



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45578	Cecil M. Harden Lake - Raccoon Lake SRA Beach	6/23/2025	6/26/2025	< 0.050
AC45579	Cagles Mill Lake - Lieber SRA Beach	6/23/2025	6/26/2025	< 0.050
AC45580	Whitewater Memorial SP - Whitewater Lake Beach	6/24/2025	6/26/2025	< 0.050
AC45581	Brookville Lake - Mounds SRA Beach	6/24/2025	6/26/2025	< 0.050
AC45582	Cagles Mill Lake - Lieber SRA Beach (Field Duplicate)	6/24/2025	6/26/2025	< 0.050
AC45583	Field Blank	6/24/2025	6/26/2025	< 0.050
AC45650	Potato Creek SP - Worster Lake Beach	6/23/2025	6/26/2025	< 0.050

Test Report (by Request)

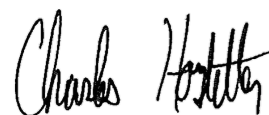
Test Information

Request: 6/26/2025 3:41:57 PM
Date: 6/25/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.082 Abs	0.001 µg/L	R^2=0.99903, 100.0		0.000	Kit:P24A3
STX Std 0	SAXITOXIN	1.082 Abs [1.0820] {0.0 C	0.001 µg/L [0.001]	R^2=0.99903, 100.0		0.000	Kit:P24A3
STX Std 1	SAXITOXIN	0.930 Abs	0.019 µg/L	R^2=0.99903, 85.95		0.020	Kit:P24A3
STX Std 1	SAXITOXIN	0.915 Abs [0.9225] {1.1 C	0.021 µg/L [0.020]	R^2=0.99903, 84.56		0.020	Kit:P24A3
STX Std 2	SAXITOXIN	0.702 Abs	0.044 µg/L	R^2=0.99903, 64.88		0.050	Kit:P24A3
STX Std 2	SAXITOXIN	0.621 Abs [0.6615] {8.7 C	0.056 µg/L [0.050]	R^2=0.99903, 57.35		0.050	Kit:P24A3
STX Std 3	SAXITOXIN	0.422 Abs	0.103 µg/L	R^2=0.99903, 39.00		0.100	Kit:P24A3
STX Std 3	SAXITOXIN	0.413 Abs [0.4175] {1.5 C	0.106 µg/L [0.105]	R^2=0.99903, 38.17		0.100	Kit:P24A3
STX Std 4	SAXITOXIN	0.290 Abs	0.176 µg/L	R^2=0.99903, 26.80		0.200	Kit:P24A3
STX Std 4	SAXITOXIN	0.284 Abs [0.2870] {1.5 C	0.182 µg/L [0.179]	R^2=0.99903, 26.24		0.200	Kit:P24A3
STX Std 5	SAXITOXIN	0.185 Abs	> 0.400 µg/L	17.098 %Abs		0.400	Kit:P24A3
STX Std 5	SAXITOXIN	0.169 Abs [0.1770] {6.4 C	> 0.400 µg/L	15.619 %Abs		0.400	Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.595 Abs	0.061 µg/L	54.991 %Abs			Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.574 Abs [0.5845] {2.5 C	0.064 µg/L [0.063]	53.050 %Abs [54.0			Kit:P24A3

Note

Signature



Test Report (by Request)

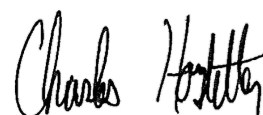
Test Information

Request: 6/26/2025 3:42:53 PM
Date: 6/25/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.119 Abs	0.000 µg/L	Low, 103.420 %Abs		0.020 - 0.400	Kit:P24A3
LRB	SAXITOXIN	1.120 Abs [1.1195] {0.1 C	0.000 µg/L [0.000]	Low, 103.512 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.483 Abs	0.084 µg/L	44.640 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.471 Abs [0.4770] {1.8 C	0.087 µg/L [0.086]	43.530 %Abs [44.0		0.020 - 0.400	Kit:P24A3
AC45578	SAXITOXIN	1.078 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45578	SAXITOXIN	1.063 Abs [1.0705] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45579	SAXITOXIN	1.077 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45579	SAXITOXIN	1.057 Abs [1.0670] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45580	SAXITOXIN	1.063 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45580	SAXITOXIN	1.001 Abs [1.0320] {4.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45580MS	SAXITOXIN	0.473 Abs	0.087 µg/L	43.715 %Abs		0.020 - 0.400	Kit:P24A3
AC45580MS	SAXITOXIN	0.464 Abs [0.4685] {1.4 C	0.089 µg/L [0.088]	42.884 %Abs [43.2		0.020 - 0.400	Kit:P24A3
AC45580MSD	SAXITOXIN	0.482 Abs	0.085 µg/L	44.547 %Abs		0.020 - 0.400	Kit:P24A3
AC45580MSD	SAXITOXIN	0.462 Abs [0.4720] {3.0 C	0.090 µg/L [0.088]	42.699 %Abs [43.6		0.020 - 0.400	Kit:P24A3
AC45581	SAXITOXIN	1.065 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45581	SAXITOXIN	0.978 Abs [1.0215] {6.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45650	SAXITOXIN	1.058 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45650	SAXITOXIN	1.059 Abs [1.0585] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45582	SAXITOXIN	1.058 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45582	SAXITOXIN	1.048 Abs [1.0530] {0.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45583	SAXITOXIN	1.033 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC45583	SAXITOXIN	1.063 Abs [1.0480] {2.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3

Note

Signature



Charles Hostetter 6/26/2025

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:P24A3229

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: "

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Name	Absorbance	Concentration	Interpretation	Position
6/26/2025 3:41:57 PM				
STX Std 0	1.082 Abs	0.001 µg/L	R ² =0.99903, 100.000 %Abs	RK1:30->A06@1
STX Std 0	1.082 Abs [1.0820] {0.0 CV}	0.001 µg/L [0.001] {0.0 CV}	R ² =0.99903, 100.000 %Abs	RK1:30->B06@1
STX Std 1	0.930 Abs	0.019 µg/L	R ² =0.99903, 85.952 %Abs	RK1:31->C06@1
STX Std 1	0.915 Abs [0.9225] {1.1 CV}	0.021 µg/L [0.020] {7.1 CV}	R ² =0.99903, 84.566 %Abs	RK1:31->D06@1
STX Std 2	0.702 Abs	0.044 µg/L	R ² =0.99903, 64.880 %Abs	RK1:32->E06@1
STX Std 2	0.621 Abs [0.6615] {8.7 CV}	0.056 µg/L [0.050] {17.0 CV}	R ² =0.99903, 57.394 %Abs	RK1:32->F06@4
STX Std 3	0.422 Abs	0.103 µg/L	R ² =0.99903, 39.002 %Abs	RK1:33->G06@4
STX Std 3	0.413 Abs [0.4175] {1.5 CV}	0.106 µg/L [0.105] {2.0 CV}	R ² =0.99903, 38.170 %Abs	RK1:33->H06@4
STX Std 4	0.290 Abs	0.176 µg/L	R ² =0.99903, 26.802 %Abs	RK1:34->A07@2
STX Std 4	0.284 Abs [0.2870] {1.5 CV}	0.182 µg/L [0.179] {2.4 CV}	R ² =0.99903, 26.248 %Abs	RK1:34->B07@2
STX Std 5	0.185 Abs	> 0.400 µg/L	17.098 %Abs	RK1:35->C07@2
STX Std 5	0.169 Abs [0.1770] {6.4 CV}	> 0.400 µg/L	15.619 %Abs	RK1:35->D07@2
+++++				
6/26/2025 3:41:57 PM				
STX Control (0.060-0.090)	0.595 Abs	0.061 µg/L	54.991 %Abs	RK1:36->E07@2
STX Control (0.060-0.090)	0.574 Abs [0.5845] {2.5 CV}	0.064 µg/L [0.063] {3.4 CV}	53.050 %Abs [54.020 %Abs]	RK1:36->F07@3

Statistic				
STX Std 0 [MEAN]	1.0820	0.0010		
STX Std 0 [SD]	0.0000	0.0000		
STX Std 0 [%CV]	0.0000	0.0000		
STX Std 1 [MEAN]	0.9225	0.0200		
STX Std 1 [SD]	0.0106	0.0014		
STX Std 1 [%CV]	1.1498	7.0711		
STX Std 1 [%DIFF]		0.0000		
STX Std 2 [MEAN]	0.6615	0.0500		
STX Std 2 [SD]	0.0573	0.0085		
STX Std 2 [%CV]	8.6585	16.9706		
STX Std 2 [%DIFF]		-0.0000		
STX Std 3 [MEAN]	0.4175	0.1045		
STX Std 3 [SD]	0.0064	0.0021		
STX Std 3 [%CV]	1.5243	2.0300		
STX Std 3 [%DIFF]		4.5000		
STX Std 4 [MEAN]	0.2870	0.1790		
STX Std 4 [SD]	0.0042	0.0042		
STX Std 4 [%CV]	1.4783	2.3702		
STX Std 4 [%DIFF]		-10.5000		
STX Std 5 [MEAN]	0.1770			
STX Std 5 [SD]	0.0113			
STX Std 5 [%CV]	6.3919			

Name	Absorbance	Concentration	Interpretation	Position	
STX Control (0.060-0.090) [MEAN]	0.5845	0.0625			
STX Control (0.060-0.090) [SD]	0.0148	0.0021			
STX Control (0.060-0.090) [%CV]	2.5405	3.3941			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.0837
B = 1.4683
C = 0.058109
D = 0.13458
R2 coef = 0.99903
50% = 0.071

