

# 2008 Lead and Copper Sampling Plan January and June 2008 District of Columbia Water and Sewer Authority Department of Water Services Division of Water Quality

#### Introduction

In a letter dated June 14, 2006, the Environmental Protection Agency (EPA) Region III declared that Optimal Corrosion Control (OCCT) was achieved in the District of Columbia. This final OCCT designation was based on data reported to EPA Region III since the introduction of orthophosphate treatment on August 23, 2004. The letter also described that the final OCCT designation began in January 2006 relative to the start of the six-month period referenced in 40 CFR §141.87(d).

The District of Columbia Water and Sewer Authority (WASA) continued monitoring the distribution system for Water Quality Parameters (WQP) supporting OCCT. The data continued to support OCCT from the treatment plant throughout WASA's distribution system. In a letter to EPA Region III dated January 18, 2007, WASA requested EPA's approval to revert to reduced monitoring for the 2007 Lead and Copper Rule (LCR) monitoring period. EPA Region III responded on February 12, 2007 indicating it was not appropriate to go to reduced monitoring for the following reasons:

- June through September 2006 samples had a higher 90<sup>th</sup> percentile value than semi-annual 90<sup>th</sup> percentile values...additional data should be collected to facilitate examination of seasonal and other trends.
- EPA Region III needed to understand the potential effects of a distribution system chlorine shock on lead levels and that it would be prudent to have monitoring data over two six-month monitoring periods.
- EPA Region III believed that the orthophosphate was not yet at its maintenance dose and data provided to date may not reflect system conditions upon application of the maintenance dose.
- Preliminary examination of pipes taken prior to July 2006 indicated that scale development was incomplete and EPA Region III requested the continued submission of lead service line specimens to its Office of Research & Development (ORD) to continue assessing scales.

Over the past two monitoring periods, WASA has taken appropriate actions to each concern raised by EPA Region III as indicated below:

- WASA examined the first draw test results from each monitoring period from July 2005 through December 2007. The test result data suggests that lead concentrations collected from compliance samples are not temperature correlated. For the 2007 monitoring period, WASA observed one first draw sample that exceeded the action level from July through September 2007.
- From April 7, 2007 to May 7, 2007 the Washington Aqueduct switched from chloramine to chlorine as a secondary disinfectant. Lead samples were collected before, during, and after the chlorine introduction at one residential home serviced by a lead service line (Figure 1). Lead levels did not increase in first draw samples; however, there was a slight increase from the service line sample after switching back to chloramines although the peak levels never exceeded the action level of 15 ppb.

In addition, compliance sampling indicated no negative effect on sample results before, during and after the chlorine application as shown in Figure 2.

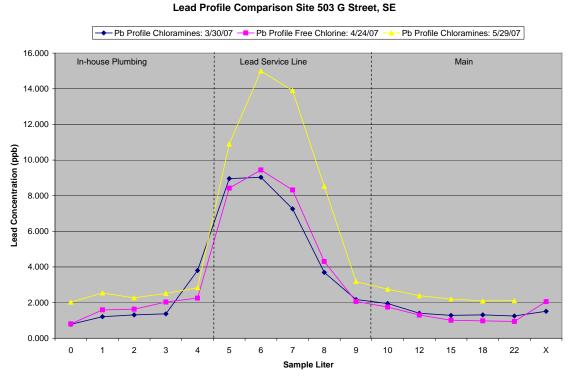
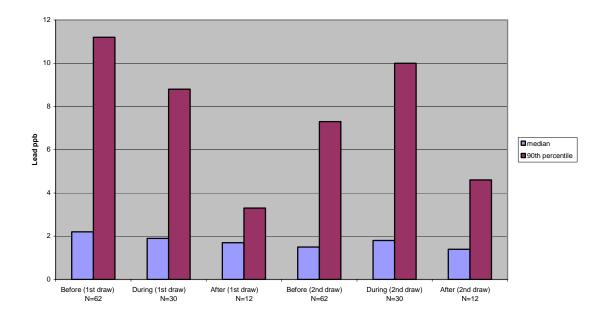


Figure 1. Lead Profiles conducted at a home before, during, and after chlorine burn



**Figure 2.** Lead concentrations taken before, during, and after the chlorine application at Tier-1, residential compliance monitoring locations from February through May 2007.

- In February 2006, the Washington Aqueduct lowered the orthophosphate levels from 3.2 mg/L to 2.3 mg/L as PO<sub>4</sub> at WASA's request in order to reduce cloudy water complaints caused by phosphate saturation. Since the reduction of orthophosphate to 2.3 mg/L, cloudy water complaints have decreased dramatically and lead levels continued to decline indicating that the phosphate reduction had no negative impact on lead release.
- Since July 2006, WASA submitted several lead service line pipe specimens to ORD; however, due to an apparent lack of funding, ORD has not analyzed the pipe submittals.

WASA has provided the information requested by EPA Region III to assist the agency in making a determination on reduced monitoring. However, due to potential changes related to WASA's current lead service line replacement program and on-gong research related to galvanize plumbing WASA submits this revised 2008 Lead and Copper Rule Sampling Plan (Plan) to reflect the continuation of semi-annual monitoring.

## Minor Revisions to the Lead and Copper Rule

In October 2007, EPA Headquarters published short-term minor revisions to the Lead and Copper Rule. WASA's LCR plan incorporates these revisions since they take effect in April 2008. Changes include a revised sample result letter that WASA mails to customers after receiving their sample results from the laboratory.

#### Sample Pool and Selection

WASA will collect samples from at least 100 sites listed in the revised sampling pool table located in Appendix C. Sample sites meet Tier 1 criteria under 40 CFR §141.86(a)(3)(ii) as single family structures with either full or partial lead service lines based on WASA's customer and service line inventory.

WASA will schedule sample collection based on the following criteria:

- 1. Primary sites with full lead service lines.
- 2. Primary sites with partial lead service lines.
- 3. Secondary sites with full lead service lines.
- 4. Secondary sites with partial lead service lines.

Customers who participated in LCR sampling between January 1, 2007 and December 31, 2007 are designated as primary sites. Two residences that participated during the second 2006 monitoring period were included as primary sites because they did not have the opportunity to participate for both monitoring periods in 2007. These locations are (1) 205 Taylor Street NW and (2) 1614 Allison Street NW. The two SW quadrant locations are listed as primary to ensure geographic distribution of the sample pool. Secondary sites represent locations added to the sample pool list in 2006 or locations that have not participated for the past two monitoring periods.

WASA will schedule and distribute samples in the order listed in Appendix C. WASA may sample locations out-of-order if the first sample submitted was rejected (refer to Criteria for Sample Acceptance section) and the customer requests a second test. WASA may also sample out-of-order if the customer contacts WASA to collect the sample after the scheduled pick up date. WASA will not leave a sample kit under the following conditions:

- Partial lead service line replacement within 60 days of sample drop-off
- Tier 1 status is suspect (e.g. possible condo conversion)
- Construction near the home or the home is undergoing rehabilitation

WASA will investigate to determine if the site should remain in the sample pool; however, the site will not be sampled until the following compliance period unless requested by the customer.

#### **Sample Collection**

WASA will collect samples between January and June 2008. The homeowner will collect first and second draw samples following the instructions in the sample kit and complete the Chain of Custody form (reference Appendix A). The samples will be sent to a certified laboratory, currently the Washington Aqueduct (WA), to analyze the lead, copper, and iron concentrations using EPA Method 200.8.

#### **Criteria for Sample Acceptance**

WASA will forward samples to WA using the following criteria:

- 1. Bottles:
  - First draw sample bottle is full
  - First draw sample bottle is identified
- 2. Chain-of-Custody or bottles have the following information:
  - Address on bottles match address on chain of custody
  - Home is a single dwelling unit (i.e., answered "No" to having multiple dwelling units)
  - Date and time stagnation started
  - Date and time sample collected
  - Stagnation time between 6 to 18 hours
  - No leaks or water use during stagnation

WASA will attempt to obtain any missing information from incomplete chain of custody forms by contacting the customer. WASA will note the customer contact by logging the customer's name, the date, questions asked, and customer responses. WASA will transfer the missing information onto the chain of custody.

## **Sample Invalidation**

WASA will request invalidation from EPA Region III for samples analyzed by WA laboratory based on 40 CFR §141.86 (f):

- The laboratory establishes that improper analysis caused erroneous results
- The sample was taken from a site that did not meet Tier 1 criteria
- The sample container was damaged during transit
- There is substantial reason to suspect that the sample was subject to tampering

#### **Notifying Customers of Results**

Under the revised LCR §141.85 (d), WASA will mail sample results to the homeowner along with lead advisory information within 30 days of receiving sample results from the laboratory.

WASA uses three standard letters to distribute lead test results (reference Appendix B). Letter #1 is used for results at or below the lead action level. Letter #2 is used for results above the lead action level. Letter #3 is used for homes at or below the lead action level with a second draw sample greater than 15 ppb. These letters have been revised to include EPA mandated language as stated under section 141.85 (d).

WASA has never obtained a first or second draw copper sample above the action level since the addition of chloramines. WASA will provide customers with written notification if the copper test results exceed the action level.

## **Sample Pool Revisions (Appendix D)**

Sites will be removed from the sample pool under the following conditions:

- Site does not meet Tier 1 criteria (e.g. condo conversion, no lead service line)
- Customer notifies WASA that they do not want to participate
- For the last four consecutive sampling events of a residence (i.e., sample kit dropped at residence), sample bottles were not returned from the residence and WASA has no past LCR monitoring data

Prior to the start of the next compliance period, WASA will move secondary sites to the primary group if samples are collected from the site. Primary sites will be moved to the secondary list if they have not participated during the last two consecutive monitoring periods.

WASA will assess the geographic distribution of the primary sites to ensure they are representative of the residential tap distribution. WASA will move secondary sites to the primary group or select new sites to improve geographic distribution if the sites are not representative of the residential tap distribution.

## **Reporting Format**

The lead and copper routine monitoring will be submitted in written and electronic format. The report format will comply with 40 CFR §141.90.

# Appendix A

Lead and Copper Customer Sample Instructions and Chain of Custody Form



# D.C. WATER AND SEWER AUTHORITY LEAD AND COPPER MONITORING PROGRAM

Thank you for participating in the District of Columbia Water and Sewer Authority's Lead and Copper Rule Monitoring Program. It is extremely important that participants follow these instructions precisely to ensure accurate test results.

## Part 1 Water Stagnation (The process for preventing water from flowing)

- 1. Run the cold water tap from your kitchen faucet for 10 minutes before starting stagnation
- 2. Close the cold water tap.
- 3. Write the date and time that you closed the tap on the attached chain-of-custody form.
- 4. **Do Not** use any water in the household for 6 to 8 hours.
- 5. Make sure your humidifier, icemaker, or sprinkler system is either turned off or not using water. Do not forget to shut off the ice-maker inside your refrigerator/freezer.

# Part 2 Water Sampling (Please do not remove aerator from faucet)

1. Use the kitchen cold-water faucet for all sampling. If you have a water treatment unit or filter attached to your plumbing system or faucet, please bypass the unit or remove the filter before sampling.



- 2. Gently open the cold water faucet and immediately fill the first bottle to the top. Close the faucet and tightly cap the sample bottle once the bottle is full.
- On the bottle label, fill out Collect Date, Collect Time, Collector (your name), Address, and Circle 1<sup>st</sup> Draw. Leave Sample # blank.
- 4. Open the cold-water faucet and run the water, keeping a hand/finger under the flowing water until the water changes temperature. Fill the second bottle to the top and tightly cap the bottle.



5. On the bottle label, fill out Collect Date, Collect Time, Collector (your name), Address, and circle 2<sup>nd</sup> Draw. Leave Sample # blank.

# Part 3 Fill out the Chain-of-Custody Form and Leave for DCWASA Pick-up

- 1. Note the Date and Time of sampling for both bottles on the attached chain-of-custody form. Please make sure that you answer all the questions and sign the form.
- 2. Leave samples and completed form on the front porch or where the kit was dropped off. DCWASA will pick-up the samples on Wednesday, January 30<sup>th</sup> (please call 202-612-3440, if you need to schedule an alternative pick-up day).

If you have any questions regarding these instructions Call **(202) 612-3440** or Email us at <u>waterquality@dcwasa.com</u> or write to D.C. Water And Sewer Authority – Department of Water Services, Water Quality Division, 3900 Donaldson Place, NW, Washington, D.C. 20016.



## **CUSTOMER INFORMATION**

Please change any incorrect information

Name «First\_name» «Last\_Name»

Address «Address»

Daytime phone # «Telephone»

Email \_\_\_\_\_\_

# LABORATORY USE ONLY

Sample ID#\_\_\_\_\_

Sample Type: \_D\_ System: WASA

Date/Time/Received By:\_\_\_\_\_

Premise # «Premise\_number»

Ple	ease Complete This Section:					
	Water last used on:	Date:	Time:		_ AM / PN	М
1 <sup>st</sup> Draw Sample collection:		Date:	Time:		_ AM / PN	M
	2 <sup>nd</sup> Draw Sample collection: Date: Time:				_ AM / P	M
Ple	ease respond to the following questio	ns:				
1)	Does your home contain two or more	dwelling units (dist	inct separate living units)?		YES	NO
2)	Was your home built after 1982?				YES	NO
	If yes, what date?					
3)	Was the private portion of your service	ce line replaced (from	n the house to the property line)		YES	NO
	If yes, what date?					
4)	Have there been any major plumbing the following dates:	changes inside the h	nouse (pipes & fixtures) during			
	a. Between January 1983 and Marc	h 1987?			YES	NO
	b. After March 1987?				YES	NO
	c. If Yes to either, please describe c	hanges (e.g., replace	ed pipes and fixtures in kitchen)			
	nditions During Stagnation and San as used during the stagnation period!	<b>apling -</b> Samples car	nnot be processed if the water			
5)	Were there any leaks in the plumbing	(faucets, toilets)?			YES	NO
6)	Was there any other household usage		ur stagnation period?		YES	NO
7)	Were the following units using water	-	•			
,	a. Ice maker		1	N/A	YES	NO
	b. Sprinkler system			N/A	YES	NO
	c. Humidifier			N/A	YES	NO
8)	Do you have a water treatment unit o	r filter attached to yo	our plumbing system or faucet?		YES	NO
	a. If yes, was the unit or filter bypas	ssed before sampling	??		YES	NO
Ιŀ	nave read and followed the sampling	1 0	•	g tap sa		
	1			- •	-	

# Appendix B Lead and Copper Monitoring Participant Results – Letter Letter #1: Below Action Level

Resident Address

Dear Resident,

Thank you for participating in the Lead and Copper Tap Water Monitoring Program administered by the District of Columbia Water and Sewer Authority (WASA). Your participation is very important because it helps us to monitor the quality of drinking water in the District of Columbia.

WASA is responsible for supplying drinking water to the residents of the District of Columbia. There is little to no problem with lead in drinking water as it leaves the treatment plant; the problem arises when the water causes corrosion inside the lead service lines and in homes with lead in their plumbing.

You were asked to provide two water samples to help us determine how faucet fixtures, household pipes, service lines and solder contribute to the lead and copper levels in tap water.

- First draw samples are required by the EPA and measure lead levels in water from your fixtures and in-house plumbing near the sample tap.
- Second draw samples reflect lead levels coming from your service line (the line from the water main to the house) and in-house plumbing.

The test results listed below indicate that the lead and copper concentrations of the tap water in your home are below the EPA action levels. The EPA action levels<sup>1</sup> for lead and copper are 15 parts per billion (ppb) and 1,300 ppb, respectively.

Sample Site	Draw	Concentration Of Lead in ppb	Concentration Of Copper in ppb
Address	First	12 ppb	107 ppb
	Second	5 ppb	1 ppb
EPA Action Level		15 ppb	1300 ppb

Your home has a full or partial lead service line according to our records. If this is not correct, please contact WASA at the telephone number listed in the closing of this letter.

EPA has established a Maximum Contaminant Level Goal (MCLG)<sup>2</sup> for lead at zero.

<sup>&</sup>lt;sup>1</sup> EPA defines an Action Level as the concentration of a contaminant, which if exceeded triggers treatment or other requirements which a water system must follow. Note that Action Levels are not health-based levels.

<sup>&</sup>lt;sup>2</sup> MCLG – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MCLGs are stringent because they allow for a margin of safety and do not take into account the cost associated with removing or fully treating all lead in the environment.

There are several sources of lead which can be found in your home such as lead paint, lead in toys, lead deposited in soil, as well as lead in your drinking water from plumbing, fixtures and lead service lines, all of which can contribute to daily exposure. For information on reducing lead exposure around your home and the health effects of lead, visit EPA's website at <a href="www.epa.gov/lead">www.epa.gov/lead</a>.

Lead can cause serious health problems, especially for pregnant women and young children if too much enters the body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of the body. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

We take exposure to lead very seriously. WASA, in consultation with advisers from The George Washington University, recommends that any customer who has a lead service line and is pregnant and /or has children under the age of six: 1) drink either filtered tap water or bottled water and 2) use filtered tap water to prepare infant formula or concentrated juices until the source has been identified and removed.

In addition WASA recommends the following routine steps customers can take to further reduce lead from their tap water:

- Use cold tap water for drinking or cooking, as hot tap water could contain higher levels of lead. Cold water should be heated on the stove for hot beverages or cooking.
- If your water has not been used for a few hours, flush water lines by running the cold water tap for at least 2 minutes prior to using for drinking or cooking.
- Collect and refrigerate cold tap water for drinking purposes in clean, dishwasher safe bottles such as sports bottles, after high water usage in your home (shower usage, running a dishwasher and doing laundry).
- Periodically, remove and clean the strainer/aerator device on your faucet to remove debris that collects inside.
- If you are using a water filter cartridge, WASA recommends that you replace the cartridge routinely, as recommended by the manufacturer.

Note: Boiling water does not reduce lead levels.

The District of Columbia Department of Health's Childhood Lead Poisoning Prevention Program (DC DOH) provides information on how to get a simple blood lead test to check lead levels in young children, pregnant women, and nursing mothers. You can also learn more about how to protect you and your family from lead by contacting the DC DOH at (202) 442-9216, or by visiting its website <a href="www.dchealth.dc.gov">www.dchealth.dc.gov</a>. If you have additional concerns about a child's health, or would like the screening done by his/her own doctor, please contact his/her pediatrician.

If you are purchasing a treatment device to reduce lead levels at your tap, choose a treatment device (i.e. filtration pitchers or tap filters) that will be used after potentially lead-leaching plumbing components. These devices must be installed, operated and maintained according to manufacturer instructions. Be sure to purchase a treatment device certified by an independent testing organization, such as NSF International. You can search the NSF International website for certified drinking water treatment devices by visiting: <a href="https://www.nsf.org/Certified/DWTU">www.nsf.org/Certified/DWTU</a>

Please be advised that neither EPA nor WASA certifies or endorses specific home drinking water treatment devices.

We appreciate your participation in the Lead and Copper Tap Water Monitoring Program. WASA is committed to making continuous improvements in our service to District residents and businesses. We look forward to your continued support of our monitoring and testing programs.

If you have additional questions or concerns, please call (202) 612-3440 WASA, Water Quality Division or write to WASA, Water Quality Division, 3900 Donaldson Pl. NW, Washington, D.C. 20016 or visit us on the web at www.dcwasa.com.

Sincerely,

Richard Giani

Manager, Water Quality Division

#### **LETTER #2-Above Action Level**

Resident Address

Dear Resident,

Thank you for participating in the Lead and Copper Tap Water Monitoring Program administered by the District of Columbia Water and Sewer Authority (WASA). Your participation is very important because it helps us to monitor the quality of drinking water in the District of Columbia.

WASA is responsible for supplying drinking water to the residents of the District of Columbia. There is little to no problem with lead in drinking water as it leaves the treatment plant; the problem arises when the water causes corrosion inside the lead service lines and in homes with lead in their plumbing.

You were asked to provide two water samples to help us determine how faucet fixtures, household pipes, service lines and solder contribute to the lead and copper levels in tap water.

- First draw samples are required by the EPA and measure lead levels in water from your fixtures and in-house plumbing near the sample tap.
- Second draw samples reflect lead levels coming from your service line (the line from the water main to the house) and in-house plumbing.

The test results listed below indicate that the lead concentration of the tap water in your home is above the EPA action level. The EPA action levels<sup>1</sup> for lead in the drinking water is 15 parts per billion (ppb) on the first draw. However, copper test results sampled from your home are below the EPA action level for copper at 1,300 ppb.

Sample Site	Draw	Concentration Of Lead in ppb	Concentration Of Copper in ppb
Address	First	12 ppb	107 ppb
	Second	5 ppb	1 ppb
EPA Action Level		15 ppb	1300 ppb

Your home has a full or partial lead service line according to our records. If this is not correct, please contact WASA at the telephone number listed in the closing of this letter.

EPA has established a Maximum Contaminant Level Goal (MCLG)<sup>2</sup> for lead at zero. MCLGs are stringent because they allow for a margin of safety and do not take into account the cost associated with removing or fully treating all lead in the environment.

<sup>1</sup> EPA defines an Action Level as the concentration of a contaminant, which if exceeded triggers treatment or other requirements which a water system must follow. Note that Action Levels are not health-based levels.

<sup>&</sup>lt;sup>2</sup> MCLG – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

There are several sources of lead which can be found in your home such as lead paint, lead in toys, lead deposited in soil, as well as lead in your drinking water from plumbing, fixtures and lead service lines, all of which can contribute to daily exposure. For information on reducing lead exposure around your home and the health effects of lead, visit EPA's website at <a href="www.epa.gov/lead">www.epa.gov/lead</a>.

Lead can cause serious health problems, especially for pregnant women and young children if too much enters the body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of the body. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

We take exposure to lead very seriously. WASA, in consultation with advisers from The George Washington University, recommends that any customer who has a lead service line and is pregnant and /or has children under the age of six: 1) drink either filtered tap water or bottled water and 2) use filtered tap water to prepare infant formula or concentrated juices until the source has been identified and removed.

In addition WASA recommends the following routine steps customers can take to further reduce lead from their tap water:

- Use cold tap water for drinking or cooking, as hot tap water could contain higher levels of lead. Cold water should be heated on the stove for hot beverages or cooking.
- If your water has not been used for a few hours, flush water lines by running the cold water tap for at least 2 minutes prior to using for drinking or cooking.
- Collect and refrigerate cold tap water for drinking purposes in clean, dishwasher safe bottles such as sports bottles, after high water usage in your home (shower usage, running a dishwasher and doing laundry).
- Periodically, remove and clean the strainer/aerator device on your faucet to remove debris that collects inside.
- If you are using a water filter cartridge, WASA recommends that you replace the cartridge routinely, as recommended by the manufacturer.

Note: Boiling water does not reduce lead levels.

The District of Columbia Department of Health's Childhood Lead Poisoning Prevention Program (DC DOH) provides information on how to get a simple blood lead test to check lead levels in young children, pregnant women, and nursing mothers. You can also learn more about how to protect you and your family from lead by contacting the DC DOH at (202) 442-9216, or by visiting its website <a href="www.dchealth.dc.gov">www.dchealth.dc.gov</a>. If you have additional concerns about a child's health, or would like the screening done by his/her own doctor, please contact his/her pediatrician.

If you are purchasing a treatment device to reduce lead levels at your tap, choose a treatment device (i.e. filtration pitchers or tap filters) that will be used after potentially lead-leaching plumbing components. These devices must be installed, operated and maintained according to manufacturer instructions. Be sure to purchase a treatment device certified by an independent testing organization, such as NSF International. You can search the NSF International website for certified drinking water treatment devices by visiting: www.nsf.org/Certified/DWTU

Please be advised that neither EPA nor WASA certifies or endorses specific home drinking water treatment devices.

We appreciate your participation in the Lead and Copper Tap Water Monitoring Program. WASA is committed to making continuous improvements in our service to District residents and businesses. We look forward to your continued support of our monitoring and testing programs.

If you have additional questions or concerns, please call (202) 612-3440 WASA, Water Quality Division or write to WASA, Water Quality Division, 3900 Donaldson Pl. NW, Washington, D.C. 20016 or visit us on the web at www.dcwasa.com.

Sincerely,

Richard Giani

Manager, Water Quality Division

# Letter #3: At or Below the Action Level with 2<sup>nd</sup> Draw Samples Greater Than 15 ppb for Lead

Resident Address

Dear Resident,

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WASA is responsible for supplying drinking water to the residents of the District of Columbia. There is little to no problem with lead in drinking water as it leaves the treatment plant; the problem arises when the water causes corrosion inside the lead service lines and in homes with lead in their plumbing.

You were asked to provide two water samples to help us determine how faucet fixtures, household pipes, service lines and solder contribute to the lead and copper levels in tap water.

- First draw samples are required by the EPA and measure lead levels in water from fixtures and in-house plumbing near the sample tap.
- Second draw samples reflect lead levels coming from your service line (the line from the water main to the house) and in-house plumbing.

The test results listed below indicate that the lead and copper concentrations of the tap water in your home are below the EPA action levels. The EPA action levels for lead and copper are 15 parts per billion (ppb) and 1,300 ppb, respectively in first draw samples. However, lead concentrations collected from your second draw sample are greater than 15 ppb. Although second-draw sampling results are not used to determine compliance with the Lead and Copper Rule's Tap Water Monitoring Program, WASA recommends that you take steps to minimize lead exposure as a general precaution. These measures are described later in this letter.

Sample Site	Draw	Concentration Of Lead in ppb	Concentration Of Copper in ppb
Address	First	12 ppb	107 ppb
	Second	22 ppb	1 ppb
EPA Action Level		15 ppb	1300 ppb

Your home has a full or partial lead service line according to our records. If this is not correct, please contact WASA at the telephone number listed in the closing of this letter.

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EPA has established a Maximum Contaminant Level Goal (MCLG)<sup>2</sup> for lead at zero. MCLGs are stringent because they allow for a margin of safety and do not take into account the cost associated with removing or fully treating all lead in the environment.

There are several sources of lead which can be found in your home such as lead paint, lead in toys, lead deposited in soil, as well as lead in your drinking water from plumbing, fixtures and lead service lines, all of which can contribute to daily exposure. For information on reducing lead exposure around your home and the health effects of lead, visit EPA's website at <a href="www.epa.gov/lead">www.epa.gov/lead</a>.

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- If your water has not been used for a few hours, flush water lines by running the cold water tap for at least 2 minutes prior to using for drinking or cooking.
- Collect and refrigerate cold tap water for drinking purposes in clean, dishwasher safe bottles such as sports bottles, after high water usage in your home (shower usage, running a dishwasher and doing laundry).
- Periodically, remove and clean the strainer/aerator device on your faucet to remove debris that collects inside.

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<sup>&</sup>lt;sup>2</sup> MCLG – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

• If you are using a water filter cartridge, WASA recommends that you replace the cartridge routinely, as recommended by the manufacturer.

# Note: Boiling water does not reduce lead levels.

The District of Columbia Department of Health's Childhood Lead Poisoning Prevention Program (DC DOH) provides information on how to get a simple blood lead test to check lead levels in young children, pregnant women, and nursing mothers. You can also learn more about how to protect you and your family from lead by contacting the DC DOH at (202) 442-9216, or by visiting its website <a href="www.dchealth.dc.gov">www.dchealth.dc.gov</a>. If you have additional concerns about a child's health, or would like the screening done by his/her own doctor, please contact his/her pediatrician.

If you are purchasing a treatment device to reduce lead levels at your tap, choose a treatment device (i.e. filtration pitchers or tap filters) that will be used after potentially lead-leaching plumbing components. These devices must be installed, operated and maintained according to manufacturer instructions. Be sure to purchase a treatment device certified by an independent testing organization, such as NSF International. You can search the NSF International website for certified drinking water treatment devices by visiting: <a href="https://www.nsf.org/Certified/DWTU">www.nsf.org/Certified/DWTU</a>

Please be advised that neither EPA nor WASA certifies or endorses specific home drinking water treatment devices.

We appreciate your participation in the Lead and Copper Tap Water Monitoring Program. WASA is committed to making continuous improvements in our service to District residents and businesses. We look forward to your continued support of our monitoring and testing programs.

If you have additional questions or concerns, please call (202) 612-3440 WASA, Water Quality Division or write to WASA, Water Quality Division, 3900 Donaldson Pl. NW, Washington, D.C. 20016 or visit us on the web at www.dcwasa.com.

Sincerely,

Richard Giani

Manager, Water Quality Division

# Appendix C Sample Pool

	Premise				Pipe Replacement
No	number	Address	Priority	Pipe Material	Date
1	3099025	1010 10th St NE	Primary	Lead	
2	3121184	106 7TH ST NE	Primary	Lead	
3	3126961	1104 TRINIDAD AVE NE	Primary	Lead	
4	3110546	1112 50th St NE	Primary	Lead	
5	3099387	1133 Park St NE	Primary	Lead	
6	3121725	119 11th St NE	Primary	Lead	
7	3111849	119 16TH ST NE	Primary	Lead	
8	3074305	119 Kentucky Ave SE	Primary	Lead	
9	3049117	1204 Longfellow St NW	Primary	Lead	
10	3102193	1207 Trinidad Ave NE	Primary	Lead	
11	3121975	1212 E Capitol St NE	Primary	Lead	
12	3049111	1216 Longfellow St NW	Primary	Lead	
13	3102158	1217 Orren St NE	Primary	Lead	
14	3098523	1224 5th St NE	Primary	Lead	
15	3092204	1228 Half St SW	Primary	Lead	
16	3092200	1236 Half St SW	Primary	Lead	
17	3025494	125 Madison St NW	Primary	Lead	
18	3032866	1262 COLUMBIA RD NW	Primary	Lead	
19	3104633	1301 Michigan Ave NE	Primary	Lead	
20	3104222	1315 FRANKLIN ST NE	Primary	Lead	
21	3104411	1317 Otis St NE	Primary	Lead	
22	3000706	1319 21st ST NW	Primary	Lead	
23	3049905	1320 Delafield PI NW	Primary	Lead	
24	3104275	1331 Irving St NE	Primary	Lead	
25	3074764	1339 Ives PI SE	Primary	Lead	
26	3088201	1339 U St SE	Primary	Lead	
27	3018501	134 Bryant St NW	Primary	Lead	
28	3049237	1346 Madison St NW	Primary	Lead	
29	3002833	1349 Wallach PI NW	Primary	Lead	
30	3081198	1354 W St SE	Primary	Lead	
31	3099975	1380 E ST NE	Primary	Lead	
32	3047187	1400 FLORAL ST NW	Primary	Lead	
33	3078536	1420 S ST SE	Primary	Lead	
34	3002488	1424 S ST NW	Primary	Lead	
35	3078538	1424 S ST SE	Primary	Lead	
36	3074936	1429 Ives PI SE	Primary	Lead	
37	3102850	143 UHLAND TER NE	Primary	Lead	
38	3002478	1436 S St NW	Primary	Lead	
39	3121925	144 Tennessee Ave NE	Primary	Lead	
40	3028190	1506 ALLISON ST NW	Primary	Lead	

	Premise		<b>5</b>	B. M	Pipe Replacement
No	number	Address	Priority	Pipe Material	Date
41	3100760	1534 D St NE	Primary	Lead	
42	3033890	1603 Hobart St NW	Primary	Lead	
43	3001883	1612 V ST NW	Primary	Lead	
44	3029160	1614 Allison St NW	Primary	Lead	
45	3075991	1622 G St SE	Primary	Lead	
46	3034043	1628 Argonne PI NW	Primary	Lead	
47	3029182	1635 WEBSTER ST NW	Primary	Lead	
48	3034000	1649 HARVARD ST NW	Primary	Lead	
49	3101136	1671 Rosedale St NE	Primary	Lead	
50	3006211	1706 NEW JERSEY AVE NW	Primary	Lead	
51	3087472	1714 Massachusetts Ave SE	Primary	Lead	
52	3031583	1747 Irving St NW	Primary	Lead	
53	3031582	1749 Irving St NW	Primary	Lead	
54	3112720	1812 M St NE	Primary	Lead	
55	3106027	1826 Jackson St NE	Primary	Lead	
56	3087484	1836 Massachusetts Ave SE	Primary	Lead	
57	3106034	1920 Jackson St NE	Primary	Lead	
58	3102875	1929 SUMMIT PL NE	Primary	Lead	
59	3009912	2007 37TH ST NW	Primary	Lead	
60	3103066	2016 4TH ST NE	Primary	Lead	
61	3073894	202 11th St SE	Primary	Lead	
62	3081115	2118 14th St SE	Primary	Lead	
63	3010160	2212 38th St NW	Primary	Lead	
64	3002740	2214 14th St NW	Primary	Lead	
65	3057169	224 Varnum St NW	Primary	Lead	
66	3124875	228 V ST NE	Primary	Lead	
67	3106796	2300 MONROE ST NE	Primary	Lead	
68	3103178	2404 3rd St NE	Primary	Lead	
69	3103183	2418 3RD ST NE	Primary	Lead	
70	3080372	2435 33RD ST SE	Primary	Lead	
71	3007215	2702 P ST NW	Primary	Lead	
72	3034952	2724 36TH PL NW	Primary	Lead	
73	3107490	2830 BRENTWOOD RD NE	Primary	Lead	
74	3107836	2846 VISTA ST NE	Primary	Lead	
75	3019046	311 ELM ST NW	Primary	Lead	
76	3035196	3206 38th St NW	Primary	Lead	
77	3107442	3211 Central Ave NE	Primary	Lead	
78	3035973	3218 MACOMB ST NW	Primary	Lead	
79	3037207	3218 MORRISON ST NW	Primary	Lead	
80	3122315	322 TENNESSEE AVE NE	Primary	Lead	
81	3019733	3223 Georgia Ave NW	Primary	Lead	
82	3035446	3232 Klingle Rd NW	Primary	Lead	

	Premise				Pipe Replacement
No	number	Address	Priority	Pipe Material	Date
83	3031787	3309 16th St NW	Primary	Lead	
84	3070403	331 RALEIGH ST SE	Primary	Lead	
85	3117544	336 Quackenbos St NE	Primary	Lead	
86	3052583	339 Randolph St NW	Primary	Lead	
87	3035897	3408 LOWELL ST NW	Primary	Lead	
88	3036748	3412 GARRISON ST NW	Primary	Lead	
89	3039602	3418 Oliver St NW	Primary	Lead	
90	3041853	3424 PORTER ST NW	Primary	Lead	
91	3039610	3427 Oliver St NW	Primary	Lead	
92	3036376	3434 30th St NW	Primary	Lead	
93	3122309	349 TENNESSEE AVE NE	Primary	Lead	
94	3041785	3530 Porter St NW	Primary	Lead	
95	3030480	3545 Hertford PI NW	Primary	Lead	
96	3036614	3550 ALBEMARLE ST NW	Primary	Lead	
97	3041389	3601 WARREN ST NW	Primary	Lead	
98	3041931	3618 PORTER ST NW	Primary	Lead	
99	3017815	37 R St NW	Primary	Lead	
100	3041925	3700 Quebec St NW	Primary	Lead	
101	3053584	3706 35th St NW	Primary	Lead	
102	3039312	3720 NORTHAMPTON ST NW	Primary	Lead	
103	3041121	3827 VEAZEY ST NW	Primary	Lead	
104	3028753	3908 13TH ST NW	Primary	Lead	
105	3040315	3973 HARRISON ST NW	Primary	Lead	
106	3040673	4111 INGOMAR ST NW	Primary	Lead	
107	3019855	424 Luray PI NW	Primary	Lead	
108	3041352	4305 38TH ST NW	Primary	Lead	
109	3042083	4307 CHESAPEAKE ST NW	Primary	Lead	
110	3028071	4325 IOWA AVE NW	Primary	Lead	
111	3042812	4331 BRANDYWINE ST NW	Primary	Lead	
112	3021575	4401 5TH ST NW	Primary	Lead	
113	3051284	4410 New Hampshire Ave NW	Primary	Lead	
114	3055262	4413 GREENWICH PKWY NW	Primary	Lead	
115	3104746	4418 14th St NE	Primary	Lead	
116	3028049	4507 13TH ST NW	Primary	Lead	
117	3027959	4518 14TH ST NW	Primary	Lead	
118	3021922	4613 9th St NW	Primary	Lead	
119	3027893	4622 15TH ST NW	Primary	Lead	
120	3055284	4703 Macarthur Blvd NW	Primary	Lead	
121	3110720	4718 Sheriff Rd NE	Primary	Lead	
122	3058539	4818 ILLINOIS AVE NW	Primary	Lead	
123	3058475	4842 KANSAS AVE NW	Primary	Lead	
124	3072020	517 4th St SE	Primary	Lead	

No         number         Address           125         3023639         5318 9TH ST NW           126         3039970         5405 39TH ST NW           127         3127201         610 L ST NE           128         3020170         618 OTIS PL NW           129         3127162         623 Morton Pl NE           130         3022018         821 BUCHANAN ST NW           131         3032568         829 Euclid St NW           132         3022262         834 Delafield Pl NW           133         3099082         1008 MARYLAND AVE NE           134         3100293         101 14th St NE           135         3099379         1115 PARK ST NE	Priority Primary	Lead Lead Lead Lead Lead Lead Lead Lead	Date
126     3039970     5405 39TH ST NW       127     3127201     610 L ST NE       128     3020170     618 OTIS PL NW       129     3127162     623 Morton Pl NE       130     3022018     821 BUCHANAN ST NW       131     3032568     829 Euclid St NW       132     3022262     834 Delafield Pl NW       133     3099082     1008 MARYLAND AVE NE       134     3100293     101 14th St NE	Primary	Lead Lead Lead Lead Lead Lead Lead Lead	
127     3127201     610 L ST NE       128     3020170     618 OTIS PL NW       129     3127162     623 Morton PI NE       130     3022018     821 BUCHANAN ST NW       131     3032568     829 Euclid St NW       132     3022262     834 Delafield PI NW       133     3099082     1008 MARYLAND AVE NE       134     3100293     101 14th St NE	Primary Primary Primary Primary Primary Primary Primary Primary Primary	Lead Lead Lead Lead Lead Lead Partial Lead	
128     3020170     618 OTIS PL NW       129     3127162     623 Morton PI NE       130     3022018     821 BUCHANAN ST NW       131     3032568     829 Euclid St NW       132     3022262     834 Delafield PI NW       133     3099082     1008 MARYLAND AVE NE       134     3100293     101 14th St NE	Primary Primary Primary Primary Primary Primary Primary Primary	Lead Lead Lead Lead Lead Lead Partial Lead	
129     3127162     623 Morton PI NE       130     3022018     821 BUCHANAN ST NW       131     3032568     829 Euclid St NW       132     3022262     834 Delafield PI NW       133     3099082     1008 MARYLAND AVE NE       134     3100293     101 14th St NE	Primary Primary Primary Primary Primary Primary	Lead Lead Lead Lead Partial Lead	
130     3022018     821 BUCHANAN ST NW       131     3032568     829 Euclid St NW       132     3022262     834 Delafield PI NW       133     3099082     1008 MARYLAND AVE NE       134     3100293     101 14th St NE	Primary Primary Primary Primary Primary	Lead Lead Lead Partial Lead	
131     3032568     829 Euclid St NW       132     3022262     834 Delafield PI NW       133     3099082     1008 MARYLAND AVE NE       134     3100293     101 14th St NE	Primary Primary Primary Primary	Lead Lead Partial Lead	
132       3022262       834 Delafield PI NW         133       3099082       1008 MARYLAND AVE NE         134       3100293       101 14th St NE	Primary Primary Primary	Lead Partial Lead	
133 3099082 1008 MARYLAND AVE NE 134 3100293 101 14th St NE	Primary Primary	Partial Lead	
134 3100293 101 14th St NE	Primary		
		Dontial I I	9/22/2004
135 3099379 1115 PARK ST NE	Primary	Partial Lead	1/1/1996
· · · · · · · · · · · · · · · · · · ·	-	Partial Lead	
136 3102133 1202 Staples St NE	Primary	Partial Lead	6/8/2007
137 3029443 1203 Quincy St NW	Primary	Partial Lead	9/7/2007
138 3092716 1211 Carrollsburg PI SW	Primary	Partial Lead	8/29/2006
139 3049657 1220 Kennedy St NW	Primary	Partial Lead	9/27/2007
140 3049889 1222 HAMILTON ST NW	Primary	Partial Lead	3/11/2005
141 3032925 1224 Irving St NW	Primary	Partial Lead	5/9/2007
142 3112743 1231 17th St NE	Primary	Partial Lead	11/28/2007
143 3087203 1319 POTOMAC AVE SE	Primary	Partial Lead	
144 3049333 1353 JEFFERSON ST NW	Primary	Partial Lead	8/20/2007
145 3122338 1412 N Carolina Ave NE	Primary	Partial Lead	8/4/2006
146 3030408 1412 Shepherd St NW	Primary	Partial Lead	7/24/2007
147 3075405 1523 D St SE	Primary	Partial Lead	6/27/2007
148 3120163 1533 Constitution Ave NE	Primary	Partial Lead	8/7/2006
149 3076133 1701 INDEPENDENCE AVE SE	Primary	Partial Lead	5/3/2006
150 3106057 1808 KEARNEY ST NE	Primary	Partial Lead	8/22/2006
151 3101807 1825 L ST NE	Primary	Partial Lead	3/18/2005
152 3031242 1843 MONROE ST NW	Primary	Partial Lead	3/1/2004
153 3031232 1863 MONROE ST NW	Primary	Partial Lead	11/6/2003
154 3102874 1931 SUMMIT PL NE	Primary	Partial Lead	4/27/2005
155 3021140 205 TAYLOR ST NW	Primary	Partial Lead	5/10/2005
156 3097777 231 K St NE	Primary	Partial Lead	7/6/2007
157 3035596 2823 28TH ST NW	Primary	Partial Lead	11/2/2005
158 3026604 302 RITTENHOUSE ST NW	Primary	Partial Lead	3/9/2007
159 3057941 3104 Hawthorne St NW	Primary	Partial Lead	1/1/1989
160 3036190 3201 Porter St NW	Primary	Partial Lead	8/8/2007
161 3035198 3202 38TH ST NW	Primary	Partial Lead	
162 3038872 3215 McKinley St NW	Primary	Partial Lead	6/1/2007
163 3030694 3301 BROWN St NW	Primary	Partial Lead	9/14/2004
164 3100953 335 17TH PL NE	Primary	Partial Lead	11/21/2005
165 3053812 3531 16TH ST NW	Primary	Partial Lead	
166 3020685 3913 8TH ST NW	Primary	Partial Lead	8/16/2004

No	Premise number	Address	Priority	Pipe Material	Pipe Replacement Date
167	3039789	3917 LIVINGSTON ST NW	Primary	Partial Lead	9/7/2007
168	3042269	4304 Fessenden St NW	Primary	Partial Lead	6/8/2007
169	3028070	4327 IOWA AVE NW	Primary	Partial Lead	
170	3042773	4332 BRANDYWINE ST NW	Primary	Partial Lead	
171	3021630	4429 3rd St NW	Primary	Partial Lead	5/23/2007
172	3058237	4609 30TH ST NW	Primary	Partial Lead	
173	3022580	4818 8TH ST NW	Primary	Partial Lead	
174	3074700	514 13th St SE	Primary	Partial Lead	3/29/2007
175	3056836	518 Varnum St NW	Primary	Partial Lead	
176	3023208	5229 7TH ST NW	Primary	Partial Lead	11/29/2007
177	3026522	6213 7TH ST NW	Primary	Partial Lead	
178	3032396	765 GIRARD ST NW	Primary	Partial Lead	7/25/2006
179	3024389	805 LONGFELLOW ST NW	Primary	Partial Lead	7/16/2007
180	3022241	817 DECATUR ST NW	Primary	Partial Lead	1/11/2006
181	3029396	1003 Quebec Pl NW	Secondary	Lead	
182	3073850	1121 C St SE	Secondary	Lead	
183	3102674	1122 Oates St NE	Secondary	Lead	
184	3126922	1145 OATES ST NE	Secondary	Lead	
185	3081496	1221 Pleasant St SE	Secondary	Lead	
186	3099351	1231 F St NE	Secondary	Lead	
187	3028546	1302 Randolph St NW	Secondary	Lead	
188	3088211	1312 V St SE	Secondary	Lead	
189	3048557	1351 Montague St NW	Secondary	Lead	
190	3100201	1357 C St NE	Secondary	Lead	
191	3074747	1371 Potomac Ave SE	Secondary	Lead	
192	3048291	1407 MONTAGUE ST NW	Secondary	Lead	
193	3002494	1412 S St NW	Secondary	Lead	
194	3075194	1427 A St SE	Secondary	Lead	
195	3077908	1435 22nd St SE	Secondary	Lead	
196	3125541	149 Todd PI NE	Secondary	Lead	
197	3100350	1525 D St NE	Secondary	Lead	
198	3087431	1603 Massachusetts Ave SE	Secondary	Lead	
199	3103049	1705 2nd St NE	Secondary	Lead	
200	3031603	1707 Irving St NW	Secondary	Lead	
201	3050063	1724 1st St NW	Secondary	Lead	
202	3031559	1746 KENYON ST NW	Secondary	Lead	
203	3033857	1804 Kenyon St NW	Secondary	Lead	
204	3031470	1811 Lamont St NW	Secondary	Lead	
205	3078580	1812 14TH ST SE	Secondary	Lead	
206	3033844	1830 Kenyon St NW	Secondary	Lead	
207	3075797	19 17th St SE	Secondary	Lead	
208	3125503	1921 1st St NE	Secondary	Lead	

No	Premise number	Address	Priority	Pipe Material	Pipe Replacement Date
209	3031306	2007 KLINGLE RD NW	Secondary	Lead	
210	3124898	2010 3rd St NE	Secondary	Lead	
211	3025967	207 Quackenbos St NW	Secondary	Lead	
212	3103119	2107 2nd St NE	Secondary	Lead	
213	3124771	211 RANDOLPH PL NE	Secondary	Lead	
214	3054722	2110 S St NW	Secondary	Lead	
215	3018683	2216 1st St NW	Secondary	Lead	
216	3071970	224 S Carolina Ave SE	Secondary	Lead	
217	3124103	226 12th PI NE	Secondary	Lead	
218	3124779	228 Randolph Pl NE	Secondary	Lead	
219	3121478	229 Tennessee Ave NE	Secondary	Lead	
220	3025316	234 Longfellow St NW	Secondary	Lead	
221	3103161	2408 2nd St NE	Secondary	Lead	
222	3103215	2421 3rd St NE	Secondary	Lead	
223	3033568	2431 Ontario Rd NW	Secondary	Lead	
224	3007308	2521 P St NW	Secondary	Lead	
225	3075088	256 15th St SE	Secondary	Lead	
226	3107330	2604 Rhode Island Ave NE	Secondary	Lead	
227	3123349	2912 S DAKOTA AVE NE	Secondary	Lead	
228	3103361	3001 7th St NE	Secondary	Lead	
229	3036169	3003 Porter St NW	Secondary	Lead	
230	3088493	3009 7TH ST SE	Secondary	Lead	
231	3054131	3013 Sherman Ave NW	Secondary	Lead	
232	3036180	3059 Porter St NW	Secondary	Lead	
233	3007563	3069 Canal St NW	Secondary	Lead	
234	3046345	313 Aspen St NW	Secondary	Lead	
235	3073087	317 9th St SE	Secondary	Lead	
236	3122109	317 Channing St NE	Secondary	Lead	
237	3021247	331 Upshur St NW	Secondary	Lead	
238	3029968	3400 Holmead PI NW	Secondary	Lead	
239	3103403	3416 9th St NE	Secondary	Lead	
240	3123540	3431 S Dakota Ave NE	Secondary	Lead	
241	3041768	3520 35th St NW	Secondary	Lead	
242	3019946	3526 Park PI NW	Secondary	Lead	
243	3030559	3529 16th St NW	Secondary	Lead	
244	3020413	3634 WARDER ST NW	Secondary	Lead	
245	3029612	3665 13th St NW	Secondary	Lead	
246	3041919	3704 Porter St NW	Secondary	Lead	
247	3040552	3710 Huntington St NW	Secondary	Lead	
248	3041071	3712 Brandywine St NW	Secondary	Lead	
249	3020538	3811 5th St NW	Secondary	Lead	
250	3029267	3907 13th St NW	Secondary	Lead	

No	Premise number	Address	Priority	Pipe Material	Pipe Replacement Date
251	3010536	3912 Benton St NW	Secondary	Lead	Date
252	3020687	3917 8th St NW	Secondary	Lead	
253	3072073	409 S Carolina Ave SE	Secondary	Lead	
254	3023442	410 Farragut St NW	Secondary	Lead	
255	3021261	4105 5th St NW	Secondary	Lead	
256	3108722	4120 Grant St NE	Secondary	Lead	
257	3042399	4131 YUMA ST NW	Secondary	Lead	
258	3124209	416 7th St NE	Secondary	Lead	
259	3087147	417 15th St SE	Secondary	Lead	
260		4204 New Hampshire Ave NW	Secondary	Lead	
261	3057003	-			
	3123490	4210 Clay St NE	Secondary	Lead	
262	3051191	4211 Illinois Ave NW	Secondary	Lead	
263	3042282	4230 FESSENDEN ST NW	Secondary	Lead	
264	3074590	427 15th St SE	Secondary	Lead	
265	3023359	433 Hamilton St NW	Secondary	Lead	
266	3075386	434 15TH ST SE	Secondary	Lead	
267	3044360	4409 Lowell St NW	Secondary	Lead	
268	3051269	4411 Illinois Ave NW	Secondary	Lead	
269	3114986	4419 14th St NE	Secondary	Lead	
270	3123201	4423 Kane PI NE	Secondary	Lead	
271	3114991	4433 14th St NE	Secondary	Lead	
272	3019923	452 Newton PI NW	Secondary	Lead	
273	3021675	4531 Georgia Ave NW	Secondary	Lead	
274	3058406	4550 30TH ST NW	Secondary	Lead	
275	3027899	4610 15th St NW	Secondary	Lead	
276	3043835	4627 49th St NW	Secondary	Lead	
277	3050274	4700 Georgia Ave NW	Secondary	Lead	
278	3022212	4711 9th St NW	Secondary	Lead	
279	3043082	4729 47TH ST NW	Secondary	Lead	
280	3058520	4821 Illinois Ave NW	Secondary	Lead	
281	3043613	4832 46th St NW	Secondary	Lead	
282	3022561	4906 9th St NW	Secondary	Lead	
283	3045865	4926 Glenbrook Rd NW	Secondary	Lead	
284	3051121	501 UPSHUR ST NW	Secondary	Lead	
285	3019360	506 Irving St NW	Secondary	Lead	
286	3020427	519 Rock Crk Church Rd NW	Secondary	Lead	
287	3072109	525 6th St SE	Secondary	Lead	
288	3049643	5409 13th St NW	Secondary	Lead	
289	3024652	5817 7th St NW	Secondary	Lead	
290	3022956	608 Gallatin St NW	Secondary	Lead	
291	3072466	610 G St SE	Secondary	Lead	
292	3052525	612 ROCK CRK CHURCH RD NW	Secondary	Lead	

	Premise				Pipe Replacement
No	number	Address	Priority	Pipe Material	Date
293	3127313	617 M St NE	Secondary	Lead	
294	3113293	618 Franklin St NE	Secondary	Lead	
295	3099778	619 12th St NE	Secondary	Lead	
296	3019775	631 Lamont St NW	Secondary	Lead	
007	2050542	636 ROCK CRK CHURCH RD	0	1	
297	3052513	NW	Secondary	Lead	
298	3023157	641 Gallatin St NW	Secondary	Lead	
299	3073488	702 9th St SE	Secondary	Lead	
300	3082284	720 ALABAMA AVE SE	Secondary	Lead	
301	3112078	721 16th St NE	Secondary	Lead	
302	3022586	728 FARRAGUT ST NW	Secondary	Lead	
303	3032501	743 Gresham PI NW	Secondary	Lead	
304	3020365	744 Quebec PI NW	Secondary	Lead	
305	3006880	75 P St NW	Secondary	Lead	
306	3032465	760 Gresham PI NW	Secondary	Lead	
307	3032309	768 Irving St NW	Secondary	Lead	
308	3047496	7705 13th St NW	Secondary	Lead	
309	3022277	804 Delafield PI NW	Secondary	Lead	
310	3006951	81 O St NW	Secondary	Lead	
311	3082314	810 Savannah St SE	Secondary	Lead	
312	3021694	812 Buchanan St NW	Secondary	Lead	
313	3032565	823 Euclid St NW	Secondary	Lead	
314	3022565	826 Emerson St NW	Secondary	Lead	
315	3127918	835 3RD ST NE	Secondary	Lead	
316	3017762	88 R St NW	Secondary	Lead	
317	3122831	905 Kent PI NE	Secondary	Lead	
318	3022544	916 Farragut St NW	Secondary	Lead	
319	3022794	926 Hamilton St NW	Secondary	Lead	
320	3023647	927 Hamilton St NW	Secondary	Lead	
321	3128734	1013 I St NE	Secondary	Partial Lead	9/11/2006
322	3103497	1016 DOUGLAS ST NE	Secondary	Partial Lead	
323	3049552	1207 Hamilton St NW	Secondary	Partial Lead	3/11/2005
324	3126989	1228 Florida Ave NE	Secondary	Partial Lead	8/18/2005
325	3049882	1236 HAMILTON ST NW	Secondary	Partial Lead	10/1/2004
326	3031926	1249 Kenyon St NW	Secondary	Partial Lead	10/31/2005
327	3050056	131 Randolph Pl NW	Secondary	Partial Lead	6/1/2004
328	3047966	1311 Floral St NW	Secondary	Partial Lead	9/22/2006
329	3030013	1337 Newton St NW	Secondary	Partial Lead	3/30/2005
330	3047902	1353 Iris St NW	Secondary	Partial Lead	7/9/2004
331	3049774	1365 Hamilton St NW	Secondary	Partial Lead	9/25/2006
332	3122443	1387 N Carolina Ave NE	Secondary	Partial Lead	6/23/2006
333	3000747	1405 21ST ST NW	Secondary	Partial Lead	7/19/2005
334	3030279	1424 Perry PI NW	Secondary	Partial Lead	5/25/2005
004	0000210	1 12 f I Olly I I I I I V	Josephialy	i ditidi Lodd	0/20/2000

No	Premise number	Address	Priority	Pipe Material	Pipe Replacement Date
335	3002524	1451 S ST NW		Partial Lead	Date
336	3104884	1505 Lawrence St NE	Secondary	Partial Lead	10/14/2005
337		1619 G St SE	Secondary Secondary		10/14/2005
	3075328			Partial Lead	0/20/2007
338	3075439	1626 E ST SE	Secondary	Partial Lead	9/20/2007
339	3101781	1731 L St NE	Secondary	Partial Lead	3/7/2005
340	3076112	1736 Bay St SE	Secondary	Partial Lead	4/20/2005
341	3034188	1755 Lanier PI NW	Secondary	Partial Lead	6/10/2005
342	3009506	1802 35TH ST NW	Secondary	Partial Lead	3/8/2007
343	3031410	1802 Kilbourne PI NW	Secondary	Partial Lead	8/22/2005
344	3031203	1814 MONROE ST NW	Secondary	Partial Lead	3/4/2004
345	3101830	1836 L St NE	Secondary	Partial Lead	3/22/2005
346	3031244	1839 MONROE ST NW	Secondary	Partial Lead	3/1/2004
347	3018911	1850 2ND ST NW	Secondary	Partial Lead	8/31/2004
348	3034591	1908 Biltmore St NW	Secondary	Partial Lead	4/3/2007
349	3121504	201 13th St NE	Secondary	Partial Lead	4/5/2007
350	3130077	223 14th PI NE	Secondary	Partial Lead	7/8/2006
351	3088216	2237 CHESTER ST SE	Secondary	Partial Lead	
352	3097707	230 G St NE	Secondary	Partial Lead	6/18/2007
353	3057574	2928 33rd PI NW	Secondary	Partial Lead	1/12/2005
354	3055102	3030 44TH ST NW	Secondary	Partial Lead	2/24/2006
355	3035880	3105 34th St NW	Secondary	Partial Lead	9/28/2006
356	3100121	312 14TH ST NE	Secondary	Partial Lead	10/28/2005
357	3075154	313 16th St SE	Secondary	Partial Lead	5/3/2007
358	3023883	319 Ingraham St NW	Secondary	Partial Lead	9/19/2007
359	3125297	32 Todd PI NE	Secondary	Partial Lead	6/29/2004
360	3030763	3428 Brown St NW	Secondary	Partial Lead	9/3/2004
361	3053577	3721 Windom PI NW	Secondary	Partial Lead	8/27/2007
362	3041213	3809 ALTON PL NW	Secondary	Partial Lead	3/13/2006
363	3102977	42 Q St NE	Secondary	Partial Lead	7/2/2007
364	3019513	420 Kenyon St NW	Secondary	Partial Lead	8/6/2004
365	3041124	4215 39th St NW	Secondary	Partial Lead	3/23/2006
366	3020469	441 Quincy St NW	Secondary	Partial Lead	8/15/2007
367	3110999	4616 HUNT PL NE	Secondary	Partial Lead	4/9/2007
368	3024685	502 Oglethorpe St NW	Secondary	Partial Lead	3/5/2007
369	3127277	513 Florida Ave NE	Secondary	Partial Lead	8/3/2005
370	3091539	52 Galveston PI SW	Secondary	Partial Lead	5/11/2006
371	3052497	522 Park Rd NW	Secondary	Partial Lead	2/3/2005
372	3052087	53 V St NW	Secondary	Partial Lead	6/25/2004
373	3039888	5301 RENO RD NW	Secondary	Partial Lead	9/20/2005
374	3058043	5304 Reno Rd NW	Secondary	Partial Lead	9/7/2005
375 376	3039963 3019999	5404 39TH ST NW 545 PARK RD NW	Secondary Secondary	Partial Lead Partial Lead	6/17/2005 2/7/2005

	Premise				Pipe Replacement
No	number	Address	Priority	Pipe Material	Date
377	3019336	605 Columbia Rd NW	Secondary	Partial Lead	8/16/2004
		605 ROCK CRK CHURCH RD			
378	3020431	NW	Secondary	Partial Lead	
379	3019657	617 Kenyon St NW	Secondary	Partial Lead	8/23/2004
380	3111743	661 MARYLAND AVE NE	Secondary	Partial Lead	10/18/2004
381	3032050	720 PARK RD NW	Secondary	Partial Lead	5/10/2007
382	3032645	736 Fairmont St NW	Secondary	Partial Lead	10/28/2005
383	3047453	7721 14th St NW	Secondary	Partial Lead	10/29/2004
384	3032623	780 Fairmont St NW	Secondary	Partial Lead	10/3/2005
385	3022249	833 DECATUR ST NW	Secondary	Partial Lead	1/19/2006
386	3022793	924 Hamilton St NW	Secondary	Partial Lead	8/4/2004

# Appendix D Revisions to Sampling Pool

# Table D.1 Locations Removed From 2008 Sample Pool

No	Address	Priority	Pipe Material	Pipe Replacement Date	Date Removed from Sampling	Reason for non- routine
1	4206 10th St NE	Primary	Brass		8/21/2007	no lead
2	1334 HEMLOCK ST NW	Primary	Copper	11/5/2003	11/15/2007	no lead
3	1956 BILTMORE ST NW	Primary	Copper	9/20/2007	9/24/2007	no lead
4	1971 BILTMORE ST NW	Primary	Copper	10/3/2007	10/17/2007	no lead
5	3014 Channing St NE	Primary	Copper	6/14/2007	7/23/2007	no lead
6	532 13TH ST SE	Primary	Copper	3/30/2007	7/17/2007	no lead
7	712 JEFFERSON ST NW	Primary	Copper	7/27/2007	.,,=00.	no lead
8	926 14TH ST SE	Primary	Copper	10/2/2007	10/9/2007	no lead
9	1313 T St SE	Primary	Copper	7/1/2007	10/31/2007	no lead
10	2003 KLINGLE RD NW	Primary	Lead	77 172001	7/23/2007	multi-family residence
11	2134 NEWPORT PL NW	Primary	Lead		11/20/2007	multi-family residence
12	3439 24TH ST SE	Primary	Lead		11/20/2007	multi-family residence
13	403 K St NE	Primary	Lead		11/20/2007	multi-family residence
14	5105 14TH ST NW	Primary	Lead		11/20/2007	multi-family residence
15	5121 ILLINOIS AVE NW	Primary	Lead		11/20/2007	multi-family residence
16	607 ATLANTIC ST SE	Primary	Lead		11/20/2007	multi-family residence
17	704 ALABAMA AVE SE	Primary	Lead		11/20/2007	multi-family residence
18	1241 JACKSON ST NE	Primary	Partial Lead	7/27/2004	11/20/2007	multi-family residence
19	1341 Massachusetts Ave SE	Primary	Partial Lead	7/2/2004	10/30/2007	multi-family residence
20	1214 SHEPHERD ST NW	Secondary	Copper	172/2001	9/5/2007	no lead
21	1330 Quincy St NW	Secondary	Copper	8/20/2007	9/5/2007	no lead
22	1371 Kalmia Rd NW	Secondary	Copper	7/24/2007	8/21/2007	no lead
23	1410 D St SE	Secondary	Copper	8/17/2007	9/20/2007	no lead
24	150 W St NW	Secondary	Copper	9/4/2007	9/20/2007	no lead
25	1524 31st St NW	Secondary	Copper	5/22/2007	7/17/2007	no lead
26	1614 D St SE	Secondary	Copper		9/20/2007	no lead
27	2519 Ontario Rd NW	Secondary	Copper	5/2/2007		no lead
28	2919 Bellevue Ter NW	Secondary	Copper	10/1/2007	10/17/2007	no lead

				Pipe	Date Removed	
No	Address	Priority	Pipe Material	Replacement Date	from Sampling	Reason for non- routine
29	300 E St NE	Secondary	Partial Lead	1/1/1976	11/8/2007	multi-family residence
30	342 15th St SE	Secondary	Copper	4/5/2007	7/17/2007	no lead
31	3521 17th St NE	Secondary	Copper	10/11/2007	10/17/2007	no lead
32	3709 S St NW	Secondary	Copper	6/25/2007	7/17/2007	no lead
33	4013 8th St NW	Secondary	Copper		7/17/2007	no lead
34	4415 3rd St NW	Secondary	Copper	5/29/2007	7/17/2007	no lead
35	5717 SHERIER PL NW	Secondary	Copper	7/19/2007	8/23/2007	no lead
36	619 Oneida PI NW	Secondary	Copper	10/19/2007	11/15/2007	no lead
37	701 Quincy St NW	Secondary	Copper		9/5/2007	no lead
38	729 11TH ST NE	Secondary	Copper		7/23/2007	no lead
39	1409 35TH ST NW	Secondary	Lead		11/20/2007	multi-family residence
40	1656 U St SE	Secondary	Lead		10/26/2007	multi-family residence
41	1838 Calvert St NW	Secondary	Lead		11/2/2007	multi-family residence
42	3336 Quesada St NW	Secondary	Lead		11/5/2007	request no participation

Table D.2 Locations in 2008 Sampling Pool with Service Line Material Changes Recorded in the Second Semester of 2007

	Pipe			
			Replacement	
No	Address	Comments	Date	
1	101 14th St NE	Customer reported private side replaced	1/1/1996	
2	1202 Staples St NE	Public side replacement	6/8/2007	
3	1203 Quincy St NW	Public side replacement	9/7/2007	
4	1220 Kennedy St NW	Public side replacement	9/27/2007	
5	1231 17th St NE	Public side replacement	11/28/2007	
6	1353 JEFFERSON ST NW	Public side replacement	8/20/2007	
7	1412 Shepherd St NW	Public side replacement	7/24/2007	
8	1523 D St SE	Public side replacement	6/27/2007	
9	1626 E ST SE	Public side replacement	9/20/2007	
10	230 G St NE	Public side replacement	6/18/2007	
11	231 K St NE	Public side replacement	7/6/2007	
12	319 Ingraham St NW	Public side replacement	9/19/2007	
13	3201 Porter St NW	Public side replacement	8/8/2007	
14	3215 McKinley St NW	Customer reported private side replaced	6/1/2007	
15	3531 16TH ST NW	Customer reported private side replaced	11/1/2005	
16	3721 Windom PI NW	Public side replacement	8/27/2007	
17	3917 LIVINGSTON ST NW	Public side replacement	9/7/2007	
18	42 Q St NE	Public side replacement	7/2/2007	
19	4304 Fessenden St NW	Public side replacement	6/8/2007	
20	4327 IOWA AVE NW  Test pit showed lead and copper on public side		7/26/2005	
21	441 Quincy St NW	Public side replacement	8/15/2007	
22	5229 7TH ST NW	Public side replacement	11/29/2007	
23	805 LONGFELLOW ST NW	Public side replacement	7/16/2007	

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Table D.3 Locations That Changed Priority Status

	Locations That Changed Priority Status					
No	Address	Change				
1	1003 Quebec Pl NW	Primary to Secondary				
2	1013 I St NE	Primary to Secondary				
3	1016 DOUGLAS ST NE	Primary to Secondary				
4	1145 OATES ST NE	Primary to Secondary				
5	1231 F St NE	Primary to Secondary				
6	1351 Montague St NW	Primary to Secondary				
7	1451 S ST NW	Primary to Secondary				
8	1626 E ST SE	Primary to Secondary				
9	1814 MONROE ST NW	Primary to Secondary				
10	207 Quackenbos St NW	Primary to Secondary				
11	312 14TH ST NE	Primary to Secondary				
12	3526 Park PI NW	Primary to Secondary				
13	3634 WARDER ST NW	Primary to Secondary				
14	3665 13th St NW	Primary to Secondary				
15	3809 ALTON PL NW	Primary to Secondary				
16	4131 YUMA ST NW	Primary to Secondary				
17	4818 8TH ST NW	Primary to Secondary				
18	52 Galveston PI SW	Primary to Secondary				
19	5301 RENO RD NW	Primary to Secondary				
20	5404 39TH ST NW	Primary to Secondary				
21	641 Gallatin St NW	Primary to Secondary				
22	661 MARYLAND AVE NE	Primary to Secondary				
23	835 3RD ST NE	Primary to Secondary				
24	119 Kentucky Ave SE	Secondary to Primary				
25	1217 Orren St NE	Secondary to Primary				
26	1354 W St SE	Secondary to Primary				
27	1412 Shepherd St NW	Secondary to Primary				
28	1424 S ST SE	Secondary to Primary				
29	1429 Ives PI SE	Secondary to Primary				
30	1523 D St SE	Secondary to Primary				
31	1534 D St NE	Secondary to Primary				
32	1603 Hobart St NW	Secondary to Primary				
33	1622 G St SE	Secondary to Primary				
34	1628 Argonne PI NW	Secondary to Primary				
	1714 Massachusetts Ave					
35	SE	Secondary to Primary				
36	1747 Irving St NW	Secondary to Primary				
37	1749 Irving St NW	Secondary to Primary				
38	1826 Jackson St NE	Secondary to Primary				
39	1836 Massachusetts Ave SE	Secondary to Primary				
40	1920 Jackson St NE	Secondary to Primary				

No	Address	Change
41	2212 38th St NW	Secondary to Primary
42	2214 14th St NW	Secondary to Primary
43	224 Varnum St NW	Secondary to Primary
44	228 V ST NE	Secondary to Primary
45	2724 36TH PL NW	Secondary to Primary
46	3206 38th St NW	Secondary to Primary
47	3232 Klingle Rd NW	Secondary to Primary
48	3309 16th St NW	Secondary to Primary
49	336 Quackenbos St NE	Secondary to Primary
50	339 Randolph St NW	Secondary to Primary
51	3418 Oliver St NW	Secondary to Primary
52	3427 Oliver St NW	Secondary to Primary
53	3530 Porter St NW	Secondary to Primary
54	3545 Hertford PI NW	Secondary to Primary
55	3700 Quebec St NW	Secondary to Primary
56	1228 Half St SW	Added for geographic coverage - Primary
57	1236 Half St SW	Added for geographic coverage - Primary