



Assured Bio Labs, LLC Legionella ViaScan Analysis

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Client:	Certified Industrial Hygienist	Date Collected:	1/1/2010
Project:	Legionella	Date Received:	1/2/2010
Job Number:	CIH010110	Date Reported:	1/9/2010
Assured Bio ID:	CIH010210-1	Analyst:	M. McGraw

Selected References

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Methods of Analysis

Assured Bio Labs, LLC uses the following Standard Operating Procedures for the analysis of samples:

ViaScan/ Culturable Bacteria from Bulk Material: 125
ViaScan/ Culturable Bacteria from a Swab: 126
ViaScan/ Culturable Bacteria from an Air Sample: 138
Bacterial Species ID for Dominant Organisms: 117, 118, 119, 120
Bacteria Species Id of Enteric Gram Negative Bacteria: 142

ViaScan/ Culturable Fungi from Bulk Material: 122
ViaScan/ Culturable Fungi from a Swab: 124
ViaScan/ Culturable Fungi from an Air Sample: 138
Fungal Species ID for Dominant Organisms: 117, 118, 119, 120

Reporting Limits

Minimum Reporting Limit: The American Industrial Hygiene Association defines this term in AIHA LQAP Policy Document – Module 9 as "The minimum concentration of an analyte that, in a given matrix and with a specific method, has a 99 percent probability of being identified, qualitatively or quantitatively measured, and reported to be greater than zero."

Analytical Sensitivity: The American Industrial Hygiene Association defines this term in AIHA LQAP Policy Document – Module 9 as "The lowest concentration that can be detected by the method, based upon the amount or portion of sample analyzed."

Additional Comments

The analytical data included in this report reflect only the conditions of the material sampled and submitted to the laboratory for analysis at the time of collection. The results included in this report may not be used for past or future environmental conditions.

Assured Bio Labs, LLC utilizes the standard outlined in *Bioaerosols: Assessment and Control* by J. Macher when making reliable interpretations. It states, "In general, 25 to 250 bacterial colonies and 10 to 60 fungal colonies are considered optimal for accurate counting and identification of CFU's on standard 100-mm plates."

Sample Number:	CIH010210-1-1	Incubation Temperature:	35°C
Sample ID:	Cooling Tower	Sample Type:	Bulk
Sample Condition:	Intact	Dilution Plate Counted:	10 ⁰ **
Minimum Reporting Limit:	1	Analytical Sensitivity:	1

	<u>Colony Forming Units Counted</u>	<u>Colony Forming Units/milliliter</u>
Colony Identifications:		
<i>Legionella</i> bacteria	100	4
Bacteria	150	6

Comments: Sample was concentrated. 250 milliliters of water were filtered through a 0.2 µm filter and resuspended in 2 milliliters of water. 0.2 milliliters were plated on **BCYE (non-selective *Legionella* media) and incubated at 35° C. Resulting CFU/mL calculation is "CFU/25"

Sample Number:	CIH010210-1-1	Incubation Temperature:	35°C
Sample ID:	Cooling Tower	Sample Type:	Bulk
Sample Condition:	Intact	Dilution Plate Counted:	10 ⁰ **
Minimum Reporting Limit:	1	Analytical Sensitivity:	1

	<u>Colony Forming Units Counted</u>	<u>Colony Forming Units/milliliter</u>
Colony Identifications:		
<i>Legionella</i> bacteria	125	5
Bacteria	50	2

Comments: Sample was concentrated. 250 milliliters of water were filtered through a 0.2 µm filter and resuspended in 2 milliliters of water. 0.2 milliliters were plated on **PAV (moderately-selective *Legionella* media) and incubated at 35° C. Resulting CFU/mL calculation is "CFU/25"

Sample Number:	CIH010210-1-1	Incubation Temperature:	35°C
Sample ID:	Cooling Tower	Sample Type:	Bulk
Sample Condition:	Intact	Dilution Plate Counted:	10 ⁰ **
Minimum Reporting Limit:	1	Analytical Sensitivity:	1

	<u>Colony Forming Units Counted</u>	<u>Colony Forming Units/milliliter</u>
Colony Identifications:		
<i>Legionella</i> bacteria	125	5
Bacteria	Below Detectable Limits	Below Detectable Limits

Comments: Sample was concentrated. 250 milliliters of water were filtered through a 0.2 µm filter and resuspended in 2 milliliters of water. 0.2 milliliters were plated on **GPCV (highly-selective *Legionella* media) and incubated at 35° C. Resulting CFU/mL calculation is "CFU/25"
