



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

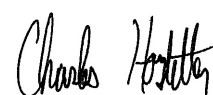
| Sample # | Location | Date Collected | Date Analyzed | Conc. (ppb) |
|----------|----------------------------------|----------------|---------------|-------------|
| AB51870 | Raccoon Lake SRA | 6/27/2022 | 6/29/2022 | < 0.05 |
| AB51871 | Hardy Lake SRA | 6/27/2022 | 6/29/2022 | < 0.05 |
| AB51872 | Hardy Lake SRA (Field Duplicate) | 6/27/2022 | 6/29/2022 | < 0.05 |
| AB51873 | Field Blank | 6/27/2022 | 6/29/2022 | < 0.05 |

Test Information

Request: 6/29/2022 10:28:38 AM
Date: 6/29/2022

| Name/ID | Assay | Absorbance | Concentration | Interpretation | Note | Reference | Lot# |
|---------------------------|-----------|---------------------------|--------------------|--------------------------------|------|-----------|---------|
| STX Std 0 | SAXITOXIN | 1.251 Abs | 0.000 µg/L | R ² =0.99907, 100.6 | | | M22B127 |
| STX Std 0 | SAXITOXIN | 1.235 Abs [1.2430] {0.9 C | 0.002 µg/L [0.001] | R ² =0.99907, 99.35 | | | M22B127 |
| STX Std 1 | SAXITOXIN | 1.060 Abs | 0.018 µg/L | R ² =0.99907, 85.27 | | | M22B127 |
| STX Std 1 | SAXITOXIN | 1.046 Abs [1.0530] {0.9 C | 0.020 µg/L [0.019] | R ² =0.99907, 84.15 | | | M22B127 |
| STX Std 2 | SAXITOXIN | 0.800 Abs | 0.049 µg/L | R ² =0.99907, 64.36 | | | M22B127 |
| STX Std 2 | SAXITOXIN | 0.771 Abs [0.7855] {2.6 C | 0.053 µg/L [0.051] | R ² =0.99907, 62.02 | | | M22B127 |
| STX Std 3 | SAXITOXIN | 0.567 Abs | 0.098 µg/L | R ² =0.99907, 45.61 | | | M22B127 |
| STX Std 3 | SAXITOXIN | 0.540 Abs [0.5535] {3.4 C | 0.107 µg/L [0.102] | R ² =0.99907, 43.44 | | | M22B127 |
| STX Std 4 | SAXITOXIN | 0.400 Abs | 0.178 µg/L | R ² =0.99907, 32.18 | | | M22B127 |
| STX Std 4 | SAXITOXIN | 0.386 Abs [0.3930] {2.5 C | 0.189 µg/L [0.183] | R ² =0.99907, 31.05 | | | M22B127 |
| STX Std 5 | SAXITOXIN | 0.252 Abs | > 0.400 µg/L | 20.274 %Abs | | | M22B127 |
| STX Std 5 | SAXITOXIN | 0.245 Abs [0.2485] {2.0 C | > 0.400 µg/L | 19.710 %Abs | | | M22B127 |
| STX Control (0.060-0.090) | SAXITOXIN | 0.659 Abs | 0.074 µg/L | 53.017 %Abs | | | M22B127 |
| STX Control (0.060-0.090) | SAXITOXIN | 0.632 Abs [0.6455] {3.0 C | 0.081 µg/L [0.078] | 50.845 %Abs [51.9 | | | M22B127 |

Note



Signature

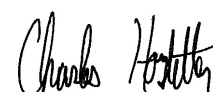
Test Report (by Request)

Test Information

Request: 6/29/2022 10:30:32 AM
Date: 6/29/2022

| Name/ID | Assay | Absorbance | Concentration | Interpretation | Note | Reference | Lot# |
|------------|-----------|---------------------------|--------------------|-------------------|------|---------------|---------|
| LRB | SAXITOXIN | 1.223 Abs | 0.003 µg/L | Low, 98.391 %Abs | | 0.020 - 0.400 | M22B127 |
| LRB | SAXITOXIN | 1.207 Abs [1.2150] {0.9 C | 0.005 µg/L [0.004] | Low, 97.104 %Abs | | 0.020 - 0.400 | M22B127 |
| LFB | SAXITOXIN | 0.645 Abs | 0.077 µg/L | 51.891 %Abs | | 0.020 - 0.400 | M22B127 |
| LFB | SAXITOXIN | 0.623 Abs [0.6340] {2.5 C | 0.083 µg/L [0.080] | 50.121 %Abs [51.0 | | 0.020 - 0.400 | M22B127 |
| AB51870 | SAXITOXIN | 1.213 Abs | 0.004 µg/L | Low, 97.586 %Abs | | 0.020 - 0.400 | M22B127 |
| AB51870 | SAXITOXIN | 1.208 Abs [1.2105] {0.3 C | 0.005 µg/L [0.004] | Low, 97.184 %Abs | | 0.020 - 0.400 | M22B127 |
| AB51870MS | SAXITOXIN | 0.596 Abs | 0.090 µg/L | 47.949 %Abs | | 0.020 - 0.400 | M22B127 |
| AB51870MS | SAXITOXIN | 0.566 Abs [0.5810] {3.7 C | 0.098 µg/L [0.094] | 45.535 %Abs [46.7 | | 0.020 - 0.400 | M22B127 |
| AB51870MSD | SAXITOXIN | 0.579 Abs | 0.095 µg/L | 46.581 %Abs | | 0.020 - 0.400 | M22B127 |
| AB51870MSD | SAXITOXIN | 0.563 Abs [0.5710] {2.0 C | 0.099 µg/L [0.097] | 45.294 %Abs [45.9 | | 0.020 - 0.400 | M22B127 |
| AB51871 | SAXITOXIN | 1.177 Abs | 0.008 µg/L | Low, 94.690 %Abs | | 0.020 - 0.400 | M22B127 |
| AB51871 | SAXITOXIN | 1.155 Abs [1.1660] {1.3 C | 0.010 µg/L [0.009] | Low, 92.920 %Abs | | 0.020 - 0.400 | M22B127 |
| AB51872 | SAXITOXIN | 1.164 Abs | 0.009 µg/L | Low, 93.644 %Abs | | 0.020 - 0.400 | M22B127 |
| AB51872 | SAXITOXIN | 1.150 Abs [1.1570] {0.9 C | 0.010 µg/L [0.009] | Low, 92.518 %Abs | | 0.020 - 0.400 | M22B127 |
| AB51873 | SAXITOXIN | 1.210 Abs | 0.004 µg/L | Low, 97.345 %Abs | | 0.020 - 0.400 | M22B127 |
| AB51873 | SAXITOXIN | 1.193 Abs [1.2015] {1.0 C | 0.006 µg/L [0.005] | Low, 95.977 %Abs | | 0.020 - 0.400 | M22B127 |

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: M22B1271

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 |
|------------------------------|-----------------------------|-------------------------------|---------------------------------------|---------------|
| 6/29/2022 10:28:38 AM | | | | |
| STX Std 0 | 1.251 Abs | 0.000 µg/L | R ² =0.99907, 100.644 %Abs | RK1:23->A01@2 |
| STX Std 0 | 1.235 Abs [1.2430] {0.9 CV} | 0.002 µg/L [0.001] {141.4 CV} | R ² =0.99907, 99.356 %Abs | RK1:23->B01@2 |
| STX Std 1 | 1.060 Abs | 0.018 µg/L | R ² =0.99907, 85.278 %Abs | RK1:24->C01@2 |
| STX Std 1 | 1.046 Abs [1.0530] {0.9 CV} | 0.020 µg/L [0.019] {7.4 CV} | R ² =0.99907, 84.151 %Abs | RK1:24->D01@2 |
| STX Std 2 | 0.800 Abs | 0.049 µg/L | R ² =0.99907, 64.360 %Abs | RK1:25->E01@2 |
| STX Std 2 | 0.771 Abs [0.7855] {2.6 CV} | 0.053 µg/L [0.051] {5.5 CV} | R ² =0.99907, 62.027 %Abs | RK1:25->F01@3 |
| STX Std 3 | 0.567 Abs | 0.098 µg/L | R ² =0.99907, 45.615 %Abs | RK1:26->G01@3 |
| STX Std 3 | 0.540 Abs [0.5535] {3.4 CV} | 0.107 µg/L [0.102] {6.2 CV} | R ² =0.99907, 43.443 %Abs | RK1:26->H01@3 |
| STX Std 4 | 0.400 Abs | 0.178 µg/L | R ² =0.99907, 32.180 %Abs | RK1:27->A02@2 |
| STX Std 4 | 0.386 Abs [0.3930] {2.5 CV} | 0.189 µg/L [0.183] {4.2 CV} | R ² =0.99907, 31.054 %Abs | RK1:27->B02@2 |
| STX Std 5 | 0.252 Abs | > 0.400 µg/L | 20.274 %Abs | RK1:28->C02@2 |
| STX Std 5 | 0.245 Abs [0.2485] {2.0 CV} | > 0.400 µg/L | 19.710 %Abs | RK1:28->D02@2 |
| ***** | | | | |
| 6/29/2022 10:28:38 AM | | | | |
| STX Control (0.060-0.090) | 0.659 Abs | 0.074 µg/L | 53.017 %Abs | RK1:29->E02@2 |
| STX Control (0.060-0.090) | 0.632 Abs [0.6455] {3.0 CV} | 0.081 µg/L [0.078] {6.4 CV} | 50.845 %Abs [51.931 %Abs] | RK1:29->F02@3 |
| ***** | | | | |
| Statistic | | | | |
| STX Std 0 [MEAN] | 1.2430 | 0.0010 | | |
| STX Std 0 [SD] | 0.0113 | 0.0014 | | |
| STX Std 0 [%CV] | 0.9102 | 141.4214 | | |
| STX Std 1 [MEAN] | 1.0530 | 0.0190 | | |
| STX Std 1 [SD] | 0.0099 | 0.0014 | | |
| STX Std 1 [%CV] | 0.9401 | 7.4432 | | |
| STX Std 1 [%DIFF] | | -5.0000 | | |
| STX Std 2 [MEAN] | 0.7855 | 0.0510 | | |
| STX Std 2 [SD] | 0.0205 | 0.0028 | | |
| STX Std 2 [%CV] | 2.6106 | 5.5459 | | |
| STX Std 2 [%DIFF] | | 2.0000 | | |
| STX Std 3 [MEAN] | 0.5535 | 0.1025 | | |
| STX Std 3 [SD] | 0.0191 | 0.0064 | | |
| STX Std 3 [%CV] | 3.4493 | 6.2087 | | |
| STX Std 3 [%DIFF] | | 2.5000 | | |
| STX Std 4 [MEAN] | 0.3930 | 0.1835 | | |
| STX Std 4 [SD] | 0.0099 | 0.0078 | | |
| STX Std 4 [%CV] | 2.5190 | 4.2388 | | |
| STX Std 4 [%DIFF] | | -8.2500 | | |
| STX Std 5 [MEAN] | 0.2485 | | | |
| STX Std 5 [SD] | 0.0049 | | | |
| STX Std 5 [%CV] | 1.9918 | | | |

| Name | Absorbance | Concentration | Interpretation | Position |
|----------------------------------|------------|---------------|----------------|----------|
| STX Control (0.060-0.090) [MEAN] | 0.6455 | 0.0775 | | |
| STX Control (0.060-0.090) [SD] | 0.0191 | 0.0049 | | |
| STX Control (0.060-0.090) [%CV] | 2.9577 | 6.3868 | | |

Assay Curve

$$y = (A-D)/(1+(x/C)^B) + D$$

Weight: NONE

A = 1.2459

B = 1.2480

C = 0.065664

D = 0.15597

R2 coef = 0.99907

50% = 0.083

