



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45783	Cecil M. Harden Lake - Raccoon Lake SRA Beach	7/7/2025	7/10/2025	< 0.40
AC45784	Cagles Mill Lake - Lieber SRA Beach	7/7/2025	7/10/2025	< 0.40
AC45785	Monroe Lake - Fairfax SRA Beach	7/7/2025	7/10/2025	< 0.40
AC45786	Monroe Lake - Paynetown SRA Beach	7/7/2025	7/10/2025	< 0.40
AC45787	Starve Hollow SRA - Starve Hollow Lake Beach	7/7/2025	7/10/2025	< 0.40
AC45788	Whitewater Memorial SP - Whitewater Lake Beach	7/8/2025	7/10/2025	< 0.40
AC45789	Brookville Lake - Quakertown SRA Beach	7/8/2025	7/10/2025	< 0.40
AC45790	Brookville Lake - Mounds SRA Beach	7/8/2025	7/10/2025	< 0.40
AC45791	Hardy Lake SRA - Hardy Lake SRA Beach	7/8/2025	7/10/2025	< 0.40
AC45792	Deam Lake SRA - Deam Lake Beach	7/8/2025	7/10/2025	< 0.40
AC45793	Hardy Lake SRA - Hardy Lake SRA Beach (Field Duplicate)	7/8/2025	7/10/2025	< 0.40
AC45794	Field Blank	7/8/2025	7/10/2025	< 0.40
AC45795	Ft. Ben Harrison SP Dog Lake	7/7/2025	7/10/2025	< 0.40

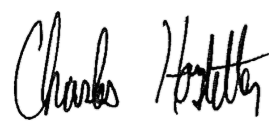
Test Report (by Request)

Test Information

Request: 7/10/2025 2:28:41 PM
Date: 7/10/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.564 Abs	0.000 µg/L	R^2=0.99923, 101.4		0.000	Kit:P23L3i
ATX Std 0	ANATOXIN	1.517 Abs [1.5405] {2.2 C	0.008 µg/L [0.004]	R^2=0.99923, 98.44		0.000	Kit:P23L3i
ATX Std 1	ANATOXIN	1.274 Abs	0.135 µg/L	R^2=0.99923, 82.67		0.150	Kit:P23L3i
ATX Std 1	ANATOXIN	1.231 Abs [1.2525] {2.4 C	0.165 µg/L [0.150]	R^2=0.99923, 79.88		0.150	Kit:P23L3i
ATX Std 2	ANATOXIN	0.991 Abs	0.397 µg/L	R^2=0.99923, 64.30		0.400	Kit:P23L3i
ATX Std 2	ANATOXIN	0.998 Abs [0.9945] {0.5 C	0.389 µg/L [0.393]	R^2=0.99923, 64.76		0.400	Kit:P23L3i
ATX Std 3	ANATOXIN	0.667 Abs	1.028 µg/L	R^2=0.99923, 43.28		1.000	Kit:P23L3i
ATX Std 3	ANATOXIN	0.649 Abs [0.6580] {1.9 C	1.083 µg/L [1.056]	R^2=0.99923, 42.11		1.000	Kit:P23L3i
ATX Std 4	ANATOXIN	0.424 Abs	2.207 µg/L	R^2=0.99923, 27.51		2.500	Kit:P23L3i
ATX Std 4	ANATOXIN	0.399 Abs [0.4115] {4.3 C	2.415 µg/L [2.311]	R^2=0.99923, 25.88		2.500	Kit:P23L3i
ATX Std 5	ANATOXIN	0.227 Abs	> 5.000 µg/L	14.731 %Abs		5.000	Kit:P23L3i
ATX Std 5	ANATOXIN	0.214 Abs [0.2205] {4.2 C	> 5.000 µg/L	13.887 %Abs		5.000	Kit:P23L3i
ATX Control	ANATOXIN	0.804 Abs	0.693 µg/L	52.174 %Abs			Kit:P23L3i
ATX Control	ANATOXIN	0.787 Abs [0.7955] {1.5 C	0.728 µg/L [0.711]	51.071 %Abs [51.6			Kit:P23L3i

Note

Signature 

Charles Hostetter 7/10/2025

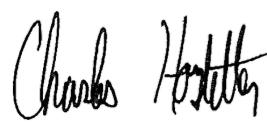
Test Report (by Request)

Test Information

Request: 7/10/2025 2:52:04 PM
Date: 7/10/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	ANATOXIN	1.385 Abs	0.067 µg/L	Low, 89.877 %Abs		0.150 - 5.000	Kit:P23L3I
LRB	ANATOXIN	1.384 Abs [1.3845] {0.1 C	0.068 µg/L [0.068]	Low, 89.812 %Abs		0.150 - 5.000	Kit:P23L3I
LFB (ANA)	ANATOXIN	0.846 Abs	0.614 µg/L	54.899 %Abs		0.150 - 5.000	Kit:P23L3I
LFB (ANA)	ANATOXIN	0.814 Abs [0.8300] {2.7 C	0.673 µg/L [0.644]	52.823 %Abs [53.8		0.150 - 5.000	Kit:P23L3I
AC45783	ANATOXIN	1.348 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45783	ANATOXIN	1.321 Abs [1.3345] {1.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45784	ANATOXIN	1.347 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45784	ANATOXIN	1.351 Abs [1.3490] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45785	ANATOXIN	1.370 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45785	ANATOXIN	1.350 Abs [1.3600] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45786	ANATOXIN	1.501 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45786	ANATOXIN	1.472 Abs [1.4865] {1.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45787	ANATOXIN	1.430 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45787	ANATOXIN	1.395 Abs [1.4125] {1.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45787MS	ANATOXIN	0.764 Abs	0.777 µg/L	49.578 %Abs		0.150 - 5.000	Kit:P23L3I
AC45787MS	ANATOXIN	0.761 Abs [0.7625] {0.3 C	0.784 µg/L [0.781]	49.384 %Abs [49.4		0.150 - 5.000	Kit:P23L3I
AC45787MSD	ANATOXIN	0.755 Abs	0.797 µg/L	48.994 %Abs		0.150 - 5.000	Kit:P23L3I
AC45787MSD	ANATOXIN	0.741 Abs [0.7480] {1.3 C	0.830 µg/L [0.814]	48.086 %Abs [48.5		0.150 - 5.000	Kit:P23L3I
AC45788	ANATOXIN	1.432 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45788	ANATOXIN	1.384 Abs [1.4080] {2.4 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45789	ANATOXIN	1.379 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45789	ANATOXIN	1.369 Abs [1.3740] {0.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45790	ANATOXIN	1.332 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45790	ANATOXIN	1.349 Abs [1.3405] {0.9 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45791	ANATOXIN	1.280 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45791	ANATOXIN	1.277 Abs [1.2785] {0.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45792	ANATOXIN	1.457 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45792	ANATOXIN	1.458 Abs [1.4575] {0.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45793	ANATOXIN	1.350 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45793	ANATOXIN	1.335 Abs [1.3425] {0.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45794	ANATOXIN	1.411 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45794	ANATOXIN	1.437 Abs [1.4240] {1.3 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45795	ANATOXIN	1.411 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23L3I
AC45795	ANATOXIN	1.416 Abs [1.4135] {0.3 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
7/10/2025 2:28:41 PM				
ATX Std 0	1.564 Abs	0.000 µg/L	R ² =0.99923, 101.493 %Abs	RK1:23->A01@2
ATX Std 0	1.517 Abs [1.5405] {2.2 CV}	0.008 µg/L [0.004] {141.4 CV}	R ² =0.99923, 98.443 %Abs	RK1:23->B01@2
ATX Std 1	1.274 Abs	0.135 µg/L	R ² =0.99923, 82.674 %Abs	RK1:24->C01@2
ATX Std 1	1.231 Abs [1.2525] {2.4 CV}	0.165 µg/L [0.150] {14.1 CV}	R ² =0.99923, 79.883 %Abs	RK1:24->D01@2
ATX Std 2	0.991 Abs	0.397 µg/L	R ² =0.99923, 64.309 %Abs	RK1:25->E01@2
ATX Std 2	0.998 Abs [0.9945] {0.5 CV}	0.389 µg/L [0.393] {1.4 CV}	R ² =0.99923, 64.763 %Abs	RK1:25->F01@3
ATX Std 3	0.667 Abs	1.028 µg/L	R ² =0.99923, 43.284 %Abs	RK1:26->G01@3
ATX Std 3	0.649 Abs [0.6580] {1.9 CV}	1.083 µg/L [1.056] {3.7 CV}	R ² =0.99923, 42.116 %Abs	RK1:26->H01@3
ATX Std 4	0.424 Abs	2.207 µg/L	R ² =0.99923, 27.515 %Abs	RK1:27->A02@2
ATX Std 4	0.399 Abs [0.4115] {4.3 CV}	2.415 µg/L [2.311] {6.4 CV}	R ² =0.99923, 25.892 %Abs	RK1:27->B02@2
ATX Std 5	0.227 Abs	> 5.000 µg/L	14.731 %Abs	RK1:28->C02@2
ATX Std 5	0.214 Abs [0.2205] {4.2 CV}	> 5.000 µg/L	13.887 %Abs	RK1:28->D02@2

7/10/2025 2:28:41 PM				
ATX Control	0.804 Abs	0.693 µg/L	52.174 %Abs	RK1:29->E02@2
ATX Control	0.787 Abs [0.7955] {1.5 CV}	0.728 µg/L [0.711] {3.5 CV}	51.071 %Abs [51.622 %Abs]	RK1:29->F02@3

Statistic				
ATX Std 0 [MEAN]	1.5405	0.0040		
ATX Std 0 [SD]	0.0332	0.0057		
ATX Std 0 [%CV]	2.1574	141.4214		
ATX Std 1 [MEAN]	1.2525	0.1500		
ATX Std 1 [SD]	0.0304	0.0212		
ATX Std 1 [%CV]	2.4276	14.1421		
ATX Std 1 [%DIFF]		-0.0000		
ATX Std 2 [MEAN]	0.9945	0.3930		
ATX Std 2 [SD]	0.0049	0.0057		
ATX Std 2 [%CV]	0.4977	1.4394		
ATX Std 2 [%DIFF]		-1.7500		
ATX Std 3 [MEAN]	0.6580	1.0555		
ATX Std 3 [SD]	0.0127	0.0389		
ATX Std 3 [%CV]	1.9343	3.6846		
ATX Std 3 [%DIFF]		5.5500		
ATX Std 4 [MEAN]	0.4115	2.3110		
ATX Std 4 [SD]	0.0177	0.1471		
ATX Std 4 [%CV]	4.2959	6.3643		
ATX Std 4 [%DIFF]		-7.5600		
ATX Std 5 [MEAN]	0.2205			
ATX Std 5 [SD]	0.0092			
ATX Std 5 [%CV]	4.1689			

Name	Absorbance	Concentration	Interpretation	Position	
ATX Control [MEAN]	0.7955	0.7105			
ATX Control [SD]	0.0120	0.0247			
ATX Control [%CV]	1.5111	3.4833			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.5421
 B = 0.89363
 C = 0.78160
 D = -0.018146
 R2 coef = 0.99923
 50% = 0.763

