



Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyze	Conc. (ppb)
AC45783	Cecil M. Harden Lake - Raccoon Lake SRA Beach	7/7/2025	7/9/2025	< 0.10
AC45784	Cagles Mill Lake - Lieber SRA Beach	7/7/2025	7/9/2025	< 0.10
AC45785	Monroe Lake - Fairfax SRA Beach	7/7/2025	7/9/2025	< 0.10
AC45786	Monroe Lake - Paynetown SRA Beach	7/7/2025	7/9/2025	< 0.10
AC45787	Starve Hollow SRA - Starve Hollow Lake Beach	7/7/2025	7/9/2025	< 0.10
AC45788	Whitewater Memorial SP - Whitewater Lake Beach	7/8/2025	7/9/2025	< 0.10
AC45789	Brookville Lake - Quakertown SRA Beach	7/8/2025	7/9/2025	< 0.10
AC45790	Brookville Lake - Mounds SRA Beach	7/8/2025	7/9/2025	< 0.10
AC45791	Hardy Lake SRA - Hardy Lake SRA Beach	7/8/2025	7/9/2025	< 0.10
AC45792	Deam Lake SRA - Deam Lake Beach	7/8/2025	7/9/2025	< 0.10
AC45793	Hardy Lake SRA - Hardy Lake SRA Beach (Field Duplicate)	7/8/2025	7/9/2025	< 0.10
AC45794	Field Blank	7/8/2025	7/9/2025	< 0.10
AC45795	Ft. Ben Harrison SP Dog Lake	7/7/2025	7/9/2025	< 0.10

Test Information

Request: 7/9/2025 5:53:45 PM
Date: 7/9/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	0.944 Abs	0.000 µg/L	R^2=0.99955, 99.8%		0.000	Kit:25079C
CYL Std 0	CYLINDROSPERMOPSIN	0.945 Abs [0.9445] {0.1 C	0.000 µg/L [0.000]	R^2=0.99955, 100.0%		0.000	Kit:25079C
CYL Std 1	CYLINDROSPERMOPSIN	0.817 Abs	0.039 µg/L	R^2=0.99955, 86.4%		0.050	Kit:25079C
CYL Std 1	CYLINDROSPERMOPSIN	0.784 Abs [0.8005] {2.9 C	0.055 µg/L [0.047]	R^2=0.99955, 82.9%		0.050	Kit:25079C
CYL Std 2	CYLINDROSPERMOPSIN	0.696 Abs	0.110 µg/L	R^2=0.99955, 73.6%		0.100	Kit:25079C
CYL Std 2	CYLINDROSPERMOPSIN	0.710 Abs [0.7030] {1.4 C	0.099 µg/L [0.105]	R^2=0.99955, 75.1%		0.100	Kit:25079C
CYL Std 3	CYLINDROSPERMOPSIN	0.561 Abs	0.253 µg/L	R^2=0.99955, 59.3%		0.250	Kit:25079C
CYL Std 3	CYLINDROSPERMOPSIN	0.554 Abs [0.5575] {0.9 C	0.264 µg/L [0.259]	R^2=0.99955, 58.6%		0.250	Kit:25079C
CYL Std 4	CYLINDROSPERMOPSIN	0.457 Abs	0.465 µg/L	R^2=0.99955, 48.3%		0.500	Kit:25079C
CYL Std 4	CYLINDROSPERMOPSIN	0.447 Abs [0.4520] {1.6 C	0.494 µg/L [0.480]	R^2=0.99955, 47.3%		0.500	Kit:25079C
CYL Std 5	CYLINDROSPERMOPSIN	0.350 Abs	0.929 µg/L	R^2=0.99955, 37.0%		1.000	Kit:25079C
CYL Std 5	CYLINDROSPERMOPSIN	0.330 Abs [0.3400] {4.2 C	1.077 µg/L [1.003]	R^2=0.99955, 34.9%		1.000	Kit:25079C
CYL Std 6	CYLINDROSPERMOPSIN	0.285 Abs	1.558 µg/L	R^2=0.99955, 30.1%		2.000	Kit:25079C
CYL Std 6	CYLINDROSPERMOPSIN	0.228 Abs [0.2565] {15.7	> 2.000 µg/L [1.55]	24.127 %Abs		2.000	Kit:25079C
CYL QCS	CYLINDROSPERMOPSIN	0.355 Abs	0.897 µg/L	37.566 %Abs			Kit:25079C
CYL QCS	CYLINDROSPERMOPSIN	0.353 Abs [0.3540] {0.4 C	0.910 µg/L [0.904]	37.354 %Abs [37.4			Kit:25079C

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) 7/9/2025 6:01:42 PM

Signature 

David Jordan 7/9/2025

Test Information

Request: 7/9/2025 5:55:20 PM

Date: 7/9/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB (CYL)	CYLINDROSPERMOPSIN	0.930 Abs	0.003 µg/L	Low, 98.413 %Abs		0.050 - 2.000	Kit:25079C
LRB (CYL)	CYLINDROSPERMOPSIN	0.903 Abs [0.9165] {2.1 C	0.009 µg/L [0.006]	Low, 95.556 %Abs		0.050 - 2.000	Kit:25079C
LFB (CYL)	CYLINDROSPERMOPSIN	0.433 Abs	0.538 µg/L	45.820 %Abs		0.050 - 2.000	Kit:25079C
LFB (CYL)	CYLINDROSPERMOPSIN	0.395 Abs [0.4140] {6.5 C	0.684 µg/L [0.611]	41.799 %Abs [43.8		0.050 - 2.000	Kit:25079C
AC45783	CYLINDROSPERMOPSIN	0.901 Abs	0.010 µg/L	Low, 95.344 %Abs		0.050 - 2.000	Kit:25079C
AC45783	CYLINDROSPERMOPSIN	0.889 Abs [0.8950] {0.9 C	0.013 µg/L [0.012]	Low, 94.074 %Abs		0.050 - 2.000	Kit:25079C
AC45784	CYLINDROSPERMOPSIN	0.928 Abs	0.003 µg/L	Low, 98.201 %Abs		0.050 - 2.000	Kit:25079C
AC45784	CYLINDROSPERMOPSIN	0.930 Abs [0.9290] {0.2 C	0.003 µg/L [0.003]	Low, 98.413 %Abs		0.050 - 2.000	Kit:25079C
AC45785	CYLINDROSPERMOPSIN	0.911 Abs	0.007 µg/L	Low, 96.402 %Abs		0.050 - 2.000	Kit:25079C
AC45785	CYLINDROSPERMOPSIN	0.904 Abs [0.9075] {0.5 C	0.009 µg/L [0.008]	Low, 95.661 %Abs		0.050 - 2.000	Kit:25079C
AC45786	CYLINDROSPERMOPSIN	0.934 Abs	0.002 µg/L	Low, 98.836 %Abs		0.050 - 2.000	Kit:25079C
AC45786	CYLINDROSPERMOPSIN	0.901 Abs [0.9175] {2.5 C	0.010 µg/L [0.006]	Low, 95.344 %Abs		0.050 - 2.000	Kit:25079C
AC45787	CYLINDROSPERMOPSIN	0.915 Abs	0.006 µg/L	Low, 96.825 %Abs		0.050 - 2.000	Kit:25079C
AC45787	CYLINDROSPERMOPSIN	0.888 Abs [0.9015] {2.1 C	0.013 µg/L [0.010]	Low, 93.968 %Abs		0.050 - 2.000	Kit:25079C
AC45787MS	CYLINDROSPERMOPSIN	0.422 Abs	0.576 µg/L	44.656 %Abs		0.050 - 2.000	Kit:25079C
AC45787MS	CYLINDROSPERMOPSIN	0.408 Abs [0.4150] {2.4 C	0.629 µg/L [0.603]	43.175 %Abs [43.9		0.050 - 2.000	Kit:25079C
AC45787MSD	CYLINDROSPERMOPSIN	0.415 Abs	0.602 µg/L	43.915 %Abs		0.050 - 2.000	Kit:25079C
AC45787MSD	CYLINDROSPERMOPSIN	0.409 Abs [0.4120] {1.0 C	0.625 µg/L [0.614]	43.280 %Abs [43.5		0.050 - 2.000	Kit:25079C
AC45788	CYLINDROSPERMOPSIN	0.926 Abs	0.004 µg/L	Low, 97.989 %Abs		0.050 - 2.000	Kit:25079C
AC45788	CYLINDROSPERMOPSIN	0.887 Abs [0.9065] {3.0 C	0.014 µg/L [0.009]	Low, 93.862 %Abs		0.050 - 2.000	Kit:25079C
AC45789	CYLINDROSPERMOPSIN	0.982 Abs	0.000 µg/L	Low, 103.915 %Abs		0.050 - 2.000	Kit:25079C
AC45789	CYLINDROSPERMOPSIN	0.903 Abs [0.9425] {5.9 C	0.009 µg/L [0.005]	Low, 95.556 %Abs		0.050 - 2.000	Kit:25079C
AC45790	CYLINDROSPERMOPSIN	0.927 Abs	0.003 µg/L	Low, 98.095 %Abs		0.050 - 2.000	Kit:25079C
AC45790	CYLINDROSPERMOPSIN	0.927 Abs [0.9270] {0.0 C	0.003 µg/L [0.003]	Low, 98.095 %Abs		0.050 - 2.000	Kit:25079C
AC45791	CYLINDROSPERMOPSIN	0.904 Abs	0.009 µg/L	Low, 95.661 %Abs		0.050 - 2.000	Kit:25079C
AC45791	CYLINDROSPERMOPSIN	0.898 Abs [0.9010] {0.5 C	0.011 µg/L [0.010]	Low, 95.026 %Abs		0.050 - 2.000	Kit:25079C
AC45792	CYLINDROSPERMOPSIN	0.889 Abs	0.013 µg/L	Low, 94.074 %Abs		0.050 - 2.000	Kit:25079C
AC45792	CYLINDROSPERMOPSIN	0.892 Abs [0.8905] {0.2 C	0.012 µg/L [0.013]	Low, 94.392 %Abs		0.050 - 2.000	Kit:25079C
AC45793	CYLINDROSPERMOPSIN	0.928 Abs	0.003 µg/L	Low, 98.201 %Abs		0.050 - 2.000	Kit:25079C
AC45793	CYLINDROSPERMOPSIN	0.854 Abs [0.8910] {5.9 C	0.025 µg/L [0.014]	Low, 90.370 %Abs		0.050 - 2.000	Kit:25079C
AC45794	CYLINDROSPERMOPSIN	0.898 Abs	0.011 µg/L	Low, 95.026 %Abs		0.050 - 2.000	Kit:25079C
AC45794	CYLINDROSPERMOPSIN	0.898 Abs [0.8980] {0.0 C	0.011 µg/L [0.011]	Low, 95.026 %Abs		0.050 - 2.000	Kit:25079C
AC45795	CYLINDROSPERMOPSIN	0.867 Abs	0.020 µg/L	Low, 91.746 %Abs		0.050 - 2.000	Kit:25079C
AC45795	CYLINDROSPERMOPSIN	0.897 Abs [0.8820] {2.4 C	0.011 µg/L [0.016]	Low, 94.921 %Abs		0.050 - 2.000	Kit:25079C

Note

Signature 

David Jordan 7/9/2025

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
7/9/2025 5:53:45 PM				
CYL Std 0	0.944 Abs	0.000 µg/L	R ² =0.99955, 99.894 %Abs	RK1:23->A01@2
CYL Std 0	0.945 Abs [0.9445] {0.1 CV}	0.000 µg/L [0.000]	R ² =0.99955, 100.000 %Abs	RK1:23->B01@2
CYL Std 1	0.817 Abs	0.039 µg/L	R ² =0.99955, 86.455 %Abs	RK1:24->C01@2
CYL Std 1	0.784 Abs [0.8005] {2.9 CV}	0.055 µg/L [0.047] {24.1 CV}	R ² =0.99955, 82.963 %Abs	RK1:24->D01@2
CYL Std 2	0.696 Abs	0.110 µg/L	R ² =0.99955, 73.651 %Abs	RK1:25->E01@2
CYL Std 2	0.710 Abs [0.7030] {1.4 CV}	0.099 µg/L [0.105] {7.4 CV}	R ² =0.99955, 75.132 %Abs	RK1:25->F01@3
CYL Std 3	0.561 Abs	0.253 µg/L	R ² =0.99955, 59.365 %Abs	RK1:26->G01@3
CYL Std 3	0.554 Abs [0.5575] {0.9 CV}	0.264 µg/L [0.259] {3.0 CV}	R ² =0.99955, 58.624 %Abs	RK1:26->H01@3
CYL Std 4	0.457 Abs	0.465 µg/L	R ² =0.99955, 48.360 %Abs	RK1:27->A02@2
CYL Std 4	0.447 Abs [0.4520] {1.6 CV}	0.494 µg/L [0.480] {4.3 CV}	R ² =0.99955, 47.302 %Abs	RK1:27->B02@2
CYL Std 5	0.350 Abs	0.929 µg/L	R ² =0.99955, 37.037 %Abs	RK1:28->C02@2
CYL Std 5	0.330 Abs [0.3400] {4.2 CV}	1.077 µg/L [1.003] {10.4 CV}	R ² =0.99955, 34.921 %Abs	RK1:28->D02@2
CYL Std 6	0.285 Abs	1.558 µg/L	R ² =0.99955, 30.159 %Abs	RK1:29->E02@2
CYL Std 6	0.228 Abs [0.2565] {15.7 CV}	> 2.000 µg/L [1.558]	24.127 %Abs	RK1:29->F02@3

7/9/2025 5:53:45 PM				
CYL QCS	0.355 Abs	0.897 µg/L	37.566 %Abs	RK1:30->G02@3
CYL QCS	0.353 Abs [0.3540] {0.4 CV}	0.910 µg/L [0.904] {1.0 CV}	37.354 %Abs [37.460 %Abs]	RK1:30->H02@3

Statistic				
CYL Std 0 [MEAN]	0.9445	0.0000		
CYL Std 0 [SD]	0.0007	0.0000		
CYL Std 0 [%CV]	0.0749	0.0000		
CYL Std 1 [MEAN]	0.8005	0.0470		
CYL Std 1 [SD]	0.0233	0.0113		
CYL Std 1 [%CV]	2.9150	24.0717		
CYL Std 1 [%DIFF]		-6.0000		
CYL Std 2 [MEAN]	0.7030	0.1045		
CYL Std 2 [SD]	0.0099	0.0078		
CYL Std 2 [%CV]	1.4082	7.4432		
CYL Std 2 [%DIFF]		4.5000		
CYL Std 3 [MEAN]	0.5575	0.2585		
CYL Std 3 [SD]	0.0049	0.0078		
CYL Std 3 [%CV]	0.8878	3.0090		
CYL Std 3 [%DIFF]		3.4000		
CYL Std 4 [MEAN]	0.4520	0.4795		
CYL Std 4 [SD]	0.0071	0.0205		
CYL Std 4 [%CV]	1.5644	4.2766		
CYL Std 4 [%DIFF]		-4.1000		

Name	Absorbance	Concentration	Interpretation	Position	
CYL Std 5 [MEAN]	0.3400	1.0030			
CYL Std 5 [SD]	0.0141	0.1047			
CYL Std 5 [%CV]	4.1594	10.4339			
CYL Std 5 [%DIFF]		0.3000			
CYL Std 6 [MEAN]	0.2565				
CYL Std 6 [SD]	0.0403				
CYL Std 6 [%CV]	15.7135				
CYL QCS [MEAN]	0.3540	0.9035			
CYL QCS [SD]	0.0014	0.0092			
CYL QCS [%CV]	0.3995	1.0174			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
Weight: NONE
A = 0.94634
B = 0.83011
C = 0.30128
D = 0.11590
R2 coef = 0.99955
50% = 0.424

