# Microcystins ELISA Summary Report

**Office of Water Quality - Watershed Assessment and Planning Branch**

| Sample # | Location | Date Collected | Date Analyzed | Conc. (ppb) |
|---|---|---|---|---|
| AB26345 | Fairfax SRA | 7/25/2016 | 7/27/2016 | < 0.15 |
| AB26345LD | Fairfax (Lab Duplicate) | 7/25/2016 | 7/27/2016 | < 0.15 |
| AB26346 | Paynetown SRA | 7/25/2016 | 7/27/2016 | < 0.15 |
| AB26347 | Starve Hollow SRA | 7/25/2016 | 7/27/2016 | < 0.15 |
| AB26348 | Hardy Lake (Field Duplicate) | 7/25/2016 | 7/27/2016 | 0.24 |
| AB26349 | Field Blank | 7/25/2016 | 7/27/2016 | < 0.15 |
| AB26350 | Deam Lake SRA | 7/25/2016 | 7/27/2016 | < 0.15 |
| AB26351 | Hardy Lake SRA | 7/25/2016 | 7/27/2016 | 0.21 |
| AB26352 | Whitewater Memorial SP | 7/26/2016 | 7/27/2016 | < 0.15 |
| AB26353 | Quakertown SRA | 7/26/2016 | 7/27/2016 | 0.30 |
| AB26354 | Mounds SRA | 7/26/2016 | 7/27/2016 | 1.04 |
| AB26355 | Raccoon Lake SRA | 7/26/2016 | 7/27/2016 | < 0.15 |
| 20160725LB | Lab Blank | 7/25/2016 | 7/27/2016 | < 0.15 |

IDEM

# Assay Calibration Report

## Assay Information

Assay Name: Microcystins ADDA
Assay Mode: 4-Parameter Logistic
Normal: 0.1500 - 5.0000

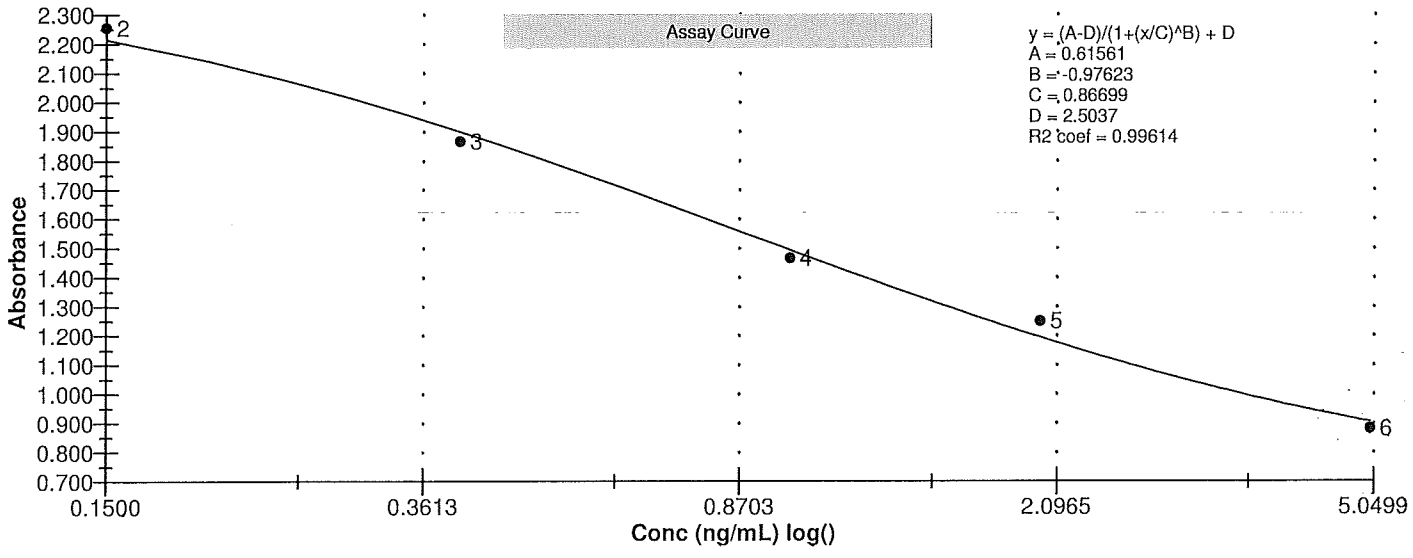
Units: ng/mL
# of decimals: 4
Assay Description:

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
Axis Mode: Y = Abs, X = Log(Conc)

## Assay Calibration and Statistics

| Name | Absorbance | Concentration | Position |
|---|---|---|---|
| 7/27/2016 3:26:50 PM | | | |
| Std1 | 2.491 Abs | 0.0052 ng/mL | A01 |
| Std2 | 2.221 Abs | 0.1463 ng/mL | C01 |
| Std2 | 2.291 Abs | 0.1046 ng/mL | D01 |
| Std3 | 1.879 Abs | 0.4213 ng/mL | E01 |
| Std3 | 1.855 Abs | 0.4466 ng/mL | F01 |
| Std4 | 1.438 Abs | 1.1305 ng/mL | G01 |
| Std4 | 1.494 Abs | 1.0000 ng/mL | H01 |
| Std5 | 1.250 Abs | 1.7420 ng/mL | B02 |
| Std6 | 0.882 Abs | > 5.0000 ng/mL | D02 |
| | | | |
| 7/27/2016 3:26:50 PM | | | |
| Normal Control | 1.761 Abs | 0.5562 ng/mL | F02 |
| Normal Control | 1.745 Abs | 0.5767 ng/mL | E02 |

| Name | Mean Abs | SD Abs | CV Abs | Mean Conc | SD Conc | CV Conc | Diff Conc |
|---|---|---|---|---|---|---|---|
| Std1 | 2.491 | | | 0.005 | | | |
| Std2 | 2.256 | 0.049 | 2.19 | 0.125 | 0.029 | 23.50 | -16.67 |
| Std3 | 1.867 | 0.017 | 0.91 | 0.434 | 0.018 | 4.12 | 8.50 |
| Std4 | 1.466 | 0.040 | 2.70 | 1.065 | 0.092 | 8.66 | 6.50 |
| Std5 | 1.250 | | | 1.742 | | | -12.90 |
| Std6 | 0.882 | | | | | | -100.00 |
| Normal Control | 1.753 | 0.011 | 0.65 | 0.566 | 0.014 | 2.56 | |



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# Test Report

**Test Information**

| Name/ID | Assay | Absorbance | Concentration | Interpretation | Reference | Position |
|---|---|---|---|---|---|---|
| | | | 7/27/2016 3:26:50 PM | | | |
| Std1 | Microcystins ADDA | 2.491 Abs | 0.0300 ng/mL | | 0.0000 | A01 |
| Std1 | Microcystins ADDA | 2.661 Abs | < 0.0000 ng/mL | | 0.0000 | B01 |
| Std2 | Microcystins ADDA | 2.221 Abs | 0.1550 ng/mL | | 0.1500 | C01 |
| Std2 | Microcystins ADDA | 2.291 Abs | 0.1175 ng/mL | | 0.1500 | D01 |
| Std3 | Microcystins ADDA | 1.879 Abs | 0.4116 ng/mL | | 0.4000 | E01 |
| Std3 | Microcystins ADDA | 1.855 Abs | 0.4357 ng/mL | | 0.4000 | F01 |
| Std4 | Microcystins ADDA | 1.438 Abs | 1.1090 ng/mL | | 1.0000 | G01 |
| Std4 | Microcystins ADDA | 1.494 Abs | 0.9780 ng/mL | | 1.0000 | H01 |
| Std5 | Microcystins ADDA | 1.221 Abs | 1.8690 ng/mL | | 2.0000 | A02 |
| Std5 | Microcystins ADDA | 1.250 Abs | 1.7350 ng/mL | | 2.0000 | B02 |
| Std6 | Microcystins ADDA | 0.920 Abs | 4.9550 ng/mL | | 5.0000 | C02 |
| Std6 | Microcystins ADDA | 0.882 Abs | > 5.0000 ng/mL | | 5.0000 | D02 |
| Normal Control | Microcystins ADDA | 1.745 Abs | 0.5767 ng/mL | | | E02 |
| Normal Control | Microcystins ADDA | 1.761 Abs | 0.5562 ng/mL | | | F02 |
| AB26345 | Microcystins ADDA | 2.592 Abs | < 0.0000 ng/mL | Out(LR) | 0.1500 - 5.0000 | G02 |
| AB26345 | Microcystins ADDA | 2.562 Abs [2.5770] {0.8 C | < 0.0000 ng/mL [< 0.0000] | Out(LR) [Out(LR)] | 0.1500 - 5.0000 | H02 |
| AB26345LD | Microcystins ADDA | 2.564 Abs | < 0.0000 ng/mL | Out(LR) | 0.1500 - 5.0000 | A03 |
| AB26345LD | Microcystins ADDA | 2.545 Abs [2.5545] {0.5 C | < 0.0000 ng/mL [< 0.0000] | Out(LR) [Out(LR)] | 0.1500 - 5.0000 | B03 |
| AB26346 | Microcystins ADDA | 2.559 Abs | < 0.0000 ng/mL | Out(LR) | 0.1500 - 5.0000 | C03 |
| AB26346 | Microcystins ADDA | 2.594 Abs [2.5765] {1.0 C | < 0.0000 ng/mL [< 0.0000] | Out(LR) [Out(LR)] | 0.1500 - 5.0000 | D03 |
| AB26347 | Microcystins ADDA | 2.628 Abs | < 0.0000 ng/mL | Out(LR) | 0.1500 - 5.0000 | E03 |
| AB26347 | Microcystins ADDA | 2.576 Abs [2.6020] {1.4 C | < 0.0000 ng/mL [< 0.0000] | Out(LR) [Out(LR)] | 0.1500 - 5.0000 | F03 |
| AB26348 | Microcystins ADDA | 2.055 Abs | 0.2627 ng/mL | | 0.1500 - 5.0000 | G03 |
| AB26348 | Microcystins ADDA | 2.105 Abs [2.0800] {1.7 C | 0.2247 ng/mL [0.2433] {11.0 C' | | 0.1500 - 5.0000 | H03 |
| Ab26349 | Microcystins ADDA | 2.552 Abs | < 0.0000 ng/mL | Out(LR) | 0.1500 - 5.0000 | A04 |
| Ab26349 | Microcystins ADDA | 2.576 Abs [2.5640] {0.7 C | < 0.0000 ng/mL [< 0.0000] | Out(LR) [Out(LR)] | 0.1500 - 5.0000 | B04 |
| AB26350 | Microcystins ADDA | 2.613 Abs | < 0.0000 ng/mL | Out(LR) | 0.1500 - 5.0000 | C04 |
| AB26350 | Microcystins ADDA | 2.500 Abs [2.5565] {3.1 C | 0.0015 ng/mL [< 0.0000] | Low [Out(LR)] | 0.1500 - 5.0000 | D04 |
| AB26351 | Microcystins ADDA | 2.110 Abs | 0.2210 ng/mL | | 0.1500 - 5.0000 | E04 |
| AB26351 | Microcystins ADDA | 2.146 Abs [2.1280] {1.2 C | 0.1955 ng/mL [0.2081] {8.7 CV | | 0.1500 - 5.0000 | F04 |
| AB26352 | Microcystins ADDA | 2.542 Abs | < 0.0000 ng/mL | Out(LR) | 0.1500 - 5.0000 | G04 |
| AB26352 | Microcystins ADDA | 2.614 Abs [2.5780] {2.0 C | < 0.0000 ng/mL [< 0.0000] | Out(LR) [Out(LR)] | 0.1500 - 5.0000 | H04 |
| AB26353 | Microcystins ADDA | 1.940 Abs | 0.3614 ng/mL | | 0.1500 - 5.0000 | A05 |
| AB26353 | Microcystins ADDA | 2.090 Abs [2.0150] {5.3 C | 0.2358 ng/mL [0.2950] {29.7 C' | | 0.1500 - 5.0000 | B05 |
| AB26354 | Microcystins ADDA | 1.553 Abs | 0.8795 ng/mL | | 0.1500 - 5.0000 | C05 |
| AB26354 | Microcystins ADDA | 1.398 Abs [1.4755] {7.4 C | 1.2355 ng/mL [1.0410] {23.8 C' | | 0.1500 - 5.0000 | D05 |
| AB26355 | Microcystins ADDA | 2.389 Abs | 0.0524 ng/mL | LOW | 0.1500 - 5.0000 | E05 |
| AB26355 | Microcystins ADDA | 2.468 Abs [2.4285] {2.3 C | 0.0152 ng/mL [0.0333] {77.8 C' | Low [Low] | 0.1500 - 5.0000 | F05 |
| 20160725LB | Microcystins ADDA | 2.577 Abs | < 0.0000 ng/mL | Out(LR) | 0.1500 - 5.0000 | G05 |
| 20160725LB | Microcystins ADDA | 2.630 Abs [2.6035] {1.4 C | < 0.0000 ng/mL [< 0.0000] | Out(LR) [Out(LR)] | 0.1500 - 5.0000 | H05 |

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

Laboratory Analyst Signature

7/28/16
Date