



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC44191	Cecil M. Harden Lake - Raccoon Lake SRA Beach	5/12/2025	5/15/2025	< 0.40
AC44192	Cagles Mill Lake - Lieber SRA Beach	5/12/2025	5/15/2025	< 0.40
AC44193	Monroe Lake - Fairfax SRA Beach	5/12/2025	5/15/2025	< 0.40
AC44194	Monroe Lake - Paynetown SRA Beach	5/12/2025	5/15/2025	< 0.40
AC44195	Starve Hollow SRA - Starve Hollow Lake Beach	5/12/2025	5/15/2025	< 0.40
AC44196	Whitewater Memorial SP - Whitewater Lake Beach	5/13/2025	5/15/2025	< 0.40
AC44197	Brookville Lake - Quakertown SRA Beach	5/13/2025	5/15/2025	< 0.40
AC44198	Brookville Lake - Mounds SRA Beach	5/13/2025	5/15/2025	< 0.40
AC44199	Hardy Lake SRA - Hardy Lake SRA Beach	5/13/2025	5/15/2025	< 0.40
AC44200	Deam Lake SRA - Deam Lake Beach	5/13/2025	5/15/2025	< 0.40
AC44201	Cecil M. Harden Lake - Raccoon Lake SRA Beach (Field Duplicate)	5/12/2025	5/15/2025	< 0.40
AC44202	Field Blank	5/12/2025	5/15/2025	< 0.40
AC44203	Ft. Ben Harrison SP Dog Lake	5/12/2025	5/15/2025	< 0.40

Test Report (by Request)

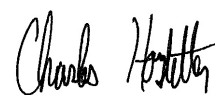
Test Information

Request: 5/15/2025 1:35:30 PM
Date: 5/15/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.579 Abs	0.000 µg/L	R^2=0.99905, 100.7		0.000	Kit:P23L3i
ATX Std 0	ANATOXIN	1.555 Abs [1.5670] {1.1 C	0.006 µg/L [0.003]	R^2=0.99905, 99.23		0.000	Kit:P23L3i
ATX Std 1	ANATOXIN	1.300 Abs	0.141 µg/L	R^2=0.99905, 82.96		0.150	Kit:P23L3i
ATX Std 1	ANATOXIN	1.277 Abs [1.2885] {1.3 C	0.156 µg/L [0.149]	R^2=0.99905, 81.45		0.150	Kit:P23L3i
ATX Std 2	ANATOXIN	1.000 Abs	0.400 µg/L	R^2=0.99905, 63.81		0.400	Kit:P23L3i
ATX Std 2	ANATOXIN	1.010 Abs [1.0050] {0.7 C	0.389 µg/L [0.395]	R^2=0.99905, 64.45		0.400	Kit:P23L3i
ATX Std 3	ANATOXIN	0.663 Abs	1.006 µg/L	R^2=0.99905, 42.31		1.000	Kit:P23L3i
ATX Std 3	ANATOXIN	0.629 Abs [0.6460] {3.7 C	1.107 µg/L [1.057]	R^2=0.99905, 40.14		1.000	Kit:P23L3i
ATX Std 4	ANATOXIN	0.416 Abs	2.175 µg/L	R^2=0.99905, 26.54		2.500	Kit:P23L3i
ATX Std 4	ANATOXIN	0.396 Abs [0.4060] {3.5 C	2.343 µg/L [2.259]	R^2=0.99905, 25.27		2.500	Kit:P23L3i
ATX Std 5	ANATOXIN	0.231 Abs	> 5.000 µg/L	14.742 %Abs		5.000	Kit:P23L3i
ATX Std 5	ANATOXIN	0.215 Abs [0.2230] {5.1 C	> 5.000 µg/L	13.720 %Abs		5.000	Kit:P23L3i
ATX Control	ANATOXIN	0.800 Abs	0.693 µg/L	51.053 %Abs			Kit:P23L3i
ATX Control	ANATOXIN	0.800 Abs [0.8000] {0.0 C	0.693 µg/L [0.693]	51.053 %Abs [51.0			Kit:P23L3i

Note

Signature



Charles Hostetter 5/15/2025

Test Report (by Request)

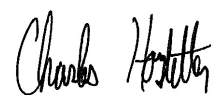
Test Information

Request: 5/15/2025 2:01:40 PM
Date: 5/15/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	ANATOXIN	1.369 Abs	0.099 µg/L	Low, 87.364 %Abs		0.150 - 5.000	Kit:P23L3I
LRB	ANATOXIN	1.315 Abs [1.3420] {2.8 C	0.131 µg/L [0.115]	Low, 83.918 %Abs		0.150 - 5.000	Kit:P23L3I
LFB (ANA)	ANATOXIN	0.858 Abs	0.593 µg/L	54.754 %Abs		0.150 - 5.000	Kit:P23L3I
LFB (ANA)	ANATOXIN	0.828 Abs [0.8430] {2.5 C	0.643 µg/L [0.618]	52.840 %Abs [53.7		0.150 - 5.000	Kit:P23L3I
AC44191	ANATOXIN	1.473 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44191	ANATOXIN	1.420 Abs [1.4465] {2.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44192	ANATOXIN	1.404 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44192	ANATOXIN	1.415 Abs [1.4095] {0.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44193	ANATOXIN	1.373 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44193	ANATOXIN	1.299 Abs [1.3360] {3.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44194	ANATOXIN	1.541 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44194	ANATOXIN	1.505 Abs [1.5230] {1.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44195	ANATOXIN	1.470 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44195	ANATOXIN	1.428 Abs [1.4490] {2.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44196	ANATOXIN	1.403 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44196	ANATOXIN	1.407 Abs [1.4050] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44196MS	ANATOXIN	0.767 Abs	0.757 µg/L	48.947 %Abs		0.150 - 5.000	Kit:P23L3I
AC44196MS	ANATOXIN	0.768 Abs [0.7675] {0.1 C	0.755 µg/L [0.756]	49.011 %Abs [48.9		0.150 - 5.000	Kit:P23L3I
AC44196MSD	ANATOXIN	0.846 Abs	0.612 µg/L	53.989 %Abs		0.150 - 5.000	Kit:P23L3I
AC44196MSD	ANATOXIN	0.816 Abs [0.8310] {2.6 C	0.664 µg/L [0.638]	52.074 %Abs [53.0		0.150 - 5.000	Kit:P23L3I
AC44197	ANATOXIN	1.445 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44197	ANATOXIN	1.420 Abs [1.4325] {1.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44198	ANATOXIN	1.386 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44198	ANATOXIN	1.383 Abs [1.3845] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44199	ANATOXIN	1.358 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44199	ANATOXIN	1.334 Abs [1.3460] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44200	ANATOXIN	1.519 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44200	ANATOXIN	1.512 Abs [1.5155] {0.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44201	ANATOXIN	1.493 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44201	ANATOXIN	1.477 Abs [1.4850] {0.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44202	ANATOXIN	1.393 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44202	ANATOXIN	1.420 Abs [1.4065] {1.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44203	ANATOXIN	1.398 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC44203	ANATOXIN	1.400 Abs [1.3990] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I

Note

Signature



Charles Hostetter 5/15/2025

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:
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 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

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
5/15/2025 1:35:30 PM				
ATX Std 0	1.579 Abs	0.000 µg/L	R^2=0.99905, 100.766 %Abs	RK1:23->A01@2
ATX Std 0	1.555 Abs [1.5670] {1.1 CV}	0.006 µg/L [0.003] {141.4 CV}	R^2=0.99905, 99.234 %Abs	RK1:23->B01@2
ATX Std 1	1.300 Abs	0.141 µg/L	R^2=0.99905, 82.961 %Abs	RK1:24->C01@2
ATX Std 1	1.277 Abs [1.2885] {1.3 CV}	0.156 µg/L [0.149] {7.1 CV}	R^2=0.99905, 81.493 %Abs	RK1:24->D01@2
ATX Std 2	1.000 Abs	0.400 µg/L	R^2=0.99905, 63.816 %Abs	RK1:25->E01@2
ATX Std 2	1.010 Abs [1.0050] {0.7 CV}	0.389 µg/L [0.395] {2.0 CV}	R^2=0.99905, 64.454 %Abs	RK1:25->F01@3
ATX Std 3	0.663 Abs	1.006 µg/L	R^2=0.99905, 42.310 %Abs	RK1:26->G01@3
ATX Std 3	0.629 Abs [0.6460] {3.7 CV}	1.107 µg/L [1.057] {6.8 CV}	R^2=0.99905, 40.140 %Abs	RK1:26->H01@3
ATX Std 4	0.416 Abs	2.175 µg/L	R^2=0.99905, 26.548 %Abs	RK1:27->A02@2
ATX Std 4	0.396 Abs [0.4060] {3.5 CV}	2.343 µg/L [2.259] {5.3 CV}	R^2=0.99905, 25.271 %Abs	RK1:27->B02@2
ATX Std 5	0.231 Abs	> 5.000 µg/L	14.742 %Abs	RK1:28->C02@2
ATX Std 5	0.215 Abs [0.2230] {5.1 CV}	> 5.000 µg/L	13.720 %Abs	RK1:28->D02@2

5/15/2025 1:35:30 PM				
ATX Control	0.800 Abs	0.693 µg/L	51.053 %Abs	RK1:29->E02@2
ATX Control	0.800 Abs [0.8000] {0.0 CV}	0.693 µg/L [0.693] {0.0 CV}	51.053 %Abs [51.053 %Abs]	RK1:29->F02@3

Statistic				
ATX Std 0 [MEAN]	1.5670	0.0030		
ATX Std 0 [SD]	0.0170	0.0042		
ATX Std 0 [%CV]	1.0830	141.4214		
ATX Std 1 [MEAN]	1.2885	0.1485		
ATX Std 1 [SD]	0.0163	0.0106		
ATX Std 1 [%CV]	1.2622	7.1425		
ATX Std 1 [%DIFF]		-1.0000		
ATX Std 2 [MEAN]	1.0050	0.3945		
ATX Std 2 [SD]	0.0071	0.0078		
ATX Std 2 [%CV]	0.7036	1.9717		
ATX Std 2 [%DIFF]		-1.3750		
ATX Std 3 [MEAN]	0.6460	1.0565		
ATX Std 3 [SD]	0.0240	0.0714		
ATX Std 3 [%CV]	3.7216	6.7598		
ATX Std 3 [%DIFF]		5.6500		
ATX Std 4 [MEAN]	0.4060	2.2590		
ATX Std 4 [SD]	0.0141	0.1188		
ATX Std 4 [%CV]	3.4833	5.2587		
ATX Std 4 [%DIFF]		-9.6400		
ATX Std 5 [MEAN]	0.2230			
ATX Std 5 [SD]	0.0113			
ATX Std 5 [%CV]	5.0734			

Name	Absorbance	Concentration	Interpretation	Position	
ATX Control [MEAN]	0.8000	0.6930			
ATX Control [SD]	0.0000	0.0000			
ATX Control [%CV]	0.0000	0.0000			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.5686
B = 0.98024
C = 0.67674
D = 0.048909
R2 coef = 0.99905
50% = 0.724

