



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC41107	Potato Creek SP - Worster Lake Beach	7/29/2024	7/30/2024	< 0.40
AC41108	Mississinewa Lake - Miami SRA Beach	7/29/2024	7/30/2024	< 0.40
AC41109	Salamonie Lake - Lost Bridge West SRA Beach	7/29/2024	7/30/2024	< 0.40
AC41110	Potato Creek SP - Worster Lake Beach (Field Duplicate)	7/29/2024	7/30/2024	< 0.40
AC41111	Field Blank	7/29/2024	7/30/2024	< 0.40
AC41112	Patoka Lake - Newton Stewart SRA Beach	7/29/2024	7/30/2024	< 0.40

Test Report (by Request)

Test Information

Request: 7/30/2024 2:56:47 PM
 Date: 7/30/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.624 Abs	0.000 µg/L	R^2=0.99711, 101.3		0.000	Kit:P23L3t
ATX Std 0	ANATOXIN	1.581 Abs [1.6025] {1.9 C	0.007 µg/L [0.004]	R^2=0.99711, 98.62		0.000	Kit:P23L3t
ATX Std 1	ANATOXIN	1.339 Abs	0.121 µg/L	R^2=0.99711, 83.53		0.150	Kit:P23L3t
ATX Std 1	ANATOXIN	1.265 Abs [1.3020] {4.0 C	0.170 µg/L [0.146]	R^2=0.99711, 78.91		0.150	Kit:P23L3t
ATX Std 2	ANATOXIN	1.005 Abs	0.412 µg/L	R^2=0.99711, 62.69		0.400	Kit:P23L3t
ATX Std 2	ANATOXIN	1.032 Abs [1.0185] {1.9 C	0.380 µg/L [0.396]	R^2=0.99711, 64.37		0.400	Kit:P23L3t
ATX Std 3	ANATOXIN	0.665 Abs	1.074 µg/L	R^2=0.99711, 41.48		1.000	Kit:P23L3t
ATX Std 3	ANATOXIN	0.649 Abs [0.6570] {1.7 C	1.124 µg/L [1.099]	R^2=0.99711, 40.48		1.000	Kit:P23L3t
ATX Std 4	ANATOXIN	0.484 Abs	1.853 µg/L	R^2=0.99711, 30.19		2.500	Kit:P23L3t
ATX Std 4	ANATOXIN	0.406 Abs [0.4450] {12.4	2.421 µg/L [2.137]	R^2=0.99711, 25.32		2.500	Kit:P23L3t
ATX Std 5	ANATOXIN	0.227 Abs	> 5.000 µg/L	14.161 %Abs		5.000	Kit:P23L3t
ATX Std 5	ANATOXIN	0.200 Abs [0.2135] {8.9 C	> 5.000 µg/L	12.477 %Abs		5.000	Kit:P23L3t
ATX Control	ANATOXIN	0.826 Abs	0.686 µg/L	51.528 %Abs			Kit:P23L3t
ATX Control	ANATOXIN	0.816 Abs [0.8210] {0.9 C	0.705 µg/L [0.696]	50.905 %Abs [51.2			Kit:P23L3t

Note

* A - Abs > 3; IA - Initial Abs; DA - Delta Abs; SD - SD of Abs; LR - Linear Range; [...] - Mean result of duplicate tests

* Generated by software version (6.4.1.1171/1085/1.00/0.95) 7/30/2024 3:25:00 PM

Signature *David Jordan*

David Jordan 7/30/2024

Test Report (by Request)

Test Information

Request: 7/30/2024 3:18:34 PM
Date: 7/30/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	ANATOXIN	1.441 Abs	0.065 µg/L	Low, 89.894 %Abs		0.150 - 5.000	Kit:P23L3f
LRB	ANATOXIN	1.431 Abs [1.4360] {0.5 C	0.070 µg/L [0.068]	Low, 89.270 %Abs		0.150 - 5.000	Kit:P23L3f
LFB (ANA)	ANATOXIN	0.872 Abs	0.603 µg/L	54.398 %Abs		0.150 - 5.000	Kit:P23L3f
LFB (ANA)	ANATOXIN	0.825 Abs [0.8485] {3.9 C	0.688 µg/L [0.646]	51.466 %Abs [52.9		0.150 - 5.000	Kit:P23L3f
AC41107	ANATOXIN	1.458 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3f
AC41107	ANATOXIN	1.432 Abs [1.4450] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3f
AC41108	ANATOXIN	1.400 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3f
AC41108	ANATOXIN	1.395 Abs [1.3975] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3f
AC41109	ANATOXIN	1.385 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3f
AC41109	ANATOXIN	1.373 Abs [1.3790] {0.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3f
AC41109MS	ANATOXIN	0.836 Abs	0.667 µg/L	52.152 %Abs		0.150 - 5.000	Kit:P23L3f
AC41109MS	ANATOXIN	0.833 Abs [0.8345] {0.3 C	0.672 µg/L [0.670]	51.965 %Abs [52.0		0.150 - 5.000	Kit:P23L3f
AC41109MSD	ANATOXIN	0.809 Abs	0.719 µg/L	50.468 %Abs		0.150 - 5.000	Kit:P23L3f
AC41109MSD	ANATOXIN	0.794 Abs [0.8015] {1.3 C	0.749 µg/L [0.734]	49.532 %Abs [50.0		0.150 - 5.000	Kit:P23L3f
AC41110	ANATOXIN	1.452 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3f
AC41110	ANATOXIN	1.424 Abs [1.4380] {1.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3f
AC41111	ANATOXIN	1.453 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3f
AC41111	ANATOXIN	1.432 Abs [1.4425] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3f
AC41112	ANATOXIN	1.552 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3f
AC41112	ANATOXIN	1.470 Abs [1.5110] {3.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3f

Note

Signature *David Jordan*

David Jordan 7/30/2024

* A - Abs > 3; IA - Initial Abs; DA - Delta Abs; SD - SD of Abs; LR - Linear Range; [...] - Mean result of duplicate tests

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Assay Information

Assay Name: ANATOXIN
 Version: 2
 Temperature: Room Temperature
 Last Modified By: Security disabled
 Units: µg/L
 Assay Description: PN 520060
 Assay Substances: Controls:

Assay Mode: 4-Parameter Logistic Weight by:None
 Well Type: Flat bottom
 Last Modified On: 7/25/2019 3:49:23 PM
 Normal: 0.150 - 5.000
 # of decimals: 3
 Kit Lot Number: Kit:P23L3054

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: 1 days 0 hours
 Axis Mode: Y = Abs, X = Log(Conc)

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
7/30/2024 2:56:47 PM				
ATX Std 0	1.624 Abs	0.000 µg/L	R ² =0.99711, 101.310 %Abs	RK1:23->A01@2
ATX Std 0	1.581 Abs [1.6025] {1.9 CV}	0.007 µg/L [0.004] {141.4 CV}	R ² =0.99711, 98.628 %Abs	RK1:23->B01@2
ATX Std 1	1.339 Abs	0.121 µg/L	R ² =0.99711, 83.531 %Abs	RK1:24->C01@2
ATX Std 1	1.265 Abs [1.3020] {4.0 CV}	0.170 µg/L [0.146] {23.8 CV}	R ² =0.99711, 78.915 %Abs	RK1:24->D01@2
ATX Std 2	1.005 Abs	0.412 µg/L	R ² =0.99711, 62.695 %Abs	RK1:25->E01@2
ATX Std 2	1.032 Abs [1.0185] {1.9 CV}	0.380 µg/L [0.396] {5.7 CV}	R ² =0.99711, 64.379 %Abs	RK1:25->F01@3
ATX Std 3	0.665 Abs	1.074 µg/L	R ² =0.99711, 41.485 %Abs	RK1:26->G01@3
ATX Std 3	0.649 Abs [0.6570] {1.7 CV}	1.124 µg/L [1.099] {3.2 CV}	R ² =0.99711, 40.487 %Abs	RK1:26->H01@3
ATX Std 4	0.484 Abs	1.853 µg/L	R ² =0.99711, 30.193 %Abs	RK1:27->A02@2
ATX Std 4	0.406 Abs [0.4450] {12.4 CV}	2.421 µg/L [2.137] {18.8 CV}	R ² =0.99711, 25.328 %Abs	RK1:27->B02@2
ATX Std 5	0.227 Abs	> 5.000 µg/L	14.161 %Abs	RK1:28->C02@2
ATX Std 5	0.200 Abs [0.2135] {8.9 CV}	> 5.000 µg/L	12.477 %Abs	RK1:28->D02@2

7/30/2024 2:56:47 PM				
ATX Control	0.826 Abs	0.686 µg/L	51.528 %Abs	RK1:29->E02@2
ATX Control	0.816 Abs [0.8210] {0.9 CV}	0.705 µg/L [0.696] {1.9 CV}	50.905 %Abs [51.216 %Abs]	RK1:29->F02@3

Statistic				
ATX Std 0 [MEAN]	1.6025	0.0035		
ATX Std 0 [SD]	0.0304	0.0049		
ATX Std 0 [%CV]	1.8974	141.4214		
ATX Std 1 [MEAN]	1.3020	0.1455		
ATX Std 1 [SD]	0.0523	0.0346		
ATX Std 1 [%CV]	4.0189	23.8132		
ATX Std 1 [%DIFF]		-3.0000		
ATX Std 2 [MEAN]	1.0185	0.3960		
ATX Std 2 [SD]	0.0191	0.0226		
ATX Std 2 [%CV]	1.8745	5.7140		
ATX Std 2 [%DIFF]		-1.0000		
ATX Std 3 [MEAN]	0.6570	1.0990		
ATX Std 3 [SD]	0.0113	0.0354		
ATX Std 3 [%CV]	1.7220	3.2170		
ATX Std 3 [%DIFF]		9.9000		
ATX Std 4 [MEAN]	0.4450	2.1370		
ATX Std 4 [SD]	0.0552	0.4016		
ATX Std 4 [%CV]	12.3942	18.7944		
ATX Std 4 [%DIFF]		-14.5200		
ATX Std 5 [MEAN]	0.2135			
ATX Std 5 [SD]	0.0191			
ATX Std 5 [%CV]	8.9423			

Name	Absorbance	Concentration	Interpretation	Position
ATX Control [MEAN]	0.8210	0.6955		
ATX Control [SD]	0.0071	0.0134		
ATX Control [%CV]	0.8613	1.9317		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.6063
 B = 0.89338
 C = 0.74189
 D = -0.011301
 R2 coef = 0.99711
 50% = 0.734

