November 2, 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
Eastgate Elementary School, 910 East 10th Avenue, Kennewick, Washington

Dear Keith:

On Wednesday, December 21, 2016, Fulcrum Environmental Consulting, Inc. (Fulcrum) collected 33 drinking water samples for lead and copper analysis from Eastgate Elementary School (School) located at 910 East 10th Avenue in Kennewick, Washington. Initial sampling identified nine fixture locations with copper concentrations above guidance levels. Fulcrum returned to the School on January 21, January 28, March 4, and March 18, 2017, to collect samples after remediation of the fixture 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 nine samples with copper concentrations above the Environmental Protection Agency (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.

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. Fulcrum returned on January 21st, January 28th, March 4th, and March 18th 2007 and collected a sample to evaluate the success of the remediation. The follow-up samples

[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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yielded results confirming the remediation was successful at reducing copper below the EPA action level. Following sampling and review of laboratory results, Fulcrum recommended, and the District elected, to return the identified fixtures to service.

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. See Figure 1-A and 1-B 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 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.

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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 from service fixtures that did not respond to an aggressive flush. Filtered fixtures were resampled following filter installation to verify effectiveness of the filter.

Remedial Sampling

Remedial sampling typically consisted of first, second, and third draw samples from the fixture location 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

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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-A and 1-B 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 the remedial sampling event are presented in Figure 1-A and 1-B 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 nine samples, with a copper concentration above the EPA action level of 1,300 micrograms per liter (µg/L). No samples were identified with lead concentrations above the EPA action level of 15 µg/L.

Remedial Sampling

Immediately following receipt of initial sampling results, the District removed the identified fixtures from service pending remediation and further testing. To remediate elevated copper concentrations, the District

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completed aggressive flushes of the fixtures. Fulcrum returned on mornings following the aggressive flush, January 21, January 28, March 4, and March 18, 2017, to collect follow-up samples.

Analytical results from remedial sampling indicated the aggressive flushes were successful at reducing copper concentrations below the action level for the fixtures in question.

Recommendations

No samples were found to contain lead concentrations above method reporting limits. Nine initial samples contained copper above the EPA action level of 1,300 µg/L. The District completed aggressive flushes to reduce the copper concentration of the fixtures follow-up samples yielded results below the 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.

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 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).

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-A: Sample Location Map – First Floor
Figure 1-B: Sample Location Map – Second Floor

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LEGEND

KF-## - Kitchen faucet

CF-## - Classroom faucet

CDF-## - Classroom drinking fountain

OF-## - Office faucet

WC-## - Water cooler fountain

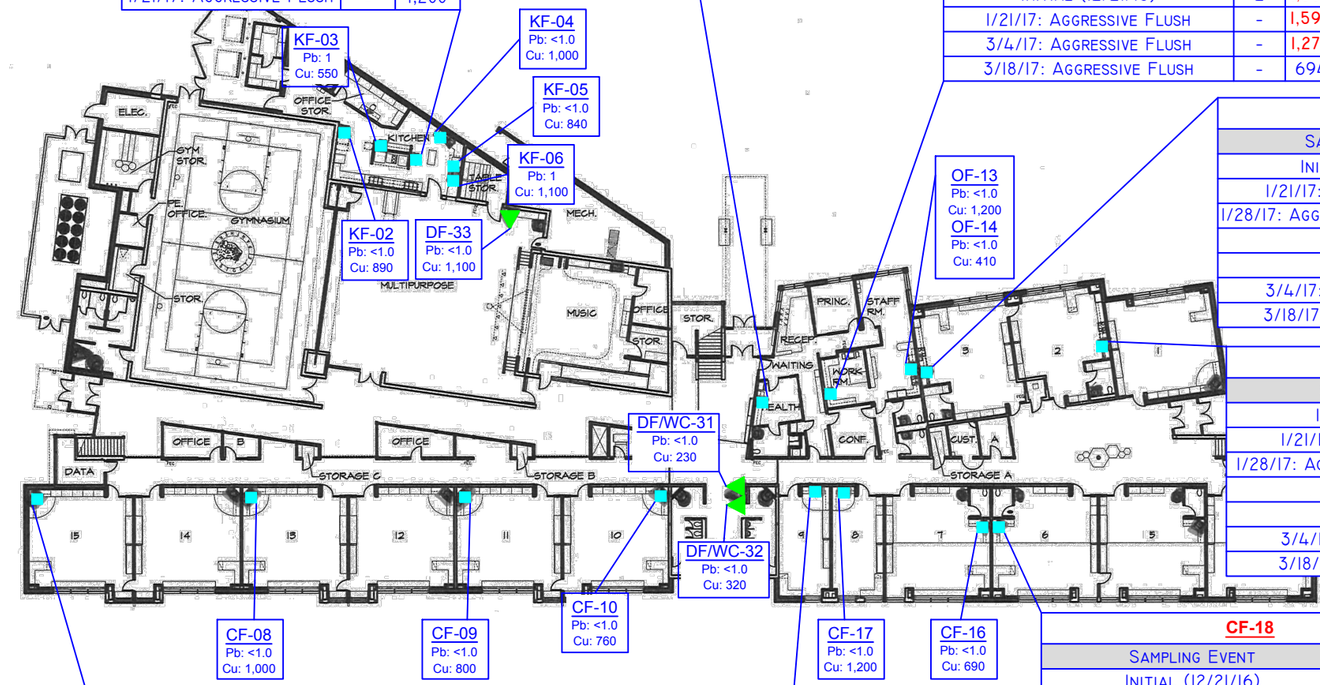
BF-## - Bottle filler fountain

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.



KF-01

Sampling Event	Pb	Cu
Initial (12/21/16)	4	1,300
1/21/17: Aggressive Flush	-	1,200

NF-12

Sampling Event	Pb	Cu
Initial (12/21/16)	<1.0	2,000
1/21/17: Aggressive Flush	-	1,660
3/4/17: Aggressive Flush	-	1,350
3/18/17: Aggressive Flush	-	797

NF-15

Sampling Event	Pb	Cu
Initial (12/21/16)	2	1,300
1/21/17: Aggressive Flush	-	1,590
3/4/17: Aggressive Flush	-	1,270
3/18/17: Aggressive Flush	-	694

CF-20

Sampling Event	Pb	Cu
Initial (12/21/16)	<1.0	1,600
1/21/17: Aggressive Flush	-	1,730
1/28/17: Aggressive Flush, 1st Draw	-	1,770
1/28/17: 2nd Draw	-	2,250
1/28/17: 3rd Draw	-	767
3/4/17: Aggressive Flush	-	1,280
3/18/17: Aggressive Flush	-	674

CF-19

Sampling Event	Pb	Cu
Initial (12/21/16)	<1.0	1,600
1/21/17: Aggressive Flush	-	1,480
1/28/17: Aggressive Flush, 1st Draw	-	1,610
1/28/17: 2nd Draw	-	2,370
1/28/17: 3rd Draw	-	941
3/4/17: Aggressive Flush	-	1,300
3/18/17: Aggressive Flush	-	578

CF-18

Sampling Event	Pb	Cu
Initial (12/21/16)	<1.0	1,400
1/21/17: Aggressive Flush	-	1,160
1/28/17: Aggressive Flush, 1st Draw		1,320
1/28/17: 2nd Draw		1,900
1/28/17: 3rd Draw		657

CF-07

Sampling Event	Pb	Cu
Initial (12/21/16)	<1.0	1,400
1/21/17: Aggressive Flush	-	1,400
1/28/17: Aggressive Flush, 1st Draw	-	2,500
1/28/17: 2nd Draw	-	3,670
1/28/17: 3rd Draw	-	1,740
3/4/17: Aggressive Flush	-	837

CF-11

Sampling Event	Pb	Cu
Initial (12/21/16)	<1.0	1,300
1/21/17: Aggressive Flush	-	877

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Eastgate Elementary School
910 East 10th Avenue
Kennewick, Washington

Sample Location Map - First Floor

FIGURE
1-A

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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

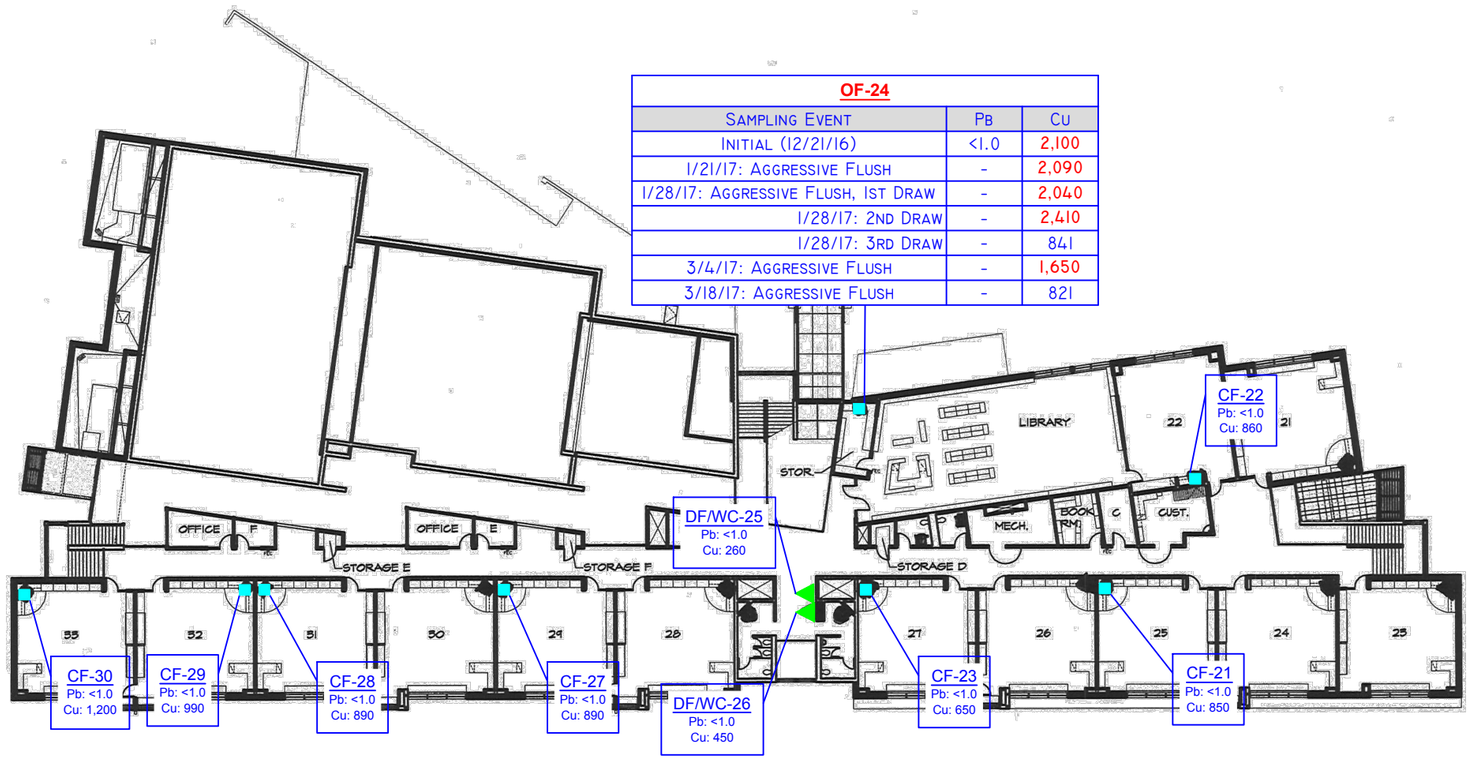
NF-## - Nurse's faucet

- 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.

OF-24		
Sampling Event	Pb	Cu
Initial (12/21/16)	<1.0	2,100
1/21/17: Aggressive Flush	-	2,090
1/28/17: Aggressive Flush, 1st Draw	-	2,040
1/28/17: 2nd Draw	-	2,410
1/28/17: 3rd Draw	-	841
3/4/17: Aggressive Flush	-	1,650
3/18/17: Aggressive Flush	-	821



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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: Eastgate Elementary Address: 910 E 10th Ave, Kennewick WA

☑ Elementary ☐ Middle School ☐ High School ☐ Administration

Date of Construction: 2015 Modernizations: N/A

Fixture Type	Locations	Fixture Styles[1]	Samples	Ratio
Drinking fountain/water cooler (DF/WC)	8	3	5	63%
Kitchen Fixture (KF)	6	4	6	100%
Classroom faucet, including faucets in Food Labs and Life Sciences Classrooms (CF)	29	2	17	60%
Classroom drinking fountain at sink (CDF)	N/A	N/A	-	-
Nurse's Office/Health Room (NF)	1	1	1	100%
Teacher's Lounges/Work Rooms (OF)	4	2	4	100%
TOTALS	**48**		**33**	**69%**

1 Fixture styles are approximate based on sampler's observations

Lead Sampler: Nathan Bostrom Date: 12/21/2016

Sample Prefix: EGE – 122116 – P (first-draw) – _____ – 01-35

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)
EGE122116-P-KF-01: Kitchen, Middle island, E. end	**Kitchen Faucet**	4	**1,300**
EGE122116-P-KF-02: Kitchen, W. wall	Kitchen Faucet	<1.0	890
EGE122116-P-KF-03: Kitchen, Middle island, W. end	Kitchen Faucet	1	550
EGE122116-P-KF-04: Kitchen, N. wall	Kitchen Faucet	<1.0	1,000
EGE122116-P-KF-05: Kitchen, E. wall, faucet	Kitchen Faucet	<1.0	840
EGE122116-P-KF-06: Kitchen, E. wall, sprayer	Kitchen Faucet	1	1,100
EGE122116-P-CF-07: Room 15	**Classroom Faucet**	<1.0	**1,400**
EGE122116-P-CF-08: Room 13	Classroom Faucet	<1.0	1,000
EGE122116-P-CF-09: Room 11	Classroom Faucet	<1.0	800
EGE122116-P-CF-10: Room 10	Classroom Faucet	<1.0	760
EGE122116-P-CF-11: Room 09	**Classroom Faucet**	<1.0	**1,300**
EGE122116-P-NF-12: Health Room	**Nurse's Faucet**	<1.0	**2,000**
EGE122116-P-OF-13: Staff Lounge	Office Faucet	<1.0	1,200
EGE122116-P-OF-14: Staff Lounge, instant hot	Office Faucet	<1.0	410
EGE122116-P-NF-15: Work Room	**Office Faucet**	2	**1,300**
EGE122116-P-CF-16: Room 07	Classroom Faucet	<1.0	690
EGE122116-P-CF-17: Room 08	Classroom Faucet	<1.0	1,200
EGE122116-P-CF-18: Room 06	**Classroom Faucet**	<1.0	**1,400**
EGE122116-P-CF-19: Room 02	**Classroom Faucet**	<1.0	**1,600**
EGE122116-P-CF-20: Room 03	**Classroom Faucet**	<1.0	**1,600**
EGE122116-P-CF-21: Room 25	Classroom Faucet	<1.0	850
EGE122116-P-CF-22: Room 22	Classroom Faucet	<1.0	860
EGE122116-P-CF-23: Room 27	Classroom Faucet	<1.0	650
EGE122116-P-OF-24: Library Work Room	**Office Faucet**	<1.0	**2,100**
EGE122116-P-DW/WC-25: 2nd floor, left fixture	Drinking Fountain/Water Cooler	<1.0	260
EGE122116-P-DW/WC-26: 2nd floor, right fixture	Drinking Fountain/Water Cooler	<1.0	450
EGE122116-P-CF-27: Room 29	Classroom Faucet	<1.0	890
EGE122116-P-CF-28: Room 31	Classroom Faucet	<1.0	890
EGE122116-P-CF-29: Room 32	Classroom Faucet	<1.0	990
EGE122116-P-CF-30: Room 33	Classroom Faucet	<1.0	1,200
EGE122116-P-DF/WC-31: First floor, left fixture	Drinking Fountain/Water Cooler	<1.0	230
EGE122116-P-DF/WC-32: First floor, right fixture	Drinking Fountain/Water Cooler	<1.0	320
EGE122116-P-DF-33: Multipurpose/Cafeteria, right fixture	Drinking Fountain	<1.0	1,100
EGE122116-P-CF-34: Laboratory Blank	*Distilled Water Blank*	*<1.0*	*<10*
EGE122116-P-CF-35: Laboratory Spike	*Lead and Copper Spike*	*14*	*1,300*
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 indicated in **bold** indicate concentrations above the action levels of 15 µg/L for lead and 1,300 µg/L for copper

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

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Table 2: pH and Temperature Data Summary

Sample Number	Fixture Type	pH Flush	pH Sample	Temp (°C) Flush	Temp (°C) Sample
EGE122116-P-KF-05: Kitchen, E. wall	Kitchen Faucet	6.94	7.92	13.9	17.3
EGE122116-P-CF-09: Classroom 11	Classroom Faucet	7.91	7.80	16.5	18.7
EGE122116-P-NF-12: Health Room	Nurse's Faucet	7.87	7.82	15.9	20.0
EGE122116-P-CF-16: Classroom 07	Classroom Faucet	7.63	7.88	20.3	20.1
EGE122116-P-CF-20: Classroom 03	Classroom Faucet	7.87	7.83	16.7	20.1
EGE122116-P-OF-24: Storage room, rear of library	Office Faucet	7.85	7.95	20.6	18.6
EGE122116-P-CF-28: Classroom 31	Classroom Faucet	7.31	7.88	21.1	20.8
EGE122116-P-DF/WC-32: First floor drinking fountain, right fixture	Water Cooler Fountain	7.61	7.96	15.7	15.5

Table 3: Remedial Sampling Analytical Results

	Sample Identification										
Sampling Event	KF-01	CF-07	CF-11	NF-12	NF-15	CF-18	CF-19	CF-20	OF-24	*Laboratory Blank (-34)*	*Laboratory Spike(-35)*
Initial (12/21/2016)	**1,300**	**1,400**	**1,300**	**2,000**	**1,300**	**1,400**	**1,600**	**1,600**	**2,100**	*<10*	*1,300*
Aggressive Flush (1/21/2017)	1,200	**1,400**	877	**1,660**	**1,590**	1,160	**1,480**	**1,730**	**2,090**	*0.60*	-
3-Part Evaluation; First Draw (1/28/2017)	-	**2,500**	-	-	-	**1,320**	**1,610**	**1,770**	**2,040**	*<10*	*1,290*
Second Draw (1/28/2017)	-	**3,670**	-	-	-	**1,900**	**2,370**	**2,250**	**2,410**	-	-
Third Draw (1/28/2017)	-	**1,740**	-	-	-	657	941	767	841	-	-
Aggressive Flush (3/4/2017)	-	837	-	**1,350**	**1,270**	-	**1,300**	**1,280**	**1,650**	*<0.5*	*1,220*
Aggressive Flush (3/18/2017)	-	-	-	797	694	-	578	674	821	*0.760*	*1,310*
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 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 indicated in **bold** indicate concentrations above the action levels of 15 µg/L for lead and 1,300 µg/L for copper

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

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ATTACHMENT D

Initial Analytical Results

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RJ Lee*Group*, Inc. | Columbia Basin Analytical Laboratories
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

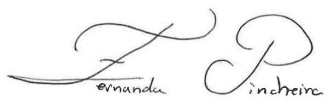
Columbia Basin Analytical Laboratories received 35 sample(s) on 12/21/16 for analysis. These sample(s) have been assigned a login order number of W612100. Enclosed is the final report that consists of a summary report of the sample(s), and a copy of the chain of custody.

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.

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:



01/10/17

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

Amanda Enbysk

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

Client Project:

Fulcrum Kennewick

RJ Lee Group No.: W612100
COC No.: Kennewick
Samples Received: 12/21/16
Analysis/Prep Date: 01/07/17
Report Date: 01/10/17

Sample Name: EGE122116-P-KF-01 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-01 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.3	0.1	X
Lead	EPA 200.8	0.004	0.001	

Sample Name: EGE122116-P-KF-02 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-02 **Date Analyzed:** 01/06/17

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

Sample Name: EGE122116-P-KF-03 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-03 **Date Analyzed:** 01/06/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.55	0.01	
Lead	EPA 200.8	0.001	0.001	

Sample Name: EGE122116-P-KF-04 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-04 **Date Analyzed:** 01/06/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.00	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: EGE122116-P-KF-05 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-05 **Date Analyzed:** 01/06/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.84	0.01	
Lead	EPA 200.8	< 0.001	0.001	

RJ LEE GROUP

Sample Name: EGE122116-P-KF-06 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-06 **Date Analyzed:** 01/07/17

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

Sample Name: EGE122116-P-CF-07 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-07 **Date Analyzed:** 01/07/17

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

Sample Name: EGE122116-P-CF-08 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-08 **Date Analyzed:** 01/06/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.00	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: EGE122116-P-CF-09 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-09 **Date Analyzed:** 01/06/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.80	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: EGE122116-P-CF-10 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-10 **Date Analyzed:** 01/06/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.76	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: EGE122116-P-CF-11 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-11 **Date Analyzed:** 01/07/17

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

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Sample Name: EGE122116-P-NF-12 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-12 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	2.0	0.1	X
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: EGE122116-P-OF-13 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-13 **Date Analyzed:** 01/07/17

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: EGE122116-P-OF-14 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-14 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.41	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: EGE122116-P-NF-15 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-15 **Date Analyzed:** 01/07/17

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: EGE122116-P-CF-16 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-16 **Date Analyzed:** 01/07/17

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

Sample Name: EGE122116-P-CF-17 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-17 **Date Analyzed:** 01/07/17

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	

RJ LEE GROUP

Sample Name: EGE122116-P-CF-18 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-18 **Date Analyzed:** 01/07/17

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

Sample Name: EGE122116-P-CF-19 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-19 **Date Analyzed:** 01/07/17

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

Sample Name: EGE122116-P-CF-20 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-20 **Date Analyzed:** 01/07/17

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

Sample Name: EGE122116-P-CF-21 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-21 **Date Analyzed:** 01/07/17

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

Sample Name: EGE122116-P-CF-22 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-22 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.86	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: EGE122116-P-CF-23 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-23 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.65	0.01	
Lead	EPA 200.8	< 0.001	0.001	

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Sample Name: EGE122116-P-OF-24 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-24 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	2.1	0.1	X
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: EGE122116-P-DF/WC-25 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-25 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.26	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: EGE122116-P-NF/WC-26 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-26 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.45	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: EGE122116-P-CF-27 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-27 **Date Analyzed:** 01/07/17

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

Sample Name: EGE122116-P-CF-28 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-28 **Date Analyzed:** 01/07/17

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

Sample Name: EGE122116-P-CF-29 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-29 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.99	0.01	
Lead	EPA 200.8	< 0.001	0.001	

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Sample Name: EGE122116-P-CF-30 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-30 **Date Analyzed:** 01/07/17

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: EGE122116-P-DF/WC-31 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-31 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.23	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: EGE122116-P-DF/WC-32 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-32 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.32	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: EGE122116-P-DF-33 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-33 **Date Analyzed:** 01/07/17

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

Sample Name: EGE122116-P-CF-34 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-34 **Date Analyzed:** 01/07/17

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

Sample Name: EGE122116-P-CF-35 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612100-35 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.3	0.1	X
Lead	EPA 200.8	0.014	0.001	

RJ LEE GROUP

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

W612100

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
EGE122116-P-KF-01	Kitchen	12-21-16				X		UNPR	DW	P		17.2
EGE122116-P-KF-02												17.1
EGE122116-P-KF-03												17.7
EGE122116-P-KF-04												16.9
EGE122116-P-KF-05												17.0
EGE122116-P-KF-06												17.4
EGE122116-P-CF-07	RM-15											18.0
EGE122116-P-CF-08	RM-13											18.1
EGE122116-P-CF-09	RM-11											18.1
EGE122116-P-CF-10	RM-10											18.0
EGE122116-P-CF-11	Rm-9											17.2

Chain of Custody	Relinquished By (Signature): Nathan Bostrom	Date: 12-21-16	Time: 325	Received By (Signature):	Date: DEC 21 2016 Time: 325
	Relinquished By (Print Name): Nathan Bostrom	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name: Fulcrum	Method of Shipment:		Company Name: RJ Lee	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

W612100

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
EGE122116-P-NF-12	Nurses Office	12-21-16				X		UNPR	DW	P		18.4
EGE122116-P-OF-13	Office											18.4
EGE122116-P-OF-14	Office (Hot faucet)											18.5
EGE122116-P-NF-15	Nurse's office											18.5
EGE122116-P-CF-16	RM-7											17.9
EGE122116-P-CF-17	RM-8											18.4
EGE122116-P-CF-18	RM-[redacted] 6											17.7
EGE122116-P-CF-19	RM-2											17.7
EGE122116-P-CF-20	RM-3											17.7
EGE122116-P-CF-21	RM-25											17.7
EGE122116-P-CF-22	RM-22											17.5

Chain of Custody	Relinquished By (Signature): Nathan Bostrom	Date: 12-21-16	Time: 325	Received By (Signature):	Date: DEC 21 2016 Time: 325
	Relinquished By (Print Name): Nathan Bostrom	Relinquished To:		Received By (Print Name): LOPEZ	Relinquished To:
	Company Name: Fulcrum	Method of Shipment:		Company Name: RJ Lee	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**

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509.544.6010 **Fax**

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Environmental and IH Laboratory Analytical Services

W612100

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
EGE 122116-P-CF-23	RM-27	12-21-16				X		UNPR.	DW	P		17.2
EGE 122116-P-CF-24	Library office											17.1
EGE 122116-P-DF/Wc-25	Upstairs left											17.7
EGE 122116-P-DF/Wc-26	upstairs right											16.9
EGE 122116-P-CF-27	RM-29											17.0
EGE 122116-P-CF-28	RM-31											17.4
EGE 122116-P-CF-29	RM-32											18.0
EGE 122116-P-CF-30	RM-3											18.1
EGE 122116-P-DF/Wc-31	Left Main floor											18.1
EGE 122116-P-DF/Wc-32	Right Main floor											18.0
EGE 122116-P-DF-33	Cafeteria DF											18.7

Chain of Custody	Relinquished By (Signature): Nathan B	Date: 12-21-16	Time: 3:25	Received By (Signature):	Date: DEC 21 2016 Time: 325
	Relinquished By (Print Name): Nathan Bostrom	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name: Fulcrum	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
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724.733.1799 **Fax**

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

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Environmental and IH Laboratory Analytical Services

W612100

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
EGE122116-P-CF-34	RM 203	12-21-16				X		UNPR.	DW	P		13.1
EGE122116-P-CF-35	RM 211	↓										12.6

Chain of Custody	Relinquished By (Signature): Nathan Bostrom	Date: 12-21-16	Time: 325	**Chain of Custody**	Received By (Signature):	Date: DEC 21 2016	Time: 325
	Relinquished By (Print Name): Nathan Bostrom	Relinquished To:			Received By (Print Name):	Relinquished To:	
	Company Name: Fulcrum	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:	

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

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 - Eastgate Elementary
Work Order Number: 1701236

January 24, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 16 sample(s) on 1/23/2017 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

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate El
Work Order: 1701236

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1701236-001	EGE12117-P-KF-01	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-002	EGE12117-S-KF-01	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-003	EGE12117-T-KF-01	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-004	EGE12117-P-CF-07	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-005	EGE12117-P-CF-11	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-006	EGE12117-P-NF-12	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-007	EGE12117-S-NF-12	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-008	EGE12117-T-NF-12	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-009	EGE12117-P-OF-15	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-010	EGE12117-S-NF-15	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-011	EGE12117-T-NF-15	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-012	EGE12117-P-CF-18	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-013	EGE12117-P-CF-19	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-014	EGE12117-P-CF-20	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-015	EGE12117-P-OF-24	01/21/2017 11:00 AM	01/23/2017 12:25 PM
1701236-016	EGE12117-P-CF-34	01/21/2017 11:00 AM	01/23/2017 12:25 PM

Case Narrative

WO#: **1701236**
Date: **1/24/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate 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:
1701236-001A 202824: Prep Comments for EPA200.8, Sample 1701236-001A: Turbidity: 0.08 NTU
1701236-004A 202825: Prep Comments for EPA200.8, Sample 1701236-004A: Turbidity: 0.09 NTU
1701236-005A 202826: Prep Comments for EPA200.8, Sample 1701236-005A: Turbidity: 0.04 NTU
1701236-006A 202827: Prep Comments for EPA200.8, Sample 1701236-006A: Turbidity: 0.10 NTU
1701236-009A 202828: Prep Comments for EPA200.8, Sample 1701236-009A: Turbidity: 0.12 NTU
1701236-012A 202829: Prep Comments for EPA200.8, Sample 1701236-012A: Turbidity: 0.04 NTU
1701236-013A 202830: Prep Comments for EPA200.8, Sample 1701236-013A: Turbidity: 0.14 NTU
1701236-014A 202831: Prep Comments for EPA200.8, Sample 1701236-014A: Turbidity: 0.11 NTU
1701236-015A 202835: Prep Comments for EPA200.8, Sample 1701236-015A: Turbidity: 0.05 NTU
1701236-016A 202836: Prep Comments for EPA200.8, Sample 1701236-016A: Turbidity: 0.02 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 - Eastgate Elementary

Lab ID: 1701236-001 **Collection Date:** 1/21/2017 11:00:00 AM
Client Sample ID: **EGE12117-P-KF-01** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 15998		Analyst: TN
Copper	1,200	0.500		µg/L	1	1/23/2017 9:28:35 PM

Lab ID: 1701236-004 **Collection Date:** 1/21/2017 11:00:00 AM
Client Sample ID: **EGE12117-P-CF-07** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 15998		Analyst: TN
Copper	1,400	0.500		µg/L	1	1/23/2017 9:32:11 PM

Lab ID: 1701236-005 **Collection Date:** 1/21/2017 11:00:00 AM
Client Sample ID: **EGE12117-P-CF-11** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 15998		Analyst: TN
Copper	877	0.500		µg/L	1	1/23/2017 9:35:48 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate Elementary

Lab ID: 1701236-006 **Collection Date:** 1/21/2017 11:00:00 AM
Client Sample ID: **EGE12117-P-NF-12** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 15998		Analyst: TN
Copper	1,660	0.500		µg/L	1	1/23/2017 9:39:24 PM

Lab ID: 1701236-009 **Collection Date:** 1/21/2017 11:00:00 AM
Client Sample ID: **EGE12117-P-OF-15** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 15998		Analyst: TN
Copper	1,590	0.500		µg/L	1	1/23/2017 9:43:00 PM

Lab ID: 1701236-012 **Collection Date:** 1/21/2017 11:00:00 AM
Client Sample ID: **EGE12117-P-CF-18** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 15998		Analyst: TN
Copper	1,160	0.500		µg/L	1	1/23/2017 9:46:37 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate Elementary

Lab ID: 1701236-013 **Collection Date:** 1/21/2017 11:00:00 AM
Client Sample ID: **EGE12117-P-CF-19** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 15998		Analyst: TN
Copper	1,480	0.500		µg/L	1	1/23/2017 9:57:28 PM

Lab ID: 1701236-014 **Collection Date:** 1/21/2017 11:00:00 AM
Client Sample ID: **EGE12117-P-CF-20** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 15999		Analyst: TN
Copper	1,730	0.500		µg/L	1	1/23/2017 10:11:56 PM

Lab ID: 1701236-015 **Collection Date:** 1/21/2017 11:00:00 AM
Client Sample ID: **EGE12117-P-OF-24** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 15999		Analyst: TN
Copper	2,090	0.500		µg/L	1	1/23/2017 10:26:21 PM

Analytical Report

Work Order: **1701236**
Date Reported: **1/24/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate Elementary

Lab ID: 1701236-016 **Collection Date:** 1/21/2017 11:00:00 AM
Client Sample ID: **EGE12117-P-CF-34** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 15999		Analyst: TN
Copper	0.600	0.500		µg/L	1	1/23/2017 10:29:58 PM

Work Order: 1701236
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate El

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	**MB-15999**	SampType:	**MBLK**			Units:	**µg/L**		Prep Date:	**1/23/2017**		RunNo:	**34026**	
Client ID:	**MBLKW**	Batch ID:	**15999**						Analysis Date:	**1/23/2017**		SeqNo:	**647576**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		ND	0.500											

Sample ID	**LCS-15999**	SampType:	**LCS**			Units:	**µg/L**		Prep Date:	**1/23/2017**		RunNo:	**34026**	
Client ID:	**LCSW**	Batch ID:	**15999**						Analysis Date:	**1/23/2017**		SeqNo:	**647577**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		93.6	0.500	100.0	0	93.6	85	115						

Sample ID	**1701236-014ADUP**	SampType:	**DUP**			Units:	**µg/L**		Prep Date:	**1/23/2017**		RunNo:	**34026**	
Client ID:	**EGE12117-P-CF-20**	Batch ID:	**15999**						Analysis Date:	**1/23/2017**		SeqNo:	**647579**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		1,730	0.500						1,728	0.181	30			

Sample ID	**1701236-014AMS**	SampType:	**MS**			Units:	**µg/L**		Prep Date:	**1/23/2017**		RunNo:	**34026**	
Client ID:	**EGE12117-P-CF-20**	Batch ID:	**15999**						Analysis Date:	**1/23/2017**		SeqNo:	**647580**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		1,910	0.500	200.0	1,728	91.9	70	130						

Sample ID	**1701236-014AMSD**	SampType:	**MSD**			Units:	**µg/L**		Prep Date:	**1/23/2017**		RunNo:	**34026**	
Client ID:	**EGE12117-P-CF-20**	Batch ID:	**15999**						Analysis Date:	**1/23/2017**		SeqNo:	**647581**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		1,960	0.500	200.0	1,728	115	70	130	1,912	2.39	30			

Work Order: 1701236
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate El

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	**MB-15998**	SampType:	**MBLK**			Units:	**µg/L**		Prep Date:	**1/23/2017**		RunNo:	**34025**	
Client ID:	**MBLKW**	Batch ID:	**15998**						Analysis Date:	**1/23/2017**		SeqNo:	**647526**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		ND	0.500											

Sample ID	**LCS-15998**	SampType:	**LCS**			Units:	**µg/L**		Prep Date:	**1/23/2017**		RunNo:	**34025**	
Client ID:	**LCSW**	Batch ID:	**15998**						Analysis Date:	**1/23/2017**		SeqNo:	**647527**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		94.1	0.500	100.0	0	94.1	85	115						

Sample ID	**1701235-017ADUP**	SampType:	**DUP**			Units:	**µg/L**		Prep Date:	**1/23/2017**		RunNo:	**34025**	
Client ID:	**BATCH**	Batch ID:	**15998**						Analysis Date:	**1/23/2017**		SeqNo:	**647529**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		1,090	0.500						1,167	6.49	30			

Sample ID	**1701235-017AMS**	SampType:	**MS**			Units:	**µg/L**		Prep Date:	**1/23/2017**		RunNo:	**34025**	
Client ID:	**BATCH**	Batch ID:	**15998**						Analysis Date:	**1/23/2017**		SeqNo:	**647532**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		1,360	0.500	200.0	1,167	94.9	70	130						

Sample ID	**1701235-017AMSD**	SampType:	**MSD**			Units:	**µg/L**		Prep Date:	**1/23/2017**		RunNo:	**34025**	
Client ID:	**BATCH**	Batch ID:	**15998**						Analysis Date:	**1/23/2017**		SeqNo:	**647533**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		1,400	0.500	200.0	1,167	115	70	130	1,357	2.89	30			

Sample Log-In Check List

Client Name:	**FE**	Work Order Number:	**1701236**
Logged by:	**Clare Griggs**	Date Received:	**1/23/2017 12:25:00 PM**

Chain of Custody

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

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	9.8
Sample	7.1

* 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.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 1/21/2017 | Laboratory Project No (internal): 1701236 | Page: 1 of: 2

Client: Fulcrum Environmental Consulting
Address: 406 North Second Street
City, State, Zip: Yakima, WA 98901
Telephone: 509.574.0839 Fax: 509.545.8453

Project Name: Kennewick SD Drinking Water - Eastgate Elementary
Project No: 162017 Collected by: Amanda Enbysk & Nathan Bostrom
Location: Eastgate 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
EGE12117-P-KF-01	1/21/17	1100	DW									⊗					HNO_3 preserved
EGE12117-S-KF-01																	HOLD: unpreserved
EGE12117-T-KF-01																	HOLD; unpreserved
EGE12117-P-CF-07												⊗					HNO_3 preserved
EGE12117-P-CF-11												⊗					
EGE12117-P-NF-12												⊗					
EGE12117-S-NF-12																	HOLD; unpr.
EGE12117-T-NF-12																	HOLD; unpr.
EGE12117-P-NF-15												⊗					HNO_3 preserved
EGE12117-S-NF-15																	HOLD; unpreserved

**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 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 Amanda McCoy	1/21/2017, 1600	x	
x Amanda McCoy	1/23/2017, 1225	x OK	1/23/2017 1225

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

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: 1/21/2017

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: 509.545.8453

Project Name: Kennewick SD Drinking Water - Eastgate Elementary
Project No: 162017
Collected by: Amanda Enbysk & Nathan Bostrom
Location: Eastgate 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
EGE12117-T-NF-15	1/21/17	1100	DW														HCl; unpreserved
EGE12117-P-CF-18	↓	↓	↓										⊗				HNO_3 preserved
EGE12117-P-CF-19													⊗				
EGE12117-P-CF-20													⊗				
EGE12117-P-DF-24													⊗				
EGE12117-P-CF-34													⊗				↓

**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 samples

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 Amanda M Enbysk	1/21/2017; 1600	x	
Relinquished	Date/Time	Received	Date/Time
x Amanda M Enbysk	1/23/2017; 1225	x [signature]	1/23/17 1225

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

^Please coordinate with the lab in advance

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

Fremont Analytical

Chain of Custody Record and Laboratory Services Agreement

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

Date: 1/21/2017

Laboratory Project No (internal): 1701236

Page: 1 of: 2

Client: Fulcrum Environmental Consulting
Address: 406 North Second Street
City, State, Zip: Yakima, WA 98901
Telephone: 509.574.0839 Fax: 509.545.8453

Project Name: Kennewick SD Drinking Water - Eastgate Elementary
Project No: 162017 Collected by: Amanda Enbysk + Nathan Bostrom
Location: Eastgate 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
EGE12117-P-KF-01	1/21/17	1100	DW										⊗					HNO_3 preserved
EGE12117-S-KF-01																		HOLD; unpreserved
EGE12117-T-KF-01																		HOLD; unpreserved
EGE12117-P-CF-07													⊗					HNO_3 preserved
EGE12117-P-CF-11													⊗					
EGE12117-P-NF-12													⊗					
EGE12117-S-NF-12																		HOLD; unpr.
EGE12117-T-NF-12																		HOLD; unpr.
EGE12117-P-NF-15	1/22/17												⊗					HNO_3 preserved
EGE12117-S-NF-15																		HOLD; unpreserved

**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

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TAT → SameDay^ NextDay^ 2 Day 3 Day STD

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Relinquished	Date/Time	Received	Date/Time
x Amanda McEy	1/21/2017, 1600	x	
Relinquished	Date/Time	Received	Date/Time
x Amanda McEy	1/23/2017; 1225	x	1/23/2017 1225

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

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: 1/21/2017

Laboratory Project No (internal): 1701236

Page: 2 of: 2

Client: Fulcrum Environmental Consulting
Address: 406 North Second Street
City, State, Zip: Yakima, WA 98901
Telephone: 509.574.0839 Fax: 509.545.8453

Project Name: Kennewick SD Drinking Water - Eastgate Elementary
Project No: 162017
Collected by: Amanda Enbysk & Nathan Bostrom
Location: Eastgate 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
EGE1217-T-NF-15	1/21/17	1100	DW														HOLD; unpreserved
EGE1217-P-CF-18												X					HNO_3 preserved
EGE1217-P-CF-19												X					
EGE1217-P-CF-20												X					
EGE1217-P-CF-24												X					
EGE1217-P-CF-34												X					

**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

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x Amanda M Enbysk	1/21/2017; 1600	x	
Relinquished	Date/Time	Received	Date/Time
x Amanda M Enbysk	1/23/2017; 1225	x	1/23/17 1225

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

^Please coordinate with the lab in advance

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

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 - Eastgate Elementary Follow-up Sampling
Work Order Number: 1701339

January 31, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 17 sample(s) on 1/30/2017 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: *01/31/2017*

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Eastgate Elementary Follo
Work Order: 1701339

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1701339-001	EGE12817-P-CF-07	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-002	EGE12817-S-CF-07	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-003	EGE12817-T-CF-07	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-004	EGE12817-P-CF-18	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-005	EGE12817-S-CF-18	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-006	EGE12817-T-CF-18	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-007	EGE12817-P-CF-19	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-008	EGE12817-S-CF-19	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-009	EGE12817-T-CF-19	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-010	EGE12817-P-CF-20	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-011	EGE12817-S-CF-20	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-012	EGE12817-T-CF-20	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-013	EGE12817-P-CF-24	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-014	EGE12817-S-CF-24	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-015	EGE12817-T-CF-24	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-016	EGE12817-P-CF-34	01/28/2017 11:00 AM	01/30/2017 9:20 AM
1701339-017	EGE12817-P-CF-35	01/28/2017 11:00 AM	01/30/2017 9:20 AM

Case Narrative

WO#: **1701339**
Date: **1/31/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Eastgate Elementary Follow-up Sampling

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:
1701339-001A 204217: Prep Comments for EPA200.8, Sample 1701339-001A: Turbidiy: 0.64 NTU
1701339-002A 204218: Prep Comments for EPA200.8, Sample 1701339-002A: Turbidiy: 0.07 NTU
1701339-003A 204219: Prep Comments for EPA200.8, Sample 1701339-003A: Turbidiy: 0.03 NTU
1701339-004A 204220: Prep Comments for EPA200.8, Sample 1701339-004A: Turbidiy: 0.08 NTU
1701339-005A 204221: Prep Comments for EPA200.8, Sample 1701339-005A: Turbidiy: 0.05 NTU
1701339-006A 204222: Prep Comments for EPA200.8, Sample 1701339-006A: Turbidiy: 0.01 NTU
1701339-007A 204223: Prep Comments for EPA200.8, Sample 1701339-007A: Turbidiy: 0.08 NTU
1701339-008A 204224: Prep Comments for EPA200.8, Sample 1701339-008A: Turbidiy: 0.05 NTU
1701339-009A 204225: Prep Comments for EPA200.8, Sample 1701339-009A: Turbidiy: 0.03 NTU
1701339-010A 204226: Prep Comments for EPA200.8, Sample 1701339-010A: Turbidiy: 0.07 NTU
1701339-011A 204227: Prep Comments for EPA200.8, Sample 1701339-011A: Turbidiy: 0.01 NTU
1701339-012A 204230: Prep Comments for EPA200.8, Sample 1701339-012A: Turbidiy: 0.03 NTU
1701339-013A 204234: Prep Comments for EPA200.8, Sample 1701339-013A: Turbidiy: 0.05 NTU
1701339-014A 204235: Prep Comments for EPA200.8, Sample 1701339-014A: Turbidiy: 0.06 NTU
1701339-015A 204236: Prep Comments for EPA200.8, Sample 1701339-015A: Turbidiy: 0.01 NTU
1701339-016A 204237: Prep Comments for EPA200.8, Sample 1701339-016A: Turbidiy: 0.02 NTU
1701339-017A 204238: Prep Comments for EPA200.8, Sample 1701339-017A: Turbidiy: 0.04 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 - Eastgate Elementary Follow-up Sampling

Lab ID: 1701339-001 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-P-CF-07** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16072		Analyst: TN
Copper	2,500	0.500		µg/L	1	1/30/2017 9:20:57 PM

Lab ID: 1701339-002 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-S-CF-07** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16072		Analyst: TN
Copper	3,670	0.500		µg/L	1	1/30/2017 9:24:33 PM

Lab ID: 1701339-003 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-T-CF-07** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16072		Analyst: TN
Copper	1,740	0.500		µg/L	1	1/30/2017 9:28:09 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Eastgate Elementary Follow-up Sampling

Lab ID: 1701339-004 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-P-CF-18** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16072		Analyst: TN
Copper	1,320	0.500		µg/L	1	1/30/2017 9:31:45 PM

Lab ID: 1701339-005 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-S-CF-18** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16072		Analyst: TN
Copper	1,900	0.500		µg/L	1	1/30/2017 9:35:22 PM

Lab ID: 1701339-006 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-T-CF-18** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16072		Analyst: TN
Copper	657	0.500		µg/L	1	1/30/2017 9:38:58 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Eastgate Elementary Follow-up Sampling

Lab ID: 1701339-007 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-P-CF-19** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16072		Analyst: TN
Copper	1,610	0.500		µg/L	1	1/30/2017 9:42:35 PM

Lab ID: 1701339-008 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-S-CF-19** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16072		Analyst: TN
Copper	2,370	0.500		µg/L	1	1/30/2017 9:46:11 PM

Lab ID: 1701339-009 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-T-CF-19** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16072		Analyst: TN
Copper	941	0.500		µg/L	1	1/30/2017 9:49:48 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Eastgate Elementary Follow-up Sampling

Lab ID: 1701339-010 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-P-CF-20** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16072		Analyst: TN
Copper	1,770	0.500		µg/L	1	1/30/2017 9:53:24 PM

Lab ID: 1701339-011 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-S-CF-20** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16072		Analyst: TN
Copper	2,250	0.500		µg/L	1	1/30/2017 10:04:15 PM

Lab ID: 1701339-012 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-T-CF-20** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16073		Analyst: TN
Copper	767	0.500		µg/L	1	1/30/2017 10:18:42 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Eastgate Elementary Follow-up Sampling

Lab ID: 1701339-013 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-P-CF-24** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16073		Analyst: TN
Copper	2,040	0.500		µg/L	1	1/30/2017 10:33:07 PM

Lab ID: 1701339-014 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-S-CF-24** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16073		Analyst: TN
Copper	2,410	0.500		µg/L	1	1/30/2017 10:36:44 PM

Lab ID: 1701339-015 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-T-CF-24** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16073		Analyst: TN
Copper	841	0.500		µg/L	1	1/30/2017 10:47:35 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Eastgate Elementary Follow-up Sampling

Lab ID: 1701339-016 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-P-CF-34** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16073		Analyst: TN
Copper	ND	0.500		µg/L	1	1/30/2017 10:51:12 PM

Lab ID: 1701339-017 **Collection Date:** 1/28/2017 11:00:00 AM
Client Sample ID: **EGE12817-P-CF-35** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16073		Analyst: TN
Copper	1,290	0.500		µg/L	1	1/30/2017 10:54:48 PM

Work Order: 1701339
CLIENT: Fulcrum Environmental
Project: Kennewick SD - Eastgate Elementary Follo

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	**MB-16073**	SampType:	**MBLK**	Units:	**µg/L**	Prep Date:	**1/30/2017**	RunNo:	**34164**
Client ID:	**MBLKW**	Batch ID:	**16073**			Analysis Date:	**1/30/2017**	SeqNo:	**650626**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.500									

Sample ID	**LCS-16073**	SampType:	**LCS**	Units:	**µg/L**	Prep Date:	**1/30/2017**	RunNo:	**34164**
Client ID:	**LCSW**	Batch ID:	**16073**			Analysis Date:	**1/30/2017**	SeqNo:	**650629**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	101	0.500	100.0	0	101	85	115				

Sample ID	**1701339-012ADUP**	SampType:	**DUP**	Units:	**µg/L**	Prep Date:	**1/30/2017**	RunNo:	**34164**
Client ID:	**EGE12817-T-CF-20**	Batch ID:	**16073**			Analysis Date:	**1/30/2017**	SeqNo:	**650634**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	777	0.500						767.1	1.28	30	

Sample ID	**1701339-012AMS**	SampType:	**MS**	Units:	**µg/L**	Prep Date:	**1/30/2017**	RunNo:	**34164**
Client ID:	**EGE12817-T-CF-20**	Batch ID:	**16073**			Analysis Date:	**1/30/2017**	SeqNo:	**650637**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	939	0.500	200.0	767.1	86.1	70	130				

Sample ID	**1701339-012AMSD**	SampType:	**MSD**	Units:	**µg/L**	Prep Date:	**1/30/2017**	RunNo:	**34164**
Client ID:	**EGE12817-T-CF-20**	Batch ID:	**16073**			Analysis Date:	**1/30/2017**	SeqNo:	**650639**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	925	0.500	200.0	767.1	79.1	70	130	939.3	1.50	30	

Work Order: 1701339
CLIENT: Fulcrum Environmental
Project: Kennewick SD - Eastgate Elementary Follo

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	MB-16072	SampType:	MBLK			Units:	µg/L		Prep Date:	1/30/2017		RunNo:	34163	
Client ID:	MBLKW	Batch ID:	16072						Analysis Date:	1/30/2017		SeqNo:	650554	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		ND	0.500											

Sample ID	LCS-16072	SampType:	LCS			Units:	µg/L		Prep Date:	1/30/2017		RunNo:	34163	
Client ID:	LCSW	Batch ID:	16072						Analysis Date:	1/30/2017		SeqNo:	650555	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		99.9	0.500	100.0	0	99.9	85	115						

Sample ID	1701338-001ADUP	SampType:	DUP			Units:	µg/L		Prep Date:	1/30/2017		RunNo:	34163	
Client ID:	BATCH	Batch ID:	16072						Analysis Date:	1/30/2017		SeqNo:	650557	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		207	0.500						211.6	2.01	30			

Sample ID	1701338-001AMS	SampType:	MS			Units:	µg/L		Prep Date:	1/30/2017		RunNo:	34163	
Client ID:	BATCH	Batch ID:	16072						Analysis Date:	1/30/2017		SeqNo:	650563	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		420	0.500	200.0	211.6	104	70	130						

Sample ID	1701338-001AMSD	SampType:	MSD			Units:	µg/L		Prep Date:	1/30/2017		RunNo:	34163	
Client ID:	BATCH	Batch ID:	16072						Analysis Date:	1/30/2017		SeqNo:	650565	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		400	0.500	200.0	211.6	94.3	70	130	419.8	4.81	30			

Sample Log-In Check List

Client Name:	**FE**	Work Order Number:	**1701339**
Logged by:	**Clare Griggs**	Date Received:	**1/30/2017 9:20:00 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 ☐
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	9.0
Sample	9.8

* 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: 1/28/2017 Laboratory Project No (internal): 1701339

Page: 1 of: 2

Client: Fulcrum Environmental Consulting
Address: 406 North Second Street
City, State, Zip: Yakima, WA 98901
Telephone: 509.574.0839 Fax: 509.545.8453

Project Name: Kennewick SD - Eastgate Elementary Follow-Up Sampling
Project No: 162017 Collected by: Nate Bostrom
Location: Eastgate Elementary School, 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
EGE12817-P-CF-07	1/28/2017	11:00	DW										⊗				Preserved with HNO_3
EGE12817-S-CF-07	↓	↓	↓										⊗				↓
EGE12817-T-CF-07													⊗				
EGE12817-P-CF-18													⊗				
EGE12817-S-CF-18													⊗				
EGE12817-T-CF-18													⊗				
EGE12817-P-CF-19													⊗				
EGE12817-S-CF-19													⊗				
EGE12817-T-CF-19													⊗				
EGE12817-P-CF-20	↓	↓	↓										⊗				

**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: All samples HNO_3 preserved

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 Anne MEA	1/28/2017; 1530	x	1/30/17 0920
Relinquished	Date/Time	Received	Date/Time
x		x	

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: 1/28/2017 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: 509.545.8453

Project Name: Kennewick SD - Eastgate Elementary Follow-Up Sampling
Project No: 162017 Collected by: Nate Bostrom
Location: Eastgate Elementary School, 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
EGE12817-S-CF-20	1/28/2017	11:00	DW										⊗				Preserved with HNO_3
EGE12817-T-CF-20	↓	↓	↓										⊗				
EGE12817-P-CF-24													⊗				
EGE12817-S-CF-24													⊗				
EGE12817-T-CF-24													⊗				
EGE12817-P-CF-34													⊗				
EGE12817-P-CF-35	↓	↓	↓										⊗				↓

**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: All samples HNO_3 preserved

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 Amanda McEy	1/28/2017; 1530	x	
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 - Eastgate Elementary
Work Order Number: 1703044

March 13, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 14 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

Date: *03/13/2017*

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate El
Work Order: 1703044

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1703044-001	EGE3417-P-CF-07	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-002	EGE3417-P-NF-12	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-003	EGE3417-S-NF-12	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-004	EGE3417-T-NF-12	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-005	EGE3417-P-OF-15	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-006	EGE3417-P-CF-19	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-007	EGE3417-P-CF-20	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-008	EGE3417-S-CF-20	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-009	EGE3417-T-CF-20	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-010	EGE3417-P-OF-24	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-011	EGE3417-S-OF-24	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-012	EGE3417-T-OF-24	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-013	EGE3417-P-CF-34	03/04/2017 7:00 AM	03/06/2017 8:54 AM
1703044-014	EGE3417-P-CF-35	03/04/2017 7:00 AM	03/06/2017 8:54 AM

Case Narrative

WO#: **1703044**
Date: **3/13/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate 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:
1703044-001A 209766: Prep Comments for EPA200.8, Sample 1703044-001A: Turbidity: 0.12 NTU
1703044-002A 209797: Prep Comments for EPA200.8, Sample 1703044-002A: Turbidity: 0.01 NTU
1703044-005A 209798: Prep Comments for EPA200.8, Sample 1703044-005A: Turbidity: 0.08 NTU
1703044-006A 209799: Prep Comments for EPA200.8, Sample 1703044-006A: Turbidity: 0.04 NTU
1703044-007A 209800: Prep Comments for EPA200.8, Sample 1703044-007A: Turbidity: 0.00 NTU
1703044-010A 209801: Prep Comments for EPA200.8, Sample 1703044-010A: Turbidity: 0.02 NTU
1703044-013A 209802: Prep Comments for EPA200.8, Sample 1703044-013A: Turbidity: 0.00 NTU
1703044-014A 209803: Prep Comments for EPA200.8, Sample 1703044-014A: 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 - Eastgate Elementary

Lab ID: 1703044-001 **Collection Date:** 3/4/2017 7:00:00 AM
Client Sample ID: **EGE3417-P-CF-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	837	0.500		µg/L	1	3/10/2017 7:41:49 PM

Lab ID: 1703044-002 **Collection Date:** 3/4/2017 7:00:00 AM
Client Sample ID: **EGE3417-P-NF-12** **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	1,350	0.500		µg/L	1	3/10/2017 7:45:51 PM

Lab ID: 1703044-005 **Collection Date:** 3/4/2017 7:00:00 AM
Client Sample ID: **EGE3417-P-OF-15** **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	1,270	0.500		µg/L	1	3/10/2017 7:49:53 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate Elementary

Lab ID: 1703044-006 **Collection Date:** 3/4/2017 7:00:00 AM
Client Sample ID: **EGE3417-P-CF-19** **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	1,300	0.500		µg/L	1	3/10/2017 7:53:54 PM

Lab ID: 1703044-007 **Collection Date:** 3/4/2017 7:00:00 AM
Client Sample ID: **EGE3417-P-CF-20** **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	1,280	0.500		µg/L	1	3/10/2017 8:06:01 PM

Lab ID: 1703044-010 **Collection Date:** 3/4/2017 7:00:00 AM
Client Sample ID: **EGE3417-P-OF-24** **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	1,650	0.500		µg/L	1	3/10/2017 8:10:03 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate Elementary

Lab ID: 1703044-013 **Collection Date:** 3/4/2017 7:00:00 AM
Client Sample ID: **EGE3417-P-CF-34** **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 8:14:05 PM

Lab ID: 1703044-014 **Collection Date:** 3/4/2017 7:00:00 AM
Client Sample ID: **EGE3417-P-CF-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	1,220	0.500		µg/L	1	3/10/2017 8:18:07 PM

Work Order: 1703044
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate El

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									

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				

Sample ID	**1703042-001ADUP**	SampType:	**DUP**			Units:	**µg/L**	Prep Date:	**3/6/2017**	RunNo:	**34876**	
Client ID:	**BATCH**	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	

Sample ID	**1703042-001AMS**	SampType:	**MS**			Units:	**µg/L**	Prep Date:	**3/6/2017**	RunNo:	**34876**	
Client ID:	**BATCH**	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				

Sample ID	**1703042-001AMSD**	SampType:	**MSD**			Units:	**µg/L**	Prep Date:	**3/6/2017**	RunNo:	**34876**	
Client ID:	**BATCH**	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

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:	**1703044**
Logged by:	**Erica Silva**	Date Received:	**3/6/2017 8:54:00 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	4.2
Sample	2.8

* 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: 3/4/2017 Laboratory Project No (internal): 1703044

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 - Eastgate Elementary
Project No: 162017.03 Collected by:
Location: Eastgate 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)	Preserved w/ HNO3	Comments
1	EGE3417-P-CF-07	3/4/2017	7 AM	DW									X						
2	EGE3417-P-NF-12																	+	
3	EGE3417-S-NF-12																	+	
4	EGE3417-T-NF-12																	+	
5	EGE3417-P-OF-15												X						
6	EGE3417-P-CF-19												X						
7	EGE3417-P-CF-20												X						
8	EGE3417-S-CF-20																	+	
9	EGE3417-T-CF-20																	+	
10	EGE3417-P-OF-24												X						

**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.)

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Special Remarks: Preserve all unpreserved

TAT - ASAP

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Relinquished	Date/Time	Received	Date/Time
x [signature]	3/4/17 - 1PM	x [signature]	3/6/17 0854
Relinquished	Date/Time	Received	Date/Time
x		x	

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

^Please coordinate with the lab in advance

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: 3/4/2017 *Laboratory Project No (internal):* 1703044

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 - Eastgate Elementary
Project No: 162017.03 **Collected by:**
Location: Eastgate 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)			Preserved w/ HNO3	Comments
1	EGE3417-S-OF-24	3/4/2017	7:AM	DW																	
2	EGE3417-T-OF-24	3/4/17	X	↓																	
3	EGE3417-P-CF-34	3/4/17		↓										X						X	
4	EGE3417-P-CF-35	3/4/17	↓	↓										X						X	
5																					
6																					
7																					
8																					
9																					
10																					

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Relinquished	Date/Time	Received	Date/Time
x Northam RS	3/4/17 1PM	x	3/6/17 0834
x		x	

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Chain of Custody Record and Laboratory Services Agreement

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3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
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Date: 3/4/2017 | Laboratory Project No (internal): 1703044 | Page: 1 of: 2

Client: Fulcrum Environmental Consulting
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City, State, Zip: Yakima, WA, 98901
Telephone: 509.574.0839 Fax: 509.575.8453

Project Name: Kennewick SD Drinking Water - Eastgate Elementary
Project No: 162017.03 Collected by:
Location: Eastgate 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)	Preserved w/ HNO3	Comments
1	EGE3417-P-CF-07	3/4/2017	7 AM	DW									X						
2	EGE3417-P-NF-12	"	"	"									X					+	
3	EGE3417-S-NF-12	"	"	"														+	Hold - 3/6/17 NB
4	EGE3417-T-NF-12	"	"	"														+	Hold 3/6/17 NB
5	EGE3417-P-OF-15	"	"	"									X						
6	EGE3417-P-CF-19	"	"	"									X						
7	EGE3417-P-CF-20	"	"	"									X						
8	EGE3417-S-CF-20	"	"	"														+	
9	EGE3417-T-CF-20	"	"	"														+	
10	EGE3417-P-OF-24	"	"	"									X						

**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

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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): 703044

Page: 2 of: 2

Client: Fulcrum Environmental Consulting
Address: 406 North Second Street
City, State, Zip: Yakima, WA, 98901
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Project Name: Kennewick SD Drinking Water - Eastgate Elementary
Project No: 162017.03 Collected by:
Location: Eastgate Elementary, Kennewick, WA
Report To (PM): Ryan Mathews
PM Email: rmathews@efulcrum.net; cc:aenbysk@efulcrum.net

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	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)	Preserved w/ HNO3	Comments
1	EGE3417-S-OF-24	3/4/2017	7:AM	DW																
2	EGE3417-T-OF-24	3/4/17	X	↓																
3	EGE3417-P-CF-34	3/4/17		↓										X					X	
4	EGE3417-P-CF-35	3/4/17	↓	↓										X					X	
5																				
6																				
7																				
8																				
9																				
10																				

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Relinquished	Date/Time	Received	Date/Time
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 - Eastgate Elem.
Work Order Number: 1703212

March 21, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 9 sample(s) on 3/20/2017 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

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate El
Work Order: 1703212

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1703212-001	EGE31817-P-NF-12	03/18/2017 7:00 AM	03/20/2017 9:00 AM
1703212-002	EGE31817-P-OF-15	03/18/2017 7:00 AM	03/20/2017 9:00 AM
1703212-003	EGE31817-P-CF-19	03/18/2017 7:00 AM	03/20/2017 9:00 AM
1703212-004	EGE31817-P-CF-20	03/18/2017 7:00 AM	03/20/2017 9:00 AM
1703212-005	EGE31817-P-OF-24	03/18/2017 7:00 AM	03/20/2017 9:00 AM
1703212-006	EGE31817-S-OF-24	03/18/2017 7:00 AM	03/20/2017 9:00 AM
1703212-007	EGE31817-T-OF-24	03/18/2017 7:00 AM	03/20/2017 9:00 AM
1703212-008	EGE31817-P-CF-34	03/18/2017 7:00 AM	03/20/2017 9:00 AM
1703212-009	EGE31817-P-CF-35	03/18/2017 7:00 AM	03/20/2017 9:00 AM

Case Narrative

WO#: **1703212**
Date: **3/21/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate Elem.

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:
1703212-001A 211560: Prep Comments for EPA200.8, Sample 1703212-001A: 0.01 NTU
1703212-002A 211561: Prep Comments for EPA200.8, Sample 1703212-002A: 0.10 NTU
1703212-003A 211562: Prep Comments for EPA200.8, Sample 1703212-003A: 0.15 NTU
1703212-004A 211563: Prep Comments for EPA200.8, Sample 1703212-004A: 0.01 NTU
1703212-005A 211564: Prep Comments for EPA200.8, Sample 1703212-005A: 0.02 NTU
1703212-008A 211565: Prep Comments for EPA200.8, Sample 1703212-008A: 0.00 NTU
1703212-009A 211566: Prep Comments for EPA200.8, Sample 1703212-009A: 0.01 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 - Eastgate Elem.

Lab ID: 1703212-001 **Collection Date:** 3/18/2017 7:00:00 AM
Client Sample ID: **EGE31817-P-NF-12** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16542		Analyst: TN
Copper	797	0.500		µg/L	1	3/21/2017 11:48:22 AM

Lab ID: 1703212-002 **Collection Date:** 3/18/2017 7:00:00 AM
Client Sample ID: **EGE31817-P-OF-15** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16542		Analyst: TN
Copper	694	0.500		µg/L	1	3/21/2017 11:52:23 AM

Lab ID: 1703212-003 **Collection Date:** 3/18/2017 7:00:00 AM
Client Sample ID: **EGE31817-P-CF-19** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16542		Analyst: TN
Copper	578	0.500		µg/L	1	3/21/2017 11:56:24 AM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate Elem.

Lab ID: 1703212-004 **Collection Date:** 3/18/2017 7:00:00 AM
Client Sample ID: **EGE31817-P-CF-20** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16542		Analyst: TN
Copper	674	0.500		µg/L	1	3/21/2017 12:08:31 PM

Lab ID: 1703212-005 **Collection Date:** 3/18/2017 7:00:00 AM
Client Sample ID: **EGE31817-P-OF-24** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16542		Analyst: TN
Copper	821	0.500		µg/L	1	3/21/2017 12:12:32 PM

Lab ID: 1703212-008 **Collection Date:** 3/18/2017 7:00:00 AM
Client Sample ID: **EGE31817-P-CF-34** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16542		Analyst: TN
Copper	0.760	0.500		µg/L	1	3/21/2017 12:16:33 PM

Analytical Report

Work Order: **1703212**
Date Reported: **3/21/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate Elem.

Lab ID: 1703212-009 **Collection Date:** 3/18/2017 7:00:00 AM
Client Sample ID: **EGE31817-P-CF-35** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16542		Analyst: TN
Copper	1,310	0.500		µg/L	1	3/21/2017 12:20:35 PM

Work Order: 1703212
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Eastgate El

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	**MB-16542**	SampType:	**MBLK**			Units:	**µg/L**		Prep Date:	**3/20/2017**		RunNo:	**35065**	
Client ID:	**MBLKW**	Batch ID:	**16542**						Analysis Date:	**3/21/2017**		SeqNo:	**670309**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		ND	0.500											

Sample ID	**LCS-16542**	SampType:	**LCS**			Units:	**µg/L**		Prep Date:	**3/20/2017**		RunNo:	**35065**	
Client ID:	**LCSW**	Batch ID:	**16542**						Analysis Date:	**3/21/2017**		SeqNo:	**670310**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		105	0.500	100.0	0	105	85	115						

Sample ID	**1703211-007ADUP**	SampType:	**DUP**			Units:	**µg/L**		Prep Date:	**3/20/2017**		RunNo:	**35065**	
Client ID:	**BATCH**	Batch ID:	**16542**						Analysis Date:	**3/21/2017**		SeqNo:	**670312**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		0.689	0.500						0	200	30			

Sample ID	**1703211-007AMS**	SampType:	**MS**			Units:	**µg/L**		Prep Date:	**3/20/2017**		RunNo:	**35065**	
Client ID:	**BATCH**	Batch ID:	**16542**						Analysis Date:	**3/21/2017**		SeqNo:	**670313**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		200	0.500	200.0	0	100	70	130						

Sample ID	**1703211-007AMSD**	SampType:	**MSD**			Units:	**µg/L**		Prep Date:	**3/20/2017**		RunNo:	**35065**	
Client ID:	**BATCH**	Batch ID:	**16542**						Analysis Date:	**3/21/2017**		SeqNo:	**670314**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		213	0.500	200.0	0	106	70	130	200.1	6.16	30			

Sample Log-In Check List

Client Name:	**FE**	Work Order Number:	**1703212**
Logged by:	**Clare Griggs**	Date Received:	**3/20/2017 9:00:00 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:	Amanda Enbysk	Date	3/20/2017
By Whom:	Clare Griggs	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	Confirming samples to be run for analysis.		
Client Instructions:	See revised COC.		

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler	2.9
Sample	1.9

* 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: 3/18/2017 Laboratory Project No (internal): 1703212

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 - Eastgate Elem
Project No:
Collected by: Amanda Enbysk
Location: Eastgate Elem.
Report To (PM): Ryan Mathews
PM Email: rmathews@efulcrum.net; cc: aenbysk@efulcrum.net

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1	EGE31817-P-NF-12	3/18/2017	7AM	DW														X	
2	EGE31817-P-OF-15																	X	
3	EGE31817-P-CF-19																	X	
4	EGE31817-P-CF-20																	X	
5	EGE31817-P-OF-24																	X	
6	" S-OF-24																		Hold - Unpreserved
7	" T-OF-24																		Hold Unpreserved
8	" P-CF-34																	X	
9	" P-CF-35																	X	
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

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

Special Remarks:
TAT ASAP
Please Preserve all unpreserved

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 Nathan Bostrom	31817	x	3/20/2017 0900
x		x	

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

^Please coordinate with the lab in advance

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: 3/18/2017

Laboratory Project No (Internal): 1703212

Page: 1 of: 1

Project Name: Kennewick SP Drinking Water - Eastgate Elem

Project No:

Collected by: Amanda Enbysk

Location: Eastgate Elem.

Report To (PM): Ryan Mathews

PM Email: rmathews@efulcrum.net; cc: aenbysk@efulcrum.net

Client: Fulcrum Environmental Consulting

Address: 406 North Second Street

City, State, Zip: Yakima, WA, 98901

Telephone: 509.574.0839 Fax: 509.575.8453

*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)		Preserved w/ HNO3	Comments
1	EGE31817-P-NF-12	3/18/2017	7AM	DW									X						X	NB 3/20/17
2	EGE31817-P-OF-15												X						X	NB 3/20/17
3	EGE31817-P-CF-19												X						X	NB 3/20/17
4	EGE31817-P-CF-20												X						X	NB 3/20/17
5	EGE31817-P-OF-24												X						X	NB 3/20/17
6	" S-OF-24																			Hold - Unpreserved
7	" T-OF-24																			Hold Unpreserved
8	" P-CF-34												X						X	NB 3/20/17
9	" P-CF-35												X						X	NB 3/20/17
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.)

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Relinquished	Date/Time	Received	Date/Time
x Nathan Boston	3/18/17	x	3/20/2017 0900
Relinquished	Date/Time	Received	Date/Time
x		x	

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

^Please coordinate with the lab in advance