



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45921	Cecil M. Harden Lake - Raccoon Lake SRA Beach	7/21/2025	7/23/2025	< 0.050
AC45922	Cagles Mill Lake - Lieber SRA Beach	7/21/2025	7/23/2025	< 0.050
AC45923	Brookville Lake - Quakertown SRA Beach	7/22/2025	7/23/2025	< 0.050
AC45924	Brookville Lake - Mounds SRA Beach	7/22/2025	7/23/2025	< 0.050
AC45925	Hardy Lake SRA - Hardy Lake SRA Beach	7/22/2025	7/23/2025	< 0.050
AC45926	Brookville Lake - Quakertown SRA Beach (Field Dup.)	7/22/2025	7/23/2025	< 0.050
AC45927	Field Blank	7/22/2025	7/23/2025	< 0.050
AC45928	Ft. Ben Harrison SP Dog Lake	7/21/2025	7/23/2025	< 0.050

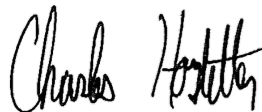
Test Report (by Request)

Test Information

Request: 7/23/2025 11:06:01 AM
Date: 7/23/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.603 Abs	0.000 µg/L	R^2=0.99950, 100.5		0.000	Kit:25065(
STX Std 0	SAXITOXIN	1.586 Abs [1.5945] {0.8 C	0.002 µg/L [0.001]	R^2=0.99950, 99.43		0.000	Kit:25065(
STX Std 1	SAXITOXIN	1.382 Abs	0.020 µg/L	R^2=0.99950, 86.64		0.020	Kit:25065(
STX Std 1	SAXITOXIN	1.380 Abs [1.3810] {0.1 C	0.020 µg/L [0.020]	R^2=0.99950, 86.52		0.020	Kit:25065(
STX Std 2	SAXITOXIN	1.062 Abs	0.048 µg/L	R^2=0.99950, 66.58		0.050	Kit:25065(
STX Std 2	SAXITOXIN	1.028 Abs [1.0450] {2.3 C	0.051 µg/L [0.050]	R^2=0.99950, 64.45		0.050	Kit:25065(
STX Std 3	SAXITOXIN	0.691 Abs	0.101 µg/L	R^2=0.99950, 43.32		0.100	Kit:25065(
STX Std 3	SAXITOXIN	0.666 Abs [0.6785] {2.6 C	0.107 µg/L [0.104]	R^2=0.99950, 41.75		0.100	Kit:25065(
STX Std 4	SAXITOXIN	0.445 Abs	0.188 µg/L	R^2=0.99950, 27.90		0.200	Kit:25065(
STX Std 4	SAXITOXIN	0.442 Abs [0.4435] {0.5 C	0.190 µg/L [0.189]	R^2=0.99950, 27.71		0.200	Kit:25065(
STX Std 5	SAXITOXIN	0.273 Abs	> 0.400 µg/L	17.116 %Abs		0.400	Kit:25065(
STX Std 5	SAXITOXIN	0.269 Abs [0.2710] {1.0 C	> 0.400 µg/L	16.865 %Abs		0.400	Kit:25065(
STX Control (0.060-0.090)	SAXITOXIN	0.888 Abs	0.068 µg/L	55.674 %Abs			Kit:25065(
STX Control (0.060-0.090)	SAXITOXIN	0.886 Abs [0.8870] {0.2 C	0.068 µg/L [0.068]	55.549 %Abs [55.6			Kit:25065(

Note

Signature 

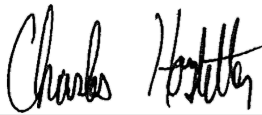
Charles Hostetter 7/23/2025

Test Information

Request: 7/23/2025 11:06:57 AM
Date: 7/23/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#	
LRB	SAXITOXIN	1.643 Abs	0.000 µg/L	Low, 103.009 %Abs		0.020 - 0.400	Kit:25065(	
LRB	SAXITOXIN	1.638 Abs [1.6405] {0.2 C	0.000 µg/L [0.000]	Low, 102.696 %Abs		0.020 - 0.400	Kit:25065(	
LFB (SAX)	SAXITOXIN	0.740 Abs	0.091 µg/L	46.395 %Abs		0.020 - 0.400	Kit:25065(	
LFB (SAX)	SAXITOXIN	0.704 Abs [0.7220] {3.5 C	0.098 µg/L [0.095]	44.138 %Abs [45.2		0.020 - 0.400	Kit:25065(	
AC45921	SAXITOXIN	1.592 Abs	< LOD	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45921	SAXITOXIN	1.600 Abs [1.5960] {0.4 C	< LOD [< LOD]	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45922	SAXITOXIN	1.372 Abs	0.023 µg/L	86.019 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45922	SAXITOXIN	1.380 Abs [1.3760] {0.4 C	0.022 µg/L [0.023]	86.520 %Abs [86.2	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45922MS	SAXITOXIN	0.672 Abs	0.105 µg/L	42.132 %Abs		0.020 - 0.400	Kit:25065(	
AC45922MS	SAXITOXIN	0.663 Abs [0.6675] {1.0 C	0.107 µg/L [0.106]	41.567 %Abs [41.8		0.020 - 0.400	Kit:25065(	
AC45922MSD	SAXITOXIN	0.671 Abs	0.105 µg/L	42.069 %Abs		0.020 - 0.400	Kit:25065(	
AC45922MSD	SAXITOXIN	0.666 Abs [0.6685] {0.5 C	0.107 µg/L [0.106]	41.755 %Abs [41.9		0.020 - 0.400	Kit:25065(	
AC45923	SAXITOXIN	1.529 Abs	< LOD	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45923	SAXITOXIN	1.535 Abs [1.5320] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45924	SAXITOXIN	1.416 Abs	< LOD	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45924	SAXITOXIN	1.434 Abs [1.4250] {0.9 C	< LOD [< LOD]	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45925	SAXITOXIN	1.557 Abs	< LOD	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45925	SAXITOXIN	1.597 Abs [1.5770] {1.8 C	< LOD [< LOD]	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45926	SAXITOXIN	1.553 Abs	< LOD	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45926	SAXITOXIN	1.539 Abs [1.5460] {0.6 C	< LOD [< LOD]	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45927	SAXITOXIN	1.660 Abs	< LOD	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45927	SAXITOXIN	1.628 Abs [1.6440] {1.4 C	< LOD [< LOD]	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45928	SAXITOXIN	1.551 Abs	< LOD	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	
AC45928	SAXITOXIN	1.506 Abs [1.5285] {2.1 C	< LOD [< LOD]	Low, Out Adjust Dilt	MDF=1.100	0.020 - 0.400	Kit:25065(	

Note

Signature 

Charles Hostetter 7/23/2025

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
7/23/2025 11:06:01 AM				
STX Std 0	1.603 Abs	0.000 µg/L	R^2=0.99950, 100.502 %Abs	RK1:30->A06@1
STX Std 0	1.586 Abs [1.5945] {0.8 CV}	0.002 µg/L [0.001] {141.4 CV}	R^2=0.99950, 99.436 %Abs	RK1:30->B06@1
STX Std 1	1.382 Abs	0.020 µg/L	R^2=0.99950, 86.646 %Abs	RK1:31->C06@1
STX Std 1	1.380 Abs [1.3810] {0.1 CV}	0.020 µg/L [0.020] {0.0 CV}	R^2=0.99950, 86.520 %Abs	RK1:31->D06@1
STX Std 2	1.062 Abs	0.048 µg/L	R^2=0.99950, 66.583 %Abs	RK1:32->E06@1
STX Std 2	1.028 Abs [1.0450] {2.3 CV}	0.051 µg/L [0.050] {4.3 CV}	R^2=0.99950, 64.451 %Abs	RK1:32->F06@4
STX Std 3	0.691 Abs	0.101 µg/L	R^2=0.99950, 43.323 %Abs	RK1:33->G06@4
STX Std 3	0.666 Abs [0.6785] {2.6 CV}	0.107 µg/L [0.104] {4.1 CV}	R^2=0.99950, 41.755 %Abs	RK1:33->H06@4
STX Std 4	0.445 Abs	0.188 µg/L	R^2=0.99950, 27.900 %Abs	RK1:34->A07@2
STX Std 4	0.442 Abs [0.4435] {0.5 CV}	0.190 µg/L [0.189] {0.7 CV}	R^2=0.99950, 27.712 %Abs	RK1:34->B07@2
STX Std 5	0.273 Abs	> 0.400 µg/L	17.116 %Abs	RK1:35->C07@2
STX Std 5	0.269 Abs [0.2710] {1.0 CV}	> 0.400 µg/L	16.865 %Abs	RK1:35->D07@2

7/23/2025 11:06:01 AM				
STX Control (0.060-0.090)	0.888 Abs	0.068 µg/L	55.674 %Abs	RK1:36->E07@2
STX Control (0.060-0.090)	0.886 Abs [0.8870] {0.2 CV}	0.068 µg/L [0.068] {0.0 CV}	55.549 %Abs [55.611 %Abs]	RK1:36->F07@3

Statistic				
STX Std 0 [MEAN]	1.5945	0.0010		
STX Std 0 [SD]	0.0120	0.0014		
STX Std 0 [%CV]	0.7539	141.4214		
STX Std 1 [MEAN]	1.3810	0.0200		
STX Std 1 [SD]	0.0014	0.0000		
STX Std 1 [%CV]	0.1024	0.0000		
STX Std 1 [%DIFF]		0.0000		
STX Std 2 [MEAN]	1.0450	0.0495		
STX Std 2 [SD]	0.0240	0.0021		
STX Std 2 [%CV]	2.3006	4.2855		
STX Std 2 [%DIFF]		-1.0000		
STX Std 3 [MEAN]	0.6785	0.1040		
STX Std 3 [SD]	0.0177	0.0042		
STX Std 3 [%CV]	2.6054	4.0795		
STX Std 3 [%DIFF]		4.0000		
STX Std 4 [MEAN]	0.4435	0.1890		
STX Std 4 [SD]	0.0021	0.0014		
STX Std 4 [%CV]	0.4783	0.7483		
STX Std 4 [%DIFF]		-5.5000		
STX Std 5 [MEAN]	0.2710			
STX Std 5 [SD]	0.0028			
STX Std 5 [%CV]	1.0437			

Name	Absorbance	Concentration	Interpretation	Position	
STX Control (0.060-0.090) [MEAN]	0.8870	0.0680			
STX Control (0.060-0.090) [SD]	0.0014	0.0000			
STX Control (0.060-0.090) [%CV]	0.1594	0.0000			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.5954
B = 1.4147
C = 0.068235
D = 0.17090
R2 coef = 0.99950
50% = 0.081

