



Saxitoxin Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ug/L)	% Recovery
LRB	Lab Reagent Blank	7/17/2019	7/17/2019	< 0.05	
LFB	Lab Fortified Blank (True value = 0.10)	7/17/2019	7/17/2019	0.087	87
AB39870	Pokagon State Park	7/16/2019	7/17/2019	< 0.05	
AB39870MS	Pokagon (Matrix Spike, True Value = 0.10)	7/17/2019	7/17/2019	0.10	88
AB39870MSD	Pokagon (Matrix Spike Duplicate, True Value = 0.10)	7/17/2019	7/17/2019	0.10	91
AB39871	Potawatomi Inn's Beach	7/16/2019	7/17/2019	< 0.05	
AB39872	Chain O'Lakes SP	7/16/2019	7/17/2019	0.20	
AB39873	Kunkel Beach @ Ouabache State Park	7/16/2019	7/17/2019	0.12	
AB39874	Potato Creek State Park	7/15/2019	7/17/2019	< 0.05	
AB39875	Mississinewa Lake Miami SRA	7/15/2019	7/17/2019	< 0.05	
AB39876	Lost Bridge West SRA @ Salamonie Lake	7/15/2019	7/17/2019	< 0.05	
AB39877	Kunkel Beach (Field Duplicate)	7/16/2019	7/17/2019	0.12	
AB39878	Field Blank	7/16/2019	7/17/2019	< 0.05	

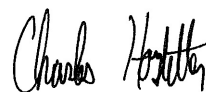
Test Information

Request: 7/17/2019 12:38:06 PM
Date: 7/17/2019 - 7/17/2019

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference
STX Std 0	SAXITOXIN	0.905 Abs	0.000 µg/L	R^2=0.99969	0.000
STX Std 0	SAXITOXIN	0.891 Abs [0.8980] {1.1 CV}	0.002 µg/L [0.001] {141}	R^2=0.99969	0.000
STX Std 1	SAXITOXIN	0.727 Abs	0.020 µg/L	R^2=0.99969	0.020
STX Std 1	SAXITOXIN	0.727 Abs [0.7270] {0.0 CV}	0.020 µg/L [0.020] {0.0}	R^2=0.99969	0.020
STX Std 2	SAXITOXIN	0.524 Abs	0.047 µg/L	R^2=0.99969	0.050
STX Std 2	SAXITOXIN	0.497 Abs [0.5105] {3.7 CV}	0.052 µg/L [0.049] {7.1}	R^2=0.99969	0.050
STX Std 3	SAXITOXIN	0.318 Abs	0.102 µg/L	R^2=0.99969	0.100
STX Std 3	SAXITOXIN	0.312 Abs [0.3150] {1.3 CV}	0.104 µg/L [0.103] {1.4}	R^2=0.99969	0.100
STX Std 4	SAXITOXIN	0.196 Abs	0.186 µg/L	R^2=0.99969	0.200
STX Std 4	SAXITOXIN	0.193 Abs [0.1945] {1.1 CV}	0.190 µg/L [0.188] {1.5}	R^2=0.99969	0.200
STX Std 5	SAXITOXIN	0.107 Abs	> 0.400 µg/L		0.400
STX Std 5	SAXITOXIN	0.105 Abs [0.1060] {1.3 CV}	> 0.400 µg/L		0.400
STX Control (0.060-0.090)	SAXITOXIN	0.405 Abs	0.073 µg/L		0.075 +-
STX Control (0.060-0.090)	SAXITOXIN	0.389 Abs [0.3970] {2.8 CV}	0.077 µg/L [0.075] {3.8}		0.075 +-
LRB	SAXITOXIN	0.860 Abs	0.006 µg/L	LOW	0.020 - C
LRB	SAXITOXIN	0.832 Abs [0.8460] {2.3 CV}	0.009 µg/L [0.007] {28.3}	LOW [LOW]	0.020 - C
LFB	SAXITOXIN	0.359 Abs	0.086 µg/L		0.020 - C
LFB	SAXITOXIN	0.353 Abs [0.3560] {1.2 CV}	0.088 µg/L [0.087] {1.6}		0.020 - C
AB39870	SAXITOXIN	0.797 Abs	0.013 µg/L	LOW	0.020 - C
AB39870	SAXITOXIN	0.806 Abs [0.8015] {0.8 CV}	0.013 µg/L [0.013] {0.0}	LOW	0.020 - C
AB39870MS	SAXITOXIN	0.332 Abs	0.096 µg/L		0.020 - C
AB39870MS	SAXITOXIN	0.308 Abs [0.3200] {5.3 CV}	0.106 µg/L [0.101] {7.0}		0.020 - C
AB39870MSD	SAXITOXIN	0.315 Abs	0.103 µg/L		0.020 - C
AB39870MSD	SAXITOXIN	0.309 Abs [0.3120] {1.4 CV}	0.106 µg/L [0.104] {2.0}		0.020 - C
AB39871	SAXITOXIN	0.825 Abs	0.010 µg/L	LOW	0.020 - C
AB39871	SAXITOXIN	0.817 Abs [0.8210] {0.7 CV}	0.011 µg/L [0.010] {6.7}	LOW	0.020 - C
AB39872	SAXITOXIN	0.204 Abs	0.195 µg/L		0.020 - C
AB39872	SAXITOXIN	0.202 Abs [0.2030] {0.7 CV}	0.198 µg/L [0.197] {1.1}		0.020 - C
AB39873	SAXITOXIN	0.305 Abs	0.118 µg/L		0.020 - C
AB39873	SAXITOXIN	0.297 Abs [0.3010] {1.9 CV}	0.122 µg/L [0.120] {2.4}		0.020 - C
AB39874	SAXITOXIN	0.734 Abs	0.021 µg/L		0.020 - C
AB39874	SAXITOXIN	0.717 Abs [0.7255] {1.7 CV}	0.023 µg/L [0.022] {6.4}		0.020 - C
AB39875	SAXITOXIN	0.850 Abs	0.008 µg/L	LOW	0.020 - C
AB39875	SAXITOXIN	0.842 Abs [0.8460] {0.7 CV}	0.009 µg/L [0.009] {8.3}	LOW	0.020 - C
AB39876	SAXITOXIN	0.829 Abs	0.010 µg/L	LOW	0.020 - C
AB39876	SAXITOXIN	0.823 Abs [0.8260] {0.5 CV}	0.011 µg/L [0.010] {6.7}	LOW	0.020 - C
AB39877	SAXITOXIN	0.301 Abs	0.120 µg/L		0.020 - C
AB39877	SAXITOXIN	0.290 Abs [0.2955] {2.6 CV}	0.126 µg/L [0.123] {3.4}		0.020 - C
AB39878	SAXITOXIN	0.850 Abs	0.008 µg/L	LOW	0.020 - C
AB39878	SAXITOXIN	0.863 Abs [0.8565] {1.1 CV}	0.005 µg/L [0.007] {32.6}	LOW	0.020 - C

Note

Signature



Charles Hostetter 7/19/2019

Assay Information

Assay Name: SAXITOXIN
Version: 1
Temperature: Room Temperature
Last Modified By: Security disabled
Units: µg/L
Assay Description: PN. 52255B
Assay Substances: Controls:

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: 7 days 0 hours

Axis Mode: Y = Abs, X = Log(Conc)

Assay Mode: 4-Parameter Logistic Weight by:None

Well Type: Flat bottom

Last Modified On: 12/5/2017 3:33:23 PM

Normal: 0.020 - 0.400

of decimals: 3

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
7/17/2019 12:38:06 PM				
STX Std 0	0.905 Abs	0.000 µg/L	R^2=0.99969	RK1:23->A01@2
STX Std 0	0.891 Abs [0.8980] {1.1 CV}	0.002 µg/L [0.001] {141.4 CV}	R^2=0.99969	RK1:23->B01@2
STX Std 1	0.727 Abs	0.020 µg/L	R^2=0.99969	RK1:24->C01@2
STX Std 1	0.727 Abs [0.7270] {0.0 CV}	0.020 µg/L [0.020] {0.0 CV}	R^2=0.99969	RK1:24->D01@2
STX Std 2	0.524 Abs	0.047 µg/L	R^2=0.99969	RK1:25->E01@2
STX Std 2	0.497 Abs [0.5105] {3.7 CV}	0.052 µg/L [0.049] {7.1 CV}	R^2=0.99969	RK1:25->F01@3
STX Std 3	0.318 Abs	0.102 µg/L	R^2=0.99969	RK1:26->G01@3
STX Std 3	0.312 Abs [0.3150] {1.3 CV}	0.104 µg/L [0.103] {1.4 CV}	R^2=0.99969	RK1:26->H01@3
STX Std 4	0.196 Abs	0.186 µg/L	R^2=0.99969	RK1:27->A02@2
STX Std 4	0.193 Abs [0.1945] {1.1 CV}	0.190 µg/L [0.188] {1.5 CV}	R^2=0.99969	RK1:27->B02@2
STX Std 5	0.107 Abs	> 0.400 µg/L		RK1:28->C02@2
STX Std 5	0.105 Abs [0.1060] {1.3 CV}	> 0.400 µg/L		RK1:28->D02@2

7/17/2019 12:38:06 PM				
STX Control (0.060-0.090)	0.405 Abs	0.073 µg/L		RK1:29->E02@2
STX Control (0.060-0.090)	0.389 Abs [0.3970] {2.8 CV}	0.077 µg/L [0.075] {3.8 CV}		RK1:29->F02@3

Statistic				
STX Std 0 [MEAN]	0.8980	0.0010		
STX Std 0 [SD]	0.0099	0.0014		
STX Std 0 [%CV]	1.1024	141.4214		
STX Std 1 [MEAN]	0.7270	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]	0.5105	0.0495		
STX Std 2 [SD]	0.0191	0.0035		
STX Std 2 [%CV]	3.7398	7.1425		
STX Std 2 [%DIFF]		-1.0000		
STX Std 3 [MEAN]	0.3150	0.1030		
STX Std 3 [SD]	0.0042	0.0014		
STX Std 3 [%CV]	1.3469	1.3730		
STX Std 3 [%DIFF]		3.0000		
STX Std 4 [MEAN]	0.1945	0.1880		
STX Std 4 [SD]	0.0021	0.0028		
STX Std 4 [%CV]	1.0906	1.5045		
STX Std 4 [%DIFF]		-6.0000		
STX Std 5 [MEAN]	0.1060			
STX Std 5 [SD]	0.0014			
STX Std 5 [%CV]	1.3342			

Name	Absorbance	Concentration	Interpretation	Position
STX Control (0.060-0.090) [MEAN]	0.3970	0.0750		
STX Control (0.060-0.090) [SD]	0.0113	0.0028		
STX Control (0.060-0.090) [%CV]	2.8498	3.7712		
STX Control (0.060-0.090) [%DIFF]		-0.0000		

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 0.89844
B = 1.3185
C = 0.056397
D = 0.051052
R2 coef = 0.99966

