AKTPEERLESS

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May 31, 2016

Mary Beth Kiley
Holy Redeemer Grade School
1711 Junction Street
Detroit, Michigan 48209

Subject: Summary of Water Sampling Activities
Holy Redeemer Grade School
Detroit, Michigan
AKT Peerless Project No. Project No. 11510f-1-20

Ms. Kiley:

AKT Peerless was retained to provide environmental consulting services at Holy Redeemer Grade School located at 1711 Junction Street, Detroit, Wayne County, Michigan (subject property). AKT Peerless conducted sampling of the municipally-provided drinking water at the subject property. AKT Peerless' scope of services is based on its proposal, PF-19174, dated April 27, 2016, and the existing master services agreement between AKT Peerless and the Archdiocese of Detroit.

Introduction

AKT Peerless was provided a letter from the City of Detroit Health Department to Holy Redeemer Grade School, dated April 14, 2016, regarding the protection of children from lead exposure at all early childhood education centers (ECECs). According to the letter, all ECECs are required to provide the Detroit Health Department testing of the drinking water for lead within the past 12 months by June 15, 2016. Laboratory results are required from sampling of three high-flow sources of drinking water in the building, including at least one common-use drinking fountain and the main kitchen tap, if applicable.

Refer to Attachment 1 for a copy of the letter from the Detroit Health Department.

Scope of Assessment

AKT Peerless' scope of work included (1) conducting a pre-sampling inspection of the fixture(s), (2) identifying three high priority sample locations with the assistance of facility maintenance personnel, (3) checking and cleaning aerators, (4) recording water coolers and associated model numbers, (5) noting electric wires grounded to pipes, to the extent readily observable, (6) identifying the locations of recalled water coolers to the extent readily observable, and (7) conducting first draw and 30 second flush samples.

Samples were collected in general accordance with Michigan Department of Environmental Quality (MDEQ) sampling protocol for *Drinking Water Sampling for Lead and Copper at Schools and Daycares on Community Water Supplies*, dated April 20, 2016. The drinking water samples were transported under chain-of-custody documentation to Brighton Analytical Laboratory L.L.C. (BAL), a National Environmental Laboratory Accreditation Conference (NELAC)/MDEQ certified drinking water laboratory. Refer to Attachment 2 for a site map with sample locations. Refer to Attachment 3 for a photographic log.

Water Cooler Survey

AKT Peerless identified the following water coolers at the subject property:

Manufacturer	Model Number	Quantity	Grounded Piping (Yes/No/Not Accessible)
Elkay	Not accessible	1	Not accessible
Elkay	EWCA_4_1A	2	Not accessible
Elkay	EWCA_B_3	1	Not accessible
Oasis	Not accessible	1	Not accessible
Elkay	FD7003T12	1	Not accessible
Elkay	EHFSA8_1G	1	Not accessible; however, according to site contact, the cooler is grounded.

AKT Peerless also observed one water cooler and one water bubbler; however, no manufacturer or model number were identified.

A survey of water coolers at the subject property did not identify water coolers that were recalled due to potential lead exposure hazards.

Laboratory Analysis and Methods

AKT Peerless submitted six of drinking water samples collected from the subject property to BAL for the analysis of lead. Samples were analyzed using United States Environmental Protection Agency (USEPA) Method 200.8 rev 5.4. If present, aerators were removed and cleaned at each sample location, except for the aerator on the lunch room faucet was stuck closed. The results of the laboratory analyses of the samples are summarized in the table below:

Summary of Analytical Results

Sample Identification*	Analytical Result (parts per billion, ppb)
HR-WC-P-01	3
HR-WC-F-01	4
HR-WC-P-02	Not detected
HR-WC-F-02	2
HR-KC-P-01	Not detected
HR-KC-F-01	Not detected

* HR = Holy Redeemer; WC = Water Cooler; KC = Kitchen Cold; P = Primary Draw; F = Flush Draw

Analytical Results

AKT Peerless compared the laboratory analytical results to the National Primary Drinking Water Standards (adopted by the MDEQ). The laboratory analytical results did not indicate the presence of lead above applicable primary drinking water standards.

Refer to Attachment 4 for a complete laboratory analytical report and chain of custody documentation.

Conclusions

Based on laboratory analytical results, target parameters were not detected in the samples above the United States Environmental Protection Agency (USEPA) action level of 15 ppb.

Limitations

The information and opinions obtained in this report are for the exclusive use of Holy Redeemer Grade School and the Archdiocese of Detroit. No distribution to or reliance by other parties may occur without the express written permission of AKT Peerless. AKT Peerless will not distribute this report without your written consent or as required by law or by a Court order. The information and opinions contained in the report are given in light of that assignment. The report must be reviewed and relied upon only in conjunction with the terms and conditions expressly agreed upon by the parties and as limited therein. Any third parties who have been extended the right to rely on the contents of this report by AKT Peerless (which is expressly required prior to any third-party release), expressly agrees to be bound by the original terms and conditions entered into by AKT Peerless, Holy Redeemer Grade School, and the Archdiocese of Detroit.

Subject to the above and the terms and conditions, AKT Peerless accepts responsibility for the competent performance of its duties in executing the assignment and preparing reports in accordance with the normal standards of the profession, but disclaims any responsibility for consequential damages. Although AKT Peerless believes that results contained herein are reliable, AKT Peerless cannot warrant or guarantee that the information provided is exhaustive or that the information provided by Holy Redeemer Grade School and the Archdiocese of Detroit or third parties is complete or accurate.

Signatures of Environmental Professionals

Deanna Hutsell, P.E.
Project Manager
AKT Peerless
Farmington, Michigan Office
Phone: 248.615.1333
Fax: 248.615.1334

The following individual contributed to the completion of this report.

Julie Barton
Project Manager
AKT Peerless
Detroit, Michigan Office

Attachment 1 Detroit Health Department Letter
Attachment 2 Site Plan with Sampling Locations
Attachment 3 Photographic Log
Attachment 4 Laboratory Analytical Report and Chain of Custody Documentation

AKTPEERLESS

Attachment 1
Detroit Health Department Letter

Detroit Health Department

April 14, 2016

Holy Redeemer Grade School
1711 Junction St
Detroit, MI 48209-2190
(313) 841-5230

Protecting Detroit children from lead

Dear Head Administrator:

We are contacting you regarding our shared efforts to maintain a safe and healthy learning environment for Detroit children. Given the recent news about potential lead contamination of school drinking water in Michigan schools, including Howell and Westland, the Detroit Health Department is being proactive to assure that the water in schools, preschools, daycares, and childcare centers is clean and free of lead.
Therefore, we are asking that your school either:

1) Furnish evidence of water testing your campus meeting EPA criteria (https://www.epa.gov/dwreginfo/lead-drinking-water-schools-and-child-care-facilities) conducted after 4/15/2015; or
2) Conduct water testing for lead contamination. Water testing should be conducted according to EPA criteria by a 3rd party (more on specific criteria and 3rd party vendors in the accompanying sheet).

These are required by June 15th, 2016:

- To offset the costs of testing, the Detroit Health Department will reimburse your school for up to $225, with funding made possible by a generous grant from the Children's Hospital Foundation of Michigan. Reimbursement will be provided after the Detroit Health Department has received your completed lab results.
- If there is evidence of lead contamination above the actionable level of 15 parts per billion, we will require a full assessment and mitigation plan.
- Further, the Detroit Health Department recommends that all children under the age of 6 be tested annually for elevated blood lead.

Please send your completed lab results to the Detroit Health Department:

ATTN: Matt Vallevand
Detroit Health Department
3245 E. Jefferson Ave, Ste 100
Detroit, MI 48207

If you have any questions, please contact Matt Vallevand:
Email: vallevandm@detroitmi.gov
Or by phone: (313) 876-4550

Additional resources about Lead can be found at the following websites or by calling the telephone numbers provided:

1. Detroit Health Department Lead Program: 313-876-0133
2. Centers for Disease Control & Prevention (CDC) www.cdc/gov/ncel/lead; 800-232-4636
3. Us Environmental Protection Agency (EPA): www.epa.gov/nlic.htm. 800-424-LEAD
4. US Department of Housing and Urban Development: www.hud.gov/lead
5. US Consumer Product Safety Commission Hotline: www.cpcs.gov 800-638-2772

Sincerely,

Abdul M. El-Sayed, MD, DPhil
Executive Director & Health Officer

Detroit Health Department

PURPOSE:

To ensure that all Licensed daycares, preschools, head starts, and elementary schools (early childhood education centers; ECECs) in the City of Detroit have completed a Lead Hazard Risk including screening drinking water for lead contamination.

POLICY:

All ECECs licensed for children in the in the City of Detroit shall complete a Lead Hazard Risk Assessment of the facilities that includes testing the drinking water for Lead in accordance with EPA standards (https://www.epa.gov/dwreginfo/lead-drinking-water-schools-and-child-care-facilities) and guidance from the WK Kellogg Foundation (https://www.wkkf.org/~/media/pdfs/healthy%20kids/2016/managing%20lead%20in%20drinking%20water.pdf).

PROCEDURE:

1. As part of the mandated inspection of all ECECs by the Detroit Health Department (DHealth), all ECECs shall be notified about this new policy in writing.
2. All Lead testing must adhere to the guidelines and protocols set forth by the U.S. Environmental Protection Agency (EPA) (https://www.epa.gov/dwreginfo/lead-drinking-water-schools-and-child-care-facilities).
3. Lead testing and assessment must be completed by a 3rd party State or EPA certified vendor (vendor list attached).
4. During DHealth's inspection, or by June 15th, the ECEC is required to provide DHealth with a copy of Lead testing of the drinking water within the last 12 months.
5. If no lead screening test has been done, the ECEC has until June 15th, 2016 to provide DHealth with the Lab results resulting from sampling at three high-flow sources of drinking water in the building (including at least one common-use drinking fountain, if applicable; and the main kitchen tap, if applicable). Failure to provide the test results may result in DHealth's recommendation to the State to suspend or terminate the license or a cease and desist order by the Health Officer.
6. Lead in drinking water must be less than 15 parts per billion (ppb). If the results of Lead in drinking water is greater that 15ppb, the ECEC in conjunction with DHealth shall notify parents/guardians of all children in the ECEC in writing within seven (7) days of the receipt of the Lab results.
    a. The Health Department shall coordinate services for all children with elevated Lead levels greater than 5µg/dl per usual protocols.
7. If levels are found to be higher than the actionable limit of 15 ppb, the ECEC shall:
    a. Immediately shut down the flows from which the samples were collected.
    b. Immediately provide students and staff bottled drinking water in classrooms and main areas.
    c. Immediately retest all usable water flows in the building per EPA protocol.
    d. Provide DHealth a written plan within 15 days of the receipt of lab results greater than 15ppb with a plan to mitigate the source of the lead. The ECEC shall ensure that all mitigation work is completed within 90 days with the drinking water tested below 15 ppb during which bottled drinking water will be provided.
8. This policy shall take effect on April 15th, 2016. By this date, each ECEC will be notified of the requirement to have conducted testing by May 15th, 2016.

ADAPTED EPA SAMPLING PROCEDURES:

ECECs will be required to sample at least 3 high-priority sites:

- Drinking fountains, both bubbler and water cooler style
- Kitchen sinks
- Classroom combination sinks and drinking fountains
- Home economic rooms sinks
- Teacher's lounge sink, nurse's office sink
- Classroom sinks in special education classrooms
- Any sink known to be or visibly used for consumption (for example, coffee maker or cups are nearby)

Before you sample

A written sampling plan is highly recommended. It will clarify procedures for any personnel who are involved in the sampling program.

- Conduct a pre-sampling inspection.
- Identify each outlet that will be tested for lead.
- Check aerators for debris; clean if necessary.
- Make note of cooler make and model.
- Note any locations where electrical wires are grounded to water pipes.
- Identify locations of recalled water coolers.

Code each outlet using a system that will allow you to identify each unique outlet by:

- Location
- Type
- Other relevant characteristic

Example of a coding system

A drinking water bubbler (DW) on the 2nd floor (02) of the middle school (MID), the 15th outlet counted, might be coded as MID- 02- DW-015.
Coding examples can include:

- DW= drinking water bubbler
- WC = water cooler (chiller unit)
- CF = classroom faucet
- KC = kitchen faucet, cold
- KH = kitchen faucet, hot
- EC = home economics room, cold
- EH = home economics room sink, hot
- BF = bathroom faucet
- NS = nurse's office sink
- SC = service connector

In addition to the unique outlet code, a unique sample identifier is necessary if more than one sample will be taken from an outlet. A flush sample would also require a unique identifier.
The first draw (P) and flush (F) samples taken for the above outlet would be MID- 02- DW-015-P-01 and MID- 02- DW-015-F-01.

- P = primary (first draw) sample
- F = flush
- 01 = first sample
- 02 = second sample

The coding should be identified on a site map and a narrative that describes the location.

Communicate your plans
Be open about goals to avoid confusion and communication breakdowns at a later stage. Communicate to maintenance staff, teachers, parents, and students about the plan and their roles.

How to sample?
Basic sampling protocol: This is an overview of the sampling procedures. A more detailed protocol is contained in EPA's guidance document 3Ts for Reducing Lead in Drinking Water in Schools: Revised Technical Guidance (https://www.epa.gov/dwreginfo/lead-drinking-water-schools-and-child-care-facilities#3Ts). 3rd party testers should refer to this document.

- Determine which outlets will be sampled. Determine priorities and code outlets appropriately.
- Outlets must be inactive for at least 6 to 8 hours before testing. (Overnight is best.)
- Take a "first draw" 250 ml** sample at each outlet. A "first draw" is the water that is the first to come out of the tap after the period of inactivity.
- If lead is suspected throughout system, take a 30 second "flush" sample from outlet(s).
- Send samples to a laboratory which is certified to test lead in drinking water.

Detroit Health Department

Lead Water Sampling 3rd Party Testers

Company	Address	City	Phone Number
ATC Associates	46555 Humboldt Dr, Suite 100	Novi	(248) 669-5140
Nova Environmental	5300 Plymouth Rd	Ann Arbor, MI	(734) 930-0995
Atwell Hicks	Two Towne Square, Suite 700	Southfield	(248) 447-2000
Green Solutions	17800 Woodward Ave	Detroit	(313) 279-0449
American Environmental Consulting	12838 Gavel	Detroit	(313) 491-2600

Please send completed lab results to the Detroit Health Department:

ATTN: Matt Vallevand
Detroit Health Department
3245 E. Jefferson Ave, Ste 100
Detroit, MI 48207

If you have any questions, please contact Matt Vallevand:

Email: vallevandm@detroitmi.gov
Phone: (313) 876-4550

Reimbursement ($225) can only be processed after the Detroit Health Department has received your site's lab samples. You may authorize your lab to send results directly to the Detroit Health Department, just be sure that your location's name and address are clearly labeled.

Detroit Health Department

Helpful information about lead safety and testing

To help ensure the safety of Detroiters and make sure it is following national best practices, the Detroit Health Department is seeing to it that the water in Detroit's schools, pre-schools, Head Start centers, day cares and child care centers is safe to drink.

To make sure the testing is done properly, we are requiring that this testing be done by a facility that is certified by the US Environmental Protection Agency.

The EPA limit for the presence of lead in water to be considered safe for drinking is 15 parts per billion (PPB). Most recent tests conducted of water being distributed by the City is well within EPA Guidelines, averaging 2.3 PPB. Because there are still lead service lines in the city and lead pipes in many houses and other buildings, we felt it was important to make sure that the water at our educational facilities be tested.

If elevated levels of lead are found as a result of any of these tests, the water outlet will immediately be shut down in the school. The Detroit Health Department will ensure that the drinking water throughout the entire school is immediately retested. Bottled water will be provided for all students and staff.

Should your child be tested for lead poisoning?
All children under the age of 6 in Detroit and other cities with older homes should be tested annually for lead. To have your child tested, you should make an appointment to take your child to their pediatrician or health care provider. Call the toll-free number on the back of your child's health insurance card.

You can also make an appointment at Children's Hospital Pediatrics. Call 313-745-KIDS (5437).

The Detroit Health Department also provides lead testing at its clinics at Samaritan Center (313-410-8142; at 5555 Connor, Detroit, MI 48213) or Family Place (313-410-7803; at 8726 Woodward Ave., Detroit MI, 48202).

Family Place is by-appointment only, while Samaritan Center takes walk-ins. The clinics are open 8 a.m.-5 p.m., except between noon-1 p.m. Mondays, Tuesdays, Thursdays and Fridays. It is open 9 a.m.-6 p.m. Wednesdays, except it is closed from 1 p.m.-2 p.m.

If your child does not have medical coverage, check to see if he or she is Medicaid eligible. Go to www.mibridges.michigan.gov/access for information.

Detroit Health Department

Q: Who is at risk for lead poisoning?

A: Children ages 6 and younger are at the greatest risk because they are still growing and developing. Exposure to lead can result in delays in physical and mental development for small children. Pregnant women and nursing mothers are also at risk and should avoid exposure to lead to protect their children. Adults can also suffer from lead poisoning, which usually results in aches, pains, and feeling tired all the time. However, there are few long term effects of lead poisoning in adults.

Q: How is lead poisoning treated?

A. It depends on how high the lead level is. At a very high level, an individual should be hospitalized so that the lead can be removed from his or her blood. At lower levels, steps should be taken to eliminate the exposure to lead while the body clears the lead itself.

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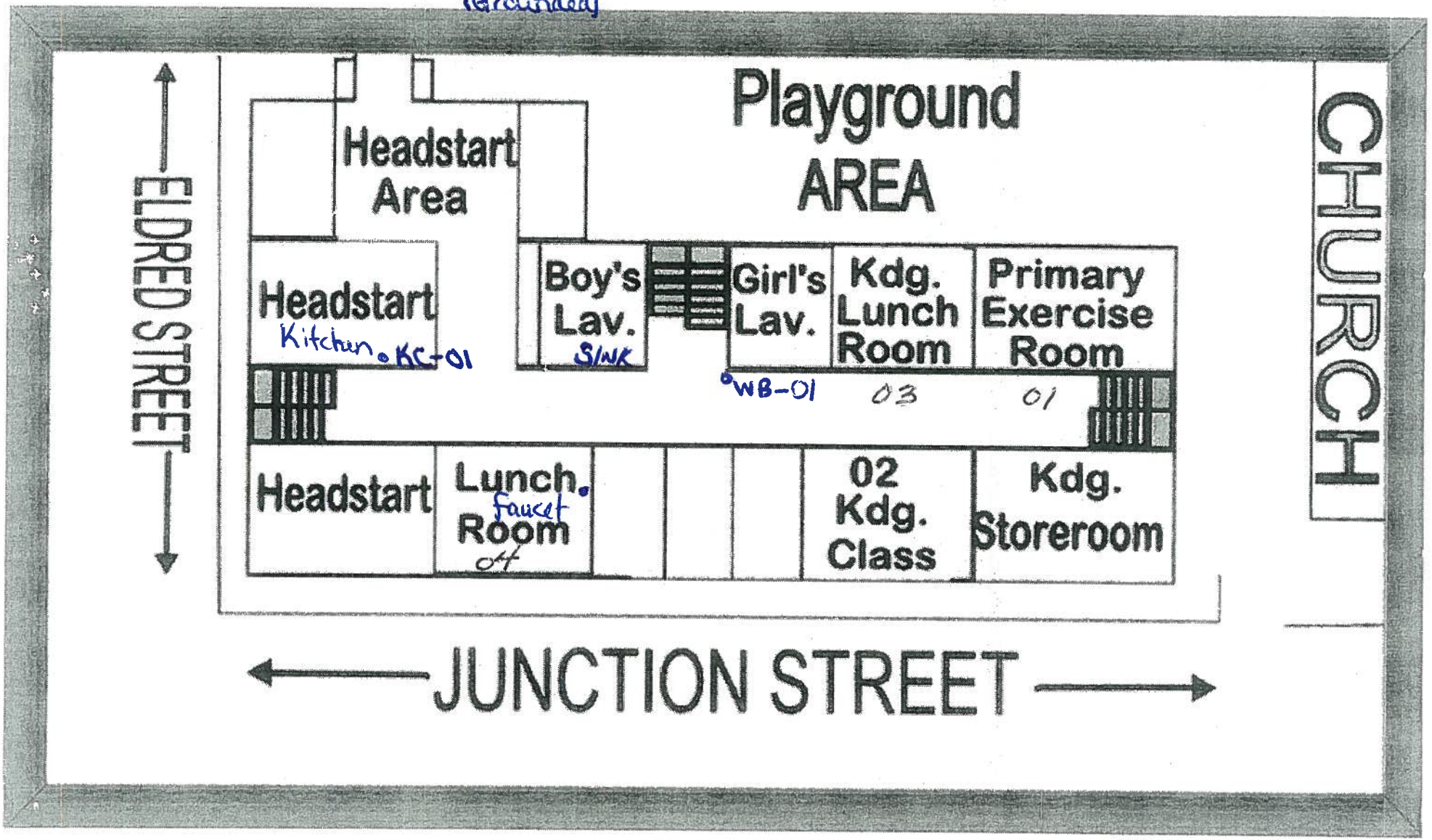
Attachment 2
Site Plan and Sampling Locations

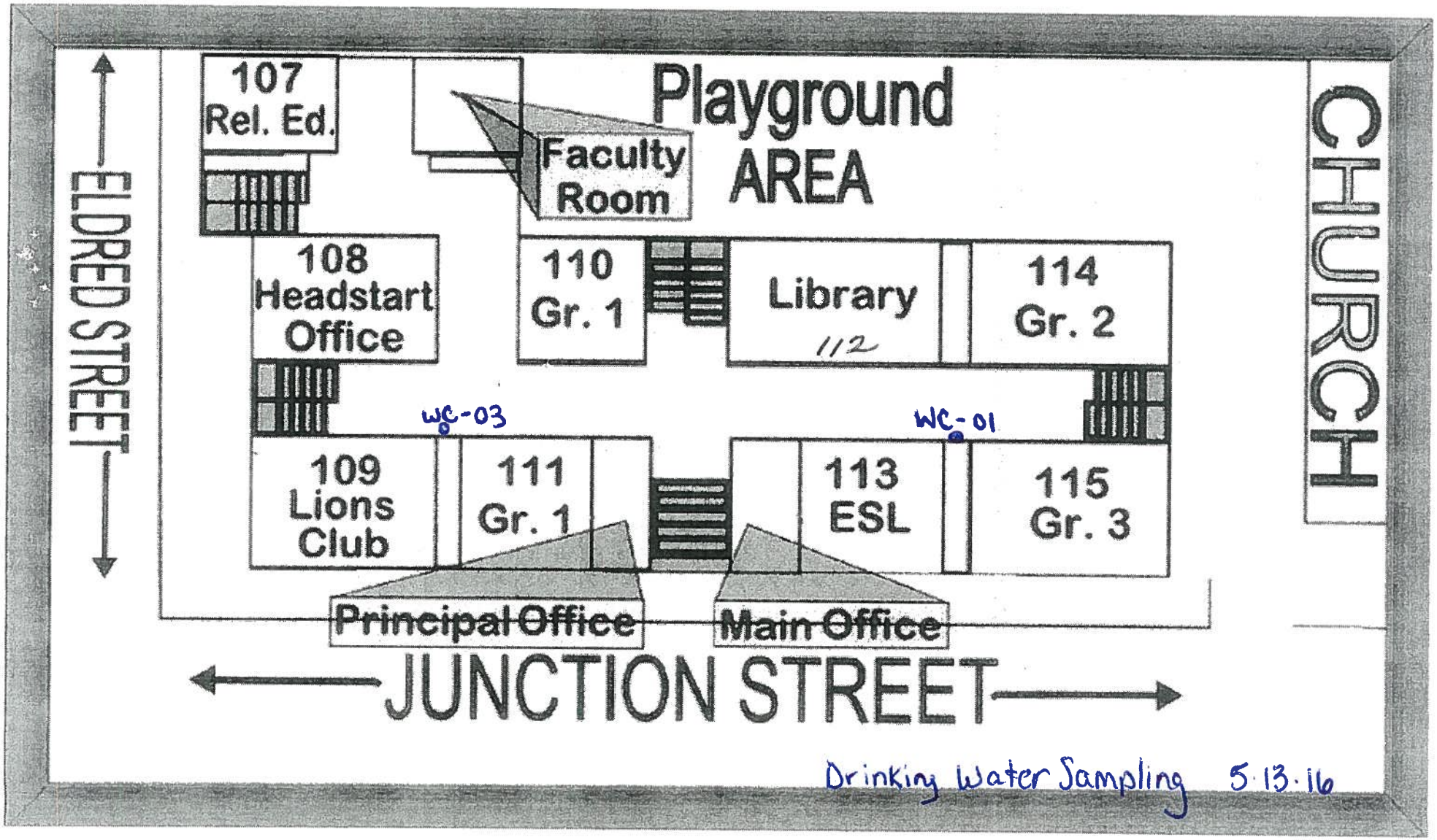
HOLY REDEEMER GRADE SCHOOL BASEMENT

Exit and Stairs



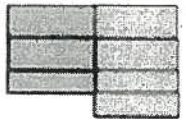
HOLY REDEEMER GRADE SCHOOL MAIN FLOOR

Exit and Stairs

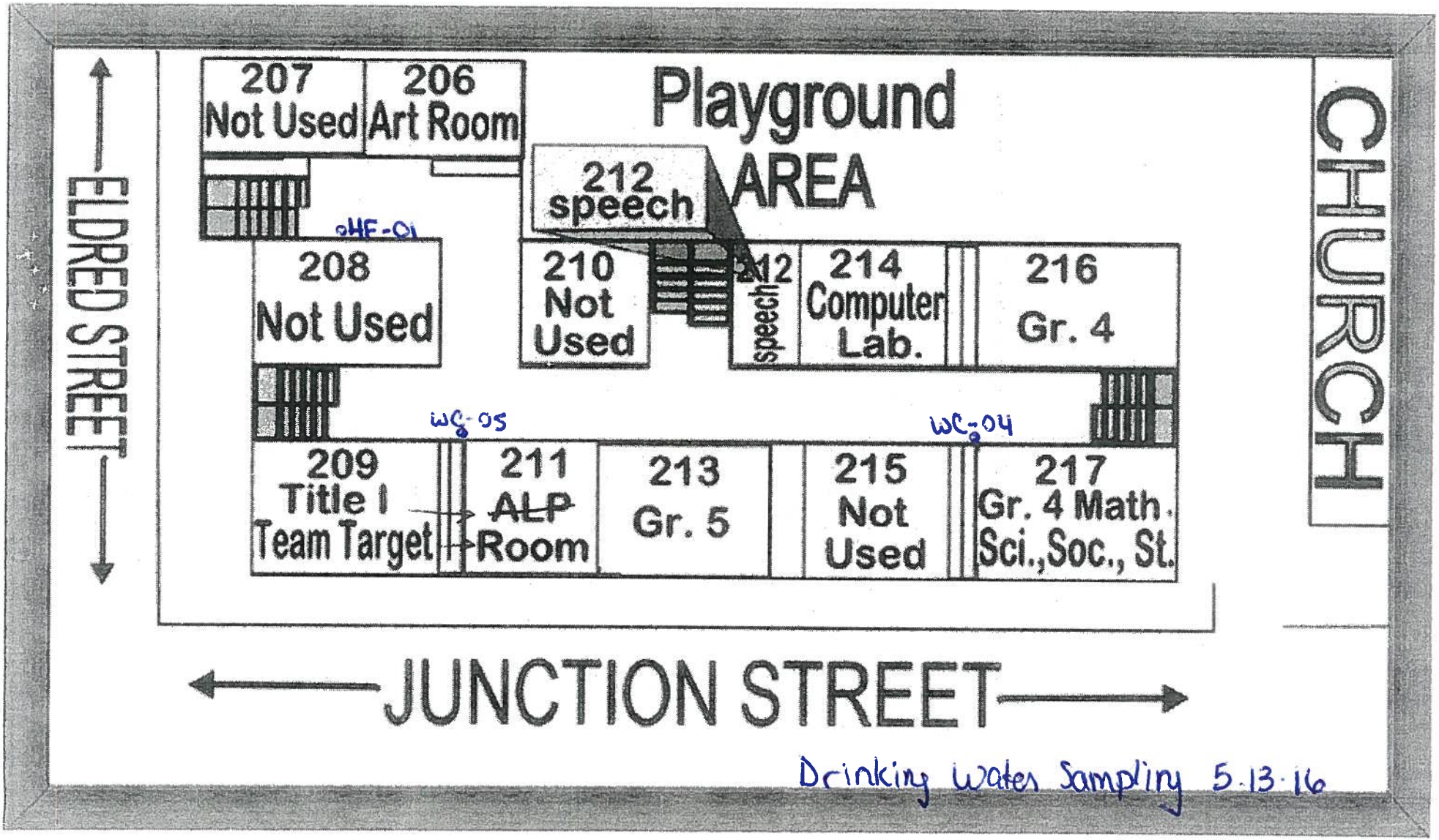


Drinking Water Sampling 5.13.16

HOLY REDEEMER GRADE SCHOOL SECOND FLOOR



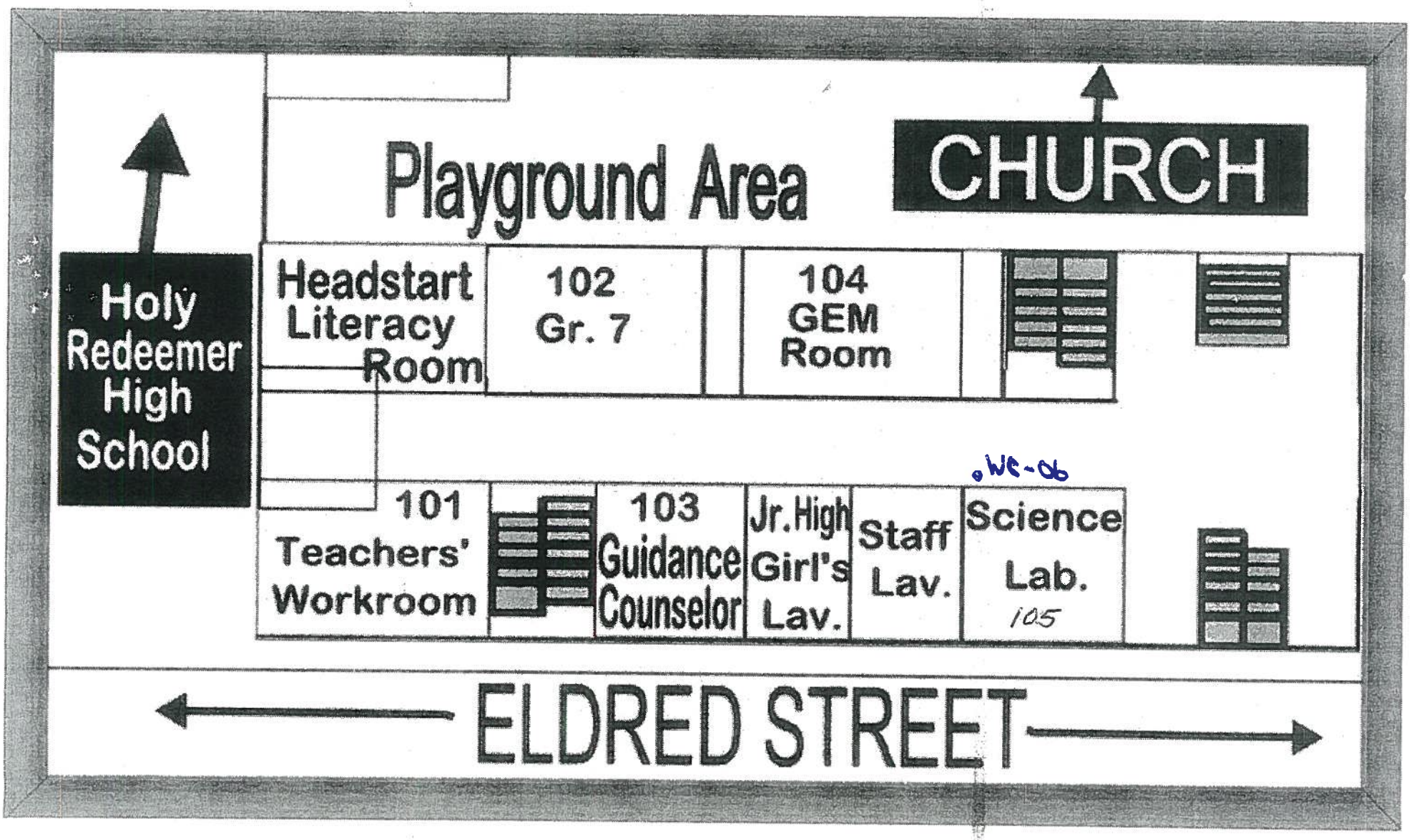
→ **Exit and Stairs**



Drinking Water Sampling 5.13.16

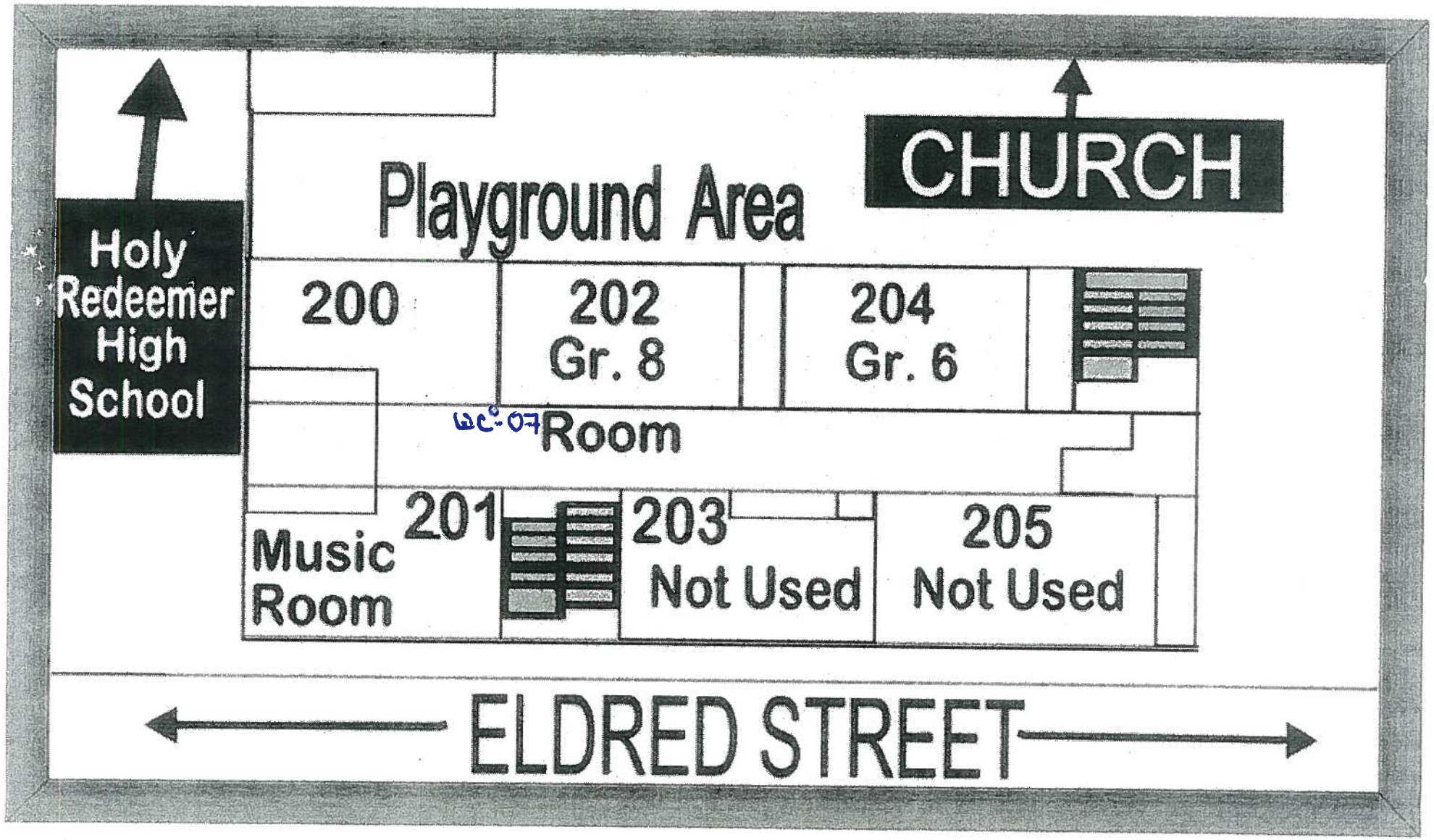
HOLY REDEEMER JUNIOR HIGH FIRST FLOOR

Exit and Stairs



HOLY REDEEMER JUNIOR HIGH SECOND FLOOR

Exit and Stairs



Attachment 3
Photographic Log

OASIS WATER COOLER IN SUBJECT BUILDING

ELKAY WATER COOLER IN SUBJECT BUILDING

AKTPEERLESS

PHOTOGRAPHS

HOLY REDEEMER GRADE SCHOOL
1711 JUNCTION STREET
DETROIT, MICHIGAN

TAKEN BY: JSB
DATE: 5/13/16

PROJECT NUMBER: 11510F

ELKAY WATER COOLER IN SUBJECT BUILDING

WATER BUBBLER

AKTPEERLESS

PHOTOGRAPHS

HOLY REDEEMER GRADE SCHOOL
1711 JUNCTION STREET
DETROIT, MICHIGAN

TAKEN BY: JSB
DATE: 5/13/16

PROJECT NUMBER: 11510F

AKTPEERLESS

Attachment 4
Laboratory Analytical Report and Chain of Custody Documentation

Brighton Analytical L.L.C.™
2105 Pless Drive · Brighton, Michigan 48114 · Phone (810) 229-7575 · Fax (810) 229-8650 · E-mail bai-brighton@sbcglobal.net

May 19, 2016

AKT Peerless
333 W. Fort
Detroit, MI 48226

Subject: AOD Drinking Water - Holy Redeemer
1151 of-1-20

Dear Ms. Barton :

Thank you for making Brighton Analytical, L.L.C. your laboratory of choice. Attached are the results for the samples submitted on 05/16/2016 for the above mentioned project. NELAP/TNI Accredited Analysis and MDEQ Drinking Water Certified Analysis will be identified in their respective reporting formats. Hard copies can be supplied at your request for a fee of $20.00 per copy.

The invoice for this project will be emailed separately. If you have any questions concerning the data or invoice, please don't hesitate to contact our office. We welcome your comments and suggestions to improve our quality systems. Please reference Brighton Analytical, L.L.C. Project ID 39076 when calling or emailing. We thank you for this opportunity to partner with you on this project and hope to work with you again in the future.

Sincerely,
Brighton Analytical, L.L.C.

Brighton Analytical, L.L.C.™

Email: bai-brighton@sbcglobal.net

2105 Pless Drive
Brighton, MI 48114

Phone: 810-229-7575
Fax: 810-229-8650

BA PROJECT #: 39076

PAGE 1 OF 1

ABBREVIATIONS FOR MATRIX
S = Solid
L = Liquid
DW = Drinking H_2O
O = Oil
P = Wipe
A = Air (Tedlar Bag)
F = Filter
T = Tube
M = Misc.

PROJECT NAME: AOD Drinking Water

PROJECT #: Holy Redeemer 11510f-1-20

PO #: (PLEASE NOTE IF DIFFERENT BILLING ADDRESS)

Sample collected by: Julie Burton / Kyle Jump

REQUESTED TURNAROUND: (circle one)
Rush: 1 -3 business days (verify with lab & specify date needed)
1 Day = 2.5X Cost 2 Day = 2X Cost 3 Day = 1.5X Cost
Standard: 5 business days

If RUSH, approved by: _____

Sample Coll.

Brighton ID #	Sample Description	Date	Time	Container Type & Quantity: VOA'S (PRES) Y N N/A	HDPE UNPRESERVED	HDPE HNO_3	HDPE H_2SO_4	HDPE NAOH	AMBER PRESERVED?	GLASS, NO PRESERVATIVE	STERILIZED BACTERIA	MEOH Preserved Y N	Sample Matrix	Analysis Requested/Method: Lead
1) 2938	HR-WC-P-01	5-13-16	6:15			X							DW	X
2) 39	HR-WC-F-01		6:15		•	X							DW	X
3) 40	HR-WC-P-02		6:25			X							DW	X
4) 41	HR-WC-F-02		6:25			X							DW	X
5) 42	HR-KC-P-01		6:20			X							DW	X
6) 43	HR-KC-F-01		6:20			X							DW	X
7)														
8)														
9)														
10)														

Special Instructions:

COMPANY/MAILING ADDRESS:
AKT PEERLESS
333 W Fort Suite 100
Detroit MI 48226
ATTN: Julie Burton
PHONE: 313-212-9558
FAX OR EMAIL: burton,@aktpeerless.com

Samples received within hold time? yes ☒ no ☐
Temperature of samples °C:
pHs verified in login? yes ☒ no ☐
Headspace/bubbles in VOA's? yes ☐ no ☐ n/a ☒
Sample containers and COC match? yes ☒ no ☐

BILLING ADDRESS (IF REQUIRED):
214 Jones Ave
Saginaw MI 48607
989-754-9896
invoices@aktpeerless.com

Drinking H_2O:
Fax to LCHD? yes ☐ no ☒
Chlorinated Water Supply? yes ☒ no ☐
AMT.: ~~150~~

MCL Failure: yes ☐ no ☐
Client Notified (date/time/initials): _____

Please fill out the Chain of Custody completely and review. Incorrect or incomplete information will result in a "hold" on all analyses.

Trans. #	RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:	Trans. #	RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
1	Kyle Jump		5/16/16	0940	3				
2			5-16-16	12:30 pm	4				

Brighton Analytical LLC
2105 Pless Drive
Brighton, Michigan 48114
Phone: (810)229-7575 (810)229-8650
e-mail:bai-brighton@sbcglobal.net
MDNRE Certified #9404
NELAC Accredited #176507

Sample Date/Time: 5/13/2016 06:15
Submit Date/Time: 5/16/2016 12:30
Report Date: 5/19/2016

AKT Peerless
333 W. Fort
Detroit, MI 48226

BA Project # **39076**
BA Sample ID **CD02938**

Project Name: **AOD Drinking Water - Holy Redeemer**
Project Number: **1151 of-1-20**
Sample ID: **HR-WC-P-01**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	3	ug/L	1	15	EPA 200.8 rev5.4	21:13	05/18/2016

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.
Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

Released by _____

Date 5/19/16

Brighton Analytical LLC
2105 Pless Drive
Brighton, Michigan 48114
Phone: (810)229-7575 (810)229-8650
e-mail:bai-brighton@sbcglobal.net
MDNRE Certified #9404
NELAC Accredited #176507

Sample Date/Time: 5/13/2016 06:15
Submit Date/Time: 5/16/2016 12:30
Report Date: 5/19/2016

AKT Peerless
333 W. Fort
Detroit, MI 48226

BA Project # **39076**
BA Sample ID **CD02939**

Project Name: **AOD Drinking Water - Holy Redeemer**
Project Number:**1151 of-1-20**
Sample ID: **HR-WC-F-01**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	4	ug/L	1	15	EPA 200.8 rev5.4	21:18	05/18/2016

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.
Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

Released by _____

Date 5/19/16

Brighton Analytical LLC
2105 Pless Drive
Brighton, Michigan 48114
Phone: (810)229-7575 (810)229-8650
e-mail:bai-brighton@sbcglobal.net
MDNRE Certified #9404
NELAC Accredited #176507

Sample Date/Time: 5/13/2016 06:25
Submit Date/Time: 5/16/2016 12:30
Report Date: 5/19/2016

AKT Peerless
333 W. Fort
Detroit, MI 48226

BA Project # **39076**
BA Sample ID **CD02940**

Project Name: **AOD Drinking Water - Holy Redeemer**
Project Number: **1151 of-1-20**
Sample ID: **HR-WC-P-02**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	21:36	05/18/2016

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.
Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

Released by _____

Date 5/19/16

Brighton Analytical LLC
2105 Pless Drive
Brighton, Michigan 48114
Phone: (810)229-7575 (810)229-8650
e-mail:bai-brighton@sbcglobal.net
MDNRE Certified #9404
NELAC Accredited #176507

Sample Date/Time: 5/13/2016 06:25
Submit Date/Time: 5/16/2016 12:30
Report Date: 5/19/2016

AKT Peerless
333 W. Fort
Detroit, MI 48226

BA Project # **39076**
BA Sample ID **CD02941**

Project Name: **AOD Drinking Water - Holy Redeemer**
Project Number: **1151 of-1-20**
Sample ID: **HR-WC-F-02**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	2	ug/L	1	15	EPA 200.8 rev5.4	21:40	05/18/2016

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.
Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

Released by _____
Date 5/19/16

Brighton Analytical LLC
2105 Pless Drive
Brighton, Michigan 48114
Phone: (810)229-7575 (810)229-8650
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MDNRE Certified #9404
NELAC Accredited #176507

Sample Date/Time: 5/13/2016 06:20
Submit Date/Time: 5/16/2016 12:30
Report Date: 5/19/2016

AKT Peerless
333 W. Fort
Detroit, MI 48226

BA Project # **39076**
BA Sample ID **CD02942**

Project Name: **AOD Drinking Water - Holy Redeemer**
Project Number:**1151 of-1-20**
Sample ID: **HR-KC-P-01**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	21:45	05/18/2016

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.
Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

Released by _____

Date 5/19/16

Brighton Analytical LLC
2105 Pless Drive
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Phone: (810)229-7575 (810)229-8650
e-mail:bai-brighton@sbcglobal.net
MDNRE Certified #9404
NELAC Accredited #176507

Sample Date/Time: 5/13/2016 06:20
Submit Date/Time: 5/16/2016 12:30
Report Date: 5/19/2016

AKT Peerless
333 W. Fort
Detroit, MI 48226

BA Project # **39076**
BA Sample ID **CD02943**

Project Name: **AOD Drinking Water - Holy Redeemer**
Project Number: **1151 of-1-20**
Sample ID: **HR-KC-F-01**

Analyte Name	Result	Units	RL	MCL	Method Reference	Analysis Time	Analysis Date
Drinking Water Metal Analysis							
Total Lead (Drinking Water)	Not detected	ug/L	1	15	EPA 200.8 rev5.4	21:49	05/18/2016

RL=Reported detection limit for analytical method requested. Some compounds require special analytical methods to achieve MDNR designated target detection limits (TDL).

MCL = Maximum contaminant Levels.
Analysis not specifically identified as drinking water are for non-regulatory compliance purposes.

Released by _____

Date 5/19/16

Brighton Analytical L.L.C.

BRIGHTON ANALYTICAL, LLC

QUALITY ASSURANCE/QUALITY CONTROL

ICP-MS
EPA METHOD 200.8/6020

REPRESENTATIVE BATCH PRECISION AND ACCURACY QUALITY CONTROL SUMMARY

Analysis Date: 5/18/2016 Standard ID: 050416 H2O Batch: 5/17/2016 W4

Matrix Spike Lab ID: CD02943 Matrix: Total Analyst: LT

Metals	Matrix Spike - Precision *			Matrix Spike - Accuracy**				Miscellaneous***		
	Matrix Spike (ug/L)	Matrix Spike Dup (ug/L)	RPD (%)	Spk Conc (ug/L)	MS Recovery (%)	MSD Recovery (%)	Sample Conc (ug/L)	Method Blk (ug/L)	LCS-Method STD (%)	Ind. Std. SPEX 1&3 (%)
Copper	997	1059	6.0	1000	96.8	103.0	29	<1	100.3	98.0
Arsenic	951	1012	6.2	1000	95.1	101.2	0	<1	95.9	94.0
Lead	948	953	0.5	1000	94.8	95.3	0	<1	96.1	94.2

* Matrix spike precision range +/- 20% RPD
** Matrix spike accuracy range +/- 30% recovery
*** LCS accuracy range +/- 15% recovery / Ind std accuracy range +/- 10% recovery

Comments: _____