



## Microcystins ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB22601	Quakertown SRA	7/20/2015	7/22/2015	< 0.150
AB22602	Mounds SRA	7/20/2015	7/22/2015	0.248
AB22603	Raccoon Lake SRA	7/20/2015	7/22/2015	0.221
AB22599	Mounds SRA (Field Duplicate)	7/20/2015	7/22/2015	0.312
AB22604	Hardy Lake SRA	7/21/2015	7/22/2015	4.034
AB22600	Field Blank	7/21/2015	7/22/2015	< 0.150
20150721LB	Lab Blank	7/21/2015	7/22/2015	< 0.150
AB22604LD	Hardy Lake SRA (Lab Duplicate)	7/21/2015	7/22/2015	4.815

\* Sample AB22604 and AB22604LD results were above the 5.0 ppb upper limit.  
The sample was diluted 3X and re-run on 7/22/15 in triplicate.  
The mean result for AB22604 was 4.034 ppb with a Standard Deviation of 0.283.  
The mean result of AB22604LD was 4.815 ppb with a Standard Deviation of 0.418 .



# Assay Calibration Report

## Assay Information

Assay Name: Microcystins ADDA Units: ng/mL  
Assay Mode: 4-Parameter Logistic # of decimals: 4  
Normal: 0.1500 - 5.0000 Assay Description:

Controls:  
Normal Control

### Standards:

Std1, Concentration = 0.0000, Minimum number to use: 2  
Std2, Concentration = 0.1500, Minimum number to use: 2  
Std3, Concentration = 0.4000, Minimum number to use: 2  
Std4, Concentration = 1.0000, Minimum number to use: 2  
Std5, Concentration = 2.0000, Minimum number to use: 2  
Std6, Concentration = 5.0000, Minimum number to use: 2

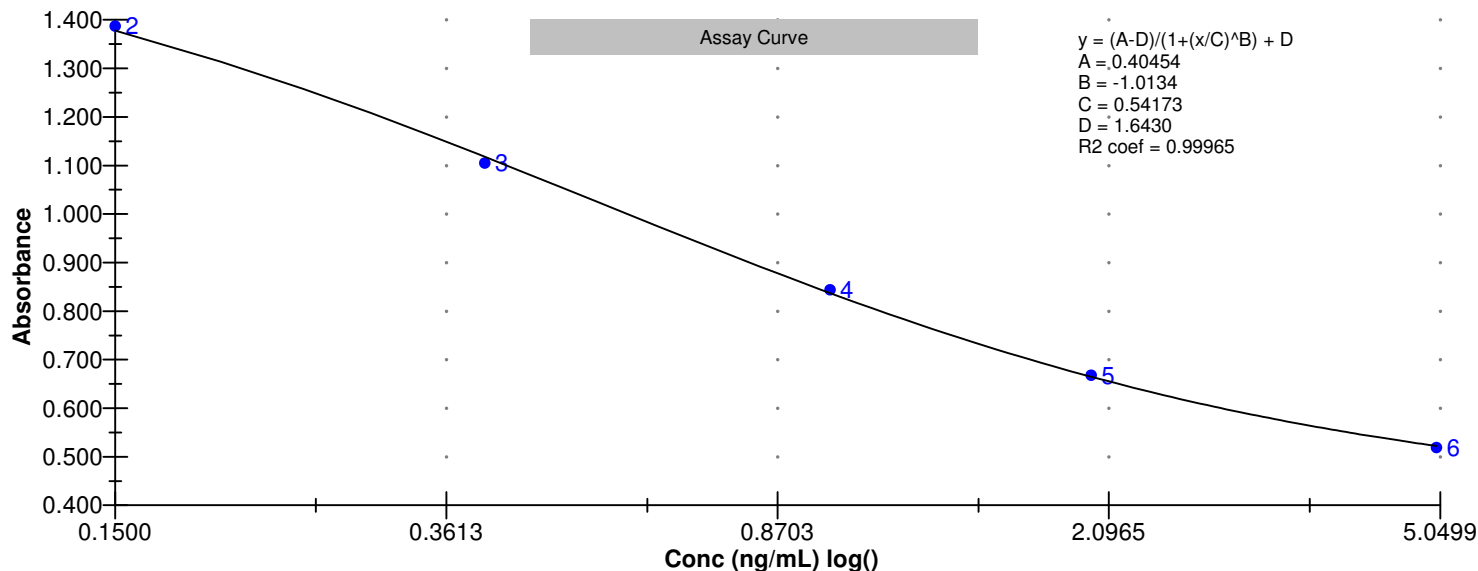
Curve valid interval: 7 days 0 hours

Axis Mode: Y = Abs, X = Log(Conc)

## Assay Calibration and Statistics

Name	Absorbance	Concentration	Position
7/22/2015 10:32:17 AM			
Std1	1.649 Abs	< 0.0000 ng/mL	A01
Std1	1.633 Abs	0.0047 ng/mL	B01
Std2	1.374 Abs	0.1529 ng/mL	C01
Std2	1.399 Abs	0.1355 ng/mL	D01
Std3	1.096 Abs	0.4300 ng/mL	E01
Std3	1.114 Abs	0.4055 ng/mL	F01
Std4	0.836 Abs	1.0050 ng/mL	G01
Std4	0.852 Abs	0.9505 ng/mL	H01
Std5	0.644 Abs	2.2185 ng/mL	A02
Std5	0.691 Abs	1.7725 ng/mL	B02
Std6	0.513 Abs	> 5.0000 ng/mL	C02
Std6	0.525 Abs	4.8800 ng/mL	D02
7/22/2015 10:32:17 AM			
Normal Control	0.898 Abs	0.8135 ng/mL	F02
Normal Control	0.904 Abs	0.7975 ng/mL	E02

Name	Mean Abs	SD Abs	CV Abs	Mean Conc	SD Conc	CV Conc	Diff Conc
Std1	1.641	0.011	0.69				
Std2	1.387	0.018	1.27	0.144	0.012	8.53	-4.00
Std3	1.105	0.013	1.15	0.418	0.017	4.15	4.50
Std4	0.844	0.011	1.34	0.978	0.039	3.94	-2.20
Std5	0.668	0.033	4.98	1.995	0.315	15.80	-0.25
Std6	0.519	0.008	1.63				-100.00
Normal Control	0.901	0.004	0.47	0.806	0.011	1.40	





# Test Report

## Test Information

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Position
7/22/2015 10:32:17 AM						
Std1	Microcystins ADDA	1.649 Abs	< 0.0000 ng/mL		0.0000	A01
Std1	Microcystins ADDA	1.633 Abs	0.0047 ng/mL		0.0000	B01
Std2	Microcystins ADDA	1.374 Abs	0.1529 ng/mL		0.1500	C01
Std2	Microcystins ADDA	1.399 Abs	0.1355 ng/mL		0.1500	D01
Std3	Microcystins ADDA	1.096 Abs	0.4300 ng/mL		0.4000	E01
Std3	Microcystins ADDA	1.114 Abs	0.4055 ng/mL		0.4000	F01
Std4	Microcystins ADDA	0.836 Abs	1.0050 ng/mL		1.0000	G01
Std4	Microcystins ADDA	0.852 Abs	0.9505 ng/mL		1.0000	H01
Std5	Microcystins ADDA	0.644 Abs	2.2185 ng/mL		2.0000	A02
Std5	Microcystins ADDA	0.691 Abs	1.7725 ng/mL		2.0000	B02
Std6	Microcystins ADDA	0.513 Abs	> 5.0000 ng/mL		5.0000	C02
Std6	Microcystins ADDA	0.525 Abs	4.8800 ng/mL		5.0000	D02
Normal Control	Microcystins ADDA	0.904 Abs	0.7975 ng/mL			E02
Normal Control	Microcystins ADDA	0.898 Abs	0.8135 ng/mL			F02
AB22601	Microcystins ADDA	1.498 Abs	0.0737 ng/mL	<b>LOW</b>	0.1500 - 5.0000	G02
AB22601	Microcystins ADDA	1.436 Abs	0.1111 ng/mL	<b>LOW</b>	0.1500 - 5.0000	H02
AB22602	Microcystins ADDA	1.262 Abs	0.2432 ng/mL		0.1500 - 5.0000	A03
AB22602	Microcystins ADDA	1.251 Abs	0.2535 ng/mL		0.1500 - 5.0000	B03
AB22603	Microcystins ADDA	1.288 Abs	0.2203 ng/mL		0.1500 - 5.0000	C03
AB22603	Microcystins ADDA	1.286 Abs	0.2220 ng/mL		0.1500 - 5.0000	D03
AB22599	Microcystins ADDA	1.217 Abs	0.2865 ng/mL		0.1500 - 5.0000	E03
AB22599	Microcystins ADDA	1.169 Abs	0.3380 ng/mL		0.1500 - 5.0000	F03
AB22604	Microcystins ADDA	0.468 Abs	> 5.0000 ng/mL	Out(LR)	0.1500 - 5.0000	G03
AB22604	Microcystins ADDA	0.514 Abs	> 5.0000 ng/mL	Out(LR)	0.1500 - 5.0000	H03
AB22600	Microcystins ADDA	1.686 Abs	< 0.0000 ng/mL	Out(LR)	0.1500 - 5.0000	A04
AB22600	Microcystins ADDA	1.754 Abs	< 0.0000 ng/mL	Out(LR)	0.1500 - 5.0000	B04
20150721LB	Microcystins ADDA	1.638 Abs	0.0024 ng/mL	<b>LOW</b>	0.1500 - 5.0000	C04
20150721LB	Microcystins ADDA	1.655 Abs	< 0.0000 ng/mL	Out(LR)	0.1500 - 5.0000	D04
AB22604LD	Microcystins ADDA	0.418 Abs	> 5.0000 ng/mL	Out(LR)	0.1500 - 5.0000	E04
AB22604LD	Microcystins ADDA	0.439 Abs	> 5.0000 ng/mL	Out(LR)	0.1500 - 5.0000	F04

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

Laboratory Analyst Signature

7/23/2015

Date



# Assay Calibration Report

## Assay Information

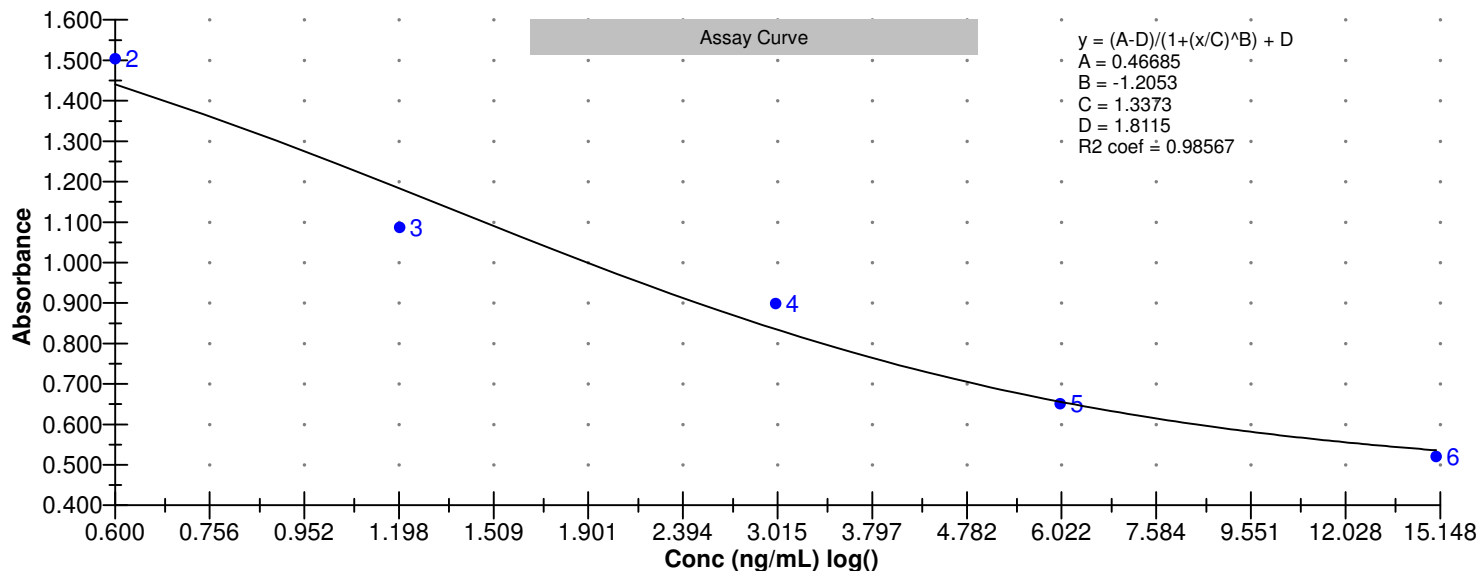
Assay Name: Microcystin ADDA 3X Units: ng/mL  
Assay Mode: 4-Parameter Logistic # of decimals: 3  
Normal: 0.450 - 15.000 Assay Description:

Controls:  
Normal Control  
Standards:  
Std1, Concentration = 0.000, Minimum number to use: 2  
Std2, Concentration = 0.600, Minimum number to use: 2  
Std3, Concentration = 1.200, Minimum number to use: 2  
Std4, Concentration = 3.000, Minimum number to use: 2  
Std5, Concentration = 6.000, Minimum number to use: 2  
Std6, Concentration = 15.000, Minimum number to use: 2  
Curve valid interval: 7 days 0 hours  
Axis Mode: Y = Abs, X = Log(Conc)

## Assay Calibration and Statistics

Name	Absorbance	Concentration	Position
7/22/2015 2:58:25 PM			
Std1	1.768 Abs	0.080 ng/mL	A01
Std1	1.834 Abs	< 0.000 ng/mL	B01
Std2	1.553 Abs	0.407 ng/mL	C01
Std2	1.456 Abs	0.572 ng/mL	D01
Std3	1.074 Abs	1.571 ng/mL	E01
Std3	1.100 Abs	1.473 ng/mL	F01
Std4	0.873 Abs	2.679 ng/mL	H01
Std4	0.924 Abs	2.319 ng/mL	G01
Std5	0.655 Abs	6.030 ng/mL	A02
Std5	0.647 Abs	6.293 ng/mL	B02
Std6	0.515 Abs	> 15.000 ng/mL	C02
Std6	0.526 Abs	> 15.000 ng/mL	D02
7/22/2015 2:58:25 PM			
Normal Control	1.014 Abs	1.829 ng/mL	E02
Normal Control	1.033 Abs	1.742 ng/mL	F02

Name	Mean Abs	SD Abs	CV Abs	Mean Conc	SD Conc	CV Conc	Diff Conc
Std1	1.801	0.047	2.59				
Std2	1.504	0.069	4.56	0.490	0.117	23.84	-18.33
Std3	1.087	0.018	1.69	1.522	0.069	4.55	26.83
Std4	0.899	0.036	4.01	2.499	0.255	10.19	-16.70
Std5	0.651	0.006	0.87	6.161	0.186	3.02	2.68
Std6	0.521	0.008	1.49				-100.00
Normal Control	1.023	0.013	1.31	1.786	0.062	3.45	





# Test Report

## Test Information

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Position
7/22/2015 2:58:25 PM						
Std1	Microcystin ADDA 3X	1.768 Abs	0.080 ng/mL		0.000	A01
Std1	Microcystin ADDA 3X	1.834 Abs	< 0.000 ng/mL		0.000	B01
Std2	Microcystin ADDA 3X	1.553 Abs	0.407 ng/mL		0.600	C01
Std2	Microcystin ADDA 3X	1.456 Abs	0.572 ng/mL		0.600	D01
Std3	Microcystin ADDA 3X	1.074 Abs	1.571 ng/mL		1.200	E01
Std3	Microcystin ADDA 3X	1.100 Abs	1.473 ng/mL		1.200	F01
Std4	Microcystin ADDA 3X	0.924 Abs	2.319 ng/mL		3.000	G01
Std4	Microcystin ADDA 3X	0.873 Abs	2.679 ng/mL		3.000	H01
Std5	Microcystin ADDA 3X	0.655 Abs	6.030 ng/mL		6.000	A02
Std5	Microcystin ADDA 3X	0.647 Abs	6.293 ng/mL		6.000	B02
Std6	Microcystin ADDA 3X	0.515 Abs	> 15.000 ng/mL		15.000	C02
Std6	Microcystin ADDA 3X	0.526 Abs	> 15.000 ng/mL		15.000	D02
Normal Control	Microcystin ADDA 3X	1.014 Abs	1.829 ng/mL			E02
Normal Control	Microcystin ADDA 3X	1.033 Abs	1.742 ng/mL			F02
AB22604	Microcystin ADDA 3X	0.740 Abs	4.155 ng/mL		0.450 - 15.000	G02
AB22604	Microcystin ADDA 3X	0.720 Abs	4.497 ng/mL		0.450 - 15.000	H02
AB22604(2)	Microcystin ADDA 3X	0.758 Abs	3.888 ng/mL		0.450 - 15.000	A03
AB22604(2)	Microcystin ADDA 3X	0.777 Abs	3.633 ng/mL		0.450 - 15.000	B03
AB22604(3)	Microcystin ADDA 3X	0.741 Abs	4.140 ng/mL		0.450 - 15.000	C03
AB22604(3)	Microcystin ADDA 3X	0.758 Abs	3.888 ng/mL		0.450 - 15.000	D03
AB22604LD	Microcystin ADDA 3X	0.714 Abs	4.605 ng/mL		0.450 - 15.000	E03
AB22604LD	Microcystin ADDA 3X	0.682 Abs	5.295 ng/mL		0.450 - 15.000	F03
AB22604LD(2)	Microcystin ADDA 3X	0.761 Abs	3.846 ng/mL		0.450 - 15.000	G03
AB22604LD(2)	Microcystin ADDA 3X	0.702 Abs	4.845 ng/mL		0.450 - 15.000	H03
AB22604LD(3)	Microcystin ADDA 3X	0.675 Abs	5.470 ng/mL		0.450 - 15.000	A04
AB22604LD(3)	Microcystin ADDA 3X	0.703 Abs	4.826 ng/mL		0.450 - 15.000	B04
20150722LB	Microcystin ADDA 3X	1.855 Abs	< 0.000 ng/mL	Out(LR)	0.450 - 15.000	C04
20150722LB	Microcystin ADDA 3X	1.912 Abs	< 0.000 ng/mL	Out(LR)	0.450 - 15.000	D04

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