



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	5/29/2019	5/30/2019	< 0.050	
LFB	Lab Fortified Blank (True value = 0.100)	5/29/2019	5/30/2019	0.094	94
AB38909	Hardy Lake SRA	5/28/2019	5/30/2019	< 0.050	
AB38909LD	Hardy Lake SRA (Lab Duplicate)	5/28/2019	5/30/2019	< 0.050	
AB38907	Field Blank	5/28/2019	5/30/2019	< 0.050	
AB38917	Hardy Lake SRA (Field Duplicate)	5/28/2019	5/30/2019	< 0.050	

Test Information

Request: 5/30/2019 8:24:20 AM
Date: 5/30/2019 - 5/30/2019

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference
STX Std 0	SAXITOXIN	1.016 Abs	0.000 µg/L	R^2=0.99964	0.000
STX Std 0	SAXITOXIN	0.998 Abs [1.0070] {1.3 CV}	0.002 µg/L [0.001] {141}	R^2=0.99964	0.000
STX Std 1	SAXITOXIN	0.836 Abs	0.019 µg/L	R^2=0.99964	0.020
STX Std 1	SAXITOXIN	0.827 Abs [0.8315] {0.8 CV}	0.020 µg/L [0.019] {3.6}	R^2=0.99964	0.020
STX Std 2	SAXITOXIN	0.567 Abs	0.051 µg/L	R^2=0.99964	0.050
STX Std 2	SAXITOXIN	0.558 Abs [0.5625] {1.1 CV}	0.052 µg/L [0.052] {1.4}	R^2=0.99964	0.050
STX Std 3	SAXITOXIN	0.369 Abs	0.095 µg/L	R^2=0.99964	0.100
STX Std 3	SAXITOXIN	0.350 Abs [0.3595] {3.7 CV}	0.102 µg/L [0.098] {5.0}	R^2=0.99964	0.100
STX Std 4	SAXITOXIN	0.211 Abs	0.192 µg/L	R^2=0.99964	0.200
STX Std 4	SAXITOXIN	0.212 Abs [0.2115] {0.3 CV}	0.191 µg/L [0.192] {0.4}	R^2=0.99964	0.200
STX Std 5	SAXITOXIN	0.121 Abs	> 0.400 µg/L		0.400
STX Std 5	SAXITOXIN	0.120 Abs [0.1205] {0.6 CV}	> 0.400 µg/L		0.400
STX Control (0.060-0.090)	SAXITOXIN	0.460 Abs	0.071 µg/L		0.075 +-
STX Control (0.060-0.090)	SAXITOXIN	0.446 Abs [0.4530] {2.2 CV}	0.074 µg/L [0.073] {2.9}		0.075 +-
LRB	SAXITOXIN	1.010 Abs	0.000 µg/L	LOW	0.020 - C
LRB	SAXITOXIN	1.019 Abs [1.0145] {0.6 CV}	0.000 µg/L [0.000]	LOW [LOW]	0.020 - C
LFB	SAXITOXIN	0.370 Abs	0.095 µg/L		0.020 - C
LFB	SAXITOXIN	0.375 Abs [0.3725] {0.9 CV}	0.093 µg/L [0.094] {1.5}		0.020 - C
AB38909	SAXITOXIN	0.921 Abs	0.011 µg/L	LOW	0.020 - C
AB38909	SAXITOXIN	0.908 Abs [0.9145] {1.0 CV}	0.012 µg/L [0.012] {6.1}	LOW [LOW]	0.020 - C
AB38909LD	SAXITOXIN	0.913 Abs	0.012 µg/L	LOW	0.020 - C
AB38909LD	SAXITOXIN	0.902 Abs [0.9075] {0.9 CV}	0.013 µg/L [0.013] {5.7}	LOW [LOW]	0.020 - C
AB38907	SAXITOXIN	0.931 Abs	0.010 µg/L	LOW	0.020 - C
AB38907	SAXITOXIN	0.931 Abs [0.9310] {0.0 CV}	0.010 µg/L [0.010] {0.0}	LOW [LOW]	0.020 - C
AB38917	SAXITOXIN	0.915 Abs	0.011 µg/L	LOW	0.020 - C
AB38917	SAXITOXIN	0.933 Abs [0.9240] {1.4 CV}	0.010 µg/L [0.010] {6.7}	LOW [LOW]	0.020 - C

Note

Signature 



SAXITOXIN - Assay Calibration Report

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
5/30/2019 8:24:20 AM				
STX Std 0	1.016 Abs	0.000 µg/L	R^2=0.99964	RK1:23->A01@2
STX Std 0	0.998 Abs [1.0070] {1.3 CV}	0.002 µg/L [0.001] {141.4 CV}	R^2=0.99964	RK1:23->B01@2
STX Std 1	0.836 Abs	0.019 µg/L	R^2=0.99964	RK1:24->C01@2
STX Std 1	0.827 Abs [0.8315] {0.8 CV}	0.020 µg/L [0.019] {3.6 CV}	R^2=0.99964	RK1:24->D01@2
STX Std 2	0.567 Abs	0.051 µg/L	R^2=0.99964	RK1:25->E01@2
STX Std 2	0.558 Abs [0.5625] {1.1 CV}	0.052 µg/L [0.052] {1.4 CV}	R^2=0.99964	RK1:25->F01@3
STX Std 3	0.369 Abs	0.095 µg/L	R^2=0.99964	RK1:26->G01@3
STX Std 3	0.350 Abs [0.3595] {3.7 CV}	0.102 µg/L [0.098] {5.0 CV}	R^2=0.99964	RK1:26->H01@3
STX Std 4	0.211 Abs	0.192 µg/L	R^2=0.99964	RK1:27->A02@2
STX Std 4	0.212 Abs [0.2115] {0.3 CV}	0.191 µg/L [0.192] {0.4 CV}	R^2=0.99964	RK1:27->B02@2
STX Std 5	0.121 Abs	> 0.400 µg/L		RK1:28->C02@2
STX Std 5	0.120 Abs [0.1205] {0.6 CV}	> 0.400 µg/L		RK1:28->D02@2
*****	*****	*****	*****	*****
5/30/2019 8:24:20 AM				
STX Control (0.060-0.090)	0.460 Abs	0.071 µg/L		RK1:29->E02@2
STX Control (0.060-0.090)	0.446 Abs [0.4530] {2.2 CV}	0.074 µg/L [0.073] {2.9 CV}		RK1:29->F02@3
*****	*****	*****	*****	*****
Statistic				
STX Std 0 [MEAN]	1.0070	0.0010		
STX Std 0 [SD]	0.0127	0.0014		
STX Std 0 [%CV]	1.2639	141.4214		
STX Std 1 [MEAN]	0.8315	0.0195		
STX Std 1 [SD]	0.0064	0.0007		
STX Std 1 [%CV]	0.7654	3.6262		
STX Std 1 [%DIFF]		-2.5000		
STX Std 2 [MEAN]	0.5625	0.0515		
STX Std 2 [SD]	0.0064	0.0007		
STX Std 2 [%CV]	1.1314	1.3730		
STX Std 2 [%DIFF]		3.0000		
STX Std 3 [MEAN]	0.3595	0.0985		
STX Std 3 [SD]	0.0134	0.0049		
STX Std 3 [%CV]	3.7371	5.0251		
STX Std 3 [%DIFF]		-1.5000		
STX Std 4 [MEAN]	0.2115	0.1915		
STX Std 4 [SD]	0.0007	0.0007		
STX Std 4 [%CV]	0.3343	0.3692		
STX Std 4 [%DIFF]		-4.2500		
STX Std 5 [MEAN]	0.1205			
STX Std 5 [SD]	0.0007			
STX Std 5 [%CV]	0.5868			

Name	Absorbance	Concentration	Interpretation	Position
STX Control (0.060-0.090) [MEAN]	0.4530	0.0725		
STX Control (0.060-0.090) [SD]	0.0099	0.0021		
STX Control (0.060-0.090) [%CV]	2.1853	2.9260		
STX Control (0.060-0.090) [%DIFF]		-3.3333		

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.0092
B = 1.3824
C = 0.055341
D = 0.069075
R2 coef = 0.99965

