



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45383	Cecil M. Harden Lake - Raccoon Lake SRA Beach	6/9/2025	6/12/2025	< 0.050
AC45384	Cagles Mill Lake - Lieber SRA Beach	6/9/2025	6/12/2025	< 0.050
AC45385	Monroe Lake - Fairfax SRA Beach	6/9/2025	6/12/2025	< 0.050
AC45386	Monroe Lake - Paynetown SRA Beach	6/9/2025	6/12/2025	< 0.050
AC45387	Starve Hollow SRA - Starve Hollow Lake Beach	6/9/2025	6/12/2025	< 0.050
AC45388	Whitewater Memorial SP - Whitewater Lake Beach	6/10/2025	6/12/2025	< 0.050
AC45389	Brookville Lake - Quakertown SRA Beach	6/10/2025	6/12/2025	< 0.050
AC45390	Brookville Lake - Mounds SRA Beach	6/10/2025	6/12/2025	< 0.050
AC45391	Hardy Lake SRA - Hardy Lake SRA Beach	6/10/2025	6/12/2025	< 0.050
AC45392	Deam Lake SRA - Deam Lake Beach	6/10/2025	6/12/2025	< 0.050
AC45393	Cagles Mill Lake - Lieber SRA Beach (Field Duplicate)	6/9/2025	6/12/2025	< 0.050
AC45394	Field Blank	6/9/2025	6/12/2025	< 0.050
AC45395	Ft. Ben Harrison SP Dog Lake	6/9/2025	6/12/2025	< 0.050

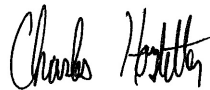
Test Report (by Request)

Test Information

Request: 6/12/2025 2:58:24 PM
Date: 6/12/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.131 Abs	0.000 µg/L	R^2=0.99965, 100.6		0.000	Kit:P24A3
STX Std 0	SAXITOXIN	1.116 Abs [1.1235] {0.9 C	0.002 µg/L [0.001]	R^2=0.99965, 99.28		0.000	Kit:P24A3
STX Std 1	SAXITOXIN	0.969 Abs	0.020 µg/L	R^2=0.99965, 86.21		0.020	Kit:P24A3
STX Std 1	SAXITOXIN	0.947 Abs [0.9580] {1.6 C	0.022 µg/L [0.021]	R^2=0.99965, 84.25		0.020	Kit:P24A3
STX Std 2	SAXITOXIN	0.737 Abs	0.047 µg/L	R^2=0.99965, 65.56		0.050	Kit:P24A3
STX Std 2	SAXITOXIN	0.707 Abs [0.7220] {2.9 C	0.052 µg/L [0.050]	R^2=0.99965, 62.90		0.050	Kit:P24A3
STX Std 3	SAXITOXIN	0.478 Abs	0.099 µg/L	R^2=0.99965, 42.52		0.100	Kit:P24A3
STX Std 3	SAXITOXIN	0.480 Abs [0.4790] {0.3 C	0.099 µg/L [0.099]	R^2=0.99965, 42.70		0.100	Kit:P24A3
STX Std 4	SAXITOXIN	0.252 Abs	0.236 µg/L	R^2=0.99965, 22.42		0.200	Kit:P24A3
STX Std 4	SAXITOXIN	0.293 Abs [0.2725] {10.6	0.192 µg/L [0.214]	R^2=0.99965, 26.06		0.200	Kit:P24A3
STX Std 5	SAXITOXIN	0.188 Abs	0.367 µg/L	R^2=0.99965, 16.72		0.400	Kit:P24A3
STX Std 5	SAXITOXIN	0.182 Abs [0.1850] {2.3 C	0.387 µg/L [0.377]	R^2=0.99965, 16.15		0.400	Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.620 Abs	0.066 µg/L	55.160 %Abs			Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.607 Abs [0.6135] {1.5 C	0.068 µg/L [0.067]	54.004 %Abs [54.5			Kit:P24A3

Note

Signature 

Test Report (by Request)

Test Information

Request: 6/12/2025 2:59:38 PM
Date: 6/12/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.053 Abs	0.010 µg/L	Low, 93.683 %Abs		0.020 - 0.400	Kit:P24A3
LRB	SAXITOXIN	1.022 Abs [1.0375] {2.1 C	0.014 µg/L [0.012]	Low, 90.925 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.515 Abs	0.089 µg/L	45.819 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.499 Abs [0.5070] {2.2 C	0.093 µg/L [0.091]	44.395 %Abs [45.1		0.020 - 0.400	Kit:P24A3
AC45383	SAXITOXIN	1.107 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45383	SAXITOXIN	1.091 Abs [1.0990] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45384	SAXITOXIN	1.071 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45384	SAXITOXIN	1.072 Abs [1.0715] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45385	SAXITOXIN	1.126 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45385	SAXITOXIN	1.102 Abs [1.1140] {1.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45386	SAXITOXIN	1.018 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45386	SAXITOXIN	0.963 Abs [0.9905] {3.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45387	SAXITOXIN	0.979 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45387	SAXITOXIN	0.978 Abs [0.9785] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45388	SAXITOXIN	1.035 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45388	SAXITOXIN	1.060 Abs [1.0475] {1.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45389	SAXITOXIN	1.075 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45389	SAXITOXIN	1.067 Abs [1.0710] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45390	SAXITOXIN	1.028 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45390	SAXITOXIN	1.087 Abs [1.0575] {3.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45390MS	SAXITOXIN	0.498 Abs	0.093 µg/L	44.306 %Abs		0.020 - 0.400	Kit:P24A3
AC45390MS	SAXITOXIN	0.483 Abs [0.4905] {2.2 C	0.098 µg/L [0.096]	42.972 %Abs [43.6		0.020 - 0.400	Kit:P24A3
AC45390MSD	SAXITOXIN	0.468 Abs	0.102 µg/L	41.637 %Abs		0.020 - 0.400	Kit:P24A3
AC45390MSD	SAXITOXIN	0.469 Abs [0.4685] {0.2 C	0.102 µg/L [0.102]	41.726 %Abs [41.6		0.020 - 0.400	Kit:P24A3
AC45391	SAXITOXIN	1.091 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45391	SAXITOXIN	1.098 Abs [1.0945] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45392	SAXITOXIN	1.156 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45392	SAXITOXIN	1.064 Abs [1.1100] {5.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45393	SAXITOXIN	1.086 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45393	SAXITOXIN	1.066 Abs [1.0760] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45394	SAXITOXIN	1.084 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45394	SAXITOXIN	1.089 Abs [1.0865] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45395	SAXITOXIN	1.059 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45395	SAXITOXIN	1.051 Abs [1.0550] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3

Note

Signature



Charles Hostetter 6/12/2025

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:

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:P24A3229

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
6/12/2025 2:58:24 PM					
STX Std 0	1.131 Abs	0.000 µg/L	R^2=0.99965, 100.623 %Abs	RK1:30->A07@2	
STX Std 0	1.116 Abs [1.1235] {0.9 CV}	0.002 µg/L [0.001] {141.4 CV}	R^2=0.99965, 99.288 %Abs	RK1:30->B07@2	
STX Std 1	0.969 Abs	0.020 µg/L	R^2=0.99965, 86.210 %Abs	RK1:31->C07@2	
STX Std 1	0.947 Abs [0.9580] {1.6 CV}	0.022 µg/L [0.021] {6.7 CV}	R^2=0.99965, 84.253 %Abs	RK1:31->D07@2	
STX Std 2	0.737 Abs	0.047 µg/L	R^2=0.99965, 65.569 %Abs	RK1:32->E07@2	
STX Std 2	0.707 Abs [0.7220] {2.9 CV}	0.052 µg/L [0.050] {7.1 CV}	R^2=0.99965, 62.900 %Abs	RK1:32->F07@3	
STX Std 3	0.478 Abs	0.099 µg/L	R^2=0.99965, 42.527 %Abs	RK1:33->G07@3	
STX Std 3	0.480 Abs [0.4790] {0.3 CV}	0.099 µg/L [0.099] {0.0 CV}	R^2=0.99965, 42.705 %Abs	RK1:33->H07@3	
STX Std 4	0.252 Abs	0.236 µg/L	R^2=0.99965, 22.420 %Abs	RK1:34->A08@2	
STX Std 4	0.293 Abs [0.2725] {10.6 CV}	0.192 µg/L [0.214] {14.5 CV}	R^2=0.99965, 26.068 %Abs	RK1:34->B08@2	
STX Std 5	0.188 Abs	0.367 µg/L	R^2=0.99965, 16.726 %Abs	RK1:35->C08@2	
STX Std 5	0.182 Abs [0.1850] {2.3 CV}	0.387 µg/L [0.377] {3.8 CV}	R^2=0.99965, 16.192 %Abs	RK1:35->D08@2	

6/12/2025 2:58:24 PM					
STX Control (0.060-0.090)	0.620 Abs	0.066 µg/L	55.160 %Abs	RK1:36->E08@2	
STX Control (0.060-0.090)	0.607 Abs [0.6135] {1.5 CV}	0.068 µg/L [0.067] {2.1 CV}	54.004 %Abs [54.582 %Abs]	RK1:36->F08@3	

Statistic					
STX Std 0 [MEAN]	1.1235	0.0010			
STX Std 0 [SD]	0.0106	0.0014			
STX Std 0 [%CV]	0.9441	141.4214			
STX Std 1 [MEAN]	0.9580	0.0210			
STX Std 1 [SD]	0.0156	0.0014			
STX Std 1 [%CV]	1.6238	6.7344			
STX Std 1 [%DIFF]		5.0000			
STX Std 2 [MEAN]	0.7220	0.0495			
STX Std 2 [SD]	0.0212	0.0035			
STX Std 2 [%CV]	2.9381	7.1425			
STX Std 2 [%DIFF]		-1.0000			
STX Std 3 [MEAN]	0.4790	0.0990			
STX Std 3 [SD]	0.0014	0.0000			
STX Std 3 [%CV]	0.2952	0.0000			
STX Std 3 [%DIFF]		-1.0000			
STX Std 4 [MEAN]	0.2725	0.2140			
STX Std 4 [SD]	0.0290	0.0311			
STX Std 4 [%CV]	10.6390	14.5386			
STX Std 4 [%DIFF]		7.0000			
STX Std 5 [MEAN]	0.1850	0.3770			
STX Std 5 [SD]	0.0042	0.0141			
STX Std 5 [%CV]	2.2933	3.7512			

Name	Absorbance	Concentration	Interpretation	Position	
STX Std 5 [%DIFF]		-5.7500			
STX Control (0.060-0.090) [MEAN]	0.6135	0.0670			
STX Control (0.060-0.090) [SD]	0.0092	0.0014			
STX Control (0.060-0.090) [%CV]	1.4984	2.1108			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.1215
 B = 1.3964
 C = 0.067764
 D = 0.099610
 R2 coef = 0.99965
 50% = 0.078

