NYC 9/11 Public Portal Document

P & K Microbiology Services, Inc.
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The Environmental Microbiology Specialists
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Client: ATC Associates, Inc., New York, NY
Project ID: WTC/DDC
Date sampled: July 25, 2002
Date of inoculation: July 26, 2002
Samples submitted By: Wagdi
Date characterization completed: August 6, 2002
P&K Report No.: 020726-081

Fungal / Bacterial Analysis (Culture Method)

Wipe Samples

Sample ID	Area (inch2)	Medium used	Dilution factor	Fungal / Bacterial ID	Colony counts	Conc. ** (CFU / in2)	Percentage* (%)
				Fungi			
0725-WTC-W1	1	MEA	100X	Acremonium strictum	37	3,700	76
				Penicillium	11	1,100	22
				Trichoderma koningii	1	100	2
						Total: 4,900	
				Bacteria			
		TSA	16400X	Bacillus	8	131,200	3
				gram negative bacteria and others	236	3,870,400	97
						Total: 4,001,600	
				Fungi			
0725-WTC-W2	1	MEA	100X	Penicillium	7	700	70
				Trichoderma koningii	3	300	30
						Total: 1,000	
				Bacteria			
		TSA	16400X	gram negative bacteria and others	278	4,559,200	100
						Total: 4,559,200	
				Fungi			
0725-WTC-W3	1	MEA	100X	Acremonium strictum	28	2,800	27
				Aspergillus versicolor	5	500	5
				Cladosporium	9	900	9
				Penicillium	56	5,600	55
				Rhodotorula	4	400	4
						Total: 10,200	
				Bacteria			
		TSA	16400X	Bacillus	2	32,800	< 1
				gram negative bacteria and others	297	4,870,800	98
				Staphylococcus	4	65,600	1
						Total: 4,969,200	
				Fungi			
0725-WTC-W4	1	MEA	100X	Penicillium	7	700	64
				Trichoderma koningii	4	400	36
						Total: 1,100	
				Bacteria			
		TSA	100X	Bacillus	4	400	100
						Total: 400	

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Wipe Samples

Sample ID	Area (inch2)	Medium used	Dilution factor	Fungal / Bacterial ID	Colony counts	Conc. ** (CFU / in2)	Percentage* (%)
				Fungi			
0725-WTC-W5	1	MEA	100X	Aspergillus versicolor	24	2,400	77
				Penicillium	3	300	10
				sterile fungi	3	300	10
				Trichoderma koningii	1	100	3
						Total: 3,100	
				Bacteria			
		TSA	4100X	gram negative bacteria and others	312	1,279,200	65
				Pseudomonas sp. non aeruginosa	169	692,900	35
						Total: 1,972,100	
				Fungi			
0725-WTC-W6	1	MEA	100X	Aspergillus versicolor	1	100	< 1
				Cladosporium	24	2,400	17
				Penicillium	3	300	2
				yeasts	116	11,600	81
						Total: 14,400	
				Bacteria			
		TSA	100X	Bacillus	9	900	4
				gram negative bacteria and others	236	23,600	93
				Micrococcus luteus	4	400	2
				Rhodococcus	6	600	2
						Total: 25,500	
				Fungi			
0725-WTC-W7	1	MEA	100X	Basidiomycetes	1	100	25
				Penicillium	3	300	75
						Total: 400	
				Bacteria			
		TSA	100X	gram negative bacteria and others	72	7,200	97
				Micrococcus luteus	2	200	3
						Total: 7,400	

* Percentage of each group of fungi / bacteria in total population.

** Concentration is (CFU/Sample) if sample amount is NA.

Media types: Cellulose agar (CA), Czapek cellulose agar (CCA), cornmeal agar (CMA), 2% malt extract agar (MEA), 2% malt extract agar plus 20% sucrose (MEA+S), inhibitory mold agar (IMA), Pseudomonas isolation agar (PIA), rose bengal agar (RBA), sabouraud dextrose agar (SDA), tryptic soy agar (TSA), nutrient agar (NTA), Blood agar (BA), Staphylococcus Medium 110 (Staphy).

The detection limit of fungal and bacterial analysis using culture methods is one colony. The quantitation limits vary from analysis to analysis and from processing procedure to processing procedure. Contact us to determine your quantitation limits.

Approved by: _____

Chin S. Yang, Ph.D., Microbiologist

Quality control checked by: _____

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

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