



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC40371	Cecil M. Harden Lake - Raccoon Lake SRA Beach	6/10/2024	6/12/2024	< 0.05
AC40372	Cagles Mill Lake - Lieber SRA Beach	6/10/2024	6/12/2024	< 0.05
AC40373	Monroe Lake - Fairfax SRA Beach	6/10/2024	6/12/2024	< 0.05
AC40374	Monroe Lake - Paynetown SRA Beach	6/10/2024	6/12/2024	< 0.05
AC40375	Starve Hollow SRA - Starve Hollow Lake Beach	6/10/2024	6/12/2024	0.17
AC40376	Whitewater Memorial SP - Whitewater Lake Beach	6/11/2024	6/12/2024	< 0.05
AC40377	Brookville Lake - Quakertown SRA Beach	6/11/2024	6/12/2024	< 0.05
AC40378	Brookville Lake - Mounds SRA Beach	6/11/2024	6/12/2024	< 0.05
AC40379	Hardy Lake SRA - Hardy Lake SRA Beach	6/11/2024	6/12/2024	< 0.05
AC40380	Deam Lake SRA - Deam Lake Beach	6/11/2024	6/12/2024	< 0.05
AC40381	Cecil M. Harden Lake - Raccoon Lake SRA Beach (Field Duplicate)	6/11/2024	6/12/2024	< 0.05
AC40382	Field Blank	6/10/2024	6/12/2024	< 0.05
AC40383	Ft. Ben Harrison SP Dog Lake	6/10/2024	6/12/2024	< 0.05

Test Report (by Request)

Test Information

Request: 6/12/2024 2:31:33 PM
 Date: 6/12/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.613 Abs	0.000 µg/L	R^2=0.99999, 101.5		0.000	Kit:P24A3
STX Std 0	SAXITOXIN	1.564 Abs [1.5885] {2.2 C	0.003 µg/L [0.002]	R^2=0.99999, 98.42		0.000	Kit:P24A3
STX Std 1	SAXITOXIN	1.325 Abs	0.020 µg/L	R^2=0.99999, 83.36		0.020	Kit:P24A3
STX Std 1	SAXITOXIN	1.330 Abs [1.3275] {0.3 C	0.020 µg/L [0.020]	R^2=0.99999, 83.70		0.020	Kit:P24A3
STX Std 2	SAXITOXIN	0.994 Abs	0.050 µg/L	R^2=0.99999, 62.55		0.050	Kit:P24A3
STX Std 2	SAXITOXIN	0.985 Abs [0.9895] {0.6 C	0.051 µg/L [0.051]	R^2=0.99999, 61.98		0.050	Kit:P24A3
STX Std 3	SAXITOXIN	0.691 Abs	0.097 µg/L	R^2=0.99999, 43.48		0.100	Kit:P24A3
STX Std 3	SAXITOXIN	0.664 Abs [0.6775] {2.8 C	0.104 µg/L [0.101]	R^2=0.99999, 41.78		0.100	Kit:P24A3
STX Std 4	SAXITOXIN	0.426 Abs	0.198 µg/L	R^2=0.99999, 26.80		0.200	Kit:P24A3
STX Std 4	SAXITOXIN	0.424 Abs [0.4250] {0.3 C	0.199 µg/L [0.199]	R^2=0.99999, 26.68		0.200	Kit:P24A3
STX Std 5	SAXITOXIN	0.267 Abs	0.397 µg/L	R^2=0.99999, 16.80		0.400	Kit:P24A3
STX Std 5	SAXITOXIN	0.261 Abs [0.2640] {1.6 C	> 0.400 µg/L [0.39	16.425 %Abs		0.400	Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.854 Abs	0.068 µg/L	53.744 %Abs			Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.850 Abs [0.8520] {0.3 C	0.068 µg/L [0.068]	53.493 %Abs [53.6			Kit:P24A3

Note

Signature *David Jordan*
 David Jordan 6/12/2024

Test Report (by Request)

Test Information

Request: 6/12/2024 2:32:45 PM
Date: 6/12/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.540 Abs	0.005 µg/L	Low, 96.916 %Abs		0.020 - 0.400	Kit:P24A3
LRB	SAXITOXIN	1.541 Abs [1.5405] {0.0 C	0.005 µg/L [0.005]	Low, 96.979 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.763 Abs	0.083 µg/L	48.018 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.769 Abs [0.7660] {0.6 C	0.082 µg/L [0.083]	48.395 %Abs [48.2		0.020 - 0.400	Kit:P24A3
AC40371	SAXITOXIN	1.534 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40371	SAXITOXIN	1.531 Abs [1.5325] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40372	SAXITOXIN	1.450 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40372	SAXITOXIN	1.457 Abs [1.4535] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40373	SAXITOXIN	1.562 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40373	SAXITOXIN	1.551 Abs [1.5565] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40374	SAXITOXIN	1.566 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40374	SAXITOXIN	1.556 Abs [1.5610] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40375	SAXITOXIN	0.499 Abs	0.174 µg/L	31.403 %Abs	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40375	SAXITOXIN	0.499 Abs [0.4990] {0.0 C	0.174 µg/L [0.174]	31.403 %Abs [31.4	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40376	SAXITOXIN	1.493 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40376	SAXITOXIN	1.484 Abs [1.4885] {0.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40377	SAXITOXIN	1.525 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40377	SAXITOXIN	1.546 Abs [1.5355] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40377MS	SAXITOXIN	0.765 Abs	0.082 µg/L	48.143 %Abs		0.020 - 0.400	Kit:P24A3
AC40377MS	SAXITOXIN	0.777 Abs [0.7710] {1.1 C	0.080 µg/L [0.081]	48.899 %Abs [48.5		0.020 - 0.400	Kit:P24A3
AC40377MSD	SAXITOXIN	0.774 Abs	0.081 µg/L	48.710 %Abs		0.020 - 0.400	Kit:P24A3
AC40377MSD	SAXITOXIN	0.780 Abs [0.7770] {0.5 C	0.080 µg/L [0.081]	49.087 %Abs [48.8		0.020 - 0.400	Kit:P24A3
AC40378	SAXITOXIN	1.516 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40378	SAXITOXIN	1.516 Abs [1.5160] {0.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40379	SAXITOXIN	1.492 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40379	SAXITOXIN	1.515 Abs [1.5035] {1.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40380	SAXITOXIN	1.579 Abs	0.001 µg/L	Low, 99.371 %Abs		0.020 - 0.400	Kit:P24A3
AC40380	SAXITOXIN	1.579 Abs [1.5790] {0.0 C	0.001 µg/L [0.001]	Low, 99.371 %Abs		0.020 - 0.400	Kit:P24A3
AC40381	SAXITOXIN	1.543 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40381	SAXITOXIN	1.543 Abs [1.5430] {0.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40382	SAXITOXIN	1.590 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40382	SAXITOXIN	1.620 Abs [1.6050] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40383	SAXITOXIN	1.506 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40383	SAXITOXIN	1.449 Abs [1.4775] {2.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3

Note

Signature

David Jordan

David Jordan 6/12/2024

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: "

"

Name	Absorbance	Concentration	Interpretation	Position
6/12/2024 2:31:33 PM				
STX Std 0	1.613 Abs	0.000 µg/L	R ² =0.99999, 101.510 %Abs	RK1:30->A07@2
STX Std 0	1.564 Abs [1.5885] {2.2 CV}	0.003 µg/L [0.002] {141.4 CV}	R ² =0.99999, 98.427 %Abs	RK1:30->B07@2
STX Std 1	1.325 Abs	0.020 µg/L	R ² =0.99999, 83.386 %Abs	RK1:31->C07@2
STX Std 1	1.330 Abs [1.3275] {0.3 CV}	0.020 µg/L [0.020] {0.0 CV}	R ² =0.99999, 83.700 %Abs	RK1:31->D07@2
STX Std 2	0.994 Abs	0.050 µg/L	R ² =0.99999, 62.555 %Abs	RK1:32->E07@2
STX Std 2	0.985 Abs [0.9895] {0.6 CV}	0.051 µg/L [0.051] {1.4 CV}	R ² =0.99999, 61.989 %Abs	RK1:32->F07@3
STX Std 3	0.691 Abs	0.097 µg/L	R ² =0.99999, 43.486 %Abs	RK1:33->G07@3
STX Std 3	0.664 Abs [0.6775] {2.8 CV}	0.104 µg/L [0.101] {4.9 CV}	R ² =0.99999, 41.787 %Abs	RK1:33->H07@3
STX Std 4	0.426 Abs	0.198 µg/L	R ² =0.99999, 26.809 %Abs	RK1:34->A08@2
STX Std 4	0.424 Abs [0.4250] {0.3 CV}	0.199 µg/L [0.199] {0.4 CV}	R ² =0.99999, 26.683 %Abs	RK1:34->B08@2
STX Std 5	0.267 Abs	0.397 µg/L	R ² =0.99999, 16.803 %Abs	RK1:35->C08@2
STX Std 5	0.261 Abs [0.2640] {1.6 CV}	> 0.400 µg/L [0.397]	16.425 %Abs	RK1:35->D08@2

6/12/2024 2:31:33 PM				
STX Control (0.060-0.090)	0.854 Abs	0.068 µg/L	53.744 %Abs	RK1:36->E08@2
STX Control (0.060-0.090)	0.850 Abs [0.8520] {0.3 CV}	0.068 µg/L [0.068] {0.0 CV}	53.493 %Abs [53.619 %Abs]	RK1:36->F08@3

Statistic				
STX Std 0 [MEAN]	1.5885	0.0015		
STX Std 0 [SD]	0.0346	0.0021		
STX Std 0 [%CV]	2.1812	141.4214		
STX Std 1 [MEAN]	1.3275	0.0200		
STX Std 1 [SD]	0.0035	0.0000		
STX Std 1 [%CV]	0.2663	0.0000		
STX Std 1 [%DIFF]		0.0000		
STX Std 2 [MEAN]	0.9895	0.0505		
STX Std 2 [SD]	0.0064	0.0007		
STX Std 2 [%CV]	0.6431	1.4002		
STX Std 2 [%DIFF]		1.0000		
STX Std 3 [MEAN]	0.6775	0.1005		
STX Std 3 [SD]	0.0191	0.0049		
STX Std 3 [%CV]	2.8180	4.9251		
STX Std 3 [%DIFF]		0.5000		
STX Std 4 [MEAN]	0.4250	0.1985		
STX Std 4 [SD]	0.0014	0.0007		
STX Std 4 [%CV]	0.3328	0.3562		
STX Std 4 [%DIFF]		-0.7500		
STX Std 5 [MEAN]	0.2640			
STX Std 5 [SD]	0.0042			
STX Std 5 [%CV]	1.6071			

Name	Absorbance	Concentration	Interpretation	Position
STX Control (0.060-0.090) [MEAN]	0.8520	0.0680		
STX Control (0.060-0.090) [SD]	0.0028	0.0000		
STX Control (0.060-0.090) [%CV]	0.3320	0.0000		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.5895
 B = 1.2514
 C = 0.067381
 D = 0.12302
 R2 coef = 0.99999
 50% = 0.077

