



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC46387	Chain O'Lakes SP - Sand Lake Beach	8/25/2025	8/27/2025	< 0.050
AC46388	Ouabache SP - Kunkel Lake Beach	8/25/2025	8/27/2025	< 0.050
AC46389	Summit Lake SP - Summit Lake Beach	8/25/2025	8/27/2025	< 0.050
AC46390	Potato Creek SP - Worster Lake Beach	8/26/2025	8/27/2025	< 0.050
AC46391	Mississinewa Lake - Miami SRA Beach	8/26/2025	8/27/2025	< 0.050
AC46392	Salamonie Lake - Lost Bridge West SRA Beach	8/26/2025	8/27/2025	< 0.050
AC46393	Potato Creek SP - Worster Lake Beach (Field Duplicate)	8/26/2025	8/27/2025	< 0.050
AC46394	Field Blank	8/26/2025	8/27/2025	< 0.050
AC46395	Ferdinand State Forest - Ferdinand Lake Beach	8/25/2025	8/27/2025	0.055
AC46396	Patoka Lake - Newton Stewart SRA	8/25/2025	8/27/2025	< 0.050
AC46418	Ft Ben Harrison SP - Dog Lake	8/25/2025	8/27/2025	< 0.050

Test Report (by Request)

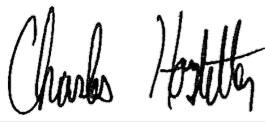
Test Information

Request: 8/27/2025 11:42:20 AM
Date: 8/27/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
STX Std 0	SAXITOXIN	1.629 Abs	0.000 µg/L	R^2=0.99991, 101.8		0.000	Kit:25065(
STX Std 0	SAXITOXIN	1.570 Abs [1.5995] {2.6 C	0.003 µg/L [0.002]	R^2=0.99991, 98.12		0.000	Kit:25065(
STX Std 1	SAXITOXIN	1.365 Abs	0.019 µg/L	R^2=0.99991, 85.31		0.020	Kit:25065(
STX Std 1	SAXITOXIN	1.329 Abs [1.3470] {1.9 C	0.022 µg/L [0.021]	R^2=0.99991, 83.06		0.020	Kit:25065(
STX Std 2	SAXITOXIN	1.032 Abs	0.049 µg/L	R^2=0.99991, 64.50		0.050	Kit:25065(
STX Std 2	SAXITOXIN	1.013 Abs [1.0225] {1.3 C	0.051 µg/L [0.050]	R^2=0.99991, 63.31		0.050	Kit:25065(
STX Std 3	SAXITOXIN	0.707 Abs	0.099 µg/L	R^2=0.99991, 44.18		0.100	Kit:25065(
STX Std 3	SAXITOXIN	0.678 Abs [0.6925] {3.0 C	0.105 µg/L [0.102]	R^2=0.99991, 42.37		0.100	Kit:25065(
STX Std 4	SAXITOXIN	0.440 Abs	0.195 µg/L	R^2=0.99991, 27.50		0.200	Kit:25065(
STX Std 4	SAXITOXIN	0.437 Abs [0.4385] {0.5 C	0.197 µg/L [0.196]	R^2=0.99991, 27.31		0.200	Kit:25065(
STX Std 5	SAXITOXIN	0.270 Abs	0.390 µg/L	R^2=0.99991, 16.87		0.400	Kit:25065(
STX Std 5	SAXITOXIN	0.255 Abs [0.2625] {4.0 C	> 0.400 µg/L [0.39	15.937 %Abs		0.400	Kit:25065(
STX Control (0.060-0.090)	SAXITOXIN	0.887 Abs	0.067 µg/L	55.437 %Abs			Kit:25065(
STX Control (0.060-0.090)	SAXITOXIN	0.856 Abs [0.8715] {2.5 C	0.071 µg/L [0.069]	53.500 %Abs [54.4			Kit:25065(

Note

* 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) 8/27/2025 11:48:58 AM

Signature 

Charles Hostetter 8/27/25

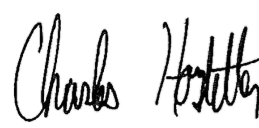
Test Report (by Request)

Test Information

Request: 8/27/2025 11:43:38 AM
Date: 8/27/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	SAXITOXIN	1.561 Abs	0.004 µg/L	Low, 97.562 %Abs		0.020 - 0.400	Kit:25065(
LRB	SAXITOXIN	1.535 Abs [1.5480] {1.2 C	0.006 µg/L [0.005]	Low, 95.937 %Abs		0.020 - 0.400	Kit:25065(
LFB (SAX)	SAXITOXIN	0.716 Abs	0.097 µg/L	44.750 %Abs		0.020 - 0.400	Kit:25065(
LFB (SAX)	SAXITOXIN	0.696 Abs [0.7060] {2.0 C	0.101 µg/L [0.099]	43.500 %Abs [44.1		0.020 - 0.400	Kit:25065(
AC46387	SAXITOXIN	1.180 Abs	0.037 µg/L	73.750 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46387	SAXITOXIN	1.146 Abs [1.1630] {2.1 C	0.041 µg/L [0.039]	71.625 %Abs [72.6	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46388	SAXITOXIN	1.449 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46388	SAXITOXIN	1.416 Abs [1.4325] {1.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46389	SAXITOXIN	1.521 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46389	SAXITOXIN	1.527 Abs [1.5240] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46389MS	SAXITOXIN	0.698 Abs	0.101 µg/L	43.625 %Abs		0.020 - 0.400	Kit:25065(
AC46389MS	SAXITOXIN	0.690 Abs [0.6940] {0.8 C	0.102 µg/L [0.102]	43.125 %Abs [43.3		0.020 - 0.400	Kit:25065(
AC46389MSD	SAXITOXIN	0.713 Abs	0.097 µg/L	44.562 %Abs		0.020 - 0.400	Kit:25065(
AC46389MSD	SAXITOXIN	0.685 Abs [0.6990] {2.8 C	0.104 µg/L [0.101]	42.812 %Abs [43.6		0.020 - 0.400	Kit:25065(
AC46390	SAXITOXIN	1.453 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46390	SAXITOXIN	1.452 Abs [1.4525] {0.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46391	SAXITOXIN	1.089 Abs	0.047 µg/L	68.062 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46391	SAXITOXIN	1.064 Abs [1.0765] {1.6 C	0.050 µg/L [0.049]	66.500 %Abs [67.2	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46392	SAXITOXIN	1.450 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46392	SAXITOXIN	1.411 Abs [1.4305] {1.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46393	SAXITOXIN	1.464 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46393	SAXITOXIN	1.449 Abs [1.4565] {0.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46394	SAXITOXIN	1.545 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46394	SAXITOXIN	1.565 Abs [1.5550] {0.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46395	SAXITOXIN	1.029 Abs	0.054 µg/L	64.312 %Abs	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46395	SAXITOXIN	1.019 Abs [1.0240] {0.7 C	0.055 µg/L [0.055]	63.687 %Abs [64.0	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46396	SAXITOXIN	1.569 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46396	SAXITOXIN	1.599 Abs [1.5840] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46418	SAXITOXIN	1.505 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(
AC46418	SAXITOXIN	1.456 Abs [1.4805] {2.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.020 - 0.400	Kit:25065(

Note

Signature 

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:2506505967

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	
8/27/2025 11:42:20 AM					
STX Std 0	1.629 Abs	0.000 µg/L	R^2=0.99991, 101.812 %Abs	RK1:30->A07@2	
STX Std 0	1.570 Abs [1.5995] {2.6 CV}	0.003 µg/L [0.002] {141.4 CV}	R^2=0.99991, 98.125 %Abs	RK1:30->B07@2	
STX Std 1	1.365 Abs	0.019 µg/L	R^2=0.99991, 85.312 %Abs	RK1:31->C07@2	
STX Std 1	1.329 Abs [1.3470] {1.9 CV}	0.022 µg/L [0.021] {10.3 CV}	R^2=0.99991, 83.062 %Abs	RK1:31->D07@2	
STX Std 2	1.032 Abs	0.049 µg/L	R^2=0.99991, 64.500 %Abs	RK1:32->E07@2	
STX Std 2	1.013 Abs [1.0225] {1.3 CV}	0.051 µg/L [0.050] {2.8 CV}	R^2=0.99991, 63.312 %Abs	RK1:32->F07@3	
STX Std 3	0.707 Abs	0.099 µg/L	R^2=0.99991, 44.187 %Abs	RK1:33->G07@3	
STX Std 3	0.678 Abs [0.6925] {3.0 CV}	0.105 µg/L [0.102] {4.2 CV}	R^2=0.99991, 42.375 %Abs	RK1:33->H07@3	
STX Std 4	0.440 Abs	0.195 µg/L	R^2=0.99991, 27.500 %Abs	RK1:34->A08@2	
STX Std 4	0.437 Abs [0.4385] {0.5 CV}	0.197 µg/L [0.196] {0.7 CV}	R^2=0.99991, 27.312 %Abs	RK1:34->B08@2	
STX Std 5	0.270 Abs	0.390 µg/L	R^2=0.99991, 16.875 %Abs	RK1:35->C08@2	
STX Std 5	0.255 Abs [0.2625] {4.0 CV}	> 0.400 µg/L [0.390]	15.937 %Abs	RK1:35->D08@2	

8/27/2025 11:42:20 AM					
STX Control (0.060-0.090)	0.887 Abs	0.067 µg/L	55.437 %Abs	RK1:36->E08@2	
STX Control (0.060-0.090)	0.856 Abs [0.8715] {2.5 CV}	0.071 µg/L [0.069] {4.1 CV}	53.500 %Abs [54.469 %Abs]	RK1:36->F08@3	

Statistic					
STX Std 0 [MEAN]	1.5995	0.0015			
STX Std 0 [SD]	0.0417	0.0021			
STX Std 0 [%CV]	2.6083	141.4214			
STX Std 1 [MEAN]	1.3470	0.0205			
STX Std 1 [SD]	0.0255	0.0021			
STX Std 1 [%CV]	1.8898	10.3479			
STX Std 1 [%DIFF]		2.5000			
STX Std 2 [MEAN]	1.0225	0.0500			
STX Std 2 [SD]	0.0134	0.0014			
STX Std 2 [%CV]	1.3139	2.8284			
STX Std 2 [%DIFF]		-0.0000			
STX Std 3 [MEAN]	0.6925	0.1020			
STX Std 3 [SD]	0.0205	0.0042			
STX Std 3 [%CV]	2.9612	4.1594			
STX Std 3 [%DIFF]		2.0000			
STX Std 4 [MEAN]	0.4385	0.1960			
STX Std 4 [SD]	0.0021	0.0014			
STX Std 4 [%CV]	0.4838	0.7215			
STX Std 4 [%DIFF]		-2.0000			
STX Std 5 [MEAN]	0.2625				
STX Std 5 [SD]	0.0106				
STX Std 5 [%CV]	4.0406				

Name	Absorbance	Concentration	Interpretation	Position	
STX Control (0.060-0.090) [MEAN]	0.8715	0.0690			
STX Control (0.060-0.090) [SD]	0.0219	0.0028			
STX Control (0.060-0.090) [%CV]	2.5152	4.0992			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.5999
B = 1.2525
C = 0.071305
D = 0.11159
R2 coef = 0.99991
50% = 0.080

