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

RE: Kennewick SD Drinking Water-Chinook MS

Work Order Number: 1705257

May 22, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 31 sample(s) on 5/22/2017 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

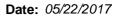
All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

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 Drinking Water-Chinook MS

Work Order: 1705257

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1705257-001	CHK52017-P-KF-03	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-002	CHK52017-P-KF-04	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-003	CHK52017-S-KF-04	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-004	CHK52017-T-KF-04	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-005	CHK52017-P-CDF-05	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-006	CHK52017-P-CF-06	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-007	CHK52017-P-OF-11	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-008	CHK52017-S-OF-11	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-009	CHK52017-T-OF-11	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-010	CHK52017-P-CF-16	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-011	CHK52017-P-CF-17	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-012	CHK52017-P-CF-18	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-013	CHK52017-P-CF-19	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-014	CHK52017-P-KF-20	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-015	CHK52017-S-KF-20	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-016	CHK52017-T-KF-20	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-017	CHK52017-P-KF-21	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-018	CHK52017-P-KF-22	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-019	CHK52017-P-KF-23	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-020	CHK52017-P-CF-24	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-021	CHK52017-P-CF-25	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-022	CHK52017-P-KF-26	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-023	CHK52017-P-KF-27	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-024	CHK52017-P-OF-28	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-025	CHK52017-P-WC-31	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-026	CHK52017-P-NF-33	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-027	CHK52017-P-OF-34	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-028	CHK52017-S-OF-34	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-029	CHK52017-T-OF-34	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-030	CHK52017-P-WC-35	05/20/2017 8:30 AM	05/22/2017 9:56 AM
1705257-031	CHK52017-P-WC-36	05/20/2017 8:30 AM	05/22/2017 9:56 AM



Case Narrative

WO#: **1705257**Date: **5/22/2017**

CLIENT: Fulcrum Environmental

Project: Kennewick SD Drinking Water-Chinook MS

WorkOrder Narrative:

I. SAMPLE RECEIPT:

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

II. GENERAL REPORTING COMMENTS:

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

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

III. ANALYSES AND EXCEPTIONS:

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

Prep Sample Comments:

1705257-001A 220412: Prep Comments for EPA200.8, Sample 1705257-001A: Turbidity: 0.03 NTU 1705257-002A 220413: Prep Comments for EPA200.8, Sample 1705257-002A: Turbidity: 0.01 NTU 1705257-005A 220414: Prep Comments for EPA200.8, Sample 1705257-005A: Turbidity: 0.16 NTU 1705257-006A 220415: Prep Comments for EPA200.8, Sample 1705257-006A: Turbidity: 0.23 NTU 1705257-007A 220416: Prep Comments for EPA200.8, Sample 1705257-007A: Turbidity: 0.25 NTU 1705257-010A 220417: Prep Comments for EPA200.8, Sample 1705257-010A: Turbidity: 0.13 NTU 1705257-011A 220418: Prep Comments for EPA200.8, Sample 1705257-011A: Turbidity: 0.19 NTU 1705257-012A 220419: Prep Comments for EPA200.8, Sample 1705257-012A: Turbidity: 0.06 NTU 1705257-013A 220420: Prep Comments for EPA200.8, Sample 1705257-013A: Turbidity: 0.08 NTU 1705257-014A 220421: Prep Comments for EPA200.8, Sample 1705257-014A: Turbidity: 0.06 NTU 1705257-017A 220422: Prep Comments for EPA200.8, Sample 1705257-017A: Turbidity: 0.16 NTU 1705257-018A 220423: Prep Comments for EPA200.8, Sample 1705257-018A: Turbidity: 0.27 NTU 1705257-019A 220426: Prep Comments for EPA200.8, Sample 1705257-019A: Turbidity: 0.12 NTU 1705257-020A 220430: Prep Comments for EPA200.8, Sample 1705257-020A: Turbidity: 0.18 NTU 1705257-021A 220431: Prep Comments for EPA200.8, Sample 1705257-021A: Turbidity: 0.22 NTU 1705257-022A 220432: Prep Comments for EPA200.8, Sample 1705257-022A: Turbidity: 0.30 NTU 1705257-023A 220433: Prep Comments for EPA200.8, Sample 1705257-023A: Turbidity: 0.13 NTU 1705257-024A 220434: Prep Comments for EPA200.8, Sample 1705257-024A: Turbidity: 0.59 NTU 1705257-025A 220435: Prep Comments for EPA200.8, Sample 1705257-025A: Turbidity: 0.33 NTU 1705257-026A 220436: Prep Comments for EPA200.8, Sample 1705257-026A: Turbidity: 0.81 NTU 1705257-027A 220437: Prep Comments for EPA200.8, Sample 1705257-027A: Turbidity: 0.26 NTU 1705257-030A 220438: Prep Comments for EPA200.8, Sample 1705257-030A: Turbidity: 0.01 NTU 1705257-031A 220439: Prep Comments for EPA200.8, Sample 1705257-031A: Turbidity: 0.01 NTU



Qualifiers & Acronyms

WO#: **1705257**

Date Reported: 5/22/2017

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: 1705257

Date Reported: 5/22/2017

CLIENT: Fulcrum Environmental

Project: Kennewick SD Drinking Water-Chinook MS

Lab ID: 1705257-001 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-KF-03 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 17121 Analyst: TN

Copper 661 0.500 µg/L 1 5/22/2017 11:56:44 AM

Lab ID: 1705257-002 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-KF-04 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8 Batch ID: 17121 Analyst: TN

Copper 885 0.500 μg/L 1 5/22/2017 12:00:46 PM

Lab ID: 1705257-005 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-CDF-05 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

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

Batch ID: 17121 Analyst: TN

Copper 680 0.500 µg/L 1 5/22/2017 12:04:47 PM



Work Order: 1705257

Date Reported: **5/22/2017**

CLIENT: Fulcrum Environmental

Project: Kennewick SD Drinking Water-Chinook MS

Lab ID: 1705257-006 Collection Date: 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-CF-06 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 17121 Analyst: TN

Copper 3,380 0.500 μg/L 1 5/22/2017 12:08:49 PM

Lab ID: 1705257-007 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-OF-11 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8 Batch ID: 17121 Analyst: TN

Copper 657 0.500 μg/L 1 5/22/2017 12:12:50 PM

Lab ID: 1705257-010 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-CF-16 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8 Batch ID: 17121 Analyst: TN

Copper 1,010 0.500 µg/L 1 5/22/2017 12:24:57 PM



Work Order: **1705257**Date Reported: **5/22/2017**

CLIENT: Fulcrum Environmental

Project: Kennewick SD Drinking Water-Chinook MS

Lab ID: 1705257-011 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-CF-17 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 17121 Analyst: TN

Copper 1,150 0.500 μg/L 1 5/22/2017 12:28:58 PM

Lab ID: 1705257-012 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-CF-18 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8 Batch ID: 17121 Analyst: TN

Copper 1,090 0.500 μg/L 1 5/22/2017 12:32:59 PM

Lab ID: 1705257-013 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-CF-19 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

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

Batch ID: 17121

Analyst: TN

Copper 1,100 0.500 µg/L 1 5/22/2017 12:37:01 PM



Work Order: 1705257

Date Reported: **5/22/2017**

CLIENT: Fulcrum Environmental

Project: Kennewick SD Drinking Water-Chinook MS

Lab ID: 1705257-014 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-KF-20 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

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

Batch ID: 17121 Analyst: TN

Copper 1,320 0.500 μg/L 1 5/22/2017 12:41:02 PM

Lab ID: 1705257-017 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-KF-21 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8 Batch ID: 17121 Analyst: TN

Copper 1,270 0.500 μg/L 1 5/22/2017 12:45:03 PM

Client Sample ID: CHK52017-P-KF-22 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

Drinking Water Metals by EPA Method 200.8 Batch ID: 17121 Analyst: TN

Copper 1,070 0.500 µg/L 1 5/22/2017 12:49:05 PM



Work Order: 1705257

Date Reported: **5/22/2017**

CLIENT: Fulcrum Environmental

Project: Kennewick SD Drinking Water-Chinook MS

Lab ID: 1705257-019 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-KF-23 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

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

Batch ID: 17128

Analyst: TN

Copper 1,030 0.500 µg/L 1 5/22/2017 3:50:32 PM

Lab ID: 1705257-020 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-CF-24 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 17128 Analyst: TN

Copper 1,550 0.500 $\mu g/L$ 1 5/22/2017 4:06:36 PM

Lab ID: 1705257-021 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-CF-25 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

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

Batch ID: 17128

Analyst: TN

Copper 1,100 0.500 µg/L 1 5/22/2017 4:10:37 PM



Work Order: 1705257

Date Reported: **5/22/2017**

CLIENT: Fulcrum Environmental

Project: Kennewick SD Drinking Water-Chinook MS

Lab ID: 1705257-022 Collection Date: 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-KF-26 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

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

Batch ID: 17128

Analyst: TN

Copper 874 0.500 µg/L 1 5/22/2017 4:14:38 PM

Lab ID: 1705257-023 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-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: 17128 Analyst: TN

Copper 1,140 0.500 μ g/L 1 5/22/2017 4:18:39 PM

Lab ID: 1705257-024 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-OF-28 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

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

Batch ID: 17128

Analyst: TN

Copper 899 0.500 μg/L 1 5/22/2017 4:30:45 PM



Work Order: 1705257

Date Reported: **5/22/2017**

CLIENT: Fulcrum Environmental

Project: Kennewick SD Drinking Water-Chinook MS

Lab ID: 1705257-025 Collection Date: 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-WC-31 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 17128 Analyst: TN

Copper 1,640 0.500 µg/L 1 5/22/2017 4:34:47 PM

Lab ID: 1705257-026 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-NF-33 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

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

Batch ID: 17128

Analyst: TN

Copper 807 0.500 μg/L 1 5/22/2017 4:38:48 PM

Lab ID: 1705257-027 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-OF-34 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

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

Batch ID: 17128

Analyst: TN

Copper 1,460 0.500 µg/L 1 5/22/2017 4:42:49 PM



Work Order: 1705257

Date Reported: 5/22/2017

CLIENT: Fulcrum Environmental

Project: Kennewick SD Drinking Water-Chinook MS

Client Sample ID: CHK52017-P-WC-35 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 17128 Analyst: TN

Copper 4.70 0.500 μg/L 1 5/22/2017 4:46:51 PM

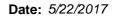
Lab ID: 1705257-031 **Collection Date:** 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-WC-36 Matrix: Drinking Water

Analyses Result RL Qual Units DF Date Analyzed

<u>Drinking Water Metals by EPA Method 200.8</u>
Batch ID: 17128 Analyst: TN

Copper 1,300 0.500 $\mu g/L$ 1 5/22/2017 4:50:52 PM





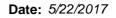
Work Order: 1705257

QC SUMMARY REPORT

CLIENT: Fulcrum Environmental

Project:		SD Drinking Water-C	hinook M	S		Drinking Water Metals by EPA Method 200
Sample ID	MB-17128 MBLKW	SampType: MBLK Batch ID: 17128			Units: µg/L	Prep Date: 5/22/2017 RunNo: 36319 Analysis Date: 5/22/2017 SeqNo: 696099
Analyte		Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Copper		ND	0.500			
Sample ID	LCS-17128	SampType: LCS			Units: µg/L	Prep Date: 5/22/2017 RunNo: 36319
Client ID:	LCSW	Batch ID: 17128				Analysis Date: 5/22/2017 SeqNo: 696100
Analyte		Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Copper		98.3	0.500	100.0	0	98.3 85 115
Sample ID	1705257-019ADUP	SampType: DUP			Units: µg/L	Prep Date: 5/22/2017 RunNo: 36319
Client ID:	CHK52017-P-KF-23	Batch ID: 17128				Analysis Date: 5/22/2017 SeqNo: 696102
Analyte		Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Copper		1,020	0.500			1,029 0.430 30
Sample ID	1705257-019AMS	SampType: MS			Units: µg/L	Prep Date: 5/22/2017 RunNo: 36319
Client ID:	CHK52017-P-KF-23	Batch ID: 17128				Analysis Date: 5/22/2017 SeqNo: 696103
Analyte		Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Copper		1,220	0.500	200.0	1,029	96.8 70 130
Sample ID	1705257-019AMSD	SampType: MSD			Units: µg/L	Prep Date: 5/22/2017 RunNo: 36319
Client ID:	CHK52017-P-KF-23	Batch ID: 17128				Analysis Date: 5/22/2017 SeqNo: 696104
Analyte		Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Copper		1,180	0.500	200.0	1,029	75.0 70 130 1,223 3.63 30

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Work Order: 1705257

QC SUMMARY REPORT

CLIENT: Fulcrum Environmental

	nvironmental k SD Drinking Water-C	hinook M	S		Drinking Water Metals by EPA Method 200
Sample ID MB-17121	SampType: MBLK			Units: µg/L	Prep Date: 5/22/2017 RunNo: 36308
Client ID: MBLKW	Batch ID: 17121				Analysis Date: 5/22/2017 SeqNo: 695842
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Copper	ND	0.500			
Sample ID LCS-17121	SampType: LCS			Units: µg/L	Prep Date: 5/22/2017 RunNo: 36308
Client ID: LCSW	Batch ID: 17121				Analysis Date: 5/22/2017 SeqNo: 695843
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Copper	101	0.500	100.0	0	101 85 115
Sample ID 1705251-001ADUP	SampType: DUP			Units: µg/L	Prep Date: 5/22/2017 RunNo: 36308
Client ID: BATCH	Batch ID: 17121				Analysis Date: 5/22/2017 SeqNo: 695845
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Copper	134	0.500			137.0 2.29 30
Sample ID 1705251-001AMS	SampType: MS			Units: µg/L	Prep Date: 5/22/2017 RunNo: 36308
Client ID: BATCH	Batch ID: 17121				Analysis Date: 5/22/2017 SeqNo: 695846
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Copper	343	0.500	200.0	137.0	103 70 130
Sample ID 1705251-001AMSD	SampType: MSD			Units: µg/L	Prep Date: 5/22/2017 RunNo: 36308
Client ID: BATCH	Batch ID: 17121				Analysis Date: 5/22/2017 SeqNo: 695847
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Copper	328	0.500	200.0	137.0	95.7 70 130 342.5 4.19 30

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Sample Log-In Check List

CI	ient Name:	FE	Work Order Numb	per: 1705257	
Lo	gged by:	Erica Silva	Date Received:	5/22/2017	7 9:56:00 AM
<u>Cha</u>	in of Cust	ody			
1.	Is Chain of C	ustody complete?	Yes 🗸	No 🗌	Not Present
2.	How was the	sample delivered?	<u>FedEx</u>		
<u>Log</u>	In				
	— Coolers are p	present?	Yes 🗹	No 🗌	NA 🗆
			_		
4.	Shipping con	tainer/cooler in good condition?	Yes 🗸	No 📙	_
5.		ls present on shipping container/cooler? nments for Custody Seals not intact)	Yes	No 🗸	Not Required
6.	Was an atten	npt made to cool the samples?	Yes 🗸	No 🗌	NA 🗌
7.	Were all item	s received at a temperature 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 🗌	
10.	Are samples	properly preserved?	Yes 🗸	No 🗌	
11.	Was preserva	ative added to bottles?	Yes 🗸	No \square	NA \square
					HNO3
		space in the VOA vials?	Yes 🗔	No 🗀	NA 🗸
13.	Did all sampl	es containers arrive in good condition(unbroken)?	Yes 🗹	No 🗀	
14.	Does paperw	ork match bottle labels?	Yes 🗹	No \square	
15.	Are matrices	correctly identified on Chain of Custody?	Yes 🗸	No 🗌	
16.	Is it clear wha	at analyses were requested?	Yes 🗸	No 🗌	
17.	Were all hold	ing times able to be met?	Yes 🗸	No 🗌	
<u>Spe</u>	cial Handl	ing (if applicable)			
-		otified of all discrepancies with this order?	Yes	No 🗌	NA 🗹
	Person	Notified: Date			
	By Who		P.	one Fax	In Person
	Regardi				
	_	estructions:			
10	Additional rer	marks:			
13.		o 003A, 004A, 008A, 009A, 015A, 016A, 018A, 019 <i>,</i>	A		

Item Information

	Item #	Temp ⁰C
Cooler		6.4
Sample		6.0

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

^Please coordinate with the lab in advance			×			×
TAT → SameDay^ NextDay^ 2 Day 3 Day STD		ived	Received		Date/Time	Reminduisned
IAT: ASAF	Date/Time 0951	ived	Received ×	7, 1200	5/20/2017;	Refiniquished * Invadil Color
	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.	cal on behalf of the Client named	h Fremont Analyti Agreement.	this Agreement wit nd backside of this A	orized to enter into erms on the front a	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.
Plase pesein all impreserved	A fee may be 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.	Disposal by La assessed if sa	Return to Client	Sample Disposal:
Special Remarks:	Turn-around times for samples	O-Phosphate Fluoride Nitrat	Bromide C	Chloride Sulfate	Nitrite	***Anions (Circle): Nitrate
Sb Se Sr Sn Ti Tl U V Zn	Co Cr Cu e Hg K Mg Mn Mo Na Ni Pb	Individual: Ag Al As B Ba Be Ca Cd (TAL	8 Priority Pollutants	MTCA-5 RCRA-8	**Metals Analysis (Circle):
	8		-	4	-cr-16	10 CHK5 1017-6
HOLD; expreserved					=	9CH23017 T-08-
HOLD; unpreserved					-0F-11	0-5-410897HJ8
All the second of the second s	8)F-11	7CHK52017-P-01-11
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	8				COF-05	られたかりナーヤー
HOD, impreserved					T-KT-04	1-1-HOR 9XHJ
HOLD; unpreserved	St.				F.04	
	(S) (S)				X-04	2CHK6307-8-KF-04
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GW = Ground Water, SW = Storm Water, WW = Waste Water	ng Water,	SL = Solid, W = Water,	ıct, S = Soil, SD = Sediment,	O = Other, P = Product,	AQ = Aqueous, B = Bulk,	*Matrix Codes: A = Air, AQ
efulcrum.net	rmathews@efulcrum.net; cc: aenbysk@efulcrum.net	PM Email:	Fax: 509.575.8453	Fax:	509.574.0839	Telephone:
	NS	Report To (PM):		3901	Yakima, WA, 98901	City, State, Zip:
Kennywik WA	ridale school	Location:		and Street	406 North Second Street	Address:
bysk	200000000000000000000000000000000000000	Project No:		Fulcrum Environmental Consulting	Fulcrum Environ	Client:
Page: of:	Constitution of the state of			352-3790 352-7178	Tel: 206-352-3790 Fax: 206-352-7178	Seattle, WA 98103
Laboratory Project No (intermal): 1 10525 1 5	Date: 5/20/2017			yhcal	Analy	
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horatory Services Agreement	Istody Record and La	Chain of Custody R				

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supp 2	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.	nt named above, that	alf of the Clie	nalytical on beha	h Fremont Ar greement.	reement wit	ont and back	terms on the fr	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.
201 A COSTO DE CONTRA CONTRA DE CONT	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.)	s unless otherv	Disposal by Lab (Samples will be held for 30 day assessed if samples are retained after 30 days.)	nples are retair	Disposal by La assessed if sar		Return to Client	Sample Disposal:
Special Remarks:	Turn-around times for samples	Nitrate+Nitrite	Fluoride	O-Phosphate	Bromide	Sulfate	Chloride	Nitrate Nitrite	***Anions (Circle): Ni
Sb Se Sr Sn Ti Tl U V Zn	Cr Fe Hg K Mg Mn Mo Na Ni Pb	Be Ca Cd Co Cr	As B Ba	Individual: Ag Al	s TAL	Priority Pollutants	RCRA-8 Pr		**Metals Analysis (Circle): MTCA-5
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SW = Storm Water, WW = Waste Water	ater, GW = Ground Water,	DW = Drir	SL = Solid, W = Water,	SD = Sediment, SL	S = Soil,	er, P = Product,	B = Bulk, O = Other,	AQ = Aqueous, B =	*Matrix Codes: A = Air,
gfulcrum.net	rmathews@efulcrum.net; cc: aenbysk@efulcrum.net	1	PM Email:		Fax: 509.575.8453	Fax:	39	509.574.0839	Telephone:
	VS	PM):	Repor		44 ME 200 WAR	70 20 20 20 20 40	A, 98901	Yakima, WA, 98901	City, State, Zip:
WA	M5, Kennewich	2	Location:			et	406 North Second Street	406 North	Address:
manda Enbysk	00		Project No:			onsulting	Fulcrum Environmental Consulting	Fulcrum En	Client:
22	WATES.	Project Name: KSO Ormky	Projec			8	Fax: 206-352-7178		Seattle, WA 98103
						0	Tel: 206-352-3790		3600 Fremont Ave N.
Laboratory Project No (internal): 1705257 5	5/20/2017	Date:					lytica	Ana	
cord and Laboratory Services Agreement	y Record and La	Chain of Custody Re	Chain				3	remo	

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ial Remarks:	Turn-around times for samples	phate Elipsida	Bromide	ride Sulfate	Nitrite Chloride	***Anions (Circle): Nitrate
Sb Se Sr Sn Ti Tl U V Zn	ù Fe Hg K Mg Mn Mo Na Ni Pb	Ag Al As B Ba Be Ca Cd	TAL Individual:	Priority Pollutants	TCA-5 RCRA-8	**Metals Analysis (Circle): MTCA-5
	8		-	~	-WC-35 V	10 CAK 5 3017 - P-
					F-34	· CHK63017-T-0F-34
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And the major of the second of	⊗				P-NF-33	6 CHK52017-P-1
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ulcrum.net	rmathews@efulcrum.net; cc: aenbysk@efulcrum.net	PM Email:	Fax: 509.575.8453	Fax: 5	509.574.0839	Telephone:
		Report To (PM):		1	Yakima, WA, 98901	City, State, Zip:
Konewick, WA	the School		Company of A Topics	Street	406 North Second Street	Address:
Amanda Enbysk	[630]7,38 collec	Project No:		ntal Consulting	Fulcrum Environmental Consulting	Client:
	The service is store to be serviced			2-7178	Fax: 206-352-7178	Seattle, WA 98103
Page: 3 of: 4				-3790	Tel: 206-352-3790	3600 Fremont Ave N.
Laboratory Project No (internal): 1705257 of	Date: 5/20/2017			cal	Analytica	
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	emont	Chain of Custody Record and Laboratory Services Agreement
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3600 Fremont Ave N.	l. Tel: 206-352-3790	the property of the section of the s
Seattle, WA 98103	Fax: 206-352-7178	Project Name: KSD Drake, Water - Cherook MS
Client:	Fulcrum Environmental Consulting	162017, 28 Collected by: Amanda Enbysk
Address:	406 North Second Street	chinook middle school
City, State, Zip:	Yakima, WA, 98901	(PM): Ryan Mathew
Telephone:	509.574.0839 Fax: 509	
*Matrix Codes: A = Air, A	*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil,	SD = Sediment, SL = Solid, W = Water, DW = Dri
Sample Name	Sample Date Tipo	Sample Type Type Total Color C
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**Metals Analysis (Circle):	MTCA-5 RCRA-8 Priority Pollutants	TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Ti Tl U V Zn
***Anions (Circle): Nitrate	Nitrite Chloride	
Sample Disposal:	☐ Return to Client ☐ Disposal by Lab (! assessed if sampl	Disposal by Lab (Samples will be held for 30 days unless otherwise noted. A fee may be assessed if samples are retained after 30 days.)
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