



## Anatoxin-A Receptor-Binding Assay Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB23022	Raccoon Lake SRA	8/31/2015	9/1/2015	< 10.0
AB23023	Fairfax SRA	8/31/2015	9/1/2015	< 10.0
AB23024	Hardy Lake SRA	8/31/2015	9/2/2015	< 10.0
AB23025	Mounds SRA	8/31/2015	9/1/2015	< 10.0
AB23026	Quakertown SRA	8/31/2015	9/1/2015	< 10.0
AB23027	Whitewater Memorial SP	8/31/2015	9/1/2015	< 10.0
AB23028	Potato Creek SP	9/1/2015	9/2/2015	< 10.0
AB23029	Chain O' Lake SP	9/1/2015	9/2/2015	< 10.0
AB23030	Lost Bridge West SRA	9/1/2015	9/2/2015	< 10.0
AB23031	Raccoon Lake SRA (Field Duplicate)	8/31/2015	9/1/2015	< 10.0
AB23032	Field Blank	8/31/2015	9/1/2015	< 10.0
AB23025LD	Mounds SRA (Lab Duplicate)	8/31/2015	9/1/2015	< 10.0
20150831LB	Lab Blank	8/31/2015	9/1/2015	< 10.0



# Test Report

## Test Information

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Position
9/1/2015 3:01:50 PM						
Std1	ANATOXIN-A 1X	2.135 Abs	< 0.000 ng/mL		0.000	A01
Std1	ANATOXIN-A 1X	2.063 Abs	< 0.000 ng/mL		0.000	B01
Std1	ANATOXIN-A 1X	1.950 Abs	1.350 ng/mL		0.000	C01
Std2	ANATOXIN-A 1X	1.617 Abs	12.115 ng/mL		10.000	D01
Std2	ANATOXIN-A 1X	1.683 Abs	9.195 ng/mL		10.000	E01
Std2	ANATOXIN-A 1X	1.611 Abs	12.405 ng/mL		10.000	F01
Std3	ANATOXIN-A 1X	1.298 Abs	35.700 ng/mL		35.000	G01
Std3	ANATOXIN-A 1X	1.391 Abs	26.675 ng/mL		35.000	H01
Std3	ANATOXIN-A 1X	1.358 Abs	29.610 ng/mL		35.000	A02
Std4	ANATOXIN-A 1X	0.893 Abs	132.450 ng/mL		125.000	B02
Std4	ANATOXIN-A 1X	0.865 Abs	147.250 ng/mL		125.000	C02
Std4	ANATOXIN-A 1X	0.859 Abs	150.750 ng/mL		125.000	D02
Std5	ANATOXIN-A 1X	0.613 Abs	> 500.000 ng/mL		500.000	E02
Std5	ANATOXIN-A 1X	0.643 Abs	433.000 ng/mL		500.000	F02
Std5	ANATOXIN-A 1X	0.650 Abs	414.000 ng/mL		500.000	G02
AB23022	ANATOXIN-A 1X	2.093 Abs	< 0.000 ng/mL	Out(LR)	10.000 - 500.000	H02
AB23022	ANATOXIN-A 1X	1.839 Abs	3.855 ng/mL	LOW	10.000 - 500.000	A03
AB23022	ANATOXIN-A 1X	1.872 Abs [1.9347] {7.1 C	3.005 ng/mL [1.605] {17.5 CV}	Low [Low]	10.000 - 500.000	B03
AB23023	ANATOXIN-A 1X	1.856 Abs	3.405 ng/mL	LOW	10.000 - 500.000	C03
AB23023	ANATOXIN-A 1X	1.915 Abs	2.014 ng/mL	LOW	10.000 - 500.000	D03
AB23023	ANATOXIN-A 1X	1.767 Abs [1.8460] {4.0 C	6.020 ng/mL [3.670] {53.3 CV}	Low [Low]	10.000 - 500.000	E03
AB23025	ANATOXIN-A 1X	1.886 Abs	2.665 ng/mL	LOW	10.000 - 500.000	A04
AB23025	ANATOXIN-A 1X	1.743 Abs	6.840 ng/mL	LOW	10.000 - 500.000	B04
AB23025	ANATOXIN-A 1X	1.761 Abs [1.7967] {4.3 C	6.220 ng/mL [5.075] {43.0 CV}	Low [Low]	10.000 - 500.000	C04
AB23026	ANATOXIN-A 1X	1.727 Abs	7.415 ng/mL	LOW	10.000 - 500.000	D04
AB23026	ANATOXIN-A 1X	1.633 Abs	11.305 ng/mL		10.000 - 500.000	E04
AB23026	ANATOXIN-A 1X	1.646 Abs [1.6687] {3.1 C	10.710 ng/mL [9.720] {21.4 CV}	[Low]	10.000 - 500.000	F04
AB23027	ANATOXIN-A 1X	1.666 Abs	9.835 ng/mL	LOW	10.000 - 500.000	G04
AB23027	ANATOXIN-A 1X	1.552 Abs	15.470 ng/mL		10.000 - 500.000	H04
AB23027	ANATOXIN-A 1X	1.827 Abs [1.6817] {8.2 C	4.190 ng/mL [9.175] {57.4 CV}	Low [Low]	10.000 - 500.000	A05
AB23031	ANATOXIN-A 1X	1.944 Abs	1.425 ng/mL	LOW	10.000 - 500.000	B05
AB23031	ANATOXIN-A 1X	1.772 Abs	5.860 ng/mL	LOW	10.000 - 500.000	C05
AB23031	ANATOXIN-A 1X	1.851 Abs [1.8557] {4.6 C	3.535 ng/mL [3.415] {61.5 CV}	Low [Low]	10.000 - 500.000	D05
AB23032	ANATOXIN-A 1X	1.949 Abs	1.330 ng/mL	LOW	10.000 - 500.000	E05
AB23032	ANATOXIN-A 1X	1.841 Abs	3.805 ng/mL	LOW	10.000 - 500.000	F05
AB23032	ANATOXIN-A 1X	1.867 Abs [1.8857] {3.0 C	3.125 ng/mL [2.670] {46.4 CV}	Low [Low]	10.000 - 500.000	G05
AB23025LD	ANATOXIN-A 1X	1.662 Abs	10.005 ng/mL		10.000 - 500.000	H05
AB23025LD	ANATOXIN-A 1X	1.818 Abs	4.445 ng/mL	LOW	10.000 - 500.000	A06
AB23025LD	ANATOXIN-A 1X	1.757 Abs [1.7457] {4.5 C	6.355 ng/mL [6.750] {40.7 CV}	Low [Low]	10.000 - 500.000	B06
20150831LB	ANATOXIN-A 1X	1.820 Abs	4.390 ng/mL	LOW	10.000 - 500.000	C06
20150831LB	ANATOXIN-A 1X	1.797 Abs	5.070 ng/mL	LOW	10.000 - 500.000	D06
20150831LB	ANATOXIN-A 1X	1.730 Abs [1.7823] {2.6 C	7.305 ng/mL [5.525] {27.3 CV}	Low [Low]	10.000 - 500.000	E06

The data in this report is preliminary without a quality control report. This data is not warranted for accuracy or other purposes.

David Jordan

Laboratory Analyst Signature

9/3/2015

Date



## Assay Calibration Report

### Assay Information

Assay Name: ANATOXIN-A 1X  
Assay Mode: 4-Parameter Logistic  
Normal: 10.000 - 500.000  
Units: ng/mL  
# of decimals: 3  
Assay Description:

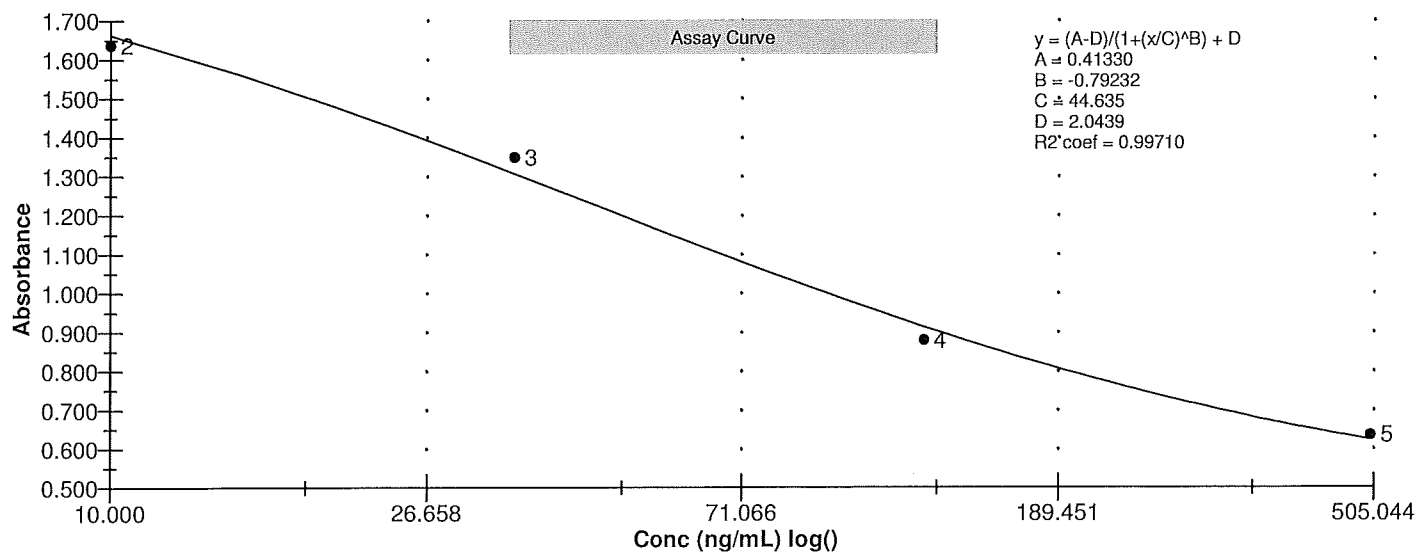
### Standards:

Std1, Concentration = 0.000, Minimum number to use: 3  
Std2, Concentration = 10.000, Minimum number to use: 3  
Std3, Concentration = 35.000, Minimum number to use: 3  
Std4, Concentration = 125.000, Minimum number to use: 3  
Std5, Concentration = 500.000, Minimum number to use: 3  
Curve valid interval: 7 days 0 hours  
Axis Mode: Y = Abs, X = Log(Conc)

### Assay Calibration and Statistics

Name	Absorbance	Concentration	Position
9/1/2015 3:01:50 PM			
Std1	2.135 Abs	< 0.000 ng/mL	A01
Std1	2.063 Abs	< 0.000 ng/mL	B01
Std1	1.950 Abs	1.310 ng/mL	C01
Std2	1.617 Abs	12.060 ng/mL	D01
Std2	1.683 Abs	9.120 ng/mL	E01
Std2	1.611 Abs	12.355 ng/mL	F01
Std3	1.298 Abs	35.975 ng/mL	G01
Std3	1.391 Abs	26.805 ng/mL	H01
Std3	1.358 Abs	29.800 ng/mL	A02
Std4	0.893 Abs	134.700 ng/mL	B02
Std4	0.865 Abs	149.800 ng/mL	C02
Std5	0.613 Abs	> 500.000 ng/mL	E02
Std5	0.643 Abs	437.000 ng/mL	F02
Std5	0.650 Abs	418.500 ng/mL	G02

Name	Mean Abs	SD Abs	CV Abs	Mean Conc	SD Conc	CV Conc	Diff Conc
Std1	2.049	0.093	4.55				
Std2	1.637	0.040	2.44	11.178	1.789	16.00	11.78
Std3	1.349	0.047	3.50	30.860	4.676	15.15	-11.83
Std4	0.879	0.020	2.25	142.250	10.677	7.51	13.80
Std5	0.635	0.020	3.09				-100.00





# Test Report

## Test Information

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Position
9/2/2015 2:49:36 PM						
Std1	ANATOXIN-A 1X	1.785 Abs	0.209 ng/mL		0.000	A01
Std1	ANATOXIN-A 1X	1.977 Abs	< 0.000 ng/mL		0.000	B01
Std1	ANATOXIN-A 1X	1.817 Abs	0.049 ng/mL		0.000	C01
Std2	ANATOXIN-A 1X	1.446 Abs	8.715 ng/mL		10.000	D01
Std2	ANATOXIN-A 1X	1.389 Abs	11.910 ng/mL		10.000	F01
Std3	ANATOXIN-A 1X	1.159 Abs	35.150 ng/mL		35.000	G01
Std3	ANATOXIN-A 1X	1.253 Abs	23.115 ng/mL		35.000	H01
Std3	ANATOXIN-A 1X	1.186 Abs	31.220 ng/mL		35.000	A02
Std4	ANATOXIN-A 1X	0.904 Abs	105.200 ng/mL		125.000	B02
Std4	ANATOXIN-A 1X	0.917 Abs	99.350 ng/mL		125.000	C02
Std4	ANATOXIN-A 1X	0.876 Abs	119.000 ng/mL		125.000	D02
Std5	ANATOXIN-A 1X	0.535 Abs	> 500.000 ng/mL		500.000	E02
Std5	ANATOXIN-A 1X	0.634 Abs	394.000 ng/mL		500.000	F02
Std5	ANATOXIN-A 1X	0.640 Abs	381.000 ng/mL		500.000	G02
AB23024	ANATOXIN-A 1X	1.740 Abs	0.604 ng/mL	LOW	10.000 - 500.000	H02
AB23024	ANATOXIN-A 1X	1.700 Abs	1.120 ng/mL	LOW	10.000 - 500.000	A03
AB23024	ANATOXIN-A 1X	1.735 Abs [1.7250] {1.3 C	0.660 ng/mL [0.779] {35.6 CV}	Low [Low]	10.000 - 500.000	B03
AB23028	ANATOXIN-A 1X	1.780 Abs	0.243 ng/mL	LOW	10.000 - 500.000	C03
AB23028	ANATOXIN-A 1X	1.694 Abs	1.210 ng/mL	LOW	10.000 - 500.000	D03
AB23028	ANATOXIN-A 1X	1.759 Abs [1.7443] {2.6 C	0.414 ng/mL [0.558] {82.9 CV}	Low [Low]	10.000 - 500.000	E03
AB23029	ANATOXIN-A 1X	1.606 Abs	2.995 ng/mL	LOW	10.000 - 500.000	F03
AB23029	ANATOXIN-A 1X	1.594 Abs	3.310 ng/mL	LOW	10.000 - 500.000	G03
AB23029	ANATOXIN-A 1X	1.716 Abs [1.6387] {4.1 C	0.895 ng/mL [2.230] {54.7 CV}	Low [Low]	10.000 - 500.000	H03
AB23030	ANATOXIN-A 1X	2.089 Abs	< 0.000 ng/mL	Out(LR)	10.000 - 500.000	A04
AB23030	ANATOXIN-A 1X	1.990 Abs	< 0.000 ng/mL	Out(LR)	10.000 - 500.000	B04
AB23030	ANATOXIN-A 1X	2.001 Abs [2.0267] {2.7 C	< 0.000 ng/mL [< 0.000] {54.7 C	Out(LR) [Out(LR)]	10.000 - 500.000	C04

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*David Jordan*

Laboratory Analyst Signature

*9/3/2015*

Date



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Normal: 10.000 - 500.000

Units: ng/mL  
# of decimals: 3  
Assay Description:

## Standards:

Std1, Concentration = 0.000, Minimum number to use: 3  
Std2, Concentration = 10.000, Minimum number to use: 3  
Std3, Concentration = 35.000, Minimum number to use: 3  
Std4, Concentration = 125.000, Minimum number to use: 3  
Std5, Concentration = 500.000, Minimum number to use: 3  
Curve valid interval: 7 days 0 hours  
Axis Mode: Y = Abs, X = Log(Conc)

## Assay Calibration and Statistics

Name	Absorbance	Concentration	Position
9/2/2015 2:44:29 PM			
Std1	1.770 Abs	0.319 ng/mL	A01
Std1	1.946 Abs	< 0.000 ng/mL	B01
Std1	1.809 Abs	0.078 ng/mL	C01
Std2	1.449 Abs	8.815 ng/mL	D01
Std2	1.378 Abs	12.965 ng/mL	F01
Std3	1.157 Abs	36.220 ng/mL	G01
Std3	1.248 Abs	24.250 ng/mL	H01
Std3	1.163 Abs	35.300 ng/mL	A02
Std4	0.864 Abs	126.300 ng/mL	B02
Std4	0.866 Abs	125.150 ng/mL	C02
Std4	0.813 Abs	158.500 ng/mL	D02
Std5	0.525 Abs	> 500.000 ng/mL	E02
Std5	0.624 Abs	407.000 ng/mL	F02
Std5	0.634 Abs	385.000 ng/mL	G02

Name	Mean Abs	SD Abs	CV Abs	Mean Conc	SD Conc	CV Conc	Diff Conc
Std1	1.842	0.092	5.02				
Std2	1.414	0.050	3.55	10.890	2.934	26.95	8.90
Std3	1.189	0.051	4.28	31.923	6.661	20.87	-8.79
Std4	0.848	0.030	3.54	136.650	18.931	13.85	9.32
Std5	0.594	0.060	10.14				-100.00

