



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC40776	Cecil M. Harden Lake - Raccoon Lake SRA Beach	7/8/2024	7/11/2024	< 0.05
AC40777	Cagles Mill Lake - Lieber SRA Beach	7/8/2024	7/11/2024	< 0.05
AC40778	Monroe Lake - Fairfax SRA Beach	7/8/2024	7/11/2024	< 0.05
AC40779	Monroe Lake - Paynetown SRA Beach	7/8/2024	7/11/2024	< 0.05
AC40780	Starve Hollow SRA - Starve Hollow Lake Beach	7/8/2024	7/11/2024	< 0.05
AC40781	Whitewater Memorial SP - Whitewater Lake Beach	7/9/2024	7/11/2024	< 0.05
AC40782	Brookville Lake - Quakertown SRA Beach	7/9/2024	7/11/2024	< 0.05
AC40783	Brookville Lake - Mounds SRA Beach	7/9/2024	7/11/2024	< 0.05
AC40784	Hardy Lake SRA - Hardy Lake SRA Beach	7/9/2024	7/11/2024	< 0.05
AC40785	Deam Lake SRA - Deam Lake Beach	7/9/2024	7/11/2024	< 0.05
AC40786	Cecil M. Harden Lake - Raccoon Lake SRA Beach (Field Duplicate)	7/8/2024	7/11/2024	< 0.05
AC40787	Field Blank	7/8/2024	7/11/2024	< 0.05
AC40788	Ft. Ben Harrison SP Dog Lake	7/9/2024	7/11/2024	< 0.05

Test Report (by Request)

Test Information

Request: 7/11/2024 2:06:10 PM
 Date: 7/11/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.366 Abs	0.000 µg/L	R ² =0.99988, 101.6		0.000	Kit:P24A3
STX Std 0	SAXITOXIN	1.321 Abs [1.3435] {2.4 C	0.005 µg/L [0.003]	R ² =0.99988, 98.28		0.000	Kit:P24A3
STX Std 1	SAXITOXIN	1.185 Abs	0.020 µg/L	R ² =0.99988, 88.17		0.020	Kit:P24A3
STX Std 1	SAXITOXIN	1.185 Abs [1.1850] {0.0 C	0.020 µg/L [0.020]	R ² =0.99988, 88.17		0.020	Kit:P24A3
STX Std 2	SAXITOXIN	0.923 Abs	0.049 µg/L	R ² =0.99988, 68.67		0.050	Kit:P24A3
STX Std 2	SAXITOXIN	0.908 Abs [0.9155] {1.2 C	0.051 µg/L [0.050]	R ² =0.99988, 67.56		0.050	Kit:P24A3
STX Std 3	SAXITOXIN	0.620 Abs	0.101 µg/L	R ² =0.99988, 46.13		0.100	Kit:P24A3
STX Std 3	SAXITOXIN	0.615 Abs [0.6175] {0.6 C	0.102 µg/L [0.102]	R ² =0.99988, 45.75		0.100	Kit:P24A3
STX Std 4	SAXITOXIN	0.388 Abs	0.195 µg/L	R ² =0.99988, 28.86		0.200	Kit:P24A3
STX Std 4	SAXITOXIN	0.388 Abs [0.3880] {0.0 C	0.195 µg/L [0.195]	R ² =0.99988, 28.86		0.200	Kit:P24A3
STX Std 5	SAXITOXIN	0.235 Abs	> 0.400 µg/L	17.485 %Abs		0.400	Kit:P24A3
STX Std 5	SAXITOXIN	0.236 Abs [0.2355] {0.3 C	> 0.400 µg/L	17.560 %Abs		0.400	Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.775 Abs	0.070 µg/L	57.664 %Abs			Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.765 Abs [0.7700] {0.9 C	0.072 µg/L [0.071]	56.920 %Abs [57.2			Kit:P24A3

Note

Signature *David Jordan*

David Jordan 7/11/2024

* 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) 7/11/2024 2:29:18 PM

Test Report (by Request)

Test Information

Request: 7/11/2024 2:07:25 PM
Date: 7/11/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.390 Abs	0.000 µg/L	Low, 103.423 %Abs		0.020 - 0.400	Kit:P24A3
LRB	SAXITOXIN	1.410 Abs [1.4000] {1.0 C	0.000 µg/L [0.000]	Low, 104.911 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.705 Abs	0.083 µg/L	52.455 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.680 Abs [0.6925] {2.6 C	0.088 µg/L [0.086]	50.595 %Abs [51.5		0.020 - 0.400	Kit:P24A3
AC40776	SAXITOXIN	1.352 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40776	SAXITOXIN	1.354 Abs [1.3530] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40777	SAXITOXIN	1.234 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40777	SAXITOXIN	1.242 Abs [1.2380] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40778	SAXITOXIN	1.407 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40778	SAXITOXIN	1.420 Abs [1.4135] {0.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40779	SAXITOXIN	1.407 Abs	0.000 µg/L	Low, 104.688 %Abs		0.020 - 0.400	Kit:P24A3
AC40779	SAXITOXIN	1.410 Abs [1.4085] {0.2 C	0.000 µg/L [0.000]	Low, 104.911 %Abs		0.020 - 0.400	Kit:P24A3
AC40780	SAXITOXIN	1.120 Abs	0.030 µg/L	83.333 %Abs	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40780	SAXITOXIN	1.125 Abs [1.1225] {0.3 C	0.029 µg/L [0.030]	83.705 %Abs [83.5	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40781	SAXITOXIN	1.355 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40781	SAXITOXIN	1.353 Abs [1.3540] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40782	SAXITOXIN	1.372 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40782	SAXITOXIN	1.394 Abs [1.3830] {1.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40783	SAXITOXIN	1.366 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40783	SAXITOXIN	1.353 Abs [1.3595] {0.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40783MS	SAXITOXIN	0.682 Abs	0.087 µg/L	50.744 %Abs		0.020 - 0.400	Kit:P24A3
AC40783MS	SAXITOXIN	0.685 Abs [0.6835] {0.3 C	0.087 µg/L [0.087]	50.967 %Abs [50.8		0.020 - 0.400	Kit:P24A3
AC40783MSD	SAXITOXIN	0.671 Abs	0.089 µg/L	49.926 %Abs		0.020 - 0.400	Kit:P24A3
AC40783MSD	SAXITOXIN	0.672 Abs [0.6715] {0.1 C	0.089 µg/L [0.089]	50.000 %Abs [49.9		0.020 - 0.400	Kit:P24A3
AC40784	SAXITOXIN	1.336 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40784	SAXITOXIN	1.385 Abs [1.3605] {2.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40785	SAXITOXIN	1.429 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40785	SAXITOXIN	1.433 Abs [1.4310] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40786	SAXITOXIN	1.398 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40786	SAXITOXIN	1.402 Abs [1.4000] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40787	SAXITOXIN	1.417 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40787	SAXITOXIN	1.447 Abs [1.4320] {1.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40788	SAXITOXIN	1.304 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC40788	SAXITOXIN	1.320 Abs [1.3120] {0.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3

Note

Signature *David Jordan*

David Jordan 7/11/2024

* 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) 7/11/2024 2:29:18 PM

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
7/11/2024 2:06:10 PM				
STX Std 0	1.366 Abs	0.000 µg/L	R ² =0.99988, 101.637 %Abs	RK1:30->A07@2
STX Std 0	1.321 Abs [1.3435] {2.4 CV}	0.005 µg/L [0.003] {141.4 CV}	R ² =0.99988, 98.289 %Abs	RK1:30->B07@2
STX Std 1	1.185 Abs	0.020 µg/L	R ² =0.99988, 88.170 %Abs	RK1:31->C07@2
STX Std 1	1.185 Abs [1.1850] {0.0 CV}	0.020 µg/L [0.020] {0.0 CV}	R ² =0.99988, 88.170 %Abs	RK1:31->D07@2
STX Std 2	0.923 Abs	0.049 µg/L	R ² =0.99988, 68.676 %Abs	RK1:32->E07@2
STX Std 2	0.908 Abs [0.9155] {1.2 CV}	0.051 µg/L [0.050] {2.8 CV}	R ² =0.99988, 67.560 %Abs	RK1:32->F07@3
STX Std 3	0.620 Abs	0.101 µg/L	R ² =0.99988, 46.131 %Abs	RK1:33->G07@3
STX Std 3	0.615 Abs [0.6175] {0.6 CV}	0.102 µg/L [0.102] {0.7 CV}	R ² =0.99988, 45.759 %Abs	RK1:33->H07@3
STX Std 4	0.388 Abs	0.195 µg/L	R ² =0.99988, 28.869 %Abs	RK1:34->A08@2
STX Std 4	0.388 Abs [0.3880] {0.0 CV}	0.195 µg/L [0.195] {0.0 CV}	R ² =0.99988, 28.869 %Abs	RK1:34->B08@2
STX Std 5	0.235 Abs	> 0.400 µg/L	17.485 %Abs	RK1:35->C08@2
STX Std 5	0.236 Abs [0.2355] {0.3 CV}	> 0.400 µg/L	17.560 %Abs	RK1:35->D08@2

7/11/2024 2:06:10 PM				
STX Control (0.060-0.090)	0.775 Abs	0.070 µg/L	57.664 %Abs	RK1:36->E08@2
STX Control (0.060-0.090)	0.765 Abs [0.7700] {0.9 CV}	0.072 µg/L [0.071] {2.0 CV}	56.920 %Abs [57.292 %Abs]	RK1:36->F08@3

Statistic				
STX Std 0 [MEAN]	1.3435	0.0025		
STX Std 0 [SD]	0.0318	0.0035		
STX Std 0 [%CV]	2.3684	141.4214		
STX Std 1 [MEAN]	1.1850	0.0200		
STX Std 1 [SD]	0.0000	0.0000		
STX Std 1 [%CV]	0.0000	0.0000		
STX Std 1 [%DIFF]		0.0000		
STX Std 2 [MEAN]	0.9155	0.0500		
STX Std 2 [SD]	0.0106	0.0014		
STX Std 2 [%CV]	1.1586	2.8284		
STX Std 2 [%DIFF]		-0.0000		
STX Std 3 [MEAN]	0.6175	0.1015		
STX Std 3 [SD]	0.0035	0.0007		
STX Std 3 [%CV]	0.5726	0.6967		
STX Std 3 [%DIFF]		1.5000		
STX Std 4 [MEAN]	0.3880	0.1950		
STX Std 4 [SD]	0.0000	0.0000		
STX Std 4 [%CV]	0.0000	0.0000		
STX Std 4 [%DIFF]		-2.5000		
STX Std 5 [MEAN]	0.2355			
STX Std 5 [SD]	0.0007			
STX Std 5 [%CV]	0.3003			

Name	Absorbance	Concentration	Interpretation	Position
STX Control (0.060-0.090) [MEAN]	0.7700	0.0710		
STX Control (0.060-0.090) [SD]	0.0071	0.0014		
STX Control (0.060-0.090) [%CV]	0.9183	1.9918		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.3446
 B = 1.4062
 C = 0.076366
 D = 0.13161
 R2 coef = 0.99988
 50% = 0.089

