



## Anatoxin-a ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

<b>Sample #</b>	<b>Location</b>	<b>Date Collected</b>	<b>Date Analyzed</b>	<b>Conc. (ppb)</b>
AB42518	Cagles Mill Lake Beach (Field Duplicate)	6/1/2020	6/3/2020	< 0.40
AB42519	Field Blank	6/1/2020	6/3/2020	< 0.40
AB42520	Cagles Mill Lake Beach	6/1/2020	6/3/2020	< 0.40
AB42521	Quakertown SRA	6/1/2020	6/3/2020	< 0.40
AB42522	Raccoon Lake SRA	6/1/2020	6/3/2020	< 0.40
AB42523	Mounds SRA	6/1/2020	6/3/2020	< 0.40

## Test Information

Request: 6/3/2020 6:28:04 PM

Date: 6/3/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
ATX Std 0	ANATOXIN	1.054 Abs	0.000 µg/L	R <sup>2</sup> =0.99849, 100.76		19G0191
ATX Std 0	ANATOXIN	1.039 Abs [1.0465] {1.0 CV}	0.005 µg/L [0.003] {1.0 CV}	R <sup>2</sup> =0.99849, 99.331		19G0191
ATX Std 1	ANATOXIN	0.888 Abs	0.149 µg/L	R <sup>2</sup> =0.99849, 84.895		19G0191
ATX Std 1	ANATOXIN	0.866 Abs [0.8770] {1.8 CV}	0.173 µg/L [0.161] {1.8 CV}	R <sup>2</sup> =0.99849, 82.792		19G0191
ATX Std 2	ANATOXIN	0.724 Abs	0.355 µg/L	R <sup>2</sup> =0.99849, 69.216		19G0191
ATX Std 2	ANATOXIN	0.702 Abs [0.7130] {2.2 CV}	0.389 µg/L [0.372] {2.2 CV}	R <sup>2</sup> =0.99849, 67.113		19G0191
ATX Std 3	ANATOXIN	0.433 Abs	1.064 µg/L	R <sup>2</sup> =0.99849, 41.396		19G0191
ATX Std 3	ANATOXIN	0.429 Abs [0.4310] {0.7 CV}	1.081 µg/L [1.072] {0.7 CV}	R <sup>2</sup> =0.99849, 41.013		19G0191
ATX Std 4	ANATOXIN	0.252 Abs	2.302 µg/L	R <sup>2</sup> =0.99849, 24.092		19G0191
ATX Std 4	ANATOXIN	0.249 Abs [0.2505] {0.8 CV}	2.338 µg/L [2.320] {0.8 CV}	R <sup>2</sup> =0.99849, 23.805		19G0191
ATX Std 5	ANATOXIN	0.131 Abs	> 5.000 µg/L	12.524 %Abs		19G0191
ATX Std 5	ANATOXIN	0.126 Abs [0.1285] {2.8 CV}	> 5.000 µg/L	12.046 %Abs		19G0191
ATX Control	ANATOXIN	0.528 Abs	0.750 µg/L	50.478 %Abs		19G0191
ATX Control	ANATOXIN	0.512 Abs [0.5200] {2.2 CV}	0.795 µg/L [0.773] {2.2 CV}	48.948 %Abs [49.713] {2.2 CV}		19G0191

## Note

Signature David Jordan

Date: 6/03/2020

# Test Report (by Request)

**Test Information**

 Request: 6/3/2020 6:49:39 PM  
 Date: 6/3/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
LRB	ANATOXIN	0.965 Abs	0.073 µg/L	<b>LOW, 92.256 %ABS</b>	0.150 - 5.000	19G0191
LRB	ANATOXIN	0.944 Abs [0.9545] {1.6 CV}	0.093 µg/L [0.083] {1.6 CV}	<b>LOW, 90.249 %ABS</b>	0.150 - 5.000	19G0191
LFB	ANATOXIN	0.644 Abs	0.489 µg/L	61.568 %Abs	0.150 - 5.000	19G0191
LFB	ANATOXIN	0.619 Abs [0.6315] {2.8 CV}	0.537 µg/L [0.513] {2.8 CV}	59.178 %Abs [60.37]	0.150 - 5.000	19G0191
AB42518	ANATOXIN	0.997 Abs	0.047 µg/L	<b>LOW, 95.315 %ABS</b>	0.150 - 5.000	19G0191
AB42518	ANATOXIN	1.006 Abs [1.0015] {0.6 CV}	0.038 µg/L [0.042] {1.3 CV}	<b>LOW, 96.176 %ABS</b>	0.150 - 5.000	19G0191
AB42519	ANATOXIN	1.001 Abs	0.044 µg/L	<b>LOW, 95.698 %ABS</b>	0.150 - 5.000	19G0191
AB42519	ANATOXIN	0.950 Abs [0.9755] {3.7 CV}	0.096 µg/L [0.070] {5.3 CV}	<b>LOW, 90.822 %ABS</b>	0.150 - 5.000	19G0191
AB42520	ANATOXIN	0.959 Abs	0.086 µg/L	<b>LOW, 91.683 %ABS</b>	0.150 - 5.000	19G0191
AB42520	ANATOXIN	0.947 Abs [0.9530] {0.9 CV}	0.099 µg/L [0.093] {0.9 CV}	<b>LOW, 90.535 %ABS</b>	0.150 - 5.000	19G0191
AB42521	ANATOXIN	1.044 Abs	0.000 µg/L	<b>LOW, 99.809 %ABS</b>	0.150 - 5.000	19G0191
AB42521	ANATOXIN	1.028 Abs [1.0360] {1.1 CV}	0.016 µg/L [0.008] {1.9 CV}	<b>LOW, 98.279 %ABS</b>	0.150 - 5.000	19G0191
AB42522	ANATOXIN	1.008 Abs	0.036 µg/L	<b>LOW, 96.367 %ABS</b>	0.150 - 5.000	19G0191
AB42522	ANATOXIN	1.021 Abs [1.0145] {0.9 CV}	0.024 µg/L [0.030] {2.5 CV}	<b>LOW, 97.610 %ABS</b>	0.150 - 5.000	19G0191
AB42522MS	ANATOXIN	0.611 Abs	0.554 µg/L	58.413 %Abs	0.150 - 5.000	19G0191
AB42522MS	ANATOXIN	0.596 Abs [0.6035] {1.8 CV}	0.585 µg/L [0.569] {3.0 CV}	56.979 %Abs [57.696]	0.150 - 5.000	19G0191
AB42522MSD	ANATOXIN	0.589 Abs	0.601 µg/L	56.310 %Abs	0.150 - 5.000	19G0191
AB42522MSD	ANATOXIN	0.581 Abs [0.5850] {1.0 CV}	0.619 µg/L [0.610] {2.0 CV}	55.545 %Abs [55.927]	0.150 - 5.000	19G0191
AB42523	ANATOXIN	1.062 Abs	0.000 µg/L	<b>LOW, 101.530 %ABS</b>	0.150 - 5.000	19G0191
AB42523	ANATOXIN	1.022 Abs [1.0420] {2.7 CV}	0.023 µg/L [0.012] {1.9 CV}	<b>LOW, 97.706 %ABS</b>	0.150 - 5.000	19G0191

**Note**

 Signature David Jordan

Date: 6/03/2020

**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: 19G0191

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
<b>6/3/2020 6:28:04 PM</b>				
ATX Std 0	1.054 Abs		R <sup>2</sup> =0.99849, 100.765 %Abs	RK1:23->A01@2
ATX Std 0	1.039 Abs [1.0465] {1.0 CV}		R <sup>2</sup> =0.99849, 99.331 %Abs	RK1:23->B01@2
ATX Std 1	0.888 Abs		R <sup>2</sup> =0.99849, 84.895 %Abs	RK1:24->C01@2
ATX Std 1	0.866 Abs [0.8770] {1.8 CV}		R <sup>2</sup> =0.99849, 82.792 %Abs	RK1:24->D01@2
ATX Std 2	0.724 Abs		R <sup>2</sup> =0.99849, 69.216 %Abs	RK1:25->E01@2
ATX Std 2	0.702 Abs [0.7130] {2.2 CV}		R <sup>2</sup> =0.99849, 67.113 %Abs	RK1:25->F01@3
ATX Std 3	0.433 Abs		R <sup>2</sup> =0.99849, 41.396 %Abs	RK1:26->G01@3
ATX Std 3	0.429 Abs [0.4310] {0.7 CV}		R <sup>2</sup> =0.99849, 41.013 %Abs	RK1:26->H01@3
ATX Std 4	0.252 Abs		R <sup>2</sup> =0.99849, 24.092 %Abs	RK1:27->A02@2
ATX Std 4	0.249 Abs [0.2505] {0.8 CV}		R <sup>2</sup> =0.99849, 23.805 %Abs	RK1:27->B02@2
ATX Std 5	0.131 Abs		12.524 %Abs	RK1:28->C02@2
ATX Std 5	0.126 Abs [0.1285] {2.8 CV}		12.046 %Abs	RK1:28->D02@2
*****				
<b>6/3/2020 6:28:04 PM</b>				
ATX Control	0.528 Abs		50.478 %Abs	RK1:29->E02@2
ATX Control	0.512 Abs [0.5200] {2.2 CV}		48.948 %Abs [49.713 %Abs]	RK1:29->F02@3
*****				
<b>Statistic</b>				
ATX Std 0 [MEAN]	1.0465			
ATX Std 0 [SD]	0.0106			
ATX Std 0 [%CV]	1.0135			
ATX Std 1 [MEAN]	0.8770			
ATX Std 1 [SD]	0.0156			
ATX Std 1 [%CV]	1.7738			
ATX Std 1 [%DIFF]				
ATX Std 2 [MEAN]	0.7130			
ATX Std 2 [SD]	0.0156			
ATX Std 2 [%CV]	2.1818			
ATX Std 2 [%DIFF]				
ATX Std 3 [MEAN]	0.4310			
ATX Std 3 [SD]	0.0028			
ATX Std 3 [%CV]	0.6562			
ATX Std 3 [%DIFF]				
ATX Std 4 [MEAN]	0.2505			
ATX Std 4 [SD]	0.0021			
ATX Std 4 [%CV]	0.8468			
ATX Std 4 [%DIFF]				
ATX Std 5 [MEAN]	0.1285			
ATX Std 5 [SD]	0.0035			
ATX Std 5 [%CV]	2.7514			

Name	Absorbance	Concentration	Interpretation	Position
ATX Control [MEAN]	0.5200			
ATX Control [SD]	0.0113			
ATX Control [%CV]	2.1757			

**Assay Curve**

$y = (A-D)/(1+(x/C)^B) + D$   
 Weight: NONE  
 A = 1.0440  
 B = 1.0675  
 C = 0.74882  
 D = 0.013226  
 R2 coef = 0.99849  
 50% = 0.764

