



## Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

| Sample # | Location                                                      | Date Collected | Date Analyzed | Conc. (ppb) |
|----------|---------------------------------------------------------------|----------------|---------------|-------------|
| AC45396  | Pokagon SP - Main Beach                                       | 6/16/2025      | 6/19/2025     | < 0.050     |
| AC45397  | Pokagon SP - Potawatomi Inn Beach                             | 6/16/2025      | 6/19/2025     | < 0.050     |
| AC45398  | Chain O'Lakes SP - Sand Lake Beach                            | 6/16/2025      | 6/19/2025     | < 0.050     |
| AC45399  | Ouabache SP - Kunkel Lake Beach                               | 6/16/2025      | 6/19/2025     | < 0.050     |
| AC45400  | Potato Creek SP - Worster Lake Beach                          | 6/17/2025      | 6/19/2025     | < 0.050     |
| AC45401  | Mississinewa Lake - Miami SRA Beach                           | 6/17/2025      | 6/19/2025     | < 0.050     |
| AC45402  | Salamonie Lake - Lost Bridge West SRA Beach                   | 6/17/2025      | 6/19/2025     | < 0.050     |
| AC45403  | Summit Lake SP - Summit Lake Beach                            | 6/17/2025      | 6/19/2025     | < 0.050     |
| AC45404  | Salamonie Lake - Lost Bridge West SRA Beach (Field Duplicate) | 6/17/2025      | 6/19/2025     | < 0.050     |
| AC45405  | Field Blank                                                   | 6/17/2025      | 6/19/2025     | < 0.050     |
| AC45406  | Lincoln SP - Lake Lincoln Beach                               | 6/16/2025      | 6/19/2025     | < 0.050     |
| AC45407  | Ferdinand State Forest - Ferdinand Lake Beach                 | 6/16/2025      | 6/19/2025     | < 0.050     |
| AC45408  | Patoka Lake - Newton Stewart SRA                              | 6/16/2025      | 6/19/2025     | < 0.050     |

# Test Report (by Request)

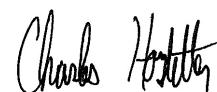
## Test Information

Request: 6/19/2025 3:17:50 PM  
Date: 6/19/2025

| Name/ID                   | Assay     | Absorbance                | Concentration      | Interpretation     | Note | Reference | Lot#      |
|---------------------------|-----------|---------------------------|--------------------|--------------------|------|-----------|-----------|
| STX Std 0                 | SAXITOXIN | 1.094 Abs                 | 0.001 µg/L         | R^2=0.99996, 99.81 |      | 0.000     | Kit:P24A3 |
| STX Std 0                 | SAXITOXIN | 1.098 Abs [1.0960] {0.3 C | 0.000 µg/L [0.001] | R^2=0.99996, 100.1 |      | 0.000     | Kit:P24A3 |
| STX Std 1                 | SAXITOXIN | 0.940 Abs                 | 0.019 µg/L         | R^2=0.99996, 85.76 |      | 0.020     | Kit:P24A3 |
| STX Std 1                 | SAXITOXIN | 0.926 Abs [0.9330] {1.1 C | 0.021 µg/L [0.020] | R^2=0.99996, 84.48 |      | 0.020     | Kit:P24A3 |
| STX Std 2                 | SAXITOXIN | 0.704 Abs                 | 0.048 µg/L         | R^2=0.99996, 64.23 |      | 0.050     | Kit:P24A3 |
| STX Std 2                 | SAXITOXIN | 0.676 Abs [0.6900] {2.9 C | 0.053 µg/L [0.051] | R^2=0.99996, 61.67 |      | 0.050     | Kit:P24A3 |
| STX Std 3                 | SAXITOXIN | 0.468 Abs                 | 0.100 µg/L         | R^2=0.99996, 42.70 |      | 0.100     | Kit:P24A3 |
| STX Std 3                 | SAXITOXIN | 0.464 Abs [0.4660] {0.6 C | 0.101 µg/L [0.101] | R^2=0.99996, 42.33 |      | 0.100     | Kit:P24A3 |
| STX Std 4                 | SAXITOXIN | 0.292 Abs                 | 0.196 µg/L         | R^2=0.99996, 26.64 |      | 0.200     | Kit:P24A3 |
| STX Std 4                 | SAXITOXIN | 0.289 Abs [0.2905] {0.7 C | 0.199 µg/L [0.198] | R^2=0.99996, 26.36 |      | 0.200     | Kit:P24A3 |
| STX Std 5                 | SAXITOXIN | 0.188 Abs                 | 0.392 µg/L         | R^2=0.99996, 17.15 |      | 0.400     | Kit:P24A3 |
| STX Std 5                 | SAXITOXIN | 0.179 Abs [0.1835] {3.5 C | > 0.400 µg/L [0.39 | 16.332 %Abs        |      | 0.400     | Kit:P24A3 |
| STX Control (0.060-0.090) | SAXITOXIN | 0.549 Abs                 | 0.077 µg/L         | 50.091 %Abs        |      |           | Kit:P24A3 |
| STX Control (0.060-0.090) | SAXITOXIN | 0.543 Abs [0.5460] {0.8 C | 0.079 µg/L [0.078] | 49.544 %Abs [49.8  |      |           | Kit:P24A3 |

## Note

Signature



Charles Hostetter 6/19/2025

# Test Report (by Request)

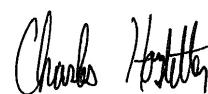
## Test Information

Request: 6/19/2025 3:19:07 PM  
Date: 6/19/2025

| Name/ID    | Assay     | Absorbance                | Concentration      | Interpretation       | Note      | Reference     | Lot#      |
|------------|-----------|---------------------------|--------------------|----------------------|-----------|---------------|-----------|
| LRB        | SAXITOXIN | 0.999 Abs                 | 0.013 µg/L         | Low, 91.150 %Abs     |           | 0.020 - 0.400 | Kit:P24A3 |
| LRB        | SAXITOXIN | 1.112 Abs [1.0555] {7.6 C | 0.000 µg/L [0.007] | Low, 101.460 %Abs    |           | 0.020 - 0.400 | Kit:P24A3 |
| LFB (SAX)  | SAXITOXIN | 0.485 Abs                 | 0.094 µg/L         | 44.252 %Abs          |           | 0.020 - 0.400 | Kit:P24A3 |
| LFB (SAX)  | SAXITOXIN | 0.478 Abs [0.4815] {1.0 C | 0.096 µg/L [0.095] | 43.613 %Abs [43.9    |           | 0.020 - 0.400 | Kit:P24A3 |
| AC45396    | SAXITOXIN | 1.040 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45396    | SAXITOXIN | 1.023 Abs [1.0315] {1.2 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45397    | SAXITOXIN | 1.041 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45397    | SAXITOXIN | 1.033 Abs [1.0370] {0.5 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45398    | SAXITOXIN | 1.004 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45398    | SAXITOXIN | 1.009 Abs [1.0065] {0.4 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45398MS  | SAXITOXIN | 0.470 Abs                 | 0.099 µg/L         | 42.883 %Abs          |           | 0.020 - 0.400 | Kit:P24A3 |
| AC45398MS  | SAXITOXIN | 0.455 Abs [0.4625] {2.3 C | 0.104 µg/L [0.102] | 41.515 %Abs [42.1    |           | 0.020 - 0.400 | Kit:P24A3 |
| AC45398MSD | SAXITOXIN | 0.479 Abs                 | 0.096 µg/L         | 43.704 %Abs          |           | 0.020 - 0.400 | Kit:P24A3 |
| AC45398MSD | SAXITOXIN | 0.460 Abs [0.4695] {2.9 C | 0.102 µg/L [0.099] | 41.971 %Abs [42.8    |           | 0.020 - 0.400 | Kit:P24A3 |
| AC45399    | SAXITOXIN | 1.060 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45399    | SAXITOXIN | 1.047 Abs [1.0535] {0.9 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45400    | SAXITOXIN | 1.042 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45400    | SAXITOXIN | 1.054 Abs [1.0480] {0.8 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45401    | SAXITOXIN | 1.062 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45401    | SAXITOXIN | 1.059 Abs [1.0605] {0.2 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45402    | SAXITOXIN | 1.077 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45402    | SAXITOXIN | 1.061 Abs [1.0690] {1.1 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45403    | SAXITOXIN | 1.059 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45403    | SAXITOXIN | 1.046 Abs [1.0525] {0.9 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45404    | SAXITOXIN | 1.071 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45404    | SAXITOXIN | 1.065 Abs [1.0680] {0.4 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45405    | SAXITOXIN | 1.093 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45405    | SAXITOXIN | 1.101 Abs [1.0970] {0.5 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45406    | SAXITOXIN | 1.049 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45406    | SAXITOXIN | 1.031 Abs [1.0400] {1.2 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45407    | SAXITOXIN | 0.997 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45407    | SAXITOXIN | 0.972 Abs [0.9845] {1.8 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45408    | SAXITOXIN | 1.119 Abs                 | < LOD              | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |
| AC45408    | SAXITOXIN | 1.104 Abs [1.1115] {1.0 C | < LOD [< LOD]      | Low, Out Adjust Dilu | MDF=1.100 | 0.020 - 0.400 | Kit:P24A3 |

## Note

Signature



Charles Hostetter 6/19/2025

Assay Information

Assay Name: SAXITOXIN  
Version: 2  
Temperature: Room Temperature  
Last Modified By: Security disabled  
Units: µg/L  
Assay Description: PN. 52255B  
Assay Substances: Controls:

Assay Mode: 4-Parameter Logistic Weight by:None  
Well Type: Flat bottom  
Last Modified On: 7/25/2019 3:55:28 PM  
Normal: 0.020 - 0.400  
# of decimals: 3  
Kit Lot Number: Kit:P24A3229

STX Control (0.060-0.090)  
Standards:  
STX Std 0, Concentration = 0.000, Minimum number to use: 2  
STX Std 1, Concentration = 0.020, Minimum number to use: 2  
STX Std 2, Concentration = 0.050, Minimum number to use: 2  
STX Std 3, Concentration = 0.100, Minimum number to use: 2  
STX Std 4, Concentration = 0.200, Minimum number to use: 2  
STX Std 5, Concentration = 0.400, Minimum number to use: 2  
Curve valid interval: 1 days 0 hours  
Axis Mode: Y = Abs, X = Log(Conc)

Assay Calibration

Current Calibration Status: "

"

| Name                      | Absorbance                  | Concentration                 | Interpretation            | Position      |       |
|---------------------------|-----------------------------|-------------------------------|---------------------------|---------------|-------|
| 6/19/2025 3:17:50 PM      |                             |                               |                           |               |       |
| STX Std 0                 | 1.094 Abs                   | 0.001 µg/L                    | R^2=0.99996, 99.818 %Abs  | RK1:30->A07@2 |       |
| STX Std 0                 | 1.098 Abs [1.0960] {0.3 CV} | 0.000 µg/L [0.001] {141.4 CV} | R^2=0.99996, 100.182 %Abs | RK1:30->B07@2 |       |
| STX Std 1                 | 0.940 Abs                   | 0.019 µg/L                    | R^2=0.99996, 85.766 %Abs  | RK1:31->C07@2 |       |
| STX Std 1                 | 0.926 Abs [0.9330] {1.1 CV} | 0.021 µg/L [0.020] {7.1 CV}   | R^2=0.99996, 84.489 %Abs  | RK1:31->D07@2 |       |
| STX Std 2                 | 0.704 Abs                   | 0.048 µg/L                    | R^2=0.99996, 64.234 %Abs  | RK1:32->E07@2 |       |
| STX Std 2                 | 0.676 Abs [0.6900] {2.9 CV} | 0.053 µg/L [0.051] {7.0 CV}   | R^2=0.99996, 61.679 %Abs  | RK1:32->F07@3 |       |
| STX Std 3                 | 0.468 Abs                   | 0.100 µg/L                    | R^2=0.99996, 42.701 %Abs  | RK1:33->G07@3 |       |
| STX Std 3                 | 0.464 Abs [0.4660] {0.6 CV} | 0.101 µg/L [0.101] {0.7 CV}   | R^2=0.99996, 42.336 %Abs  | RK1:33->H07@3 |       |
| STX Std 4                 | 0.292 Abs                   | 0.196 µg/L                    | R^2=0.99996, 26.642 %Abs  | RK1:34->A08@2 |       |
| STX Std 4                 | 0.289 Abs [0.2905] {0.7 CV} | 0.199 µg/L [0.198] {1.1 CV}   | R^2=0.99996, 26.369 %Abs  | RK1:34->B08@2 |       |
| STX Std 5                 | 0.188 Abs                   | 0.392 µg/L                    | R^2=0.99996, 17.153 %Abs  | RK1:35->C08@2 |       |
| STX Std 5                 | 0.179 Abs [0.1835] {3.5 CV} | > 0.400 µg/L [0.392]          | 16.332 %Abs               | RK1:35->D08@2 |       |
| *****                     | *****                       | *****                         | *****                     | *****         | ***** |
| 6/19/2025 3:17:50 PM      |                             |                               |                           |               |       |
| STX Control (0.060-0.090) | 0.549 Abs                   | 0.077 µg/L                    | 50.091 %Abs               | RK1:36->E08@2 |       |
| STX Control (0.060-0.090) | 0.543 Abs [0.5460] {0.8 CV} | 0.079 µg/L [0.078] {1.8 CV}   | 49.544 %Abs [49.818 %Abs] | RK1:36->F08@3 |       |
| *****                     | *****                       | *****                         | *****                     | *****         | ***** |
| Statistic                 |                             |                               |                           |               |       |
| STX Std 0 [MEAN]          | 1.0960                      | 0.0005                        |                           |               |       |
| STX Std 0 [SD]            | 0.0028                      | 0.0007                        |                           |               |       |
| STX Std 0 [%CV]           | 0.2581                      | 141.4214                      |                           |               |       |
| STX Std 1 [MEAN]          | 0.9330                      | 0.0200                        |                           |               |       |
| STX Std 1 [SD]            | 0.0099                      | 0.0014                        |                           |               |       |
| STX Std 1 [%CV]           | 1.0610                      | 7.0711                        |                           |               |       |
| STX Std 1 [%DIFF]         |                             | 0.0000                        |                           |               |       |
| STX Std 2 [MEAN]          | 0.6900                      | 0.0505                        |                           |               |       |
| STX Std 2 [SD]            | 0.0198                      | 0.0035                        |                           |               |       |
| STX Std 2 [%CV]           | 2.8694                      | 7.0011                        |                           |               |       |
| STX Std 2 [%DIFF]         |                             | 1.0000                        |                           |               |       |
| STX Std 3 [MEAN]          | 0.4660                      | 0.1005                        |                           |               |       |
| STX Std 3 [SD]            | 0.0028                      | 0.0007                        |                           |               |       |
| STX Std 3 [%CV]           | 0.6070                      | 0.7036                        |                           |               |       |
| STX Std 3 [%DIFF]         |                             | 0.5000                        |                           |               |       |
| STX Std 4 [MEAN]          | 0.2905                      | 0.1975                        |                           |               |       |
| STX Std 4 [SD]            | 0.0021                      | 0.0021                        |                           |               |       |
| STX Std 4 [%CV]           | 0.7302                      | 1.0741                        |                           |               |       |
| STX Std 4 [%DIFF]         |                             | -1.2500                       |                           |               |       |
| STX Std 5 [MEAN]          | 0.1835                      |                               |                           |               |       |
| STX Std 5 [SD]            | 0.0064                      |                               |                           |               |       |
| STX Std 5 [%CV]           | 3.4681                      |                               |                           |               |       |

| Name                             | Absorbance | Concentration | Interpretation | Position |  |
|----------------------------------|------------|---------------|----------------|----------|--|
| STX Control (0.060-0.090) [MEAN] | 0.5460     | 0.0780        |                |          |  |
| STX Control (0.060-0.090) [SD]   | 0.0042     | 0.0014        |                |          |  |
| STX Control (0.060-0.090) [%CV]  | 0.7770     | 1.8131        |                |          |  |

Assay Curve

y = (A-D)/(1+(x/C)^B) + D  
Weight: NONE  
A = 1.0969  
B = 1.3412  
C = 0.066090  
D = 0.10454  
R2 coef = 0.99996  
50% = 0.077

