



December 18, 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) – Encinal Jr/Sr High School Drinking Fountains
210 Central Ave, 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 30, 2017. 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 nineteen (19) 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 38 drinking water samples at 19 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-340-FD	Mail Room	First Draw	<5
WS-340-PF		Post-Flush	<5
WS-341-FD	Hallway adjacent to Room 200 Entrance	First Draw	<5
WS-341-PF		Post-Flush	<5
WS-342-FD	Hallway adjacent to Room 205 Entrance	First Draw	<5
WS-342-PF		Post-Flush	<5
WS-343-FD	Hallway adjacent to Room 210 Entrance	First Draw	<5
WS-343-PF		Post-Flush	<5
WS-344-FD	Hallway adjacent to Room 210	First Draw	<5
WS-344-PF		Post-Flush	<5
WS-345-FD	Hallway adjacent to Room 216	First Draw	<5
WS-345-PF		Post-Flush	<5
WS-346-FD	Hallway adjacent to Room 214	First Draw	<5
WS-346-PF		Post-Flush	<5
WS-347-FD	Hallway adjacent to Room 211	First Draw	<5
WS-347-PF		Post-Flush	<5
WS-348-FD	Hallway adjacent to Room 304 Entrance	First Draw	<5
WS-348-PF		Post-Flush	<5
WS-349-FD	Hallway adjacent to Room 404	First Draw	<5
WS-349-PF		Post-Flush	<5
WS-350-FD	Building 100 Center Hub Lounge Room North Faucet/Sink	First Draw	<5
WS-350-PF		Post-Flush	<5
WS-351-FD	Exterior Swimming Pool Area adjacent to Women's Changing Room 805	First Draw	<5
WS-351-PF		Post-Flush	<5
WS-352-FD	Hallway adjacent to Room 404	First Draw	<5
WS-352-PF		Post-Flush	<5
WS-353-FD	Hallway adjacent to Room 309	First Draw	<5
WS-353-PF		Post-Flush	<5
WS-354-FD	Room 307	First Draw	<5
WS-354-PF		Post-Flush	<5
WS-355-FD	400 Wing Snack Room	First Draw	<5
WS-355-PF		Post-Flush	<5
WS-356-FD	717A Faculty Room	First Draw	<5
WS-356-PF		Post-Flush	<5
WS-357-FD	West Side Gym Corridor Northwest Fountain	First Draw	<5
WS-357-PF		Post-Flush	<5
WS-358-FD	East Side Gym Corridor Northwest Fountain	First Draw	<5
WS-358-PF		Post-Flush	<5

All first-draw and post-flush water sample concentrations were below 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 performing periodic water sampling to ensure lead in drinking water concentrations remain below the action level.

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: Forensic Analytical Metals Analysis of Drinking Water Report #M192472, dated 12/14/17.

Metals Analysis of Drinking Water

ACC Environmental Consultants
Ben Schulte Bisping
7977 Capwell Dr., Suite 100

Oakland, CA 94621

Client ID: 1117
Report Number: M192472
Date Received: 12/04/17
Date Analyzed: 12/13/17
Date Printed: 12/14/17
First Reported: 12/14/17

Job ID / Site: 3007-119.00, AUSD Water Sampling, Encinel High School
Date(s) Collected: 11/30/17

FALI Job ID: 1117-1506
Total Samples Submitted: 38
Total Samples Analyzed: 38

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
WS-340-FD	30787707	Pb	< 5	ppb	5	SM 3113B
WS-340-PF	30787708	Pb	< 5	ppb	5	SM 3113B
WS-341-FD	30787709	Pb	< 5	ppb	5	SM 3113B
WS-341-PF	30787710	Pb	< 5	ppb	5	SM 3113B
WS-342-FD	30787711	Pb	< 5	ppb	5	SM 3113B
WS-342-PF	30787712	Pb	< 5	ppb	5	SM 3113B
WS-343-FD	30787713	Pb	< 5	ppb	5	SM 3113B
WS-343-PF	30787714	Pb	< 5	ppb	5	SM 3113B
WS-344-PD	30787715	Pb	< 5	ppb	5	SM 3113B
WS-344-PF	30787716	Pb	< 5	ppb	5	SM 3113B
WS-345-FD	30787717	Pb	< 5	ppb	5	SM 3113B
WS-345-PF	30787718	Pb	< 5	ppb	5	SM 3113B
WS-346-FD	30787719	Pb	< 5	ppb	5	SM 3113B
WS-346-PF	30787720	Pb	< 5	ppb	5	SM 3113B
WS-347-FD	30787721	Pb	< 5	ppb	5	SM 3113B
WS-347-PF	30787722	Pb	< 5	ppb	5	SM 3113B
WS-348-FD	30787723	Pb	< 5	ppb	5	SM 3113B
WS-348-PF	30787724	Pb	< 5	ppb	5	SM 3113B
WS-349-FD	30787725	Pb	< 5	ppb	5	SM 3113B
WS-349-PF	30787726	Pb	< 5	ppb	5	SM 3113B
WS-350-FD	30787727	Pb	< 5	ppb	5	SM 3113B
WS-350-PF	30787728	Pb	< 5	ppb	5	SM 3113B
WS-351-FD	30787729	Pb	< 5	ppb	5	SM 3113B
WS-351-PF	30787730	Pb	< 5	ppb	5	SM 3113B
WS-352-FD	30787731	Pb	< 5	ppb	5	SM 3113B
WS-352-PF	30787732	Pb	< 5	ppb	5	SM 3113B
WS-353-FD	30787733	Pb	< 5	ppb	5	SM 3113B



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Date(s) Collected: 11/30/17

FALI Job ID: 1117-1506
Total Samples Submitted: 38
Total Samples Analyzed: 38

Sample Number	Lab Number	Analyte	Result	Result Units	Reporting Limit*	Method Reference
WS-353-PF	30787734	Pb	< 5	ppb	5	SM 3113B
WS-354-FD	30787735	Pb	< 5	ppb	5	SM 3113B
WS-354-PF	30787736	Pb	< 5	ppb	5	SM 3113B
WS-355-FD	30787737	Pb	< 5	ppb	5	SM 3113B
WS-355-PF	30787738	Pb	< 5	ppb	5	SM 3113B
WS-356-FD	30787739	Pb	< 5	ppb	5	SM 3113B
WS-356-PF	30787740	Pb	< 5	ppb	5	SM 3113B
WS-357-FD	30787741	Pb	< 5	ppb	5	SM 3113B
WS-357-PF	30787742	Pb	< 5	ppb	5	SM 3113B
WS-358-FD	30787743	Pb	< 5	ppb	5	SM 3113B
WS-358-PF	30787744	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

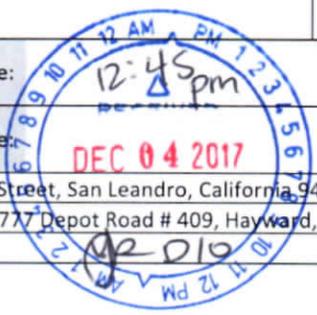
Report to:	Ben Schulte Bisping	Email:	Bshulte@accenv.com	Phone:	510.773.0708
Project Name:	AUSD Water Sampling				
Project Address:	ENCINEL HIGH SCHOOL	Project Number:	3007-119.00		
Collected by:	Gus Valerian			Date Collected:	11/30/17
Sample Analysis:	PLM	<input checked="" type="checkbox"/> Lead	GFAA	Stop at 1st 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-340-FD	POTABLE WATER- FIRST DRAW	Mail Room	Faucet, right side (cold) Note: cups adjacent	
WS-340-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-341-FD	POTABLE WATER- FIRST DRAW	Hallway, adjacent to Room 200 entrance	Silver Fountain	
WS-341-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-342-FD	POTABLE WATER- FIRST DRAW	Hallway, adjacent to Room 205 entrance	Hydration station	
WS-342-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-343-FD	POTABLE WATER- FIRST DRAW	Hallway, adjacent to room 210 entrance	White Fountain	
WS-343-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-344-FD	POTABLE WATER- FIRST DRAW	Hallway, adjacent to room 210	White Fountain	
WS-344-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-345-FD	POTABLE WATER- FIRST DRAW	Hallway, adjacent to room 216	Hydration Station	
WS-345-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	

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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

BULK SAMPLE CHAIN-OF-CUSTODY

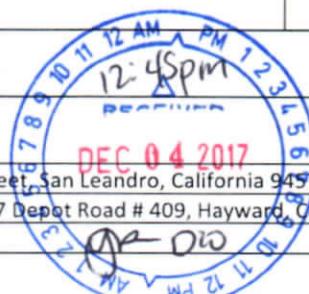
Report to:	Ben Schulte Bisping	Email:	Bshulte@accenv.com	Phone:	510.773.0708
Project Name:	AUSD Water Sampling				
Project Address:	ENCINEL HIGH SCHOOL	Project Number:	3007-119.00		
Collected by:	Gus Valerian	Date Collected:	11/30/17		
Sample Analysis:	PLM <input checked="" type="checkbox"/> Lead	GFAA	Stop at 1 st 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-346-FD	POTABLE WATER- FIRST DRAW	Hallway, adjacent to room 214	White fountain	
WS-346-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-347-FD	POTABLE WATER- FIRST DRAW	Hallway, adjacent to room 211	Silver fountain	
WS-347-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-348-FD	POTABLE WATER- FIRST DRAW	Hallway , adjacent to room 304 entrance	Silver fountain	
WS-348-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-349-FD	POTABLE WATER- FIRST DRAW	Hallway, adjacent to room 404	Silver Fountain	
WS-349-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-350-FD	POTABLE WATER- FIRST DRAW	Building 100, center hub lounge room, Northmost faucet/ sink	Right lever (cold) Note: cups/ dishes adjacent to faucet	
WS-350-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-351-FD	POTABLE WATER- FIRST DRAW	Exterior, Swimming pool area, adjacent to women's changing room 805	White fountain	
WS-351-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	

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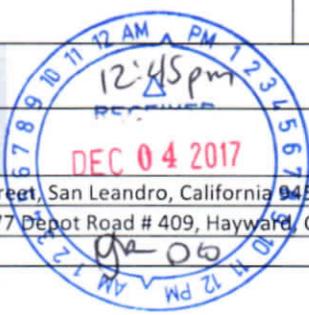
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Comments: ANALYZE WATER SAMPLES FOR LEAD VIA GFAA

Sample ID	Material Size-Color-Pattern-Material-Post Description	Material Location [Quantity] Building or Floor: Area(s) - Component	Sample Location Area - Component	Size
WS-352-FD	POTABLE WATER- FIRST DRAW	Hallway, adjacent to room 404	Silver fountain	
WS-352-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-353-FD	POTABLE WATER- FIRST DRAW	Hallway, adjacent to room 309	Silver fountain	
WS-353-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-354-FD	POTABLE WATER- FIRST DRAW	Room 307	Northmost faucet Note: cups and dishes adjacent to sink	
WS-354-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-355-FD	POTABLE WATER- FIRST DRAW	400 wing, snack room	Faucet, right lever (cold) -cups adjacent Note: faucet dripping upon arrival	
WS-355-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-356-FD	POTABLE WATER- FIRST DRAW	717A, Faculty room	Silver faucet, right lever (cold) Note: faucet dripping upon arrival	
WS-356-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	
WS-357-FD	POTABLE WATER- FIRST DRAW	West side Gym Corridor NW most fountain	Dual silver left fountain	
WS-357-PF	POTABLE WATER- POST FLUSH	SAME AS ABOVE	SAME AS ABOVE	

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