



## Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

---

<b>Sample #</b>	<b>Location</b>	<b>Date Collected</b>	<b>Date Analyzed</b>	<b>Conc. (ppb)</b>
AB43437	Summit Lake - State Park	7/21/2020	7/23/2020	<0.05
AB43439	Pokagon State Park	7/20/2020	7/23/2020	<0.05
AB43440	Potawatomi Inn's Beach	7/20/2020	7/23/2020	<0.05
AB43441	Chain O'Lakes SP	7/20/2020	7/23/2020	<0.05
AB43442	Potato Creek State Park	7/20/2020	7/23/2020	<0.05
AB43443	Lost Bridge West SRA	7/20/2020	7/23/2020	<0.05
AB43444	Mississinewa Lake Miami SRA	7/20/2020	7/23/2020	<0.05
AB43445	Pokagon State Park (Field Duplicate)	7/20/2020	7/23/2020	<0.05
AB43446	Field Blank	7/20/2020	7/23/2020	<0.05

# Test Report (by Request)

**Test Information**

 Request: 7/23/2020 3:32:54 PM  
 Date: 7/23/2020 - 7/23/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
STX Std 0	SAXITOXIN	1.557 Abs	0.000 µg/L	R^2=0.99815, 99.425		19J1672
STX Std 0	SAXITOXIN	1.575 Abs [1.5660] {0.8 CV}	0.000 µg/L [0.000]	R^2=0.99815, 100.57		19J1672
STX Std 1	SAXITOXIN	1.176 Abs	0.024 µg/L	R^2=0.99815, 75.096		19J1672
STX Std 1	SAXITOXIN	1.238 Abs [1.2070] {3.6 CV}	0.019 µg/L [0.021] {1	R^2=0.99815, 79.055		19J1672
STX Std 2	SAXITOXIN	0.955 Abs	0.044 µg/L	R^2=0.99815, 60.983		19J1672
STX Std 2	SAXITOXIN	0.915 Abs [0.9350] {3.0 CV}	0.048 µg/L [0.046] {6	R^2=0.99815, 58.429		19J1672
STX Std 3	SAXITOXIN	0.616 Abs	0.099 µg/L	R^2=0.99815, 39.336		19J1672
STX Std 3	SAXITOXIN	0.584 Abs [0.6000] {3.8 CV}	0.108 µg/L [0.104] {6	R^2=0.99815, 37.292		19J1672
STX Std 4	SAXITOXIN	0.353 Abs	0.215 µg/L	R^2=0.99815, 22.542		19J1672
STX Std 4	SAXITOXIN	0.358 Abs [0.3555] {1.0 CV}	0.211 µg/L [0.213] {1	R^2=0.99815, 22.861		19J1672
STX Std 5	SAXITOXIN	0.234 Abs	0.362 µg/L	R^2=0.99815, 14.943		19J1672
STX Std 5	SAXITOXIN	0.227 Abs [0.2305] {2.1 CV}	0.376 µg/L [0.369] {2	R^2=0.99815, 14.496		19J1672
STX Control (0.060-0.090)	SAXITOXIN	0.766 Abs	0.069 µg/L	48.914 %Abs		19J1672
STX Control (0.060-0.090)	SAXITOXIN	0.736 Abs [0.7510] {2.8 CV}	0.074 µg/L [0.072] {4	46.999 %Abs [47.95]		19J1672

**Note**

Signature \_\_\_\_\_

# Test Report (by Request)

**Test Information**

 Request: 7/23/2020 3:33:42 PM  
 Date: 7/23/2020 - 7/23/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
LRB	SAXITOXIN	1.600 Abs	0.000 µg/L	<b>LOW, 102.171 %ABS</b>	0.020 - 0.400	19J1672
LRB	SAXITOXIN	1.559 Abs [1.5795] {1.8 CV}	0.000 µg/L [0.000]		0.020 - 0.400	19J1672
LFB (SAX)	SAXITOXIN	0.987 Abs	0.040 µg/L	63.027 %Abs	0.020 - 0.400	19J1672
LFB (SAX)	SAXITOXIN	0.924 Abs [0.9555] {4.7 CV}	0.047 µg/L [0.043] {1.1}	59.004 %Abs [61.015]	0.020 - 0.400	19J1672
AB43437	SAXITOXIN	1.578 Abs	0.000 µg/L	<b>LOW, 100.766 %ABS</b>	0.020 - 0.400	19J1672
AB43437	SAXITOXIN	1.598 Abs [1.5880] {0.9 CV}	0.000 µg/L [0.000]		0.020 - 0.400	19J1672
AB43439	SAXITOXIN	1.498 Abs	0.004 µg/L	<b>LOW, 95.658 %ABS</b>	0.020 - 0.400	19J1672
AB43439	SAXITOXIN	1.545 Abs [1.5215] {2.2 CV}	0.001 µg/L [0.003] {8.1}		0.020 - 0.400	19J1672
AB43440	SAXITOXIN	1.594 Abs	0.000 µg/L	<b>LOW, 101.788 %ABS</b>	0.020 - 0.400	19J1672
AB43440	SAXITOXIN	1.600 Abs [1.5970] {0.3 CV}	0.000 µg/L [0.000]		0.020 - 0.400	19J1672
AB43440MS	SAXITOXIN	0.766 Abs	0.069 µg/L	48.914 %Abs	0.020 - 0.400	19J1672
AB43440MS	SAXITOXIN	0.760 Abs [0.7630] {0.6 CV}	0.070 µg/L [0.069] {1.1}	48.531 %Abs [48.723]	0.020 - 0.400	19J1672
AB43440MSD	SAXITOXIN	0.915 Abs	0.048 µg/L	58.429 %Abs	0.020 - 0.400	19J1672
AB43440MSD	SAXITOXIN	0.890 Abs [0.9025] {2.0 CV}	0.051 µg/L [0.049] {4.4}	56.833 %Abs [57.633]	0.020 - 0.400	19J1672
AB43441	SAXITOXIN	1.444 Abs	0.007 µg/L	<b>LOW, 92.209 %ABS</b>	0.020 - 0.400	19J1672
AB43441	SAXITOXIN	1.442 Abs [1.4430] {0.1 CV}	0.007 µg/L [0.007] {0.0}		0.020 - 0.400	19J1672
AB43442	SAXITOXIN	1.380 Abs	0.010 µg/L	<b>LOW, 88.123 %ABS</b>	0.020 - 0.400	19J1672
AB43442	SAXITOXIN	1.381 Abs [1.3805] {0.1 CV}	0.010 µg/L [0.010] {0.0}		0.020 - 0.400	19J1672
AB43443	SAXITOXIN	1.524 Abs	0.002 µg/L	<b>LOW, 97.318 %ABS</b>	0.020 - 0.400	19J1672
AB43443	SAXITOXIN	1.549 Abs [1.5365] {1.2 CV}	0.001 µg/L [0.002] {4.1}		0.020 - 0.400	19J1672
AB43444	SAXITOXIN	1.475 Abs	0.005 µg/L	<b>LOW, 94.189 %ABS</b>	0.020 - 0.400	19J1672
AB43444	SAXITOXIN	1.464 Abs [1.4695] {0.5 CV}	0.006 µg/L [0.006] {1.1}		0.020 - 0.400	19J1672
AB43445	SAXITOXIN	1.541 Abs	0.001 µg/L	<b>LOW, 98.404 %ABS</b>	0.020 - 0.400	19J1672
AB43445	SAXITOXIN	1.541 Abs [1.5410] {0.0 CV}	0.001 µg/L [0.001] {0.0}		0.020 - 0.400	19J1672
AB43446	SAXITOXIN	1.599 Abs	0.000 µg/L	<b>LOW, 102.107 %ABS</b>	0.020 - 0.400	19J1672
AB43446	SAXITOXIN	1.589 Abs [1.5940] {0.4 CV}	0.000 µg/L [0.000]		0.020 - 0.400	19J1672

**Note**

Signature \_\_\_\_\_

**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: 19J1672

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
<b>7/23/2020 3:32:54 PM</b>				
STX Std 0	1.557 Abs		R <sup>2</sup> =0.99815, 99.425 %Abs	RK1:30->A06@1
STX Std 0	1.575 Abs [1.5660] {0.8 CV}		R <sup>2</sup> =0.99815, 100.575 %Abs	RK1:30->B06@1
STX Std 1	1.176 Abs		R <sup>2</sup> =0.99815, 75.096 %Abs	RK1:31->C06@1
STX Std 1	1.238 Abs [1.2070] {3.6 CV}		R <sup>2</sup> =0.99815, 79.055 %Abs	RK1:31->D06@1
STX Std 2	0.955 Abs		R <sup>2</sup> =0.99815, 60.983 %Abs	RK1:32->E06@1
STX Std 2	0.915 Abs [0.9350] {3.0 CV}		R <sup>2</sup> =0.99815, 58.429 %Abs	RK1:32->F06@4
STX Std 3	0.616 Abs		R <sup>2</sup> =0.99815, 39.336 %Abs	RK1:33->G06@4
STX Std 3	0.584 Abs [0.6000] {3.8 CV}		R <sup>2</sup> =0.99815, 37.292 %Abs	RK1:33->H06@4
STX Std 4	0.353 Abs		R <sup>2</sup> =0.99815, 22.542 %Abs	RK1:34->A07@2
STX Std 4	0.358 Abs [0.3555] {1.0 CV}		R <sup>2</sup> =0.99815, 22.861 %Abs	RK1:34->B07@2
STX Std 5	0.234 Abs		R <sup>2</sup> =0.99815, 14.943 %Abs	RK1:35->C07@2
STX Std 5	0.227 Abs [0.2305] {2.1 CV}		R <sup>2</sup> =0.99815, 14.496 %Abs	RK1:35->D07@2
*****				
<b>7/23/2020 3:32:54 PM</b>				
STX Control (0.060-0.090)	0.766 Abs		48.914 %Abs	RK1:36->E07@2
STX Control (0.060-0.090)	0.736 Abs [0.7510] {2.8 CV}		46.999 %Abs [47.957 %Abs]	RK1:36->F07@3
*****				
<b>Statistic</b>				
STX Std 0 [MEAN]	1.5660			
STX Std 0 [SD]	0.0127			
STX Std 0 [%CV]	0.8128			
STX Std 1 [MEAN]	1.2070			
STX Std 1 [SD]	0.0438			
STX Std 1 [%CV]	3.6322			
STX Std 1 [%DIFF]				
STX Std 2 [MEAN]	0.9350			
STX Std 2 [SD]	0.0283			
STX Std 2 [%CV]	3.0251			
STX Std 2 [%DIFF]				
STX Std 3 [MEAN]	0.6000			
STX Std 3 [SD]	0.0226			
STX Std 3 [%CV]	3.7712			
STX Std 3 [%DIFF]				
STX Std 4 [MEAN]	0.3555			
STX Std 4 [SD]	0.0035			
STX Std 4 [%CV]	0.9945			
STX Std 4 [%DIFF]				
STX Std 5 [MEAN]	0.2305			
STX Std 5 [SD]	0.0049			
STX Std 5 [%CV]	2.1474			

Name	Absorbance	Concentration	Interpretation	Position
STX Std 5 [%DIFF]				
STX Control (0.060-0.090) [MEAN]	0.7510			
STX Control (0.060-0.090) [SD]	0.0212			
STX Control (0.060-0.090) [%CV]	2.8247			

**Assay Curve**

$y = (A-D)/(1+(x/C)^B) + D$   
 Weight: NONE  
 A = 1.5608  
 B = 1.1098  
 C = 0.063194  
 D = 0.042948  
 R2 coef = 0.99815  
 50% = 0.066

