November 3, 2017

Kennewick School District No. 17
Attn: Keith Colee, Maintenance and Operations Manager
1000 West Fourth Avenue
Kennewick, Washington, 99336

RE: Winter 2016 Drinking Water Sampling Results
Sunset View Elementary, 711 North Center Parkway, Kennewick, Washington

Dear Keith:

On Wednesday, December 21, 2016, Fulcrum Environmental Consulting, Inc. (Fulcrum) collected 51 drinking water samples for lead and copper analysis from Sunset View Elementary (School) located at 711 North Center Parkway in Kennewick, Washington. Initial sampling identified one fixture location with a lead concentration above guidance levels and nine fixture locations with copper concentrations above guidance levels. Fulcrum returned to the School on March 4, and April 5, 2017 to collect samples after remediation of the fixtures and laboratory results found concentrations to be below guidance levels. Sampling was completed as part of a District-wide project and all analysis was completed by Washington State Department of Ecology (Ecology) accredited laboratories.

Summary

The purpose of initial sampling was to evaluate current drinking water quality conditions with respect to lead and copper as a result of the increased national and local interest related to lead in drinking water. The intent of sampling was to meet the requirements of the pending regulations set forth in Washington Administrative Code (WAC) 246-366A-130 and 246-366A-135[1]. Consistent with the regulations, Fulcrum completed sampling at the rates of at least 50% of plumbing fixtures used regularly for drinking or cooking in elementary and preschools and at least 25% of drinking or cooking fixtures in middle schools, junior high schools, and high schools. In addition, Fulcrum sampled administrative facilities in the District at the same rate as elementary schools, of at least 50% of drinking and cooking fixtures.

Fulcrum completed initial sampling on December 21, 2016. Initial results identified one sample with a lead concentration of 16 micrograms per liter (µg/L), above the Environmental Protection Agency (EPA) action level of 15 µg/L, and nine samples with copper concentrations above the EPA action level of 1,300 µg/L. Upon receipt of results, the District removed the identified fixtures from service pending remediation and further testing.

The fixture identified with an elevated lead concentration was replaced and preconditioned by running cold water continuously through the fixture for 24 hours, as specified in WAC 246-366A-130. Following

[1] Washington State Department of Health, WAC 246-366A, *The Environmental Health and Safety Standards of Primary and Secondary Schools*, http://apps.leg.wa.gov/WAC/default.aspx?cite=246-366A, July 26, 2016

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replacement and preconditioning, Fulcrum returned to the School on March 4, and April 5, 2017 and collected follow-up samples to confirm the success of fixture replacement. No other fixtures of like style were replaced. Follow-up samples yielded results below the EPA action level, confirming fixture replacement was successful.

Copper is not a significant component in fixtures, but is the primary material in the plumbing system. To remediate elevated copper, the District aggressively flushed the fixtures with cold water to clear the plumbing of copper construction debris and installed filters on fixtures that did not respond to an aggressive flush. Fulcrum returned on March 4, and April 5, 2017 and collected samples to evaluate the success of the remediation. Follow-up samples found copper concentrations below the EPA action level, confirming the remediation was successful. Following sampling and review of laboratory results, Fulcrum recommended, and the District elected, to return the fixtures to service. Fulcrum recommended that the District replace all fixtures of like style to those initially identified with elevated lead.

As all samples now report concentrations below lead and copper action levels, at this time Fulcrum does not recommend any additional sampling. However, consistent with industry practice and the intent of WAC 246-366A, Fulcrum recommends that the District complete re-sampling of the building within the next five years (before December 2021). Additionally, if WAC 246-366A-130 is enacted, the regulations would require testing of all remaining fixtures within two years of the effective date (July 1, 2017). See Figure 1 in Attachment A for fixture locations and laboratory results.

Sampling Methodology

As a portion of this project, Fulcrum prepared a Sampling and Analysis Plan (SAP) intended to satisfy future initial sampling requirements under pending regulations.

For initial evaluation purposes, Fulcrum collected “first draw” samples. This “first draw” water volume consists of 250 milliliters (mL) and is intended to represent the water quality in the fixture, tubing connecting the fixture to the building piping, and potentially a portion of the building piping. If lead and copper are present, this first-draw sample typically contains the highest lead levels and indicates high copper from the associated building piping.

For most post-remediation evaluation sampling, Fulcrum collected three-part samples consisting of the first draw, “second draw”, and “third draw” water volumes. Second and third draw samples are intended to represent the water quality of building piping and plumbing components behind the fixture and the water entering the building from the water main.

As a quality control measure, Fulcrum also included a laboratory blank of distilled water and a laboratory “spike” sample with known concentrations of lead and copper at the selected action levels for the project during all sampling events. Blank and spike sample results are included in the results tables for reference.

Blank and spike samples were used to evaluate laboratory performance. The reported lead and copper concentrations of quality assurance samples provided a metric to determine accuracy of the analyses. If the reported concentration of the spike sample differed from the action level, then the spike sample

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concentration was used as the action level.

Field evaluation of pH and temperature of drinking water was completed during the cold water flush and immediately following sample collection on select fixtures during the initial sampling event as a general evaluation of water quality.

Sampling Activities

Fulcrum's two-part sampling process consisted of an initial site visit the prior afternoon/evening to locate and flush each water sampling location (fixture). Sample collection occurred the following morning, after the fixture sat motionless for more than eight but no less than 18 hours, typically approximately 14 hours.

Initial Sampling

On the initial visit, Fulcrum flushed cold water through each fixture selected for sampling for approximately one minute. Following the flush, each fixture was covered and secured within a plastic bag. The plastic bags were marked with signage indicating testing was in progress and the fixture should not be used. Fulcrum returned to the school eight to 18 hours later to collect the samples. Each sample consisted of the first draw collected into 250-mL unpreserved polyethylene bottles and was immediately placed on ice in a chilled cooler.

Samples collected from the initial sampling event were delivered under chain-of-custody to RJ Lee Group's Columbia Basin Analytical Laboratory (Ecology Lab ID: C859-16) in Pasco, Washington for analysis.

Fixture Replacement and Flushing

Fixtures identified with elevated lead concentrations were replaced and preconditioned by running cold water continuously through the fixture for 24 hours, as outlined in WAC 246-366A-130. Following replacement and preconditioning, Fulcrum collected follow-up samples to confirm the success of fixture replacement.

Fixtures producing elevated copper concentrations were generally identified in newer District buildings and were not associated with specific fixture styles. The relationship between building construction age and fixture styles indicates elevated copper concentrations are principally associated with construction debris in the plumbing system.

All fixtures with elevated copper were flushed aggressively by running water through the fixture at high flow with the aerator removed for approximately 30 minutes to clear the plumbing of any debris potentially causing elevated copper concentrations. Following an aggressive flush, fixtures were resampled to evaluate the effectiveness at reducing copper concentrations. The District elected to install filters, install signage indicating the fixtures should be used only for handwashing, or permanently removed fixtures that did not respond to an aggressive flush. Filtered fixtures were resampled following filter installation to verify effectiveness of the filter.

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Remedial Sampling

Remedial sampling typically consisted of first, second, and third draw samples from the fixture locations and plumbing system in question. First draw samples were collected into 250 mL polyethylene bottles preserved with nitric acid. The second draw water volume consists of water collected into a 250 mL unpreserved polyethylene container immediately following the first draw. No water was lost between collection of the first and second draw samples. The third draw water volume is a 1,000 mL sample collected into a one liter unpreserved polyethylene container after the fixture has been flushed for about three to five minutes.

Samples collected following remedial activities were shipped by common carrier under chain of custody to Fremont Analytical Laboratory (Ecology Lab ID: C910-16) in Seattle, Washington for analysis. Fremont was selected based on their availability to complete analysis on an expedited schedule.

Analytical Results

Samples from both initial and remedial sampling events were analyzed for lead and copper in drinking water by EPA Method 200.8.

Initial Sampling

Sample locations from the initial sampling event are presented in Figure 1 in Attachment A of this letter. A site-specific sampling and analysis plan (SSSAP) that provides a building specific summary of the location, number, and sampling frequency of water fixture locations is located in Attachment B. Initial analytical results are summarized in Table 1 located in Attachment C of this letter. Laboratory analytical results from the initial sampling event are located in Attachment D of this letter.

In addition, pH and temperature data from the initial sampling event is presented in Table 2 in Attachment C of this letter.

Remedial Sampling

Sample locations from remedial sampling events are presented in Figure 1 in Attachment A of this letter. The remedial analytical results from this project are summarized in Table 3 located in Attachment C of this letter. Laboratory analytical results from the remedial sampling event are located in Attachment E of this letter.

Discussion

Initial Sampling

Analytical results identified one sample with a lead concentration above the EPA action level of 15 µg/L and nine samples with copper concentrations above the EPA action level of 1,300 µg/L.

Remedial Sampling

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Immediately following receipt of initial sampling results, the District removed the identified fixtures from service pending remediation and further testing. To remediate elevated lead concentrations, the District replaced the identified fixture. No fixtures of the same style were identified in the building. Fulcrum returned on March 4th and April 5th, 2017 following fixture replacement and preconditioning to collect follow-up samples from the initially identified fixture. No other fixtures of like style were replaced. See Attachment F for a photograph layout with the identified fixture style.

To remediate elevated copper concentrations, the District completed aggressive flushes of the identified fixtures. The District installed filters on fixtures that did not respond to an aggressive flush. Fulcrum returned on the morning following the aggressive flush and filter installation, March 4, and April 5, 2017, to collect follow-up samples from the fixtures.

Analytical results from remedial sampling indicated the fixture replacement, aggressive flushing, and filter installation were successful at reducing lead and copper concentrations below action levels for the fixtures in question.

Recommendations

One initial sample contained lead above the EPA action level of 15 µg/L and nine initial samples contained copper concentrations above the EPA action level of 1,300 µg/L. The District replaced the identified fixture with elevated lead and preconditioned the fixture for 24 hours as specified in WAC 246-366A-130. The District completed an aggressive flush of the fixtures identified with elevated copper and installed filters on fixtures that did not respond to aggressive flushing. Follow-up sampling demonstrated that all lead and copper concentrations were below action levels. Following remedial sampling and review of laboratory results, Fulcrum recommended, and the District elected, to return the fixtures to service. Fulcrum recommends the District replace all fixtures of like style to those initially identified with elevated lead. See Attachment F for a photograph layout of the identified fixture style.

As all samples now report concentrations below lead and copper action levels, Fulcrum does not recommend any additional sampling at this time. However, consistent with industry practice and the intent of WAC 246-366A, Fulcrum recommends that the District complete re-sampling of the building within the next five years (before November 2021). Additionally, if WAC 246-366A-130 is enacted, the regulations would require testing of all remaining fixtures within two years of the effective date (July 1, 2017).

If you have any questions, please feel free to contact me at (509) 574-0839.

Sincerely,

Amanda Enbysk, GIT
Environmental Geologist

Ryan K. Mathews, CIH, CHMM
Principal

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ATTACHMENT A

Figure 1: Sample Location Map

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LEGEND

KF-## - Kitchen faucet

CF-## - Classroom faucet

CDF-## - Classroom drinking fountain

OF-## - Office faucet

WC-## - Water cooler fountain

BF-## - Bottle filler fountain

NF-## - Nurse's faucet

- - Sample location: faucet

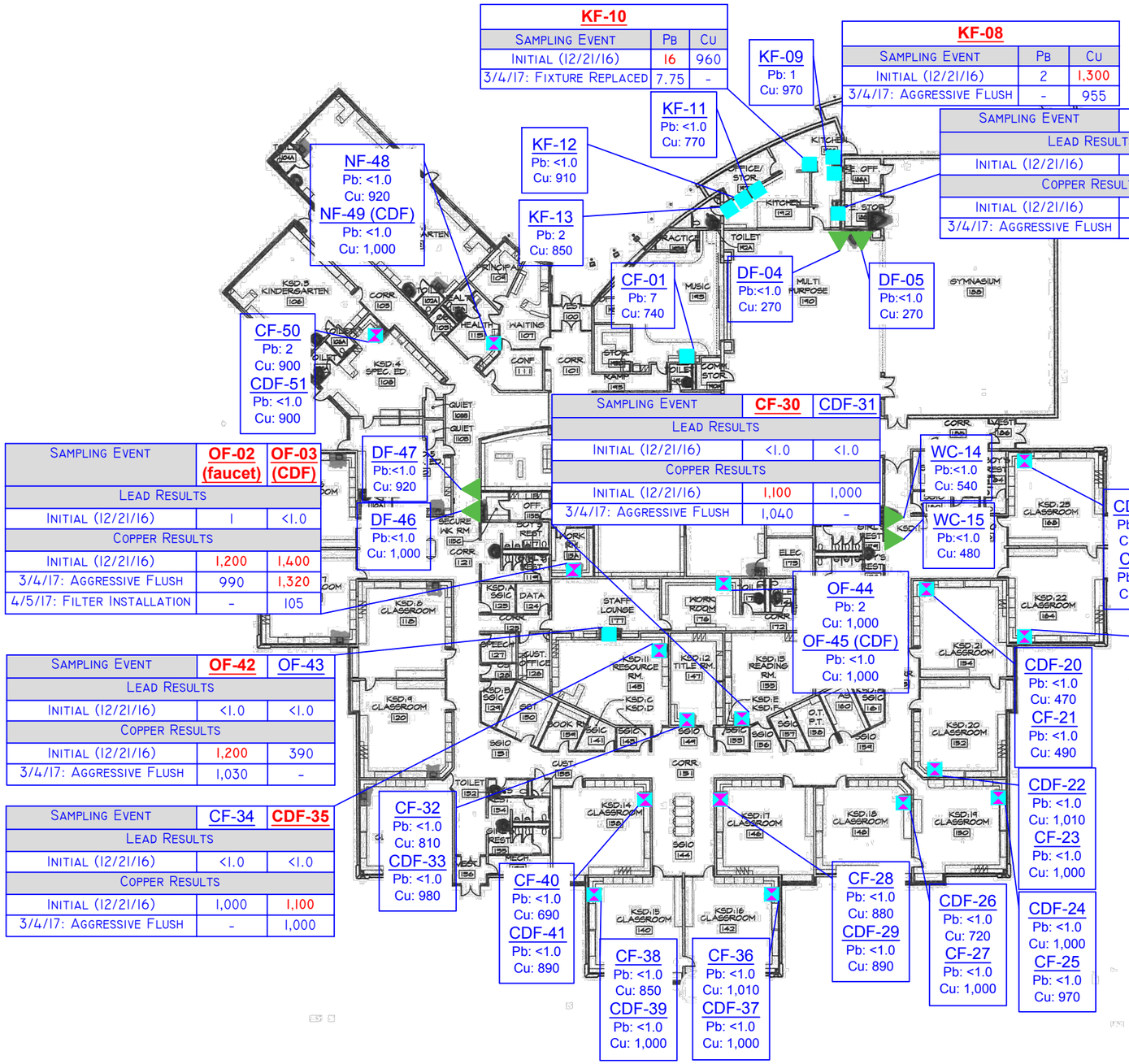
- - Sample location: drinking fountain at sink

- - Sample location: faucet and drinking fountain at same sink

- - Sample location: water cooler fountain

-Lead (Pb) and copper (Cu) results for each sample location are below each identifier. All results reported in µg/L.

-Samples in **BOLD RED** indicate fixture locations where the initial concentrations of lead or copper were above the respective action level.



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Kennewick SD Drinking Water Sampling. 162017.00. AME. 10262017

Sunset View Elementary School
711 North Center Parkway
Kennewick, Washington

Sample Location Map

FIGURE
1

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ATTACHMENT B

Site-Specific Sampling and Analysis Plan

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Site-Specific Sampling and Analysis Plan

Kennewick School District – Winter 2016 Drinking Water Sampling

Note: This SSSAP has been prepared as a supplement to the project SAP/QAPP and provide a building specific summary of the location, number, and sampling frequency of water fixture locations.

Campus/Building: Sunset View Elementary Address: 711 North Center Parkway, Kennewick, WA

☑ Elementary ☐ Middle School ☐ High School ☐ Administration

Date of Construction: 2012 Modernizations: N/A

Fixture Type	Locations	Fixture Styles[1]	Samples	Ratio
Drinking fountain/water cooler (DF/WC)	8	1	6	75%
Kitchen Fixture (KF)	8	4	8	100%
Classroom faucet, including faucets in Food Labs and Life Sciences Classrooms (CF)	25	1	15	60%
Classroom drinking fountain at sink (CDF)	28	1	18	64%
Nurse's Office/Health Room (NF)	1	1	1	100%
Teacher's Lounges/Work Rooms (OF)	4	2	4	100%
TOTALS	**74**		**51**	**69%**

1 Fixture styles are approximate based on sampler's observations

Lead Sampler: Logan Lopez Date: 12/21/2016

Sample Prefix: SVE – 122116 – P (first-draw) – _____ – 01-53

School Code *Date* *Sample Type* *Fixture Type* *Sample Number*

Laboratory: R. J. Lee Group, Columbia Basin Analytical Delivery Date: December 21, 2016

Comments:

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ATTACHMENT C

Table 1: Initial Sampling Analytical Results Summary Table
Table 2: pH and Temperature Data Summary Table
Table 3: Remedial Sampling Analytical Results Summary Table

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Table 1: Initial Sampling Analytical Results

Sample Identification and Location	Fixture Type	Lead Results (µg/L)	Copper Results (µg/L)
122116-SVE-P-CF-01: Music Room	Classroom Faucet	7	740
122116-SVE-P-OF-02: Library Work Room, faucet	**Office Faucet**	1	**1,200**
122116-SVE-P-OF-03: Library Work Room, fountain	**Classroom Drinking Fountain**	<1.0	**1,400**
122116-SVE-P-DF-04: Multipurpose, left fixture	Drinking Fountain	<1.0	270
122116-SVE-P-DF-05: Multipurpose, right fixture	Drinking Fountain	<1.0	270
122116-SVE-P-KF-06: Kitchen, East wall, south faucet	**Kitchen Faucet**	3	**1,400**
122116-SVE-P-KF-07: Kitchen, East wall, south sprayer	**Kitchen Faucet**	3	**1,600**
122116-SVE-P-KF-08: Kitchen, East wall, center fixture	**Kitchen Faucet**	2	**1,300**
122116-SVE-P-KF-09: Kitchen, East wall, North fixture	Kitchen Faucet	1	970
122116-SVE-P-KF-10: Kitchen, center partition north wall	**Kitchen Faucet**	**16**	960
122116-SVE-P-KF-11: Kitchen, North wall, right fixture	Kitchen Faucet	<1.0	770
122116-SVE-P-KF-12: Kitchen, North wall, center fixture	Kitchen Faucet	<1.0	910
122116-SVE-P-KF-13: Kitchen, North wall, left fixture	Kitchen Faucet	2	850
122116-SVE-P-WC-14: Corridor opposite Classroom 23, left fixture	Water Cooler Fountain	<1.0	540
122116-SVE-P-WC-15: Corridor opposite Classroom 23, right fixture	Water Cooler Fountain	<1.0	480
122116-SVE-P-CDF-16: Classroom 23	Classroom Drinking Fountain	<1.0	970
122116-SVE-P-CF-17: Classroom 25	Classroom Faucet	<1.0	970
122116-SVE-P-CDF-18: Classroom 22	**Classroom Drinking Fountain**	<1.0	**1,100**
122116-SVE-P-CF-19: Classroom 22	Classroom Faucet	<1.0	1,000
122116-SVE-P-CDF-20: Classroom 21	Classroom Drinking Fountain	<1.0	470
122116-SVE-P-CF-21: Classroom 21	Classroom Faucet	<1.0	490
122116-SVE-P-CDF-22: Classroom 20	Classroom Drinking Fountain	<1.0	1,010
122116-SVE-P-CF-23: Classroom 20	Classroom Faucet	1	1,000
122116-SVE-P-CDF-24: Classroom 19	Classroom Drinking Fountain	<1.0	1,000
122116-SVE-P-CF-25: Classroom 19	Classroom Faucet	<1.0	970
122116-SVE-P-CDF-26: Classroom 18	Classroom Drinking Fountain	<1.0	720
122116-SVE-P-CDF-27: Classroom 18	Classroom Drinking Fountain	<1.0	1,000
122116-SVE-P-CF-28: Classroom 17	Classroom Faucet	<1.0	880
122116-SVE-P-CDF-29: Classroom 17	Classroom Drinking Fountain	<1.0	890
122116-SVE-P-CF-30: Classroom 13, Reading Room	**Classroom Faucet**	<1.0	**1,100**
122116-SVE-P-CF-31: Classroom 13, Reading Room	Classroom Drinking Fountain	<1.0	1,000
122116-SVE-P-CF-32: Classroom 12, Title Room	Classroom Faucet	<1.0	810
122116-SVE-P-CDF-33: Classroom 12, Title Room	Classroom Drinking Fountain	<1.0	980
122116-SVE-P-CF-34: Classroom 11, Resource Room	Classroom Faucet	<1.0	1,000
122116-SVE-P-CDF-35: Classroom 11, Resource Room	**Classroom Drinking Fountain**	<1.0	**1,100**
122116-SVE-P-CF-36: Classroom 16	Classroom Faucet	<1.0	1,010
122116-SVE-P-CDF-37: Classroom 16	Classroom Drinking Fountain	<1.0	1,000
122116-SVE-P-CF-38: Classroom 15	Classroom Faucet	<1.0	850
122116-SVE-P-CDF-39: Classroom 15	Classroom Drinking Fountain	<1.0	1,000
122116-SVE-P-CF-40: Classroom 14	Classroom Faucet	<1.0	690
122116-SVE-P-CDF-41: Classroom 14	Classroom Drinking Fountain	<1.0	890
122116-SVE-P-OF-42: Staff Lounge	**Office Faucet**	<1.0	**1,200**

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Sample Identification and Location	Fixture Type	Lead Results (µg/L)	Copper Results (µg/L)
122116-SVE-P-OF-43: Staff Lounge, instant hot	Office Faucet	<1.0	390
122116-SVE-P-OF-44: Staff Work Room 176	Office Faucet	2	1,000
122116-SVE-P-OF-45: Staff Work Room 176, drinking fountain	Classroom Drinking Fountain	<1.0	1,000
122116-SVE-P-DF-46: Corridor opposite Room 5, right fixture	Drinking Fountain	<1.0	1,000
122116-SVE-P-DF-47: Corridor opposite Room 5, left fixture	Drinking Fountain	<1.0	920
122116-SVE-P-NF-48: Nurse's Office	Nurse's Faucet	<1.0	920
122116-SVE-P-NF-49: Nurse's Office	Nurse's Drinking Fountain	<1.0	1,000
122116-SVE-P-CF-50: Classroom 4	Classroom Faucet	2	900
122116-SVE-P-CDF-51: Classroom 4	Classroom Drinking Fountain	<1.0	900
122116-SVE-P-BF-52: Laboratory Blank	*Distilled Water Blank*	*<1.0*	*<10*
122116-SVE-P-DF-53: Laboratory Spike	*Lead and Copper Spike*	*14*	*1,100*
EPA Action Level		**15**	**1,300**

1 µg/L means microgram per liter or parts per billion (ppb).

2 Action levels based on the U.S. EPA's Lead and Copper Rule.

Results in **bold** indicate concentrations above the action levels of 15 µg/L for lead and 1,300 µg/L for copper

Results in *italics* are quality assurance spike and blank samples.

Table 2: pH and Temperature Data Summary

Sample Number	Fixture Type	pH Flush	pH Sample	Temperature (°C) Flush	Temperature (°C) Sample
122116-SVE-P-CF-01: Music Room	Classroom Faucet	7.84	7.71	16.0	19.5
122116-SVE-P-DF-05: Multipurpose room, E. fixture	Drinking Fountain	7.84	7.95	15.1	17.5
122116-SVE-P-KF-09: Kitchen, E. wall, N. fixture	Kitchen Faucet	7.94	7.83	15.8	18.5
122116-SVE-P-KF-13: Kitchen, N. wall, W. fixture	Kitchen Faucet	7.92	7.79	16.5	18.0
122116-SVE-P-CF-17: Classroom 25	Classroom Faucet	7.91	7.78	16.4	19.5
122116-SVE-P-CF-21: Classroom 21	Classroom Faucet	7.87	7.84	15.7	21.5
122116-SVE-P-CF-25: Classroom 19	Classroom Faucet	7.89	7.75	20.0	20.5
122116-SVE-P-CDF-29: Classroom 17	Classroom Drinking Fountain	7.66	7.80	21.4	20.8
122116-SVE-P-CDF-33: Room 147	Classroom Drinking Fountain	7.66	7.79	21.6	20.3
122116-SVE-P-CDF-37: Room 142	Classroom Drinking Fountain	7.70	7.85	19.4	17.4
122116-SVE-P-CDF-41: Room 138	Classroom Drinking Fountain	7.74	7.83	15.1	20.6
122116-SVE-P-OF-45: Room 178	Drinking Fountain	7.55	7.65	21.6	21.4
122116-SVE-P-NF-49: Nurse's office	Drinking Fountain	7.73	7.71	19.7	23.6

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Table 3: Remedial Sampling Analytical Results Summary

Sampling Event	Sample Identification											
	OF-02	OF-03	KF-06	KF-07	KF-08	KF-10	CDF-18	CF-30	CDF-35	OF-42	*Laboratory Blank (-52)*	*Laboratory Spike (-53)*
Lead Results												
Initial (12/21/2016)	1	<1.0	3	3	2	**16**	<1.0	<1.0	<1.0	<1.0	*<1.0*	*14*
Fixture Replaced (3/4/2017)	-	-	-	-	-	7.75	-	-	-	-	*<1.0*	*16.8*
EPA Action Level	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**
Copper Results												
Initial (12/21/2016)	**1,200**	**1,400**	**1,400**	**1,600**	**1,300**	960	**1,100**	**1,100**	**1,100**	**1,200**	*<10*	*1,100*
Aggressive Flush (3/4/2017)	990	**1,320**	1,030	1,050	955	-	1,110	1,040	1,000	1,030	*<0.5*	*1,260*
Filter Installed (4/5/2017)	-	105	-	-	-	-	-	-	-	-	*<0.5*	*1,270*
EPA Action Level	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**

1 Results reported in micrograms per liter (µg/L) or parts per billion (ppb).

2 Action levels based on the U.S. EPA's Lead and Copper Rule.

Results indicated in **bold** indicate concentrations above the action levels of 15 µg/L for lead

Results indicated in *italics* are quality assurance spike and blank samples.

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ATTACHMENT D

Initial Analytical Results

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2710 North 20th Avenue, Pasco WA 99301
Tel: (509) 545-4989 | Fax: (509) 544-6010

Fulcrum Environmental
406 N. 2nd St.
Yakima, WA 98901

Subject: Chemical Analysis Report

Columbia Basin Analytical Laboratories received 53 sample(s) on 12/21/16 for analysis. These sample(s) have been assigned a login order number of W612107. Enclosed is the final report that consists of a summary report of the sample(s), and a copy of the chain of custody.

General Lab Comments

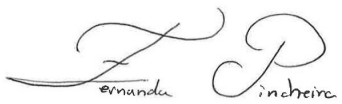
The results provided in this report relate only to the items tested. Sample(s) were received in acceptable conditions unless otherwise noted in the comments above. Sample(s) have not been field blank corrected unless otherwise noted in the general set comments above. The sample(s) were prepared in accordance with EPA 200.8 and analyzed in compliance with EPA 200.8. This test report shall not be reproduced, except in full, without written approval of Columbia Basin Analytical Laboratories. Any questions, please contact our office.

-Samples W612107-01 - 13 were analyzed on January 12, 2017 because they were analyzed on separate instrumentation runs and samples requiring dilutions were analyzed on January 13, 2017. The remaining samples were analyzed on January 17, 2017 and samples requiring dilutions were analyzed on January 18, 2017.

All samples were diluted 1:10.

X - Samples that exceeded the instrument calibration range were rerun at a 1:100 dilution, necessitating a 10-fold increase in the PQL.

Release of the data contained in the hard copy report has been authorized by the Laboratory Director or a designee as verified by the following signature. This report has been administratively reviewed by the following individual:



01/23/17

Project Coordinator II, M. Fernanda Pincheira — Date

If you have any questions please feel free to contact Fernanda Pincheira at MPincheira@rjleegroup.com.

RJ LEE GROUP

Laboratory Report

Ryan Mathews

Fulcrum Environmental
406 N. 2nd St.
Yakima, WA 98901

Client Project:

Fulcrum Kennewick

RJ Lee Group No.: W612107
COC No.: Kennewick
Samples Received: 12/21/16
Analysis/Prep Date: 01/12/17
Report Date: 01/23/17

Sample Name: 122116-SVE-P-CF-01 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-01 **Date Analyzed:** 01/12/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.74	0.01	
Lead	EPA 200.8	0.007	0.001	

Sample Name: 122116-SVE-P-OF-02 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-02 **Date Analyzed:** 01/13/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.2	0.1	X
Lead	EPA 200.8	0.001	0.001	

Sample Name: 122116-SVE-P-OF-03 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-03 **Date Analyzed:** 01/13/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.4	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-DF-04 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-04 **Date Analyzed:** 01/12/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.27	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-DF-05 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-05 **Date Analyzed:** 01/12/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.27	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

RJ LEE GROUP

Sample Name: 122116-SVE-P-KF-06 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-06 **Date Analyzed:** 01/13/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.4	0.1	X
Lead	EPA 200.8	0.003	0.001	

Sample Name: 122116-SVE-P-KF-07 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-07 **Date Analyzed:** 01/13/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.6	0.1	X
Lead	EPA 200.8	0.003	0.001	

Sample Name: 122116-SVE-P-KF-08 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-08 **Date Analyzed:** 01/13/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.3	0.1	X
Lead	EPA 200.8	0.002	0.001	

Sample Name: 122116-SVE-P-KF-09 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-09 **Date Analyzed:** 01/12/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.97	0.01	
Lead	EPA 200.8	0.001	0.001	

Sample Name: 122116-SVE-P-KF-10 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-10 **Date Analyzed:** 01/12/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.96	0.01	
Lead	EPA 200.8	0.016	0.001	

Sample Name: 122116-SVE-P-KF-11 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-11 **Date Analyzed:** 01/12/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.77	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

RJ LEE GROUP

Sample Name: 122116-SVE-P-KF-12 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-12 **Date Analyzed:** 01/12/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.91	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-KF-13 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-13 **Date Analyzed:** 01/12/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.85	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: 122116-SVE-P-WC-14 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-14 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.54	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-WC-15 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-15 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.48	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CDF-16 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-16 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.97	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-17 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-17 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.97	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

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Sample Name: 122116-SVE-P-CDF-18 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-18 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.1	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-19 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-19 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.0	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CDF-20 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-20 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.47	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-21 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-21 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.49	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CDF-22 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-22 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.01	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-23 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-23 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.0	0.1	X
Lead	EPA 200.8	0.001	0.001	

RJ LEE GROUP

Sample Name: 122116-SVE-P-CDF-24 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-24 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.0	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-25 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-25 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.97	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CDF-26 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-26 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.72	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-27 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-27 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.0	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-28 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-28 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.88	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CDF-29 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-29 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.89	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

RJ LEE GROUP

Sample Name: 122116-SVE-P-CF-30 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-30 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.1	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-31 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-31 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.0	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-32 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-32 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.81	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CDF-33 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-33 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.98	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-34 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-34 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.0	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CDF-35 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-35 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.1	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

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Sample Name: 122116-SVE-P-CF-36 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-36 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.01	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CDF-37 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-37 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.0	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-38 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-38 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.85	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CDF-39 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-39 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.0	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-40 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-40 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.69	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CDF-41 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-41 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.89	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

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Sample Name: 122116-SVE-P-OF-42 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-42 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.2	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-OF-43 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-43 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.39	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-OF-44 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-44 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.0	0.1	X
Lead	EPA 200.8	0.002	0.001	

Sample Name: 122116-SVE-P-OF-45 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-45 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.0	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-DF-46 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-46 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.0	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-DF-47 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-47 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.92	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

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Sample Name: 122116-SVE-P-NF-48 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-48 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.92	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-NF-49 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-49 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.0	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-CF-50 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-50 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.87	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: 122116-SVE-P-CDF-51 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-51 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.9	0.1	X
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-BF-52 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-52 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	< 0.010	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: 122116-SVE-P-DF-53 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612107-53 **Date Analyzed:** 01/18/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.1	0.1	X
Lead	EPA 200.8	0.014	0.001	

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Report Qualifiers:

A = Target Analyte media breakthrough suspect, see analytical report
B = Analyte detected in the associated blank
D = Analyte analyzed in a dilution
d = Data that exceeds the RSD criteria set by the SOP
E = Report concentration was above the instrument calibration range
H = Holding times for preparation or analysis exceeded
J = Analyte detected below quantitation limits, concentration is estimated
L = Sample condition at receipt out of compliance with method defined conditions
P = Library spectrum match, rsd >90% w RT match
R = RPD (relative percent difference) outside accepted recovery limits
Q = Result out of method specific acceptance QC criteria
U = Analyte analyzed for but not detected
S = Spike Recovery outside accepted recovery limits
N/A = Not Applicable
Z = Not ELAP accredited analyte
ND = Not Detected

Scientist III J Grissmerson

Request for Environmental and IH Laboratory Analytical Services

W612107

ATTENTION TO:	**RYAN MATHEWS**	Purchase Order No.:	Client Job No.: **162017**

Lab Use Only	Project No.:	Client No:	
	Date Logged In:	Logged In By:	
Report Results To	Name: Amanda Enbysk, Ryan Mathews		
	Company: Fulcrum Environmental Consulting		
	Address: 406 North 2nd Street		
	City, State, Zip: Yakima, WA, 98901		
	Phone: (509) 574-0839	Fax: (509) 575-8453	
	Call with Verbal Results:		
	Email Results To: aenbysk@efulcrum.net, **CC:** rmathews@efulcrum.net		
	Fax Results To:		
Send Invoice To	Name: Lorrie Boutillier		
	Company: Fulcrum Environmental	Email: lboutillier@efulcrum.net	
	Address: 406 North 2nd Street		
	City, State, Zip: Yakima, WA, 98901		
	Phone: (509) 574-0839	Fax: (509) 575-8453	
Special Instructions			

Turnaround Request: Standard: **Yes** No — If 'No,' No. of Business Days:

Drinking Water Sample Only: Sample Purpose: Information X Regulatory ☐ Accreditation (please list below):
System ID #:
DOH Source #:
Multiple Sources #s:
Sample Purpose: A ☐ B ☐ Other ☐

Chemistry Analysis Key

Preservation:		Matrix:		Container:
Unpres	H_2SO_4	WW=Wastewater	SW=Surface Water	P=Plastic
4°C	HCl	GW=Groudwater	DW=Drinking Water	G=Glass
HNO_3	NaOH	S=Soil/Sludge	O=Oil	W=Wipe
Other	Na_2SO_4	E=Extract	X=Other	A=Air (filter or tube)

Client Sample ID	Sample Description	Sample Date	Sample Time Start	Sample Time Stop	Wipe Area / Air Volume	EPA 200.8: Pb, Cu	Pres. Upon Receipt (Y/N)	Preservation	Matrix	Container Type	pH	No. Containers	
122116-SVE-P-CF-01	Music Faucet	12/21					X	Y UNPR.	DW	P			19.1
122116-SVE-P-OF-02	Library Sink												20.0
122116-SVE-P-OF-03	Library DF												19.3
122116-SVE-P-DF-04	Cafeteria DFL												18.8
122116SVE-P-DF-05	Cafeteria DFR												18.4
122116-SVE-P-KF-06	Food Prep SE												19.8
122116-SVE-P-KF-07	SE Rinser												20.5
122116-SVE-P-KF-08	Food Prep NER												20.9
122116-SVE-P-KF-09	Food Prep NEL												20.9
122116-SVE-P-KF-10	N Sink												20.6
122116-SVE-P-KF-11	NW Sprayer	V											20.1

Chain of Custody	Relinquished By (Signature):	Date: 12/21	Time: 12:30	Received By (Signature):	Date: DEC 21 2016 Time: 12:45
	Relinquished By (Print Name): Logan Lopez	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:
Chain of Custody	Relinquished By (Signature):	Date:	Time:	Received By (Signature):	Date: Time:
	Relinquished By (Print Name):	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**
509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Environmental and IH Laboratory Analytical Services

W612107

ATTENTION TO:	**RYAN MATHEWS**	Purchase Order No.:	Client Job No.: **162017**

Lab Use Only	Project No.:	Client No:	
	Date Logged In:	Logged In By:	
Report Results To	Name: Amanda Enbysk, Ryan Mathews		
	Company: Fulcrum Environmental Consulting		
	Address: 406 North 2nd Street		
	City, State, Zip: Yakima, WA, 98901		
	Phone: (509) 574-0839	Fax: (509) 575-8453	
	Call with Verbal Results:		
	Email Results To: aenbysk@efulcrum.net, **CC:** rmathews@efulcrum.net		
	Fax Results To:		
Send Invoice To	Name: Lorrie Boutillier		
	Company: Fulcrum Environmental	Email: lboutillier@efulcrum.net	
	Address: 406 North 2nd Street		
	City, State, Zip: Yakima, WA, 98901		
	Phone: (509) 574-0839	Fax: (509) 575-8453	
Special Instructions			

Turnaround Request: Standard: **Yes** No If 'No,' No. of Business Days:

Drinking Water Sample Only: Sample Purpose: Information **X** Regulatory □ Accreditation (please list below):
System ID #:
DOH Source #:
Multiple Sources #s:
Sample Purpose: A □ B □ Other □

Chemistry Analysis Key

Preservation:		Matrix:		Container:
Unpres	H_2SO_4	WW=Wastewater	SW=Surface Water	P=Plastic
4°C	HCl	GW=Groudwater	DW=Drinking Water	G=Glass
HNO_3	NaOH	S=Soil/Sludge	O=Oil	W=Wipe
Other	Na_2SO_4	E=Extract	X=Other	A=Air (filter or tube)

Client Sample ID	Sample Description	Sample Date	Sample Time Start	Sample Time Stop	Wipe Area / Air Volume	Analysis Requested: EPA 200.8: Pb, Cu	Pres. Upon Receipt (Y/N)	Preservation	Matrix	Container Type	pH	No. Containers	
122116-SVE-KF-12	NW Faucet	12/21					X	Y UNPR.	DW	P			20.2
122116-SVE-KF-13	NW Handwash												20.3
122116-SVE-P-WC-14	DFR (NW)												20.0
122116-SVE-P-WC-15	DFL (NW)												20.1
122116-SVE-P-CDF-16	23 DF												20.0
122116-SVE-P-CF-17	23 Sink												19.6
122116-SVE-P-CDF-18	22 DF												20.4
122116-SVE-P-CF-19	22 Sink												20.3
122116-SVE-P-CDF-20	21 DF												20.6
122116-SVE-P-CF-21	21 Sink												20.8
122116-SVE-P-CDF-22	20 DF												20.7

Chain of Custody	Relinquished By (Signature):	Date: 12/21	Time: 12:30	Received By (Signature):	Date: DEC 21 2016 Time: 1245
	Relinquished By (Print Name): Logan Lopez	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:
Chain of Custody	Relinquished By (Signature):	Date:	Time:	Received By (Signature):	Date: Time:
	Relinquished By (Print Name):	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
Columbia Basin Analytical Laboratories
2710 North 20th Avenue
Pasco, WA 99301

509.545.4989 **Phone**
509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Environmental and IH Laboratory Analytical Services

W612107

ATTENTION TO:	**RYAN MATHEWS**	Purchase Order No.:	Client Job No.: **162017**

Lab Use Only	Project No.:	Client No:	
	Date Logged In:	Logged In By:	
Report Results To	Name: Amanda Enbysk, Ryan Mathews		
	Company: Fulcrum Environmental Consulting		
	Address: 406 North 2nd Street		
	City, State, Zip: Yakima, WA, 98901		
	Phone: (509) 574-0839	Fax: (509) 575-8453	
	Call with Verbal Results:		
	Email Results To: aenbysk@efulcrum.net, **CC:** rmathews@efulcrum.net		
	Fax Results To:		
Send Invoice To	Name: Lorrie Boutillier		
	Company: Fulcrum Environmental	Email: lboutillier@efulcrum.net	
	Address: 406 North 2nd Street		
	City, State, Zip: Yakima, WA, 98901		
	Phone: (509) 574-0839	Fax: (509) 575-8453	
Special Instructions			

Turnaround Request: Standard: Yes No If 'No,' No. of Business Days:

Drinking Water Sample Only: Sample Purpose: Information X Regulatory □ Accreditation (please list below):
System ID #:
DOH Source #:
Multiple Sources #s:
Sample Purpose: A □ B □ Other □

Chemistry Analysis Key

Preservation:		Matrix:		Container:
Unpres	H_2SO_4	WW=Wastewater	SW=Surface Water	P=Plastic
4°C	HCl	GW=Groudwater	DW=Drinking Water	G=Glass
HNO_3	NaOH	S=Soil/Sludge	O=Oil	W=Wipe
Other	Na_2SO_4	E=Extract	X=Other	A=Air (filter or tube)

Client Sample ID	Sample Description	Sample Date	Sample Time Start	Sample Time Stop	Wipe Area / Air Volume	Analysis Requested: EPA 200.8: Pb, Cu	Pres. Upon Receipt (Y/N)	Preservation	Matrix	Container Type	pH	No. Containers	
122116-SVE-P-CF-23	20 Sink						X	Y UNPR	DW	P			20.7
122116-SVE-P-CDF-24	19 DF												19.1
122116-SVE-P-CF-25	19 Sink												20.6
122116-SVE-P-CDF-26	19 DF												20.6
122116-SVE-P-CF-27	18 Sink												20.6
122116-SVE-P-CF-28	17 Sink												20.3
122116-SVE-P-CDF-29	17 DF												20.9
122116-SVE-P-CF-30	13 Sink												20.3
122116-SVE-P-CF-31	13 DF												20.4
122116-SVE-P-CF-32	12 Sink												20.4
122116-SVE-P-CDF-33	12 DF												20.4

Chain of Custody	Relinquished By (Signature):	Date: 12/21	Time: 12:30	**Chain of Custody**	Received By (Signature): Date: DEC 21 2016 Time: 1245
	Relinquished By (Print Name): Logan Lopez	Relinquished To:			Received By (Print Name): Lopez Relinquished To:
	Company Name:	Method of Shipment:			Company Name: RJ Lee Method of Shipment:
Chain of Custody	Relinquished By (Signature):	Date:	Time:	**Chain of Custody**	Received By (Signature): Date: Time:
	Relinquished By (Print Name):	Relinquished To:			Received By (Print Name): Relinquished To:
	Company Name:	Method of Shipment:			Company Name: Method of Shipment:

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RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Environmental and IH Laboratory Analytical Services

W612107

ATTENTION TO:	**RYAN MATHEWS**	Purchase Order No.:	Client Job No.: **162017**

Lab Use Only	Project No.:	Client No:	
	Date Logged In:	Logged In By:	
Report Results To	Name: Amanda Enbysk, Ryan Mathews		
	Company: Fulcrum Environmental Consulting		
	Address: 406 North 2nd Street		
	City, State, Zip: Yakima, WA, 98901		
	Phone: (509) 574-0839	Fax: (509) 575-8453	
	Call with Verbal Results:		
	Email Results To: aenbysk@efulcrum.net, **CC:** rmathews@efulcrum.net		
	Fax Results To:		
Send Invoice To	Name: Lorrie Boutillier		
	Company: Fulcrum Environmental	Email: lboutillier@efulcrum.net	
	Address: 406 North 2nd Street		
	City, State, Zip: Yakima, WA, 98901		
	Phone: (509) 574-0839	Fax: (509) 575-8453	
Special Instructions			

Turnaround Request: Standard: Yes No If 'No,' No. of Business Days:

Drinking Water Sample Only: Sample Purpose: Information X Regulatory □ Accreditation (please list below):
System ID #:
DOH Source #:
Multiple Sources #s:
Sample Purpose: A □ B □ Other □

Chemistry Analysis Key

Preservation:		Matrix:		Container:
Unpres	H_2SO_4	WW=Wastewater	SW=Surface Water	P=Plastic
4°C	HCl	GW=Groudwater	DW=Drinking Water	G=Glass
HNO_3	NaOH	S=Soil/Sludge	O=Oil	W=Wipe
Other	Na_2SO_4	E=Extract	X=Other	A=Air (filter or tube)

Client Sample ID	Sample Description	Sample Date	Sample Time Start	Sample Time Stop	Wipe Area / Air Volume	Analysis Requested: EPA 200.8: Pb, Cu	Pres. Upon Receipt (Y/N)	Preservation	Matrix	Container Type	pH	No. Containers	
122116-SVE-P-CF-34	11 Sink						X	Y UNPR	DW				20.4
122116-SVE-P-CDF-35	11 DF												20.4
122116-SVE-P-CF-36	16 Sink												20.1
122116-SVE-P-CDF-37	16 DF												20.0
122116-SVE-P-CF-38	15 Sink												20.9
122116-SVE-P-CDF-39	15 DF												20.4
122116-SVE-P-CF-40	14 Sink												20.8
122116-SVE-P-CDF-41	14 DF												20.8
122116-SVE-P-DF-42	Staff faucet												20.3
122116-SVE-P-DF-43	Staff Hot												20.0
122116-SVE-P-DF-44	WKRm 178												21.0

Chain of Custody	Relinquished By (Signature):	Date: 12/21	Time: 17:30	Received By (Signature):	Date: DEC 21 2016 Time: 1245
	Relinquished By (Print Name): Logan Lopez	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:
Chain of Custody	Relinquished By (Signature):	Date:	Time:	Received By (Signature):	Date: Time:
	Relinquished By (Print Name):	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:

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RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Environmental and IH Laboratory Analytical Services

W612107

ATTENTION TO:	**RYAN MATHEWS**	Purchase Order No.:	Client Job No.: **162017**

Lab Use Only	Project No.:	Client No:	
	Date Logged In:	Logged In By:	
Report Results To	Name: Amanda Enbysk, Ryan Mathews		
	Company: Fulcrum Environmental Consulting		
	Address: 406 North 2nd Street		
	City, State, Zip: Yakima, WA, 98901		
	Phone: (509) 574-0839	Fax: (509) 575-8453	
	Call with Verbal Results:		
	Email Results To: aenbysk@efulcrum.net, **CC:** rmathews@efulcrum.net		
	Fax Results To:		
Send Invoice To	Name: Lorrie Boutillier		
	Company: Fulcrum Environmental	Email: lboutillier@efulcrum.net	
	Address: 406 North 2nd Street		
	City, State, Zip: Yakima, WA, 98901		
	Phone: (509) 574-0839	Fax: (509) 575-8453	
Special Instructions			

Turnaround Request: Standard: Yes No If 'No,' No. of Business Days:

Drinking Water Sample Only: Sample Purpose: Information X Regulatory □ Accreditation (please list below):
System ID #:
DOH Source #:
Multiple Sources #s:
Sample Purpose: A □ B □ Other □

Chemistry Analysis Key

Preservation:		Matrix:		Container:
Unpres	H_2SO_4	WW=Wastewater	SW=Surface Water	P=Plastic
4°C	HCl	GW=Groudwater	DW=Drinking Water	G=Glass
HNO_3	NaOH	S=Soil/Sludge	O=Oil	W=Wipe
Other	Na_2SO_4	E=Extract	X=Other	A=Air (filter or tube)

Client Sample ID	Sample Description	Sample Date	Sample Time Start	Sample Time Stop	Wipe Area / Air Volume	EPA 200.8: Pb, Cu	Pres. Upon Receipt (Y/N)	Preservation	Matrix	Container Type	pH	No. Containers	
122116-SVE-P-DF-45	178 DF	12/21					X	Y UNPR.	DW	P			21.2
122116-SVE-P-DF-46	DF R(west)												20.5
122116-SVE-P-DF-47	DF L(west												20.1
122116-SVE-P-NF-48	Health Sink												20.9
122116-SVE-PNF-49	Health DF												21.0
122116-SVE-P-CF-50	Rm 4 Sink												21.6
122116-SVE-P-CDF-51	Rm 4 DF												20.6
122116-SVE-P-BF-52	Blue Rm DF												19.4
122116-SVE-P-DF-53	Yellow DF												19.5

Chain of Custody

Relinquished By (Signature):		Date: 12/21	Time: 12:30
Relinquished By (Print Name):	Logan Lopez	Relinquished To:	
Company Name:		Method of Shipment:	

Chain of Custody

Received By (Signature):		Date: DEC 21 2016	Time: 1245
Received By (Print Name):		Relinquished To:	
Company Name:		Method of Shipment:	

Chain of Custody

Relinquished By (Signature):		Date:	Time:
Relinquished By (Print Name):		Relinquished To:	
Company Name:		Method of Shipment:	

Chain of Custody

Received By (Signature):		Date:	Time:
Received By (Print Name):		Relinquished To:	
Company Name:		Method of Shipment:	

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RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

FULCRUM environmental consulting

ATTACHMENT E

Remedial Analytical Results

P. 509.574.0839 F. 509.575.8453
406 North 2nd Street
Yakima, Washington 98901
efulcrum.net

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Fulcrum Environmental
Ryan Mathews
406 N. 2nd Street
Yakima, WA 98901

RE: Kennewick SD Drinking Water - Sunset View Elementary
Work Order Number: 1703042

March 13, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 18 sample(s) on 3/6/2017 for the analyses presented in the following report.

Drinking Water Metals by EPA Method 200.8

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager

CC:
Amanda Enbysk

Date: *03/13/2017*

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Sunset Vie
Work Order: 1703042

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1703042-001	SVE3417-P-OF-02	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-002	SVE3417-S-OF-02	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-003	SVE3417-T-OF-02	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-004	SVE3417-P-OF-03	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-005	SVE3417-P-KF-06	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-006	SVE3417-P-KF-07	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-007	SVE3417-S-KF-07	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-008	SVE3417-T-KF-07	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-009	SVE3417-P-KF-08	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-010	SVE3417-P-KF-10	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-011	SVE3417-S-KF-10	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-012	SVE3417-T-KF-10	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-013	SVE3417-P-CDF-18	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-014	SVE3417-P-CF-30	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-015	SVE3417-P-CDF-35	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-016	SVE3417-P-OF-42	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-017	SVE3417-P-BF-52	03/04/2017 8:30 AM	03/06/2017 8:43 AM
1703042-018	SVE3417-P-DF-53	03/04/2017 8:30 AM	03/06/2017 8:43 AM

Case Narrative

WO#: **1703042**
Date: **3/13/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Sunset View Elementary

WorkOrder Narrative:
I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Prep Sample Comments:
1703042-001A 209751: Prep Comments for EPA200.8, Sample 1703042-001A: Turbidity: 0.00 NTU
1703042-004A 209755: Prep Comments for EPA200.8, Sample 1703042-004A: Turbidity: 0.01 NTU
1703042-005A 209756: Prep Comments for EPA200.8, Sample 1703042-005A: Turbidity: 0.27 NTU
1703042-006A 209757: Prep Comments for EPA200.8, Sample 1703042-006A: Turbidity: 0.11 NTU
1703042-009A 209758: Prep Comments for EPA200.8, Sample 1703042-009A: Turbidity: 0.00 NTU
1703042-010A 209759: Prep Comments for EPA200.8, Sample 1703042-010A: Turbidity: 0.00 NTU
1703042-013A 209760: Prep Comments for EPA200.8, Sample 1703042-013A: Turbidity: 0.01 NTU
1703042-014A 209761: Prep Comments for EPA200.8, Sample 1703042-014A: Turbidity: 0.01 NTU
1703042-015A 209762: Prep Comments for EPA200.8, Sample 1703042-015A: Turbidity: 0.00 NTU
1703042-016A 209763: Prep Comments for EPA200.8, Sample 1703042-016A: Turbidity: 0.01 NTU
1703042-017A 209764: Prep Comments for EPA200.8, Sample 1703042-017A: Turbidity: 0.00 NTU
1703042-018A 209765: Prep Comments for EPA200.8, Sample 1703042-018A: Turbidity: 0.00 NTU

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Sunset View Elementary

Lab ID: 1703042-001 **Collection Date:** 3/4/2017 8:30:00 AM
Client Sample ID: **SVE3417-P-OF-02** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16429		Analyst: TN
Copper	990	0.500		µg/L	1	3/10/2017 6:33:18 PM

Lab ID: 1703042-004 **Collection Date:** 3/4/2017 8:30:00 AM
Client Sample ID: **SVE3417-P-OF-03** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16429		Analyst: TN
Copper	1,320	0.500		µg/L	1	3/10/2017 6:49:25 PM

Lab ID: 1703042-005 **Collection Date:** 3/4/2017 8:30:00 AM
Client Sample ID: **SVE3417-P-KF-06** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16429		Analyst: TN
Copper	1,030	0.500		µg/L	1	3/10/2017 6:53:26 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Sunset View Elementary

Lab ID: 1703042-006 **Collection Date:** 3/4/2017 8:30:00 AM
Client Sample ID: **SVE3417-P-KF-07** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16429		Analyst: TN
Copper	1,050	0.500		µg/L	1	3/10/2017 6:57:28 PM

Lab ID: 1703042-009 **Collection Date:** 3/4/2017 8:30:00 AM
Client Sample ID: **SVE3417-P-KF-08** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16429		Analyst: TN
Copper	955	0.500		µg/L	1	3/10/2017 7:01:30 PM

Lab ID: 1703042-010 **Collection Date:** 3/4/2017 8:30:00 AM
Client Sample ID: **SVE3417-P-KF-10** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16429		Analyst: TN
Lead	7.75	1.00		µg/L	1	3/10/2017 7:05:32 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Sunset View Elementary

Lab ID: 1703042-013 **Collection Date:** 3/4/2017 8:30:00 AM
Client Sample ID: **SVE3417-P-CDF-18** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16429		Analyst: TN
Copper	1,110	0.500		µg/L	1	3/10/2017 7:17:39 PM

Lab ID: 1703042-014 **Collection Date:** 3/4/2017 8:30:00 AM
Client Sample ID: **SVE3417-P-CF-30** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16429		Analyst: TN
Copper	1,040	0.500		µg/L	1	3/10/2017 7:21:41 PM

Lab ID: 1703042-015 **Collection Date:** 3/4/2017 8:30:00 AM
Client Sample ID: **SVE3417-P-CDF-35** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16429		Analyst: TN
Copper	1,000	0.500		µg/L	1	3/10/2017 7:25:42 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Sunset View Elementary

Lab ID: 1703042-016 **Collection Date:** 3/4/2017 8:30:00 AM
Client Sample ID: **SVE3417-P-OF-42** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16429		Analyst: TN
Copper	1,030	0.500		µg/L	1	3/10/2017 7:29:44 PM

Lab ID: 1703042-017 **Collection Date:** 3/4/2017 8:30:00 AM
Client Sample ID: **SVE3417-P-BF-52** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16429		Analyst: TN
Copper	ND	0.500		µg/L	1	3/10/2017 7:33:46 PM
Lead	ND	1.00		µg/L	1	3/10/2017 7:33:46 PM

Lab ID: 1703042-018 **Collection Date:** 3/4/2017 8:30:00 AM
Client Sample ID: **SVE3417-P-DF-53** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16429		Analyst: TN
Copper	1,260	0.500		µg/L	1	3/10/2017 7:37:47 PM
Lead	16.8	1.00		µg/L	1	3/10/2017 7:37:47 PM

Work Order: 1703042
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Sunset Vie

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	**MB-16429**	SampType: **MBLK**			Units: **µg/L**		Prep Date: **3/6/2017**		RunNo: **34876**		
Client ID:	**MBLKW**	Batch ID: **16429**					Analysis Date: **3/10/2017**		SeqNo: **665941**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.500									
Lead	ND	1.00									

Sample ID	**LCS-16429**	SampType: **LCS**			Units: **µg/L**		Prep Date: **3/6/2017**		RunNo: **34876**		
Client ID:	**LCSW**	Batch ID: **16429**					Analysis Date: **3/10/2017**		SeqNo: **665944**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	89.6	0.500	100.0	0	89.6	85	115				
Lead	53.2	1.00	50.00	0	106	85	115				

Sample ID	**1703042-001ADUP**	SampType: **DUP**			Units: **µg/L**		Prep Date: **3/6/2017**		RunNo: **34876**		
Client ID:	**SVE3417-P-OF-02**	Batch ID: **16429**					Analysis Date: **3/10/2017**		SeqNo: **665946**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	962	0.500						990.4	2.93	30	
Lead	4.43	1.00						4.498	1.61	30	

Sample ID	**1703042-001AMS**	SampType: **MS**			Units: **µg/L**		Prep Date: **3/6/2017**		RunNo: **34876**		
Client ID:	**SVE3417-P-OF-02**	Batch ID: **16429**					Analysis Date: **3/10/2017**		SeqNo: **665947**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	1,170	0.500	200.0	990.4	89.8	70	130				
Lead	109	1.00	100.0	4.498	105	70	130				

Sample ID	**1703042-001AMSD**	SampType: **MSD**			Units: **µg/L**		Prep Date: **3/6/2017**		RunNo: **34876**		
Client ID:	**SVE3417-P-OF-02**	Batch ID: **16429**					Analysis Date: **3/10/2017**		SeqNo: **665948**		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	1,110	0.500	200.0	990.4	59.2	70	130	1,170	5.37	30	S

Work Order: 1703042
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Sunset Vie

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID **1703042-001AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **3/6/2017** RunNo: **34876**
Client ID: **SVE3417-P-OF-02** Batch ID: **16429** Analysis Date: **3/10/2017** SeqNo: **665948**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	110	1.00	100.0	4.498	105	70	130	109.2	0.480	30	

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Sample Log-In Check List

Client Name:	**FE**	Work Order Number:	**1703042**
Logged by:	**Clare Griggs**	Date Received:	**3/6/2017 8:43:00 AM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	FedEx		

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Required ☑
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >0°C to 10.0°C*	Yes ☑	No ☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☑	No ☐	NA ☐ HNO3
12.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler	5.4
Sample	2.4

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Chain of Custody Record and Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 3/4/2017

Laboratory Project No (internal): 1703042

Page: 1 of: 2

Client: Fulcrum Environmental Consulting
Address: 406 North Second Street
City, State, Zip: Yakima, WA, 98901
Telephone: 509.574.0839 Fax: 509.575.8453

Project Name: Kennewick SD Drinking Water - Sunset View Elementary
Project No: 162017.11 Collected by: Amanda Enbysk
Location: Sunset View Elementary, Kennewick, WA
Report To (PM): Ryan Mathews
PM Email: rmathews@efulcrum.net; cc:aenbysk@efulcrum.net

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1 SVE3417-P-OF-02	3/4/2017	0830	DW									⊗					HNO_3 pres; analyze for Cu only
2 SVE3417-S-OF-02	↓	↓	↓														HOLD; unpr.
3 SVE3417-T-OF-02																	↓
4 SVE3417-P-OF-03												⊗					HNO_3 pres; analyze for Cu only
5 SVE3417-P-KF-06												⊗					
6 SVE3417-P-KF-07												⊗					↓
7 SVE3417-S-KF-07																	HOLD; unpr.
8 SVE3417-T-KF-07																	↓
9 SVE3417-P-KF-08												⊗					HNO_3 pres; analyze for Cu only
10 SVE3417-P-KF-10	↓	↓	↓									⊗					HNO_3 pres; analyze for Pb only

**Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr (Cu) Fe Hg K Mg Mn Mo Na Ni (Pb) Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (Samples will be held for 30 days unless otherwise noted. A fee may be assessed if samples are retained after 30 days.)

Turn-around times for samples received after 4:00pm will begin on the following business day.

Special Remarks: Please preserve all unp. samples

TAT: ASAP

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

^Please coordinate with the lab in advance

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x	3/4/17; 1300	x	3/6/17 0843
Relinquished	Date/Time	Received	Date/Time
x		x	

Distribution: White - Lab, Yellow - File, Pink - Originator

www.fremontanalytical.com

Chain of Custody Record and Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 3/4/2017 Laboratory Project No (internal): _____

Page: 2 of: 2

Client: Fulcrum Environmental Consulting
Address: 406 North Second Street
City, State, Zip: Yakima, WA, 98901
Telephone: 509.574.0839 Fax: 509.575.8453

Project Name: Kennewick SD Drinking Water - Sunset View Elementary
Project No: 162017.11 Collected by: Amanda Enbysk
Location: Sunset View Elementary, Kennewick, WA
Report To (PM): Ryan Mathews
PM Email: rmathews@efulcrum.net; cc:aenbysk@efulcrum.net

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8) Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	SVE3417-S-KF-10	3/4/2017	0830	DW													HOLD; impr.
2	SVE3417-T-KF-10																
3	SVE3417-P-COF-18												⊗				HNO_3 preserved; analyze for Cu only
4	SVE3417-P-CF-30												⊗				
5	SVE3417-P-COF-35												⊗				
6	SVE3417-P-OF-42												⊗				
7	SVE3417-P-BF-52												⊗				HNO_3 preserved; analyze for Pb or Cu
8	SVE3417-P-DF-53												⊗				
9																	
10																	

**Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr (Cu) Fe Hg K Mg Mn Mo Na Ni (Pb) Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (Samples will be held for 30 days unless otherwise noted. A fee may be assessed if samples are retained after 30 days.)

Turn-around times for samples received after 4:00pm will begin on the following business day.

Special Remarks: see page 1

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x Amanda McEvoy	3/4/17; 1300	x OK	3/4/17 0843
x		x	

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

^Please coordinate with the lab in advance

3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Fulcrum Environmental
Ryan Mathews
406 N. 2nd Street
Yakima, WA 98901

RE: Kennewick SD Drinking Water-Sunset View Elementary
Work Order Number: 1704068

April 07, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 5 sample(s) on 4/6/2017 for the analyses presented in the following report.

Drinking Water Metals by EPA Method 200.8

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager

Date: *04/07/2017*

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Sunset View
Work Order: 1704068

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1704068-001	SVE4517-P-OF-03	04/05/2017 9:00 AM	04/06/2017 10:31 AM
1704068-002	SVE4517-S-OF-03	04/05/2017 9:00 AM	04/06/2017 10:31 AM
1704068-003	SVE4517-T-OF-03	04/05/2017 9:00 AM	04/06/2017 10:31 AM
1704068-004	SVE4517-P-BF-52	04/05/2017 9:00 AM	04/06/2017 10:31 AM
1704068-005	SVE4517-P-DF-53	04/05/2017 9:00 AM	04/06/2017 10:31 AM

Case Narrative

WO#: **1704068**
Date: **4/7/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Sunset View Elementary

WorkOrder Narrative:
I. SAMPLE RECEIPT:
Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:
Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:
Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Prep Sample Comments:
1704068-001A 214537: Prep Comments for EPA200.8, Sample 1704068-001A: Turbidity: 0.36 NTU
1704068-004A 214538: Prep Comments for EPA200.8, Sample 1704068-004A: Turbidity: 0.01 NTU
1704068-005A 214539: Prep Comments for EPA200.8, Sample 1704068-005A: Turbidity: 0.00 NTU

Qualifiers:

* - Flagged value is not within established control limits
B - Analyte detected in the associated Method Blank
D - Dilution was required
E - Value above quantitation range
H - Holding times for preparation or analysis exceeded
I - Analyte with an internal standard that does not meet established acceptance criteria
J - Analyte detected below Reporting Limit
N - Tentatively Identified Compound (TIC)
Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
S - Spike recovery outside accepted recovery limits
ND - Not detected at the Reporting Limit
R - High relative percent difference observed

Acronyms:

%Rec - Percent Recovery
CCB - Continued Calibration Blank
CCV - Continued Calibration Verification
DF - Dilution Factor
HEM - Hexane Extractable Material
ICV - Initial Calibration Verification
LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
MB or MBLANK - Method Blank
MDL - Method Detection Limit
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PDS - Post Digestion Spike
Ref Val - Reference Value
RL - Reporting Limit
RPD - Relative Percent Difference
SD - Serial Dilution
SGT - Silica Gel Treatment
SPK - Spike
Surr - Surrogate

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Sunset View Elementary

Lab ID: 1704068-001 **Collection Date:** 4/5/2017 9:00:00 AM
Client Sample ID: **SVE4517-P-OF-03** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16722		Analyst: TN
Copper	105	0.500		µg/L	1	4/7/2017 2:29:21 PM

Lab ID: 1704068-004 **Collection Date:** 4/5/2017 9:00:00 AM
Client Sample ID: **SVE4517-P-BF-52** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16722		Analyst: TN
Copper	ND	0.500		µg/L	1	4/7/2017 2:33:22 PM

Lab ID: 1704068-005 **Collection Date:** 4/5/2017 9:00:00 AM
Client Sample ID: **SVE4517-P-DF-53** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16722		Analyst: TN
Copper	1,270	0.500		µg/L	1	4/7/2017 2:37:24 PM

Work Order: 1704068
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Sunset View

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	**MB-16722**	SampType:	**MBLK**			Units:	**µg/L**	Prep Date:	**4/7/2017**	RunNo:	**35427**	
Client ID:	**MBLKW**	Batch ID:	**16722**					Analysis Date:	**4/7/2017**	SeqNo:	**678405**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		ND	0.500									

Sample ID	**LCS-16722**	SampType:	**LCS**			Units:	**µg/L**	Prep Date:	**4/7/2017**	RunNo:	**35427**	
Client ID:	**LCSW**	Batch ID:	**16722**					Analysis Date:	**4/7/2017**	SeqNo:	**678406**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		98.2	0.500	100.0	0	98.2	85	115				

Sample ID	**1704067-001ADUP**	SampType:	**DUP**			Units:	**µg/L**	Prep Date:	**4/7/2017**	RunNo:	**35427**	
Client ID:	**BATCH**	Batch ID:	**16722**					Analysis Date:	**4/7/2017**	SeqNo:	**678408**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		963	0.500						932.8	3.19	30	

Sample ID	**1704067-001AMS**	SampType:	**MS**			Units:	**µg/L**	Prep Date:	**4/7/2017**	RunNo:	**35427**	
Client ID:	**BATCH**	Batch ID:	**16722**					Analysis Date:	**4/7/2017**	SeqNo:	**678409**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		1,190	0.500	200.0	932.8	131	70	130				S

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Sample ID	**1704067-001AMSD**	SampType:	**MSD**			Units:	**µg/L**	Prep Date:	**4/7/2017**	RunNo:	**35427**	
Client ID:	**BATCH**	Batch ID:	**16722**					Analysis Date:	**4/7/2017**	SeqNo:	**678410**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		1,140	0.500	200.0	932.8	103	70	130	1,195	4.82	30	

Sample Log-In Check List

Client Name:	**FE**	Work Order Number:	**1704068**
Logged by:	**Erica Silva**	Date Received:	**4/6/2017 10:31:00 AM**

Chain of Custody

1.	Is Chain of Custody complete?	Yes ☑	No ☐	Not Present ☐
2.	How was the sample delivered?	FedEx		

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Required ☑
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >0°C to 10.0°C*	Yes ☑	No ☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☑	No ☐	NA ☐ HNO3 to 002A, 003A
12.	Is there headspace in the VOA vials?	Yes ☐	No ☐	NA ☑
13.	Did all samples containers arrive in good condition(unbroken)?	Yes ☑	No ☐	
14.	Does paperwork match bottle labels?	Yes ☑	No ☐	
15.	Are matrices correctly identified on Chain of Custody?	Yes ☑	No ☐	
16.	Is it clear what analyses were requested?	Yes ☑	No ☐	
17.	Were all holding times able to be met?	Yes ☑	No ☐	

Special Handling (if applicable)

18.	Was client notified of all discrepancies with this order?	Yes ☐	No ☐	NA ☑

Person Notified: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler 1	2.2
Cooler 2	0.9
Sample 1	2.9
Sample 2	1.1

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C

Chain of Custody Record and Laboratory Services Agreement

Fremont Analytical
3600 Fremont Ave N. Tel: 206-352-3790
Seattle, WA 98103 Fax: 206-352-7178

Date: 4/5/2017 Laboratory Project No (internal): 1704068

Page: 1 of: 1

Client: Fulcrum Environmental Consulting
Address: 406 North Second Street
City, State, Zip: Yakima, WA, 98901
Telephone: 509.574.0839 Fax: 509.575.8453

Project Name: Kennewick SD Drinking Water - Sunset View Elementary
Project No: 162017.11 Collected by: Amanda Enbysk
Location: Sunset View Elementary, Kennewick, WA
Report To (PM): Ryan Mathews
PM Email: rmathews@efulcrum.net; cc: aenbysk@efulcrum.net

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1	SVE4517-P-OF-03	4/5/2017	0900	OW									⊗					HNO_3 preserved
2	SVE4517-S-OF-03	↓	↓	↓														HOLD; unpreserved
3	SVE4517-T-OF-03																	↓
4	SVE4517-P-BF-52												⊗					HNO_3 preserved
5	SVE4517-P-DF-53	↓	↓	↓									⊗					↓
6																		
7																		
8																		
9																		
10																		

**Metals Analysis (Circle): MTCA-5 RCRA-8 Priority Pollutants TAL *Individual:* Ag Al As B Ba Be Ca Cd Co Cr (Cu) Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (Samples will be held for 30 days unless otherwise noted. A fee may be assessed if samples are retained after 30 days.)

Turn-around times for samples received after 4:00pm will begin on the following business day.

Special Remarks:
Please preserve all unpreserved
TAT: ASAP

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
x [signature]	4/5/2017; 1500	x [signature]	4/6/2017 1031
x		x	

TAT → SameDay^ NextDay^ 2 Day 3 Day STD
^Please coordinate with the lab in advance

FULCRUM environmental consulting

ATTACHMENT F

Fixture Style Photographs

P. 509.574.0839 F. 509.575.8453
406 North 2nd Street
Yakima, Washington 98901
efulcrum.net

Sample 122116-SVE-P-KF-10: **16 µg/L** initial lead concentration. Fixture style above is identified producing elevated lead concentrations.

Sample 122116-SVE-P-KF-13: 2 µg/L initial lead concentration. Same fixture style as initial sample with elevated lead concentration.

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