



Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC45395	Ft. Ben Harrison SP Dog Lake	6/10/2025	6/11/2025	< 0.10

Test Report (by Request)

Test Information

Request: 6/11/2025 3:04:23 PM
Date: 6/11/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	0.777 Abs	0.000 µg/L	R^2=0.99986, 101.7		0.000	Kit:240520
CYL Std 0	CYLINDROSPERMOPSIN	0.751 Abs [0.7640] {2.4 C	0.002 µg/L [0.001]	R^2=0.99986, 98.25		0.000	Kit:240520
CYL Std 1	CYLINDROSPERMOPSIN	0.589 Abs	0.047 µg/L	R^2=0.99986, 77.05		0.050	Kit:240520
CYL Std 1	CYLINDROSPERMOPSIN	0.572 Abs [0.5805] {2.1 C	0.054 µg/L [0.051]	R^2=0.99986, 74.86		0.050	Kit:240520
CYL Std 2	CYLINDROSPERMOPSIN	0.472 Abs	0.106 µg/L	R^2=0.99986, 61.78		0.100	Kit:240520
CYL Std 2	CYLINDROSPERMOPSIN	0.486 Abs [0.4790] {2.1 C	0.097 µg/L [0.102]	R^2=0.99986, 63.61		0.100	Kit:240520
CYL Std 3	CYLINDROSPERMOPSIN	0.335 Abs	0.241 µg/L	R^2=0.99986, 43.84		0.250	Kit:240520
CYL Std 3	CYLINDROSPERMOPSIN	0.330 Abs [0.3325] {1.1 C	0.249 µg/L [0.245]	R^2=0.99986, 43.15		0.250	Kit:240520
CYL Std 4	CYLINDROSPERMOPSIN	0.230 Abs	0.488 µg/L	R^2=0.99986, 30.10		0.500	Kit:240520
CYL Std 4	CYLINDROSPERMOPSIN	0.221 Abs [0.2255] {2.8 C	0.523 µg/L [0.506]	R^2=0.99986, 28.92		0.500	Kit:240520
CYL Std 5	CYLINDROSPERMOPSIN	0.146 Abs	1.053 µg/L	R^2=0.99986, 19.11		1.000	Kit:240520
CYL Std 5	CYLINDROSPERMOPSIN	0.146 Abs [0.1460] {0.0 C	1.053 µg/L [1.053]	R^2=0.99986, 19.11		1.000	Kit:240520
CYL Std 6	CYLINDROSPERMOPSIN	0.105 Abs	1.864 µg/L	R^2=0.99986, 13.74		2.000	Kit:240520
CYL Std 6	CYLINDROSPERMOPSIN	0.103 Abs [0.1040] {1.4 C	1.930 µg/L [1.897]	R^2=0.99986, 13.48		2.000	Kit:240520
CYL QCS	CYLINDROSPERMOPSIN	0.177 Abs	0.762 µg/L	23.168 %Abs			Kit:240520
CYL QCS	CYLINDROSPERMOPSIN	0.179 Abs [0.1780] {0.8 C	0.748 µg/L [0.755]	23.429 %Abs [23.2			Kit:240520

Note

Signature 

David Jordan 6/11/2025

Test Report (by Request)

Test Information

Request: 6/11/2025 3:45:00 PM
Date: 6/11/2025

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AC45395	CYLINDROSPERMOPSIN	0.677 Abs	0.019 µg/L	Low, 88.613 %Abs		0.050 - 2.000	Kit:240520
AC45395	CYLINDROSPERMOPSIN	0.659 Abs [0.6680] {1.9 C	0.024 µg/L [0.022]	Low, 86.257 %Abs		0.050 - 2.000	Kit:240520
LRB (CYL)	CYLINDROSPERMOPSIN	0.773 Abs	0.000 µg/L	Low, 101.178 %Abs		0.050 - 2.000	Kit:240520
LRB (CYL)	CYLINDROSPERMOPSIN	0.762 Abs [0.7675] {1.0 C	0.000 µg/L [0.000]	Low, 99.738 %Abs		0.050 - 2.000	Kit:240520
LFB (CYL)	CYLINDROSPERMOPSIN	0.218 Abs	0.535 µg/L	28.534 %Abs		0.050 - 2.000	Kit:240520
LFB (CYL)	CYLINDROSPERMOPSIN	0.221 Abs [0.2195] {1.0 C	0.523 µg/L [0.529]	28.927 %Abs [28.7		0.050 - 2.000	Kit:240520
AC45395MS	CYLINDROSPERMOPSIN	0.217 Abs	0.539 µg/L	28.403 %Abs		0.050 - 2.000	Kit:240520
AC45395MS	CYLINDROSPERMOPSIN	0.218 Abs [0.2175] {0.3 C	0.535 µg/L [0.537]	28.534 %Abs [28.4		0.050 - 2.000	Kit:240520
AC45395MSD	CYLINDROSPERMOPSIN	0.236 Abs	0.466 µg/L	30.890 %Abs		0.050 - 2.000	Kit:240520
AC45395MSD	CYLINDROSPERMOPSIN	0.225 Abs [0.2305] {3.4 C	0.507 µg/L [0.487]	29.450 %Abs [30.1		0.050 - 2.000	Kit:240520

Note

Signature

David Jordan

David Jordan 6/11/2025

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	
6/11/2025 3:04:23 PM					
CYL Std 0	0.777 Abs	0.000 µg/L	R^2=0.99986, 101.702 %Abs	RK1:32->A08@2	
CYL Std 0	0.751 Abs [0.7640] {2.4 CV}	0.002 µg/L [0.001] {141.4 CV}	R^2=0.99986, 98.298 %Abs	RK1:32->B08@2	
CYL Std 1	0.589 Abs	0.047 µg/L	R^2=0.99986, 77.094 %Abs	RK1:33->C08@2	
CYL Std 1	0.572 Abs [0.5805] {2.1 CV}	0.054 µg/L [0.051] {9.8 CV}	R^2=0.99986, 74.869 %Abs	RK1:33->D08@2	
CYL Std 2	0.472 Abs	0.106 µg/L	R^2=0.99986, 61.780 %Abs	RK1:34->E08@2	
CYL Std 2	0.486 Abs [0.4790] {2.1 CV}	0.097 µg/L [0.102] {6.3 CV}	R^2=0.99986, 63.613 %Abs	RK1:34->F08@3	
CYL Std 3	0.335 Abs	0.241 µg/L	R^2=0.99986, 43.848 %Abs	RK1:35->G08@3	
CYL Std 3	0.330 Abs [0.3325] {1.1 CV}	0.249 µg/L [0.245] {2.3 CV}	R^2=0.99986, 43.194 %Abs	RK1:35->H08@3	
CYL Std 4	0.230 Abs	0.488 µg/L	R^2=0.99986, 30.105 %Abs	RK1:36->A09@2	
CYL Std 4	0.221 Abs [0.2255] {2.8 CV}	0.523 µg/L [0.506] {4.9 CV}	R^2=0.99986, 28.927 %Abs	RK1:36->B09@2	
CYL Std 5	0.146 Abs	1.053 µg/L	R^2=0.99986, 19.110 %Abs	RK1:37->C09@2	
CYL Std 5	0.146 Abs [0.1460] {0.0 CV}	1.053 µg/L [1.053] {0.0 CV}	R^2=0.99986, 19.110 %Abs	RK1:37->D09@2	
CYL Std 6	0.105 Abs	1.864 µg/L	R^2=0.99986, 13.743 %Abs	RK1:38->E09@2	
CYL Std 6	0.103 Abs [0.1040] {1.4 CV}	1.930 µg/L [1.897] {2.5 CV}	R^2=0.99986, 13.482 %Abs	RK1:38->F09@3	

6/11/2025 3:04:23 PM					
CYL QCS	0.177 Abs	0.762 µg/L	23.168 %Abs	RK1:39->G09@3	
CYL QCS	0.179 Abs [0.1780] {0.8 CV}	0.748 µg/L [0.755] {1.3 CV}	23.429 %Abs [23.298 %Abs]	RK1:39->H09@3	

Statistic					
CYL Std 0 [MEAN]	0.7640	0.0010			
CYL Std 0 [SD]	0.0184	0.0014			
CYL Std 0 [%CV]	2.4064	141.4214			
CYL Std 1 [MEAN]	0.5805	0.0505			
CYL Std 1 [SD]	0.0120	0.0049			
CYL Std 1 [%CV]	2.0708	9.8015			
CYL Std 1 [%DIFF]		1.0000			
CYL Std 2 [MEAN]	0.4790	0.1015			
CYL Std 2 [SD]	0.0099	0.0064			
CYL Std 2 [%CV]	2.0667	6.2699			
CYL Std 2 [%DIFF]		1.5000			
CYL Std 3 [MEAN]	0.3325	0.2450			
CYL Std 3 [SD]	0.0035	0.0057			
CYL Std 3 [%CV]	1.0633	2.3089			
CYL Std 3 [%DIFF]		-2.0000			
CYL Std 4 [MEAN]	0.2255	0.5055			
CYL Std 4 [SD]	0.0064	0.0247			
CYL Std 4 [%CV]	2.8222	4.8959			
CYL Std 4 [%DIFF]		1.1000			

Name	Absorbance	Concentration	Interpretation	Position	
CYL Std 5 [MEAN]	0.1460	1.0530			
CYL Std 5 [SD]	0.0000	0.0000			
CYL Std 5 [%CV]	0.0000	0.0000			
CYL Std 5 [%DIFF]		5.3000			
CYL Std 6 [MEAN]	0.1040	1.8970			
CYL Std 6 [SD]	0.0014	0.0467			
CYL Std 6 [%CV]	1.3598	2.4601			
CYL Std 6 [%DIFF]		-5.1500			
CYL QCS [MEAN]	0.1780	0.7550			
CYL QCS [SD]	0.0014	0.0099			
CYL QCS [%CV]	0.7945	1.3112			

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 0.76378
 B = 0.92339
 C = 0.16351
 D = 0.035355
 R2 coef = 0.99986
 50% = 0.182

