



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45929	Chain O'Lakes SP - Sand Lake Beach	7/28/2025	7/29/2025	< 0.050
AC45930	Potato Creek SP - Worster Lake Beach	7/28/2025	7/29/2025	< 0.050
AC45931	Mississinewa Lake - Miami SRA Beach	7/28/2025	7/29/2025	0.068
AC45932	Salamonie Lake - Lost Bridge West SRA Beach	7/28/2025	7/29/2025	< 0.050
AC45933	Potato Creek SP - Worster Lake Beach (Field Dup)	7/28/2025	7/29/2025	< 0.050
AC45934	Field Blank	7/28/2025	7/29/2025	< 0.050
AC45935	Ferdinand State Forest - Ferdinand Lake Beach	7/29/2025	7/29/2025	0.059

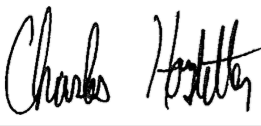
Test Report (by Request)

Test Information

Request: 7/29/2025 4:10:05 PM
Date: 7/29/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.534 Abs	0.000 µg/L	R^2=0.99983, 100.0		0.000	Kit:250650
STX Std 0	SAXITOXIN	1.533 Abs [1.5335] {0.0 C	0.000 µg/L [0.000]	R^2=0.99983, 100.0		0.000	Kit:250650
STX Std 1	SAXITOXIN	1.293 Abs	0.019 µg/L	R^2=0.99983, 84.28		0.020	Kit:250650
STX Std 1	SAXITOXIN	1.269 Abs [1.2810] {1.3 C	0.021 µg/L [0.020]	R^2=0.99983, 82.72		0.020	Kit:250650
STX Std 2	SAXITOXIN	0.993 Abs	0.048 µg/L	R^2=0.99983, 64.73		0.050	Kit:250650
STX Std 2	SAXITOXIN	0.985 Abs [0.9890] {0.6 C	0.049 µg/L [0.049]	R^2=0.99983, 64.21		0.050	Kit:250650
STX Std 3	SAXITOXIN	0.688 Abs	0.099 µg/L	R^2=0.99983, 44.85		0.100	Kit:250650
STX Std 3	SAXITOXIN	0.660 Abs [0.6740] {2.9 C	0.106 µg/L [0.103]	R^2=0.99983, 43.02		0.100	Kit:250650
STX Std 4	SAXITOXIN	0.437 Abs	0.193 µg/L	R^2=0.99983, 28.48		0.200	Kit:250650
STX Std 4	SAXITOXIN	0.420 Abs [0.4285] {2.8 C	0.203 µg/L [0.198]	R^2=0.99983, 27.37		0.200	Kit:250650
STX Std 5	SAXITOXIN	0.264 Abs	0.386 µg/L	R^2=0.99983, 17.21		0.400	Kit:250650
STX Std 5	SAXITOXIN	0.250 Abs [0.2570] {3.9 C	> 0.400 µg/L [0.38	16.297 %Abs		0.400	Kit:250650
STX Control (0.060-0.090)	SAXITOXIN	0.871 Abs	0.065 µg/L	56.780 %Abs			Kit:250650
STX Control (0.060-0.090)	SAXITOXIN	0.865 Abs [0.8680] {0.5 C	0.066 µg/L [0.066]	56.389 %Abs [56.5			Kit:250650

Note

Signature 

Charles Hostetter 7/30/25

Test Information

Request: 7/29/2025 4:11:02 PM
Date: 7/29/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.543 Abs	0.000 µg/L	Low, 100.587 %Abs		0.020 - 0.400	Kit:25065(
LRB	SAXITOXIN	1.537 Abs [1.5400] {0.3 C	0.000 µg/L [0.000]	Low, 100.196 %Abs		0.020 - 0.400	Kit:25065(
LFB (SAX)	SAXITOXIN	0.704 Abs	0.095 µg/L	45.893 %Abs		0.020 - 0.400	Kit:25065(
LFB (SAX)	SAXITOXIN	0.666 Abs [0.6850] {3.9 C	0.104 µg/L [0.100]	43.416 %Abs [44.6		0.020 - 0.400	Kit:25065(
AC45929	SAXITOXIN	1.158 Abs	0.034 µg/L	75.489 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45929	SAXITOXIN	1.140 Abs [1.1490] {1.1 C	0.036 µg/L [0.035]	74.316 %Abs [74.9	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45930	SAXITOXIN	1.390 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45930	SAXITOXIN	1.442 Abs [1.4160] {2.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45931	SAXITOXIN	0.897 Abs	0.067 µg/L	58.475 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45931	SAXITOXIN	0.881 Abs [0.8890] {1.3 C	0.069 µg/L [0.068]	57.432 %Abs [57.9	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45931MS	SAXITOXIN	0.505 Abs	0.173 µg/L	32.920 %Abs		0.020 - 0.400	Kit:25065(
AC45931MS	SAXITOXIN	0.499 Abs [0.5020] {0.8 C	0.176 µg/L [0.175]	32.529 %Abs [32.72		0.020 - 0.400	Kit:25065(
AC45931MSD	SAXITOXIN	0.503 Abs	0.158 µg/L	32.790 %Abs		0.020 - 0.400	Kit:25065(
AC45931MSD	SAXITOXIN	0.493 Abs [0.4980] {1.4 C	0.163 µg/L [0.161]	32.138 %Abs [32.4		0.020 - 0.400	Kit:25065(
AC45932	SAXITOXIN	1.326 Abs	0.017 µg/L	Low, 86.441 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45932	SAXITOXIN	1.355 Abs [1.3405] {1.5 C	0.015 µg/L [0.016]	Low, 88.331 %Abs		0.020 - 0.400	Kit:25065(
AC45933	SAXITOXIN	1.433 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45933	SAXITOXIN	1.430 Abs [1.4315] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45934	SAXITOXIN	1.513 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45934	SAXITOXIN	1.507 Abs [1.5100] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45935	SAXITOXIN	0.966 Abs	0.057 µg/L	62.973 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45935	SAXITOXIN	0.943 Abs [0.9545] {1.7 C	0.060 µg/L [0.059]	61.473 %Abs [62.2	MDF=1.100	0.020 - 0.400	Kit:25065(

Note

Signature

Charles Hostetter

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
7/29/2025 4:10:05 PM				
STX Std 0	1.534 Abs	0.000 µg/L	R ² =0.99983, 100.000 %Abs	RK1:30->A06@1
STX Std 0	1.533 Abs [1.5335] {0.0 CV}	0.000 µg/L [0.000]	R ² =0.99983, 100.000 %Abs	RK1:30->B06@1
STX Std 1	1.293 Abs	0.019 µg/L	R ² =0.99983, 84.289 %Abs	RK1:31->C06@1
STX Std 1	1.269 Abs [1.2810] {1.3 CV}	0.021 µg/L [0.020] {7.1 CV}	R ² =0.99983, 82.725 %Abs	RK1:31->D06@1
STX Std 2	0.993 Abs	0.048 µg/L	R ² =0.99983, 64.733 %Abs	RK1:32->E06@1
STX Std 2	0.985 Abs [0.9890] {0.6 CV}	0.049 µg/L [0.049] {1.5 CV}	R ² =0.99983, 64.211 %Abs	RK1:32->F06@4
STX Std 3	0.688 Abs	0.099 µg/L	R ² =0.99983, 44.850 %Abs	RK1:33->G06@4
STX Std 3	0.660 Abs [0.6740] {2.9 CV}	0.106 µg/L [0.103] {4.8 CV}	R ² =0.99983, 43.025 %Abs	RK1:33->H06@4
STX Std 4	0.437 Abs	0.193 µg/L	R ² =0.99983, 28.488 %Abs	RK1:34->A07@2
STX Std 4	0.420 Abs [0.4285] {2.8 CV}	0.203 µg/L [0.198] {3.6 CV}	R ² =0.99983, 27.379 %Abs	RK1:34->B07@2
STX Std 5	0.264 Abs	0.386 µg/L	R ² =0.99983, 17.210 %Abs	RK1:35->C07@2
STX Std 5	0.250 Abs [0.2570] {3.9 CV}	> 0.400 µg/L [0.386]	16.297 %Abs	RK1:35->D07@2

7/29/2025 4:10:05 PM				
STX Control (0.060-0.090)	0.871 Abs	0.065 µg/L	56.780 %Abs	RK1:36->E07@2
STX Control (0.060-0.090)	0.865 Abs [0.8680] {0.5 CV}	0.066 µg/L [0.066] {1.1 CV}	56.389 %Abs [56.584 %Abs]	RK1:36->F07@3

Statistic				
STX Std 0 [MEAN]	1.5335	0.0000		
STX Std 0 [SD]	0.0007	0.0000		
STX Std 0 [%CV]	0.0461	0.0000		
STX Std 1 [MEAN]	1.2810	0.0200		
STX Std 1 [SD]	0.0170	0.0014		
STX Std 1 [%CV]	1.3248	7.0711		
STX Std 1 [%DIFF]		0.0000		
STX Std 2 [MEAN]	0.9890	0.0485		
STX Std 2 [SD]	0.0057	0.0007		
STX Std 2 [%CV]	0.5720	1.4579		
STX Std 2 [%DIFF]		-3.0000		
STX Std 3 [MEAN]	0.6740	0.1025		
STX Std 3 [SD]	0.0198	0.0049		
STX Std 3 [%CV]	2.9375	4.8290		
STX Std 3 [%DIFF]		2.5000		
STX Std 4 [MEAN]	0.4285	0.1980		
STX Std 4 [SD]	0.0120	0.0071		
STX Std 4 [%CV]	2.8053	3.5712		
STX Std 4 [%DIFF]		-1.0000		
STX Std 5 [MEAN]	0.2570			
STX Std 5 [SD]	0.0099			
STX Std 5 [%CV]	3.8519			

Name	Absorbance	Concentration	Interpretation	Position	
STX Control (0.060-0.090) [MEAN]	0.8680	0.0655			
STX Control (0.060-0.090) [SD]	0.0042	0.0007			
STX Control (0.060-0.090) [%CV]	0.4888	1.0796			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.5328
B = 1.2047
C = 0.074145
D = 0.090091
R2 coef = 0.99983
50% = 0.082

