



Anatoxin-a 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	7/31/2019	7/31/2019	<0.40	
LFB	Lab Fortified Blank (True value = 0.800)	7/31/2019	7/31/2019	0.61	76
AB39924	Kunkel Beach at Ouabache SP	7/29/2019	7/31/2019	<0.40	
AB39925	Lost Bridge West SRA	7/29/2019	7/31/2019	<0.40	
AB39926	Mississinewa Lake Miami SRA	7/29/2019	7/31/2019	<0.40	
AB39926MS	Mississinewa (Matrix Spike, True Value = 0.80)	7/31/2019	7/31/2019	0.64	70
AB39926MSD	Mississinewa (Matrix Spk. Duplicate, T.V. = 0.80)	7/31/2019	7/31/2019	0.72	80
AB39927	Potato Creek SP	7/29/2019	7/31/2019	<0.40	
AB39928	Lost Bridge West SRA Field Dup.	7/29/2019	7/31/2019	<0.40	
AB39929	Field Blank	7/29/2019	7/31/2019	<0.40	

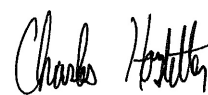
Test Information

Request: 7/31/2019 11:02:35 AM
Date: 7/31/2019 - 8/1/2019

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference
ATX Std 0	ANATOXIN	1.079 Abs	0.000 µg/L	R^2=0.99892	0.000
ATX Std 0	ANATOXIN	1.067 Abs [1.0730] {0.8 CV}	0.003 µg/L [0.002] {141.1}	R^2=0.99892	0.000
ATX Std 1	ANATOXIN	0.858 Abs	0.132 µg/L	R^2=0.99892	0.150
ATX Std 1	ANATOXIN	0.840 Abs [0.8490] {1.5 CV}	0.147 µg/L [0.139] {7.6}	R^2=0.99892	0.150
ATX Std 2	ANATOXIN	0.630 Abs	0.415 µg/L	R^2=0.99892	0.400
ATX Std 2	ANATOXIN	0.617 Abs [0.6235] {1.5 CV}	0.438 µg/L [0.426] {3.8}	R^2=0.99892	0.400
ATX Std 3	ANATOXIN	0.425 Abs	0.983 µg/L	R^2=0.99892	1.000
ATX Std 3	ANATOXIN	0.419 Abs [0.4220] {1.0 CV}	1.009 µg/L [0.996] {1.8}	R^2=0.99892	1.000
ATX Std 4	ANATOXIN	0.256 Abs	2.240 µg/L	R^2=0.99892	2.500
ATX Std 4	ANATOXIN	0.249 Abs [0.2525] {2.0 CV}	2.332 µg/L [2.286] {2.8}	R^2=0.99892	2.500
ATX Std 5	ANATOXIN	0.133 Abs	> 5.000 µg/L		5.000
ATX Std 5	ANATOXIN	0.130 Abs [0.1315] {1.6 CV}	> 5.000 µg/L		5.000
ATX Control	ANATOXIN	0.487 Abs	0.755 µg/L		0.75 +/- 0.05
ATX Control	ANATOXIN	0.469 Abs [0.4780] {2.7 CV}	0.814 µg/L [0.785] {5.3}		0.75 +/- 0.05
LRB	ANATOXIN	0.943 Abs	0.068 µg/L	LOW	0.150 - 5.000
LRB	ANATOXIN	0.966 Abs [0.9545] {1.7 CV}	0.053 µg/L [0.061] {17.5}	LOW [LOW]	0.150 - 5.000
LFB	ANATOXIN	0.546 Abs	0.590 µg/L		0.150 - 5.000
LFB	ANATOXIN	0.527 Abs [0.5365] {2.5 CV}	0.639 µg/L [0.614] {5.6}		0.150 - 5.000
AB39924	ANATOXIN	0.943 Abs	0.075 µg/L	LOW	0.150 - 5.000
AB39924	ANATOXIN	0.933 Abs [0.9380] {0.8 CV}	0.083 µg/L [0.079] {7.2}	LOW	0.150 - 5.000
AB39925	ANATOXIN	0.973 Abs	0.054 µg/L	LOW	0.150 - 5.000
AB39925	ANATOXIN	0.925 Abs [0.9490] {3.6 CV}	0.088 µg/L [0.071] {33.9}	LOW	0.150 - 5.000
AB39926	ANATOXIN	0.940 Abs	0.077 µg/L	LOW	0.150 - 5.000
AB39926	ANATOXIN	0.925 Abs [0.9325] {1.1 CV}	0.088 µg/L [0.082] {9.4}	LOW	0.150 - 5.000
AB39926MS	ANATOXIN	0.537 Abs	0.613 µg/L		0.150 - 5.000
AB39926MS	ANATOXIN	0.516 Abs [0.5265] {2.8 CV}	0.669 µg/L [0.641] {6.2}		0.150 - 5.000
AB39926MSD	ANATOXIN	0.500 Abs	0.715 µg/L		0.150 - 5.000
AB39926MSD	ANATOXIN	0.498 Abs [0.4990] {0.3 CV}	0.721 µg/L [0.718] {0.6}		0.150 - 5.000
AB39927	ANATOXIN	0.928 Abs	0.086 µg/L	LOW	0.150 - 5.000
AB39927	ANATOXIN	0.921 Abs [0.9245] {0.5 CV}	0.091 µg/L [0.089] {4.0}	LOW	0.150 - 5.000
AB39928	ANATOXIN	0.963 Abs	0.060 µg/L	LOW	0.150 - 5.000
AB39928	ANATOXIN	0.948 Abs [0.9555] {1.1 CV}	0.071 µg/L [0.065] {11.9}	LOW	0.150 - 5.000
AB39929	ANATOXIN	1.053 Abs	0.009 µg/L	LOW	0.150 - 5.000
AB39929	ANATOXIN	1.000 Abs [1.0265] {3.7 CV}	0.037 µg/L [0.023] {86.1}	LOW	0.150 - 5.000

Note

Signature



Charles Hostetter 8/2/2019

Assay Information

Assay Name: ANATOXIN
Version: 1
Temperature: Room Temperature
Last Modified By: Security disabled
Units: µg/L
Assay Description: PN 520060
Assay Substances: Controls:

ATX Control

Standards:

ATX Std 0, Concentration = 0.000, Minimum number to use: 2

ATX Std 1, Concentration = 0.150, Minimum number to use: 2

ATX Std 2, Concentration = 0.400, Minimum number to use: 2

ATX Std 3, Concentration = 1.000, Minimum number to use: 2

ATX Std 4, Concentration = 2.500, Minimum number to use: 2

ATX Std 5, Concentration = 5.000, 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: 1/16/2017 8:49:03 AM

Normal: 0.150 - 5.000

of decimals: 3

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
7/31/2019 11:02:35 AM				
ATX Std 0	1.079 Abs	0.000 µg/L	R^2=0.99892	RK1:23->A01@2
ATX Std 0	1.067 Abs [1.0730] {0.8 CV}	0.003 µg/L [0.002] {141.4 CV}	R^2=0.99892	RK1:23->B01@2
ATX Std 1	0.858 Abs	0.132 µg/L	R^2=0.99892	RK1:24->C01@2
ATX Std 1	0.840 Abs [0.8490] {1.5 CV}	0.147 µg/L [0.139] {7.6 CV}	R^2=0.99892	RK1:24->D01@2
ATX Std 2	0.630 Abs	0.415 µg/L	R^2=0.99892	RK1:25->E01@2
ATX Std 2	0.617 Abs [0.6235] {1.5 CV}	0.438 µg/L [0.426] {3.8 CV}	R^2=0.99892	RK1:25->F01@3
ATX Std 3	0.425 Abs	0.983 µg/L	R^2=0.99892	RK1:26->G01@3
ATX Std 3	0.419 Abs [0.4220] {1.0 CV}	1.009 µg/L [0.996] {1.8 CV}	R^2=0.99892	RK1:26->H01@3
ATX Std 4	0.256 Abs	2.240 µg/L	R^2=0.99892	RK1:27->A02@2
ATX Std 4	0.249 Abs [0.2525] {2.0 CV}	2.332 µg/L [2.286] {2.8 CV}	R^2=0.99892	RK1:27->B02@2
ATX Std 5	0.133 Abs	> 5.000 µg/L		RK1:28->C02@2
ATX Std 5	0.130 Abs [0.1315] {1.6 CV}	> 5.000 µg/L		RK1:28->D02@2

7/31/2019 11:02:35 AM				
ATX Control	0.487 Abs	0.755 µg/L		RK1:29->E02@2
ATX Control	0.469 Abs [0.4780] {2.7 CV}	0.814 µg/L [0.785] {5.3 CV}		RK1:29->F02@3

Statistic				
ATX Std 0 [MEAN]	1.0730	0.0015		
ATX Std 0 [SD]	0.0085	0.0021		
ATX Std 0 [%CV]	0.7908	141.4214		
ATX Std 1 [MEAN]	0.8490	0.1395		
ATX Std 1 [SD]	0.0127	0.0106		
ATX Std 1 [%CV]	1.4992	7.6033		
ATX Std 1 [%DIFF]		-7.0000		
ATX Std 2 [MEAN]	0.6235	0.4265		
ATX Std 2 [SD]	0.0092	0.0163		
ATX Std 2 [%CV]	1.4743	3.8132		
ATX Std 2 [%DIFF]		6.6250		
ATX Std 3 [MEAN]	0.4220	0.9960		
ATX Std 3 [SD]	0.0042	0.0184		
ATX Std 3 [%CV]	1.0054	1.8459		
ATX Std 3 [%DIFF]		-0.4000		
ATX Std 4 [MEAN]	0.2525	2.2860		
ATX Std 4 [SD]	0.0049	0.0651		
ATX Std 4 [%CV]	1.9603	2.8457		
ATX Std 4 [%DIFF]		-8.5600		
ATX Std 5 [MEAN]	0.1315			
ATX Std 5 [SD]	0.0021			
ATX Std 5 [%CV]	1.6132			

Name	Absorbance	Concentration	Interpretation	Position
ATX Control [MEAN]	0.4780	0.7845		
ATX Control [SD]	0.0127	0.0417		
ATX Control [%CV]	2.6627	5.3179		
ATX Control [%DIFF]		4.6000		

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.0756
B = 0.89118
C = 0.61606
D = -0.0037290
R2 coef = 0.99889

