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

RE: Kennewick SD Drinking Water - Southridge HS
Work Order Number: 1704066

April 07, 2017

Attention Ryan Mathews:

Fremont Analytical, Inc. received 32 sample(s) on 4/6/2017 for the analyses presented in the following report.

Drinking Water Metals by EPA Method 200.8

This report consists of the following:

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

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

Thank you for using Fremont Analytical.

Sincerely,

Chelsea Ward
Project Manager

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Southridge
Work Order: 1704066

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1704066-001	SHS4517-P-KF-01	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-002	SHS4517-S-KF-01	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-003	SHS4517-T-KF-01	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-004	SHS4517-P-WC-06	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-005	SHS4517-P-WC-08	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-006	SHS4517-P-WC-09	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-007	SHS4517-P-WC-10	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-008	SHS4517-P-WC-13	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-009	SHS4517-P-CF-14	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-010	SHS4517-S-CF-14	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-011	SHS4517-T-CF-14	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-012	SHS4517-P-WC-15	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-013	SHS4517-S-WC-15	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-014	SHS4517-T-WC-15	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-015	SHS4517-P-WC-17	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-016	SHS4517-P-WC-19	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-017	SHS4517-S-WC-19	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-018	SHS4517-T-WC-19	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-019	SHS4517-P-OF-23	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-020	SHS4517-S-OF-23	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-021	SHS4517-T-OF-23	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-022	SHS4517-P-WC-25	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-023	SHS4517-P-WC-29	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-024	SHS4517-P-WC-30	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-025	SHS4517-P-WC-31	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-026	SHS4517-P-DF-35	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-027	SHS4517-P-WC-36	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-028	SHS4517-P-DF-37	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-029	SHS4517-P-WC-38	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-030	SHS4517-P-WC-39	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-031	SHS4517-P-CF-40	04/05/2017 9:30 AM	04/06/2017 10:31 AM
1704066-032	SHS4517-P-CF-41	04/05/2017 9:30 AM	04/06/2017 10:31 AM

Case Narrative

WO#: **1704066**
Date: **4/7/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Southridge HS

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:
1704066-001A 214496: Prep Comments for EPA200.8, Sample 1704066-001A: Turbidity: 0.01 NTU
1704066-004A 214500: Prep Comments for EPA200.8, Sample 1704066-004A: Turbidity: 0.00 NTU
1704066-005A 214501: Prep Comments for EPA200.8, Sample 1704066-005A: Turbidity: 0.01 NTU
1704066-006A 214502: Prep Comments for EPA200.8, Sample 1704066-006A: Turbidity: 0.01 NTU
1704066-007A 214503: Prep Comments for EPA200.8, Sample 1704066-007A: Turbidity: 0.01 NTU
1704066-008A 214504: Prep Comments for EPA200.8, Sample 1704066-008A: Turbidity: 0.17 NTU
1704066-009A 214505: Prep Comments for EPA200.8, Sample 1704066-009A: Turbidity: 0.01 NTU
1704066-012A 214506: Prep Comments for EPA200.8, Sample 1704066-012A: Turbidity: 0.01 NTU
1704066-015A 214507: Prep Comments for EPA200.8, Sample 1704066-015A: Turbidity: 0.01 NTU
1704066-016A 214508: Prep Comments for EPA200.8, Sample 1704066-016A: Turbidity: 0.01 NTU
1704066-019A 214509: Prep Comments for EPA200.8, Sample 1704066-019A: Turbidity: 0.01 NTU
1704066-022A 214510: Prep Comments for EPA200.8, Sample 1704066-022A: Turbidity: 0.00 NTU
1704066-023A 214511: Prep Comments for EPA200.8, Sample 1704066-023A: Turbidity: 0.01 NTU
1704066-024A 214512: Prep Comments for EPA200.8, Sample 1704066-024A: Turbidity: 0.01 NTU
1704066-025A 214513: Prep Comments for EPA200.8, Sample 1704066-025A: Turbidity: 0.04 NTU
1704066-026A 214514: Prep Comments for EPA200.8, Sample 1704066-026A: Turbidity: 0.01 NTU
1704066-027A 214515: Prep Comments for EPA200.8, Sample 1704066-027A: Turbidity: 0.00 NTU
1704066-028A 214516: Prep Comments for EPA200.8, Sample 1704066-028A: Turbidity: 0.04 NTU
1704066-029A 214517: Prep Comments for EPA200.8, Sample 1704066-029A: Turbidity: 0.01 NTU
1704066-030A 214518: Prep Comments for EPA200.8, Sample 1704066-030A: Turbidity: 0.01 NTU
1704066-031A 214525: Prep Comments for EPA200.8, Sample 1704066-031A: Turbidity: 0.01 NTU
1704066-032A 214526: Prep Comments for EPA200.8, Sample 1704066-032A: 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 - Southridge HS

Lab ID: 1704066-001 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-KF-01** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	1,040	0.500		µg/L	1	4/7/2017 10:50:49 AM

Lab ID: 1704066-004 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-06** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	371	0.500		µg/L	1	4/7/2017 11:06:54 AM

Lab ID: 1704066-005 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-08** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	511	0.500		µg/L	1	4/7/2017 11:10:56 AM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Southridge HS

Lab ID: 1704066-006 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-09** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	281	0.500		µg/L	1	4/7/2017 11:14:57 AM

Lab ID: 1704066-007 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-10** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	1,350	0.500		µg/L	1	4/7/2017 11:27:03 AM

Lab ID: 1704066-008 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-13** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	107	0.500		µg/L	1	4/7/2017 11:31:04 AM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Southridge HS

Lab ID: 1704066-009 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-CF-14** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	656	0.500		µg/L	1	4/7/2017 11:35:06 AM

Lab ID: 1704066-012 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-15** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	2,210	0.500		µg/L	1	4/7/2017 11:39:07 AM

Lab ID: 1704066-015 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-17** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	119	0.500		µg/L	1	4/7/2017 12:00:25 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Southridge HS

Lab ID: 1704066-016 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-19** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	226	0.500		µg/L	1	4/7/2017 12:04:27 PM

Lab ID: 1704066-019 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-OF-23** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	1,050	0.500		µg/L	1	4/7/2017 12:08:28 PM

Lab ID: 1704066-022 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-25** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	2,280	0.500		µg/L	1	4/7/2017 12:12:29 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Southridge HS

Lab ID: 1704066-023 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-29** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	2,200	0.500		µg/L	1	4/7/2017 12:16:31 PM

Lab ID: 1704066-024 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-30** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	269	0.500		µg/L	1	4/7/2017 12:20:32 PM

Lab ID: 1704066-025 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-31** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	214	0.500		µg/L	1	4/7/2017 12:24:33 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Southridge HS

Lab ID: 1704066-026 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-DF-35** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	2,220	0.500		µg/L	1	4/7/2017 12:28:35 PM

Lab ID: 1704066-027 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-36** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	342	0.500		µg/L	1	4/7/2017 12:32:36 PM

Lab ID: 1704066-028 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-DF-37** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	1,110	0.500		µg/L	1	4/7/2017 12:36:37 PM

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Southridge HS

Lab ID: 1704066-029 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-38** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	1,320	0.500		µg/L	1	4/7/2017 12:48:43 PM

Lab ID: 1704066-030 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-WC-39** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16721		Analyst: TN
Copper	113	0.500		µg/L	1	4/7/2017 12:52:44 PM

Lab ID: 1704066-031 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-CF-40** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16722		Analyst: TN
Copper	1,330	0.500		µg/L	1	4/7/2017 1:24:56 PM

Analytical Report

Work Order: **1704066**
Date Reported: **4/7/2017**

CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Southridge HS

Lab ID: 1704066-032 **Collection Date:** 4/5/2017 9:30:00 AM
Client Sample ID: **SHS4517-P-CF-41** **Matrix:** Drinking Water

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
Drinking Water Metals by EPA Method 200.8				Batch ID: 16722		Analyst: TN
Copper	ND	0.500		µg/L	1	4/7/2017 1:37:02 PM

Work Order: 1704066
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Southridge

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	**MB-16722**	SampType:	**MBLK**			Units:	**µg/L**		Prep Date:	**4/7/2017**		RunNo:	**35427**	
Client ID:	**MBLKW**	Batch ID:	**16722**						Analysis Date:	**4/7/2017**		SeqNo:	**678405**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		ND	0.500											

Sample ID	**LCS-16722**	SampType:	**LCS**			Units:	**µg/L**		Prep Date:	**4/7/2017**		RunNo:	**35427**	
Client ID:	**LCSW**	Batch ID:	**16722**						Analysis Date:	**4/7/2017**		SeqNo:	**678406**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		98.2	0.500	100.0	0	98.2	85	115						

Sample ID	**1704067-001ADUP**	SampType:	**DUP**			Units:	**µg/L**		Prep Date:	**4/7/2017**		RunNo:	**35427**	
Client ID:	**BATCH**	Batch ID:	**16722**						Analysis Date:	**4/7/2017**		SeqNo:	**678408**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		963	0.500						932.8	3.19	30			

Sample ID	**1704067-001AMS**	SampType:	**MS**			Units:	**µg/L**		Prep Date:	**4/7/2017**		RunNo:	**35427**	
Client ID:	**BATCH**	Batch ID:	**16722**						Analysis Date:	**4/7/2017**		SeqNo:	**678409**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		1,190	0.500	200.0	932.8	131	70	130				S		

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Sample ID	**1704067-001AMSD**	SampType:	**MSD**			Units:	**µg/L**		Prep Date:	**4/7/2017**		RunNo:	**35427**	
Client ID:	**BATCH**	Batch ID:	**16722**						Analysis Date:	**4/7/2017**		SeqNo:	**678410**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual		
Copper		1,140	0.500	200.0	932.8	103	70	130	1,195	4.82	30			

Work Order: 1704066
CLIENT: Fulcrum Environmental
Project: Kennewick SD Drinking Water - Southridge

QC SUMMARY REPORT

Drinking Water Metals by EPA Method 200.8

Sample ID	**MB-16721**	SampType:	**MBLK**			Units:	**µg/L**	Prep Date:	**4/7/2017**	RunNo:	**35418**	
Client ID:	**MBLKW**	Batch ID:	**16721**					Analysis Date:	**4/7/2017**	SeqNo:	**678226**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		ND	0.500									

Sample ID	**LCS-16721**	SampType:	**LCS**			Units:	**µg/L**	Prep Date:	**4/7/2017**	RunNo:	**35418**	
Client ID:	**LCSW**	Batch ID:	**16721**					Analysis Date:	**4/7/2017**	SeqNo:	**678227**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		96.8	0.500	100.0	0	96.8	85	115				

Sample ID	**1704066-001ADUP**	SampType:	**DUP**			Units:	**µg/L**	Prep Date:	**4/7/2017**	RunNo:	**35418**	
Client ID:	**SHS4517-P-KF-01**	Batch ID:	**16721**					Analysis Date:	**4/7/2017**	SeqNo:	**678229**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		1,030	0.500						1,041	1.20	30	

Sample ID	**1704066-001AMS**	SampType:	**MS**			Units:	**µg/L**	Prep Date:	**4/7/2017**	RunNo:	**35418**	
Client ID:	**SHS4517-P-KF-01**	Batch ID:	**16721**					Analysis Date:	**4/7/2017**	SeqNo:	**678230**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		1,240	0.500	200.0	1,041	102	70	130				

Sample ID	**1704066-001AMSD**	SampType:	**MSD**			Units:	**µg/L**	Prep Date:	**4/7/2017**	RunNo:	**35418**	
Client ID:	**SHS4517-P-KF-01**	Batch ID:	**16721**					Analysis Date:	**4/7/2017**	SeqNo:	**678231**	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		1,230	0.500	200.0	1,041	96.1	70	130	1,245	0.899	30	

Sample Log-In Check List

Client Name:	**FE**	Work Order Number:	**1704066**
Logged by:	**Clare Griggs**	Date Received:	**4/6/2017 10:31:00 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°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: _____ Date _____

By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

19. Additional remarks:

Item Information

Item #	Temp ºC
Cooler 1	2.2
Cooler 2	0.9
Sample 1	2.9
Sample 2	1.1

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

Chain of Custody Record and Laboratory Services Agreement

Fremont Analytical

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

Date: 4/5/2017 Laboratory Project No (internal): 1704066

Page: 1 of: 4

Project Name: Kennewick SD Drinking Water - Southridge HS

Client: Fulcrum Environmental Consulting Project No: 162017.21 Collected by: Amanda Enbysk

Address: 406 North Second Street Location: ~~Kennewick, WA~~ Southridge High School, Kennewick, WA

City, State, Zip: Yakima, WA, 98901 Report To (PM): Ryan Mathews

Telephone: 509.574.0839 Fax: 509.575.8453 PM Email: rmathews@efulcrum.net; cc: aenbysk@efulcrum.net

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

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) | Dissolved (D)	Anions (IC)***	EDB (8011)			HNO3 preservation	Comments
1	SHS4517-P-KF-01	4/5/2017	0930	DW										⊗						⊗	
2	SHS4517-S-KF-01																				HOLD; unpreserved
3	SHS4517-T-KF-01																				
4	SHS4517-P-WC-06													⊗						⊗	
5	SHS4517-P-WC-08													⊗						⊗	
6	SHS4517-P-WC-09													⊗						⊗	
7	SHS4517-P-WC-10													⊗						⊗	
8	SHS4517-P-WC-13													⊗						⊗	
9	SHS4517-P-CF-14													⊗						⊗	
10	SHS4517-S-CF-14																				HOLD; unpreserved

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

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

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

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

Special Remarks: Please preserve all unpreserved

TAT: ASAP

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

Relinquished	Date/Time	Received	Date/Time
x [signature]	4/5/17; 1500	x [signature]	4/6/2017 1031
x		x	

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

^Please coordinate with the lab in advance

Chain of Custody Record and Laboratory Services Agreement

Fremont Analytical

3600 Fremont Ave N.
Seattle, WA 98103

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

Date: 4/5/17

Laboratory Project No (internal): _____

Page: 2 of: 4

Project Name: Kennewick GW Drinking Water - Southridge HS

Project No: 162017.21

Collected by: Amanda Enbysk

Location: Southridge High School, Kennewick, WA

Client: Fulcrum Environmental Consulting

Address: 406 North Second Street

City, State, Zip: Yakima, WA, 98901

Report To (PM): Ryan Mathews

Telephone: 509.574.0839

Fax: 509.575.8453

PM Email: rmathews@efulcrum.net; cc: aenbysk@efulcrum.net

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

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T)	Dissolved (D)	Anions (IC)***	EDB (8011)	HNO3 preserved	Comments
1 SHS4517-T-CF-14	4/5/2017	0930	DW																HOLD; unpreserved
2 SHS4517-P-WC-15												⊗						⊗	
3 SHS4517-S-WC-15																			HOLD; unpreserved
4 SHS4517-T-WC-15																			↓
5 SHS4517-P-WC-17												⊗						⊗	
6 SHS4517-P-WC-19												⊗						⊗	
7 SHS4517-S-WC-19																			HOLD; unpreserved
8 SHS4517-T-WC-19																			↓
9 SHS4517-P-OF-23												⊗						⊗	
10 SHS4517-S-OF-23																			HOLD; unpreserved

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

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

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

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Special Remarks: See page 1

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Relinquished	Date/Time	Received	Date/Time
x Amanda MCerfs	4/5/2017; 1500	x	4/6/2017 1031
Relinquished	Date/Time	Received	Date/Time
x		x	

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

^Please coordinate with the lab in advance

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

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Chain of Custody Record and Laboratory Services Agreement

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

Date: 4/5/17

Laboratory Project No (internal): _____

Page: 3 of: 4

Client: Fulcrum Environmental Consulting
Address: 406 North Second Street
City, State, Zip: Yakima, WA, 98901
Telephone: 509.574.0839 Fax: 509.575.8453

Project Name: Kennewick SD Drinking Water - Southridge HS
Project No: 162017.21 Collected by: Amanda Enbysk
Location: Southridge High School, Kennewick, WA
Report To (PM): Ryan Mathews
PM Email: rmathews@efulcrum.net; cc: aenbysk@efulcrum.net

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

	Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDB (8011)	HNO3 preserved	Comments
1	SHS4517-T-OF-23	4/5/17	0930	GW															HOLD; unpreserved
2	SHS4517-P-WC-25												⊗					⊗	
3	SHS4517-P-WC-29												⊗					⊗	
4	SHS4517-P-WC-30												⊗					⊗	
5	SHS4517-P-WC-31												⊗					⊗	
6	SHS4517-P-DF-35												⊗					⊗	
7	SHS4517-P-WC-36												⊗					⊗	
8	SHS4517-P-DF-37												⊗					⊗	
9	SHS4517-P-WC-38												⊗					⊗	
10	SHS4517-P-WC-39	↓	↓	↓									⊗					⊗	

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

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

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x Amanda McEnbysk	4/5/17; 1500	x	4/6/2017 1031
x		x	

TAT → SameDay^ NextDay^ 2 Day 3 Day STD

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Chain of Custody Record and Laboratory Services Agreement

Fremont Analytical

3600 Fremont Ave N.
Seattle, WA 98103

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

Date: 4/5/17

Laboratory Project No (internal): _____

Page: 4 of: 4

Client: Fulcrum Environmental Consulting
Address: 406 North Second Street
City, State, Zip: Yakima, WA, 98901
Telephone: 509.574.0839 Fax: 509.575.8453

Project Name: Kennewick SD Drinking Water - Southridge HS
Project No: 162017.21 Collected by: Amanda Enbysk
Location: Southridge High School, Kennewick, WA
Report To (PM): Ryan Mathews
PM Email: rmathews@efulcrum.net; cc: aenbysk@efulcrum.net

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1	SHS4517-P-CF-40	4/5/17	0930	DW									X						X	
2	SHS4517-P-CF-41	↓	↓	↓									X						X	
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				

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

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