



Saxitoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB42518	Cagles Mill Lake Beach (Field Duplicate)	6/1/2020	6/3/2020	<0.05
AB42519	Field Blank	6/1/2020	6/3/2020	<0.05
AB42520	Cagles Mill Lake Beach	6/1/2020	6/3/2020	<0.05
AB42521	Quakertown SRA	6/1/2020	6/3/2020	<0.05
AB42522	Raccoon Lake SRA	6/1/2020	6/3/2020	<0.05
AB42523	Mounds SRA	6/1/2020	6/3/2020	<0.05

Test Report (by Request)

Test Information

 Request: 6/3/2020 6:47:45 PM
 Date: 6/3/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
STX Std 0	SAXITOXIN	1.557 Abs	0.002 µg/L	R^2=0.99992, 98.857		19J1672
STX Std 0	SAXITOXIN	1.592 Abs [1.5745] {1.6 CV}	0.000 µg/L [0.001] {1}	R^2=0.99992, 101.07		19J1672
STX Std 1	SAXITOXIN	1.318 Abs	0.020 µg/L	R^2=0.99992, 83.683		19J1672
STX Std 1	SAXITOXIN	1.316 Abs [1.3170] {0.1 CV}	0.020 µg/L [0.020] {0}	R^2=0.99992, 83.556		19J1672
STX Std 2	SAXITOXIN	0.969 Abs	0.049 µg/L	R^2=0.99992, 61.524		19J1672
STX Std 2	SAXITOXIN	0.942 Abs [0.9555] {2.0 CV}	0.051 µg/L [0.050] {2}	R^2=0.99992, 59.810		19J1672
STX Std 3	SAXITOXIN	0.624 Abs	0.101 µg/L	R^2=0.99992, 39.619		19J1672
STX Std 3	SAXITOXIN	0.619 Abs [0.6215] {0.6 CV}	0.102 µg/L [0.102] {0}	R^2=0.99992, 39.302		19J1672
STX Std 4	SAXITOXIN	0.387 Abs	0.192 µg/L	R^2=0.99992, 24.571		19J1672
STX Std 4	SAXITOXIN	0.382 Abs [0.3845] {0.9 CV}	0.196 µg/L [0.194] {1}	R^2=0.99992, 24.254		19J1672
STX Std 5	SAXITOXIN	0.232 Abs	> 0.400 µg/L	14.730 %Abs		19J1672
STX Std 5	SAXITOXIN	0.232 Abs [0.2320] {0.0 CV}	> 0.400 µg/L	14.730 %Abs		19J1672
STX Control (0.060-0.090)	SAXITOXIN	0.768 Abs	0.074 µg/L	48.762 %Abs		19J1672
STX Control (0.060-0.090)	SAXITOXIN	0.746 Abs [0.7570] {2.1 CV}	0.077 µg/L [0.075] {2}	47.365 %Abs [48.063]		19J1672

Note

 Signature David Jordan

Date: 6/03/2020

Test Report (by Request)

Test Information

 Request: 6/3/2020 6:48:31 PM
 Date: 6/3/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
LRB	SAXITOXIN	1.612 Abs	0.000 µg/L	LOW, 102.349 %ABS	0.020 - 0.400	19J1672
LRB	SAXITOXIN	1.604 Abs [1.6080] {0.4 CV}	0.000 µg/L [0.000]	LOW, 101.841 %ABS	0.020 - 0.400	19J1672
LFB	SAXITOXIN	0.761 Abs	0.075 µg/L	48.317 %Abs	0.020 - 0.400	19J1672
LFB	SAXITOXIN	0.739 Abs [0.7500] {2.1 CV}	0.078 µg/L [0.076] {2.1 CV}	46.921 %Abs [47.619]	0.020 - 0.400	19J1672
AB42518	SAXITOXIN	1.516 Abs	0.007 µg/L	LOW, 96.254 %ABS	0.020 - 0.400	19J1672
AB42518	SAXITOXIN	1.543 Abs [1.5295] {1.2 CV}	0.004 µg/L [0.006] {1.2 CV}	LOW, 97.968 %ABS	0.020 - 0.400	19J1672
AB42519	SAXITOXIN	1.597 Abs	0.000 µg/L	LOW, 101.397 %ABS	0.020 - 0.400	19J1672
AB42519	SAXITOXIN	1.579 Abs [1.5880] {0.8 CV}	0.000 µg/L [0.000]	LOW, 100.254 %ABS	0.020 - 0.400	19J1672
AB42520	SAXITOXIN	1.577 Abs	0.000 µg/L	LOW, 100.127 %ABS	0.020 - 0.400	19J1672
AB42520	SAXITOXIN	1.571 Abs [1.5740] {0.3 CV}	0.001 µg/L [0.001] {1.0 CV}	LOW, 99.746 %ABS	0.020 - 0.400	19J1672
AB42521	SAXITOXIN	1.538 Abs	0.004 µg/L	LOW, 97.651 %ABS	0.020 - 0.400	19J1672
AB42521	SAXITOXIN	1.525 Abs [1.5315] {0.6 CV}	0.005 µg/L [0.004] {1.5 CV}	LOW, 96.825 %ABS	0.020 - 0.400	19J1672
AB42522	SAXITOXIN	1.569 Abs	0.001 µg/L	LOW, 99.619 %ABS	0.020 - 0.400	19J1672
AB42522	SAXITOXIN	1.554 Abs [1.5615] {0.7 CV}	0.003 µg/L [0.002] {7.0 CV}	LOW, 98.667 %ABS	0.020 - 0.400	19J1672
AB42522MS	SAXITOXIN	0.732 Abs	0.080 µg/L	46.476 %Abs	0.020 - 0.400	19J1672
AB42522MS	SAXITOXIN	0.710 Abs [0.7210] {2.2 CV}	0.083 µg/L [0.081] {2.2 CV}	45.079 %Abs [45.776]	0.020 - 0.400	19J1672
AB42522MSD	SAXITOXIN	0.728 Abs	0.080 µg/L	46.222 %Abs	0.020 - 0.400	19J1672
AB42522MSD	SAXITOXIN	0.718 Abs [0.7230] {1.0 CV}	0.082 µg/L [0.081] {1.0 CV}	45.587 %Abs [45.905]	0.020 - 0.400	19J1672
AB42523	SAXITOXIN	1.593 Abs	0.000 µg/L	LOW, 101.143 %ABS	0.020 - 0.400	19J1672
AB42523	SAXITOXIN	1.589 Abs [1.5910] {0.2 CV}	0.000 µg/L [0.000]	LOW, 100.889 %ABS	0.020 - 0.400	19J1672

Note

 Signature *David Jordan*

Date: 6/03/2020

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: 19J1672

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
6/3/2020 6:47:45 PM				
STX Std 0	1.557 Abs		R ² =0.99992, 98.857 %Abs	RK1:30->A06@1
STX Std 0	1.592 Abs [1.5745] {1.6 CV}		R ² =0.99992, 101.079 %Abs	RK1:30->B06@1
STX Std 1	1.318 Abs		R ² =0.99992, 83.683 %Abs	RK1:31->C06@1
STX Std 1	1.316 Abs [1.3170] {0.1 CV}		R ² =0.99992, 83.556 %Abs	RK1:31->D06@1
STX Std 2	0.969 Abs		R ² =0.99992, 61.524 %Abs	RK1:32->E06@1
STX Std 2	0.942 Abs [0.9555] {2.0 CV}		R ² =0.99992, 59.810 %Abs	RK1:32->F06@4
STX Std 3	0.624 Abs		R ² =0.99992, 39.619 %Abs	RK1:33->G06@4
STX Std 3	0.619 Abs [0.6215] {0.6 CV}		R ² =0.99992, 39.302 %Abs	RK1:33->H06@4
STX Std 4	0.387 Abs		R ² =0.99992, 24.571 %Abs	RK1:34->A07@2
STX Std 4	0.382 Abs [0.3845] {0.9 CV}		R ² =0.99992, 24.254 %Abs	RK1:34->B07@2
STX Std 5	0.232 Abs		14.730 %Abs	RK1:35->C07@2
STX Std 5	0.232 Abs [0.2320] {0.0 CV}		14.730 %Abs	RK1:35->D07@2

6/3/2020 6:47:45 PM				
STX Control (0.060-0.090)	0.768 Abs		48.762 %Abs	RK1:36->E07@2
STX Control (0.060-0.090)	0.746 Abs [0.7570] {2.1 CV}		47.365 %Abs [48.063 %Abs]	RK1:36->F07@3

Statistic				
STX Std 0 [MEAN]	1.5745			
STX Std 0 [SD]	0.0247			
STX Std 0 [%CV]	1.5718			
STX Std 1 [MEAN]	1.3170			
STX Std 1 [SD]	0.0014			
STX Std 1 [%CV]	0.1074			
STX Std 1 [%DIFF]				
STX Std 2 [MEAN]	0.9555			
STX Std 2 [SD]	0.0191			
STX Std 2 [%CV]	1.9981			
STX Std 2 [%DIFF]				
STX Std 3 [MEAN]	0.6215			
STX Std 3 [SD]	0.0035			
STX Std 3 [%CV]	0.5689			
STX Std 3 [%DIFF]				
STX Std 4 [MEAN]	0.3845			
STX Std 4 [SD]	0.0035			
STX Std 4 [%CV]	0.9195			
STX Std 4 [%DIFF]				
STX Std 5 [MEAN]	0.2320			
STX Std 5 [SD]	0.0000			
STX Std 5 [%CV]	0.0000			

Name	Absorbance	Concentration	Interpretation	Position
STX Control (0.060-0.090) [MEAN]	0.7570			
STX Control (0.060-0.090) [SD]	0.0156			
STX Control (0.060-0.090) [%CV]	2.0550			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.5757
 B = 1.3405
 C = 0.062167
 D = 0.12550
 R2 coef = 0.99992
 50% = 0.071

