



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC41195	Cecil M. Harden Lake - Raccoon Lake SRA Beach	8/5/2024	8/7/2024	< 0.05
AC41196	Cagles Mill Lake - Lieber SRA Beach	8/5/2024	8/7/2024	< 0.05
AC41197	Monroe Lake - Fairfax SRA Beach	8/5/2024	8/7/2024	< 0.05
AC41198	Monroe Lake - Paynetown SRA Beach	8/5/2024	8/7/2024	< 0.05
AC41199	Starve Hollow SRA - Starve Hollow Lake Beach	8/5/2024	8/7/2024	< 0.05
AC41200	Whitewater Memorial SP - Whitewater Lake Beach	8/6/2024	8/7/2024	< 0.05
AC41201	Brookville Lake - Quakertown SRA Beach	8/6/2024	8/7/2024	< 0.05
AC41202	Brookville Lake - Mounds SRA Beach	8/6/2024	8/7/2024	< 0.05
AC41203	Hardy Lake SRA - Hardy Lake SRA Beach	8/6/2024	8/7/2024	< 0.05
AC41204	Deam Lake SRA - Deam Lake Beach	8/6/2024	8/7/2024	< 0.05
AC41205	Cagles Mill Lake - Lieber SRA Beach (Field Duplicate)	8/5/2024	8/7/2024	< 0.05
AC41206	Field Blank	8/5/2024	8/7/2024	< 0.05
AC41207	Ft. Ben Harrison SP Dog Lake	8/6/2024	8/7/2024	< 0.05

Test Report (by Request)

Test Information

Request: 8/7/2024 2:05:05 PM
 Date: 8/7/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.425 Abs	0.000 µg/L	R^2=0.99999, 100.1		0.000	Kit:P24A3
STX Std 0	SAXITOXIN	1.420 Abs [1.4225] {0.2 C	0.001 µg/L [0.001]	R^2=0.99999, 99.78		0.000	Kit:P24A3
STX Std 1	SAXITOXIN	1.217 Abs	0.020 µg/L	R^2=0.99999, 85.52		0.020	Kit:P24A3
STX Std 1	SAXITOXIN	1.211 Abs [1.2140] {0.3 C	0.020 µg/L [0.020]	R^2=0.99999, 85.10		0.020	Kit:P24A3
STX Std 2	SAXITOXIN	0.920 Abs	0.050 µg/L	R^2=0.99999, 64.65		0.050	Kit:P24A3
STX Std 2	SAXITOXIN	0.909 Abs [0.9145] {0.9 C	0.051 µg/L [0.051]	R^2=0.99999, 63.87		0.050	Kit:P24A3
STX Std 3	SAXITOXIN	0.636 Abs	0.098 µg/L	R^2=0.99999, 44.65		0.100	Kit:P24A3
STX Std 3	SAXITOXIN	0.621 Abs [0.6285] {1.7 C	0.102 µg/L [0.100]	R^2=0.99999, 43.64		0.100	Kit:P24A3
STX Std 4	SAXITOXIN	0.396 Abs	0.194 µg/L	R^2=0.99999, 27.82		0.200	Kit:P24A3
STX Std 4	SAXITOXIN	0.379 Abs [0.3875] {3.1 C	0.206 µg/L [0.200]	R^2=0.99999, 26.63		0.200	Kit:P24A3
STX Std 5	SAXITOXIN	0.239 Abs	> 0.400 µg/L	16.796 %Abs		0.400	Kit:P24A3
STX Std 5	SAXITOXIN	0.238 Abs [0.2385] {0.3 C	> 0.400 µg/L	16.725 %Abs		0.400	Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.779 Abs	0.070 µg/L	54.744 %Abs			Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.753 Abs [0.7660] {2.4 C	0.074 µg/L [0.072]	52.916 %Abs [53.8			Kit:P24A3

Note

Signature *David Jordan*
 David Jordan 8/7/2024

Test Report (by Request)

Test Information

Request: 8/7/2024 2:06:21 PM
Date: 8/7/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.443 Abs	0.000 µg/L	Low, 101.405 %Abs		0.020 - 0.400	Kit:P24A3
LRB	SAXITOXIN	1.461 Abs [1.4520] {0.9 C	0.000 µg/L [0.000]	Low, 102.670 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.703 Abs	0.084 µg/L	49.403 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.693 Abs [0.6980] {1.0 C	0.086 µg/L [0.085]	48.700 %Abs [49.0		0.020 - 0.400	Kit:P24A3
AC41195	SAXITOXIN	1.383 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41195	SAXITOXIN	1.383 Abs [1.3830] {0.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41196	SAXITOXIN	1.358 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41196	SAXITOXIN	1.330 Abs [1.3440] {1.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41197	SAXITOXIN	1.434 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41197	SAXITOXIN	1.418 Abs [1.4260] {0.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41198	SAXITOXIN	1.375 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41198	SAXITOXIN	1.361 Abs [1.3680] {0.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41199	SAXITOXIN	1.103 Abs	0.033 µg/L	77.512 %Abs	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41199	SAXITOXIN	1.107 Abs [1.1050] {0.3 C	0.033 µg/L [0.033]	77.793 %Abs [77.6	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41200	SAXITOXIN	1.399 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41200	SAXITOXIN	1.397 Abs [1.3980] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41200MS	SAXITOXIN	0.701 Abs	0.084 µg/L	49.262 %Abs		0.020 - 0.400	Kit:P24A3
AC41200MS	SAXITOXIN	0.697 Abs [0.6990] {0.4 C	0.085 µg/L [0.085]	48.981 %Abs [49.1		0.020 - 0.400	Kit:P24A3
AC41200MSD	SAXITOXIN	0.686 Abs	0.087 µg/L	48.208 %Abs		0.020 - 0.400	Kit:P24A3
AC41200MSD	SAXITOXIN	0.681 Abs [0.6835] {0.5 C	0.088 µg/L [0.088]	47.857 %Abs [48.0		0.020 - 0.400	Kit:P24A3
AC41201	SAXITOXIN	1.388 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41201	SAXITOXIN	1.396 Abs [1.3920] {0.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41202	SAXITOXIN	1.386 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41202	SAXITOXIN	1.361 Abs [1.3735] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41203	SAXITOXIN	1.395 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41203	SAXITOXIN	1.387 Abs [1.3910] {0.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41204	SAXITOXIN	1.415 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41204	SAXITOXIN	1.413 Abs [1.4140] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41205	SAXITOXIN	1.379 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41205	SAXITOXIN	1.380 Abs [1.3795] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41206	SAXITOXIN	1.483 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41206	SAXITOXIN	1.463 Abs [1.4730] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41207	SAXITOXIN	1.405 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41207	SAXITOXIN	1.373 Abs [1.3890] {1.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3

Note

Signature *David Jordan*

David Jordan 8/7/2024

* 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) 8/7/2024 2:12:49 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
8/7/2024 2:05:05 PM				
STX Std 0	1.425 Abs	0.000 µg/L	R ² =0.99999, 100.141 %Abs	RK1:30->A07@2
STX Std 0	1.420 Abs [1.4225] {0.2 CV}	0.001 µg/L [0.001] {141.4 CV}	R ² =0.99999, 99.789 %Abs	RK1:30->B07@2
STX Std 1	1.217 Abs	0.020 µg/L	R ² =0.99999, 85.524 %Abs	RK1:31->C07@2
STX Std 1	1.211 Abs [1.2140] {0.3 CV}	0.020 µg/L [0.020] {0.0 CV}	R ² =0.99999, 85.102 %Abs	RK1:31->D07@2
STX Std 2	0.920 Abs	0.050 µg/L	R ² =0.99999, 64.652 %Abs	RK1:32->E07@2
STX Std 2	0.909 Abs [0.9145] {0.9 CV}	0.051 µg/L [0.051] {1.4 CV}	R ² =0.99999, 63.879 %Abs	RK1:32->F07@3
STX Std 3	0.636 Abs	0.098 µg/L	R ² =0.99999, 44.694 %Abs	RK1:33->G07@3
STX Std 3	0.621 Abs [0.6285] {1.7 CV}	0.102 µg/L [0.100] {2.8 CV}	R ² =0.99999, 43.640 %Abs	RK1:33->H07@3
STX Std 4	0.396 Abs	0.194 µg/L	R ² =0.99999, 27.829 %Abs	RK1:34->A08@2
STX Std 4	0.379 Abs [0.3875] {3.1 CV}	0.206 µg/L [0.200] {4.2 CV}	R ² =0.99999, 26.634 %Abs	RK1:34->B08@2
STX Std 5	0.239 Abs	> 0.400 µg/L	16.796 %Abs	RK1:35->C08@2
STX Std 5	0.238 Abs [0.2385] {0.3 CV}	> 0.400 µg/L	16.725 %Abs	RK1:35->D08@2

8/7/2024 2:05:05 PM				
STX Control (0.060-0.090)	0.779 Abs	0.070 µg/L	54.744 %Abs	RK1:36->E08@2
STX Control (0.060-0.090)	0.753 Abs [0.7660] {2.4 CV}	0.074 µg/L [0.072] {3.9 CV}	52.916 %Abs [53.830 %Abs]	RK1:36->F08@3

Statistic				
STX Std 0 [MEAN]	1.4225	0.0005		
STX Std 0 [SD]	0.0035	0.0007		
STX Std 0 [%CV]	0.2485	141.4214		
STX Std 1 [MEAN]	1.2140	0.0200		
STX Std 1 [SD]	0.0042	0.0000		
STX Std 1 [%CV]	0.3495	0.0000		
STX Std 1 [%DIFF]		0.0000		
STX Std 2 [MEAN]	0.9145	0.0505		
STX Std 2 [SD]	0.0078	0.0007		
STX Std 2 [%CV]	0.8505	1.4002		
STX Std 2 [%DIFF]		1.0000		
STX Std 3 [MEAN]	0.6285	0.1000		
STX Std 3 [SD]	0.0106	0.0028		
STX Std 3 [%CV]	1.6876	2.8284		
STX Std 3 [%DIFF]		-0.0000		
STX Std 4 [MEAN]	0.3875	0.2000		
STX Std 4 [SD]	0.0120	0.0085		
STX Std 4 [%CV]	3.1021	4.2426		
STX Std 4 [%DIFF]		-0.0000		
STX Std 5 [MEAN]	0.2385			
STX Std 5 [SD]	0.0007			
STX Std 5 [%CV]	0.2965			

Name	Absorbance	Concentration	Interpretation	Position
STX Control (0.060-0.090) [MEAN]	0.7660	0.0720		
STX Control (0.060-0.090) [SD]	0.0184	0.0028		
STX Control (0.060-0.090) [%CV]	2.4001	3.9284		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.4236
 B = 1.2927
 C = 0.071608
 D = 0.11186
 R2 coef = 0.99999
 50% = 0.082

