



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45383	Cecil M. Harden Lake - Raccoon Lake SRA Beach	6/9/2025	6/12/2025	< 0.40
AC45384	Cagles Mill Lake - Lieber SRA Beach	6/9/2025	6/12/2025	< 0.40
AC45385	Monroe Lake - Fairfax SRA Beach	6/9/2025	6/12/2025	< 0.40
AC45386	Monroe Lake - Paynetown SRA Beach	6/9/2025	6/12/2025	< 0.40
AC45387	Starve Hollow SRA - Starve Hollow Lake Beach	6/9/2025	6/12/2025	< 0.40
AC45388	Whitewater Memorial SP - Whitewater Lake Beach	6/10/2025	6/12/2025	< 0.40
AC45389	Brookville Lake - Quakertown SRA Beach	6/10/2025	6/12/2025	< 0.40
AC45390	Brookville Lake - Mounds SRA Beach	6/10/2025	6/12/2025	< 0.40
AC45391	Hardy Lake SRA - Hardy Lake SRA Beach	6/10/2025	6/12/2025	< 0.40
AC45392	Deam Lake SRA - Deam Lake Beach	6/10/2025	6/12/2025	< 0.40
AC45393	Cagles Mill Lake - Lieber SRA Beach (Field Duplicate)	6/9/2025	6/12/2025	< 0.40
AC45394	Field Blank	6/9/2025	6/12/2025	< 0.40
AC45395	Ft. Ben Harrison SP Dog Lake	6/9/2025	6/12/2025	< 0.40

Test Report (by Request)

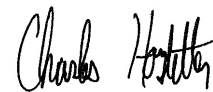
Test Information

Request: 6/12/2025 2:37:35 PM
Date: 6/12/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.620 Abs	0.000 µg/L	R^2=0.99854, 100.4		0.000	Kit:P23L3i
ATX Std 0	ANATOXIN	1.605 Abs [1.6125] {0.7 C	0.005 µg/L [0.003]	R^2=0.99854, 99.50		0.000	Kit:P23L3i
ATX Std 1	ANATOXIN	1.379 Abs	0.124 µg/L	R^2=0.99854, 85.45		0.150	Kit:P23L3i
ATX Std 1	ANATOXIN	1.316 Abs [1.3475] {3.3 C	0.165 µg/L [0.145]	R^2=0.99854, 81.58		0.150	Kit:P23L3i
ATX Std 2	ANATOXIN	1.048 Abs	0.404 µg/L	R^2=0.99854, 64.97		0.400	Kit:P23L3i
ATX Std 2	ANATOXIN	1.049 Abs [1.0485] {0.1 C	0.403 µg/L [0.404]	R^2=0.99854, 65.03		0.400	Kit:P23L3i
ATX Std 3	ANATOXIN	0.708 Abs	0.998 µg/L	R^2=0.99854, 43.85		1.000	Kit:P23L3i
ATX Std 3	ANATOXIN	0.665 Abs [0.6865] {4.4 C	1.122 µg/L [1.060]	R^2=0.99854, 41.22		1.000	Kit:P23L3i
ATX Std 4	ANATOXIN	0.447 Abs	2.168 µg/L	R^2=0.99854, 27.71		2.500	Kit:P23L3i
ATX Std 4	ANATOXIN	0.437 Abs [0.4420] {1.6 C	2.244 µg/L [2.206]	R^2=0.99854, 27.05		2.500	Kit:P23L3i
ATX Std 5	ANATOXIN	0.246 Abs	> 5.000 µg/L	15.251 %Abs		5.000	Kit:P23L3i
ATX Std 5	ANATOXIN	0.226 Abs [0.2360] {6.0 C	> 5.000 µg/L	14.011 %Abs		5.000	Kit:P23L3i
ATX Control	ANATOXIN	0.871 Abs	0.650 µg/L	53.999 %Abs			Kit:P23L3i
ATX Control	ANATOXIN	0.862 Abs [0.8665] {0.7 C	0.666 µg/L [0.658]	53.441 %Abs [53.7			Kit:P23L3i

Note

Signature



Test Report (by Request)

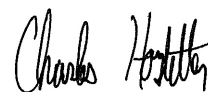
Test Information

Request: 6/12/2025 3:20:38 PM
Date: 6/12/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	ANATOXIN	1.414 Abs	0.102 µg/L	Low, 87.663 %Abs		0.150 - 5.000	Kit:P23L3I
LRB	ANATOXIN	1.292 Abs [1.3530] {6.4 C	0.182 µg/L [0.142]	80.099 %Abs [Low,		0.150 - 5.000	Kit:P23L3I
LFB (ANA)	ANATOXIN	0.881 Abs	0.634 µg/L	54.619 %Abs		0.150 - 5.000	Kit:P23L3I
LFB (ANA)	ANATOXIN	0.870 Abs [0.8755] {0.9 C	0.652 µg/L [0.643]	53.937 %Abs [54.2		0.150 - 5.000	Kit:P23L3I
AC45383	ANATOXIN	1.534 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45383	ANATOXIN	1.496 Abs [1.5150] {1.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45384	ANATOXIN	1.473 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45384	ANATOXIN	1.465 Abs [1.4690] {0.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45385	ANATOXIN	1.465 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45385	ANATOXIN	1.351 Abs [1.4080] {5.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45386	ANATOXIN	1.608 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45386	ANATOXIN	1.561 Abs [1.5845] {2.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45387	ANATOXIN	1.536 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45387	ANATOXIN	1.501 Abs [1.5185] {1.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45388	ANATOXIN	1.449 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45388	ANATOXIN	1.493 Abs [1.4710] {2.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45389	ANATOXIN	1.458 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45389	ANATOXIN	1.405 Abs [1.4315] {2.6 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45390	ANATOXIN	1.573 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45390	ANATOXIN	1.550 Abs [1.5615] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45390MS	ANATOXIN	0.844 Abs	0.698 µg/L	52.325 %Abs		0.150 - 5.000	Kit:P23L3I
AC45390MS	ANATOXIN	0.827 Abs [0.8355] {1.4 C	0.730 µg/L [0.714]	51.271 %Abs [51.7		0.150 - 5.000	Kit:P23L3I
AC45390MSD	ANATOXIN	0.815 Abs	0.753 µg/L	50.527 %Abs		0.150 - 5.000	Kit:P23L3I
AC45390MSD	ANATOXIN	0.810 Abs [0.8125] {0.4 C	0.763 µg/L [0.758]	50.217 %Abs [50.3		0.150 - 5.000	Kit:P23L3I
AC45391	ANATOXIN	1.455 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45391	ANATOXIN	1.452 Abs [1.4535] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45392	ANATOXIN	1.562 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45392	ANATOXIN	1.511 Abs [1.5365] {2.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45393	ANATOXIN	1.571 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45393	ANATOXIN	1.542 Abs [1.5565] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45394	ANATOXIN	1.548 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45394	ANATOXIN	1.537 Abs [1.5425] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45395	ANATOXIN	1.517 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45395	ANATOXIN	1.494 Abs [1.5055] {1.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I

Note

Signature



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
6/12/2025 2:37:35 PM				
ATX Std 0	1.620 Abs	0.000 µg/L	R ² =0.99854, 100.434 %Abs	RK1:23->A01@2
ATX Std 0	1.605 Abs [1.6125] {0.7 CV}	0.005 µg/L [0.003] {141.4 CV}	R ² =0.99854, 99.504 %Abs	RK1:23->B01@2
ATX Std 1	1.379 Abs	0.124 µg/L	R ² =0.99854, 85.493 %Abs	RK1:24->C01@2
ATX Std 1	1.316 Abs [1.3475] {3.3 CV}	0.165 µg/L [0.145] {20.1 CV}	R ² =0.99854, 81.587 %Abs	RK1:24->D01@2
ATX Std 2	1.048 Abs	0.404 µg/L	R ² =0.99854, 64.972 %Abs	RK1:25->E01@2
ATX Std 2	1.049 Abs [1.0485] {0.1 CV}	0.403 µg/L [0.404] {0.2 CV}	R ² =0.99854, 65.034 %Abs	RK1:25->F01@3
ATX Std 3	0.708 Abs	0.998 µg/L	R ² =0.99854, 43.893 %Abs	RK1:26->G01@3
ATX Std 3	0.665 Abs [0.6865] {4.4 CV}	1.122 µg/L [1.060] {8.3 CV}	R ² =0.99854, 41.228 %Abs	RK1:26->H01@3
ATX Std 4	0.447 Abs	2.168 µg/L	R ² =0.99854, 27.712 %Abs	RK1:27->A02@2
ATX Std 4	0.437 Abs [0.4420] {1.6 CV}	2.244 µg/L [2.206] {2.4 CV}	R ² =0.99854, 27.092 %Abs	RK1:27->B02@2
ATX Std 5	0.246 Abs	> 5.000 µg/L	15.251 %Abs	RK1:28->C02@2
ATX Std 5	0.226 Abs [0.2360] {6.0 CV}	> 5.000 µg/L	14.011 %Abs	RK1:28->D02@2

6/12/2025 2:37:35 PM				
ATX Control	0.871 Abs	0.650 µg/L	53.999 %Abs	RK1:29->E02@2
ATX Control	0.862 Abs [0.8665] {0.7 CV}	0.666 µg/L [0.658] {1.7 CV}	53.441 %Abs [53.720 %Abs]	RK1:29->F02@3

Statistic				
ATX Std 0 [MEAN]	1.6125	0.0025		
ATX Std 0 [SD]	0.0106	0.0035		
ATX Std 0 [%CV]	0.6578	141.4214		
ATX Std 1 [MEAN]	1.3475	0.1445		
ATX Std 1 [SD]	0.0445	0.0290		
ATX Std 1 [%CV]	3.3060	20.0632		
ATX Std 1 [%DIFF]		-3.6667		
ATX Std 2 [MEAN]	1.0485	0.4035		
ATX Std 2 [SD]	0.0007	0.0007		
ATX Std 2 [%CV]	0.0674	0.1752		
ATX Std 2 [%DIFF]		0.8750		
ATX Std 3 [MEAN]	0.6865	1.0600		
ATX Std 3 [SD]	0.0304	0.0877		
ATX Std 3 [%CV]	4.4291	8.2718		
ATX Std 3 [%DIFF]		6.0000		
ATX Std 4 [MEAN]	0.4420	2.2060		
ATX Std 4 [SD]	0.0071	0.0537		
ATX Std 4 [%CV]	1.5998	2.4361		
ATX Std 4 [%DIFF]		-11.7600		
ATX Std 5 [MEAN]	0.2360			
ATX Std 5 [SD]	0.0141			
ATX Std 5 [%CV]	5.9924			

Name	Absorbance	Concentration	Interpretation	Position	
ATX Control [MEAN]	0.8665	0.6580			
ATX Control [SD]	0.0064	0.0113			
ATX Control [%CV]	0.7344	1.7194			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.6167
 B = 0.97841
 C = 0.71692
 D = 0.050764
 R2 coef = 0.99854
 50% = 0.770

