

|             |                    |                 |                      |
|-------------|--------------------|-----------------|----------------------|
| EXP. NUMBER | EXPERIMENT/SUBJECT | DATE            | 69                   |
| NAME        | LAB PARTNER        | LOCKER/DESK NO. | COURSE & SECTION NO. |

8-31-12  
 • retest from 8-24 (page 68)

9/4/12 - + - +  
 Absorbance at 600 nm

| #  | -    | +     | #  | -    | +     | #   | -    | +     | #  | -    | +     |
|----|------|-------|----|------|-------|-----|------|-------|----|------|-------|
| A1 | 0.00 | 1.672 | C1 | 0.00 | 1.786 | SA1 | 0.00 | 1.766 | L1 | 0.00 | 1.881 |
| A3 | 0.00 | 0.393 | C2 | 0.00 | 1.828 | SA2 | 0.00 | 1.705 | L2 | 0.00 | 1.575 |
| A2 | 0.00 | 1.625 | C3 | 0.00 | 0.237 | SA3 | 0.00 | 0.337 | L3 | 0.00 | 0.960 |
| A4 | 0.00 | 0.152 | C4 | 0.00 | 0.250 | SA4 | 0.00 | 1.232 | L4 | 0.00 | 1.378 |
| A5 | 0.00 | 0.065 | C5 | 0.00 | 0.044 | SA5 | 0.00 | 0.102 | L5 | 0.00 | 1.100 |
| A6 | 0.00 | 1.255 | C6 | 0.00 | 1.194 | SA6 | 0.00 | 1.290 | L6 | 0.00 | 0.294 |
|    |      |       |    |      |       |     |      |       | L7 | 0.00 | 0.103 |
|    |      |       |    |      |       |     |      |       | L8 | 0.00 | 0.103 |

Food prep same  
 looks = to fully different

|    | -    | +     |    | -    | +     |     | -    | + |    | -    | +       |
|----|------|-------|----|------|-------|-----|------|---|----|------|---------|
| A1 | .048 | 1.016 | C1 | .048 | 1.016 | SA1 | .048 |   | L1 | .048 |         |
| A2 | .048 | 1.016 | C2 | .048 | 1.016 | SA2 | .048 |   | L2 | .048 |         |
| A3 | .048 | 1.016 | C3 | .048 | 1.016 | SA3 | .048 |   | L3 | .048 |         |
| A4 | .048 | 1.016 | C4 | .048 | 1.016 | SA4 | .048 |   | L4 | .048 |         |
| A5 | .048 | 0.089 | C5 | .048 | 0.075 | SA5 | .048 |   | L5 | .048 |         |
| A6 | .048 | 1.016 | C6 | .048 | 1.016 | SA6 | .048 |   | L6 | .048 |         |
|    |      |       |    |      |       |     |      |   | L7 | .048 |         |
|    |      |       |    |      |       |     |      |   | L8 | .048 | = 1.016 |

For C3, when 1 ml of PBS added... went to .645  
 L4 = .526 (w/ 1ml added)  
 C1 still matched  
 - made 25% dilution = matched out  
 - made 17.5% dilution = matched out  
 - 6.25% = matched out  
 - 3.125% = matched out  
 - 1.5625% = .459  
 C2 = 10% = .345  
 1% = .345  
 C6 = 10% = .445

L: Dilutions

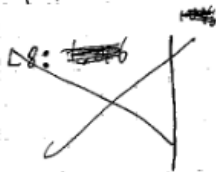
|           |      |            |      |
|-----------|------|------------|------|
| SIGNATURE | DATE | WITNESS/TA | DATE |
|-----------|------|------------|------|

|             |                    |                 |                      |
|-------------|--------------------|-----------------|----------------------|
| EXP. NUMBER | EXPERIMENT/SUBJECT | DATE            | 70                   |
| NAME        | LAB PARTNER        | LOCKER/DESK NO. | COURSE & SECTION NO. |

Cadmium Detector 8A1 = K824008  
 Arsenic Detector 9C1 = K824009  
 Lead Detector 12C2 = K824012

|           |      |            |      |
|-----------|------|------------|------|
| SIGNATURE | DATE | WITNESS/TA | DATE |
|-----------|------|------------|------|

Fluorescence Test for Detectors  
9-4-12

~~L8:~~ 

| Sample | Dilution | Flu. @ 405 |
|--------|----------|------------|
| L1     | 1:64     | .459       |
| L2     | 1:100    | .345       |
| L3     | 1:2      | .645       |
| L4     | 1:2      | .526       |
| L5     | —        | .075       |
| L6     | 1:10     | .445       |

| Sample | Dilution | Flu. @ 405 nm |
|--------|----------|---------------|
| L8     | 1:10     | .228          |
| L7     | 1:10     | .865          |
| L6     | —        | .341          |
| L5     | 1:10     | .478          |
| L4     | 1:10     | .465          |
| L3     | 1:10     | .409          |
| L2     | 1:10     | .314          |
| L1     | —        | .656          |
| A6     | 1:10     | .281          |
| A5     | —        | .120          |
| A4     | —        | .662          |
| A3     | 1:10     | .218          |
| A2     | 1:100    | .173          |
| A1     | 1:100    | .219          |

9-5-12

- Repeat of tests from p. 69 (and book)
- liquid cultures of 3 detectors

Fluorescence Per O.D. Calculations (From 9/7/12) ~~AK~~

Flu. at 405nm

Abs. @ 600.2 nm ✓

from 9-4-12

| Sample | Flu./OD                 | Cont.   |
|--------|-------------------------|---------|
| A1     | 5.983                   | .1 M    |
| A2     | 4.007                   | .05 M   |
| A3     | 10.158                  | .01 M   |
| A4     | 12.340                  | 5 mM    |
| A5     | 1.711                   | 1 mM    |
| A6     | <del>24.333</del> 2.633 | Control |
| C1     | 8.904                   | .1 M    |
| C2     | 6.857                   | .05 M   |
| C3     | 17.211                  | .01 M   |
| C4     | 135.333                 | 5 mM    |
| C5     | —                       | 1 mM    |
| C6     | 2.187                   | Control |
| L1     | .463                    | .02 M   |
| L2     | 5.929                   | .01 M   |
| L3     | 4.325                   | 5 mM    |
| L4     | 2.035                   | 1 mM    |
| L5     | 1.587                   | .5 mM   |
| L6     | 2.306                   | .1 mM   |
| L7     | 2.830                   | .02 mM  |
| L8     | 1.567                   | control |

| Sample | Flu./OD                 |        |
|--------|-------------------------|--------|
| A1     | <del>6.2810</del>       | 13.098 |
| A2     | <del>10.158</del> 4.727 | 10.646 |
| A3     | <del>2.455</del>        | 5.547  |
| A4     | <del>4.033</del>        | 4.355  |
| A5     | <del>11.268</del>       | 1.846  |
| A6     | <del>11.268</del>       | 2.259  |
| C1     | 16.448                  |        |
| C2     | 18.873                  |        |
| C3     | 5.443                   |        |
| C4     | 4.208                   |        |
| C5     | 1.705                   |        |
| C6     | 3.727                   |        |
| L1     | .349                    |        |
| L2     | 1.997                   |        |
| L3     | 4.260                   |        |
| L4     | 3.374                   |        |
| L5     | 4.345                   |        |
| L6     | 1.160                   |        |
| L7     | 83.981                  |        |
| L8     | 2.067                   |        |