



Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45898	Tippecanoe River at Monterey Boat Ramp	7/15/2025	7/17/2025	< 0.40
AC45899	Tippecanoe River at Pulaski Boat Ramp	7/15/2025	7/17/2025	< 0.40
AC45900	Tippecanoe River at the SR 16/SR 39 bridge (Buffalo)	7/15/2025	7/17/2025	< 0.40

Test Report (by Request)

Test Information

Request: 7/17/2025 5:05:19 PM
Date: 7/17/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.559 Abs	0.000 µg/L	R^2=0.99888, 101.6		0.000	Kit:P23L3i
ATX Std 0	ANATOXIN	1.509 Abs [1.5340] {2.3 C	0.009 µg/L [0.005]	R^2=0.99888, 98.37		0.000	Kit:P23L3i
ATX Std 1	ANATOXIN	1.285 Abs	0.118 µg/L	R^2=0.99888, 83.76		0.150	Kit:P23L3i
ATX Std 1	ANATOXIN	1.198 Abs [1.2415] {5.0 C	0.176 µg/L [0.147]	R^2=0.99888, 78.09		0.150	Kit:P23L3i
ATX Std 2	ANATOXIN	0.978 Abs	0.382 µg/L	R^2=0.99888, 63.75		0.400	Kit:P23L3i
ATX Std 2	ANATOXIN	0.946 Abs [0.9620] {2.4 C	0.421 µg/L [0.402]	R^2=0.99888, 61.66		0.400	Kit:P23L3i
ATX Std 3	ANATOXIN	0.644 Abs	1.014 µg/L	R^2=0.99888, 41.98		1.000	Kit:P23L3i
ATX Std 3	ANATOXIN	0.618 Abs [0.6310] {2.9 C	1.096 µg/L [1.055]	R^2=0.99888, 40.28		1.000	Kit:P23L3i
ATX Std 4	ANATOXIN	0.406 Abs	2.201 µg/L	R^2=0.99888, 26.46		2.500	Kit:P23L3i
ATX Std 4	ANATOXIN	0.397 Abs [0.4015] {1.6 C	2.277 µg/L [2.239]	R^2=0.99888, 25.88		2.500	Kit:P23L3i
ATX Std 5	ANATOXIN	0.221 Abs	> 5.000 µg/L	14.407 %Abs		5.000	Kit:P23L3i
ATX Std 5	ANATOXIN	0.203 Abs [0.2120] {6.0 C	> 5.000 µg/L	13.233 %Abs		5.000	Kit:P23L3i
ATX Control	ANATOXIN	0.770 Abs	0.704 µg/L	50.196 %Abs			Kit:P23L3i
ATX Control	ANATOXIN	0.738 Abs [0.7540] {3.0 C	0.772 µg/L [0.738]	48.110 %Abs [49.1			Kit:P23L3i

Note

Signature

David Jordan

David Jordan 7/17/2025

Test Report (by Request)

Test Information

Request: 7/17/2025 5:06:55 PM
Date: 7/17/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB (ANA)	ANATOXIN	1.300 Abs	0.109 µg/L	Low, 84.746 %Abs		0.150 - 5.000	Kit:P23L3i
LRB (ANA)	ANATOXIN	1.260 Abs [1.2800] {2.2 C	0.134 µg/L [0.122]	Low, 82.138 %Abs		0.150 - 5.000	Kit:P23L3i
LFB (ANA)	ANATOXIN	0.837 Abs	0.581 µg/L	54.563 %Abs		0.150 - 5.000	Kit:P23L3i
LFB (ANA)	ANATOXIN	0.814 Abs [0.8255] {2.0 C	0.620 µg/L [0.601]	53.064 %Abs [53.8		0.150 - 5.000	Kit:P23L3i
AC45898	ANATOXIN	1.472 Abs	0.023 µg/L	Low, 95.958 %Abs		0.150 - 5.000	Kit:P23L3i
AC45898	ANATOXIN	1.435 Abs [1.4535] {1.8 C	0.039 µg/L [0.031]	Low, 93.546 %Abs		0.150 - 5.000	Kit:P23L3i
AC45899	ANATOXIN	1.410 Abs	0.050 µg/L	Low, 91.917 %Abs		0.150 - 5.000	Kit:P23L3i
AC45899	ANATOXIN	1.393 Abs [1.4015] {0.9 C	0.058 µg/L [0.054]	Low, 90.808 %Abs		0.150 - 5.000	Kit:P23L3i
AC45900	ANATOXIN	1.256 Abs	0.136 µg/L	Low, 81.877 %Abs		0.150 - 5.000	Kit:P23L3i
AC45900	ANATOXIN	1.277 Abs [1.2665] {1.2 C	0.123 µg/L [0.130]	Low, 83.246 %Abs		0.150 - 5.000	Kit:P23L3i
AC45900LD	ANATOXIN	1.273 Abs	0.125 µg/L	Low, 82.986 %Abs		0.150 - 5.000	Kit:P23L3i
AC45900LD	ANATOXIN	1.248 Abs [1.2605] {1.4 C	0.141 µg/L [0.133]	Low, 81.356 %Abs		0.150 - 5.000	Kit:P23L3i

Note

Signature *David Jordan*

David Jordan 7/17/2025

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:

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: "

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Name	Absorbance	Concentration	Interpretation	Position
7/17/2025 5:05:19 PM				
ATX Std 0	1.559 Abs	0.000 µg/L	R ² =0.99888, 101.630 %Abs	RK1:23->A01@2
ATX Std 0	1.509 Abs [1.5340] {2.3 CV}	0.009 µg/L [0.005] {141.4 CV}	R ² =0.99888, 98.370 %Abs	RK1:23->B01@2
ATX Std 1	1.285 Abs	0.118 µg/L	R ² =0.99888, 83.768 %Abs	RK1:24->C01@2
ATX Std 1	1.198 Abs [1.2415] {5.0 CV}	0.176 µg/L [0.147] {27.9 CV}	R ² =0.99888, 78.096 %Abs	RK1:24->D01@2
ATX Std 2	0.978 Abs	0.382 µg/L	R ² =0.99888, 63.755 %Abs	RK1:25->E01@2
ATX Std 2	0.946 Abs [0.9620] {2.4 CV}	0.421 µg/L [0.402] {6.9 CV}	R ² =0.99888, 61.669 %Abs	RK1:25->F01@3
ATX Std 3	0.644 Abs	1.014 µg/L	R ² =0.99888, 41.982 %Abs	RK1:26->G01@3
ATX Std 3	0.618 Abs [0.6310] {2.9 CV}	1.096 µg/L [1.055] {5.5 CV}	R ² =0.99888, 40.287 %Abs	RK1:26->H01@3
ATX Std 4	0.406 Abs	2.201 µg/L	R ² =0.99888, 26.467 %Abs	RK1:27->A02@2
ATX Std 4	0.397 Abs [0.4015] {1.6 CV}	2.277 µg/L [2.239] {2.4 CV}	R ² =0.99888, 25.880 %Abs	RK1:27->B02@2
ATX Std 5	0.221 Abs	> 5.000 µg/L	14.407 %Abs	RK1:28->C02@2
ATX Std 5	0.203 Abs [0.2120] {6.0 CV}	> 5.000 µg/L	13.233 %Abs	RK1:28->D02@2

7/17/2025 5:05:19 PM				
ATX Control	0.770 Abs	0.704 µg/L	50.196 %Abs	RK1:29->E02@2
ATX Control	0.738 Abs [0.7540] {3.0 CV}	0.772 µg/L [0.738] {6.5 CV}	48.110 %Abs [49.153 %Abs]	RK1:29->F02@3

Statistic				
ATX Std 0 [MEAN]	1.5340	0.0045		
ATX Std 0 [SD]	0.0354	0.0064		
ATX Std 0 [%CV]	2.3048	141.4214		
ATX Std 1 [MEAN]	1.2415	0.1470		
ATX Std 1 [SD]	0.0615	0.0410		
ATX Std 1 [%CV]	4.9552	27.8994		
ATX Std 1 [%DIFF]		-2.0000		
ATX Std 2 [MEAN]	0.9620	0.4015		
ATX Std 2 [SD]	0.0226	0.0276		
ATX Std 2 [%CV]	2.3521	6.8685		
ATX Std 2 [%DIFF]		0.3750		
ATX Std 3 [MEAN]	0.6310	1.0550		
ATX Std 3 [SD]	0.0184	0.0580		
ATX Std 3 [%CV]	2.9136	5.4960		
ATX Std 3 [%DIFF]		5.5000		
ATX Std 4 [MEAN]	0.4015	2.2390		
ATX Std 4 [SD]	0.0064	0.0537		
ATX Std 4 [%CV]	1.5850	2.4002		
ATX Std 4 [%DIFF]		-10.4400		
ATX Std 5 [MEAN]	0.2120			
ATX Std 5 [SD]	0.0127			
ATX Std 5 [%CV]	6.0037			

Name	Absorbance	Concentration	Interpretation	Position	
ATX Control [MEAN]	0.7540	0.7380			
ATX Control [SD]	0.0226	0.0481			
ATX Control [%CV]	3.0010	6.5153			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.5363
 B = 0.91284
 C = 0.69746
 D = 0.010125
 R2 coef = 0.99888
 50% = 0.710

