



Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45929	Chain O'Lakes SP - Sand Lake Beach	7/28/2025	7/30/2025	< 0.10
AC45930	Potato Creek SP - Worster Lake Beach	7/28/2025	7/30/2025	< 0.10
AC45931	Mississinewa Lake - Miami SRA Beach	7/28/2025	7/30/2025	< 0.10
AC45932	Salamonie Lake - Lost Bridge West SRA Beach	7/28/2025	7/30/2025	< 0.10
AC45933	Potato Creek SP - Worster Lake Beach (Field Dup)	7/28/2025	7/30/2025	< 0.10
AC45934	Field Blank	7/28/2025	7/30/2025	< 0.10
AC45935	Ferdinand State Forest - Ferdinand Lake Beach	7/29/2025	7/30/2025	< 0.10

Test Report (by Request)

Test Information

Request: 7/30/2025 2:24:36 PM
Date: 7/30/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	0.834 Abs	0.000 µg/L	R^2=0.99527, 106.1		0.000	Kit:25079(
CYL Std 0	CYLINDROSPERMOPSIN	0.738 Abs [0.7860] {8.6 C	0.015 µg/L [0.008]	R^2=0.99527, 93.85		0.000	Kit:25079(
CYL Std 1	CYLINDROSPERMOPSIN	0.685 Abs	0.036 µg/L	R^2=0.99527, 87.15		0.050	Kit:25079(
CYL Std 1	CYLINDROSPERMOPSIN	0.657 Abs [0.6710] {3.0 C	0.050 µg/L [0.043]	R^2=0.99527, 83.58		0.050	Kit:25079(
CYL Std 2	CYLINDROSPERMOPSIN	0.568 Abs	0.109 µg/L	R^2=0.99527, 72.26		0.100	Kit:25079(
CYL Std 2	CYLINDROSPERMOPSIN	0.571 Abs [0.5695] {0.4 C	0.107 µg/L [0.108]	R^2=0.99527, 72.64		0.100	Kit:25079(
CYL Std 3	CYLINDROSPERMOPSIN	0.435 Abs	0.270 µg/L	R^2=0.99527, 55.34		0.250	Kit:25079(
CYL Std 3	CYLINDROSPERMOPSIN	0.422 Abs [0.4285] {2.1 C	0.294 µg/L [0.282]	R^2=0.99527, 53.65		0.250	Kit:25079(
CYL Std 4	CYLINDROSPERMOPSIN	0.378 Abs	0.395 µg/L	R^2=0.99527, 48.05		0.500	Kit:25079(
CYL Std 4	CYLINDROSPERMOPSIN	0.361 Abs [0.3695] {3.3 C	0.444 µg/L [0.420]	R^2=0.99527, 45.92		0.500	Kit:25079(
CYL Std 5	CYLINDROSPERMOPSIN	0.255 Abs	1.025 µg/L	R^2=0.99527, 32.44		1.000	Kit:25079(
CYL Std 5	CYLINDROSPERMOPSIN	0.242 Abs [0.2485] {3.7 C	1.162 µg/L [1.094]	R^2=0.99527, 30.78		1.000	Kit:25079(
CYL Std 6	CYLINDROSPERMOPSIN	0.199 Abs	1.901 µg/L	R^2=0.99527, 25.31		2.000	Kit:25079(
CYL Std 6	CYLINDROSPERMOPSIN	0.188 Abs [0.1935] {4.0 C	> 2.000 µg/L [1.90	23.919 %Abs		2.000	Kit:25079(
CYL QCS	CYLINDROSPERMOPSIN	0.292 Abs	0.743 µg/L	37.150 %Abs			Kit:25079(
CYL QCS	CYLINDROSPERMOPSIN	0.306 Abs [0.2990] {3.3 C	0.664 µg/L [0.704]	38.931 %Abs [38.0			Kit:25079(

Note

Signature *David Jordan*

David Jordan 7/30/2025

Test Report (by Request)

Test Information

Request: 7/30/2025 3:01:28 PM
Date: 7/30/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB (CYL)	CYLINDROSPERMOPSIN	0.984 Abs	0.000 µg/L	Low, 125.191 %Abs		0.050 - 2.000	Kit:25079C
LRB (CYL)	CYLINDROSPERMOPSIN	0.935 Abs [0.9595] {3.6 C	0.000 µg/L [0.000]	Low, 118.957 %Abs		0.050 - 2.000	Kit:25079C
LFB (CYL)	CYLINDROSPERMOPSIN	0.347 Abs	0.490 µg/L	44.148 %Abs		0.050 - 2.000	Kit:25079C
LFB (CYL)	CYLINDROSPERMOPSIN	0.344 Abs [0.3455] {0.6 C	0.500 µg/L [0.495]	43.766 %Abs [43.9		0.050 - 2.000	Kit:25079C
AC45929	CYLINDROSPERMOPSIN	0.870 Abs	0.000 µg/L	Low, 110.687 %Abs		0.050 - 2.000	Kit:25079C
AC45929	CYLINDROSPERMOPSIN	0.904 Abs [0.8870] {2.7 C	0.000 µg/L [0.000]	Low, 115.013 %Abs		0.050 - 2.000	Kit:25079C
AC45930	CYLINDROSPERMOPSIN	0.957 Abs	0.000 µg/L	Low, 121.756 %Abs		0.050 - 2.000	Kit:25079C
AC45930	CYLINDROSPERMOPSIN	0.983 Abs [0.9700] {1.9 C	0.000 µg/L [0.000]	Low, 125.064 %Abs		0.050 - 2.000	Kit:25079C
AC45931	CYLINDROSPERMOPSIN	1.199 Abs	0.000 µg/L	Low, 152.545 %Abs		0.050 - 2.000	Kit:25079C
AC45931	CYLINDROSPERMOPSIN	1.103 Abs [1.1510] {5.9 C	0.000 µg/L [0.000]	Low, 140.331 %Abs		0.050 - 2.000	Kit:25079C
AC45931MS	CYLINDROSPERMOPSIN	0.501 Abs	0.175 µg/L	63.740 %Abs		0.050 - 2.000	Kit:25079C
AC45931MS	CYLINDROSPERMOPSIN	0.495 Abs [0.4980] {0.9 C	0.182 µg/L [0.179]	62.977 %Abs [63.3		0.050 - 2.000	Kit:25079C
AC45931MSD	CYLINDROSPERMOPSIN	0.514 Abs	0.160 µg/L	65.394 %Abs		0.050 - 2.000	Kit:25079C
AC45931MSD	CYLINDROSPERMOPSIN	0.531 Abs [0.5225] {2.3 C	0.142 µg/L [0.151]	67.557 %Abs [66.4		0.050 - 2.000	Kit:25079C
AC45932	CYLINDROSPERMOPSIN	1.178 Abs	0.000 µg/L	Low, 149.873 %Abs		0.050 - 2.000	Kit:25079C
AC45932	CYLINDROSPERMOPSIN	1.217 Abs [1.1975] {2.3 C	0.000 µg/L [0.000]	Low, 154.835 %Abs		0.050 - 2.000	Kit:25079C
AC45933	CYLINDROSPERMOPSIN	1.205 Abs	0.000 µg/L	Low, 153.308 %Abs		0.050 - 2.000	Kit:25079C
AC45933	CYLINDROSPERMOPSIN	1.122 Abs [1.1635] {5.0 C	0.000 µg/L [0.000]	Low, 142.748 %Abs		0.050 - 2.000	Kit:25079C
AC45934	CYLINDROSPERMOPSIN	1.056 Abs	0.000 µg/L	Low, 134.351 %Abs		0.050 - 2.000	Kit:25079C
AC45934	CYLINDROSPERMOPSIN	1.060 Abs [1.0580] {0.3 C	0.000 µg/L [0.000]	Low, 134.860 %Abs		0.050 - 2.000	Kit:25079C
AC45935	CYLINDROSPERMOPSIN	1.121 Abs	0.000 µg/L	Low, 142.621 %Abs		0.050 - 2.000	Kit:25079C
AC45935	CYLINDROSPERMOPSIN	1.141 Abs [1.1310] {1.3 C	0.000 µg/L [0.000]	Low, 145.165 %Abs		0.050 - 2.000	Kit:25079C

Note

Signature

David Jordan

David Jordan 7/30/2025

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: Kit:2507906661

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
7/30/2025 2:24:36 PM				
CYL Std 0	0.834 Abs	0.000 µg/L	R^2=0.99527, 106.107 %Abs	RK1:32->A07@2
CYL Std 0	0.738 Abs [0.7860] {8.6 CV}	0.015 µg/L [0.008] {141.4 CV}	R^2=0.99527, 93.893 %Abs	RK1:32->B07@2
CYL Std 1	0.685 Abs	0.036 µg/L	R^2=0.99527, 87.150 %Abs	RK1:33->C07@2
CYL Std 1	0.657 Abs [0.6710] {3.0 CV}	0.050 µg/L [0.043] {23.0 CV}	R^2=0.99527, 83.588 %Abs	RK1:33->D07@2
CYL Std 2	0.568 Abs	0.109 µg/L	R^2=0.99527, 72.265 %Abs	RK1:34->E07@2
CYL Std 2	0.571 Abs [0.5695] {0.4 CV}	0.107 µg/L [0.108] {1.3 CV}	R^2=0.99527, 72.646 %Abs	RK1:34->F07@3
CYL Std 3	0.435 Abs	0.270 µg/L	R^2=0.99527, 55.344 %Abs	RK1:35->G07@3
CYL Std 3	0.422 Abs [0.4285] {2.1 CV}	0.294 µg/L [0.282] {6.0 CV}	R^2=0.99527, 53.690 %Abs	RK1:35->H07@3
CYL Std 4	0.378 Abs	0.395 µg/L	R^2=0.99527, 48.092 %Abs	RK1:36->A08@2
CYL Std 4	0.361 Abs [0.3695] {3.3 CV}	0.444 µg/L [0.420] {8.3 CV}	R^2=0.99527, 45.929 %Abs	RK1:36->B08@2
CYL Std 5	0.255 Abs	1.025 µg/L	R^2=0.99527, 32.443 %Abs	RK1:37->C08@2
CYL Std 5	0.242 Abs [0.2485] {3.7 CV}	1.162 µg/L [1.094] {8.9 CV}	R^2=0.99527, 30.789 %Abs	RK1:37->D08@2
CYL Std 6	0.199 Abs	1.901 µg/L	R^2=0.99527, 25.318 %Abs	RK1:38->E08@2
CYL Std 6	0.188 Abs [0.1935] {4.0 CV}	> 2.000 µg/L [1.901]	23.919 %Abs	RK1:38->F08@3

7/30/2025 2:24:36 PM				
CYL QCS	0.292 Abs	0.743 µg/L	37.150 %Abs	RK1:39->G08@3
CYL QCS	0.306 Abs [0.2990] {3.3 CV}	0.664 µg/L [0.704] {7.9 CV}	38.931 %Abs [38.041 %Abs]	RK1:39->H08@3

Statistic				
CYL Std 0 [MEAN]	0.7860	0.0075		
CYL Std 0 [SD]	0.0679	0.0106		
CYL Std 0 [%CV]	8.6364	141.4214		
CYL Std 1 [MEAN]	0.6710	0.0430		
CYL Std 1 [SD]	0.0198	0.0099		
CYL Std 1 [%CV]	2.9507	23.0221		
CYL Std 1 [%DIFF]		-14.0000		
CYL Std 2 [MEAN]	0.5695	0.1080		
CYL Std 2 [SD]	0.0021	0.0014		
CYL Std 2 [%CV]	0.3725	1.3095		
CYL Std 2 [%DIFF]		8.0000		
CYL Std 3 [MEAN]	0.4285	0.2820		
CYL Std 3 [SD]	0.0092	0.0170		
CYL Std 3 [%CV]	2.1452	6.0179		
CYL Std 3 [%DIFF]		12.8000		
CYL Std 4 [MEAN]	0.3695	0.4195		
CYL Std 4 [SD]	0.0120	0.0346		
CYL Std 4 [%CV]	3.2533	8.2594		
CYL Std 4 [%DIFF]		-16.1000		

Name	Absorbance	Concentration	Interpretation	Position	
CYL Std 5 [MEAN]	0.2485	1.0935			
CYL Std 5 [SD]	0.0092	0.0969			
CYL Std 5 [%CV]	3.6991	8.8590			
CYL Std 5 [%DIFF]		9.3500			
CYL Std 6 [MEAN]	0.1935				
CYL Std 6 [SD]	0.0078				
CYL Std 6 [%CV]	4.0197				
CYL QCS [MEAN]	0.2990	0.7035			
CYL QCS [SD]	0.0099	0.0559			
CYL QCS [%CV]	3.3109	7.9405			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 0.78891
B = 0.88639
C = 0.25410
D = 0.099906
R2 coef = 0.99527
50% = 0.357

