

**National Shellfish Sanitation Program (NSSP) Guide for the Control of Molluscan Shellfish: 2023 Revision**

**Appendix A – Tube Code Table for Validation and Verification**

Appendix A:		Tube Code Table for Validation and Verification			
Initial Pre-Process <i>V.p.</i> Density Measurement		Post-Process <i>V.p.</i> Density Measurement			
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(0,0,1)	0.0001, 0.00001, 0.000001	10	2	0.01	0.1
(0,0,2)	0.0001, 0.00001, 0.000001	9	3	0.01	0.1
(0,1,0)	0.0001, 0.00001, 0.000001	10	2	0.01	0.1
(0,1,1)	0.0001, 0.00001, 0.000001	9	3	0.01	0.1
(0,2,0)	0.0001, 0.00001, 0.000001	9	3	0.01	0.1
(0,2,1)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(0,3,0)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(1,0,0)	0.0001, 0.00001, 0.000001	6	5	0.1	1
(1,0,1)	0.0001, 0.00001, 0.000001	9	3	0.01	0.1
(1,0,2)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(1,1,0)	0.0001, 0.00001, 0.000001	9	3	0.01	0.1
(1,1,1)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(1,1,2)	0.0001, 0.00001, 0.000001	10	1	0.001	0.01
(1,2,0)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(1,2,1)	0.0001, 0.00001, 0.000001	10	1	0.001	0.01
(1,3,0)	0.0001, 0.00001, 0.000001	10	1	0.001	0.01
(1,3,1)	0.0001, 0.00001, 0.000001	8	1	0.001	0.01
(1,4,0)	0.0001, 0.00001, 0.000001	8	1	0.001	0.01
(2,0,0)	0.0001, 0.00001, 0.000001	5	2	0.01	0.1
(2,0,1)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(2,0,2)	0.0001, 0.00001, 0.000001	10	1	0.001	0.01
(2,1,0)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(2,1,1)	0.0001, 0.00001, 0.000001	10	1	0.001	0.01
(2,1,2)	0.0001, 0.00001, 0.000001	10	6	0.01	0.1
(2,2,0)	0.0001, 0.00001, 0.000001	7	4	0.01	0.1
(2,2,1)	0.0001, 0.00001, 0.000001	10	6	0.01	0.1
(2,2,2)	0.0001, 0.00001, 0.000001	8	0	0.0001	0.001
(2,3,0)	0.0001, 0.00001, 0.000001	8	5	0.01	0.1
(2,3,1)	0.0001, 0.00001, 0.000001	8	0	0.0001	0.001
(2,4,0)	0.0001, 0.00001, 0.000001	8	0	0.0001	0.001
(2,4,1)	0.0001, 0.00001, 0.000001	7	0	0.0001	0.001
(2,5,0)	0.0001, 0.00001, 0.000001	7	0	0.0001	0.001
(3,0,0)	0.0001, 0.00001, 0.000001	6	3	0.01	0.1
(3,0,1)	0.0001, 0.00001, 0.000001	9	5	0.01	0.1
(3,0,2)	0.0001, 0.00001, 0.000001	10	0	0.0001	0.001
(3,1,0)	0.0001, 0.00001, 0.000001	9	5	0.01	0.1
(3,1,1)	0.0001, 0.00001, 0.000001	10	0	0.0001	0.001
(3,1,2)	0.0001, 0.00001, 0.000001	8	0	0.0001	0.001
(3,2,0)	0.0001, 0.00001, 0.000001	10	0	0.0001	0.001

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Initial Pre-Process <i>V.p. Density</i> Measurement		Post-Process <i>V.p. Density</i> Measurement			
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(3,2,1)	0.0001, 0.00001, 0.000001	8	0	0.0001	0.001
(3,2,2)	0.0001, 0.00001, 0.000001	8	6	0.01	0.1
(3,3,0)	0.0001, 0.00001, 0.000001	8	0	0.0001	0.001
(3,3,1)	0.0001, 0.00001, 0.000001	8	6	0.01	0.1
(3,3,2)	0.0001, 0.00001, 0.000001	6	0	0.0001	0.001
(3,4,0)	0.0001, 0.00001, 0.000001	8	6	0.01	0.1
(3,4,1)	0.0001, 0.00001, 0.000001	6	0	0.0001	0.001
(3,5,0)	0.0001, 0.00001, 0.000001	6	0	0.0001	0.001
(4,0,0)	0.0001, 0.00001, 0.000001	8	1	0.001	0.01
(4,0,1)	0.0001, 0.00001, 0.000001	9	0	0.0001	0.001
(4,0,2)	0.0001, 0.00001, 0.000001	10	7	0.01	0.1
(4,1,0)	0.0001, 0.00001, 0.000001	9	0	0.0001	0.001
(4,1,1)	0.0001, 0.00001, 0.000001	10	7	0.01	0.1
(4,1,2)	0.0001, 0.00001, 0.000001	5	4	0.01	0.1
(4,2,0)	0.0001, 0.00001, 0.000001	10	7	0.01	0.1
(4,2,2)	0.001, 0.0001, 0.00001	10	2	0.01	0.1
(4,3,0)	0.0001, 0.00001, 0.000001	5	4	0.01	0.1
(4,3,1)	0.001, 0.0001, 0.00001	10	8	0.1	1
(4,3,2)	0.001, 0.0001, 0.00001	7	6	0.1	1
(4,4,0)	0.001, 0.0001, 0.00001	10	8	0.1	1
(4,4,1)	0.001, 0.0001, 0.00001	7	6	0.1	1
(4,5,0)	0.001, 0.0001, 0.00001	7	6	0.1	1
(4,5,1)	0.001, 0.0001, 0.00001	8	2	0.01	0.1
(4,6,0)	0.001, 0.0001, 0.00001	8	2	0.01	0.1
(5,0,0)	0.0001, 0.00001, 0.000001	9	6	0.01	0.1
(5,0,1)	0.0001, 0.00001, 0.000001	7	0	0.0001	0.001
(5,0,2)	0.0001, 0.00001, 0.000001	6	0	0.0001	0.001
(5,0,3)	0.001, 0.0001, 0.00001	5	0	0.001	0.01
(5,1,0)	0.0001, 0.00001, 0.000001	7	0	0.0001	0.001
(5,1,1)	0.0001, 0.00001, 0.000001	6	0	0.0001	0.001
(5,1,2)	0.001, 0.0001, 0.00001	5	0	0.001	0.01
(5,1,3)	0.001, 0.0001, 0.00001	8	7	0.1	1
(5,2,0)	0.0001, 0.00001, 0.000001	6	0	0.0001	0.001
(5,2,1)	0.001, 0.0001, 0.00001	5	0	0.001	0.01
(5,2,2)	0.001, 0.0001, 0.00001	8	7	0.1	1
(5,3,0)	0.001, 0.0001, 0.00001	5	0	0.001	0.01
(5,3,1)	0.001, 0.0001, 0.00001	8	7	0.1	1
(5,3,2)	0.001, 0.0001, 0.00001	9	8	0.1	1
(5,4,0)	0.001, 0.0001, 0.00001	8	7	0.1	1
(5,4,1)	0.001, 0.0001, 0.00001	9	8	0.1	1
(5,4,2)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(5,5,0)	0.001, 0.0001, 0.00001	9	8	0.1	1

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Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(5,5,1)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(5,6,0)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(6,0,0)	0.0001, 0.00001, 0.000001	5	4	0.01	0.1
(6,0,1)	0.001, 0.0001, 0.00001	10	2	0.01	0.1
(6,0,2)	0.001, 0.0001, 0.00001	7	6	0.1	1
(6,0,3)	0.001, 0.0001, 0.00001	8	2	0.01	0.1
(6,1,0)	0.001, 0.0001, 0.00001	10	2	0.01	0.1
(6,1,1)	0.001, 0.0001, 0.00001	7	6	0.1	1
(6,1,2)	0.001, 0.0001, 0.00001	8	2	0.01	0.1
(6,1,3)	0.001, 0.0001, 0.00001	10	9	0.1	1
(6,2,0)	0.001, 0.0001, 0.00001	7	6	0.1	1
(6,2,1)	0.001, 0.0001, 0.00001	8	2	0.01	0.1
(6,2,2)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(6,2,3)	0.001, 0.0001, 0.00001	10	3	0.01	0.1
(6,3,0)	0.001, 0.0001, 0.00001	8	2	0.01	0.1
(6,3,1)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(6,3,2)	0.001, 0.0001, 0.00001	10	3	0.01	0.1
(6,4,0)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(6,4,1)	0.001, 0.0001, 0.00001	10	3	0.01	0.1
(6,4,2)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(6,5,0)	0.001, 0.0001, 0.00001	10	3	0.01	0.1
(6,5,1)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(6,5,2)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(6,6,0)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(6,6,1)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(6,7,0)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(7,0,0)	0.001, 0.0001, 0.00001	5	0	0.001	0.01
(7,0,1)	0.001, 0.0001, 0.00001	8	7	0.1	1
(7,0,2)	0.001, 0.0001, 0.00001	10	9	0.1	1
(7,0,3)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(7,1,0)	0.001, 0.0001, 0.00001	8	7	0.1	1
(7,1,1)	0.001, 0.0001, 0.00001	10	9	0.1	1
(7,1,2)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(7,1,3)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(7,2,0)	0.001, 0.0001, 0.00001	10	9	0.1	1
(7,2,1)	0.001, 0.0001, 0.00001	10	3	0.01	0.1
(7,2,2)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(7,2,3)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(7,3,0)	0.001, 0.0001, 0.00001	10	3	0.01	0.1
(7,3,1)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(7,3,2)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(7,3,3)	0.001, 0.0001, 0.00001	5	2	0.01	0.1

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Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(7,4,0)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(7,4,1)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(7,4,2)	0.001, 0.0001, 0.00001	5	2	0.01	0.1
(7,4,3)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(7,5,0)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(7,5,1)	0.001, 0.0001, 0.00001	5	2	0.01	0.1
(7,5,2)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(7,6,0)	0.001, 0.0001, 0.00001	5	2	0.01	0.1
(7,6,1)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(7,6,2)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(7,7,0)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(7,7,1)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(8,0,0)	0.001, 0.0001, 0.00001	9	8	0.1	1
(8,0,1)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(8,0,2)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(8,0,3)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(8,1,0)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(8,1,1)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(8,1,2)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(8,1,3)	0.001, 0.0001, 0.00001	5	2	0.01	0.1
(8,2,0)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(8,2,1)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(8,2,2)	0.001, 0.0001, 0.00001	5	2	0.01	0.1
(8,2,3)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(8,3,0)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(8,3,1)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(8,3,2)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(8,3,3)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(8,4,0)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(8,4,1)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(8,4,2)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(8,4,3)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(8,5,0)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(8,5,1)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(8,5,2)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(8,5,3)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(8,6,0)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(8,6,1)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(8,6,2)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(8,7,0)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(8,7,1)	0.001, 0.0001, 0.00001	8	4	0.01	0.1
(8,7,2)	0.001, 0.0001, 0.00001	10	5	0.01	0.1

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Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(8,8,0)	0.001, 0.0001, 0.00001	8	4	0.01	0.1
(8,8,1)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(9,0,0)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(9,0,1)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(9,0,2)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(9,0,3)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(9,1,0)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(9,1,1)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(9,1,2)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(9,1,3)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(9,1,4)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(9,2,0)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(9,2,1)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(9,2,2)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(9,2,3)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(9,2,4)	0.001, 0.0001, 0.00001	10	5	0.01	0.1
(9,3,0)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(9,3,1)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(9,3,2)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(9,3,3)	0.001, 0.0001, 0.00001	10	5	0.01	0.1
(9,3,4)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(9,4,0)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(9,4,1)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(9,4,2)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(9,4,3)	0.001, 0.0001, 0.00001	7	4	0.01	0.1
(9,4,4)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(9,5,0)	0.001, 0.0001, 0.00001	8	4	0.01	0.1
(9,5,1)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(9,5,2)	0.001, 0.0001, 0.00001	7	4	0.01	0.1
(9,5,3)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(9,5,4)	0.001, 0.0001, 0.00001	10	0	0.0001	0.001
(9,6,0)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(9,6,1)	0.001, 0.0001, 0.00001	9	5	0.01	0.1
(9,6,2)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(9,6,3)	0.001, 0.0001, 0.00001	10	0	0.0001	0.001
(9,7,0)	0.001, 0.0001, 0.00001	9	5	0.01	0.1
(9,7,1)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(9,7,2)	0.001, 0.0001, 0.00001	6	4	0.01	0.1
(9,7,3)	0.001, 0.0001, 0.00001	9	6	0.01	0.1
(9,8,0)	0.001, 0.0001, 0.00001	10	6	0.01	0.1
(9,8,1)	0.001, 0.0001, 0.00001	7	1	0.001	0.01
(9,8,2)	0.001, 0.0001, 0.00001	8	0	0.0001	0.001

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Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(9,8,3)	0.001, 0.0001, 0.00001	10	7	0.01	0.1
(9,9,0)	0.001, 0.0001, 0.00001	9	0	0.0001	0.001
(9,9,1)	0.001, 0.0001, 0.00001	8	0	0.0001	0.001
(9,9,2)	0.001, 0.0001, 0.00001	7	0	0.0001	0.001
(10,0,0)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(10,0,1)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(10,0,2)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(10,0,3)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(10,1,0)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(10,1,1)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(10,1,2)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(10,1,3)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(10,1,4)	0.001, 0.0001, 0.00001	10	0	0.0001	0.001
(10,2,0)	0.001, 0.0001, 0.00001	8	4	0.01	0.1
(10,2,1)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(10,2,2)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(10,2,3)	0.001, 0.0001, 0.00001	6	4	0.01	0.1
(10,2,4)	0.001, 0.0001, 0.00001	8	0	0.0001	0.001
(10,3,0)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(10,3,1)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(10,3,2)	0.001, 0.0001, 0.00001	9	0	0.0001	0.001
(10,3,3)	0.001, 0.0001, 0.00001	7	5	0.01	0.1
(10,3,4)	0.001, 0.0001, 0.00001	5	4	0.01	0.1
(10,3,5)	0.001, 0.0001, 0.00001	6	0	0.0001	0.001
(10,4,0)	0.001, 0.0001, 0.00001	10	6	0.01	0.1
(10,4,1)	0.001, 0.0001, 0.00001	9	0	0.0001	0.001
(10,4,2)	0.001, 0.0001, 0.00001	7	0	0.0001	0.001
(10,4,3)	0.001, 0.0001, 0.00001	5	4	0.01	0.1
(10,4,4)	0.001, 0.0001, 0.00001	6	5	0.01	0.1
(10,4,5)	0.01, 0.001, 0.0001	7	6	0.1	1
(10,5,0)	0.001, 0.0001, 0.00001	8	0	0.0001	0.001
(10,5,1)	0.001, 0.0001, 0.00001	7	0	0.0001	0.001
(10,5,2)	0.001, 0.0001, 0.00001	6	0	0.0001	0.001
(10,5,3)	0.01, 0.001, 0.0001	5	0	0.001	0.01
(10,5,4)	0.01, 0.001, 0.0001	8	7	0.1	1
(10,5,5)	0.01, 0.001, 0.0001	9	8	0.1	1
(10,5,6)	0.01, 0.001, 0.0001	7	2	0.01	0.1
(10,6,0)	0.001, 0.0001, 0.00001	5	4	0.01	0.1
(10,6,1)	0.01, 0.001, 0.0001	6	5	0.1	1
(10,6,2)	0.01, 0.001, 0.0001	7	6	0.1	1
(10,6,3)	0.01, 0.001, 0.0001	9	8	0.1	1
(10,6,4)	0.01, 0.001, 0.0001	7	2	0.01	0.1

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Initial Pre-Process <i>V.p. Density</i> Measurement		Post-Process <i>V.p. Density</i> Measurement			
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(10,6,5)	0.01, 0.001, 0.0001	10	3	0.01	0.1
(10,6,6)	0.01, 0.001, 0.0001	6	2	0.01	0.1
(10,7,0)	0.01, 0.001, 0.0001	5	0	0.001	0.01
(10,7,1)	0.01, 0.001, 0.0001	8	2	0.01	0.1
(10,7,2)	0.01, 0.001, 0.0001	10	9	0.1	1
(10,7,3)	0.01, 0.001, 0.0001	10	3	0.01	0.1
(10,7,4)	0.01, 0.001, 0.0001	6	2	0.01	0.1
(10,7,5)	0.01, 0.001, 0.0001	9	3	0.01	0.1
(10,7,6)	0.01, 0.001, 0.0001	8	3	0.01	0.1
(10,7,7)	0.01, 0.001, 0.0001	10	4	0.01	0.1
(10,8,0)	0.01, 0.001, 0.0001	9	8	0.1	1
(10,8,1)	0.01, 0.001, 0.0001	10	3	0.01	0.1
(10,8,2)	0.01, 0.001, 0.0001	6	2	0.01	0.1
(10,8,3)	0.01, 0.001, 0.0001	5	2	0.01	0.1
(10,8,4)	0.01, 0.001, 0.0001	8	3	0.01	0.1
(10,8,5)	0.01, 0.001, 0.0001	10	4	0.01	0.1
(10,8,6)	0.01, 0.001, 0.0001	9	4	0.01	0.1
(10,8,7)	0.01, 0.001, 0.0001	6	3	0.01	0.1
(10,8,8)	0.01, 0.001, 0.0001	8	4	0.01	0.1
(10,9,0)	0.01, 0.001, 0.0001	6	2	0.01	0.1
(10,9,1)	0.01, 0.001, 0.0001	5	2	0.01	0.1
(10,9,2)	0.01, 0.001, 0.0001	8	3	0.01	0.1
(10,9,3)	0.01, 0.001, 0.0001	7	3	0.01	0.1
(10,9,4)	0.01, 0.001, 0.0001	6	3	0.01	0.1
(10,9,5)	0.01, 0.001, 0.0001	8	4	0.01	0.1
(10,9,6)	0.01, 0.001, 0.0001	10	1	0.001	0.01
(10,9,7)	0.01, 0.001, 0.0001	8	1	0.001	0.01
(10,9,8)	0.01, 0.001, 0.0001	10	0	0.0001	0.001
(10,9,9)	0.01, 0.001, 0.0001	8	0	0.0001	0.001
(10,10,0)	0.01, 0.001, 0.0001	10	4	0.01	0.1
(10,10,1)	0.01, 0.001, 0.0001	9	4	0.01	0.1
(10,10,2)	0.01, 0.001, 0.0001	8	4	0.01	0.1
(10,10,3)	0.01, 0.001, 0.0001	9	5	0.01	0.1
(10,10,4)	0.01, 0.001, 0.0001	6	4	0.01	0.1
(10,10,5)	0.01, 0.001, 0.0001	7	0	0.0001	0.001
(10,10,6)	0.10, 0.01, 0.001	10	2	0.01	0.1
(10,10,7)	0.10, 0.01, 0.001	8	2	0.01	0.1
(10,10,8)	0.10, 0.01, 0.001	10	3	0.01	0.1
(10,10,9)	0.10, 0.01, 0.001	8	3	0.01	0.1
(0,0,1)	0.0001, 0.00001, 0.000001	10	2	0.01	0.1
(0,0,2)	0.0001, 0.00001, 0.000001	9	3	0.01	0.1
(0,1,0)	0.0001, 0.00001, 0.000001	10	2	0.01	0.1

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Initial Pre-Process <i>V.p. Density</i> Measurement		Post-Process <i>V.p. Density</i> Measurement			
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(0,1,1)	0.0001, 0.00001, 0.000001	9	3	0.01	0.1
(0,2,0)	0.0001, 0.00001, 0.000001	9	3	0.01	0.1
(0,2,1)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(0,3,0)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(1,0,0)	0.0001, 0.00001, 0.000001	6	5	0.1	1
(1,0,1)	0.0001, 0.00001, 0.000001	9	3	0.01	0.1
(1,0,2)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(1,1,0)	0.0001, 0.00001, 0.000001	9	3	0.01	0.1
(1,1,1)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(1,1,2)	0.0001, 0.00001, 0.000001	10	1	0.001	0.01
(1,2,0)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(1,2,1)	0.0001, 0.00001, 0.000001	10	1	0.001	0.01
(1,3,0)	0.0001, 0.00001, 0.000001	10	1	0.001	0.01
(1,3,1)	0.0001, 0.00001, 0.000001	8	1	0.001	0.01
(1,4,0)	0.0001, 0.00001, 0.000001	8	1	0.001	0.01
(2,0,0)	0.0001, 0.00001, 0.000001	5	2	0.01	0.1
(2,0,1)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(2,0,2)	0.0001, 0.00001, 0.000001	10	1	0.001	0.01
(2,1,0)	0.0001, 0.00001, 0.000001	9	4	0.01	0.1
(2,1,1)	0.0001, 0.00001, 0.000001	10	1	0.001	0.01
(2,1,2)	0.0001, 0.00001, 0.000001	10	6	0.01	0.1
(2,2,0)	0.0001, 0.00001, 0.000001	7	4	0.01	0.1
(2,2,1)	0.0001, 0.00001, 0.000001	10	6	0.01	0.1
(2,2,2)	0.0001, 0.00001, 0.000001	8	0	0.0001	0.001
(2,3,0)	0.0001, 0.00001, 0.000001	8	5	0.01	0.1
(2,3,1)	0.0001, 0.00001, 0.000001	8	0	0.0001	0.001
(2,4,0)	0.0001, 0.00001, 0.000001	8	0	0.0001	0.001
(2,4,1)	0.0001, 0.00001, 0.000001	7	0	0.0001	0.001
(2,5,0)	0.0001, 0.00001, 0.000001	7	0	0.0001	0.001
(3,0,0)	0.0001, 0.00001, 0.000001	6	3	0.01	0.1
(3,0,1)	0.0001, 0.00001, 0.000001	9	5	0.01	0.1
(3,0,2)	0.0001, 0.00001, 0.000001	10	0	0.0001	0.001
(3,1,0)	0.0001, 0.00001, 0.000001	9	5	0.01	0.1
(3,1,1)	0.0001, 0.00001, 0.000001	10	0	0.0001	0.001
(3,1,2)	0.0001, 0.00001, 0.000001	8	0	0.0001	0.001
(3,2,0)	0.0001, 0.00001, 0.000001	10	0	0.0001	0.001
(3,2,1)	0.0001, 0.00001, 0.000001	8	0	0.0001	0.001
(3,2,2)	0.0001, 0.00001, 0.000001	8	6	0.01	0.1
(3,3,0)	0.0001, 0.00001, 0.000001	8	0	0.0001	0.001
(3,3,1)	0.0001, 0.00001, 0.000001	8	6	0.01	0.1
(3,3,2)	0.0001, 0.00001, 0.000001	6	0	0.0001	0.001
(3,4,0)	0.0001, 0.00001, 0.000001	8	6	0.01	0.1



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Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(3,4,1)	0.0001, 0.00001, 0.000001	6	0	0.0001	0.001
(3,5,0)	0.0001, 0.00001, 0.000001	6	0	0.0001	0.001
(4,0,0)	0.0001, 0.00001, 0.000001	8	1	0.001	0.01
(4,0,1)	0.0001, 0.00001, 0.000001	9	0	0.0001	0.001
(4,0,2)	0.0001, 0.00001, 0.000001	10	7	0.01	0.1
(4,1,0)	0.0001, 0.00001, 0.000001	9	0	0.0001	0.001
(4,1,1)	0.0001, 0.00001, 0.000001	10	7	0.01	0.1
(4,1,2)	0.0001, 0.00001, 0.000001	5	4	0.01	0.1
(4,2,0)	0.0001, 0.00001, 0.000001	10	7	0.01	0.1
(4,2,2)	0.001, 0.0001, 0.00001	10	2	0.01	0.1
(4,3,0)	0.0001, 0.00001, 0.000001	5	4	0.01	0.1
(4,3,1)	0.001, 0.0001, 0.00001	10	8	0.1	1
(4,3,2)	0.001, 0.0001, 0.00001	7	6	0.1	1
(4,4,0)	0.001, 0.0001, 0.00001	10	8	0.1	1
(4,4,1)	0.001, 0.0001, 0.00001	7	6	0.1	1
(4,5,0)	0.001, 0.0001, 0.00001	7	6	0.1	1
(4,5,1)	0.001, 0.0001, 0.00001	8	2	0.01	0.1
(4,6,0)	0.001, 0.0001, 0.00001	8	2	0.01	0.1
(5,0,0)	0.0001, 0.00001, 0.000001	9	6	0.01	0.1
(5,0,1)	0.0001, 0.00001, 0.000001	7	0	0.0001	0.001
(5,0,2)	0.0001, 0.00001, 0.000001	6	0	0.0001	0.001
(5,0,3)	0.001, 0.0001, 0.00001	5	0	0.001	0.01
(5,1,0)	0.0001, 0.00001, 0.000001	7	0	0.0001	0.001
(5,1,1)	0.0001, 0.00001, 0.000001	6	0	0.0001	0.001
(5,1,2)	0.001, 0.0001, 0.00001	5	0	0.001	0.01
(5,1,3)	0.001, 0.0001, 0.00001	8	7	0.1	1
(5,2,0)	0.0001, 0.00001, 0.000001	6	0	0.0001	0.001
(5,2,1)	0.001, 0.0001, 0.00001	5	0	0.001	0.01
(5,2,2)	0.001, 0.0001, 0.00001	8	7	0.1	1
(5,3,0)	0.001, 0.0001, 0.00001	5	0	0.001	0.01
(5,3,1)	0.001, 0.0001, 0.00001	8	7	0.1	1
(5,3,2)	0.001, 0.0001, 0.00001	9	8	0.1	1
(5,4,0)	0.001, 0.0001, 0.00001	8	7	0.1	1
(5,4,1)	0.001, 0.0001, 0.00001	9	8	0.1	1
(5,4,2)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(5,5,0)	0.001, 0.0001, 0.00001	9	8	0.1	1
(5,5,1)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(5,6,0)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(6,0,0)	0.0001, 0.00001, 0.000001	5	4	0.01	0.1
(6,0,1)	0.001, 0.0001, 0.00001	10	2	0.01	0.1
(6,0,2)	0.001, 0.0001, 0.00001	7	6	0.1	1
(6,0,3)	0.001, 0.0001, 0.00001	8	2	0.01	0.1

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Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(6,1,0)	0.001, 0.0001, 0.00001	10	2	0.01	0.1
(6,1,1)	0.001, 0.0001, 0.00001	7	6	0.1	1
(6,1,2)	0.001, 0.0001, 0.00001	8	2	0.01	0.1
(6,1,3)	0.001, 0.0001, 0.00001	10	9	0.1	1
(6,2,0)	0.001, 0.0001, 0.00001	7	6	0.1	1
(6,2,1)	0.001, 0.0001, 0.00001	8	2	0.01	0.1
(6,2,2)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(6,2,3)	0.001, 0.0001, 0.00001	10	3	0.01	0.1
(6,3,0)	0.001, 0.0001, 0.00001	8	2	0.01	0.1
(6,3,1)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(6,3,2)	0.001, 0.0001, 0.00001	10	3	0.01	0.1
(6,4,0)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(6,4,1)	0.001, 0.0001, 0.00001	10	3	0.01	0.1
(6,4,2)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(6,5,0)	0.001, 0.0001, 0.00001	10	3	0.01	0.1
(6,5,1)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(6,5,2)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(6,6,0)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(6,6,1)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(6,7,0)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(7,0,0)	0.001, 0.0001, 0.00001	5	0	0.001	0.01
(7,0,1)	0.001, 0.0001, 0.00001	8	7	0.1	1
(7,0,2)	0.001, 0.0001, 0.00001	10	9	0.1	1
(7,0,3)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(7,1,0)	0.001, 0.0001, 0.00001	8	7	0.1	1
(7,1,1)	0.001, 0.0001, 0.00001	10	9	0.1	1
(7,1,2)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(7,1,3)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(7,2,0)	0.001, 0.0001, 0.00001	10	9	0.1	1
(7,2,1)	0.001, 0.0001, 0.00001	10	3	0.01	0.1
(7,2,2)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(7,2,3)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(7,3,0)	0.001, 0.0001, 0.00001	10	3	0.01	0.1
(7,3,1)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(7,3,2)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(7,3,3)	0.001, 0.0001, 0.00001	5	2	0.01	0.1
(7,4,0)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(7,4,1)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(7,4,2)	0.001, 0.0001, 0.00001	5	2	0.01	0.1
(7,4,3)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(7,5,0)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(7,5,1)	0.001, 0.0001, 0.00001	5	2	0.01	0.1

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Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(7,5,2)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(7,6,0)	0.001, 0.0001, 0.00001	5	2	0.01	0.1
(7,6,1)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(7,6,2)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(7,7,0)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(7,7,1)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(8,0,0)	0.001, 0.0001, 0.00001	9	8	0.1	1
(8,0,1)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(8,0,2)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(8,0,3)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(8,1,0)	0.001, 0.0001, 0.00001	7	2	0.01	0.1
(8,1,1)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(8,1,2)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(8,1,3)	0.001, 0.0001, 0.00001	5	2	0.01	0.1
(8,2,0)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(8,2,1)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(8,2,2)	0.001, 0.0001, 0.00001	5	2	0.01	0.1
(8,2,3)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(8,3,0)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(8,3,1)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(8,3,2)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(8,3,3)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(8,4,0)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(8,4,1)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(8,4,2)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(8,4,3)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(8,5,0)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(8,5,1)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(8,5,2)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(8,5,3)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(8,6,0)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(8,6,1)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(8,6,2)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(8,7,0)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(8,7,1)	0.001, 0.0001, 0.00001	8	4	0.01	0.1
(8,7,2)	0.001, 0.0001, 0.00001	10	5	0.01	0.1
(8,8,0)	0.001, 0.0001, 0.00001	8	4	0.01	0.1
(8,8,1)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(9,0,0)	0.001, 0.0001, 0.00001	6	2	0.01	0.1
(9,0,1)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(9,0,2)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(9,0,3)	0.001, 0.0001, 0.00001	10	4	0.01	0.1

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Appendix A:		Tube Code Table for Validation and Verification			
Initial Pre-Process <i>V.p. Density</i> Measurement		Post-Process <i>V.p. Density</i> Measurement			
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(9,1,0)	0.001, 0.0001, 0.00001	9	3	0.01	0.1
(9,1,1)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(9,1,2)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(9,1,3)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(9,1,4)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(9,2,0)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(9,2,1)	0.001, 0.0001, 0.00001	10	4	0.01	0.1
(9,2,2)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(9,2,3)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(9,2,4)	0.001, 0.0001, 0.00001	10	5	0.01	0.1
(9,3,0)	0.001, 0.0001, 0.00001	7	3	0.01	0.1
(9,3,1)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(9,3,2)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(9,3,3)	0.001, 0.0001, 0.00001	10	5	0.01	0.1
(9,3,4)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(9,4,0)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(9,4,1)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(9,4,2)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(9,4,3)	0.001, 0.0001, 0.00001	7	4	0.01	0.1
(9,4,4)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(9,5,0)	0.001, 0.0001, 0.00001	8	4	0.01	0.1
(9,5,1)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(9,5,2)	0.001, 0.0001, 0.00001	7	4	0.01	0.1
(9,5,3)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(9,5,4)	0.001, 0.0001, 0.00001	10	0	0.0001	0.001
(9,6,0)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(9,6,1)	0.001, 0.0001, 0.00001	9	5	0.01	0.1
(9,6,2)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(9,6,3)	0.001, 0.0001, 0.00001	10	0	0.0001	0.001
(9,7,0)	0.001, 0.0001, 0.00001	9	5	0.01	0.1
(9,7,1)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(9,7,2)	0.001, 0.0001, 0.00001	6	4	0.01	0.1
(9,7,3)	0.001, 0.0001, 0.00001	9	6	0.01	0.1
(9,8,0)	0.001, 0.0001, 0.00001	10	6	0.01	0.1
(9,8,1)	0.001, 0.0001, 0.00001	7	1	0.001	0.01
(9,8,2)	0.001, 0.0001, 0.00001	8	0	0.0001	0.001
(9,8,3)	0.001, 0.0001, 0.00001	10	7	0.01	0.1
(9,9,0)	0.001, 0.0001, 0.00001	9	0	0.0001	0.001
(9,9,1)	0.001, 0.0001, 0.00001	8	0	0.0001	0.001
(9,9,2)	0.001, 0.0001, 0.00001	7	0	0.0001	0.001
(10,0,0)	0.001, 0.0001, 0.00001	8	3	0.01	0.1
(10,0,1)	0.001, 0.0001, 0.00001	7	3	0.01	0.1

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Initial Pre-Process <i>V.p.</i> Density Measurement		Post-Process <i>V.p.</i> Density Measurement			
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(10,0,2)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(10,0,3)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(10,1,0)	0.001, 0.0001, 0.00001	9	4	0.01	0.1
(10,1,1)	0.001, 0.0001, 0.00001	6	3	0.01	0.1
(10,1,2)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(10,1,3)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(10,1,4)	0.001, 0.0001, 0.00001	10	0	0.0001	0.001
(10,2,0)	0.001, 0.0001, 0.00001	8	4	0.01	0.1
(10,2,1)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(10,2,2)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(10,2,3)	0.001, 0.0001, 0.00001	6	4	0.01	0.1
(10,2,4)	0.001, 0.0001, 0.00001	8	0	0.0001	0.001
(10,3,0)	0.001, 0.0001, 0.00001	10	1	0.001	0.01
(10,3,1)	0.001, 0.0001, 0.00001	8	1	0.001	0.01
(10,3,2)	0.001, 0.0001, 0.00001	9	0	0.0001	0.001
(10,3,3)	0.001, 0.0001, 0.00001	7	5	0.01	0.1
(10,3,4)	0.001, 0.0001, 0.00001	5	4	0.01	0.1
(10,3,5)	0.001, 0.0001, 0.00001	6	0	0.0001	0.001
(10,4,0)	0.001, 0.0001, 0.00001	10	6	0.01	0.1
(10,4,1)	0.001, 0.0001, 0.00001	9	0	0.0001	0.001
(10,4,2)	0.001, 0.0001, 0.00001	7	0	0.0001	0.001
(10,4,3)	0.001, 0.0001, 0.00001	5	4	0.01	0.1
(10,4,4)	0.001, 0.0001, 0.00001	6	5	0.01	0.1
(10,4,5)	0.01, 0.001, 0.0001	7	6	0.1	1
(10,5,0)	0.001, 0.0001, 0.00001	8	0	0.0001	0.001
(10,5,1)	0.001, 0.0001, 0.00001	7	0	0.0001	0.001
(10,5,2)	0.001, 0.0001, 0.00001	6	0	0.0001	0.001
(10,5,3)	0.01, 0.001, 0.0001	5	0	0.001	0.01
(10,5,4)	0.01, 0.001, 0.0001	8	7	0.1	1
(10,5,5)	0.01, 0.001, 0.0001	9	8	0.1	1
(10,5,6)	0.01, 0.001, 0.0001	7	2	0.01	0.1
(10,6,0)	0.001, 0.0001, 0.00001	5	4	0.01	0.1
(10,6,1)	0.01, 0.001, 0.0001	6	5	0.1	1
(10,6,2)	0.01, 0.001, 0.0001	7	6	0.1	1
(10,6,3)	0.01, 0.001, 0.0001	9	8	0.1	1
(10,6,4)	0.01, 0.001, 0.0001	7	2	0.01	0.1
(10,6,5)	0.01, 0.001, 0.0001	10	3	0.01	0.1
(10,6,6)	0.01, 0.001, 0.0001	6	2	0.01	0.1
(10,7,0)	0.01, 0.001, 0.0001	5	0	0.001	0.01
(10,7,1)	0.01, 0.001, 0.0001	8	2	0.01	0.1
(10,7,2)	0.01, 0.001, 0.0001	10	9	0.1	1
(10,7,3)	0.01, 0.001, 0.0001	10	3	0.01	0.1

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Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Before: 10 tubes, 3 dilutions		After: 1 dilution; total tubes	Allowed	2 log reduction	3 log reduction
Tube Codes	Homogenate Mass		Positive (turbid) tubes	Homogenate Mass	Homogenate Mass
(10,7,4)	0.01, 0.001, 0.0001	6	2	0.01	0.1
(10,7,5)	0.01, 0.001, 0.0001	9	3	0.01	0.1
(10,7,6)	0.01, 0.001, 0.0001	8	3	0.01	0.1
(10,7,7)	0.01, 0.001, 0.0001	10	4	0.01	0.1
(10,8,0)	0.01, 0.001, 0.0001	9	8	0.1	1
(10,8,1)	0.01, 0.001, 0.0001	10	3	0.01	0.1
(10,8,2)	0.01, 0.001, 0.0001	6	2	0.01	0.1
(10,8,3)	0.01, 0.001, 0.0001	5	2	0.01	0.1
(10,8,4)	0.01, 0.001, 0.0001	8	3	0.01	0.1
(10,8,5)	0.01, 0.001, 0.0001	10	4	0.01	0.1
(10,8,6)	0.01, 0.001, 0.0001	9	4	0.01	0.1
(10,8,7)	0.01, 0.001, 0.0001	6	3	0.01	0.1
(10,8,8)	0.01, 0.001, 0.0001	8	4	0.01	0.1
(10,9,0)	0.01, 0.001, 0.0001	6	2	0.01	0.1
(10,9,1)	0.01, 0.001, 0.0001	5	2	0.01	0.1
(10,9,2)	0.01, 0.001, 0.0001	8	3	0.01	0.1
(10,9,3)	0.01, 0.001, 0.0001	7	3	0.01	0.1
(10,9,4)	0.01, 0.001, 0.0001	6	3	0.01	0.1
(10,9,5)	0.01, 0.001, 0.0001	8	4	0.01	0.1
(10,9,6)	0.01, 0.001, 0.0001	10	1	0.001	0.01
(10,9,7)	0.01, 0.001, 0.0001	8	1	0.001	0.01
(10,9,8)	0.01, 0.001, 0.0001	10	0	0.0001	0.001
(10,9,9)	0.01, 0.001, 0.0001	8	0	0.0001	0.001
(10,10,0)	0.01, 0.001, 0.0001	10	4	0.01	0.1
(10,10,1)	0.01, 0.001, 0.0001	9	4	0.01	0.1
(10,10,2)	0.01, 0.001, 0.0001	8	4	0.01	0.1
(10,10,3)	0.01, 0.001, 0.0001	9	5	0.01	0.1
(10,10,4)	0.01, 0.001, 0.0001	6	4	0.01	0.1
(10,10,5)	0.01, 0.001, 0.0001	7	0	0.0001	0.001
(10,10,6)	0.10, 0.01, 0.001	10	2	0.01	0.1
(10,10,7)	0.10, 0.01, 0.001	8	2	0.01	0.1
(10,10,8)	0.10, 0.01, 0.001	10	3	0.01	0.1
(10,10,9)	0.10, 0.01, 0.001	8	3	0.01	0.1