



## Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB48046	Raccoon Lake SRA	7/26/2021	7/28/2021	< 0.15
AB48047	Cagles Mill Lake Beach	7/26/2021	7/28/2021	< 0.15
AB48048	Paynetown SRA	7/26/2021	7/28/2021	< 0.15
AB48049	Whitewater Memorial SP	7/27/2021	7/28/2021	< 0.15
AB48050	Quakertown SRA	7/27/2021	7/28/2021	< 0.15
AB48051	Mounds SRA	7/27/2021	7/28/2021	< 0.15
AB48052	Hardy Lake SRA	7/26/2021	7/28/2021	< 0.15
AB48053	Cagles Mill Lake Beach (Field Duplicate)	7/26/2021	7/28/2021	< 0.15
AB48054	Field Blank	7/26/2021	7/28/2021	< 0.15
AB48065	Ft. Ben Harrison SP Dog Lake - East	7/27/2021	7/28/2021	0.29

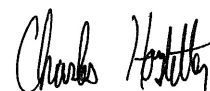
## Test Information

Request: 7/28/2021 2:29:24 PM  
Date: 7/28/2021

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	1.082 Abs	0.001 µg/L	R^2=0.99197, 99.54			M21B4676
CYL Std 0	CYLINDROSPERMOPSIN	1.092 Abs [1.0870] {0.7 C	0.000 µg/L [0.001]	R^2=0.99197, 100.4			M21B4676
CYL Std 1	CYLINDROSPERMOPSIN	0.925 Abs	0.035 µg/L	R^2=0.99197, 85.05			M21B4676
CYL Std 1	CYLINDROSPERMOPSIN	0.894 Abs [0.9095] {2.4 C	0.045 µg/L [0.040]	R^2=0.99197, 82.24			M21B4676
CYL Std 2	CYLINDROSPERMOPSIN	0.746 Abs	0.105 µg/L	R^2=0.99197, 68.62			M21B4676
CYL Std 2	CYLINDROSPERMOPSIN	0.727 Abs [0.7365] {1.8 C	0.115 µg/L [0.110]	R^2=0.99197, 66.88			M21B4676
CYL Std 3	CYLINDROSPERMOPSIN	0.524 Abs	0.284 µg/L	R^2=0.99197, 48.20			M21B4676
CYL Std 3	CYLINDROSPERMOPSIN	0.501 Abs [0.5125] {3.2 C	0.314 µg/L [0.299]	R^2=0.99197, 46.05			M21B4676
CYL Std 4	CYLINDROSPERMOPSIN	0.455 Abs	0.386 µg/L	R^2=0.99197, 41.85			M21B4676
CYL Std 4	CYLINDROSPERMOPSIN	0.435 Abs [0.4450] {3.2 C	0.423 µg/L [0.405]	R^2=0.99197, 40.01			M21B4676
CYL Std 5	CYLINDROSPERMOPSIN	0.283 Abs	0.930 µg/L	R^2=0.99197, 26.03			M21B4676
CYL Std 5	CYLINDROSPERMOPSIN	0.268 Abs [0.2755] {3.8 C	1.021 µg/L [0.975]	R^2=0.99197, 24.65			M21B4676
CYL Std 6	CYLINDROSPERMOPSIN	0.164 Abs	> 2.000 µg/L	15.087 %Abs			M21B4676
CYL Std 6	CYLINDROSPERMOPSIN	0.166 Abs [0.1650] {0.9 C	> 2.000 µg/L	15.271 %Abs			M21B4676
CYL QCS	CYLINDROSPERMOPSIN	0.314 Abs	0.777 µg/L	28.887 %Abs			M21B4676
CYL QCS	CYLINDROSPERMOPSIN	0.315 Abs [0.3145] {0.2 C	0.772 µg/L [0.775]	28.979 %Abs [28.9			M21B4676

## Note

Signature



Charles Hostetter 7/29/2021

# Test Report (by Request)

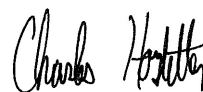
## Test Information

Request: 7/28/2021 2:31:16 PM  
Date: 7/28/2021

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	CYLINDROSPERMOPSIN	1.073 Abs	0.003 µg/L	Low, 98.712 %Abs		0.050 - 2.000	M21B467f
LRB	CYLINDROSPERMOPSIN	1.058 Abs [1.0655] {1.0 C	0.005 µg/L [0.004]	Low, 97.332 %Abs		0.050 - 2.000	M21B467f
LFB	CYLINDROSPERMOPSIN	0.394 Abs	0.513 µg/L	36.247 %Abs		0.050 - 2.000	M21B467f
LFB	CYLINDROSPERMOPSIN	0.381 Abs [0.3875] {2.4 C	0.547 µg/L [0.530]	35.051 %Abs [35.6		0.050 - 2.000	M21B467f
AB48046	CYLINDROSPERMOPSIN	0.947 Abs	0.029 µg/L	Low, 87.121 %Abs		0.050 - 2.000	M21B467f
AB48046	CYLINDROSPERMOPSIN	0.954 Abs [0.9505] {0.5 C	0.028 µg/L [0.029]	Low, 87.764 %Abs		0.050 - 2.000	M21B467f
AB48047	CYLINDROSPERMOPSIN	0.964 Abs	0.025 µg/L	Low, 88.684 %Abs		0.050 - 2.000	M21B467f
AB48047	CYLINDROSPERMOPSIN	0.989 Abs [0.9765] {1.8 C	0.019 µg/L [0.022]	Low, 90.984 %Abs		0.050 - 2.000	M21B467f
AB48048	CYLINDROSPERMOPSIN	1.041 Abs	0.008 µg/L	Low, 95.768 %Abs		0.050 - 2.000	M21B467f
AB48048	CYLINDROSPERMOPSIN	0.993 Abs [1.0170] {3.3 C	0.018 µg/L [0.013]	Low, 91.352 %Abs		0.050 - 2.000	M21B467f
AB48048MS	CYLINDROSPERMOPSIN	0.393 Abs	0.516 µg/L	36.155 %Abs		0.050 - 2.000	M21B467f
AB48048MS	CYLINDROSPERMOPSIN	0.377 Abs [0.3850] {2.9 C	0.558 µg/L [0.537]	34.683 %Abs [35.4		0.050 - 2.000	M21B467f
AB48048MSD	CYLINDROSPERMOPSIN	0.365 Abs	0.592 µg/L	33.579 %Abs		0.050 - 2.000	M21B467f
AB48048MSD	CYLINDROSPERMOPSIN	0.369 Abs [0.3670] {0.8 C	0.581 µg/L [0.586]	33.947 %Abs [33.7		0.050 - 2.000	M21B467f
AB48049	CYLINDROSPERMOPSIN	0.973 Abs	0.023 µg/L	Low, 89.512 %Abs		0.050 - 2.000	M21B467f
AB48049	CYLINDROSPERMOPSIN	1.005 Abs [0.9890] {2.3 C	0.015 µg/L [0.019]	Low, 92.456 %Abs		0.050 - 2.000	M21B467f
AB48050	CYLINDROSPERMOPSIN	1.082 Abs	0.001 µg/L	Low, 99.540 %Abs		0.050 - 2.000	M21B467f
AB48050	CYLINDROSPERMOPSIN	1.034 Abs [1.0580] {3.2 C	0.009 µg/L [0.005]	Low, 95.124 %Abs		0.050 - 2.000	M21B467f
AB48051	CYLINDROSPERMOPSIN	1.013 Abs	0.014 µg/L	Low, 93.192 %Abs		0.050 - 2.000	M21B467f
AB48051	CYLINDROSPERMOPSIN	0.985 Abs [0.9990] {2.0 C	0.020 µg/L [0.017]	Low, 90.616 %Abs		0.050 - 2.000	M21B467f
AB48052	CYLINDROSPERMOPSIN	0.969 Abs	0.024 µg/L	Low, 89.144 %Abs		0.050 - 2.000	M21B467f
AB48052	CYLINDROSPERMOPSIN	0.975 Abs [0.9720] {0.4 C	0.022 µg/L [0.023]	Low, 89.696 %Abs		0.050 - 2.000	M21B467f
AB48053	CYLINDROSPERMOPSIN	0.989 Abs	0.019 µg/L	Low, 90.984 %Abs		0.050 - 2.000	M21B467f
AB48053	CYLINDROSPERMOPSIN	1.020 Abs [1.0045] {2.2 C	0.012 µg/L [0.015]	Low, 93.836 %Abs		0.050 - 2.000	M21B467f
AB48054	CYLINDROSPERMOPSIN	1.088 Abs	0.001 µg/L	Low, 100.000 %Abs		0.050 - 2.000	M21B467f
AB48054	CYLINDROSPERMOPSIN	1.013 Abs [1.0505] {5.0 C	0.014 µg/L [0.008]	Low, 93.192 %Abs		0.050 - 2.000	M21B467f
AB48065	CYLINDROSPERMOPSIN	0.517 Abs	0.293 µg/L	47.562 %Abs		0.050 - 2.000	M21B467f
AB48065	CYLINDROSPERMOPSIN	0.515 Abs [0.5160] {0.3 C	0.296 µg/L [0.294]	47.378 %Abs [47.4		0.050 - 2.000	M21B467f

## Note

Signature



Charles Hostetter 7/29/2021

## Assay Information

Assay Name: CYLINDROSPERMOPSIN\_

Version: 2

Temperature: Room Temperature

Last Modified By: Security disabled

Units: µg/L

Assay Description: PN 522011

Assay Substances: Controls:  
CYL QCS

Standards:

CYL Std 0, Concentration = 0.000, Minimum number to use: 2

CYL Std 1, Concentration = 0.050, Minimum number to use: 2

CYL Std 2, Concentration = 0.100, Minimum number to use: 2

CYL Std 3, Concentration = 0.250, Minimum number to use: 2

CYL Std 4, Concentration = 0.500, Minimum number to use: 2

CYL Std 5, Concentration = 1.000, Minimum number to use: 2

CYL Std 6, Concentration = 2.000, 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: 9/30/2020 10:05:41 AM

Normal: 0.050 - 2.000

# of decimals: 3

Kit Lot Number: M21B4676

## Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
7/28/2021 2:29:24 PM				
CYL Std 0	1.082 Abs	0.001 µg/L	R <sup>2</sup> =0.99197, 99.540 %Abs	RK1:23->A01@2
CYL Std 0	1.092 Abs [1.0870] {0.7 CV}	0.000 µg/L [0.001] {141.4 CV}	R <sup>2</sup> =0.99197, 100.460 %Abs	RK1:23->B01@2
CYL Std 1	0.925 Abs	0.035 µg/L	R <sup>2</sup> =0.99197, 85.097 %Abs	RK1:24->C01@2
CYL Std 1	0.894 Abs [0.9095] {2.4 CV}	0.045 µg/L [0.040] {17.7 CV}	R <sup>2</sup> =0.99197, 82.245 %Abs	RK1:24->D01@2
CYL Std 2	0.746 Abs	0.105 µg/L	R <sup>2</sup> =0.99197, 68.629 %Abs	RK1:25->E01@2
CYL Std 2	0.727 Abs [0.7365] {1.8 CV}	0.115 µg/L [0.110] {6.4 CV}	R <sup>2</sup> =0.99197, 66.881 %Abs	RK1:25->F01@3
CYL Std 3	0.524 Abs	0.284 µg/L	R <sup>2</sup> =0.99197, 48.206 %Abs	RK1:26->G01@3
CYL Std 3	0.501 Abs [0.5125] {3.2 CV}	0.314 µg/L [0.299] {7.1 CV}	R <sup>2</sup> =0.99197, 46.090 %Abs	RK1:26->H01@3
CYL Std 4	0.455 Abs	0.386 µg/L	R <sup>2</sup> =0.99197, 41.858 %Abs	RK1:27->A02@2
CYL Std 4	0.435 Abs [0.4450] {3.2 CV}	0.423 µg/L [0.405] {6.5 CV}	R <sup>2</sup> =0.99197, 40.018 %Abs	RK1:27->B02@2
CYL Std 5	0.283 Abs	0.930 µg/L	R <sup>2</sup> =0.99197, 26.035 %Abs	RK1:28->C02@2
CYL Std 5	0.268 Abs [0.2755] {3.8 CV}	1.021 µg/L [0.975] {6.6 CV}	R <sup>2</sup> =0.99197, 24.655 %Abs	RK1:28->D02@2
CYL Std 6	0.164 Abs	> 2.000 µg/L	15.087 %Abs	RK1:29->E02@2
CYL Std 6	0.166 Abs [0.1650] {0.9 CV}	> 2.000 µg/L	15.271 %Abs	RK1:29->F02@3
*****				
7/28/2021 2:29:24 PM				
CYL QCS	0.314 Abs	0.777 µg/L	28.887 %Abs	RK1:30->G02@3
CYL QCS	0.315 Abs [0.3145] {0.2 CV}	0.772 µg/L [0.775] {0.5 CV}	28.979 %Abs [28.933 %Abs]	RK1:30->H02@3
*****				
Statistic				
CYL Std 0 [MEAN]	1.0870	0.0005		
CYL Std 0 [SD]	0.0071	0.0007		
CYL Std 0 [%CV]	0.6505	141.4214		
CYL Std 1 [MEAN]	0.9095	0.0400		
CYL Std 1 [SD]	0.0219	0.0071		
CYL Std 1 [%CV]	2.4102	17.6777		
CYL Std 1 [%DIFF]		-20.0000		
CYL Std 2 [MEAN]	0.7365	0.1100		
CYL Std 2 [SD]	0.0134	0.0071		
CYL Std 2 [%CV]	1.8242	6.4282		
CYL Std 2 [%DIFF]		10.0000		
CYL Std 3 [MEAN]	0.5125	0.2990		
CYL Std 3 [SD]	0.0163	0.0212		
CYL Std 3 [%CV]	3.1734	7.0947		
CYL Std 3 [%DIFF]		19.6000		
CYL Std 4 [MEAN]	0.4450	0.4045		
CYL Std 4 [SD]	0.0141	0.0262		
CYL Std 4 [%CV]	3.1780	6.4680		
CYL Std 4 [%DIFF]		-19.1000		

Name	Absorbance	Concentration	Interpretation	Position
CYL Std 5 [MEAN]	0.2755	0.9755		
CYL Std 5 [SD]	0.0106	0.0643		
CYL Std 5 [%CV]	3.8499	6.5963		
CYL Std 5 [%DIFF]		-2.4500		
CYL Std 6 [MEAN]	0.1650			
CYL Std 6 [SD]	0.0014			
CYL Std 6 [%CV]	0.8571			
CYL QCS [MEAN]	0.3145	0.7745		
CYL QCS [SD]	0.0007	0.0035		
CYL QCS [%CV]	0.2248	0.4565		

#### Assay Curve

$$y = (A-D)/(1+(x/C)^B) + D$$

Weight: NONE

A = 1.0939

B = 0.87211

C = 0.23791

D = 0.036082

R2 coef = 0.99197

50% = 0.261

