



Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC46387	Chain O'Lakes SP - Sand Lake Beach	8/25/2025	8/27/2025	< 0.10
AC46388	Ouabache SP - Kunkel Lake Beach	8/25/2025	8/27/2025	< 0.10
AC46389	Summit Lake SP - Summit Lake Beach	8/25/2025	8/27/2025	< 0.10
AC46390	Potato Creek SP - Worster Lake Beach	8/26/2025	8/27/2025	< 0.10
AC46391	Mississinewa Lake - Miami SRA Beach	8/26/2025	8/27/2025	< 0.10
AC46392	Salamonie Lake - Lost Bridge West SRA Beach	8/26/2025	8/27/2025	< 0.10
AC46393	Potato Creek SP - Worster Lake Beach (Field Duplicate)	8/26/2025	8/27/2025	< 0.10
AC46394	Field Blank	8/26/2025	8/27/2025	< 0.10
AC46395	Ferdinand State Forest - Ferdinand Lake Beach	8/25/2025	8/27/2025	< 0.10
AC46396	Patoka Lake - Newton Stewart SRA	8/25/2025	8/27/2025	< 0.10
AC46418	Ft Ben Harrison SP - Dog Lake	8/25/2025	8/27/2025	0.56

Test Report (by Request)

Test Information

Request: 8/27/2025 6:53:55 PM
Date: 8/27/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	1.046 Abs	0.000 µg/L	R^2=0.99811, 103.0		0.000	Kit:250796
CYL Std 0	CYLINDROSPERMOPSIN	0.983 Abs [1.0145] {4.4 C	0.014 µg/L [0.007]	R^2=0.99811, 96.84		0.000	Kit:250796
CYL Std 1	CYLINDROSPERMOPSIN	0.878 Abs	0.074 µg/L	R^2=0.99811, 86.50		0.050	Kit:250796
CYL Std 1	CYLINDROSPERMOPSIN	0.922 Abs [0.9000] {3.5 C	0.048 µg/L [0.061]	R^2=0.99811, 90.83		0.050	Kit:250796
CYL Std 2	CYLINDROSPERMOPSIN	0.832 Abs	0.104 µg/L	R^2=0.99811, 81.97		0.100	Kit:250796
CYL Std 2	CYLINDROSPERMOPSIN	0.859 Abs [0.8455] {2.3 C	0.086 µg/L [0.095]	R^2=0.99811, 84.63		0.100	Kit:250796
CYL Std 3	CYLINDROSPERMOPSIN	0.696 Abs	0.216 µg/L	R^2=0.99811, 68.57		0.250	Kit:250796
CYL Std 3	CYLINDROSPERMOPSIN	0.661 Abs [0.6785] {3.6 C	0.252 µg/L [0.234]	R^2=0.99811, 65.12		0.250	Kit:250796
CYL Std 4	CYLINDROSPERMOPSIN	0.482 Abs	0.533 µg/L	R^2=0.99811, 47.48		0.500	Kit:250796
CYL Std 4	CYLINDROSPERMOPSIN	0.480 Abs [0.4810] {0.3 C	0.537 µg/L [0.535]	R^2=0.99811, 47.29		0.500	Kit:250796
CYL Std 5	CYLINDROSPERMOPSIN	0.358 Abs	0.941 µg/L	R^2=0.99811, 35.27		1.000	Kit:250796
CYL Std 5	CYLINDROSPERMOPSIN	0.337 Abs [0.3475] {4.3 C	1.051 µg/L [0.996]	R^2=0.99811, 33.20		1.000	Kit:250796
CYL Std 6	CYLINDROSPERMOPSIN	0.245 Abs	1.899 µg/L	R^2=0.99811, 24.13		2.000	Kit:250796
CYL Std 6	CYLINDROSPERMOPSIN	0.236 Abs [0.2405] {2.6 C	> 2.000 µg/L [1.89	23.251 %Abs		2.000	Kit:250796
CYL QCS	CYLINDROSPERMOPSIN	0.384 Abs	0.827 µg/L	37.833 %Abs			Kit:250796
CYL QCS	CYLINDROSPERMOPSIN	0.415 Abs [0.3995] {5.5 C	0.715 µg/L [0.771]	40.887 %Abs [39.3			Kit:250796

Note

* A - Abs > 3; IA - Initial Abs; DA - Delta Abs; SD - SD of Abs; LR - Linear Range; [...] - Mean result of duplicate tests
* Generated by software version (6.4.1.1171/1085/1.00/0.95) 8/27/2025 6:57:05 PM

Signature *David Jordan*

David Jordan 8/27/2025

Test Information

Request: 8/27/2025 6:55:11 PM
Date: 8/27/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB (CYL)	CYLINDROSPERMOPSIN	0.971 Abs	0.021 µg/L	Low, 95.665 %Abs		0.050 - 2.000	Kit:25079C
LRB (CYL)	CYLINDROSPERMOPSIN	0.951 Abs [0.9610] {1.5 C	0.032 µg/L [0.027]	Low, 93.695 %Abs		0.050 - 2.000	Kit:25079C
LFB (CYL)	CYLINDROSPERMOPSIN	0.458 Abs	0.591 µg/L	45.123 %Abs		0.050 - 2.000	Kit:25079C
LFB (CYL)	CYLINDROSPERMOPSIN	0.450 Abs [0.4540] {1.2 C	0.611 µg/L [0.601]	44.335 %Abs [44.7		0.050 - 2.000	Kit:25079C
AC46387	CYLINDROSPERMOPSIN	0.938 Abs	0.039 µg/L	Low, 92.414 %Abs		0.050 - 2.000	Kit:25079C
AC46387	CYLINDROSPERMOPSIN	0.957 Abs [0.9475] {1.4 C	0.029 µg/L [0.034]	Low, 94.286 %Abs		0.050 - 2.000	Kit:25079C
AC46388	CYLINDROSPERMOPSIN	1.007 Abs	0.001 µg/L	Low, 99.212 %Abs		0.050 - 2.000	Kit:25079C
AC46388	CYLINDROSPERMOPSIN	0.986 Abs [0.9965] {1.5 C	0.013 µg/L [0.007]	Low, 97.143 %Abs		0.050 - 2.000	Kit:25079C
AC46389	CYLINDROSPERMOPSIN	0.954 Abs	0.030 µg/L	Low, 93.990 %Abs		0.050 - 2.000	Kit:25079C
AC46389	CYLINDROSPERMOPSIN	0.959 Abs [0.9565] {0.4 C	0.027 µg/L [0.029]	Low, 94.483 %Abs		0.050 - 2.000	Kit:25079C
AC46389MS	CYLINDROSPERMOPSIN	0.494 Abs	0.507 µg/L	48.670 %Abs		0.050 - 2.000	Kit:25079C
AC46389MS	CYLINDROSPERMOPSIN	0.512 Abs [0.5030] {2.5 C	0.470 µg/L [0.489]	50.443 %Abs [49.5		0.050 - 2.000	Kit:25079C
AC46389MSD	CYLINDROSPERMOPSIN	0.465 Abs	0.573 µg/L	45.813 %Abs		0.050 - 2.000	Kit:25079C
AC46389MSD	CYLINDROSPERMOPSIN	0.464 Abs [0.4645] {0.2 C	0.575 µg/L [0.574]	45.714 %Abs [45.7		0.050 - 2.000	Kit:25079C
AC46390	CYLINDROSPERMOPSIN	1.006 Abs	0.001 µg/L	Low, 99.113 %Abs		0.050 - 2.000	Kit:25079C
AC46390	CYLINDROSPERMOPSIN	1.000 Abs [1.0030] {0.4 C	0.005 µg/L [0.003]	Low, 98.522 %Abs		0.050 - 2.000	Kit:25079C
AC46391	CYLINDROSPERMOPSIN	0.987 Abs	0.012 µg/L	Low, 97.241 %Abs		0.050 - 2.000	Kit:25079C
AC46391	CYLINDROSPERMOPSIN	0.993 Abs [0.9900] {0.4 C	0.009 µg/L [0.011]	Low, 97.833 %Abs		0.050 - 2.000	Kit:25079C
AC46392	CYLINDROSPERMOPSIN	0.957 Abs	0.029 µg/L	Low, 94.286 %Abs		0.050 - 2.000	Kit:25079C
AC46392	CYLINDROSPERMOPSIN	1.002 Abs [0.9795] {3.2 C	0.004 µg/L [0.017]	Low, 98.719 %Abs		0.050 - 2.000	Kit:25079C
AC46393	CYLINDROSPERMOPSIN	0.949 Abs	0.033 µg/L	Low, 93.498 %Abs		0.050 - 2.000	Kit:25079C
AC46393	CYLINDROSPERMOPSIN	0.978 Abs [0.9635] {2.1 C	0.017 µg/L [0.025]	Low, 96.355 %Abs		0.050 - 2.000	Kit:25079C
AC46394	CYLINDROSPERMOPSIN	1.016 Abs	0.000 µg/L	Low, 100.000 %Abs		0.050 - 2.000	Kit:25079C
AC46394	CYLINDROSPERMOPSIN	0.925 Abs [0.9705] {6.6 C	0.046 µg/L [0.023]	Low, 91.133 %Abs		0.050 - 2.000	Kit:25079C
AC46395	CYLINDROSPERMOPSIN	0.998 Abs	0.006 µg/L	Low, 98.325 %Abs		0.050 - 2.000	Kit:25079C
AC46395	CYLINDROSPERMOPSIN	0.968 Abs [0.9830] {2.2 C	0.023 µg/L [0.015]	Low, 95.369 %Abs		0.050 - 2.000	Kit:25079C
AC46396	CYLINDROSPERMOPSIN	0.942 Abs	0.037 µg/L	Low, 92.808 %Abs		0.050 - 2.000	Kit:25079C
AC46396	CYLINDROSPERMOPSIN	0.973 Abs [0.9575] {2.3 C	0.020 µg/L [0.029]	Low, 95.862 %Abs		0.050 - 2.000	Kit:25079C
AC46418	CYLINDROSPERMOPSIN	0.456 Abs	0.596 µg/L	44.926 %Abs		0.050 - 2.000	Kit:25079C
AC46418	CYLINDROSPERMOPSIN	0.489 Abs [0.4725] {4.9 C	0.517 µg/L [0.557]	48.177 %Abs [46.5		0.050 - 2.000	Kit:25079C

Note

Signature

David Jordan

David Jordan 8/27/2025

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
8/27/2025 6:53:55 PM				
CYL Std 0	1.046 Abs	0.000 µg/L	R ² =0.99811, 103.054 %Abs	RK1:23->A01@2
CYL Std 0	0.983 Abs [1.0145] {4.4 CV}	0.014 µg/L [0.007] {141.4 CV}	R ² =0.99811, 96.847 %Abs	RK1:23->B01@2
CYL Std 1	0.878 Abs	0.074 µg/L	R ² =0.99811, 86.502 %Abs	RK1:24->C01@2
CYL Std 1	0.922 Abs [0.9000] {3.5 CV}	0.048 µg/L [0.061] {30.1 CV}	R ² =0.99811, 90.837 %Abs	RK1:24->D01@2
CYL Std 2	0.832 Abs	0.104 µg/L	R ² =0.99811, 81.970 %Abs	RK1:25->E01@2
CYL Std 2	0.859 Abs [0.8455] {2.3 CV}	0.086 µg/L [0.095] {13.4 CV}	R ² =0.99811, 84.631 %Abs	RK1:25->F01@3
CYL Std 3	0.696 Abs	0.216 µg/L	R ² =0.99811, 68.571 %Abs	RK1:26->G01@3
CYL Std 3	0.661 Abs [0.6785] {3.6 CV}	0.252 µg/L [0.234] {10.9 CV}	R ² =0.99811, 65.123 %Abs	RK1:26->H01@3
CYL Std 4	0.482 Abs	0.533 µg/L	R ² =0.99811, 47.488 %Abs	RK1:27->A02@2
CYL Std 4	0.480 Abs [0.4810] {0.3 CV}	0.537 µg/L [0.535] {0.5 CV}	R ² =0.99811, 47.291 %Abs	RK1:27->B02@2
CYL Std 5	0.358 Abs	0.941 µg/L	R ² =0.99811, 35.271 %Abs	RK1:28->C02@2
CYL Std 5	0.337 Abs [0.3475] {4.3 CV}	1.051 µg/L [0.996] {7.8 CV}	R ² =0.99811, 33.202 %Abs	RK1:28->D02@2
CYL Std 6	0.245 Abs	1.899 µg/L	R ² =0.99811, 24.138 %Abs	RK1:29->E02@2
CYL Std 6	0.236 Abs [0.2405] {2.6 CV}	> 2.000 µg/L [1.899]	23.251 %Abs	RK1:29->F02@3

8/27/2025 6:53:55 PM				
CYL QCS	0.384 Abs	0.827 µg/L	37.833 %Abs	RK1:30->G02@3
CYL QCS	0.415 Abs [0.3995] {5.5 CV}	0.715 µg/L [0.771] {10.3 CV}	40.887 %Abs [39.360 %Abs]	RK1:30->H02@3

Statistic				
CYL Std 0 [MEAN]	1.0145	0.0070		
CYL Std 0 [SD]	0.0445	0.0099		
CYL Std 0 [%CV]	4.3911	141.4214		
CYL Std 1 [MEAN]	0.9000	0.0610		
CYL Std 1 [SD]	0.0311	0.0184		
CYL Std 1 [%CV]	3.4570	30.1390		
CYL Std 1 [%DIFF]		22.0000		
CYL Std 2 [MEAN]	0.8455	0.0950		
CYL Std 2 [SD]	0.0191	0.0127		
CYL Std 2 [%CV]	2.2581	13.3978		
CYL Std 2 [%DIFF]		-5.0000		
CYL Std 3 [MEAN]	0.6785	0.2340		
CYL Std 3 [SD]	0.0247	0.0255		
CYL Std 3 [%CV]	3.6476	10.8786		
CYL Std 3 [%DIFF]		-6.4000		
CYL Std 4 [MEAN]	0.4810	0.5350		
CYL Std 4 [SD]	0.0014	0.0028		
CYL Std 4 [%CV]	0.2940	0.5287		
CYL Std 4 [%DIFF]		7.0000		

Name	Absorbance	Concentration	Interpretation	Position	
CYL Std 5 [MEAN]	0.3475	0.9960			
CYL Std 5 [SD]	0.0148	0.0778			
CYL Std 5 [%CV]	4.2732	7.8094			
CYL Std 5 [%DIFF]		-0.4000			
CYL Std 6 [MEAN]	0.2405				
CYL Std 6 [SD]	0.0064				
CYL Std 6 [%CV]	2.6461				
CYL QCS [MEAN]	0.3995	0.7710			
CYL QCS [SD]	0.0219	0.0792			
CYL QCS [%CV]	5.4869	10.2719			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
Weight: NONE
A = 1.0081
B = 1.0749
C = 0.39009
D = 0.10574
R2 coef = 0.99811
50% = 0.479

