

DRINKING WATER LEAD SAMPLING OF KLAMATH FALLS ESD FACILITY 2685 FOOTHILLS BLVD, KLAMATH FALLS, OREGON FOR SOUTHERN OREGON EDUCATION SERVICE DISTRICT

INTRODUCTION

Coleman Creek Consulting, Inc. (CCC) was retained by the Southern Oregon Education Service District (SOESD) to perform representative lead and copper drinking water sampling of the Klamath Falls ESD Facility at the above address. The purpose of the lead and copper drinking water sampling was to determine the concentration of lead and copper in representative drinking water sources and compare with regulatory standards. In 2017, Education Service Districts were required to adopt a Healthy and Safe Schools Plan, including provisions for testing and reducing exposure to elevated levels of lead in water used for drinking and food preparation.

LEAD DRINKING WATER SAMPLING REQUIREMENTS

Guidelines for sampling lead in water were established by the Oregon Health Authority. Water sampling is to occur after water sits overnight in the pipes without being used, and must be sampled after a day occupied by students or building occupants. All water sources are to be sampled, with the exception of water used for heating, sanitation, irrigation, and science sinks for grades 6 and up with non-potable water signs. Initial testing is required to be performed by 2020, and every 6 years thereafter, according to a testing schedule determined by the Oregon Department of Education.

DRINKING WATER SAMPLING

David W. Fawcett of CCC visited the Klamath Falls ESD Facility on October 24, 2019. Mr. Fawcett collected a lead and copper drinking water sample from the drinking water sources identified in the facility. See Site Sample Record Sheet (page 3) for a description of the drinking water sources sampled. See Drinking Water Sample Location Diagram in Appendix A for a visual review of all drinking water sample locations. The drinking water samples were collected in the early morning, ensuring that the sample source had not been in use since the previous day. The sample was placed in a cooler and transported to Neilson Research Corporation for lead analysis.

DRINKING WATER LEAD RESULTS AND TESTING SUMMARY SHEET

The five drinking water samples collected were analyzed for lead using EPA Method 200.8. See Neilson Research Corporation Analytical Report in Appendix B. A Drinking Water Testing Summary Sheet (page 4) indicates the lead in drinking water concentrations for the five water samples were reported ranging from 0.414 to 1.4 parts per billion (ppb).



CONCLUSIONS

Five drinking water samples were collected from drinking water sources at the Klamath Falls ESD Facility prior to use that day by building occupants, and after a day the facility was occupied. The lead concentrations reported were all below the 15 ppb lead action level in water.

RECOMMENDATIONS

Coleman Creek Consulting, Inc. recommends future drinking water sampling at the Klamath Falls ESD Facility according to the schedule set out by the Oregon Department of Education. Coleman Creek Consulting, Inc. appreciates the opportunity to continue to perform environmental sampling and consulting services to Southern Oregon Education Service District.

All, Fancett

David W. Fawcett Director of Consulting Services



DRINKING WATER LEAD/COPPER SAMPLE RECORD SHEET

FACILITY:	Klamath Falls ESD Facility	DATE:	10-24-19
ADDRESS:	2685 Foothills Blvd.	SAMPLER:	David W. Fawcett
	Klamath Falls, Oregon		

	SOURCE		COLLECTION
SAMPLE #	DESCRIPTION	LOCATION	TIME
19-104G.K1	Drinking Fountain	Hall Drinking Fountain	0721
19-104G.K2	Sink Faucet	Break Room Sink	0723
19-104G.K3	Sink Faucet	Women's Restroom Sink	0725
19-104G.K4	Sink Faucet	Men's Restroom Sink	0727
19-104G.K5	Sink Faucet	Mechanical Room Sink	0729



DRINKING WATER TESTING SUMMARY SHEET

DISTRICT NAME:Southern Oregon Education Service DistrictDISTRICT ID#:2025SCHOOL NAME:Klamath Falls OfficeBUILDING NAME:Klamath Falls Office BuildingBUILDING ID#:20250010

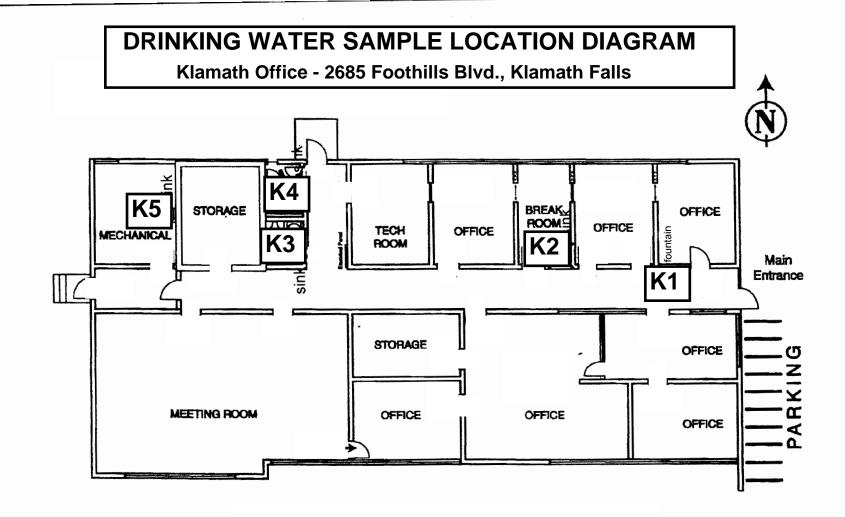
Sample Number	Fixture Location	Fixture	Test	Test	# Retest	Final
	Description	ID#	Date	Result		Result
				(ppb)		(ppb)
19-104G.K1	Hall Drinking Fountain	DW	10-24-19	0.806		
19-104G.K2	Breakroom Sink	KF	10-24-19	1.4		
19-104G.K3	Women's RR Sink	BF	10-24-19	0.414		
19-104G.K4	Men's RR Sink	BF	10-24-19	0.774		
19-104G.K5	Mechanical Room Sink	OT	10-24-19	0.455		

Fixture ID Coding:

DW = Drinking Water Fountain WC = Water Cooler WB = Water Bottle Filler CF = Classroom Faucet BF = Bathroom Faucet SF = Staff/Office Faucet KF = Kitchen/Food Prep OS = Outside Spigot OT = Other (Specify)

APPENDIX A

DRINKING WATER SAMPLE LOCATION DIAGRAM



LEGEND:

APPENDIX B

NEILSON RESEARCH CORPORATION ANALYTICAL REPORT



October 30, 2019

Dave Fawcett Coleman Creek Consulting 810 Leonard St Ashland, OR 97520 TEL: (541) 535-7108 FAX: (541) 535-8795

RE: 19-104G SOESD-Klamath

Order No.: 19101072

Dear Dave Fawcett:

Neilson Research Corporation received 5 sample(s) on 10/24/2019 for the analyses presented in the following report.

Neilson Research Corporation

Website: www.nrclabs.com

TEL: (541) 770-5678 FAX: (541) 770-2901

245 S Grape St Medford, OR 97501

The results relate only to the parameters tested or to the sample as received by the laboratory. This report shall not be reproduced except in full, without the written approval of Neilson Research Corporation. If you have any questions regarding these test results, please feel free to call.

Sincerely, Neilson Research Corporation

Tama Stimedeman

Tamra Schmedemann Senior Project Manager 245 S Grape St Medford, OR 97501



Case Narrative

WO#: **19101072** Date: **10/30/2019**

CLIENT: Coleman Creek Consulting Project: 19-104G SOESD-Klamath

The analyses were performed according to the guidelines in the Neilson Research Corporation Quality Assurance Program. This report contains analytical results for the sample(s) as received by the laboratory.

Neilson Research Corporation certifies that this report is in compliance with the requirements of NELAP. No unusual difficulties were experienced during analysis of this batch except as noted below or qualified with data flags on the reports.



Analytical Report

Lab Order: 19101072

Received Date: 10/24/2019 9:19:00 AM

Reported Date: 10/30/2019 1:52:22 PM

WO#: 19101072 Date Reported: 10/30/2019

Coleman Creek Consulting 810 Leonard St Ashland, OR 97520

Sample Information:

Lab ID:	19101072-01	Clier	nt Sample ID:	19-10	4G.K1			
Collection Date:	10/24/2019 7:21:00 AM	Colle	ected By:	David	l Fawcet	t		
Matrix:	Drinking Water	Sam	ple Location:	Grab				
Trace Metals by EPA 200.8 ICP-MS				A	nalyst;	SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status
Copper	10.9		0.515	µg/L	1	10/28/2019	1300	А
Lead	0.806		0.103	µg/L	1	10/25/2019	15.0	А
Lab ID:	19101072-02	Clier	nt Sample ID:	19-10	4G.K2			
Collection Date:	10/24/2019 7:23:00 AM	Colle	ected By:	David	l Fawcet	t		
Matrix:	Drinking Water	Samp	ple Location:	Grab				
Trace Metals by EP	PA 200.8 ICP-MS			A	nalyst;	SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status
Copper	1.61		0.515	µg/L	1	10/28/2019	1300	А
Lead	1.40		0.103	µg/L	1	10/25/2019	15.0	А
Lab ID:	19101072-03	Clier	nt Sample ID:	19-10	4G.K3			
Collection Date:	10/24/2019 7:25:00 AM	Colle	ected By:	David	l Fawcet	t		
Matrix:	Drinking Water	Samp	ple Location:	Grab				
Trace Metals by EP	PA 200.8 ICP-MS			A	nalyst;	SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status
Copper	2.12		0.515	µg/L	1	10/28/2019	1300	А
Lead	0.414		0.103	µg/L	1	10/25/2019	15.0	А

* Value exceeds Maximum Contaminant Level.

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- QUALIFIERS ND Not Detected at the Reporting Limit

Н Holding times for preparation or analysis exceeded

Recovery outside comtrol limits due to Matrix Interference MI

Sample container temperature is out of limit as specified at testcode

- R RPD outside accepted recovery limits

Original

C1

PL

Permit Limit



Analytical Report

WO#: 19101072 Date Reported: 10/30/2019

Coleman Creek Consulting 810 Leonard St Ashland, OR 97520

Sample Information:

Lab Order: 19101072 Received Date: 10/24/2019 9:19:00 AM Reported Date: 10/30/2019 1:52:22 PM

Lab ID:	19101072-04		Clien	t Sample ID:	19-10	4G.K4			
Collection Date:	10/24/2019 7:27:00	AM		cted By:		l Fawcet	t		
Matrix:	Drinking Water		Samp	le Location:	Grab				
Trace Metals by EP	A 200.8 ICP-MS				A	nalyst;	SJS		
Analyses		Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status
Copper		1.39		0.515	µg/L	1	10/28/2019	1300	А
Lead		0.774		0.103	µg/L	1	10/25/2019	15.0	А
Lab ID:	19101072-05		Clien	t Sample ID:	19-10	4G.K5			
Lab ID: Collection Date:	19101072-05 10/24/2019 7:29:00	AM		t Sample ID: cted By:		4G.K5 I Fawcet	t		
		AM	Colle	-			t		
Collection Date:	10/24/2019 7:29:00 Drinking Water	AM	Colle	cted By:	David Grab	l Fawcet	t SJS		
Collection Date: Matrix:	10/24/2019 7:29:00 Drinking Water	AM Result	Colle	cted By:	David Grab	l Fawcet		MCL	NELAP Status
Collection Date: Matrix: Trace Metals by EP	10/24/2019 7:29:00 Drinking Water		Colle Samp	cted By: le Location:	David Grab A	l Fawcet nalyst;	SJS Date	MCL 1300	

* Value exceeds Maximum Contaminant Level. QUALIFIERS

- Е Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

- C1 Sample container temperature is out of limit as specified at testcode
- Н Holding times for preparation or analysis exceeded
- Recovery outside comtrol limits due to Matrix Interference MI
- Permit Limit PL



QC SUMMARY REPORT

WO#: 19101072

30-Oct-19

Client:Coleman Creek (Project:19-104G SOESE	•					1	TestCode: I	CPMS_200.8	8_DW	
Sample ID: MB-2216	SampType: MBLK	TestCode: ICPM	S_200.8 Units: µg/L		Prep Date	e: 10/25/2	2019	RunNo: 517	74	
Client ID: PBW	Batch ID: 2216	TestNo: E200	.8 E200.8		Analysis Date	e: 10/25/2	2019	SeqNo: 991	94	
Analyte	Result	PQL SPK v	alue SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.515								
Lead	ND	0.103								
Sample ID: LCS-2216	SampType: LCS	TestCode: ICPM	S_200.8 Units: μg/L		Prep Date	e: 10/25/ 2	2019	RunNo: 517	74	
Client ID: LCSW	Batch ID: 2216	TestNo: E200	.8 E200.8		Analysis Date	e: 10/25/2	2019	SeqNo: 991	95	
Analyte	Result	PQL SPK v	alue SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	115	0.104	100 0	115	85	115				
Sample ID: 19101089-12AMS	SampType: MS	TestCode: ICPM	S_200.8 Units: μg/L		Prep Date	e: 10/25/2	2019	RunNo: 517	74	
Client ID: BatchQC	Batch ID: 2216	TestNo: E200	.8 E200.8		Analysis Date	e: 10/25/2	2019	SeqNo: 992	207	
Analyte	Result	PQL SPK v	alue SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	515	0.520	100 425	89.8	70	130				
Lead	114	0.104	100 3.63	110	70	130				
Sample ID: 19101089-12AMSD	SampType: MSD	TestCode: ICPM	S_200.8 Units: μg/L		Prep Date	e: 10/25/2	2019	RunNo: 517	74	
Client ID: BatchQC	Batch ID: 2216	TestNo: E200	.8 E200.8		Analysis Date	e: 10/25/2	2019	SeqNo: 992	208	
Analyte	Result	PQL SPK v	alue SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	511	0.520	100 425	85.4	70	130	515	0.845	20	
Lead	114	0.104	100 3.63	111	70	130	114	0.723	20	
Quantitation 1	temperature is out of limit as specified as		Holding times for preparation or an	alysis exceeded		MI	Recovery outside com		ix In	
ND Not Detected at th	e Reporting Limit	PL	Permit Limit			RL	Reporting Detection L	imit		0



QC SUMMARY REPORT

WO#: 19101072

30-Oct-19

Client: Coleman Creel Project: 19-104G SOE	υ				TestC	ode: ICPMS_200.8_DW	
Sample ID: 19101089-12AMSE Client ID: BatchQC	SampType: MSD Batch ID: 2216	TestCode: ICPM TestNo: E200.	- 10	A	Prep Date: 10/25/2019 analysis Date: 10/25/2019	RunNo: 5174 SeqNo: 99208	
Analyte	Result	PQL SPK v	alue SPK Ref Val	%REC	LowLimit HighLimit RP	D Ref Val %RPD RPDLimit	Qual
Sample ID: LCS-2216	SampType: LCS	TestCode: ICPM	S_200.8 Units: μg/L		Prep Date: 10/25/2019	RunNo: 5203	
Client ID: LCSW	Batch ID: 2216	TestNo: E200 .	8 E200.8	A	nalysis Date: 10/28/2019	SeqNo: 99692	
Analyte	Result	PQL SPK v	alue SPK Ref Val	%REC	LowLimit HighLimit RP	D Ref Val %RPD RPDLimit	Qual
Copper	105	0.520	100 0	105	85 115		

Qualifiers:

H Holding times for preparation or analysis exceeded

PL

Permit Limit

MI Recovery outside comtrol limits due to Matrix In

RL Reporting Detection Limit

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245 South Grape Street * Medford, OR 97501 (541) 770-5678 fax (541) 770-2901

Chain of Custody Record

This Chain of Custody is a LEGAL DOCUMENT and must be filled out accurately.

of Page

Ascheduling) As 0% surcharge) 5% surcharge) 6 surcharge)	NRC:Workorder:#	Remarks/Field Data NRC Sample # 0,100 0,12 0,100 0,000	OUT O	Section G Lab Use Only Temp: CUW D 4°C-+/-2°C: Yes No Received on Ice	nber of Bottles/Received: Checked: Checked: Checked: Cseals Intact: Yes No d'Blaink Included: Yes S. FedEX Other Amount Check:# Amount
Section C Invoice Information Attention: Company Name: Address: P.O. #	Analysis Requested			WP - Wipe OT - Other Time Date Time 10-2化-19 0919	D/20/Pd QQ 7/D Num Payment Invoice Cash:VISA, MCc
Section B Required Project Information Project Name: SOESD-Kla Warth Project Number: 19-10-46 Report To: Deure Fau, CeM Copy To:	Containers	Date Time Collected Collected id-24-19 0721 0723 0725		Print David L/ Farice A 10.24-19	MUUNTIE RUSH
ulting 1) 535-8795	Email Report Yes No Mail Report X Yes No Fax Report Yes No Section E Sample Information	Sample ID Comp/Grab Matrix* 19-10461/51 (Sup) Sw K2 K2 K4	Page 7 of 7	Relinquish/Receive Sign Relinquished By: Advill M Received By: Received By:	Relinquished By Laboratory: