



## Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)	% Recovery
LRB	Lab Reagent Blank	7/24/2019	7/25/2019	<0.05	
LFB	Lab Fortified Blank (True value = 0.100)	7/24/2019	7/25/2019	0.091	91
AB39883	Whitewater Memorial S P	7/22/2019	7/25/2019	<0.05	
AB39883MS	Whitewater (Matrix Spike, True Value = 0.10)	7/24/2019	7/25/2019	0.097	85
AB39883MS D	Whitewater (Matrix Spike Duplicate, True Value = 0.10)	7/24/2019	7/25/2019	0.100	88
AB39879	Hardy Lake S R A	7/22/2019	7/25/2019	0.087	
AB39880	Quakertown S R A	7/22/2019	7/25/2019	<0.05	
AB39881	Raccoon Lake S R A	7/22/2019	7/25/2019	<0.05	
AB39884	Hardy Lake S R A Field Dup.	7/22/2019	7/25/2019	0.089	
AB39885	Field Blank	7/22/2019	7/25/2019	<0.05	
AB39886	Mounds S R A	7/22/2019	7/25/2019	<0.05	
AB39899	Lost Bridge West S R A @ Salamonie Lake	7/23/2019	7/25/2019	<0.05	
AB39900	Lost Bridge West S R A Field Dup.	7/23/2019	7/25/2019	<0.05	
AB39901	Field Blank	7/23/2019	7/25/2019	<0.05	

## Test Information

Request: 7/25/2019 2:54:11 PM  
Date: 7/25/2019

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference
STX Std 0	SAXITOXIN	0.989 Abs	0.002 µg/L	R^2=0.99973	0.000
STX Std 0	SAXITOXIN	1.006 Abs [0.9975] {1.2 CV}	0.000 µg/L [0.001] {141}	R^2=0.99973	0.000
STX Std 1	SAXITOXIN	0.831 Abs	0.021 µg/L	R^2=0.99973	0.020
STX Std 1	SAXITOXIN	0.848 Abs [0.8395] {1.4 CV}	0.019 µg/L [0.020] {7.1}	R^2=0.99973	0.020
STX Std 2	SAXITOXIN	0.600 Abs	0.049 µg/L	R^2=0.99973	0.050
STX Std 2	SAXITOXIN	0.593 Abs [0.5965] {0.8 CV}	0.051 µg/L [0.050] {2.8}	R^2=0.99973	0.050
STX Std 3	SAXITOXIN	0.373 Abs	0.101 µg/L	R^2=0.99973	0.100
STX Std 3	SAXITOXIN	0.368 Abs [0.3705] {1.0 CV}	0.103 µg/L [0.102] {1.4}	R^2=0.99973	0.100
STX Std 4	SAXITOXIN	0.223 Abs	0.189 µg/L	R^2=0.99973	0.200
STX Std 4	SAXITOXIN	0.223 Abs [0.2230] {0.0 CV}	0.189 µg/L [0.189] {0.0}	R^2=0.99973	0.200
STX Std 5	SAXITOXIN	0.123 Abs	> 0.400 µg/L		0.400
STX Std 5	SAXITOXIN	0.120 Abs [0.1215] {1.7 CV}	> 0.400 µg/L		0.400
STX Control (0.060-0.090)	SAXITOXIN	0.464 Abs	0.075 µg/L		0.075 +-
STX Control (0.060-0.090)	SAXITOXIN	0.444 Abs [0.4540] {3.1 CV}	0.080 µg/L [0.078] {4.6}		0.075 +-
ANA LRB 1	SAXITOXIN	0.964 Abs	0.006 µg/L	LOW	0.020 - C
ANA LRB 1	SAXITOXIN	0.986 Abs [0.9750] {1.6 CV}	0.003 µg/L [0.004] {47.1}	LOW [LOW]	0.020 - C
LFB	SAXITOXIN	0.404 Abs	0.091 µg/L		0.020 - C
LFB	SAXITOXIN	0.400 Abs [0.4020] {0.7 CV}	0.092 µg/L [0.091] {0.8}		0.020 - C
AB39883	SAXITOXIN	0.925 Abs	0.012 µg/L	LOW	0.020 - C
AB39883	SAXITOXIN	0.922 Abs [0.9235] {0.2 CV}	0.012 µg/L [0.012] {0.0}	LOW	0.020 - C
AB39883MS	SAXITOXIN	0.398 Abs	0.093 µg/L		0.020 - C
AB39883MS	SAXITOXIN	0.372 Abs [0.3850] {4.8 CV}	0.101 µg/L [0.097] {5.8}		0.020 - C
AB39883MSD	SAXITOXIN	0.379 Abs	0.099 µg/L		0.020 - C
AB39883MSD	SAXITOXIN	0.376 Abs [0.3775] {0.6 CV}	0.100 µg/L [0.100] {0.7}		0.020 - C
AB39879	SAXITOXIN	0.451 Abs	0.086 µg/L		0.020 - C
AB39879	SAXITOXIN	0.448 Abs [0.4495] {0.5 CV}	0.087 µg/L [0.087] {0.8}		0.020 - C
AB39880	SAXITOXIN	0.912 Abs	0.013 µg/L	LOW	0.020 - C
AB39880	SAXITOXIN	0.904 Abs [0.9080] {0.6 CV}	0.014 µg/L [0.014] {5.2}	LOW	0.020 - C
AB39881	SAXITOXIN	0.935 Abs	0.010 µg/L	LOW	0.020 - C
AB39881	SAXITOXIN	0.905 Abs [0.9200] {2.3 CV}	0.014 µg/L [0.012] {23.6}	LOW	0.020 - C
AB39884	SAXITOXIN	0.441 Abs	0.089 µg/L		0.020 - C
AB39884	SAXITOXIN	0.445 Abs [0.4430] {0.6 CV}	0.088 µg/L [0.089] {0.8}		0.020 - C
AB39885	SAXITOXIN	0.971 Abs	0.005 µg/L	LOW	0.020 - C
AB39885	SAXITOXIN	0.970 Abs [0.9705] {0.1 CV}	0.005 µg/L [0.005] {0.0}	LOW [LOW]	0.020 - C
AB39886	SAXITOXIN	0.892 Abs	0.015 µg/L	LOW	0.020 - C
AB39886	SAXITOXIN	0.882 Abs [0.8870] {0.8 CV}	0.016 µg/L [0.015] {4.6}	LOW	0.020 - C
AB39899	SAXITOXIN	0.909 Abs	0.013 µg/L	LOW	0.020 - C
AB39899	SAXITOXIN	0.903 Abs [0.9060] {0.5 CV}	0.014 µg/L [0.014] {5.2}	LOW	0.020 - C
AB39899LD	SAXITOXIN	0.890 Abs	0.015 µg/L	LOW	0.020 - C
AB39899LD	SAXITOXIN	0.904 Abs [0.8970] {1.1 CV}	0.014 µg/L [0.014] {4.9}	LOW	0.020 - C
AB39900	SAXITOXIN	0.901 Abs	0.014 µg/L	LOW	0.020 - C
AB39900	SAXITOXIN	0.900 Abs [0.9005] {0.1 CV}	0.014 µg/L [0.014] {0.0}	LOW	0.020 - C
AB39901	SAXITOXIN	0.969 Abs	0.005 µg/L	LOW	0.020 - C
AB39901	SAXITOXIN	0.971 Abs [0.9700] {0.1 CV}	0.005 µg/L [0.005] {0.0}	LOW [LOW]	0.020 - C

## Note

Signature David Jordan  
Date: 7/25/2019



# 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	
7/25/2019 2:54:11 PM					
STX Std 0	0.989 Abs	0.002 µg/L	R^2=0.99973	RK1:23->A01@2	
STX Std 0	1.006 Abs [0.9975] {1.2 CV}	0.000 µg/L [0.001] {141.4 CV}	R^2=0.99973	RK1:23->B01@2	
STX Std 1	0.831 Abs	0.021 µg/L	R^2=0.99973	RK1:24->C01@2	
STX Std 1	0.848 Abs [0.8395] {1.4 CV}	0.019 µg/L [0.020] {7.1 CV}	R^2=0.99973	RK1:24->D01@2	
STX Std 2	0.600 Abs	0.049 µg/L	R^2=0.99973	RK1:25->E01@2	
STX Std 2	0.593 Abs [0.5965] {0.8 CV}	0.051 µg/L [0.050] {2.8 CV}	R^2=0.99973	RK1:25->F01@3	
STX Std 3	0.373 Abs	0.101 µg/L	R^2=0.99973	RK1:26->G01@3	
STX Std 3	0.368 Abs [0.3705] {1.0 CV}	0.103 µg/L [0.102] {1.4 CV}	R^2=0.99973	RK1:26->H01@3	
STX Std 4	0.223 Abs	0.189 µg/L	R^2=0.99973	RK1:27->A02@2	
STX Std 4	0.223 Abs [0.2230] {0.0 CV}	0.189 µg/L [0.189] {0.0 CV}	R^2=0.99973	RK1:27->B02@2	
STX Std 5	0.123 Abs	> 0.400 µg/L		RK1:28->C02@2	
STX Std 5	0.120 Abs [0.1215] {1.7 CV}	> 0.400 µg/L		RK1:28->D02@2	
*****					
7/25/2019 2:54:11 PM					
STX Control (0.060-0.090)	0.464 Abs	0.075 µg/L		RK1:29->E02@2	
STX Control (0.060-0.090)	0.444 Abs [0.4540] {3.1 CV}	0.080 µg/L [0.078] {4.6 CV}		RK1:29->F02@3	
*****					
Statistic					
STX Std 0 [MEAN]	0.9975	0.0010			
STX Std 0 [SD]	0.0120	0.0014			
STX Std 0 [%CV]	1.2051	141.4214			
STX Std 1 [MEAN]	0.8395	0.0200			
STX Std 1 [SD]	0.0120	0.0014			
STX Std 1 [%CV]	1.4319	7.0711			
STX Std 1 [%DIFF]		0.0000			
STX Std 2 [MEAN]	0.5965	0.0500			
STX Std 2 [SD]	0.0049	0.0014			
STX Std 2 [%CV]	0.8298	2.8284			
STX Std 2 [%DIFF]		-0.0000			
STX Std 3 [MEAN]	0.3705	0.1020			
STX Std 3 [SD]	0.0035	0.0014			
STX Std 3 [%CV]	0.9543	1.3865			
STX Std 3 [%DIFF]		2.0000			
STX Std 4 [MEAN]	0.2230	0.1890			
STX Std 4 [SD]	0.0000	0.0000			
STX Std 4 [%CV]	0.0000	0.0000			
STX Std 4 [%DIFF]		-5.5000			
STX Std 5 [MEAN]	0.1215				
STX Std 5 [SD]	0.0021				
STX Std 5 [%CV]	1.7459				

Name	Absorbance	Concentration	Interpretation	Position	
STX Control (0.060-0.090) [MEAN]	0.4540	0.0775			
STX Control (0.060-0.090) [SD]	0.0141	0.0035			
STX Control (0.060-0.090) [%CV]	3.1150	4.5620			
STX Control (0.060-0.090) [%DIFF]		3.3333			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D  
Weight: NONE  
A = 0.99904  
B = 1.4041  
C = 0.061134  
D = 0.063880  
R2 coef = 0.99971

