



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC46122	Cecil M. Harden Lake - Raccoon Lake SRA Beach	8/4/2025	8/6/2025	< 0.050
AC46123	Cagles Mill Lake - Lieber SRA Beach	8/4/2025	8/6/2025	< 0.050
AC46124	Monroe Lake - Fairfax SRA Beach	8/4/2025	8/6/2025	< 0.050
AC46125	Monroe Lake - Paynetown SRA Beach	8/4/2025	8/6/2025	< 0.050
AC46126	Starve Hollow SRA - Starve Hollow Lake Beach	8/4/2025	8/6/2025	0.28
AC46127	Whitewater Memorial SP - Whitewater Lake Beach	8/5/2025	8/6/2025	< 0.050
AC46128	Brookville Lake - Quakertown SRA Beach	8/5/2025	8/6/2025	< 0.050
AC46129	Brookville Lake - Mounds SRA Beach	8/5/2025	8/6/2025	< 0.050
AC46130	Hardy Lake SRA - Hardy Lake SRA Beach	8/5/2025	8/6/2025	< 0.050
AC46131	Deam Lake SRA - Deam Lake Beach	8/5/2025	8/6/2025	< 0.050
AC46132	Brookville Lake - Mounds SRA Beach (Field Duplicate)	8/5/2025	8/6/2025	< 0.050
AC46133	Field Blank	8/5/2025	8/6/2025	< 0.050
AC46134	Ft. Ben Harrison SP Dog Lake	8/4/2025	8/6/2025	< 0.050
AC46147	Mississinewa Lake - Miami SRA Beach	8/4/2025	8/6/2025	< 0.050

Test Report (by Request)

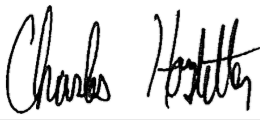
Test Information

Request: 8/6/2025 10:41:08 AM
Date: 8/6/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.468 Abs	0.000 µg/L	R^2=0.99938, 102.0		0.000	Kit:250650
STX Std 0	SAXITOXIN	1.410 Abs [1.4390] {2.9 C	0.004 µg/L [0.002]	R^2=0.99938, 97.98		0.000	Kit:250650
STX Std 1	SAXITOXIN	1.273 Abs	0.018 µg/L	R^2=0.99938, 88.46		0.020	Kit:250650
STX Std 1	SAXITOXIN	1.211 Abs [1.2420] {3.5 C	0.024 µg/L [0.021]	R^2=0.99938, 84.15		0.020	Kit:250650
STX Std 2	SAXITOXIN	0.992 Abs	0.047 µg/L	R^2=0.99938, 68.93		0.050	Kit:250650
STX Std 2	SAXITOXIN	0.974 Abs [0.9830] {1.3 C	0.049 µg/L [0.048]	R^2=0.99938, 67.68		0.050	Kit:250650
STX Std 3	SAXITOXIN	0.653 Abs	0.103 µg/L	R^2=0.99938, 45.37		0.100	Kit:250650
STX Std 3	SAXITOXIN	0.648 Abs [0.6505] {0.5 C	0.105 µg/L [0.104]	R^2=0.99938, 45.03		0.100	Kit:250650
STX Std 4	SAXITOXIN	0.432 Abs	0.184 µg/L	R^2=0.99938, 30.02		0.200	Kit:250650
STX Std 4	SAXITOXIN	0.393 Abs [0.4125] {6.7 C	0.208 µg/L [0.196]	R^2=0.99938, 27.31		0.200	Kit:250650
STX Std 5	SAXITOXIN	0.247 Abs	0.388 µg/L	R^2=0.99938, 17.16		0.400	Kit:250650
STX Std 5	SAXITOXIN	0.233 Abs [0.2400] {4.1 C	> 0.400 µg/L [0.38	16.192 %Abs		0.400	Kit:250650
STX Control (0.060-0.090)	SAXITOXIN	0.836 Abs	0.068 µg/L	58.096 %Abs			Kit:250650
STX Control (0.060-0.090)	SAXITOXIN	0.821 Abs [0.8285] {1.3 C	0.071 µg/L [0.070]	57.054 %Abs [57.5			Kit:250650

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) 8/6/2025 12:50:06 PM

Signature 

Charles Hostetter 8/6/2025

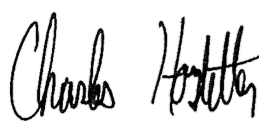
Test Report (by Request)

Test Information

Request: 8/6/2025 10:42:43 AM
Date: 8/6/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.459 Abs	0.000 µg/L	Low, 101.390 %Abs		0.020 - 0.400	Kit:25065(
LRB	SAXITOXIN	1.456 Abs [1.4575] {0.1 C	0.000 µg/L [0.000]	Low, 101.181 %Abs		0.020 - 0.400	Kit:25065(
LFB (SAX)	SAXITOXIN	0.666 Abs	0.100 µg/L	46.282 %Abs		0.020 - 0.400	Kit:25065(
LFB (SAX)	SAXITOXIN	0.636 Abs [0.6510] {3.3 C	0.108 µg/L [0.104]	44.197 %Abs [45.2		0.020 - 0.400	Kit:25065(
AC46122	SAXITOXIN	1.397 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46122	SAXITOXIN	1.393 Abs [1.3950] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46122MS	SAXITOXIN	0.638 Abs	0.107 µg/L	44.336 %Abs		0.020 - 0.400	Kit:25065(
AC46122MS	SAXITOXIN	0.625 Abs [0.6315] {1.5 C	0.110 µg/L [0.109]	43.433 %Abs [43.8		0.020 - 0.400	Kit:25065(
AC46122MSD	SAXITOXIN	0.622 Abs	0.111 µg/L	43.224 %Abs		0.020 - 0.400	Kit:25065(
AC46122MSD	SAXITOXIN	0.625 Abs [0.6235] {0.3 C	0.110 µg/L [0.111]	43.433 %Abs [43.3		0.020 - 0.400	Kit:25065(
AC46123	SAXITOXIN	1.361 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46123	SAXITOXIN	1.318 Abs [1.3395] {2.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46124	SAXITOXIN	1.308 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46124	SAXITOXIN	1.291 Abs [1.2995] {0.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46125	SAXITOXIN	1.342 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46125	SAXITOXIN	1.342 Abs [1.3420] {0.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46126	SAXITOXIN	0.351 Abs	0.265 µg/L	24.392 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46126	SAXITOXIN	0.332 Abs [0.3415] {3.9 C	0.285 µg/L [0.275]	23.072 %Abs [23.7	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46127	SAXITOXIN	1.054 Abs	0.044 µg/L	73.245 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46127	SAXITOXIN	1.023 Abs [1.0385] {2.1 C	0.047 µg/L [0.046]	71.091 %Abs [72.1	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46128	SAXITOXIN	1.356 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46128	SAXITOXIN	1.348 Abs [1.3520] {0.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46129	SAXITOXIN	1.292 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46129	SAXITOXIN	1.304 Abs [1.2980] {0.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46130	SAXITOXIN	1.356 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46130	SAXITOXIN	1.377 Abs [1.3665] {1.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46131	SAXITOXIN	1.440 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46131	SAXITOXIN	1.410 Abs [1.4250] {1.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46132	SAXITOXIN	1.306 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46132	SAXITOXIN	1.296 Abs [1.3010] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46133	SAXITOXIN	1.388 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46133	SAXITOXIN	1.417 Abs [1.4025] {1.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46134	SAXITOXIN	1.304 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46134	SAXITOXIN	1.312 Abs [1.3080] {0.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46147	SAXITOXIN	1.109 Abs	0.037 µg/L	77.067 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46147	SAXITOXIN	1.084 Abs [1.0965] {1.6 C	0.041 µg/L [0.039]	75.330 %Abs [76.1	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:

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 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

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
8/6/2025 10:41:08 AM					
STX Std 0	1.468 Abs	0.000 µg/L	R^2=0.99938, 102.015 %Abs	RK1:23->A01@2	
STX Std 0	1.410 Abs [1.4390] {2.9 CV}	0.004 µg/L [0.002] {141.4 CV}	R^2=0.99938, 97.985 %Abs	RK1:23->B01@2	
STX Std 1	1.273 Abs	0.018 µg/L	R^2=0.99938, 88.464 %Abs	RK1:24->C01@2	
STX Std 1	1.211 Abs [1.2420] {3.5 CV}	0.024 µg/L [0.021] {20.2 CV}	R^2=0.99938, 84.156 %Abs	RK1:24->D01@2	
STX Std 2	0.992 Abs	0.047 µg/L	R^2=0.99938, 68.937 %Abs	RK1:25->E01@2	
STX Std 2	0.974 Abs [0.9830] {1.3 CV}	0.049 µg/L [0.048] {2.9 CV}	R^2=0.99938, 67.686 %Abs	RK1:25->F01@3	
STX Std 3	0.653 Abs	0.103 µg/L	R^2=0.99938, 45.379 %Abs	RK1:26->G01@3	
STX Std 3	0.648 Abs [0.6505] {0.5 CV}	0.105 µg/L [0.104] {1.4 CV}	R^2=0.99938, 45.031 %Abs	RK1:26->H01@3	
STX Std 4	0.432 Abs	0.184 µg/L	R^2=0.99938, 30.021 %Abs	RK1:27->A02@2	
STX Std 4	0.393 Abs [0.4125] {6.7 CV}	0.208 µg/L [0.196] {8.7 CV}	R^2=0.99938, 27.311 %Abs	RK1:27->B02@2	
STX Std 5	0.247 Abs	0.388 µg/L	R^2=0.99938, 17.165 %Abs	RK1:28->C02@2	
STX Std 5	0.233 Abs [0.2400] {4.1 CV}	> 0.400 µg/L [0.388]	16.192 %Abs	RK1:28->D02@2	

8/6/2025 10:41:08 AM					
STX Control (0.060-0.090)	0.836 Abs	0.068 µg/L	58.096 %Abs	RK1:29->E02@2	
STX Control (0.060-0.090)	0.821 Abs [0.8285] {1.3 CV}	0.071 µg/L [0.070] {3.1 CV}	57.054 %Abs [57.575 %Abs]	RK1:29->F02@3	

Statistic					
STX Std 0 [MEAN]	1.4390	0.0020			
STX Std 0 [SD]	0.0410	0.0028			
STX Std 0 [%CV]	2.8501	141.4214			
STX Std 1 [MEAN]	1.2420	0.0210			
STX Std 1 [SD]	0.0438	0.0042			
STX Std 1 [%CV]	3.5298	20.2031			
STX Std 1 [%DIFF]		5.0000			
STX Std 2 [MEAN]	0.9830	0.0480			
STX Std 2 [SD]	0.0127	0.0014			
STX Std 2 [%CV]	1.2948	2.9463			
STX Std 2 [%DIFF]		-4.0000			
STX Std 3 [MEAN]	0.6505	0.1040			
STX Std 3 [SD]	0.0035	0.0014			
STX Std 3 [%CV]	0.5435	1.3598			
STX Std 3 [%DIFF]		4.0000			
STX Std 4 [MEAN]	0.4125	0.1960			
STX Std 4 [SD]	0.0276	0.0170			
STX Std 4 [%CV]	6.6854	8.6585			
STX Std 4 [%DIFF]		-2.0000			
STX Std 5 [MEAN]	0.2400				
STX Std 5 [SD]	0.0099				
STX Std 5 [%CV]	4.1248				

Name	Absorbance	Concentration	Interpretation	Position	
STX Control (0.060-0.090) [MEAN]	0.8285	0.0695			
STX Control (0.060-0.090) [SD]	0.0106	0.0021			
STX Control (0.060-0.090) [%CV]	1.2802	3.0523			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.4364
B = 1.3271
C = 0.079127
D = 0.10299
R2 coef = 0.99938
50% = 0.089

