PIERCE ELEMENTARY SCHOOL

Outlet Sampling and Plumbing Assessment Recommendations

1101 West Vernon Drive, Flint, Michigan 48503

BACKGROUND INFORMATION

On Friday, November 6, 2015, the Department of Licensing and Regulatory Affairs (DLARA) and the Department of Environmental Quality (DEQ) conducted an assessment of Pierce Elementary School's plumbing system to gain a comprehensive understanding of how water moves through the building and what types of plumbing materials are used. The southernmost out-building, in addition to the main school building, were included in the assessment. The assessment identified the following potential sources of lead leaching into drinking water:

- Lead solder joints on copper piping
- Brass valves and brass fittings
- Brass components in fixtures
- Galvanized piping

The assessment identified 34 faucets or fountains that provide water for drinking, cooking, and/or food preparation: 32 faucets/fountains in the main school building and two faucets/fountains in the southernmost out-building. The other two out-buildings had no working water fixtures. A total of five additional faucets or fountains were identified as inoperable and were not assessed or labeled for sampling, as follows:

- Main building, Room 112, classroom faucet (no cold water connection)
- Main building, Gym, drinking water fountain
- Main building, Gym, drinking water fountain
- Main building, Hallway to out-buildings, near Room 306, drinking water fountain
- Middle out-building, drinking water fountain

The DEQ and DLARA Team (Team) developed a sequence for sampling the faucets/fountains in each building based on how the water is expected to travel through each building.

On Saturday, November 7, 2015, the DEQ and the DLARA completed sampling of the 32 faucets/fountains in the main school building, and the two faucets/fountains in the southernmost out-building, each in the order determined by the plumbing assessment from the previous day, following a stagnation period of over 12 hours. At each of the 34 faucets/fountains identified, the Team collected four samples. Two initial, 125-mililiter samples (P1 and P2), were collected immediately after turning on the tap. The water was then flushed for 30 seconds and a third, 125-mililiter sample (F01) was collected. Finally, the water was flushed for another two minutes, and the fourth 125-mililiter sample (F02) was collected. These samples were used to determine the impact of any lead sources in and around each specific faucet/fountain and its connecting plumbing.

The Team then completed consecutive sampling at three of the 32 faucets/fountains in the main school building, and one of the two faucets/fountains in the southernmost out-building. This consecutive sampling was used to determine the impact of any lead sources located deep in the supply plumbing at each of these buildings. The four sites comprised of one site at the far end of the northern supply line, two sites along the south supply line near the mid-point and at the far end, and one site at the out-building. At each of these four sites, the Team collected 10, 1-liter samples. The 10 samples were collected immediately after turning on the tap, and consecutively, without any flushing time in between.

WATER SERVICE INFORMATION

A four-inch diameter cast iron or ductile iron water service line enters the boiler room. The boiler room is located near the middle of the west side of the main building. The water line enters on the south side of the room. The cold water piping transitions into copper piping inside the boiler room. In one area beneath pipe insulation, staff observed what appeared to be a lead bushing. The cold water supply line exits the boiler room. Exiting the boiler room, one cold water supply line appears to serve the north corridor, and one cold water supply line appears to serve the south corridor.

The middle and southernmost out-building appears to be served from the main building off of the supply line serving the south corridor of the school. Skirting around the bottom of the out-building unit prevented an assessment of the service line to this building. The northernmost out-building is not occupied and was not assessed.

Outlets with Lead Levels Greater than 15 Parts per Billion

The DEQ recommends school facilities take action if samples from any drinking water outlets show lead levels greater than 15 parts per billion. Based on the sampling conducted at 34 faucets/fountains on November 7, 2015, the following 25 drinking water outlets had lead water level results greater than 15 parts per billion. Each of these 25 outlets is listed below with its sample results, including a description of the potential source(s) of lead, and recommended actions to be taken by the school.

Outlet: Bubbler Drinking Fountain (01DW001)

Location: Hallway next to Boiler Room, behind Stage
Results: P1=20 parts per billion, P2=2 parts per billion
F01=2 parts per billion, F02=non-detect

These results suggest the highest contribution of lead may be from the bubbler itself. This bubbler fixture is made of chrome-plated brass. Connecting plumbing should be checked for brass components, including brass valves.

Replacement of this bubbler tap and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Water Cooler Fountain (01WC002)

Location: Hallway next to Mechanical Room, north corridor
Results: P1=8 parts per billion, P2=13 parts per billion
F01=35 parts per billion, F02=19 parts per billion

These results suggest the lead may be from the water cooler unit and the connecting plumbing. The water cooler is an Elkay model. This model may contain brass components. Connecting plumbing to the cooler unit may also contain brass components.

Replacement of this water cooler and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location and needs to be completed for use. If replacement is not currently feasible, SHUT OFF THIS WATER COOLER FOUNTAIN AND **DO NOT USE THIS WATER COOLER FOR DRINKING OR COOKING.**

Outlet: Sink Faucet (01CF003)

Location: Classroom 109, northeast wall
Results: P1=26 parts per billion, P2=17 parts per billion
F01=9 part per billion, F02=2 parts per billion

These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. This model faucet typically has a brass tube in its deck body, and may contain some additional brass components. Connecting plumbing in the cabinet under the sink should be checked for brass components, including brass valves.

Replacement of this faucet and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

This faucet also has an aerator/screen at the outlet. If the faucet is not replaced, the aerator/screen should be removed, inspected for particulate accumulations, scrubbed clean, and reinstalled. If particulates are found, the aerator/screen should be periodically checked and cleaned.

Outlet: Bubbler Fountain (01DW004)

Location: Classroom 109, northwest wall
Results: P1=42 parts per billion, P2=17 parts per billion
F01=3 parts per billion, F02=1 part per billion

These results suggest the highest contribution of lead may be from the bubbler and its connecting plumbing. This bubbler fixture is made of chrome-plated brass and has a brass connector on the underside of the sink. Connecting plumbing in the cabinet under the sink should be checked for brass connectors, copper piping with lead solder, and a brass shut-off valve.

Replacement of this bubbler tap and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Sink Faucet (01CF007)

Location: Classroom 108, northwest wall
Results: P1=97 parts per billion, P2=132 parts per billion
F01=9 parts per billion, F02=2 parts per billion

These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. This faucet appears to be manufactured by Central Brass. This model faucet typically has a brass tube in its deck body, may contain some additional brass components, and has a brass spout. Connecting plumbing in the cabinet under the sink should be checked for brass connectors, copper piping with lead solder, and brass shut-off valves.

Replacement of this faucet and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

This faucet also has an aerator/screen at the outlet. If the faucet is not replaced, the aerator/screen should be removed, inspected for particulate accumulations, scrubbed clean, and reinstalled. If particulates are found, the aerator/screen should be periodically checked and cleaned.

Outlet: Bubbler Fountain (01DW008)

Location: Classroom 108, northwest wall
Results: P1=468 parts per billion, P2=75 parts per billion
F01=6 parts per billion, F02=4 parts per billion

These results suggest the highest contribution of lead may be from the bubbler and its connecting plumbing. This bubbler fixture is made of chrome-plated brass, with a brass operating valve, and a brass connector on the underside of the sink. Connecting plumbing under the sink should be checked for brass components and copper piping with lead solder.

Replacement of this bubbler tap and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Bubbler Fountain (01DW009)

Location: Classroom 111, northeast wall
Results: P1=26 parts per billion, P2=38 parts per billion
F01=7 parts per billion, F02=3 parts per billion

These results suggest the highest contribution of lead may be from the bubbler and its connecting plumbing. This bubbler fixture is made of chrome-plated brass, with a brass operating valve, and a brass connector on the underside of the sink. Connecting plumbing in the cabinet under the sink should be checked for brass components and copper piping with lead solder.

Replacement of this bubbler tap and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Sink Faucet (01CF010)

Location: Classroom 111, northeast wall
Results: P1=43 parts per billion, P2=22 parts per billion
F01=3 parts per billion, F02=3 parts per billion

These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. This faucet appears to be manufactured by Central Brass. This model faucet typically has a brass tube in its deck body, may contain some additional brass components, and has a brass spout. The spout's chrome finish is worn down to the brass. Connecting plumbing in the cabinet under the sink should be checked for brass connectors, copper piping with lead solder, and brass shut-off valves.

Replacement of this faucet and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

This faucet also has an aerator/screen at the outlet. If the faucet is not replaced, the aerator/screen should be removed, inspected for particulate accumulations, scrubbed clean, and reinstalled. If particulates are found, the aerator/screen should be periodically checked and cleaned.

Outlet: Sink Faucet (01CF011)

Location: Classroom 107, southwest wall
Results: P1=25 parts per billion, P2=11 parts per billion
F01=3 parts per billion, F02=2 parts per billion

These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. This faucet appears to be manufactured by Central Brass. This model faucet typically has a brass tube in its deck body, may contain some additional brass components, and has a brass spout. Connecting plumbing in the cabinet under the sink should be checked for brass connectors, copper piping with lead solder, and brass shut-off valves.

Replacement of this sink faucet and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

At the time of assessment, the faucet aerator/screen was found removed. If the faucet is not replaced and the aerator/screen is going to be reinstalled, it should be inspected for particulate accumulations, and scrubbed clean. If particulates are found, the aerator/screen should be periodically checked and cleaned.

Outlet: Bubbler Fountain (01DW012)

Location: Classroom 112, southwest wall
Results: P1=78 parts per billion, P2=11 parts per billion
F01=4 parts per billion, F02=3 parts per billion

These results suggest the highest contribution of lead may be from the bubbler and its connecting plumbing. This bubbler fixture is made of chrome-plated brass, with a brass operating valve and a brass connector on the underside of the sink. Connecting plumbing under the sink should be checked for brass components and copper piping with lead solder.

Replacement of this bubbler tap and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Sink Faucet (01CF018)

Location: Classroom 301, northwest wall
Results: P1=13 parts per billion, P2=16 parts per billion
F01=4 parts per billion, F02=1 part per billion

These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. This faucet appears to be manufactured by Central Brass. This model faucet typically has a brass tube in its deck body, may contain some additional brass components, and has a brass spout. The spout's chrome finish is worn down to the brass. Connecting plumbing in the cabinet under the sink should be checked for brass connectors, copper piping with lead solder, and brass shut-off valves.

Replacement of this faucet and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

This faucet also appears to have an aerator/screen at the outlet. If the faucet is not replaced, the aerator/screen should be removed, inspected for particulate accumulations, scrubbed clean, and reinstalled. If particulates are found, the aerator/screen should be periodically checked and cleaned.

Outlet: Bubbler Fountain (01DW019)

Location: Classroom 302, southwest wall
Results: P1=220 parts per billion, P2=23 parts per billion
F01=3 parts per billion, F02=2 parts per billion

These results suggest the highest contribution of lead may be from the bubbler and its connecting plumbing. This bubbler fixture is made of chrome-plated brass, with a brass operating valve, and a brass connector on the underside of the sink. Connecting plumbing in the cabinet under the sink should be checked for brass components and copper piping with lead solder.

Replacement of this bubbler tap and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Sink Faucet (01CF020)

Location: Classroom 302, southwest wall
Results: P1=53 parts per billion, P2=30 parts per billion
F01=1 part per billion, F02=non-detect

These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. This faucet appears to be manufactured by Central Brass. The base of this faucet is chrome-plated brass, has brass components within the base, and a brass spout. The spout's chrome finish is worn down to the brass. Connecting plumbing in the cabinet under the sink should be checked for brass connectors, copper piping with lead solder, and brass shut-off valves.

Replacement of this faucet and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

This faucet also appears to have an aerator/screen at the outlet. If the faucet is not replaced, the aerator/screen should be removed, inspected for particulate accumulations, scrubbed clean, and reinstalled. If particulates are found, the aerator/screen should be periodically checked and cleaned.

Outlet: Sink Faucet (01CF021)

Location: Classroom 306, southwest wall
Results: P1=15 parts per billion, P2=50 parts per billion
F01=8 parts per billion, F02=3 parts per billion

These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. This faucet appears to be manufactured by Central Brass. This model faucet typically has a brass tube in its deck body, may contain some additional brass components, and has a brass spout. The spout's chrome finish is worn down to the brass. Connecting plumbing in the cabinet under the sink should be checked for brass connectors, copper piping with lead solder, and brass shut-off valves.

Replacement of this faucet and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

This faucet also appears to have an aerator/screen at the outlet. If the faucet is not replaced, the aerator/screen should be removed, inspected for particulate accumulations, scrubbed clean, and reinstalled. If particulates are found, the aerator/screen should be periodically checked and cleaned.

Outlet: Bubbler Fountain (01DW022)

Location: Classroom 306, southwest wall
Results: P1=17 parts per billion, P2=6 parts per billion
F01=4 parts per billion, F02=13 parts per billion

These results suggest lead may be from the bubbler and its connecting plumbing. This bubbler fixture is made of chrome-plated brass, with a brass operating valve, and a brass connector on the underside of the sink. Connecting plumbing in the cabinet under the sink should be checked for brass components and copper piping with lead solder. The increase in the fourth sample (F02) results may be a result of excessive water stagnation in this area of the building.

Replacement of this bubbler and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location, along with an overall flushing program. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Sink Faucet (01CF023)

Location: Classroom 312, southeast wall
Results: P1=22 parts per billion, P2=14 parts per billion
F01=9 parts per billion, F02=6 parts per billion

These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. This faucet appears to be manufactured by Chicago Specialty. This model faucet typically has a brass tube in its deck body, may contain some additional brass components, and has a brass spout. The spout's chrome finish is worn down to the brass. Connecting plumbing in the cabinet under the sink should be checked for brass connectors, copper piping with lead solder, and brass shut-off valves.

Replacement of this faucet and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

This faucet also appears to have an aerator/screen at the outlet. If the faucet is not replaced, the aerator/screen should be removed, inspected for particulate accumulations, scrubbed clean, and reinstalled. If particulates are found, the aerator/screen should be periodically checked and cleaned.

Outlet: Bubbler Fountain (01DW024)

Location: Classroom 312, southeast wall
Results: P1=36 parts per billion, P2=8 parts per billion
F01=6 parts per billion, F02=4 parts per billion

These results suggest the highest contribution of lead may be from the bubbler and its connecting plumbing. This bubbler fixture is made of chrome-plated brass, with a brass operating valve, and a brass connector on the underside of the sink. Connecting plumbing in the cabinet under the sink should be checked for brass components and copper piping with lead solder.

Replacement of this bubbler tap and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Bubbler Fountain (01DW025)

Location: Classroom 307, southwest wall
Results: P1=191 parts per billion, P2=69 parts per billion
F01=28 parts per billion, F02=6 parts per billion

These results suggest the highest contribution of lead may be from the bubbler and its connecting plumbing. This bubbler fixture is made of chrome-plated brass and has a brass connector on the underside of the sink. Connecting plumbing in the cabinet under the sink should be checked for brass connectors, copper piping with lead solder, and a brass shut-off valve.

Copper results for sample P1 at this location were also at levels above which the DEQ recommends school facilities take action. Copper results suggest these same brass components are contributing to this condition.

Replacement of this bubbler tap and its connecting plumbing with lead-free materials will significantly reduce lead and copper exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead and copper concentrations and lead and copper exposure.

Outlet: Sink Faucet (01CF026)

Location: Classroom 307, southwest wall
Results: P1=61 parts per billion, P2=36 parts per billion
F01=7 parts per billion, F02=4 parts per billion

These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. This faucet appears to be manufactured by Central Brass. This model faucet typically has a brass tube in its deck body and, may contain some additional brass components, and has a brass spout. The spout's chrome finish is worn down to the brass. Connecting plumbing in the cabinet under the sink should be checked for brass connectors, copper piping with lead solder, and brass shut-off valves.

Replacement of this faucet and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

This faucet also appears to have an aerator/screen at the outlet. If the faucet is not replaced, the aerator/screen should be removed, inspected for particulate accumulations, scrubbed clean, and reinstalled. If particulates are found, the aerator/screen should be periodically checked and cleaned.

Outlet: Bubbler Fountain (01DW027)

Location: Classroom 311, southeast wall
Results: P1=23 parts per billion, P2=19 parts per billion
F01=61 parts per billion, F02=20 parts per billion

These results suggest lead may be from the bubbler and its connecting plumbing. This bubbler fixture is made of chrome-plated brass, with a brass operating valve, and a brass connector on the underside of the sink. Connecting plumbing in the cabinet under the sink should be checked for brass components and copper piping with lead solder. The increase in the third (F01) and fourth sample (F02) results may be a result of excessive water stagnation in this area of the building.

Replacement of this bubbler tap and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location and needs to be completed. In addition, an overall flushing program is required – even after this bubbler is replaced. If replacement is not currently feasible, SHUT OFF THIS BUBBLER AND **DO NOT USE THIS BUBBLER FOR DRINKING OR COOKING.**

Outlet: Sink Faucet (01CF028)

Location: Classroom 311, southeast wall
Results: P1=17 parts per billion, P2=19 parts per billion
F01=38 parts per billion, F02=15 parts per billion

These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. This faucet appears to be manufactured by Central Brass. This model faucet typically has a brass tube in its deck body, may contain some additional brass components, and has a brass spout. The spout's chrome finish is worn down to the brass. Connecting plumbing in the cabinet under the sink should be checked for brass connectors, copper piping with lead solder, and brass shut-off valves.

Replacement of this faucet and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location and needs to be completed. In addition, an overall flushing program is required – even after this faucet is replaced. If a replacement is not currently feasible, **DO NOT USE THIS FAUCET FOR DRINKING OR COOKING.**

This faucet also appears to have an aerator/screen at the outlet. If the faucet is not replaced, the aerator/screen should be removed, inspected for particulate accumulations, scrubbed clean, and reinstalled. If particulates are found, the aerator/screen should be periodically checked and cleaned.

Outlet: Bubbler Fountain (01DW029)

Location: Classroom 308, northwest wall
Results: P1=78 parts per billion, P2=23 parts per billion
F01=5 parts per billion, F02=2 parts per billion

These results suggest the highest contribution of lead may be from the bubbler and its connecting plumbing. This bubbler fixture is made of chrome-plated brass, with a brass operating valve, and a brass connector on the underside of the sink. The bubbler also has been modified with added copper couplings below the spout. Connecting plumbing in the cabinet under the sink should be checked for brass components and copper piping with lead solder.

Replacement of this bubbler tap and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes.

Outlet: Sink Faucet (01CF030)

Location: Classroom 308, northwest wall
Results: P1=60 parts per billion, P2=9 parts per billion
F01=11 parts per billion, F02=3 parts per billion

These results suggest the highest contribution of lead may be from the faucet and its connecting plumbing. This faucet appears to be manufactured by Central Brass. This model faucet typically has a brass tube in it deck body, may contain some additional brass components, and has a brass spout. The spout's chrome finish is worn down to the brass. Connecting plumbing in the cabinet under the sink should be checked for brass connectors, copper piping with lead solder, and brass shut-off valves.

Replacement of this faucet and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

This faucet also appears to have an aerator/screen at the outlet. If the faucet is not replaced, the aerator/screen should be removed, inspected for particulate accumulations, scrubbed clean, and reinstalled. If particulates are found, the aerator/screen should be periodically checked and cleaned.

Outlet: Bubbler Fountain (01DW031)

Location: Classroom 310, northeast wall
Results: P1=29 parts per billion, P2=35 parts per billion
F01=73 parts per billion, F02=3 parts per billion

These results suggest the highest contribution of lead may be from the bubbler and its connecting plumbing. This bubbler fixture is made of chrome-plated brass and has a brass connector on the underside of the sink. Connecting plumbing in the cabinet under the sink should be checked for brass components and copper piping with lead solder.

Replacement of this bubbler tap and its connecting plumbing with lead-free materials will significantly reduce lead exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead concentrations and lead exposure.

Outlet: Water Cooler (02DW034)

Location: South out-building, Temporary Classroom, northeast wall
Results: P1= non-detect, P2=54 parts per billion
F01=36 parts per billion, F02=2 parts per billion

These results suggest the lead may be from the water cooler unit. This model may contain brass components. Connecting plumbing to the cooler unit may also contain brass components.

Copper results for sample P1 at this location were also at levels above which the DEQ recommends school facilities take action. Copper results suggest these same brass components are contributing to this condition.

Replacement of the entire unit is recommended and will significantly reduce lead and copper exposure at this location. If replacement is not currently feasible, sample results indicate that flushing this tap for three minutes following periods of stagnation is likely to reduce lead and copper concentrations and lead and copper exposure.

Outlets with Lead Levels 15 Parts per Billion or Less

While the remaining nine outlets showed sample results to be at levels requiring no further action, several recommendations have been identified.

The fourth sample (F02) at all nine outlets following approximately three minutes of use and flushing at a reduced flow resulted in reduced lead concentrations. This indicates that flushing these nine taps used for drinking, cooking, and/or food preparation for four minutes following periods of stagnation will further reduce lead exposure.

Five of these nine outlets are comprised of similar materials as the outlets listed above and could potentially experience higher lead levels under extended periods of stagnation. These faucets/fountains include:

- Bubbler Fountains in main corridor next to Men's Restroom, east of Library (01DW017), and Classroom 100 (01DW015)
- Sink Side Bubbler Unit in Classroom 110 (01DW006)
- Chrome-Plated Brass Base Faucets in Classroom 100 (01CF013), and Classroom 310 (01CF032)

Replacement of these fixtures with lead-free materials is also recommended.

The classroom faucet and four drinking water fountains identified as out of service in the Background Information, should be sampled prior to being placed back into service, or replaced with lead-free materials.

The remaining four outlets showed sample results of 15 parts per billion or less, requiring no further action or additional recommendations. These faucets/fountains include:

- Sink Faucets in Classroom 110 (01CF005), Classroom 100 (01CF014), and south out-building, Temporary Classroom (02KC033)
- Kitchen Faucet in the Teacher's Lounge (01KC016)

Consecutive Sampling Results and Building Plumbing Recommendations

The consecutive samples taken on November 7, 2015, at three sites in the main school building, and one in the southernmost out-building, provide additional confirmation that overall, the highest contribution of lead appears to be from the individual faucet/fountains and not from the larger diameter supply plumbing within the main school building or the out-building units. However, results from Classroom 310 also suggest that the southern supply line extending beyond the restrooms may be impacted by minimal water use and stagnation – specifically, the cold water line serving Classrooms 306-312.

A operational flushing procedure may further reduce lead contributions from this supply line caused by stagnant conditions related to its use. Routine flushing of the larger diameter supply plumbing at the end points of the distribution system, (for example at Classroom 100, Classroom 310 and Classroom 311) should be performed on a regular basis. Even if the identified outlets are replaced, the south end of the corridor serving Classrooms 306-312 may still benefit from a flushing procedure to further reduce lead contributions and other effects of stagnant water in this supply line.

Results of the consecutive sample monitoring are listed in the table below.

Consecutive Sample No.	1	2	3	4	5	6	7	8	9	10
LOCATION	**LEAD RESULT (PARTS PER BILLION; ND = NOT-DETECTED)**									
Classroom 100 Sink Faucet (01CF013)	2	2	2	2	2	2	2	2	3	3
Classroom 301 Sink Faucet (01CF018)	4	2	2	2	1	1	1	1	1	ND
Classroom 310 Sink Faucet (01CF032)	4	5	6	4	3	3	3	3	3	2
Out-building Southernmost Kitchen Faucet (01KC033)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Pierce Elementary
2500 N. Averill Avenue
Flint, Michigan 48503

ANALYTE	RESULT (mg/L)	ANALYTE	RESULT (mg/L)	Sample Description	Site Code	Site Code Description
Lead	0.008	Copper	0.51	01WC002	P1	First Primary draw of 125 milliliters
Lead	0.013	Copper	0.60	01WC002	P2	Second Primary draw of 125 milliliters
Lead	0.035	Copper	0.77	01WC002	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.019	Copper	0.35	01WC002	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.020	Copper	0.68	01DW001	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.25	01DW001	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.17	01DW001	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.08	01DW001	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.026	Copper	0.36	01CF003 - RM 109	P1	First Primary draw of 125 milliliters
Lead	0.017	Copper	0.27	01CF003 - RM 109	P2	Second Primary draw of 125 milliliters
Lead	0.009	Copper	0.34	01CF003 - RM 109	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.15	01CF003 - RM 109	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.042	Copper	0.43	01DW004 - RM 109	P1	First Primary draw of 125 milliliters
Lead	0.017	Copper	0.26	01DW004 - RM 109	P2	Second Primary draw of 125 milliliters
Lead	0.003	Copper	0.15	01DW004 - RM 109	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.001	Copper	0.15	01DW004 - RM 109	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.014	Copper	0.28	01DW006 - RM 110	P1	First Primary draw of 125 milliliters
Lead	0.003	Copper	0.18	01DW006 - RM 110	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.17	01DW006 - RM 110	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.001	Copper	0.16	01DW006 - RM 110	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.007	Copper	0.31	01CF005 - RM 110	P1	First Primary draw of 125 milliliters
Lead	0.008	Copper	0.30	01CF005 - RM 110	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.16	01CF005 - RM 110	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.16	01CF005 - RM 110	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.097	Copper	0.60	01CF007 - RM 108	P1	First Primary draw of 125 milliliters
Lead	0.132	Copper	0.55	01CF007 - RM 108	P2	Second Primary draw of 125 milliliters
Lead	0.009	Copper	0.21	01CF007 - RM 108	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.15	01CF007 - RM 108	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.026	Copper	0.34	01DW009 - RM 111	P1	First Primary draw of 125 milliliters
Lead	0.038	Copper	0.51	01DW009 - RM 111	P2	Second Primary draw of 125 milliliters
Lead	0.007	Copper	0.22	01DW009 RM 111	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.003	Copper	0.15	01DW009 - RM 111	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.025	Copper	0.25	01CF011 - RM 107	P1	First Primary draw of 125 milliliters
Lead	0.011	Copper	0.19	01CF011 - RM 107	P2	Second Primary draw of 125 milliliters
Lead	0.003	Copper	0.16	01CF011 - RM 107	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.15	01CF011 - RM 107	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.043	Copper	1.15	01CF010 - RM 111	P1	First Primary draw of 125 milliliters
Lead	0.022	Copper	0.60	01CF010 - RM 111	P2	Second Primary draw of 125 milliliters
Lead	0.003	Copper	0.16	01CF010 - RM 111	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.003	Copper	0.15	01CF010 - RM 111	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.078	Copper	0.50	01DW012 - RM 112	P1	First Primary draw of 125 milliliters
Lead	0.011	Copper	0.19	01DW012 - RM 112	P2	Second Primary draw of 125 milliliters
Lead	0.004	Copper	0.16	01DW012 - RM 112	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.003	Copper	0.15	01DW012 - RM 112	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.468	Copper	0.20	01DW008 - RM 108	P1	First Primary draw of 125 milliliters
Lead	0.075	Copper	0.16	01DW008 - RM 108	P2	Second Primary draw of 125 milliliters
Lead	0.006	Copper	0.15	01DW008 - RM 108	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.004	Copper	0.15	01DW008 - RM 108	F02	Flush Sample taken 2 minutes after First Flush Sample

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Pierce Elementary
2500 N. Averill Avenue
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ANALYTE	RESULT (mg/L)	ANALYTE	RESULT (mg/L)	Sample Description	Site Code	Site Code Description
Lead	0.023	Copper	0.19	01DW027 - RM 311	P1	First Primary draw of 125 milliliters
Lead	0.019	Copper	0.25	01DW027 - RM 311	P2	Second Primary draw of 125 milliliters
Lead	0.061	Copper	0.39	01DW027 - RM 311	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.020	Copper	0.18	01DW027 - RM 311	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.061	Copper	0.60	01CF026 - RM 307	P1	First Primary draw of 125 milliliters
Lead	0.036	Copper	0.40	01CF026 - RM 307	P2	Second Primary draw of 125 milliliters
Lead	0.007	Copper	0.17	01CF026 - RM 307	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.004	Copper	0.15	01CF026 - RM 307	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.191	Copper	2.05	01DW025 - RM 307	P1	First Primary draw of 125 milliliters
Lead	0.069	Copper	0.50	01DW025 - RM 307	P2	Second Primary draw of 125 milliliters
Lead	0.028	Copper	0.20	01DW025 - RM 307	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.006	Copper	0.17	01DW025 - RM 307	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.017	Copper	0.39	01CF028 - RM 311	P1	First Primary draw of 125 milliliters
Lead	0.019	Copper	0.21	01CF028 - RM 311	P2	Second Primary draw of 125 milliliters
Lead	0.038	Copper	0.24	01CF028 - RM 311	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.015	Copper	0.17	01CF028 - RM 311	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.011	Copper	0.30	01CF032 - RM 310	P1	First Primary draw of 125 milliliters
Lead	0.005	Copper	0.13	01CF032 - RM 310	P2	Second Primary draw of 125 milliliters
Lead	0.003	Copper	0.12	01CF032 - RM 310	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.12	01CF032 - RM 310	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.029	Copper	0.36	01DW031 - RM 310	P1	First Primary draw of 125 milliliters
Lead	0.035	Copper	0.24	01DW031 - RM 310	P2	Second Primary draw of 125 milliliters
Lead	0.073	Copper	0.43	01DW031 - RM 310	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.003	Copper	0.12	01DW031 - RM 310	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.060	Copper	1.08	01CF030 - RM 308	P1	First Primary draw of 125 milliliters
Lead	0.009	Copper	0.18	01CF030 - RM 308	P2	Second Primary draw of 125 milliliters
Lead	0.011	Copper	0.14	01CF030 - RM 308	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.003	Copper	0.13	01CF030 - RM 308	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.078	Copper	0.48	01DW029 - RM 308	P1	First Primary draw of 125 milliliters
Lead	0.023	Copper	0.19	01DW029 - RM 308	P2	Second Primary draw of 125 milliliters
Lead	0.005	Copper	0.14	01DW029 - RM 308	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.13	01DW029 - RM 308	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.002	Copper	0.22	02KC033 - TEMPORARY CLASSROOM	P1	First Primary draw of 125 milliliters
Lead	0.000	Copper	0.51	02KC033 - TEMPORARY CLASSROOM	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.27	02KC033 - TEMPORARY CLASSROOM	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.00	02KC033 - TEMPORARY CLASSROOM	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.000	Copper	0.73	02DW034 - TEMPORARY	P1	First Primary draw of 125 milliliters
Lead	0.054	Copper	0.82	02DW034 - TEMPORARY	P2	Second Primary draw of 125 milliliters
Lead	0.036	Copper	1.77	02DW034 - TEMPORARY	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.17	02DW034 - TEMPORARY	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.036	Copper	0.32	01DW024 - RM 312	P1	First Primary draw of 125 milliliters
Lead	0.008	Copper	0.16	01DW024 - RM 312	P2	Second Primary draw of 125 milliliters
Lead	0.006	Copper	0.15	01DW024 - RM 312	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.004	Copper	0.13	01DW024 - RM 312	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.053	Copper	0.53	01CF020 - RM 302	P1	First Primary draw of 125 milliliters
Lead	0.030	Copper	0.34	01CF020 - RM 302	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.12	01CF020 - RM 302	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.11	01CF020 - RM 302	F02	Flush Sample taken 2 minutes after First Flush Sample

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ANALYTE	RESULT (mg/L)	ANALYTE	RESULT (mg/L)	Sample Description	Site Code	Site Code Description
Lead	0.022	Copper	0.27	01CF023 - RM 312	P1	First Primary draw of 125 milliliters
Lead	0.014	Copper	0.19	01CF023 - RM 312	P2	Second Primary draw of 125 milliliters
Lead	0.009	Copper	0.17	01CF023 - RM 312	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.006	Copper	0.15	01CF023 - RM 312	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.220	Copper	0.51	01DW019 - RM 302	P1	First Primary draw of 125 milliliters
Lead	0.023	Copper	0.34	01DW019 - RM 302	P2	Second Primary draw of 125 milliliters
Lead	0.003	Copper	0.13	01DW019 - RM 302	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.12	01DW019 - RM 302	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.017	Copper	0.40	01DW022 - RM 306	P1	First Primary draw of 125 milliliters
Lead	0.006	Copper	0.17	01DW022 - RM 306	P2	Second Primary draw of 125 milliliters
Lead	0.004	Copper	0.15	01DW022 - RM 306	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.013	Copper	0.15	01DW022 - RM 306	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.015	Copper	0.36	01CF021 - RM 306	P1	First Primary draw of 125 milliliters
Lead	0.050	Copper	0.25	01CF021 - RM 306	P2	Second Primary draw of 125 milliliters
Lead	0.008	Copper	0.17	01CF021 - RM 306	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.003	Copper	0.14	01CF021 - RM 306	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.013	Copper	0.30	01CF018 - RM 301	P1	First Primary draw of 125 milliliters
Lead	0.016	Copper	0.31	01CF018 - RM 301	P2	Second Primary draw of 125 milliliters
Lead	0.004	Copper	0.16	01CF018 - RM 301	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.001	Copper	0.14	01CF018 - RM 301	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.004	Copper	0.30	01DW017 - MAIN CORRIDOR	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.15	01DW017 - MAIN CORRIDOR	P2	Second Primary draw of 125 milliliters
Lead	0.002	Copper	0.12	01DW017 - MAIN CORRIDOR	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.001	Copper	0.11	01DW017 - MAIN CORRIDOR	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.007	Copper	0.50	01KC016 - TEACHERS LOUNGE	P1	First Primary draw of 125 milliliters
Lead	0.002	Copper	0.63	01KC016 - TEACHERS LOUNGE	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.20	01KC016 - TEACHERS LOUNGE	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.000	Copper	0.12	01KC016 - TEACHERS LOUNGE	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.010	Copper	0.20	01CF014 - RM 100	P1	First Primary draw of 125 milliliters
Lead	0.013	Copper	0.21	01CF014 - RM 100	P2	Second Primary draw of 125 milliliters
Lead	0.008	Copper	0.18	01CF014 - RM 100	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.003	Copper	0.14	01CF014 - RM 100	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.014	Copper	0.19	01DW015 - RM 100	P1	First Primary draw of 125 milliliters
Lead	0.003	Copper	0.14	01DW015 - RM 100	P2	Second Primary draw of 125 milliliters
Lead	0.001	Copper	0.13	01DW015 - RM 100	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.15	01DW015 - RM 100	F02	Flush Sample taken 2 minutes after First Flush Sample
Lead	0.012	Copper	0.25	01CF013 - RM 100	P1	First Primary draw of 125 milliliters
Lead	0.006	Copper	0.19	01CF013 - RM 100	P2	Second Primary draw of 125 milliliters
Lead	0.000	Copper	0.13	01CF013 - RM 100	F01	Flush Sample taken 30 Seconds after Second Primary Draw
Lead	0.002	Copper	0.16	01CF013 - RM 100	F02	Flush Sample taken 2 minutes after First Flush Sample

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ANALYTE	RESULT (mg/L)	ANALYTE	RESULT (mg/L)	Sample Description	Site Code	Site Code Description
Lead	0.000	Copper	0.10	02KC033- TEMPORARY CLASSROOM	CA1	First Sequential Sample
Lead	0.000	Copper	0.00	02KC033- TEMPORARY CLASSROOM	CA2	Second Sequential Sample
Lead	0.000	Copper	0.00	02KC033- TEMPORARY CLASSROOM	CA3	Third Sequential Sample
Lead	0.000	Copper	0.00	02KC033- TEMPORARY CLASSROOM	CA4	Forth Sequential Sample
Lead	0.000	Copper	0.00	02KC033- TEMPORARY CLASSROOM	CA5	Fifth Sequential Sample
Lead	0.000	Copper	0.00	02KC033- TEMPORARY CLASSROOM	CA6	Sixth Sequential Sample
Lead	0.000	Copper	0.00	02KC033- TEMPORARY CLASSROOM	CA7	Seventh Sequential Sample
Lead	0.000	Copper	0.00	02KC033- TEMPORARY CLASSROOM	CA8	Eigth Sequential Sample
Lead	0.000	Copper	0.00	02KC033- TEMPORARY CLASSROOM	CA9	Ninth Sequential Sample
Lead	0.000	Copper	0.00	02KC033- TEMPORARY CLASSROOM	CA10	Tenth Sequential Sample
Lead	0.002	Copper	0.17	01CF013- RM 100	CB1	First Sequential Sample
Lead	0.002	Copper	0.16	01CF013- RM 100	CB2	Second Sequential Sample
Lead	0.002	Copper	0.15	01CF013- RM 100	CB3	Third Sequential Sample
Lead	0.002	Copper	0.16	01CF013- RM 100	CB4	Forth Sequential Sample
Lead	0.002	Copper	0.17	01CF013- RM 100	CB5	Fifth Sequential Sample
Lead	0.002	Copper	0.18	01CF013- RM 100	CB6	Sixth Sequential Sample
Lead	0.002	Copper	0.18	01CF013- RM 100	CB7	Seventh Sequential Sample
Lead	0.002	Copper	0.19	01CF013- RM 100	CB8	Eigth Sequential Sample
Lead	0.003	Copper	0.19	01CF013- RM 100	CB9	Ninth Sequential Sample
Lead	0.003	Copper	0.21	01CF013- RM 100	CB10	Tenth Sequential Sample
Lead	0.004	Copper	0.18	01CF018- RM 301	CC1	First Sequential Sample
Lead	0.002	Copper	0.13	01CF018- RM 301	CC2	Second Sequential Sample
Lead	0.002	Copper	0.12	01CF018- RM 301	CC3	Third Sequential Sample
Lead	0.002	Copper	0.12	01CF018- RM 301	CC4	Forth Sequential Sample
Lead	0.001	Copper	0.12	01CF018- RM 301	CC5	Fifth Sequential Sample
Lead	0.001	Copper	0.12	01CF018- RM 301	CC6	Sixth Sequential Sample
Lead	0.001	Copper	0.12	01CF018- RM 301	CC7	Seventh Sequential Sample
Lead	0.001	Copper	0.12	01CF018- RM 301	CC8	Eigth Sequential Sample
Lead	0.001	Copper	0.12	01CF018- RM 301	CC9	Ninth Sequential Sample
Lead	0.000	Copper	0.12	01CF018- RM 301	CC10	Tenth Sequential Sample
Lead	0.004	Copper	0.15	01CF032- RM 310	CD1	First Sequential Sample
Lead	0.005	Copper	0.14	01CF032- RM 310	CD2	Second Sequential Sample
Lead	0.006	Copper	0.14	01CF032- RM 310	CD3	Third Sequential Sample
Lead	0.004	Copper	0.14	01CF032- RM 310	CD4	Forth Sequential Sample
Lead	0.003	Copper	0.13	01CF032- RM 310	CD5	Fifth Sequential Sample
Lead	0.003	Copper	0.13	01CF032- RM 310	CD6	Sixth Sequential Sample
Lead	0.003	Copper	0.13	01CF032- RM 310	CD7	Seventh Sequential Sample
Lead	0.003	Copper	0.13	01CF032- RM 310	CD8	Eigth Sequential Sample
Lead	0.003	Copper	0.13	01CF032- RM 310	CD9	Ninth Sequential Sample
Lead	0.002	Copper	0.13	01CF032- RM 310	CD10	Tenth Sequential Sample

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