



## Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB52419	Raccoon Lake SRA	8/8/2022	8/10/2022	< 0.15
AB52421	Cagles Mill Lake Beach	8/8/2022	8/10/2022	< 0.15
AB52422	Paynetown SRA	8/8/2022	8/10/2022	< 0.15
AB52423	Fairfax SRA	8/8/2022	8/10/2022	< 0.15
AB52425	Whitewater Memorial SP	8/9/2022	8/10/2022	< 0.15
AB52428	Hardy Lake SRA	8/9/2022	8/10/2022	< 0.15
AB52429	Hardy Lake SRA (Field Duplicate)	8/9/2022	8/10/2022	< 0.15
AB52431	Ft. Ben Harrison SP Dog Lake	8/9/2022	8/10/2022	0.25

# Test Report (by Request)

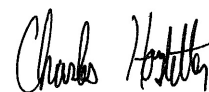
## Test Information

Request: 8/10/2022 2:11:50 PM  
Date: 8/10/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	1.587 Abs	0.000 µg/L	R^2=0.99936, 103.7			M22A1121
CYL Std 0	CYLINDROSPERMOPSIN	1.473 Abs [1.5300] {5.3 C	0.008 µg/L [0.004]	R^2=0.99936, 96.27			M22A1121
CYL Std 1	CYLINDROSPERMOPSIN	1.300 Abs	0.050 µg/L	R^2=0.99936, 84.96			M22A1121
CYL Std 1	CYLINDROSPERMOPSIN	1.268 Abs [1.2840] {1.8 C	0.060 µg/L [0.055]	R^2=0.99936, 82.87			M22A1121
CYL Std 2	CYLINDROSPERMOPSIN	1.209 Abs	0.082 µg/L	R^2=0.99936, 79.02			M22A1121
CYL Std 2	CYLINDROSPERMOPSIN	1.160 Abs [1.1845] {2.9 C	0.102 µg/L [0.092]	R^2=0.99936, 75.81			M22A1121
CYL Std 3	CYLINDROSPERMOPSIN	0.903 Abs	0.256 µg/L	R^2=0.99936, 59.02			M22A1121
CYL Std 3	CYLINDROSPERMOPSIN	0.904 Abs [0.9035] {0.1 C	0.255 µg/L [0.256]	R^2=0.99936, 59.08			M22A1121
CYL Std 4	CYLINDROSPERMOPSIN	0.713 Abs	0.455 µg/L	R^2=0.99936, 46.60			M22A1121
CYL Std 4	CYLINDROSPERMOPSIN	0.660 Abs [0.6865] {5.5 C	0.532 µg/L [0.493]	R^2=0.99936, 43.13			M22A1121
CYL Std 5	CYLINDROSPERMOPSIN	0.452 Abs	1.009 µg/L	R^2=0.99936, 29.54			M22A1121
CYL Std 5	CYLINDROSPERMOPSIN	0.442 Abs [0.4470] {1.6 C	1.043 µg/L [1.026]	R^2=0.99936, 28.88			M22A1121
CYL Std 6	CYLINDROSPERMOPSIN	0.275 Abs	1.907 µg/L	R^2=0.99936, 17.97			M22A1121
CYL Std 6	CYLINDROSPERMOPSIN	0.260 Abs [0.2675] {4.0 C	> 2.000 µg/L [1.90]	16.993 %Abs			M22A1121
CYL QCS	CYLINDROSPERMOPSIN	0.510 Abs	0.838 µg/L	33.333 %Abs			M22A1121
CYL QCS	CYLINDROSPERMOPSIN	0.507 Abs [0.5085] {0.4 C	0.846 µg/L [0.842]	33.137 %Abs [33.2			M22A1121

## Note

Signature



# Test Report (by Request)

## Test Information

Request: 8/10/2022 2:48:44 PM  
Date: 8/10/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	CYLINDROSPERMOPSIN	1.486 Abs	0.005 µg/L	Low, 97.124 %Abs		0.050 - 2.000	M22A1121
LRB	CYLINDROSPERMOPSIN	1.432 Abs [1.4590] {2.6 C	0.016 µg/L [0.011]	Low, 93.595 %Abs		0.050 - 2.000	M22A1121
LFB	CYLINDROSPERMOPSIN	0.596 Abs	0.644 µg/L	38.954 %Abs		0.050 - 2.000	M22A1121
LFB	CYLINDROSPERMOPSIN	0.582 Abs [0.5890] {1.7 C	0.672 µg/L [0.658]	38.039 %Abs [38.4		0.050 - 2.000	M22A1121
AB52419	CYLINDROSPERMOPSIN	1.379 Abs	0.028 µg/L	Low, 90.131 %Abs		0.050 - 2.000	M22A1121
AB52419	CYLINDROSPERMOPSIN	1.360 Abs [1.3695] {1.0 C	0.033 µg/L [0.031]	Low, 88.889 %Abs		0.050 - 2.000	M22A1121
AB52421	CYLINDROSPERMOPSIN	1.382 Abs	0.027 µg/L	Low, 90.327 %Abs		0.050 - 2.000	M22A1121
AB52421	CYLINDROSPERMOPSIN	1.400 Abs [1.3910] {0.9 C	0.023 µg/L [0.025]	Low, 91.503 %Abs		0.050 - 2.000	M22A1121
AB52422	CYLINDROSPERMOPSIN	1.446 Abs	0.013 µg/L	Low, 94.510 %Abs		0.050 - 2.000	M22A1121
AB52422	CYLINDROSPERMOPSIN	1.393 Abs [1.4195] {2.6 C	0.024 µg/L [0.019]	Low, 91.046 %Abs		0.050 - 2.000	M22A1121
AB52423	CYLINDROSPERMOPSIN	1.366 Abs	0.031 µg/L	Low, 89.281 %Abs		0.050 - 2.000	M22A1121
AB52423	CYLINDROSPERMOPSIN	1.348 Abs [1.3570] {0.9 C	0.036 µg/L [0.034]	Low, 88.105 %Abs		0.050 - 2.000	M22A1121
AB52425	CYLINDROSPERMOPSIN	1.353 Abs	0.035 µg/L	Low, 88.431 %Abs		0.050 - 2.000	M22A1121
AB52425	CYLINDROSPERMOPSIN	1.345 Abs [1.3490] {0.4 C	0.037 µg/L [0.036]	Low, 87.908 %Abs		0.050 - 2.000	M22A1121
AB52428	CYLINDROSPERMOPSIN	1.376 Abs	0.029 µg/L	Low, 89.935 %Abs		0.050 - 2.000	M22A1121
AB52428	CYLINDROSPERMOPSIN	1.377 Abs [1.3765] {0.1 C	0.028 µg/L [0.029]	Low, 90.000 %Abs		0.050 - 2.000	M22A1121
AB52429	CYLINDROSPERMOPSIN	1.387 Abs	0.026 µg/L	Low, 90.654 %Abs		0.050 - 2.000	M22A1121
AB52429	CYLINDROSPERMOPSIN	1.402 Abs [1.3945] {0.8 C	0.022 µg/L [0.024]	Low, 91.634 %Abs		0.050 - 2.000	M22A1121
AB52431	CYLINDROSPERMOPSIN	0.940 Abs	0.228 µg/L	61.438 %Abs		0.050 - 2.000	M22A1121
AB52431	CYLINDROSPERMOPSIN	0.889 Abs [0.9145] {3.9 C	0.268 µg/L [0.248]	58.105 %Abs [59.7		0.050 - 2.000	M22A1121

## Note

Signature



Charles Hostetter 8/10/2022

## 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:

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: M22A1121

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 Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
8/10/2022 2:11:50 PM				
CYL Std 0	1.587 Abs	0.000 µg/L	R <sup>2</sup> =0.99936, 103.725 %Abs	RK1:32->A08@2
CYL Std 0	1.473 Abs [1.5300] {5.3 CV}	0.008 µg/L [0.004] {141.4 CV}	R <sup>2</sup> =0.99936, 96.275 %Abs	RK1:32->B08@2
CYL Std 1	1.300 Abs	0.050 µg/L	R <sup>2</sup> =0.99936, 84.967 %Abs	RK1:33->C08@2
CYL Std 1	1.268 Abs [1.2840] {1.8 CV}	0.060 µg/L [0.055] {12.9 CV}	R <sup>2</sup> =0.99936, 82.876 %Abs	RK1:33->D08@2
CYL Std 2	1.209 Abs	0.082 µg/L	R <sup>2</sup> =0.99936, 79.020 %Abs	RK1:34->E08@2
CYL Std 2	1.160 Abs [1.1845] {2.9 CV}	0.102 µg/L [0.092] {15.4 CV}	R <sup>2</sup> =0.99936, 75.817 %Abs	RK1:34->F08@3
CYL Std 3	0.903 Abs	0.256 µg/L	R <sup>2</sup> =0.99936, 59.020 %Abs	RK1:35->G08@3
CYL Std 3	0.904 Abs [0.9035] {0.1 CV}	0.255 µg/L [0.256] {0.3 CV}	R <sup>2</sup> =0.99936, 59.085 %Abs	RK1:35->H08@3
CYL Std 4	0.713 Abs	0.455 µg/L	R <sup>2</sup> =0.99936, 46.601 %Abs	RK1:36->A09@2
CYL Std 4	0.660 Abs [0.6865] {5.5 CV}	0.532 µg/L [0.493] {11.0 CV}	R <sup>2</sup> =0.99936, 43.137 %Abs	RK1:36->B09@2
CYL Std 5	0.452 Abs	1.009 µg/L	R <sup>2</sup> =0.99936, 29.542 %Abs	RK1:37->C09@2
CYL Std 5	0.442 Abs [0.4470] {1.6 CV}	1.043 µg/L [1.026] {2.3 CV}	R <sup>2</sup> =0.99936, 28.889 %Abs	RK1:37->D09@2
CYL Std 6	0.275 Abs	1.907 µg/L	R <sup>2</sup> =0.99936, 17.974 %Abs	RK1:38->E09@2
CYL Std 6	0.260 Abs [0.2675] {4.0 CV}	> 2.000 µg/L [1.907]	16.993 %Abs	RK1:38->F09@3
*****				
8/10/2022 2:11:50 PM				
CYL QCS	0.510 Abs	0.838 µg/L	33.333 %Abs	RK1:39->G09@3
CYL QCS	0.507 Abs [0.5085] {0.4 CV}	0.846 µg/L [0.842] {0.7 CV}	33.137 %Abs [33.235 %Abs]	RK1:39->H09@3
*****				
Statistic				
CYL Std 0 [MEAN]	1.5300	0.0040		
CYL Std 0 [SD]	0.0806	0.0057		
CYL Std 0 [%CV]	5.2686	141.4214		
CYL Std 1 [MEAN]	1.2840	0.0550		
CYL Std 1 [SD]	0.0226	0.0071		
CYL Std 1 [%CV]	1.7623	12.8565		
CYL Std 1 [%DIFF]		10.0000		
CYL Std 2 [MEAN]	1.1845	0.0920		
CYL Std 2 [SD]	0.0346	0.0141		
CYL Std 2 [%CV]	2.9251	15.3719		
CYL Std 2 [%DIFF]		-8.0000		
CYL Std 3 [MEAN]	0.9035	0.2555		
CYL Std 3 [SD]	0.0007	0.0007		
CYL Std 3 [%CV]	0.0783	0.2768		
CYL Std 3 [%DIFF]		2.2000		
CYL Std 4 [MEAN]	0.6865	0.4935		
CYL Std 4 [SD]	0.0375	0.0544		
CYL Std 4 [%CV]	5.4591	11.0329		
CYL Std 4 [%DIFF]		-1.3000		

Name	Absorbance	Concentration	Interpretation	Position
CYL Std 5 [MEAN]	0.4470	1.0260		
CYL Std 5 [SD]	0.0071	0.0240		
CYL Std 5 [%CV]	1.5819	2.3432		
CYL Std 5 [%DIFF]		2.6000		
CYL Std 6 [MEAN]	0.2675			
CYL Std 6 [SD]	0.0106			
CYL Std 6 [%CV]	3.9651			
CYL QCS [MEAN]	0.5085	0.8420		
CYL QCS [SD]	0.0021	0.0057		
CYL QCS [%CV]	0.4172	0.6718		

## Assay Curve

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

Weight: NONE

A = 1.5274

B = 0.81951

C = 0.46847

D = -0.12142

R2 coef = 0.99936

50% = 0.390

