



Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC03080	Ft. Ben Harrison SP Dog Lake	6/13/2023	6/14/2023	< 0.15

Test Report (by Request)

Test Information

Request: 6/14/2023 2:52:06 PM
 Date: 6/14/2023

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	1.262 Abs	0.000 µg/L	R ² =0.99977, 102.7			P23C0657
CYL Std 0	CYLINDROSPERMOPSIN	1.194 Abs [1.2280] {3.9 C	0.005 µg/L [0.003]	R ² =0.99977, 97.23			P23C0657
CYL Std 1	CYLINDROSPERMOPSIN	0.973 Abs	0.045 µg/L	R ² =0.99977, 79.23			P23C0657
CYL Std 1	CYLINDROSPERMOPSIN	0.936 Abs [0.9545] {2.7 C	0.054 µg/L [0.050]	R ² =0.99977, 76.22			P23C0657
CYL Std 2	CYLINDROSPERMOPSIN	0.797 Abs	0.095 µg/L	R ² =0.99977, 64.90			P23C0657
CYL Std 2	CYLINDROSPERMOPSIN	0.770 Abs [0.7835] {2.4 C	0.105 µg/L [0.100]	R ² =0.99977, 62.70			P23C0657
CYL Std 3	CYLINDROSPERMOPSIN	0.517 Abs	0.255 µg/L	R ² =0.99977, 42.10			P23C0657
CYL Std 3	CYLINDROSPERMOPSIN	0.506 Abs [0.5115] {1.5 C	0.265 µg/L [0.260]	R ² =0.99977, 41.20			P23C0657
CYL Std 4	CYLINDROSPERMOPSIN	0.369 Abs	0.452 µg/L	R ² =0.99977, 30.04			P23C0657
CYL Std 4	CYLINDROSPERMOPSIN	0.343 Abs [0.3560] {5.2 C	0.507 µg/L [0.479]	R ² =0.99977, 27.93			P23C0657
CYL Std 5	CYLINDROSPERMOPSIN	0.226 Abs	0.950 µg/L	R ² =0.99977, 18.40			P23C0657
CYL Std 5	CYLINDROSPERMOPSIN	0.213 Abs [0.2195] {4.2 C	1.037 µg/L [0.993]	R ² =0.99977, 17.34			P23C0657
CYL Std 6	CYLINDROSPERMOPSIN	0.139 Abs	1.974 µg/L	R ² =0.99977, 11.31			P23C0657
CYL Std 6	CYLINDROSPERMOPSIN	0.130 Abs [0.1345] {4.7 C	> 2.000 µg/L [1.97	10.586 %Abs			P23C0657
CYL QCS	CYLINDROSPERMOPSIN	0.247 Abs	0.833 µg/L	20.114 %Abs			P23C0657
CYL QCS	CYLINDROSPERMOPSIN	0.246 Abs [0.2465] {0.3 C	0.838 µg/L [0.836]	20.033 %Abs [20.0			P23C0657

Note

Signature *David Jordan*

David Jordan 6/14/2023

* 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 (6.4.1.1139/1085/1.00/0.95) 6/14/2023 4:07:34 PM

Test Report (by Request)

Test Information

 Request: 6/14/2023 3:31:32 PM
 Date: 6/14/2023

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB (CYL)	CYLINDROSPERMOPSIN	1.211 Abs	0.002 µg/L	Low, 98.616 %Abs		0.050 - 2.000	P23C0657
LRB (CYL)	CYLINDROSPERMOPSIN	1.168 Abs [1.1895] {2.6 C	0.008 µg/L [0.005]	Low, 95.114 %Abs		0.050 - 2.000	P23C0657
LFB (CYL)	CYLINDROSPERMOPSIN	0.308 Abs	0.599 µg/L	25.081 %Abs		0.050 - 2.000	P23C0657
LFB (CYL)	CYLINDROSPERMOPSIN	0.297 Abs [0.3025] {2.6 C	0.633 µg/L [0.616]	24.186 %Abs [24.6		0.050 - 2.000	P23C0657
AC03080	CYLINDROSPERMOPSIN	1.061 Abs	0.026 µg/L	Low, 86.401 %Abs		0.050 - 2.000	P23C0657
AC03080	CYLINDROSPERMOPSIN	1.073 Abs [1.0670] {0.8 C	0.024 µg/L [0.025]	Low, 87.378 %Abs		0.050 - 2.000	P23C0657
AC03080MS	CYLINDROSPERMOPSIN	0.324 Abs	0.554 µg/L	26.384 %Abs		0.050 - 2.000	P23C0657
AC03080MS	CYLINDROSPERMOPSIN	0.318 Abs [0.3210] {1.3 C	0.570 µg/L [0.562]	25.896 %Abs [26.1		0.050 - 2.000	P23C0657
AC03080MSD	CYLINDROSPERMOPSIN	0.345 Abs	0.503 µg/L	28.094 %Abs		0.050 - 2.000	P23C0657
AC03080MSD	CYLINDROSPERMOPSIN	0.312 Abs [0.3285] {7.1 C	0.587 µg/L [0.545]	25.407 %Abs [26.7		0.050 - 2.000	P23C0657

Note

 Signature David Jordan

David Jordan 6/14/2023

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: P23C0657

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
6/14/2023 2:52:06 PM				
CYL Std 0	1.262 Abs	0.000 µg/L	R ² =0.99977, 102.769 %Abs	RK1:32->A08@2
CYL Std 0	1.194 Abs [1.2280] {3.9 CV}	0.005 µg/L [0.003] {141.4 CV}	R ² =0.99977, 97.231 %Abs	RK1:32->B08@2
CYL Std 1	0.973 Abs	0.045 µg/L	R ² =0.99977, 79.235 %Abs	RK1:33->C08@2
CYL Std 1	0.936 Abs [0.9545] {2.7 CV}	0.054 µg/L [0.050] {12.9 CV}	R ² =0.99977, 76.221 %Abs	RK1:33->D08@2
CYL Std 2	0.797 Abs	0.095 µg/L	R ² =0.99977, 64.902 %Abs	RK1:34->E08@2
CYL Std 2	0.770 Abs [0.7835] {2.4 CV}	0.105 µg/L [0.100] {7.1 CV}	R ² =0.99977, 62.704 %Abs	RK1:34->F08@3
CYL Std 3	0.517 Abs	0.255 µg/L	R ² =0.99977, 42.101 %Abs	RK1:35->G08@3
CYL Std 3	0.506 Abs [0.5115] {1.5 CV}	0.265 µg/L [0.260] {2.7 CV}	R ² =0.99977, 41.205 %Abs	RK1:35->H08@3
CYL Std 4	0.369 Abs	0.452 µg/L	R ² =0.99977, 30.049 %Abs	RK1:36->A09@2
CYL Std 4	0.343 Abs [0.3560] {5.2 CV}	0.507 µg/L [0.479] {8.1 CV}	R ² =0.99977, 27.932 %Abs	RK1:36->B09@2
CYL Std 5	0.226 Abs	0.950 µg/L	R ² =0.99977, 18.404 %Abs	RK1:37->C09@2
CYL Std 5	0.213 Abs [0.2195] {4.2 CV}	1.037 µg/L [0.993] {6.2 CV}	R ² =0.99977, 17.345 %Abs	RK1:37->D09@2
CYL Std 6	0.139 Abs	1.974 µg/L	R ² =0.99977, 11.319 %Abs	RK1:38->E09@2
CYL Std 6	0.130 Abs [0.1345] {4.7 CV}	> 2.000 µg/L [1.974]	10.586 %Abs	RK1:38->F09@3

6/14/2023 2:52:06 PM				
CYL QCS	0.247 Abs	0.833 µg/L	20.114 %Abs	RK1:39->G09@3
CYL QCS	0.246 Abs [0.2465] {0.3 CV}	0.838 µg/L [0.836] {0.4 CV}	20.033 %Abs [20.073 %Abs]	RK1:39->H09@3

Statistic				
CYL Std 0 [MEAN]	1.2280	0.0025		
CYL Std 0 [SD]	0.0481	0.0035		
CYL Std 0 [%CV]	3.9156	141.4214		
CYL Std 1 [MEAN]	0.9545	0.0495		
CYL Std 1 [SD]	0.0262	0.0064		
CYL Std 1 [%CV]	2.7410	12.8565		
CYL Std 1 [%DIFF]		-1.0000		
CYL Std 2 [MEAN]	0.7835	0.1000		
CYL Std 2 [SD]	0.0191	0.0071		
CYL Std 2 [%CV]	2.4367	7.0711		
CYL Std 2 [%DIFF]		-0.0000		
CYL Std 3 [MEAN]	0.5115	0.2600		
CYL Std 3 [SD]	0.0078	0.0071		
CYL Std 3 [%CV]	1.5207	2.7196		
CYL Std 3 [%DIFF]		4.0000		
CYL Std 4 [MEAN]	0.3560	0.4795		
CYL Std 4 [SD]	0.0184	0.0389		
CYL Std 4 [%CV]	5.1643	8.1107		
CYL Std 4 [%DIFF]		-4.1000		

Name	Absorbance	Concentration	Interpretation	Position
CYL Std 5 [MEAN]	0.2195	0.9935		
CYL Std 5 [SD]	0.0092	0.0615		
CYL Std 5 [%CV]	4.1879	6.1921		
CYL Std 5 [%DIFF]		-0.6500		
CYL Std 6 [MEAN]	0.1345			
CYL Std 6 [SD]	0.0064			
CYL Std 6 [%CV]	4.7316			
CYL QCS [MEAN]	0.2465	0.8355		
CYL QCS [SD]	0.0007	0.0035		
CYL QCS [%CV]	0.2869	0.4232		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.2290
 B = 0.97436
 C = 0.16883
 D = 0.039730
 R2 coef = 0.99977
 50% = 0.181

