



Saxitoxin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)	% Recovery
LRB 1	Lab Reagent Blank	8/7/2019	8/7/2019	<0.050	
LFB 1	Lab Fortified Blank (Spike = 0.10 ppb)	8/7/2019	8/7/2019	0.085	85
AB40022	Raccoon Lake SRA	8/5/2019	8/7/2019	<0.050	
AB40025	Starve Hollow SRA	8/5/2019	8/7/2019	0.064	
AB40026	Whitewater Memorial SP	8/6/2019	8/7/2019	<0.050	
AB40026MS	Whitewater Memorial SP MS (Spk. = 0.1 ppb)	8/6/2019	8/7/2019	0.090	78
AB40026MSD	Whitewater Memorial SP MSD (Spk. = 0.1 ppb)	8/6/2019	8/7/2019	0.093	81
AB40027	Quakertown SRA	8/6/2019	8/7/2019	<0.050	
AB40028	Mounds SRA	8/6/2019	8/7/2019	<0.050	
AB40029	Hardy Lake SRA	8/6/2019	8/7/2019	<0.050	
AB40030	Deam Lake SRA	8/6/2019	8/7/2019	<0.050	
AB40031	Field Blank	8/6/2019	8/7/2019	<0.050	
AB40033	Raccoon Lake SRA Field Dup.	8/5/2019	8/7/2019	<0.050	
AB40046	Fairfax SRA	8/5/2019	8/7/2019	0.075	
AB40047	Paynetown SRA	8/5/2019	8/7/2019	0.068	
LRB 2	Lab Reagent Blank 2	8/7/2019	8/7/2019	<0.050	
LFB 2	Lab Fortified Blank 2 (Spike = 0.10 ppb)	8/7/2019	8/7/2019	0.090	90



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: "

"

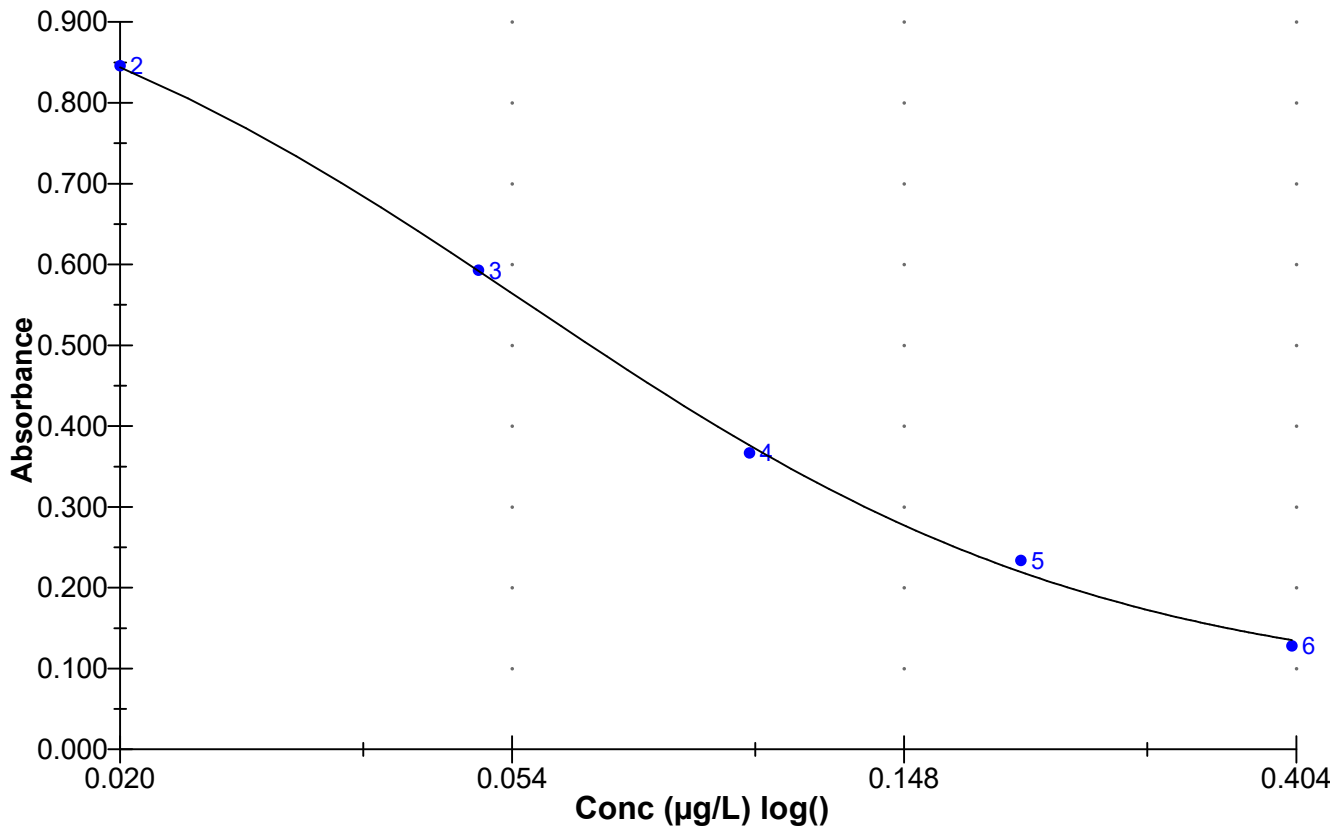
Name	Absorbance	Concentration	Interpretation	Position	
8/7/2019 12:33:30 PM					
STX Std 0	1.037 Abs	0.000 µg/L	R^2=0.99947	RK1:23->A01@2	
STX Std 0	1.035 Abs [1.0360] {0.1 CV}	0.001 µg/L [0.001] {141.4 CV}	R^2=0.99947	RK1:23->B01@2	
STX Std 1	0.848 Abs	0.020 µg/L	R^2=0.99947	RK1:24->C01@2	
STX Std 1	0.845 Abs [0.8465] {0.3 CV}	0.020 µg/L [0.020] {0.0 CV}	R^2=0.99947	RK1:24->D01@2	
STX Std 2	0.608 Abs	0.048 µg/L	R^2=0.99947	RK1:25->E01@2	
STX Std 2	0.578 Abs [0.5930] {3.6 CV}	0.052 µg/L [0.050] {5.7 CV}	R^2=0.99947	RK1:25->F01@3	
STX Std 3	0.368 Abs	0.103 µg/L	R^2=0.99947	RK1:26->G01@3	
STX Std 3	0.367 Abs [0.3675] {0.2 CV}	0.103 µg/L [0.103] {0.0 CV}	R^2=0.99947	RK1:26->H01@3	
STX Std 4	0.231 Abs	0.188 µg/L	R^2=0.99947	RK1:27->A02@2	
STX Std 4	0.236 Abs [0.2335] {1.5 CV}	0.182 µg/L [0.185] {2.3 CV}	R^2=0.99947	RK1:27->B02@2	
STX Std 5	0.129 Abs	> 0.400 µg/L		RK1:28->C02@2	
STX Std 5	0.127 Abs [0.1280] {1.1 CV}	> 0.400 µg/L		RK1:28->D02@2	
+++++					
8/7/2019 12:33:30 PM					
STX Control (0.060-0.090)	0.478 Abs	0.071 µg/L		RK1:29->E02@2	
STX Control (0.060-0.090)	0.459 Abs [0.4685] {2.9 CV}	0.076 µg/L [0.074] {4.8 CV}		RK1:29->F02@3	

Statistic					
STX Std 0 [MEAN]	1.0360	0.0005			
STX Std 0 [SD]	0.0014	0.0007			
STX Std 0 [%CV]	0.1365	141.4214			
STX Std 1 [MEAN]	0.8465	0.0200			
STX Std 1 [SD]	0.0021	0.0000			
STX Std 1 [%CV]	0.2506	0.0000			
STX Std 1 [%DIFF]		0.0000			
STX Std 2 [MEAN]	0.5930	0.0500			
STX Std 2 [SD]	0.0212	0.0028			
STX Std 2 [%CV]	3.5773	5.6569			
STX Std 2 [%DIFF]		-0.0000			
STX Std 3 [MEAN]	0.3675	0.1030			
STX Std 3 [SD]	0.0007	0.0000			
STX Std 3 [%CV]	0.1924	0.0000			
STX Std 3 [%DIFF]		3.0000			
STX Std 4 [MEAN]	0.2335	0.1850			
STX Std 4 [SD]	0.0035	0.0042			
STX Std 4 [%CV]	1.5141	2.2933			
STX Std 4 [%DIFF]		-7.5000			
STX Std 5 [MEAN]	0.1280				
STX Std 5 [SD]	0.0014				
STX Std 5 [%CV]	1.1048				

Name	Absorbance	Concentration	Interpretation	Position	
STX Control (0.060-0.090) [MEAN]	0.4685	0.0735			
STX Control (0.060-0.090) [SD]	0.0134	0.0035			
STX Control (0.060-0.090) [%CV]	2.8677	4.8102			
STX Control (0.060-0.090) [%DIFF]		-2.0000			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
Weight: NONE
A = 1.0370
B = 1.3415
C = 0.056315
D = 0.070264
R2 coef = 0.99945



Test Information

Request: 8/7/2019 12:33:30 PM
Date: 8/7/2019

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference
STX Std 0	SAXITOXIN	1.037 Abs	0.000 µg/L	R^2=0.99947	0.000
STX Std 0	SAXITOXIN	1.035 Abs [1.0360] {0.1 CV}	0.001 µg/L [0.001] {141.1}	R^2=0.99947	0.000
STX Std 1	SAXITOXIN	0.848 Abs	0.020 µg/L	R^2=0.99947	0.020
STX Std 1	SAXITOXIN	0.845 Abs [0.8465] {0.3 CV}	0.020 µg/L [0.020] {0.000}	R^2=0.99947	0.020
STX Std 2	SAXITOXIN	0.608 Abs	0.048 µg/L	R^2=0.99947	0.050
STX Std 2	SAXITOXIN	0.578 Abs [0.5930] {3.6 CV}	0.052 µg/L [0.050] {5.71}	R^2=0.99947	0.050
STX Std 3	SAXITOXIN	0.368 Abs	0.103 µg/L	R^2=0.99947	0.100
STX Std 3	SAXITOXIN	0.367 Abs [0.3675] {0.2 CV}	0.103 µg/L [0.103] {0.000}	R^2=0.99947	0.100
STX Std 4	SAXITOXIN	0.231 Abs	0.188 µg/L	R^2=0.99947	0.200
STX Std 4	SAXITOXIN	0.236 Abs [0.2335] {1.5 CV}	0.182 µg/L [0.185] {2.31}	R^2=0.99947	0.200
STX Std 5	SAXITOXIN	0.129 Abs	> 0.400 µg/L		0.400
STX Std 5	SAXITOXIN	0.127 Abs [0.1280] {1.1 CV}	> 0.400 µg/L		0.400
STX Control (0.060-0.090)	SAXITOXIN	0.478 Abs	0.071 µg/L		0.075 +-0.015
STX Control (0.060-0.090)	SAXITOXIN	0.459 Abs [0.4685] {2.9 CV}	0.076 µg/L [0.074] {4.81}		0.075 +-0.015
LRB 1	SAXITOXIN	0.993 Abs	0.006 µg/L	LOW	0.020 - 0.040
LRB 1	SAXITOXIN	0.990 Abs [0.9915] {0.2 CV}	0.006 µg/L [0.006] {0.000}	LOW [LOW]	0.020 - 0.040
LFB 1	SAXITOXIN	0.423 Abs	0.085 µg/L		0.020 - 0.040
LFB 1	SAXITOXIN	0.423 Abs [0.4230] {0.0 CV}	0.085 µg/L [0.085] {0.000}		0.020 - 0.040
AB40022	SAXITOXIN	0.976 Abs	0.009 µg/L	LOW	0.020 - 0.040
AB40022	SAXITOXIN	0.960 Abs [0.9680] {1.2 CV}	0.010 µg/L [0.009] {7.41}	LOW	0.020 - 0.040
AB40025	SAXITOXIN	0.558 Abs	0.062 µg/L		0.020 - 0.040
AB40025	SAXITOXIN	0.538 Abs [0.5480] {2.6 CV}	0.065 µg/L [0.064] {3.31}		0.020 - 0.040
AB40026	SAXITOXIN	0.942 Abs	0.012 µg/L	LOW	0.020 - 0.040
AB40026	SAXITOXIN	0.936 Abs [0.9390] {0.5 CV}	0.012 µg/L [0.012] {0.000}	LOW	0.020 - 0.040
AB40026MS	SAXITOXIN	0.410 Abs	0.089 µg/L		0.020 - 0.040
AB40026MS	SAXITOXIN	0.408 Abs [0.4090] {0.3 CV}	0.090 µg/L [0.090] {0.81}		0.020 - 0.040
AB40026MSD	SAXITOXIN	0.402 Abs	0.092 µg/L		0.020 - 0.040
AB40026MSD	SAXITOXIN	0.393 Abs [0.3975] {1.6 CV}	0.094 µg/L [0.093] {1.51}		0.020 - 0.040
AB40027	SAXITOXIN	0.952 Abs	0.011 µg/L	LOW	0.020 - 0.040
AB40027	SAXITOXIN	0.944 Abs [0.9480] {0.6 CV}	0.012 µg/L [0.012] {6.11}	LOW	0.020 - 0.040
AB40028	SAXITOXIN	0.947 Abs	0.011 µg/L	LOW	0.020 - 0.040
AB40028	SAXITOXIN	0.951 Abs [0.9490] {0.3 CV}	0.011 µg/L [0.011] {0.000}	LOW	0.020 - 0.040
AB40029	SAXITOXIN	0.654 Abs	0.045 µg/L		0.020 - 0.040
AB40029	SAXITOXIN	0.652 Abs [0.6530] {0.2 CV}	0.045 µg/L [0.045] {0.000}		0.020 - 0.040
AB40030	SAXITOXIN	0.995 Abs	0.007 µg/L	LOW	0.020 - 0.040
AB40030	SAXITOXIN	0.991 Abs [0.9930] {0.3 CV}	0.007 µg/L [0.007] {0.000}	LOW	0.020 - 0.040
AB40031	SAXITOXIN	0.994 Abs	0.007 µg/L	LOW	0.020 - 0.040
AB40031	SAXITOXIN	0.991 Abs [0.9925] {0.2 CV}	0.007 µg/L [0.007] {0.000}	LOW	0.020 - 0.040
AB40033	SAXITOXIN	0.966 Abs	0.010 µg/L	LOW	0.020 - 0.040
AB40033	SAXITOXIN	0.971 Abs [0.9685] {0.4 CV}	0.009 µg/L [0.009] {7.41}	LOW	0.020 - 0.040
AB40046	SAXITOXIN	0.495 Abs	0.075 µg/L		0.020 - 0.040
AB40046	SAXITOXIN	0.489 Abs [0.4920] {0.9 CV}	0.076 µg/L [0.075] {0.91}		0.020 - 0.040
AB40047	SAXITOXIN	0.530 Abs	0.067 µg/L		0.020 - 0.040
AB40047	SAXITOXIN	0.516 Abs [0.5230] {1.9 CV}	0.069 µg/L [0.068] {2.11}		0.020 - 0.040
LRB 2	SAXITOXIN	1.014 Abs	0.004 µg/L	LOW	0.020 - 0.040
LRB 2	SAXITOXIN	1.041 Abs [1.0275] {1.9 CV}	0.000 µg/L [0.002] {141.1}	LOW [LOW]	0.020 - 0.040
LFB 2	SAXITOXIN	0.407 Abs	0.090 µg/L		0.020 - 0.040
LFB 2	SAXITOXIN	0.403 Abs [0.4050] {0.7 CV}	0.091 µg/L [0.090] {0.81}		0.020 - 0.040

