



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



Date: 05/22/2017

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Chinook MS
Work Order: 1705257

Work Order Sample Summary

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

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:

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

Acronyms:

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



CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17121 Analyst: TN

Copper	661	0.500		µg/L	1	5/22/2017 11:56:44 AM
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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
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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
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17121 Analyst: TN

Copper	680	0.500		µg/L	1	5/22/2017 12:04:47 PM
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17121 Analyst: TN

Copper	3,380	0.500		µg/L	1	5/22/2017 12:08:49 PM
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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
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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
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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
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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
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17121 Analyst: TN

Copper	1,150	0.500		µg/L	1	5/22/2017 12:28:58 PM
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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
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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
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17121 Analyst: TN

Copper	1,100	0.500		µg/L	1	5/22/2017 12:37:01 PM
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17121 Analyst: TN

Copper	1,320	0.500		µg/L	1	5/22/2017 12:41:02 PM
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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
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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
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Lab ID: 1705257-018 **Collection Date:** 5/20/2017 8:30:00 AM
Client Sample ID: CHK52017-P-KF-22 **Matrix:** Drinking Water

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

Batch ID: 17121 Analyst: TN

Copper	1,070	0.500		µg/L	1	5/22/2017 12:49:05 PM
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17128 Analyst: TN

Copper	1,030	0.500		µg/L	1	5/22/2017 3:50:32 PM
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17128 Analyst: TN

Copper	1,550	0.500		µg/L	1	5/22/2017 4:06:36 PM
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17128 Analyst: TN

Copper	1,100	0.500		µg/L	1	5/22/2017 4:10:37 PM
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17128 Analyst: TN

Copper	874	0.500		µg/L	1	5/22/2017 4:14:38 PM
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17128 Analyst: TN

Copper	1,140	0.500		µg/L	1	5/22/2017 4:18:39 PM
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17128 Analyst: TN

Copper	899	0.500		µg/L	1	5/22/2017 4:30:45 PM
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17128 Analyst: TN

Copper	1,640	0.500		µg/L	1	5/22/2017 4:34:47 PM
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17128 Analyst: TN

Copper	807	0.500		µg/L	1	5/22/2017 4:38:48 PM
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17128 Analyst: TN

Copper	1,460	0.500		µg/L	1	5/22/2017 4:42:49 PM
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CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Chinook MS

Lab ID: 1705257-030

Collection Date: 5/20/2017 8:30:00 AM

Client Sample ID: CHK52017-P-WC-35

Matrix: Drinking Water

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

Batch ID: 17128 Analyst: TN

Copper	4.70	0.500		µg/L	1	5/22/2017 4:46:51 PM
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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
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Drinking Water Metals by EPA Method 200.8

Batch ID: 17128 Analyst: TN

Copper	1,300	0.500		µg/L	1	5/22/2017 4:50:52 PM
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Work Order: 1705257
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Chinook MS

QC SUMMARY REPORT
Drinking Water Metals by EPA Method 200.8

Sample ID MB-17128	SampType: MBLK	Units: µg/L	Prep Date: 5/22/2017	RunNo: 36319							
Client ID: MBLKW	Batch ID: 17128	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

Work Order: 1705257
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water-Chinook MS

QC SUMMARY REPORT
Drinking Water Metals by EPA Method 200.8

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

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

Work Order Number: **1705257**
Date Received: **5/22/2017 9:56:00 AM**

Chain of Custody

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

Log In

3. Coolers are present? Yes No NA
4. Shipping container/cooler in good condition? Yes No
5. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes No Not Required
6. Was an attempt made to cool the samples? Yes No NA
7. Were all items received at a temperature of $>0^{\circ}\text{C}$ to 10.0°C^* ? Yes No NA
8. Sample(s) in proper container(s)? Yes No
9. Sufficient sample volume for indicated test(s)? Yes No
10. Are samples properly preserved? Yes No
11. Was preservative added to bottles? Yes No NA
HNO₃
12. Is there headspace in the VOA vials? Yes No NA
13. Did all samples containers arrive in good condition(unbroken)? Yes No
14. Does paperwork match bottle labels? Yes No
15. Are matrices correctly identified on Chain of Custody? Yes No
16. Is it clear what analyses were requested? Yes No
17. Were all holding times able to be met? Yes No

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

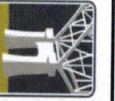
19. Additional remarks:

HNO₃ to 003A, 004A, 008A, 009A, 015A, 016A, 018A, 019A

Item Information

Item #	Temp °C
Cooler	6.4
Sample	6.0

* Note: DoD/ELAP and TNI require items to be received at $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$



Chain of Custody Record and Laboratory Services Agreement

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

Date: 5/20/2017

Laboratory Project No (Internal): 1705257

Client: Fulcrum Environmental Consulting

Project Name: Kennecook SD Drinking Water - Choctaw MS

Collected by: Amanda Enbysk

Address: 406 North Second Street

Project No: 162017.28

Location: Choctaw Middle School, Kennecook, WA

City, State, zip: Yakima, WA, 98901

Report To (PM): Ryan Mathews

Telephone: 509.574.0839

Fax: 509.575.8453

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

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	Analytes														Comments		
				VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DH)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals ** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (C)***	EDB (8011)				
1 CHK52017-R-KF-03	5/20/2017	0830	DW	<input checked="" type="checkbox"/>																<u>H2O2 preserved</u>
2 CHK52017-R-KF-04																				<u>HOLD; unpreserved</u>
3 CHK52017-S-KF-04																				<u>HOLD; unpreserved</u>
4 CHK52017-T-KF-04																				<u>HOLD; unpreserved</u>
5 CHK52017-R-COF-05																				<u>HOLD; unpreserved</u>
6 CHK52017-R-CF-06																				<u>HOLD; unpreserved</u>
7 CHK52017-R-OF-11																				<u>HOLD; unpreserved</u>
8 CHK52017-S-OF-11																				<u>HOLD; unpreserved</u>
9 CHK52017-T-OF-11																				<u>HOLD; unpreserved</u>
10 CHK52017-R-CF-16																				<u>HOLD; unpreserved</u>

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

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

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

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.

Refiniquished Date/Time 5/20/2017 1200 Received [Signature] Date/Time 5/22/2017 0956



Fremont
Analytical

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

Client: Fulcrum Environmental Consulting
Address: 406 North Second Street
City, State, Zip: Yakima, WA, 98901
Telephone: 509.574.0839
Fax: 509.575.8433

Date: 5/20/2017
Laboratory Project No (Internal): 1705257
Page: 3 of 4
Project Name: 150 Drivng Water - Chumuck MS
Project No: 162017.28
Location: Chumuck Middle School, Kennewick, WA
Report To (PM): Ryan Matthews
PM Email: rmathews@fulcrum.net; cc: aenbysk@fulcrum.net
Collected by: Amanda Enbysk

Chain of Custody Record and Laboratory Services Agreement

*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1 CHK52017-P-CF-25	5/20/2017	0830	DW														
2 CHK52017-P-KF-26																	
3 CHK52017-P-KF-27																	
4 CHK52017-P-OF-28																	
5 CHK52017-P-WC-31																	
6 CHK52017-P-NF-33																	
7 CHK52017-P-OF-34																	
8 CHK52017-S-2F-34																	
9 CHK52017-T-OF-34																	
10 CHK52017-P-WC-35																	

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

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Requished Date/Time 5/20/2017, 1200 Received Date/Time 5/22/2017 0950
Refiniquished Date/Time Received Date/Time

