



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC46374	Cecil M. Harden Lake - Raccoon Lake SRA Beach	8/18/2025	8/20/2025	< 0.050
AC46375	Cagles Mill Lake - Lieber SRA Beach	8/18/2025	8/20/2025	< 0.050
AC46376	Monroe Lake - Fairfax SRA Beach	8/18/2025	8/20/2025	< 0.050
AC46377	Monroe Lake - Paynetown SRA Beach	8/18/2025	8/20/2025	< 0.050
AC46378	Starve Hollow SRA - Starve Hollow Lake Beach	8/18/2025	8/20/2025	0.11
AC46379	Whitewater Memorial SP - Whitewater Lake Beach	8/19/2025	8/20/2025	< 0.050
AC46380	Brookville Lake - Quakertown SRA Beach	8/19/2025	8/20/2025	< 0.050
AC46381	Brookville Lake - Mounds SRA Beach	8/19/2025	8/20/2025	< 0.050
AC46382	Hardy Lake SRA - Hardy Lake SRA Beach	8/19/2025	8/20/2025	< 0.050
AC46383	Monroe Lake - Fairfax SRA Beach (Field Duplicate)	8/18/2025	8/20/2025	< 0.050
AC46384	Field Blank	8/18/2025	8/20/2025	< 0.050
AC46385	Ft. Ben Harrison SP Dog Lake	8/18/2025	8/20/2025	< 0.050
AC46386	Mississinewa Lake - Miami SRA Beach	8/18/2025	8/20/2025	0.085

Test Report (by Request)

Test Information

Request: 8/20/2025 11:09:23 AM
Date: 8/20/2025 - 8/21/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.548 Abs	0.000 µg/L	R^2=0.99974, 100.8		0.000	Kit:250650
STX Std 0	SAXITOXIN	1.521 Abs [1.5345] {1.2 C	0.002 µg/L [0.001]	R^2=0.99974, 99.08		0.000	Kit:250650
STX Std 1	SAXITOXIN	1.313 Abs	0.019 µg/L	R^2=0.99974, 85.53		0.020	Kit:250650
STX Std 1	SAXITOXIN	1.290 Abs [1.3015] {1.2 C	0.021 µg/L [0.020]	R^2=0.99974, 84.03		0.020	Kit:250650
STX Std 2	SAXITOXIN	0.994 Abs	0.047 µg/L	R^2=0.99974, 64.75		0.050	Kit:250650
STX Std 2	SAXITOXIN	0.936 Abs [0.9650] {4.2 C	0.054 µg/L [0.051]	R^2=0.99974, 60.97		0.050	Kit:250650
STX Std 3	SAXITOXIN	0.671 Abs	0.096 µg/L	R^2=0.99974, 43.71		0.100	Kit:250650
STX Std 3	SAXITOXIN	0.621 Abs [0.6460] {5.5 C	0.108 µg/L [0.102]	R^2=0.99974, 40.45		0.100	Kit:250650
STX Std 4	SAXITOXIN	0.430 Abs	0.183 µg/L	R^2=0.99974, 28.01		0.200	Kit:250650
STX Std 4	SAXITOXIN	0.405 Abs [0.4175] {4.2 C	0.199 µg/L [0.191]	R^2=0.99974, 26.38		0.200	Kit:250650
STX Std 5	SAXITOXIN	0.258 Abs	> 0.400 µg/L	16.808 %Abs		0.400	Kit:250650
STX Std 5	SAXITOXIN	0.245 Abs [0.2515] {3.7 C	> 0.400 µg/L	15.961 %Abs		0.400	Kit:250650
STX Control (0.060-0.090)	SAXITOXIN	0.833 Abs	0.067 µg/L	54.267 %Abs			Kit:250650
STX Control (0.060-0.090)	SAXITOXIN	0.809 Abs [0.8210] {2.1 C	0.071 µg/L [0.069]	52.704 %Abs [53.4			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) 8/21/2025 6:40:21 AM

Signature Charles Hostetter

Charles Hostetter 8/21/2025

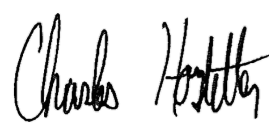
Test Report (by Request)

Test Information

Request: 8/20/2025 11:10:58 AM
Date: 8/20/2025 - 8/21/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.461 Abs	0.008 µg/L	Low, 95.179 %Abs		0.020 - 0.400	Kit:25065(
LRB	SAXITOXIN	1.452 Abs [1.4565] {0.4 C	0.008 µg/L [0.008]			0.020 - 0.400	Kit:25065(
LFB	SAXITOXIN	0.680 Abs	0.094 µg/L	44.300 %Abs		0.020 - 0.400	Kit:25065(
LFB	SAXITOXIN	0.658 Abs [0.6690] {2.3 C	0.099 µg/L [0.097]	42.866 %Abs [43.5		0.020 - 0.400	Kit:25065(
AC46374	SAXITOXIN	1.474 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46374	SAXITOXIN	1.436 Abs [1.4550] {1.8 C	< LOD [< LOD]		MDF=1.100	0.020 - 0.400	Kit:25065(
AC46375	SAXITOXIN	1.374 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46375	SAXITOXIN	1.349 Abs [1.3615] {1.3 C	< LOD [< LOD]		MDF=1.100	0.020 - 0.400	Kit:25065(
AC46376	SAXITOXIN	1.345 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46376	SAXITOXIN	1.319 Abs [1.3320] {1.4 C	< LOD [< LOD]		MDF=1.100	0.020 - 0.400	Kit:25065(
AC46377	SAXITOXIN	1.406 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46377	SAXITOXIN	1.347 Abs [1.3765] {3.0 C	< LOD [< LOD]		MDF=1.100	0.020 - 0.400	Kit:25065(
AC46378	SAXITOXIN	0.680 Abs	0.103 µg/L	44.300 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46378	SAXITOXIN	0.647 Abs [0.6635] {3.5 C	0.112 µg/L [0.108]	42.150 %Abs [43.2	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46379	SAXITOXIN	1.160 Abs	0.034 µg/L	75.570 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46379	SAXITOXIN	1.129 Abs [1.1445] {1.9 C	0.037 µg/L [0.036]	73.550 %Abs [74.5	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46380	SAXITOXIN	1.399 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46380	SAXITOXIN	1.395 Abs [1.3970] {0.2 C	< LOD [< LOD]		MDF=1.100	0.020 - 0.400	Kit:25065(
AC46381	SAXITOXIN	1.459 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46381	SAXITOXIN	1.363 Abs [1.4110] {4.8 C	< LOD [< LOD]		MDF=1.100	0.020 - 0.400	Kit:25065(
AC46381MS	SAXITOXIN	0.646 Abs	0.102 µg/L	42.085 %Abs		0.020 - 0.400	Kit:25065(
AC46381MS	SAXITOXIN	0.617 Abs [0.6315] {3.2 C	0.109 µg/L [0.106]	40.195 %Abs [41.1		0.020 - 0.400	Kit:25065(
AC46381MSD	SAXITOXIN	0.628 Abs	0.106 µg/L	40.912 %Abs		0.020 - 0.400	Kit:25065(
AC46381MSD	SAXITOXIN	0.598 Abs [0.6130] {3.5 C	0.114 µg/L [0.110]	38.958 %Abs [39.9		0.020 - 0.400	Kit:25065(
AC46382	SAXITOXIN	1.413 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46382	SAXITOXIN	1.392 Abs [1.4025] {1.1 C	< LOD [< LOD]		MDF=1.100	0.020 - 0.400	Kit:25065(
AC46383	SAXITOXIN	1.368 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46383	SAXITOXIN	1.309 Abs [1.3385] {3.1 C	< LOD [< LOD]		MDF=1.100	0.020 - 0.400	Kit:25065(
AC46384	SAXITOXIN	1.465 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46384	SAXITOXIN	1.474 Abs [1.4695] {0.4 C	< LOD [< LOD]		MDF=1.100	0.020 - 0.400	Kit:25065(
AC46385	SAXITOXIN	1.352 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46385	SAXITOXIN	1.340 Abs [1.3460] {0.6 C	< LOD [< LOD]		MDF=1.100	0.020 - 0.400	Kit:25065(
AC46386	SAXITOXIN	0.785 Abs	0.083 µg/L	51.140 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46386	SAXITOXIN	0.761 Abs [0.7730] {2.2 C	0.087 µg/L [0.085]	49.577 %Abs [50.3	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	
8/20/2025 11:09:23 AM					
STX Std 0	1.548 Abs	0.000 µg/L	R^2=0.99974, 100.847 %Abs	RK1:23->A01@2	
STX Std 0	1.521 Abs [1.5345] {1.2 CV}	0.002 µg/L [0.001] {141.4 CV}	R^2=0.99974, 99.088 %Abs	RK1:23->B01@2	
STX Std 1	1.313 Abs	0.019 µg/L	R^2=0.99974, 85.537 %Abs	RK1:24->C01@2	
STX Std 1	1.290 Abs [1.3015] {1.2 CV}	0.021 µg/L [0.020] {7.1 CV}	R^2=0.99974, 84.039 %Abs	RK1:24->D01@2	
STX Std 2	0.994 Abs	0.047 µg/L	R^2=0.99974, 64.756 %Abs	RK1:25->E01@2	
STX Std 2	0.936 Abs [0.9650] {4.2 CV}	0.054 µg/L [0.051] {9.8 CV}	R^2=0.99974, 60.977 %Abs	RK1:25->F01@3	
STX Std 3	0.671 Abs	0.096 µg/L	R^2=0.99974, 43.713 %Abs	RK1:26->G01@3	
STX Std 3	0.621 Abs [0.6460] {5.5 CV}	0.108 µg/L [0.102] {8.3 CV}	R^2=0.99974, 40.456 %Abs	RK1:26->H01@3	
STX Std 4	0.430 Abs	0.183 µg/L	R^2=0.99974, 28.013 %Abs	RK1:27->A02@2	
STX Std 4	0.405 Abs [0.4175] {4.2 CV}	0.199 µg/L [0.191] {5.9 CV}	R^2=0.99974, 26.384 %Abs	RK1:27->B02@2	
STX Std 5	0.258 Abs	> 0.400 µg/L	16.808 %Abs	RK1:28->C02@2	
STX Std 5	0.245 Abs [0.2515] {3.7 CV}	> 0.400 µg/L	15.961 %Abs	RK1:28->D02@2	

8/20/2025 11:09:23 AM					
STX Control (0.060-0.090)	0.833 Abs	0.067 µg/L	54.267 %Abs	RK1:29->E02@2	
STX Control (0.060-0.090)	0.809 Abs [0.8210] {2.1 CV}	0.071 µg/L [0.069] {4.1 CV}	52.704 %Abs [53.485 %Abs]	RK1:29->F02@3	

Statistic					
STX Std 0 [MEAN]	1.5345	0.0010			
STX Std 0 [SD]	0.0191	0.0014			
STX Std 0 [%CV]	1.2442	141.4214			
STX Std 1 [MEAN]	1.3015	0.0200			
STX Std 1 [SD]	0.0163	0.0014			
STX Std 1 [%CV]	1.2496	7.0711			
STX Std 1 [%DIFF]		0.0000			
STX Std 2 [MEAN]	0.9650	0.0505			
STX Std 2 [SD]	0.0410	0.0049			
STX Std 2 [%CV]	4.2500	9.8015			
STX Std 2 [%DIFF]		1.0000			
STX Std 3 [MEAN]	0.6460	0.1020			
STX Std 3 [SD]	0.0354	0.0085			
STX Std 3 [%CV]	5.4730	8.3189			
STX Std 3 [%DIFF]		2.0000			
STX Std 4 [MEAN]	0.4175	0.1910			
STX Std 4 [SD]	0.0177	0.0113			
STX Std 4 [%CV]	4.2342	5.9234			
STX Std 4 [%DIFF]		-4.5000			
STX Std 5 [MEAN]	0.2515				
STX Std 5 [SD]	0.0092				
STX Std 5 [%CV]	3.6550				

Name	Absorbance	Concentration	Interpretation	Position	
STX Control (0.060-0.090) [MEAN]	0.8210	0.0690			
STX Control (0.060-0.090) [SD]	0.0170	0.0028			
STX Control (0.060-0.090) [%CV]	2.0671	4.0992			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.5368
B = 1.3158
C = 0.066376
D = 0.13879
R2 coef = 0.99974
50% = 0.077

