



An Employee Owned Company

November 27, 2017

Steven Lee  
Alameda Unified School District MOF  
2060 Challenger Drive  
Alameda, CA 94501

*transmitted via email to stlee@alameda.k12.ca.us*

Re: **Drinking Water Lead Sampling Results**  
**Alameda Unified School District (AUSD) – Otis Elementary School Drinking Fountains**  
**3010 Fillmore St, Alameda, CA**  
*ACC Project No. 3007-119.00*

Dear Mr. Lee:

Enclosed please find the laboratory test results for the drinking water sampling performed at the above-referenced site on November 3, 2017. Additionally, ACC had previously performed water sampling at Portable Classrooms 116-120. Sampling report for previous water sampling attached. The sampling was performed to determine lead concentrations in drinking water at drinking fountain locations throughout the school.

The intent of the testing was to collect drinking water samples to determine if lead concentrations at drinking water locations exceed the EPA and California Lead Action Levels. The EPA and State of California Lead Action Levels for lead in drinking water are concentrations exceeding 15 parts per billion (ppb). ACC collected drinking water samples from thirty-three (33) locations at the school. At each location, ACC collected water samples as “first-draw” and “post-flush” samples. First-draw samples were collected after non-use for a minimum of eight (8) continuous hours. Post-flush samples were collected after running the tap for at least thirty (30) seconds. The samples were collected in 125 milliliter bottles preserved with nitric acid and were submitted under standard chain of custody protocols to Forensic Analytical of Hayward, California, an American Industrial Hygiene Association (AIHA) accredited laboratory, for analysis. Samples were analyzed for lead in accordance with the EPA SM3113B Test Method.

ACC collected a total of 66 drinking water samples at 33 drinking fountain locations for analysis. Copies of the laboratory results are attached.

### **Drinking Water Sample Results**

The water samples were obtained from drinking fountain locations as listed herein. The sample numbers, locations, type of draw and lead concentrations are listed below. ACC collected drinking water samples from the main drinking water sources. Not all water sources were sampled.

Sample Number	Location	Type of Draw	Lead Concentration in Parts Per Billion (PPB)
WS-1-FD	Staff Room	First Draw	7
WS-1-PF		Post-Flush	<5
WS-2-FD	Health Office	First Draw	<5
WS-2-PF		Post-Flush	<5
WS-3-FD	Under Portico Outside Main Office	First Draw	5
WS-3-PF		Post-Flush	7
WS-4-FD	Room 102	First Draw	8
WS-4-PF		Post-Flush	8
WS-5-FD	Room 101	First Draw	<5
WS-5-PF		Post-Flush	<5
WS-6-FD	Room 103	First Draw	9
WS-6-PF		Post-Flush	<5
WS-7-FD	Room 104	First Draw	12
WS-7-PF		Post-Flush	15
WS-8-FD	Room 105	First Draw	<5
WS-8-PF		Post-Flush	<5
WS-9-FD	Room 109	First Draw	<5
WS-9-PF		Post-Flush	<5
WS-10-FD	<b>Room 108</b>	First Draw	10
<b>WS-10-PF</b>		<b>Post-Flush</b>	<b>16</b>
WS-11-FD	Room 107	First Draw	13
WS-11-PF		Post-Flush	7
WS-12-FD	Room 106	First Draw	<5
WS-12-PF		Post-Flush	<5
WS-13-FD	Under Portico across from Room 130	First Draw	<5
WS-13-PF		Post-Flush	<5
WS-14-FD	Room 110	First Draw	<5
WS-14-PF		Post-Flush	<5

AUSD Otis Elementary School Drinking Fountains Water Sampling

3010 Fillmore St, Alameda, CA

November 27, 2017

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Sample Number	Location	Type of Draw	Lead Concentration in Parts Per Billion (PPB)
WS-15-FD	Room 112 (Note: hot water, pipe splitter running to fountain is connected to the hot water pipe)	First Draw	<5
WS-15-PF		Post-Flush	<5
WS-16-FD	Exterior Playground Fountain shared wall with Room 112	First Draw	<5
WS-16-PF		Post-Flush	<5
WS-17-FD	Room 113 (Note: hot water, pipe splitter running to fountain is connected to the hot water pipe)	First Draw	<5
WS-17-PF		Post-Flush	<5
WS-18-FD	Room 111	First Draw	<5
WS-18-PF		Post-Flush	<5
WS-19-FD	Room 222	First Draw	<5
WS-19-PF		Post-Flush	<5
WS-20-FD	Room 224 (Note: hot water, pipe splitter running to fountain is connected to the hot water pipe)	First Draw	<5
WS-20-PF		Post-Flush	<5
WS-21-FD	2 <sup>nd</sup> Floor Hallway at shared Wall with Room 224	First Draw	8
WS-21-PF		Post-Flush	<5
WS-22-FD	Room 223 (Note: hot water, pipe splitter running to fountain is connected to the hot water pipe)	First Draw	<5
WS-22-PF		Post-Flush	<5
WS-23-FD	Room 221	First Draw	<5
WS-23-PF		Post-Flush	<5
WS-24-FD	Room 220	First Draw	<5
WS-24-PF		Post-Flush	<5
WS-25-FD	Multi-purpose Room	First Draw	<5
WS-25-PF		Post-Flush	<5
WS-26-FD	Playground Fountain at shared Wall with Kitchen/Multi-purpose Room	First Draw	<5
WS-26-PF		Post-Flush	<5
WS-32-FD	Room 332	First Draw	<5
WS-32-PF		Post-Flush	<5
WS-33-FD	Room 333	First Draw	<5
WS-33-PF		Post-Flush	<5

Sample Number	Location	Type of Draw	Lead Concentration in Parts Per Billion (PPB)
WS-34-FD	Room 334	First Draw	<5
WS-34-PF		Post-Flush	<5
WS-35-FD	Room 335	First Draw	<5
WS-35-PF		Post-Flush	<5
WS-36-FD	Room 336	First Draw	<5
WS-36-PF		Post-Flush	<5
WS-37-FD	Room 337	First Draw	<5
WS-37-PF		Post-Flush	<5
WS-38-FD	Exterior under Overhang Outside of Room 332	First Draw	<5
WS-38-PF		Post-Flush	<5
N/A	Portables 116-120 – See Attached Previous Sampling Report	First Draw and Post Flush	All water samples at Portables 116-120 below 5 ppb.

One post-flush water sample concentration was above the EPA and California Lead Action Level of 15 PPB. When the first-draw and post-flush samples are both elevated this may indicate leaching of lead from the fixture and distribution water lines in the building. When the pre-flush only is elevated, this usually indicates localized corrosion issues within the faucet, fittings and/or connections.

The EPA and California Lead Action Levels are used to protect the public from metals that can adversely affect their health. These laws require water systems to monitor lead levels at the consumers’ taps. If Action Levels for lead (15 ppb) are exceeded, installation or modifications to corrosion control treatment is required. In addition, if the action level for lead is exceeded, public notification is required.

### Recommendations

Based on the results of the drinking water investigation, ACC makes the following recommendations:

- ACC recommends disconnecting/replacing the fixture at Room 108 Drinking Fountain location and replacing/inspecting the pipe for corrosion where the post-flush water sampling concentration exceeded the action level and subsequent re-sampling at this location.

### Limitations

ACC shall not be responsible for claims that may arise out of failure to correct problems or to identify problems that may exist at this location. ACC assumes no responsibility for damages for work performed or errors in documentation or missing information. ACC does not guarantee the accuracy of information provided by other parties. All statements and/or recommendations are based on conditions observed and tested at the time of the inspection. The scope of the investigation for this report was to collect representative drinking water samples from several locations at the school. ACC has not investigated and does not possess any opinion regarding other drinking water locations within the building. This report does not intend to identify all hazards or unsafe conditions, or to indicate that other hazards or unsafe conditions do not exist at the subject site.

Please contact me at (510) 638-8400 ext. 109 if you have any questions.

Sincerely,

ACC ENVIRONMENTAL CONSULTANTS, INC.



Ben Schulte-Bisping  
Project Manager  
California Department of Public Health Lead I/A/M #24564



Mark A. Sanchez, CHMM  
President  
California Department of Public Health Lead I/A/M/S #5150

Attachments: AUSD Otis ES Portables Water Sampling Report, dated Sept. 2016.  
Forensic Analytical Metals Analysis of Drinking Water Report #M191456, dated 11/16/17.



September 28, 2016

Steven Lee  
Alameda Unified School District MOF  
2060 Challenger Drive  
Alameda, CA 94501

*transmitted via email to [stlee@alameda.k12.ca.us](mailto:stlee@alameda.k12.ca.us)*

**Re: Drinking Water Lead, Copper, and Iron Sampling Results**  
**Alameda Unified School District (AUSD) – Otis Elementary School Portable Classrooms 116-120**  
**3010 Fillmore Street, Alameda, CA**  
*ACC Project No. 3007-106.00*

Dear Mr. Lee:

Enclosed please find the laboratory test results for the limited drinking water sampling performed at the above-referenced site on September 17, 2016. The sampling was performed in response to staff members expressing concerns of the drinking water quality regarding cloudy water with bad taste at the five (5) portable classrooms.

The intent of the testing was to collect representative water samples to determine whether lead, copper, and iron concentrations of a limited number of drinking water locations exceed the EPA and California Lead and Copper Action Levels or the EPA Secondary Maximum Contaminant level (SMCL) for iron. The EPA and State of California Lead and Copper Action Levels for drinking water are concentrations exceeding 15 parts per billion (ppb) and 1,300 ppb, respectively. The EPA Secondary MCL for iron is a concentration exceeding 300 ppb. ACC collected drinking water samples from ten locations at the subject property. At each location ACC collected water samples as “first-draw” and “post-flush” samples. First-draw samples were collected after non-use for a minimum of eight (8) continuous hours. Post-flush samples were collected after running the tap for at least thirty (30) seconds. The samples were collected in 125 milliliter bottles preserved with nitric acid and were submitted under standard chain of custody protocols to Forensic Analytical of Hayward, California, an American Industrial Hygiene Association (AIHA) accredited laboratory, for analysis. Samples were analyzed for lead in accordance with the EPA SM3113B Test Method, and for copper and iron in accordance with the EPA 200.2/200.7 Test Method.

ACC did not observed any ‘cloudiness’ of the water. No unusual discoloration, taste, or odor was observed at the drinking water fountains in the portable classrooms. The portable classrooms were reported to have been recently installed. The sink fixtures in the classrooms are marked ‘ECAST Lead Free’.

ACC collected a total of ten (10) drinking water samples for analysis. Copies of the laboratory results are attached.

### Drinking Water Sample Results

The water samples were obtained from various locations as listed herein. The sample numbers, locations, type of draw and lead/copper/iron concentrations are listed below. ACC collected drinking water samples from the main source of drinking water. Not all water sources were sampled.

Sample Number	Location	Type of Draw	Lead Concentration in Parts Per Billion (PPB)	Copper Concentration in Parts Per Billion (PPB)	Iron Concentration in Parts Per Billion (PPB)
WS-116-FD	Portable 116 Drinking Water Fountain	First Draw	<5	70	<200
WS-116-PF	Portable 116 Drinking Water Fountain	Post-Flush	<5	<30	<200
WS-117-FD	Portable 117 Drinking Water Fountain	First Draw	<5	50	<200
WS-117-PF	Portable 117 Drinking Water Fountain	Post-Flush	<5	40	<200
WS-118-FD	Portable 118 Drinking Water Fountain	First Draw	<5	50	<200
WS-118-PF	Portable 118 Drinking Water Fountain	Post-Flush	<5	40	<200
WS-119-FD	Portable 119 Drinking Water Fountain	First Draw	<5	60	<200
WS-119-PF	Portable 119 Drinking Water Fountain	Post-Flush	<5	<30	<200
WS-120-FD	Portable 120 Drinking Water Fountain	First Draw	<5	80	<200
WS-120-PF	Portable 120 Drinking Water Fountain	Post-Flush	<5	90	<200

All lead and copper drinking water “first-draw” and “post-flush” water sample results at the locations tested were below the lead and copper Action Levels. The EPA and California Lead and Copper Action Levels are used to protect the public from metals that can adversely affect their health. These laws require water systems to monitor lead and copper levels at the consumers’ taps. If Action Levels for lead (15 ppb) or copper (1,300 ppb) are exceeded, installation or modifications to corrosion control treatment is required. If the action level for lead is exceeded, public notification is required.

The limits for iron concentrations in drinking water are established by the EPA National Secondary Drinking Water Regulations. EPA does not enforce these "secondary maximum contaminant levels" (SMCLs). They are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL. The EPA SMCL for Iron in Drinking Water is set at a level of 300 ppb. None of the ten (10) drinking water samples collected at the site were at or above the SMCL.

### **Recommendations**

ACC makes the following recommendations:

- Continue monitoring the drinking water for signs of discoloration or changes in taste/odor.
- ACC recommends periodic water sampling of drinking water sources (i.e. water fountains, kitchen sinks, etc.) to monitor for any changes.

### **Limitations**

ACC shall not be responsible for claims that may arise out of failure to correct problems or to identify problems that may exist in this building. ACC assumes no responsibility for damages for work performed or errors in documentation or missing information. ACC does not guarantee the accuracy of information provided by other parties. All statements and/or recommendations are based on conditions observed and tested at the time of the inspection. The scope of the investigation for this report was to collect representative drinking water samples from several locations at the school. ACC has not investigated and does not possess any opinion regarding other drinking water locations within the building. This report does not intend to identify all hazards or unsafe conditions, or to indicate that other hazards or unsafe conditions do not exist at the subject site.

Please contact me at (510) 638-8400 ext. 109 if you have any questions.

Sincerely,

ACC ENVIRONMENTAL CONSULTANTS, INC.



Ben Schulte-Bisping  
Project Manager  
California Department of Public Health Lead Inspector/Assessor #24564

Attachments: Forensic Analytical *Metals Analysis of Drinking Water* Report #M176931, dated 09/22/16.



# Metals Analysis of Drinking Water

ACC Environmental Consultants  
Ben Schulte  
7977 Capwell Dr., Suite 100  
  
Oakland, CA 94621

**Client ID:** 1117  
**Report Number:** M176931  
**Date Received:** 09/19/16  
**Date Analyzed:** 09/21/16  
**Date Printed:** 09/22/16  
**First Reported:** 09/22/16

**Job ID / Site:** 3007-106.00, AUSD Portables (OTISES), 3010 Fillmore St., Alameda, CA  
**Date(s) Collected:** 9/17/16

**FALI Job ID:** 1117  
**Total Samples Submitted:** 10  
**Total Samples Analyzed:** 10

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
WS-116-FD	30749346	Cu	70	ppb	30	EPA 200.2/200.7
		Fe	< 200	ppb	200	EPA 200.2/200.7
		Pb	< 5	ppb	5	SM 3113B
WS-116-PF	30749347	Cu	< 30	ppb	30	EPA 200.2/200.7
		Fe	< 200	ppb	200	EPA 200.2/200.7
		Pb	< 5	ppb	5	SM 3113B
WS-117-FD	30749348	Cu	50	ppb	30	EPA 200.2/200.7
		Fe	< 200	ppb	200	EPA 200.2/200.7
		Pb	< 5	ppb	5	SM 3113B
WS-117-PF	30749349	Cu	40	ppb	30	EPA 200.2/200.7
		Fe	< 200	ppb	200	EPA 200.2/200.7
		Pb	< 5	ppb	5	SM 3113B
WS-118-FD	30749350	Cu	50	ppb	30	EPA 200.2/200.7
		Fe	< 200	ppb	200	EPA 200.2/200.7
		Pb	< 5	ppb	5	SM 3113B
WS-118-PF	30749351	Cu	40	ppb	30	EPA 200.2/200.7
		Fe	< 200	ppb	200	EPA 200.2/200.7
		Pb	< 5	ppb	5	SM 3113B
WS-119-FD	30749352	Cu	60	ppb	30	EPA 200.2/200.7
		Fe	< 200	ppb	200	EPA 200.2/200.7
		Pb	< 5	ppb	5	SM 3113B
WS-119-PF	30749353	Cu	< 30	ppb	30	EPA 200.2/200.7
		Fe	< 200	ppb	200	EPA 200.2/200.7
		Pb	< 5	ppb	5	SM 3113B
WS-120-FD	30749354	Cu	80	ppb	30	EPA 200.2/200.7
		Fe	< 200	ppb	200	EPA 200.2/200.7
		Pb	< 5	ppb	5	SM 3113B



# Metals Analysis of Drinking Water

ACC Environmental Consultants  
Ben Schulte  
7977 Capwell Dr., Suite 100  
  
Oakland, CA 94621

**Client ID:** 1117  
**Report Number:** M176931  
**Date Received:** 09/19/16  
**Date Analyzed:** 09/21/16  
**Date Printed:** 09/22/16  
**First Reported:** 09/22/16

**Job ID / Site:** 3007-106.00, AUSD Portables (OTISES), 3010 Fillmore St., Alameda, CA  
**Date(s) Collected:** 9/17/16

**FALI Job ID:** 1117  
**Total Samples Submitted:** 10  
**Total Samples Analyzed:** 10

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
WS-120-PF	30749355	Cu	90	ppb	30	EPA 200.2/200.7
		Fe	< 200	ppb	200	EPA 200.2/200.7
		Pb	< 5	ppb	5	SM 3113B

\* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

*Daniele Siu*

Daniele Siu, Laboratory Supervisor, Hayward Laboratory

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Client Name & Address: ACC Environmental Con.  
7977 Capwell Dr. Ste 100  
Oakland, CA 94621

Client No.: [Blank]

PO / Job#: 3007-106.00

Date: 9/19/16

Turn Around Time: Same Day / 1Day / 2Day /  3Day / 4Day / 5Day

PCM:  NIOSH 7400A /  NIOSH 7400B  Rotometer

PLM:  Standard /  Point Count 400-1000 /  CARB 435

Contact: Ben Schulte Phone: 510-773-0708

E-mail: bschulte@accenv.com

Site Name: AUSD Portables (OTISES)

Site Location: 3010 Fillmore St, Alameda, CA

TEM Air:  AHERA /  Yamate2 /  NIOSH 7402  
 TEM Bulk:  Quantitative /  Qualitative /  Chatfield  
 TEM Water:  Potable /  Non-Potable /  Weight %  
 TEM Microvac:  Qual /  D5755(str/area) /  D5756(str/mass)

IAQ Particle Identification (PLM LAB)  PLM Opaques/Soot  
 Particle Identification (TEM LAB)  Special Project

Metals Analysis Matrix: Lead, Iron, Copper Method: [Blank]  
 Analytes: [Blank]

Comments: Analyze water samples for Lead/Iron/Copper  Silica in Air  w/Gravimetry

Sample ID	Date / Time	Sample Location / Description	FOR AIR SAMPLES ONLY				Sample Area / Air Volume
			Type	Time On/Off	Avg LPM	Total Time	
WS-116-FD	9/17/16 8am	Portable 116 Drinking Fountain First Draw	<input checked="" type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
WS-116-PF		Portable 116 Drinking Fountain Post Flush	<input checked="" type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
WS-117-FD		Portable 117 Drinking Fountain First Draw	<input checked="" type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
WS-117-PF		Portable 117 Drinking Fountain Post Flush	<input checked="" type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
WS-118-FD		Portable 118 Drinking Fountain First Draw	<input checked="" type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
WS-118-PF		Portable 118 Drinking Fountain Post Flush	<input checked="" type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
WS-119-FD		Portable 119 Drinking Fountain First Draw	<input checked="" type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
WS-119-PF		Portable 119 Drinking Fountain Post Flush	<input checked="" type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
WS-120-FD		Portable 120 Drinking Fountain First Draw	<input checked="" type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				
WS-120-PF		Portable 120 Drinking Fountain Post Flush	<input checked="" type="checkbox"/> A <input type="checkbox"/> P <input type="checkbox"/> C				

Sampled By: B. Schulte Date/Time: 9/17/16 8am

Shipped Via:  Fed Ex  UPS  US Mail  Courier  Drop Off  Other:

Relinquished By: [Signature] Date / Time: 9/19/16 2:45pm

Relinquished By: [Blank] Date / Time: [Blank]

Received By: [Signature] Date / Time: 9/19/16 2:45pm

Received By: [Blank] Date / Time: [Blank]

Condition Acceptable?  Yes  No

Condition Acceptable?  Yes  No

# Metals Analysis of Drinking Water

ACC Environmental Consultants  
Ben Schulte  
7977 Capwell Dr., Suite 100  
  
Oakland, CA 94621

**Client ID:** 1117  
**Report Number:** M191456  
**Date Received:** 11/09/17  
**Date Analyzed:** 11/10/17  
**Date Printed:** 11/16/17  
**First Reported:** 11/16/17

**Job ID / Site:** 3007-119-00, AUSD Water Sampling, Otis ES, 3010 Fillmore  
**Date(s) Collected:** 11/3/17

**FALI Job ID:** 1117-1506  
**Total Samples Submitted:** 66  
**Total Samples Analyzed:** 66

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
WS-1-FD	30783846	Pb	7	ppb	5	SM 3113B
WS-1-PF	30783847	Pb	< 5	ppb	5	SM 3113B
WS-2-FD	30783848	Pb	< 5	ppb	5	SM 3113B
WS-2-PF	30783849	Pb	< 5	ppb	5	SM 3113B
WS-3-FD	30783850	Pb	5	ppb	5	SM 3113B
WS-3-PF	30783851	Pb	7	ppb	5	SM 3113B
WS-4-FD	30783852	Pb	8	ppb	5	SM 3113B
WS-4-PF	30783853	Pb	8	ppb	5	SM 3113B
WS-5-FD	30783854	Pb	< 5	ppb	5	SM 3113B
WS-5-PF	30783855	Pb	< 5	ppb	5	SM 3113B
WS-6-FD	30783856	Pb	9	ppb	5	SM 3113B
WS-6-PF	30783857	Pb	< 5	ppb	5	SM 3113B
WS-7-FD	30783858	Pb	12	ppb	5	SM 3113B
WS-7-PF	30783859	Pb	15	ppb	5	SM 3113B
WS-8-FD	30783860	Pb	< 5	ppb	5	SM 3113B
WS-8-PF	30783861	Pb	< 5	ppb	5	SM 3113B
WS-9-FD	30783862	Pb	< 5	ppb	5	SM 3113B
WS-9-PF	30783863	Pb	< 5	ppb	5	SM 3113B
WS-10-FD	30783864	Pb	10	ppb	5	SM 3113B
WS-10-PF	30783865	Pb	16	ppb	5	SM 3113B
WS-11-FD	30783866	Pb	13	ppb	5	SM 3113B
WS-11-PF	30783867	Pb	7	ppb	5	SM 3113B
WS-12-FD	30783868	Pb	< 5	ppb	5	SM 3113B
WS-12-PF	30783869	Pb	< 5	ppb	5	SM 3113B
WS-13-FD	30783870	Pb	< 5	ppb	5	SM 3113B
WS-13-PF	30783871	Pb	< 5	ppb	5	SM 3113B
WS-14-FD	30783872	Pb	< 5	ppb	5	SM 3113B



# Metals Analysis of Drinking Water

ACC Environmental Consultants  
Ben Schulte  
7977 Capwell Dr., Suite 100  
  
Oakland, CA 94621

**Client ID:** 1117  
**Report Number:** M191456  
**Date Received:** 11/09/17  
**Date Analyzed:** 11/10/17  
**Date Printed:** 11/16/17  
**First Reported:** 11/16/17

**Job ID / Site:** 3007-119-00, AUSD Water Sampling, Otis ES, 3010 Fillmore  
**Date(s) Collected:** 11/3/17

**FALI Job ID:** 1117-1506  
**Total Samples Submitted:** 66  
**Total Samples Analyzed:** 66

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
WS-14-PF	30783873	Pb	< 5	ppb	5	SM 3113B
WS-15-FD	30783874	Pb	< 5	ppb	5	SM 3113B
WS-15-PF	30783875	Pb	< 5	ppb	5	SM 3113B
WS-16-FD	30783876	Pb	< 5	ppb	5	SM 3113B
WS-16-PF	30783877	Pb	< 5	ppb	5	SM 3113B
WS-17-FD	30783878	Pb	< 5	ppb	5	SM 3113B
WS-17-PF	30783879	Pb	< 5	ppb	5	SM 3113B
WS-18-FD	30783880	Pb	< 5	ppb	5	SM 3113B
WS-18-PF	30783881	Pb	< 5	ppb	5	SM 3113B
WS-19-FD	30783882	Pb	< 5	ppb	5	SM 3113B
WS-19-PF	30783883	Pb	< 5	ppb	5	SM 3113B
WS-20-FD	30783884	Pb	< 5	ppb	5	SM 3113B
WS-20-PF	30783885	Pb	< 5	ppb	5	SM 3113B
WS-21-FD	30783886	Pb	8	ppb	5	SM 3113B
WS-21-PF	30783887	Pb	< 5	ppb	5	SM 3113B
WS-22-FD	30783888	Pb	< 5	ppb	5	SM 3113B
WS-22-PF	30783889	Pb	< 5	ppb	5	SM 3113B
WS-23-FD	30783890	Pb	< 5	ppb	5	SM 3113B
WS-23-PF	30783891	Pb	< 5	ppb	5	SM 3113B
WS-24-FD	30783892	Pb	< 5	ppb	5	SM 3113B
WS-24-PF	30783893	Pb	< 5	ppb	5	SM 3113B
WS-25-FD	30783894	Pb	< 5	ppb	5	SM 3113B
WS-25-PF	30783895	Pb	< 5	ppb	5	SM 3113B
WS-26-FD	30783896	Pb	< 5	ppb	5	SM 3113B
WS-26-PF	30783897	Pb	< 5	ppb	5	SM 3113B
WS-32-FD	30783898	Pb	< 5	ppb	5	SM 3113B
WS-32-PF	30783899	Pb	< 5	ppb	5	SM 3113B



# Metals Analysis of Drinking Water

ACC Environmental Consultants  
Ben Schulte  
7977 Capwell Dr., Suite 100  
  
Oakland, CA 94621

**Client ID:** 1117  
**Report Number:** M191456  
**Date Received:** 11/09/17  
**Date Analyzed:** 11/10/17  
**Date Printed:** 11/16/17  
**First Reported:** 11/16/17

**Job ID / Site:** 3007-119-00, AUSD Water Sampling, Otis ES, 3010 Fillmore  
**Date(s) Collected:** 11/3/17

**FALI Job ID:** 1117-1506  
**Total Samples Submitted:** 66  
**Total Samples Analyzed:** 66

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
WS-33-FD	30783900	Pb	< 5	ppb	5	SM 3113B
WS-33-PF	30783901	Pb	< 5	ppb	5	SM 3113B
WS-34-FD	30783902	Pb	< 5	ppb	5	SM 3113B
WS-34-PF	30783903	Pb	< 5	ppb	5	SM 3113B
WS-35-FD	30783904	Pb	< 5	ppb	5	SM 3113B
WS-35-PF	30783905	Pb	< 5	ppb	5	SM 3113B
WS-36-FD	30783906	Pb	< 5	ppb	5	SM 3113B
WS-36-PF	30783907	Pb	< 5	ppb	5	SM 3113B
WS-37-FD	30783908	Pb	< 5	ppb	5	SM 3113B
WS-37-PF	30783909	Pb	< 5	ppb	5	SM 3113B
WS-38-FD	30783910	Pb	< 5	ppb	5	SM 3113B
WS-38-PF	30783911	Pb	< 5	ppb	5	SM 3113B

\* The Reporting Limit represents the lowest amount of analyte that the laboratory can confidently detect in the sample, and is not a regulatory level. The Units for the Reporting Limit are the same as the Units for the Final Results.

*Daniele Siu*

Daniele Siu, Laboratory Supervisor, Hayward Laboratory

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# BULK SAMPLE CHAIN-OF-CUSTODY

Report to:	Ben Schulte Bisping	Email:	Bshulte@accenv.com	Phone:	510.773.0708
Project Name:	AUSD Water Sampling				
Project Address:	Otis Elementary, 3010 Fillmore			Project Number:	3007-119.00
Collected by:	Gus Valerian GValerian@accenv.com			Date Collected:	11/3/2017
Sample Analysis:	PLM	<input checked="" type="checkbox"/> Lead	GFAA	Stop at 1 <sup>st</sup> Positive Layer	Turnaround Time: 5 Day

Comments: ANALYZE WATER SAMPLES FOR LEAD VIA GFAA

Sample ID	Material Size-Color-Pattern-Material-Post Description	Material Location [Quantity] Building or Floor: Area(s) - Component	Sample Location Area - Component	Size
WS-1-FD	POTABLE WATER- FIRST DRAW	Staff room	Left fountain	
WS-1-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-2-FD	POTABLE WATER- FIRST DRAW	Health office	Cold Water only (right lever) faucet	
WS-2-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-3-FD	POTABLE WATER- FIRST DRAW	Under portico, outside of main Office	Silver solo fountain	
WS-3-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-4-FD	POTABLE WATER- FIRST DRAW	Room 102	Fountain	
WS-4-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-5-FD	POTABLE WATER- FIRST DRAW	Room 101	Fountain	
WS-5-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-6-FD	POTABLE WATER- FIRST DRAW	Room 103	Fountain	
WS-6-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	

Released:	Signature:	Date:	Time:
Received:	Signature:	Date:	Time:



Lab Info: **EMSL Analytical, Inc. (EMSL):** 464 McCormick Street, San Leandro, California 94577, (510) 895-3675  
**Forensic Analytical Laboratories, Inc. (FALI):** 3777 Depot Road # 409, Hayward, California 94545, (510) 887-8828



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Collected by:	Gus Valerian GValerian@accenv.com			Date Collected:	11/3/2017
Sample Analysis:	PLM	<input checked="" type="checkbox"/> Lead	GFAA	Stop at 1 <sup>st</sup> Positive Layer	Turnaround Time: 5 Day

Comments: ANALYZE WATER SAMPLES FOR LEAD VIA GFAA

Sample ID	Material Size-Color-Pattern-Material-Post Description	Material Location [Quantity] Building or Floor: Area(s) - Component	Sample Location Area - Component	Size
WS-7-FD	POTABLE WATER- FIRST DRAW	Room 104	Fountain	
WS-7-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-8-FD	POTABLE WATER- FIRST DRAW	Room 105	Fountain	
WS-8-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-9-FD	POTABLE WATER- FIRST DRAW	Room 109	Fountain	
WS-9-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-10-FD	POTABLE WATER- FIRST DRAW	Room 108	Fountain	
WS-10-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-11-FD	POTABLE WATER- FIRST DRAW	Room 107	Fountain	
WS-11-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-12-FD	POTABLE WATER- FIRST DRAW	Room 106	Fountain	
WS-12-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	



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Project Address:	Otis Elementary, 3010 Fillmore			Project Number:	3007-119.00
Collected by:	Gus Valerian GValerian@accenv.com			Date Collected:	11/3/2017
Sample Analysis:	PLM	<input checked="" type="checkbox"/> Lead	GFAA	Stop at 1 <sup>st</sup> Positive Layer	Turnaround Time: 5 Day
Comments:	ANALYZE WATER SAMPLES FOR LEAD VIA GFAA				

Sample ID	Material Size-Color-Pattern-Material-Post Description	Material Location [Quantity] Building or Floor: Area(s) - Component	Sample Location Area - Component	Size
WS-13-FD	POTABLE WATER- FIRST DRAW	Under portico, across from room 130 entrance	Left fountain	
WS-13-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-14-FD	POTABLE WATER- FIRST DRAW	Room 110	Fountain	
WS-14-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-15-FD	POTABLE WATER- FIRST DRAW	Room 112	Fountain Note: hot water, pipe splitter running to fountain is connected to the hot water pipe	
WS-15-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-16-FD	POTABLE WATER- FIRST DRAW	Exterior play ground fountain , shared wall with room 112	Right fountain	
WS-16-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-17-FD	POTABLE WATER- FIRST DRAW	Room 113	Fountain Note: hot water, pipe splitter running to fountain is connected to the hot water pipe	
WS-17-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-18-FD	POTABLE WATER- FIRST DRAW	Room 111	Fountain	
WS-18-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	

Released:	Signature:	Date:	Time:
Received:	Signature: <i>ceym</i>	Date:	Time:



Lab Info:	<b>EMSL Analytical, Inc. (EMSL):</b> 464 McCormick Street, San Leandro, California 94577, (510) 895-3675 <input checked="" type="checkbox"/> <b>Forensic Analytical Laboratories, Inc. (FALI):</b> 3777 Depot Road, Hayward, California 94545, (510) 887-8828
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Project Address:	Otis Elementary, 3010 Fillmore			Project Number:	3007-119.00
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Sample Analysis:	PLM	<input checked="" type="checkbox"/> Lead	GFAA	Stop at 1 <sup>st</sup> Positive Layer	Turnaround Time: 5 Day

Comments: ANALYZE WATER SAMPLES FOR LEAD VIA GFAA

Sample ID	Material Size-Color-Pattern-Material-Post Description	Material Location [Quantity] Building or Floor: Area(s) - Component	Sample Location Area - Component	Size
WS-19-FD	POTABLE WATER- FIRST DRAW	Room 222	Fountain	
WS-19-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-20-FD	POTABLE WATER- FIRST DRAW	Room 224	Fountain Note: hot water, pipe splitter running to fountain is connected to the hot water pipe	
WS-20-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-21-FD	POTABLE WATER- FIRST DRAW	2nd floor hallway ,shared wall with 224	Fountain	
WS-21-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-22-FD	POTABLE WATER- FIRST DRAW	Room 223	Fountain Note: hot water, pipe splitter running to fountain is connected to the hot water pipe	
WS-22-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-23-FD	POTABLE WATER- FIRST DRAW	Room 221	Fountain	
WS-23-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-24-FD	POTABLE WATER- FIRST DRAW	Room 220	Fountain	
WS-24-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	

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# BULK SAMPLE CHAIN-OF-CUSTODY

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Project Address:	Otis Elementary, 3010 Fillmore			Project Number:	3007-119.00
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Comments: ANALYZE WATER SAMPLES FOR LEAD VIA GFAA

Sample ID	Material Size-Color-Pattern-Material-Post Description	Material Location [Quantity] Building or Floor: Area(s) - Component	Sample Location Area - Component	Size
WS-25-FD	POTABLE WATER- FIRST DRAW	Multi purpose room	Right , white. Fountain	
WS-25-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-26-FD	POTABLE WATER- FIRST DRAW	Playground, fountain Shared wall with kitchen / multi purpose room	Left fountain	
WS-26-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-27-FD	POTABLE WATER- FIRST DRAW	Room 116	Fountain	} Per client HOLD - cym
WS-27-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-28-FD	POTABLE WATER- FIRST DRAW	Room 117	Fountain	↓
WS-28-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-29-FD	POTABLE WATER- FIRST DRAW	Room 118	Fountain	
WS-29-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-30-FD	POTABLE WATER- FIRST DRAW	Room 119	Fountain	
WS-30-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	

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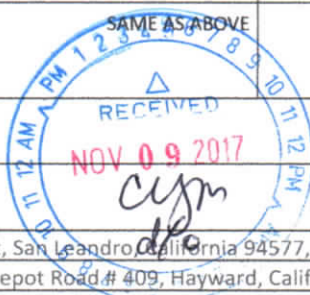
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Sample ID	Material Size-Color-Pattern-Material-Post Description	Material Location [Quantity] Building or Floor: Area(s) - Component	Sample Location Area - Component	Size
WS-31-FD	POTABLE WATER- FIRST DRAW	Room 120	Fountain	
WS-31-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	↑
WS-32-FD	POTABLE WATER- FIRST DRAW	Room 332	Fountain	
WS-32-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-33-FD	POTABLE WATER- FIRST DRAW	Room 333	Fountain	
WS-33-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-34-FD	POTABLE WATER- FIRST DRAW	Room 334	Fountain	
WS-34-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-35-FD	POTABLE WATER- FIRST DRAW	Room 335	Fountain	
WS-35-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-36-FD	POTABLE WATER- FIRST DRAW	Room 336	Fountain	
WS-36-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	

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