

FIXTURE & FILTER SAMPLING RESULTS REPORT Freeman Elementary School



October 14, 2016

INTRODUCTION

During the month of January 2016, the Department of Licensing and Regulatory Affairs (DLARA) completed replacement of drinking water fixtures at Freeman Elementary School. These fixture replacements were required because testing results indicated that the older fixtures at most schools were imparting lead to the drinking water. After the fixtures were replaced, a more thorough flushing of the plumbing lines was completed to remove any remaining materials from the building's water supply system.

For the protection of public health, DLARA started offering the installation of filters on drinking water fixtures at daycare facilities and schools in Flint. This work began in July, 2016.

TIMELINE

Post Fixture Replacement

- On Sunday, January 31, 2016 the DLARA and the Department of Environmental Quality (DEQ) attempted to sample the new fixtures at the school. Several samples were taken and it was noted that they were rusty in appearance and warm. The sampling was abandoned as it was obvious that the system needed additional flushing to remove stagnant water.
- On Saturday, February 6, 2016 the DLARA and the DEQ conducted a post-fixture sampling assessment of the plumbing system at the facility. This assessment indicated that further work was required to lower the lead levels in the water.
- On March 19, 2016 samples were taken at three fixtures. One fixture was no longer above the target of 15 parts per billion (ppb) for lead after two brass fittings were replaced. Flushing continued to improve the system.
- More flushing and follow-up work continued and sampling on April 16, 2016 showed that the remaining two fixtures were below the lead target of 15 ppb.
- On April 30, 2016 the departments went back and sampled all fixtures. All samples were below target levels.

- The week of May 2nd filters were installed at all drinking water fixtures at Freeman Elementary by DLARA.
- On June 4, 2016, the school fixtures were sampled with filters in place (as a pilot).
- On September 17, 2016 the school fixtures were again sampled with fixtures in place.
- On September 24, 2016 after deep flushing, three fixtures were sampled through the filter. All lead levels were Non-Detected (ND).

Water Main Description

An inspection of the water main yielded a four inch cast iron water main.

SAMPLING METHODS

Fixture Sampling

Each operational drinking water fixture at the school was identified and sampled. After a minimum six-hour stagnation period, four samples were collected at each of the fixtures identified. Two initial samples were collected immediately after turning on the tap. The water was then flushed for 30 seconds and a third sample was collected. Finally, the water was flushed for another two minutes, and the fourth sample was collected. These samples were used to determine the impact of any lead sources in and around each specific fixture and its connecting plumbing.

Deep Plumbing Sampling

A different sampling method is used to determine the impact of any lead sources located deep in the supply plumbing of the building. During this method, ten bottles are collected in a row (consecutively). These bottles are one liter in size, which is larger than those used for the fixture sampling method.

Sampling Notes

- The entire school was sampled on the following occasions:
- October 24 and 31, 2015 before fixture replacement for 31 fixtures (124 samples) and 3 fixtures for deep plumbing assessment (30 samples) were sampled. A total of 154 samples were sent to the lab for analysis.
- February 6, 2016 after fixture replacement, 39 fixtures (156 samples) and 3 fixtures for deep plumbing assessment (30 samples) were sampled. A total of 186 samples were sent to the lab for analysis.
- April 30, 2016 after fixture replacement for 41 fixtures (164 samples) and 3 fixtures for deep plumbing assessment (30 samples) were sampled. A total of 194 samples were sent to the lab for analysis.
- June 4, 2016 after filter installation for drinking water fixtures, 41 fixtures (164 samples) and three fixtures for deep plumbing assessment (30 samples) were sampled. A total of 194 samples were sent to the lab for analysis.
- September 17, 2016, 41 fixtures were sampled. Each fixture was sampled with a 250 ml bottle, which collected the water immediately next to the fixture to see if the fixtures were imparting lead.

SAMPLING RESULTS

Pre-Fixture Replacement

On October 24 and 31, 2015
Of the 154 samples:

- Lead Range: ND to 326 ppb
- Copper Range: ND to 710 ppb

Post-Fixture Replacement

February 6, 2016
Of the 186 samples:

- Lead Range: ND to 119 ppb
- Copper Range: ND to 660 ppb

Post-Fixture Replacement

March 19, 2016
Of the 6 samples:

- Lead Range: 2 to 222 ppb
- Copper Range: 210 to 470 ppb

Post-Fixture Replacement

April 16, 2016
Of the 6 samples:

- Lead Range: ND to 11 ppb
- Copper Range: 80 to 520 ppb

Post-Fixture Replacement

April 30, 2016
Of the 194 samples:

- Lead Range: ND to 14 ppb
- Copper Range: ND to 660 ppb

Post-Filter Installation

June 4, 2016
Of the 194 samples:

- All samples were ND for both lead and copper.

Post-Filter Installation

September 17, 2016
Of the 41 samples:

- Lead Range: ND to 2 ppb
- Copper Range: ND to 400 ppb

Post-Filter Installation

September 24, 2016
Of the 12 samples:

- Lead Range: All samples were ND.
- Copper Range: ND to 310 ppb

* Where the result is non-detected for lead it means that the amount of lead in the water was less than 1 ppb.

* Where the result is non-detected for copper it means that the amount of copper in the water was less than 50 ppb.

Pre-Fixture Replacement -- Freeman Elementary School
October 24 and 31, 2015

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | 40 | DW001 HALLWAY | P1 | Copper | 410 |
| Lead | 6 | DW001 HALLWAY | P2 | Copper | 290 |
| Lead | 4 | DW001 HALLWAY | F01 | Copper | 170 |
| Lead | 1 | DW001 HALLWAY | F02 | Copper | ND |
| Lead | 15 | DW002 HALLWAY | P1 | Copper | 210 |
| Lead | 6 | DW002 HALLWAY | P2 | Copper | 100 |
| Lead | 4 | DW002 HALLWAY | F01 | Copper | 70 |
| Lead | 1 | DW002 HALLWAY | F02 | Copper | ND |
| Lead | 5 | KC003 COMMUNITY | P1 | Copper | 310 |
| Lead | 2 | KC003 COMMUNITY | P2 | Copper | 270 |
| Lead | ND | KC003 COMMUNITY | F01 | Copper | 140 |
| Lead | ND | KC003 COMMUNITY | F02 | Copper | 130 |
| Lead | 12 | CF004 ROOM #1 | P1 | Copper | 270 |
| Lead | 7 | CF004 ROOM #1 | P2 | Copper | 250 |
| Lead | 4 | CF004 ROOM #1 | F01 | Copper | 210 |
| Lead | 2 | CF004 ROOM #1 | F02 | Copper | 80 |
| Lead | 5 | DW005 ROOM #1 | P1 | Copper | 100 |
| Lead | 3 | DW005 ROOM #1 | P2 | Copper | 90 |
| Lead | 3 | DW005 ROOM #1 | F01 | Copper | 90 |
| Lead | 2 | DW005 ROOM #1 | F02 | Copper | 60 |
| Lead | 16 | CF006 ROOM#2 | P1 | Copper | 170 |
| Lead | 3 | CF006 ROOM #2 | P2 | Copper | 220 |
| Lead | 1 | CF006 ROOM #2 | F01 | Copper | 110 |
| Lead | 1 | CF006 ROOM #2 | F02 | Copper | 110 |
| Lead | 7 | CF007 RM#3 | P1 | Copper | 170 |
| Lead | 6 | CF007 RM #3 | P2 | Copper | 270 |
| Lead | 3 | CF007 RM#3 | F01 | Copper | 90 |
| Lead | 2 | CF007 RM#3 | F02 | Copper | 70 |
| Lead | 13 | CF008 RM#4 | P1 | Copper | 280 |
| Lead | 6 | CF008 RM#4 | P2 | Copper | 540 |
| Lead | 1 | CF008 RM#4 | F01 | Copper | 170 |
| Lead | ND | CF008 RM#4 | F02 | Copper | 150 |
| Lead | 9 | CF009 RM 5 | P1 | Copper | 310 |
| Lead | 2 | CF009 RM 5 | P2 | Copper | 280 |
| Lead | 2 | CF009 RM 5 | F01 | Copper | 80 |
| Lead | 1 | CF009 RM 5 | F02 | Copper | 70 |
| Lead | 12 | CF010 RM 6 | P1 | Copper | 240 |
| Lead | 4 | CF010 RM 6 | P2 | Copper | 220 |
| Lead | 2 | CF010 RM 6 | F01 | Copper | 170 |
| Lead | ND | CF010 RM 6 | F02 | Copper | 120 |
| Lead | 2 | CF011 ROOM #7 | P1 | Copper | 200 |
| Lead | ND | CF011 ROOM #7 | P2 | Copper | 150 |
| Lead | 2 | CF011 ROOM #7 | F01 | Copper | 110 |
| Lead | ND | CF011 ROOM #7 | F02 | Copper | 60 |
| Lead | 2 | CF012 RM #9 | P1 | Copper | 230 |
| Lead | 4 | CF012 RM #9 | P2 | Copper | 160 |
| Lead | 2 | CF012 RM #9 | F01 | Copper | 110 |

• Results in RED exceed the 15 parts per billion (ppb) lead or 1,300 ppm for copper

Pre-Fixture Replacement -- Freeman Elementary School
 October 24 and 31, 2015

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | ND | CF012 RM #9 | F02 | Copper | 80 |
| Lead | 9 | CF013 ROOM #10 | P1 | Copper | 60 |
| Lead | 18 | CF013- ROOM #10 | P2 | Copper | 70 |
| Lead | 3 | CF013 ROOM #10 | F01 | Copper | 190 |
| Lead | 3 | CF013 ROOM #10 | F02 | Copper | 100 |
| Lead | 27 | CF014 ROOM #10 | P1 | Copper | 110 |
| Lead | 7 | CF014- ROOM #10 | P2 | Copper | 100 |
| Lead | 4 | CF014-ROOM #10 | F01 | Copper | 100 |
| Lead | 3 | CF014-ROOM #10 | F02 | Copper | 80 |
| Lead | 102 | CF015 RM 11 | P1 | Copper | 430 |
| Lead | 326 | CF015 RM 11 | P2 | Copper | 660 |
| Lead | 14 | CF015 RM 11 | F01 | Copper | 190 |
| Lead | 11 | CF015 RM 11 | F02 | Copper | 130 |
| Lead | 3 | CF016 RM 11 | P1 | Copper | 990 |
| Lead | 3 | CF016 RM 11 | P2 | Copper | 890 |
| Lead | 5 | CF016 RM 11 | F01 | Copper | 160 |
| Lead | 4 | CF016 RM 11 | F02 | Copper | 130 |
| Lead | 10 | CF017 RM#15 | P1 | Copper | 170 |
| Lead | 14 | CF017 RM#15 | P2 | Copper | 290 |
| Lead | 2 | CF017 RM#15 | F01 | Copper | 170 |
| Lead | 2 | CF017 RM#15 | F02 | Copper | 150 |
| Lead | 14 | CF018 RM#15 | P1 | Copper | 200 |
| Lead | 5 | CF018 RM#15 | P2 | Copper | 170 |
| Lead | 2 | CF018 RM#15 | F01 | Copper | 140 |
| Lead | 2 | CF018 RM#15 | F02 | Copper | 140 |
| Lead | 5 | CF019 ROOM #17 | P1 | Copper | 160 |
| Lead | 3 | CF019 ROOM #17 | P2 | Copper | 150 |
| Lead | 1 | CF019 ROOM #17 | F01 | Copper | 140 |
| Lead | ND | CF019 ROOM #17 | F02 | Copper | 140 |
| Lead | 13 | CF020 ROOM #17 | P1 | Copper | 190 |
| Lead | 4 | CF020 ROOM #17 | P2 | Copper | 160 |
| Lead | 5 | CF020 ROOM #17 | F01 | Copper | 160 |
| Lead | 3 | CF020 ROOM #17 | F02 | Copper | 140 |
| Lead | 4 | CF021 RM 12 | P1 | Copper | 90 |
| Lead | 7 | CF021 RM 12 | P2 | Copper | 150 |
| Lead | ND | CF021 RM 12 | F01 | Copper | 140 |
| Lead | ND | CF021 RM 12 | F02 | Copper | 150 |
| Lead | 10 | CF022 RM 12 | P1 | Copper | 320 |
| Lead | 3 | CF022 RM 12 | P2 | Copper | 170 |
| Lead | 1 | CF022 RM 12 | F01 | Copper | 150 |
| Lead | 1 | CF022 RM 12 | F02 | Copper | 150 |
| Lead | 9 | CF023 RM #19 | P1 | Copper | 130 |
| Lead | 9 | CF023 RM #19 | P2 | Copper | 180 |
| Lead | 1 | CF023 RM #19 | F01 | Copper | 150 |
| Lead | ND | CF023 RM #19 | F02 | Copper | 150 |
| Lead | 23 | CF024 RM #19 | P1 | Copper | 230 |
| Lead | 3 | CF024 RM #19 | P2 | Copper | 170 |

• Results in RED exceed the 15 parts per billion (ppb) lead or 1,300 ppm for copper

Pre-Fixture Replacement -- Freeman Elementary School
October 24 and 31, 2015

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | 4 | CF024 RM #19 | F01 | Copper | 160 |
| Lead | 3 | CF024 RM #19 | F02 | Copper | 160 |
| Lead | ND | CF025 ROOM #14 | P1 | Copper | 140 |
| Lead | 3 | CF025 ROOM #14 | P2 | Copper | 250 |
| Lead | 3 | CF025 ROOM #14 | F01 | Copper | 170 |
| Lead | 2 | CF025 ROOM #14 | F02 | Copper | 180 |
| Lead | 36 | CF026 ROOM #14 | P1 | Copper | 750 |
| Lead | 30 | CF026 ROOM #14 | P2 | Copper | 660 |
| Lead | 17 | CF026 ROOM #14 | F01 | Copper | 350 |
| Lead | 4 | CF026 ROOM #14 | F02 | Copper | 200 |
| Lead | 9 | CF027 RM 21 | P1 | Copper | 190 |
| Lead | 7 | CF027 RM 21 | P2 | Copper | 210 |
| Lead | ND | CF027 RM 21 | F01 | Copper | 160 |
| Lead | ND | CF027 RM 21 | F02 | Copper | 150 |
| Lead | 9 | CF028 RM #21 | P1 | Copper | 170 |
| Lead | 2 | CF028 RM #21 | P2 | Copper | 160 |
| Lead | 1 | CF028 RM #21 | F01 | Copper | 150 |
| Lead | 1 | CF028 RM #21 | F02 | Copper | 150 |
| Lead | 17 | CF029 DHS OFFICE | P1 | Copper | 590 |
| Lead | 12 | CF029 DHS OFFICE | P2 | Copper | 400 |
| Lead | 2 | CF029 DHS OFFICE | F01 | Copper | 80 |
| Lead | ND | CF029 DHF OFFICE | F02 | Copper | ND |
| Lead | 10 | CF030 RAINBOW | P1 | Copper | 380 |
| Lead | 3 | CF030 RAINBOW | P2 | Copper | 420 |
| Lead | 7 | CF030 RAINBOW | F01 | Copper | 590 |
| Lead | ND | CF030 RAINBOW | F02 | Copper | 210 |
| Lead | 57 | CF031 RAINBOW | P1 | Copper | 380 |
| Lead | 3 | CF031 RAINBOW | P2 | Copper | 210 |
| Lead | 2 | CF031 RAINBOW | F01 | Copper | 270 |
| Lead | ND | CF031 RAINBOW | F02 | Copper | 190 |
| Lead | 62 | CF015 | CB1 | Copper | 400 |
| Lead | 8 | CF015 | CB2 | Copper | 140 |
| Lead | 8 | CF015 | CB3 | Copper | 130 |
| Lead | 7 | CF015 | CB4 | Copper | 130 |
| Lead | 7 | CF015 | CB5 | Copper | 130 |
| Lead | 7 | CF015 | CB6 | Copper | 130 |
| Lead | 7 | CF015 | CB7 | Copper | 130 |
| Lead | 6 | CF015 | CB8 | Copper | 120 |
| Lead | 6 | CF015 | CB9 | Copper | 120 |
| Lead | 6 | CF015 | CB10 | Copper | 120 |
| Lead | 2 | CF027 | CC1 | Copper | 160 |
| Lead | ND | CF027 | CC2 | Copper | 140 |
| Lead | ND | CF027 | CC3 | Copper | 140 |
| Lead | ND | CF027 | CC4 | Copper | 140 |
| Lead | ND | CF027 | CC5 | Copper | 140 |
| Lead | ND | CF027 | CC6 | Copper | 150 |
| Lead | ND | CF027 | CC7 | Copper | 150 |

• Results in RED exceed the 15 parts per billion (ppb) lead or 1,300 ppm for copper

Pre-Fixture Replacement -- Freeman Elementary School
October 24 and 31, 2015

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | ND | CF027 | CC8 | Copper | 150 |
| Lead | ND | CF027 | CC9 | Copper | 150 |
| Lead | ND | CF027 | CC10 | Copper | 150 |
| Lead | 2 | CF030 | CA1 | Copper | 450 |
| Lead | 1 | CF030 | CA2 | Copper | 370 |
| Lead | ND | CF030 | CA3 | Copper | 220 |
| Lead | ND | CF030 | CA4 | Copper | 220 |
| Lead | ND | CF030 | CA5 | Copper | 210 |
| Lead | ND | CF030 | CA6 | Copper | 210 |
| Lead | ND | CF030 | CA7 | Copper | 200 |
| Lead | ND | CF030 | CA8 | Copper | 200 |
| Lead | ND | CF030 | CA9 | Copper | 200 |
| Lead | ND | CF030 | CA10 | Copper | 200 |

Post Fixture Replacement -- Freeman Elementary School

February 6, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | 15 | DW001 | P1 | Copper | 290 |
| Lead | 8 | DW001 | P2 | Copper | 350 |
| Lead | ND | DW001 | F01 | Copper | 320 |
| Lead | ND | DW001 | F02 | Copper | ND |
| Lead | 8 | DW002 | P1 | Copper | 180 |
| Lead | 2 | DW002 | P2 | Copper | 60 |
| Lead | ND | DW002 | F01 | Copper | ND |
| Lead | ND | DW002 | F02 | Copper | ND |
| Lead | 1 | KC003 | P1 | Copper | 190 |
| Lead | ND | KC003 | P2 | Copper | 200 |
| Lead | ND | KC003 | F01 | Copper | 100 |
| Lead | ND | KC003 | F02 | Copper | 80 |
| Lead | 1 | CF004 | P1 | Copper | 310 |
| Lead | ND | CF004 | P2 | Copper | 200 |
| Lead | ND | CF004 | F01 | Copper | 120 |
| Lead | 2 | CF004 | F02 | Copper | 80 |
| Lead | 3 | DW005 | P1 | Copper | 130 |
| Lead | 3 | DW005 | P2 | Copper | 90 |
| Lead | 7 | DW005 | F01 | Copper | 80 |
| Lead | 9 | DW005 | F02 | Copper | 80 |
| Lead | 2 | CF006 | P1 | Copper | 300 |
| Lead | ND | CF006 | P2 | Copper | 300 |
| Lead | 2 | CF006 | F01 | Copper | 190 |
| Lead | ND | CF006 | F02 | Copper | 100 |
| Lead | ND | CF006A | P1 | Copper | 160 |
| Lead | ND | CF006A | P2 | Copper | 110 |
| Lead | ND | CF006A | F01 | Copper | 110 |
| Lead | ND | CF006A | F02 | Copper | 100 |
| Lead | ND | CF007 | P1 | Copper | 300 |
| Lead | 1 | CF007 | P2 | Copper | 190 |
| Lead | 2 | CF007 | F01 | Copper | 170 |
| Lead | ND | CF007 | F02 | Copper | 60 |
| Lead | ND | CF007A | P1 | Copper | 190 |
| Lead | ND | CF007A | P2 | Copper | 80 |
| Lead | ND | CF007A | F01 | Copper | 80 |
| Lead | ND | CF007A | F02 | Copper | 70 |
| Lead | 5 | CF008 | P1 | Copper | 300 |
| Lead | ND | CF008 | P2 | Copper | 370 |
| Lead | 2 | CF008 | F01 | Copper | 220 |
| Lead | ND | CF008 | F02 | Copper | 110 |
| Lead | 3 | CF008A | P1 | Copper | 200 |
| Lead | ND | CF008A | P2 | Copper | 130 |
| Lead | ND | CF008A | F01 | Copper | 120 |
| Lead | ND | CF008A | F02 | Copper | 110 |
| Lead | 2 | CF009 | P1 | Copper | 260 |
| Lead | ND | CF009 | P2 | Copper | 160 |

Non-Detected (ND) means for lead the amount in water is less than 1 ppb and for copper the amount in water is less than 50 ppb.

Post Fixture Replacement -- Freeman Elementary School

February 6, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | ND | CF009 | F01 | Copper | 160 |
| Lead | ND | CF009 | F02 | Copper | 60 |
| Lead | ND | CF009A | P1 | Copper | 140 |
| Lead | ND | CF009A | P2 | Copper | 70 |
| Lead | ND | CF009A | F01 | Copper | 60 |
| Lead | ND | CF009A | F02 | Copper | 70 |
| Lead | 5 | CF010 | P1 | Copper | 660 |
| Lead | 3 | CF010 | P2 | Copper | 360 |
| Lead | ND | CF010 | F01 | Copper | 170 |
| Lead | ND | CF010 | F02 | Copper | 110 |
| Lead | 6 | CF010A | P1 | Copper | 220 |
| Lead | 4 | CF010A | P2 | Copper | 110 |
| Lead | 4 | CF010A | F01 | Copper | 100 |
| Lead | 2 | CF010A | F02 | Copper | 110 |
| Lead | 6 | CF011 | P1 | Copper | 200 |
| Lead | 2 | CF011 | P2 | Copper | 170 |
| Lead | 1 | CF011 | F01 | Copper | 160 |
| Lead | ND | CF011 | F02 | Copper | 50 |
| Lead | ND | CF011A | P1 | Copper | 90 |
| Lead | ND | CF011A | P2 | Copper | 50 |
| Lead | ND | CF011A | F01 | Copper | 70 |
| Lead | ND | CF011A | F02 | Copper | 60 |
| Lead | 3 | CF012 | P1 | Copper | 290 |
| Lead | ND | CF012 | P2 | Copper | 330 |
| Lead | ND | CF012 | F01 | Copper | 280 |
| Lead | ND | CF012 | F02 | Copper | 70 |
| Lead | ND | CF012A | P1 | Copper | 190 |
| Lead | ND | CF012A | P2 | Copper | 80 |
| Lead | ND | CF012A | F01 | Copper | 90 |
| Lead | ND | CF012A | F02 | Copper | 70 |
| Lead | 12 | CF013 | P1 | Copper | 70 |
| Lead | 7 | CF013 | P2 | Copper | 110 |
| Lead | ND | CF013 | F01 | Copper | 100 |
| Lead | ND | CF013 | F02 | Copper | 100 |
| Lead | 13 | CF014 | P1 | Copper | 80 |
| Lead | 9 | CF014 | P2 | Copper | 80 |
| Lead | 3 | CF014 | F01 | Copper | 200 |
| Lead | ND | CF014 | F02 | Copper | 120 |
| Lead | 31 | CF015 | P1 | Copper | 260 |
| Lead | 9 | CF015 | P2 | Copper | 380 |
| Lead | 2 | CF015 | F01 | Copper | 120 |
| Lead | 1 | CF015 | F02 | Copper | 100 |
| Lead | 5 | CF016 | P1 | Copper | 580 |
| Lead | ND | CF016 | P2 | Copper | 410 |
| Lead | ND | CF016 | F01 | Copper | 110 |
| Lead | ND | CF016 | F02 | Copper | 110 |

Non-Detected (ND) means for lead the amount in water is less than 1 ppb and for copper the amount in water is less than 50 ppb.

Post Fixture Replacement -- Freeman Elementary School

February 6, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | 119 | CF016A | P1 | Copper | 290 |
| Lead | 12 | CF016A | P2 | Copper | 160 |
| Lead | 5 | CF016A | F01 | Copper | 110 |
| Lead | 3 | CF016A | F02 | Copper | 100 |
| Lead | 19 | CF017 | P1 | Copper | 270 |
| Lead | 16 | CF017 | P2 | Copper | 180 |
| Lead | 1 | CF017 | F01 | Copper | 110 |
| Lead | ND | CF017 | F02 | Copper | 90 |
| Lead | 2 | CF018 | P1 | Copper | 120 |
| Lead | ND | CF018 | P2 | Copper | 90 |
| Lead | ND | CF018 | F01 | Copper | 90 |
| Lead | ND | CF018 | F02 | Copper | 90 |
| Lead | 9 | CF019 | P1 | Copper | 190 |
| Lead | 11 | CF019 | P2 | Copper | 160 |
| Lead | ND | CF019 | F01 | Copper | 90 |
| Lead | ND | CF019 | F02 | Copper | 80 |
| Lead | 1 | CF020 | P1 | Copper | 120 |
| Lead | ND | CF020 | P2 | Copper | 90 |
| Lead | ND | CF020 | F01 | Copper | 80 |
| Lead | ND | CF020 | F02 | Copper | 80 |
| Lead | 3 | CF021 | P1 | Copper | 270 |
| Lead | 6 | CF021 | P2 | Copper | 190 |
| Lead | ND | CF021 | F01 | Copper | 90 |
| Lead | ND | CF021 | F02 | Copper | 90 |
| Lead | 2 | CF022 | P1 | Copper | 150 |
| Lead | ND | CF022 | P2 | Copper | 90 |
| Lead | ND | CF022 | F01 | Copper | 90 |
| Lead | ND | CF022 | F02 | Copper | 80 |
| Lead | 1 | CF023 | P1 | Copper | 400 |
| Lead | 1 | CF023 | P2 | Copper | 320 |
| Lead | ND | CF023 | F01 | Copper | 100 |
| Lead | ND | CF023 | F02 | Copper | 80 |
| Lead | ND | CF024 | P1 | Copper | 120 |
| Lead | 2 | CF024 | P2 | Copper | 340 |
| Lead | ND | CF024 | F01 | Copper | 90 |
| Lead | ND | CF024 | F02 | Copper | 90 |
| Lead | ND | CF025 | P1 | Copper | 120 |
| Lead | 2 | CF025 | P2 | Copper | 270 |
| Lead | ND | CF025 | F01 | Copper | 130 |
| Lead | ND | CF025 | F02 | Copper | 90 |
| Lead | 2 | CF026 | P1 | Copper | 150 |
| Lead | ND | CF026 | P2 | Copper | 100 |
| Lead | ND | CF026 | F01 | Copper | 90 |
| Lead | ND | CF026 | F02 | Copper | 90 |
| Lead | 2 | CF027 | P1 | Copper | 230 |
| Lead | ND | CF027 | P2 | Copper | 110 |

Non-Detected (ND) means for lead the amount in water is less than 1 ppb and for copper the amount in water is less than 50 ppb.

Post Fixture Replacement -- Freeman Elementary School

February 6, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | ND | CF027 | F01 | Copper | 90 |
| Lead | ND | CF027 | F02 | Copper | 90 |
| Lead | ND | CF028 | P1 | Copper | 170 |
| Lead | ND | CF028 | P2 | Copper | 110 |
| Lead | ND | CF028 | F01 | Copper | 90 |
| Lead | ND | CF028 | F02 | Copper | 90 |
| Lead | 45 | CF029 | P1 | Copper | 450 |
| Lead | 6 | CF029 | P2 | Copper | 210 |
| Lead | ND | CF029 | F01 | Copper | ND |
| Lead | ND | CF029 | F02 | Copper | ND |
| Lead | 2 | CF030 | P1 | Copper | 480 |
| Lead | ND | CF030 | P2 | Copper | 240 |
| Lead | ND | CF030 | F01 | Copper | 300 |
| Lead | ND | CF030 | F02 | Copper | 130 |
| Lead | 3 | CF031 | P1 | Copper | 260 |
| Lead | 2 | CF031 | P2 | Copper | 150 |
| Lead | ND | CF031 | F01 | Copper | 140 |
| Lead | ND | CF031 | F02 | Copper | 120 |
| Lead | ND | CF030 | CA1 | Copper | 120 |
| Lead | 1 | CF030 | CA2 | Copper | 120 |
| Lead | ND | CF030 | CA3 | Copper | 110 |
| Lead | ND | CF030 | CA4 | Copper | 110 |
| Lead | ND | CF030 | CA5 | Copper | 110 |
| Lead | ND | CF030 | CA6 | Copper | 110 |
| Lead | ND | CF030 | CA7 | Copper | 110 |
| Lead | ND | CF030 | CA8 | Copper | 110 |
| Lead | ND | CF030 | CA9 | Copper | 110 |
| Lead | ND | CF030 | CA10 | Copper | 100 |
| Lead | 4 | CF015 | CB1 | Copper | 150 |
| Lead | 2 | CF015 | CB2 | Copper | 100 |
| Lead | 2 | CF015 | CB3 | Copper | 100 |
| Lead | 1 | CF015 | CB4 | Copper | 100 |
| Lead | 1 | CF015 | CB5 | Copper | 90 |
| Lead | 1 | CF015 | CB6 | Copper | 90 |
| Lead | ND | CF015 | CB7 | Copper | 80 |
| Lead | ND | CF015 | CB8 | Copper | 80 |
| Lead | ND | CF015 | CB9 | Copper | 80 |
| Lead | ND | CF015 | CB10 | Copper | 80 |
| Lead | ND | CF027 | CC1 | Copper | 90 |
| Lead | ND | CF027 | CC2 | Copper | 90 |
| Lead | ND | CF027 | CC3 | Copper | 90 |
| Lead | ND | CF027 | CC4 | Copper | 80 |
| Lead | ND | CF027 | CC5 | Copper | 90 |
| Lead | ND | CF027 | CC6 | Copper | 80 |
| Lead | ND | CF027 | CC7 | Copper | 90 |
| Lead | ND | CF027 | CC8 | Copper | 90 |

Non-Detected (ND) means for lead the amount in water is less than 1 ppb and for copper the amount in water is less than 50 ppb.

Post Fixture Replacement -- Freeman Elementary School
February 6, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|-------------|---------------------|---------------------------|------------------|---------------|---------------------|
| Lead | ND | CF027 | CC9 | Copper | 90 |
| Lead | ND | CF027 | CC10 | Copper | 90 |

Non-Detected (ND) means for lead the amount in water is less than 1 ppb and for copper the amount in water is less than 50 ppb.

Follow-Up -- Freeman Elementary School
March 19, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|-------------|---------------------|---------------------------|------------------|---------------|---------------------|
| Lead | 146 | CF015 | P1 | Copper | 340 |
| Lead | 9 | CF015 | P2 | Copper | 330 |
| Lead | 87 | CF016A | P1 | Copper | 470 |
| Lead | 222 | CF016A | P2 | Copper | 420 |
| Lead | 2 | CF019 | P1 | Copper | 220 |
| Lead | 2 | CF019 | P2 | Copper | 210 |

Follow-Up -- Freeman Elementary School

April 16, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result ppb |
|------|--------------|--------------------|-----------|--------|------------|
| Lead | 11 | CF015 | P1 | Copper | 520 |
| Lead | 5 | CF015 | P2 | Copper | 360 |
| Lead | 1 | CF015 | F01 | Copper | 100 |
| Lead | ND | CF015 | F02 | Copper | 100 |
| Lead | 4 | CF016A | P1 | Copper | 310 |
| Lead | 5 | CF016A | P2 | Copper | 330 |
| Lead | ND | CF016A | F01 | Copper | 80 |
| Lead | ND | CF016A | F02 | Copper | 80 |

Post Fixture Replacement -- Freeman Elementary School

April 30, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | 12 | DW001 HALL | P1 | Copper | 350 |
| Lead | 2 | DW001 HALL | P2 | Copper | 220 |
| Lead | 1 | DW001 HALL | F01 | Copper | 160 |
| Lead | ND | DW001 HALL | F02 | Copper | ND |
| Lead | 6 | DW002 HALL | P1 | Copper | 130 |
| Lead | ND | DW002 HALL | P2 | Copper | ND |
| Lead | ND | DW002 HALL | F01 | Copper | ND |
| Lead | ND | DW002 HALL | F02 | Copper | ND |
| Lead | ND | KC003 COM ROOM | P1 | Copper | 100 |
| Lead | ND | KC003 COM ROOM | P2 | Copper | 150 |
| Lead | ND | KC003 COM ROOM | F01 | Copper | 80 |
| Lead | ND | KC003 COM ROOM | F02 | Copper | 70 |
| Lead | 1 | CF004 ROOM 1 | P1 | Copper | 290 |
| Lead | ND | CF004 ROOM 1 | P2 | Copper | 140 |
| Lead | ND | CF004 ROOM 1 | F01 | Copper | 100 |
| Lead | ND | CF004 ROOM 1 | F02 | Copper | 80 |
| Lead | 1 | DW005 ROOM 1 | P1 | Copper | 90 |
| Lead | ND | DW005 ROOM 1 | P2 | Copper | 80 |
| Lead | ND | DW005 ROOM 1 | F01 | Copper | 80 |
| Lead | ND | DW005 ROOM 1 | F02 | Copper | 70 |
| Lead | 1 | CF006 B ROOM2 | P1 | Copper | 240 |
| Lead | ND | CF006 B ROOM2 | P2 | Copper | 190 |
| Lead | 1 | CF006 B ROOM2 | F01 | Copper | 100 |
| Lead | ND | CF006 B ROOM2 | F02 | Copper | 70 |
| Lead | 1 | CF006A (F) ROOM 2 | P1 | Copper | 160 |
| Lead | ND | CF006A (F) ROOM 2 | P2 | Copper | 80 |
| Lead | ND | CF006A (F) ROOM 2 | F01 | Copper | 80 |
| Lead | ND | CF006A (F) ROOM 2 | F02 | Copper | 80 |
| Lead | 5 | CF007 ROOM 3 (F) | P1 | Copper | 350 |
| Lead | ND | CF007 ROOM 3 (F) | P2 | Copper | 150 |
| Lead | 1 | CF007 ROOM 3 F | F01 | Copper | 130 |
| Lead | ND | CF007 ROOM3 F | F02 | Copper | 70 |
| Lead | ND | CF007A ROOM 3 (B) | P1 | Copper | 90 |
| Lead | ND | CF007A ROOM 3 (B) | P2 | Copper | 70 |
| Lead | ND | CF007A ROOM 3 (B) | F01 | Copper | 70 |
| Lead | ND | CF007A ROOM 3 (B) | F02 | Copper | 60 |
| Lead | 5 | CF008 (B) ROOM 4 | P1 | Copper | 200 |
| Lead | 3 | CF008 (B) ROOM 4 | P2 | Copper | 350 |
| Lead | 3 | CF008 (B) ROOM 4 | F01 | Copper | 180 |
| Lead | ND | CF008 (B) ROOM 4 | F02 | Copper | 90 |
| Lead | 2 | CF008A (F) ROOM 4 | P1 | Copper | 190 |
| Lead | ND | CF008A (F) ROOM 4 | P2 | Copper | 100 |
| Lead | ND | CF008A (F) ROOM 4 | F01 | Copper | 100 |
| Lead | ND | CF008A (F) ROOM 4 | F02 | Copper | 140 |
| Lead | 2 | CF009 B ROOM5 | P1 | Copper | 210 |
| Lead | ND | CF009 B ROOM5 | P2 | Copper | 130 |

The result of non-detected (ND) means; for lead the amount in water is less than 1 ppb, for copper the amount in water is less than 50 ppb.

Post Fixture Replacement -- Freeman Elementary School

April 30, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | ND | CF009 B ROOM5 | F01 | Copper | 160 |
| Lead | ND | CF009 B ROOM5 | F02 | Copper | 60 |
| Lead | ND | CF009A B ROOM5 | P2 | Copper | 70 |
| Lead | ND | CF009A B ROOM5 | F01 | Copper | 70 |
| Lead | ND | CF009A B ROOM5 | F02 | Copper | 60 |
| Lead | ND | CF009A B ROOM5 | P1 | Copper | 140 |
| Lead | 2 | CF010 (B) ROOM 6 | P1 | Copper | 300 |
| Lead | ND | CF010 (B) ROOM 6 | P2 | Copper | 190 |
| Lead | ND | CF010 (B) ROOM 6 | F01 | Copper | 140 |
| Lead | ND | CF010 (B) ROOM 6 | F02 | Copper | 80 |
| Lead | ND | CF010A (F) ROOM 6 | P1 | Copper | 110 |
| Lead | ND | CF010A (F) ROOM 6 | P2 | Copper | 80 |
| Lead | ND | CF010A (F) ROOM 6 | F01 | Copper | 80 |
| Lead | ND | CF010A (F) ROOM 6 | F02 | Copper | 80 |
| Lead | 2 | CF011 (B) ROOM 7 | P1 | Copper | 180 |
| Lead | 1 | CF011 (B) ROOM 7 | P2 | Copper | 120 |
| Lead | 1 | CF011 (B) ROOM 7 | F01 | Copper | 140 |
| Lead | ND | CF011 (B) ROOM 7 | F02 | Copper | ND |
| Lead | ND | CFND11A (F) ROOM 7 | P1 | Copper | 110 |
| Lead | ND | CF011A (F) ROOM 7 | F01 | Copper | 50 |
| Lead | ND | CF011A (F) ROOM 7 | F02 | Copper | ND |
| Lead | ND | CF011A(F) ROOM 7 | P2 | Copper | 50 |
| Lead | 1 | CF012 (B) ROOM 9 | P1 | Copper | 210 |
| Lead | ND | CF012 (B) ROOM 9 | P2 | Copper | 170 |
| Lead | ND | CF012 (B) ROOM 9 | F01 | Copper | 200 |
| Lead | ND | CF012 (B) ROOM 9 | F02 | Copper | 70 |
| Lead | 3 | CF012A (F) ROOM 9 | P1 | Copper | 180 |
| Lead | ND | CF012A (F) ROOM 9 | P2 | Copper | 70 |
| Lead | ND | CF012A (F) ROOM 9 | F01 | Copper | 90 |
| Lead | ND | CF012A (F) ROOM 9 | F02 | Copper | 70 |
| Lead | 2 | CF13 (F) ROOM 10 | P1 | Copper | 490 |
| Lead | 2 | CF13 (F) ROOM 10 | P2 | Copper | 660 |
| Lead | ND | CF13 (F) ROOM 10 | F01 | Copper | 120 |
| Lead | 1 | CF13 (F) ROOM 10 | F02 | Copper | 110 |
| Lead | 7 | CF014 (B) ROOM 10 | P1 | Copper | 360 |
| Lead | 14 | CF014 (B) ROOM 10 | P2 | Copper | 280 |
| Lead | 5 | CF014 (B) ROOM 10 | F01 | Copper | 220 |
| Lead | ND | CF014 (B) ROOM 10 | F02 | Copper | 130 |
| Lead | 12 | CF015 (F) ROOM 11 | P1 | Copper | 310 |
| Lead | 5 | CF015 (F) ROOM 11 | P2 | Copper | 280 |
| Lead | 1 | CF015 (F) ROOM 11 | F01 | Copper | 100 |
| Lead | 1 | CF015 (F) ROOM 11 | F02 | Copper | 90 |
| Lead | 1 | CF016 (F) ROOM 11 | P1 | Copper | 250 |
| Lead | 2 | CF016 (F) ROOM 11 | P2 | Copper | 480 |
| Lead | 1 | CF016 (F) ROOM 11 | F01 | Copper | 110 |
| Lead | ND | CF016 (F) ROOM 11 | F02 | Copper | 110 |

The result of non-detected (ND) means; for lead the amount in water is less than 1 ppb, for copper the amount in water is less than 50 ppb.

Post Fixture Replacement -- Freeman Elementary School

April 30, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | 2 | CF016A (B) ROOM 11 | P1 | Copper | 280 |
| Lead | 1 | CF016A (B) ROOM 11 | P2 | Copper | 160 |
| Lead | ND | CF016A (B) ROOM 11 | F01 | Copper | 110 |
| Lead | ND | CF016A (B) ROOM 11 | F02 | Copper | 100 |
| Lead | 3 | CF017 (F) ROOM 15 | P1 | Copper | 250 |
| Lead | 5 | CF017 (F) ROOM 15 | P2 | Copper | 160 |
| Lead | ND | CF017 (F) ROOM 15 | F01 | Copper | 90 |
| Lead | ND | CF017 (F) ROOM 15 | F02 | Copper | 80 |
| Lead | 2 | CF018 (B) ROOM 15 | P1 | Copper | 110 |
| Lead | ND | CF018 (B) ROOM 15 | P2 | Copper | 80 |
| Lead | ND | CF018 (B) ROOM 15 | F01 | Copper | 70 |
| Lead | ND | CF018 (B) ROOM 15 | F02 | Copper | 70 |
| Lead | ND | CF019 (F) ROOM 17 | P1 | Copper | 170 |
| Lead | ND | CF019 (F) ROOM 17 | P2 | Copper | 150 |
| Lead | ND | CF019 (F) ROOM 17 | F01 | Copper | 80 |
| Lead | ND | CF019 (F) ROOM 17 | F02 | Copper | 70 |
| Lead | ND | CF020 (B) ROOM 17 | P1 | Copper | 100 |
| Lead | ND | CF020 (B) ROOM 17 | P2 | Copper | 70 |
| Lead | ND | CF020 (B) ROOM 17 | F01 | Copper | 70 |
| Lead | ND | CF020 (B) ROOM 17 | F02 | Copper | 70 |
| Lead | ND | CF021 (F) ROOM 12 | P1 | Copper | 190 |
| Lead | 1 | CF021 (F) ROOM 12 | P2 | Copper | 130 |
| Lead | ND | CF021 (F) ROOM 12 | F01 | Copper | 70 |
| Lead | ND | CF021 (F) ROOM 12 | F02 | Copper | 70 |
| Lead | 1 | CF022 (B) ROOM 12 | P1 | Copper | 110 |
| Lead | ND | CF022 (B) ROOM 12 | P2 | Copper | 70 |
| Lead | ND | CF022 (B) ROOM 12 | F01 | Copper | 70 |
| Lead | ND | CF022 (B) ROOM 12 | F02 | Copper | 70 |
| Lead | 2 | CF023 (F) ROOM 19 | P1 | Copper | 370 |
| Lead | ND | CF023 (F) ROOM 19 | P2 | Copper | 160 |
| Lead | ND | CF023 (F) ROOM 19 | F01 | Copper | 70 |
| Lead | ND | CF023 (F) ROOM 19 | F02 | Copper | 70 |
| Lead | ND | CF024 (B) ROOM 19 | P1 | Copper | 170 |
| Lead | ND | CF024 (B) ROOM 19 | P2 | Copper | 90 |
| Lead | ND | CF024 (B) ROOM 19 | F01 | Copper | 60 |
| Lead | ND | CF024 (B) ROOM 19 | F02 | Copper | 70 |
| Lead | 2 | CF025 (F) ROOM 14 | P1 | Copper | 260 |
| Lead | 1 | CF025 (F) ROOM 14 | P2 | Copper | 190 |
| Lead | ND | CF025 (F) ROOM 14 | F01 | Copper | 110 |
| Lead | ND | CF025 (F) ROOM 14 | F02 | Copper | 80 |
| Lead | ND | CF026 (B) ROOM 14 | P2 | Copper | 80 |
| Lead | ND | CF026 (B) ROOM 14 | F01 | Copper | 70 |
| Lead | ND | CF026 (B) ROOM 14 | F02 | Copper | 70 |
| Lead | 1 | CF026 (B) ROOM 14 | P1 | Copper | 110 |
| Lead | ND | CF027 (F) ROOM 21 | P1 | Copper | 190 |
| Lead | ND | CF027 (F) ROOM 21 | P2 | Copper | 140 |

The result of non-detected (ND) means; for lead the amount in water is less than 1 ppb, for copper the amount in water is less than 50 ppb.

Post Fixture Replacement -- Freeman Elementary School

April 30, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|----------------------|-----------|--------|--------------|
| Lead | ND | CF027 (F) ROOM 21 | F01 | Copper | 80 |
| Lead | ND | CF027 (F) ROOM 21 | F02 | Copper | 70 |
| Lead | ND | CF028 (B) ROOM 21 | P1 | Copper | 80 |
| Lead | ND | CF028 (B) ROOM 21 | P2 | Copper | 70 |
| Lead | ND | CF028 (B) ROOM 21 | F01 | Copper | 70 |
| Lead | ND | CF028 (B) ROOM 21 | F02 | Copper | 70 |
| Lead | 2 | CF029 DHS OFFICE | P1 | Copper | 210 |
| Lead | 1 | CF029 DHS OFFICE | P2 | Copper | 110 |
| Lead | ND | CF029 DHS OFFICE | F01 | Copper | ND |
| Lead | ND | CF029 DHS OFFICE | F02 | Copper | ND |
| Lead | ND | DW029A (B) NORTH GYM | P1 | Copper | 200 |
| Lead | 5 | DW029A (B) NORTH GYM | P2 | Copper | 350 |
| Lead | 3 | DW029A (B) NORTH GYM | F01 | Copper | 120 |
| Lead | 2 | DW029A (B) NORTH GYM | F02 | Copper | 110 |
| Lead | 14 | DW029B (B) SOUTH GYM | P1 | Copper | 170 |
| Lead | 1 | DW029B (B) SOUTH GYM | P2 | Copper | 180 |
| Lead | ND | DW029B(B) SOUTH GYM | F01 | Copper | 100 |
| Lead | ND | DW029B(B) SOUTH GYM | F02 | Copper | 90 |
| Lead | ND | CF030 (F) RAINBOW RM | P1 | Copper | 340 |
| Lead | ND | CF030 (F) RAINBOW RM | P2 | Copper | 140 |
| Lead | ND | CF030 (F) RAINBOW RM | F01 | Copper | 160 |
| Lead | ND | CF030 (F) RAINBOW RM | F02 | Copper | 80 |
| Lead | 1 | CF031 (B) RAINBOW RM | P1 | Copper | 140 |
| Lead | ND | CF031 (B) RAINBOW RM | P2 | Copper | 90 |
| Lead | ND | CF031 (B) RAINBOW RM | F01 | Copper | 80 |
| Lead | ND | CF031 (B) RAINBOW RM | F02 | Copper | 80 |
| Lead | 2 | CF015 | CB1 | Copper | 160 |
| Lead | 1 | CF015 | CB2 | Copper | 100 |
| Lead | 1 | CF015 | CB3 | Copper | 100 |
| Lead | 1 | CF015 | CB4 | Copper | 100 |
| Lead | 1 | CF015 | CB5 | Copper | 90 |
| Lead | ND | CF015 | CB6 | Copper | 90 |
| Lead | ND | CF015 | CB7 | Copper | 80 |
| Lead | ND | CF015 | CB8 | Copper | 80 |
| Lead | ND | CF015 | CB9 | Copper | 80 |
| Lead | ND | CF015 | CB10 | Copper | 80 |
| Lead | ND | CF027 | CC1 | Copper | 80 |
| Lead | ND | CF027 | CC2 | Copper | 70 |
| Lead | ND | CF027 | CC3 | Copper | 70 |
| Lead | ND | CF027 | CC4 | Copper | 70 |
| Lead | ND | CF027 | CC5 | Copper | 80 |
| Lead | ND | CF027 | CC6 | Copper | 70 |
| Lead | ND | CF027 | CC7 | Copper | 70 |
| Lead | ND | CF027 | CC8 | Copper | 70 |
| Lead | ND | CF027 | CC9 | Copper | 80 |
| Lead | ND | CF027 | CC10 | Copper | 70 |

The result of non-detected (ND) means; for lead the amount in water is less than 1 ppb, for copper the amount in water is less than 50 ppb.

Post Fixture Replacement -- Freeman Elementary School
April 30, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|-------------|---------------------|---------------------------|------------------|---------------|---------------------|
| Lead | ND | CF030 | CA1 | Copper | 90 |
| Lead | ND | CF030 | CA2 | Copper | 80 |
| Lead | ND | CF030 | CA3 | Copper | 80 |
| Lead | ND | CF030 | CA4 | Copper | 80 |
| Lead | ND | CF030 | CA5 | Copper | 70 |
| Lead | ND | CF030 | CA6 | Copper | 70 |
| Lead | ND | CF030 | CA7 | Copper | 70 |
| Lead | ND | CF030 | CA8 | Copper | 70 |
| Lead | ND | CF030 | CA9 | Copper | 70 |
| Lead | ND | CF030 | CA10 | Copper | 70 |

Post Filter Installation -- Freeman Elementary School

June 4, 2106

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | ND | DW001 | P1 | Copper | ND |
| Lead | ND | DW001 | P2 | Copper | ND |
| Lead | ND | DW001 | F01 | Copper | ND |
| Lead | ND | DW001 | F02 | Copper | ND |
| Lead | ND | DW002 | P1 | Copper | ND |
| Lead | ND | DW002 | P2 | Copper | ND |
| Lead | ND | DW002 | F01 | Copper | ND |
| Lead | ND | DW002 | F02 | Copper | ND |
| Lead | ND | KC003 | P1 | Copper | ND |
| Lead | ND | KC003 | P2 | Copper | ND |
| Lead | ND | KC003 | F01 | Copper | ND |
| Lead | ND | KC003 | F02 | Copper | ND |
| Lead | ND | CF004 | P1 | Copper | ND |
| Lead | ND | CF004 | P2 | Copper | ND |
| Lead | ND | CF004 | F01 | Copper | ND |
| Lead | ND | CF004 | F02 | Copper | ND |
| Lead | ND | DW005 | P1 | Copper | ND |
| Lead | ND | DW005 | P2 | Copper | ND |
| Lead | ND | DW005 | F01 | Copper | ND |
| Lead | ND | DW005 | F02 | Copper | ND |
| Lead | ND | CF006 | P1 | Copper | ND |
| Lead | ND | CF006 | P2 | Copper | ND |
| Lead | ND | CF006 | F01 | Copper | ND |
| Lead | ND | CF006 | F02 | Copper | ND |
| Lead | ND | CF006A | P1 | Copper | ND |
| Lead | ND | CF006A | P2 | Copper | ND |
| Lead | ND | CF006A | F01 | Copper | ND |
| Lead | ND | CF006A | F02 | Copper | ND |
| Lead | ND | CF007 | P1 | Copper | ND |
| Lead | ND | CF007 | P2 | Copper | ND |
| Lead | ND | CF007 | F01 | Copper | ND |
| Lead | ND | CF007 | F02 | Copper | ND |
| Lead | ND | CF007A | P1 | Copper | ND |
| Lead | ND | CF007A | P2 | Copper | ND |
| Lead | ND | CF007A | F01 | Copper | ND |
| Lead | ND | CF007A | F02 | Copper | ND |
| Lead | ND | CF008 | P1 | Copper | ND |
| Lead | ND | CF008 | P2 | Copper | ND |
| Lead | ND | CF008 | F01 | Copper | ND |
| Lead | ND | CF008 | F02 | Copper | ND |
| Lead | ND | CF008A | P1 | Copper | ND |
| Lead | ND | CF008A | P2 | Copper | ND |
| Lead | ND | CF008A | F01 | Copper | ND |
| Lead | ND | CF008A | F02 | Copper | ND |

• The result of non-detected (ND) means; for lead the amount in water is less than 1 ppb, for copper the amount in water is less than 50 ppb.

Post Filter Installation -- Freeman Elementary School

June 4, 2106

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | ND | CF009 | P1 | Copper | ND |
| Lead | ND | CF009 | P2 | Copper | ND |
| Lead | ND | CF009 | F01 | Copper | ND |
| Lead | ND | CF009 | F02 | Copper | ND |
| Lead | ND | CF009A | P1 | Copper | ND |
| Lead | ND | CF009A | P2 | Copper | ND |
| Lead | ND | CF009A | F01 | Copper | ND |
| Lead | ND | CF009A | F02 | Copper | ND |
| Lead | ND | CF010 | P1 | Copper | ND |
| Lead | ND | CF010 | P2 | Copper | ND |
| Lead | ND | CF010 | F01 | Copper | ND |
| Lead | ND | CF010 | F02 | Copper | ND |
| Lead | ND | CF010A | P1 | Copper | ND |
| Lead | ND | CF010A | P2 | Copper | ND |
| Lead | ND | CF010A | F01 | Copper | ND |
| Lead | ND | CF010A | F02 | Copper | ND |
| Lead | ND | CF011 | P1 | Copper | ND |
| Lead | ND | CF011 | P2 | Copper | ND |
| Lead | ND | CF011 | F01 | Copper | ND |
| Lead | ND | CF011 | F02 | Copper | ND |
| Lead | ND | CF011A | P1 | Copper | ND |
| Lead | ND | CF011A | P2 | Copper | ND |
| Lead | ND | CF011A | F01 | Copper | ND |
| Lead | ND | CF011A | F02 | Copper | ND |
| Lead | ND | CF012 | P1 | Copper | ND |
| Lead | ND | CF012 | P2 | Copper | ND |
| Lead | ND | CF012 | F01 | Copper | ND |
| Lead | ND | CF012 | F02 | Copper | ND |
| Lead | ND | CF012A | P1 | Copper | ND |
| Lead | ND | CF012A | P2 | Copper | ND |
| Lead | ND | CF012A | F01 | Copper | ND |
| Lead | ND | CF012A | F02 | Copper | ND |
| Lead | ND | CF013 | P1 | Copper | ND |
| Lead | ND | CF013 | P2 | Copper | ND |
| Lead | ND | CF013 | F01 | Copper | ND |
| Lead | ND | CF013 | F02 | Copper | ND |
| Lead | ND | CF014 | P1 | Copper | ND |
| Lead | ND | CF014 | P2 | Copper | ND |
| Lead | ND | CF014 | F01 | Copper | ND |
| Lead | ND | CF014 | F02 | Copper | ND |
| Lead | ND | CF015 | P1 | Copper | ND |
| Lead | ND | CF015 | P2 | Copper | ND |
| Lead | ND | CF015 | F01 | Copper | ND |
| Lead | ND | CF015 | F02 | Copper | ND |

• The result of non-detected (ND) means; for lead the amount in water is less than 1 ppb, for copper the amount in water is less than 50 ppb.

Post Filter Installation -- Freeman Elementary School

June 4, 2106

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | ND | CF016 | P1 | Copper | ND |
| Lead | ND | CF016 | P2 | Copper | ND |
| Lead | ND | CF016 | F01 | Copper | ND |
| Lead | ND | CF016 | F02 | Copper | ND |
| Lead | ND | CF016A | P1 | Copper | ND |
| Lead | ND | CF016A | P2 | Copper | ND |
| Lead | ND | CF016A | F01 | Copper | ND |
| Lead | ND | CF016A | F02 | Copper | ND |
| Lead | ND | CF017 | P1 | Copper | ND |
| Lead | ND | CF017 | P2 | Copper | ND |
| Lead | ND | CF017 | F01 | Copper | ND |
| Lead | ND | CF017 | F02 | Copper | ND |
| Lead | ND | CF018 | P1 | Copper | ND |
| Lead | ND | CF018 | P2 | Copper | ND |
| Lead | ND | CF018 | F01 | Copper | ND |
| Lead | ND | CF018 | F02 | Copper | ND |
| Lead | ND | CF019 | P1 | Copper | ND |
| Lead | ND | CF019 | P2 | Copper | ND |
| Lead | ND | CF019 | F01 | Copper | ND |
| Lead | ND | CF019 | F02 | Copper | ND |
| Lead | ND | CF020 | P1 | Copper | ND |
| Lead | ND | CF020 | P2 | Copper | ND |
| Lead | ND | CF020 | F01 | Copper | ND |
| Lead | ND | CF020 | F02 | Copper | ND |
| Lead | ND | CF021 | P1 | Copper | ND |
| Lead | ND | CF021 | P2 | Copper | ND |
| Lead | ND | CF021 | F01 | Copper | ND |
| Lead | ND | CF021 | F02 | Copper | ND |
| Lead | ND | CF022 | P1 | Copper | ND |
| Lead | ND | CF022 | P2 | Copper | ND |
| Lead | ND | CF022 | F01 | Copper | ND |
| Lead | ND | CF022 | F02 | Copper | ND |
| Lead | ND | CF023 | P1 | Copper | ND |
| Lead | ND | CF023 | P2 | Copper | ND |
| Lead | ND | CF023 | F01 | Copper | ND |
| Lead | ND | CF023 | F02 | Copper | ND |
| Lead | ND | CF024 | P1 | Copper | ND |
| Lead | ND | CF024 | P2 | Copper | ND |
| Lead | ND | CF024 | F01 | Copper | ND |
| Lead | ND | CF024 | F02 | Copper | ND |
| Lead | ND | CF025 | P1 | Copper | ND |
| Lead | ND | CF025 | P2 | Copper | ND |
| Lead | ND | CF025 | F01 | Copper | ND |
| Lead | ND | CF025 | F02 | Copper | ND |

• The result of non-detected (ND) means; for lead the amount in water is less than 1 ppb, for copper the amount in water is less than 50 ppb.

Post Filter Installation -- Freeman Elementary School

June 4, 2106

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | ND | CF026 | P1 | Copper | ND |
| Lead | ND | CF026 | P2 | Copper | ND |
| Lead | ND | CF026 | F01 | Copper | ND |
| Lead | ND | CF026 | F02 | Copper | ND |
| Lead | ND | CF027 | P1 | Copper | ND |
| Lead | ND | CF027 | P2 | Copper | ND |
| Lead | ND | CF027 | F01 | Copper | ND |
| Lead | ND | CF027 | F02 | Copper | ND |
| Lead | ND | CF028 | P1 | Copper | ND |
| Lead | ND | CF028 | P2 | Copper | ND |
| Lead | ND | CF028 | F01 | Copper | ND |
| Lead | ND | CF028 | F02 | Copper | ND |
| Lead | ND | CF029 | P1 | Copper | ND |
| Lead | ND | CF029 | P2 | Copper | ND |
| Lead | ND | CF029 | F01 | Copper | ND |
| Lead | ND | CF029 | F02 | Copper | ND |
| Lead | ND | DW029A | P1 | Copper | ND |
| Lead | ND | DW029A | P2 | Copper | ND |
| Lead | ND | DW029A | F01 | Copper | ND |
| Lead | ND | DW029A | F02 | Copper | ND |
| Lead | ND | DW029B | P1 | Copper | ND |
| Lead | ND | DW029B | P2 | Copper | ND |
| Lead | ND | DW029B | F01 | Copper | ND |
| Lead | ND | DW029B | F02 | Copper | ND |
| Lead | ND | CF030 | P1 | Copper | ND |
| Lead | ND | CF030 | P2 | Copper | ND |
| Lead | ND | CF030 | F01 | Copper | ND |
| Lead | ND | CF030 | F02 | Copper | ND |
| Lead | ND | CF031 | P1 | Copper | ND |
| Lead | ND | CF031 | P2 | Copper | ND |
| Lead | ND | CF031 | F01 | Copper | ND |
| Lead | ND | CF031 | F02 | Copper | ND |
| Lead | ND | CF015 | CA1 | Copper | ND |
| Lead | ND | CF015 | CA2 | Copper | ND |
| Lead | ND | CF015 | CA3 | Copper | ND |
| Lead | ND | CF015 | CA4 | Copper | ND |
| Lead | ND | CF015 | CA5 | Copper | ND |
| Lead | ND | CF015 | CA6 | Copper | ND |
| Lead | ND | CF015 | CA7 | Copper | ND |
| Lead | ND | CF015 | CA8 | Copper | ND |
| Lead | ND | CF015 | CA9 | Copper | ND |
| Lead | ND | CF015 | CA10 | Copper | ND |
| Lead | ND | CF027 | CB1 | Copper | ND |
| Lead | ND | CF027 | CB2 | Copper | ND |

• The result of non-detected (ND) means; for lead the amount in water is less than 1 ppb, for copper the amount in water is less than 50 ppb.

Post Filter Installation -- Freeman Elementary School

June 4, 2106

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | ND | CF027 | CB3 | Copper | ND |
| Lead | ND | CF027 | CB4 | Copper | ND |
| Lead | ND | CF027 | CB5 | Copper | ND |
| Lead | ND | CF027 | CB6 | Copper | ND |
| Lead | ND | CF027 | CB7 | Copper | ND |
| Lead | ND | CF027 | CB8 | Copper | ND |
| Lead | ND | CF027 | CB9 | Copper | ND |
| Lead | ND | CF027 | CB10 | Copper | ND |
| Lead | ND | CF030 | CC1 | Copper | ND |
| Lead | ND | CF030 | CC2 | Copper | ND |
| Lead | ND | CF030 | CC3 | Copper | ND |
| Lead | ND | CF030 | CC4 | Copper | ND |
| Lead | ND | CF030 | CC5 | Copper | ND |
| Lead | ND | CF030 | CC6 | Copper | ND |
| Lead | ND | CF030 | CC7 | Copper | ND |
| Lead | ND | CF030 | CC8 | Copper | ND |
| Lead | ND | CF030 | CC9 | Copper | ND |
| Lead | ND | CF030 | CC10 | Copper | ND |

• The result of non-detected (ND) means; for lead the amount in water is less than 1 pbb, for copper the amount in water is less than 50 pbb.

Freeman Elementary
September 17, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------------|-----------|--------|--------------|
| Lead | ND | DW001 HALLWAY | P1 | Copper | 400 |
| Lead | ND | DW002 HALLWAY | P1 | Copper | 50 |
| Lead | ND | KC003 COMMUNITY ROOM | P1 | Copper | ND |
| Lead | ND | CF004 ROOM 1 | P1 | Copper | ND |
| Lead | ND | DW005 ROOM1 | P1 | Copper | ND |
| Lead | ND | CF006 ROOM2 (BUBBLER) | P1 | Copper | ND |
| Lead | ND | CF006A ROOM 2 (FAUCET) | P1 | Copper | ND |
| Lead | ND | CF007 ROOM 3 (BUBBLER) | P1 | Copper | ND |
| Lead | ND | CF007A ROOM 3 (FAUCET) | P1 | Copper | ND |
| Lead | ND | CF008 ROOM 4 (BUBBLER) | P1 | Copper | ND |
| Lead | ND | CF008A ROOM 4 (FAUCET) | P1 | Copper | ND |
| Lead | ND | CF009 ROOM 5 (BUBBLER) | P1 | Copper | ND |
| Lead | ND | CF009A ROOM 5 (FAUCET) | P1 | Copper | ND |
| Lead | ND | CF010 ROOM 6 (BUBBLER) | P1 | Copper | ND |
| Lead | ND | CF010A ROOM 6 (FAUCET) | P1 | Copper | ND |
| Lead | ND | CF011 ROOM 7 (BUBBLER) | P1 | Copper | ND |
| Lead | ND | CF011A ROOM 7 (FAUCET) | P1 | Copper | ND |
| Lead | ND | CF012 ROOM 9 (BUBBLER) | P1 | Copper | ND |
| Lead | ND | CF012A ROOM9 (FAUCET) | P1 | Copper | ND |
| Lead | ND | CF013 ROOM 10 | P1 | Copper | ND |
| Lead | 2 | CF014 ROOM 10 | P1 | Copper | ND |
| Lead | ND | CF015 ROOM 11 | P1 | Copper | ND |
| Lead | ND | CF016 ROOM 11(FAUCET) | P1 | Copper | ND |
| Lead | ND | CF016A ROOM 11 (BUBBLER) | P1 | Copper | ND |
| Lead | ND | CF017 ROOM 15 | P1 | Copper | ND |
| Lead | ND | CF018 ROOM 15 | P1 | Copper | ND |
| Lead | ND | CF019 ROOM 17 | P1 | Copper | ND |
| Lead | ND | CF020 ROOM 17 | P1 | Copper | ND |
| Lead | ND | CF021 ROOM 12 | P1 | Copper | ND |
| Lead | ND | CF022 ROOM 12 | P1 | Copper | ND |
| Lead | ND | CF023 ROOM 19 | P1 | Copper | ND |
| Lead | ND | CF024 ROOM 19 | P1 | Copper | ND |
| Lead | ND | CF025 ROOM 14 | P1 | Copper | ND |
| Lead | ND | CF026 ROOM 14 | P1 | Copper | ND |
| Lead | ND | CF027 ROOM 21 | P1 | Copper | ND |
| Lead | ND | CF028 ROOM 21 | P1 | Copper | ND |
| Lead | ND | CF029 DHS OFFICE | P1 | Copper | ND |
| Lead | ND | DW029A NORTH BUBBLER | P1 | Copper | ND |
| Lead | ND | DW029B SOUTH BUBBLER | P1 | Copper | ND |
| Lead | ND | CF030 RAINBOW/PRE-K | P1 | Copper | ND |
| Lead | ND | CF031 RAINBOW/PRE-K | P1 | Copper | ND |

• Non-detected (ND) means; for lead the amount in water is less than 1 pbb. for copper the amount in water is less than 50 pbb.

Freeman Elementary
September 24, 2016

| Lead | Result (ppb) | Sample Description | Site Code | Copper | Result (ppb) |
|------|--------------|--------------------|-----------|--------|--------------|
| Lead | ND | DW001 HALLWAY | P1 | Copper | 310 |
| Lead | ND | DW001 HALLWAY | P2 | Copper | ND |
| Lead | ND | DW001 HALLWAY | P3 | Copper | ND |
| Lead | ND | DW001 HALLWAY | P4 | Copper | ND |
| Lead | ND | DW002 HALLWAY | P1 | Copper | 70 |
| Lead | ND | DW002 HALLWAY | P2 | Copper | ND |
| Lead | ND | DW002 HALLWAY | P3 | Copper | ND |
| Lead | ND | DW002 HALLWAY | P4 | Copper | ND |
| Lead | ND | CF014 ROOM 10 | P1 | Copper | ND |
| Lead | ND | CF014 ROOM 10 | P2 | Copper | ND |
| Lead | ND | CF014 ROOM 10 | P3 | Copper | ND |
| Lead | ND | CF014 ROOM 10 | P4 | Copper | ND |

• Non-detected (ND) means; for lead the amount in water is less than 1 pbb. for copper the amount in water is less than 50 pbb.