November 3, 2017

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

RE: Winter 2016 Drinking Water Sampling Results
Highlands Middle School, 425 South Tweedt Street, Kennewick, Washington

Dear Keith:

On Wednesday, December 21, 2016, Fulcrum Environmental Consulting, Inc. (Fulcrum) collected 34 drinking water samples for lead and copper analysis from Highlands Middle School (School) located at 425 South Tweedt Street in Kennewick, Washington. Initial sampling identified five fixture locations with lead concentrations above guidance levels and four fixture locations with copper concentrations above guidance levels. Fulcrum returned to the School to collect samples after remediation of the fixtures and laboratory results found concentrations to be below guidance levels. Sampling was completed as part of a District-wide project and all analysis was completed by Washington State Department of Ecology (Ecology) accredited laboratories.

Summary

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

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

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

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

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replacement and preconditioning, Fulcrum returned to the School on January 28, February 25, and April 5, 2017, and collected follow-up samples to confirm the success of fixture replacement. Follow-up samples yielded results below the EPA action level, confirming fixture replacement was successful.

Copper is not a significant component in fixtures, but is the primary material in the plumbing system. To remediate elevated copper, the District aggressively flushed three fixtures with cold water to clear the plumbing of copper construction debris and replaced one water cooler with a filtered bottle filler fountain. Fulcrum returned on January 28 and April 5, 2017 and collected samples to evaluate the success of the remediation. Follow-up samples found copper concentrations below the EPA action level, confirming the remediation was successful. Following sampling and review of laboratory results, Fulcrum recommended the fixtures be returned to service. Fulcrum recommended that the District replace all fixtures of like style to those initially identified with elevated lead.

As all samples now report concentrations below lead and copper action levels, at this time Fulcrum does not recommend any additional sampling. However, consistent with industry practice and the intent of WAC 246-366A, Fulcrum recommends that the District complete re-sampling of the building within the next five years (before December 2021).

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

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immediately following sample collection on select fixtures during the initial sampling event as a general evaluation of water quality.

Sampling Activities

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

Initial Sampling

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

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

Fixture Replacement and Flushing

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

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

All fixtures with elevated copper were flushed aggressively by running water through the fixture at high flow with the aerator removed for approximately 30 minutes to clear the plumbing of any debris potentially causing elevated copper concentrations. Following an aggressive flush, fixtures were resampled to evaluate the effectiveness at reducing copper concentrations. The District elected to install filters on 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 locations and plumbing system in question. First draw samples were collected into 250 mL polyethylene bottles

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preserved with nitric acid. The second draw water volume consists of water collected into a 250 mL unpreserved polyethylene container immediately following the first draw. No water was lost between collection of the first and second draw samples. The third draw water volume is a 1,000 mL sample collected into a one liter unpreserved polyethylene container after the fixture has been flushed for about three to five minutes.

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

Analytical Results

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

Initial Sampling

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

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

Remedial Sampling

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

Discussion

Initial Sampling

Analytical results identified five samples with a lead concentration above the EPA action level of 15 µg/L and four samples with copper concentrations above the EPA action level of 1,300 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 lead concentrations, the District

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replaced the identified fixtures. Fulcrum returned on January 28, and February 25, 2017 following fixture replacement and preconditioning to collect follow-up samples from the initially identified fixtures. The District replaced one fixture of like style, located adjacent to the identified fixture in the kitchen. No other fixtures of like style to the kitchen faucet were identified in the building. No other fixtures of like style to classroom faucets identified producing elevated lead concentrations were replaced. See Attachment F for a photograph layout with the identified classroom faucet fixture style.

To remediate elevated copper concentrations, the District completed an aggressive flush of three of the identified fixtures and replaced the identified water cooler with a filtered bottle filler fountain. Fulcrum returned on the morning following the aggressive flush and fixture replacement, January 28, and April 5, 2017, to collect follow-up samples from the fixtures.

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

Recommendations

Five initial samples contained lead above the EPA action level of 15 µg/L and four initial samples contained copper above the EPA action level of 1,300 µg/L. The District replaced the identified fixtures with elevated lead and preconditioned the fixtures for 24 hours as specified in WAC 246-366A-130. The District completed an aggressive flush of three fixtures identified with elevated copper and replaced one identified water cooler with a filtered bottle filler fountain. Follow-up sampling demonstrated that all lead and copper concentrations were below action levels. Following remedial sampling and review of laboratory results, Fulcrum recommended, and the District elected to, return the fixtures to service. Fulcrum recommends the District replace all fixtures of like style to those initially identified with elevated lead. See Attachment F for a photograph layout of the identified classroom faucet fixture style.

As all samples now report concentrations below lead and copper action levels, Fulcrum does not recommend any additional sampling at this time. However, consistent with industry practice and the intent of WAC 246-366A, Fulcrum recommends that the District complete re-sampling of the building within the next five years (before December 2021).

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

THE AMERICAN BOARD OF INDUSTRIAL HYGIENE
INCORPORATED
CERTIFICATION NUMBER
9916 CP
EXPIRES
12-1-2021
PENNSYLVANIA · 1960
RYAN K. MATHEWS, CIH

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ATTACHMENT A

Figure 1: Sample Location Map

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LEGEND

KF-## - Kitchen faucet

CF-## - Classroom faucet

CDF-## - Classroom drinking fountain

OF-## - Office faucet

WC-## - Water cooler fountain

BF-## - Bottle filler fountain

NF-## - Nurse's faucet

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

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

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

CDF-08

Sampling Event	Pb	Cu
Initial (12/21/16)	<1.0	1,500
1/28/17: Aggressive Flush, 1st Draw	-	1,340
1/28/17: 2nd Draw	-	1,400
1/28/17: 3rd Draw	-	927
4/5/17: Aggressive Flush	-	1,030

CF-09

Sampling Event	Pb	Cu
Initial (12/21/16)	20	980
1/28/17: Fixture Replaced	7.0	-

CF-12

Sampling Event	Pb	Cu
Initial (12/21/16)	27	660
1/28/17: Fixture Replaced	5.76	-

CF-14

Sampling Event	Pb	Cu
Initial (12/21/16)	19	800
1/28/17: Fixture Replaced, 1st Draw	14.6	-
1/28/17: 2nd Draw	2.12	-
1/28/17: 3rd Draw	<1.00	-
4/5/17: Fixture Replaced	1.94	-

KF-03

Sampling Event	Pb	Cu
Initial (12/21/16)	15	750
1/28/17: Fixture Replaced	6.93	-

DF-04

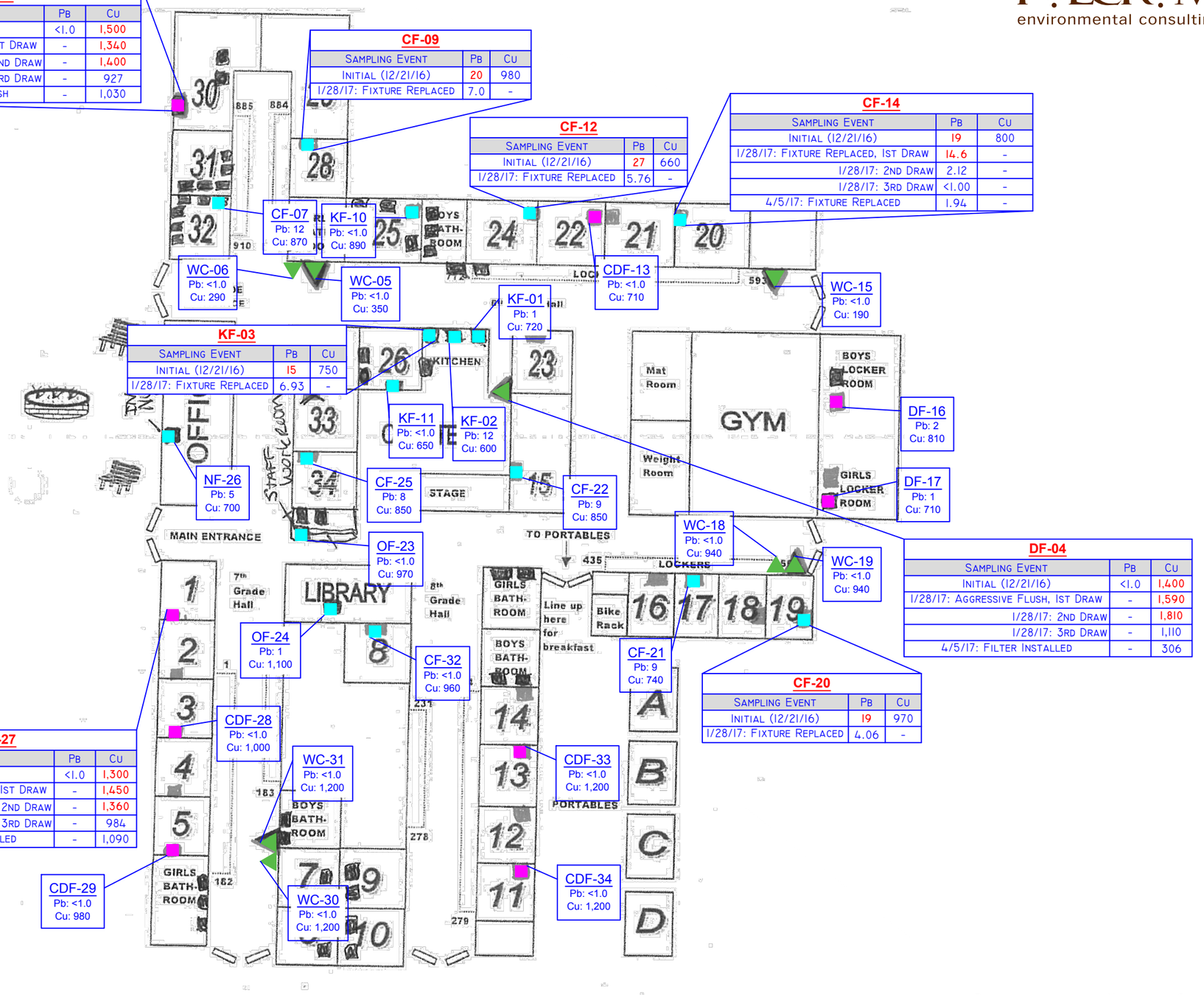
Sampling Event	Pb	Cu
Initial (12/21/16)	<1.0	1,400
1/28/17: Aggressive Flush, 1st Draw	-	1,590
1/28/17: 2nd Draw	-	1,810
1/28/17: 3rd Draw	-	1,110
4/5/17: Filter Installed	-	306

CF-20

Sampling Event	Pb	Cu
Initial (12/21/16)	19	970
1/28/17: Fixture Replaced	4.06	-

CDF-27

Sampling Event	Pb	Cu
Initial (12/21/16)	<1.0	1,300
1/28/17: Aggressive Flush, 1st Draw	-	1,450
1/28/17: 2nd Draw	-	1,360
1/28/17: 3rd Draw	-	984
4/5/17: Filter Installed	-	1,090



Drawing provided by Kennewick School District

Fulcrum Environmental Consulting, Inc. 406 North Second Street, Yakima, Washington 98901 p: 509.574.0839 f: 509.575.8453 efulcrum.net Kennewick SD Drinking Water Sampling. 162017.00. AME. 10252017	Highlands Middle School 425 South Tweedt Street Kennewick, Washington	Sample Location Map FIGURE 1

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ATTACHMENT B

Site-Specific Sampling and Analysis Plan

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Site-Specific Sampling and Analysis Plan

Kennewick School District – Winter 2016 Drinking Water Sampling

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

Campus/Building: Highlands Middle School Address: 425 South Tweedt Street, Kennewick, WA

☐ Elementary ☑ Middle School ☐ High School ☐ Administration

Date of Construction: 1959 Modernizations: 1966, 1994

Fixture Type	Locations	Fixture Styles[1]	Samples	Ratio
Drinking fountain/water cooler (DF/WC)	8	5	8	100%
Kitchen Fixture (KF)	3	2	3	100%
Classroom faucet, including faucets in Food Labs and Life Sciences Classrooms (CF)	40	3	11	28%
Classroom drinking fountain at sink (CDF)	26	2	9	27%
Nurse's Office/Health Room (NF)	1	1	1	100%
Teacher's Lounges/Work Rooms (OF)	2	2	2	100%
TOTALS	**80**		**34**	**43%**

1 Fixture styles are approximate based on sampler's observations

Lead Sampler: Amanda Enbysk Date: 12/21/16

Sample Prefix: HMS – 122116 – P (first-draw) – _____ – 01-36

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)
HMS122116-P-KF-01: Kitchen, N. wall, E. fixture	Kitchen Faucet	1	720
HMS122116-P-KF-02: Kitchen, N. wall, middle fixture	Kitchen Faucet	12	600
HMS122116-P-KF-03: Kitchen, N. wall, W. fixture	**Kitchen Faucet**	**15**	750
HMS122116-P-DF-04: Cafeteria	**Drinking Fountain**	<1.0	**1,400**
HMS122116-P-WC-05: 5th Grade Hall, W. end, right fixture	Water Cooler	<1.0	350
HMS122116-P-WC-06: 5th Grade Hall, W. end, left fixture	Water Cooler	<1.0	290
HMS122116-P-CF-07: Room 32	Classroom Faucet	12	870
HMS122116-P-CDF-08: Room 30	**Classroom Drinking Fountain**	<1.0	**1,500**
HMS122116-P-CF-09: Room 28	**Classroom Faucet**	**20**	980
HMS122116-P-KF-10: Room 25	Kitchen Faucet	<1.0	890
HMS122116-P-KF-11: Room 26	Kitchen Faucet	<1.0	650
HMS122116-P-CF-12: Room 24	**Classroom Faucet**	**27**	660
HMS122116-P-CDF-13: Room 13	Classroom Drinking Fountain	<1.0	710
HMS122116-P-CF-14: Room 20	**Classroom Faucet**	**19**	800
HMS122116-P-WC-15: 5th Grade Hall, E. end	Water Cooler	<1.0	190
HMS122116-P-DF-16: Boy's Locker Room	Drinking Fountain	2	810
HMS122116-P-DF-17: Girl's Locker Room	Drinking Fountain	1	710
HMS122116-P-WC-18: E. end of main hallway, E. fixture	Water Cooler	<1.0	940
HMS122116-P-WC-19: E. end of main hallway, W. fixture	Water Cooler	<1.0	940
HMS122116-P-CF-20: Room 19	**Classroom Faucet**	**19**	970
HMS122116-P-CF-21: Room 17	Classroom Faucet	9	740
HMS122116-P-CF-22: Room 15	Classroom Faucet	9	850
HMS122116-P-OF-23: Staff Workroom, S. fixture	Office Faucet	<1.0	970
HMS122116-P-OF-24: Library	Office Faucet	1	1,100
HMS122116-P-CF-25: Room 34	Office Faucet	8	850
HMS122116-P-NF-26: Nurse's Office	Nurse's Faucet	5	700
HMS122116-P-CDF-27: Room 01	**Classroom Drinking Fountain**	<1.0	**1,300**
HMS122116-P-CDF-28: Room 03	Classroom Drinking Fountain	<1.0	1,000
HMS122116-P-CDF-29: Room 05	Classroom Drinking Fountain	<1.0	980
HMS122116-P-WC-30: 7th Grade Hall, S. end, S. fixture	Water Cooler	<1.0	1,200
HMS122116-P-WC-31: 7th Grade Hall, S. end, N. fixture	Water Cooler	<1.0	1,200
HMS122116-P-CF-32: Room 08	Classroom Faucet	<1.0	960
HMS122116-P-CDF-33: Room 13	Classroom Drinking Fountain	<1.0	1,200
HMS122116-P-CDF-34: Room 11	Classroom Drinking Fountain	<1.0	1,200
HMS122116-P-CDF-35: Laboratory Spike	*Lead and Copper Spike*	*14*	*1,300*
HMS122116-P-OD-36: Laboratory Blank	*Distilled Water Blank*	*<1.0*	*<10*
EPA Action Level		**15**	**1,300**

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

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

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

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

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Table 2: pH and Temperature Data Summary

Sample Number	Fixture Type	pH Flush	pH Sample	Temperature (°C) flush	Temperature (°C) sample
HMS122116-P-KF-01: Kitchen, N. wall, E. fixture	Drinking Fountain	7.39	7.66	19.7	20.6
HMS122116-P-CDF-08: Classroom 30	Classroom Drinking Fountain	7.44	7.87	20.6	16.5
HMS122116-P-CF-12: Classroom 24	Classroom Faucet	7.62	7.73	13.2	18.5
HMS122116-P-DF-16: Boy's locker room	Drinking Fountain	7.50	7.68	19.6	19.8
HMS122116-P-CF-20: Classroom 19	Classroom Faucet	7.67	7.84	16.5	15.3
HMS122116-P-OF-24: Library office fixture	Office Faucet	7.68	7.69	17.9	21.7
HMS122116-P-CF-32: Classroom 08	Classroom Faucet	7.65	7.83	19.1	21.1

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Table 3: Remedial Sampling Analytical Results Summary

Sampling Event	Sample Identification									
	KF-03	DF-04	CDF-08	CF-09	CF-12	CF-14	CF-20	CDF-27	*Laboratory Spike (-35)*	*Laboratory Blank (-36)*
Lead Results										
Initial (12/21/2016)	**15**	<1.0	<1.0	**20**	**27**	**19**	**19**	<1.0	*14*	*<1.0*
First Draw, Fixture Replaced (1/28/2017)	6.93	-	-	7.00	5.76	**14.6**	4.06	-	*16.5*	*<1.00*
Second Draw (1/28/2017)	-	-	-	-	-	2.12	-	-	-	-
Third Draw (1/28/2017)	-	-	-	-	-	<1.00	-	-	-	-
Fixture Replaced (2/25/2017)	-	-	-	-	-	1.94	-	-	*13.5*	*<1.00*
EPA Action Level	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**
Copper Results										
Initial (12/21/2016)	750	**1,400**	**1,500**	980	660	800	970	**1,300**	*1,300*	*<10*
First Draw, Aggressive Flush (1/28/2017)	-	**1,590**	**1,340**	-	-	-	-	**1,450**	*1,320*	*<0.500*
Second Draw (1/28/2017)	-	**1,810**	**1,400**	-	-	-	-	**1,360**	-	-
Third Draw (1/28/2017)	-	1,110	927	-	-	-	-	984	-	-
Aggressive Flush, Filter Installation (4/5/2017)	-	306	1,030	-	-	-	-	1,090	*1,300*	*<0.500*
EPA Action Level	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**	**1,300**

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

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

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

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

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ATTACHMENT D

Initial Analytical Results

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

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

Subject: Chemical Analysis Report

Columbia Basin Analytical Laboratories received 36 sample(s) on 12/21/16 for analysis. These sample(s) have been assigned a login order number of W612101. 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.: W612101
COC No.: Kennewick
Samples Received: 12/21/16
Analysis/Prep Date: 01/07/17
Report Date: 01/10/17

Sample Name: HMS122116-P-KF-01 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-01 **Date Analyzed:** 01/07/17

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

Sample Name: HMS122116-P-KF-02 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-02 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.60	0.01	
Lead	EPA 200.8	0.012	0.001	

Sample Name: HMS122116-P-KF-03 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-03 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.75	0.01	
Lead	EPA 200.8	0.015	0.001	

Sample Name: HMS122116-P-DF-04 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-04 **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: HMS122116-P-WC-05 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-05 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.35	0.01	
Lead	EPA 200.8	< 0.001	0.001	

RJ LEE GROUP

Sample Name: HMS122116-P-WC-06 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-06 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.29	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: HMS122116-P-CF-07 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-07 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.87	0.01	
Lead	EPA 200.8	0.012	0.001	

Sample Name: HMS122116-P-CDF-08 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-08 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.5	0.1	X
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: HMS122116-P-CF-09 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-09 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.98	0.01	
Lead	EPA 200.8	0.020	0.001	

Sample Name: HMS122116-P-KF-10 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-10 **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: HMS122116-P-KF-11 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-11 **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	

RJ LEE GROUP

Sample Name: HMS122116-P-CF-12 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-12 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.66	0.01	
Lead	EPA 200.8	0.027	0.001	

Sample Name: HMS122116-P-CDF-13 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-13 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.71	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: HMS122116-P-CF-14 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-14 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.80	0.01	
Lead	EPA 200.8	0.019	0.001	

Sample Name: HMS122116-P-WC-15 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-15 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.19	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: HMS122116-P-DF-16 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-16 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.81	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: HMS122116-P-DF-17 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-17 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.71	0.01	
Lead	EPA 200.8	0.001	0.001	

RJ LEE GROUP

Sample Name: HMS122116-P-WC-18 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-18 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.94	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: HMS122116-P-WC-19 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-19 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.94	0.01	
Lead	EPA 200.8	< 0.001	0.001	

Sample Name: HMS122116-P-CF-20 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-20 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.97	0.01	
Lead	EPA 200.8	0.019	0.001	

Sample Name: HMS122116-P-CF-21 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-21 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.74	0.01	
Lead	EPA 200.8	0.009	0.001	

Sample Name: HMS122116-P-CF-22 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-22 **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	0.009	0.001	

Sample Name: HMS122116-P-OF-23 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-23 **Date Analyzed:** 01/07/17

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

RJ LEE GROUP

Sample Name: HMS122116-P-OF-24 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-24 **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: HMS122116-P-CF-25 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-25 **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	0.008	0.001	

Sample Name: HMS122116-P-NF-26 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-26 **Date Analyzed:** 01/07/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.70	0.01	
Lead	EPA 200.8	0.005	0.001	

Sample Name: HMS122116-P-CDF-27 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-27 **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	

Sample Name: HMS122116-P-CDF-28 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-28 **Date Analyzed:** 01/07/17

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: HMS122116-P-CDF-29 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-29 **Date Analyzed:** 01/07/17

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

RJ LEE GROUP

Sample Name: HMS122116-P-WC-30 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-30 **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: HMS122116-P-WC-31 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-31 **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: HMS122116-P-CF-32 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-32 **Date Analyzed:** 01/07/17

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

Sample Name: HMS122116-P-CDF-33 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-33 **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: HMS122116-P-CDF-34 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-34 **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: HMS122116-P-CDF-35 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-35 **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

Sample Name: HMS122116-P-OF-36 **Matrix:** Potable Water **Date Received:** 12/21/16
RJ Lee Grp. ID: W612101-36 **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	

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

W612101

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
HMS122116-P-KF-01	Kitchen, east fixtue, N wall	12/21/16				X		UNPR	DW	P		16.7
HMS122116-P-KF-02	Kitchen, N wall center											17.6
HMS122116-P-KF-03	Kitchen, N wall west											17.4
HMS122116-P-DF-04	Cafeteria											16.9
HMS122116-P-WC-05	6th grade hall west, E fixture											16.2
HMS122116-P-WC-06	6th grade hall east, W fixture											16.6
HMS122116-P-CF-07	Classroom 32, NW corner											17.3
HMS122116-P-CDF-08	Classroom 30, W wall											16.8
HMS122116-P-CF-09	Classroom 28											16.8
HMS122116-P-KF-10	Classroom 25, Home ec											16.8
HMS122116-P-KF-11	Classroom 24 Kitchen											16.9

Chain of Custody	Relinquished By (Signature):	Date: 12/21/16	Time: 1430	**Chain of Custody**	Received By (Signature): Date: DEC 21 2016 Time: 1430
	Relinquished By (Print Name):	Relinquished To:			Received By (Print Name): Relinquished To:
	Company Name:	Method of Shipment:			Company Name: Method of Shipment:
Chain of Custody	Relinquished By (Signature):	Date:	Time:	**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

Request for Environmental and IH Laboratory Analytical Services

W612101

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
HMS122116-P-CF-12	Classroom 24	12/21/16				X		UNPR.	DW	P		17.5
HMS122116-P-COF-13	Classroom 22											17.1
HMS122116-P-CF-14	Classroom 20											17.1
HMS122116-P-WC-15	6th grade hall, E entrance											17.0
HMS122116-P-DF-16	Boy's Locker Room, S sink											17.0
HMS122116-P-DF-17	Girls Locker Room, S sink											17.1
HMS122116-P-WC-18	Center hallway, West fixture											16.2
HMS122116-P-WC-19	Center hallway, East fixture											15.8
HMS122116-P-CF-20	Classroom 19											17.3
HMS122116-P-CF-21	Classroom 17											17.3
HMS122116-P-CF-22	Classroom 15, music											17.3

Chain of Custody	Relinquished By (Signature):	Date: 12/21/16	Time: 1430	Received By (Signature):	Date: DEC 21 2016 Time: 1430
	Relinquished By (Print Name):	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:
Chain of Custody	Relinquished By (Signature):	Date:	Time:	Received By (Signature):	Date: Time:
	Relinquished By (Print Name):	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:

Pennsylvania - HQ
350 Hochberg Road
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724.325.1776 **Phone**
724.733.1799 **Fax**

Washington
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RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

Request for Environmental and IH Laboratory Analytical Services

W612101

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: Unpres, H_2SO_4, 4°C, HCl, HNO_3, NaOH, Other, Na_2SO_4

Matrix: WW=Wastewater, GW=Groudwater, S=Soil/Sludge, E=Extract, SW=Surface Water, DW=Drinking Water, O=Oil, X=Other

Container: P=Plastic, G=Glass, W=Wipe, 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
HMS122116-P-OF-23	Staff Lounge	12/21/16				X		UNPR.	DW	P		17.4
HMS122116-P-OF-24	Library workroom	12/21/16										17.2
HMS122116-P-CF-25	Classroom 34											17.1
HMS122116-P-NF-26	Health/Nurse's office											17.3
HMS122116-P-CDF-27	Classroom 1											16.8
HMS122116-P-CDF-28	Classroom 3											16.8
HMS122116-P-CDF-29	Classroom 5											16.7
HMS122116-P-WC-30	7th grade hall, S fixture											16.3
HMS122116-P-WC-31	7th grade hall, N fixture											16.4
HMS122116-P-CF-32	Classroom 8											17.2
HMS122116-P-CDF-33	Classroom 13											17.1

Chain of Custody
- Relinquished By (Signature): | Date: 12/21/16 Time: 1430
- Relinquished By (Print Name): | Relinquished To:
- Company Name: | Method of Shipment:

Chain of Custody
- Received By (Signature): | Date: DEC 21 2016 Time: 1430
- Received By (Print Name): | Relinquished To:
- Company Name: RJ Lee | Method of Shipment:

Chain of Custody
- Relinquished By (Signature): | Date: Time:
- Relinquished By (Print Name): | Relinquished To:
- Company Name: | Method of Shipment:

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

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

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724.733.1799 **Fax**

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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

W612101

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
HMS122116-P-COF-34	Classroom 11	12/21/16				X		UNPR.	DW	P		16.6
HMS122116-P-COF-35	Room 35	↓				↓		↓				15.9
HMS122116-P-OF-36	7th Grade hall workroom	↓				↓						15.1

Chain of Custody	Relinquished By (Signature):	Date: 12/21/16	Time: 1430	Received By (Signature):	Date: DEC 21 2016 Time: 1430
	Relinquished By (Print Name):	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:
Chain of Custody	Relinquished By (Signature):	Date:	Time:	Received By (Signature):	Date: Time:
	Relinquished By (Print Name):	Relinquished To:		Received By (Print Name):	Relinquished To:
	Company Name:	Method of Shipment:		Company Name:	Method of Shipment:

Pennsylvania - HQ
350 Hochberg Road
Monroeville, PA 15146

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

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

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

RJ LEE GROUP
DELIVERING SCIENTIFIC RESOLUTION

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 - Highlands MS Follow-up Sampling
Work Order Number: 1701337

February 03, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 26 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: *02/03/2017*

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Highlands MS Follow-up Sa
Work Order: 1701337

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1701337-001	HMS12817-P-CDF-27	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-002	HMS12817-S-CDF-27	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-003	HMS12817-T-CDF-27	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-004	HMS12817-P-CDF-08	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-005	HMS12817-S-CDF-08	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-006	HMS12817-T-CDF-08	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-007	HMS12817-P-CF-09	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-008	HMS12817-S-CF-09	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-009	HMS12817-T-CF-09	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-010	HMS12817-P-KF-03	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-011	HMS12817-S-KF-03	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-012	HMS12817-T-KF-03	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-013	HMS12817-P-DF-04	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-014	HMS12817-S-DF-04	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-015	HMS12817-T-DF-04	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-016	HMS12817-P-CF-12	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-017	HMS12817-S-CF-12	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-018	HMS12817-T-CF-12	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-019	HMS12817-P-CF-14	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-020	HMS12817-S-CF-14	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-021	HMS12817-T-CF-14	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-022	HMS12817-P-CF-20	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-023	HMS12817-S-CF-20	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-024	HMS12817-T-CF-20	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-025	HMS12817-P-CDF-35	01/28/2017 10:00 AM	01/30/2017 9:22 AM
1701337-026	HMS12817-P-OF-36	01/28/2017 10:00 AM	01/30/2017 9:22 AM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned

Case Narrative

WO#: **1701337**
Date: **2/3/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Highlands MS 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:
1701337-001A 204184: Prep Comments for EPA200.8, Sample 1701337-001A: Turbidity: 0.12 NTU
1701337-004A 204185: Prep Comments for EPA200.8, Sample 1701337-004A: Turbidity: 0.01 NTU
1701337-007A 204186: Prep Comments for EPA200.8, Sample 1701337-007A: Turbidity: 0.06 NTU
1701337-010A 204187: Prep Comments for EPA200.8, Sample 1701337-010A: Turbidity: 0.02 NTU
1701337-013A 204188: Prep Comments for EPA200.8, Sample 1701337-013A: Turbidity: 0.01 NTU
1701337-016A 204189: Prep Comments for EPA200.8, Sample 1701337-016A: Turbidity: 0.03 NTU
1701337-019A 204190: Prep Comments for EPA200.8, Sample 1701337-019A: Turbidity: 0.24 NTU
1701337-022A 204191: Prep Comments for EPA200.8, Sample 1701337-022A: Turbidity: 0.19 NTU
1701337-025A 204192: Prep Comments for EPA200.8, Sample 1701337-025A: Turbidity: 0.08 NTU
1701337-026A 204193: Prep Comments for EPA200.8, Sample 1701337-026A: Turbidity: 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 - Highlands MS Follow-up Sampling

Lab ID: 1701337-001 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-P-CDF-27** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16071		Analyst: TN
Copper	1,450	0.500		µg/L	1	1/30/2017 7:28:58 PM

Lab ID: 1701337-002 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-S-CDF-27** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16124		Analyst: TN
Copper	1,360	0.500		µg/L	1	2/3/2017 11:32:17 AM

Lab ID: 1701337-003 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-T-CDF-27** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16124		Analyst: TN
Copper	984	0.500		µg/L	1	2/3/2017 11:43:08 AM

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Highlands MS Follow-up Sampling

Lab ID: 1701337-004 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-P-CDF-08** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16071		Analyst: TN
Copper	1,340	0.500		µg/L	1	1/30/2017 7:32:35 PM

Lab ID: 1701337-005 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-S-CDF-08** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16124		Analyst: TN
Copper	1,400	0.500		µg/L	1	2/3/2017 11:46:44 AM

Lab ID: 1701337-006 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-T-CDF-08** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16124		Analyst: TN
Copper	927	0.500		µg/L	1	2/3/2017 11:50:20 AM

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Highlands MS Follow-up Sampling

Lab ID: 1701337-007 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-P-CF-09** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16071		Analyst: TN
Lead	7.00	1.00		µg/L	1	1/30/2017 7:36:11 PM

Lab ID: 1701337-010 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-P-KF-03** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16071		Analyst: TN
Lead	6.93	1.00		µg/L	1	1/30/2017 7:39:47 PM

Lab ID: 1701337-013 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-P-DF-04** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16071		Analyst: TN
Copper	1,590	0.500		µg/L	1	1/30/2017 7:43:24 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Highlands MS Follow-up Sampling

Lab ID: 1701337-014 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-S-DF-04** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16124		Analyst: TN
Copper	1,810	0.500		µg/L	1	2/3/2017 11:53:57 AM

Lab ID: 1701337-015 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-T-DF-04** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16124		Analyst: TN
Copper	1,110	0.500		µg/L	1	2/3/2017 11:57:33 AM

Lab ID: 1701337-016 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-P-CF-12** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16071		Analyst: TN
Lead	5.76	1.00		µg/L	1	1/30/2017 7:54:15 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Highlands MS Follow-up Sampling

Lab ID: 1701337-019 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-P-CF-14** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16071		Analyst: TN
Lead	14.6	1.00		µg/L	1	1/30/2017 7:57:52 PM

Lab ID: 1701337-020 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-S-CF-14** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16116		Analyst: TN
Lead	2.12	1.00		µg/L	1	2/2/2017 9:13:17 PM

Lab ID: 1701337-021 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-T-CF-14** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16116		Analyst: TN
Lead	ND	1.00		µg/L	1	2/2/2017 9:16:54 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD - Highlands MS Follow-up Sampling

Lab ID: 1701337-022 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-P-CF-20** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16071		Analyst: TN
Copper	791	0.500		µg/L	1	1/30/2017 8:01:28 PM
Lead	4.06	1.00		µg/L	1	1/30/2017 8:01:28 PM

Lab ID: 1701337-025 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-P-CDF-35** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16071		Analyst: TN
Copper	1,320	0.500		µg/L	1	1/30/2017 8:05:05 PM
Lead	16.5	1.00		µg/L	1	1/30/2017 8:05:05 PM

Lab ID: 1701337-026 **Collection Date:** 1/28/2017 10:00:00 AM
Client Sample ID: **HMS12817-P-OF-36** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16071		Analyst: TN
Copper	ND	0.500		µg/L	1	1/30/2017 8:08:41 PM
Lead	ND	1.00		µg/L	1	1/30/2017 8:08:41 PM

Work Order: 1701337
CLIENT: Fulcrum Environmental
Project: Kennewick SD - Highlands MS Follow-up Sa

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID: **MB-16124**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **2/3/2017**	RunNo: **34249**
Client ID: **MBLKW**	Batch ID: **16124**		Analysis Date: **2/3/2017**	SeqNo: **652984**

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

Sample ID: **LCS-16124**	SampType: **LCS**	Units: **µg/L**	Prep Date: **2/3/2017**	RunNo: **34249**
Client ID: **LCSW**	Batch ID: **16124**		Analysis Date: **2/3/2017**	SeqNo: **652985**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	95.5	0.500	100.0	0	95.5	85	115				

Sample ID: **1701294-015ADUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **2/3/2017**	RunNo: **34249**
Client ID: **BATCH**	Batch ID: **16124**		Analysis Date: **2/3/2017**	SeqNo: **652987**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	205	0.500						219.7	7.05	30	

Sample ID: **1701294-015AMS**	SampType: **MS**	Units: **µg/L**	Prep Date: **2/3/2017**	RunNo: **34249**
Client ID: **BATCH**	Batch ID: **16124**		Analysis Date: **2/3/2017**	SeqNo: **652988**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	418	0.500	200.0	219.7	99.2	70	130				

Sample ID: **1701294-015AMSD**	SampType: **MSD**	Units: **µg/L**	Prep Date: **2/3/2017**	RunNo: **34249**
Client ID: **BATCH**	Batch ID: **16124**		Analysis Date: **2/3/2017**	SeqNo: **652989**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	417	0.500	200.0	219.7	98.5	70	130	418.0	0.315	30	

Work Order: 1701337
CLIENT: Fulcrum Environmental
Project: Kennewick SD - Highlands MS Follow-up Sa

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID: **MB-16116**	SampType: **MBLK**			Units: **µg/L**		Prep Date: **2/2/2017**			RunNo: **34242**	
Client ID: **MBLKW**	Batch ID: **16116**					Analysis Date: **2/2/2017**			SeqNo: **652929**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	1.00									

Sample ID: **LCS-16116**	SampType: **LCS**			Units: **µg/L**		Prep Date: **2/2/2017**			RunNo: **34242**	
Client ID: **LCSW**	Batch ID: **16116**					Analysis Date: **2/2/2017**			SeqNo: **652930**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	47.3	1.00	50.00	0	94.7	85	115				

Sample ID: **1701233-016ADUP**	SampType: **DUP**			Units: **µg/L**		Prep Date: **2/2/2017**			RunNo: **34242**	
Client ID: **BATCH**	Batch ID: **16116**					Analysis Date: **2/2/2017**			SeqNo: **652932**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	1.00						0		30	

Sample ID: **1701233-016AMS**	SampType: **MS**			Units: **µg/L**		Prep Date: **2/2/2017**			RunNo: **34242**	
Client ID: **BATCH**	Batch ID: **16116**					Analysis Date: **2/2/2017**			SeqNo: **652933**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	85.5	1.00	100.0	0.2482	85.3	70	130				

Sample ID: **1701233-016AMSD**	SampType: **MSD**			Units: **µg/L**		Prep Date: **2/2/2017**			RunNo: **34242**	
Client ID: **BATCH**	Batch ID: **16116**					Analysis Date: **2/2/2017**			SeqNo: **652934**	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	88.6	1.00	100.0	0.2482	88.3	70	130	85.51	3.53	30	

Work Order: 1701337
CLIENT: Fulcrum Environmental
Project: Kennewick SD - Highlands MS Follow-up Sa

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID: **MB-16071**	SampType: **MBLK**	Units: **µg/L**	Prep Date: **1/30/2017**	RunNo: **34162**
Client ID: **MBLKW**	Batch ID: **16071**		Analysis Date: **1/30/2017**	SeqNo: **650506**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.500									
Lead	ND	1.00									

Sample ID: **LCS-16071**	SampType: **LCS**	Units: **µg/L**	Prep Date: **1/30/2017**	RunNo: **34162**
Client ID: **LCSW**	Batch ID: **16071**		Analysis Date: **1/30/2017**	SeqNo: **650507**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	99.3	0.500	100.0	0	99.3	85	115				
Lead	49.2	1.00	50.00	0	98.4	85	115				

Sample ID: **1701225-002ADUP**	SampType: **DUP**	Units: **µg/L**	Prep Date: **1/30/2017**	RunNo: **34162**
Client ID: **BATCH**	Batch ID: **16071**		Analysis Date: **1/30/2017**	SeqNo: **650509**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	366	0.500						360.8	1.46	30	
Lead	9.21	1.00						9.286	0.844	30	

Sample ID: **1701225-002AMS**	SampType: **MS**	Units: **µg/L**	Prep Date: **1/30/2017**	RunNo: **34162**
Client ID: **BATCH**	Batch ID: **16071**		Analysis Date: **1/30/2017**	SeqNo: **650510**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	590	0.500	200.0	360.8	114	70	130				
Lead	109	1.00	100.0	9.286	99.5	70	130				

Sample ID: **1701225-002AMSD**	SampType: **MSD**	Units: **µg/L**	Prep Date: **1/30/2017**	RunNo: **34162**
Client ID: **BATCH**	Batch ID: **16071**		Analysis Date: **1/30/2017**	SeqNo: **650511**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	564	0.500	200.0	360.8	102	70	130	589.6	4.44	30	

Work Order: 1701337
CLIENT: Fulcrum Environmental
Project: Kennewick SD - Highlands MS Follow-up Sa

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID: **1701225-002AMSD** SampType: **MSD** Units: **µg/L** Prep Date: **1/30/2017** RunNo: **34162**
Client ID: **BATCH** Batch ID: **16071** Analysis Date: **1/30/2017** SeqNo: **650511**

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	109	1.00	100.0	9.286	99.4	70	130	108.8	0.125	30	

Sample Log-In Check List

Client Name:	**FE**	Work Order Number:	**1701337**
Logged by:	**Clare Griggs**	Date Received:	**1/30/2017 9:22:00 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 1	9.6
Cooler 2	8.2
Sample 1	4.5
Sample 2	9.6

* 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: 1/28/2017

Laboratory Project No (internal): 1701337

Page: 1 of: 3

Project Name: Kennewick SD - Highlands MS Follow-Up Sampling

Client: Fulcrum Environmental Consulting

Project No: 162017 Collected by: Nate Bostrom

Address: 406 North Second Street

Location: Highlands Middle School, Kennewick, WA

City, State, Zip: Yakima, WA 98901

Report To (PM): Ryan Mathews

Telephone: 509.574.0839 Fax: 509.545.8453

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

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HMS12817-S-CDF-27																	Hold - unpr.
HMS12817-T-CDF-27																	Hold - unpr.
HMS 12817-P-CDF-08													X				Preserved in NO3; Analyze for Cu only
HMS 12817-S-CDF-08																	Hold - Preserved with NO3
HMS12817-T-CDF-08																	Hold - unpreserved
HMS12887-P-CF09													X				Preserved in NO3; Analyze for Pb only
HMS 12817-S-CF-09																	Hold - Preserved with NO3
HMS 12817-T-CF-09																	Hold - unpreserved
HMS 12817-P-KF-03													X				Preserved in NO3; Analyze for Pb only

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Seattle, WA 98103 Fax: 206-352-7178

Date: 1/28/2017 Laboratory Project No (internal): _____

Page: 2 of: 3

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 - Highlands MS Follow-Up Sampling
Project No: 162017 Collected by: Nate Bostrom
Location: Highlands Middle 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

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HMS12817-T-KF-03																	Hold - unpreserved
HMS12817-P-DF-04													X				Preserved in NO_3; Analyze for Cu only
HMS12817-S-DF-04																	Hold - Preserved with NO_3
HMS12817-T-DF-04																	Hold - unpreserved
HMS12817-P-CF-12													X				Preserved in NO_3; Analyze for Pb only
HMS12817-S-CF-12																	Hold - Preserved with NO_3
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Date: 1/28/2017 | Laboratory Project No (internal): | Page: 3 of: 3

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 - Highlands MS Follow-Up Sampling
Project No: 162017 Collected by: Nate Bostrom
Location: Highlands Middle School, Kennewick, WA
Report To (PM): Ryan Mathews
PM Email: rmathews@efulcrum.net; cc: aenbysk@efulcrum.net

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HMS12817-T-CF-14	1/28/2017	10:05	DW														Hold - unpr.
HMS12817-P-CF-20													X				Preserved in NO_3
HMS12817 S-CF-26																	Hold - Preserved with NO_3
HMS12817-T-CF-20																	Hold - unpr.
HMS12817-P-COF-35													X				HNO_3 preserved - analyze for Pb & Cu
HMS12817-P-OF-36													X				HNO_3 preserved - analyze for Pb & Cu

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Fax: 206-352-7178

Date: 1/28/2017 Laboratory Project No (internal): 1701337

Page: 1 of: 3

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 - Highlands MS Follow-Up Sampling
Project No: 162017 Collected by: Nate Bostrom
Location: Highlands Middle School, Kennewick, WA
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HMS12817-P-CF-12	↓	↓	↓										X							Preserved in NO_3; Analyze for Pb only
HMS12817-S-CF-12	↓	↓	↓																	Hold - Preserved with NO_3
HMS12817-T-CF-12	↓	↓	↓																	Hold - unpreserved
HMS12817-P-CF-14	↓	↓	↓										X							Preserved in NO_3; Analyze for Pb only
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Chain of Custody Record and Laboratory Services Agreement

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Laboratory Project No (internal): ______

Page: 3 of: 3

Client:	Fulcrum Environmental Consulting	Project Name:	Kennewick SD - Highlands MS Follow-Up Sampling
Address:	406 North Second Street	Project No:	162017 — Collected by: Nate Bostrom
City, State, Zip:	Yakima, WA 98901	Location:	Highlands Middle School, Kennewick, WA
Telephone:	509.574.0839 — Fax: 509.545.8453	Report To (PM):	Ryan Mathews
		PM Email:	rmathews@efulcrum.net; cc: aenbysk@efulcrum.net

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Page: 1 of: 3

Client: Fulcrum Environmental Consulting
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HMS12817-P-CF09													X				Preserved in NO_3; Analyze for Pb only
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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
HMS12817-S-KF-03	1/28/2017	10:00	DW															Hold - Preserved with NO_3
HMS12817-T-KF-03																		Hold - unpreserved
HMS12817-P-DF-04													X					Preserved in NO_3; Analyze for Cu only
HMS12817-S-DF-04													X					~~Hold - Preserved with NO_3~~ Analyze for Cu only (QC) 2/2/17
HMS12817-T-DF-04													X					~~Hold unpreserved~~ Analyze for Cu only (QC) 2/2/17
HMS12817-P-CF-12													X					Preserved in NO_3; Analyze for Pb only
HMS12817-S-CF-12																		Hold - Preserved with NO_3
HMS12817-T-CF-12																		Hold - unpreserved
HMS12817-P-CF-14													X					Preserved in NO_3; Analyze for Pb only
HMS12817-S-CF-14													X					~~Hold - Preserved with NO_3~~ Analyze for Pb only (QC) 2/2/17

**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 [signature]	1/28/2017; 1530	x	
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.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Date: 1/28/2017 Laboratory Project No (internal): _____

Page: 3 of: 3

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 - Highlands MS Follow-Up Sampling
Project No: 162017 Collected by: Nate Bostrom
Location: Highlands Middle 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
HMS12817-T-CF-14	1/28/2017	10:00	DW										X				Hold ~~unpr~~. Analyze for Pb only AEA 2/2/17
HMS12817-P-CF-20													X				Preserved in NO_3
HMS12817 S-CF-26																	Hold - Preserved with NO_3
HMS12817-T-CF-20																	Hold - unpr.
HMS12817-P-COF-35													X				HNO_3 preserved - analyze for Pb & Cu
HMS12017-P-OF-36													X				HNO_3 preserved - analyze for Pb & Cu

**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 Amund McCoy	1/28/2017; 1530	x	
Relinquished	Date/Time	Received	Date/Time
x		x	

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 Drinking Water - Highlands Middle School
Work Order Number: 1702288

February 27, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 5 sample(s) on 2/27/2017 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: *02/27/2017*

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Highlands
Work Order: 1702288

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1702288-001	HMS22517-P-CF-14	02/25/2017 7:45 AM	02/27/2017 9:19 AM
1702288-002	HMS22517-S-CF-14	02/25/2017 7:45 AM	02/27/2017 9:19 AM
1702288-003	HMS22517-T-CF-14	02/25/2017 7:45 AM	02/27/2017 9:19 AM
1702288-004	HMS22517-P-CDF-35	02/25/2017 7:45 AM	02/27/2017 9:19 AM
1702288-005	HMS22517-P-OF-36	02/25/2017 7:45 AM	02/27/2017 9:19 AM

Case Narrative

WO#: **1702288**
Date: **2/27/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Highlands Middle School

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:
1702288-004A 208799: Prep Comments for EPA200.8, Sample 1702288-004A: Turbidity: 0.00 NTU
1702288-001A 208798: Prep Comments for EPA200.8, Sample 1702288-001A: Turbidity: 0.00 NTU
1702288-005A 208800: Prep Comments for EPA200.8, Sample 1702288-005A: Turbidity: 0.00 NTU

Qualifiers:

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

Acronyms:

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

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Highlands Middle School

Lab ID: 1702288-001 **Collection Date:** 2/25/2017 7:45:00 AM
Client Sample ID: **HMS22517-P-CF-14** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16360		Analyst: TN
Lead	1.94	1.00		µg/L	1	2/27/2017 4:47:52 PM

Lab ID: 1702288-004 **Collection Date:** 2/25/2017 7:45:00 AM
Client Sample ID: **HMS22517-P-CDF-35** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16360		Analyst: TN
Lead	13.5	1.00		µg/L	1	2/27/2017 4:51:28 PM

Lab ID: 1702288-005 **Collection Date:** 2/25/2017 7:45:00 AM
Client Sample ID: **HMS22517-P-OF-36** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16360		Analyst: TN
Lead	ND	1.00		µg/L	1	2/27/2017 4:55:04 PM

Work Order: 1702288
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Highlands

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	MB-16360	SampType:	MBLK			Units:	µg/L		Prep Date:	2/27/2017		RunNo:	34678	
Client ID:	MBLKW	Batch ID:	16360						Analysis Date:	2/27/2017		SeqNo:	662272	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Lead		ND	1.00											

Sample ID	LCS-16360	SampType:	LCS			Units:	µg/L		Prep Date:	2/27/2017		RunNo:	34678	
Client ID:	LCSW	Batch ID:	16360						Analysis Date:	2/27/2017		SeqNo:	662273	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Lead		44.6	1.00	50.00	0	89.1	85	115						

Sample ID	1702286-001ADUP	SampType:	DUP			Units:	µg/L		Prep Date:	2/27/2017		RunNo:	34678	
Client ID:	BATCH	Batch ID:	16360						Analysis Date:	2/27/2017		SeqNo:	662277	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Lead		6.19	1.00						6.458	4.26	30			

Sample ID	1702286-001AMS	SampType:	MS			Units:	µg/L		Prep Date:	2/27/2017		RunNo:	34678	
Client ID:	BATCH	Batch ID:	16360						Analysis Date:	2/27/2017		SeqNo:	662278	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Lead		88.8	1.00	100.0	6.458	82.3	70	130						

Sample ID	1702286-001AMSD	SampType:	MSD			Units:	µg/L		Prep Date:	2/27/2017		RunNo:	34678	
Client ID:	BATCH	Batch ID:	16360						Analysis Date:	2/27/2017		SeqNo:	662279	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Lead		92.3	1.00	100.0	6.458	85.9	70	130	88.79	3.92	30			

Sample Log-In Check List

Client Name:	**FE**	Work Order Number:	**1702288**
Logged by:	**Erica Silva**	Date Received:	**2/27/2017 9:19:00 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:

HNO3 added to 002A, 003A

Item Information

Item #	Temp ºC
Cooler 1	1.8
Cooler 2	0.9
Sample 1	1.2
Sample 2	1.5

* 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: 2/25/2017 Laboratory Project No (internal): 1702288

Page: 1 of: 1

Client: Fulcrum Environmental Consulting, Inc.
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 - Highlands Middle School
Project No: 162017.06 Collected by: Amanda Enbysk
Location: Highlands Middle 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
HMS22517-P-CF-14	2/25/2017	0945	DW										X				HNO_3 pres.
HMS22517-S-CF-14	↓	↓	↓														HOLD; unpr. ↓
HMS22517-T-CF-14																	
HMS22517-P-CDF-35													X				HNO_3 pres. ↓
HMS22517-P-OF-36													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.)

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

Special Remarks: Please preserve 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	2/25/2017 1300	x	2/27/17 0919
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-Highlands MS
Work Order Number: 1704069

April 07, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 9 sample(s) on 4/6/2017 for the analyses presented in the following report.

Drinking Water Metals by EPA Method 200.8

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager

Date: *04/07/2017*

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Highlands M
Work Order: 1704069

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1704069-001	HMS4517-P-DF-04	04/05/2017 10:00 AM	04/06/2017 10:31 AM
1704069-002	HMS4517-P-CDF-08	04/05/2017 10:00 AM	04/06/2017 10:31 AM
1704069-003	HMS4517-S-CDF-08	04/05/2017 10:00 AM	04/06/2017 10:31 AM
1704069-004	HMS4517-T-CDF-08	04/05/2017 10:00 AM	04/06/2017 10:31 AM
1704069-005	HMS4517-P-CDF-27	04/05/2017 10:00 AM	04/06/2017 10:31 AM
1704069-006	HMS4517-S-CDF-27	04/05/2017 10:00 AM	04/06/2017 10:31 AM
1704069-007	HMS4517-T-CDF-27	04/05/2017 10:00 AM	04/06/2017 10:31 AM
1704069-008	HMS4517-P-CDF-35	04/05/2017 10:00 AM	04/06/2017 10:31 AM
1704069-009	HMS4517-P-OF-36	04/05/2017 10:00 AM	04/06/2017 10:31 AM

Case Narrative

WO#: **1704069**
Date: **4/7/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Highlands MS

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:
1704069-001A 214540: Prep Comments for EPA200.8, Sample 1704069-001A: Turbidity: 0.01 NTU
1704069-002A 214541: Prep Comments for EPA200.8, Sample 1704069-002A: Turbidity: 0.02 NTU
1704069-005A 214542: Prep Comments for EPA200.8, Sample 1704069-005A: Turbidity: 0.01 NTU
1704069-008A 214543: Prep Comments for EPA200.8, Sample 1704069-008A: Turbidity: 0.01 NTU
1704069-009A 214546: Prep Comments for EPA200.8, Sample 1704069-009A: Turbidity: 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-Highlands MS

Lab ID: 1704069-001 **Collection Date:** 4/5/2017 10:00:00 AM
Client Sample ID: **HMS4517-P-DF-04** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16722		Analyst: TN
Copper	306	0.500		µg/L	1	4/7/2017 2:41:25 PM

Lab ID: 1704069-002 **Collection Date:** 4/5/2017 10:00:00 AM
Client Sample ID: **HMS4517-P-CDF-08** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16722		Analyst: TN
Copper	1,030	0.500		µg/L	1	4/7/2017 2:45:27 PM

Lab ID: 1704069-005 **Collection Date:** 4/5/2017 10:00:00 AM
Client Sample ID: **HMS4517-P-CDF-27** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16722		Analyst: TN
Copper	1,090	0.500		µg/L	1	4/7/2017 2:49:28 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Highlands MS

Lab ID: 1704069-008 **Collection Date:** 4/5/2017 10:00:00 AM
Client Sample ID: **HMS4517-P-CDF-35** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16722		Analyst: TN
Copper	1,300	0.500		µg/L	1	4/7/2017 2:53:30 PM

Lab ID: 1704069-009 **Collection Date:** 4/5/2017 10:00:00 AM
Client Sample ID: **HMS4517-P-OF-36** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16723		Analyst: TN
Copper	ND	0.500		µg/L	1	4/7/2017 3:17:41 PM

Work Order: 1704069
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Highlands M

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	**MB-16723**	SampType:	**MBLK**			Units:	**µg/L**		Prep Date:	**4/7/2017**		RunNo:	**35429**	
Client ID:	**MBLKW**	Batch ID:	**16723**						Analysis Date:	**4/7/2017**		SeqNo:	**678502**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		ND	0.500											

Sample ID	**LCS-16723**	SampType:	**LCS**			Units:	**µg/L**		Prep Date:	**4/7/2017**		RunNo:	**35429**	
Client ID:	**LCSW**	Batch ID:	**16723**						Analysis Date:	**4/7/2017**		SeqNo:	**678505**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		96.5	0.500	100.0	0	96.5	85	115						

Sample ID	**1704069-009ADUP**	SampType:	**DUP**			Units:	**µg/L**		Prep Date:	**4/7/2017**		RunNo:	**35429**	
Client ID:	**HMS4517-P-OF-36**	Batch ID:	**16723**						Analysis Date:	**4/7/2017**		SeqNo:	**678507**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		ND	0.500						0		30			

Sample ID	**1704069-009AMS**	SampType:	**MS**			Units:	**µg/L**		Prep Date:	**4/7/2017**		RunNo:	**35429**	
Client ID:	**HMS4517-P-OF-36**	Batch ID:	**16723**						Analysis Date:	**4/7/2017**		SeqNo:	**678508**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		188	0.500	200.0	0.4218	93.9	70	130						

Sample ID	**1704069-009AMSD**	SampType:	**MSD**			Units:	**µg/L**		Prep Date:	**4/7/2017**		RunNo:	**35429**	
Client ID:	**HMS4517-P-OF-36**	Batch ID:	**16723**						Analysis Date:	**4/7/2017**		SeqNo:	**678509**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		194	0.500	200.0	0.4218	97.0	70	130	188.3	3.16	30			

Work Order: 1704069
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Highlands M

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

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

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

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

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

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

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

Sample Log-In Check List

Client Name:	**FE**	Work Order Number:	**1704069**
Logged by:	**Erica Silva**	Date Received:	**4/6/2017 10:31:00 AM**

Chain of Custody

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

Log In

3.	Coolers are present?	Yes ☑	No ☐	NA ☐
4.	Shipping container/cooler in good condition?	Yes ☑	No ☐	
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes ☐	No ☐	Not Required ☑
6.	Was an attempt made to cool the samples?	Yes ☑	No ☐	NA ☐
7.	Were all items received at a temperature of >0°C to 10.0°C*	Yes ☑	No ☐	NA ☐
8.	Sample(s) in proper container(s)?	Yes ☑	No ☐	
9.	Sufficient sample volume for indicated test(s)?	Yes ☑	No ☐	
10.	Are samples properly preserved?	Yes ☑	No ☐	
11.	Was preservative added to bottles?	Yes ☑	No ☐ HNO3 to 003A, 004A, 006A, 007A	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 1	2.2
Cooler 2	0.9
Sample 1	2.9
Sample 2	1.1

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

Chain of Custody Record and Laboratory Services Agreement

Fremont Analytical

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

Date: 4/5/17 Laboratory Project No (internal): 17040469

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 SO Drinking Water - Highlands MS
Project No: 162017.06 Collected by: Amanda Enbysk
Location: Highlands Middle 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
1	HMS4517-P-DF-04	4/5/17	1000	DW									⊗					HNO_3 preserved
2	HMS4517-P-COF-08												⊗					↓
3	HMS4517-S-COF-08																	HOLD; unpr.
4	HMS4517-T-COF-08																	↓
5	HMS4517-P-COF-27												⊗					HNO_3 preserved
6	HMS4517-S-COF-27																	HOLD; unpr
7	HMS4517-T-COF-27																	↓
8	HMS4517-P-COF-35												⊗					HNO_3 preserved
9	HMS4517-P-DF-36	↓	↓	↓									⊗					↓
10																		

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

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

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

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

Special Remarks: Please preserve all unpreserved

TAT: ASAP

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

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

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

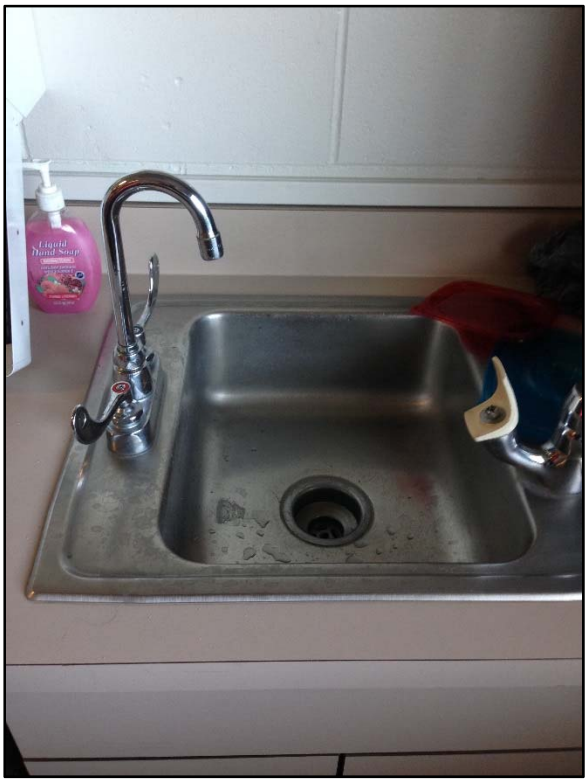
^Please coordinate with the lab in advance

FULCRUM environmental consulting

ATTACHMENT F

Fixture Style Photographs

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



Sample HMS122116-P-CF-14: **19 µg/L** initial lead concentration. Faucet above is identified producing elevated lead concentrations.

Sample AE122216-P-CF-07: 12 µg/L initial lead concentration. Same fixture style as classroom faucets with elevated lead concentrations.

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Yakima, Washington 98901
efulcrum.net