



## Anatoxin-A Receptor-Binding Assay Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

| Sample #   | Location                     | Date Collected | Date Analyzed | Conc. (ppb) |
|------------|------------------------------|----------------|---------------|-------------|
| AB22927    | Raccoon Lake Field Duplicate | 8/17/2015      | 8/20/2015     | < 10        |
| AB22928    | Field Blank                  | 8/17/2015      | 8/20/2015     | < 10        |
| AB22929    | Raccoon Lake SRA             | 8/17/2015      | 8/20/2015     | < 10        |
| AB22930    | Fairfax SRA                  | 8/17/2015      | 8/20/2015     | < 10        |
| AB22931    | Paynetown SRA                | 8/17/2015      | 8/20/2015     | < 10        |
| AB22932    | Hardy Lake SRA               | 8/18/2015      | 8/20/2015     | < 10        |
| AB22933    | Mounds SRA                   | 8/18/2015      | 8/20/2015     | < 10        |
| AB22934    | Quakertown SRA               | 8/18/2015      | 8/20/2015     | < 10        |
| AB22935    | Whitewater Memorial SP       | 8/18/2015      | 8/20/2015     | < 10        |
| AB22935LD  | Whitewater Lab Duplicate     | 8/18/2015      | 8/20/2015     | < 10        |
| 20150817LB | Lab Blank                    | 8/17/2015      | 8/20/2015     | < 10        |



## Test Report

### Test Information

| Name/ID              | Assay         | Absorbance                | Concentration                 | Interpretation | Reference        | Position |
|----------------------|---------------|---------------------------|-------------------------------|----------------|------------------|----------|
| 8/20/2015 2:30:04 PM |               |                           |                               |                |                  |          |
| Std1                 | ANATOXIN-A 1X | 2.025 Abs                 | 0.634 ng/mL                   |                | 0.000            | A01      |
| Std1                 | ANATOXIN-A 1X | 2.196 Abs                 | < 0.000 ng/mL                 |                | 0.000            | B01      |
| Std1                 | ANATOXIN-A 1X | 2.123 Abs                 | < 0.000 ng/mL                 |                | 0.000            | C01      |
| Std2                 | ANATOXIN-A 1X | 1.639 Abs                 | 9.930 ng/mL                   |                | 10.000           | D01      |
| Std2                 | ANATOXIN-A 1X | 1.639 Abs                 | 9.930 ng/mL                   |                | 10.000           | E01      |
| Std2                 | ANATOXIN-A 1X | 1.618 Abs                 | 10.835 ng/mL                  |                | 10.000           | F01      |
| Std3                 | ANATOXIN-A 1X | 1.249 Abs                 | 41.970 ng/mL                  |                | 35.000           | G01      |
| Std3                 | ANATOXIN-A 1X | 1.298 Abs                 | 35.300 ng/mL                  |                | 35.000           | H01      |
| Std3                 | ANATOXIN-A 1X | 1.386 Abs                 | 25.865 ng/mL                  |                | 35.000           | A02      |
| Std4                 | ANATOXIN-A 1X | 0.983 Abs                 | 116.350 ng/mL                 |                | 125.000          | B02      |
| Std4                 | ANATOXIN-A 1X | 1.014 Abs                 | 102.000 ng/mL                 |                | 125.000          | C02      |
| Std4                 | ANATOXIN-A 1X | 0.875 Abs                 | 193.250 ng/mL                 |                | 125.000          | D02      |
| Std5                 | ANATOXIN-A 1X | 0.703 Abs                 | > 500.000 ng/mL               |                | 500.000          | E02      |
| Std5                 | ANATOXIN-A 1X | 0.737 Abs                 | 456.500 ng/mL                 |                | 500.000          | F02      |
| Std5                 | ANATOXIN-A 1X | 0.748 Abs                 | 420.000 ng/mL                 |                | 500.000          | G02      |
| AB22929              | ANATOXIN-A 1X | 2.125 Abs                 | < 0.000 ng/mL                 | Out(LR)        | 10.000 - 500.000 | H02      |
| AB22929              | ANATOXIN-A 1X | 2.085 Abs                 | 0.126 ng/mL                   | LOW            | 10.000 - 500.000 | A03      |
| AB22929              | ANATOXIN-A 1X | 2.102 Abs [2.1040] {1.0 C | 0.037 ng/mL [0.029] {77.2 CV} | Low [Low]      | 10.000 - 500.000 | B03      |
| AB22930              | ANATOXIN-A 1X | 2.015 Abs                 | 0.743 ng/mL                   | LOW            | 10.000 - 500.000 | C03      |
| AB22930              | ANATOXIN-A 1X | 1.940 Abs                 | 1.750 ng/mL                   | LOW            | 10.000 - 500.000 | D03      |
| AB22930              | ANATOXIN-A 1X | 1.776 Abs [1.9103] {6.4 C | 5.250 ng/mL [2.245] {91.7 CV} | Low [Low]      | 10.000 - 500.000 | E03      |
| AB22931              | ANATOXIN-A 1X | 1.867 Abs                 | 3.070 ng/mL                   | LOW            | 10.000 - 500.000 | F03      |
| AB22931              | ANATOXIN-A 1X | 1.860 Abs                 | 3.215 ng/mL                   | LOW            | 10.000 - 500.000 | G03      |
| AB22931              | ANATOXIN-A 1X | 1.845 Abs [1.8573] {0.6 C | 3.540 ng/mL [3.275] {7.3 CV}  | Low [Low]      | 10.000 - 500.000 | H03      |
| AB22927              | ANATOXIN-A 1X | 1.826 Abs                 | 3.975 ng/mL                   | LOW            | 10.000 - 500.000 | A04      |
| AB22927              | ANATOXIN-A 1X | 1.717 Abs                 | 7.030 ng/mL                   | LOW            | 10.000 - 500.000 | B04      |
| AB22927              | ANATOXIN-A 1X | 1.804 Abs [1.7823] {3.2 C | 4.510 ng/mL [5.080] {31.5 CV} | Low [Low]      | 10.000 - 500.000 | C04      |
| AB22928              | ANATOXIN-A 1X | 1.589 Abs                 | 12.175 ng/mL                  |                | 10.000 - 500.000 | D04      |
| AB22928              | ANATOXIN-A 1X | 1.639 Abs                 | 9.930 ng/mL                   | LOW            | 10.000 - 500.000 | E04      |
| AB22928              | ANATOXIN-A 1X | 1.827 Abs [1.6850] {7.4 C | 3.950 ng/mL [8.140] {49.0 CV} | Low [Low]      | 10.000 - 500.000 | F04      |
| 20150817LB           | ANATOXIN-A 1X | 1.647 Abs                 | 9.600 ng/mL                   | LOW            | 10.000 - 500.000 | G04      |
| 20150817LB           | ANATOXIN-A 1X | 1.777 Abs                 | 5.220 ng/mL                   | LOW            | 10.000 - 500.000 | H04      |
| 20150817LB           | ANATOXIN-A 1X | 1.993 Abs [1.8057] {9.7 C | 1.003 ng/mL [4.470] {81.5 CV} | Low [Low]      | 10.000 - 500.000 | A05      |
| AB22932              | ANATOXIN-A 1X | 1.856 Abs                 | 3.300 ng/mL                   | LOW            | 10.000 - 500.000 | B05      |
| AB22932              | ANATOXIN-A 1X | 1.821 Abs                 | 4.095 ng/mL                   | LOW            | 10.000 - 500.000 | C05      |
| AB22932              | ANATOXIN-A 1X | 1.857 Abs [1.8447] {1.1 C | 3.280 ng/mL [3.549] {13.1 CV} | Low [Low]      | 10.000 - 500.000 | D05      |
| AB22933              | ANATOXIN-A 1X | 1.772 Abs                 | 5.360 ng/mL                   | LOW            | 10.000 - 500.000 | E05      |
| AB22933              | ANATOXIN-A 1X | 1.737 Abs                 | 6.390 ng/mL                   | LOW            | 10.000 - 500.000 | F05      |
| AB22933              | ANATOXIN-A 1X | 1.744 Abs [1.7510] {1.1 C | 6.175 ng/mL [5.965] {9.1 CV}  | Low [Low]      | 10.000 - 500.000 | G05      |
| AB22934              | ANATOXIN-A 1X | 1.936 Abs                 | 1.814 ng/mL                   | LOW            | 10.000 - 500.000 | H05      |
| AB22934              | ANATOXIN-A 1X | 1.900 Abs                 | 2.430 ng/mL                   | LOW            | 10.000 - 500.000 | A06      |
| AB22934              | ANATOXIN-A 1X | 1.674 Abs [1.8367] {7.7 C | 8.545 ng/mL [3.725] {87.3 CV} | Low [Low]      | 10.000 - 500.000 | B06      |
| AB22935              | ANATOXIN-A 1X | 1.716 Abs                 | 7.065 ng/mL                   | LOW            | 10.000 - 500.000 | C06      |
| AB22935              | ANATOXIN-A 1X | 1.582 Abs                 | 12.520 ng/mL                  |                | 10.000 - 500.000 | D06      |
| AB22935              | ANATOXIN-A 1X | 1.665 Abs [1.6543] {4.1 C | 8.885 ng/mL [9.305] {29.3 CV} | Low [Low]      | 10.000 - 500.000 | E06      |
| AB22935LD            | ANATOXIN-A 1X | 1.735 Abs                 | 6.455 ng/mL                   | LOW            | 10.000 - 500.000 | F06      |
| AB22935LD            | ANATOXIN-A 1X | 1.702 Abs                 | 7.535 ng/mL                   | LOW            | 10.000 - 500.000 | G06      |
| AB22935LD            | ANATOXIN-A 1X | 1.801 Abs [1.7460] {2.9 C | 4.585 ng/mL [6.115] {24.1 CV} | Low [Low]      | 10.000 - 500.000 | H06      |

The data in this report is preliminary without a quality control report. This data is not warranted for accuracy or other purposes.

*David Jordan*

Laboratory Analyst Signature

8/20/15

Date



# Assay Calibration Report

## Assay Information

Assay Name: ANATOXIN-A 1X  
 Assay Mode: 4-Parameter Logistic  
 Normal: 10.000 - 500.000  
 Units: ng/mL  
 # of decimals: 3  
 Assay Description:

## Standards:

Std1, Concentration = 0.000, Minimum number to use: 3  
 Std2, Concentration = 10.000, Minimum number to use: 3  
 Std3, Concentration = 35.000, Minimum number to use: 3  
 Std4, Concentration = 125.000, Minimum number to use: 3  
 Std5, Concentration = 500.000, Minimum number to use: 3  
 Curve valid interval: 7 days 0 hours  
 Axis Mode: Y = Abs, X = Log(Conc)

## Assay Calibration and Statistics

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|----------------------|------------|-----------------|----------|
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| Std2                 | 1.639 Abs  | 9.930 ng/mL     | E01      |
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| Std5                 | 0.703 Abs  | > 500.000 ng/mL | E02      |
| Std5                 | 0.737 Abs  | 456.500 ng/mL   | F02      |
| Std5                 | 0.748 Abs  | 420.000 ng/mL   | G02      |

| Name | Mean Abs | SD Abs | CV Abs | Mean Conc | SD Conc | CV Conc | Diff Conc |
|------|----------|--------|--------|-----------|---------|---------|-----------|
| Std1 | 2.115    | 0.086  | 4.06   |           |         |         |           |
| Std2 | 1.632    | 0.012  | 0.74   | 10.232    | 0.523   | 5.11    | 2.32      |
| Std3 | 1.311    | 0.069  | 5.30   | 34.378    | 8.092   | 23.54   | -1.78     |
| Std4 | 0.957    | 0.073  | 7.62   | 137.200   | 49.068  | 35.76   | 9.76      |
| Std5 | 0.729    | 0.023  | 3.22   |           |         |         | -100.00   |

