



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	7/2/2019	7/2/2019	<0.40	71
LFB	Lab Fortified Blank	7/2/2019	7/2/2019	0.57	
AB39631	Field Blank	7/1/2019	7/2/2019	<0.40	
AB39633	Kunkel Beach @ Ouabache State Park	7/1/2019	7/2/2019	<0.40	
AB39633LD	Kunkel Beach @ Ouabache State Park (Lab Dup.)	7/2/2019	7/2/2019	<0.40	
AB39634	Kunkel Beach @ Ouabache State Park (Field Dup.)	7/1/2019	7/2/2019	<0.40	

Test Information

Request: 7/2/2019 10:51:54 AM
Date: 7/2/2019

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference
ATX Std 0	ANATOXIN	1.043 Abs	0.000 µg/L	R^2=0.99921	0.000
ATX Std 0	ANATOXIN	1.024 Abs [1.0335] {1.3 CV}	0.006 µg/L [0.003] {141}	R^2=0.99921	0.000
ATX Std 1	ANATOXIN	0.868 Abs	0.128 µg/L	R^2=0.99921	0.150
ATX Std 1	ANATOXIN	0.842 Abs [0.8550] {2.2 CV}	0.154 µg/L [0.141] {13.0}	R^2=0.99921	0.150
ATX Std 2	ANATOXIN	0.659 Abs	0.405 µg/L	R^2=0.99921	0.400
ATX Std 2	ANATOXIN	0.647 Abs [0.6530] {1.3 CV}	0.427 µg/L [0.416] {3.7}	R^2=0.99921	0.400
ATX Std 3	ANATOXIN	0.445 Abs	0.989 µg/L	R^2=0.99921	1.000
ATX Std 3	ANATOXIN	0.431 Abs [0.4380] {2.3 CV}	1.049 µg/L [1.019] {4.2}	R^2=0.99921	1.000
ATX Std 4	ANATOXIN	0.265 Abs	2.268 µg/L	R^2=0.99921	2.500
ATX Std 4	ANATOXIN	0.259 Abs [0.2620] {1.6 CV}	2.342 µg/L [2.305] {2.3}	R^2=0.99921	2.500
ATX Std 5	ANATOXIN	0.138 Abs	> 5.000 µg/L		5.000
ATX Std 5	ANATOXIN	0.134 Abs [0.1360] {2.1 CV}	> 5.000 µg/L		5.000
ATX Control	ANATOXIN	0.524 Abs	0.714 µg/L		0.75 +- 0
ATX Control	ANATOXIN	0.503 Abs [0.5135] {2.9 CV}	0.778 µg/L [0.746] {6.1}		0.75 +- 0
LRB	ANATOXIN	0.986 Abs	0.031 µg/L	LOW	0.150 - 5
LRB	ANATOXIN	0.970 Abs [0.9780] {1.2 CV}	0.042 µg/L [0.036] {21.3}	LOW [LOW]	0.150 - 5
LFB	ANATOXIN	0.586 Abs	0.553 µg/L		0.150 - 5
LFB	ANATOXIN	0.574 Abs [0.5800] {1.5 CV}	0.581 µg/L [0.567] {3.5}		0.150 - 5
AB39631	ANATOXIN	1.018 Abs	0.010 µg/L	LOW	0.150 - 5
AB39631	ANATOXIN	0.989 Abs [1.0035] {2.0 CV}	0.029 µg/L [0.019] {68.9}	LOW [LOW]	0.150 - 5
AB39633	ANATOXIN	0.940 Abs	0.065 µg/L	LOW	0.150 - 5
AB39633	ANATOXIN	0.951 Abs [0.9455] {0.8 CV}	0.056 µg/L [0.060] {10.5}	LOW [LOW]	0.150 - 5
AB39633LD	ANATOXIN	0.968 Abs	0.043 µg/L	LOW	0.150 - 5
AB39633LD	ANATOXIN	0.950 Abs [0.9590] {1.3 CV}	0.057 µg/L [0.050] {19.8}	LOW [LOW]	0.150 - 5
AB39634	ANATOXIN	1.012 Abs	0.014 µg/L	LOW	0.150 - 5
AB39634	ANATOXIN	0.969 Abs [0.9905] {3.1 CV}	0.043 µg/L [0.029] {72.0}	LOW [LOW]	0.150 - 5

Note

Signature

David Jordan

Date: 7/2/2019



ANATOXIN - Assay Calibration Report

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
7/2/2019 10:51:54 AM				
ATX Std 0	1.043 Abs	0.000 µg/L	R^2=0.99921	RK1:30->A05@1
ATX Std 0	1.024 Abs [1.0335] {1.3 CV}	0.006 µg/L [0.003] {141.4 CV}	R^2=0.99921	RK1:30->B05@1
ATX Std 1	0.868 Abs	0.128 µg/L	R^2=0.99921	RK1:31->C05@1
ATX Std 1	0.842 Abs [0.8550] {2.2 CV}	0.154 µg/L [0.141] {13.0 CV}	R^2=0.99921	RK1:31->D05@1
ATX Std 2	0.659 Abs	0.405 µg/L	R^2=0.99921	RK1:32->E05@1
ATX Std 2	0.647 Abs [0.6530] {1.3 CV}	0.427 µg/L [0.416] {3.7 CV}	R^2=0.99921	RK1:32->F05@4
ATX Std 3	0.445 Abs	0.989 µg/L	R^2=0.99921	RK1:33->G05@4
ATX Std 3	0.431 Abs [0.4380] {2.3 CV}	1.049 µg/L [1.019] {4.2 CV}	R^2=0.99921	RK1:33->H05@4
ATX Std 4	0.265 Abs	2.268 µg/L	R^2=0.99921	RK1:34->A06@1
ATX Std 4	0.259 Abs [0.2620] {1.6 CV}	2.342 µg/L [2.305] {2.3 CV}	R^2=0.99921	RK1:34->B06@1
ATX Std 5	0.138 Abs	> 5.000 µg/L		RK1:35->C06@1
ATX Std 5	0.134 Abs [0.1360] {2.1 CV}	> 5.000 µg/L		RK1:35->D06@1

7/2/2019 10:51:54 AM				
ATX Control	0.524 Abs	0.714 µg/L		RK1:36->E06@1
ATX Control	0.503 Abs [0.5135] {2.9 CV}	0.778 µg/L [0.746] {6.1 CV}		RK1:36->F06@4

Statistic				
ATX Std 0 [MEAN]	1.0335	0.0030		
ATX Std 0 [SD]	0.0134	0.0042		
ATX Std 0 [%CV]	1.2999	141.4214		
ATX Std 1 [MEAN]	0.8550	0.1410		
ATX Std 1 [SD]	0.0184	0.0184		
ATX Std 1 [%CV]	2.1503	13.0388		
ATX Std 1 [%DIFF]		-6.0000		
ATX Std 2 [MEAN]	0.6530	0.4160		
ATX Std 2 [SD]	0.0085	0.0156		
ATX Std 2 [%CV]	1.2994	3.7395		
ATX Std 2 [%DIFF]		4.0000		
ATX Std 3 [MEAN]	0.4380	1.0190		
ATX Std 3 [SD]	0.0099	0.0424		
ATX Std 3 [%CV]	2.2602	4.1635		
ATX Std 3 [%DIFF]		1.9000		
ATX Std 4 [MEAN]	0.2620	2.3050		
ATX Std 4 [SD]	0.0042	0.0523		
ATX Std 4 [%CV]	1.6193	2.2701		
ATX Std 4 [%DIFF]		-7.8000		
ATX Std 5 [MEAN]	0.1360			
ATX Std 5 [SD]	0.0028			
ATX Std 5 [%CV]	2.0797			

Name	Absorbance	Concentration	Interpretation	Position	
ATX Control [MEAN]	0.5135	0.7460			
ATX Control [SD]	0.0148	0.0453			
ATX Control [%CV]	2.8918	6.0663			
ATX Control [%DIFF]		-0.5333			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
Weight: NONE
A = 1.0365
B = 0.93931
C = 0.73535
D = -0.0028143
R2 coef = 0.99922

