

Coleman Creek Consulting, Inc.

DRINKING WATER LEAD SAMPLING
OF
MEDFORD ESD FACILITY
101 N. GRAPE STREET, MEDFORD, 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 Medford 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

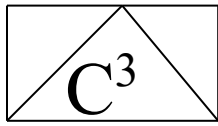
Guidelines for sampling lead in water were established by the Oregon Health Authority. Water sampling is to occur after water sits overnight in the pipes without being used, and must be sampled after a day occupied by students or building occupants. All water sources are to be sampled, with the exception 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 Medford ESD Facility on October 5, 2019. Mr. Fawcett collected a lead and copper drinking water sample from the drinking water sources identified in the facility. See Site Sample Record Sheets (page 3-4) 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 twelve 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 5) indicates the lead in drinking water concentrations for eleven of the samples were reported ranging from <0.103 to 4.48 parts per billion (ppb). The Tech Room sink faucet was reported with 28.9 ppb lead, above than the 15 ppb lead action level.



Coleman Creek Consulting, Inc.

TECH ROOM SINK FAUCET REPLACEMENT AND RE-SAMPLE RESULTS

The Tech Room sink faucet was replaced, and the new faucet re-sampled November 16, 2019. The re-sampled faucet was reported with 12.0 ppb lead.

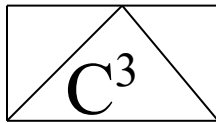
CONCLUSIONS

Twelve drinking water samples were collected from drinking water sources at the Medford 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, after replacement and re-sampling of the Tech Room sink faucet.

RECOMMENDATIONS

Coleman Creek Consulting, Inc. recommends future drinking water sampling at the Medford 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.

David W. Fawcett
Director of Consulting Services



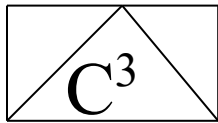
Coleman Creek Consulting, Inc.

DRINKING WATER LEAD/COPPER SAMPLE RECORD SHEET

FACILITY: Medford ESD
ADDRESS: 101 N. Grape Street
Medford, Oregon

DATE: 10-05-19
SAMPLER: David W. Fawcett

SAMPLE #	SOURCE DESCRIPTION	LOCATION	COLLECTION TIME
19-104G.M1	Sink Faucet	School Improvement Services Mid-Level	0602
19-104G.M2	Sink Faucet	Conference Room, Kitchenette	0610
19-104G.M3	Sink Faucet	Conference Room, Restroom	0613
19-104G.M4	Sink Faucet	Mid-Level Restroom	0615
19-104G.M5	Sink Faucet	Mid-Level Lunch Room	0617
19-104G.M6	Sink Faucet	Mid-Level Lunch Room, Instant Hot	0622
19-104G.M7	Drinking Fountain	Library	0626
19-104G.M8	Sink Faucet	Tech Room Sink	0629
19-104G.M9	Drinking Fountain	1 st Floor Hall	0633
19-104G.M10	Sink Faucet	1 st Floor Women's Restroom, Left Sink	0635
19-104G.M11	Sink Faucet	1 st Floor Women's Restroom, Right Sink	0636
19-104G.M12	Sink Faucet	1 st Floor Men's Restroom Sink	0638



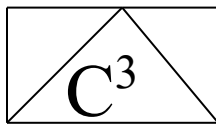
Coleman Creek Consulting, Inc.

DRINKING WATER LEAD/COPPER SAMPLE RECORD SHEET

FACILITY: Medford ESD
ADDRESS: 101 N. Grape Street
Medford, Oregon

DATE: 11-16-19
SAMPLER: David W. Fawcett

SAMPLE #	SOURCE DESCRIPTION	LOCATION	COLLECTION TIME
19-104G.M13	Sink Faucet	Tech Room Sink	0806



Coleman Creek Consulting, Inc.

DRINKING WATER TESTING SUMMARY SHEET

DISTRICT NAME: Southern Oregon Education Service District
 DISTRICT ID#: 2025
 SCHOOL NAME: Medford Office
 BUILDING NAME: Medford Office SOESD1
 BUILDING ID#: 20250000

Sample Number	Fixture Location Description	Fixture ID#	Test Date	Test Result (ppb)	# Retest	Final Result (ppb)
19-104G.M1	Improvement Services	SF	10-05-19	0.434		
19-104G.M2	Conference Kitchenette	KF	10-05-19	1.6		
19-104G.M3	Conference Bath	BF	10-05-19	0.201		
19-104G.M4	Mid-Level Bath	BF	10-05-19	4.48		
19-104G.M5	Mid-Level Lunch Room	KF	10-05-19	0.482		
19-104G.M6	Mid-Level Insta-hot	OT	10-05-19	0.187		
19-104G.M7	Library Fountain	DW	10-05-19	0.247		
19-104G.M8	Tech Room Sink	OT	10-05-19	28.9	1	12.0
19-104G.M9	1 st Floor Fountain	DW	10-05-19	<0.103		
19-104G.M10	1st Floor Women's RR Left Sink	BF	10-05-19	0.672		
19-104G.M11	1st Floor Women's RR Right Sink	BF	10-05-19	0.592		
19-104G.M12	1 st Floor Men's RR Sink	BF	10-05-19	1.28		

Fixture ID Coding:

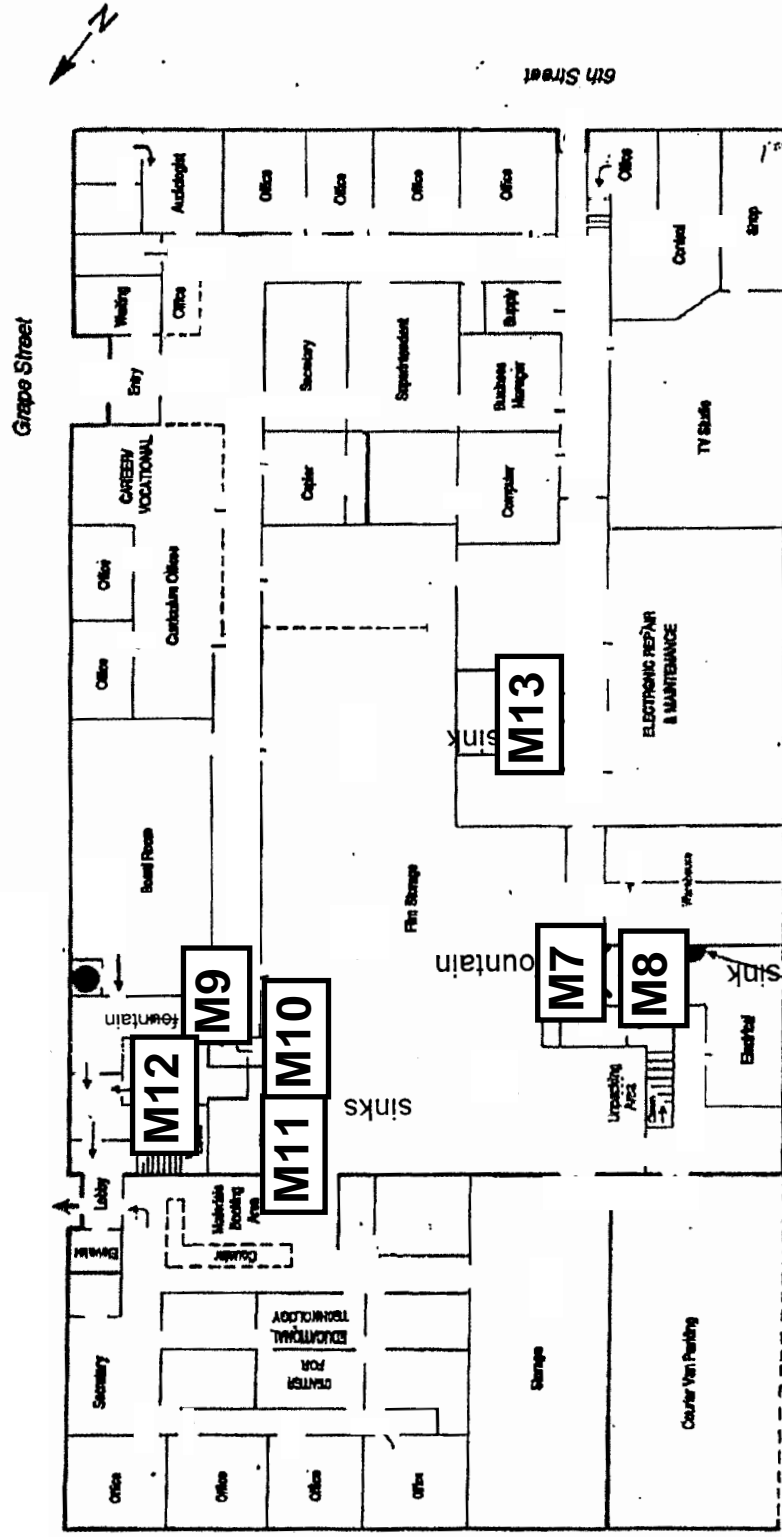
DW = Drinking Water Fountain WC = Water Cooler WB = Water Bottle Filler
 CF = Classroom Faucet BF = Bathroom Faucet SF = Staff/Office Faucet
 KF = Kitchen/Food Prep OS = Outside Spigot OT = Other (Specify)

APPENDIX A

**DRINKING WATER SAMPLE LOCATION
DIAGRAM**

DRINKING WATER SAMPLE LOCATION DIAGRAM

Medford 1st Floor - 101 N. Grape Street, Medford

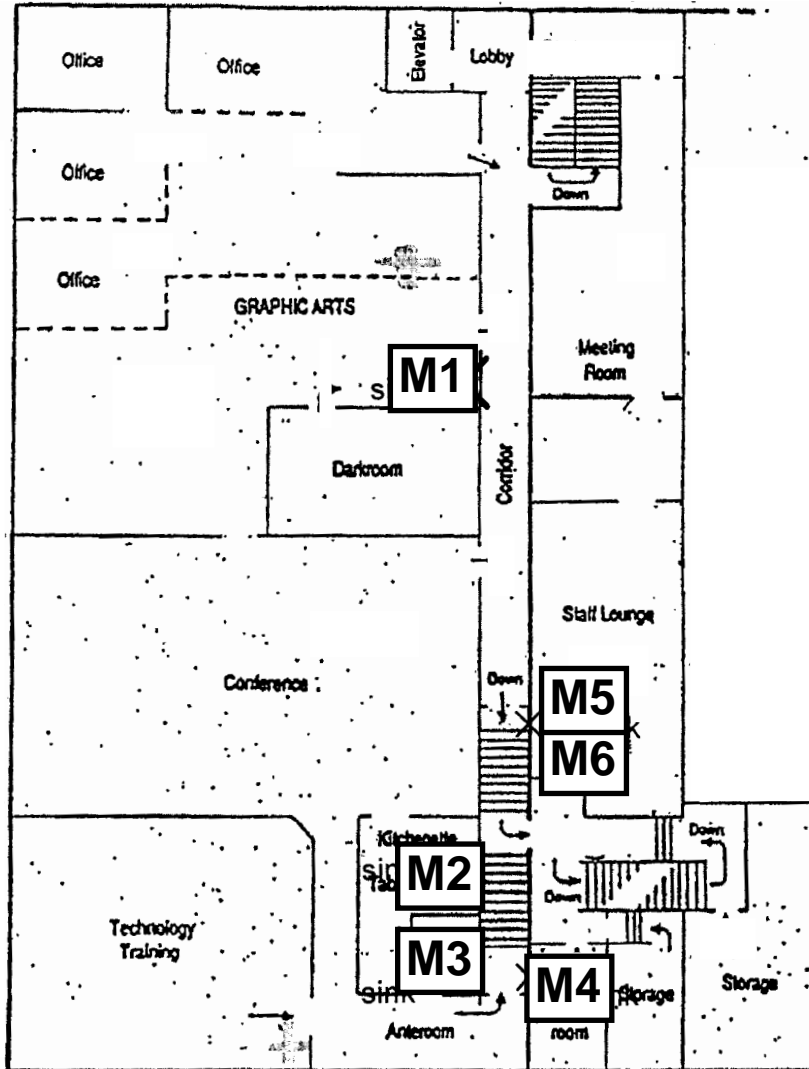


LEGEND:

M7 = Drinking Water Sample Location

DRINKING WATER SAMPLE LOCATION DIAGRAM

Medford 2nd Floor - 101 N. Grape Street, Medford



LEGEND:

M3 = Drinking Water Sample Location

APPENDIX B

**NEILSON RESEARCH CORPORATION
ANALYTICAL REPORT**



Neilson Research Corporation
245 S Grape St
Medford, OR 97501
TEL: (541) 770-5678 FAX: (541) 770-2901
Website: www.nrclabs.com

October 11, 2019

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

RE: 19-104G SO ESD-Medford

Order No.: 19100305

Dear Dave Fawcett:

Neilson Research Corporation received 12 sample(s) on 10/7/2019 for the analyses presented in the following report.

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

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

Original



Neilson Research Corporation
245 S Grape St
Medford, OR 97501
TEL: (541) 770-5678 FAX: (541) 770-2901
Website: www.nrclabs.com

Case Narrative

WO#: 19100305
Date: 10/11/2019

CLIENT: Coleman Creek Consulting

Project: 19-104G SO ESD-Medford

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.

Original



Neilson Research Corporation
 245 S Grape St
 Medford, OR 97501
 TEL: (541) 770-5678 FAX: (541) 770-2901
 Website: www.nrclabs.com

Analytical Report

WO#: 19100305
 Date Reported: 10/11/2019

Coleman Creek Consulting
 810 Leonard St
 Ashland, OR 97520

Lab Order: 19100305
Received Date: 10/7/2019 11:08:00 AM
Reported Date: 10/11/2019 12:05:27 PM

Sample Information:

Lab ID: 19100305-01 Client Sample ID: 19-104G.M1
 Collection Date: 10/5/2019 6:07:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status	
Copper	704		0.515	µg/L	1	10/9/2019	1300	A	
Lead	0.434		0.103	µg/L	1	10/9/2019	15.0	A	

Lab ID: 19100305-02 Client Sample ID: 19-104G.M2
 Collection Date: 10/5/2019 6:10:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status	
Copper	543		0.515	µg/L	1	10/9/2019	1300	A	
Lead	1.60		0.103	µg/L	1	10/9/2019	15.0	A	

Lab ID: 19100305-03 Client Sample ID: 19-104G.M3
 Collection Date: 10/5/2019 6:13:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status	
Copper	646		5.15	µg/L	10	10/9/2019	1300	A	
Lead	0.201		0.103	µg/L	1	10/9/2019	15.0	A	

- | | | |
|-------------------|--|--|
| QUALIFIERS | * Value exceeds Maximum Contaminant Level. | C1 Sample container temperature is out of limit as specified at testcode |
| | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| | J Analyte detected below quantitation limits | MI Recovery outside control limits due to Matrix Interference |
| | ND Not Detected at the Reporting Limit | PL Permit Limit |
| | R RPD outside accepted recovery limits | |

Results are out of the EPA limits

Original



Neilson Research Corporation
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Analytical Report

WO#: 19100305
 Date Reported: 10/11/2019

Coleman Creek Consulting
 810 Leonard St
 Ashland, OR 97520

Lab Order: 19100305
Received Date: 10/7/2019 11:08:00 AM
Reported Date: 10/11/2019 12:05:27 PM

Sample Information:

Lab ID: 19100305-04 Client Sample ID: 19-104G.M4
 Collection Date: 10/5/2019 6:15:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status	
Copper	66.1		0.515	µg/L	1	10/9/2019	1300	A	
Lead	4.48		0.103	µg/L	1	10/9/2019	15.0	A	

Lab ID: 19100305-05 Client Sample ID: 19-104G.M5
 Collection Date: 10/5/2019 6:17:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status	
Copper	196		0.515	µg/L	1	10/9/2019	1300	A	
Lead	0.482		0.103	µg/L	1	10/9/2019	15.0	A	

Lab ID: 19100305-06 Client Sample ID: 19-104G.M6
 Collection Date: 10/5/2019 6:22:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status	
Copper	116		0.515	µg/L	1	10/9/2019	1300	A	
Lead	0.187		0.103	µg/L	1	10/9/2019	15.0	A	

- | | | |
|-------------------|--|--|
| QUALIFIERS | * Value exceeds Maximum Contaminant Level. | C1 Sample container temperature is out of limit as specified at testcode |
| | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| | J Analyte detected below quantitation limits | MI Recovery outside control limits due to Matrix Interference |
| | ND Not Detected at the Reporting Limit | PL Permit Limit |
| | R RPD outside accepted recovery limits | |

Results are out of the EPA limits

Original



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Analytical Report

WO#: 19100305
 Date Reported: 10/11/2019

Coleman Creek Consulting
 810 Leonard St
 Ashland, OR 97520

Lab Order: 19100305
Received Date: 10/7/2019 11:08:00 AM
Reported Date: 10/11/2019 12:05:27 PM

Sample Information:

Lab ID: 19100305-07 Client Sample ID: 19-104G.M7
 Collection Date: 10/5/2019 6:26:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status	
Copper	614		0.515	µg/L	1	10/9/2019	1300	A	
Lead	0.247		0.103	µg/L	1	10/9/2019	15.0	A	

Lab ID: 19100305-08 Client Sample ID: 19-104G.M8
 Collection Date: 10/5/2019 6:29:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status	
Copper	119		0.515	µg/L	1	10/9/2019	1300	A	
Lead	28.9	*	0.103	µg/L	1	10/9/2019	15.0	A	

Lab ID: 19100305-09 Client Sample ID: 19-104G.M9
 Collection Date: 10/5/2019 6:33:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status	
Copper	58.2		0.515	µg/L	1	10/9/2019	1300	A	
Lead	ND		0.103	µg/L	1	10/9/2019	15.0	A	

- | | | |
|-------------------|--|--|
| QUALIFIERS | * Value exceeds Maximum Contaminant Level. | C1 Sample container temperature is out of limit as specified at testcode |
| | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| | J Analyte detected below quantitation limits | MI Recovery outside control limits due to Matrix Interference |
| | ND Not Detected at the Reporting Limit | PL Permit Limit |
| | R RPD outside accepted recovery limits | |

Results are out of the EPA limits

Original



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 Website: www.nrclabs.com

Analytical Report

WO#: 19100305
 Date Reported: 10/11/2019

Coleman Creek Consulting
 810 Leonard St
 Ashland, OR 97520

Lab Order: 19100305
Received Date: 10/7/2019 11:08:00 AM
Reported Date: 10/11/2019 12:05:27 PM

Sample Information:

Lab ID: 19100305-10 Client Sample ID: 19-104G.M10
 Collection Date: 10/5/2019 6:35:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status	
Copper	262		0.515	µg/L	1	10/9/2019	1300	A	
Lead	0.672		0.103	µg/L	1	10/9/2019	15.0	A	

Lab ID: 19100305-11 Client Sample ID: 19-104G.M11
 Collection Date: 10/5/2019 6:36:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status	
Copper	243		0.515	µg/L	1	10/9/2019	1300	A	
Lead	0.592		0.103	µg/L	1	10/9/2019	15.0	A	

Lab ID: 19100305-12 Client Sample ID: 19-104G.M12
 Collection Date: 10/5/2019 6:38:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS		
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status	
Copper	499		0.515	µg/L	1	10/9/2019	1300	A	
Lead	1.28		0.103	µg/L	1	10/9/2019	15.0	A	

- | | | |
|-------------------|--|--|
| QUALIFIERS | * Value exceeds Maximum Contaminant Level. | C1 Sample container temperature is out of limit as specified at testcode |
| | E Value above quantitation range | H Holding times for preparation or analysis exceeded |
| | J Analyte detected below quantitation limits | MI Recovery outside control limits due to Matrix Interference |
| | ND Not Detected at the Reporting Limit | PL Permit Limit |
| | R RPD outside accepted recovery limits | |

Results are out of the EPA limits

Original



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 Website: www.nrclabs.com

QC SUMMARY REPORT

WO#: 19100305
 11-Oct-19

Client: Coleman Creek Consulting
Project: 19-104G SO ESD-Medford

TestCode: ICPMS_200.8_DW

Sample ID: MB-2023	SampType: MBLK	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 10/8/2019	RunNo: 4703						
Client ID: PBW	Batch ID: 2023	TestNo: E200.8	E200.8	Analysis Date: 10/9/2019	SeqNo: 91238						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Copper ND 0.515
 Lead ND 0.103

Sample ID: LCS-2023	SampType: LCS	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 10/8/2019	RunNo: 4703						
Client ID: LCSW	Batch ID: 2023	TestNo: E200.8	E200.8	Analysis Date: 10/9/2019	SeqNo: 91239						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Copper 107 0.520 100 0 107 85 115
 Lead 105 0.104 100 0 105 85 115

Sample ID: 19100317-11AMS	SampType: MS	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 10/8/2019	RunNo: 4703						
Client ID: BatchQC	Batch ID: 2023	TestNo: E200.8	E200.8	Analysis Date: 10/9/2019	SeqNo: 91246						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Copper 131 0.520 100 29.1 102 70 130
 Lead 99.4 0.104 100 0.291 99.1 70 130

Sample ID: 19100317-11AMSD	SampType: MSD	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 10/8/2019	RunNo: 4703						
Client ID: BatchQC	Batch ID: 2023	TestNo: E200.8	E200.8	Analysis Date: 10/9/2019	SeqNo: 91247						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Copper 129 0.520 100 29.1 99.7 70 130 131 1.76 20

Qualifiers: * Value exceeds Maximum Contaminant Level. C1 Sample container temperature is out of limit as specified at testcode H Holding times for preparation or analysis exceed
 MI Recovery outside control limits due to Matrix Interference ND Not Detected at the Reporting Limit PL Permit Limit
 RL Reporting Detection Limit

Original



Neilson Research Corporation
 245 S Grape St
 Medford, OR 97501
 TEL: (541) 770-5678 FAX: (541) 770-2901
 Website: www.nrclabs.com

QC SUMMARY REPORT

WO#: 19100305
 11-Oct-19

Client: Coleman Creek Consulting
Project: 19-104G SO ESD-Medford

TestCode: ICPMS_200.8_DW

Sample ID: 19100317-11AMSD	SampType: MSD	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 10/8/2019	RunNo: 4703						
Client ID: BatchQC	Batch ID: 2023	TestNo: E200.8	E200.8	Analysis Date: 10/9/2019	SeqNo: 91247						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	98.9	0.104	100	0.291	98.6	70	130	99.4	0.559	20	

Sample ID: MB-2024	SampType: MBLK	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 10/8/2019	RunNo: 4703						
Client ID: PBW	Batch ID: 2024	TestNo: E200.8	E200.8	Analysis Date: 10/9/2019	SeqNo: 91250						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	ND	0.515									
Lead	ND	0.103									

Sample ID: LCS-2024	SampType: LCS	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 10/8/2019	RunNo: 4703						
Client ID: LCSW	Batch ID: 2024	TestNo: E200.8	E200.8	Analysis Date: 10/9/2019	SeqNo: 91251						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	108	0.520	100	0	108	85	115				
Lead	101	0.104	100	0	101	85	115				

Sample ID: 19100307-11AMS	SampType: MS	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 10/8/2019	RunNo: 4703						
Client ID: BatchQC	Batch ID: 2024	TestNo: E200.8	E200.8	Analysis Date: 10/9/2019	SeqNo: 91274						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	105	0.520	100	2.61	102	70	130				
Lead	101	0.104	100	2.63	98.5	70	130				

Qualifiers:

* Value exceeds Maximum Contaminant Level.	C1 Sample container temperature is out of limit as specified at testcode	H Holding times for preparation or analysis exceed
MI Recovery outside control limits due to Matrix Interference	ND Not Detected at the Reporting Limit	PL Permit Limit
RL Reporting Detection Limit		

Original



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 245 S Grape St
 Medford, OR 97501
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 Website: www.nrclabs.com

QC SUMMARY REPORT

WO#: 19100305
 11-Oct-19

Client: Coleman Creek Consulting
Project: 19-104G SO ESD-Medford

TestCode: ICPMS_200.8_DW

Sample ID: 19100307-11AMS	SampType: MS	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 10/8/2019	RunNo: 4703						
Client ID: BatchQC	Batch ID: 2024	TestNo: E200.8	E200.8	Analysis Date: 10/9/2019	SeqNo: 91274						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID: 19100307-11AMSD	SampType: MSD	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 10/8/2019	RunNo: 4703						
Client ID: BatchQC	Batch ID: 2024	TestNo: E200.8	E200.8	Analysis Date: 10/9/2019	SeqNo: 91275						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	107	0.520	100	2.61	104	70	130	105	1.90	20	
Lead	104	0.104	100	2.63	101	70	130	101	2.50	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.	C1 Sample container temperature is out of limit as specified at testcode	H Holding times for preparation or analysis exceeded
MI Recovery outside control limits due to Matrix Interference	ND Not Detected at the Reporting Limit	PL Permit Limit
RL Reporting Detection Limit		

Original



Chain of Custody Record

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

NEILSON RESEARCH CORPORATION
 Environmental Testing Laboratory
 245 South Grape Street • Medford, OR 97501
 (541) 770-5678 fax (541) 770-2901

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information		Section D Rush Status (Subject to Scheduling)	
Company:	Coleman Creek Consulting	Project Name:	SOFSD-Medford	Attention:		<input checked="" type="checkbox"/> Standard 10-14 Days	
Address:	810 Leonard St Ashland, OR 97520	Project Number:	19-1049	Company Name:		<input type="checkbox"/> 5 Business Days (60% surcharge)	
Email:	fawbro@coountry.net	Report To:	DAVE FAWBRO	Address:		<input type="checkbox"/> 3 Business Days (75% surcharge)	
Phone:	(541) 535-7108 Fax (541) 535-8795	Copy To:		P.O. #		<input type="checkbox"/> 24 - 48 hours (100% surcharge)	
Collected By (Print):	David Fawbro					Other	Authorized Yes <input type="checkbox"/> No <input type="checkbox"/>
Collected By (Sign):	<i>David Fawbro</i>						
Email Report	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
Fax Report	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						

Section E Sample Information	Section F Refinuish/Receive	Section G Lab Use Only
Page <u>1</u> of <u>12</u>	Refinuish/Receive By: <i>David Fawbro</i>	Temp: <u>QWD</u>
Sample ID: <u>M1</u>	Received By:	4°C +/- 2°C: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Sample ID: <u>M2</u>	Refinuish/Receive By:	Received in Ice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Sample ID: <u>M3</u>	Received By:	Number of Bottles/Receptacles: <u>12</u>
Sample ID: <u>M4</u>	Refinuish/Receive By:	pH Checked: <u>epb</u>
Sample ID: <u>M5</u>	Received By:	CPC Seals intact: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Sample ID: <u>M6</u>	Refinuish/Receive By:	Field Blank included: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Sample ID: <u>M7</u>	Received By:	LPS: <u>epb</u>
Sample ID: <u>M8</u>	Refinuish/Receive By:	Received Via: <u>Hand</u>
Sample ID: <u>M9</u>	Received By:	Payment: <input checked="" type="checkbox"/> Invoice <input type="checkbox"/> Cash <input type="checkbox"/> VISA, MC <input type="checkbox"/> Check # <input type="checkbox"/>
Sample ID: <u>M10</u>	Received By Laboratory: <i>WMA</i>	

Section H Analysis Requested
Matrix: DW - Drinking Water WW - Wastewater W - Water S - Solid/Solid SL - Sludge O - Oil WP - Wipe OT - Other
No. of Containers
Remarks/Field Data
NRC-Workorder # (Lab Use Only): <u>1910030S</u>
NRC Sample # (Lab Use Only)
<u>M1</u> <u>0607</u> <u>DLW</u> <u>10-5-19</u> <u>0607</u> <u>XX</u> <u>96/cu</u> <u>01A</u>
<u>M2</u> <u>0610</u> <u>XX</u> <u>02A</u>
<u>M3</u> <u>0613</u> <u>XX</u> <u>03A</u>
<u>M4</u> <u>0615</u> <u>XX</u> <u>04A</u>
<u>M5</u> <u>0617</u> <u>XX</u> <u>05A</u>
<u>M6</u> <u>0622</u> <u>XX</u> <u>06A</u>
<u>M7</u> <u>0626</u> <u>XX</u> <u>07A</u>
<u>M8</u> <u>0629</u> <u>XX</u> <u>08A</u>
<u>M9</u> <u>0633</u> <u>XX</u> <u>09A</u>
<u>M10</u> <u>0635</u> <u>XX</u> <u>10A</u>



Environmental Testing Laboratory
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.

Section A
Required Client Information
 Company: Coleman Creek Consulting
 Address: 810 Leonard St
 Ashland, OR 97520
 Email: fawbro@ccountry.net
 Phone: (541) 535-7108 Fax (541) 535-8795
 Collected By (Print): David Fawcett
 Collected By (Sign): *[Signature]*
 Email Report Yes No Mail Report Yes No
 Fax Report Yes No

Section B
Required Project Information
 Project Name: 50 EST - Medford
 Project Number: 19-1046
 Report To: Dave Fawcett
 Copy To:

Section C
Invoice Information
 Attention:
 Company Name:
 Address:
 P.O. #

Section D
Rush Status (Subject to Scheduling)
 Standard 10-14 Days
 5 Business Days (50% surcharge)
 3 Business Days (75% surcharge)
 24 - 48 hours (100% surcharge)
 Other _____
 Authorized Yes No

Section E
Sample Information

Page	Sample ID	Comp/Grab	Matrix*	Date Collected	Time Collected	No. of Containers	Analysis Requested	NRC-Workorder # (Lab Use Only)	NRC Sample # (Lab Use Only)
19-1046, M11	Grab	↓	DP	10-5-19	0636	1		19100305	
M12	↓	↓	↓	↓	0638	1			11A 12A

*Matrix: DW - Drinking Water WW - Wastewater W - Water S - Soil/Solid SL - Sludge O - Oil WP - Wipe OT - Other

Section F
Refiniquish/Receive
 Refiniquish/Receive By: *[Signature]* Sign
 Received By: *[Signature]* Sign
 Refiniquish By:
 Received By:
 Refiniquish By:
 Received By Laboratory: *[Signature]*

Section G
Lab Use Only
 Temp: *[Signature]*
 4°C +/- 2°C: Yes No
 Received on Ice: Yes No
 Number of Bottles/Flasks: 12
 pH Checked:
 SCC Status intact: Yes No
 Field Blank included: Yes No
 Received Via: UPS FedEx Other Hand
 Payment: Invoice Cash VISA, MC Check # _____ Amount _____

- B Analyte detected in the associated method blank.
- BA BOD Alternative Calculation: The initial results performed by Standard Methods did not fall within parameters of the Standard Methods calculation. An alternate approved calculation was performed using the HACH method and the value reported is an estimated concentration.
- C Sample(s) does not meet NELAP/ORELAP sample acceptance criteria. See Case Narrative.
- C1 Sample(s) does not meet NELAP/ORELAP sample acceptance criteria for temperature.
- CF Results confirmed by re-analysis.
- CU Cleanup performed as specified by method.
- D1 The diesel elution pattern for the sample is not typical.
- D2 The sample appears to be a heavier hydrocarbon range than diesel.
- D3 The sample appears to be a lighter hydrocarbon range than diesel.
- D4 Detected hydrocarbons do not have pattern and range consistent with typical petroleum products and may be due to biogenic interference.
- D5 Detected hydrocarbons in the diesel range appear to be weathered diesel.
- E Estimated value.
- ER Elevated reporting limit due to matrix. Report limits (MDLs, MRLs & PQLs) are adjusted based on variations in sample preparation amounts, analytical dilutions, and percent solids, where applicable.
- FC Fecal Coliforms: Sample(s) received past 40 CFR Part 136 specified holding time. Results reported as estimated values.
- G1 The gasoline elution pattern for the sample is not typical.
- G2 The sample appears to be a heavier hydrocarbon range than gasoline.
- G3 The sample appears to be a lighter hydrocarbon range than gasoline.
- G4 Detected hydrocarbons in the gasoline range appear to be weathered gasoline.
- HP Sample re-analysis performed outside of method specified holding time.
- HR Sample received outside of method specified holding time.
- HS Sample analyzed for volatile organics contained headspace.
- HT At the client's request, the sample was analyzed outside of method specified holding time.
- H Analysis performed outside of method specified holding time.
- J Analyte detected below the Minimum Reporting Limit (MRL) and above the Method Detection Limit (MDL). The J flag result is an estimated value and the user should be aware that this data is of limited reliability.
- L Dissolved metals were not filtered within 15 minutes of collection per 40 CFR Part 136.
- MI Surrogate, Duplicate Sample (DUP) or Matrix Spikes recoveries are out of control limits due to matrix interference. Sample results may be biased.
- N See Case Narrative on page 2 of report.
- NLR No Legionella Recovered.
- PLR Presence of Legionella Recovered.
- Q Initial calibration verification (ICV), continuing calibration verification (CCV) or laboratory control sample (LCS) exceeded high recovery limits, but associated samples are non-detect and the sample results are not affected. Data meets EPA/NELAP requirements.
- R Relative percent difference (RPD) is outside of the accepted recovery limits.
- R1 Relative percent difference (RPD) is outside of the accepted recovery limits. However, analyses are not controlled on RPD values for sample concentrations that are less than the reporting limit.
- R3 The relative percent difference (RPD) and/or percent recovery for the duplicate (DUP) or matrix spike (MS)/matrix spike duplicate (MSD) cannot be accurately calculated due to the concentration of analyte already present in the sample.
- R4 Duplicate analysis failed due to result being at or near the method reporting limit.
- S Surrogate and/or matrix spike recovery is outside of the accepted recovery limits. Sample results may be biased.
- S1 Surrogate or matrix spike recovery is outside of control limits due to dilution necessary for analysis.
- SC Sub-contracted to another laboratory for analysis.
- SP Sample(s) were not collected per EPA Method 5035A protocols. The results are considered minimum values.
- # Value exceeds regulatory level for TCLP contaminant.
- X1 The motor oil elution pattern for the sample is not typical.
- X2 The sample appears to be a heavier hydrocarbon range than motor oil.
- X3 The sample appears to be a lighter hydrocarbon range than motor oil.
- * Value exceeds Maximum Contaminant Level or is outside the acceptable range.



Neilson Research Corporation
245 S Grape St
Medford, OR 97501
TEL: (541) 770-5678 FAX: (541) 770-2901
Website: www.nrclabs.com

November 25, 2019

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

RE: Medford ESD 19-104G

Order No.: 19110670

Dear Dave Fawcett:

Neilson Research Corporation received 1 sample(s) on 11/18/2019 for the analyses presented in the following report.

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

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



Neilson Research Corporation
245 S Grape St
Medford, OR 97501
TEL: (541) 770-5678 FAX: (541) 770-2901
Website: www.nrclabs.com

Case Narrative

WO#: 19110670
Date: 11/25/2019

CLIENT: Coleman Creek Consulting

Project: Medford ESD 19-104G

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.

Original



Neilson Research Corporation
 245 S Grape St
 Medford, OR 97501
 TEL: (541) 770-5678 FAX: (541) 770-2901
 Website: www.nrclabs.com

Analytical Report

WO#: **19110670**
 Date Reported: **11/25/2019**

Coleman Creek Consulting
 810 Leonard St
 Ashland, OR 97520

Lab Order: 19110670
Received Date: 11/18/2019 9:19:00 AM
Reported Date: 11/25/2019 4:05:47 PM

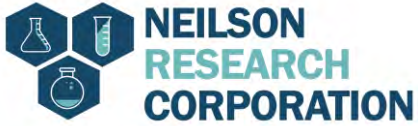
Sample Information:

Lab ID: **19110670-01** Client Sample ID: 19-104G-M13
 Collection Date: 11/16/2019 8:06:00 AM Collected By: David Fawcett
 Matrix: Drinking Water Sample Location: Grab

Trace Metals by EPA 200.8 ICP-MS							Analyst: SJS	
Analyses	Result	Qual	MRL	Units	DF	Date Analyzed	MCL	NELAP Status
Copper	37.8		0.515	µg/L	1	11/20/2019	1300	A
Lead	12.0		0.103	µg/L	1	11/20/2019	15.0	A

QUALIFIERS	* Value exceeds Maximum Contaminant Level.	C1 Sample container temperature is out of limit as specified at testcode
	E Value above quantitation range	H Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	MI Recovery outside control limits due to Matrix Interference
	ND Not Detected at the Reporting Limit	PL Permit Limit
	R RPD outside accepted recovery limits	

Original



Neilson Research Corporation
 245 S Grape St
 Medford, OR 97501
 TEL: (541) 770-5678 FAX: (541) 770-2901
 Website: www.nrclabs.com

QC SUMMARY REPORT

WO#: 19110670
 25-Nov-19

Client: Coleman Creek Consulting
Project: Medford ESD 19-104G

TestCode: ICPMS_200.8_DW

Sample ID: MB-2429	SampType: MBLK	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 11/20/2019	RunNo: 5792						
Client ID: PBW	Batch ID: 2429	TestNo: E200.8	E200.8	Analysis Date: 11/20/2019	SeqNo: 109499						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Copper	ND	0.515									
Lead	ND	0.103									

Sample ID: LCS-2429	SampType: LCS	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 11/20/2019	RunNo: 5792						
Client ID: LCSW	Batch ID: 2429	TestNo: E200.8	E200.8	Analysis Date: 11/20/2019	SeqNo: 109500						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Copper	113	0.520	100	0	113	85	115				
Lead	110	0.104	100	0	110	85	115				

Sample ID: 19110578-05AMS	SampType: MS	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 11/20/2019	RunNo: 5792						
Client ID: BatchQC	Batch ID: 2429	TestNo: E200.8	E200.8	Analysis Date: 11/20/2019	SeqNo: 109511						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Copper	165	0.520	100	72.0	93.2	70	130				
Lead	99.2	0.104	100	1.06	98.1	70	130				

Sample ID: 19110578-05AMSD	SampType: MSD	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 11/20/2019	RunNo: 5792						
Client ID: BatchQC	Batch ID: 2429	TestNo: E200.8	E200.8	Analysis Date: 11/20/2019	SeqNo: 109514						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Copper	166	0.520	100	72.0	93.7	70	130	165	0.269	20	
--------	-----	-------	-----	------	------	----	-----	-----	-------	----	--

Qualifiers:

* Value exceeds Maximum Contaminant Level.	C1 Sample container temperature is out of limit as specified at testcode	E Value above quantitation range
H Holding times for preparation or analysis exceeded	MI Recovery outside control limits due to Matrix Interference	ND Not Detected at the Reporting Limit
PL Permit Limit	RL Reporting Detection Limit	

Original



Neilson Research Corporation
 245 S Grape St
 Medford, OR 97501
 TEL: (541) 770-5678 FAX: (541) 770-2901
 Website: www.nrclabs.com

QC SUMMARY REPORT

WO#: 19110670
 25-Nov-19

Client: Coleman Creek Consulting
Project: Medford ESD 19-104G

TestCode: ICPMS_200.8_DW

Sample ID: 19110578-05AMSD	SampType: MSD	TestCode: ICPMS_200.8	Units: µg/L	Prep Date: 11/20/2019	RunNo: 5792						
Client ID: BatchQC	Batch ID: 2429	TestNo: E200.8	E200.8	Analysis Date: 11/20/2019	SeqNo: 109514						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	97.0	0.104	100	1.06	95.9	70	130	99.2	2.25	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.	C1 Sample container temperature is out of limit as specified at testcode	E Value above quantitation range
H Holding times for preparation or analysis exceeded	MI Recovery outside control limits due to Matrix Interference	ND Not Detected at the Reporting Limit
PL Permit Limit	RL Reporting Detection Limit	

Original

Chain of Custody Record

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

Section A
Required Client Information

Company: Coleman Creek Consulting
 Address: 810 Leonard St
 Ashland, OR 97520
 Email: fawbro@ccountry.net
 Phone: (541) 535-7108 Fax: (541) 535-8795

Collected By (Print): David Fawcett
 Collected By (Sign): [Signature]
 Email Report Yes ___ No Mail Report Yes ___ No
 Fax Report ___ Yes ___ No

Section B
Required Project Information

Project Name: Medford ESD
 Project Number: 19-1046
 Report To:
 Copy To:

Section C
Invoice Information

Attention:
 Company Name:
 Address:
 P.O. #

Section D
Rush Status (Subject to Scheduling)

Standard 10-14 Days
 ___ 5 Business Days (50% surcharge)
 ___ 3 Business Days (75% surcharge)
 ___ 24 - 48 hours (100% surcharge)
 ___ Other _____

Authorized ___ Yes ___ No

Section E
Sample Information

Sample ID	Comp/Grab	Matrix*	Date Collected	Time Collected	No. of Containers	Analysis Requested													
19-1046.M13	Grab	DW	11-16-19	0806	1														

NRC Workorder # 19110670
 (Lab Use Only)

Remarks/Field Data

NRC Sample #
 (Lab Use Only)

*Matrix: DW - Drinking Water WW - Wastewater W - Water S - Soil/Solid SL - Sludge O - Oil WP - Wipe OT - Other

Section F
Relinquish/Receive

Relinquished By:	Sign	Print	Date	Time
[Signature]	[Signature]	David W. Fawcett	11-13-19	0919
Received By:				
Relinquished By:				
Received By:				
Relinquished By:				
Received By Laboratory:	[Signature]	McKenzie Rush	11/18/19	979

Section G
Lab Use Only

Temp: [Signature]
 4°C +/- 2°C: ___ Yes ___ No
 Received on Ice: ___ Yes No
 Number of Bottles Received: 1
 pH Checked: _____
 COC Seals Intact: ___ Yes ___ No ___ NA
 Field Blank Included: ___ Yes ___ No

Received Via ___ UPS: ___ FedEx: ___ Other Hand
 Payment: Invoice ___ Cash: ___ VISA, M/C: ___ Check# _____ Amount: _____