Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ug/L)
AB42857	Summit Lake - State Park	6/8/2020	6/10/2020	< 0.40
AB42858	Kunkel Beach @ Oubache State Park	6/8/2020	6/10/2020	< 0.40
AB42859	Pokagon State Park	6/8/2020	6/10/2020	< 0.40
AB42860	Potowatomi Inn's Beach	6/8/2020	6/10/2020	< 0.40
AB42861	Chain O'Lakes SP	6/8/2020	6/10/2020	< 0.40
AB42862	Potato Creek State Park	6/9/2020	6/10/2020	< 0.40
AB42863	Lost Bridge West SRA	6/9/2020	6/10/2020	< 0.40
AB42864	Mississinewa Lake Miami SRA	6/9/2020	6/10/2020	< 0.40
AB42865	Field Blank	6/9/2020	6/10/2020	< 0.40
AB42866	Lost Bridge West SRA (Field Duplicate)	6/9/2020	6/10/2020	< 0.40

eurofins | Abraxis

Test Report (by Request)

Test Information

Request: 6/10/2020 4:49:40 PM
Date: 6/10/2020 - 6/11/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
ATX Std 0	ANATOXIN	1.230 Abs	0.010 µg/L	R^2=0.99966, 99.194		20A2174
ATX Std 0	ANATOXIN	1.251 Abs [1.2405] {1.2 CV}	0.000 µg/L [0.005] {1	R^2=0.99966, 100.88		20A2174
ATX Std 1	ANATOXIN	1.072 Abs	0.151 µg/L	R^2=0.99966, 86.452		20A2174
ATX Std 1	ANATOXIN	1.074 Abs [1.0730] {0.1 CV}	0.149 µg/L [0.150] {0	R^2=0.99966, 86.613		20A2174
ATX Std 2	ANATOXIN	0.871 Abs	0.388 µg/L	R^2=0.99966, 70.242		20A2174
ATX Std 2	ANATOXIN	0.863 Abs [0.8670] {0.7 CV}	0.399 µg/L [0.394] {2	R^2=0.99966, 69.597		20A2174
ATX Std 3	ANATOXIN	0.570 Abs	1.026 µg/L	R^2=0.99966, 45.968		20A2174
ATX Std 3	ANATOXIN	0.566 Abs [0.5680] {0.5 CV}	1.039 µg/L [1.033] {0	R^2=0.99966, 45.645		20A2174
ATX Std 4	ANATOXIN	0.329 Abs	2.333 µg/L	R^2=0.99966, 26.532		20A2174
ATX Std 4	ANATOXIN	0.320 Abs [0.3245] {2.0 CV}	2.419 µg/L [2.376] {2	R^2=0.99966, 25.806		20A2174
ATX Std 5	ANATOXIN	0.171 Abs	> 5.000 µg/L	13.790 %Abs		20A2174
ATX Std 5	ANATOXIN	0.166 Abs [0.1685] {2.1 CV}	> 5.000 µg/L	13.387 %Abs		20A2174
ATX Control	ANATOXIN	0.644 Abs	0.817 µg/L	51.935 %Abs		20A2174
ATX Control	ANATOXIN	0.624 Abs [0.6340] {2.2 CV}	0.869 µg/L [0.843] {4	50.323 %Abs [51.12		20A2174

Note

Signature David Jordan

Date: 6/10/2020

* 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 (6.4.1.1073/1085/1.00/0.95) 6/11/2020 9:17:54 AM

eurofins | Abraxis

Test Report (by Request)

Test Information

Request: 6/10/2020 4:50:45 PM
Date: 6/10/2020 - 6/11/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
LRB	ANATOXIN	1.182 Abs	0.050 µg/L	**LOW, 95.323 %ABS**	0.150 - 5.000	20A2174
LRB	ANATOXIN	1.180 Abs [1.1810] {0.1 CV}	0.052 µg/L [0.051] {2		0.150 - 5.000	20A2174
LFB	ANATOXIN	0.753 Abs	0.580 µg/L	60.726 %Abs	0.150 - 5.000	20A2174
LFB	ANATOXIN	0.743 Abs [0.7480] {0.9 CV}	0.599 µg/L [0.589] {2	59.919 %Abs [60.32	0.150 - 5.000	20A2174
AB42857	ANATOXIN	1.171 Abs	0.066 µg/L	**LOW, 94.435 %ABS**	0.150 - 5.000	20A2174
AB42857	ANATOXIN	1.142 Abs [1.1565] {1.8 CV}	0.094 µg/L [0.080] {2		0.150 - 5.000	20A2174
AB42857MS	ANATOXIN	0.707 Abs	0.672 µg/L	57.016 %Abs	0.150 - 5.000	20A2174
AB42857MS	ANATOXIN	0.692 Abs [0.6995] {1.5 CV}	0.704 µg/L [0.688] {3	55.806 %Abs [56.411	0.150 - 5.000	20A2174
AB42857MSD	ANATOXIN	0.702 Abs	0.682 µg/L	56.613 %Abs	0.150 - 5.000	20A2174
AB42857MSD	ANATOXIN	0.708 Abs [0.7050] {0.6 CV}	0.669 µg/L [0.676] {1	57.097 %Abs [56.85	0.150 - 5.000	20A2174
AB42858	ANATOXIN	1.240 Abs	0.001 µg/L	**LOW, 100.000 %ABS**	0.150 - 5.000	20A2174
AB42858	ANATOXIN	1.233 Abs [1.2365] {0.4 CV}	0.008 µg/L [0.005] {1		0.150 - 5.000	20A2174
AB42859	ANATOXIN	1.255 Abs	0.000 µg/L	**LOW, 101.210 %ABS**	0.150 - 5.000	20A2174
AB42859	ANATOXIN	1.229 Abs [1.2420] {1.5 CV}	0.012 µg/L [0.006] {1		0.150 - 5.000	20A2174
AB42860	ANATOXIN	1.227 Abs	0.013 µg/L	**LOW, 98.952 %ABS**	0.150 - 5.000	20A2174
AB42860	ANATOXIN	1.243 Abs [1.2350] {0.9 CV}	0.000 µg/L [0.007] {1		0.150 - 5.000	20A2174
AB42861	ANATOXIN	1.235 Abs	0.005 µg/L	**LOW, 99.597 %ABS**	0.150 - 5.000	20A2174
AB42861	ANATOXIN	1.229 Abs [1.2320] {0.3 CV}	0.012 µg/L [0.009] {5		0.150 - 5.000	20A2174
AB42862	ANATOXIN	1.171 Abs	0.066 µg/L	**LOW, 94.435 %ABS**	0.150 - 5.000	20A2174
AB42862	ANATOXIN	1.135 Abs [1.1530] {2.2 CV}	0.100 µg/L [0.083] {2		0.150 - 5.000	20A2174
AB42863	ANATOXIN	1.096 Abs	0.140 µg/L	**LOW, 88.387 %ABS**	0.150 - 5.000	20A2174
AB42863	ANATOXIN	1.143 Abs [1.1195] {3.0 CV}	0.092 µg/L [0.116] {2		0.150 - 5.000	20A2174
AB42864	ANATOXIN	1.142 Abs	0.094 µg/L	**LOW, 92.097 %ABS**	0.150 - 5.000	20A2174
AB42864	ANATOXIN	1.147 Abs [1.1445] {0.3 CV}	0.089 µg/L [0.091] {3		0.150 - 5.000	20A2174
AB42865	ANATOXIN	1.132 Abs	0.103 µg/L	**LOW, 91.290 %ABS**	0.150 - 5.000	20A2174
AB42865	ANATOXIN	1.163 Abs [1.1475] {1.9 CV}	0.074 µg/L [0.089] {2		0.150 - 5.000	20A2174
AB42866	ANATOXIN	1.147 Abs	0.089 µg/L	**LOW, 92.500 %ABS**	0.150 - 5.000	20A2174
AB42866	ANATOXIN	1.137 Abs [1.1420] {0.6 CV}	0.099 µg/L [0.094] {7		0.150 - 5.000	20A2174

Note

Signature David Jordan

Date: 6/10/2020

* 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 (6.4.1.1073/1085/1.00/0.95) 6/11/2020 9:17:54 AM

eurofins | Abraxis

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: 20A2174

Assay Calibration

Current Calibration Status: " "

Name	Absorbance	Concentration	Interpretation	Position
6/10/2020 4:49:40 PM				
ATX Std 0	1.230 Abs		R^2=0.99966, 99.194 %Abs	RK1:23->A01@2
ATX Std 0	1.251 Abs [1.2405] {1.2 CV}		R^2=0.99966, 100.887 %Abs	RK1:23->B01@2
ATX Std 1	1.072 Abs		R^2=0.99966, 86.452 %Abs	RK1:24->C01@2
ATX Std 1	1.074 Abs [1.0730] {0.1 CV}		R^2=0.99966, 86.613 %Abs	RK1:24->D01@2
ATX Std 2	0.871 Abs		R^2=0.99966, 70.242 %Abs	RK1:25->E01@2
ATX Std 2	0.863 Abs [0.8670] {0.7 CV}		R^2=0.99966, 69.597 %Abs	RK1:25->F01@3
ATX Std 3	0.570 Abs		R^2=0.99966, 45.968 %Abs	RK1:26->G01@3
ATX Std 3	0.566 Abs [0.5680] {0.5 CV}		R^2=0.99966, 45.645 %Abs	RK1:26->H01@3
ATX Std 4	0.329 Abs		R^2=0.99966, 26.532 %Abs	RK1:27->A02@2
ATX Std 4	0.320 Abs [0.3245] {2.0 CV}		R^2=0.99966, 25.806 %Abs	RK1:27->B02@2
ATX Std 5	0.171 Abs		13.790 %Abs	RK1:28->C02@2
ATX Std 5	0.166 Abs [0.1685] {2.1 CV}		13.387 %Abs	RK1:28->D02@2
++++++++++++++++++++++++++++++++	++++++++++++++++++++++		++++++++++++++++++++++	++++++++++++++++++++++
6/10/2020 4:49:40 PM				
ATX Control	0.644 Abs		51.935 %Abs	RK1:29->E02@2
ATX Control	0.624 Abs [0.6340] {2.2 CV}		50.323 %Abs [51.129 %Abs]	RK1:29->F02@3
**********	**********	**********	**********	**********
Statistic				
ATX Std 0 [MEAN]	1.2405			
ATX Std 0 [SD]	0.0148			
ATX Std 0 [%CV]	1.1970			
ATX Std 1 [MEAN]	1.0730			
ATX Std 1 [SD]	0.0014			
ATX Std 1 [%CV]	0.1318			
ATX Std 1 [%DIFF]				
ATX Std 2 [MEAN]	0.8670			
ATX Std 2 [SD]	0.0057			
ATX Std 2 [%CV]	0.6525			
ATX Std 2 [%DIFF]				
ATX Std 3 [MEAN]	0.5680			
ATX Std 3 [SD]	0.0028			
ATX Std 3 [%CV]	0.4980			
ATX Std 3 [%DIFF]				
ATX Std 4 [MEAN]	0.3245			
ATX Std 4 [SD]	0.0064			
ATX Std 4 [%CV]	1.9612			
ATX Std 4 [%DIFF]				
ATX Std 5 [MEAN]	0.1685			
ATX Std 5 [SD]	0.0035			
ATX Std 5 [%CV]	2.0982			

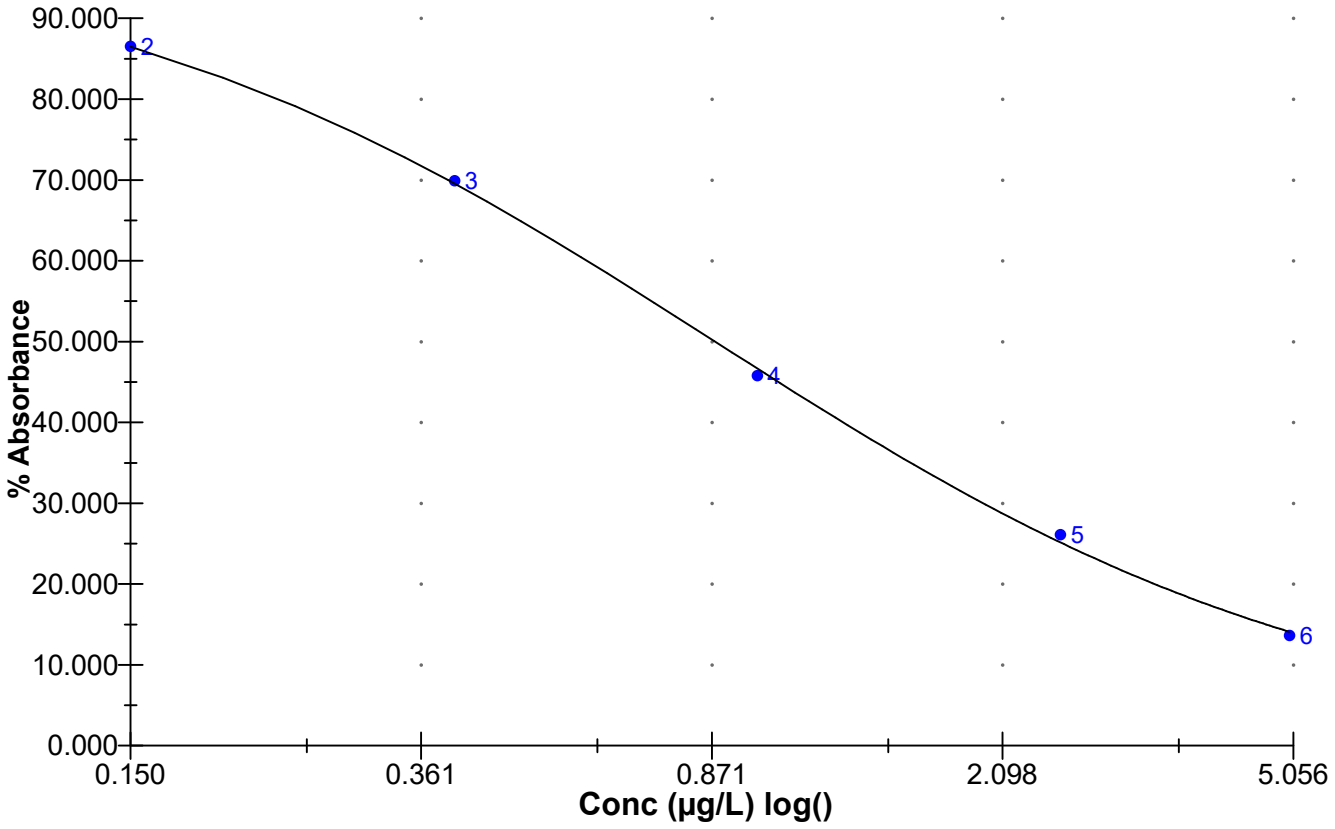
eurofins | Abraxis

ANATOXIN - Assay Calibration Report

Name	Absorbance	Concentration	Interpretation	Position
ATX Control [MEAN]	0.6340			
ATX Control [SD]	0.0141			
ATX Control [%CV]	2.2306			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 1.2409
B = 1.0496
C = 0.87283
D = 0.0040839
R2 coef = 0.99966
50% = 0.880



*Generated by software version (6.4.1.1073/1085/1.00/0.95) 6/10/2020 5:07:35 PM