



Saxitoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB42349	Raccoon Lake SRA	5/18/2020	5/21/2020	<0.05
AB42350	Deam Lake SRA	5/19/2020	5/21/2020	<0.05
AB42351	Cagles Mill Lake Beach	5/18/2020	5/21/2020	<0.05
AB42352	Paynetown SRA	5/18/2020	5/21/2020	<0.05
AB42353	Fairfax SRA	5/18/2020	5/21/2020	<0.05
AB42354	Starve Hollow SRA	5/18/2020	5/21/2020	<0.05
AB42355	Whitewater Memorial SP	5/19/2020	5/21/2020	<0.05
AB42356	Quakertown SRA	5/19/2020	5/21/2020	<0.05
AB42357	Mounds SRA	5/19/2020	5/21/2020	<0.05
AB42358	Hardy Lake SRA	5/19/2020	5/21/2020	<0.05
AB42359	Field Blank	5/18/2020	5/21/2020	<0.05
AB42360	Cagles Mill Lake Beach (Field Duplicate)	5/18/2020	5/21/2020	<0.05

Test Report (by Request)

Test Information

 Request: 5/21/2020 11:05:09 AM
 Date: 5/21/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
STX Std 0	SAXITOXIN	1.572 Abs	0.000 µg/L	R ² =0.99969, 100.70		19J1672
STX Std 0	SAXITOXIN	1.550 Abs [1.5610] {1.0 CV}	0.001 µg/L [0.001] {1}	R ² =0.99969, 99.295		19J1672
STX Std 1	SAXITOXIN	1.263 Abs	0.019 µg/L	R ² =0.99969, 80.910		19J1672
STX Std 1	SAXITOXIN	1.221 Abs [1.2420] {2.4 CV}	0.022 µg/L [0.021] {1}	R ² =0.99969, 78.219		19J1672
STX Std 2	SAXITOXIN	0.933 Abs	0.047 µg/L	R ² =0.99969, 59.769		19J1672
STX Std 2	SAXITOXIN	0.909 Abs [0.9210] {1.8 CV}	0.050 µg/L [0.049] {4}	R ² =0.99969, 58.232		19J1672
STX Std 3	SAXITOXIN	0.589 Abs	0.104 µg/L	R ² =0.99969, 37.732		19J1672
STX Std 3	SAXITOXIN	0.595 Abs [0.5920] {0.7 CV}	0.102 µg/L [0.103] {1}	R ² =0.99969, 38.117		19J1672
STX Std 4	SAXITOXIN	0.377 Abs	0.189 µg/L	R ² =0.99969, 24.151		19J1672
STX Std 4	SAXITOXIN	0.347 Abs [0.3620] {5.9 CV}	0.209 µg/L [0.199] {7}	R ² =0.99969, 22.229		19J1672
STX Std 5	SAXITOXIN	0.213 Abs	0.389 µg/L	R ² =0.99969, 13.645		19J1672
STX Std 5	SAXITOXIN	0.207 Abs [0.2100] {2.0 CV}	> 0.400 µg/L [0.389]	13.261 %Abs		19J1672
STX Control (0.060-0.090)	SAXITOXIN	0.721 Abs	0.076 µg/L	46.188 %Abs		19J1672
STX Control (0.060-0.090)	SAXITOXIN	0.712 Abs [0.7165] {0.9 CV}	0.078 µg/L [0.077] {1}	45.612 %Abs [45.900]		19J1672

Note

 Signature *David Jordan*

Date: 5/21/2020

Test Report (by Request)

Test Information

 Request: 5/21/2020 11:07:22 AM
 Date: 5/21/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
LRB	SAXITOXIN	1.444 Abs	0.008 µg/L	LOW, 92.505 %ABS	0.020 - 0.400	19J1672
LRB	SAXITOXIN	1.477 Abs [1.4605] {1.6 CV}	0.006 µg/L [0.007] {2}	LOW, 94.619 %ABS	0.020 - 0.400	19J1672
LFB	SAXITOXIN	0.727 Abs	0.075 µg/L	46.573 %Abs	0.020 - 0.400	19J1672
LFB	SAXITOXIN	0.712 Abs [0.7195] {1.5 CV}	0.078 µg/L [0.076] {2}	45.612 %Abs [46.092]	0.020 - 0.400	19J1672
AB42349	SAXITOXIN	1.514 Abs	0.003 µg/L	LOW, 96.989 %ABS	0.020 - 0.400	19J1672
AB42349	SAXITOXIN	1.524 Abs [1.5190] {0.5 CV}	0.003 µg/L [0.003] {0}	LOW, 97.630 %ABS	0.020 - 0.400	19J1672
AB42349MS	SAXITOXIN	0.656 Abs	0.088 µg/L	42.024 %Abs	0.020 - 0.400	19J1672
AB42349MS	SAXITOXIN	0.653 Abs [0.6545] {0.3 CV}	0.089 µg/L [0.089] {0}	41.832 %Abs [41.928]	0.020 - 0.400	19J1672
AB42349MSD	SAXITOXIN	0.713 Abs	0.077 µg/L	45.676 %Abs	0.020 - 0.400	19J1672
AB42349MSD	SAXITOXIN	0.699 Abs [0.7060] {1.4 CV}	0.080 µg/L [0.079] {2}	44.779 %Abs [45.227]	0.020 - 0.400	19J1672
AB42350	SAXITOXIN	1.528 Abs	0.002 µg/L	LOW, 97.886 %ABS	0.020 - 0.400	19J1672
AB42350	SAXITOXIN	1.511 Abs [1.5195] {0.8 CV}	0.004 µg/L [0.003] {4}	LOW, 96.797 %ABS	0.020 - 0.400	19J1672
AB42351	SAXITOXIN	1.500 Abs	0.004 µg/L	LOW, 96.092 %ABS	0.020 - 0.400	19J1672
AB42351	SAXITOXIN	1.519 Abs [1.5095] {0.9 CV}	0.003 µg/L [0.004] {2}	LOW, 97.309 %ABS	0.020 - 0.400	19J1672
AB42352	SAXITOXIN	1.539 Abs	0.002 µg/L	LOW, 98.591 %ABS	0.020 - 0.400	19J1672
AB42352	SAXITOXIN	1.505 Abs [1.5220] {1.6 CV}	0.004 µg/L [0.003] {4}	LOW, 96.413 %ABS	0.020 - 0.400	19J1672
AB42353	SAXITOXIN	1.467 Abs	0.007 µg/L	LOW, 93.978 %ABS	0.020 - 0.400	19J1672
AB42353	SAXITOXIN	1.481 Abs [1.4740] {0.7 CV}	0.005 µg/L [0.006] {2}	LOW, 94.875 %ABS	0.020 - 0.400	19J1672
AB42354	SAXITOXIN	1.465 Abs	0.007 µg/L	LOW, 93.850 %ABS	0.020 - 0.400	19J1672
AB42354	SAXITOXIN	1.474 Abs [1.4695] {0.4 CV}	0.007 µg/L [0.007] {0}	LOW, 94.427 %ABS	0.020 - 0.400	19J1672
AB42355	SAXITOXIN	1.433 Abs	0.009 µg/L	LOW, 91.800 %ABS	0.020 - 0.400	19J1672
AB42355	SAXITOXIN	1.444 Abs [1.4385] {0.5 CV}	0.009 µg/L [0.009] {0}	LOW, 92.505 %ABS	0.020 - 0.400	19J1672
AB42356	SAXITOXIN	1.442 Abs	0.009 µg/L	LOW, 92.377 %ABS	0.020 - 0.400	19J1672
AB42356	SAXITOXIN	1.426 Abs [1.4340] {0.8 CV}	0.010 µg/L [0.009] {7}	LOW, 91.352 %ABS	0.020 - 0.400	19J1672
AB42357	SAXITOXIN	1.445 Abs	0.009 µg/L	LOW, 92.569 %ABS	0.020 - 0.400	19J1672
AB42357	SAXITOXIN	1.449 Abs [1.4470] {0.2 CV}	0.008 µg/L [0.009] {8}	LOW, 92.825 %ABS	0.020 - 0.400	19J1672
AB42358	SAXITOXIN	1.453 Abs	0.008 µg/L	LOW, 93.081 %ABS	0.020 - 0.400	19J1672
AB42358	SAXITOXIN	1.443 Abs [1.4480] {0.5 CV}	0.009 µg/L [0.009] {8}	LOW, 92.441 %ABS	0.020 - 0.400	19J1672
AB42359	SAXITOXIN	1.516 Abs	0.003 µg/L	LOW, 97.117 %ABS	0.020 - 0.400	19J1672
AB42359	SAXITOXIN	1.526 Abs [1.5210] {0.5 CV}	0.003 µg/L [0.003] {0}	LOW, 97.758 %ABS	0.020 - 0.400	19J1672
AB42360	SAXITOXIN	1.448 Abs	0.008 µg/L	LOW, 92.761 %ABS	0.020 - 0.400	19J1672
AB42360	SAXITOXIN	1.427 Abs [1.4375] {1.0 CV}	0.010 µg/L [0.009] {1}	LOW, 91.416 %ABS	0.020 - 0.400	19J1672
LFB 2	SAXITOXIN	0.648 Abs	0.090 µg/L	41.512 %Abs	0.020 - 0.400	19J1672
LFB 2	SAXITOXIN	0.648 Abs [0.6480] {0.0 CV}	0.090 µg/L [0.090] {0}	41.512 %Abs [41.512]	0.020 - 0.400	19J1672
LRB 2	SAXITOXIN	1.471 Abs	0.006 µg/L	LOW, 94.234 %ABS	0.020 - 0.400	19J1672
LRB 2	SAXITOXIN	1.471 Abs [1.4710] {0.0 CV}	0.006 µg/L [0.006] {0}	LOW, 94.234 %ABS	0.020 - 0.400	19J1672

Note

 Signature *David Jordan*

Date: 5/21/2020

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: 19J1672

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
5/21/2020 11:05:09 AM				
STX Std 0	1.572 Abs		R ² =0.99969, 100.705 %Abs	RK1:23->A01@2
STX Std 0	1.550 Abs [1.5610] {1.0 CV}		R ² =0.99969, 99.295 %Abs	RK1:23->B01@2
STX Std 1	1.263 Abs		R ² =0.99969, 80.910 %Abs	RK1:24->C01@2
STX Std 1	1.221 Abs [1.2420] {2.4 CV}		R ² =0.99969, 78.219 %Abs	RK1:24->D01@2
STX Std 2	0.933 Abs		R ² =0.99969, 59.769 %Abs	RK1:25->E01@2
STX Std 2	0.909 Abs [0.9210] {1.8 CV}		R ² =0.99969, 58.232 %Abs	RK1:25->F01@3
STX Std 3	0.589 Abs		R ² =0.99969, 37.732 %Abs	RK1:26->G01@3
STX Std 3	0.595 Abs [0.5920] {0.7 CV}		R ² =0.99969, 38.117 %Abs	RK1:26->H01@3
STX Std 4	0.377 Abs		R ² =0.99969, 24.151 %Abs	RK1:27->A02@2
STX Std 4	0.347 Abs [0.3620] {5.9 CV}		R ² =0.99969, 22.229 %Abs	RK1:27->B02@2
STX Std 5	0.213 Abs		R ² =0.99969, 13.645 %Abs	RK1:28->C02@2
STX Std 5	0.207 Abs [0.2100] {2.0 CV}		13.261 %Abs	RK1:28->D02@2

5/21/2020 11:05:09 AM				
STX Control (0.060-0.090)	0.721 Abs		46.188 %Abs	RK1:29->E02@2
STX Control (0.060-0.090)	0.712 Abs [0.7165] {0.9 CV}		45.612 %Abs [45.900 %Abs]	RK1:29->F02@3

Statistic				
STX Std 0 [MEAN]	1.5610			
STX Std 0 [SD]	0.0156			
STX Std 0 [%CV]	0.9966			
STX Std 1 [MEAN]	1.2420			
STX Std 1 [SD]	0.0297			
STX Std 1 [%CV]	2.3912			
STX Std 1 [%DIFF]				
STX Std 2 [MEAN]	0.9210			
STX Std 2 [SD]	0.0170			
STX Std 2 [%CV]	1.8426			
STX Std 2 [%DIFF]				
STX Std 3 [MEAN]	0.5920			
STX Std 3 [SD]	0.0042			
STX Std 3 [%CV]	0.7167			
STX Std 3 [%DIFF]				
STX Std 4 [MEAN]	0.3620			
STX Std 4 [SD]	0.0212			
STX Std 4 [%CV]	5.8600			
STX Std 4 [%DIFF]				
STX Std 5 [MEAN]	0.2100			
STX Std 5 [SD]	0.0042			
STX Std 5 [%CV]	2.0203			

Name	Absorbance	Concentration	Interpretation	Position
STX Control (0.060-0.090) [MEAN]	0.7165			
STX Control (0.060-0.090) [SD]	0.0064			
STX Control (0.060-0.090) [%CV]	0.8882			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.5592
 B = 1.1881
 C = 0.062159
 D = 0.060825
 R2 coef = 0.99969
 50% = 0.066

