



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45225	Cecil M. Harden Lake - Raccoon Lake SRA Beach	5/27/2025	5/28/2025	< 0.050
AC45226	Whitewater Memorial SP - Whitewater Lake Beach	5/27/2025	5/28/2025	< 0.050
AC45227	Brookville Lake - Quakertown SRA Beach	5/27/2025	5/28/2025	< 0.050
AC45228	Whitewater Memorial SP - Whitewater Lake Beach (Field Duplicate)	5/27/2025	5/28/2025	< 0.050
AC45229	Field Blank	5/27/2025	5/28/2025	< 0.050
AC45243	Ouabache SP - Kunkel Lake Beach	5/27/2025	5/28/2025	< 0.050

Test Report (by Request)

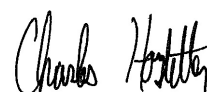
Test Information

Request: 5/28/2025 5:04:59 PM
Date: 5/28/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.254 Abs	0.004 µg/L	R^2=0.99991, 97.85		0.000	Kit:250650
STX Std 0	SAXITOXIN	1.308 Abs [1.2810] {3.0 C	0.000 µg/L [0.002]	R^2=0.99991, 102.1		0.000	Kit:250650
STX Std 1	SAXITOXIN	1.115 Abs	0.018 µg/L	R^2=0.99991, 87.04		0.020	Kit:250650
STX Std 1	SAXITOXIN	1.086 Abs [1.1005] {1.9 C	0.021 µg/L [0.020]	R^2=0.99991, 84.77		0.020	Kit:250650
STX Std 2	SAXITOXIN	0.826 Abs	0.051 µg/L	R^2=0.99991, 64.48		0.050	Kit:250650
STX Std 2	SAXITOXIN	0.832 Abs [0.8290] {0.5 C	0.050 µg/L [0.051]	R^2=0.99991, 64.94		0.050	Kit:250650
STX Std 3	SAXITOXIN	0.571 Abs	0.099 µg/L	R^2=0.99991, 44.57		0.100	Kit:250650
STX Std 3	SAXITOXIN	0.555 Abs [0.5630] {2.0 C	0.103 µg/L [0.101]	R^2=0.99991, 43.32		0.100	Kit:250650
STX Std 4	SAXITOXIN	0.360 Abs	0.194 µg/L	R^2=0.99991, 28.10		0.200	Kit:250650
STX Std 4	SAXITOXIN	0.358 Abs [0.3590] {0.4 C	0.195 µg/L [0.195]	R^2=0.99991, 27.94		0.200	Kit:250650
STX Std 5	SAXITOXIN	0.228 Abs	0.395 µg/L	R^2=0.99991, 17.75		0.400	Kit:250650
STX Std 5	SAXITOXIN	0.218 Abs [0.2230] {3.2 C	> 0.400 µg/L [0.39	17.018 %Abs		0.400	Kit:250650
STX Control (0.060-0.090)	SAXITOXIN	0.704 Abs	0.070 µg/L	54.957 %Abs			Kit:250650
STX Control (0.060-0.090)	SAXITOXIN	0.705 Abs [0.7045] {0.1 C	0.070 µg/L [0.070]	55.035 %Abs [54.9			Kit:250650

Note

Signature



Test Report (by Request)

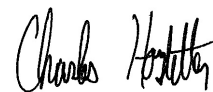
Test Information

Request: 5/28/2025 5:05:53 PM
Date: 5/28/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.317 Abs	0.000 µg/L	Low, 102.810 %Abs		0.020 - 0.400	Kit:25065(
LRB	SAXITOXIN	1.293 Abs [1.3050] {1.3 C	0.000 µg/L [0.000]	Low, 100.937 %Abs		0.020 - 0.400	Kit:25065(
LFB (SAX)	SAXITOXIN	0.562 Abs	0.101 µg/L	43.872 %Abs		0.020 - 0.400	Kit:25065(
LFB (SAX)	SAXITOXIN	0.577 Abs [0.5695] {1.9 C	0.097 µg/L [0.099]	45.043 %Abs [44.4		0.020 - 0.400	Kit:25065(
AC45225	SAXITOXIN	1.279 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45225	SAXITOXIN	1.244 Abs [1.2615] {2.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45225MS	SAXITOXIN	0.568 Abs	0.100 µg/L	44.340 %Abs		0.020 - 0.400	Kit:25065(
AC45225MS	SAXITOXIN	0.569 Abs [0.5685] {0.1 C	0.099 µg/L [0.100]	44.418 %Abs [44.3		0.020 - 0.400	Kit:25065(
AC45225MSD	SAXITOXIN	0.579 Abs	0.097 µg/L	45.199 %Abs		0.020 - 0.400	Kit:25065(
AC45225MSD	SAXITOXIN	0.560 Abs [0.5695] {2.4 C	0.102 µg/L [0.100]	43.716 %Abs [44.4		0.020 - 0.400	Kit:25065(
AC45226	SAXITOXIN	1.287 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45226	SAXITOXIN	1.257 Abs [1.2720] {1.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45227	SAXITOXIN	1.255 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45227	SAXITOXIN	1.263 Abs [1.2590] {0.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45228	SAXITOXIN	1.241 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45228	SAXITOXIN	1.260 Abs [1.2505] {1.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45229	SAXITOXIN	1.311 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45229	SAXITOXIN	1.272 Abs [1.2915] {2.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45243	SAXITOXIN	1.253 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC45243	SAXITOXIN	1.233 Abs [1.2430] {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
5/28/2025 5:04:59 PM				
STX Std 0	1.254 Abs	0.004 µg/L	R ² =0.99991, 97.892 %Abs	RK1:30->A06@1
STX Std 0	1.308 Abs [1.2810] {3.0 CV}	0.000 µg/L [0.002] {141.4 CV}	R ² =0.99991, 102.108 %Abs	RK1:30->B06@1
STX Std 1	1.115 Abs	0.018 µg/L	R ² =0.99991, 87.041 %Abs	RK1:31->C06@1
STX Std 1	1.086 Abs [1.1005] {1.9 CV}	0.021 µg/L [0.020] {10.9 CV}	R ² =0.99991, 84.778 %Abs	RK1:31->D06@1
STX Std 2	0.826 Abs	0.051 µg/L	R ² =0.99991, 64.481 %Abs	RK1:32->E06@1
STX Std 2	0.832 Abs [0.8290] {0.5 CV}	0.050 µg/L [0.051] {1.4 CV}	R ² =0.99991, 64.949 %Abs	RK1:32->F06@4
STX Std 3	0.571 Abs	0.099 µg/L	R ² =0.99991, 44.575 %Abs	RK1:33->G06@4
STX Std 3	0.555 Abs [0.5630] {2.0 CV}	0.103 µg/L [0.101] {2.8 CV}	R ² =0.99991, 43.326 %Abs	RK1:33->H06@4
STX Std 4	0.360 Abs	0.194 µg/L	R ² =0.99991, 28.103 %Abs	RK1:34->A07@2
STX Std 4	0.358 Abs [0.3590] {0.4 CV}	0.195 µg/L [0.195] {0.4 CV}	R ² =0.99991, 27.947 %Abs	RK1:34->B07@2
STX Std 5	0.228 Abs	0.395 µg/L	R ² =0.99991, 17.799 %Abs	RK1:35->C07@2
STX Std 5	0.218 Abs [0.2230] {3.2 CV}	> 0.400 µg/L [0.395]	17.018 %Abs	RK1:35->D07@2

5/28/2025 5:04:59 PM				
STX Control (0.060-0.090)	0.704 Abs	0.070 µg/L	54.957 %Abs	RK1:36->E07@2
STX Control (0.060-0.090)	0.705 Abs [0.7045] {0.1 CV}	0.070 µg/L [0.070] {0.0 CV}	55.035 %Abs [54.996 %Abs]	RK1:36->F07@3

Statistic				
STX Std 0 [MEAN]	1.2810	0.0020		
STX Std 0 [SD]	0.0382	0.0028		
STX Std 0 [%CV]	2.9808	141.4214		
STX Std 1 [MEAN]	1.1005	0.0195		
STX Std 1 [SD]	0.0205	0.0021		
STX Std 1 [%CV]	1.8633	10.8786		
STX Std 1 [%DIFF]		-2.5000		
STX Std 2 [MEAN]	0.8290	0.0505		
STX Std 2 [SD]	0.0042	0.0007		
STX Std 2 [%CV]	0.5118	1.4002		
STX Std 2 [%DIFF]		1.0000		
STX Std 3 [MEAN]	0.5630	0.1010		
STX Std 3 [SD]	0.0113	0.0028		
STX Std 3 [%CV]	2.0095	2.8004		
STX Std 3 [%DIFF]		1.0000		
STX Std 4 [MEAN]	0.3590	0.1945		
STX Std 4 [SD]	0.0014	0.0007		
STX Std 4 [%CV]	0.3939	0.3635		
STX Std 4 [%DIFF]		-2.7500		
STX Std 5 [MEAN]	0.2230			
STX Std 5 [SD]	0.0071			
STX Std 5 [%CV]	3.1709			

Name	Absorbance	Concentration	Interpretation	Position	
STX Control (0.060-0.090) [MEAN]	0.7045	0.0700			
STX Control (0.060-0.090) [SD]	0.0007	0.0000			
STX Control (0.060-0.090) [%CV]	0.1004	0.0000			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.2821
B = 1.3350
C = 0.069846
D = 0.12379
R2 coef = 0.99991
50% = 0.082

