



## Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB52159	Raccoon Lake SRA	7/25/2022	7/27/2022	< 0.15
AB52161	Cagles Mill Lake Beach	7/25/2022	7/27/2022	< 0.15
AB52162	Paynetown SRA	7/25/2022	7/27/2022	< 0.15
AB52163	Fairfax SRA	7/25/2022	7/27/2022	< 0.15
AB52165	Whitewater Memorial SP	7/26/2022	7/27/2022	< 0.15
AB52166	Quakertown SRA	7/26/2022	7/27/2022	< 0.15
AB52167	Mounds SRA	7/26/2022	7/27/2022	< 0.15
AB52168	Hardy Lake SRA	7/26/2022	7/27/2022	< 0.15
AB52169	Whitewater Memorial SP (Field Duplicate)	7/26/2022	7/27/2022	< 0.15
AB52170	Field Blank	7/26/2022	7/27/2022	< 0.15
AB52174	Ft. Ben Harrison SP Dog Lake	7/26/2022	7/27/2022	< 0.15

# Test Report (by Request)

## Test Information

Request: 7/27/2022 2:44:26 PM  
Date: 7/27/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	1.685 Abs	0.000 µg/L	R^2=0.99940, 102.2			M22A1121
CYL Std 0	CYLINDROSPERMOPSIN	1.610 Abs [1.6475] {3.2 C	0.006 µg/L [0.003]	R^2=0.99940, 97.65			M22A1121
CYL Std 1	CYLINDROSPERMOPSIN	1.419 Abs	0.048 µg/L	R^2=0.99940, 86.10			M22A1121
CYL Std 1	CYLINDROSPERMOPSIN	1.391 Abs [1.4050] {1.4 C	0.056 µg/L [0.052]	R^2=0.99940, 84.40			M22A1121
CYL Std 2	CYLINDROSPERMOPSIN	1.291 Abs	0.089 µg/L	R^2=0.99940, 78.33			M22A1121
CYL Std 2	CYLINDROSPERMOPSIN	1.266 Abs [1.2785] {1.4 C	0.098 µg/L [0.094]	R^2=0.99940, 76.82			M22A1121
CYL Std 3	CYLINDROSPERMOPSIN	0.959 Abs	0.258 µg/L	R^2=0.99940, 58.15			M22A1121
CYL Std 3	CYLINDROSPERMOPSIN	0.942 Abs [0.9505] {1.3 C	0.271 µg/L [0.264]	R^2=0.99940, 57.16			M22A1121
CYL Std 4	CYLINDROSPERMOPSIN	0.746 Abs	0.461 µg/L	R^2=0.99940, 45.26			M22A1121
CYL Std 4	CYLINDROSPERMOPSIN	0.705 Abs [0.7255] {4.0 C	0.515 µg/L [0.488]	R^2=0.99940, 42.77			M22A1121
CYL Std 5	CYLINDROSPERMOPSIN	0.482 Abs	0.987 µg/L	R^2=0.99940, 29.24			M22A1121
CYL Std 5	CYLINDROSPERMOPSIN	0.479 Abs [0.4805] {0.4 C	0.996 µg/L [0.992]	R^2=0.99940, 29.06			M22A1121
CYL Std 6	CYLINDROSPERMOPSIN	0.296 Abs	1.952 µg/L	R^2=0.99940, 17.96			M22A1121
CYL Std 6	CYLINDROSPERMOPSIN	0.280 Abs [0.2880] {3.9 C	> 2.000 µg/L [1.95]	16.990 %Abs			M22A1121
CYL QCS	CYLINDROSPERMOPSIN	0.553 Abs	0.793 µg/L	33.556 %Abs			M22A1121
CYL QCS	CYLINDROSPERMOPSIN	0.553 Abs [0.5530] {0.0 C	0.793 µg/L [0.793]	33.556 %Abs [33.5			M22A1121

## Note

Signature

David Jordan

David Jordan 7/27/2022

# Test Report (by Request)

## Test Information

Request: 7/27/2022 2:45:33 PM  
Date: 7/27/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	CYLINDROSPERMOPSIN	1.671 Abs	0.000 µg/L	Low, 101.396 %Abs		0.050 - 2.000	M22A1121
LRB	CYLINDROSPERMOPSIN	1.569 Abs [1.6200] {4.5 C	0.013 µg/L [0.007]	Low, 95.206 %Abs		0.050 - 2.000	M22A1121
LFB	CYLINDROSPERMOPSIN	0.649 Abs	0.601 µg/L	39.381 %Abs		0.050 - 2.000	M22A1121
LFB	CYLINDROSPERMOPSIN	0.635 Abs [0.6420] {1.5 C	0.625 µg/L [0.613]	38.532 %Abs [38.9		0.050 - 2.000	M22A1121
AB52159	CYLINDROSPERMOPSIN	1.508 Abs	0.026 µg/L	Low, 91.505 %Abs		0.050 - 2.000	M22A1121
AB52159	CYLINDROSPERMOPSIN	1.470 Abs [1.4890] {1.8 C	0.035 µg/L [0.031]	Low, 89.199 %Abs		0.050 - 2.000	M22A1121
AB52159MS	CYLINDROSPERMOPSIN	0.616 Abs	0.660 µg/L	37.379 %Abs		0.050 - 2.000	M22A1121
AB52159MS	CYLINDROSPERMOPSIN	0.610 Abs [0.6130] {0.7 C	0.671 µg/L [0.666]	37.015 %Abs [37.1		0.050 - 2.000	M22A1121
AB52159MSD	CYLINDROSPERMOPSIN	0.651 Abs	0.598 µg/L	39.502 %Abs		0.050 - 2.000	M22A1121
AB52159MSD	CYLINDROSPERMOPSIN	0.623 Abs [0.6370] {3.1 C	0.647 µg/L [0.623]	37.803 %Abs [38.6		0.050 - 2.000	M22A1121
AB52161	CYLINDROSPERMOPSIN	1.496 Abs	0.029 µg/L	Low, 90.777 %Abs		0.050 - 2.000	M22A1121
AB52161	CYLINDROSPERMOPSIN	1.484 Abs [1.4900] {0.6 C	0.032 µg/L [0.031]	Low, 90.049 %Abs		0.050 - 2.000	M22A1121
AB52162	CYLINDROSPERMOPSIN	1.499 Abs	0.028 µg/L	Low, 90.959 %Abs		0.050 - 2.000	M22A1121
AB52162	CYLINDROSPERMOPSIN	1.480 Abs [1.4895] {0.9 C	0.033 µg/L [0.031]	Low, 89.806 %Abs		0.050 - 2.000	M22A1121
AB52163	CYLINDROSPERMOPSIN	1.528 Abs	0.022 µg/L	Low, 92.718 %Abs		0.050 - 2.000	M22A1121
AB52163	CYLINDROSPERMOPSIN	1.550 Abs [1.5390] {1.0 C	0.017 µg/L [0.020]	Low, 94.053 %Abs		0.050 - 2.000	M22A1121
AB52165	CYLINDROSPERMOPSIN	1.523 Abs	0.023 µg/L	Low, 92.415 %Abs		0.050 - 2.000	M22A1121
AB52165	CYLINDROSPERMOPSIN	1.490 Abs [1.5065] {1.5 C	0.030 µg/L [0.026]	Low, 90.413 %Abs		0.050 - 2.000	M22A1121
AB52166	CYLINDROSPERMOPSIN	1.457 Abs	0.038 µg/L	Low, 88.410 %Abs		0.050 - 2.000	M22A1121
AB52166	CYLINDROSPERMOPSIN	1.452 Abs [1.4545] {0.2 C	0.040 µg/L [0.039]	Low, 88.107 %Abs		0.050 - 2.000	M22A1121
AB52167	CYLINDROSPERMOPSIN	1.445 Abs	0.041 µg/L	Low, 87.682 %Abs		0.050 - 2.000	M22A1121
AB52167	CYLINDROSPERMOPSIN	1.429 Abs [1.4370] {0.8 C	0.046 µg/L [0.043]	Low, 86.711 %Abs		0.050 - 2.000	M22A1121
AB52168	CYLINDROSPERMOPSIN	1.501 Abs	0.028 µg/L	Low, 91.080 %Abs		0.050 - 2.000	M22A1121
AB52168	CYLINDROSPERMOPSIN	1.512 Abs [1.5065] {0.5 C	0.025 µg/L [0.027]	Low, 91.748 %Abs		0.050 - 2.000	M22A1121
AB52169	CYLINDROSPERMOPSIN	1.575 Abs	0.012 µg/L	Low, 95.570 %Abs		0.050 - 2.000	M22A1121
AB52169	CYLINDROSPERMOPSIN	1.506 Abs [1.5405] {3.2 C	0.026 µg/L [0.019]	Low, 91.383 %Abs		0.050 - 2.000	M22A1121
AB52170	CYLINDROSPERMOPSIN	1.491 Abs	0.030 µg/L	Low, 90.473 %Abs		0.050 - 2.000	M22A1121
AB52170	CYLINDROSPERMOPSIN	1.486 Abs [1.4885] {0.2 C	0.031 µg/L [0.030]	Low, 90.170 %Abs		0.050 - 2.000	M22A1121
AB52174	CYLINDROSPERMOPSIN	1.242 Abs	0.107 µg/L	75.364 %Abs		0.050 - 2.000	M22A1121
AB52174	CYLINDROSPERMOPSIN	1.195 Abs [1.2185] {2.7 C	0.126 µg/L [0.117]	72.512 %Abs [73.9		0.050 - 2.000	M22A1121

## Note

Signature 

David Jordan 7/27/2022

## 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:  
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: M22A1121

## Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
7/27/2022 2:44:26 PM				
CYL Std 0	1.685 Abs	0.000 µg/L	R <sup>2</sup> =0.99940, 102.245 %Abs	RK1:32->A07@2
CYL Std 0	1.610 Abs [1.6475] {3.2 CV}	0.006 µg/L [0.003] {141.4 CV}	R <sup>2</sup> =0.99940, 97.694 %Abs	RK1:32->B07@2
CYL Std 1	1.419 Abs	0.048 µg/L	R <sup>2</sup> =0.99940, 86.104 %Abs	RK1:33->C07@2
CYL Std 1	1.391 Abs [1.4050] {1.4 CV}	0.056 µg/L [0.052] {10.9 CV}	R <sup>2</sup> =0.99940, 84.405 %Abs	RK1:33->D07@2
CYL Std 2	1.291 Abs	0.089 µg/L	R <sup>2</sup> =0.99940, 78.337 %Abs	RK1:34->E07@2
CYL Std 2	1.266 Abs [1.2785] {1.4 CV}	0.098 µg/L [0.094] {6.8 CV}	R <sup>2</sup> =0.99940, 76.820 %Abs	RK1:34->F07@3
CYL Std 3	0.959 Abs	0.258 µg/L	R <sup>2</sup> =0.99940, 58.192 %Abs	RK1:35->G07@3
CYL Std 3	0.942 Abs [0.9505] {1.3 CV}	0.271 µg/L [0.264] {3.5 CV}	R <sup>2</sup> =0.99940, 57.160 %Abs	RK1:35->H07@3
CYL Std 4	0.746 Abs	0.461 µg/L	R <sup>2</sup> =0.99940, 45.267 %Abs	RK1:36->A08@2
CYL Std 4	0.705 Abs [0.7255] {4.0 CV}	0.515 µg/L [0.488] {7.8 CV}	R <sup>2</sup> =0.99940, 42.779 %Abs	RK1:36->B08@2
CYL Std 5	0.482 Abs	0.987 µg/L	R <sup>2</sup> =0.99940, 29.248 %Abs	RK1:37->C08@2
CYL Std 5	0.479 Abs [0.4805] {0.4 CV}	0.996 µg/L [0.992] {0.6 CV}	R <sup>2</sup> =0.99940, 29.066 %Abs	RK1:37->D08@2
CYL Std 6	0.296 Abs	1.952 µg/L	R <sup>2</sup> =0.99940, 17.961 %Abs	RK1:38->E08@2
CYL Std 6	0.280 Abs [0.2880] {3.9 CV}	> 2.000 µg/L [1.952]	16.990 %Abs	RK1:38->F08@3
*****				
7/27/2022 2:44:26 PM				
CYL QCS	0.553 Abs	0.793 µg/L	33.556 %Abs	RK1:39->G08@3
CYL QCS	0.553 Abs [0.5530] {0.0 CV}	0.793 µg/L [0.793] {0.0 CV}	33.556 %Abs [33.556 %Abs]	RK1:39->H08@3
*****				
Statistic				
CYL Std 0 [MEAN]	1.6475	0.0030		
CYL Std 0 [SD]	0.0530	0.0042		
CYL Std 0 [%CV]	3.2190	141.4214		
CYL Std 1 [MEAN]	1.4050	0.0520		
CYL Std 1 [SD]	0.0198	0.0057		
CYL Std 1 [%CV]	1.4092	10.8786		
CYL Std 1 [%DIFF]		4.0000		
CYL Std 2 [MEAN]	1.2785	0.0935		
CYL Std 2 [SD]	0.0177	0.0064		
CYL Std 2 [%CV]	1.3827	6.8064		
CYL Std 2 [%DIFF]		-6.5000		
CYL Std 3 [MEAN]	0.9505	0.2645		
CYL Std 3 [SD]	0.0120	0.0092		
CYL Std 3 [%CV]	1.2647	3.4754		
CYL Std 3 [%DIFF]		5.8000		
CYL Std 4 [MEAN]	0.7255	0.4880		
CYL Std 4 [SD]	0.0290	0.0382		
CYL Std 4 [%CV]	3.9961	7.8245		
CYL Std 4 [%DIFF]		-2.4000		

Name	Absorbance	Concentration	Interpretation	Position
CYL Std 5 [MEAN]	0.4805	0.9915		
CYL Std 5 [SD]	0.0021	0.0064		
CYL Std 5 [%CV]	0.4415	0.6419		
CYL Std 5 [%DIFF]		-0.8500		
CYL Std 6 [MEAN]	0.2880			
CYL Std 6 [SD]	0.0113			
CYL Std 6 [%CV]	3.9284			
CYL QCS [MEAN]	0.5530	0.7930		
CYL QCS [SD]	0.0000	0.0000		
CYL QCS [%CV]	0.0000	0.0000		

## Assay Curve

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

Weight: NONE

A = 1.6479

B = 0.88733

C = 0.38581

D = -0.024820

R2 coef = 0.99940

50% = 0.373

