

November 3, 2017

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

RE: Winter 2016 Drinking Water Sampling Results
Tri-Tech Skills Center, 5929 West Metaline Street, Kennewick, Washington

Dear Keith:

On Wednesday, December 21, 2016, Fulcrum Environmental Consulting, Inc. (Fulcrum) collected 36 drinking water samples for lead and copper analysis from Tri-Tech Skills Center (School) located at 5929 Metaline Avenue in Kennewick, Washington. Initial sampling identified six fixture locations with lead concentrations above guidance levels and one fixture location with a copper concentration above guidance levels. Fulcrum returned to the School on January 28 and February 25, 2017 to collect samples after remediation of the fixtures and laboratory results found concentrations to be below guidance levels. Sampling was completed as part of a District-wide project and all analysis was completed by Washington State Department of Ecology (Ecology) accredited laboratories.

Summary

The purpose of initial sampling was to evaluate current drinking water quality conditions with respect to lead and copper as a result of the increased national and local interest related to lead in drinking water. The intent of sampling was to meet the requirements of the pending regulations set forth in Washington Administrative Code (WAC) 246-366A-130 and 246-366A-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 December 21, 2016. Initial results identified six samples with lead concentrations above the Environmental Protection Agency (EPA) action level of 15 micrograms per liter (μ g/L), and one sample with copper concentrations above the EPA action level of 1,300 μ g/L. Upon receipt of results, the District removed the identified fixtures from service pending remediation and further testing.

The fixtures identified with elevated lead concentrations were replaced and preconditioned by running cold water continuously through the fixture for 24 hours, as specified in WAC 246-366A-130. Following replacement and preconditioning, Fulcrum returned to the School on January 28, and February 25, 2017

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



and collected follow-up samples to confirm the success of fixture replacement. No other fixtures of like style were replaced. Follow-up samples yielded results below the EPA action level, confirming fixture replacement was successful.

Copper is not a significant component in fixtures, but is the primary material in the plumbing system. One fixture, located in Welding Classroom 310, was identified with an elevated copper concentration. To remediate elevated copper, Fulcrum recommended and the District elected to permanently remove the fixture from service. Following sampling and review of laboratory results, Fulcrum recommended, and District elected to, return all fixtures reporting below action levels to service.

As all samples now report concentrations below lead and copper action levels, at this time Fulcrum does not recommend any additional sampling. However, consistent with industry practice and the intent of WAC 246-366A, Fulcrum recommends that the District complete re-sampling of the building within the next five years (before December 2021). See Figure 1 in Attachment A for fixture locations and laboratory results.

Sampling Methodology

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

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

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

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

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

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



Sampling Activities

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

Initial Sampling

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

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

Fixture Replacement and Flushing

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

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

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

Remedial Sampling

Remedial sampling typically consisted of first, second, and third draw samples from the fixture locations and plumbing system in question. First draw samples were collected into 250 mL polyethylene bottles preserved with nitric acid. The second draw water volume consists of water collected into a 250 mL



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

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

Analytical Results

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

Initial Sampling

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

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

Remedial Sampling

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

Discussion

Initial Sampling

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

Remedial Sampling

Immediately following receipt of initial sampling results, the District removed the identified fixtures from service pending remediation and further testing. To remediate elevated lead concentrations, the District replaced the identified fixtures. No other fixtures of like style were replaced. Fulcrum returned on January



28, and February 25, 2017 following fixture replacement and preconditioning to collect follow-up samples from the initially identified fixtures. No other fixtures of like style were replaced. See Attachment F for a photograph layout with the identified fixture style.

To remediate elevated copper concentrations, Fulcrum recommended and the District elected to permanently remove the fixture, a water cooler fountain located in Welding Classroom 310, from service.

Analytical results from remedial sampling indicated remediation was successful at reducing lead and copper concentrations below the action level for all but one of the fixtures. Fulcrum recommended, and the District elected, to permanently remove the remaining fixture, identified as the water cooler fountain in Welding Classroom 310, from service.

Recommendations

Six initial samples contained lead above the EPA action level of 15 μ g/L and one initial sample contained copper above the EPA action level of 1,300 μ g/L. The District replaced the identified fixtures with elevated lead and preconditioned the fixtures for 24 hours as specified in WAC 246-366A-130. Fulcrum recommended, and the District elected, to permanently remove the fixture identified with elevated copper from service. Following remedial sampling and review of laboratory results, Fulcrum recommended, and the District elected, to return all fixtures reporting below action levels to service. Fulcrum recommends the District replace all fixtures of like style to those initially identified with elevated lead. See Attachment F for a photograph layout of the identified fixture styles.

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

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

Sincerely,

Amanda Enbysk, GIT Environmental Geologist Ryan K. Mathews, CIH, CHMM

Principal

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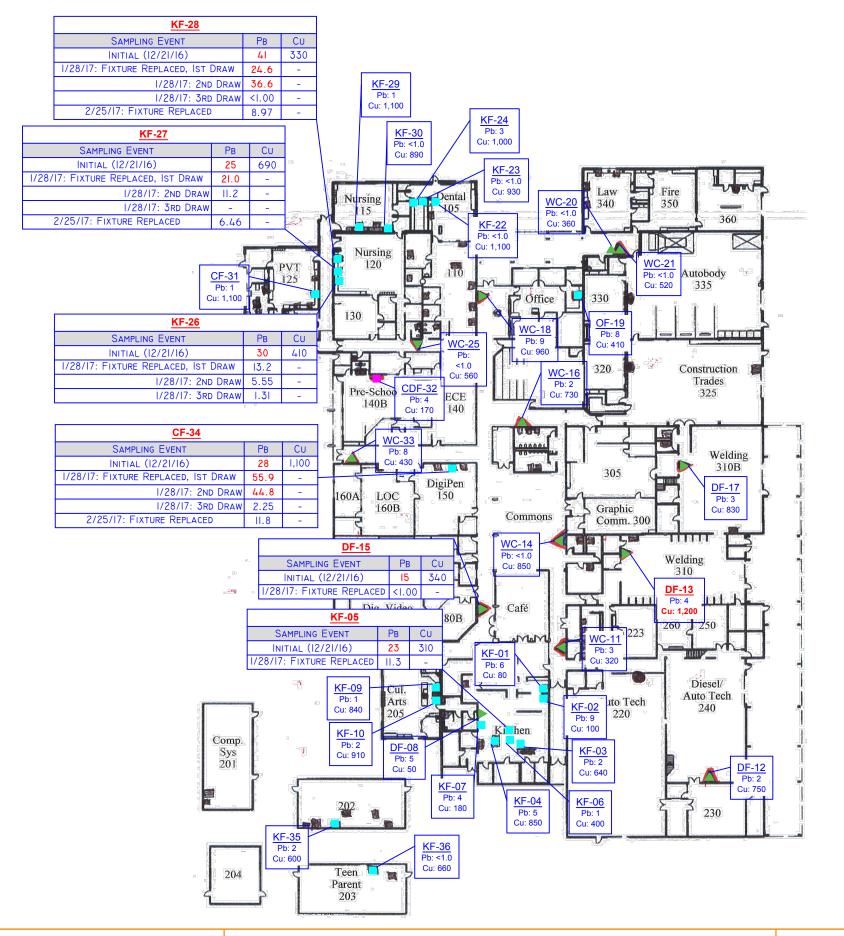


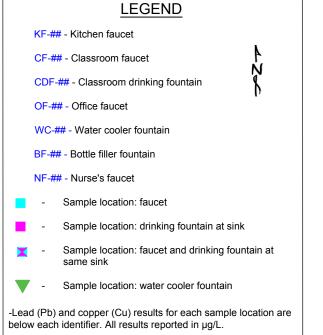
ATTACHMENT A

Figure 1: Sample Location Map









-Samples in **BOLD RED** indicate fixture locations where the

initial concentrations of lead or copper were above the respective

DRAWING PROVIDED BY KENNEWICK SCHOOL DISTRICT



ATTACHMENT B

Site-Specific Sampling and Analysis Plan





Site-Specific Sampling and Analysis Plan

Kennewick School District - Winter 2016 Drinking Water Sampling

Note: This S	SSSAP has	been prep	ared as a s	upplement t	o the proje	ct SAP/QAPP	and provide	a building
specific sum	mary of the	location,	number, an	d sampling j	frequency o	f water fixture	e locations.	

Campus/Building: <u>Tri-Tech Skills Cente</u>	r Address: <u>59</u>	29 West Meta	line Street, Kenne	wick, WA
☐ Elementary ☐ Middle School	☑ High	High School		on
Date of Construction:	N	Modernizations	3:	
Fixture Type	Locations	Fixture Styles ¹	Samples	Ratio
Drinking fountain/water cooler (DF/WC)	13	6	13	100%
Kitchen Fixture (KF)	9	5	9	100%
Classroom faucet, including faucets in Food Labs and Life Sciences Classrooms (CF)	27	9	12	44%
Classroom drinking fountain at sink (CDF)	2	2	1	50%
Nurse's Office/Health Room (NF)	N/A	-	N/A	-
Teacher's Lounges/Work Rooms (OF)	1	1	1	100%
TOTALS	52		36	69%
Fixture styles are approximate based or	n sampler's obse	rvations	1	
Lead Sampler: Amanda Er	nbysk		_ Date: _	12/21/2016
Sample Prefix: TTS – 122116– School Code Date				er
Laboratory: R. J. Lee Group, Columbia	Basin Analytic	al Delive	ery Date: <u>Decem</u>	ber 21, 2016

Comments:

-Two fixtures in P-202 and one fixture in P-203 classified as "kitchen fixtures" as these are childcare facilities



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

Table 1: Illitial Sampling Analytical Results		Lead	Copper
Sample Identification and Location	Fixture Type	Results (µg/L)	Results (µg/L)
TTS122116-P-KF-01: Kitchen, E. wall, N. fixture	Kitchen Faucet	6	80
TTS122116-P-KF-02: Kitchen, E. wall, S. fixture	Kitchen Faucet	9	100
TTS122116-P-KF-03: Kitchen, S. island, in wood counter	Kitchen Faucet	2	640
TTS122116-P-KF-04: Kitchen, W. island, food prep	Kitchen Faucet	5	850
TTS122116-P-KF-05: Kitchen, N. center island, S. fixture	Kitchen Faucet	23	310
TTS122116-P-KF-06: Kitchen, N. center island, N. fixture	Kitchen Faucet	1	400
TTS122116-P-KF-07: Kitchen, W. wall	Kitchen Faucet	4	180
TTS122116-P-DF-08: Kitchen, W. wall	Drinking Fountain	5	50
TTS122116-P-KF-09: Classroom 205, N. fixture	Kitchen Faucet	1	840
TTS122116-P-KF-10: Classroom 205, S. fixture	Kitchen Faucet	2	910
TTS122116-P-WC-11: S. hallway, E. of café	Water Cooler Fountain	3	320
TTS122116-P-DF-12: Diesel, S. wall	Drinking Fountain	2	750
TTS122116-P-DF-13: Room 310	Drinking Fountain	4	1,200
TTS122116-P-WC-14: Commons, E. wall	Water Cooler Fountain	<1.0	850
TTS122116-P-DF-15: Commons, W. wall	Water Cooler Fountain	15	340
TTS122116-P-WC-16: Hallway, N. of Commons	Water Cooler Fountain	2	730
TTS122116-P-DF-17: Room 310B	Drinking Fountain	3	830
TTS122116-P-WC-18: Entrance, outside office	Water Cooler Fountain	9	960
TTS122116-P-OF-19: Staff kitchen	Office Faucet	8	410
TTS122116-P-WC-20: Entrance, outside Auto Body, right fixture	Water Cooler Fountain	<1.0	360
TTS122116-P-WC-21: Entrance, outside Auto Body, left fixture	Water Cooler Fountain	<1.0	520
TTS122116-P-KF-22: Dental, center island, E. fixture	Kitchen Faucet	<1.0	1,100
TTS122116-P-KF-23: Dental, center island, W. fixture	Kitchen Faucet	<1.0	930
TTS122116-P-KF-24: Dental, W. wall	Kitchen Faucet	3	1,000
TTS122116-P-WC-25: N.W. hallway, outside room 110	Water Cooler Fountain	<1.0	560
TTS122116-P-KF-26: Nursing, S. fixture	Nurse' Faucet	30	410
TTS122116-P-KF-27: Nursing, middle fixture	Kitchen Faucet	25	690
TTS122116-P-KF-28: Nursing, N. fixture	Kitchen Faucet	41	330
TTS122116-P-KF-29: Nursing, W. fixture	Kitchen Faucet	1	1,100
TTS122116-P-KF-30: Nursing, E. fixture	Kitchen Faucet	<1.0	890
TTS122116-P-CF-31: Room 125, E. wall, S. fixture	Classroom Faucet	1	1,100
TTS122116-P-CDF-32: Room 140B	Classroom Drinking Fountain	4	170
TTS122116-P-WC-33: Outside room 160	Water Cooler Fountain	8	430
TTS122116-P-CF-34: Room 150, middle fixture	Classroom Faucet	28	1,100
TTS122116-P-KF-35: P-202 center bottle fixture	Kitchen Faucet	2	600
TTS122116-P-KF-36: P-203	Kitchen Faucet	<1.0	660



Sample Identification and Location	Fixture Type	Lead Results (µg/L)	Copper Results (µg/L)
TTS122116-P-CF-37: Laboratory Blank	Distilled Water Blank	<1.0	<10
TTS122116-P-DF-38: Laboratory Spike	Lead and Copper Spike	14	1,200
EPA Action Level		15	1,300

- 1 μg/L means microgram per liter or parts per billion (ppb).
- 2 Action levels based on the U.S. EPA's Lead and Copper Rule. Results in **bold** indicate concentrations above the action levels of 15 μg/L for lead and 1,300 μg/L for copper Results in *italics* are quality assurance spike and blank samples.

Table 2: pH and Temperature Data Summary

Sample Number	Fixture Type	pH Flush	pH Sample	Temperature (°C) Flush	Temperature (°C) Sample
TTS122116-P-KF-04: Kitchen, W. island, food prep	Kitchen Faucet	6.64	7.75	16.2	16.2
TTS122116-P-DF-08: Kitchen, W. wall	Drinking Fountain	6.64	7.48	17.1	18.8
TTS122116-P-DF-12: Diesel, S. wall	Drinking Fountain	6.79	7.67	20.5	20.3
TTS122116-P-WC-16: Hallway, N. of Commons	Water Cooler Fountain	6.86	7.86	14.7	11.0
TTS122116-P-WC-20: Entrance, outside auto body, E. fixture	Water Cooler Fountain	7.31	7.86	13.8	11.8
TTS122116-P-KF-24: Dental, W. wall	Kitchen Faucet	7.33	7.73	16.0	18.9
TTS122116-P-KF-28: Nursing, N. fixture	Kitchen Faucet	7.26	7.58	19.1	21.1
TTS122116-P-CDF-32: Room 140B	Classroom Drinking Fountain	7.36	7.65	20.2	20.4
TTS122116-P-KF-36: Portable P-203	Kitchen Faucet	7.60	7.79	14.3	18.5





Table 3: Remedial Sampling Analytical Results Summary

	Sample Identification							
Sampling Event	KF-05	DF-15	KF-26	KF-27	KF-28	CF-34	Laboratory Blank (-37)	Laboratory Spike (-38)
Initial (12/21/16)	23	15	30	25	41	28	<1	14
Fixture Replacement, First Draw (1/28/17)	11.3	<1.0	13.2	21	24.6	55.9	<1.0	16.2
Second Draw (1/28/17)	-	-	5.55	11.2	36.6	44.8	-	-
Third Draw (1/28/17)	-	-	1.31	-	<1.0	2.25	-	-
Fixture Replacement (2/25/17)	-	-	-	6.46	8.97	11.8	<1.0	12.6
EPA Action Level	15	15	15	15	15	15	15	15

Results reported in micrograms per liter (μ g/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 μ g/L for lead Results indicated in *italics* are quality assurance spike and blank samples.



ATTACHMENT D

Initial Analytical Results





RJ Lee Group, Inc. | Columbia Basin Analytical Laboratories

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

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

Subject: Chemical Analysis Report

Columbia Basin Analytical Laboratories received 38 sample(s) on 12/21/16 for analysis. These sample(s) have been assigned a login order number of W612108. Enclosed is the final report that consists of a summary report of the sample(s), and a copy of the chain of custody.

General Lab Comments

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

All samples were diluted 1:10.

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

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

01/18/17

Project Coordinator II, M. Fernanda Pincheira

Date

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



Laboratory Report

Ryan Mathews

RJ Lee Group No.:W612108

Fulcrum Environmental

COC No.: Kennewick Samples Received: 12/21/16

406 N. 2nd St.

Analysis/Prep Date: 01/17/17

Yakima, WA 98901

Report Date: 01/18/17

Client Project:

Fulcrum Kennewick

Sample Name:	TTS122116-P-KF-01	Matrix: Potable Water	Date Received:	12/21/16
RJ Lee Grp. ID:		Water Water	Date Analyzed:	01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.08	0.01	
Lead	EPA 200.8	0.006	0.001	

Date Received: 12/21/16 Sample Name: TTS122116-P-KF-02 Matrix: Potable Water W612108-02 **Date Analyzed:** 01/17/17 RJ Lee Grp. ID:

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.10	0.01	
Lead	EPA 200.8	0.009	0.001	

Date Received: 12/21/16 Sample Name: TTS122116-P-KF-03 Matrix: Potable Water RJ Lee Grp. ID: W612108-03 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.64	0.01	_
Lead	EPA 200.8	0.002	0.001	

Date Received: 12/21/16 Sample Name: TTS122116-P-KF-04 Matrix: Potable Water RJ Lee Grp. ID: W612108-04 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.85	0.01	_
Lead	EPA 200.8	0.005	0.001	

Date Received: 12/21/16 Sample Name: TTS122116-P-KF-05 Matrix: Potable Water RJ Lee Grp. ID: W612108-05 **Date Analyzed:** 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.31	0.01	
Lead	EPA 200.8	0.023	0.001	

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

WWW.RJLEEGROUP.COM

01/18/17 8:26 Approved: Report Template: GenMetalReportFull_v12.rpt Report Time Stamp: 01/18/17 11:54



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Sample Name:	TTS12211	VIALLIX. FOLAD	le Water	Date Received	
RJ Lee Grp. ID:	W612108-	06		Date Analyze	1: 01/17/17
Analy	te	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8	0.40	0.01	
Lead		EPA 200.8	0.001	0.001	
Sample Name: RJ Lee Grp. ID:	TTS12211 W612108-	viallix. I olao	le Water	Date Received Date Analyzed	
Analy	te	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper Lead		EPA 200.8 EPA 200.8	0.18 0.004	0.01 0.001	
Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	viallix. I olao	le Water	Date Received Date Analyzed	
Analy	te	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8	0.05	0.01	
Lead		EPA 200.8	0.005	0.001	
Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	VIAITIX: FOLAD	le Water	Date Received Date Analyzed	
Analy	te	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8	0.84	0.01	
Lead		EPA 200.8	0.001	0.001	
Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	viallix. I olao	le Water	Date Received Date Analyzed	
Analy	te	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
~			0.91	0.01	
Copper		EPA 200.8		0.01	
Copper Lead		EPA 200.8 EPA 200.8	0.002	0.001	
	TTS122110 W612108-	EPA 200.8 6-P-WC-11 Matrix: Potab	0.002		
Lead Sample Name:	W612108-	EPA 200.8 6-P-WC-11 Matrix: Potab	0.002	0.001 Date Received	
Lead Sample Name: RJ Lee Grp. ID:	W612108-	EPA 200.8 6-P-WC-11 Matrix: Potab 11	0.002 le Water Result	0.001 Date Received Date Analyzed PQL	1: 01/17/17

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

Approved: 01/18/17 8:26 Report Time Stamp: 01/18/17 11:54



Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	viauix.	Potable Wate	r	Date Received Date Analyzed	
Analyt	e	Method		Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8 EPA 200.8		0.75 0.002	0.01	
Sample Name: RJ Lee Grp. ID:	TTS122116 W612108-	6-P-DF-13 Matrix:	Potable Wate		Date Received	
Analyt	e	Method		Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8 EPA 200.8		1.2 0.004	0.1 0.001	X
Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	6-P-WC-14 Matrix:	Potable Wate	r	Date Received Date Analyzed	
Analyt	e	Method		Result (mg/L)	PQL (mg/L)	Qualifiers
Copper Lead		EPA 200.8 EPA 200.8		0.85 < 0.0010	0.01 0.001	
Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	VIAITIX:	Potable Wate	r	Date Received Date Analyzed	
Analyt	e e	Method		Result (mg/L)	PQL (mg/L)	Qualifiers
Copper Lead		EPA 200.8 EPA 200.8		0.34 0.015	0.01 0.001	
Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	6-P-WC-16 Matrix:	Potable Wate	r	Date Received Date Analyzed	
Analyt	re	Method		Result (mg/L)	PQL (mg/L)	Qualifiers
Copper Lead		EPA 200.8 EPA 200.8		0.73 0.002	0.01 0.001	
Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	viauix.	Potable Wate	r	Date Received Date Analyzed	
Analyt	e	Method		Result (mg/L)	PQL (mg/L)	Qualifiers
Copper Lead		EPA 200.8 EPA 200.8		0.83 0.003	0.01 0.001	

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



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Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	6-P-WC-18 Matrix: Potable	e Water	Date Receive Date Analyze	
Analy		Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8	0.96	0.01	
Lead		EPA 200.8	0.009	0.001	
Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	VIALLIX. I GLAUK	e Water	Date Receive Date Analyze	
Analy	te	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8	0.41	0.01	
Lead		EPA 200.8	0.008	0.001	
Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	6-P-WC-20 Matrix: Potable 20	e Water	Date Receive Date Analyze	
Analy	te	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8	0.36	0.01	
Lead		EPA 200.8	< 0.0010	0.001	
Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	6-P-WC-21 Matrix: Potable 21	e Water	Date Receive Date Analyze	
Analy	te	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8	0.52	0.01	
Lead		EPA 200.8	< 0.0010	0.001	
Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	VIALLIX. I GLAUK	e Water	Date Receive Date Analyze	
Analy	te	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8	1.1	0.1	X
Lead		EPA 200.8	< 0.0010	0.001	
Sample Name: RJ Lee Grp. ID:	TTS122110 W612108-	VIALLIX. I GLAUK	e Water	Date Receive Date Analyze	
Analy	te	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8	0.93	0.01	
Соррег		E171 200.0			

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Sample Name:	TTS12211	VIALITY.	Potable Water		Date Received	
RJ Lee Grp. ID:	W612108-	24			Date Analyze	d: 01/17/17
Analy	te	Method		Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8		1.0	0.1	X
Lead		EPA 200.8		0.003	0.001	
Sample Name: RJ Lee Grp. ID:	TTS12211 W612108-	6-P-WC-25 Matrix:	Potable Water		Date Received Date Analyzed	
Analy	te	Method		Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8		0.56	0.01	
Lead		EPA 200.8		< 0.0010	0.001	
Sample Name: RJ Lee Grp. ID:	TTS12211 W612108-	VIALITY.	Potable Water		Date Received Date Analyzed	
Analyt	te	Method		Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8		0.41	0.01	
Lead		EPA 200.8		0.030	0.001	
Sample Name: RJ Lee Grp. ID:	TTS12211 W612108-	VIALUX:	Potable Water		Date Received Date Analyzed	
Analy	te	Method		Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8	•	0.69	0.01	
Lead		EPA 200.8		0.025	0.001	
Sample Name: RJ Lee Grp. ID:	TTS12211 W612108-	VIALITY.	Potable Water		Date Received Date Analyzed	
Analy	te	Method		Result (mg/L)	PQL (mg/L)	Qualifiers
Copper		EPA 200.8		0.33	0.01	_
Lead		EPA 200.8		0.041	0.001	
Sample Name: RJ Lee Grp. ID:	TTS12211 W612108-	VIALLIX	Potable Water		Date Received Date Analyzed	
		Madhad		Result	PQL	Qualifiers
Analy	te	Method		(mg/L)	(mg/L)	
Analyt	te	EPA 200.8		(mg/L)		X

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Sample Name:	TTS12211	VIALLIX. FULADIC V	Vater	Date Received	
RJ Lee Grp. ID:	W612108-			Date Analyzed	
Analyt	te	Method	Result	PQL	Qualifiers
			(mg/L)	(mg/L)	
Copper		EPA 200.8	0.89	0.01	
Lead		EPA 200.8	< 0.0010	0.001	
Sample Name:	TTS12211	6-P-CF-31 Matrix: Potable V	Water	Date Received	1: 12/21/16
RJ Lee Grp. ID:	W612108-	31	vaici	Date Analyzed	1: 01/17/17
Analyt	te	Method	Result	PQL	Qualifiers
		3.55.25.2	(mg/L)	(mg/L)	
Copper		EPA 200.8	1.1	0.1	X
Lead		EPA 200.8	0.001	0.001	71
			0,001		10/01/16
Sample Name:		6-P-CDF-32 Matrix: Potable V	Water	Date Received	
RJ Lee Grp. ID:	W612108-			Date Analyzed	
Analyt	te	Method	Result	PQL	Qualifiers
			(mg/L)	(mg/L)	
Copper		EPA 200.8	0.17	0.01	
Lead		EPA 200.8	0.004	0.001	
Sample Name: RJ Lee Grp. ID:	TTS12211 W612108-	6-P-WC-33 Matrix: Potable V	Vater	Date Received Date Analyzed	
-		Method	Result		
Analyt	ie	Method		PQL (mg/L)	Qualifiers
			(mg/L)	(mg/L)	
Copper		EPA 200.8	0.43	0.01	
Lead		EPA 200.8	0.008	0.001	
Sample Name: RJ Lee Grp. ID:	TTS12211 W612108-	VIALLIX. I GLADIC V	Vater	Date Received Date Analyzed	
Analyt	te	Method	Result	PQL	Qualifiers
ľ			(mg/L)	(mg/L)	
Copper		EPA 200.8	1.1	0.1	X
Lead		EPA 200.8	0.028	0.001	
					10/01/16
Sample Name:	TTS12211	VIALLIX. I GLADIC V	Water	Date Received	
RJ Lee Grp. ID:	W612108-			Date Analyzed	
		N.E. (1 1	Result	PQL	Qualifiers
Analyt	te	Method			& m
Analyt	te 	Metnod	(mg/L)	(mg/L)	
Analyt	te	EPA 200.8			Q.III.

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Sample Name: TTS122116-P-KF-36 Matrix: Potable Water Date Received: 12/21/16 W612108-36 Date Analyzed: 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	0.66	0.01	
Lead	EPA 200.8	< 0.0010	0.001	

Sample Name: TTS122116-P-CF-37 Matrix: Potable Water

RJ Lee Grp. ID: W612108-37 Matrix: Potable Water

Date Received: 12/21/16

Date Analyzed: 01/17/17

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

Sample Name: TTS122116-P-DF-38 Matrix: Potable Water Date Received: 12/21/16

RJ Lee Grp. ID: W612108-38 Date Analyzed: 01/17/17

Analyte	Method	Result (mg/L)	PQL (mg/L)	Qualifiers
Copper	EPA 200.8	1.2	0.1	X
Lead	EPA 200.8	0.014	0.001	

Report Qualifiers:

 $A = Target\ Analyte\ media\ breakthrough\ suspect,\ see\ analytical\ report$

 $D = Analyte \ analyzed \ in \ a \ dilution$

 $E = Report\ concentration\ was\ above\ the\ instrument\ calibration\ range$

J = Analyte detected below quantitation limits, concentration is estimated

P = Library spectrum match, rsd >90% w RT match

Q = Result out of method specific acceptance QC criteria S = Spike Recovery outside accepted recovery limits

Z = Not ELAP accredited analyte

ND = Not Detected

B = Analyte detected in the associated blank

d = Data that exceeds the RSD criteria set by the SOP

H = Holding times for preparation or analysis exceeded

L = Sample condition at receipt out of compliance with method

R = RPD (relative percent difference) outside accepted recovery limits

U = A nalyte analyzed for but not detected

N/A = Not Applicable

QA Officer/Organic Analytical SME John Coddington

belalas

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
Approved: 01/18/17 8:26
Report Template: GenMetalReportFull_v12.rpt
Report Time Stamp: 01/18/17 11:54

Request for Environmental and IH Laboratory Analytical Services

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Relinquished By (Print Name):	Relinquished By (Signature):		Company Name:	Relinquished By (Signature)		12137119-8-KE-10	TSIZZIIG-P-KF-09	TS122116-P-07-08	TSIAAII6-PKF-07	1512-14-MIEE151	120-17-6-91100151	1512116-P-KF -04	15123116 P-KF -03	15122116-P-KF-02	Totallo-1-A-CA	16-P-KF-01	Client Sample ID	5		Phone: (509) 574-0839	e, Zi	Address:	Company:	Name: Lorrie Boutillier	Fax Results To:	Email Results To:	Call with Verbal Results:	Phone: (509) 574-0839	City, State, Zip:	Address: 406 Nort	Company: Fulcrum	Name: Amanda Enbysk, Ryan Mathews	Date Logged In:	Project No.:	
t Name):	ature):			t Name:	(A) MASSA	classicom add, sink	Classroom 206, N sink	Kitchen, west wall	kitdun, welst wall sink	Kitchen, N. confer island N	UN.	Worst about 15 thun the	Southisland Kitchen, "counter	Southanen Kithen	KIFGUT HU SONDTIN MANY	Kitchen, hondwish inservice	Sample Description			4-0839 Fax:	Yakima, WA, 98901	406 North 2nd Street	Fulcrum Environmental Email: Ibout	7		aenbysk@efulcrum.net, CC: rmathews@efulcrum.net	ts:	4-0839 Fax:	Yakima, WA, 98901	406 North 2nd Street	Fulcrum Environmental Consulting	sk, Ryan Mathews	Logged in By:	Client No:	RYAN MATHEWS
Relinquished To: Method of Shipment:	Date:		Method of Shipment:	Relinquished To:	1 2/2	<	4								_	- hajaylle	Sample Date			(509) 575-8453			Email: lboutillier@efulcrum.net			s@efulcrum.r		(509) 575-8453					y:		
d To:		-1	hipment:														Start	Sample Time		453			ım.net			net		453							
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Pennsylvania - HQ

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Washington

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DELIVERING SCIENTIFIC RESOLUTION RJ LEE GROUP

Request for Environmental and IH Laboratory Analytical Services

W612108, Page 10 of 12

TTSIZZILG-WI-1888-12 ATTENTION TO: Send Invoice 17512216-P-DF-13 Instructions 123116-6 75122116-P-WE-14 75122116-P-DF-17 175122116-8-WC-11 TS122116-P-DF-15 Special Chain of Custody Chain of 175122116-P-WC-21 4200116-6-mc-30 Report Lab Use Custody 15122116-1-WC-16 Results ぉ Client Sample ID Phone: Address: Project No.: City, State, Zip: Phone: Company: Name: Amanda Enbysk, Ryan Mathews Date Logged In: Relinquished By (Print Name) Company: Fulcrum Environmental Name: Lorrie Boutillier Fax Results To: Email Results To: Call with Verbal Results: City, State, Zip: Company Name: Relinquished By (Print Name): Relinquished By (Signature): Company Name: Relinquished By (Signature): Address: - OF-19 406 North 2nd Street Fulcrum Environmental Consulting 406 North 2nd Street (509) 574-0839 **RYAN MATHEWS** (509) 574-0839 Hallway Not Commons aenbysk@efulcrum.net, CC: rmathews@efulcrum.net Yakima, WA, 98901 Entrance and . Hustotali Diesel/Autolour Swall Yakima, WA, 98901 Entrancead Entrante, apposite office Commons, weldin 310 weldin 310B Commons, www. Sample Description Kithanette K wall Logged In By: Client No: Fax: Fax: Email: lboutillier@efulcrum.net 11/16/el Date: 1-/31/16 Method of Shipment: Relinquished To: Relinquished To: Method of Shipment: 509) 575-8453 509) 575-8453 Sample Date Start Time: lime: Stop 1436 Wipe Area / Air Volume Purchase Order No.: Sample Only Multiple Sources #s: EPA 200.8: Pb, Cu Analysis Key | HNO3 Turnaround Chemistry Drinking Request Chain of Custody Chain of Custody Water 4 °C Unpres H₂SO₄ Standard: Received By (Print Name) DOH Source #: System ID #: Preservation: Sample Purpose: Company Name: Received By (Print Name): Received By (Signature): Company Name: Sample Purpose: A **Analysis Requested** NaOH H Yes Information X Regulatory 8 WW=Wastewater GW=Groudwater S=Soil/Sludge Other o If 'No,' No. of Business Days: Accreditation (please list below): 0=0 Client Job No.: DW=Drinking Water SW=Surface Water Method of Shipment: Relinquished To: Method of Shipment: Pres. Upon Receipt (Y/N) Preservation Matrix P=Plastic W=Wipe G=Glass Container A=Air (filter or tube) Time: Time: Container Type 1430 pН No. Containers 3 5 6 5 6. J 6: 4

Monroeville, PA 15146 350 Hochberg Road

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Request for Environmental and IH Laboratory Analytical Services W61210%

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RYAN MATHEWS Client No. C	Chain of Custody		Chain of Custody		IEE/ST	TTSIDD	1751221	T75172	TIGGIST	17512211	175122	TTSIZZI	Meist	17512211	911Res S.L.	Clie		Special Instructions		10	Send Invoice					į	To	Results	Renort			Only	Lab Use	ATTENTION TO	
Client No: Logged in By: Contained	Relinquished By (Signa Relinquished By (Print	Company Name:	Relinquished By (Print	Balinguished By (Ciana	6-P-CDF-32	116-P-CF-31	16-F-KF-30	116-P-KF-29	6-P-KF-18	ルーアードドープラ	116-1-KF- 26	16-p-100-25			P-KF	nt Sample ID				e, Zi		;	Name: Iorrie Boutillier			Call with Verbal Result					Name: Amanda Enbys	Date Logged In:	Project No.:		
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Turnaround Request Sample Purpose: Information X Regulatory D Accreditation (please list be Sample Purpose: Information X Regulatory D Accreditation (please list be Chemistry 4°C HQ No. Na.) Topinking Starder Water Unpres H,SO, Water Chemistry 4°C HQ Na. Na.) Unpres H,SO, Water Steel H,SO, Starder Starder Steel H,SO, Starder Starder Steel H,SO, Starder Starder Steel H,SO, Starder Starder Steel H,SO, Starder Starder Steel H,SO, Starder Starder Steel H,SO, Starder Steel H,SO, Starder Steel H,SO, Starde	ed To:	f Shipment:	100													Start	Samp		-8453			rum.net			n.net		-8453								
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Request for Environmental and IH Laboratory Analytical Services NO12108

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W612108, Page 12 of 12

ATTENTION TO: 175122116-9-DF-38 Send Invoice 775122116-8-CF-37 15 Wallly-1-KF-36 176122116-P-CF-34 TT5122116-P-WL-33 Hallway adj. 160 Instructions 12 Jan6-6- KF-36 Chain of Special Lab Use Chain of Custody Report Results 7 Client Sample ID Address: Phone: Project No.: Date Logged In: City, State, Zip: Company: Fax Results To: Email Results To: Name: Amanda Enbysk, Ryan Mathews Company Name: Relinquished By (Signature): Relinquished By (Print Name): Relinquished By (Signature) Name: Lorrie Boutillier Call with Verbal Results: Phone: City, State, Zip: Address: 406 North 2nd Street Company: Relinquished By (Print Name): Company Name: Fulcrum Environmental Fulcrum Environmental Consulting 406 North 2nd Street (509) 574-0839 **RYAN MATHEWS** (509) 574-0839 aenbysk@efulcrum.net, CC: rmathews@efulcrum.net Yakima, WA, 98901 Yakima, WA, 98901 april 1400 P-203, Kithan P-202, curtur softe misser her Digipen 150, centersmit Sample Description 180 Fax: Fax: Logged In By: Client No: Email: lboutillier@efulcrum.net Date: 12/21/ Relinquished To: Method of Shipment: Relinquished To: Method of Shipment: 19/01/16 509) 575-8453 509) 575-8453 Sample Date Start Time: 4 Time: Stop Wipe Area / Air Volume Sample Only Multiple Sources #s: Purchase Order No.: EPA 200.8: Pb, Cu Analysis Key | HNO3 Turnaround Chemistry 4 Drinking Request Chain of Custody Chain of Water Custody 4°C DOH Source #: System ID #: Standard: Received By (Print Name) Unpres H₂SO₄ Preservation: Received By (Signature): Company Name: Sample Purpose: A Company Name: Received By (Print Name): imple Purpose: Analysis Requested Na₂SO₄ NaOH HCI Yes Information X Regulatory B o Other o S WW=Wastewater GW=Groudwater S=Soil/Sludge If 'No,' No. of Business Days. 0=0il Accreditation (please list below): Client Job No.: DW=Drinking Water SW=Surface Water Relinquished to: Method of Shipment: Relinquished To: Method of Shipment: Pres. Upon Receipt (Y/N) Preservation 7 2 Matrix A=Air (filter or tube) W=Wipe G=Glass P=Plastic Container 162017 Container Type 430 рΗ 6 No. Containers

Pennsylvania - HQ Monroeville, PA 15146 350 Hochberg Road

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509.545.4989 Phone

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

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ATTACHMENT E

Remedial Analytical Results





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

Fulcrum Environmental Ryan Mathews

406 N. 2nd Street Yakima, WA 98901

RE: Kennewick SD Drinking Water - Tri-Tech Skills Center

Work Order Number: 1702286

February 27, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 11 sample(s) on 2/27/2017 for the analyses presented in the following report.

Drinking Water Metals by EPA Method 200.8

This report consists of the following:

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

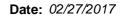
All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward Project Manager CC:

Amanda Enbysk





CLIENT: Fulcrum Environmental Work Order Sample Summary

Project: Kennewick SD Drinking Water - Tri-Tech Sk

Work Order: 1702286

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1702286-001	TTS22517-P-KF-27	02/25/2017 7:15 AM	02/27/2017 9:20 AM
1702286-002	TTS22517-S-KF-27	02/25/2017 7:15 AM	02/27/2017 9:20 AM
1702286-003	TTS22517-T-KF-27	02/25/2017 7:15 AM	02/27/2017 9:20 AM
1702286-004	TTS22517-P-KF-28	02/25/2017 7:15 AM	02/27/2017 9:20 AM
1702286-005	TTS22517-S-KF-28	02/25/2017 7:15 AM	02/27/2017 9:20 AM
1702286-006	TTS22517-T-KF-28	02/25/2017 7:15 AM	02/27/2017 9:20 AM
1702286-007	TTS22517-P-CF-34	02/25/2017 7:15 AM	02/27/2017 9:20 AM
1702286-008	TTS22517-S-CF-34	02/25/2017 7:15 AM	02/27/2017 9:20 AM
1702286-009	TTS22517-T-CF-34	02/25/2017 7:15 AM	02/27/2017 9:20 AM
1702286-010	TTS22517-P-CF-37	02/25/2017 7:15 AM	02/27/2017 9:20 AM
1702286-011	TTS22517-P-DF-38	02/25/2017 7:15 AM	02/27/2017 9:20 AM



Case Narrative

WO#: **1702286**Date: **2/27/2017**

CLIENT: Fulcrum Environmental

Project: Kennewick SD Drinking Water - Tri-Tech Skills Center

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:

1702286-004A 208787: Prep Comments for EPA200.8, Sample 1702286-004A: Turbidity: 0.01 NTU 1702286-010A 208789: Prep Comments for EPA200.8, Sample 1702286-010A: Turbidity: 0.00 NTU 1702286-001A 208783: Prep Comments for EPA200.8, Sample 1702286-001A: Turbidity: 0.01 NTU 1702286-007A 208788: Prep Comments for EPA200.8, Sample 1702286-007A: Turbidity: 0.00 NTU 1702286-011A 208790: Prep Comments for EPA200.8, Sample 1702286-011A: Turbidity: 0.00 NTU

Original



Qualifiers & Acronyms

WO#: **1702286**

Date Reported: 2/27/2017

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: 1702286

Date Reported: 2/27/2017

CLIENT: Fulcrum Environmental

Project: Kennewick SD Drinking Water - Tri-Tech Skills Center

Lab ID: 1702286-001 **Collection Date:** 2/25/2017 7:15:00 AM

Client Sample ID: TTS22517-P-KF-27 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>

Batch ID: 16360 Analyst: TN

Lead 6.46 1.00 μg/L 1 2/27/2017 3:46:33 PM

Lab ID: 1702286-004 **Collection Date:** 2/25/2017 7:15:00 AM

Client Sample ID: TTS22517-P-KF-28 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 16360 Analyst: TN

Lead 8.97 1.00 $\mu g/L$ 1 2/27/2017 4:00:58 PM

Lab ID: 1702286-007 **Collection Date:** 2/25/2017 7:15:00 AM

Client Sample ID: TTS22517-P-CF-34 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>

Batch ID: 16360

Analyst: TN

Lead 11.8 1.00 μg/L 1 2/27/2017 4:04:34 PM



Analytical Report

Work Order: 1702286

Date Reported: 2/27/2017

CLIENT: Fulcrum Environmental

Project: Kennewick SD Drinking Water - Tri-Tech Skills Center

Lab ID: 1702286-010 **Collection Date:** 2/25/2017 7:15:00 AM

Client Sample ID: TTS22517-P-CF-37 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 16360 Analyst: TN

Lead ND 1.00 μg/L 1 2/27/2017 4:08:10 PM

Lab ID: 1702286-011 **Collection Date:** 2/25/2017 7:15:00 AM

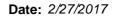
Client Sample ID: TTS22517-P-DF-38 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 16360 Analyst: TN

Lead 12.6 1.00 $\mu g/L$ 1 2/27/2017 4:11:47 PM

Original





Work Order: 1702286

QC SUMMARY REPORT

CLIENT: Fulcrum Environmental

Project:	Kennewick	SD Drinking Water - T	ri-Tech S	Sk		Drinking Water Metals by EPA N	lethod 200.8
Sample ID	MB-16360	SampType: MBLK			Units: µg/L	Prep Date: 2/27/2017 RunNo: 34678	
Client ID:	MBLKW	Batch ID: 16360				Analysis Date: 2/27/2017 SeqNo: 662272	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPI	DLimit Qual
Lead		ND	1.00				
Sample ID	LCS-16360	SampType: LCS			Units: µg/L	Prep Date: 2/27/2017 RunNo: 34678	
Client ID:	LCSW	Batch ID: 16360				Analysis Date: 2/27/2017 SeqNo: 662273	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPI	DLimit Qual
Lead		44.6	1.00	50.00	0	89.1 85 115	
Sample ID	1702286-001ADUP	SampType: DUP			Units: µg/L	Prep Date: 2/27/2017 RunNo: 34678	
Client ID:	TTS22517-P-KF-27	Batch ID: 16360				Analysis Date: 2/27/2017 SeqNo: 662277	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPI	DLimit Qual
Lead		6.19	1.00			6.458 4.26	30
Sample ID	1702286-001AMS	SampType: MS			Units: µg/L	Prep Date: 2/27/2017 RunNo: 34678	
Client ID:	TTS22517-P-KF-27	Batch ID: 16360				Analysis Date: 2/27/2017 SeqNo: 662278	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPI	DLimit Qual
Lead		88.8	1.00	100.0	6.458	82.3 70 130	
Sample ID	1702286-001AMSD	SampType: MSD			Units: µg/L	Prep Date: 2/27/2017 RunNo: 34678	
Client ID:	TTS22517-P-KF-27	Batch ID: 16360				Analysis Date: 2/27/2017 SeqNo: 662279	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPI	DLimit Qual
Lead		92.3	1.00	100.0	6.458	85.9 70 130 88.79 3.92	30

Page 7 of 10 Original



Sample Log-In Check List

С	lient Name:	FE			Work Ord	er Num	ber: 1702286		
Lo	ogged by:	Erica Silva			Date Rec	eived:	2/27/2017	9:20:00 AM	
Chain of Custody									
1.	Is Chain of C	ustody complete?			Yes [✓	No 🗌	Not Present	
2.	How was the	sample delivered?			<u>FedEx</u>				
Log	ı In								
_	Coolers are p	resent?			Yes [✓	No 🗌	NA 🗆	
ā	Objector		dition 0				N. 🗆		
4.		tainer/cooler in good con				✓	No ∐		
5.	Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)				Yes		No 🗹	Not Required \square	
6.	Was an atten	npt made to cool the san	nples?		Yes [✓	No 🗌	NA 🗌	
7.	Were all item	s received at a temperat	ure of >0°C to 10.0°C	*	Yes [✓	No 🗆	NA \square	
8.	Sample(s) in	proper container(s)?			Yes [✓	No 🗌		
9.	Sufficient sar	nple volume for indicated	test(s)?		Yes [✓	No \square		
10.	Are samples	properly preserved?			Yes	✓	No \square		
11.	Was preserva	ative added to bottles?			Yes [✓	No \square	NA \square	
12.	Is there head	space in the VOA vials?			Yes [No 🗌	HNO3 NA ✓	
		es containers arrive in go	ood condition(unbroke	n)?	Yes [✓	No 🗌		
_		ork match bottle labels?			Yes [✓	No \square		
15.	Are matrices	correctly identified on Ch	nain of Custody?		Yes [✓	No 🗌		
		at analyses were request			Yes [✓	No \square		
17.	Were all hold	ing times able to be met	?		Yes [✓	No \square		
<u>Spe</u>	cial Handl	ing (if applicable)							
18.	Was client no	otified of all discrepancies	s with this order?		Yes [No \square	NA 🗹	
	Person	Notified:		Date					
	By Who	m:		Via:	eMail	☐ Ph	none Fax	☐ In Person	
	Regardi	ng:							
	Client Ir	structions:							
19.	Additional rer	narks:							_1
		dded to 002A, 003A, 005	5A, 006A, 008A, 009A						
		, , , ,	, ,						

Item Information

Item #	Temp ⁰C
Cooler 1	1.8
Cooler 2	0.9
Sample 1	1.2
Sample 2	1.5

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

Original

3600 Fremont Ave N. Tel: 206-352-3790 Page: of: 20
Project Name: Kennewick SD Drinking Water - Tri-Tech Skills
206-352-7178 Project Name: Kennewick SD Drinking Water - Tri-Tech Skills Environmental Consulting, Inc. Environmental Consulting, Inc. Project No: 162017.10 College No:
98103 Fax: 206-352-3790 Fulcrum Environmental Consulting, Inc. 406 North Second Street Yakima, WA 98901 Project Name: Kennewick SD Drinking Water - Tri-Tech Skills College Location: Tri-Tech Skills Center, Kennewick, WA Report To (PM): Ryan Mathews
Fremont Ave N. Tel: 206-352-3790 e, WA 98103 Fax: 206-352-7178 Project Name: Kennewick SD Drinking Water - Tri-Tech Skills Fulcrum Environmental Consulting, Inc. Fulcrum Environmental Consulting, Inc. Project No: 162017.10 Colleges: 406 North Second Street Location: Tri-Tech Skills Center, Kennewick WA
Fremont Ave N. Tel: 206-352-3790 e, WA 98103 Fax: 206-352-7178 Project Name: Kennewick SD Drinking Water - Tri-Tech Skills Fulcrum Environmental Consulting, Inc. Project No: 162017.10 College
V. Tel: 206-352-3790 Fax: 206-352-7178

Page 10 of 10

Please coordinate with the lab in advance



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

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

RE: Kennewick SD - Tri Tech Skills Center Follow-Up Sampling

Work Order Number: 1701338

February 03, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 23 sample(s) on 1/30/2017 for the analyses presented in the following report.

Drinking Water Metals by EPA Method 200.8

This report consists of the following:

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

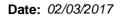
All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward Project Manager

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





CLIENT: Fulcrum Environmental Work Order Sample Summary

Project: Kennewick SD - Tri Tech Skills Center Follo

Work Order: 1701338

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1701338-001	TTS12817-P-KF-05	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-002	TTS12817-S-KF-05	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-003	TTS12817-T-KF-05	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-004	TTS12817-P-DF-13	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-005	TTS12817-S-DF-13	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-006	TTS12817-T-DF-13	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-007	TTS12817-P-DF-15	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-008	TTS12817-S-DF-15	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-009	TTS12817-T-DF-15	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-010	TTS12817-P-KF-26	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-011	TTS12817-S-KF-26	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-012	TTS12817-T-KF-26	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-013	TTS12817-P-KF-27	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-014	TTS12817-S-KF-27	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-015	TTS12817-T-KF-27	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-016	TTS12817-P-KF-28	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-017	TTS12817-S-KF-28	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-018	TTS12817-T-KF-28	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-019	TTS12817-P-CF-34	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-020	TTS12817-S-CF-34	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-021	TTS12817-T-CF-34	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-022	TTS12817-P-CF-37	01/28/2017 9:45 AM	01/30/2017 9:55 AM
1701338-023	TTS12817-P-DF-38	01/28/2017 9:45 AM	01/30/2017 9:55 AM



Case Narrative

WO#: **1701338** Date: **2/3/2017**

CLIENT: Fulcrum Environmental

Project: Kennewick SD - Tri Tech Skills Center Follow-Up Sampling

WorkOrder Narrative:

I. SAMPLE RECEIPT:

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

II. GENERAL REPORTING COMMENTS:

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

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

III. ANALYSES AND EXCEPTIONS:

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

Prep Sample Comments:

1701338-001A 204205: Prep Comments for EPA200.8, Sample 1701338-001A: Turbidiy: 0.09 NTU 1701338-004A 204209: Prep Comments for EPA200.8, Sample 1701338-004A: Turbidiy: 0.08 NTU 1701338-007A 204210: Prep Comments for EPA200.8, Sample 1701338-007A: Turbidiy: 0.04 NTU 1701338-010A 204211: Prep Comments for EPA200.8, Sample 1701338-010A: Turbidiy: 0.05 NTU 1701338-013A 204212: Prep Comments for EPA200.8, Sample 1701338-013A: Turbidiy: 0.11 NTU 1701338-016A 204213: Prep Comments for EPA200.8, Sample 1701338-016A: Turbidiy: 0.26 NTU 1701338-019A 204214: Prep Comments for EPA200.8, Sample 1701338-019A: Turbidiy: 0.15 NTU 1701338-022A 204215: Prep Comments for EPA200.8, Sample 1701338-022A: Turbidiy: 0.01 NTU 1701338-023A 204216: Prep Comments for EPA200.8, Sample 1701338-023A: Turbidiy: 0.01 NTU



Qualifiers & Acronyms

WO#: 1701338

Date Reported: 2/3/2017

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: 1701338

Date Reported: 2/3/2017

CLIENT: Fulcrum Environmental

Project: Kennewick SD - Tri Tech Skills Center Follow-Up Sampling

Lab ID: 1701338-001 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-P-KF-05 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8 Batch ID: 16072 Analyst: TN

Lead 11.3 1.00 μg/L 1 1/30/2017 8:23:08 PM

Lab ID: 1701338-004 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-P-DF-13 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 16072 Analyst: TN

Copper 823 0.500 µg/L 1 1/30/2017 8:44:49 PM

Lab ID: 1701338-007 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-P-DF-15 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 16072 Analyst: TN

Lead ND 1.00 μg/L 1 1/30/2017 8:48:27 PM



Work Order: 1701338

Date Reported: 2/3/2017

CLIENT: Fulcrum Environmental

Project: Kennewick SD - Tri Tech Skills Center Follow-Up Sampling

Lab ID: 1701338-010 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-P-KF-26 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8 Batch ID: 16072 Analyst: TN

Lead 13.2 1.00 μg/L 1 1/30/2017 8:52:04 PM

Lab ID: 1701338-011 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-S-KF-26 Matrix: Drinking Water

 Analyses
 Result
 RL Qual
 Units
 DF
 Date Analyzed

 Drinking Water Metals by EPA Method 200.8
 Batch ID: 16116
 Analyst: TN

 Lead
 5.55
 1.00
 μg/L
 1
 2/2/2017 9:20:30 PM

Lab ID: 1701338-012 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-T-KF-26 Matrix: Drinking Water

1.31

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8

Batch ID: 16116 Analyst: TN

1.00

μg/L

Lead

2/2/2017 9:24:06 PM



Work Order: **1701338**Date Reported: **2/3/2017**

CLIENT: Fulcrum Environmental

Project: Kennewick SD - Tri Tech Skills Center Follow-Up Sampling

Lab ID: 1701338-013 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-P-KF-27 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8 Batch ID: 16072 Analyst: TN

Lead 21.0 1.00 μg/L 1 1/30/2017 8:55:40 PM

Lab ID: 1701338-014 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-S-KF-27 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8 Batch ID: 16116 Analyst: TN

Lead 11.2 1.00 μg/L 1 2/2/2017 9:27:43 PM

Lab ID: 1701338-016 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-P-KF-28 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 16072 Analyst: TN

Lead 24.6 1.00 μg/L 1 1/30/2017 8:59:16 PM



Drinking Water Metals by EPA Method 200.8

Analytical Report

Batch ID: 16116

µg/L

Work Order: **1701338**Date Reported: **2/3/2017**

Analyst: TN

2/2/2017 9:34:55 PM

CLIENT: Fulcrum Environmental

Project: Kennewick SD - Tri Tech Skills Center Follow-Up Sampling

Lab ID: 1701338-017 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-S-KF-28 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8 Batch ID: 16116 Analyst: TN

Lead 36.6 1.00 µg/L 1 2/2/2017 9:31:19 PM

Lab ID: 1701338-018 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-T-KF-28 Matrix: Drinking Water

ND

Analyses Result RL Qual Units DF Date Analyzed

1.00

Lab ID: 1701338-019 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-P-CF-34 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 16072 Analyst: TN

Lead 55.9 1.00 μg/L 1 1/30/2017 9:02:53 PM

Lead



Drinking Water Metals by EPA Method 200.8

Analytical Report

Batch ID: 16116

Work Order: **1701338**Date Reported: **2/3/2017**

Analyst: TN

CLIENT: Fulcrum Environmental

Project: Kennewick SD - Tri Tech Skills Center Follow-Up Sampling

Lab ID: 1701338-020 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-S-CF-34 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8 Batch ID: 16116 Analyst: TN

Lead 44.8 1.00 µg/L 1 2/2/2017 9:38:32 PM

Lab ID: 1701338-021 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-T-CF-34 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Lead 2.25 1.00 μg/L 1 2/2/2017 9:42:08 PM

Lab ID: 1701338-022 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-P-CF-37 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 16072 Analyst: TN

Copper ND 0.500 μg/L 1 1/30/2017 9:06:29 PM Lead ND 1.00 μg/L 1 1/30/2017 9:06:29 PM



Work Order: **1701338**Date Reported: **2/3/2017**

1/30/2017 9:10:06 PM

1/30/2017 9:10:06 PM

CLIENT: Fulcrum Environmental

Copper

Lead

Project: Kennewick SD - Tri Tech Skills Center Follow-Up Sampling

Lab ID: 1701338-023 **Collection Date:** 1/28/2017 9:45:00 AM

Client Sample ID: TTS12817-P-DF-38 Matrix: Drinking Water

1,280

16.2

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8

Batch ID: 16072 Analyst: TN

0.500

1.00

μg/L

μg/L

1

Date: 2/3/2017



Work Order: 1701338

QC SUMMARY REPORT

CLIENT: Fulcrum Environmental

Project:	Kennewick	SD - Tri Tech Skills Co	enter Foll	0				Drinkin	g Water Me	tals by EF	PA Metho	d 200.8
Sample ID:	MB-16116	SampType: MBLK			Units: µg/L		Prep Date	e: 2/2/201	7	RunNo: 342	242	
Client ID:	MBLKW	Batch ID: 16116					Analysis Date	e: 2/2/201	7	SeqNo: 652	2929	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		ND	1.00									
Sample ID:	LCS-16116	SampType: LCS			Units: µg/L		Prep Date	e: 2/2/201	7	RunNo: 342	242	
Client ID:	LCSW	Batch ID: 16116					Analysis Date	e: 2/2/201	7	SeqNo: 652	2930	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		47.3	1.00	50.00	0	94.7	85	115				
Sample ID:	1701233-016ADUP	SampType: DUP			Units: µg/L		Prep Date	e: 2/2/201	7	RunNo: 342	242	
Client ID:	BATCH	Batch ID: 16116					Analysis Date	e: 2/2/201	7	SeqNo: 652	2932	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		ND	1.00						0		30	
Sample ID:	1701233-016AMS	SampType: MS			Units: µg/L		Prep Date	e: 2/2/201	7	RunNo: 342	242	
Client ID:	BATCH	Batch ID: 16116					Analysis Date	e: 2/2/201	7	SeqNo: 652	2933	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		85.5	1.00	100.0	0.2482	85.3	70	130				
Sample ID:	1701233-016AMSD	SampType: MSD			Units: µg/L		Prep Date	e: 2/2/201	7	RunNo: 342	242	
Client ID:	ВАТСН	Batch ID: 16116					Analysis Date	e: 2/2/201	7	SeqNo: 652	2934	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		88.6	1.00	100.0	0.2482	88.3	70	130	85.51	3.53	30	

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Work Order: 1701338

QC SUMMARY REPORT

CLIENT: Fulcrum Environmental

Drinking Water Metals by EPA Method 200.8

Project: Kennewick SD - Tri Tech Skills Center Follo

rioject. Refinewick	3D - TH Tech Skills C	CITICI I OI	10			
Sample ID: MB-16072	SampType: MBLK			Units: µg/L	Prep Date: 1/30/2017 RunNo: 34163	
Client ID: MBLKW	Batch ID: 16072				Analysis Date: 1/30/2017 SeqNo: 650554	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit	Qual
Copper	ND	0.500				
Lead	ND	1.00				
Sample ID: LCS-16072	SampType: LCS			Units: µg/L	Prep Date: 1/30/2017 RunNo: 34163	
Client ID: LCSW	Batch ID: 16072				Analysis Date: 1/30/2017 SeqNo: 650555	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit	Qual
Copper	99.9	0.500	100.0	0	99.9 85 115	
Lead	53.4	1.00	50.00	0	107 85 115	
Sample ID: 1701338-001ADUP	SampType: DUP			Units: µg/L	Prep Date: 1/30/2017 RunNo: 34163	
Client ID: TTS12817-P-KF-05	Batch ID: 16072				Analysis Date: 1/30/2017 SeqNo: 650557	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit	Qual
Copper	207	0.500			211.6 2.01 30	
Lead	11.6	1.00			11.30 2.83 30	
Sample ID: 1701338-001AMS	SampType: MS			Units: µg/L	Prep Date: 1/30/2017 RunNo: 34163	
Client ID: TTS12817-P-KF-05	Batch ID: 16072				Analysis Date: 1/30/2017 SeqNo: 650563	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit	Qual
Copper	420	0.500	200.0	211.6	104 70 130	
Lead	113	1.00	100.0	11.30	101 70 130	
Sample ID: 1701338-001AMSD	SampType: MSD			Units: µg/L	Prep Date: 1/30/2017 RunNo: 34163	
Client ID: TTS12817-P-KF-05	Batch ID: 16072				Analysis Date: 1/30/2017 SeqNo: 650565	
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit	Qual
Copper	400	0.500	200.0	211.6	94.3 70 130 419.8 4.81 30	

Revision v1 Page 12 of 20

Date: 2/3/2017



Work Order: 1701338

Project:

QC SUMMARY REPORT

CLIENT: Fulcrum Environmental

Kennewick SD - Tri Tech Skills Center Follo

Drinking Water Metals by EPA Method 200.8

Sample ID: 1	1701338-001AMSD	SampType: MSD	Units: µg/L	Prep Date:	1/30/2017	RunNo: 34163
•	TTS12817-P-KF-05	Batch ID: 16072		nalvsis Date:	1/30/2017	SegNo: 650565
Ciletti ID.	11312017-1-101-03	Datch ID. 10072	Δi	iaiysis Dale.	1/30/2017	Seq140. 030303

LowLimit HighLimit RPD Ref Val Result SPK value SPK Ref Val %REC %RPD RPDLimit Qual Analyte RL Lead 117 1.00 100.0 11.30 106 70 130 112.7 4.07 30

Revision v1 Page 13 of 20



Sample Log-In Check List

С	ient Name:	FE			Work Or	der Numbe	er: 1701338		
Lo	ogged by:	Erica Silva			Date Re	ceived:	1/30/2017	7 9:55:00 AM	
<u>Cha</u>	in of Custo	ody							
1.	Is Chain of C	ustody complete?			Yes		No 🗸	Not Present	
2.	How was the	sample delivered?			FedE	<u>x</u>			
<u>Log</u>	<u>In</u>								
	Coolers are p	resent?			Yes	✓	No 🗌	na 🗆	
٥.							- —		
4.	Shipping con	tainer/cooler in good condition	?		Yes	✓	No \square		
5.		s present on shipping contained ments for Custody Seals not			Yes		No 🗸	Not Required	
6.	Was an atten	npt made to cool the samples?	?		Yes	✓	No \square	na \square	
7.	Were all item	s received at a temperature of	f >0°C to 10.0)°C *	Yes	✓	No 🗆	na 🗆	
8	Sample(s) in	proper container(s)?			Yes	✓	No \square		
		nple volume for indicated test(s)?		Yes	✓	No \square		
_		properly preserved?			Yes	✓	No \square		
11.	Was preserva	ative added to bottles?			Yes	✓	No \square	NA 🗌 HNO3	
12.	Is there head	space in the VOA vials?			Yes		No \square	NA 🗹	
13.	Did all sample	es containers arrive in good co	ondition(unbrol	ken)?	Yes	✓	No \square		
14.	Does paperw	ork match bottle labels?			Yes	✓	No 🗌		
15.	Are matrices	correctly identified on Chain o	f Custody?		Yes	✓	No \square		
16.	Is it clear wha	at analyses were requested?			Yes	✓	No 🗌		
17.	Were all hold	ing times able to be met?			Yes	✓	No \square		
Sne	cial Handl	ing (if applicable)							
_		otified of all discrepancies with	this order?		Yes		No 🗆	NA 🗹	_
	Person	Notified:		Date:					
	By Who	m:		Via:	еМа	il 🗌 Pho	ne 🗌 Fax	☐ In Person	
	Regardi	ng:							
	Client In	structions:							
19.		narks: d not relinquish chain of custo dded to: 002A, 003A, 005A, 0	•	9A, 011 <i>A</i>	A, 012A, 0)14A, 015A	, 017A, 018 <i>A</i>	A, 020A, 021A	
ltem	<u>Information</u>								
		Item #	Temp °C						
	Cooler		7.6						
	Sample		9.4						

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

3600 Fremont Ave N.		
mont Av		
N.	P	
Tel:	3	
Tel: 206-352-3790	9	
-3790		

Chain of Custody Record and Laboratory Services Agreement

TAT → SameDay^ NextDay^ 2 Day 3 Day STD	Date/Time	< - Us	Received		Date/Time	Relinquished
	17)			×
ナイナ・ナイナ	Date/Time		Received	The second second second	Date/Time	Relinquished
	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.	n behalf of the Client named	ith Fremont Analytical of Agreement.	this Agreement wi d backside of this	horized to enter into terms on the front an	I represent that I am authorized to enter into this Agreement with Fremont agreement to each of the terms on the front and backside of this Agreement.
Please presence all impresent from the	on the following business day.	Disposal by Lab (Samples will be held for 30 days unless otherwise noted. A ree may be assessed if samples are retained after 30 days.)	Disposal by Lab (Samples will be held for 30 days.) assessed if samples are retained after 30 days.)	Disposal by La assessed if sa	Return to Client	Sample Disposal:
	Nitrate+Nitrite Turn-around times for samples received after 4:00pm will begin	sphate Fluoride Nitrate	Bromide O-Phosphate	Chloride Sulfate	Nitrite	***Anions (Circle): Nitrate
Ti TI U V Zn	Co Cr @ Fe Hg K Mg Mn Mo Na Ni 6	Ag Al As B Ba Be Ca Cd	nts TAL Individual:	Priority Pollutants	MTCA-5 RCRA-8	**Metals Analysis (Circle):
HNO3 pes; analyse to only	⊗		<	-	KF 26 4	1512812-8-KF26
					7-15	75-10-T-418615T
HOLD, impr.					5-15	7513817-S-DF-15
HNOzpressed, grayteter booky				- 4	25	7512817-8-0F-15
The second of th					P-13	17512877-T-DF-13
town, unpr.					DF-13	T/512817-5-08-13
# No zorsened; analyze to Cucyly	<i>≫</i>				DF-13	17512617-P-0F-13
<					P-06	7517817-1-46-06
HOLD; unpr.				-	F-05	77513817-5-KP-05
HNOZ presend; analyze to Poorly	10		DW	1/28/2017 0945		TTS13817-P-VF-05
Comments	PAIS 10 9 8 7 8 10 1 10 10 10 10 10 10 10 10 10 10 10 1	Section to the Committee of the Committe	Sample Sa	Sample Time	Sample Date	Sample Name
torm Water, WW = Waste Water	P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water	, SL = Solid, W = Water, DW = C	ct, S = Soil, SD = Sediment	O = Other, P = Produ		*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk,
sfulcrum.net	rmathews@efulcrum.net; cc: aenbysk@efulcrum.net	PM Email:	Fax: 509.545.8453	Fax: 5	509.574.0839	Telephone:
eding to distribute the man weeks from making fine and the second	Ryan Mathews	Report To (PM):	9 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A	1	Yakima, WA 98901	City, State, Zip:
	Tri Tech Skills Center, Kennewick, WA	Location:		Street	406 North Second Street	Address:
Embysk	162017 Colle	Project No:		ental Consulting	Fulcrum Environmental Consulting	Client:
Page:	Kennewick SD - Tri Tech Skills Center	Project Name:		-3790 2-7178	Tel: 206-352-3790 Fax: 206-352-7178	3600 Fremont Ave N. Seattle, WA 98103
Laboratory Project No (internal): 170 1338	Date: 1/28/2017	The control of the co			remor	

				Chain o	f Custody	Record and La	Chain of Custody Record and Laboratory Services Agreement
	remo					1/28/2017	Inharaton Brainst No (internal). 1701228
3600 Fremont Ave N.	Tel: 206-352-3790	52-3790					A CONTRACT CONTRACTOR OF THE STORY
Seattle, WA 98103		52-7178		Project Name:		Kennewick SD - Tri Tech Skills Center Follow-Up Sampling	r Follow-Up Sampling
Client:	Fulcrum Enviror	Fulcrum Environmental Consulting	<u>8</u>	Project No:		162017 Coll	CARK.
Address:	406 North Second Street	nd Street	CALL STE SALE	Location:	Y	Tri Tech Skills Center, Kennewick, WA	
City, State, Zip:	Yakima, WA 98901	901	431 00 00 00 00	Report	Report To (PM): Ryan Mathews	news	
Telephone:	509.574.0839	Fax	Fax: 509.545.8453	PM Email:		rmathews@efulcrum.net; cc: aenbysk@efulcrum.net	efulcrum.net
*Matrix Codes: A = Air, AC	AQ = Aqueous, B = Bulk,	O = Other, P = Product,	duct, S = Soil, SD = Sediment,	SL = Solid,	ater, DW = Drinking Water,		GW = Ground Water, SW = Storm Water, WW = Waste Water
Sample Name	Sam	Sample Date Time	Sample Type (Matrix)*	Secure Parker Control of Secure Parker Parker Control of Secure Parker Parke	14,5 (24,5) (80 0) (14,50) 26,5 (25,5) (25,5) (25,5) 146,6 (25,5) (26,5) (25,5)	Note to see to the second seco	Comments
ap-14-5-41861522		1/28/2017 0946	DW				HOLD; unpr.
ているりましてしてしるか	KF-26						
46-17-4-41861594	45-24				⊗		tives pres; crabbeta Phonly
75-37-S-4186137T	£6-37		8 2				HOLD; Lungor
7512817 T-KF-27	#-77						*
36-71-9-418613TT	KF-28				⊗		Hards gres; analyze for Phonly
TS-7181127	KF-78						HOLD, ungr.
BE-14-I-+18E151	BE-34						~
75-72-4-4185137A	-CF-34				8		HNO3 pres, onely telor Po only
48-42-8-418K1077	CF-24	4	4		,		ttowo; unpor.
**Metals Analysis (Circle):): MTCA-5 RCRA-8	-8 Priority Pollutants	tants TAL	Individual: Ag Al As B Ba	Be Ca Cd Co Cr (Cu)Fe	e Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti	PB Sb Se Sr Sn Ti TI U V Zn
***Anions (Circle): Nit	Nitrate Nitrite	Chloride Sulfate	te Bromide	O-Phosphate Fluoride	Nitrate+Nitrite	Turn-around times for samples received after 4:00pm will begin	10
Sample Disposal:	Return to Client	Disposal b assessed if	Disposal by Lab (Samples will be held for 30 day assessed if samples are retained after 30 days.)	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.)	vise noted. A fee may be	on the following business day.	Please preserve all unpreserved simples
I represent that I am authorized to enter into this Agreement with Fremont agreement to each of the terms on the front and backside of this Agreement.	uthorized to enter int e terms on the front :	to this Agreement and backside of th	with Fremont Anis Agreement.	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 greement to each of the terms on the front and backside of this Agreement.	ent named above, that	I have verified Client's	
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Relinquished	Date/Time	ne		Received	Date/Time	1292	¶AT → SameDay^ NextDay^ 2 Day 3 Day STD
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Page 16 of 20

Fulcru	3600 Fremont Ave N. T. Seattle, WA 98103 F.	Frem
Fulcrum Environmental Consulting	Tel: 206-352-3790 Fax: 206-352-7178	10nt

Chain of Custody Record and Laboratory Services Agreement

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	-	1		Bosowad	Timo		
	TAT: ASAY	Pate/lime 2017 0953		Received	Time	Date/Time	Relinquished x
		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.	alf of the Client name	Fremont Analytical on beh	I represent that I am authorized to enter into this Agreement with Fremont agreement to each of the terms on the front and backside of this Agreement.	am authorized to enter of the terms on the fro	I represent that I agreement to each
8	Plase greature all impresented swift -	on the following business day.	s unless otherwise noted	Disposal by Lab (Samples will be held for 30 days unless otherwise noted. A ree may be assessed if samples are retained after 30 days.)	Disposal by Lab (assessed if samp	Return to Client	Sample Disposal:
5	Special Remarks:	Nitrate+Nitrite	Fluoride Nitr	Bromide O-Phosphate	Chloride Sulfate	Nitrate Nitrite	***Anions (Circle):
/	Pb Sb Se Sr Sn Ti Tl U V Zn	Co Cr Cu Fe	Al As B Ba Be Ca Cd	TAL Individual: Ag	RCRA-8 Priority Pollutants	MTCA-5	**Metals Analysis (Circle):
					10 m 15 m		obsession of the second
1							March III Early Safety with
*				200	a di di		
					8		
						20 10 10 10 10 10 10 10 10 10 10 10 10 10	/
	HNOzgos; analyze for Pb and Cu	8			+	P-DF-38	TTS12817-P-DF-38
	HUBS pres; analyze to Pb and Cu	8				7512817-P-CF-37	-418C1511
	HOLD, unpr.	T. W.	_	DW	1/28/2017 CQ45	T-CF-34	7512817-T-CF-34
	Comments	\$\frac{1}{2}\left\{\frac{1}\left\{\frac{1}{2}\left\{\frac{1}{2}\left\{\frac{1}{2}\left\{\frac{1}{2}\left\{\frac{1}{2}\left\{\frac{1}{2}\left\{\frac{1}{2}\left\{\frac{1}{2}\left\{\frac{1}{2}\left\{\frac{1}\left\{\frac{1}\left\{\frac{1}\left\{\frac{1}\left\{\frac{1}\left\{\frac{1}\le	STORY STATE OF THE	Sample Styles St	Sample Time (Ma	S	Sample Name
	= Ground Water, SW = Storm Water, WW = Waste Water	ing Water, GW	SL = Solid, W = Water, DW =	S = Soil, SD = Sediment, SL =	O = Other, P = Product,	ir, AQ = Aqueous, B = Bulk,	*Matrix Codes: A = Air,
	fulcrum.net	rmathews@efulcrum.net; cc: aenbysk@efulcrum.net	PM Email:	545.8453	9 Fax: 509.545.8453	509.574.0839	Telephone:
		Ryan Mathews	Report To (PM):		98901	Yakima, WA 98901	City, State, Zip:
		Tri Tech Skills Center, Kennewick, WA	Location:		cond Street	406 North Second Street	Address:
D	Collected by: Umanda Entry &	162017 Colle	Project No:		Fulcrum Environmental Consulting	Fulcrum Envi	Client:
aga 1	Follow-Up Sampling	Kennewick SD - Tri Tech Skills Center Follow-Up Sampling	Project Name:		Fax: 206-352-7178		Seattle, WA 98103
7.0	Page: S of: S				Tel: 206-352-3790		3600 Fremont Ave N.
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					s Agreement.	backside of thi	front and	of the terms on the	agreement to each of the terms on the front and backside of this Agreement.
		l above, that I have verified Client's	I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have	Analytical on beha	vith Fremont	is Agreement v	ter into th	ım authorized to en	I represent that I a
	The product of the second	on the following business day.		assessed if samples are retained after 30 days.)	samples are reta	assessed if	lient [Return to Client	Sample Disposal:
		-	Suitate Bromide O-Phosphate Fluoride Nitrate+Nitrite	U-Phosphate	lah (Samples wi		Chloride	Nitrate Nitrite	***Anions (Circle):
	Special Remarks:	Turn-around times for samples	Nitro		1	Culfor.			***Aniona (Cindo).
	TI U V Zn	Co Cr 🕫 Fe Hg K Mg Mn Mo Na Ni	As B Ba Be Ca Cd	Individual: Ag Al	ants TAL	Priority Pollutants	RCRA-8	Circle): MTCA-5	**Metals Analysis (Circle): MTCA-5
	+ND3 pes; analyze to 10 only	<u> </u>			(2	4	P-KF de	1513612-8-KF
								7-05-15	T513817-705-15
	TOD, mp.							0-DF-15	TK513817-5-15-15
	6	6						10170	1151201-11-10C-15
	HOO - I was to the short	⊗						-ne 1k	Thomas of
	*							T-0F-13	TS13847-T-DF-13
	town, unpr.							5-08-13	TT512817-5-0F-13
3	4 NO a grand and to Cucyly	<i>≫</i>						P-0F-13	47512617-P-0F-13
	*							T-KF-06	7512817-T-KF
	HOLD; unpr.					_		S-KP-05	50-27-5-41ge1577
1	HNO3 presend, analyze to Poorly	0	-		DW	017 845	1/28/2017	P-47-05	4513817-P-4-05
	Comments	\$\frac{\chi_{\text{3}}\chi_{\text{3}	\$\\ \begin{align*} \b	Solitor Solito	Sample Type (Matrix)*	Sample Time	Sample Date		Sample Name
	SW = Storm Water, WW = Waste Water	ing Water, GW = Ground Water,	W = Water,	SD = Sediment, SL = Solid,	S = Soil,	O = Other, P = Product,	B = Bulk, O=	AQ = Aqueous,	*Matrix Codes: A = Air,
	ifulcrum.net	rmathews@efulcrum.net; cc: aenbysk@efulcrum.net	PM Email:		Fax: 509.545.8453	Fax:	1839	509.574.0839	Telephone:
		Ryan Mathews	Report To (PM):				/A 98901	Yakima, WA 98901	City, State, Zip:
		Tri Tech Skills Center, Kennewick, WA	Location:			treet	406 North Second Street	406 North	Address:
Pá	Collected by: america Entry K		Project No:		Uq	Fulcrum Environmental Consulting	nvironme	Fulcrum E	Client:
age ´ Pag	Tri Tech Skills Center Follow-Up Sampling	Kennewick SD - Tri Tech Skills Cente	Project Name:			7178	Fax: 206-352-7178		Seattle, WA 98103
	Page: of:					1790	Tel: 206-352-3790		3600 Fremont Ave N.
13 3 of 2	Laboratory Project No (internal): 170 1338	Date: 1/28/2017					C	Ama	
THE RESERVE OF THE PARTY.	ord and Laboratory Services Agreement	stody Record and La	Chain of Custody Rec	C					
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				his Agreement.	he front and backside of t	agreement to each of the terms on the front and backside of this Agreement.	agreemen
	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	al on behalf of the Client name	t with Fremont Analytic	enter into this Agreemen	ent that I am authorized to	I represe
	Please preserve all unpreserved semples		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.)	Disposal by Lab (Samples will be held for 30 days.) assessed if samples are retained after 30 days.		sposal: Return to Client	Sample Disposal:
	Special Remarks:	Nitrate+Nitrite Turn-around times for samples	O-Phosphate Fluoride Nitr	ate Bromide O-F	Nitrite Chloride Sulfate	Nitrate	***Anions (Circle):
	B) Sb Se Sr Sn Ti TI U V Zn	d Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr	ual: Ag Al As B Ba Be Ca Cd	utants TAL Individual:	RCRA-8 Priority Pollutants	**Metals Analysis (Circle): MTCA-5	**Metals /
72/17	Evalyte to Bay 42	8		<	4	57612812-S-CF-34	1761
2	thus pres, analyte to the only	>				312817-8-CF-36	15/
41/210	analyte to 16 only like	8			O	BE-27-1-218C121	17512
41/2/2	Co Pb only We	8				RS12617-5-KF-78	RSIZ
2/2/1						(7513617-18-KF-28	TT512
						7512817-T-KF-27	77517
m 12/17	HOO tree Couly be for to only We	(3)				46-37-S-+180191	71617
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	Comments	\$\\ \text{Co}_1 \text{Co}_2 \text{Co}_1 \text{Co}_2 \text{Co}_1 \text{Co}_2 \t		Sample Sa	Sample Date Time	Name	Sample Name
	SW = Storm Water, WW = Waste Water	ing Water, GW = Ground Water,	SD = Sediment, SL = Solid, W = Water, DW	P = Product, S = Soil, SD = Sedim	0 = Other,	*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk,	*Matrix Cod
	fulcrum.net	rmathews@efulcrum.net; cc: aenbysk@efulcrum.net	PM Email:	Fax: 509.545.8453		one: 509.574.0839	Telephone:
		Ryan Mathews	Report To (PM):		Yakima, WA 98901		City, State, Zip:
	,	Tri Tech Skills Center, Kennewick, WA	Location:		406 North Second Street		Address:
	CARR	162017 Colle	Project No:	ing	Fulcrum Environmental Consulting	Fulcrun	Client:
Pag	age	Kennewick SD - Tri Tech Skills Center Follow-Up Sampling	Project Name:		Fax: 206-352-7178	Seattle, WA 98103 Fa	Seattle,
je 19					Tel: 206-352-3790	3600 Fremont Ave N. Te	3600 Fr
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ATTACHMENT F

Fixture Style Photographs







Sample TTS122116-P-KF-05: **23 \mug/L** initial lead concentration. Fixture style above is identified producing elevated lead concentrations.



Sample TTS122116-P-CF-34: **28 \mug/L** initial lead concentration. Fixture style above is identified producing elevated lead concentrations.



Sample TTS122116-P-DF-15: **15 μg/L** initial lead concentration. Drinking fountain above is identified producing elevated lead concentrations.



Sample TTS122116-P-KF-10: 2 μ g/L initial lead concentration. Same fixture style as CF-34 and KF-27 identified producing elevated lead concentrations.





Sample TTS122116-P-KF-26: **30 µg/L** initial lead concentration. Fixture style above is identified producing elevated lead concentrations.



Sample TTS122116-P-KF-28: **41 \mug/L** initial lead concentration. Fixture style above is identified producing elevated lead concentrations.

