

October 19, 2020

Cary Midwood PBS Environmental 3500 Chad Dr, Ste 100

Eugene, OR 97408 TEL: 541-686-8684 FAX: (541) 686-4602

RE: 52570.001 LCC Legionella Child Care Order No.: 20100566

Dear Cary Midwood: Center

Neilson Research Corporation received 4 sample(s) on 10/12/2020 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

Tampa Shmedeman

Tamra Schmedemann Senior Project Manager

245 S Grape St Medford, OR 97501









**Case Narrative** 

WO#: **20100566**Date: **10/19/2020** 

**CLIENT:** PBS Environmental

**Project:** 52570.001 LCC Legionella-Child Care Center

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 Comments for LEGIOLERT, Sample 20100566-02A, Batch ID R15408 : Legionella pneumophila serogroup 1 was confirmed using an antibody agglutination test.



**Analytical Report** 

WO#: 20100566 Date Reported: 10/19/2020

**CLIENT:** PBS Environmental **Collection Date:** 10/10/2020 10:02:00 AM Lab ID: 20100566-01 **Received Date:** 10/12/2020 12:00:00 PM Client Sample ID 111989-CC-122 Matrix: DRINKING WATER

**Project:** 52570.001 LCC Legionella-Child Care Center

Sample Address:

**Building 24** Sample Location: 111989-CC-122

NELAP Result Qual DF RLMethod Units MCL Date Analyzed/Analyst **Analyses** Status

LEGIONELLA PNEUMOPHILA BY LEGIOLERT

Legionella LEGIOLERT A ND 1.00 MPN/100mL 10/12/20 13:30 DJK

Sample container temperature is out of limit as specified at testcode MI PL Recovery outside comtrol limits due to Matrix Interference

Permit Limit

Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Original

NELAP

Accredited. ORELAP 100016, OR-028



**Analytical Report** 

WO#: **20100566**Date Reported: **10/19/2020** 

10/12/20 13:30 DJK

 CLIENT:
 PBS Environmental
 Collection Date:
 10/10/2020 10:05:00 AM

 Lab ID:
 20100566-02
 Received Date:
 10/12/2020 12:00:00 PM

 Client Sample ID
 111972-CC-207
 Matrix:
 DRINKING WATER

1.00

**Project:** 52570.001 LCC Legionella-Child Care Center

LEGIOLERT A

Sample Address:

Legionella

**Building 25** 

Sample Location: 111972-CC-207

Analyses	Method	NELAP Status	Result	Qual	DF	RL	Units	MCL Date Analyzed/Analyst
LEGIONELLA PNEUMOP	HILA BY LI	EGIOLERT	•					

Sample container temperature is out of limit as specified at testcode Recovery outside comtrol limits due to Matrix Interference

MI Recovery outs PL Permit Limit H Holding times for preparation or analysis exceeded

1.00 MPN/100mL

ND Not Detected at the Reporting Limit

Original

NELAP

NELAP A Accredited. ORELAP 100016, OR-028



**Analytical Report** 

WO#: 20100566 Date Reported: 10/19/2020

**CLIENT:** PBS Environmental Collection Date: 10/10/2020 10:07:00 AM Lab ID: 20100566-03 **Received Date:** 10/12/2020 12:00:00 PM Client Sample ID 111942-CC-300A Matrix: DRINKING WATER

**Project:** 52570.001 LCC Legionella-Child Care Center

Sample Address:

**Building 26** 

Sample Location: 111942-CC-300A

Analyses		NELAP Status	Result	Qual	DF	RL	Units	MCL Date Analyzed/Analyst
LEGIONELLA PNE	EUMOPHILA BY LE	GIOLERT	•					
Legionella	LEGIOLERT	ГА	ND		1	1.00	MPN/100mL	10/12/20 13:30 DJK

Sample container temperature is out of limit as specified at testcode Recovery outside comtrol limits due to Matrix Interference

MI PL Permit Limit

Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

Original

A Accredited. ORELAP 100016, OR-028



**Analytical Report** 

WO#: 20100566 Date Reported: 10/19/2020

10/12/20 13:30

**CLIENT:** PBS Environmental Collection Date: 10/10/2020 10:10:00 AM Lab ID: 20100566-04 **Received Date:** 10/12/2020 12:00:00 PM Client Sample ID 111968-CC-418 Matrix: DRINKING WATER

**Project:** 52570.001 LCC Legionella-Child Care Center

LEGIOLERT A

Sample Address:

Legionella

**Building 27** Sample Location: 111968-CC-418

Analyses	Method N	NELAP Status	Result	Qual	DF	RL	Units	MCL Date Analyzed/Analyst
LEGIONELLA PNEUMOP	HILA BY LEGI	SIOLERT						

ND

Sample container temperature is out of limit as specified at testcode MI PL Recovery outside comtrol limits due to Matrix Interference

Permit Limit

Holding times for preparation or analysis exceeded

1.00 MPN/100mL

Not Detected at the Reporting Limit

Original

NELAP

Accredited. ORELAP 100016, OR-028



Neilson Research Corporation

245 S Grape S1 Medford, OR 97501 TEL: (541) 770-5678 FAX: (541) 770-2901

Website: www.nrclabs.com

QC SUMMARY REPORT

20100500 19-Oct-20

WO#: 20100566

Client: PBS Environmental

**Project:** 52570.001 LCC Legionella-Child Care Center

TestCode: LEGIOLERT

Sample ID: MB-R15408	SampType: MBLK	TestCode	: LEGIOLEF	TestCode: LEGIOLERT Units: MPN/100mL	00mL	Prep Date:	je.		RunNo: <b>15408</b>	80	
Client ID: PBW	Batch ID: R15408	TestNo	FestNo: LEGIOLERT	κΤ	•	Analysis Dat	Analysis Date: 10/12/2020	120	SeqNo: 233261	261	
Analyte	Result	PQL	SPK value	PQL SPK value SPK Ref Val	%REC	LowLimit	HighLimit	%REC LowLimit HighLimit RPD Ref Val	%RPD	%RPD RPDLimit Qual	Qual
Legionella	QN	1.00									

Sample ID: LCS-R15408	SampType: LCS	TestCode	9: LEGIOLERT	TestCode: LEGIOLERT Units: MPN/100mL	mL	Prep Date:	9		RunNo: 15408	80	
Client ID: LCSW	Batch ID: R15408	TestNo	TestNo: LEGIOLERT		1	Analysis Date	Analysis Date: 10/12/2020		SeqNo: 233262	262	
Analyte	Result	PaL	SPK value SPK Ref Val	SPK Ref Val	%REC	LowLimit	%REC LowLimit HighLimit RPD Ref Val	סר Nef Val	%RPD	%RPD RPDLimit Qual	Qual
Legionella	Positive	1.00	1.000	0	0	О	O				

ecovery outside comtrol limits due to Matrix In	eporting Detection Limit
MI R	RL R
Holding times for preparation or analysis exceeded	Permit Limit
Н	PL
Sample container temperature is out of limit as specified at testcode	Not Detected at the Reporting Limit
CI	N
Qualifiers:	

Original



## Chain of Custody Record

Page \_1\_ of \_1\_

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

S. NRC Workorder # 20100566 NRC Sample # (Lab Use Only) 5 Business Days (50% surcharge) 3 Business Days (75% surcharge) 20 Rush Status (Subject to Scheduling) 00 24 - 48 hours (100% surcharge) 0 2 Yes SN. Number of Bottles Received: X\_Standard 10-14 Days X Yes Authorized Remarks/Field Data Yes Received on Ice. remp: 2.9 ab Use Only 4°C+/-2°C; Other Section D Section G Address: 3500 Chad Drive Suite 100 11:45 000 Attention: Vanessa Stevenson Time Analysis Requested "Matrix DW - Drinking Water WW - Wastewater W - Water S - Soli/Solid SL - Sludge O - Oil WP - Wipe OT - Other Eugene, OR 97408 Company Name, PBS nvoice Information 00/01/01 Date Section C P.O. # Project Name: LOC Legionella-Child Care Center LOEK-KT No. of Containers Report To: david.burrows@pbsusa.com Copy To: cary.midwood@pbsusa.com Collected 1007 1005 Required Project Information 1007 0107 Project Number: 52570.001 Cary Midwood Collected 0C/01/01 20 10/10/20 DW 10/10/20 OK/01/01 Date Section B NO CompiGrab Matrix\* 20 ŝ Grab Grab Grab Grant G Yes Company: PBS Engineering & Environmental No Mail Report Address: 3500 Chad Drive Suite 100 Email: cary.midwood@pbsusa.com Collected By (Print): Carry Midwood Section A Required Client Information Sample 1D -CC-300A 111989-CC-12 11972-CC-207 Relinquished By: Mn 2 814-52-89611 Yes Phone:541.716.4472 Eugene, OR 97408 Email Report X Yes Section E Sample Information Relinquish/Receive Collected By (Sign): Relinquished By: Fax Report Received By. Received By: 1947 Section F

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2

CN

Yes

COC Seals Intact:

12:00

22222

Received By Laboratory:

Relinquished By:

pH Checked:

Hand

Other

FedEX

UPS

Cheest a

Received Via UF

Payment: X Invoice

Yes No

Field BlankTholuced:



Neilson Research Corporation 245 S Grape St Medford, OR 97501 770-5678 FAY: (541) 770-2901

TEL: (541) 770-5678 FAX: (541) 770-2901 Website: <u>www.nrclabs.com</u> **Data Flags** 

WO#: **20100566**Date: **10/19/2020** 

- 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.