

August 28, 2017

Pasco School District No. 1
Attn: Randy D. Nunamaker, Executive Director of Operations
1215 West Lewis Street
Pasco, Washington, 99301

**RE: Winter 2016 Drinking Water Sampling Results
James McGee Elementary School, 4061 North Horizon Drive, Pasco, Washington**

Dear Randy:

On Thursday, November 11, 2016, Fulcrum Environmental Consulting, Inc. (Fulcrum) collected 50 drinking water samples for lead and copper analysis from James McGee Elementary School (School) located at 4106 North Horizon Drive in Pasco, Washington. Initial sampling identified four fixture locations with lead concentrations above guidance levels. Fulcrum returned to the School to collect samples after replacement of the fixtures and found results 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-135¹. 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 November 11, 2016. Initial results identified four samples with lead concentrations above the Environmental Protection Agency (EPA) action level of 15 µg/L. Upon receipt of results, Fulcrum and the District consulted with the Benton-Franklin Health District in development of a remedial action plan.

Fulcrum returned to the School on January 4, 2017 to collect samples from the identified fixtures to confirm lead concentrations were above the action level and that the fixture was the source of lead. The four fixtures identified with elevated lead concentrations and an additional fixture of the same style were replaced and preconditioned by running cold water continuously through the fixtures for 24 hours, as specified in WAC 246-366A-130. Following replacement and preconditioning, Fulcrum returned to the School on April 7,

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

May 26, and July 25, 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. Following sampling and review of laboratory results, Benton-Franklin Health District supported Fulcrum's recommendation and the District's request to return the fixtures to service.

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

Sampling Methodology

As a portion of this project, Fulcrum prepared a Sampling and Analysis Plan (SAP) in consultation with the Benton-Franklin Health District intended to satisfy future initial sampling requirements under pending regulations.

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

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

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

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

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

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 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 2 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 four samples with lead concentrations above the EPA action level of 15 micrograms per liter ($\mu\text{g/L}$). No samples were identified with copper concentrations above the EPA action level of 1,300 $\mu\text{g/L}$.

Remedial Sampling

Immediately following receipt of initial sampling results, the District removed the identified fixtures from service pending remediation and further testing. Fulcrum returned to the School on January 4, 2017 to collect samples from the identified fixtures to confirm lead concentrations were above the action level and that the fixture was the source of lead. To remediate elevated lead concentrations, the District replaced all

identified fixtures and all of the same style. Fulcrum returned on April 7, May 26, and July 25, 2017 following fixture replacement and preconditioning to collect follow-up samples from the four initially identified fixtures and one fixture of the same style.

Analytical results from remedial sampling indicated the fixture replacement was successful at reducing lead concentrations below the action level for the fixtures in question.

Recommendations

No samples were found to contain copper concentrations above guidance levels. Four initial samples contained lead above the EPA action level of 15 µg/L. The District replaced all identified fixtures with elevated lead and one fixture of the same style and preconditioned the fixtures for 24 hours as specified in WAC 246-366A-130. Follow-up sampling demonstrated that all lead concentrations were below the action level. Following fixture replacement sampling and review of laboratory results, Benton-Franklin Health District supported Fulcrum's recommendation and the District's request to return the fixtures to service.

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

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

Sincerely,



Amanda Enbysk, GIT
Environmental Geologist

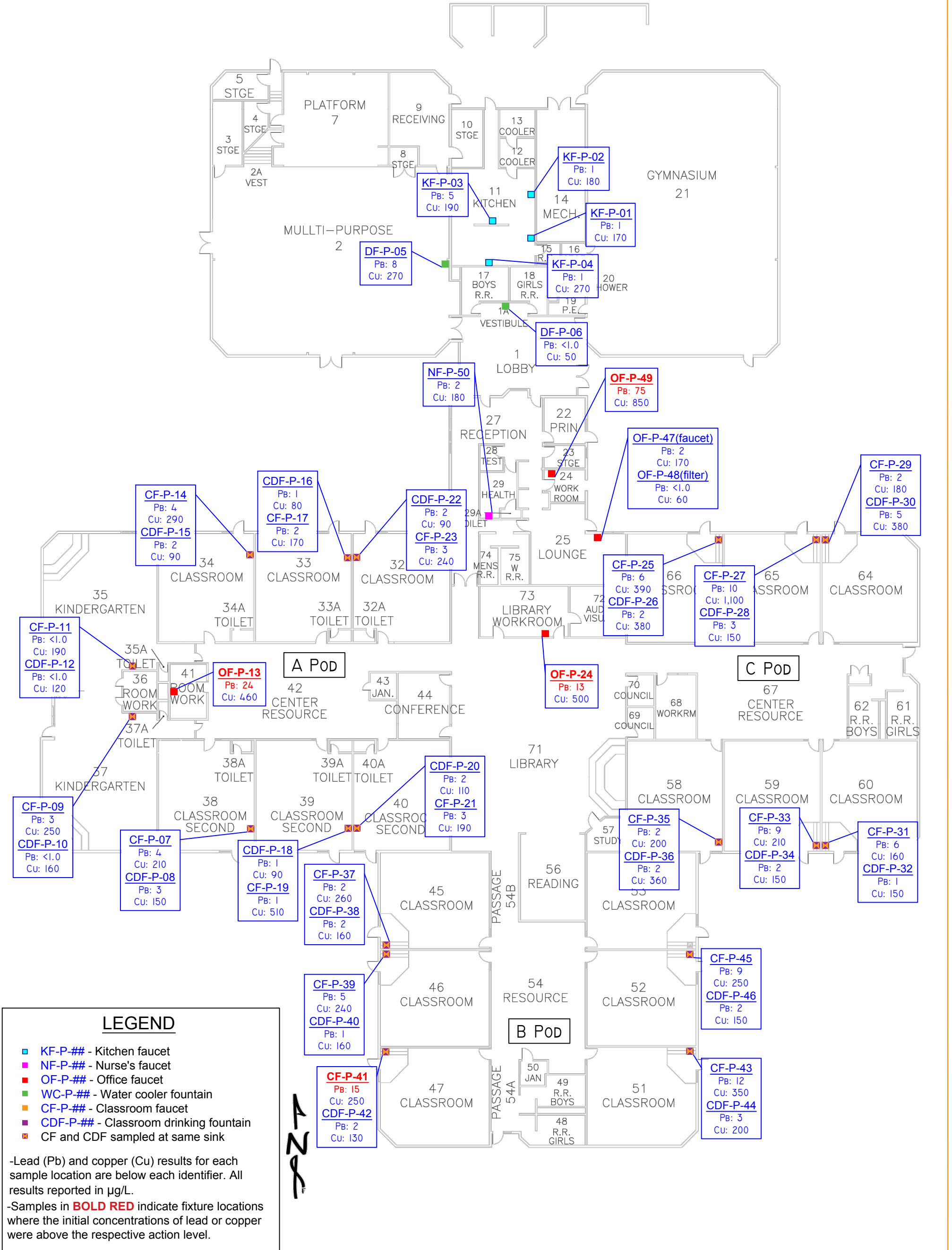


Ryan K. Mathews, CIH, CHMM
Principal

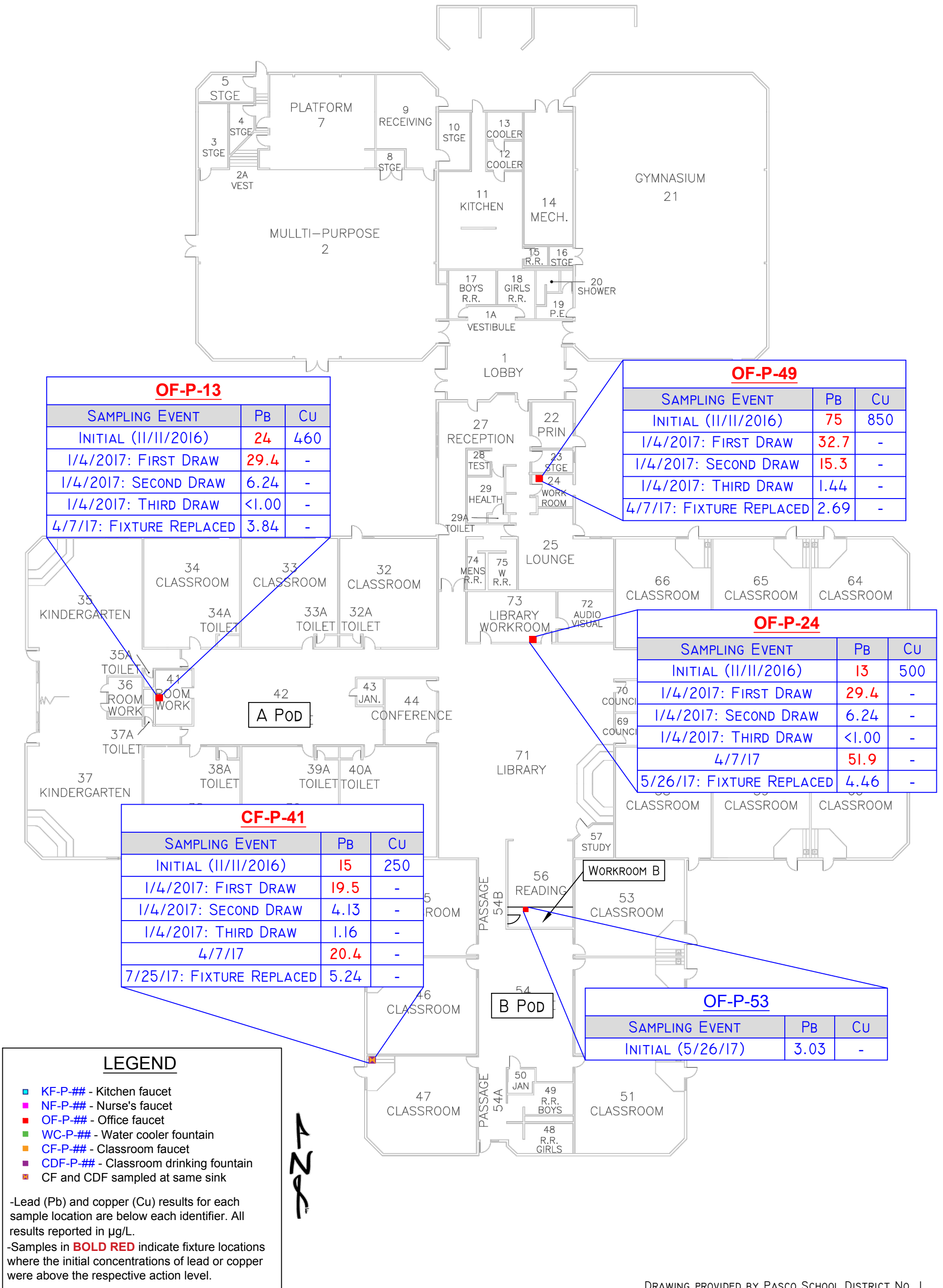


ATTACHMENT A

Figure 1: Initial Sample Location Map
Figure 2: Remedial Sample Location Map



DRAWING PROVIDED BY PASCO SCHOOL DISTRICT NO. 1



DRAWING PROVIDED BY PASCO SCHOOL DISTRICT NO. 1

ATTACHMENT B

Site-Specific Sampling and Analysis Plan

Site-Specific Sampling and Analysis Plan

Pasco School District No. 1 – Winter 2016 Drinking Water Sampling

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

Campus/Building: James McGee Elementary School Address: 4601 Horizon Drive, Pasco, WA, 99301

☒ Elementary ☐ Middle School ☐ High School ☐ Administration

Date of Construction: 1981 Modernizations: 2002

Fixture Type	Fixture Locations	Fixture Styles ¹	Samples Collected	Ratio
Drinking fountain/water cooler (DF/WC)	2	1	2	100%
Kitchen Fixture (KF)	4	4	4	100%
Classroom faucet, including faucets in Food Labs and Life Sciences Classrooms (CF)	32	4	19	59%
Classroom drinking fountain at sink (CDF)	32	3	19	59%
Nurse's Office/Health Room (NF)	1	1	1	100%
Teacher's Lounges/Work Rooms (OF)	7	4	5	71%
TOTAL SAMPLES	83		50	60%

¹ Fixture styles are approximate and based on sampler's observations

Lead Sampler: Kelsey Best Date: 11/11/2016

Sample Prefix: MCG - 111116 - - P (first draw) - 01-52
School Code Date Fixture Type Sample Type Sample Number

Laboratory: R. J. Lee Group, Columbia Basin Analytical Delivery Date: November 11, 2016

Comments:

- One exterior DF non-functional during initial sampling
- No samples were collected from portables

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

Table 1: Initial Sampling Analytical Results

Sample Identification and Location	Type of Fixture	Lead Results (µg/L)	Copper Results (µg/L)
MCG111116-KF-P-01: East wall kitchen, south fixture	Kitchen Faucet	1	170
MCG111116-KF-P-02: East wall kitchen, north fixture	Kitchen Faucet	1	180
MCG111116-KF-P-03: Center of kitchen, vat fill	Kitchen Faucet	5	190
MCG111116-KF-P-04: South wall kitchen	Kitchen Faucet	1	270
MCG111116-DF-P-05: East wall of multi-purpose/cafeteria	Drinking Fountain	8	270
MCG111116-DF-P-06: Main entrance north wall	Drinking Fountain	<1.0	50
MCG111116-CF-P-07: A Pod, Classroom 38	Classroom Faucet	4	210
MCG111116-CDF-P-08: A Pod, Classroom 38	Classroom Drinking Fountain	3	150
MCG111116-CF-P-09: A Pod, Classroom 37	Classroom Faucet	3	250
MCG111116-CDF-P-10: A Pod, Classroom 37	Classroom Drinking Fountain	<1.0	160
MCG111116-CF-P-11: A Pod, Classroom 35	Classroom Faucet	<1.0	190
MCG111116-CDF-P-12: A Pod, Classroom 35	Classroom Drinking Fountain	<1.0	120
MCG111116-OF-P-13: A Pod Workroom	Office Faucet	24	460
MCG111116-CF-P-14: A Pod, Classroom 34	Classroom Faucet	4	290
MCG111116-CDF-P-15: A Pod, Classroom 34	Classroom Drinking Fountain	2	90
MCG111116-CDF-P-16: A Pod, Classroom 33	Classroom Drinking Fountain	1	80
MCG111116-CF-P-17: A Pod, Classroom 33	Classroom Faucet	2	170
MCG111116-CDF-P-18: A Pod, Classroom 39	Classroom Drinking Fountain	1	90
MCG111116-CF-P-19: A Pod, Classroom 39	Classroom Faucet	1	510
MCG111116-CDF-P-20: A Pod, Classroom 40	Classroom Drinking Fountain	2	110
MCG111116-CF-P-21: A Pod, Classroom 40	Classroom Faucet	3	190
MCG111116-CDF-P-22: A Pod, Classroom 32	Classroom Drinking Fountain	2	90
MCG111116-CF-P-23: A Pod, Classroom 32	Classroom Faucet	3	240
MCG111116-OF-P-24: Library Workroom	Office Faucet	13	500
MCG111116-CF-P-25: C Pod, Classroom 66	Classroom Faucet	6	390
MCG111116-CDF-P-26: C Pod, Classroom 66	Classroom Drinking Fountain	2	380
MCG111116-CF-P-27: C Pod, Classroom 65	Classroom Faucet	10	1,100
MCG111116-CDF-P-28: C Pod, Classroom 65	Classroom Drinking Fountain	3	150
MCG111116-CF-P-29: C Pod, Classroom 64	Classroom Faucet	2	180
MCG111116-CDF-P-30: C Pod, Classroom 64	Classroom Drinking Fountain	5	380
MCG111116-CF-P-31: C Pod, Classroom 60	Classroom Faucet	6	160
MCG111116-CDF-P-32: C Pod, Classroom 60	Classroom Drinking Fountain	1	150
MCG111116-CF-P-33: C Pod, Classroom 59	Classroom Faucet	9	210
MCG111116-CDF-P-34: C Pod, Classroom 59	Classroom Drinking Fountain	2	150
MCG111116-CF-P-35: C Pod, Classroom 58	Classroom Faucet	2	200
MCG111116-CDF-P-36: C Pod, Classroom 58	Classroom Drinking Fountain	2	360
MCG111116-CF-P-37: B Pod, Classroom 45	Classroom Faucet	2	260
MCG111116-CDF-P-38: B Pod, Classroom 45	Classroom Drinking Fountain	2	160
MCG111116-CF-P-39: B Pod, Classroom 46	Classroom Faucet	5	240
MCG111116-CDF-P-40: B Pod, Classroom 46	Classroom Drinking Fountain	1	160
MCG111116-CF-P-41: B Pod, Classroom 47	Classroom Faucet	15	250
MCG111116-CDF-P-42: B Pod, Classroom 47	Classroom Drinking Fountain	2	130
MCG111116-CF-P-43: B Pod, Classroom 51	Classroom Faucet	12	350

Sample Identification and Location	Type of Fixture	Lead Results (µg/L)	Copper Results (µg/L)
MCG111116-CDF-P-44: B Pod, Classroom 51	Classroom Drinking Fountain	3	200
MCG111116-CF-P-45: B Pod, Classroom 52	Classroom Faucet	9	250
MCG111116-CDF-P-46: B Pod, Classroom 52	Classroom Drinking Fountain	2	150
MCG111116-OF-P-47: Staff Lounge faucet	Office Faucet	2	170
MCG111116-OF-P-48: Staff Lounge filtered bottle filler	Office Faucet	<1.0	60
MCG111116-OF-P-49: Vice Principal's Office, Workroom 24	Office Faucet	75	850
MCG111116-NF-P-50: Health Room	Nurse's Faucet	2	180
<i>MCG111116-WC-P-51: Laboratory Blank - labeled WC</i>	<i>Distilled Water Blank</i>	<i><1.0</i>	<i><10</i>
<i>MCG111116-CDF-P-52: Laboratory Spike - labeled CDF</i>	<i>Lead and Copper Spike</i>	<i>13</i>	<i>1,300</i>
EPA Action Level		15	1,300

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

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

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

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

Table 2: pH and Temperature Data Summary

Sample Number and Location	Fixture Type	pH Flush	pH Sample	Temperature Flush (°C)	Temperature Sample
MCG111116-KF-P-01: East wall kitchen, south fixture	Kitchen Faucet	8.32	8.38	19.9	17.6
MCG111116-DF-P-05: East wall of multi-purpose/cafeteria	Drinking Fountain	8.23	8.14	20.8	18.7
MCG111116-CF-P-09: A Pod, Classroom 37	Classroom Faucet	8.70	8.36	20.5	19.7
MCG111116-OF-P-13: A Pod Workroom	Office Faucet	8.33	8.13	20.9	19.6
MCG111116-CDF-P-16: A Pod, Classroom 33	Classroom Drinking Fountain	8.42	8.04	20.3	18.2
MCG111116-CDF-P-20: A Pod, Classroom 40	Classroom Drinking Fountain	8.65	8.08	20.3	18.9
MCG111116-OF-P-24: Library Workroom	Office Faucet	8.39	7.96	20.4	20.6
MCG111116-CDF-P-28: C Pod, Classroom 65	Classroom Drinking Fountain	8.36	8.12	20.6	18.2
MCG111116-CDF-P-32: C Pod, Classroom 60	Classroom Drinking Fountain	8.28	8.08	20.1	19.0
MCG111116-CF-P-37: B Pod, Classroom 45	Classroom Faucet	8.37	8.03	20.9	19.2
MCG111116-CF-P-41: B Pod, Classroom 47	Classroom Faucet	8.23	8.19	21.1	19.1
MCG111116-CF-P-45: B Pod, Classroom 52	Classroom Faucet	8.36	8.16	21.2	19.4
MCG111116-OF-P-49: Vice Principal's Office, Workroom 24	Office Faucet	8.24	8.22	21.3	20.8

Table 3: Remedial Sampling Analytical Results Summary

Sampling Event	Sample Identification						
	OF-P-13	OF-P-24	CF-P-41	OF-P-49	OF-P-53: Workroom B	Laboratory Blank (-51, -54)	Laboratory Spike (-52, 55)
Initial (11/11/2016)	24	13	15	75	-	<1.0	13
1/4/2017: First Draw	29.4	13.6	19.5	32.7	-	<1.00	13.9
1/4/2017: Second Draw	6.24	4.27	4.13	15.3	-	-	-
1/4/2017: Third Draw	<1.00	1.38	1.16	1.44	-	-	-
4/7/2017	3.84	51.9	20.4	2.69	-	<1.00	16.3
5/26/2017	-	4.46	-	-	3.03	<1.00	14.4
7/25/2017	-	-	5.24	-	-	<1.00	15.1
EPA Action Level	15	15	15	15	15	15	15

- 1 All results are 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

ATTACHMENT D

Initial Analytical Results





RJ LeeGroup, Inc. | Columbia Basin Analytical Laboratories

2710 North 20th Avenue, Pasco WA 99301

Tel: (509) 545-4989 | Fax: (509) 544-6010

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

Subject: Chemical Analysis Report

Columbia Basin Analytical Laboratories received 52 sample(s) on 11/11/16 for analysis. These sample(s) have been assigned a login order number of W611046. 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.

- Revision is due to client's request for QC data to be included in final report. Sample matrix spike recovery failure for W611055-31 is attributed to a matrix effect as outlined in EPA Method 200.8.

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:

A handwritten signature in black ink, appearing to read "Fernanda Pincheira". The signature is stylized with large, flowing letters.

02/01/17

Project Coordinator II, M. Fernanda Pincheira

Date

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

Columbia Basin Analytical Laboratories | 2710 North 20th Avenue, Pasco WA 99301 | 509.545.4989

WWW.RJLEEGROUP.COM

Report Template: GenMetalReportFull_v12.rpt

Approved: 01/27/17 14:15
Report Time Stamp: 02/01/17 09:49



Laboratory Report

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

Client Project:

No Project

RJ Lee Group No.: W611046
COC No.:
Samples Received: 11/11/16
Analysis/Prep Date: 11/29/16
Report Date: 02/01/17

Sample Name:	MCG111116-KF-P-01	Matrix:	Potable Water	Date Received:	11/11/16
RJ Lee Grp. ID:	W611046-01			Date Analyzed:	11/29/16
Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers	
Copper	EPA 200.8	0.17	0.01		
Lead	EPA 200.8	0.001	0.001		

Sample Name:	MCG111116-KF-P-02	Matrix:	Potable Water	Date Received:	11/11/16
RJ Lee Grp. ID:	W611046-02			Date Analyzed:	11/29/16
Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers	
Copper	EPA 200.8	0.18	0.01		
Lead	EPA 200.8	0.001	0.001		

Sample Name:	MCG111116-KF-P-03	Matrix:	Potable Water	Date Received:	11/11/16
RJ Lee Grp. ID:	W611046-03			Date Analyzed:	11/17/16
Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers	
Copper	EPA 200.8	0.19	0.01		
Lead	EPA 200.8	0.005	0.001		

Sample Name:	MCG111116-KF-P-04	Matrix:	Potable Water	Date Received:	11/11/16
RJ Lee Grp. ID:	W611046-04			Date Analyzed:	11/29/16
Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers	
Copper	EPA 200.8	0.27	0.01		
Lead	EPA 200.8	0.001	0.001		

Sample Name:	MCG111116-DF-P-05	Matrix:	Potable Water	Date Received:	11/11/16
RJ Lee Grp. ID:	W611046-05			Date Analyzed:	11/29/16
Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers	
Copper	EPA 200.8	0.27	0.01		
Lead	EPA 200.8	0.008	0.001		

Columbia Basin Analytical Laboratories | 2710 North 20th Avenue, Pasco WA 93301 | 509.545.4989

WWW.RJLEEGROUP.COM

Report Template: GenMetalReportFull_v12.rpt

Approved: 01/27/17 14:15
Report Time Stamp: 02/01/17 09:49



Sample Name: MCG111116-DF-P-06 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-06

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.05	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: MCG111116-CF-P-07 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-07

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.21	0.01	
Lead	EPA 200.8	0.004	0.001	

Sample Name: MCG111116-CDF-P-08 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-08

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.15	0.01	
Lead	EPA 200.8	0.003	0.001	

Sample Name: MCG111116-CF-P-09 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-09

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.25	0.01	
Lead	EPA 200.8	0.003	0.001	

Sample Name: MCG111116-CDF-P-10 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-10

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.16	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: MCG111116-CF-P-11 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-11

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.19	0.01	
Lead	EPA 200.8	< 0.0010	0.001	



Sample Name: MCG111116-CDF-P-12 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-12

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.12	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: MCG111116-OF-P-13 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-13

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.46	0.01	
Lead	EPA 200.8	0.024	0.001	

Sample Name: MCG111116-CF-P-14 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-14

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.29	0.01	
Lead	EPA 200.8	0.004	0.001	

Sample Name: MCG111116-CDF-P-15 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-15

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.09	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: MCG111116-CDF-P-16 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-16

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.08	0.01	
Lead	EPA 200.8	0.001	0.001	

Sample Name: MCG111116-CF-P-17 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-17

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.17	0.01	
Lead	EPA 200.8	0.002	0.001	



Sample Name: MCG111116-CDF-P-18 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-18

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.09	0.01	
Lead	EPA 200.8	0.001	0.001	

Sample Name: MCG111116-CF-P-19 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-19

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.51	0.01	
Lead	EPA 200.8	0.001	0.001	

Sample Name: MCG111116-CDF-P-20 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-20

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.11	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: MCG111116-CF-P-21 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-21

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.19	0.01	
Lead	EPA 200.8	0.003	0.001	

Sample Name: MCG111116-CDF-P-22 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-22

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.09	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: MCG111116-CF-P-23 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-23

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.24	0.01	
Lead	EPA 200.8	0.003	0.001	



Sample Name: MCG111116-OF-P-24 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-24

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.50	0.01	
Lead	EPA 200.8	0.013	0.001	

Sample Name: MCG111116-CF-P-25 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-25

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.39	0.01	
Lead	EPA 200.8	0.006	0.001	

Sample Name: MCG111116-CDF-P-26 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-26

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.38	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: MCG111116-CF-P-27 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-27

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.1	0.1	X
Lead	EPA 200.8	0.010	0.001	

Sample Name: MCG111116-CDF-P-28 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-28

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.15	0.01	
Lead	EPA 200.8	0.003	0.001	

Sample Name: MCG111116-CF-P-29 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-29

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.18	0.01	
Lead	EPA 200.8	0.002	0.001	



Sample Name: MCG111116-CDF-P-30 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-30

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.38	0.01	
Lead	EPA 200.8	0.005	0.001	

Sample Name: MCG111116-CF-P-31 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-31

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.16	0.01	
Lead	EPA 200.8	0.006	0.001	

Sample Name: MCG111116-CDF-P-32 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-32

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.15	0.01	
Lead	EPA 200.8	0.001	0.001	

Sample Name: MCG111116-CF-33 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-33

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.21	0.01	
Lead	EPA 200.8	0.009	0.001	

Sample Name: MCG111116-CDF-34 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-34

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.15	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: MCG111116-CF-35 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-35

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.20	0.01	
Lead	EPA 200.8	0.002	0.001	



Sample Name: MCG111116-CDF-36 **Matrix:** Potable Water **Date Received:** 11/11/16
RJ Lee Grp. ID: W611046-36 **Date Analyzed:** 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.36	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: MCG111116-CF-37 **Matrix:** Potable Water **Date Received:** 11/11/16
RJ Lee Grp. ID: W611046-37 **Date Analyzed:** 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.26	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: MCG111116-CDF-38 **Matrix:** Potable Water **Date Received:** 11/11/16
RJ Lee Grp. ID: W611046-38 **Date Analyzed:** 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.16	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: MCG111116-CF-39 **Matrix:** Potable Water **Date Received:** 11/11/16
RJ Lee Grp. ID: W611046-39 **Date Analyzed:** 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.24	0.01	
Lead	EPA 200.8	0.005	0.001	

Sample Name: MCG111116-CDF-40 **Matrix:** Potable Water **Date Received:** 11/11/16
RJ Lee Grp. ID: W611046-40 **Date Analyzed:** 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.16	0.01	
Lead	EPA 200.8	0.001	0.001	

Sample Name: MCG111116-CF-41 **Matrix:** Potable Water **Date Received:** 11/11/16
RJ Lee Grp. ID: W611046-41 **Date Analyzed:** 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.25	0.01	
Lead	EPA 200.8	0.015	0.001	



Sample Name: MCG111116-CDF-42
RJ Lee Grp. ID: W611046-42

Matrix: Potable Water

Date Received: 11/11/16

Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.13	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: MCG111116-CF-43
RJ Lee Grp. ID: W611046-43

Matrix: Potable Water

Date Received: 11/11/16

Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.35	0.01	
Lead	EPA 200.8	0.012	0.001	

Sample Name: MCG111116-CDF-44
RJ Lee Grp. ID: W611046-44

Matrix: Potable Water

Date Received: 11/11/16

Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.20	0.01	
Lead	EPA 200.8	0.003	0.001	

Sample Name: MCG111116-CF-P-45
RJ Lee Grp. ID: W611046-45

Matrix: Potable Water

Date Received: 11/11/16

Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.25	0.01	
Lead	EPA 200.8	0.009	0.001	

Sample Name: MCG111116-CFD-P-46
RJ Lee Grp. ID: W611046-46

Matrix: Potable Water

Date Received: 11/11/16

Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.15	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: MCG111116-OF-P-47
RJ Lee Grp. ID: W611046-47

Matrix: Potable Water

Date Received: 11/11/16

Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.17	0.01	
Lead	EPA 200.8	0.002	0.001	



Sample Name: MCG111116-OF-P-48 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-48

Date Received: 11/11/16
Date Analyzed: 11/17/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.06	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: MCG111116-OF-P-49 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-49

Date Received: 11/11/16
Date Analyzed: 11/17/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.85	0.01	
Lead	EPA 200.8	0.075	0.001	

Sample Name: MCG111116-NF-P-50 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-50

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.18	0.01	
Lead	EPA 200.8	0.002	0.001	

Sample Name: MCG111116-WC-P-51 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-51

Date Received: 11/11/16
Date Analyzed: 11/29/16

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

Sample Name: MCG111116-CDF-P-52 **Matrix:** Potable Water
RJ Lee Grp. ID: W611046-52

Date Received: 11/11/16
Date Analyzed: 11/29/16

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.3	0.1	X
Lead	EPA 200.8	0.013	0.001	


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J = Analyte detected below quantitation limits, concentration is estimated

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U = Analyte analyzed for but not detected

N/A = Not Applicable

Scientist III J Grissmerson

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Report Template: GenMetalReportFull_v12.rpt

Approved: 01/27/17 14:15
Report Time Stamp: 02/01/17 09:49



Ryan Mathews
Fulcrum Environmental

406 N. 2nd St.
Yakima, WA 98901
Client Project:
No Project

Quality Control

Beryllium by NIOSH 7303-Modified

RJ Lee Group No.: W611046
Samples Received: 11/11/16
Report Date: 01/19/17
Analysis/Prep Date: 11/29/16
COC No.:

Analyte	CAS NO.	QC Sample ID	Expected mg/L	Result mg/L	RPD	% REC	Limit	Qualifier & Comments
Copper	7440-50-8	Blank		<0.00100				
Copper	7440-50-8	Blank		<0.00100				
Copper	7440-50-8	Blank		<0.00100				
Copper	7440-50-8	Duplicate		0.185	0.638		80 - 120	W611046-21
Copper	7440-50-8	Duplicate		0.160	0.481		80 - 120	W611046-31
Copper	7440-50-8	Duplicate		0.248	1.16		80 - 120	W611046-41
Copper	7440-50-8	Duplicate		0.885	9.23		80 - 120	W611055-31
Copper	7440-50-8	Duplicate		0.187	0.175		80 - 120	W611046-11
Copper	7440-50-8	Duplicate		0.186	0.338		80 - 120	W611046-03
Copper	7440-50-8	Duplicate		0.174	0.523		80 - 120	W611046-01
Copper	7440-50-8	LCS	0.025	0.0275		110	85 - 115	
Copper	7440-50-8	LCS	0.025	0.0274		110	85 - 115	
Copper	7440-50-8	LCS	0.025	0.0252		101	85 - 115	
Copper	7440-50-8	LCS	0.025	0.0251		100	85 - 115	
Copper	7440-50-8	LCS	0.025	0.0276		110	85 - 115	
Copper	7440-50-8	LCS Dup	0.025	0.0247	1.92	98.8	85 - 115	
Copper	7440-50-8	LCS Dup	0.025	0.0268	2.33	107	85 - 115	
Copper	7440-50-8	LCS Dup	0.025	0.0274	0.801	110	85 - 115	
Copper	7440-50-8	LCS Dup	0.025	0.0272	1.33	109	85 - 115	
Copper	7440-50-8	LCS Dup	0.025	0.0247	1.57	98.9	85 - 115	
Copper	7440-50-8	LRB		<0.00100				
Copper	7440-50-8	LRB		<0.00100				
Copper	7440-50-8	Matrix Spike	0.250	0.425		101	80 - 120	W611046-01
Copper	7440-50-8	Matrix Spike	0.250	0.439		101	80 - 120	W611046-21
Copper	7440-50-8	Matrix Spike	0.250	0.518		107	80 - 120	W611046-41
Copper	7440-50-8	Matrix Spike	0.250	0.419		92.9	80 - 120	W611046-11
Copper	7440-50-8	Matrix Spike	0.025	0.207		84.6	80 - 120	W611046-03
Copper	7440-50-8	Matrix Spike	0.025	0.922		462	80 - 120	W611055-31
Copper	7440-50-8	Matrix Spike	0.250	0.398		95.7	80 - 120	W611046-31
Copper	7440-50-8	MRL	0.001	0.000950		95.0	70 - 130	
Copper	7440-50-8	MRL	0.001	0.000973		97.3	70 - 130	
Copper	7440-50-8	MRL Check	0.001	0.00111		111	70 - 130	

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Report Time Stamp: 01/19/17 16:00



Copper	7440-50-8	MRL Check	0.001	0.00111	111	70 - 130	
Copper	7440-50-8	MRL Check	0.001	0.00110	110	70 - 130	
Lead	7439-92-1	Blank		<0.000100			
Lead	7439-92-1	Blank		<0.000100			
Lead	7439-92-1	Blank		<0.000100			
Lead	7439-92-1	Duplicate		0.000344	11.7	80 - 120	W611046-11
Lead	7439-92-1	Duplicate		0.00127	3.62	80 - 120	W611046-01
Lead	7439-92-1	Duplicate		0.0146	2.14	80 - 120	W611046-41
Lead	7439-92-1	Duplicate		0.00460	1.06	80 - 120	W611046-03
Lead	7439-92-1	Duplicate		0.00567	1.95	80 - 120	W611046-31
Lead	7439-92-1	Duplicate		0.0528	10.7	80 - 120	W611055-31
Lead	7439-92-1	Duplicate		0.00285	4.17	80 - 120	W611046-21
Lead	7439-92-1	LCS	0.025	0.0269	108	85 - 115	
Lead	7439-92-1	LCS	0.025	0.0270	108	85 - 115	
Lead	7439-92-1	LCS	0.025	0.0268	107	85 - 115	
Lead	7439-92-1	LCS	0.025	0.0247	98.8	85 - 115	
Lead	7439-92-1	LCS	0.025	0.0245	98.2	85 - 115	
Lead	7439-92-1	LCS Dup	0.025	0.0242	2.20	96.7	85 - 115
Lead	7439-92-1	LCS Dup	0.025	0.0263	2.57	105	85 - 115
Lead	7439-92-1	LCS Dup	0.025	0.0244	0.756	97.4	85 - 115
Lead	7439-92-1	LCS Dup	0.025	0.0265	1.10	106	85 - 115
Lead	7439-92-1	LCS Dup	0.025	0.0266	1.27	106	85 - 115
Lead	7439-92-1	LRB		<0.000100			
Lead	7439-92-1	LRB		<0.000100			
Lead	7439-92-1	Matrix Spike	0.250	0.250	99.0	80 - 120	W611046-21
Lead	7439-92-1	Matrix Spike	0.250	0.242	94.7	80 - 120	W611046-31
Lead	7439-92-1	Matrix Spike	0.250	0.251	100	80 - 120	W611046-01
Lead	7439-92-1	Matrix Spike	0.025	0.0792	127	80 - 120	W611055-31
Lead	7439-92-1	Matrix Spike	0.250	0.238	95.2	80 - 120	W611046-11
Lead	7439-92-1	Matrix Spike	0.250	0.265	99.9	80 - 120	W611046-41
Lead	7439-92-1	Matrix Spike	0.025	0.0282	94.6	80 - 120	W611046-03
Lead	7439-92-1	MRL	0.001	0.000925	92.5	70 - 130	
Lead	7439-92-1	MRL	0.001	0.000894	89.4	70 - 130	
Lead	7439-92-1	MRL Check	0.001	0.00108	108	70 - 130	
Lead	7439-92-1	MRL Check	0.001	0.00109	109	70 - 130	
Lead	7439-92-1	MRL Check	0.001	0.00108	108	70 - 130	



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ND = Not Detected

Scientist III J Grissmerson

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RJ Lee Group will store the samples for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples. Unless otherwise noted, samples were received in an acceptable condition. This laboratory operates in accordance with ISO 17025 guidelines, and holds limited scopes of accreditation under ORELAP Lab Code 4061 AIHA-LAP, LLC Lab ID 178656 EPA ID WA01195 and WA DOE Lab ID C859. This report may not be used to claim product endorsement by any laboratory accrediting agency. The results contained in this report relate only to the items tested or to the sample(s) as received by the laboratory. Any reproduction of this document must be in full for the report to be valid. Quality control data is available upon request.

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WWW.RJLEEGROUP.COM

Report Template: GenMetalReportFull_v2.1.rpt

 Approved:
 Report Time Stamp: 01/19/17 16:00

Request for Environmental and IH Laboratory Analytical Services

W611046

Page 1 of 5

W611046 Rev. 2, Page 15 of 19

ATTENTION TO: Ryan Mathews				Purchase Order No.:		Client Job No.: 16189401	
Lab Use Only		Project No.: Date Logged In:		Client No.: Logged In By:			
Report Results To		Name: Amanda Embys, 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: aembys@fulcrum.net, cc: rmathews@fulcrum.net Fax Results To:		Turnaround Request		Standard: Yes No If 'No,' No. of Business Days: 16189401	
Send Invoice To		Name: Lorie Boutillier Company: Fulcrum Environmental Address: 406 N 2nd Street City, State, Zip: Yakima, WA, 98901 Phone: (509) 574-0839 Fax: (509) 575-8453		Drinking Water Sample Only		Sample Purpose: Information X Regulatory ☐ Accreditation (please list below): DOH Source #: Multiple Sources #s: Sample Purpose: A ☐ B ☐ Other ☐	
Special Instructions				Chemistry Analysis Key		Preservation: Unpres H ₂ SO ₄ 4°C HCl NaOH HNO ₃ Na ₂ SO ₄ E=Extract X=Other Matrix: WW=Wastewater GW=Groundwater S=Soil/Sludge Container: P=Plastic G=Glass W=Wipe A=Air (filter or tube)	
Client Sample ID		Sample Description		Sample Date		Sample Time	
McG11116-KF-P-01		KF: Kitchen		11/11/16			
McG11116-KF-P-02		KF: Kitchen		11/11/16			
McG11116-KF-P-03		KF: Kitchen					
McG11116-KF-P-04		KF: Kitchen					
McG11116-DF-P-05		DF: Cafeteria					
McG11116-DF-P-06		DF: Vestibule					
McG11116-CF-P-07		CF: Rm38					
McG11116-CDF-P-08		CDF: Rm38					
McG11116-CF-P-09		CF: Rm37					
McG11116-CDF-P-10		CDF: Rm37					
McG11116-CF-P-11		CF: Rm35					
Chain of Custody		Relinquished By (Signature): [Signature] Relinquished By (Print Name): Chris Best		Date: 11/11/16 Time: 10:40		Chain of Custody	
Chain of Custody		Relinquished By (Signature): [Signature] Relinquished By (Print Name): [Signature]		Date: 11/11/16 Time: 10:45		Chain of Custody	
Chain of Custody		Relinquished By (Signature): [Signature] Relinquished By (Print Name): [Signature]		Date: 11/11/16 Time: 10:45		Chain of Custody	
Chain of Custody		Relinquished By (Signature): [Signature] Relinquished By (Print Name): [Signature]		Date: 11/11/16 Time: 10:45		Chain of Custody	



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Rev. 12/03/2015

Request for Environmental and IH Laboratory Analytical Services

Page 2 of 5

W611046 Rev. 2, Page 16 of 19

ATTENTION TO: Ryan Mathews		Purchase Order No.:		Client Job No.: 16189901	
Lab Use Only	Project No.: Date Logged In: Logged In By:	Client No.:	Turnaround Request	Standard: Yes No If 'No', No. of Business Days:	Client Job No.: 16189901
Report Results To	Name: Amanda Embysk, Ryan Mathews	City, State, Zip: Yakima, WA, 98901 Phone: (509) 574-0839 Fax: (509) 575-8453	Drinking Water Sample Only	Sample Purpose: Information X Regulatory ☐ Accreditation (please list below):	System ID #: DOH Source #:
	Company: Fulcrum Environmental Consulting				
	Address: 406 North 2nd Street				
	City, State, Zip: Yakima, WA, 98901				
Call with Verbal Results:	Email Results To: aembysk@fulcrum.net, cc: rmathews@fulcrum.net	Chemistry Analysis Key	Preservation: Unpres 4°C HNO ₃ Other	Matrix: WW=Wastewater GW=Groundwater S=Soil/Sludge E=Extract	Container: P=Plastic G=Glass W=Wipe A=Air (filter or tube)
Send Invoice To	Name: Lorie Boultiller Company: Fulcrum Environmental Address: 406 N 2nd Street City, State, Zip: Yakima, WA, 98901 Phone: (509) 574-0839 Fax: (509) 575-8453	Analysis Requested	Pres. Upon Receipt (Y/N)		
Special Instructions			Preservation		
Client Sample ID	Sample Description	Sample Date	Start	Stop	Wipe Area / Air Volume
MC611116-CDF-P-12	CDF: Rm 35	11/11/16			
MC611116-CF-P-13	CF: WORK ROOM 41	11/11/16			
MC611116-CDF-P-14	CF: Rm 34				
MC611116-CDF-P-15	CDF: Room 34				
MC611116-CDF-P-16	CDF: Room 33				
MC611116-CF-P-17	CF: Room 33				
MC611116-CDF-P-18	CDF: Room 39				
MC611116-CF-P-19	CF: Room 39				
MC611116-CDF-P-20	CDF: Room 40				
MC611116-CF-P-21	CF: Room 41				
MC611116-CDF-P-22	CDF: Room 32				
Chain of Custody	Relinquished By (Signature): Key Bost Relinquished By (Print Name): Key Bost Company Name:	Date: 11/11/16 Time: 10:40	Chain of Custody	Received By (Signature): [Signature] Received By (Print Name): [Name] Company Name:	Date: 11/11/16 Time: 10:45
Chain of Custody	Relinquished By (Signature): Relinquished By (Print Name): Company Name:	Date: Time:	Chain of Custody	Received By (Signature): Received By (Print Name): Company Name:	Date: Time:



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Request for Environmental and IH Laboratory Analytical Services

ATTENTION TO:		Purchase Order No.:		Client Job No.:	
Ryan Mathews				161498.01	
Lab Use Only	Project No.:	Client No.:	Standard:	Yes	No
	Date Logged In:	Logged In By:	Sample Purpose:	Information X	Regulatory
Report Results To	Name: Amanda Embysk, Ryan Matthews		System ID #:		Accreditation (please list below):
	Company: Fulcrum Environmental Consulting		DOH Source #:		
	Address: 406 North 2nd Street		Multiple Sources #:		
	City, State, Zip: Yakima, WA, 98901		Sample Purpose: A ☐ B ☐ Other ☐		
	Phone: (509) 574-0839	Fax: (509) 575-8453	Preservation:	Matrix:	Container:
	Call with Verbal Results:		Unpres H ₂ SO ₄	WW=Wastewater	P=Plastic
	Email Results To: aembysk@fulcrum.net, cc: rmathews@fulcrum.net		4°C HCl	GW=Groundwater	G=Glass
	Fax Results To:		HNO ₃ NaOH	S=Soil/Sludge	W=Wipe
	Name: Lorie Boutillier		Other Na ₂ SO ₄	E=Extract	A=Air (filter or tube)
Send Invoice To	Company: Fulcrum Environmental	Email: lboutillier@fulcrum.net	Analysis Requested		
	Address: 406 N 2nd Street				
	City, State, Zip: Yakima, WA, 98901				
	Phone: (509) 574-0839	Fax: (509) 575-8453			
Special Instructions					
Client Sample ID	Sample Description	Sample Date	Sample Time	Wipe Area / Air Volume	Pres. Upon Receipt (Y/N)
MEG11116-CF-P-23	CF: Room 33	11/11/16			Unpres DW P
MEG11116-CF-P-24	CF: Room 73				
MEG11116-CF-P-25	CF: Room 66				
MEG11116-CDF-P-26	CDF: Room 66				
MEG11116-CF-P-27	CF: Room 65				
MEG11116-CDF-P-28	CDF: Room 65				
MEG11116-CF-P-29	CF: Room 64				
MEG11116-CDF-P-30	CDF: Room 64				
MEG11116-CF-P-31	CF: Room 60				
MEG11116-CDF-P-32	CDF: Room 61				
MEG11116-CF-P-33	CF: Room 59				
Chain of Custody	Relinquished By (Signature): Kelly Best	Date: 11/11/16	Time: 1040	Chain of Custody	Received By (Signature): [Signature]
	Relinquished By (Print Name): Kelly Best	Relinquished To:	Method of Shipment:		Received By (Print Name): [Signature]
	Company Name:				Company Name:
Chain of Custody	Relinquished By (Signature): [Signature]	Date:	Time:	Chain of Custody	Received By (Signature): [Signature]
	Relinquished By (Print Name): [Signature]	Relinquished To:	Method of Shipment:		Received By (Print Name): [Signature]
	Company Name:				Company Name:

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Request for Environmental and IH Laboratory Analytical Services

Page 4 of 5

W611046 Rev. 2, Page 18 of 19

ATTENTION TO:		Ryan Matthews		Purchase Order No.:		Client Job No.:		61898.01				
Lab Use Only	Project No.:	Date Logged In:	Client No.:	Logged In By:	Standard:	Yes	No	If 'No,' No. of Business Days:				
Report Results To	Name:	Amanda Enbysk, Ryan Matthews			Drinking Water	Sample Purpose: Information X Regulatory ☐ Accreditation (please list below):						
	Company:	Fulcrum Environmental Consulting			System ID #:							
	Address:	406 North 2nd Street			DOH Source #:							
	City, State, Zip:	Yakima, WA, 98901			Multiple Sources #:							
	Phone:	(509) 574-0839			Sample Purpose:	A ☐ B ☐ Other ☐						
	Fax:	(509) 575-8453			Preservation:	Unpres ☐ H ₂ SO ₄ ☐ HCl ☐ NaOH ☐ Na ₂ SO ₄ ☐ E=Extract						
	Call with Verbal Results:	aenbysk@fulcrum.net, cc: rmatthews@fulcrum.net			Matrix:	WW=Wastewater ☐ GW=Groundwater ☐ S=Soil/Sludge ☐ O=Oil ☐ X=Other						
	Email Results To:	aenbysk@fulcrum.net, cc: rmatthews@fulcrum.net			Container:	P=Plastic ☐ G=Glass ☐ W=Wipe ☐ A=Air (filter or tube)						
	Fax Results To:											
Send Invoice To	Name:	Lorrie Boutillier			Analysis Requested							
	Company:	Fulcrum Environmental										
	Address:	406 N 2nd Street										
	City, State, Zip:	Yakima, WA, 98901										
	Phone:	(509) 574-0839										
	Fax:	(509) 575-8453										
Special Instructions												
Client Sample ID	Sample Description	Sample Date	Start	Stop	Wipe Area / Air Volume	EPA 200.8: Pb, Cu	Pres. Upon Receipt (Y/N)	Preservation	Matrix	Container Type	pH	No. Containers
MC611116-CDF-34	CDF: Room 34	11/11/16				X						17.7
MC611116-CF-35	CF: Room 58					X						17.8
MC611116-CDF-36	CDF: Room 58					X						18.1
MC611116-CF-37	CF: Room 45					X						17.9
MC611116-CDF-38	CDF: Room 45					X						18.1
MC611116-CF-39	CF: Room 46					X						18.1
MC611116-CDF-40	CDF: Room 46					X						17.8
MC611116-CF-41	CF: Room 47					X						17.8
MC611116-CDF-42	CDF: Room 47					X						17.6
MC611116-CF-43	CF: Room 51					X						17.6
MC611116-CDF-44	CDF: Room 51					X						18.0
Chain of Custody	Relinquished By (Signature):	Date:	Time:									
	Relinquished By (Print Name):	Relinquished To:										
	Company Name:	Method of Shipment:										
Chain of Custody	Relinquished By (Signature):	Date:	Time:									
	Relinquished By (Print Name):	Relinquished To:										
	Company Name:	Method of Shipment:										
Chain of Custody	Relinquished By (Signature):	Date:	Time:									
	Relinquished By (Print Name):	Relinquished To:										
	Company Name:	Method of Shipment:										

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Per direct label should be P-H 33-44



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Request for Environmental and IH Laboratory Analytical Services

Page 5 of 5

W611046 Rev. 2, Page 19 of 19

ATTENTION TO:		Ryan Mathews		Client Job No.:		161898.01	
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					
Send Invoice To	Phone:	(509) 574-0839					
	Fax:	(509) 575-8453					
	Call with Verbal Results:	Email Results To: aenbysk@fulcrum.net, cc: rmathews@fulcrum.net					
	Fax Results To:	Email Results To: aenbysk@fulcrum.net, cc: rmathews@fulcrum.net					
Special Instructions	Name:	Lorrie Boutillier					
	Company:	Fulcrum Environmental					
Client Sample ID	Sample Description	Sample Date	Sample Time	Wipe Area / Air Volume	Analysis Requested	Pres. Upon Receipt (Y/N)	Preservation
MC611116-OF-P-45	CF: ROOM 52	11/11/16					
MC611116-CFD-P-46	CFD: ROOM 52						
MC611116-OF-P-47	OF: STAFF lounge						
MC611116-OF-P-48	OF: STAFF lounge						
MC611116-OF-P-49	OF: WORK RM 24						
MC611116-NF-P-50	NF: NURSES OFFICE						
MC611116-WC-P-51	WC						
MC611116-CFD-P-52	CFD						
Chain of Custody	Relinquished By (Signature):	Date:	Time:	Relinquished To:	Chain of Custody	Received By (Signature):	Date:
Chain of Custody	Relinquished By (Print Name):	Relinquished To:	Method of Shipment:	Chain of Custody	Received By (Print Name):	Relinquished To:	Method of Shipment:

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ATTACHMENT E

Remedial Analytical Results





Fremont
Analytical

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: Pasco SD Drinking Water - McGee Elementary Additional Sampli
Work Order Number: 1701027

January 05, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 14 sample(s) on 1/5/2017 for the analyses presented in the following report.

Drinking Water Metals by EPA Method 200.8

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager

CC:
Amanda Enbysk

CLIENT: Fulcrum Environmental
Project: Pasco SD Drinking Water - McGee Element
Work Order: 1701027

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1701027-001	MCG1417-OF-P-13	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-002	MCG1417-OF-S-13	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-003	MCG1417-OF-T-13	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-004	MCG1417-OF-P-24	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-005	MCG1417-OF-S-24	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-006	MCG1417-OF-T-24	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-007	MCG1417-CF-P-41	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-008	MCG1417-CF-S-41	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-009	MCG1417-CF-T-41	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-010	MCG1417-OF-P-49	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-011	MCG1417-OF-S-49	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-012	MCG1417-OF-T-49	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-013	MCG1417-WC-P-51	01/04/2017 8:30 AM	01/05/2017 9:13 AM
1701027-014	MCG1417-CDF-P-52	01/04/2017 8:30 AM	01/05/2017 9:13 AM

CLIENT: Fulcrum Environmental**Project:** Pasco SD Drinking Water - McGee Elementary Additional 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:

1701027-001A 199952: Prep Comments for EPA200.8, Sample 1701027-001A: Turbidity: 0.09 NTU
1701027-002A 199956: Prep Comments for EPA200.8, Sample 1701027-002A: Turbidity: 0.09 NTU
1701027-003A 199957: Prep Comments for EPA200.8, Sample 1701027-003A: Turbidity: 0.08 NTU
1701027-004A 199958: Prep Comments for EPA200.8, Sample 1701027-004A: Turbidity: 0.10 NTU
1701027-005A 199959: Prep Comments for EPA200.8, Sample 1701027-005A: Turbidity: 0.08 NTU
1701027-006A 199960: Prep Comments for EPA200.8, Sample 1701027-006A: Turbidity: 0.10 NTU
1701027-007A 199961: Prep Comments for EPA200.8, Sample 1701027-007A: Turbidity: 0.09 NTU
1701027-008A 199962: Prep Comments for EPA200.8, Sample 1701027-008A: Turbidity: 0.09 NTU
1701027-009A 199963: Prep Comments for EPA200.8, Sample 1701027-009A: Turbidity: 0.09 NTU
1701027-010A 199964: Prep Comments for EPA200.8, Sample 1701027-010A: Turbidity: 0.13 NTU
1701027-011A 199965: Prep Comments for EPA200.8, Sample 1701027-011A: Turbidity: 0.08 NTU
1701027-012A 199966: Prep Comments for EPA200.8, Sample 1701027-012A: Turbidity: 0.17 NTU
1701027-013A 199967: Prep Comments for EPA200.8, Sample 1701027-013A: Turbidity: 0.09 NTU
1701027-014A 199968: Prep Comments for EPA200.8, Sample 1701027-014A: Turbidity: 0.16 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



Analytical Report

Work Order: 1701027
Date Reported: 1/5/2017

CLIENT: Fulcrum Environmental

Project: Pasco SD Drinking Water - McGee Elementary Additional Sampling

Lab ID: 1701027-001

Client Sample ID: MCG1417-OF-P-13

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Drinking Water Metals by EPA Method 200.8

Batch ID: 15847 Analyst: TN

Lead	29.4	1.00		µg/L	1	1/5/2017 11:30:23 AM
------	------	------	--	------	---	----------------------

Lab ID: 1701027-002

Client Sample ID: MCG1417-OF-S-13

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Drinking Water Metals by EPA Method 200.8

Batch ID: 15847 Analyst: TN

Lead	6.24	1.00		µg/L	1	1/5/2017 11:44:46 AM
------	------	------	--	------	---	----------------------

Lab ID: 1701027-003

Client Sample ID: MCG1417-OF-T-13

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Drinking Water Metals by EPA Method 200.8

Batch ID: 15847 Analyst: TN

Lead	ND	1.00		µg/L	1	1/5/2017 11:48:22 AM
------	----	------	--	------	---	----------------------



Analytical Report

Work Order: 1701027
Date Reported: 1/5/2017

CLIENT: Fulcrum Environmental

Project: Pasco SD Drinking Water - McGee Elementary Additional Sampling

Lab ID: 1701027-004

Client Sample ID: MCG1417-OF-P-24

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Drinking Water Metals by EPA Method 200.8

Batch ID: 15847 Analyst: TN

Lead	13.6	1.00		µg/L	1	1/5/2017 11:59:11 AM
------	------	------	--	------	---	----------------------

Lab ID: 1701027-005

Client Sample ID: MCG1417-OF-S-24

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Drinking Water Metals by EPA Method 200.8

Batch ID: 15847 Analyst: TN

Lead	4.27	1.00		µg/L	1	1/5/2017 12:02:47 PM
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Lab ID: 1701027-006

Client Sample ID: MCG1417-OF-T-24

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Drinking Water Metals by EPA Method 200.8

Batch ID: 15847 Analyst: TN

Lead	1.38	1.00		µg/L	1	1/5/2017 12:06:23 PM
------	------	------	--	------	---	----------------------



Analytical Report

Work Order: 1701027
Date Reported: 1/5/2017

CLIENT: Fulcrum Environmental

Project: Pasco SD Drinking Water - McGee Elementary Additional Sampling

Lab ID: 1701027-007

Client Sample ID: MCG1417-CF-P-41

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Drinking Water Metals by EPA Method 200.8

Batch ID: 15847

Analyst: TN

Lead	19.5	1.00		µg/L	1	1/5/2017 12:09:59 PM
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Lab ID: 1701027-008

Client Sample ID: MCG1417-CF-S-41

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Drinking Water Metals by EPA Method 200.8

Batch ID: 15847

Analyst: TN

Lead	4.13	1.00		µg/L	1	1/5/2017 12:13:35 PM
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Lab ID: 1701027-009

Client Sample ID: MCG1417-CF-T-41

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Drinking Water Metals by EPA Method 200.8

Batch ID: 15847

Analyst: TN

Lead	1.16	1.00		µg/L	1	1/5/2017 12:17:10 PM
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Analytical Report

Work Order: 1701027
Date Reported: 1/5/2017

CLIENT: Fulcrum Environmental

Project: Pasco SD Drinking Water - McGee Elementary Additional Sampling

Lab ID: 1701027-010

Client Sample ID: MCG1417-OF-P-49

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Drinking Water Metals by EPA Method 200.8

Batch ID: 15847

Analyst: TN

Lead	32.7	1.00		µg/L	1	1/5/2017 12:20:46 PM
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Lab ID: 1701027-011

Client Sample ID: MCG1417-OF-S-49

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Drinking Water Metals by EPA Method 200.8

Batch ID: 15847

Analyst: TN

Lead	15.3	1.00		µg/L	1	1/5/2017 12:24:22 PM
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Lab ID: 1701027-012

Client Sample ID: MCG1417-OF-T-49

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Drinking Water Metals by EPA Method 200.8

Batch ID: 15847

Analyst: TN

Lead	1.44	1.00		µg/L	1	1/5/2017 12:27:58 PM
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Analytical Report

Work Order: 1701027
Date Reported: 1/5/2017

CLIENT: Fulcrum Environmental

Project: Pasco SD Drinking Water - McGee Elementary Additional Sampling

Lab ID: 1701027-013

Client Sample ID: MCG1417-WC-P-51

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Drinking Water Metals by EPA Method 200.8

Batch ID: 15847

Analyst: TN

Lead	ND	1.00		µg/L	1	1/5/2017 12:31:34 PM
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Lab ID: 1701027-014

Client Sample ID: MCG1417-CDF-P-52

Collection Date: 1/4/2017 8:30:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Drinking Water Metals by EPA Method 200.8

Batch ID: 15847

Analyst: TN

Lead	13.9	1.00		µg/L	1	1/5/2017 12:42:23 PM
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Work Order: 1701027
CLIENT: Fulcrum Environmental
Project: Pasco SD Drinking Water - McGee Element

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	MB-15847	SampType:	MBLK	Units:	µg/L	Prep Date:	1/5/2017	RunNo:	33739		
Client ID:	MBLKW	Batch ID:	15847	Analysis Date:				1/5/2017	SeqNo:	640569	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	ND	1.00									
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Sample ID	LCS-15847	SampType: LCS			Units: µg/L		Prep Date: 1/5/2017			RunNo: 33739		
Client ID:	LCSW	Batch ID: 15847			Analysis Date: 1/5/2017					SeqNo: 640570		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	49.0	1.00	50.00	0	97.9	85	115				
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Sample ID	1701027-001ADUP	SampType:	DUP	Units:	µg/L	Prep Date:	1/5/2017	RunNo:	33739		
Client ID:	MCG1417-OF-P-13	Batch ID:	15847			Analysis Date:	1/5/2017	SeqNo:	640572		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	28.6	1.00						29.36	2.48	30	
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Sample ID	1701027-001AMS	SampType:	MS	Units:	µg/L	Prep Date:	1/5/2017	RunNo:	33739		
Client ID:	MCG1417-OF-P-13	Batch ID:	15847			Analysis Date:	1/5/2017	SeqNo:	640573		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	124	1.00	100.0	29.36	94.7	70	130				
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Sample ID	1701027-001AMSD	SampType: MSD			Units: µg/L		Prep Date: 1/5/2017			RunNo: 33739		
Client ID:	MCG1417-OF-P-13	Batch ID: 15847			Analysis Date: 1/5/2017			SeqNo: 640574				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	127	1.00	100.0	29.36	97.2	70	130	124.0	2.03	30	
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Client Name: **FE**
 Logged by: **Clare Griggs**

Work Order Number: **1701027**
 Date Received: **1/5/2017 9:13:00 AM**

Chain of Custody

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

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:

COC sample MCG1417-OF-P-49 reads as MCG1417-CF-P-49 on sample label.

Item Information

Item #	Temp °C
Cooler 1	0.3
Cooler 2	0.6
Sample 1	0.1
Sample 2	0.8

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



Fremont
Analytical

3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3790
Fax: 206-352-7178

Client: Fulcrum Environmental Consulting

Address: 406 North Second Street
Yakima, WA, 98901

City, State, Zip: 509.574.0839

Telephone: 509.574.0839 Fax: 509.575.8453

Chain of Custody Record and Laboratory Services Agreement

Date: 1/4/2016

Laboratory Project No (Internal): 1791027

Page: 1 of 2

Project Name: Pasco SD Drinking Water - McGee Elementary Additional Sampling

Project No: 161898.10 Collected by: Amanda Enbysk

Location: James McGee Elementary, Pasco, WA

Report To (PM): Ryan Mathews

PM Email: rmathews@fulcrum.net; cc: aenbysk@fulcrum.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)	GY/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
MCG1417-OF-P-13	1/4/2017	830	DW														
MCG1417-OF-S-13	1/4/2017	830	DW														
MCG1417-OF-T-13	1/4/2017	830	DW														
MCG1417-OF-P-24	1/4/2017	830	DW														
MCG1417-OF-S-24	1/4/2017	830	DW														
MCG1417-OF-T-24	1/4/2017	830	DW														
MCG1417-CF-P-41	1/4/2017	830	DW														
MCG1417-CF-S-41	1/4/2017	830	DW														
MCG1417-CF-T-41	1/4/2017	830	DW														
MCG1417-OF-P-49	1/4/2017	830	DW														

**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.)

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: 1/4/17 14H5 Received Date/Time: 1/5/17 0913

Relinquished Date/Time: 1/5/17 0913 Received Date/Time: 1/5/17 0913

TAI → SameDay^ NextDay^ 2 Day 3 Day STD

*Please coordinate with the lab in advance



Fremont

3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3790
Fax: 206-352-7178

Client: Fulcrum Environmental Consulting

Address: 406 North Second Street

City, State, Zip: Yakima, WA, 98901

Telephone: 509.574.0839

Fax: 509.575.8453

Chain of Custody Record and Laboratory Services Agreement

Date: 1/4/2016

Laboratory Project No (Internal):

Page: 2 of 2

Project Name:

Pasco SD Drinking Water - McGee Elementary Additional Sampling

Project No:

Collected by: Amanda Enbysk

Location:

James McGee Elementary, Pasco, WA

Report To (PM):

Ryan Mathews

PM Email:

rmathews@fulcrum.net; cc: aenbysk@fulcrum.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)	GY/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
MCG1417-OF-S-49	1/4/2017	830	DW										X				
MCG1417-OF-T-49	1/4/2017	830	DW										X				
MCG1417-WC-P-51	1/4/2017	830	DW										X				
MCG1417-CD-F-P-52	1/4/2017	830	DW										X				
5																	
6																	
7																	
8																	
9																	
10																	

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

www.fremontanalytical.com



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Fulcrum Environmental

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

RE: Pasco SD Drinking Water - McGee Elementary
Work Order Number: 1704105

April 10, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 14 sample(s) on 4/10/2017 for the analyses presented in the following report.

Drinking Water Metals by EPA Method 200.8

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager

CC:
Amanda Enbysk

CLIENT: Fulcrum Environmental
Project: Pasco SD Drinking Water - McGee Element
Work Order: 1704105

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1704105-001	MCG4717-OF-P-13	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-002	MCG4717-OF-S-13	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-003	MCG4717-OF-T-13	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-004	MCG4717-OF-P-24	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-005	MCG4717-OF-S-24	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-006	MCG4717-OF-T-24	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-007	MCG4717-CF-P-41	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-008	MCG4717-CF-S-41	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-009	MCG4717-CF-T-41	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-010	MCG4717-OF-P-49	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-011	MCG4717-OF-S-49	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-012	MCG4717-OF-T-49	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-013	MCG4717-WC-P-51	04/07/2017 7:30 AM	04/10/2017 9:55 AM
1704105-014	MCG4717-CDF-P-52	04/07/2017 7:30 AM	04/10/2017 9:55 AM

CLIENT: Fulcrum Environmental
Project: Pasco SD Drinking Water - McGee Elementary

WorkOrder Narrative:

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

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

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

III. ANALYSES AND EXCEPTIONS:

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

Prep Sample Comments:

1704105-001A 214886: Prep Comments for EPA200.8, Sample 1704105-001A: Turbidity: 0.01 NTU
1704105-004A 214890: Prep Comments for EPA200.8, Sample 1704105-004A: Turbidity: 0.01 NTU
1704105-007A 214891: Prep Comments for EPA200.8, Sample 1704105-007A: Turbidity: 0.18 NTU
1704105-010A 214892: Prep Comments for EPA200.8, Sample 1704105-010A: Turbidity: 0.10 NTU
1704105-013A 214893: Prep Comments for EPA200.8, Sample 1704105-013A: Turbidity: 0.01 NTU
1704105-014A 214894: Prep Comments for EPA200.8, Sample 1704105-014A: 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



Analytical Report

Work Order: 1704105
Date Reported: 4/10/2017

CLIENT: Fulcrum Environmental
Project: Pasco SD Drinking Water - McGee Elementary

Lab ID: 1704105-001
Client Sample ID: MCG4717-OF-P-13
Collection Date: 4/7/2017 7:30:00 AM
Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Drinking Water Metals by EPA Method 200.8</u>				Batch ID: 16741	Analyst: TN	
Lead	3.84	1.00		µg/L	1	4/10/2017 1:25:34 PM

Lab ID: 1704105-004
Client Sample ID: MCG4717-OF-P-24
Collection Date: 4/7/2017 7:30:00 AM
Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Drinking Water Metals by EPA Method 200.8</u>				Batch ID: 16741	Analyst: TN	
Lead	51.9	1.00		µg/L	1	4/10/2017 1:41:39 PM

Lab ID: 1704105-007
Client Sample ID: MCG4717-CF-P-41
Collection Date: 4/7/2017 7:30:00 AM
Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Drinking Water Metals by EPA Method 200.8</u>				Batch ID: 16741	Analyst: TN	
Lead	20.4	1.00		µg/L	1	4/10/2017 1:45:40 PM



Analytical Report

Work Order: 1704105
Date Reported: 4/10/2017

CLIENT: Fulcrum Environmental
Project: Pasco SD Drinking Water - McGee Elementary

Lab ID: 1704105-010
Client Sample ID: MCG4717-OF-P-49
Collection Date: 4/7/2017 7:30:00 AM
Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Drinking Water Metals by EPA Method 200.8</u>				Batch ID: 16741	Analyst: TN	
Lead	2.69	1.00		µg/L	1	4/10/2017 1:49:42 PM

Lab ID: 1704105-013
Client Sample ID: MCG4717-WC-P-51
Collection Date: 4/7/2017 7:30:00 AM
Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Drinking Water Metals by EPA Method 200.8</u>				Batch ID: 16741	Analyst: TN	
Lead	ND	1.00		µg/L	1	4/10/2017 1:53:43 PM

Lab ID: 1704105-014
Client Sample ID: MCG4717-CDF-P-52
Collection Date: 4/7/2017 7:30:00 AM
Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Drinking Water Metals by EPA Method 200.8</u>				Batch ID: 16741	Analyst: TN	
Lead	16.3	1.00		µg/L	1	4/10/2017 1:57:45 PM



Work Order: 1704105
CLIENT: Fulcrum Environmental
Project: Pasco SD Drinking Water - McGee Element

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID MB-16741	SampType: MBLK	Units: µg/L		Prep Date: 4/10/2017	RunNo: 35452
Client ID: MBLKW	Batch ID: 16741	Analysis Date: 4/10/2017		SeqNo: 679043	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	ND	1.00			

Sample ID LCS-16741	SampType: LCS	Units: µg/L		Prep Date: 4/10/2017	RunNo: 35452
Client ID: LCSW	Batch ID: 16741	Analysis Date: 4/10/2017		SeqNo: 679046	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	55.7	1.00	50.00	0	111 85 115

Sample ID 1704105-001ADUP	SampType: DUP	Units: µg/L		Prep Date: 4/10/2017	RunNo: 35452
Client ID: MCG4717-OF-P-13	Batch ID: 16741	Analysis Date: 4/10/2017		SeqNo: 679048	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	3.86	1.00			3.840 0.509 30

Sample ID 1704105-001AMS	SampType: MS	Units: µg/L		Prep Date: 4/10/2017	RunNo: 35452
Client ID: MCG4717-OF-P-13	Batch ID: 16741	Analysis Date: 4/10/2017		SeqNo: 679049	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	111	1.00	100.0	3.840	107 70 130

Sample ID 1704105-001AMSD	SampType: MSD	Units: µg/L		Prep Date: 4/10/2017	RunNo: 35452
Client ID: MCG4717-OF-P-13	Batch ID: 16741	Analysis Date: 4/10/2017		SeqNo: 679050	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Lead	111	1.00	100.0	3.840	107 70 130 111.1 0.455 30



Work Order Number: **1704105**

Date Received: **4/10/2017 9:55:00 AM**

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

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 $>0^{\circ}\text{C}$ 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 ☐
			HNO ₃
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 ☐	

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 #	Temp °C
Cooler	2.4
Sample	1.1

Original



Fremont

Analytical

3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3790
Fax: 206-352-7178

Client: Fulcrum Environmental Consulting

Address: 406 North Second Street
Yakima, WA, 98901

City, State, zip: 509 574 0839

Telephone: 509 575 8453

Project Name: Passo SD Drinking Water - McLaure Elementary
Project No: 16189 B. 10
Location: McLaure Elementary, Passo, WA
Report To (PM): Ryan Mathews
PM Email: rmathews@fulcrum.net; cc: acenbysk@fulcrum.net

Date: 4/7/2017

Laboratory Project No (Internal):
Page: 1 of 2

1704105

Chain of Custody Record and Laboratory Services Agreement

*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/8TEX	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)**	ED8 (8011)	Comments
1 MCG4717-OF-1-13	4/7/17	0730	bw														HOLD; improved
2 MCG4717-OF-S-13																	
3 MCG4717-OF-T-13																	
4 MCG4717-OF-P-24																	HOLD; improved
5 MCG4717-OF-S-24																	
6 MCG4717-OF-T-24																	
7 MCG4717-OF-P-41																	HOLD; improved
8 MCG4717-OF-S-41																	
9 MCG4717-OF-T-41																	
10 MCG4717-OF-P-49																	HOLD; improved



Fremont

Analytical

3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3790
Fax: 206-352-7178

Client: Fulcrum Environmental Consulting

Address: 406 North Second Street
Yakima, WA, 98901

City, State, zip: 509.574.0839

Telephone: Fax: 509.575.8453

Date: 4/7/2017

Laboratory Project No (internal):

Page: 2 of 2

Project Name:

Project No:

Location:

Report To (PM):

PM Email:

Passo SD Drinking Water - Metge Elementary
141898.10
Metge Elementary, Passo, WA

Collected by: Amanda Embysk

Ryan Mathews

rmathews@fulcrum.net; cc: aembysk@fulcrum.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																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

**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 Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite Turn-around times for samples received after 4:00pm will begin on the following business day.

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.)

Special Remarks: See page 1

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

Relinquished x Date/Time 4/11/2017 0955 Received x Date/Time 4/10/2017 0955



Fremont
Analytical

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: Pasco SD Drinking Water - McGee Elementary
Work Order Number: 1705327

June 02, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 8 sample(s) on 5/30/2017 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

DoD/ELAP Certification #L2371, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)

CLIENT: Fulcrum Environmental
Project: Pasco SD Drinking Water - McGee Element
Work Order: 1705327

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1705327-001	MCG52617-OF-P-24	05/26/2017 7:45 AM	05/30/2017 9:25 AM
1705327-002	MCG52617-OF-S-24	05/26/2017 7:45 AM	05/30/2017 9:25 AM
1705327-003	MCG52617-OF-T-24	05/26/2017 7:45 AM	05/30/2017 9:25 AM
1705327-004	MCG52617-OF-P-53	05/26/2017 7:45 AM	05/30/2017 9:25 AM
1705327-005	MCG52617-OF-S-53	05/26/2017 7:45 AM	05/30/2017 9:25 AM
1705327-006	MCG52617-OF-T-53	05/26/2017 7:45 AM	05/30/2017 9:25 AM
1705327-007	MCG52617-CF-P-54	05/26/2017 7:45 AM	05/30/2017 9:25 AM
1705327-008	MCG52617-CF-P-55	05/26/2017 7:45 AM	05/30/2017 9:25 AM

CLIENT: Fulcrum Environmental
Project: Pasco SD Drinking Water - McGee Elementary

WorkOrder Narrative:

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

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

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

III. ANALYSES AND EXCEPTIONS:

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

Prep Sample Comments:

1705327-001A 221928: Prep Comments for EPA200.8, Sample 1705327-001A: Turbidity: 0.01 NTU
1705327-004A 221929: Prep Comments for EPA200.8, Sample 1705327-004A: Turbidity: 0.03 NTU
1705327-007A 221930: Prep Comments for EPA200.8, Sample 1705327-007A: Turbidity: 0.01 NTU
1705327-008A 221931: Prep Comments for EPA200.8, Sample 1705327-008A: Turbidity: 0.07 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



Work Order: 1705327

Date Reported: 6/2/2017

CLIENT: Fulcrum Environmental

Project: Pasco SD Drinking Water - McGee Elementary

Lab ID: 1705327-001

Client Sample ID: MCG52617-OF-P-24

Collection Date: 5/26/2017 7:45:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17228

Analyst: TN

Lead	4.46	1.00		µg/L	1	6/1/2017 5:57:21 PM
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Lab ID: 1705327-004

Client Sample ID: MCG52617-OF-P-53

Collection Date: 5/26/2017 7:45:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
----------	--------	----	------	-------	----	---------------

Drinking Water Metals by EPA Method 200.8

Batch ID: 17228

Analyst: TN

Lead	3.03	1.00		µg/L	1	6/1/2017 6:01:23 PM
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Lab ID: 1705327-007

Client Sample ID: MCG52617-CF-P-54

Collection Date: 5/26/2017 7:45:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17228

Analyst: TN

Lead	ND	1.00		µg/L	1	6/1/2017 6:05:24 PM
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Analytical Report

Work Order: 1705327

Date Reported: 6/2/2017

CLIENT: Fulcrum Environmental

Project: Pasco SD Drinking Water - McGee Elementary

Lab ID: 1705327-008

Collection Date: 5/26/2017 7:45:00 AM

Client Sample ID: MCG52617-CF-P-55

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17228

Analyst: TN

Lead	14.4	1.00		µg/L	1	6/1/2017 6:09:25 PM
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Work Order: 1705327
CLIENT: Fulcrum Environmental
Project: Pasco SD Drinking Water - McGee Element

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	MB-17228	SampType:	MBLK			Units:	µg/L		Prep Date:	6/1/2017		RunNo:	36533	
Client ID:	MBLKW	Batch ID:	17228						Analysis Date:	6/1/2017		SeqNo:	701073	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Lead		ND	1.00											

Sample ID	LCS-17228	SampType:	LCS			Units:	µg/L		Prep Date:	6/1/2017		RunNo:	36533	
Client ID:	LCSW	Batch ID:	17228						Analysis Date:	6/1/2017		SeqNo:	701074	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Lead		50.0	1.00	50.00	0	100	85	115						

Sample ID	1705308-001ADUP	SampType:	DUP			Units:	µg/L		Prep Date:	6/1/2017		RunNo:	36533	
Client ID:	BATCH	Batch ID:	17228						Analysis Date:	6/1/2017		SeqNo:	701076	
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	1705308-001AMS	SampType:	MS			Units:	µg/L		Prep Date:	6/1/2017		RunNo:	36533	
Client ID:	BATCH	Batch ID:	17228						Analysis Date:	6/1/2017		SeqNo:	701077	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Lead		99.9	1.00	100.0	0.5002	99.4	70	130						

Sample ID	1705308-001AMSD	SampType:	MSD			Units:	µg/L		Prep Date:	6/1/2017		RunNo:	36533	
Client ID:	BATCH	Batch ID:	17228						Analysis Date:	6/1/2017		SeqNo:	701080	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Lead		97.8	1.00	100.0	0.5002	97.3	70	130	99.94	2.20	30			

Client Name: **FE**
 Logged by: **Erica Silva**

Work Order Number: **1705327**
 Date Received: **5/30/2017 9:25:00 AM**

Chain of Custody

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

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
 4. Shipping container/cooler in good condition? Yes ☒ No ☐
 5. Custody Seals present on shipping container/cooler?
 (Refer to comments for Custody Seals not intact) Yes ☐ No ☒ Not Required ☐
 6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
 7. Were all items received at a temperature of >0°C to 10.0°C* Yes ☒ No ☐ NA ☐
 8. Sample(s) in proper container(s)? Yes ☒ No ☐
 9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
 10. Are samples properly preserved? Yes ☒ No ☐
 11. Was preservative added to bottles? Yes ☒ No ☐ NA ☐
 HNO3 to 002A, 003A, 005A, 006A
 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:

6/1/17: Client expedited TAT

Item Information

Item #	Temp °C
Cooler	5.4
Sample	5.6

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



Fremont

Analytical

3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3790
Fax: 206-352-7178

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:

Date: 5/26/2017

Project No: 161898.10

Location:

Report To (PM): Ryan Mathews

Collected by: Amanda Enbysk

PM Email:

mathews@fulcrum.net; cc: aenbysk@fulcrum.net

Chain of Custody Record and Laboratory Services Agreement

Laboratory Project No (Internal):

1705327

Page: 1 of 1

*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 MC652617-OE-P-24	5/26/2017	745	DW															
2 MC652617-OE-S-24																		
3 MC652617-OE-T-24																		
4 MC652617-OE-P-53																		
5 MC652617-OE-S-53																		
6 MC652617-OE-T-53																		
7 MC652617-OE-P-54																		
8 MC652617-OE-P-55																		
9																		
10																		

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

Relinquished: James McGee Date/Time: 5/30/2017 1400 Received: James McGee Date/Time: 5/30/2017 0925

TAT → SameDay NextDay 2 Day 3 Day STD

*Please coordinate with the lab in advance



Fremont
Analytical

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: PSD Drinking Water - McGee Elementary
Work Order Number: 1707247

July 26, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 5 sample(s) on 7/26/2017 for the analyses presented in the following report.

Drinking Water Metals by EPA Method 200.8

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager

CLIENT: Fulcrum Environmental
Project: PSD Drinking Water - McGee Elementary
Work Order: 1707247

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1707247-001	MCG72517-CF-P-41	07/26/2017 6:45 AM	07/26/2017 9:35 AM
1707247-002	MCG72517-CF-S-41	07/26/2017 6:45 AM	07/26/2017 9:35 AM
1707247-003	MCG72517-CF-T-41	07/26/2017 6:45 AM	07/26/2017 9:35 AM
1707247-004	MCG72517-CF-P-54	07/26/2017 6:45 AM	07/26/2017 9:35 AM
1707247-005	MCG72517-CF-P-55	07/26/2017 6:45 AM	07/26/2017 9:35 AM

CLIENT: Fulcrum Environmental
Project: PSD Drinking Water - McGee Elementary

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.

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



Analytical Report

Work Order: 1707247

Date Reported: 7/26/2017

CLIENT: Fulcrum Environmental

Project: PSD Drinking Water - McGee Elementary

Lab ID: 1707247-001

Client Sample ID: MCG72517-CF-P-41

Collection Date: 7/26/2017 6:45:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Drinking Water Metals by EPA Method 200.8</u>				Batch ID: 17729		Analyst: TN
Lead	5.24	1.00		µg/L	1	7/26/2017 2:44:25 PM

Lab ID: 1707247-004

Client Sample ID: MCG72517-CF-P-54

Collection Date: 7/26/2017 6:45:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Drinking Water Metals by EPA Method 200.8</u>				Batch ID: 17729		Analyst: TN
Lead	ND	1.00		µg/L	1	7/26/2017 2:48:26 PM

Lab ID: 1707247-005

Client Sample ID: MCG72517-CF-P-55

Collection Date: 7/26/2017 6:45:00 AM

Matrix: Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Drinking Water Metals by EPA Method 200.8</u>				Batch ID: 17729		Analyst: TN
Lead	15.1	1.00		µg/L	1	7/26/2017 2:52:28 PM

Work Order: 1707247
CLIENT: Fulcrum Environmental
Project: PSD Drinking Water - McGee Elementary

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	MB-17729	SampType: MBLK			Units: µg/L		Prep Date: 7/26/2017			RunNo: 37627		
Client ID:	MBLKW	Batch ID: 17729			Analysis Date: 7/26/2017					SeqNo: 723005		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	ND	1.00									
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Sample ID	LCS-17729	SampType: LCS			Units: µg/L		Prep Date: 7/26/2017			RunNo: 37627		
Client ID:	LCSW	Batch ID: 17729			Analysis Date: 7/26/2017			SeqNo: 723006				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	49.7	1.00	50.00	0	99.4	85	115				
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Sample ID	1707243-001ADUP	SampType:	DUP	Units:	µg/L	Prep Date:	7/26/2017	RunNo:	37627		
Client ID:	BATCH	Batch ID:	17729			Analysis Date:	7/26/2017	SeqNo:	723008		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	ND	1.00						0		30	
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Sample ID	1707243-001AMS	SampType: MS			Units: µg/L		Prep Date: 7/26/2017			RunNo: 37627		
Client ID:	BATCH	Batch ID: 17729			Analysis Date: 7/26/2017					SeqNo: 723009		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	

Lead	98.2	1.00	100.0	0.1450	98.1	70	130				
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Sample ID	1707243-001AMSD	SampType:	MSD	Units:	µg/L	Prep Date:	7/26/2017	RunNo:	37627		
Client ID:	BATCH	Batch ID:	17729			Analysis Date:	7/26/2017	SeqNo:	723010		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	100	1.00	100.0	0.1450	99.9	70	130	98.23	1.85	30	
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Work Order Number: **1707247**

Date Received: **7/26/2017 9:35:00 AM**

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐

2. How was the sample delivered? FedEx

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 ☐
			HNO ₃
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 ☐	

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:			

Item Information

Item #	Temp °C
Cooler 1	2.9
Cooler 2	0.3
Cooler 3	4.9
Sample 1	3.1
Sample 2	0.3

Original



Sample Log-In Check List

Client Name: **FE**

Work Order Number: **1707247**

Logged by: **Clare Griggs**

Date Received: **7/26/2017 9:35:00 AM**

Item #	Temp °C
Sample 3	4.3

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



Fremont

Analytical

3600 Fremont Ave N.
Seattle, WA 98103

Tel: 206-352-3790
Fax: 206-352-7178

Client: Fulcrum Environmental Consulting

Address: 406 North Second Street

City, State, Zip: Yakima, WA, 98901

Telephone: 509.574.0839

Fax: 509.575.8453

Chain of Custody Record and Laboratory Services Agreement

Date: 7/25/2017

Laboratory Project No (Internal):

1707247

Page: 1 of 1

Project Name:

Project No:

Location:

Report To (PM):

PM Email:

PSD Drinking Water - M-Gee Elementary
1101898.18
Collected by: Amanda Enbysk
James W. M-Gee Elementary, Pasco, WA

Ryan Mathews

rmathews@fulcrum.net; cc: aenbysk@fulcrum.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)	SVOCS (EPA 8270 / 625)	PAHs (EPA 8270 - SM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)**	EDB (8011)	ASOC preserved	Comments
1 MCGT2517-CF-P-41	7/25/17	0645	DW														
2 MCGT2517-CF-S-41																	
3 MCGT2517-CF-T-41																	
4 MCGT2517-CF-P-54																	
5 MCGT2517-CF-P-55																	
6																	
7																	
8																	
9																	
10																	