State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: May 13, 2015

TO: Carlotta S. Stauffer, Commission Clerk, Office of Commission Clerk

FROM: Penelope D. Buys, Engineering Specialist III, Division of Engineering

RE: Docket No. 140186-WU - Application for staff-assisted rate case in Brevard County

by Brevard Waterworks, Inc.

Please incorporate the attached e-mail into the docket file. Thank you.

Penny Buys

From:

Troy Rendell <trendell@uswatercorp.net>

Sent:

Wednesday, May 13, 2015 10:48 AM

To:

Penny Buys

Cc:

Laura King

Subject:

RE: Docket No. 140186-WU - Brevard Waterworks - Follow-up questions

Here are the approximate dates of the leak detection activities:

February 19, 2014 May 19, 2014 July 24, 2014 September 30, 2014 December 18, 2014 December 30, 2014

Based on the Utility Manager's discussions with the operators who performed the various leak detection activities - all distribution lines were checked. (100%).

From: Penny Buys [mailto: PBuys@PSC.STATE.FL.US]

Sent: Friday, May 08, 2015 8:27 AM

To: 'Troy Rendell' Cc: Laura King

Subject: RE: Docket No. 140186-WU - Brevard Waterworks - Follow-up questions

Mr. Rendell,

Please provide the dates that the leak detection testing started and ended.

Let me know if you have any more questions.

Thank you,

Penelope Buys
Engineering Specialist
Division of Engineering
Florida Public Service Commission
(850) 413-6518
Fax — (850) 413-6519
pbuys@psc.state.fl.us

From: Troy Rendell [mailto:trendell@uswatercorp.net]

Sent: Thursday, May 07, 2015 4:41 PM

To: Penny Buys **Cc:** Laura King

Subject: RE: Docket No. 140186-WU - Brevard Waterworks - Follow-up questions

Good afternoon Penny,

Penny Buys

From:

Penny Buys

Sent:

Friday, May 08, 2015 9:18 AM

To:

'Troy Rendell'

Cc:

Laura King

Subject:

RE: Docket No. 140186-WU - Brevard Waterworks - Follow-up questions

Mr. Rendell,

I have one more question. In prior responses, you stated that the majority of the Oakwood meters and distribution lines are located at the back of the customer's residence surrounded by fences with large dogs. Were there parts of the Oakwood distribution system that you were not able to test for leaks? If so, what percentage of the Oakwood distribution system was not tested?

Thank you,

Penelope Buys
Engineering Specialist
Division of Engineering
Florida Public Service Commission
(850) 413-6518
Fax — (850) 413-6519
pbuys@psc.state.fl.us

From: Penny Buys

Sent: Friday, May 08, 2015 8:27 AM

To: 'Troy Rendell' **Cc:** Laura King

Subject: RE: Docket No. 140186-WU - Brevard Waterworks - Follow-up questions

Mr. Rendell,

Please provide the dates that the leak detection testing started and ended.

Let me know if you have any more questions.

Thank you,

Penelope Buys
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(850) 413-6518
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pbuys@psc.state.fl.us

From: Troy Rendell [mailto:trendell@uswatercorp.net]

Sent: Thursday, May 07, 2015 4:41 PM

To: Penny Buys Cc: Laura King

Subject: RE: Docket No. 140186-WU - Brevard Waterworks - Follow-up questions

Good afternoon Penny,

Brevard Waterworks contacted the FRWA concerning participating in the helium test. FRWA referred us to the Water Management District. We discussed this with the WMD on Monday, May 5th. The WMD indicated that they had not heard of another utility in Florida that has undergone this testing and they were not interested in participating. Instead, the WMD indicated that they prefer the traditional leak detection methodologies, which are ultrasonic acoustic detection and zone pressure tests. The FRWA recommended that we purchase the equipment utilized by them.

The FRWA utilizes and recommended the Heath Aqua-Scope Acoustic Leak Detection. (see attached) U.S. Water Service Corporation purchased this unit for leak detection. The unit was used in Brevard (at FRWA's recommendation) for a period of 3 – 4 weeks throughout the service territory. As a result, only one service leak was detected and subsequently repaired. As discussed in Brevard's responses to the third and fourth data requests, Brevard has performed the zone pressure testing and the acoustic aqua-scope testing. These are the same tests recommended by both the WMD and the FRWA. Thus, Brevard has utilized the same leak detection utilized and recommended to us by both the FRWA and WMD.

As previously stated in Brevard's letters filed in the docket, Brevard has undertaking numerous leak detections throughout the water distribution system. The utility has walked the system, looked for leaks, performed pressure tests, tested water meters, and utilized the purchased leak detecting device. This unit has also been used in the Sunny Hills Utility Company's water system and it is planned to be utilized in the LP Waterworks' water system. This device is being used at other utilities throughout the state.

Let me know if you need any additional information.

From: Penny Buys [mailto: PBuys@PSC.STATE.FL.US]

Sent: Friday, May 01, 2015 8:13 AM **To:** 'trendell@uswatercorp.net'

Cc: Laura King

Subject: Docket No. 140186-WU - Brevard Waterworks - Follow-up questions

Mr. Rendell,

Staff has some follow-up questions concerning Brevard Waterworks' response to staff's 4th data request.

- 1) In response to question 1, it states that Brevard Waterworks has contacted the Florida Rural Water Association (FRWA) about participating in a pilot project for leak detection but has not heard back from them.
- (a) Apart from the pilot project, has Brevard Waterworks contacted the FRWA about performing a leak detection test on its system? If so, what was the date of the contact?
- (b) If your response to (a) is yes, did the FRWA agree to perform the leak detection test? If so, when was the test performed and what were the results?

2) Aside from the helium leak detection program discussed in response to question 1, are there any other leak detection programs that Brevard Waterworks has considered? If so, please provide a list describing the program and its cost.

Please respond no later than May 15, 2015. Let me know if you have any questions.

Thanks you,

Penelope Buys
Engineering Specialist
Division of Engineering
Florida Public Service Commission
(850) 413-6518
Fax — (850) 413-6519
pbuys@psc.state.fl.us

Acoustic Leak Detectors LOCATING & LEAK DETECTION

SubSurface LD-8 Acoustic Leak Survey Tools

- · 3 notch filters
- · Digital display

The SubSurface LD-8 leak survey tool is an extremely sensitive contact device for surveying your water system. Three notch filters reduce unwanted noise from transformers, power lines and other A/C interferences. This is the perfect tool to evaluate your system for leaks.

Includes: amplifier, 52" contact probes, headphones, hard carrying case, operating manual and two AA batteries.

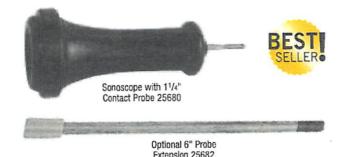
Large, Easy-To-Read Display





100 to 2,000 Hz Bandwidth: Filters: 3 Filter types: notch **Output indicators** Audio: stereo headphones Visual: 2-digit digital display Battery test: automatic 2 AA batteries (included) Battery type: Battery life: 24 hours minimum 0.66 lbs Weight (amplifier/display): 8.15"W x 3.3"H x 2.4"D Dimensions (amplifier/display):

DESCRIPTION	STOCK #	EACH
Subsurface LD-8	24919	\$
Repl. Duracell® Coppertop Batteries, AA, Pack of 8	63187	
Repl. Rayovac® Ultra Pro Alkaline Batteries, AA, Pack of 24	13430	



Sonoscope/Water Phone Leak Detectors

Inexpensive, lightweight listening device easily detects the sound of water escaping meters, valves and hydrants. No special training needed. Contact probe is approximately 1-1/4" long. Additional 6" extensions can be coupled together for extra length.

DESCRIPTION	STOCK #	EACH
Sonoscope	25680	\$
6" Extension	25682	



Heath Aqua-Scope® Acoustic Leak Detectors

Lightweight and comfortable to wear. Simple to use with both audio and visual signals. Two 9V batteries (included) provide 20 hours of continuous use. Comes with receiver module, ground microphone with handle, two microphone cables, 10" direct contact microphone with two extensions, sound protection headset, case and instruction manual.

Note: Kit does not include visual meter module; order separately.

 DESCRIPTION
 STOCK # EACH

 Heath Aqua-Scope
 25700 とけいのち

 Visual Meter Module
 25702 700 -00

Repl. Rayovac* Ultra Pro Alkaline Batteries, 9V, 8/pk 28342





Geophone Acoustic Leak Detectors

- · Redesigned with the highest quality materials for ultra sensitivity
- Most reliable leak detector available—no batteries required!
- · Compact and economical

Machined from solid brass bar stock, these leak detectors feature a photo-etched, phosphor bronze diaphragm sensor for ultra-sound sensitivity. Simply place sensors on the ground. They'll pick up and amplify sound vibrations, then transmit them to your headset. You'll hear even the slightest trickle while moving the sensors up and down a street. Follow the sound down a service line to where sound is the loudest. Heavy-duty hard-shell plastic case protects the delicate precision sensors from potential impacts or crushing hazards during storage or transport. Made in the U.S.A.

Includes: stethoscope headset, (2) ultra-sensitive brass sensors, tubing and case.

DESCRIPTION	STOCK #	EACH
Geophone Kit	25685	\$
Replacement Ear Piece	25686	
Penlacement Tuhing	25687	