



Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC46374	Cecil M. Harden Lake - Raccoon Lake SRA Beach	8/18/2025	8/21/2025	< 0.10
AC46375	Cagles Mill Lake - Lieber SRA Beach	8/18/2025	8/21/2025	< 0.10
AC46376	Monroe Lake - Fairfax SRA Beach	8/18/2025	8/21/2025	< 0.10
AC46377	Monroe Lake - Paynetown SRA Beach	8/18/2025	8/21/2025	< 0.10
AC46378	Starve Hollow SRA - Starve Hollow Lake Beach	8/18/2025	8/21/2025	< 0.10
AC46379	Whitewater Memorial SP - Whitewater Lake Beach	8/19/2025	8/21/2025	< 0.10
AC46380	Brookville Lake - Quakertown SRA Beach	8/19/2025	8/21/2025	< 0.10
AC46381	Brookville Lake - Mounds SRA Beach	8/19/2025	8/21/2025	< 0.10
AC46382	Hardy Lake SRA - Hardy Lake SRA Beach	8/19/2025	8/21/2025	< 0.10
AC46383	Monroe Lake - Fairfax SRA Beach (Field Duplicate)	8/18/2025	8/21/2025	< 0.10
AC46384	Field Blank	8/18/2025	8/21/2025	< 0.10
AC46385	Ft. Ben Harrison SP Dog Lake	8/18/2025	8/21/2025	0.29
AC46386	Mississinewa Lake - Miami SRA Beach	8/18/2025	8/21/2025	< 0.10

Test Information							
Request: 8/21/2025 1:56:47 PM							
Date: 8/21/2025							
Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	1.277 Abs	0.006 µg/L	R^2=0.99995, 97.92		0.000	Kit:25079(
CYL Std 0	CYLINDROSPERMOPSIN	1.330 Abs [1.3035] {2.9 C	0.000 µg/L [0.003]	R^2=0.99995, 101.5		0.000	Kit:25079(
CYL Std 1	CYLINDROSPERMOPSIN	1.088 Abs	0.049 µg/L	R^2=0.99995, 83.43		0.050	Kit:25079(
CYL Std 1	CYLINDROSPERMOPSIN	1.078 Abs [1.0830] {0.7 C	0.052 µg/L [0.051]	R^2=0.99995, 82.66		0.050	Kit:25079(
CYL Std 2	CYLINDROSPERMOPSIN	0.920 Abs	0.102 µg/L	R^2=0.99995, 70.55		0.100	Kit:25079(
CYL Std 2	CYLINDROSPERMOPSIN	0.937 Abs [0.9285] {1.3 C	0.096 µg/L [0.099]	R^2=0.99995, 71.85		0.100	Kit:25079(
CYL Std 3	CYLINDROSPERMOPSIN	0.657 Abs	0.246 µg/L	R^2=0.99995, 50.38		0.250	Kit:25079(
CYL Std 3	CYLINDROSPERMOPSIN	0.637 Abs [0.6470] {2.2 C	0.262 µg/L [0.254]	R^2=0.99995, 48.85		0.250	Kit:25079(
CYL Std 4	CYLINDROSPERMOPSIN	0.455 Abs	0.499 µg/L	R^2=0.99995, 34.85		0.500	Kit:25079(
CYL Std 4	CYLINDROSPERMOPSIN	0.457 Abs [0.4560] {0.3 C	0.495 µg/L [0.497]	R^2=0.99995, 35.04		0.500	Kit:25079(
CYL Std 5	CYLINDROSPERMOPSIN	0.312 Abs	0.977 µg/L	R^2=0.99995, 23.92		1.000	Kit:25079(
CYL Std 5	CYLINDROSPERMOPSIN	0.310 Abs [0.3110] {0.5 C	0.988 µg/L [0.983]	R^2=0.99995, 23.77		1.000	Kit:25079(
CYL Std 6	CYLINDROSPERMOPSIN	0.216 Abs	> 2.000 µg/L	16.564 %Abs		2.000	Kit:25079(
CYL Std 6	CYLINDROSPERMOPSIN	0.213 Abs [0.2145] {1.0 C	> 2.000 µg/L	16.334 %Abs		2.000	Kit:25079(
CYL QCS	CYLINDROSPERMOPSIN	0.363 Abs	0.745 µg/L	27.837 %Abs			Kit:25079(
CYL QCS	CYLINDROSPERMOPSIN	0.357 Abs [0.3600] {1.2 C	0.767 µg/L [0.756]	27.377 %Abs [27.6			Kit:25079(

Note

Test Report (by Request)

Test Information

Request: 8/21/2025 1:58:20 PM
Date: 8/21/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB (CYL)	CYLINDROSPERMOPSIN	1.282 Abs	0.005 µg/L	Low, 98.313 %Abs		0.050 - 2.000	Kit:25079C
LRB (CYL)	CYLINDROSPERMOPSIN	1.233 Abs [1.2575] {2.8 C	0.015 µg/L [0.010]	Low, 94.555 %Abs		0.050 - 2.000	Kit:25079C
LFB (CYL)	CYLINDROSPERMOPSIN	0.452 Abs	0.505 µg/L	34.663 %Abs		0.050 - 2.000	Kit:25079C
LFB (CYL)	CYLINDROSPERMOPSIN	0.446 Abs [0.4490] {0.9 C	0.517 µg/L [0.511]	34.202 %Abs [34.4		0.050 - 2.000	Kit:25079C
AC46374	CYLINDROSPERMOPSIN	1.192 Abs	0.024 µg/L	Low, 91.411 %Abs		0.050 - 2.000	Kit:25079C
AC46374	CYLINDROSPERMOPSIN	1.197 Abs [1.1945] {0.3 C	0.023 µg/L [0.024]	Low, 91.794 %Abs		0.050 - 2.000	Kit:25079C
AC46375	CYLINDROSPERMOPSIN	1.209 Abs	0.020 µg/L	Low, 92.715 %Abs		0.050 - 2.000	Kit:25079C
AC46375	CYLINDROSPERMOPSIN	1.183 Abs [1.1960] {1.5 C	0.026 µg/L [0.023]	Low, 90.721 %Abs		0.050 - 2.000	Kit:25079C
AC46376	CYLINDROSPERMOPSIN	1.235 Abs	0.014 µg/L	Low, 94.709 %Abs		0.050 - 2.000	Kit:25079C
AC46376	CYLINDROSPERMOPSIN	1.165 Abs [1.2000] {4.1 C	0.030 µg/L [0.022]	Low, 89.340 %Abs		0.050 - 2.000	Kit:25079C
AC46377	CYLINDROSPERMOPSIN	1.182 Abs	0.026 µg/L	Low, 90.644 %Abs		0.050 - 2.000	Kit:25079C
AC46377	CYLINDROSPERMOPSIN	1.182 Abs [1.1820] {0.0 C	0.026 µg/L [0.026]	Low, 90.644 %Abs		0.050 - 2.000	Kit:25079C
AC46378	CYLINDROSPERMOPSIN	1.162 Abs	0.031 µg/L	Low, 89.110 %Abs		0.050 - 2.000	Kit:25079C
AC46378	CYLINDROSPERMOPSIN	1.166 Abs [1.1640] {0.2 C	0.030 µg/L [0.031]	Low, 89.417 %Abs		0.050 - 2.000	Kit:25079C
AC46379	CYLINDROSPERMOPSIN	1.194 Abs	0.023 µg/L	Low, 91.564 %Abs		0.050 - 2.000	Kit:25079C
AC46379	CYLINDROSPERMOPSIN	1.179 Abs [1.1865] {0.9 C	0.027 µg/L [0.025]	Low, 90.414 %Abs		0.050 - 2.000	Kit:25079C
AC46380	CYLINDROSPERMOPSIN	1.224 Abs	0.017 µg/L	Low, 93.865 %Abs		0.050 - 2.000	Kit:25079C
AC46380	CYLINDROSPERMOPSIN	1.159 Abs [1.1915] {3.9 C	0.031 µg/L [0.024]	Low, 88.880 %Abs		0.050 - 2.000	Kit:25079C
AC46381	CYLINDROSPERMOPSIN	1.148 Abs	0.034 µg/L	Low, 88.037 %Abs		0.050 - 2.000	Kit:25079C
AC46381	CYLINDROSPERMOPSIN	1.158 Abs [1.1530] {0.6 C	0.032 µg/L [0.033]	Low, 88.804 %Abs		0.050 - 2.000	Kit:25079C
AC46381MS	CYLINDROSPERMOPSIN	0.409 Abs	0.603 µg/L	31.365 %Abs		0.050 - 2.000	Kit:25079C
AC46381MS	CYLINDROSPERMOPSIN	0.403 Abs [0.4060] {1.0 C	0.619 µg/L [0.611]	30.905 %Abs [31.1		0.050 - 2.000	Kit:25079C
AC46381MSD	CYLINDROSPERMOPSIN	0.414 Abs	0.590 µg/L	31.748 %Abs		0.050 - 2.000	Kit:25079C
AC46381MSD	CYLINDROSPERMOPSIN	0.412 Abs [0.4130] {0.3 C	0.595 µg/L [0.593]	31.595 %Abs [31.6		0.050 - 2.000	Kit:25079C
AC46382	CYLINDROSPERMOPSIN	1.199 Abs	0.022 µg/L	Low, 91.948 %Abs		0.050 - 2.000	Kit:25079C
AC46382	CYLINDROSPERMOPSIN	1.142 Abs [1.1705] {3.4 C	0.035 µg/L [0.029]	Low, 87.577 %Abs		0.050 - 2.000	Kit:25079C
AC46383	CYLINDROSPERMOPSIN	1.131 Abs	0.038 µg/L	Low, 86.733 %Abs		0.050 - 2.000	Kit:25079C
AC46383	CYLINDROSPERMOPSIN	1.121 Abs [1.1260] {0.6 C	0.041 µg/L [0.040]	Low, 85.966 %Abs		0.050 - 2.000	Kit:25079C
AC46384	CYLINDROSPERMOPSIN	1.157 Abs	0.032 µg/L	Low, 88.727 %Abs		0.050 - 2.000	Kit:25079C
AC46384	CYLINDROSPERMOPSIN	1.195 Abs [1.1760] {2.3 C	0.023 µg/L [0.028]	Low, 91.641 %Abs		0.050 - 2.000	Kit:25079C
AC46385	CYLINDROSPERMOPSIN	0.609 Abs	0.288 µg/L	46.702 %Abs		0.050 - 2.000	Kit:25079C
AC46385	CYLINDROSPERMOPSIN	0.602 Abs [0.6055] {0.8 C	0.295 µg/L [0.292]	46.166 %Abs [46.4		0.050 - 2.000	Kit:25079C
AC46386	CYLINDROSPERMOPSIN	1.140 Abs	0.036 µg/L	Low, 87.423 %Abs		0.050 - 2.000	Kit:25079C
AC46386	CYLINDROSPERMOPSIN	1.134 Abs [1.1370] {0.4 C	0.037 µg/L [0.037]	Low, 86.963 %Abs		0.050 - 2.000	Kit:25079C

Note

Signature 

David Jordan 8/21/2025

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: "

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Name	Absorbance	Concentration	Interpretation	Position	
8/21/2025 1:56:47 PM					
CYL Std 0	1.277 Abs	0.006 µg/L	R^2=0.99995, 97.929 %Abs	RK1:32->A06@1	
CYL Std 0	1.330 Abs [1.3035] {2.9 CV}	0.000 µg/L [0.003] {141.4 CV}	R^2=0.99995, 101.994 %Abs	RK1:32->B06@1	
CYL Std 1	1.088 Abs	0.049 µg/L	R^2=0.99995, 83.436 %Abs	RK1:33->C06@1	
CYL Std 1	1.078 Abs [1.0830] {0.7 CV}	0.052 µg/L [0.051] {4.2 CV}	R^2=0.99995, 82.669 %Abs	RK1:33->D06@1	
CYL Std 2	0.920 Abs	0.102 µg/L	R^2=0.99995, 70.552 %Abs	RK1:34->E06@1	
CYL Std 2	0.937 Abs [0.9285] {1.3 CV}	0.096 µg/L [0.099] {4.3 CV}	R^2=0.99995, 71.856 %Abs	RK1:34->F06@4	
CYL Std 3	0.657 Abs	0.246 µg/L	R^2=0.99995, 50.383 %Abs	RK1:35->G06@4	
CYL Std 3	0.637 Abs [0.6470] {2.2 CV}	0.262 µg/L [0.254] {4.5 CV}	R^2=0.99995, 48.850 %Abs	RK1:35->H06@4	
CYL Std 4	0.455 Abs	0.499 µg/L	R^2=0.99995, 34.893 %Abs	RK1:36->A07@2	
CYL Std 4	0.457 Abs [0.4560] {0.3 CV}	0.495 µg/L [0.497] {0.6 CV}	R^2=0.99995, 35.046 %Abs	RK1:36->B07@2	
CYL Std 5	0.312 Abs	0.977 µg/L	R^2=0.99995, 23.926 %Abs	RK1:37->C07@2	
CYL Std 5	0.310 Abs [0.3110] {0.5 CV}	0.988 µg/L [0.983] {0.8 CV}	R^2=0.99995, 23.773 %Abs	RK1:37->D07@2	
CYL Std 6	0.216 Abs	> 2.000 µg/L	16.564 %Abs	RK1:38->E07@2	
CYL Std 6	0.213 Abs [0.2145] {1.0 CV}	> 2.000 µg/L	16.334 %Abs	RK1:38->F07@3	

8/21/2025 1:56:47 PM					
CYL QCS	0.363 Abs	0.745 µg/L	27.837 %Abs	RK1:39->G07@3	
CYL QCS	0.357 Abs [0.3600] {1.2 CV}	0.767 µg/L [0.756] {2.1 CV}	27.377 %Abs [27.607 %Abs]	RK1:39->H07@3	

Statistic					
CYL Std 0 [MEAN]	1.3035	0.0030			
CYL Std 0 [SD]	0.0375	0.0042			
CYL Std 0 [%CV]	2.8751	141.4214			
CYL Std 1 [MEAN]	1.0830	0.0505			
CYL Std 1 [SD]	0.0071	0.0021			
CYL Std 1 [%CV]	0.6529	4.2006			
CYL Std 1 [%DIFF]		1.0000			
CYL Std 2 [MEAN]	0.9285	0.0990			
CYL Std 2 [SD]	0.0120	0.0042			
CYL Std 2 [%CV]	1.2946	4.2855			
CYL Std 2 [%DIFF]		-1.0000			
CYL Std 3 [MEAN]	0.6470	0.2540			
CYL Std 3 [SD]	0.0141	0.0113			
CYL Std 3 [%CV]	2.1858	4.4542			
CYL Std 3 [%DIFF]		1.6000			
CYL Std 4 [MEAN]	0.4560	0.4970			
CYL Std 4 [SD]	0.0014	0.0028			
CYL Std 4 [%CV]	0.3101	0.5691			
CYL Std 4 [%DIFF]		-0.6000			

Name	Absorbance	Concentration	Interpretation	Position	
CYL Std 5 [MEAN]	0.3110	0.9825			
CYL Std 5 [SD]	0.0014	0.0078			
CYL Std 5 [%CV]	0.4547	0.7917			
CYL Std 5 [%DIFF]		-1.7500			
CYL Std 6 [MEAN]	0.2145				
CYL Std 6 [SD]	0.0021				
CYL Std 6 [%CV]	0.9890				
CYL QCS [MEAN]	0.3600	0.7560			
CYL QCS [SD]	0.0042	0.0156			
CYL QCS [%CV]	1.1785	2.0577			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.3041
 B = 1.0427
 C = 0.20742
 D = 0.11483
 R2 coef = 0.99995
 50% = 0.250

