



EMSL Analytical, Inc.

2500 Gateway Centre Blvd., Suite 600 Morrisville, NC 27560
Tel/Fax: (919) 465-3900 / (919) 465-3950
<http://www.EMSL.com> / raleighlab@emsl.com

EMSL Order: 292205188
Customer ID: APXC62
Customer PO: 22006853 task 1
Project ID: Stafford County Public School

Attention: Carolyn Pitera
Apex Companies, LLC
9700 Capital Court, Ste 100
Manassas, VA 20110

Phone: (703) 396-6730
Fax: (703) 396-6743
Collected Date: 06/21/2022 02:00 PM - 06/21/2022 04:16 PM
Received Date: 06/23/2022 10:00 AM
Processed Date: 06/23/2022 11:00 AM
Analyzed Date: 07/05/2022 01:25 PM

Project: Anthony Burns Elementary Water/SCPS Legionella Sampling (Stafford County Public School (SCPS))

Legionella Detection - ID & Enumeration of *L. pneumophila* & *Legionella* species by ISO 11731:2017 Culture Method (EMSL Test Code M341 & Method MICRO-SOP-105)

Client Sample ID/Sample Location Lab Sample Number	Sample Type	Volume Submitted (mL)	Volume Filtered (mL)	Method Processed	Identification	Volume Examined (mL)	Limit of Detection (CFU/mL)	Final Results (CFU/mL)
062122ABE01W 292205188-0001	Potable	250	250	Concentrated	None Detected	5	0.20	ND
062122ABE02W 292205188-0002	Potable	250	250	Concentrated	None Detected	5	0.20	ND
062122ABE03W 292205188-0003	Potable	250	250	Concentrated	None Detected	5	0.20	ND
062122ABE04W 292205188-0004	Potable	250	250	Concentrated	None Detected	5	0.20	ND
062122ABE05W 292205188-0005	Potable	250	250	Concentrated	None Detected	5	0.20	ND
062122ABE06W 292205188-0006	Potable	250	250	Concentrated	None Detected	5	0.20	ND
062122ABE07W 292205188-0007	Potable	250	250	Concentrated	None Detected	5	0.20	ND
062122ABE08W 292205188-0008	Potable	250	250	Concentrated (Acid)	None Detected	0.5	2.00	ND
062122ABE09W 292205188-0009	Potable	250	250	Concentrated	None Detected	5	0.20	ND
062122ABE10W 292205188-0010	Potable	250	250	Concentrated	None Detected	5	0.20	ND
062122ABE11W 292205188-0011	Potable	250	250	Concentrated	<i>Legionella</i> spp.	5	0.20	0.60
062122ABE12W 292205188-0012	Potable	250	250	Concentrated (Acid)	<i>Legionella</i> spp.	0.5	2.00	6.00
062122ABE13W 292205188-0013	Potable	250	250	Concentrated	None Detected	5	0.20	ND
062122ABE14W 292205188-0014	Potable	250	250	Concentrated	None Detected	5	0.20	ND

Billy Barnes, Laboratory Manager
or other Approved Signatory

Legionella identification is carried out using a direct fluorescent antibody (DFA) for *Legionella pneumophila* (serogroups 1-14) and a DFA for 15 other *Legionella* species. *Legionella* spp. have tested negative by DFA but are positive for growth on selective media. ND = None Detected/Below LOD. The limit of detection (LOD) is the lowest reportable CFU/mL count and is dependent on the sample volume processed and the dilutions used during testing. Volume processed may be lower than volume submitted if sample is turbid or contains components that restrict concentration of the sample. Volume examined is the calculated amount of the original sample that is plated for culture analysis. High bacterial counts (*Legionella* or otherwise) may require dilution of the sample that will lower the Volume Examined and raise the Limit of Detection.

Samples high in non-*Legionella* bacteria may obscure the detection of *Legionella*.

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted.

CDC ELITE certified

Initial report from: 07/06/2022 11:24 AM

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EMSL Order: 292205187
Customer ID: APXC62
Customer PO: 22006853 task 1
Project ID: Stafford County Public School

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Apex Companies, LLC
9700 Capital Court, Ste 100
Manassas, VA 20110

Phone: (703) 396-6730
Fax: (703) 396-6743
Collected Date: 06/21/2022 01:58 PM - 06/21/2022 04:56 PM
Received Date: 06/23/2022 10:00 AM
Processed Date: 06/23/2022 03:20 PM
Analyzed Date: 07/05/2022 01:10 PM

Project: Anthony Burns Elementary Swabs/SCPS Legionella Sampling (Stafford County Public School (SCPS))

Legionella Detection - ID & Enumeration of *L. pneumophila* & *Legionella* species by ISO 11731:2017 Culture Method (EMSL Test Code M341 & Method MICRO-SOP-105)

Client Sample ID/Sample Location Lab Sample Number	Sample Type	Swabs Submitted	Volume Resuspended (mL)	Method Processed	Identification	Limit of Detection (CFU/swab)	Final Results (CFU/swab)
062122ABE01S 292205187-0001	Potable	1	5	Dilution	None Detected	50.00	ND
062122ABE02S 292205187-0002	Potable	1	5	Dilution	None Detected	50.00	ND
062122ABE03S 292205187-0003	Potable	1	5	Dilution	None Detected	50.00	ND
062122ABE04S 292205187-0004	Potable	1	5	Dilution	None Detected	50.00	ND
062122ABE05S 292205187-0005	Potable	1	5	Dilution (Acid)	None Detected	500.00	ND
062122ABE06S 292205187-0006	Potable	1	5	Dilution	None Detected	50.00	ND
062122ABE07S 292205187-0007	Potable	1	5	Dilution	None Detected	50.00	ND
062122ABE08S 292205187-0008	Potable	1	5	Dilution	None Detected	50.00	ND
062122ABE09S 292205187-0009	Potable	1	5	Dilution (Acid)	None Detected	500.00	ND
062122ABE010S 292205187-0010	Potable	1	5	Dilution	None Detected	50.00	ND
062122ABE011S 292205187-0011	Potable	1	5	Dilution	None Detected	50.00	ND
062122ABE012S 292205187-0012	Potable	1	5	Dilution (Acid)	<i>Legionella</i> spp.	500.00	1000.00
062122ABE013S 292205187-0013	Potable	1	5	Dilution	None Detected	50.00	ND
062122ABE014S 292205187-0014	Potable	1	5	Dilution	None Detected	50.00	ND

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Legionella identification is carried out using a direct fluorescent antibody (DFA) for *Legionella pneumophila* (serogroups 1-14) and a DFA for 15 other *Legionella* species. *Legionella* spp. have tested negative by DFA but are positive for growth on selective media. ND = None Detected/Below LOD. The limit of detection (LOD) is the lowest reportable CFU/swab count and is dependent on the resuspended volume and the dilutions used during testing. High bacterial counts (*Legionella* or otherwise) may require dilution of the sample that will raise the Limit of Detection.

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EMSL Order: 292208380
Customer ID: APXC62
Customer PO: STA0110-0526025
Project ID: Stafford County Public School

Attention: Carolyn Pitera
Apex Companies, LLC
9700 Capital Court, Ste 100
Manassas, VA 20110

Phone: (703) 396-6730
Fax: (703) 396-6743
Collected Date: 09/27/2022 09:55 AM - 09/27/2022 10:48 PM
Received Date: 09/29/2022 10:00 AM
Processed Date: 09/29/2022 12:00 PM
Analyzed Date: 10/11/2022 12:25 PM

Project: Anthony Burns Elementary Water/SCPS 75% Legionella (Stafford County Public School (SCPS))

Legionella Detection - ID & Enumeration of *L. pneumophila* & *Legionella* species by ISO 11731:2017 Culture Method (EMSL Test Code M341 & Method MICRO-SOP-105)

Client Sample ID/Sample Location Lab Sample Number	Sample Type	Volume Submitted (mL)	Volume Filtered (mL)	Method Processed	Identification	Volume Examined (mL)	Limit of Detection (CFU/mL)	Final Results (CFU/mL)
AB-92722-01W 292208380-0001	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-02W 292208380-0002	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-03W 292208380-0003	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-04W 292208380-0004	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-05W 292208380-0005	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-06W 292208380-0006	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-07W 292208380-0007	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-08W 292208380-0008	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-09W 292208380-0009	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-10W 292208380-0010	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-11W 292208380-0011	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-12W 292208380-0012	Potable	250	250	Concentrated (Acid)	None Detected	0.5	2.00	ND
AB-92722-13W 292208380-0013	Potable	250	250	Concentrated (Acid)	<i>Legionella</i> spp.	0.5	2.00	204.00
AB-92722-14W 292208380-0014	Potable	250	250	Concentrated (Acid)	<i>Legionella</i> spp.	0.5	2.00	84.00
AB-92722-15W 292208380-0015	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-16W 292208380-0016	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-17W 292208380-0017	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-18W 292208380-0018	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-19W 292208380-0019	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-20W 292208380-0020	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-21W 292208380-0021	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-22W 292208380-0022	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-23W 292208380-0023	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-24W 292208380-0024	Potable	250	250	Concentrated	None Detected	5	0.20	ND

Initial report from: 10/12/2022 11:47 AM



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EMSL Order: 292208380
Customer ID: APXC62
Customer PO: STA0110-0526025
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Attention: Carolyn Pitera
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9700 Capital Court, Ste 100
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Phone: (703) 396-6730
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Received Date: 09/29/2022 10:00 AM
Processed Date: 09/29/2022 12:00 PM
Analyzed Date: 10/11/2022 12:25 PM

Project: Anthony Burns Elementary Water/SCPS 75% Legionella (Stafford County Public School (SCPS))

AB-92722-25W 292208380-0025	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-26W 292208380-0026	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-27W 292208380-0027	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-28W 292208380-0028	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-29W 292208380-0029	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-30W 292208380-0030	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-31W 292208380-0031	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-32W 292208380-0032	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-33W 292208380-0033	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-34W 292208380-0034	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-35W 292208380-0035	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-36W 292208380-0036	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-37W 292208380-0037	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-38W 292208380-0038	Potable	250	250	Concentrated	Legionella spp.	5	0.20	0.40
AB-92722-39W 292208380-0039	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-40W 292208380-0040	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-41W 292208380-0041	Potable	250	250	Concentrated	None Detected	5	0.20	ND
AB-92722-42W 292208380-0042	Potable	250	250	Concentrated	None Detected	5	0.20	ND

Billy Barnes, Laboratory Manager
or other Approved Signatory

Legionella identification is carried out using a direct fluorescent antibody (DFA) for Legionella pneumophila (serogroups 1-14) and a DFA for 15 other Legionella species. Legionella spp. have tested negative by DFA but are positive for growth on selective media. ND = None Detected/Below LOD. The limit of detection (LOD) is the lowest reportable CFU/mL count and is dependent on the sample volume processed and the dilutions used during testing. Volume processed may be lower than volume submitted if sample is turbid or contains components that restrict concentration of the sample. Volume examined is the calculated amount of the original sample that is plated for culture analysis. High bacterial counts (Legionella or otherwise) may require dilution of the sample that will lower the Volume Examined and raise the Limit of Detection.

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Received Date: 09/29/2022 10:00 AM
Processed Date: 09/29/2022 04:00 PM
Analyzed Date: 10/17/2022 09:15 PM

Project: Anthony Burns Elementary Swab/SCPS 75% Legionella (Stafford County Public School (SCPS))

Legionella Detection - ID & Enumeration of *L. pneumophila* & *Legionella* species by ISO 11731:2017 Culture Method (EMSL Test Code M341 & Method MICRO-SOP-105)

Client Sample ID/Sample Location Lab Sample Number	Sample Type	Swabs Submitted	Volume Resuspended (mL)	Method Processed	Identification	Limit of Detection (CFU/swab)	Final Results (CFU/swab)
AB-92722-01S 292208383-0001	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-02S 292208383-0002	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-03S 292208383-0003	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-04S 292208383-0004	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-05S 292208383-0005	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-06S 292208383-0006	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-07S 292208383-0007	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-08S 292208383-0008	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-09S 292208383-0009	Potable	1	5	Dilution (Acid)	None Detected	500.00	ND
AB-92722-10S 292208383-0010	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-11S 292208383-0011	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-12S 292208383-0012	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-13S 292208383-0013	Potable	1	5	Dilution (Acid)	<i>Legionella</i> sp. (not <i>L. pneumophila</i>)	500.00	13500.00
AB-92722-14S 292208383-0014	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-15S 292208383-0015	Potable	1	5	Dilution (Acid)	None Detected	500.00	ND
AB-92722-16S 292208383-0016	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-17S 292208383-0017	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-18S 292208383-0018	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-19S 292208383-0019	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-20S 292208383-0020	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-21S 292208383-0021	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-22S 292208383-0022	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-23S 292208383-0023	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-24S 292208383-0024	Potable	1	5	Dilution	None Detected	50.00	ND

Initial report from: 10/19/2022 02:13 PM



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AB-92722-25S 292208383-0025	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-26S 292208383-0026	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-27S 292208383-0027	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-28S 292208383-0028	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-29S 292208383-0029	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-30S 292208383-0030	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-31S 292208383-0031	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-32S 292208383-0032	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-33S 292208383-0033	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-34S 292208383-0034	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-35S 292208383-0035	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-36S 292208383-0036	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-37S 292208383-0037	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-38S 292208383-0038	Potable	1	5	Dilution (Acid)	<i>Legionella</i> sp. (not <i>L. pneumophila</i>)	500.00	1000.00
AB-92722-39S 292208383-0039	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-40S 292208383-0040	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-41S 292208383-0041	Potable	1	5	Dilution	None Detected	50.00	ND
AB-92722-42S 292208383-0042	Potable	1	5	Dilution	None Detected	50.00	ND

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or other Approved Signatory

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