



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC44204	Pokagon SP - Main Beach	5/19/2025	5/22/2025	< 0.050
AC44205	Pokagon SP - Potawatomi Inn Beach	5/19/2025	5/22/2025	< 0.050
AC44206	Chain O'Lakes SP - Sand Lake Beach	5/19/2025	5/22/2025	< 0.050
AC44207	Ouabache SP - Kunkel Lake Beach	5/19/2025	5/22/2025	< 0.050
AC44208	Potato Creek SP - Worster Lake Beach	5/20/2025	5/22/2025	< 0.050
AC44209	Mississinewa Lake - Miami SRA Beach	5/20/2025	5/22/2025	< 0.050
AC44210	Salamonie Lake - Lost Bridge West SRA Beach	5/20/2025	5/22/2025	< 0.050
AC44211	Summit Lake SP - Summit Lake Beach	5/20/2025	5/22/2025	< 0.050
AC44212	Potato Creek SP - Worster Lake Beach (Field Duplicate)	5/20/2025	5/22/2025	< 0.050
AC44213	Field Blank	5/20/2025	5/22/2025	< 0.050
AC44214	Lincoln SP - Lake Lincoln Beach	5/19/2025	5/22/2025	< 0.050
AC44215	Ferdinand State Forest - Ferdinand Lake Beach	5/19/2025	5/22/2025	< 0.050
AC44216	Patoka Lake - Newton Stewart SRA	5/19/2025	5/22/2025	< 0.050

Test Report (by Request)

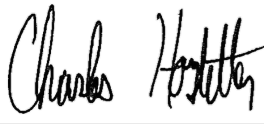
Test Information

Request: 5/22/2025 3:38:02 PM
Date: 5/22/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.291 Abs	0.000 µg/L	R^2=0.99986, 101.0		0.000	Kit:P24A3
STX Std 0	SAXITOXIN	1.263 Abs [1.2770] {1.6 C	0.002 µg/L [0.001]	R^2=0.99986, 98.90		0.000	Kit:P24A3
STX Std 1	SAXITOXIN	1.064 Abs	0.020 µg/L	R^2=0.99986, 83.32		0.020	Kit:P24A3
STX Std 1	SAXITOXIN	1.046 Abs [1.0550] {1.2 C	0.021 µg/L [0.021]	R^2=0.99986, 81.91		0.020	Kit:P24A3
STX Std 2	SAXITOXIN	0.805 Abs	0.048 µg/L	R^2=0.99986, 63.03		0.050	Kit:P24A3
STX Std 2	SAXITOXIN	0.795 Abs [0.8000] {0.9 C	0.050 µg/L [0.049]	R^2=0.99986, 62.25		0.050	Kit:P24A3
STX Std 3	SAXITOXIN	0.544 Abs	0.100 µg/L	R^2=0.99986, 42.60		0.100	Kit:P24A3
STX Std 3	SAXITOXIN	0.532 Abs [0.5380] {1.6 C	0.104 µg/L [0.102]	R^2=0.99986, 41.66		0.100	Kit:P24A3
STX Std 4	SAXITOXIN	0.343 Abs	0.196 µg/L	R^2=0.99986, 26.86		0.200	Kit:P24A3
STX Std 4	SAXITOXIN	0.338 Abs [0.3405] {1.0 C	0.200 µg/L [0.198]	R^2=0.99986, 26.46		0.200	Kit:P24A3
STX Std 5	SAXITOXIN	0.208 Abs	0.396 µg/L	R^2=0.99986, 16.28		0.400	Kit:P24A3
STX Std 5	SAXITOXIN	0.204 Abs [0.2060] {1.4 C	> 0.400 µg/L [0.39	15.975 %Abs		0.400	Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.684 Abs	0.068 µg/L	53.563 %Abs			Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.675 Abs [0.6795] {0.9 C	0.070 µg/L [0.069]	52.858 %Abs [53.2			Kit:P24A3

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) 5/22/2025 3:53:24 PM

Signature 

Charles Hostetter 5/22/25

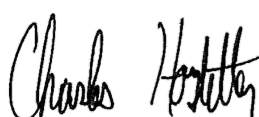
Test Report (by Request)

Test Information

Request: 5/22/2025 3:39:16 PM
Date: 5/22/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.249 Abs	0.003 µg/L	Low, 97.807 %Abs		0.020 - 0.400	Kit:P24A3
LRB	SAXITOXIN	1.259 Abs [1.2540] {0.6 C	0.002 µg/L [0.003]	Low, 98.590 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.562 Abs	0.095 µg/L	44.009 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.553 Abs [0.5575] {1.1 C	0.098 µg/L [0.097]	43.305 %Abs [43.6		0.020 - 0.400	Kit:P24A3
AC44204	SAXITOXIN	1.177 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44204	SAXITOXIN	1.176 Abs [1.1765] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44205	SAXITOXIN	1.183 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44205	SAXITOXIN	1.193 Abs [1.1880] {0.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44206	SAXITOXIN	1.175 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44206	SAXITOXIN	1.164 Abs [1.1695] {0.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44207	SAXITOXIN	1.221 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44207	SAXITOXIN	1.196 Abs [1.2085] {1.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44207MS	SAXITOXIN	0.541 Abs	0.101 µg/L	42.365 %Abs		0.020 - 0.400	Kit:P24A3
AC44207MS	SAXITOXIN	0.528 Abs [0.5345] {1.7 C	0.105 µg/L [0.103]	41.347 %Abs [41.8		0.020 - 0.400	Kit:P24A3
AC44207MSD	SAXITOXIN	0.536 Abs	0.103 µg/L	41.973 %Abs		0.020 - 0.400	Kit:P24A3
AC44207MSD	SAXITOXIN	0.529 Abs [0.5325] {0.9 C	0.105 µg/L [0.104]	41.425 %Abs [41.6		0.020 - 0.400	Kit:P24A3
AC44208	SAXITOXIN	1.171 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44208	SAXITOXIN	1.168 Abs [1.1695] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44209	SAXITOXIN	1.248 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44209	SAXITOXIN	1.212 Abs [1.2300] {2.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44210	SAXITOXIN	1.204 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44210	SAXITOXIN	1.212 Abs [1.2080] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44211	SAXITOXIN	1.203 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44211	SAXITOXIN	1.210 Abs [1.2065] {0.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44212	SAXITOXIN	1.174 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44212	SAXITOXIN	1.186 Abs [1.1800] {0.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44213	SAXITOXIN	1.288 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44213	SAXITOXIN	1.271 Abs [1.2795] {0.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44214	SAXITOXIN	1.215 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44214	SAXITOXIN	1.196 Abs [1.2055] {1.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44215	SAXITOXIN	1.128 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44215	SAXITOXIN	1.154 Abs [1.1410] {1.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44216	SAXITOXIN	1.247 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC44216	SAXITOXIN	1.265 Abs [1.2560] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3

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: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
5/22/2025 3:38:02 PM				
STX Std 0	1.291 Abs	0.000 µg/L	R ² =0.99986, 101.096 %Abs	RK1:30->A07@2
STX Std 0	1.263 Abs [1.2770] {1.6 CV}	0.002 µg/L [0.001] {141.4 CV}	R ² =0.99986, 98.904 %Abs	RK1:30->B07@2
STX Std 1	1.064 Abs	0.020 µg/L	R ² =0.99986, 83.320 %Abs	RK1:31->C07@2
STX Std 1	1.046 Abs [1.0550] {1.2 CV}	0.021 µg/L [0.021] {3.4 CV}	R ² =0.99986, 81.911 %Abs	RK1:31->D07@2
STX Std 2	0.805 Abs	0.048 µg/L	R ² =0.99986, 63.038 %Abs	RK1:32->E07@2
STX Std 2	0.795 Abs [0.8000] {0.9 CV}	0.050 µg/L [0.049] {2.9 CV}	R ² =0.99986, 62.255 %Abs	RK1:32->F07@3
STX Std 3	0.544 Abs	0.100 µg/L	R ² =0.99986, 42.600 %Abs	RK1:33->G07@3
STX Std 3	0.532 Abs [0.5380] {1.6 CV}	0.104 µg/L [0.102] {2.8 CV}	R ² =0.99986, 41.660 %Abs	RK1:33->H07@3
STX Std 4	0.343 Abs	0.196 µg/L	R ² =0.99986, 26.860 %Abs	RK1:34->A08@2
STX Std 4	0.338 Abs [0.3405] {1.0 CV}	0.200 µg/L [0.198] {1.4 CV}	R ² =0.99986, 26.468 %Abs	RK1:34->B08@2
STX Std 5	0.208 Abs	0.396 µg/L	R ² =0.99986, 16.288 %Abs	RK1:35->C08@2
STX Std 5	0.204 Abs [0.2060] {1.4 CV}	> 0.400 µg/L [0.396]	15.975 %Abs	RK1:35->D08@2

5/22/2025 3:38:02 PM				
STX Control (0.060-0.090)	0.684 Abs	0.068 µg/L	53.563 %Abs	RK1:36->E08@2
STX Control (0.060-0.090)	0.675 Abs [0.6795] {0.9 CV}	0.070 µg/L [0.069] {2.0 CV}	52.858 %Abs [53.211 %Abs]	RK1:36->F08@3

Statistic				
STX Std 0 [MEAN]	1.2770	0.0010		
STX Std 0 [SD]	0.0198	0.0014		
STX Std 0 [%CV]	1.5504	141.4214		
STX Std 1 [MEAN]	1.0550	0.0205		
STX Std 1 [SD]	0.0127	0.0007		
STX Std 1 [%CV]	1.2064	3.4493		
STX Std 1 [%DIFF]		2.5000		
STX Std 2 [MEAN]	0.8000	0.0490		
STX Std 2 [SD]	0.0071	0.0014		
STX Std 2 [%CV]	0.8839	2.8862		
STX Std 2 [%DIFF]		-2.0000		
STX Std 3 [MEAN]	0.5380	0.1020		
STX Std 3 [SD]	0.0085	0.0028		
STX Std 3 [%CV]	1.5772	2.7730		
STX Std 3 [%DIFF]		2.0000		
STX Std 4 [MEAN]	0.3405	0.1980		
STX Std 4 [SD]	0.0035	0.0028		
STX Std 4 [%CV]	1.0383	1.4285		
STX Std 4 [%DIFF]		-1.0000		
STX Std 5 [MEAN]	0.2060			
STX Std 5 [SD]	0.0028			
STX Std 5 [%CV]	1.3730			

Name	Absorbance	Concentration	Interpretation	Position	
STX Control (0.060-0.090) [MEAN]	0.6795	0.0690			
STX Control (0.060-0.090) [SD]	0.0064	0.0014			
STX Control (0.060-0.090) [%CV]	0.9366	2.0496			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.2762
 B = 1.2152
 C = 0.068832
 D = 0.080648
 R2 coef = 0.99986
 50% = 0.077

