



## Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

| Sample #   | Location                       | Date Collected | Date Analyzed | Conc. (ppb) |
|------------|--------------------------------|----------------|---------------|-------------|
| AB34019    | Field Blank                    | 8/20/2018      | 8/22/2018     | < 0.300     |
| AB34012    | Raccoon Lake SRA               | 8/20/2018      | 8/22/2018     | < 0.300     |
| AB34018    | Raccoon Lake (Field Duplicate) | 8/20/2018      | 8/22/2018     | < 0.300     |
| AB34014    | Paynetown SRA                  | 8/20/2018      | 8/22/2018     | < 0.300     |
| AB34013    | Fairfax SRA                    | 8/20/2018      | 8/22/2018     | < 0.300     |
| AB34015    | Hardy Lake SRA                 | 8/20/2018      | 8/22/2018     | < 0.300     |
| AB34010    | Dog Park Lake                  | 8/20/2018      | 8/22/2018     | < 0.300     |
| AB34017    | Whitewater Memorial SP         | 8/21/2018      | 8/22/2018     | < 0.300     |
| AB34011    | Quakertown SRA                 | 8/21/2018      | 8/22/2018     | < 0.300     |
| AB34016    | Mounds SRA                     | 8/21/2018      | 8/22/2018     | < 0.300     |
| AB34016LD  | Mounds (Lab Duplicate)         | 8/21/2018      | 8/22/2018     | < 0.300     |
| 20180821LB | Lab Blank                      | 8/21/2018      | 8/22/2018     | < 0.300     |



# Test Report

## Test Information

| Name/ID              | Assay             | Absorbance                  | Concentration                  | Interpretation | Reference       | Position |
|----------------------|-------------------|-----------------------------|--------------------------------|----------------|-----------------|----------|
| 8/22/2018 5:03:31 PM |                   |                             |                                |                |                 |          |
| Std1                 | Microcystins ADDA | 1.738 Abs                   | 0.0401 ng/mL                   |                | 0.0000          | A01      |
| Std1                 | Microcystins ADDA | 1.880 Abs                   | < 0.0000 ng/mL                 |                | 0.0000          | B01      |
| Std2                 | Microcystins ADDA | 1.589 Abs                   | 0.1683 ng/mL                   |                | 0.1500          | C01      |
| Std2                 | Microcystins ADDA | 1.596 Abs                   | 0.1613 ng/mL                   |                | 0.1500          | D01      |
| Std3                 | Microcystins ADDA | 1.279 Abs                   | 0.5979 ng/mL                   |                | 0.4000          | E01      |
| Std3                 | Microcystins ADDA | 1.499 Abs                   | 0.2669 ng/mL                   |                | 0.4000          | F01      |
| Std4                 | Microcystins ADDA | 1.146 Abs                   | 0.8894 ng/mL                   |                | 1.0000          | G01      |
| Std4                 | Microcystins ADDA | 1.180 Abs                   | 0.8061 ng/mL                   |                | 1.0000          | H01      |
| Std5                 | Microcystins ADDA | 0.824 Abs                   | 2.2211 ng/mL                   |                | 2.0000          | A02      |
| Std5                 | Microcystins ADDA | 0.780 Abs                   | 2.5381 ng/mL                   |                | 2.0000          | B02      |
| Std6                 | Microcystins ADDA | 0.600 Abs                   | 4.7120 ng/mL                   |                | 5.0000          | C02      |
| Std6                 | Microcystins ADDA | 0.603 Abs                   | 4.6570 ng/mL                   |                | 5.0000          | D02      |
| Normal Control       | Microcystins ADDA | 1.145 Abs                   | 0.8920 ng/mL                   |                |                 | E02      |
| Normal Control       | Microcystins ADDA | 1.124 Abs                   | 0.9471 ng/mL                   |                |                 | F02      |
| AB34019              | Microcystins ADDA | 1.672 Abs                   | 0.0918 ng/mL                   | LOW            | 0.1500 - 5.0000 | G02      |
| AB34019              | Microcystins ADDA | 1.846 Abs [1.7590] {7.0 CV} | < 0.0000 ng/mL [0.0255]        | Out(LR) [Low]  | 0.1500 - 5.0000 | H02      |
| AB34012              | Microcystins ADDA | 1.603 Abs                   | 0.1545 ng/mL                   |                | 0.1500 - 5.0000 | A03      |
| AB34012              | Microcystins ADDA | 1.650 Abs [1.6265] {2.0 CV} | 0.1108 ng/mL [0.1321] {23.3 C} | Low [Low]      | 0.1500 - 5.0000 | B03      |
| AB34018              | Microcystins ADDA | 1.572 Abs                   | 0.1856 ng/mL                   |                | 0.1500 - 5.0000 | C03      |
| AB34018              | Microcystins ADDA | 1.653 Abs [1.6125] {3.6 CV} | 0.1082 ng/mL [0.1453] {37.3 C} | Low [Low]      | 0.1500 - 5.0000 | D03      |
| AB34014              | Microcystins ADDA | 1.660 Abs                   | 0.1021 ng/mL                   | LOW            | 0.1500 - 5.0000 | E03      |
| AB34014              | Microcystins ADDA | 1.662 Abs [1.6610] {0.1 CV} | 0.1003 ng/mL [0.1012] {1.3 CV} | Low [Low]      | 0.1500 - 5.0000 | F03      |
| AB34013              | Microcystins ADDA | 1.706 Abs                   | 0.0641 ng/mL                   | LOW            | 0.1500 - 5.0000 | G03      |
| AB34013              | Microcystins ADDA | 1.652 Abs [1.6790] {2.3 CV} | 0.1091 ng/mL [0.0859] {36.7 C} | Low [Low]      | 0.1500 - 5.0000 | H03      |
| AB34015              | Microcystins ADDA | 1.682 Abs                   | 0.0834 ng/mL                   | LOW            | 0.1500 - 5.0000 | A04      |
| AB34015              | Microcystins ADDA | 1.745 Abs [1.7135] {2.6 CV} | 0.0351 ng/mL [0.0583] {57.6 C} | Low [Low]      | 0.1500 - 5.0000 | B04      |
| AB34010              | Microcystins ADDA | 1.725 Abs                   | 0.0496 ng/mL                   | LOW            | 0.1500 - 5.0000 | C04      |
| AB34010              | Microcystins ADDA | 1.866 Abs [1.7955] {5.6 CV} | < 0.0000 ng/mL [0.0029]        | Out(LR) [Low]  | 0.1500 - 5.0000 | D04      |
| AB34017              | Microcystins ADDA | 1.628 Abs                   | 0.1307 ng/mL                   | LOW            | 0.1500 - 5.0000 | E04      |
| AB34017              | Microcystins ADDA | 1.641 Abs [1.6345] {0.6 CV} | 0.1189 ng/mL [0.1248] {6.7 CV} | Low [Low]      | 0.1500 - 5.0000 | F04      |
| AB34011              | Microcystins ADDA | 1.632 Abs                   | 0.1270 ng/mL                   | LOW            | 0.1500 - 5.0000 | G04      |
| AB34011              | Microcystins ADDA | 1.648 Abs [1.6400] {0.7 CV} | 0.1126 ng/mL [0.1198] {8.5 CV} | Low [Low]      | 0.1500 - 5.0000 | H04      |
| AB34016              | Microcystins ADDA | 1.631 Abs                   | 0.1280 ng/mL                   | LOW            | 0.1500 - 5.0000 | A05      |
| AB34016              | Microcystins ADDA | 1.600 Abs [1.6155] {1.4 CV} | 0.1574 ng/mL [0.1425] {14.6 C} | [Low]          | 0.1500 - 5.0000 | B05      |
| AB34016LD            | Microcystins ADDA | 1.431 Abs                   | 0.3539 ng/mL                   |                | 0.1500 - 5.0000 | C05      |
| AB34016LD            | Microcystins ADDA | 1.636 Abs [1.5335] {9.5 CV} | 0.1234 ng/mL [0.2270] {68.3 C} | LOW            | 0.1500 - 5.0000 | D05      |
| 20180821LB           | Microcystins ADDA | 1.709 Abs                   | 0.0618 ng/mL                   | LOW            | 0.1500 - 5.0000 | E05      |
| 20180821LB           | Microcystins ADDA | 1.561 Abs [1.6350] {6.4 CV} | 0.1971 ng/mL [0.1243] {73.9 C} | [Low]          | 0.1500 - 5.0000 | F05      |

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

8/22/2018

Date



# Assay Calibration Report

## Assay Information

Assay Name: Microcystins ADDA

Assay Mode: 4-Parameter Logistic Weight by:None

Normal: 0.1500 - 5.0000

Units: ng/mL

# of decimals: 4

Assay Description:

Controls: Normal Control

Standards: Std1, Concentration = 0.0000, Minimum number to use: 2

Std2, Concentration = 0.1500, Minimum number to use: 2

Std3, Concentration = 0.4000, Minimum number to use: 2

Std4, Concentration = 1.0000, Minimum number to use: 2

Std5, Concentration = 2.0000, Minimum number to use: 2

Std6, Concentration = 5.0000, Minimum number to use: 2

Curve valid interval: 7 days 0 hours

## Assay Calibration and Statistics

| Name                 | Absorbance | Concentration  | Position |
|----------------------|------------|----------------|----------|
| 8/22/2018 5:03:31 PM |            |                |          |
| Std1                 | 1.738 Abs  | 0.0401 ng/mL   | A01      |
| Std1                 | 1.880 Abs  | < 0.0000 ng/mL | B01      |
| Std2                 | 1.589 Abs  | 0.1683 ng/mL   | C01      |
| Std2                 | 1.596 Abs  | 0.1613 ng/mL   | D01      |
| Std3                 | 1.279 Abs  | 0.5979 ng/mL   | E01      |
| Std3                 | 1.499 Abs  | 0.2669 ng/mL   | F01      |
| Std4                 | 1.146 Abs  | 0.8894 ng/mL   | G01      |
| Std4                 | 1.180 Abs  | 0.8061 ng/mL   | H01      |
| Std5                 | 0.824 Abs  | 2.2211 ng/mL   | A02      |
| Std5                 | 0.780 Abs  | 2.5381 ng/mL   | B02      |
| Std6                 | 0.600 Abs  | 4.7120 ng/mL   | C02      |
| Std6                 | 0.603 Abs  | 4.6570 ng/mL   | D02      |
| 8/22/2018 5:03:31 PM |            |                |          |
| Normal Control       | 1.124 Abs  | 0.9471 ng/mL   | F02      |
| Normal Control       | 1.145 Abs  | 0.8920 ng/mL   | E02      |

| Name           | Mean Abs | SD Abs | CV Abs | Mean Conc | SD Conc | CV Conc | Diff Conc |
|----------------|----------|--------|--------|-----------|---------|---------|-----------|
| Std1           | 1.809    | 0.100  | 5.55   |           |         |         |           |
| Std2           | 1.592    | 0.005  | 0.31   | 0.165     | 0.005   | 3.00    | 10.00     |
| Std3           | 1.389    | 0.156  | 11.20  | 0.432     | 0.234   | 54.13   | 8.00      |
| Std4           | 1.163    | 0.024  | 2.07   | 0.848     | 0.059   | 6.95    | -15.20    |
| Std5           | 0.802    | 0.031  | 3.88   | 2.380     | 0.224   | 9.42    | 19.00     |
| Std6           | 0.602    | 0.002  | 0.35   | 4.684     | 0.039   | 0.83    | -6.32     |
| Normal Control | 1.135    | 0.015  | 1.31   | 0.920     | 0.039   | 4.24    |           |

