



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC41107	Potato Creek SP - Worster Lake Beach	7/29/2024	7/30/2024	< 0.05
AC41108	Mississinewa Lake - Miami SRA Beach	7/29/2024	7/30/2024	< 0.05
AC41109	Salamonie Lake - Lost Bridge West SRA Beach	7/29/2024	7/30/2024	< 0.05
AC41110	Potato Creek SP - Worster Lake Beach (Field Duplicate)	7/29/2024	7/30/2024	< 0.05
AC41111	Field Blank	7/29/2024	7/30/2024	< 0.05
AC41112	Patoka Lake - Newton Stewart SRA Beach	7/29/2024	7/30/2024	< 0.05

Test Report (by Request)

Test Information

Request: 7/30/2024 3:16:28 PM
Date: 7/30/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.429 Abs	0.000 µg/L	R^2=0.99940, 100.4		0.000	Kit:P24A3
STX Std 0	SAXITOXIN	1.414 Abs [1.4215] {0.7 C	0.001 µg/L [0.001]	R^2=0.99940, 99.43		0.000	Kit:P24A3
STX Std 1	SAXITOXIN	1.202 Abs	0.021 µg/L	R^2=0.99940, 84.52		0.020	Kit:P24A3
STX Std 1	SAXITOXIN	1.208 Abs [1.2050] {0.4 C	0.020 µg/L [0.021]	R^2=0.99940, 84.95		0.020	Kit:P24A3
STX Std 2	SAXITOXIN	0.928 Abs	0.047 µg/L	R^2=0.99940, 65.26		0.050	Kit:P24A3
STX Std 2	SAXITOXIN	0.910 Abs [0.9190] {1.4 C	0.049 µg/L [0.048]	R^2=0.99940, 63.95		0.050	Kit:P24A3
STX Std 3	SAXITOXIN	0.600 Abs	0.102 µg/L	R^2=0.99940, 42.15		0.100	Kit:P24A3
STX Std 3	SAXITOXIN	0.585 Abs [0.5925] {1.8 C	0.106 µg/L [0.104]	R^2=0.99940, 41.13		0.100	Kit:P24A3
STX Std 4	SAXITOXIN	0.389 Abs	0.191 µg/L	R^2=0.99940, 27.35		0.200	Kit:P24A3
STX Std 4	SAXITOXIN	0.385 Abs [0.3870] {0.7 C	0.193 µg/L [0.192]	R^2=0.99940, 27.07		0.200	Kit:P24A3
STX Std 5	SAXITOXIN	0.240 Abs	> 0.400 µg/L	16.878 %Abs		0.400	Kit:P24A3
STX Std 5	SAXITOXIN	0.241 Abs [0.2405] {0.3 C	> 0.400 µg/L	16.948 %Abs		0.400	Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.798 Abs	0.064 µg/L	56.118 %Abs			Kit:P24A3
STX Control (0.060-0.090)	SAXITOXIN	0.788 Abs [0.7930] {0.9 C	0.066 µg/L [0.065]	55.415 %Abs [55.7			Kit:P24A3

Note

Signature *David Jordan*

David Jordan 7/30/2024

* 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) 7/30/2024 3:26:07 PM

Test Report (by Request)

Test Information

Request: 7/30/2024 3:17:22 PM
Date: 7/30/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.372 Abs	0.006 µg/L	Low, 96.484 %Abs		0.020 - 0.400	Kit:P24A3
LRB	SAXITOXIN	1.413 Abs [1.3925] {2.1 C	0.002 µg/L [0.004]	Low, 99.367 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.697 Abs	0.081 µg/L	49.015 %Abs		0.020 - 0.400	Kit:P24A3
LFB (SAX)	SAXITOXIN	0.694 Abs [0.6955] {0.3 C	0.082 µg/L [0.082]	48.804 %Abs [48.9		0.020 - 0.400	Kit:P24A3
AC41107	SAXITOXIN	1.251 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41107	SAXITOXIN	1.260 Abs [1.2555] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41108	SAXITOXIN	1.356 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41108	SAXITOXIN	1.376 Abs [1.3660] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41109	SAXITOXIN	1.084 Abs	0.034 µg/L	76.231 %Abs	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41109	SAXITOXIN	1.076 Abs [1.0800] {0.5 C	0.035 µg/L [0.035]	75.668 %Abs [75.9	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41109MS	SAXITOXIN	0.588 Abs	0.106 µg/L	41.350 %Abs		0.020 - 0.400	Kit:P24A3
AC41109MS	SAXITOXIN	0.592 Abs [0.5900] {0.5 C	0.105 µg/L [0.106]	41.632 %Abs [41.4		0.020 - 0.400	Kit:P24A3
AC41109MSD	SAXITOXIN	0.589 Abs	0.105 µg/L	41.421 %Abs		0.020 - 0.400	Kit:P24A3
AC41109MSD	SAXITOXIN	0.601 Abs [0.5950] {1.4 C	0.102 µg/L [0.104]	42.264 %Abs [41.8		0.020 - 0.400	Kit:P24A3
AC41110	SAXITOXIN	1.243 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41110	SAXITOXIN	1.260 Abs [1.2515] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41111	SAXITOXIN	1.420 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41111	SAXITOXIN	1.458 Abs [1.4390] {1.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41112	SAXITOXIN	1.428 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3
AC41112	SAXITOXIN	1.413 Abs [1.4205] {0.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:P24A3

Note

Signature *David Jordan*

David Jordan 7/30/2024

* A - Abs > 3; IA - Initial Abs; DA - Delta Abs; SD - SD of Abs; LR - Linear Range; [...] - Mean result of duplicate tests

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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
7/30/2024 3:16:28 PM				
STX Std 0	1.429 Abs	0.000 µg/L	R ² =0.99940, 100.492 %Abs	RK1:30->A06@1
STX Std 0	1.414 Abs [1.4215] {0.7 CV}	0.001 µg/L [0.001] {141.4 CV}	R ² =0.99940, 99.437 %Abs	RK1:30->B06@1
STX Std 1	1.202 Abs	0.021 µg/L	R ² =0.99940, 84.529 %Abs	RK1:31->C06@1
STX Std 1	1.208 Abs [1.2050] {0.4 CV}	0.020 µg/L [0.021] {3.4 CV}	R ² =0.99940, 84.951 %Abs	RK1:31->D06@1
STX Std 2	0.928 Abs	0.047 µg/L	R ² =0.99940, 65.260 %Abs	RK1:32->E06@1
STX Std 2	0.910 Abs [0.9190] {1.4 CV}	0.049 µg/L [0.048] {2.9 CV}	R ² =0.99940, 63.994 %Abs	RK1:32->F06@4
STX Std 3	0.600 Abs	0.102 µg/L	R ² =0.99940, 42.194 %Abs	RK1:33->G06@4
STX Std 3	0.585 Abs [0.5925] {1.8 CV}	0.106 µg/L [0.104] {2.7 CV}	R ² =0.99940, 41.139 %Abs	RK1:33->H06@4
STX Std 4	0.389 Abs	0.191 µg/L	R ² =0.99940, 27.356 %Abs	RK1:34->A07@2
STX Std 4	0.385 Abs [0.3870] {0.7 CV}	0.193 µg/L [0.192] {0.7 CV}	R ² =0.99940, 27.075 %Abs	RK1:34->B07@2
STX Std 5	0.240 Abs	> 0.400 µg/L	16.878 %Abs	RK1:35->C07@2
STX Std 5	0.241 Abs [0.2405] {0.3 CV}	> 0.400 µg/L	16.948 %Abs	RK1:35->D07@2

7/30/2024 3:16:28 PM				
STX Control (0.060-0.090)	0.798 Abs	0.064 µg/L	56.118 %Abs	RK1:36->E07@2
STX Control (0.060-0.090)	0.788 Abs [0.7930] {0.9 CV}	0.066 µg/L [0.065] {2.2 CV}	55.415 %Abs [55.767 %Abs]	RK1:36->F07@3

Statistic				
STX Std 0 [MEAN]	1.4215	0.0005		
STX Std 0 [SD]	0.0106	0.0007		
STX Std 0 [%CV]	0.7462	141.4214		
STX Std 1 [MEAN]	1.2050	0.0205		
STX Std 1 [SD]	0.0042	0.0007		
STX Std 1 [%CV]	0.3521	3.4493		
STX Std 1 [%DIFF]		2.5000		
STX Std 2 [MEAN]	0.9190	0.0480		
STX Std 2 [SD]	0.0127	0.0014		
STX Std 2 [%CV]	1.3850	2.9463		
STX Std 2 [%DIFF]		-4.0000		
STX Std 3 [MEAN]	0.5925	0.1040		
STX Std 3 [SD]	0.0106	0.0028		
STX Std 3 [%CV]	1.7901	2.7196		
STX Std 3 [%DIFF]		4.0000		
STX Std 4 [MEAN]	0.3870	0.1920		
STX Std 4 [SD]	0.0028	0.0014		
STX Std 4 [%CV]	0.7309	0.7366		
STX Std 4 [%DIFF]		-4.0000		
STX Std 5 [MEAN]	0.2405			
STX Std 5 [SD]	0.0007			
STX Std 5 [%CV]	0.2940			

Name	Absorbance	Concentration	Interpretation	Position
STX Control (0.060-0.090) [MEAN]	0.7930	0.0650		
STX Control (0.060-0.090) [SD]	0.0071	0.0014		
STX Control (0.060-0.090) [%CV]	0.8917	2.1757		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.4202
 B = 1.3589
 C = 0.066802
 D = 0.14089
 R2 coef = 0.99940
 50% = 0.078

