



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC46135	Pokagon SP - Main Beach	8/11/2025	8/13/2025	< 0.050
AC46136	Pokagon SP - Potawatomi Inn Beach	8/11/2025	8/13/2025	< 0.050
AC46137	Chain O'Lakes SP - Sand Lake Beach	8/11/2025	8/13/2025	< 0.050
AC46138	Ouabache SP - Kunkel Lake Beach	8/11/2025	8/13/2025	< 0.050
AC46139	Potato Creek SP - Worster Lake Beach	8/12/2025	8/13/2025	< 0.050
AC46140	Mississinewa Lake - Miami SRA Beach	8/12/2025	8/13/2025	< 0.050
AC46141	Salamonie Lake - Lost Bridge West SRA Beach	8/12/2025	8/13/2025	< 0.050
AC46142	Summit Lake SP - Summit Lake Beach	8/12/2025	8/13/2025	< 0.050
AC46143	Mississinewa Lake - Miami SRA Beach (Field Duplicate)	8/12/2025	8/13/2025	< 0.050
AC46144	Field Blank	8/12/2025	8/13/2025	< 0.050
AC46145	Ferdinand State Forest - Ferdinand Lake Beach	8/11/2025	8/13/2025	0.063
AC46146	Patoka Lake - Newton Stewart SRA	8/11/2025	8/13/2025	< 0.050

Test Report (by Request)

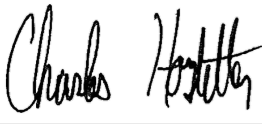
Test Information

Request: 8/13/2025 11:57:07 AM
Date: 8/13/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.569 Abs	0.000 µg/L	R^2=0.99983, 101.3		0.000	Kit:25065(
STX Std 0	SAXITOXIN	1.526 Abs [1.5475] {2.0 C	0.002 µg/L [0.001]	R^2=0.99983, 98.57		0.000	Kit:25065(
STX Std 1	SAXITOXIN	1.315 Abs	0.019 µg/L	R^2=0.99983, 84.94		0.020	Kit:25065(
STX Std 1	SAXITOXIN	1.272 Abs [1.2935] {2.4 C	0.022 µg/L [0.021]	R^2=0.99983, 82.17		0.020	Kit:25065(
STX Std 2	SAXITOXIN	1.007 Abs	0.049 µg/L	R^2=0.99983, 65.05		0.050	Kit:25065(
STX Std 2	SAXITOXIN	1.002 Abs [1.0045] {0.4 C	0.049 µg/L [0.049]	R^2=0.99983, 64.72		0.050	Kit:25065(
STX Std 3	SAXITOXIN	0.703 Abs	0.098 µg/L	R^2=0.99983, 45.41		0.100	Kit:25065(
STX Std 3	SAXITOXIN	0.670 Abs [0.6865] {3.4 C	0.106 µg/L [0.102]	R^2=0.99983, 43.28		0.100	Kit:25065(
STX Std 4	SAXITOXIN	0.431 Abs	0.198 µg/L	R^2=0.99983, 27.84		0.200	Kit:25065(
STX Std 4	SAXITOXIN	0.420 Abs [0.4255] {1.8 C	0.205 µg/L [0.202]	R^2=0.99983, 27.13		0.200	Kit:25065(
STX Std 5	SAXITOXIN	0.265 Abs	0.377 µg/L	R^2=0.99983, 17.11		0.400	Kit:25065(
STX Std 5	SAXITOXIN	0.247 Abs [0.2560] {5.0 C	> 0.400 µg/L [0.37	15.956 %Abs		0.400	Kit:25065(
STX Control (0.060-0.090)	SAXITOXIN	0.877 Abs	0.066 µg/L	56.654 %Abs			Kit:25065(
STX Control (0.060-0.090)	SAXITOXIN	0.854 Abs [0.8655] {1.9 C	0.069 µg/L [0.068]	55.168 %Abs [55.9			Kit:25065(

Note

* A - Abs > 3; IA - Initial Abs; DA - Delta Abs; SD - SD of Abs; LR - Linear Range; [...] - Mean result of duplicate tests
* Generated by software version (6.4.1.1171/1085/1.00/0.95) 8/13/2025 12:07:51 PM

Signature 

Charles Hostetter 8/13/2025

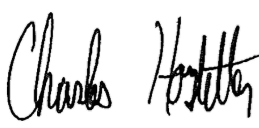
Test Report (by Request)

Test Information

Request: 8/13/2025 11:58:23 AM
Date: 8/13/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.552 Abs	0.000 µg/L	Low, 100.258 %Abs		0.020 - 0.400	Kit:25065(
LRB	SAXITOXIN	1.539 Abs [1.5455] {0.6 C	0.001 µg/L [0.001]	Low, 99.419 %Abs		0.020 - 0.400	Kit:25065(
LFB (SAX)	SAXITOXIN	0.690 Abs	0.101 µg/L	44.574 %Abs		0.020 - 0.400	Kit:25065(
LFB (SAX)	SAXITOXIN	0.685 Abs [0.6875] {0.5 C	0.102 µg/L [0.102]	44.251 %Abs [44.4		0.020 - 0.400	Kit:25065(
AC46135	SAXITOXIN	1.435 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46135	SAXITOXIN	1.425 Abs [1.4300] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46136	SAXITOXIN	1.431 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46136	SAXITOXIN	1.465 Abs [1.4480] {1.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46137	SAXITOXIN	1.222 Abs	0.030 µg/L	78.941 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46137	SAXITOXIN	1.206 Abs [1.2140] {0.9 C	0.031 µg/L [0.031]	77.907 %Abs [78.4	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46138	SAXITOXIN	1.339 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46138	SAXITOXIN	1.306 Abs [1.3225] {1.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46139	SAXITOXIN	1.402 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46139	SAXITOXIN	1.396 Abs [1.3990] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46139MS	SAXITOXIN	0.657 Abs	0.109 µg/L	42.442 %Abs		0.020 - 0.400	Kit:25065(
AC46139MS	SAXITOXIN	0.657 Abs [0.6570] {0.0 C	0.109 µg/L [0.109]	42.442 %Abs [42.4		0.020 - 0.400	Kit:25065(
AC46139MSD	SAXITOXIN	0.657 Abs	0.109 µg/L	42.442 %Abs		0.020 - 0.400	Kit:25065(
AC46139MSD	SAXITOXIN	0.652 Abs [0.6545] {0.5 C	0.110 µg/L [0.110]	42.119 %Abs [42.2		0.020 - 0.400	Kit:25065(
AC46140	SAXITOXIN	1.089 Abs	0.043 µg/L	70.349 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46140	SAXITOXIN	1.074 Abs [1.0815] {1.0 C	0.045 µg/L [0.044]	69.380 %Abs [69.8	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46141	SAXITOXIN	1.347 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46141	SAXITOXIN	1.356 Abs [1.3515] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46142	SAXITOXIN	1.456 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46142	SAXITOXIN	1.483 Abs [1.4695] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46143	SAXITOXIN	1.058 Abs	0.047 µg/L	68.346 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46143	SAXITOXIN	1.047 Abs [1.0525] {0.7 C	0.048 µg/L [0.048]	67.636 %Abs [67.9	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46144	SAXITOXIN	1.557 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46144	SAXITOXIN	1.529 Abs [1.5430] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46145	SAXITOXIN	0.946 Abs	0.062 µg/L	61.111 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46145	SAXITOXIN	0.930 Abs [0.9380] {1.2 C	0.064 µg/L [0.063]	60.078 %Abs [60.5	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46146	SAXITOXIN	1.501 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46146	SAXITOXIN	1.524 Abs [1.5125] {1.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(

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: Kit:2506505967

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
8/13/2025 11:57:07 AM				
STX Std 0	1.569 Abs	0.000 µg/L	R ² =0.99983, 101.357 %Abs	RK1:30->A07@2
STX Std 0	1.526 Abs [1.5475] {2.0 CV}	0.002 µg/L [0.001] {141.4 CV}	R ² =0.99983, 98.579 %Abs	RK1:30->B07@2
STX Std 1	1.315 Abs	0.019 µg/L	R ² =0.99983, 84.948 %Abs	RK1:31->C07@2
STX Std 1	1.272 Abs [1.2935] {2.4 CV}	0.022 µg/L [0.021] {10.3 CV}	R ² =0.99983, 82.171 %Abs	RK1:31->D07@2
STX Std 2	1.007 Abs	0.049 µg/L	R ² =0.99983, 65.052 %Abs	RK1:32->E07@2
STX Std 2	1.002 Abs [1.0045] {0.4 CV}	0.049 µg/L [0.049] {0.0 CV}	R ² =0.99983, 64.729 %Abs	RK1:32->F07@3
STX Std 3	0.703 Abs	0.098 µg/L	R ² =0.99983, 45.413 %Abs	RK1:33->G07@3
STX Std 3	0.670 Abs [0.6865] {3.4 CV}	0.106 µg/L [0.102] {5.5 CV}	R ² =0.99983, 43.282 %Abs	RK1:33->H07@3
STX Std 4	0.431 Abs	0.198 µg/L	R ² =0.99983, 27.842 %Abs	RK1:34->A08@2
STX Std 4	0.420 Abs [0.4255] {1.8 CV}	0.205 µg/L [0.202] {2.5 CV}	R ² =0.99983, 27.132 %Abs	RK1:34->B08@2
STX Std 5	0.265 Abs	0.377 µg/L	R ² =0.99983, 17.119 %Abs	RK1:35->C08@2
STX Std 5	0.247 Abs [0.2560] {5.0 CV}	> 0.400 µg/L [0.377]	15.956 %Abs	RK1:35->D08@2

8/13/2025 11:57:07 AM				
STX Control (0.060-0.090)	0.877 Abs	0.066 µg/L	56.654 %Abs	RK1:36->E08@2
STX Control (0.060-0.090)	0.854 Abs [0.8655] {1.9 CV}	0.069 µg/L [0.068] {3.1 CV}	55.168 %Abs [55.911 %Abs]	RK1:36->F08@3

Statistic				
STX Std 0 [MEAN]	1.5475	0.0010		
STX Std 0 [SD]	0.0304	0.0014		
STX Std 0 [%CV]	1.9648	141.4214		
STX Std 1 [MEAN]	1.2935	0.0205		
STX Std 1 [SD]	0.0304	0.0021		
STX Std 1 [%CV]	2.3507	10.3479		
STX Std 1 [%DIFF]		2.5000		
STX Std 2 [MEAN]	1.0045	0.0490		
STX Std 2 [SD]	0.0035	0.0000		
STX Std 2 [%CV]	0.3520	0.0000		
STX Std 2 [%DIFF]		-2.0000		
STX Std 3 [MEAN]	0.6865	0.1020		
STX Std 3 [SD]	0.0233	0.0057		
STX Std 3 [%CV]	3.3991	5.5459		
STX Std 3 [%DIFF]		2.0000		
STX Std 4 [MEAN]	0.4255	0.2015		
STX Std 4 [SD]	0.0078	0.0049		
STX Std 4 [%CV]	1.8280	2.4565		
STX Std 4 [%DIFF]		0.7500		
STX Std 5 [MEAN]	0.2560			
STX Std 5 [SD]	0.0127			
STX Std 5 [%CV]	4.9718			

Name	Absorbance	Concentration	Interpretation	Position	
STX Control (0.060-0.090) [MEAN]	0.8655	0.0675			
STX Control (0.060-0.090) [SD]	0.0163	0.0021			
STX Control (0.060-0.090) [%CV]	1.8791	3.1427			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.5459
B = 1.2049
C = 0.076095
D = 0.078876
R2 coef = 0.99983
50% = 0.083

