

FINAL REPORT

STERILITY TESTING AND ANTIMICROBIAL
ACTIVITY OF COMMERCIAL GRADE GLYCERINE

Prepared for

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Final Report

Subject:

Sterility testing and antimicrobial activity of commercial grades of glycerine.

Objectives:

1. To demonstrate the absence or presence of microbial contamination in commercial grades of glycerine (95% and 99%) at the site of production.
2. To determine the bacteriostatic and bactericidal activity of glycerine against selected bacteria.

The Program

Phase I: Under a grant from the Glycerine Producers' Association a study was undertaken to demonstrate the presence or absence of microbial contamination in 60 samples of commercial grade (95% and 99%) glycerine. Ten samples from each of six producers, collected from drums and tank cans, were forwarded for analysis by the sponsor.

Phase II: The antimicrobial activity of commercial grade glycerine was investigated to determine the concentrations necessary for inhibition (bacteriostatic) and death (bactericidal) of selected bacteria (Staphylococcus aureus, Pseudomonas aeruginosa, Escherichia coli, and Salmonella typhimurium) as specified in USP standards.

Phase One - Sterility Testing

Basically the sterility testing employed in this study consisted of inoculating aliquots of glycerine into two non selective nutrient media, i.e., Trypticase soy (BBL) and Thioglycollate broths (Difco). These media were selected because of their ability to initiate and support the growth of minimal numbers of a wide variety of organisms. Thioglycollate broth provides the necessary conditions for growth of most of aerobic, facultative, and anerobic organisms; while Trypticase soy broth is an enrichment medium capable of supporting growth of most organisms commonly found in the environment.

Control Systems:

Two samples from each Producer were randomly chosen and used in the substrate to determine the ability of the glycerine-media system to initiate and support growth of a minimal number of cells comparable to that which may be found in the test product. The test organism employed for this positive control system was a strain of Pseudomonas fluorescens (A.T.C.C. #11250) selected because it is non fastidious, survives on minimal nutrients and is relatively resistant to chemical disinfection. Cultures were maintained by weekly transfers on Trypticase soy agar. Twenty-four hour broth cultures of this organism were used as inoculum. All of the tubed media were tested for sterility by incubation at 37°C. for 24 hrs. prior to use. This pre-incubation minimized the false positive results from contaminated media.

To test the positive control system tubes containing 9.6 ml of media, to which glycerine was added in both 1 ml and 5 ml amounts, were inoculated with decimal dilutions of the test organism ranging from 3800 to 2.6 organisms. All of the glycerine-media tubes were shaken twenty-five times in a ninety degree arc to insure an even suspension of the glycerine. Concurrently, tubes containing 9.6 ml of media without glycerine were inoculated as above to demonstrate that growth of the test organism at a particular concentration could be initiated in the media. Unseeded media controls were also incubated at each temperature to demonstrate

sterility of this component. All of the above controls were incubated in duplicate at 20°C. and 37°C. for fourteen days. Daily observations were made to determine presence or absence of growth.

In all cases sterility was observed in the unseeded tubes of media. Likewise, growth of the test organisms in both media incubated at 37°C. but not at 20°C. was observed within 24 hrs. Table I shows results obtained when the seeded glycerine was incubated at 20°C. and 37°C. for fourteen days. In general the growth observed in tubes containing 1 ml of glycerine correlated with the innoculated tubes containing no glycerine. In other words it was demonstrated that an innoculum in the range of 2.6 cells survived and flourished in an environment comprised of one ml of glycerine and 9.6 ml of media. The tubes containing 5 ml of glycerine were inhibited by the glycerine to varying degrees dependent upon the number of organisms present.

Sterility Tests:

Having satisfied ourselves with an adequate system which initiated and supported growth of a minimal number of organisms sterility tests were conducted in the following manner: Trypticase soy and Thioglycollate broths were seeded with both 1 ml and 5 ml aliquots from all glycerine samples from each producer. In other words four tubes of Trypticase soy broth and four tubes of Thioglycollate broth were innoculated with 1 ml and 5 ml of each sample of glycerine.

Two tubes with each aliquot were then incubated at 37°C. and at 20°C. for fourteen days and observed daily for growth. One hundred-sixty tubes were used to test a set of ten samples from each producer and a total volume of 48 ml of each sample was tested.

The tubes from four samples of each producer which showed no growth after fourteen days of incubation were reseeded by loop into their respective media and incubated as above. This was done to determine whether the negative growth observation was due to the absence of organisms in the original sample or due to inhibition exerted by the aliquot of glycerine that was tested. In short, what this technique accomplishes is to dilute the concentration of glycerine in the reseeded tube. The limitation of this test is that an extremely low concentration of microorganisms in the original may be missed on loop transfer to the second tube. However, as supported by the data in Phase II, it was demonstrated that 1 ml aliquots of glycerine were not inhibitory to the organisms employed.

Samples displaying one or more positive growth tubes after fourteen days were retested using the above described technique in order to confirm that the growth originated in the sample of glycerine and not by chance contamination. Positive tubes from the second test series were transferred to Trypticase soy broth for enrichment and incubated at the original temperature for 24 hrs. Following this they were streaked on Trypticase soy agar which was again incubated for 24 hrs. Isolated colonies were examined macro and microscopically for genus identification.

Results of Sterility Tests:

After completion of the entire sterility procedure it was concluded that one sample (8C) of the sixty exhibited microbial contamination. This conclusion is based on the fact that originally one of the two tubes which were seeded with one ml of this sample and incubated at 37°C. showed growth after four days. Likewise, growth after seven days at 20°C. was observed in a tube of Trypticase soy broth inoculated with five ml of this sample. Upon re-examination of the original sample, one tube of Thioglycollate broth, seeded with one ml of this sample showed growth after 24 hrs. at 37°C. To further verify our findings this sample was examined again and this time growth occurred after 24 hrs. at 37°C. in 2 tubes of Trypticase soy broth. The colonial characteristics of the isolated organism and gram stain microscopic observations indicated that this contaminant was "virtually" a pure culture of a gram positive spore forming rod of the genus *Bacillus*.

Occasionally growth was also observed in other tubes but upon retesting of the original sample no growth was ever observed. Negative findings of the second determination prompted us to conclude that the original growth was due to an occasional laboratory contamination. When one considers that a total of forty-eight tubes were used for each sample the chance of a contaminant is highly probable. Only one of the 59 remaining samples indicated more than one "false positive" tube.

PHASE II - EVALUATION OF

BACTERIOSTATIC - BACTERICIDAL PROPERTIES OF GLYCERINE

Samples of glycerine were tested for bacteriostatic and bactericidal activity against the following organisms:

Pseudomonas aeruginosa A.T.C.C. #10145, Escherichia coli A.T.C.C. #11775, Salmonella typhimurium A.T.C.C. #13311 and Staphylococcus aureus A.T.C.C. #12600.

Zone of Inhibition Test:

In a preliminary exploration the zone of inhibition test was used employing a modification of the cylinder-plate method in which a hole, which served as a reservoir for ca. 2 ml of glycerine, was cut in a heavily seeded Trypticase soy agar plate. Since no zone of inhibition was observed after 24 hrs. at 20°C. and at 37°C. the results indicated that glycerine was not inhibitory against the above organisms under the conditions of this test. Moreover, this chemical actually enhanced the growth of Escherichia coli as demonstrated by a heavier growth at the periphery of the reservoir. Realizing that the presence or absence (and also the diameter) of the zone of inhibition exhibited by the test organisms is dependent on the concentration of the chemical compound in the medium, it may be concluded that the findings of the preliminary study was the result of the rapid diffusion of the glycerine through the medium decreasing its concentration to a non-inhibitory range. For this reason a modified tube dilution technique was subsequently employed in further evaluation.

Multiple Tube Dilution Test:

A multiple tube technique (16 tubes per dilution) was used in which varying aliquots of glycerine and media, Trypticase soy broth, were combined. These aliquots along with the inoculation produced volume to volume dilutions ranging from approximately one percent to one hundred percent glycerine. The unusual percentages of glycerine reported herein were due to difficulty in pipetting the highly viscous chemical; e.g., a 10 ml pipette delivered only 9.5 ml of glycerine and this is reflected in the calculations. The tubes were then seeded with 0.1 ml of a 1:10 dilution of a 24 hr. broth culture of the respective organism. These tubes were shaken to a degree sufficient to insure an even suspension of the glycerine-medium system.

The seeded glycerine-medium tubes, with glycerine concentrations of 6.7% to 31.3% were incubated at 37°C. for fourteen days with daily examination for growth. Any tubes in which growth could be detected (no inhibition) were so indicated and discarded. After 48 hrs. all tubes showing inhibition were reseeded into Trypticase soy broth and re-incubated 48 hrs. to determine whether the inhibition was due to bacteriostatic or bactericidal activity. These results summarized in Table II indicate that bacteriostatic-bactericidal differentiation could not be determined with the concentration of glycerine employed since all the re-seeds were positive.

The above experiment was repeated using higher concentra-

tions of 23.6% to 98.9% glycerine. Again those tubes showing inhibition were reseeded after 48 hrs. Of the forty-eight hour reseeds, those tubes that showed growth demonstrated that bacteriostasis had occurred in the original tube which was again reseeded after seven days to determine if the culture was killed upon prolonged contact. Negative reseeds were recorded at 48 hrs. and observed for fourteen days. At no instance did a negative reseed become a positive during this period.

Results and Discussion:

As shown in Table III the concentrations of glycerine that can be considered bacteriostatic were those in which forty-eight hour reseeds indicated growth whereas those indicating no growth upon reseeded were considered bactericidal. It should be noted that this shift from bacteriostatic to bactericidal effect occurred in a range as indicated in Table III. Additionally the data also demonstrated that a bacteriostatic concentration of glycerine may become bactericidal upon prolonged contact with the organism. For example 37.8 percent glycerine was found to be totally (all 16 tubes) bacteriostatic for Salmonella typhimurium after forty-eight hours, while after seven days above 23.6 percent was found to be bactericidal. The data as tabulated in Table III also indicate a positive correlation between the concentrations of glycerine required for bacteriostasis with those for bactericidal activity, e.g., Pseudomonas aeruginosa was inhibited and

killed at the lowest concentrations while Staphylococcus aureus was inhibited at the highest concentrations. This phenomenon occurred both for the forty-eight hour and seven day reseeds.

The results of our study confirm in part those of Barr and Tice who demonstrated that Staphylococcus aureus and Pseudomonas aeruginosa were inhibited by 30 and 25 percent respectively of glycerine on a weight to weight basis.¹ Table IV illustrates the similarity of the findings from both studies.

The data represented in the current study clearly indicate that there is great variation in susceptibility and/or resistance of the test organisms to glycerine. This would indicate that the use of glycerine as a preservative for clinical specimens may require some re-evaluation even though the concentration of glycerine used for this purpose is lower than that employed in this investigation. After forty-eight hours of incubation Salmonella typhimurium and Escherichia coli demonstrated equal susceptibility to the bacteriostatic concentration of glycerine while the Salmonella typhimurium displayed greater susceptibility to the bactericidal concentration. These observations together with the stimulatory effects of glycerine on the growth of Escherichia coli demonstrated by the zone of inhibition test suggest that caution be taken when using glycerine as a preservative for fecal samples from which the isolation of Salmonella is desired.

¹Barr, M. and Tice, L., A study of the inhibitory concentrations of various sugars and polyols on the growth of microorganisms. J. Pharmaceutical Assn., 46 (4):219-221.

Conclusions

1. Of the sixty samples of glycerine tested only one (8C) was found to be contaminated under the conditions of the test employed. This contaminant was identified as a member of the genus *Bacillus*. Since the investigators had no control over either the sterilization of the containers in which the samples were collected and shipped or the actual collection, the source of this contaminant could not be ascertained.
2. Glycerine was found to be bacteriostatic and bactericidal at various concentrations against *Pseudomonas aeruginosa*, *Escherichia coli*, *Salmonella typhimurium* and *Staphylococcus aureus*.
3. A positive correlation was found between the bacteriostatic and bactericidal concentrations of glycerine against the test organisms.
4. The use of glycerine as a preservative of clinical samples which are to be analyzed for *Salmonella* and other pathogenic enteric organisms should be re-evaluated in light of our limited data.

Table I. Positive Control System
Average Number of Cells Inoculated Per Tube

		Thioglycollate				Trypticase soy			
Producer A		3800	380	38	3.8	3800	380	38	3.8
Sample 8A									
37°C.	1 ml	1	1	1	1	1	1	1	2
	5 ml	3	-	-	-	3	-	-	-
20°C.	1 ml	5	7	-	-	6	7	-	-
	5 ml	-	-	-	-	-	-	-	-
Sample 4A									
37°C.	1 ml	1	1	1	2	1	1	2	2
	5 ml	5	-	-	-	5	5	-	-
20°C.	1 ml	5	7	11	-	5	5	-	-
	5 ml	-	-	-	-	-	-	-	-
Producer B		3400	340	34	3.4	3400	340	34	3.4
Sample 2B									
37°C.	1 ml	1	2	2	-	1	2	2	-
	5 ml	-	-	-	-	-	-	-	-
20°C.	1 ml	7	7	8	-	7	7	7	-
	5 ml	-	-	-	-	-	-	-	-
Sample 10B									
37°C.	1 ml	1	1	1	-	1	1	2	2
	5 ml	-	-	-	-	-	-	-	-
20°C.	1 ml	5	7	-	-	5	7	-	-
	5 ml	-	-	-	-	-	-	-	-
Producer C		2600	260	26	2.6	2600	260	26	2.6
Sample 1C									
37°C.	1 ml	1	2	2	-	1	1	2	-
	5 ml	2	2	-	-	2	2	-	-
20°C.	1 ml	4	6	-	-	5	5	-	-
	5 ml	-	-	-	-	-	-	-	-
Sample 10C									
37°C.	1 ml	1	2	2	-	1	1	1	1
	5 ml	2	2	-	-	2	2	2	-
20°C.	1 ml	7	8	-	-	5	5	-	-
	5 ml	-	-	-	-	-	-	-	-

Number indicates day on which growth was observed.
- indicates no growth for fourteen days.

Table I (Continued)

Average Number of Cells Innoculated Per Tube

		Thioglycollate				Trypticase soy			
		3200	320	32	3.2	3200	320	32	3.2
Producer D									
Sample 4D									
37°C.	1 ml	1	1	1	2	1	1	1	2
	5 ml	-	-	-	-	3	6	-	-
20°C.	1 ml	6	9	-	-	4	6	8	-
	5 ml	-	-	-	-	-	-	-	-
Sample 7D									
37°C.	1 ml	1	1	2	-	1	1	-	-
	5 ml	-	-	-	-	9	-	-	-
20°C.	1 ml	6	9	-	-	5	6	8	-
	5 ml	-	-	-	-	-	-	-	-
Producer E		2800	280	28	2.8	2800	280	28	2.8
Sample 10E									
37°C.	1 ml	1	1	1	1	1	1	1	1
	5 ml	-	-	-	-	-	-	-	-
20°C.	1 ml	4	8	8	9	4	5	8	9
	5 ml	-	-	-	-	-	-	-	-
Sample 3E									
37°C.	1 ml	1	1	1	1	1	1	1	1
	5 ml	-	-	-	-	-	-	-	-
20°C.	1 ml	4	8	8	8	4	5	7	9
	5 ml	-	-	-	-	-	-	-	-
Producer F		3600	360	36	3.6	3600	360	36	3.6
Sample 7F									
37°C.	1 ml	1	1	1	1	1	1	1	1
	5 ml	-	-	-	-	-	-	-	-
20°C.	1 ml	8	8	9	11	4	6	8	9
	5 ml	-	-	-	-	-	-	-	-
Sample 1F									
37°C.	1 ml	1	1	1	1	1	1	1	1
	5 ml	-	-	-	-	3	-	-	-
20°C.	1 ml	7	8	9	10	6	6	8	9
	5 ml	-	-	-	-	-	-	-	-

Number indicates day on which growth was observed.

- indicates no growth for fourteen days.

Table II

Inhibitory Effects of Glycerine

Test Organism	Percentage glycerine V/V indicating		
	No Inhibition ¹	Total Inhibition ²	Growth in Reseeds ³
<u>Staphylococcus aureus</u>	24.1	31.3	31.3
<u>Escherichia coli</u>	13.4	24.1	31.3
<u>Salmonella typhimurium</u>	13.4	24.1	31.3
<u>Pseudomonas aeruginosa</u>	13.4	24.1	31.3

1. No inhibition--all tubes at the concentration of glycerine demonstrated growth after 48 hrs. of incubation at 37°C.
2. Total inhibition--no growth for all tubes at that concentration of glycerine after 48 hrs. of incubation at 37°C.
3. Growth in Reseeds--all tubes demonstrating inhibition (no growth) were reseed after 48 hrs. contact. The concentration of glycerine that allowed growth for all tubes is shown.

Table III

Bacteriostatic-Bactericidal Concentration (%) of Glycerine				
Test Organism	48 hr. reseeds		7 day reseeds	
	Bacteriostatic ¹	Bactericidal ²	Bacteriostatic	Bactericidal
<u>Staphylococcus aureus</u>	88.8	None	≤67.8	67.8
<u>Escherichia coli</u>	37.8	58.6	≤37.8	37.8
<u>Salmonella typhimurium</u>	37.8	48.1	23.6	33.6
<u>Pseudomonas aeruginosa</u>	28.7	40.5	≤23.6	23.6

1. Bacteriostatic--All 38 hr. or 7 day reseeds at that concentration of glycerine demonstrated growth after 48 hrs. incubation at 37°C.
2. Bactericidal--No growth in 48 hr. or 7 day reseeds at that concentration of glycerine after 48 hrs. incubation at 37°C. (Observed for 14 days of incubation).

Table IV

Comparison of Concentration of Glycerine
Required for Inhibition

Test Organism	Barr and Tice (W/W)	Present Study V/V
Staphylococcus aureus	30%	31.3%
<u>Pseudomonas aeruginosa</u>	25%	24.1%

Appendix I

Raw Data Phase I: Sterility Testing

Contents of Appendix:

1. Data of sixty samples, ten apiece from each producer, coded A - F.
2. Control data - 2 samples from each producer.
3. Negative Reseeds - 4 samples from each producer that showed no growth in the initial sampling.
4. Positive Reseeds - All samples from which growth was isolated in the initial sampling were resampled.

Raw Data Producer A

Cell Count 3.8×10^5

[illegible][illegible]

CONTROL: 41A TEMPERATURE: 37 C
IDENTIFICATION: 4A
CELL Count: 3.8×10^5

1. Trypticase Soy Broth:

Date Media was made: 11/11/2011

24 Hour incubation:

Days (1-14)

A. Blank Control:

#1

#2

B. Control Dilutions-Seeded:

 10^{-2}

10-43

10-74

10-85

ed Dilu

C. Seeded Dilutions-Glycerine-Iml:

10-72

10-6

10-7

10-15

D. Seeded Dilution-Glycerine-5 ml:

10-72

10-6 2

10-74

10-85

II. Thioglycollate Broth:

Date Media was made: 10/20/2011

24 Hour incubation:

Days (1-14)

A. Blank Control:

#1

#2

B. Control Dilutions-seeded:

 10^{-2}

10-43

10-64

10-8

ed Di lu

C. Seeded Dilutions-Glycerine-Iml:

10-7 2

10-9

10-74

10-3

D. Seeded Dilutions-Glycerine-5ml:

10-22

10-9
10-7

10-8

SAMPLE: 1-A TEMPERATURE: 37 °C

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: 10/1/77

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: _____

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

IDENTIFICATION: _____

24 Hour Incubation:

24 Hour Incubation:

[illegible]

IDENTIFICATION: _____

24 Hour Incubation:

DAYS (1-14)

24 Hour Incubation:

DAYS (1-14)

[illegible]

SAMPLE: 4A TEMPERATURE: 37°C

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: —

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made:—

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

SAMPLE: 5A TEMPERATURE: 37 C

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made:—

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: ~~_____~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: ~~1964~~

SAMPLE

(where supply is available) 10ml

#2

Date Media was made: ~~1-22-2004~~

SAMPLE

(where supply is available) 10ml

1

The image shows a gel electrophoresis result with 14 lanes. Lanes 1 through 13 contain multiple horizontal bands at different vertical positions, indicating the presence of various DNA fragments. Lane 14 contains a single, prominent band at the top of the gel, which is characteristic of a high molecular weight DNA sample like a plasmid.

SAMPLE: 7A TEMPERATURE: 37 °C

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made:—

24 Hour Incubation:

SAMPLE

(where supply is available) 10ml

11

#2

5ml

1

#2

1 ml

1

#2

DAYS (1-14)

11. Thioglycolate Broth

Date Media was made: 12/1/2011

24 Hour Incubation:

SAMPLE

(where supply is available) 10ml

#1

#1

5ml

 $\frac{11}{14}$

#2

1ml

1

#2

DAYS (1-14)

[illegible]

IDENTIFICATION: _____

24 Hour Incubation:

DAYS (1-14)

[illegible]

24 Hour Incubation:

DAYS (1-14)

[illegible]

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made:

SAMPLE

DAYS (1-14)

[illegible]

Date Media was made:

SAMPLE

DAYS (1-14)

IDENTIFICATION: _____

SAMPLE

1

#2

5ml

1

#2

1 mi

#1

#2

Date Media was made:

24 Hour Incubation:

SAMPLE

#1

#1

5ml

11

#2

1ml

1

#2

Re-seeds
Types: Negative

Sample: 1A

Temperature: 37°C

I. Trypticase Soy Broth:
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 3-A

Temperature: 37°C

- I. Trypticase Soy Broth:
Date Media was made: —
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

- II. Thioglycolate Broth
Date Media was made: —
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 7-4

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made: -

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: -

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Receeds
Types: Negative

Sample: 10-A

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

SAMPLE: 1A TEMPERATURE: 20 C

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: ~~11/2/80~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

[illegible]

SAMPLE: 2A TEMPERATURE: 20 C

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: 2/2/68

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: —

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: 3A TEMPERATURE: 20 C

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: 10/1/74

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

1

#2

5ml

71

#2

im

 $\frac{11}{12}$

#2

11. Thioglycollate Broth

Date Media was made: —

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

#1

1

5ml

 $\sharp 1$

#2

1m

1

#2

SAMPLE: 4A TEMPERATURE: 20°C

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: —

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: —

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

SAMPLE: 5-A TEMPERATURE: 20°C

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

SAMPLE: 6A TEMPERATURE: 20°C

IDENTIFICATION: _____

1. Trypticase Soy Broth
Date Media was made: —
24 Hour Incubation:

[illegible]

11. Thioglycollate Broth
Date Media was made:—
24 Hour Incubation:

[illegible]

SAMPLE: 7A TEMPERATURE: 20 C

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made:—

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: 84 TEMPERATURE: 20 C

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made:—

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

IDENTIFICATION: _____

SAMPLE

1

#2

5ml

1

#2

1 ml

 $\frac{11}{12}$

#2

DAYS (1-14)

SAMPLE

#1

#1

5m l

 $\frac{4}{11} 1$

#2

1ml

11

#2

DAYS (1-14)

SAMPLE: 10A TEMPERATURE: 20°C

IDENTIFICATION: _____

.....

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1. Trypticase Soy Broth

Date Media was made: 2011-06-24

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

11. Thioglycollate Broth

Date Media was made:—

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

[illegible]

Reseeds
Types: Negative

Sample: 1-A

Temperature: 20°C

- I. Trypticase Soy Broth:
Date Media was made: —
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml	—						
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

- II. Thioglycolate Broth
Date Media was made: —
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 3-A

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 7-4

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 10-4

Temperature: 20°C

I. Trypticase Soy Broth:
Date Media was made: ✓
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made: ✓
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Raw Data Producer B

CONTROL: TEMPERATURE: 37°
IDENTIFICATION 108
CELL COUNT 3.4 x 10⁵

1. Trypticase Soy Broth:

Date Media was made:

24 Hour incubation:

Days (1-14)

A. Blank Control:

1

#2

B. Control Dilutions-Seeded:

 10^{-2} 10^{-4} 10^{-6} 10^{-8}

C. Seeded Dilutions-Glycerine-Iml:

 10^{-5} 10^{-6} 10^{-7} 10^{-8}

D. Seeded Dilution-Glycerine-5 ml:

 10^{-5} 10^{-6} 10^{-7} 10^{-8}

11. Thioglycollate Broth:

Date Media was made: 1/2/2008

24 Hour incubation:

Days (1-14)

A. Blank Control:

1

#2

B. Control Dilutions-seeded:

 10^{-2} 10^{-4} 10^{-6} 10^{-8}

C. Seeded Dilutions-Glycerine-Iml:

 10^{-5} 10^{-6} 10^{-7}

10-8

D. Seeded Dilutions-Glycerine-5ml:

10-5

$$10^{-6}$$
 10^{-8}

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: 03/03/2009

SAMPLE

DAYS (1-14)

Date Media was made: ~~10/10/1964~~

SAMPLE

DAYS (1-14)

[illegible]

SAMPLE: TEMPERATURE: 37°

IDENTIFICATION: 2B

1. Trypticase Soy Broth

Date Media was made: 11/1/77

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

11. Thioglycollate Broth

Date Media was made:—

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

[illegible][illegible]

IDENTIFICATION: 48

24 Hour Incubation:

DAYS (1-14)

[illegible]

24 Hour Incubation:

DAYS (1-14)

[illegible]

TEMPERATURE: 31°

5B

1. Trypticase Soy Broth

Date Media was made: 11/1/77

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: 5/1/74

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

IDENTIFICATION: LB

IDENTIFICATION: LB

Date Media was made: 2/20/74

SAMPLE

DAYS (1-14)

[illegible]

Date Media was made:

SAMPLE

DAYS (1-14)

[illegible]

IDENTIFICATION: 7B

IDENTIFICATION: 7B

Date Media was made: —

SAMPLE

DAYS (1-14)

[illegible]

Date Media was made: 1-20-00

SAMPLE

DAYS (1-14)

[illegible]

IDENTIFICATION: 8B

IDENTIFICATION: 8B

Date Media was made: 12/1/2011

24 Hour Incubation:

DAYS (1-14)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Date Media was made: 11/1/77

24 Hour Incubation:

DAYS (1-14)

98

[illegible]

TEMPERATURE: 37°

IDENTIFICATION: 108

1. Trypticase Soy Broth

Date Media was made: 12/1/71

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

Re-seeds
Types: Negative

Sample: 1-B

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

ReSeeds
Types: Negative

Sample: 5-B

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made: ✓

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: ✓

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Receeds
Types: Negative

Sample: 6-B

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made: ✓

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: ✓

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 9-B

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

CONTROL: 108 TEMPERATURE: 20°
IDENTIFICATION _____
CELL COUNT 3.4 x 10⁵

1. Trypticase Soy Broth:

Date Media was made: 2000

24 Hour incubation:

Days (1-14)

A. Blank Control:

1

#2

B. Control Dilutions-Seeded:

 10^{-2}

10-43

10-64

10-883

C. Seeded Dilutions-Glycerine-Iml:

10-72

10-03

10-4

 10^{-8} s

D. Seeded Dilution-Glycerine-5 ml:

10-52

10-6

10-74

10-885

11. Thioglycollate Broth:

Date Media was made: ~~10/10/19~~

24 Hour incubation:

Days (1-14)

A. Blank Control:

#1

#2

B. Control Dilutions-seeded:

 10^{-2}

10-43

10-64

10-85

C. Seeded Dilutions-Glycerine-Iml:

10-57

10-6-5

10-74

10-6

D. Seeded Dilutions-Glycerine-5ml:

10-57

10-⁸-
74

10-10-88

SAMPLE: 16 TEMPERATURE: 20°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: 04/06/04

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

11. Thioglycollate Broth

Date Media was made: 1994

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

[illegible]

SAMPLE: 26 TEMPERATURE: 200

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: —

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: —

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: TEMPERATURE: 20°

IDENTIFICATION: 3B

1. Trypticase Soy Broth

Date Media was made:—

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: —

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

IDENTIFICATION: 4B

IDENTIFICATION: 4B

Date Media was made: ~~5/20/2014~~

24 Hour Incubation:

DAYS (1-14)

(where supply is available) 10ml

11

#2

5ml

1

#2

1 ml

11

#2

Date Media was made: 11/1/78

24 Hour Incubation:

DAYS (1-14)

(where supply is available) 10ml

#1

#1

5ml

11

#2

1ml

1

#2

IDENTIFICATION: 5B

IDENTIFICATION: 5B

Date Media was made: ~~12/22/2011~~

24 Hour Incubation:

DAYS (1-14)

[illegible]

Date Media was made: ~~2000~~

24 Hour Incubation:

DAYS (1-14)

[illegible]

SAMPLE:

TEMPERATURE: 20°

IDENTIFICATION:

63

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made:—

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

[illegible]

SAMPLE: TEMPERATURE: 20°

IDENTIFICATION: 7B

1. Trypticase Soy Broth

Date Media was made: ~

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

[illegible]

11. Thioglycollate Broth

Date Media was made:

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

[illegible]

SAMPLE: 8b

TEMPERATURE: 200

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made:—

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: 12/1/79

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

IDENTIFICATION: 9B

IDENTIFICATION: 9B

1. Trypticase Soy Broth

Date Media was made: —

24 Hour Incubation:

SAMPLE

(where supply is available) 10ml

表 1

#2

5m l

#1

#2

1 ml

11

#2

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: —

24 Hour Incubation:

SAMPLE

(where supply is available) 10ml

#1

1

5ml

 $\frac{1}{11}$

#2

1 ml

#1

#2

DAYS (1-14)

[illegible]

IDENTIFICATION: _____

The image shows a gel electrophoresis result with 14 lanes. Lanes 1 through 13 contain multiple bands at different positions, indicating different DNA fragments. Lane 14 contains a single band at the bottom position, likely representing a control or a specific marker.

Re-seeds
Types: Negative

Sample: 1-B

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 5-B

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made: —

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made: —

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

ReSeeds
Types: Negative

Sample: 6-B

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made: -

24 Hour Incubation:

Days

Sample:

	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: -

24 Hour Incubation:

Days

Sample:

	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

ReSeeds
Types: Negative

Sample: 9-B

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Raw Data Producer C

CELL COUNT 2.6×10^5

Days (1-14)

#2

 10^{-2}

10-43

10-4

10-85

ed Dilu
to

10-~~\$~~2

10-43

10-74

10-^{B5}

10-72

10-6/3
4

10-75

10-8

glycolic acid

Days (1-14)

1

#2

 10^{-2}

10-43

10-5

10-8

ed Dilu
#7

10-52

10-63

10-74

10-8

ed Dilu
d 2

10-23

10-74
10-

10-8 3
10-1

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: 12/20/2011

SAMPLE

DAYS (1-14)

Date Media was made: 12/1/78

SAMPLE

DAYS (1-14)

The image shows a gel electrophoresis result with 14 lanes. Lanes 1 through 13 contain multiple horizontal bands at different vertical positions, indicating the presence of various DNA fragments. Lane 14 contains a single, prominent band at the top of the gel, which is characteristic of a high molecular weight DNA sample like lambda concatamers.

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made:

SAMPLE

DAYS (1-14)

Date Media was made:—

SAMPLE

DAYS (1-14)

IDENTIFICATION:

IDENTIFICATION:

Date Media was made: —

SAMPLE

(where supply is available) 10ml

#2

[illegible]

Date Media was made:

SAMPLE

(where supply is available) 10ml

|

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: 2006

SAMPLE

DAYS (1-14)

[illegible]

Date Media was made: ~~2000~~

SAMPLE

DAYS (1-14)

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: 10/1/77

SAMPLE

DAYS (1-14)

Date Media was made: -

SAMPLE

DAYS (1-14)

SAMPLE: 6C TEMPERATURE: 37°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: ~~1964~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: ~~11~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

SAMPLE: 7C TEMPERATURE: 37°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

is

10ml

#1

#2

5ml

#1

#2

1ml

#1

#2

1 2 3 4 5 6 7 8 9 10 11 12 13 14

11. Thioglycollate Broth

Date Media was made: 11/1/77

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

IDENTIFICATION: _____

IDENTIFICATION:

Date Media was made:

SAMPLE

DAYS (1-14)

Date Media was made: ~~original~~

SAMPLE

DAYS (1-14)

[illegible]

IDENTIFICATION:

IDENTIFICATION:

Date Media was made: ~~1992~~

SAMPLE

DAYS (1-14)

[illegible]

Date Media was made: ~~1994-8~~

SAMPLE

DAYS (1-14)

IDENTIFICATION: _____

IDENTIFICATION:

Date Media was made: 2/2/20

24 Hour Incubation:

DAYS (1-14)

This image shows a gel electrophoresis result with 14 lanes. Lanes 1 through 12 contain multiple horizontal bands at different vertical positions, indicating the presence of various DNA fragments. Lanes 13 and 14 each contain a single, distinct band located near the bottom of the gel, which likely represents a specific DNA fragment of interest.

Date Media was made:

24 Hour Incubation:

DAYS (1-14)

[illegible]

Re-seeds
Types: Negative

Sample: 1-C

Temperature: 37°C

I. Trypticase Soy Broth:
Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth
Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 2-C

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

	Days						
Sample:	1	2	3	4	5	6	7
5ml	-						
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

	Days						
Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

ReSeeds
Types: Negative

Sample: 5-C

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 7-c

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

CONTROL: 1C TEMPERATURE: 20 °C
IDENTIFICATION _____
CELL COUNT 2.6 x 10⁵

1. Trypticase Soy Broth:

Date Media was made: ~~2/22/2009~~

24 Hour incubation:

Days (1-14)

A. Blank Control:

#1

#2

B. Control Dilutions-Seeded:

 10^{-2} 10^{-4} 10^{-6} 10^{-8}

C. Seeded Dilutions-Glycerine-Iml:

 10^{-5} 10^{-6} 10^{-7}

10-8

D. Seeded Dilution-Glycerine-5 ml:

 10^{-5} 10^{-6} 10^{-7} 10^{-8}

11. Thioglycollate Broth:

Date Media was made: 12/29/2011

24 Hour incubation:

Days (1-14)

A. Blank Control:

1

#2

B. Control Dilutions-seeded:

 10^{-2} 10^{-4} 10^{-6} 10^{-8}

C. Seeded Dilutions-Glycerine-Iml:

 10^{-5} 10^{-6} 10^{-7}

10-8

D. Seeded Dilutions-Glycerine-5ml:

10-5

$$10^{-6}$$
 10^{-8} 10^{-8}

CONTROL: 10C TEMPERATURE: 20°C
IDENTIFICATION _____
CELL Count 2.6×10^5

1. Trypticase Soy Broth:

Date Media was made:

24 Hour incubation:

Days (1-14)

A. Blank Control:

1

#2

B. Control Dilutions-Seeded:

 10^{-2} 10^{-4} 10^{-6} 10^{-8}

ed Di

C. Seeded Dilutions-Glycerine-Iml:

 10^{-5} 10^{-6} 10^{-7} 10^{-8}

D. Seeded Dilution-Glycerine-5 ml:

10-5

 10^{-6} 10^{-7} 10^{-8}

II. Thioglycollate Broth:

Date Media was made: 08/06/07

24 Hour Incubation:

Days (1-14)

A. Blank Control:

#1

#2

B. Control Dilutions-seeded:

 10^{-2} 10^{-4} 10^{-6} 10^{-8}

C. Seeded Dilutions-Glycerine-Iml:

 10^{-5} 10^{-6} 10^{-7} 10^{-8}

D. Seeded Dilutions-Glycerine-5ml:

10-5

10-⁶
10-⁷

10-8

IDENTIFICATION: 1c

IDENTIFICATION:

TEMPERATURE: 20°

IDENTIFICATION:

24 Hour Incubation:

DAYS (1-14)

[illegible]

24 Hour Incubation:

DAYS (1-14)

IDENTIFICATION: _____

24 Hour Incubation:

DAYS (1-14)

[illegible]

24 Hour Incubation:

DAYS (1-14)

SAMPLE: 3C TEMPERATURE: 20°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: ~~2/28/74~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: ~~_____~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: 4c

TEMPERATURE: 20°

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

IDENTIFICATION: _____

IDENTIFICATION:

Date Media was made: 1/20/2011

SAMPLE

[illegible]

Date Media was made: 2/20/2007

SAMPLE

[illegible]

SAMPLE: 6C TEMPERATURE: 20°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: ~~_____~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: ~~200~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: ~~2000~~

SAMPLE

DAYS (1-14)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

Date Media was made: —

SAMPLE

DAYS (1-14)

[illegible]

[illegible]

SAMPLE: 9C TEMPERATURE: 20°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

11. Thioglycollate Broth

Date Media was made: —

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

IDENTIFICATION: _____

IDENTIFICATION: _____

24 Hour Incubation:

SAMPLE

DAYS (1-14)

[illegible]

24 Hour Incubation:

SAMPLE

DAYS (1-14)

[illegible]

ReSeeds
Types: Negative

Sample: 1-c

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made: -

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: -

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

ReSeeds
Types: Negative

Sample: 2-C

Temperature: 20°C

I. Trypticase Soy Broth:
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

ReSeeds
Types: Negative

Sample: 5-c

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made: —

24 Hour Incubation:

Days

Sample:

1 2 3 4 5 6 7

5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made: —

24 Hour Incubation:

Days

Sample:

1 2 3 4 5 6 7

5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 7-c

Temperature: 20°C

I. Trypticase Soy Broth:
Date Media was made:

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made:

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Raw Data Producer D

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: 11/1/77

SAMPLE

DAYS (1-14)

The image displays a gel electrophoresis result with 14 lanes, numbered 1 through 14 at the top. Each lane contains a vertical strip of gel with horizontal bands of varying intensity and position. Lanes 1 through 12 show multiple bands, with some lanes having a prominent band near the top and others having bands more evenly distributed. Lanes 13 and 14 show a single, very strong band near the bottom of the gel, indicating a specific DNA fragment or a control.

Date Media was made: —

SAMPLE

DAYS (1-14)

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: ~~11/1/77~~

SAMPLE

DAYS (1-14)

Date Media was made:

SAMPLE

DAYS (1-14)

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: —

SAMPLE

DAYS (1-14)

Date Media was made: 11/1/78

SAMPLE

DAYS (1-14)

IDENTIFICATION: _____

IDENTIFICATION:

Date Media was made: ~~August~~

SAMPLE

DAYS (1-14)

Date Media was made: ~~_____~~

SAMPLE

DAYS (1-14)

IDENTIFICATION: _____

24 Hour Incubation:

DAYS (1-14)

24 Hour Incubation:

DAYS (1-14)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: ~~none~~

SAMPLE

DAYS (1-14)

Date Media was made:

SAMPLE

DAYS (1-14)

This gel electrophoresis image displays 14 lanes, numbered 1 through 14 at the top. Each lane contains a vertical strip of gel with horizontal bands of varying intensity and position. Lanes 1-13 show complex banding patterns, with some lanes having multiple bands at different heights. Lane 14 shows a single, prominent band near the bottom of the gel.

SAMPLE: 70 TEMPERATURE: 37°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: ~~11/11/77~~

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

1

#2

5ml

送 1

#2

1 ml

41

#2

11. Thioglycollate Broth

Date Media was made: ~~2000~~

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

#1

1

5ml

第 1

#2

1m

111
41

#1
#2

72

IDENTIFICATION:

IDENTIFICATION:

#2

IDENTIFICATION: _____

IDENTIFICATION: _____

24 Hour Incubation:

DAYS (1-14)

24 Hour Incubation:

DAYS (1-14)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

IDENTIFICATION: _____

[illegible]

Re-seeds
Types: Negative

Sample: 1-D

Temperature: 37°C

- I. Trypticase Soy Broth:
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1							
+2							
1ml							
+1							
+2							

- II. Thioglycolate Broth
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1							
+2							
1ml							
+1							
+2							

Re-seeds
Types: Negative

Sample: 3-D

Temperature: 37°C

I. Trypticase Soy Broth:
Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth
Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 5-D

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 8-D

Temperature: 37° C

I. Trypticase Soy Broth:
Date Media was made: ✓
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made: ✓
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

3.24/05

Date Media was made: 2/28/2020

Days (1-14)

1

#2

 10^{-2}

10-43

10-64

10-65

10-52

10-63

10-74

10-8-1971

10-52

10-6-2

10-7-68

10.8

Date Media was made: ~~2010~~

Days (1-14)

#1

#2

 10^{-2}

10-43

10-64

10-8-5

10-52

10-6

10-

108

10-52

10-7

10-85

10-

Cell Count 3.2×10^5

[illegible]

IDENTIFICATION: _____

#2

IDENTIFICATION: _____

IDENTIFICATION: _____

24 Hour Incubation:

DAYS (1-14)

24 Hour Incubation:

DAYS (1-14)

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: ~~2/28/84~~

SAMPLE

(where supply is available) 10ml

#2

Date Media was made: ~~2000~~

SAMPLE

(where supply is available) 10ml

|

SAMPLE: 40 TEMPERATURE: 20°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: ~~2/28/2014~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: 2/22/2011

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: 12/20/2014

SAMPLE

DAYS (1-14)

Date Media was made:

SAMPLE

DAYS (1-14)

[illegible]

IDENTIFICATION:

IDENTIFICATION:

Date Media was made: 10/25/2024

SAMPLE

(where supply is available) 10ml

并

#2

5ml

37 |

#2

1 ml

#1

#2

Date Media was made: 12/25/2000

SAMPLE

(where supply is available) 10ml

#1

#1

5ml

11

#2

1 ml

1

#2

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: 11/1/77

SAMPLE

(where supply is available) 10ml

#2

[illegible]

Date Media was made: ~~1/2/77~~

SAMPLE

(where supply is available) 10ml

1

[illegible]

SAMPLE: 80 TEMPERATURE: 70°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: 11/1/2011

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: ~~2/2/79~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: 90 TEMPERATURE: 70°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

11. Thioglycollate Broth

Date Media was made: ~~_____~~

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

[illegible]

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: August 1964

SAMPLE

DAYS (1-14)

Date Media was made:

SAMPLE

DAYS (1-14)

[illegible]

ReSeeds
Types: Negative

Sample: 1-D

Temperature: 20° C

I. Trypticase Soy Broth:

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made: —

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 3-D

Temperature: 20°C

I. Trypticase Soy Broth:
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 5-D

Temperature: 20°C

I. Trypticase Soy Broth:
Date Media was made: _____
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made: _____
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

ReSeeds
Types: Negative

Sample: 8-D

Temperature: 20°C

I. Trypticase Soy Broth:
Date Media was made: _____
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made: _____
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Raw Data Producer E

CEN COUNT 2.8×10^5

Date Media was made:

Days (1-14)

1

#2

 10^{-2}

10-43

10-64

10-85

10-3 2

10-63

10-74

10-10-51

10-52

10-3

10-74

10 08 5

10-

[illegible]

Date Media was made: ~~2/28/77~~

Days (1-14)

#1

#2

 10^{-2}

10-43

10-64

 10^{-8}

ed Dilu

10-52

10-62

 10^{-7}

10-87

10-
ed Dilu

10-52

10-6 3
10-7 4

10-
10-8 5

10-

[illegible]

IDENTIFICATION: _____

24 Hour Incubation:

DAYS (1-14)

[illegible]

24 Hour Incubation:

DAYS (1-14)

[illegible]

SAMPLE: 2 E TEMPERATURE: 37°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: ~~2/22/77~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: ~~2020~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: 3E TEMPERATURE: 370

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: 12/1/77

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: 11/1/77

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: 4E TEMPERATURE: 37°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: ~~2/20/2010~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: ~~10/20/2011~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

IDENTIFICATION: _____

24 Hour Incubation:

DAYS (1-14)

[illegible]

24 Hour Incubation:

DAYS (1-14)

[illegible]

SAMPLE: 6E

TEMPERATURE: 37°

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made: ~~2/2/77~~

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

 $\frac{1}{2}$

#2

5ml

27

#2

1 ml

1

#2

11. Thioglycollate Broth

Date Media was made: 12/20/2014

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

#1

#1

5ml

21

#2

1 ml

1

#2

SAMPLE: 7E

TEMPERATURE: 37°

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made: ~~4/15/2004~~

24 Hour Incubation:

(where supply is available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: 12/1/78

24 Hour Incubation:

(where supply is available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: 8F TEMPERATURE: 370

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: 11/1/77

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: 8/20/2017

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

[illegible]

SAMPLE: 9E

TEMPERATURE: 370

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made: ~~2/2/82~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: ~~10/10/19~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

IDENTIFICATION: _____

24 Hour Incubation:

[illegible]

24 Hour Incubation:

[illegible]

Re-seeds
Types: Negative

Sample: 2-E

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

	Days						
Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

	Days						
Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 4-E

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made: -

24 Hour Incubation:

	Days						
Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: -

24 Hour Incubation:

	Days						
Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Receeds
Types: Negative

Sample: 6-E

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 8-E

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

CONTROL: 10E TEMPERATURE: 20°
IDENTIFICATION _____
CELL COUNT 2.8 x 10⁵

1. Trypticase Soy Broth:

Date Media was made: 11/11/11

24 Hour incubation:

Days (1-14)

A. Blank Control:

#1

#2

B. Control Dilutions-Seeded:

 10^{-2}

10-43

10-64

10-885

ed Dilu

C. Seeded Dilutions-Glycerine-Iml:

10-52

10-93

10-7 4

10 8/5

D. Seeded Dilution-Glycerine-5 ml:

10-5

10-6

10-7

10-85

11. Thioglycollate Broth:

Date Media was made:

24 Hour incubation:

Days (1-14)

A. Blank Control:

#1

#2

B. Control Dilutions-seeded:

 10^{-2}

10-43

10-6/4

10.8

ed Dilu

C. Seeded Dilutions-Glycerine-Iml:

10-52

10-6

 10^{-7}

10 g.

10-
ed Di lu

D. Seeded Dilutions-Glycerine-5ml:

10-3

10-6
10-7

10-88-11

10-

SAMPLE: 1E

TEMPERATURE: 70°

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: ~~10/10/19~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

[illegible]

SAMPLE: 2F TEMPERATURE: 200

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: ~~2/28/2004~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: ~~1968~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: 3E TEMPERATURE: 200

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: 11/1/77

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

11

#2

5ml

27

#2

1 m t

1

#2

DAYS (1-14)

[illegible]

II. Thioglycollate Broth

Date Media was made: ~~2/2/78~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

#1

1

5ml

#1

#2

1ml

11

#2

DAYS (1-14)

[illegible]

SAMPLE: 4E

TEMPERATURE: 20°

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made: 11/11/2011

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

1

#2

5ml

27

#2

limit

1

#2

11. Thioglycollate Broth

Date Media was made: 2002

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

#1

1

5ml

11

#2

1 ml

1

#2

SAMPLE: 5E TEMPERATURE: 700

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: ~~10/10/1997~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: ~~1/24/2009~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
- -	- -	- -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	((	A (	

SAMPLE: 6E TEMPERATURE: 70°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: 8/2/80

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

11. Thioglycollate Broth

Date Media was made: ~~10/10/1964~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: 7E TEMPERATURE: 70°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: ~~1/2/2014~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: ~~1-27-2020~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

IDENTIFICATION: _____

IDENTIFICATION:

Date Media was made: 12/1/77

SAMPLE

[illegible]

Date Media was made: ~~1/2/80~~

SAMPLE

DAYS (1-14)													
1	2	3	4	5	6	7	8	9	10	11	12	13	14
-	-	-	-	-	-	-	L	-	-	L	"	R	"
-	-	-	-	-	-	-	L	-	-	L	"		-
-	-	-	-	-	-	-	L	-	-	"	"	R	-

IDENTIFICATION: _____

IDENTIFICATION:

Date Media was made: ~~1964~~

SAMPLE

DAYS (1-14)

Date Media was made: ~~11/11/11~~

SAMPLE

DAYS (1-14)

[illegible]

IDENTIFICATION: _____

#2

Re-seeds
Types: Negative

Sample: 2-E

Temperature: 20°C

I. Trypticase Soy Broth:
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 4 E

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

ReSeeds
Types: Negative

Sample: 6-E

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made: ✓

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: ✓

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Receeds
Types: Negative

Sample: 8 E

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Raw Data Producer F

CONTROL: 1F TEMPERATURE: 37
IDENTIFICATION _____
CELL COUNT 3.6 x 10⁵

CONTROL: 1F TEMPERATURE: 37

CELL COUNT 3.6×10^5

1. Trypticase Soy Broth:

Date Media was made: ~~12/10/19~~

24 Hour incubation:

Days (1-14)

A. Blank Control:

#1

#2

B. Control Dilutions-Seeded:

 10^{-2}

10-43

10-64

10-85

ed Dilu

C. Seeded Dilutions-Glycerine-Iml:

10-32

10-6

 $10^{-7.4}$

10 8 2

D. Seeded Dilution-Glycerine-5 ml:

10-82

10-6

10-74

10-8

11. Thioglycollate Broth:

Date Media was made: 12/22/2004

24 Hour incubation:

Days (1-14)

A. Blank Control:

#1

#2

B. Control Dilutions-seeded:

 10^{-2}

10-423

10-84

10-10-5

C. Seeded Dilutions-Glycerine-Iml:

10-52

10-6

10-7⁴

10 8 5

D. Seeded Dilutions-Glycerine-5ml:

10-52

10-62
74

10-85
10-

SAMPLE: 1 F

TEMPERATURE: 87°

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: 10/20/2011

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: 2F

TEMPERATURE: 37°

IDENTIFICATION:

[illegible]

.....

1. Trypticase Soy Broth

Date Media was made: ~~2/2/78~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: ~~12/20/20~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

IDENTIFICATION: _____

24 Hour Incubation:

DAYS (1-14)

[illegible]

24 Hour Incubation:

DAYS (1-14)

[illegible]

SAMPLE: 4F

TEMPERATURE: 37°

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

The image shows a gel electrophoresis result with 14 lanes. Lanes 1 through 13 contain multiple horizontal bands at different vertical positions, representing different DNA fragments. Lane 14 contains a single, prominent band at the bottom of the gel, which is characteristic of a DNA ladder or a specific marker.

11. Thioglycollate Broth

Date Media was made: ~~2/21/77~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

SAMPLE: 5F TEMPERATURE: 37°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: ~~11/1/77~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

[illegible]

11. Thioglycollate Broth

Date Media was made: 12/20/2017

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE: 6F TEMPERATURE: 37°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: 11/1/78

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

SAMPLE: 7F TEMPERATURE: 37°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: 10/1/77

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

1

#2

5ml

241

#2

1 m

第 11 卷

#2

11. Thioglycollate Broth

Date Media was made: 4/22/2019

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

#1

 $\sharp 1$

5ml

 $\frac{1}{2}$

#2

1m

1

#2

IDENTIFICATION: _____

IDENTIFICATION:

Date Media was made: 12/1/77

24 Hour Incubation:

DAYS (1-14)

[illegible]

Date Media was made:

24 Hour Incubation:

DAYS (1-14)

[illegible]

SAMPLE: 9F

TEMPERATURE: 37°

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made: ~~_____~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: 2/20/2011

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

[illegible]

SAMPLE: 10F TEMPERATURE: 37°

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made:

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

Re-seeds
Types: Negative

Sample: 2-F

Temperature: 37°C

I. Trypticase Soy Broth:
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 4-F

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Sample:

	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Sample:

	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: 5 Negative

Sample: 7-F

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 10-F

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

CELL COUNT 3.6×10^5

1. Trypticase Soy Broth:

Date Media was made: 2/2/74

24 Hour incubation:

Days (1-14)

A. Blank Control:

1

#2

B. Control Dilutions-Seeded:

 10^{-2}

10-43

10-64

10-85

C. Seeded Dilutions-Glycerine-Iml:

10-52

10-63

10-74

10-8 5

D. Seeded Dilution-Glycerine-5 ml:

10-52

10-63

10-

 $10^{-8.5}$

11. Thioglycollate Broth:

Date Media was made: 2/22/24

24 Hour incubation:

Days (1-14)

A. Blank Control:

#1

#2

B. Control Dilutions-seeded:

 10^{-2}

10-43

10-64

10-85

C. Seeded Dilutions-Glycerine-Iml:

10-3

10-63

10-74

10-65

D. Seeded Dilutions-Glycerine-5ml:

10-52

10-7

10-85

SAMPLE: 1F

TEMPERATURE: 200

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made: 11/25/2016

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

11. Thioglycolate Broth

Date Media was made: ~~_____~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

SAMPLE

DAYS (1-14)

SAMPLE: 2F

TEMPERATURE: 20°

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made: ~~11/25/71~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

11. Thioglycollate Broth

Date Media was made: ~~10/10/1964~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: ~~2/22/2007~~

24 Hour Incubation:

SAMPLE

DAYS (1-14)

Date Media was made: 11/22/2011

24 Hour Incubation:

SAMPLE

DAYS (1-14)

[illegible]

IDENTIFICATION: _____

IDENTIFICATION:

Date Media was made: 11/1/77

24 Hour Incubation:

SAMPLE

DAYS (1-14)

[illegible]

Date Media was made:

24 Hour Incubation:

SAMPLE

DAYS (1-14)

[illegible]

SAMPLE: 5F TEMPERATURE: 20°

IDENTIFICATION: _____

1. Trypticase Soy Broth

Date Media was made: 12/22/2011

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: 12/20/2000

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: 6F

TEMPERATURE: 20°

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made: ~~11/1/77~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

11. Thioglycollate Broth

Date Media was made: ~~10/10/1964~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

SAMPLE: 7F

TEMPERATURE: 200

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made: 6-1-68

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

第 1

#2

5m

41

#2

1 m

1

#2

11. Thioglycolate Broth

Date Media was made: 11/1/78

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

#1

#1

5m

11

#2

1m

1

#2

SAMPLE: 84

TEMPERATURE: 200

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made: 1/25/55

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

[illegible]

11. Thioglycollate Broth

Date Media was made: ~~2/20/77~~

24 Hour Incubation:

SAMPLE
(where supply is
available) 10ml

DAYS (1-14)

A black and white photograph of a gel electrophoresis result. The gel has 14 lanes, numbered 1 through 14 at the top. Each lane contains a different pattern of horizontal DNA bands. Lanes 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14 all show multiple bands at different vertical positions, indicating varying DNA fragment sizes. The patterns of bands across the lanes are distinct, suggesting different DNA samples or treatments.

SAMPLE: 97

TEMPERATURE: 70°

IDENTIFICATION:

1. Trypticase Soy Broth

Date Media was made:

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

41

#2

5m

送 |

#2

1 m

411

#2

11. Thioglycollate Broth

Date Media was made:

24 Hour Incubation:

SAMPLE

DAYS (1-14)

(where supply is available) 10ml

#1

#1

5m

11

#2

1 m

送

#2

IDENTIFICATION: _____

IDENTIFICATION: _____

Date Media was made: 11/1/77

SAMPLE

DAYS (1-14)

[illegible]

Date Media was made: ~~10/10/1964~~

SAMPLE

DAYS (1-14)

Re-seeds
Types: Negative

Sample: 2-F

Temperature: 20°C

I. Trypticase Soy Broth:
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 4-F

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 7-F

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 10 F

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Raw Data - Positive Reseeds

Reseeds
Types: Positive

Sample: 36

Temperature: 37°

I. Trypticase Soy Broth:
Date Media was made: _____
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made: _____
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Receeds
Types: Positive

Sample: 46

Temperature: 37°

I. Trypticase Soy Broth:

Date Media was made: 4/20/02

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: 4/20/02

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Reseeds
Types: Positive

Sample: 76

Temperature: 37°

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Positive

Sample: 105

Temperature: 37°

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Receeds
Types: Positive

Sample: 3c

Temperature: 37°

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Receeds
Types: Positive

Sample: 4-C

Temperature: 37°C

I. Trypticase Soy Broth:
Date Media was made: —
24 Hour Incubation:

	Days						
Sample:	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth
Date Media was made: —
24 Hour Incubation:

	Days						
Sample:	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Positive

Sample: pc

Temperature: 37°

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml	-	-	-	-	-	-	-
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	+	+	+	+	+	+	+
+2	-	-	-	-	-	-	-

this was confirmed

Re-seeds
Types: Pesthouse

Sample: 96

Temperature: 37°

I. Trypticase Soy Broth:
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Positive

Sample: 10c

Temperature: 37°

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Positive

Sample: 1E

Temperature: 20°C

I. Trypticase Soy Broth:
Date Media was made: —
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth
Date Media was made: —
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Positive

Sample: 10E

Temperature: 37°

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Rebbeds
Types: Negative

Sample: 3b

Temperature: 370

I. Trypticase Soy Broth:

Date Media was made: 10/10/11

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: 10/10/11

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 106

Temperature: 37°

I. Trypticase Soy Broth:

Date Media was made: 2/20/07

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: 2/20/07

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 3C

Temperature: 37°

I. Trypticase Soy Broth:
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 8c

Temperature: 37°

I. Trypticase Soy Broth:

Date Media was made: 10/10/10

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made: 10/10/10

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Positive

Sample: 36

Temperature: 28°

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Days

Sample:

1 2 3 4 5 6 7

5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Days

Sample:

1 2 3 4 5 6 7

5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Receeds
Types: Positive

Sample: 46

Temperature: 20°

I. Trypticase Soy Broth:
Date Media was made: _____
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made: _____
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Reseeds
Types: Positive

Sample: 76

Temperature: 20°

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

Days

Sample:

	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

Days

Sample:

	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds -
Types: Positive

Sample: 106

Temperature: 20'

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Positive

Sample: 3c

Temperature: 20°

I. Trypticase Soy Broth:
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth
Date Media was made:
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Positive

Sample: 4-C

Temperature: 20°C

I. Trypticase Soy Broth:
Date Media was made: —
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth
Date Media was made: —
24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Receeds
Types: Positive

Sample: 8c

Temperature: 20°

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

ReSeeds
Types: Positive

Sample: 9C

Temperature: 20°C

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

	Days						
Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

	Days						
Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Positive

Sample: 10c

Temperature: 20°

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Positive

Sample: 1 E

Temperature: 37°C

I. Trypticase Soy Broth:

Date Media was made: -

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: -

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Positive

Sample: 10E

Temperature: 20°

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Days

Sample:

1 2 3 4 5 6 7

5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Days

Sample:

1 2 3 4 5 6 7

5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Re-seeds
Types: Negative

Sample: 3b

Temperature: 20°

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Sample:	Days						
	1	2	3	4	5	6	7
5ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml							
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 10b

Temperature: 20°

I. Trypticase Soy Broth:

Date Media was made:

24 Hour Incubation:

Days

Sample:

	1	2	3	4	5	6	7
5ml	—	—	—	—	—	—	—
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml	—	—	—	—	—	—	—
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

II. Thioglycolate Broth

Date Media was made:

24 Hour Incubation:

Days

Sample:

	1	2	3	4	5	6	7
5ml	—	—	—	—	—	—	—
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—
1ml	—	—	—	—	—	—	—
+1	—	—	—	—	—	—	—
+2	—	—	—	—	—	—	—

Re-seeds
Types: Negative

Sample: 9C

Temperature: 20°

I. Trypticase Soy Broth:

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

II. Thioglycolate Broth

Date Media was made: _____

24 Hour Incubation:

Days

Sample:	1	2	3	4	5	6	7
5ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-
1ml							
+1	-	-	-	-	-	-	-
+2	-	-	-	-	-	-	-

Raw Data Phase II:
Evaluation of Bacteriostatic, Bactericidal
Properties of Glycerine

Contents of Appendix:

1. Part I

The determination of the inhibitory characteristics of glycerine against Pseudomonas aeruginosa A.T.C.C. #10145, Escherichia coli A.T.C.C. #11775, Salmonella typhimurium A.T.C.C. #13311 and Staphylococcus aureus A.T.C.C. #12600.

2. Part II

The determination of whether the inhibition demonstrated in Part I is bacteriostatic or bactericidal, for the above organisms.

Phase II: Bacteriostatic-Bactericidal Properties

Part I

Escherichia coli A.T.C.C. #11775

Date: 6-8-71

Inhibition: 14 days

Cell count: 8.2×10^8

Percent/ Glycerine/ day	No. Positive tubes out of 16													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
6.7%	16													16
13.4%	16													16
20.3%	5			7					10					10
24.1%	0													0
28.6%	0													0
31.3%	0													0

Reseeds--48 hr.

Date: 6-10-71

Percent Glycerine	Total Tubes	Pos. Tubes
6.7%	-	-
13.4%	-	-
20.3%	11	11
24.1%	16	16
28.6%	16	16
31.3%	16	16

Phase II: Bacteriostatic-Bactericidal Properties

Part I

Pseudomonas aeruginosa A.T.C.C. #10145

Date: 6-10-71

Inhibition: 14 days

Cell count: 5.2×10^5

Percent / Glycerine/ day	No. Positive tubes out of 16													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
6.7%	16													16
13.4%	13		14			15		16						16
20.3%	1													1
24.1%	0													0
28.6%	0													0
31.3%	0													0

Reseeds--48 hr.

Date: 6-10-71

Percent Glycerine	Total Tubes	Pos. Tubes
6.7%	1	1
13.4%	3	3
20.3%	15	15
24.1%	16	16
28.6%	16	16
31.3%	13	16

Phase II: Bacteriostatic-Bactericidal Properties

Part I

Date: 6-8-71

Inhibition: 14 days

Cell count: 2.3×10^8

Salmonella typhimurium A.T.C.C. #13311

Percent Glycerine/day	No. Positive tubes out of 16													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
6.7%	16													16
13.4%	16													16
20.3%	0					1			2					2
24.1%	0													0
28.6%	0													0
31.3%	0													0

Reseeds--48 hr.

Date: 6-10-71

Percent Glycerine Total Tubes Pos. Tubes

6.7%	—	—
13.4%	—	—
20.3%	16	16
24.1%	16	16
28.6%	16	16
31.3%	16	16

Phase II: Bacteriostatic-Bactericidal Properties

Part I

Staphylococcus aureus A.T.C.C. #12600

Date: 6-8-71

Inhibition: 14 days

Cell count: 7.6×10^7

Percent / Glycerine / day	No. Positive tubes out of 16													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
6.7%	16													16
13.4%	16													16
20.3%	15	16												16
24.1%	15		16											16
28.6%	0	4	10					12		13				13
31.3%	0													0

Reseeds--48 hr.

Date: 6-10-71

Percent Total Pos.
Glycerine Tubes Tubes

6.7%	-	-
13.4%	-	-
20.3%	-	-
24.1%	1	1
28.6%	12	12
31.3%	16	16

Phase II: Bacteriostatic-Bactericidal Properties

Part II

Escherichia coli A.T.C.C. #11775

Original--- 7-4-71
 48 hr. reseed--- 7-6-71
 7 day reseed--- 7-11-71
 Cell count--- 8 x 10⁸

Percent glycerine	Initial inoculum		48 hr. reseed		72 hr. reseed		7 day reseed	
	Pos. tubes	Total tubes	Pos. tubes	Total tubes	Pos. tubes	Total tubes	Pos. tubes	Total tubes
37.8%	0	16	16	16			0	16
40.5%	0	16	15	16			0	16
43.9%	0	16	10	16			0	10
48.1%	0	16	7	16			0	7
49.5%	0	16	1	16			0	1
58.6%	0	16	0	16				
67.8%	0	16	0	16				
78.5%	0	16	3*	16	0	3		
88.8%	0	16	3*	16	0	3		
98.9%	0	16	0	16				

* Considered a chance contamination.

Phase II: Bacteriostatic-Bactericidal Properties

Part II

Pseudomonas aeruginosa A.T.C.C. #10145

Original--- 6-29-71
 48 hr. reseed--- 7-1-71
 7 day reseed--- 7-6-71
 Cell count--- 4.0×10^8

Percent glycerine	Initial		Innoculum		48 hr. reseed		7 day reseed	
	Pos. tubes	Total tubes	Pos. tubes	Total tubes	Pos. tubes	Total tubes	Pos. tubes	Total tubes
23.6%	0	16	16	16	4	16		
28.7%	0	16	16	16	0	16		
33.6%	0	16	12	16	0	12		
37.8%	0	16	4	16	0	4		
40.5%	0	16	0	16				

Phase II: Bacteriostatic-Bactericidal Properties

Part II

Salmonella typhimurium A.T.C.C. #13311

Original--- 7-13-71
 48 hr. reseed--- 7-15-71
 7 day reseed--- 7-20-71
 Cell count--- 9×10^8

Percent glycerine	Initial inoculum		48 hr. reseed		7 day reseed	
	Pos. tubes	Total tubes	Pos. tubes	Total tubes	Pos. tubes	Total tubes
23.6%	1	16	15	15	15	15
28.7%	0	16	16	16	3	16
33.6%	0	16	16	16	0	16
37.8%	0	16	16	16	0	16
40.5%	0	16	3	16	0	3
43.9%	0	16	3	16	0	3
48.1%	0	16	0	16		
49.5%	0	16	0	16		

Phase II: Bacteriostatic-Bactericidal Properties

Part II

Staphylococcus aureus A.T.C.C. #12600

Original--- 8-29-71
 48 hr. reseed--- 7-1-71
 7 day reseed--- 7-6-71
 Cell count--- 8.4×10^8

Percent glycerine	Initial inoculum		48 hr. reseed		7 day reseed	
	Pos. tubes	Total tubes	Pos. tubes	Total tubes	Pos. tubes	Total tubes
67.8%	0	16	16	16	0	16
78.5%	0	16	16	16	0	16
88.8%	0	16	16	16	0	16
98.9%	0	16	13	16	0	16