Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC40776	Cecil M. Harden Lake - Raccoon Lake SRA Beach	7/8/2024	7/11/2024	< 0.40
AC40777	Cagles Mill Lake - Lieber SRA Beach	7/8/2024	7/11/2024	< 0.40
AC40778	Monroe Lake - Fairfax SRA Beach	7/8/2024	7/11/2024	< 0.40
AC40779	Monroe Lake - Paynetown SRA Beach	7/8/2024	7/11/2024	< 0.40
AC40780	Starve Hollow SRA - Starve Hollow Lake Beach	7/8/2024	7/11/2024	< 0.40
AC40781	Whitewater Memorial SP - Whitewater Lake Beach	7/9/2024	7/11/2024	< 0.40
AC40782	Brookville Lake - Quakertown SRA Beach	7/9/2024	7/11/2024	< 0.40
AC40783	Brookville Lake - Mounds SRA Beach	7/9/2024	7/11/2024	< 0.40
AC40784	Hardy Lake SRA - Hardy Lake SRA Beach	7/9/2024	7/11/2024	< 0.40
AC40785	Deam Lake SRA - Deam Lake Beach	7/9/2024	7/11/2024	< 0.40
AC40786	Cecil M. Harden Lake - Raccoon Lake SRA Beach (Field Duplicate)	7/8/2024	7/11/2024	< 0.40
AC40787	Field Blank	7/8/2024	7/11/2024	< 0.40
AC40788	Ft. Ben Harrison SP Dog Lake	7/9/2024	7/11/2024	< 0.40

eurofins | Abraxis

Test Report (by Request)

Test Information

Request: 7/11/2024 1:45:05 PM
Date: 7/11/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
ATX Std 0	ANATOXIN	1.313 Abs	0.000 µg/L	R^2=0.99954, 102.(		0.000	Kit:P23B0
ATX Std 0	ANATOXIN	1.261 Abs [1.2870] {2.9 C	0.014 µg/L [0.007]	R^2=0.99954, 97.9{		0.000	Kit:P23B0
ATX Std 1	ANATOXIN	1.071 Abs	0.130 µg/L	R^2=0.99954, 83.2[		0.150	Kit:P23B0
ATX Std 1	ANATOXIN	1.036 Abs [1.0535] {2.3 C	0.157 µg/L [0.144]	R^2=0.99954, 80.4[		0.150	Kit:P23B0
ATX Std 2	ANATOXIN	0.795 Abs	0.412 µg/L	R^2=0.99954, 61.7[		0.400	Kit:P23B0
ATX Std 2	ANATOXIN	0.793 Abs [0.7940] {0.2 C	0.415 µg/L [0.414]	R^2=0.99954, 61.6[		0.400	Kit:P23B0
ATX Std 3	ANATOXIN	0.529 Abs	0.990 µg/L	R^2=0.99954, 41.1(		1.000	Kit:P23B0
ATX Std 3	ANATOXIN	0.519 Abs [0.5240] {1.3 C	1.024 µg/L [1.007]	R^2=0.99954, 40.3[		1.000	Kit:P23B0
ATX Std 4	ANATOXIN	0.315 Abs	2.242 µg/L	R^2=0.99954, 24.4[		2.500	Kit:P23B0
ATX Std 4	ANATOXIN	0.295 Abs [0.3050] {4.6 C	2.462 µg/L [2.352]	R^2=0.99954, 22.9[		2.500	Kit:P23B0
ATX Std 5	ANATOXIN	0.170 Abs	> 5.000 µg/L	13.209 %Abs		5.000	Kit:P23B0
ATX Std 5	ANATOXIN	0.163 Abs [0.1665] {3.0 C	> 5.000 µg/L	12.665 %Abs		5.000	Kit:P23B0
ATX Control	ANATOXIN	0.622 Abs	0.728 µg/L	48.329 %Abs			Kit:P23B0
ATX Control	ANATOXIN	0.621 Abs [0.6215] {0.1 C	0.730 µg/L [0.729]	48.252 %Abs [48.2			Kit:P23B0

Note

Signature David Jordan

David Jordan 7/11/2024

* 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) 7/11/2024 2:28:11 PM

eurofins | Abraxis

Test Report (by Request)

Test Information

Request: 7/11/2024 2:08:21 PM
Date: 7/11/2024

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	ANATOXIN	1.100 Abs	0.109 µg/L	Low, 85.470 %Abs		0.150 - 5.000	Kit:P23B0
LRB	ANATOXIN	1.066 Abs [1.0830] {2.2 C	0.134 µg/L [0.122]	Low, 82.828 %Abs		0.150 - 5.000	Kit:P23B0
LFB (ANA)	ANATOXIN	0.684 Abs	0.595 µg/L	53.147 %Abs		0.150 - 5.000	Kit:P23B0
LFB (ANA)	ANATOXIN	0.661 Abs [0.6725] {2.4 C	0.641 µg/L [0.618]	51.360 %Abs [52.2		0.150 - 5.000	Kit:P23B0
AC40776	ANATOXIN	1.073 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40776	ANATOXIN	1.071 Abs [1.0720] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40777	ANATOXIN	1.099 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40777	ANATOXIN	1.099 Abs [1.0990] {0.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40778	ANATOXIN	1.136 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40778	ANATOXIN	1.050 Abs [1.0930] {5.6 C	0.161 µg/L [< LOD	81.585 %Abs [Low,	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40779	ANATOXIN	1.240 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40779	ANATOXIN	1.211 Abs [1.2255] {1.7 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40780	ANATOXIN	1.095 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40780	ANATOXIN	1.077 Abs [1.0860] {1.2 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40781	ANATOXIN	1.116 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40781	ANATOXIN	1.115 Abs [1.1155] {0.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40782	ANATOXIN	1.091 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40782	ANATOXIN	1.048 Abs [1.0695] {2.8 C	0.163 µg/L [< LOD	81.430 %Abs [Low,	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40783	ANATOXIN	1.203 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40783	ANATOXIN	1.177 Abs [1.1900] {1.5 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40783MS	ANATOXIN	0.640 Abs	0.687 µg/L	49.728 %Abs		0.150 - 5.000	Kit:P23B0
AC40783MS	ANATOXIN	0.624 Abs [0.6320] {1.8 C	0.723 µg/L [0.705]	48.485 %Abs [49.1		0.150 - 5.000	Kit:P23B0
AC40783MSD	ANATOXIN	0.614 Abs	0.747 µg/L	47.708 %Abs		0.150 - 5.000	Kit:P23B0
AC40783MSD	ANATOXIN	0.617 Abs [0.6155] {0.3 C	0.740 µg/L [0.744]	47.941 %Abs [47.8		0.150 - 5.000	Kit:P23B0
AC40784	ANATOXIN	0.996 Abs	0.209 µg/L	77.389 %Abs	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40784	ANATOXIN	0.978 Abs [0.9870] {1.3 C	0.227 µg/L [0.218]	75.991 %Abs [76.6	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40785	ANATOXIN	1.246 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40785	ANATOXIN	1.214 Abs [1.2300] {1.8 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40786	ANATOXIN	1.106 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40786	ANATOXIN	1.090 Abs [1.0980] {1.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40787	ANATOXIN	1.174 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40787	ANATOXIN	1.174 Abs [1.1740] {0.0 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40788	ANATOXIN	1.148 Abs	< LOD	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0
AC40788	ANATOXIN	1.115 Abs [1.1315] {2.1 C	< LOD [< LOD]	Low, Out Adjust Dilu	MDF=1.100	0.150 - 5.000	Kit:P23B0

Note

Signature David Jordan

David Jordan 7/11/2024

* 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) 7/11/2024 2:28:11 PM

ANATOXIN - Assay Calibration Report

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:P23B0244

Assay Calibration

Current Calibration Status: " **"**

Name	Absorbance	Concentration	Interpretation	Position
7/11/2024 1:45:05 PM				
ATX Std 0	1.313 Abs	0.000 µg/L	R^2=0.99954, 102.020 %Abs	RK1:23->A01@2
ATX Std 0	1.261 Abs [1.2870] {2.9 CV}	0.014 µg/L [0.007] {141.4 C\	R^2=0.99954, 97.980 %Abs	RK1:23->B01@2
ATX Std 1	1.071 Abs	0.130 µg/L	R^2=0.99954, 83.217 %Abs	RK1:24->C01@2
ATX Std 1	1.036 Abs [1.0535] {2.3 CV}	0.157 µg/L [0.144] {13.3 CV}	R^2=0.99954, 80.497 %Abs	RK1:24->D01@2
ATX Std 2	0.795 Abs	0.412 µg/L	R^2=0.99954, 61.772 %Abs	RK1:25->E01@2
ATX Std 2	0.793 Abs [0.7940] {0.2 CV}	0.415 µg/L [0.414] {0.5 CV}	R^2=0.99954, 61.616 %Abs	RK1:25->F01@3
ATX Std 3	0.529 Abs	0.990 µg/L	R^2=0.99954, 41.103 %Abs	RK1:26->G01@3
ATX Std 3	0.519 Abs [0.5240] {1.3 CV}	1.024 µg/L [1.007] {2.4 CV}	R^2=0.99954, 40.326 %Abs	RK1:26->H01@3
ATX Std 4	0.315 Abs	2.242 µg/L	R^2=0.99954, 24.476 %Abs	RK1:27->A02@2
ATX Std 4	0.295 Abs [0.3050] {4.6 CV}	2.462 µg/L [2.352] {6.6 CV}	R^2=0.99954, 22.922 %Abs	RK1:27->B02@2
ATX Std 5	0.170 Abs	> 5.000 µg/L	13.209 %Abs	RK1:28->C02@2
ATX Std 5	0.163 Abs [0.1665] {3.0 CV}	> 5.000 µg/L	12.665 %Abs	RK1:28->D02@2
++++++++++++++++++++++++++++++++	++++++++++++++++++++++++	++++++++++++++++++++++++	++++++++++++++++++++++++	++++++++++++++++++++++++
7/11/2024 1:45:05 PM				
ATX Control	0.622 Abs	0.728 µg/L	48.329 %Abs	RK1:29->E02@2
ATX Control	0.621 Abs [0.6215] {0.1 CV}	0.730 µg/L [0.729] {0.2 CV}	48.252 %Abs [48.291 %Abs]	RK1:29->F02@3
**********	**********	**********	**********	**********
Statistic				
ATX Std 0 [MEAN]	1.2870	0.0070		
ATX Std 0 [SD]	0.0368	0.0099		
ATX Std 0 [%CV]	2.8570	141.4214		
ATX Std 1 [MEAN]	1.0535	0.1435		
ATX Std 1 [SD]	0.0247	0.0191		
ATX Std 1 [%CV]	2.3492	13.3045		
ATX Std 1 [%DIFF]		-4.3333		
ATX Std 2 [MEAN]	0.7940	0.4135		
ATX Std 2 [SD]	0.0014	0.0021		
ATX Std 2 [%CV]	0.1781	0.5130		
ATX Std 2 [%DIFF]		3.3750		
ATX Std 3 [MEAN]	0.5240	1.0070		
ATX Std 3 [SD]	0.0071	0.0240		
ATX Std 3 [%CV]	1.3494	2.3875		
ATX Std 3 [%DIFF]		0.7000		
ATX Std 4 [MEAN]	0.3050	2.3520		
ATX Std 4 [SD]	0.0141	0.1556		
ATX Std 4 [%CV]	4.6368	6.6141		
ATX Std 4 [%DIFF]		-5.9200		
ATX Std 5 [MEAN]	0.1665			
ATX Std 5 [SD]	0.0049			
ATX Std 5 [%CV]	2.9728			

ANATOXIN - Assay Calibration Report

Name	Absorbance	Concentration	Interpretation	Position
ATX Control [MEAN]	0.6215	0.7290		
ATX Control [SD]	0.0007	0.0014		
ATX Control [%CV]	0.1138	0.1940		

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.2895
B = 0.97261
C = 0.65308
D = 0.021402
R2 coef = 0.99954
50% = 0.679