



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC41095	Cecil M. Harden Lake - Raccoon Lake SRA Beach	7/22/2024	7/24/2024	< 0.05
AC41096	Cagles Mill Lake - Lieber SRA Beach	7/22/2024	7/24/2024	< 0.05
AC41097	Starve Hollow SRA - Starve Hollow Lake Beach	7/22/2024	7/24/2024	< 0.05
AC41098	Hardy Lake SRA - Hardy Lake SRA Beach	7/22/2024	7/24/2024	< 0.05
AC41099	Whitewater Memorial SP - Whitewater Lake Beach	7/23/2024	7/24/2024	< 0.05
AC41100	Brookville Lake - Quakertown SRA Beach	7/23/2024	7/24/2024	< 0.05
AC41101	Brookville Lake - Mounds SRA Beach	7/23/2024	7/24/2024	< 0.05
AC41102	Whitewater Memorial SP - Whitewater Lake Beach (Field Duplicate)	7/22/2024	7/24/2024	< 0.05
AC41103	Field Blank	7/22/2024	7/24/2024	< 0.05
AC41104	Ft. Ben Harrison SP Dog Lake	7/23/2024	7/24/2024	< 0.05

Test Report (by Request)

Test Information

Request: 7/24/2024 12:54:02 PM
 Date: 7/24/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.429 Abs	0.000 µg/L	R^2=0.99972, 100.0		0.000	Kit:P24A3
STX Std 0	SAXITOXIN	1.430 Abs [1.4295] {0.0 C	0.000 µg/L [0.000]	R^2=0.99972, 100.0		0.000	Kit:P24A3
STX Std 1	SAXITOXIN	1.208 Abs	0.021 µg/L	R^2=0.99972, 84.47		0.020	Kit:P24A3
STX Std 1	SAXITOXIN	1.210 Abs [1.2090] {0.1 C	0.020 µg/L [0.021]	R^2=0.99972, 84.61		0.020	Kit:P24A3
STX Std 2	SAXITOXIN	0.921 Abs	0.049 µg/L	R^2=0.99972, 64.40		0.050	Kit:P24A3
STX Std 2	SAXITOXIN	0.925 Abs [0.9230] {0.3 C	0.049 µg/L [0.049]	R^2=0.99972, 64.68		0.050	Kit:P24A3
STX Std 3	SAXITOXIN	0.613 Abs	0.103 µg/L	R^2=0.99972, 42.86		0.100	Kit:P24A3
STX Std 3	SAXITOXIN	0.610 Abs [0.6115] {0.3 C	0.103 µg/L [0.103]	R^2=0.99972, 42.65		0.100	Kit:P24A3
STX Std 4	SAXITOXIN	0.394 Abs	0.194 µg/L	R^2=0.99972, 27.55		0.200	Kit:P24A3
STX Std 4	SAXITOXIN	0.392 Abs [0.3930] {0.4 C	0.195 µg/L [0.195]	R^2=0.99972, 27.41		0.200	Kit:P24A3
STX Std 5	SAXITOXIN	0.244 Abs	0.398 µg/L	R^2=0.99972, 17.06		0.400	Kit:P24A3
STX Std 5	SAXITOXIN	0.237 Abs [0.2405] {2.1 C	> 0.400 µg/L [0.39	16.573 %Abs		0.400	Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.791 Abs	0.067 µg/L	55.315 %Abs			Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.791 Abs [0.7910] {0.0 C	0.067 µg/L [0.067]	55.315 %Abs [55.3			Kit:P24A3

Note

Signature David Jordan

David Jordan 7/24/2024

* 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) 7/24/2024 12:59:08 PM

Test Report (by Request)

Test Information

Request: 7/24/2024 12:55:15 PM
Date: 7/24/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.380 Abs	0.006 µg/L	Low, 96.504 %Abs		0.020 - 0.400	Kit:P24A3
LRB	SAXITOXIN	1.402 Abs [1.3910] {1.1 C	0.004 µg/L [0.005]	Low, 98.042 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.709 Abs	0.081 µg/L	49.580 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.687 Abs [0.6980] {2.2 C	0.086 µg/L [0.084]	48.042 %Abs [48.8		0.020 - 0.400	Kit:P24A3
AC41095	SAXITOXIN	1.376 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41095	SAXITOXIN	1.379 Abs [1.3775] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41096	SAXITOXIN	1.309 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41096	SAXITOXIN	1.303 Abs [1.3060] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41097	SAXITOXIN	1.163 Abs	0.026 µg/L	81.329 %Abs	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41097	SAXITOXIN	1.170 Abs [1.1665] {0.4 C	0.026 µg/L [0.026]	81.818 %Abs [81.5	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41097MS	SAXITOXIN	0.628 Abs	0.099 µg/L	43.916 %Abs		0.020 - 0.400	Kit:P24A3
AC41097MS	SAXITOXIN	0.624 Abs [0.6260] {0.5 C	0.100 µg/L [0.100]	43.636 %Abs [43.7		0.020 - 0.400	Kit:P24A3
AC41097MSD	SAXITOXIN	0.613 Abs	0.103 µg/L	42.867 %Abs		0.020 - 0.400	Kit:P24A3
AC41097MSD	SAXITOXIN	0.613 Abs [0.6130] {0.0 C	0.103 µg/L [0.103]	42.867 %Abs [42.8		0.020 - 0.400	Kit:P24A3
AC41098	SAXITOXIN	1.346 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41098	SAXITOXIN	1.352 Abs [1.3490] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41099	SAXITOXIN	1.372 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41099	SAXITOXIN	1.350 Abs [1.3610] {1.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41100	SAXITOXIN	1.374 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41100	SAXITOXIN	1.374 Abs [1.3740] {0.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41101	SAXITOXIN	1.346 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41101	SAXITOXIN	1.362 Abs [1.3540] {0.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41102	SAXITOXIN	1.369 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41102	SAXITOXIN	1.384 Abs [1.3765] {0.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41103	SAXITOXIN	1.417 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41103	SAXITOXIN	1.450 Abs [1.4335] {1.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41104	SAXITOXIN	1.315 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41104	SAXITOXIN	1.343 Abs [1.3290] {1.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3

Note

Signature *David Jordan*

David Jordan 7/24/2024

* 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) 7/24/2024 12:59:08 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
7/24/2024 12:54:02 PM				
STX Std 0	1.429 Abs	0.000 µg/L	R ² =0.99972, 100.000 %Abs	RK1:30->A07@2
STX Std 0	1.430 Abs [1.4295] {0.0 CV}	0.000 µg/L [0.000]	R ² =0.99972, 100.000 %Abs	RK1:30->B07@2
STX Std 1	1.208 Abs	0.021 µg/L	R ² =0.99972, 84.476 %Abs	RK1:31->C07@2
STX Std 1	1.210 Abs [1.2090] {0.1 CV}	0.020 µg/L [0.021] {3.4 CV}	R ² =0.99972, 84.615 %Abs	RK1:31->D07@2
STX Std 2	0.921 Abs	0.049 µg/L	R ² =0.99972, 64.406 %Abs	RK1:32->E07@2
STX Std 2	0.925 Abs [0.9230] {0.3 CV}	0.049 µg/L [0.049] {0.0 CV}	R ² =0.99972, 64.685 %Abs	RK1:32->F07@3
STX Std 3	0.613 Abs	0.103 µg/L	R ² =0.99972, 42.867 %Abs	RK1:33->G07@3
STX Std 3	0.610 Abs [0.6115] {0.3 CV}	0.103 µg/L [0.103] {0.0 CV}	R ² =0.99972, 42.657 %Abs	RK1:33->H07@3
STX Std 4	0.394 Abs	0.194 µg/L	R ² =0.99972, 27.552 %Abs	RK1:34->A08@2
STX Std 4	0.392 Abs [0.3930] {0.4 CV}	0.195 µg/L [0.195] {0.4 CV}	R ² =0.99972, 27.413 %Abs	RK1:34->B08@2
STX Std 5	0.244 Abs	0.398 µg/L	R ² =0.99972, 17.063 %Abs	RK1:35->C08@2
STX Std 5	0.237 Abs [0.2405] {2.1 CV}	> 0.400 µg/L [0.398]	16.573 %Abs	RK1:35->D08@2

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STX Control (0.060-0.090)	0.791 Abs	0.067 µg/L	55.315 %Abs	RK1:36->E08@2
STX Control (0.060-0.090)	0.791 Abs [0.7910] {0.0 CV}	0.067 µg/L [0.067] {0.0 CV}	55.315 %Abs [55.315 %Abs]	RK1:36->F08@3

Statistic				
STX Std 0 [MEAN]	1.4295	0.0000		
STX Std 0 [SD]	0.0007	0.0000		
STX Std 0 [%CV]	0.0495	0.0000		
STX Std 1 [MEAN]	1.2090	0.0205		
STX Std 1 [SD]	0.0014	0.0007		
STX Std 1 [%CV]	0.1170	3.4493		
STX Std 1 [%DIFF]		2.5000		
STX Std 2 [MEAN]	0.9230	0.0490		
STX Std 2 [SD]	0.0028	0.0000		
STX Std 2 [%CV]	0.3064	0.0000		
STX Std 2 [%DIFF]		-2.0000		
STX Std 3 [MEAN]	0.6115	0.1030		
STX Std 3 [SD]	0.0021	0.0000		
STX Std 3 [%CV]	0.3469	0.0000		
STX Std 3 [%DIFF]		3.0000		
STX Std 4 [MEAN]	0.3930	0.1945		
STX Std 4 [SD]	0.0014	0.0007		
STX Std 4 [%CV]	0.3599	0.3635		
STX Std 4 [%DIFF]		-2.7500		
STX Std 5 [MEAN]	0.2405			
STX Std 5 [SD]	0.0049			
STX Std 5 [%CV]	2.0581			

Name	Absorbance	Concentration	Interpretation	Position
STX Control (0.060-0.090) [MEAN]	0.7910	0.0670		
STX Control (0.060-0.090) [SD]	0.0000	0.0000		
STX Control (0.060-0.090) [%CV]	0.0000	0.0000		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.4290
 B = 1.3028
 C = 0.069480
 D = 0.12210
 R2 coef = 0.99972
 50% = 0.080

