



Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC44202	Field Blank	5/12/2025	5/14/2025	< 0.10
AC44203	Ft. Ben Harrison SP Dog Lake	5/12/2025	5/14/2025	< 0.10

Test Report (by Request)

Test Information

Request: 5/14/2025 5:19:31 PM
Date: 5/14/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	1.419 Abs	0.003 µg/L	R^2=0.99954, 98.54		0.000	Kit:240520
CYL Std 0	CYLINDROSPERMOPSIN	1.461 Abs [1.4400] {2.1 C	0.000 µg/L [0.002]	R^2=0.99954, 101.4		0.000	Kit:240520
CYL Std 1	CYLINDROSPERMOPSIN	1.204 Abs	0.041 µg/L	R^2=0.99954, 83.61		0.050	Kit:240520
CYL Std 1	CYLINDROSPERMOPSIN	1.144 Abs [1.1740] {3.6 C	0.055 µg/L [0.048]	R^2=0.99954, 79.44		0.050	Kit:240520
CYL Std 2	CYLINDROSPERMOPSIN	0.973 Abs	0.106 µg/L	R^2=0.99954, 67.56		0.100	Kit:240520
CYL Std 2	CYLINDROSPERMOPSIN	0.979 Abs [0.9760] {0.4 C	0.104 µg/L [0.105]	R^2=0.99954, 67.98		0.100	Kit:240520
CYL Std 3	CYLINDROSPERMOPSIN	0.723 Abs	0.238 µg/L	R^2=0.99954, 50.20		0.250	Kit:240520
CYL Std 3	CYLINDROSPERMOPSIN	0.694 Abs [0.7085] {2.9 C	0.261 µg/L [0.250]	R^2=0.99954, 48.15		0.250	Kit:240520
CYL Std 4	CYLINDROSPERMOPSIN	0.504 Abs	0.497 µg/L	R^2=0.99954, 35.00		0.500	Kit:240520
CYL Std 4	CYLINDROSPERMOPSIN	0.522 Abs [0.5130] {2.5 C	0.465 µg/L [0.481]	R^2=0.99954, 36.25		0.500	Kit:240520
CYL Std 5	CYLINDROSPERMOPSIN	0.341 Abs	1.013 µg/L	R^2=0.99954, 23.68		1.000	Kit:240520
CYL Std 5	CYLINDROSPERMOPSIN	0.326 Abs [0.3335] {3.2 C	1.099 µg/L [1.056]	R^2=0.99954, 22.63		1.000	Kit:240520
CYL Std 6	CYLINDROSPERMOPSIN	0.249 Abs	1.823 µg/L	R^2=0.99954, 17.25		2.000	Kit:240520
CYL Std 6	CYLINDROSPERMOPSIN	0.230 Abs [0.2395] {5.6 C	> 2.000 µg/L [1.82	15.972 %Abs		2.000	Kit:240520
CYL QCS	CYLINDROSPERMOPSIN	0.383 Abs	0.821 µg/L	26.597 %Abs			Kit:240520
CYL QCS	CYLINDROSPERMOPSIN	0.391 Abs [0.3870] {1.5 C	0.791 µg/L [0.806]	27.153 %Abs [26.8			Kit:240520

Note

Signature 

David Jordan 5/14/2025

Test Report (by Request)

Test Information

Request: 5/14/2025 5:20:04 PM
Date: 5/14/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB (CYL)	CYLINDROSPERMOPSIN	1.353 Abs	0.013 µg/L	Low, 93.958 %Abs		0.050 - 2.000	Kit:240520
LRB (CYL)	CYLINDROSPERMOPSIN	1.340 Abs [1.3465] {0.7 C	0.015 µg/L [0.014]	Low, 93.056 %Abs		0.050 - 2.000	Kit:240520
LFB (CYL)	CYLINDROSPERMOPSIN	0.429 Abs	0.669 µg/L	29.792 %Abs		0.050 - 2.000	Kit:240520
LFB (CYL)	CYLINDROSPERMOPSIN	0.419 Abs [0.4240] {1.7 C	0.698 µg/L [0.684]	29.097 %Abs [29.4		0.050 - 2.000	Kit:240520
AC44202	CYLINDROSPERMOPSIN	1.305 Abs	0.021 µg/L	Low, 90.625 %Abs		0.050 - 2.000	Kit:240520
AC44202	CYLINDROSPERMOPSIN	1.336 Abs [1.3205] {1.7 C	0.015 µg/L [0.018]	Low, 92.778 %Abs		0.050 - 2.000	Kit:240520
AC44203	CYLINDROSPERMOPSIN	1.191 Abs	0.043 µg/L	Low, 82.708 %Abs		0.050 - 2.000	Kit:240520
AC44203	CYLINDROSPERMOPSIN	1.161 Abs [1.1760] {1.8 C	0.050 µg/L [0.047]	80.625 %Abs [Low,		0.050 - 2.000	Kit:240520
AC44203MS	CYLINDROSPERMOPSIN	0.424 Abs	0.684 µg/L	29.444 %Abs		0.050 - 2.000	Kit:240520
AC44203MS	CYLINDROSPERMOPSIN	0.467 Abs [0.4455] {6.8 C	0.573 µg/L [0.629]	32.431 %Abs [30.9		0.050 - 2.000	Kit:240520
AC44203MSD	CYLINDROSPERMOPSIN	0.491 Abs	0.522 µg/L	34.097 %Abs		0.050 - 2.000	Kit:240520
AC44203MSD	CYLINDROSPERMOPSIN	0.402 Abs [0.4465] {14.1	0.753 µg/L [0.638]	27.917 %Abs [31.0		0.050 - 2.000	Kit:240520

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) 5/14/2025 5:23:33 PM

Signature 

David Jordan 5/14/2025

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:2405201466

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
5/14/2025 5:19:31 PM				
CYL Std 0	1.419 Abs	0.003 µg/L	R ² =0.99954, 98.542 %Abs	RK1:23->A01@2
CYL Std 0	1.461 Abs [1.4400] {2.1 CV}	0.000 µg/L [0.002] {141.4 CV}	R ² =0.99954, 101.458 %Abs	RK1:23->B01@2
CYL Std 1	1.204 Abs	0.041 µg/L	R ² =0.99954, 83.611 %Abs	RK1:24->C01@2
CYL Std 1	1.144 Abs [1.1740] {3.6 CV}	0.055 µg/L [0.048] {20.6 CV}	R ² =0.99954, 79.444 %Abs	RK1:24->D01@2
CYL Std 2	0.973 Abs	0.106 µg/L	R ² =0.99954, 67.569 %Abs	RK1:25->E01@2
CYL Std 2	0.979 Abs [0.9760] {0.4 CV}	0.104 µg/L [0.105] {1.3 CV}	R ² =0.99954, 67.986 %Abs	RK1:25->F01@3
CYL Std 3	0.723 Abs	0.238 µg/L	R ² =0.99954, 50.208 %Abs	RK1:26->G01@3
CYL Std 3	0.694 Abs [0.7085] {2.9 CV}	0.261 µg/L [0.250] {6.5 CV}	R ² =0.99954, 48.194 %Abs	RK1:26->H01@3
CYL Std 4	0.504 Abs	0.497 µg/L	R ² =0.99954, 35.000 %Abs	RK1:27->A02@2
CYL Std 4	0.522 Abs [0.5130] {2.5 CV}	0.465 µg/L [0.481] {4.7 CV}	R ² =0.99954, 36.250 %Abs	RK1:27->B02@2
CYL Std 5	0.341 Abs	1.013 µg/L	R ² =0.99954, 23.681 %Abs	RK1:28->C02@2
CYL Std 5	0.326 Abs [0.3335] {3.2 CV}	1.099 µg/L [1.056] {5.8 CV}	R ² =0.99954, 22.639 %Abs	RK1:28->D02@2
CYL Std 6	0.249 Abs	1.823 µg/L	R ² =0.99954, 17.292 %Abs	RK1:29->E02@2
CYL Std 6	0.230 Abs [0.2395] {5.6 CV}	> 2.000 µg/L [1.823]	15.972 %Abs	RK1:29->F02@3

5/14/2025 5:19:31 PM				
CYL QCS	0.383 Abs	0.821 µg/L	26.597 %Abs	RK1:30->G02@3
CYL QCS	0.391 Abs [0.3870] {1.5 CV}	0.791 µg/L [0.806] {2.6 CV}	27.153 %Abs [26.875 %Abs]	RK1:30->H02@3

Statistic				
CYL Std 0 [MEAN]	1.4400	0.0015		
CYL Std 0 [SD]	0.0297	0.0021		
CYL Std 0 [%CV]	2.0624	141.4214		
CYL Std 1 [MEAN]	1.1740	0.0480		
CYL Std 1 [SD]	0.0424	0.0099		
CYL Std 1 [%CV]	3.6138	20.6239		
CYL Std 1 [%DIFF]		-4.0000		
CYL Std 2 [MEAN]	0.9760	0.1050		
CYL Std 2 [SD]	0.0042	0.0014		
CYL Std 2 [%CV]	0.4347	1.3469		
CYL Std 2 [%DIFF]		5.0000		
CYL Std 3 [MEAN]	0.7085	0.2495		
CYL Std 3 [SD]	0.0205	0.0163		
CYL Std 3 [%CV]	2.8943	6.5184		
CYL Std 3 [%DIFF]		-0.2000		
CYL Std 4 [MEAN]	0.5130	0.4810		
CYL Std 4 [SD]	0.0127	0.0226		
CYL Std 4 [%CV]	2.4811	4.7042		
CYL Std 4 [%DIFF]		-3.8000		

Name	Absorbance	Concentration	Interpretation	Position	
CYL Std 5 [MEAN]	0.3335	1.0560			
CYL Std 5 [SD]	0.0106	0.0608			
CYL Std 5 [%CV]	3.1804	5.7586			
CYL Std 5 [%DIFF]		5.6000			
CYL Std 6 [MEAN]	0.2395				
CYL Std 6 [SD]	0.0134				
CYL Std 6 [%CV]	5.6096				
CYL QCS [MEAN]	0.3870	0.8060			
CYL QCS [SD]	0.0057	0.0212			
CYL QCS [%CV]	1.4617	2.6319			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.4417
 B = 0.94762
 C = 0.20535
 D = 0.098376
 R2 coef = 0.99954
 50% = 0.240

