



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC46374	Cecil M. Harden Lake - Raccoon Lake SRA Beach	8/18/2025	8/20/2025	< 0.40
AC46375	Cagles Mill Lake - Lieber SRA Beach	8/18/2025	8/20/2025	< 0.40
AC46376	Monroe Lake - Fairfax SRA Beach	8/18/2025	8/20/2025	< 0.40
AC46377	Monroe Lake - Paynetown SRA Beach	8/18/2025	8/20/2025	< 0.40
AC46378	Starve Hollow SRA - Starve Hollow Lake Beach	8/18/2025	8/20/2025	< 0.40
AC46379	Whitewater Memorial SP - Whitewater Lake Beach	8/19/2025	8/20/2025	< 0.40
AC46380	Brookville Lake - Quakertown SRA Beach	8/19/2025	8/20/2025	< 0.40
AC46381	Brookville Lake - Mounds SRA Beach	8/19/2025	8/20/2025	< 0.40
AC46382	Hardy Lake SRA - Hardy Lake SRA Beach	8/19/2025	8/20/2025	< 0.40
AC46383	Monroe Lake - Fairfax SRA Beach (Field Duplicate)	8/18/2025	8/20/2025	< 0.40
AC46384	Field Blank	8/18/2025	8/20/2025	< 0.40
AC46385	Ft. Ben Harrison SP Dog Lake	8/18/2025	8/20/2025	< 0.40
AC46386	Mississinewa Lake - Miami SRA Beach	8/18/2025	8/20/2025	< 0.40

Test Report (by Request)

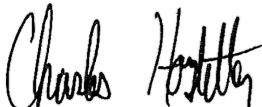
Test Information

Request: 8/20/2025 5:24:27 PM
Date: 8/20/2025 - 8/21/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.599 Abs	0.000 µg/L	R^2=0.99907, 103.6		0.000	Kit:250700
ATX Std 0	ANATOXIN	1.485 Abs [1.5420] {5.2 C	0.031 µg/L [0.016]	R^2=0.99907, 96.30		0.000	Kit:250700
ATX Std 1	ANATOXIN	1.345 Abs	0.116 µg/L	R^2=0.99907, 87.22		0.150	Kit:250700
ATX Std 1	ANATOXIN	1.264 Abs [1.3045] {4.4 C	0.174 µg/L [0.145]	R^2=0.99907, 81.97		0.150	Kit:250700
ATX Std 2	ANATOXIN	1.049 Abs	0.377 µg/L	R^2=0.99907, 68.02		0.400	Kit:250700
ATX Std 2	ANATOXIN	1.004 Abs [1.0265] {3.1 C	0.431 µg/L [0.404]	R^2=0.99907, 65.11		0.400	Kit:250700
ATX Std 3	ANATOXIN	0.688 Abs	1.024 µg/L	R^2=0.99907, 44.61		1.000	Kit:250700
ATX Std 3	ANATOXIN	0.674 Abs [0.6810] {1.5 C	1.064 µg/L [1.044]	R^2=0.99907, 43.70		1.000	Kit:250700
ATX Std 4	ANATOXIN	0.436 Abs	2.180 µg/L	R^2=0.99907, 28.27		2.500	Kit:250700
ATX Std 4	ANATOXIN	0.412 Abs [0.4240] {4.0 C	2.372 µg/L [2.276]	R^2=0.99907, 26.71		2.500	Kit:250700
ATX Std 5	ANATOXIN	0.247 Abs	4.884 µg/L	R^2=0.99907, 16.01		5.000	Kit:250700
ATX Std 5	ANATOXIN	0.211 Abs [0.2290] {11.1	> 5.000 µg/L [4.88	13.684 %Abs		5.000	Kit:250700
ATX Control	ANATOXIN	0.818 Abs	0.721 µg/L	53.048 %Abs			Kit:250700
ATX Control	ANATOXIN	0.790 Abs [0.8040] {2.5 C	0.778 µg/L [0.750]	51.232 %Abs [52.1			Kit:250700

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) 8/21/2025 6:39:48 AM

Signature 

Charles Hostetter 8/21/2025

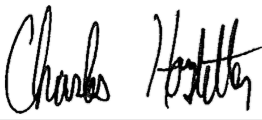
Test Information

Request: 8/20/2025 5:26:02 PM
Date: 8/20/2025 - 8/21/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#	
LRB	ANATOXIN	1.419 Abs	0.069 µg/L	Low, 92.023 %Abs		0.150 - 5.000	Kit:250700	
LRB	ANATOXIN	1.298 Abs [1.3585] {6.3 C	0.149 µg/L [0.109]			0.150 - 5.000	Kit:250700	
LFB	ANATOXIN	0.843 Abs	0.674 µg/L	54.669 %Abs		0.150 - 5.000	Kit:250700	
LFB	ANATOXIN	0.813 Abs [0.8280] {2.6 C	0.731 µg/L [0.703]	52.724 %Abs [53.6		0.150 - 5.000	Kit:250700	
AC46374	ANATOXIN	1.407 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46374	ANATOXIN	1.324 Abs [1.3655] {4.3 C	< LOD [< LOD]		MDF=1.100	0.150 - 5.000	Kit:250700	
AC46375	ANATOXIN	1.351 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46375	ANATOXIN	1.310 Abs [1.3305] {2.2 C	< LOD [< LOD]		MDF=1.100	0.150 - 5.000	Kit:250700	
AC46376	ANATOXIN	1.261 Abs	0.195 µg/L	81.777 %Abs	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46376	ANATOXIN	1.239 Abs [1.2500] {1.2 C	0.213 µg/L [0.204]	80.350 %Abs [81.0	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46377	ANATOXIN	1.429 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46377	ANATOXIN	1.393 Abs [1.4110] {1.8 C	< LOD [< LOD]		MDF=1.100	0.150 - 5.000	Kit:250700	
AC46378	ANATOXIN	1.399 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46378	ANATOXIN	1.350 Abs [1.3745] {2.5 C	< LOD [< LOD]		MDF=1.100	0.150 - 5.000	Kit:250700	
AC46379	ANATOXIN	1.278 Abs	0.180 µg/L	82.879 %Abs	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46379	ANATOXIN	1.267 Abs [1.2725] {0.6 C	0.189 µg/L [0.185]	82.166 %Abs [82.5	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46380	ANATOXIN	1.295 Abs	0.166 µg/L	83.982 %Abs	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46380	ANATOXIN	1.320 Abs [1.3075] {1.4 C	< LOD [< LOD]		MDF=1.100	0.150 - 5.000	Kit:250700	
AC46381	ANATOXIN	1.540 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46381	ANATOXIN	1.506 Abs [1.5230] {1.6 C	< LOD [< LOD]		MDF=1.100	0.150 - 5.000	Kit:250700	
AC46381MS	ANATOXIN	0.806 Abs	0.745 µg/L	52.270 %Abs		0.150 - 5.000	Kit:250700	
AC46381MS	ANATOXIN	0.753 Abs [0.7795] {4.8 C	0.859 µg/L [0.802]	48.833 %Abs [50.5		0.150 - 5.000	Kit:250700	
AC46381MSD	ANATOXIN	0.760 Abs	0.843 µg/L	49.287 %Abs		0.150 - 5.000	Kit:250700	
AC46381MSD	ANATOXIN	0.745 Abs [0.7525] {1.4 C	0.878 µg/L [0.861]	48.314 %Abs [48.8		0.150 - 5.000	Kit:250700	
AC46382	ANATOXIN	1.191 Abs	0.259 µg/L	77.237 %Abs	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46382	ANATOXIN	1.184 Abs [1.1875] {0.4 C	0.265 µg/L [0.262]	76.783 %Abs [77.0	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46383	ANATOXIN	1.510 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46383	ANATOXIN	1.408 Abs [1.4590] {4.9 C	< LOD [< LOD]		MDF=1.100	0.150 - 5.000	Kit:250700	
AC46384	ANATOXIN	1.515 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46384	ANATOXIN	1.464 Abs [1.4895] {2.4 C	< LOD [< LOD]		MDF=1.100	0.150 - 5.000	Kit:250700	
AC46385	ANATOXIN	1.472 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46385	ANATOXIN	1.489 Abs [1.4805] {0.8 C	< LOD [< LOD]		MDF=1.100	0.150 - 5.000	Kit:250700	
AC46386	ANATOXIN	1.432 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:250700	
AC46386	ANATOXIN	1.417 Abs [1.4245] {0.7 C	< LOD [< LOD]		MDF=1.100	0.150 - 5.000	Kit:250700	

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:

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:2507006152

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position	
8/20/2025 5:24:27 PM					
ATX Std 0	1.599 Abs	0.000 µg/L	R^2=0.99907, 103.696 %Abs	RK1:23->A01@2	
ATX Std 0	1.485 Abs [1.5420] {5.2 CV}	0.031 µg/L [0.016] {141.4 CV}	R^2=0.99907, 96.303 %Abs	RK1:23->B01@2	
ATX Std 1	1.345 Abs	0.116 µg/L	R^2=0.99907, 87.224 %Abs	RK1:24->C01@2	
ATX Std 1	1.264 Abs [1.3045] {4.4 CV}	0.174 µg/L [0.145] {28.3 CV}	R^2=0.99907, 81.971 %Abs	RK1:24->D01@2	
ATX Std 2	1.049 Abs	0.377 µg/L	R^2=0.99907, 68.029 %Abs	RK1:25->E01@2	
ATX Std 2	1.004 Abs [1.0265] {3.1 CV}	0.431 µg/L [0.404] {9.5 CV}	R^2=0.99907, 65.110 %Abs	RK1:25->F01@3	
ATX Std 3	0.688 Abs	1.024 µg/L	R^2=0.99907, 44.617 %Abs	RK1:26->G01@3	
ATX Std 3	0.674 Abs [0.6810] {1.5 CV}	1.064 µg/L [1.044] {2.7 CV}	R^2=0.99907, 43.709 %Abs	RK1:26->H01@3	
ATX Std 4	0.436 Abs	2.180 µg/L	R^2=0.99907, 28.275 %Abs	RK1:27->A02@2	
ATX Std 4	0.412 Abs [0.4240] {4.0 CV}	2.372 µg/L [2.276] {6.0 CV}	R^2=0.99907, 26.719 %Abs	RK1:27->B02@2	
ATX Std 5	0.247 Abs	4.884 µg/L	R^2=0.99907, 16.018 %Abs	RK1:28->C02@2	
ATX Std 5	0.211 Abs [0.2290] {11.1 CV}	> 5.000 µg/L [4.884]	13.684 %Abs	RK1:28->D02@2	
*****	*****	*****	*****	*****	*****
8/20/2025 5:24:27 PM					
ATX Control	0.818 Abs	0.721 µg/L	53.048 %Abs	RK1:29->E02@2	
ATX Control	0.790 Abs [0.8040] {2.5 CV}	0.778 µg/L [0.750] {5.4 CV}	51.232 %Abs [52.140 %Abs]	RK1:29->F02@3	
*****	*****	*****	*****	*****	*****
Statistic					
ATX Std 0 [MEAN]	1.5420	0.0155			
ATX Std 0 [SD]	0.0806	0.0219			
ATX Std 0 [%CV]	5.2276	141.4214			
ATX Std 1 [MEAN]	1.3045	0.1450			
ATX Std 1 [SD]	0.0573	0.0410			
ATX Std 1 [%CV]	4.3906	28.2843			
ATX Std 1 [%DIFF]		-3.3333			
ATX Std 2 [MEAN]	1.0265	0.4040			
ATX Std 2 [SD]	0.0318	0.0382			
ATX Std 2 [%CV]	3.0998	9.4514			
ATX Std 2 [%DIFF]		1.0000			
ATX Std 3 [MEAN]	0.6810	1.0440			
ATX Std 3 [SD]	0.0099	0.0283			
ATX Std 3 [%CV]	1.4537	2.7092			
ATX Std 3 [%DIFF]		4.4000			
ATX Std 4 [MEAN]	0.4240	2.2760			
ATX Std 4 [SD]	0.0170	0.1358			
ATX Std 4 [%CV]	4.0025	5.9650			
ATX Std 4 [%DIFF]		-8.9600			
ATX Std 5 [MEAN]	0.2290				
ATX Std 5 [SD]	0.0255				
ATX Std 5 [%CV]	11.1161				

Name	Absorbance	Concentration	Interpretation	Position	
ATX Control [MEAN]	0.8040	0.7495			
ATX Control [SD]	0.0198	0.0403			
ATX Control [%CV]	2.4626	5.3776			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.5452
 B = 0.98712
 C = 0.77659
 D = 0.035634
 R2 coef = 0.99907
 50% = 0.818

