock I none			
Backflow prevention devices: 🗆 yes 🗆 no			
Cross-connections MONE obsayved.			
	ES AND PROVIDE		EN STATEMENT TO THE
HAVE REEN CORRECTED. FAILURE TO DO S			ALL LISTED DEFICIENCIES
ENFORCEMENT ACTION BY THE DEPARTMENT.	Send your respo	onse to: Dei	partment of Environmental
Protection, 3319 Maguire Blvd., Suite 232, Orlan	do, Florida 32803	B. Phone:(4)	07)894-7555
∂			
Inspector I Colouto C. Vunag	Title <u>Chev. Sup.</u>	$\underline{\Pi}$	Date 6 // 9 / 97
		·	
Form leπ: up on site D with water plant	operator W wit	in water pu	IГVЕУОГ Romy 02/15/94

WATER TREATMENT PLANT COMPLIANCE INSPECTION REPORT

Plant name VISTAS S/0. THe	County LAKA		PWS ID3	3547-	73
Address 45 High may 27 South Che	rmont, FL 327	111	Phone 40	57/869	-1919
Owner name writities TNC of FL.			Contact	Jon 12a	Stantisser
Owner address too weather field Ave. F	HLTAMONITE Sonn	192	Phone 4	21867	-1919
This inspection date 6115141 Last C.I.	date <u>10106145</u>	Last s	survey dat	e <u>/0/+1/</u>	76
PWS Type: 12 Community Di Non-Transient M	Non-Community			tions (2
East arriver The Manual Sector State Parties		Sorv		tion	
PODO SERVICE: LI TES PELINO			cu popula		
OPERATION & MAINTENANCE	STORAGE TANKS				
Certified operator: 🖞 Yes 🗆 No 🗀 N/A	(G) Ground (C) C	Clearwell	(E) Eleva	ted	
Operator & certification class-number:	(B) Bladder (H) H	lydropneu	umatic/flov	w-through	า
17. J. ALDVICH CITE 368	Tank type (ST cul)	#11			
D&M log: A yes I no Oranges	Capacity	10,000			
Number of wells Standby well?	Gravity drain	425			
Auxiliary power. \Box yes \mathbf{K} no \Box N/A	By-pass piping	415			
$6' \times 6' \times 4''$ pad 🖄 yes \Box no	Broosure cours	-723			
Sanitary seal 🖄 OK 🛛		- YES			
Raw water tap: 🛛 🛛 🖓 yes 🗆 no	On/Off pressure	42750			
D not smooth nosed	Sight glass	715			<u> </u>]
	Fittings for sight glass				
rence/nousing 🖌 yes 🗆 no Sanitary bazarda	Air release valve	yes			
CHLORINATION	Pressure relief valve				
Chlorinator type: 🛛 Gas 🗆 Hypo	Access padlocked	425			
Cl ₂ residual: Plant 2 5 PM Remote 1.5 PPM		1			
DPD-type test kit 💭 yes 🛛 no	DEFICIENCIES / CO	OMMENT	S,		
Gas cylinder scale 🛱 yes 🔲 no	• • • • • • • • • • • • • • • • • • •				
t deguate eir pek					
\sim $\frac{1}{2}$ Adequate all-par \square yes \square no		、			
\bigcirc Adequate ventilation \square ves \square no		<u></u>			
Dual chlorination 🗋 yes 📲 no	- loto the		J.		
Auto-switchover, 🛛 yes 💆 no	Ja vo D	1	<u>)</u>		
Alarm	l.'. J/	./			
AERATION: Type_/	DE 9 CT	1- 0	/		
		\sim			
OTHER TREATMENT PROCESSES:			` <u> </u>		
	<u> </u>				<u> </u>
OTHER					
Flow measuring device:	/		······································		
🖉 🙀 meter 🗆 elapsed time clock 🗆 none	/-				
Hers Backflow prevention devices: Byes Dno	·				
Cross-connections <u>Mone of Cerred</u>	· · · · · · · · · · · · · · · · · · ·				
PLEASE CORRECT THE INDICATED DEFICIENC DEPARTMENT NO LATER THAN HAVE BEEN CORRECTED: FAILURE TO DO S	IES AND PROVIDE	A WRIT	TEN STA T ALL LIS TAKING	ATEMENT TED DEFI OF APPF	TO THE CIENCIES
ENFORCEMENT ACTION BY THE DEPARTMENT Protection, 3319 Maguire Blvd., Suite 232, Orlan	. Send your respondo, Florida 32803	nse to: D . Phone:	epartmen (407)894-	t of Envir 7555	ronmental
Inspector K cberto C. aurag	Title <u>GAV. Sup. 1</u>	<u>T</u>		Date 6	118197
Received by the L. Donge	Title Area Mar.			Date_6	119 197
Form left: On site with water plant	operator 🕂 wit	h water	purveyor	F	Romy 02/15/94

H-D

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	Plant name LK. Ridge chub	County Lake		PWS ID	3548	84
	Address EAST LAKES More Or. CLERM	-ONI, FL 327	<u>(</u>	Phone 40	<u>-1869-</u>	1919
	Owner name willities, ENC. of FL			Contact	DON RA	<u>sunussen</u>
	Owner address 200 weather field Ave. A	ALTEMONITE SINC	~91	Phone <u>u</u>	57/867.	-1719
	This inspection date 6/15/57 Last C.I.	date 10/14/94	Last	survey dat	e <u>//////</u>	<u> </u>
	PWS Type: X Community U Non-Transient N	Ion-Community		ommunity	· · -	76
	Service area characteristics <u>Ites (4+A)</u>				tions <u> </u>	<u> </u>
	Food servicer Li res Li No		Serv	veu popula		,
	OPERATION & MAINTENANCE	STORAGE TANKS				
	Certified operator: \mathbb{N} Yes \square No \square N/A	(G) Ground (C) (Clearwell	(F) Fleva	ted	
	Operator & certification class-number:	(B) Bladder (H) H	Hvdronnei	umatic/flov	w-through	n
	A.J. ALARICH "C"-	Tank time (CT 1)	11/1			
	O&M log: Uyes Ino Clermonite	Tarik (ype() (cu)	HI			
	WELL Amber hiels	Capacity Sky	7,800	├ ────┤		├ ────┤
	Number of wells Standby well?	Gravity drain	725			
	Auxiliary power 🛛 yes 🗆 no 🛛 N/A	By-pass piping	yes			
	6'x 6'x 4" pad ₩ ves ⊔ no	Pressure gauge	yes	1 1		
	Sanitary seal 🖾 OK	On/Off pressure	30160			
	Kaw water tap: be yes in no	Sight glass	<u> </u>			
		Signe glass	-703-			
۴ ک		Fittings for sight glass]
}	V Sanitary hazards	Air release valve	425			
ر د	CHLORINATION	Pressure relief valve	<u> </u>			
0	Chlorinator type: 🛛 Gas 🗆 Hypo	Access padiocked	465			
11	Cl. residual: Plant 1.5 Prim Remote					
1	DPD-type test kit 🖄 yes 🗌 no	DEFICIENCIES / CO	OMMENT	S		
	Gas cylinder scale 😡 yes 🛛 no	,	×.			
	Gas cylinder chained 🗹 yes 🛛 no	\overline{d}	/			
	Adequate air-pak V yes U no					
	Adaguata vantilation.	U		<u>_</u> Y		
		N. T	\sim	.10		
		V V D				
			-/-			
	AERATION: Type		<u>_</u>			<u>, ,</u>
	Condition X	/ 1 A	Xr			
			λ			
	OTHER TREATMENT PROCESSES.	/.	\			<u> </u>
	Flow measuring devices					
',	Flow measuring device. √ meter □ classed time clock □ none					
8	Backflow prevention devices: Vives Doo					
	Cross-connections Haine share vid.		,			
	PLEASE CORRECT THE INDICATED DEFICIENCI	ES AND PROVIDE	A WRIT	TEN STA		TO THE
	HAVE REEN CORRECTED FAILURE TO DO S			TAKING		
	ENFORCEMENT ACTION BY THE DEPARTMENT	Send your resor	nse to: F)enartmen	t of Envir	onmental
	Protection, 3319 Maguire Blvd., Suite 232, Orlar	ndo, Florida 32803	. Phone:	(407)894-	7555	
			-		- (10.0
	Inspector Roberto c-anaq	Title <u>Erivis</u> up.	<u>Π</u>		Date	<u></u>
	Received by 32 1. 23	Title Hira Mar	·		Date <u>6</u>	119197
	Form left: fon site with water plant	operator wit	h water	purveyor	P	lomy 02/15/94

Plant name High Rand Point Address Bronison Rd. of S.R. 561 South Owner name Willities Fric. 9 FLovida	County LAK (Clernont, F	1 31711	PWS ID Phone Contact	3546 7/869-1 Dom Ra	57 1919 Smussar
This inspection date 6 1 1 Last C.I. o PWS Type: A Community Non-Transient N Service area characteristics Mesidential Food service? Yes A No	date <u>10/11/95</u> on-Community <u>5C</u> No	Last s Last s Non-Cc o. of servi Serv	priorie dat survey dat ommunity ce connect red popula	tions	796
OPERATION & MAINTENANCE Certified operator: ⊠ Yes □ No □ N/A Operator & certification class-number:	STORAGE TANKS (G) Ground (C) ((B) Bladder (H) H	Clearwell Hydropneu	(E) Eleva umatic/flov	ted w-through	۱ ۱
O&M log: yes no Lk. Cres and Hill	Canacity	5000			
WELL Standby well?	Gravity drain	3,000			
Auxiliary power Ves Xing V/A	By-pass piping	425			
$6' \times 6' \times 4'' \text{ pad } \Box \text{ yes } \Box \text{ no}$	Pressure gauge	4~>			
Sanitary seal 🖸 ÖK 🛛	Op/Off pressure	38			
Raw water tap: yes no	Sight glass	53			
	Sight glass	~>			
Fence/housing ves no	Air release volve				
Sanitary hazards	Pressure relief value	1-1-1			
CHLORINATION	Access pedlocked	540			
Chiorinator type: La Gas Li Hypo	Access padiocked		<u>I</u>		
DPD-type test kit	DEFICIENCIES / Co	OMMENT	S		
Fresh ammonia solution D yes D no	+ + · ·				
Adequate ventilation 🖄 yes 📮 no		7	/ \	(
	P (1	0	\sim		
Auto-switchover U yes W no	\sim		-+/.~		
AERATION: Type	<u> </u>	<u>X-1</u>			
Condition	<u>G</u> im	<u> </u>	<u> </u>	<u> </u>	<u> </u>
OTHER TREATMENT PROCESSES:	·	<u>~~</u> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	KK V	4	. ۲
OTHER	V	1 the	1/		
Flow measuring device:		س مي ا	/ 1/	y	
B meter □ elapsed time clock □ none		US/	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
Backflow prevention devices: Uyes Uno			$\frac{\zeta}{\zeta}$		
Cross-connections					
PLEASE CORRECT THE INDICATED DEFICIENCI DEPARTMENT NO LATER THAN HAVE BEEN CORRECTED; FAILURE TO DO S ENFORCEMENT ACTION BY THE DEPARTMENT. Protection, 3319 Maguire Blvd., Suite 232, Orlan	ES AND PROVIDE STAT O WILL RESULT Send your responded, Florida 32803	E A WRIT ING THA IN THE Dinse to: D B. Phone:(TEN STA T ALL LIS TAKING epartmen 407)894-	TEMENT TED DEFIC OF APPR t of Envir 7555	TO THE CIENCIES OPRIATE onmental
Inspector Roberto C. Gurag	Title <u>Exer</u> . Sup.	Ī		Date_6	119197
Received by Mark Dag-	Title <u>Arec. M</u>	<u>e</u> t		Date 💪	119197
Form left: for site with water plant	operator Dwit	h water	purveyor	R	omy 02/15/94

1	State of Florida	/
Department	of Environmental	Protection
	Central District	

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Plant name Frank Laker of Harbor Cake	Country		PWG ID 3	3544	רד
Address Al Alice D.d. all Didserrand all 450	- W MONTVIRD	E1.347	Phone 4	57/869-	<u>· / ۶/۶</u>
Owner name willities INC of FL	· · · · · · · · · · · · · · · · · · ·	+ - 0291	Contact	Doni Ras	musser
Owner address 200 weathersfield Aver, ALT	+ wonte Springe	34714	Phone_#	07/868-	1819
This inspection date 6/19/94 Last C.I.	date 10/22/96	Last s	survey dat	e 10/11/	55
PWS Type: 🛛 Community 🔲 Non-Transient N	Non-Community	□ Non-Co	ommunity		· · · · · · · · · · · · · · · · · · ·
Service area characteristics 16 side minut	N	o. of servi	ce connec	ctions <u>.54</u>	
Food service? LI Yes & No		Serv	red popula	tion	
OPERATION & MAINTENANCE	STORAGE TANKS				
Operator & contification class-number:	(G) Ground (C) ((E) Eleva		
Derator & certification class-number.	(B) Bladder (H) I	Hydrophel		<u>w-through</u>	
	Tank type (SI.cul)	<u>H/I</u>			
WELL	Capacity	1,000			
Number of wells Standby well?	Gravity drain	yes			
Auxiliary power 🗋 yes 🗌 no 🛛 N/A	By-pass piping	yes			
6'x 6'x 4" pad b⊈ yes ⊔ no	Pressure gauge	yes			
	On/Off pressure	40/60			
$\square \text{ not smooth nosed}$	Sight glass	405			
	Fittings for sight glass				
Fence/housing \square yes \square no	Ala selecce value	• (
Sanitary hazards	Air release valve	423			
CHLORINATION	Pressure relief valve				
Chlorinator type: 🗆 Gas 🖉 Hypo	Access padlocked	725			
Cl ₂ residual: Plant <u>1.5 Pt</u> Remote <u>1.5 Pt</u>			~		
	DEFICIENCIES / C	UNIMENT	2		
		1 N			
Adequate air-pak		<u> </u>	r	······	<u> </u>
Fresh ammonia solution 🗅 yes 🗆 no	U . (6)/	,D`	کا لہ		
Adequate ventilation 🗆 🗶 es 🗆 no	te. VI	<u>.</u>			
Dual chlorination 🖵 yes 🛛 no					
Auto-switchover 🖾 ye's 🔲 no	- VV 10	<u> </u>	4l -		
		. X \	ť`		
Condition	- / / //	$-\sqrt{\chi}$			
		<u>X</u>			
OTHER TREATMENT PROCESSES:					
OTHER	<u>•</u>			· · · · <u>-</u> · · · ·	
Flow measuring device:				······	
$\nabla \Pi$ meter Π elapsed time clock Π none	·				
Backflow prevention devices. Ves Do					
Cross-connections heave discust					
	····			· · · · · · · · · · · · · · · · · · ·	
NEASE CORRECT THE INDICATED DEFICIENCE			TEN OT	TERRENT	
DEPARTMENT NO LATER THAN	IES AND PROVIDE		TALLUS		
HAVE BEEN CORRECTED; FAILURE TO DO S	O WILL RESULT	IN THE	TAKING	OF APPR	OPRIATE
ENFORCEMENT ACTION BY THE DEPARTMENT	. Send your respo	onse to: D	epartmen	t of Enviro	onmental
Protection, 3319 Maguire Blvd., Suite 232, Orlar	ndo, Florida 32803	3. Phone:(407)894-	7555	
Inspector Roberto C. Gunay	Title Con	<u></u>		Date <u>6</u>	115157
Received by 133 1. h	Title <u>Arec mar</u>	••		Date <u>C</u>	119187
Form left: 🛄 on site 🔍 🗆 (with water plant	operator wit	h water i	purvevor		
+ +	T	_	- /	Ro	my_02/15/94
·	1				

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	Plant name LAK& Crescent HILLS Address SR 561 South Chermonit	County LAKA FL 32711		PWS ID Phone	33548	1919
	Owner name willitics DAL. of FL.		<u> </u>	Contact	Day Ra.	smussen
	Owner address 700 Weatherfield Ave.	ALTAMONTE SIN	ingr_	Phone 4	07/869-	1919
	This inspection date <u>6/17/71</u> Last C.I.	date 10/12/46		survey dat	e <u>10]11</u>	73
	PWS Type: U-Community U Non-Transient N		o of servi		tions	96
	Service area characteristics $1 \propto 574 \times 717 \times 10^{-1}$		Serv	ed popula	tion	<u> </u>
	OPERATION & MAINTENANCE	STORAGE TANKS	i .			
	Certified operator: 🖾 Yes 🗆 No 🗆 N/A	(G) Ground (C) (Clearwell	(E) Eleva	ted	
	Operator & certification class-number:	(B) Bladder (H)	Hydropneu	umatic/flov	w-through)
	OSM LOO: RIVES DO GRESCENT BAY	Tank type (STall)	H/1			
, ί	WELL High Card and	Capacity	10,000			
rin	Number of wells Standby Well?	Gravity drain	yes			
m. put	AAuxiliary power 🔯 yes 🗆 no 🗆 N/A	By-pass piping	yes			
gas		Pressure gauge	405			
15	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	On/Off pressure	40-60	þ		
1,0	not smooth nosed	Sight glass	yes			
F	Check valve 🖾 yes 🛛 no	Fittings for sight glass	<u> </u>			
	Fence/housing 🛛 yes 🗆 no	Air release valve	yes			
	Sanitary hazards	Pressure relief valve	-			
	Chlorinator type: $\mathbb{N}_{\mathcal{G}}$ Gas \square Hypo	Access padlocked	725		<u>.</u>	
	Cl. residual: Plant 7.0 PPr Remote - SPP/1		1			
جمع بر	MDPD-type test kit 🗹 yes 🗌 no	DEFICIENCIES / C	OMMENT	S		
J. 13	Gas cylinder scale 🗹 yes 🗆 no	1. Clean a	lgar ,	in the	puni	Heari
ゴーキ	Gas cylinder chained 14 yes 🗆 no	diccharge	•			
د خ	Fresh ammonia solution. \square ves \square no	2. CHECK AV	vis. su	ritut 1	Ear the	Aur.
141	Adequate ventilation 🖾 yes 🗆 no	Con Cor	verted	N//)	Pipbe	2m 1
ì	Dual chlorination 📴-yes 🔲 no	- <u>744 47.</u>	1-0000	- 140		<u> </u>
	Auto-switchover					<u> </u>
						<u></u>
	Condition					<u> </u>
	OTHER TREATMENT PROCESSES					
	UTHER TREATMENT THOULOULD.					
		······································				<u></u>
	OTHER					
1	Flow measuring device:					
8	Backflow prevention devices: Sives Dino					
	Cross-connections MGMA charved.					
		· · · · · · · · · · · · · · · · · · ·				
	PLEASE CORRECT THE INDICATED DEFICIENCE	ES AND PROVID	E A WRIT TING THA	TEN ST		TO THE
	HAVE BEEN CORRECTED; FAILURE TO DO S ENFORCEMENT ACTION BY THE DEPARTMENT Protection, 3319 Maguire Blvd., Suite 232, Orlar	SO WILL RESULT . Send your respondo, Florida 32803	IN THE onse to: [3. Phone:	TAKING Departmer (407)894	OF APPE nt of Envir -7555	ronmental
	Inspector Roberto C. anag	Title Erev. Sup	». T		Date 6	115157
	Received by Marth	Title Area Mar	•		Date 6	118187
	Form left: on site 🛱 with water plant	operator (wi	th water	purveyor	F	Romy 02/15/94

	Plant name Oranges SIO, THe	County LAK1	PWS 10 3354685
	Address LK. Lowsa Rord Clerword,		Phone 4071 867-1119
	Owner name <u>writies</u> <u>Lkic</u> of <u>FC</u>		_ Contact Uon Icas a ussin
	This inspection date (p. (1515)	data 10 06/195 Loat	Phone 4011 801-111
	PWS Type: M Community I Non-Transient N	lon-Community Non-C	Survey date <u>jor corre</u>
	Service area characteristics Residential		vice connections
	Food service? Yes X No	Ser	ved population
	OPERATION & MAINTENANCE	STORAGE TANKS	
	Certified operator: 🛛 Yes 🗆 No 🗆 N/A	(G) Ground (C) Clearwell	(E) Elevated
	Operator & certification class-number:	(B) Bladder (H) Hydropne	umatic/flow-through
	A = 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1	Tank type (STeal) H/1	
	WELL VISTASS	Capacity 5,000	
	Number of wells Standby well?	Gravity drain 9.65	
	Auxiliary power 🛛 yes 🖄 no 🗂 N/A	By-pass piping	
	6′×6′×4″ pad ⊠yes □ no	Pressure gauge 465	``````````````````````````````````````
	Baw water tap:	On/Off pressure 38	
		Sight glass JLC	
	Check valve 🖄 yes 🗆 no	Fittings for sight glass	
	Fence/housing 🖄 yes 🗆 no	Air release valve	
	Sanitary hazards	Pressure relief valve	
٥		Access padlocked	
4	Cl, residual: Plant 2 572PH Remote	·····	
	DPD-type test kit yes 🗌 no	DEFICIENCIES / COMMENT	rs
Ч	Gas cylinder scale 🖉 yes 🛛 no		
2			
5	Fresh ammonia solution \mathbb{N} yes \square no		
	Adequate ventilation	14 10	}
U.	Dual chlorination 🛱 yes 🗆 no	- li li li	- <u>,</u>
	Auto-switchover	$D^T \mathcal{N}_{19} $	-
	Alarm Lass Porna 10.465 Dyes DAno	, v v v V-	- ` .
	AERATION: Type	CIP VK	
	OTHER TREATMENT PROCESSES:	<u>`</u>	· · · · · · · · · · · · · · · · · · ·
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	·····
	OTHER		
5."	Flow measuring device:		
+05	, fi f meter □ elapsed time clock □ none		
avel	("Backflow prevention devices: Hyes Ino		
1,4	Cross-connections REAS - Start		
	PLEASE CORRECT THE INDICATED DEFICIENC	IES AND PROVIDE A WRI	TTEN STATEMENT TO THE
	HAVE REEN CORRECTED, EAULIRE TO DO G		TALL LISTED DEFICIENCIES
	ENFORCEMENT ACTION BY THE DEPARTMENT	Send your response to:	Department of Environmental
	Protection, 3319 Maguire Blvd., Suite 232, Orlar	ndo, Florida 32803. Phone	:(407)894-7555
	Inspector Roberto C. ang	Title UNV. Sup. TI	Date 6 119 197
	Received by Ball Bag	Title Area Mar.	Date 🢪 / 19 197
	Form left: A on site M with water aloot	operator M with water	DUIWAYOr
	i di anti	operator with water	Romy 02/15/94

Lake Utility Services, Inc.

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Analysis of Interconnected Mains TYE 12/31/95

<u>Reference No.</u>	<u>Vendor No.</u>	Vendor Name	<u>Dollar Amt.</u>
38509	6760	Farner Barley & Associates	1,707.50
40159	6760	Farner Barley & Associates	275.00
41817	6760	Farner Barley & Associates	1,320.00
42756	6760	Farner Barley & Associates	724.63
44269	6760	Farner Barley & Associates	245.00
44638	6760	Farner Barley & Associates	2,052.50
46521	6760	Farner Barley & Associates	500.00
46667	6760	Farner Barley & Associates	1,712.50
48361	6760	Farner Barley & Associates	2,522.50
48362	6760	Farner Barley & Associates	149.25
52237	6760	Farner Barley & Associates	1,208.77
52238	6760	Farner Barley & Associates	2,886.63
56325	6760	Farner Barley & Associates	117.00
56326	6760	Farner Barley & Associates	225.00
57560	6760	Farner Barley & Associates	150.00
53815	6760	Farner Barley & Associates	2,382.21
53816	6760	Farner Barley & Associates	750.00
54760	6760	Farner Barley & Associates	5,000.00
55109	6760	Farner Barley & Associates	235.00
55110	6760	Farner Barley & Associates	487.50
58131	8116	Belleview Underground, Inc.	51,419.66
58731	6760	Farner Barley & Associates	2,110.00
60108	6760	Farner Barley & Associates	870.21
60568	1228	Clayton Group Inc	575.00
60569	1228	Clayton Group Inc	153.69
60656	8116	Belleview Underground, Inc.	60,711.54
61629	6760	Farner Barley & Associates	812.50
62409	6760	Farner Barley & Associates	200.00
63696	8306	H.C. Connell, Inc.	3,289.00
65620	3466	American Express	820.00
65915	6760	Farner Barley & Associates	742.50
67133	6760	Farner Barley & Associates	1,012.50
69831	6471	Ben E. Girtman, Attorney at Law	1,978.23
73007	6760	Farner Barley & Associates	600.00
73723	6471	Ben E. Girtman, Attorney at Law	787.42
495	8306	H.C. Connell, Inc.	4,882.91
496	8306	H.C. Connell, Inc.	101,116.90
2223	6760	Farner Barley & Associates	4.90
2224	6760	Farner Barley & Associates	80.00
78570	6760	Farner Barley & Associates	405.90
79292	6760	Farner Barley & Associates	600.00
79840	6760	Farner Barley & Associates	1,602.50
82636	6760	Farner Barley & Associates	345.00

			Docket No. 960444-WU Exhibit (DR-3)	
			Page 2 of 2	
82637	6760	Farner Barley & Associates	937.50	
82779	6760	Farner Barley & Associates	167.12	
83602	6760	Farner Barley & Associates	1,787.50	
83839	6471	Ben E. Girtman, Attorney at Law	199.02	
85025	8306	H.C. Connell, Inc.	68,124.55	
85026	6760	Farner Barley & Associates	625.00	
86875	8306	H.C. Connell, Inc.	65,879.28	
87345	8306	H.C. Connell, Inc.	9,910.45	
88286	6760	Farner Barley & Associates	1,401.25	
88918	8306	H.C. Connell, Inc.	52,979.38	
88919	8306	H.C. Connell, Inc.	2,504.47	
89445	6760	Farner Barley & Associates	525.00	
89447	8306	H.C. Connell, Inc.	127,828.93	
90067	6760	Farner Barley & Associates	573.16	
90068	6760	Farner Barley & Associates	1,012.50	
91052	6760	Farner Barley & Associates	262.50	
91055	8306	H.C. Connell, Inc.	101,582.22	
91055	8306	H.C. Connell, Inc.	67,871.00	
95492	8306	H.C. Connell, Inc.	59,456.43	
96262	6760	Farner Barley & Associates	90.40	
98338	9106	McCoy & Associates	1,250.00	
	Sub-Total -	Invoices	824,739.01	
Sub 628	Operator's C	Capitalize Time	282.00	
Sub 634	Operator's Capitalize Time		94.00	
Sub 636	Operator's C	Capitalize Time	634.50	
Sub 661	Operator's C	Capitalize Time	3,666.00	
Sub 662	Operator's C	Capitalize Time	3,008.00	
Sub 665	Operator's C	Capitalize Time	470.00	
Sub 628	Operator's C	Capitalize Time	240.00	
Sub 631	Operator's C	Capitalize Time	432.00	
Sub 632	Operator's Capitalize Time		972.00	
Sub 633	Operator's Capitalize Time		2,760.00	
Sub 634	Operator's C	Capitalize Time	936.00	
Sub 636	Operator's C	Capitalize Time	1,734.00	
Sub 661	Operator's C	Capitalize Time	3,318.00	
Sub 662	Operator's C	Capitalize Time	696.00	
Sub 665	Operator's Capitalize Time		1,632.00	
Sub 667	Operator's C	Capitalize Time	22,536.00	
Sub 628	Operator's C	Capitalize Time	4,532.00	
	Sub-Total -	Capitalized Time	47,942.50	
	Sub-Total -	CIAC Property	28,500.00	
	Total - Inter	connecting Mains	901,181.51	

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Water Distribution Training Course

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AMERICAN WATER WORKS ASSOCIATION

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AWWA DISTRIBUTION MANUAL

tained under fire demand, particularly in high-value districts, as such pressures permit the fire department to use direct streams from the hydranta effectively without pumpers.

The topography of a service area has much to do with the maintenance of good pressures throughout the system. When the area is very hilly and has a considerable range of elevation, it becomes nearly impossible to effect a standard pressure which is neither too high in the low areas nor too low in the high areas. Pressures in excess of 100 psi should preferably be avoided, but sometimes they cannot be. When such high pressures are necessary, it is wise to have the individual customers provide pressurereducing valves to limit the pressures to 100 psi or less.

Although excess pressures promote pipeline failures and excess leakage, the losses resulting from increased leakage and the cost of repairing mains (for the most part) broken by pressure increases are usually more than offset by the increased revenues resulting from better registration of meters and increased usage. This is true, of course, only if the system is substantially metered.

Unaccounted for Water

Conservation of water is a fundamental and proper concern of water system operation, not only to prevent depletion and ill use of an important natural resource, but to secure direct money savings in operation and long-range savings in deferred capital costs for plant expansion. Good modern water utility practice dictates that all customer services be metered whenever possible. Plant output as well as plant uses should likewise be metered to secure proper records. The difference between the total net plant output delivered to the distribution system and the total measured quantity of water passing through customers' services for the same specified time is termed the "unaccounted-for" or the "non-revenue-producing" water.

Use of Estimates

In order to reduce unaccounted-for water as much as possible, many operators attempt to estimate the amount of unmetered uses, such as street flushing and fire-fighting or service to publicly owned buildings, hospitals, and charitable institutions. Such attempts sometimes go as far as to include allowances for system leakage and underregistration of customermeters and thereby account for almost all the water produced.

In systems which are completely metered, or substantially so, a proper determination of unaccounted for water should contain no estimates, for, in the final analysis, the judgment of the esumator is biased by his desire to explain away excess losses, waste, or unmetered uses. In systems where

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SYSTEM CAPACITY

only partial metering is in effect, accurate estimates of unaccounted-to, water are virtually unobtainable. If unmetered customers form a relatively small percentage of the total, an estimate of water used by such customers based upon the average use of similar metered customers may be proper to secure a reasonable estimate, but the basis for such estimates should be recorded.

The amount of water used for flushing streets and fighting fires is relatively small. It has been estimated by some operators to be 1-3 per cent. The amount of water lost in the pipe system through unavoidable leakage that is, leakage in mains and services which would cost more to locate and stop than the lost water is worth—has been variously estimated at 1,000– 3,000 gpd per mile of pipe, depending on such factors as the age and condition of the pipe system, prevailing system pressures, and ground conditions. Underregistration of meters in a system may vary from as low as 2 per cent to as high as 15 per cent. depending upon the size of meter and effieiency of the meter maintenance program. Unauthorized uses of water, such as through an unmetered fire line or, on occasion, by deliberately bypassing meters, sometimes prove to be an important factor.

Desirable Results

The proper amount of unaccounted-for water in any given system is a function of that system alone. It might range, in a substantially fully metered system, from as much as 35 per cent to as little as 5 per cent. The former percentage may apply if pressures are very high and variable, leakage is difficult to detect and remedy, the pipe system is extensive and old, or practically all customers use water only in small amounts (a principal cause of underregistration of meters). The smaller percentage may be a result of low pressures, the existence of only a few customers who each take a considerable percentage of the total water, and a small mileage of mains. A fair average of unaccounted-for water might be 10-20 per cent for fully metered systems with good meter maintenance programs and average conditions of service.

Expansion of Service Areas

Expansion of service areas presents one of the most critical problems in the provision of adequate and reliable water service. In most cities, great increases in population are not taking place within the political boundaries; they are more often taking place through rather haphazard annexation of outlying areas. County- or area-wide planning is becoming increasingly necessary to determine adequately the extent of the future growth of a water system. The extent of such expansion, both in the immediate and more remote future, must be recognized in planning the distribution system.

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Distribution System(s) for LUSI

	# of	
	Lots	Total #
	Served	of Lots
Clermont II	35	70
Highland Point	32	48
Crescent Bay	45	107
Crescent West	70	102
Lake Crescent Hills	77	138
Preston Cove	49	107
South Clermont Region	182	677
EDB customers		* -44
Total	433	1,135

* Note - When water lines were installed to serve EDB homes the mains passed 44 existing homes with wells