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

RE: Kennewick School District - Sagecrest Elementary Drinking Wat Work Order Number: 1702138

February 14, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 35 sample(s) on 2/13/2017 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: Project: Work Order:	Fulcrum Environmental Kennewick School District - Sagecrest Elem 1702138	Work Order S	Sample Summary
Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1702138-001	SCE21117-P-KF-01	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-002	SCE21117-P-KF-02	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-003	SCE21117-P-CF-06	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-004	SCE21117-P-CDF-07	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-005	SCE21117-S-CDF-07	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-006	SCE21117-T-CDF-07	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-007	SCE21117-P-CDF-08	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-008	SCE21117-S-CDF-08	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-009	SCE21117-T-CDF-08	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-010	SCE21117-P-CF-09	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-011	SCE21117-P-NF-12	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-012	SCE21117-P-OF-13	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-013	SCE21117-P-OF-14	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-014	SCE21117-P-CDF-15	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-015	SCE21117-S-CDF-15	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-016	SCE21117-T-CDF-15	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-017	SCE21117-P-CF-16	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-018	SCE21117-P-CDF-17	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-019	SCE21117-S-CDF-17	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-020	SCE21117-T-CDF-17	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-021	SCE21117-P-CF-18	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-022	SCE21117-S-CF-18	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-023	SCE21117-T-CF-18	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-024	SCE21117-P-KF-19	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-025	SCE21117-P-KF-20	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-026	SCE21117-P-CDF-21	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-027	SCE21117-P-CF-22	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-028	SCE21117-P-CDF-23	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-029	SCE21117-P-CF-24	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-030	SCE21117-P-OF-25	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-031	SCE21117-P-CDF-28	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-032	SCE21117-P-CF-29	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-033	SCE21117-P-CF-30	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-034	SCE21117-P-CF-31	02/11/2017 7:30 AM	02/13/2017 9:43 AM
1702138-035	SCE21117-P-CDF-32	02/11/2017 7:30 AM	02/13/2017 9:43 AM



Case Narrative

Date: 2/14/2017

CLIENT: Fulcrum Environmental

Project:

Kennewick School District - Sagecrest Elementary Drinking Water 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:

1702138-001A 206724:	Prep Comments	s for EPA200	.8. Sample 17	702138-001A: ⁻	Turbidity: 0.00 NTU
1702138-002A 206725:					
1702138-003A 206726:	•				
1702138-004A 206727:					
1702138-007A 206728:	•				
1702138-010A 206729:					
1702138-011A 206730:	•				
1702138-012A 206731:					
1702138-013A 206732:					
1702138-014A 206733:					
1702138-017A 206734:	•				
1702138-018A 206735:					
1702138-021A 206736:					
1702138-024A 206737:	•				
1702138-025A 206740:					
1702138-026A 206744:					
1702138-027A 206745:					
1702138-028A 206746:	•				
1702138-029A 206747:					
1702138-030A 206748:	•				
1702138-031A 206749:					
1702138-032A 206750:					
1702138-033A 206751:	Prep Comments	s for EPA200	.8, Sample 17	702138-033A: ⁻	Turbidity: 0.27 NTU
1702138-034A 206752:	Prep Comments	s for EPA200	.8, Sample 17	702138-034A: ⁻	Turbidity: 0.07 NTU
1702138-035A 206753:	Prep Comments	s for EPA200	.8, Sample 17	702138-035A: ⁻	Turbidity: 0.03 NTU

Qualifiers & Acronyms



WO#: **1702138** Date Reported: **2/14/2017**

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:
 1702138

 Date Reported:
 2/14/2017

CLIENT: Fulcrum Environmental

Project: Kennewick School District - Sagecrest Elementary Drinking Water Sampli

Lab ID: 1702138-001 Client Sample ID: SCE21117-I	Collection		2/11/2017 7:30:00 AM Water		
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8			Batcl	n ID: 16	210 Analyst: TN
Copper	781	0.500	µg/L	1	2/13/2017 4:54:47 PM

Lab ID: 1702138-002 Client Sample ID: SCE21117-P-KF	Collection Matrix: D		2/11/2017 7:30:00 AM Water		
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Meth	Batch	ID: 162	10 Analyst: TN		
Copper	626	0.500	µg/L	1	2/13/2017 4:58:23 PM
Lab ID: 1702138-003 Client Sample ID: SCE21117-P-CF Analyses	-06 Result	RL Qual	Collection Matrix: D Units		2/11/2017 7:30:00 AM Water Date Analyzed
Drinking Water Metals by EPA Meth	nod 200.8		Batch	ID: 162	10 Analyst: TN

0.500

µg/L

1

863

Copper

2/13/2017 5:02:00 PM



 Work Order:
 1702138

 Date Reported:
 2/14/2017

CLIENT: Fulcrum Environmental

Project: Kennewick School District - Sagecrest Elementary Drinking Water Sampli

Lab ID: 1702138-004 Client Sample ID: SCE21117-P-0	n Date: Drinking	2/11/2017 7:30:00 AM Water			
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8			Batcl	h ID: 16	210 Analyst: TN
Copper	925	0.500	µg/L	1	2/13/2017 5:05:36 PM

Lab ID: 1702138-007 Client Sample ID: SCE21117-P-CD	Collection Date: 2/11/2017 7:30:00 AM Matrix: Drinking Water				
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Metho	Batch	ID: 162	210 Analyst: TN		
Copper	1,210	0.500	μg/L	1	2/13/2017 5:09:13 PM
Lab ID: 1702138-010 Collection Date: 2/11/2017 7:30:00 AM Client Sample ID: SCE21117-P-CF-09 Matrix: Drinking Water					

Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8			Batch	n ID: 162	210 Analyst: TN
Copper	1,170	0.500	µg/L	1	2/13/2017 5:20:03 PM



 Work Order:
 1702138

 Date Reported:
 2/14/2017

CLIENT: Fulcrum Environmental

Project: Kennewick School District - Sagecrest Elementary Drinking Water Sampli

Lab ID: 1702138-011 Client Sample ID: SCE21117-P	Collection Matrix:		2/11/2017 7:30:00 AM Water		
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				n ID: 16	210 Analyst: TN
Copper	890	0.500	µg/L	1	2/13/2017 5:23:40 PM

Lab ID: 1702138-012 Client Sample ID: SCE21117-P-OF	Collection Date: 2/11/2017 7:30:00 AM Matrix: Drinking Water					
Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Meth		Batch	ID: 162	10 Analyst: TN		
Copper	853	0.500		µg/L	1	2/13/2017 5:27:16 PM
Lab ID: 1702138-013 Client Sample ID: SCE21117-P-OF	-14			Collection Matrix: Dr		2/11/2017 7:30:00 AM Water
Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Meth	od 200.8			Batch	ID: 162	10 Analyst: TN

0.500

µg/L

1

1,030

Copper

2/13/2017 5:30:53 PM



 Work Order:
 1702138

 Date Reported:
 2/14/2017

CLIENT: Fulcrum Environmental

Project: Kennewick School District - Sagecrest Elementary Drinking Water Sampli

Lab ID: 1702138-014 Client Sample ID: SCE21117-	Collection Matrix:		2/11/2017 7:30:00 AM Water		
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8			Batcl	h ID: 16	210 Analyst: TN
Copper	793	0.500	µg/L	1	2/13/2017 5:34:29 PM

Lab ID: 1702138-017 Client Sample ID: SCE21117-	Collection Date: 2/11/2017 7:30:00 AM Matrix: Drinking Water				
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA	<u>Method 200.8</u>		Batch	n ID: 162	210 Analyst: TN
Copper	964	0.500	µg/L	1	2/13/2017 5:38:05 PM
Lab ID: 1702138-018 Client Sample ID: SCE21117-	P-CDF-17		Collection Matrix: D		2/11/2017 7:30:00 AM Nater
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA	Method 200.8		Batch	n ID: 162	210 Analyst: TN
Copper	881	0.500	µg/L	1	2/13/2017 5:41:41 PM



 Work Order:
 1702138

 Date Reported:
 2/14/2017

CLIENT: Fulcrum Environmental

Project: Kennewick School District - Sagecrest Elementary Drinking Water Sampli

Lab ID: 1702138-021 Client Sample ID: SCE21117-P-	Collection Matrix:		2/11/2017 7:30:00 AM Water		
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				n ID: 16	210 Analyst: TN
Copper	1,050	0.500	µg/L	1	2/13/2017 5:45:18 PM

Lab ID: 1702138-024 Client Sample ID: SCE21117-P-K		Collection Date: 2/11/2017 7:30:00 AM Matrix: Drinking Water				
Analyses	Result	RL Qual	Units	DF	Date Analyzed	
Drinking Water Metals by EPA Met	<u>hod 200.8</u>		Batch	n ID: 16	210 Analyst: TN	
Copper	1,070	0.500	µg/L	1	2/13/2017 5:48:55 PM	
Lab ID: 1702138-025					2/11/2017 7:30:00 AM	
Client Sample ID: SCE21117-P-K	F-20		Matrix: D	rinking	Water	
Analyses	Result	RL Qual	Units	DF	Date Analyzed	
Drinking Water Metals by EPA Met	<u>hod 200.8</u>		Batch	n ID: 16	211 Analyst: TN	

0.500

µg/L

1

1,010

Copper

2/13/2017 7:51:41 PM



 Work Order:
 1702138

 Date Reported:
 2/14/2017

CLIENT: Fulcrum Environmental

Project: Kennewick School District - Sagecrest Elementary Drinking Water Sampli

Lab ID: 1702138-026 Client Sample ID: SCE21117-F	Collection Date: 2/11/2017 7:30:00 AM Matrix: Drinking Water				
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA M	lethod 200.8		Batcl	h ID: 16	211 Analyst: TN
Copper	1,060	0.500	µg/L	1	2/13/2017 8:13:22 PM

Lab ID: 1702138-027 Client Sample ID: SCE21117-P-CF	Collection Date: 2/11/2017 7:30:00 AM Matrix: Drinking Water				
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Meth	<u>od 200.8</u>		Batch	n ID: 162	211 Analyst: TN
Copper	588	0.500	µg/L	1	2/13/2017 8:16:58 PM
Lab ID: 1702138-028 Client Sample ID: SCE21117-P-CD		PL Qual	Matrix: D	rinking	
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Meth	<u>od 200.8</u>		Batch	n ID: 162	211 Analyst: TN

0.500

µg/L

1

853

Copper

2/13/2017 8:20:34 PM



Drinking Water Metals by EPA Method 200.8

Analytical Report

 Work Order:
 1702138

 Date Reported:
 2/14/2017

CLIENT: Fulcrum Environmental

Project: Kennewick School District - Sagecrest Elementary Drinking Water Sampli

Lab ID: 1702138-029 Client Sample ID: SCE21117-P-C	Collection Date: 2/11/2017 7:30:00 AM Matrix: Drinking Water				
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Met	<u>hod 200.8</u>		Batcl	n ID: 16	211 Analyst: TN
Copper	998	0.500	µg/L	1	2/13/2017 8:24:11 PM

Lab ID: 1702138-030 Client Sample ID: SCE21117-	Collection Date: 2/11/2017 7:30:00 AM Matrix: Drinking Water				
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA	<u>Method 200.8</u>		Batcl	h ID: 162	211 Analyst: TN
Copper	1,070	0.500	µg/L	1	2/13/2017 8:27:47 PM
Lab ID: 1702138-031 Client Sample ID: SCE21117-	B-CDE-28		Collection Matrix:		2/11/2017 7:30:00 AM
Analyses	Result	RL Qual	Units	DF	Date Analyzed

0.500

652

Batch ID: 16211

1

µg/L

Copper

Analyst: TN

2/13/2017 8:31:23 PM



 Work Order:
 1702138

 Date Reported:
 2/14/2017

CLIENT: Fulcrum Environmental

Project: Kennewick School District - Sagecrest Elementary Drinking Water Sampli

Lab ID: 1702138-032 Client Sample ID: SCE21117-P-	CF-29		Collection Matrix:		2/11/2017 7:30:00 AM Water
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Me	ethod 200.8		Batcl	h ID: 16	211 Analyst: TN
Copper	960	0.500	µg/L	1	2/13/2017 8:35:00 PM

Lab ID: 1702138-033 Client Sample ID: SCE21117-P-CF		Collection Date: 2/11/2017 7:30:00 AM Matrix: Drinking Water			
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Meth	od 200.8		Batch	n ID: 162	211 Analyst: TN
Copper	1,000	0.500	µg/L	1	2/13/2017 8:38:36 PM
Lab ID: 1702138-034 Client Sample ID: SCE21117-P-CF	-31		Collection Matrix: D		2/11/2017 7:30:00 AM Water
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Meth	od 200.8		Batch	n ID: 162	211 Analyst: TN

0.500

µg/L

1

ND

Copper

2/13/2017 8:42:13 PM



 Work Order:
 1702138

 Date Reported:
 2/14/2017

CLIENT: Fulcrum Environmental

Project: Kennewick School District - Sagecrest Elementary Drinking Water Sampli

Lab ID: 1702138-035 Client Sample ID: SCE21117-P-	Collection Date: 2/11/2017 7:30:00 AM Matrix: Drinking Water				
Analyses	Result	RL Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Me	ethod 200.8		Batch	n ID: 16	211 Analyst: TN
Copper	1,200	0.500	µg/L	1	2/13/2017 8:45:49 PM



Work Order:	1702138							QC	SUMMARY REF	PORT
CLIENT:	Fulcrum Env	vironmental					F	• -		-
Project:	Kennewick S	School District - Sage	ecrest Ele	em			L	Water W	etals by EPA Metho	u 200.0
Sample ID MB-16	6211	SampType: MBLK			Units: µg/L		Prep Date:	2/13/2017	RunNo: 34434	
Client ID: MBLK	Ŵ	Batch ID: 16211					Analysis Date:	2/13/2017	SeqNo: 657292	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit RPD Ref Val	%RPD RPDLimit	Qual
Copper		ND	0.500							
Sample ID LCS-1	6211	SampType: LCS			Units: µg/L		Prep Date:	2/13/2017	RunNo: 34434	
Client ID: LCSW	I	Batch ID: 16211					Analysis Date:	2/13/2017	SeqNo: 657293	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit RPD Ref Val	%RPD RPDLimit	Qual
Copper		90.7	0.500	100.0	0	90.7	85	115		
Sample ID 17021	38-025ADUP	SampType: DUP			Units: µg/L		Prep Date:	2/13/2017	RunNo: 34434	
Client ID: SCE2	1117-P-KF-20	Batch ID: 16211					Analysis Date:	2/13/2017	SeqNo: 657295	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit RPD Ref Val	%RPD RPDLimit	Qual
Copper		987	0.500					1,008	2.03 30	
Sample ID 17021	38-025AMS	SampType: MS			Units: µg/L		Prep Date:	2/13/2017	RunNo: 34434	
Client ID: SCE2	1117-P-KF-20	Batch ID: 16211					Analysis Date:	2/13/2017	SeqNo: 657296	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit RPD Ref Val	%RPD RPDLimit	Qual
Copper NOTES:		1,140	0.500	200.0	1,008	65.9	70	130		S
S - Outlying spil	ke recovery(ies) o	bserved. A duplicate ana	ysis was pe	erformed and r	ecovered within ran	ge.				
Sample ID 17021	38-025AMSD	SampType: MSD			Units: µg/L		Prep Date:	2/13/2017	RunNo: 34434	
Client ID: SCE2	1117-P-KF-20	Batch ID: 16211					Analysis Date:	2/13/2017	SeqNo: 657297	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit H	lighLimit RPD Ref Val	%RPD RPDLimit	Qual
Copper		1,150	0.500	200.0	1,008	71.8	70	130 1,139	1.03 30	



Work Order:	1702138									QC S	SUMMA	RY REF	PORT
CLIENT:	Fulcrum En								Drinkin	g Water Me			
Project:	Kennewick	School Distr	ict - Sage	ecrest Ele	m				DIIIKII	y water me		Ametho	u 200.
Sample ID MB-16	210	SampType	MBLK			Units: µg/L		Prep Dat	e: 2/13/2	017	RunNo: 344	432	
Client ID: MBLK	W	Batch ID:	16210					Analysis Dat	e: 2/13/2	017	SeqNo: 657	7198	
Analyte		R	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper			ND	0.500									
Sample ID LCS-16	6210	SampType	LCS			Units: µg/L		Prep Dat	e: 2/13/2	017	RunNo: 344	432	
Client ID: LCSW		Batch ID:	16210					Analysis Dat	e: 2/13/2	017	SeqNo: 657	7199	
Analyte		R	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper			93.2	0.500	100.0	0	93.2	85	115				
Sample ID 170213	37-001ADUP	SampType	DUP			Units: µg/L		Prep Dat	e: 2/13/2	017	RunNo: 344	432	
Client ID: BATCH	4	Batch ID:	16210					Analysis Dat	e: 2/13/2	017	SeqNo: 657	7201	
Analyte		R	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper			676	0.500						677.5	0.160	30	
Sample ID 170213	37-001AMS	SampType	MS			Units: µg/L		Prep Dat	e: 2/13/2	017	RunNo: 344	432	
Client ID: BATCH	4	Batch ID:	16210					Analysis Dat	e: 2/13/2	017	SeqNo: 657	7202	
Analyte		R	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper			869	0.500	200.0	677.5	95.8	70	130				
Sample ID 170213	37-001AMSD	SampType	MSD			Units: µg/L		Prep Dat	e: 2/13/2	017	RunNo: 344	432	
Client ID: BATCH	4	Batch ID:	16210					Analysis Dat	e: 2/13/2	017	SeqNo: 657	7203	
Analyte		R	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper			830	0.500	200.0	677.5	76.3	70	130	869.0	4.57	30	



Sample Log-In Check List

lient Name: FE	Work Order Num	ber: 1702138	
ogged by: Erica Silva	Date Received:	2/13/2017	7 9:43:00 AM
in of Custody			
Is Chain of Custody complete?	Yes 🖌	No 🗌	Not Present
How was the sample delivered?	<u>FedEx</u>		
In			
	Yes 🗹	No 🗌	
Shipping container/cooler in good condition?	Yes 🖌	No 🗌	
Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact)	Yes	No 🗹	Not Required
Was an attempt made to cool the samples?	Yes 🖌	No 🗌	
Were all items received at a temperature of >0°C to 10.0°C	* Yes 🗹	No 🗌	NA 🗌
Sample(s) in proper container(s)?	Yes 🖌	No 🗌	
Sufficient sample volume for indicated test(s)?	Yes 🔽	No 🗌	
Are samples properly preserved?	Yes 🖌	No 🗌	
Was preservative added to bottles?	Yes 🖌	No 🗌	NA 🗌
Is there headsnace in the VOA vials?	Yes 🗌	No 🗌	HNO3 NA 🗹
	Yes 🗹	No 🗌	
Are matrices correctly identified on Chain of Quated 2			
	_		
		_	
<u>cial Handling (if applicable)</u>			
Was client notified of all discrepancies with this order?	Yes	No 🗌	NA 🗹
Person Notified:	Date		
By Whom:	Via: 🗌 eMail 🗌 Ph	one 🗌 Fax	In Person
Regarding:			
Client Instructions:			
	in of Custody Is Chain of Custody complete? How was the sample delivered? LIn Coolers are present? Shipping container/cooler in good condition? Custody Seals present on shipping container/cooler? (Refer to comments for Custody Seals not intact) Was an attempt made to cool the samples? Were all items received at a temperature of >0°C to 10.0°C Sample(s) in proper container(s)? Sufficient sample volume for indicated test(s)? Are samples properly preserved? Was preservative added to bottles? Is there headspace in the VOA vials? Did all samples containers arrive in good condition(unbroker Does paperwork match bottle labels? Are matrices correctly identified on Chain of Custody? Is it clear what analyses were requested? Were all holding times able to be met? Cial Handling (if applicable) Was client notified of all discrepancies with this order? Person Notified: By Whom: Regarding:	in of Custody Is Chain of Custody complete? Yes ✔ How was the sample delivered? FedEx LIn Coolers are present? Yes ✔ Coolers are present? Yes ✔ ✓ Shipping container/cooler in good condition? Yes ✔ ✓ Custody Seals present on shipping container/cooler? Yes ✔ ✓ Was an attempt made to cool the samples? Yes ✔ ✓ Were all items received at a temperature of >0°C to 10.0°C* Yes ✔ ✓ Sufficient sample volume for indicated test(s)? Yes ✔ ✓ Are samples properly preserved? Yes ✔ ✓ Was preservative added to bottles? Yes ✔ ✓ Did all samples containers arrive in good condition(unbroken)? Yes ✔ ✓ Did all samples containers arrive in good condition(unbroken)? Yes ✔ ✓ Are matrices correctly identified on Chain of Custody? Yes ✔ ✓ Vere all holding times able to be met? Yes ✔ ✓ Was client notified of all discrepancies with this order? Yes ✔ ✓ Dist clear what analyses were requested? Yes ✔ ✓ Were all holding times able to be met? </td <td>win of Custody Is Chain of Custody complete? Yes ✓ No How was the sample delivered? EadEx Lin Coolers are present? Yes ✓ No Coolers are present? Yes ✓ No ○ Shipping container/cooler in good condition? Yes ✓ No ○ Custody Seals present on shipping container/cooler? Yes ✓ No ○ Was an attempt made to cool the samples? Yes ✓ No ○ Were all items received at a temperature of >0°C to 10.0°C° Yes ✓ No ○ Sample(s) in proper container(s)? Yes ✓ No ○ Sufficient sample volume for indicated test(s)? Yes ✓ No ○ Sufficient sample volume for indicated test(s)? Yes ✓ No ○ Mas preservative added to bottles? Yes ✓ No ○ Is there headspace in the VOA vials? Yes ✓ No ○ Did all samples containers arrive in good condition(unbroken)? Yes ✓ No ○</td>	win of Custody Is Chain of Custody complete? Yes ✓ No How was the sample delivered? EadEx Lin Coolers are present? Yes ✓ No Coolers are present? Yes ✓ No ○ Shipping container/cooler in good condition? Yes ✓ No ○ Custody Seals present on shipping container/cooler? Yes ✓ No ○ Was an attempt made to cool the samples? Yes ✓ No ○ Were all items received at a temperature of >0°C to 10.0°C° Yes ✓ No ○ Sample(s) in proper container(s)? Yes ✓ No ○ Sufficient sample volume for indicated test(s)? Yes ✓ No ○ Sufficient sample volume for indicated test(s)? Yes ✓ No ○ Mas preservative added to bottles? Yes ✓ No ○ Is there headspace in the VOA vials? Yes ✓ No ○ Did all samples containers arrive in good condition(unbroken)? Yes ✓ No ○

HNO3 added to 005A, 006A, 008A, 009A, 015A, 016A, 019A, 020A, 022A, 023A

Item Information

Item #	Temp ⁰C
Cooler	3.2
Sample	3.3

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

		Chain of Cu	istody Record and La	Chain of Custody Record and Laboratory Services Agreement
	enon		Date: 2/11/2017	Laboratory Project No (internal): 170213X 20
3600 Fremont Ave N.	Tel: 206-352-3790			Page:
Seattle, WA 98103	Fax: 206-352-7178	Project Name:	Kennewick School District - Sagecres	0 Ofference of the second
Client:	Fulcrum Environmental Consulting	Project No:	162017.18 Col	c bostron
Address:	406 North Second Street	Location:	ıry, Kennewick, W	
City, State, Zip:	Yakima, WA 98901	Report To (PM):	1	a radio semi distanti ori totori sultara di na salari ginti kadajan Oktora.
Telephone:	509.574.0839 Fax:	509.545.8453 PM Email:	rmathews@efulcrum.net; cc: aenbysk@efulcrum.net	efulcrum.net
*Matrix Codes: A = Air, AQ = A	AQ = Aqueous, B = Bulk, O = Other, P = Product,	S = Soil, SD = Sediment, SL = Solid, W = Water,	g Water, GW = Ground Water,	SW = Storm Water, WW = Waste Water
	Sample Date Time	Sample South and a state of the state of th		Comments
SCE21117-P-KF-01	2/11/2017 07-30			this priserved
SCE21117-P-KF-02	2/11/2017	DW		
SCE21117-P-CF-06	2/11/2017			
SCE21117-P-CDF-07	2/11/2017	DW		
SCE21117-S-CDF-07	2/11/2017			How inpreserved
SCE21117-T-CDF-07	2/11/2017	DW		
SCE21117-P-CDF-08	2/11/2017	DW		HND3 preserved
SCE21117-S-CDF-08	2/11/2017	DW		HOLD; unpreserved
SCE21117-T-CDF-08	2/11/2017	DW		
SCE21117-P-CF-09	2/11/2017	DW	<u>()</u>	HUO3 preserved
Sircle):	MTCA-5 RCRA-8 Priority Pollutants	ts TAL Individual: Ag Al As B Ba Be Ca Cd	Co Cr Cu Fe Hg K Mg Mn Mo Na Ni	Pb Sb Se Sr Sn Ti TI U V Zn
***Anions (Circle): Nitrate	Nitrite Chloride	Bromide O-Phosphate Fluoride Nitr	Nitrate+Nitrite Turn-around times for samples	
Sample Disposal:	Return to Client Disposal by assessed if s	Disposal by Lab (Samples will be held for 30 days unless otherwise noted. A tee may be assessed if samples are retained after 30 days.)	d. A tee may be on the following business day.	please proserve around the pro-
I represent that I am authors agreement to each of the ter	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.	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.	d above, that I have verified Client's	
Relipquished MUCK	Date/Time	x Received X 2/3	Shirt MAR	TAT: ASAP
Relinquished	Date/Time	Received	bate/Time	TAT → SameDay^ NextDay^ 2 Day 3 Day STD
×		×		^Please coordinate with the lab in advance

Free Pre-	remont		Chain of Custody Re		11/2017 Laboratory Project No (Internal): 1702138 20
3600 Fremont Ave N. Seattle, WA 98103	Tel: 206-352-3790 Fax: 206-352-7178		Project Name:	Kennewick School District - Sagecrest	Page: of:4
Client:	Fulcrum Environmental Consulting	Bu	Project No:	162017.18 Coll	collected by Annaly Entrysk o Nede Bostrom
Address:	406 North Second Street		Location:	Sagecrest Elementary, Kennewick, WA	
City, State, Zip:	Yakima, WA 98901	the service services and the pass	Report To (PM):	Ryan Mathews	ndinect daimeans, nonnergiocht al dinnongeus, lost stollter et cont
Telephone:	509.574.0839 Fa	Fax: 509.545.8453	PM Email:	rmathews@efulcrum.net; cc: aenbysk@efulcrum.net	efulcrum.net
*Matrix Codes: A = Air, AQ =	AQ = Aqueous, B = Bulk, O = Other, P = Product,	sample	SL = Solid, W = Water, DW	ng Water, GW = Ground Water,	sw = storm Water, WW = Waste Water
SCE21117-P-NF-12	2/11/2017 0450	DW			HNO3 preserved
SCE21117-P-OF-13	2/11/2017	DW	Ring general engeneration from		unity and the state and the source of the so
SCE21117-P-OF-14	2/11/2017	DW			
SCE21117-P-CDF-15	2/11/2017	DW	A MARK A STATE AND A STATE		Here is a second second of the second of th
SCE21117-S-CDF-15	2/11/2017	DW			HOLD; unpreserved
SCE21117-T-CDF-15	2/11/2017	DW	Solution of the local of		
SCE21117-P-CF-16	2/11/2017	DW	a spints () there are no an		HNO3 preserved
SCE21117-P-CDF-17	2/11/2017	DW			F
SCE21117-S-CDF-17	2/11/2017	DW	ent od barenar		HOLD, unpriserved
SCE21117-T-CDF-17	2/11/2017	DW			~
**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	Pb Sb Se Sr Sn Ti TI U V Zn
***Anions (Circle): Nitrate	Nitrite Chloride	te Bromide O-Phosphate	phate Fluoride Nitra	Nitrate+Nitrite Turn-around times for samples received after 4:00pm will begin	Special Remarks:
Sample Disposal:	Return to Client Disposal assessed	Disposal by Lab (Samples will be held for 30 da assessed if samples are retained after 30 da assesses are retained after 30 da assesse	Disposal by Lab (Samples will be held for 30 days unless otherwise noted. A tee may be assessed if samples are retained after 30 days.)		
I represent that I am auth agreement to each of the te	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.	with Fremont Analytical or is Agreement.	n behalf of the Client named	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.	se puge +
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3600 Fremont Ave N.	Tel: 206	Tel: 206-352-3790					vitreanter s Mutas red					Page:	3 of:	4	nte partire		<u>19 of</u>
Seattle, WA 98103	Fax: 206	Fax: 206-352-7178				Pr	Project Name:	Kenn	ewick Scho	Kennewick School District - Sagecrest Elementary Drinking Water Sampling	- Sagecrest	: Elementa	ry Drinkin	g Water Sa	ampling		age
Client:	Fulcrum Environmental Consulting	onmental Co	nsulting	in the for M	Section 1	P	Project No:	A and a	162017.18	8 THE R	Colle	Collected by:	Imanda 8	Enbysk 2	254	bostrom	Pa
Address:	406 North Second Street	ond Street	ADDREAD THAT	SET STATE	144 C. 144	I SHOLL H LO	Location:	Sagec	rest Element	Sagecrest Elementary, Kennewick, WA	vick, WA			-			
City, State, Zip:	Yakima, WA 98901	8901	me wit ment	other act for s	the life course of	Re	Report To (PM):		Ryan Mathews	incidental di	oni "sagenae	Sumsh treat	est, 0075975	reach feirme	-1642" -023 I	Halfie, or tor	
Telephone:	509.574.0839	NOT WITH WHICH	Fax: 505	Fax: 509.545.8453	2415 10 113	PA	PM Email:	rmath	ews@efulcr	rmathews@efulcrum.net; cc: aenbysk@efulcrum.net	aenbysk@e	fulcrum.net	-				
A = Air,	AQ = Aqueous, B = Bulk,	O = Other,	P = Product,	S = Soil, SD	SD = Sediment, \$	SL = Solid, W	W = Water, DV	DW = Drinking Water,	iter,	GW = Ground Water, SW = Storm Water, WW = Waste Water	er, SW = Sto	rm Water, V	VW = Waste	Water	THEFT AND THE	The solution of the	1001 - 1001 27 - 1001
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**Metals Analysis (Circle):	MTCA-5 RCRA-8	1376	Priority Pollutants	TAL	Individual: Ag	Al As B	Ba Be Ca (cd co cr Cu	Fe Hg	K Mg Mn Mo Na	Na Ni Pb	Sb Se Sr	Sn Ti TI (UVZn	and the street	Line for striking	
***Anions (Circle): Nitrate	te Nitrite	Chloride	Sulfate	Bromide	O-Phosphate	ate Fluc	Fluoride Ni	Nitrate+Nitrite		Turn-around times for samples received after 4:00pm will begin	n will begin	Special Remarks:	iarks:				
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I represent that I am authorized to enter into this Agreement with Fremont Analytical op-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.	horized to enter i erms on the from	nto this Agree t and backsid	ement with e of this Ag	Fremont Ar reement.	alytical on-	sehalf of the	Client nam	ed above, th	at I have ve	rified Clien	ıt's	Sec	page 1	F			
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ent's Sa page I	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 greement to each of the terms on the front and backside of this Agreement.	nt with Fremont Analyt this Agreement.	er into this Agreemen ront and backside of t	terms on the fi	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.
	on the following business day.	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 da assessed if samples are retained after 30 days.	ent Disposal assessed	Return to Client	Sample Disposal:
n will begin	_	O-Phosphate Fluoride Nitra	Sulfate Bromide (Chloride Sul	ate Nitrite	***Anions (Circle): Nitrate
∧o Na Ni Pb Sb Se Sr Sn Ti TI U V Zn	Co Cr Cu Fe Hg K Mg Mn Mo Na Ni	Individual: Ag Al As B Ba Be Ca Cd	TAL	RCRA-8 Priority Pollutants	MTCA-5	**Metals Analysis (Circle):
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Comments	AREAST & CO SAM	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Sample Type (Matrix)*	Sample Sample Date Time		Sample Name
GW = Ground Water, SW = Storm Water, WW = Waste Water	ting Water,	SD = Sediment, SL = Solid, W = Water, DW	P = Product, S = Soil, SD = Se	B = Bulk, O = Other, P =	AQ = Aqueous, B	*Matrix Codes: A = Air, AC
: aenbysk@efulcrum.net	rmathews@efulcrum.net; cc: aenbysk@efulcrum.net	PM Email:	Fax: 509.545.8453	THE PROPERTY	509.574.0839	Telephone:
and manages, made ages again and concerning a barranges, for controls,	Ryan Mathews	Report To (PM):	manufactures for the loss of the	VA 98901	Yakima, WA 98901	City, State, Zip:
	Sagecrest Elementary, Kennewick, WA	Location:		406 North Second Street	406 North	Address:
Kennewick School District - Sagecrest Elementary Drinking Water Sampling	Kennewick School District 162017.18	Project Name: Project No:	llting	Fulcrum Environmental Consulting	Fulcrum E	Client:
Page:4 of:4				Tel: 206-352-3790 Fax: 206-352-7178		3600 Fremont Ave N. Seattle, WA 98103
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