



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC44204	Pokagon SP - Main Beach	5/19/2025	5/22/2025	< 0.40
AC44205	Pokagon SP - Potawatomi Inn Beach	5/19/2025	5/22/2025	< 0.40
AC44206	Chain O'Lakes SP - Sand Lake Beach	5/19/2025	5/22/2025	< 0.40
AC44207	Ouabache SP - Kunkel Lake Beach	5/19/2025	5/22/2025	< 0.40
AC44208	Potato Creek SP - Worster Lake Beach	5/20/2025	5/22/2025	< 0.40
AC44209	Mississinewa Lake - Miami SRA Beach	5/20/2025	5/22/2025	< 0.40
AC44210	Salamonie Lake - Lost Bridge West SRA Beach	5/20/2025	5/22/2025	< 0.40
AC44211	Summit Lake SP - Summit Lake Beach	5/20/2025	5/22/2025	< 0.40
AC44212	Potato Creek SP - Worster Lake Beach (Field Duplicate)	5/20/2025	5/22/2025	< 0.40
AC44213	Field Blank	5/20/2025	5/22/2025	< 0.40
AC44214	Lincoln SP - Lake Lincoln Beach	5/19/2025	5/22/2025	< 0.40
AC44215	Ferdinand State Forest - Ferdinand Lake Beach	5/19/2025	5/22/2025	< 0.40
AC44216	Patoka Lake - Newton Stewart SRA	5/19/2025	5/22/2025	< 0.40

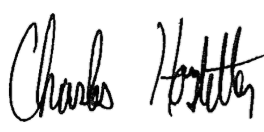
Test Report (by Request)

Test Information

Request: 5/22/2025 3:17:05 PM
Date: 5/22/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.747 Abs	0.000 µg/L	R^2=0.99965, 101.5		0.000	Kit:P23L3i
ATX Std 0	ANATOXIN	1.694 Abs [1.7205] {2.2 C	0.012 µg/L [0.006]	R^2=0.99965, 98.43		0.000	Kit:P23L3i
ATX Std 1	ANATOXIN	1.465 Abs	0.125 µg/L	R^2=0.99965, 85.12		0.150	Kit:P23L3i
ATX Std 1	ANATOXIN	1.405 Abs [1.4350] {3.0 C	0.163 µg/L [0.144]	R^2=0.99965, 81.63		0.150	Kit:P23L3i
ATX Std 2	ANATOXIN	1.102 Abs	0.421 µg/L	R^2=0.99965, 64.03		0.400	Kit:P23L3i
ATX Std 2	ANATOXIN	1.122 Abs [1.1120] {1.3 C	0.399 µg/L [0.410]	R^2=0.99965, 65.19		0.400	Kit:P23L3i
ATX Std 3	ANATOXIN	0.777 Abs	0.946 µg/L	R^2=0.99965, 45.14		1.000	Kit:P23L3i
ATX Std 3	ANATOXIN	0.723 Abs [0.7500] {5.1 C	1.083 µg/L [1.015]	R^2=0.99965, 42.01		1.000	Kit:P23L3i
ATX Std 4	ANATOXIN	0.459 Abs	2.270 µg/L	R^2=0.99965, 26.67		2.500	Kit:P23L3i
ATX Std 4	ANATOXIN	0.432 Abs [0.4455] {4.3 C	2.482 µg/L [2.376]	R^2=0.99965, 25.10		2.500	Kit:P23L3i
ATX Std 5	ANATOXIN	0.261 Abs	> 5.000 µg/L	15.166 %Abs		5.000	Kit:P23L3i
ATX Std 5	ANATOXIN	0.242 Abs [0.2515] {5.3 C	> 5.000 µg/L	14.062 %Abs		5.000	Kit:P23L3i
ATX Control	ANATOXIN	0.890 Abs	0.717 µg/L	51.714 %Abs			Kit:P23L3i
ATX Control	ANATOXIN	0.847 Abs [0.8685] {3.5 C	0.796 µg/L [0.757]	49.216 %Abs [50.4			Kit:P23L3i

Note

Signature 

Charles Hostetter 5/22/25

Test Report (by Request)

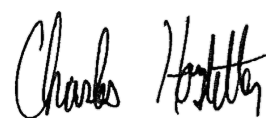
Test Information

Request: 5/22/2025 3:40:26 PM
Date: 5/22/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	ANATOXIN	1.518 Abs	0.095 µg/L	Low, 88.205 %Abs		0.150 - 5.000	Kit:P23L3I
LRB	ANATOXIN	1.477 Abs [1.4975] {1.9 C	0.118 µg/L [0.107]	Low, 85.822 %Abs		0.150 - 5.000	Kit:P23L3I
LFB (ANA)	ANATOXIN	0.928 Abs	0.653 µg/L	53.922 %Abs		0.150 - 5.000	Kit:P23L3I
LFB (ANA)	ANATOXIN	0.915 Abs [0.9215] {1.0 C	0.674 µg/L [0.664]	53.167 %Abs [53.5		0.150 - 5.000	Kit:P23L3I
AC44204	ANATOXIN	1.631 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44204	ANATOXIN	1.566 Abs [1.5985] {2.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44205	ANATOXIN	1.530 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44205	ANATOXIN	1.553 Abs [1.5415] {1.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44206	ANATOXIN	1.456 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44206	ANATOXIN	1.410 Abs [1.4330] {2.3 C	0.175 µg/L	81.929 %Abs	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44207	ANATOXIN	1.692 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44207	ANATOXIN	1.650 Abs [1.6710] {1.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44207MS	ANATOXIN	0.895 Abs	0.708 µg/L	52.005 %Abs		0.150 - 5.000	Kit:P23L3I
AC44207MS	ANATOXIN	0.856 Abs [0.8755] {3.1 C	0.779 µg/L [0.744]	49.739 %Abs [50.8		0.150 - 5.000	Kit:P23L3I
AC44207MSD	ANATOXIN	0.849 Abs	0.793 µg/L	49.332 %Abs		0.150 - 5.000	Kit:P23L3I
AC44207MSD	ANATOXIN	0.837 Abs [0.8430] {1.0 C	0.816 µg/L [0.805]	48.635 %Abs [48.9		0.150 - 5.000	Kit:P23L3I
AC44208	ANATOXIN	1.469 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44208	ANATOXIN	1.411 Abs [1.4400] {2.8 C	0.175 µg/L [< LOD]	81.987 %Abs [Low,	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44209	ANATOXIN	1.677 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44209	ANATOXIN	1.645 Abs [1.6610] {1.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44210	ANATOXIN	1.619 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44210	ANATOXIN	1.578 Abs [1.5985] {1.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44211	ANATOXIN	1.516 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44211	ANATOXIN	1.518 Abs [1.5170] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44212	ANATOXIN	1.511 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44212	ANATOXIN	1.489 Abs [1.5000] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44213	ANATOXIN	1.656 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44213	ANATOXIN	1.663 Abs [1.6595] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44214	ANATOXIN	1.615 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44214	ANATOXIN	1.600 Abs [1.6075] {0.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44215	ANATOXIN	1.576 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44215	ANATOXIN	1.549 Abs [1.5625] {1.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44216	ANATOXIN	1.542 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44216	ANATOXIN	1.499 Abs [1.5205] {2.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I

Note

Signature



Charles Hostetter 5/22/25

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
5/22/2025 3:17:05 PM				
ATX Std 0	1.747 Abs	0.000 µg/L	R^2=0.99965, 101.511 %Abs	RK1:23->A01@2
ATX Std 0	1.694 Abs [1.7205] {2.2 CV}	0.012 µg/L [0.006] {141.4 CV}	R^2=0.99965, 98.431 %Abs	RK1:23->B01@2
ATX Std 1	1.465 Abs	0.125 µg/L	R^2=0.99965, 85.125 %Abs	RK1:24->C01@2
ATX Std 1	1.405 Abs [1.4350] {3.0 CV}	0.163 µg/L [0.144] {18.7 CV}	R^2=0.99965, 81.639 %Abs	RK1:24->D01@2
ATX Std 2	1.102 Abs	0.421 µg/L	R^2=0.99965, 64.033 %Abs	RK1:25->E01@2
ATX Std 2	1.122 Abs [1.1120] {1.3 CV}	0.399 µg/L [0.410] {3.8 CV}	R^2=0.99965, 65.195 %Abs	RK1:25->F01@3
ATX Std 3	0.777 Abs	0.946 µg/L	R^2=0.99965, 45.148 %Abs	RK1:26->G01@3
ATX Std 3	0.723 Abs [0.7500] {5.1 CV}	1.083 µg/L [1.015] {9.5 CV}	R^2=0.99965, 42.010 %Abs	RK1:26->H01@3
ATX Std 4	0.459 Abs	2.270 µg/L	R^2=0.99965, 26.671 %Abs	RK1:27->A02@2
ATX Std 4	0.432 Abs [0.4455] {4.3 CV}	2.482 µg/L [2.376] {6.3 CV}	R^2=0.99965, 25.102 %Abs	RK1:27->B02@2
ATX Std 5	0.261 Abs	> 5.000 µg/L	15.166 %Abs	RK1:28->C02@2
ATX Std 5	0.242 Abs [0.2515] {5.3 CV}	> 5.000 µg/L	14.062 %Abs	RK1:28->D02@2

5/22/2025 3:17:05 PM				
ATX Control	0.890 Abs	0.717 µg/L	51.714 %Abs	RK1:29->E02@2
ATX Control	0.847 Abs [0.8685] {3.5 CV}	0.796 µg/L [0.757] {7.4 CV}	49.216 %Abs [50.465 %Abs]	RK1:29->F02@3

Statistic				
ATX Std 0 [MEAN]	1.7205	0.0060		
ATX Std 0 [SD]	0.0375	0.0085		
ATX Std 0 [%CV]	2.1782	141.4214		
ATX Std 1 [MEAN]	1.4350	0.1440		
ATX Std 1 [SD]	0.0424	0.0269		
ATX Std 1 [%CV]	2.9565	18.6598		
ATX Std 1 [%DIFF]		-4.0000		
ATX Std 2 [MEAN]	1.1120	0.4100		
ATX Std 2 [SD]	0.0141	0.0156		
ATX Std 2 [%CV]	1.2718	3.7942		
ATX Std 2 [%DIFF]		2.5000		
ATX Std 3 [MEAN]	0.7500	1.0145		
ATX Std 3 [SD]	0.0382	0.0969		
ATX Std 3 [%CV]	5.0912	9.5489		
ATX Std 3 [%DIFF]		1.4500		
ATX Std 4 [MEAN]	0.4455	2.3760		
ATX Std 4 [SD]	0.0191	0.1499		
ATX Std 4 [%CV]	4.2855	6.3092		
ATX Std 4 [%DIFF]		-4.9600		
ATX Std 5 [MEAN]	0.2515			
ATX Std 5 [SD]	0.0134			
ATX Std 5 [%CV]	5.3420			

Name	Absorbance	Concentration	Interpretation	Position	
ATX Control [MEAN]	0.8685	0.7565			
ATX Control [SD]	0.0304	0.0559			
ATX Control [%CV]	3.5009	7.3842			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.7239
 B = 0.96445
 C = 0.74041
 D = 0.029609
 R2 coef = 0.99965
 50% = 0.771

