



Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45921	Cecil M. Harden Lake - Raccoon Lake SRA Beach	7/21/2025	7/23/2025	< 0.10
AC45922	Cagles Mill Lake - Lieber SRA Beach	7/21/2025	7/23/2025	< 0.10
AC45923	Brookville Lake - Quakertown SRA Beach	7/22/2025	7/23/2025	< 0.10
AC45924	Brookville Lake - Mounds SRA Beach	7/22/2025	7/23/2025	< 0.10
AC45925	Hardy Lake SRA - Hardy Lake SRA Beach	7/22/2025	7/23/2025	< 0.10
AC45926	Brookville Lake - Quakertown SRA Beach (Field Dup.)	7/22/2025	7/23/2025	< 0.10
AC45927	Field Blank	7/22/2025	7/23/2025	< 0.10
AC45928	Ft. Ben Harrison SP Dog Lake	7/21/2025	7/23/2025	< 0.10

Test Report (by Request)

Test Information

Request: 7/23/2025 2:26:42 PM
Date: 7/23/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	0.801 Abs	0.000 µg/L	R^2=0.99862, 101.5		0.000	Kit:25079
CYL Std 0	CYLINDROSPERMOPSIN	0.776 Abs [0.7885] {2.2 C	0.002 µg/L [0.001]	R^2=0.99862, 98.35		0.000	Kit:25079
CYL Std 1	CYLINDROSPERMOPSIN	0.641 Abs	0.039 µg/L	R^2=0.99862, 81.24		0.050	Kit:25079
CYL Std 1	CYLINDROSPERMOPSIN	0.591 Abs [0.6160] {5.7 C	0.059 µg/L [0.049]	R^2=0.99862, 74.9		0.050	Kit:25079
CYL Std 2	CYLINDROSPERMOPSIN	0.517 Abs	0.098 µg/L	R^2=0.99862, 65.52		0.100	Kit:25079
CYL Std 2	CYLINDROSPERMOPSIN	0.513 Abs [0.5150] {0.5 C	0.101 µg/L [0.100]	R^2=0.99862, 65.01		0.100	Kit:25079
CYL Std 3	CYLINDROSPERMOPSIN	0.357 Abs	0.266 µg/L	R^2=0.99862, 45.24		0.250	Kit:25079
CYL Std 3	CYLINDROSPERMOPSIN	0.347 Abs [0.3520] {2.0 C	0.284 µg/L [0.275]	R^2=0.99862, 43.98		0.250	Kit:25079
CYL Std 4	CYLINDROSPERMOPSIN	0.276 Abs	0.466 µg/L	R^2=0.99862, 34.98		0.500	Kit:25079
CYL Std 4	CYLINDROSPERMOPSIN	0.284 Abs [0.2800] {2.0 C	0.439 µg/L [0.453]	R^2=0.99862, 35.95		0.500	Kit:25079
CYL Std 5	CYLINDROSPERMOPSIN	0.212 Abs	0.809 µg/L	R^2=0.99862, 26.86		1.000	Kit:25079
CYL Std 5	CYLINDROSPERMOPSIN	0.180 Abs [0.1960] {11.5	1.154 µg/L [0.982]	R^2=0.99862, 22.81		1.000	Kit:25079
CYL Std 6	CYLINDROSPERMOPSIN	0.141 Abs	> 2.000 µg/L	17.871 %Abs		2.000	Kit:25079
CYL Std 6	CYLINDROSPERMOPSIN	0.133 Abs [0.1370] {4.1 C	> 2.000 µg/L	16.857 %Abs		2.000	Kit:25079
CYL QCS	CYLINDROSPERMOPSIN	0.204 Abs	0.878 µg/L	25.856 %Abs			Kit:25079
CYL QCS	CYLINDROSPERMOPSIN	0.201 Abs [0.2025] {1.0 C	0.906 µg/L [0.892]	25.475 %Abs [25.6			Kit:25079

Note

Signature

David Jordan

David Jordan 7/23/2025

Test Information

Request: 7/23/2025 2:59:28 PM
Date: 7/23/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB	CYLINDROSPERMOPSIN	0.766 Abs	0.004 µg/L	Low, 97.085 %Abs		0.050 - 2.000	Kit:25079(
LRB	CYLINDROSPERMOPSIN	0.727 Abs [0.7465] {3.7 C	0.013 µg/L [0.009]	Low, 92.142 %Abs		0.050 - 2.000	Kit:25079(
LFB (CYL)	CYLINDROSPERMOPSIN	0.233 Abs	0.663 µg/L	29.531 %Abs		0.050 - 2.000	Kit:25079(
LFB (CYL)	CYLINDROSPERMOPSIN	0.235 Abs [0.2340] {0.6 C	0.652 µg/L [0.658]	29.785 %Abs [29.6		0.050 - 2.000	Kit:25079(
AC45921	CYLINDROSPERMOPSIN	0.734 Abs	0.011 µg/L	Low, 93.029 %Abs		0.050 - 2.000	Kit:25079(
AC45921	CYLINDROSPERMOPSIN	0.736 Abs [0.7350] {0.2 C	0.011 µg/L [0.011]	Low, 93.283 %Abs		0.050 - 2.000	Kit:25079(
AC45922	CYLINDROSPERMOPSIN	0.756 Abs	0.006 µg/L	Low, 95.817 %Abs		0.050 - 2.000	Kit:25079(
AC45922	CYLINDROSPERMOPSIN	0.744 Abs [0.7500] {1.1 C	0.009 µg/L [0.008]	Low, 94.297 %Abs		0.050 - 2.000	Kit:25079(
AC45922MS	CYLINDROSPERMOPSIN	0.267 Abs	0.499 µg/L	33.840 %Abs		0.050 - 2.000	Kit:25079(
AC45922MS	CYLINDROSPERMOPSIN	0.253 Abs [0.2600] {3.8 C	0.559 µg/L [0.529]	32.066 %Abs [32.9		0.050 - 2.000	Kit:25079(
AC45922MSD	CYLINDROSPERMOPSIN	0.262 Abs	0.519 µg/L	33.207 %Abs		0.050 - 2.000	Kit:25079(
AC45922MSD	CYLINDROSPERMOPSIN	0.252 Abs [0.2570] {2.8 C	0.563 µg/L [0.541]	31.939 %Abs [32.5		0.050 - 2.000	Kit:25079(
AC45923	CYLINDROSPERMOPSIN	0.719 Abs	0.015 µg/L	Low, 91.128 %Abs		0.050 - 2.000	Kit:25079(
AC45923	CYLINDROSPERMOPSIN	0.722 Abs [0.7205] {0.3 C	0.014 µg/L [0.015]	Low, 91.508 %Abs		0.050 - 2.000	Kit:25079(
AC45924	CYLINDROSPERMOPSIN	0.740 Abs	0.010 µg/L	Low, 93.790 %Abs		0.050 - 2.000	Kit:25079(
AC45924	CYLINDROSPERMOPSIN	0.721 Abs [0.7305] {1.8 C	0.015 µg/L [0.013]	Low, 91.381 %Abs		0.050 - 2.000	Kit:25079(
AC45925	CYLINDROSPERMOPSIN	0.794 Abs	0.000 µg/L	Low, 100.634 %Abs		0.050 - 2.000	Kit:25079(
AC45925	CYLINDROSPERMOPSIN	0.752 Abs [0.7730] {3.8 C	0.007 µg/L [0.004]	Low, 95.311 %Abs		0.050 - 2.000	Kit:25079(
AC45926	CYLINDROSPERMOPSIN	0.733 Abs	0.012 µg/L	Low, 92.902 %Abs		0.050 - 2.000	Kit:25079(
AC45926	CYLINDROSPERMOPSIN	0.719 Abs [0.7260] {1.4 C	0.015 µg/L [0.014]	Low, 91.128 %Abs		0.050 - 2.000	Kit:25079(
AC45927	CYLINDROSPERMOPSIN	0.737 Abs	0.011 µg/L	Low, 93.409 %Abs		0.050 - 2.000	Kit:25079(
AC45927	CYLINDROSPERMOPSIN	0.734 Abs [0.7355] {0.3 C	0.011 µg/L [0.011]	Low, 93.029 %Abs		0.050 - 2.000	Kit:25079(
AC45928	CYLINDROSPERMOPSIN	0.695 Abs	0.022 µg/L	Low, 88.086 %Abs		0.050 - 2.000	Kit:25079(
AC45928	CYLINDROSPERMOPSIN	0.682 Abs [0.6885] {1.3 C	0.025 µg/L [0.024]	Low, 86.439 %Abs		0.050 - 2.000	Kit:25079(

Note

Signature *David Jordan*

David Jordan 7/23/2025

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
7/23/2025 2:26:42 PM				
CYL Std 0	0.801 Abs	0.000 µg/L	R ² =0.99862, 101.521 %Abs	RK1:32->A07@2
CYL Std 0	0.776 Abs [0.7885] {2.2 CV}	0.002 µg/L [0.001] {141.4 CV}	R ² =0.99862, 98.352 %Abs	RK1:32->B07@2
CYL Std 1	0.641 Abs	0.039 µg/L	R ² =0.99862, 81.242 %Abs	RK1:33->C07@2
CYL Std 1	0.591 Abs [0.6160] {5.7 CV}	0.059 µg/L [0.049] {28.9 CV}	R ² =0.99862, 74.905 %Abs	RK1:33->D07@2
CYL Std 2	0.517 Abs	0.098 µg/L	R ² =0.99862, 65.526 %Abs	RK1:34->E07@2
CYL Std 2	0.513 Abs [0.5150] {0.5 CV}	0.101 µg/L [0.100] {2.1 CV}	R ² =0.99862, 65.019 %Abs	RK1:34->F07@3
CYL Std 3	0.357 Abs	0.266 µg/L	R ² =0.99862, 45.247 %Abs	RK1:35->G07@3
CYL Std 3	0.347 Abs [0.3520] {2.0 CV}	0.284 µg/L [0.275] {4.6 CV}	R ² =0.99862, 43.980 %Abs	RK1:35->H07@3
CYL Std 4	0.276 Abs	0.466 µg/L	R ² =0.99862, 34.981 %Abs	RK1:36->A08@2
CYL Std 4	0.284 Abs [0.2800] {2.0 CV}	0.439 µg/L [0.453] {4.2 CV}	R ² =0.99862, 35.995 %Abs	RK1:36->B08@2
CYL Std 5	0.212 Abs	0.809 µg/L	R ² =0.99862, 26.869 %Abs	RK1:37->C08@2
CYL Std 5	0.180 Abs [0.1960] {11.5 CV}	1.154 µg/L [0.982] {24.9 CV}	R ² =0.99862, 22.814 %Abs	RK1:37->D08@2
CYL Std 6	0.141 Abs	> 2.000 µg/L	17.871 %Abs	RK1:38->E08@2
CYL Std 6	0.133 Abs [0.1370] {4.1 CV}	> 2.000 µg/L	16.857 %Abs	RK1:38->F08@3

7/23/2025 2:26:42 PM				
CYL QCS	0.204 Abs	0.878 µg/L	25.856 %Abs	RK1:39->G08@3
CYL QCS	0.201 Abs [0.2025] {1.0 CV}	0.906 µg/L [0.892] {2.2 CV}	25.475 %Abs [25.665 %Abs]	RK1:39->H08@3

Statistic				
CYL Std 0 [MEAN]	0.7885	0.0010		
CYL Std 0 [SD]	0.0177	0.0014		
CYL Std 0 [%CV]	2.2419	141.4214		
CYL Std 1 [MEAN]	0.6160	0.0490		
CYL Std 1 [SD]	0.0354	0.0141		
CYL Std 1 [%CV]	5.7395	28.8615		
CYL Std 1 [%DIFF]		-2.0000		
CYL Std 2 [MEAN]	0.5150	0.0995		
CYL Std 2 [SD]	0.0028	0.0021		
CYL Std 2 [%CV]	0.5492	2.1320		
CYL Std 2 [%DIFF]		-0.5000		
CYL Std 3 [MEAN]	0.3520	0.2750		
CYL Std 3 [SD]	0.0071	0.0127		
CYL Std 3 [%CV]	2.0088	4.6283		
CYL Std 3 [%DIFF]		10.0000		
CYL Std 4 [MEAN]	0.2800	0.4525		
CYL Std 4 [SD]	0.0057	0.0191		
CYL Std 4 [%CV]	2.0203	4.2192		
CYL Std 4 [%DIFF]		-9.5000		

Name	Absorbance	Concentration	Interpretation	Position	
CYL Std 5 [MEAN]	0.1960	0.9815			
CYL Std 5 [SD]	0.0226	0.2440			
CYL Std 5 [%CV]	11.5446	24.8550			
CYL Std 5 [%DIFF]		-1.8500			
CYL Std 6 [MEAN]	0.1370				
CYL Std 6 [SD]	0.0057				
CYL Std 6 [%CV]	4.1291				
CYL QCS [MEAN]	0.2025	0.8920			
CYL QCS [SD]	0.0021	0.0198			
CYL QCS [%CV]	1.0476	2.2196			

Assay Curve

y = (A-D)/(1+(x/C)^B) + D
Weight: NONE
A = 0.79024
B = 0.91749
C = 0.16502
D = 0.077520
R2 coef = 0.99862
50% = 0.210

