



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB51536	Summit Lake - State Park	6/21/2022	6/28/2022	< 0.05
AB51537	Kunkel Beach @ Oubache State Park	6/20/2022	6/28/2022	0.070
AB51538	Pokagon State Park	6/20/2022	6/28/2022	< 0.05
AB51539	Potawatomi Inn's Beach	6/20/2022	6/28/2022	< 0.05
AB51540	Chain O'Lakes SP	6/20/2022	6/28/2022	< 0.05
AB51541	Potato Creek State Park	6/21/2022	6/28/2022	< 0.05
AB51542	Lost Bridge West SRA	6/21/2022	6/28/2022	< 0.05
AB51543	Mississinewa Lake Miami SRA	6/21/2022	6/28/2022	< 0.05
AB51544	Lost Bridge West SRA (Field Dup)	6/21/2022	6/28/2022	< 0.05
AB51545	Field Blank	6/20/2022	6/28/2022	< 0.05
AB51546	Lincoln State Park	6/20/2022	6/28/2022	< 0.05
AB51547	Patoka SRA Beach	6/20/2022	6/28/2022	< 0.05
AB51548	Ferdinand State Forest Lake	6/20/2022	6/28/2022	< 0.05

Test Report (by Request)

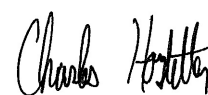
Test Information

Request: 6/28/2022 2:36:38 PM
Date: 6/28/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	0.623 Abs	0.001 µg/L	R ² =0.99929, 99.6%			M22B127
STX Std 0	SAXITOXIN	0.627 Abs [0.6250] {0.5 C	0.000 µg/L [0.001]	R ² =0.99929, 100.3%			M22B127
STX Std 1	SAXITOXIN	0.549 Abs	0.019 µg/L	R ² =0.99929, 87.8%			M22B127
STX Std 1	SAXITOXIN	0.546 Abs [0.5475] {0.4 C	0.020 µg/L [0.019]	R ² =0.99929, 87.3%			M22B127
STX Std 2	SAXITOXIN	0.455 Abs	0.047 µg/L	R ² =0.99929, 72.8%			M22B127
STX Std 2	SAXITOXIN	0.439 Abs [0.4470] {2.5 C	0.053 µg/L [0.050]	R ² =0.99929, 70.2%			M22B127
STX Std 3	SAXITOXIN	0.348 Abs	0.100 µg/L	R ² =0.99929, 55.6%			M22B127
STX Std 3	SAXITOXIN	0.339 Abs [0.3435] {1.9 C	0.106 µg/L [0.103]	R ² =0.99929, 54.2%			M22B127
STX Std 4	SAXITOXIN	0.262 Abs	0.184 µg/L	R ² =0.99929, 41.9%			M22B127
STX Std 4	SAXITOXIN	0.256 Abs [0.2590] {1.6 C	0.193 µg/L [0.189]	R ² =0.99929, 40.9%			M22B127
STX Std 5	SAXITOXIN	0.182 Abs	0.391 µg/L	R ² =0.99929, 29.1%			M22B127
STX Std 5	SAXITOXIN	0.173 Abs [0.1775] {3.6 C	> 0.400 µg/L [0.39]	27.680 %Abs			M22B127
STX Control (0.060-0.090)	SAXITOXIN	0.403 Abs	0.069 µg/L	64.480 %Abs			M22B127
STX Control (0.060-0.090)	SAXITOXIN	0.387 Abs [0.3950] {2.9 C	0.077 µg/L [0.073]	61.920 %Abs [63.2			M22B127

Note

Signature



Test Report (by Request)

Test Information

Request: 6/28/2022 2:37:45 PM
Date: 6/28/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	0.638 Abs	0.000 µg/L	Low, 102.080 %Abs		0.020 - 0.400	M22B127
LRB	SAXITOXIN	0.631 Abs [0.6345] {0.8 C	0.000 µg/L [0.000]	Low, 100.960 %Abs		0.020 - 0.400	M22B127
LFB (SAX)	SAXITOXIN	0.447 Abs	0.050 µg/L	71.520 %Abs		0.020 - 0.400	M22B127
LFB (SAX)	SAXITOXIN	0.443 Abs [0.4450] {0.6 C	0.052 µg/L [0.051]	70.880 %Abs [71.2		0.020 - 0.400	M22B127
AB51536	SAXITOXIN	0.634 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51536	SAXITOXIN	0.633 Abs [0.6335] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51537	SAXITOXIN	0.431 Abs	0.063 µg/L	68.960 %Abs	MDF=1.100	0.020 - 0.400	M22B127
AB51537	SAXITOXIN	0.401 Abs [0.4160] {5.1 C	0.077 µg/L [0.070]	64.160 %Abs [66.5	MDF=1.100	0.020 - 0.400	M22B127
AB51537MS	SAXITOXIN	0.330 Abs	0.113 µg/L	52.800 %Abs		0.020 - 0.400	M22B127
AB51537MS	SAXITOXIN	0.319 Abs [0.3245] {2.4 C	0.122 µg/L [0.117]	51.040 %Abs [51.9		0.020 - 0.400	M22B127
AB51537MSD	SAXITOXIN	0.317 Abs	0.124 µg/L	50.720 %Abs		0.020 - 0.400	M22B127
AB51537MSD	SAXITOXIN	0.298 Abs [0.3075] {4.4 C	0.141 µg/L [0.132]	47.680 %Abs [49.2		0.020 - 0.400	M22B127
AB51538	SAXITOXIN	0.624 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51538	SAXITOXIN	0.623 Abs [0.6235] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51539	SAXITOXIN	0.627 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51539	SAXITOXIN	0.614 Abs [0.6205] {1.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51540	SAXITOXIN	0.610 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51540	SAXITOXIN	0.597 Abs [0.6035] {1.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51541	SAXITOXIN	0.611 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51541	SAXITOXIN	0.614 Abs [0.6125] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51542	SAXITOXIN	0.627 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51542	SAXITOXIN	0.625 Abs [0.6260] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51543	SAXITOXIN	0.637 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51543	SAXITOXIN	0.621 Abs [0.6290] {1.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51544	SAXITOXIN	0.625 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51544	SAXITOXIN	0.610 Abs [0.6175] {1.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51545	SAXITOXIN	0.633 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51545	SAXITOXIN	0.630 Abs [0.6315] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51546	SAXITOXIN	0.594 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51546	SAXITOXIN	0.578 Abs [0.5860] {1.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51547	SAXITOXIN	0.640 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51547	SAXITOXIN	0.628 Abs [0.6340] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51548	SAXITOXIN	0.620 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100		M22B127
AB51548	SAXITOXIN	0.609 Abs [0.6145] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100		M22B127

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:

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: M22B1271

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
6/28/2022 2:36:38 PM				
STX Std 0	0.623 Abs	0.001 µg/L	R^2=0.99929, 99.680 %Abs	RK1:30->A07@2
STX Std 0	0.627 Abs [0.6250] {0.5 CV}	0.000 µg/L [0.001] {141.4 CV}	R^2=0.99929, 100.320 %Abs	RK1:30->B07@2
STX Std 1	0.549 Abs	0.019 µg/L	R^2=0.99929, 87.840 %Abs	RK1:31->C07@2
STX Std 1	0.546 Abs [0.5475] {0.4 CV}	0.020 µg/L [0.019] {3.6 CV}	R^2=0.99929, 87.360 %Abs	RK1:31->D07@2
STX Std 2	0.455 Abs	0.047 µg/L	R^2=0.99929, 72.800 %Abs	RK1:32->E07@2
STX Std 2	0.439 Abs [0.4470] {2.5 CV}	0.053 µg/L [0.050] {8.5 CV}	R^2=0.99929, 70.240 %Abs	RK1:32->F07@3
STX Std 3	0.348 Abs	0.100 µg/L	R^2=0.99929, 55.680 %Abs	RK1:33->G07@3
STX Std 3	0.339 Abs [0.3435] {1.9 CV}	0.106 µg/L [0.103] {4.1 CV}	R^2=0.99929, 54.240 %Abs	RK1:33->H07@3
STX Std 4	0.262 Abs	0.184 µg/L	R^2=0.99929, 41.920 %Abs	RK1:34->A08@2
STX Std 4	0.256 Abs [0.2590] {1.6 CV}	0.193 µg/L [0.189] {3.4 CV}	R^2=0.99929, 40.960 %Abs	RK1:34->B08@2
STX Std 5	0.182 Abs	0.391 µg/L	R^2=0.99929, 29.120 %Abs	RK1:35->C08@2
STX Std 5	0.173 Abs [0.1775] {3.6 CV}	> 0.400 µg/L [0.391]	27.680 %Abs	RK1:35->D08@2

6/28/2022 2:36:38 PM				
STX Control (0.060-0.090)	0.403 Abs	0.069 µg/L	64.480 %Abs	RK1:36->E08@2
STX Control (0.060-0.090)	0.387 Abs [0.3950] {2.9 CV}	0.077 µg/L [0.073] {7.7 CV}	61.920 %Abs [63.200 %Abs]	RK1:36->F08@3

Statistic				
STX Std 0 [MEAN]	0.6250	0.0005		
STX Std 0 [SD]	0.0028	0.0007		
STX Std 0 [%CV]	0.4525	141.4214		
STX Std 1 [MEAN]	0.5475	0.0195		
STX Std 1 [SD]	0.0021	0.0007		
STX Std 1 [%CV]	0.3875	3.6262		
STX Std 1 [%DIFF]		-2.5000		
STX Std 2 [MEAN]	0.4470	0.0500		
STX Std 2 [SD]	0.0113	0.0042		
STX Std 2 [%CV]	2.5310	8.4853		
STX Std 2 [%DIFF]		-0.0000		
STX Std 3 [MEAN]	0.3435	0.1030		
STX Std 3 [SD]	0.0064	0.0042		
STX Std 3 [%CV]	1.8527	4.1191		
STX Std 3 [%DIFF]		3.0000		
STX Std 4 [MEAN]	0.2590	0.1885		
STX Std 4 [SD]	0.0042	0.0064		
STX Std 4 [%CV]	1.6381	3.3761		
STX Std 4 [%DIFF]		-5.7500		
STX Std 5 [MEAN]	0.1775			
STX Std 5 [SD]	0.0064			
STX Std 5 [%CV]	3.5853			

Name	Absorbance	Concentration	Interpretation	Position	
STX Control (0.060-0.090) [MEAN]	0.3950	0.0730			
STX Control (0.060-0.090) [SD]	0.0113	0.0057			
STX Control (0.060-0.090) [%CV]	2.8642	7.7491			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 0.62614
 B = 1.1208
 C = 0.092310
 D = 0.094019
 R2 coef = 0.99929
 50% = 0.127

