



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45929	Chain O'Lakes SP - Sand Lake Beach	7/28/2025	7/29/2025	< 0.40
AC45930	Potato Creek SP - Worster Lake Beach	7/28/2025	7/29/2025	< 0.40
AC45931	Mississinewa Lake - Miami SRA Beach	7/28/2025	7/29/2025	< 0.40
AC45932	Salamonie Lake - Lost Bridge West SRA Beach	7/28/2025	7/29/2025	< 0.40
AC45933	Potato Creek SP - Worster Lake Beach (Field Dup)	7/28/2025	7/29/2025	< 0.40
AC45934	Field Blank	7/28/2025	7/29/2025	< 0.40
AC45935	Ferdinand State Forest - Ferdinand Lake Beach	7/29/2025	7/29/2025	< 0.40

Test Report (by Request)

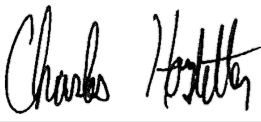
Test Information

Request: 7/29/2025 3:50:14 PM
Date: 7/29/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.385 Abs	0.000 µg/L	R^2=0.99898, 100.3		0.000	Kit:P23L3i
ATX Std 0	ANATOXIN	1.374 Abs [1.3795] {0.6 C	0.003 µg/L [0.002]	R^2=0.99898, 99.56		0.000	Kit:P23L3i
ATX Std 1	ANATOXIN	1.169 Abs	0.130 µg/L	R^2=0.99898, 84.71		0.150	Kit:P23L3i
ATX Std 1	ANATOXIN	1.126 Abs [1.1475] {2.6 C	0.165 µg/L [0.148]	R^2=0.99898, 81.55		0.150	Kit:P23L3i
ATX Std 2	ANATOXIN	0.913 Abs	0.394 µg/L	R^2=0.99898, 66.15		0.400	Kit:P23L3i
ATX Std 2	ANATOXIN	0.909 Abs [0.9110] {0.3 C	0.399 µg/L [0.397]	R^2=0.99898, 65.87		0.400	Kit:P23L3i
ATX Std 3	ANATOXIN	0.597 Abs	1.076 µg/L	R^2=0.99898, 43.26		1.000	Kit:P23L3i
ATX Std 3	ANATOXIN	0.609 Abs [0.6030] {1.4 C	1.037 µg/L [1.057]	R^2=0.99898, 44.13		1.000	Kit:P23L3i
ATX Std 4	ANATOXIN	0.376 Abs	2.298 µg/L	R^2=0.99898, 27.24		2.500	Kit:P23L3i
ATX Std 4	ANATOXIN	0.381 Abs [0.3785] {0.9 C	2.254 µg/L [2.276]	R^2=0.99898, 27.60		2.500	Kit:P23L3i
ATX Std 5	ANATOXIN	0.212 Abs	4.966 µg/L	R^2=0.99898, 15.36		5.000	Kit:P23L3i
ATX Std 5	ANATOXIN	0.186 Abs [0.1990] {9.2 C	> 5.000 µg/L [4.96]	13.478 %Abs		5.000	Kit:P23L3i
ATX Control	ANATOXIN	0.741 Abs	0.688 µg/L	53.696 %Abs			Kit:P23L3i
ATX Control	ANATOXIN	0.746 Abs [0.7435] {0.5 C	0.677 µg/L [0.683]	54.058 %Abs [53.8			Kit:P23L3i

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) 7/29/2025 4:24:51 PM

Signature 

Charles Hostetter 7/30/2025

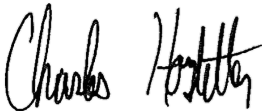
Test Information

Request: 7/29/2025 4:16:10 PM

Date: 7/29/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	ANATOXIN	1.209 Abs	0.100 µg/L	Low, 87.609 %Abs		0.150 - 5.000	Kit:P23L3i
LRB	ANATOXIN	1.195 Abs [1.2020] {0.8 C	0.110 µg/L [0.105]	Low, 86.594 %Abs		0.150 - 5.000	Kit:P23L3i
LFB (ANA)	ANATOXIN	0.753 Abs	0.663 µg/L	54.565 %Abs		0.150 - 5.000	Kit:P23L3i
LFB (ANA)	ANATOXIN	0.725 Abs [0.7390] {2.7 C	0.723 µg/L [0.693]	52.536 %Abs [53.5		0.150 - 5.000	Kit:P23L3i
AC45929	ANATOXIN	1.286 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i
AC45929	ANATOXIN	1.250 Abs [1.2680] {2.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i
AC45930	ANATOXIN	1.166 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i
AC45930	ANATOXIN	1.173 Abs [1.1695] {0.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i
AC45931	ANATOXIN	1.133 Abs	0.175 µg/L	82.101 %Abs	MDF=1.100	0.150 - 5.000	Kit:P23L3i
AC45931	ANATOXIN	1.152 Abs [1.1425] {1.2 C	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i
AC45931MS	ANATOXIN	0.703 Abs	0.851 µg/L	50.942 %Abs		0.150 - 5.000	Kit:P23L3i
AC45931MS	ANATOXIN	0.675 Abs [0.6890] {2.9 C	0.928 µg/L [0.890]	48.913 %Abs [49.92		0.150 - 5.000	Kit:P23L3i
AC45931MSD	ANATOXIN	0.673 Abs	0.849 µg/L	48.768 %Abs		0.150 - 5.000	Kit:P23L3i
AC45931MSD	ANATOXIN	0.654 Abs [0.6635] {2.0 C	0.901 µg/L [0.875]	47.391 %Abs [48.0		0.150 - 5.000	Kit:P23L3i
AC45932	ANATOXIN	1.242 Abs	0.078 µg/L	Low, 90.000 %Abs	MDF=1.100	0.150 - 5.000	Kit:P23L3i
AC45932	ANATOXIN	1.265 Abs [1.2535] {1.3 C	0.063 µg/L [0.071]	Low, 91.667 %Abs	MDF=1.100	0.150-5.000	Kit:P23L3i
AC45933	ANATOXIN	1.169 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i
AC45933	ANATOXIN	1.137 Abs [1.1530] {2.0 C	0.170 µg/L [< LOD	82.391 %Abs [Low,	MDF=1.100	0.150 - 5.000	Kit:P23L3i
AC45934	ANATOXIN	1.334 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i
AC45934	ANATOXIN	1.313 Abs [1.3235] {1.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i
AC45935	ANATOXIN	1.301 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i
AC45935	ANATOXIN	1.267 Abs [1.2840] {1.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3i

Note



Signature

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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
7/29/2025 3:50:14 PM				
ATX Std 0	1.385 Abs	0.000 µg/L	R ² =0.99898, 100.362 %Abs	RK1:23->A01@2
ATX Std 0	1.374 Abs [1.3795] {0.6 CV}	0.003 µg/L [0.002] {141.4 CV}	R ² =0.99898, 99.565 %Abs	RK1:23->B01@2
ATX Std 1	1.169 Abs	0.130 µg/L	R ² =0.99898, 84.710 %Abs	RK1:24->C01@2
ATX Std 1	1.126 Abs [1.1475] {2.6 CV}	0.165 µg/L [0.148] {16.8 CV}	R ² =0.99898, 81.594 %Abs	RK1:24->D01@2
ATX Std 2	0.913 Abs	0.394 µg/L	R ² =0.99898, 66.159 %Abs	RK1:25->E01@2
ATX Std 2	0.909 Abs [0.9110] {0.3 CV}	0.399 µg/L [0.397] {0.9 CV}	R ² =0.99898, 65.870 %Abs	RK1:25->F01@3
ATX Std 3	0.597 Abs	1.076 µg/L	R ² =0.99898, 43.261 %Abs	RK1:26->G01@3
ATX Std 3	0.609 Abs [0.6030] {1.4 CV}	1.037 µg/L [1.057] {2.6 CV}	R ² =0.99898, 44.130 %Abs	RK1:26->H01@3
ATX Std 4	0.376 Abs	2.298 µg/L	R ² =0.99898, 27.246 %Abs	RK1:27->A02@2
ATX Std 4	0.381 Abs [0.3785] {0.9 CV}	2.254 µg/L [2.276] {1.4 CV}	R ² =0.99898, 27.609 %Abs	RK1:27->B02@2
ATX Std 5	0.212 Abs	4.966 µg/L	R ² =0.99898, 15.362 %Abs	RK1:28->C02@2
ATX Std 5	0.186 Abs [0.1990] {9.2 CV}	> 5.000 µg/L [4.966]	13.478 %Abs	RK1:28->D02@2

7/29/2025 3:50:14 PM				
ATX Control	0.741 Abs	0.688 µg/L	53.696 %Abs	RK1:29->E02@2
ATX Control	0.746 Abs [0.7435] {0.5 CV}	0.677 µg/L [0.683] {1.1 CV}	54.058 %Abs [53.877 %Abs]	RK1:29->F02@3

Statistic				
ATX Std 0 [MEAN]	1.3795	0.0015		
ATX Std 0 [SD]	0.0078	0.0021		
ATX Std 0 [%CV]	0.5638	141.4214		
ATX Std 1 [MEAN]	1.1475	0.1475		
ATX Std 1 [SD]	0.0304	0.0247		
ATX Std 1 [%CV]	2.6497	16.7788		
ATX Std 1 [%DIFF]		-1.6667		
ATX Std 2 [MEAN]	0.9110	0.3965		
ATX Std 2 [SD]	0.0028	0.0035		
ATX Std 2 [%CV]	0.3105	0.8917		
ATX Std 2 [%DIFF]		-0.8750		
ATX Std 3 [MEAN]	0.6030	1.0565		
ATX Std 3 [SD]	0.0085	0.0276		
ATX Std 3 [%CV]	1.4072	2.6102		
ATX Std 3 [%DIFF]		5.6500		
ATX Std 4 [MEAN]	0.3785	2.2760		
ATX Std 4 [SD]	0.0035	0.0311		
ATX Std 4 [%CV]	0.9341	1.3670		
ATX Std 4 [%DIFF]		-8.9600		
ATX Std 5 [MEAN]	0.1990			
ATX Std 5 [SD]	0.0184			
ATX Std 5 [%CV]	9.2386			

Name	Absorbance	Concentration	Interpretation	Position	
ATX Control [MEAN]	0.7435	0.6825			
ATX Control [SD]	0.0035	0.0078			
ATX Control [%CV]	0.4755	1.1397			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.3820
B = 0.93318
C = 0.80624
D = -0.0024910
R2 coef = 0.99898
50% = 0.806

