



Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB47694	Raccoon Lake SRA	6/28/2021	6/29/2021	< 0.15
AB47693	Cagles Mill Lake Beach	6/28/2021	6/29/2021	< 0.15
AB47697	Whitewater Memorial SP	6/28/2021	6/29/2021	< 0.15
AB47696	Mounds SRA	6/28/2021	6/29/2021	< 0.15
AB47695	Hardy Lake SRA	6/28/2021	6/29/2021	< 0.15
AB47698	Mounds SRA (Field Duplicate)	6/28/2021	6/29/2021	< 0.15
AB47699	Field Blank	6/28/2021	6/29/2021	< 0.15
AB47700	Ft. Ben Harrison SP Dog Lake - East	6/28/2021	6/29/2021	< 0.15

Test Report (by Request)

Test Information

 Request: 6/29/2021 2:33:30 PM
 Date: 6/29/2021

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	0.990 Abs	0.000 µg/L	R ² =0.99821, 100.8			20H3911
CYL Std 0	CYLINDROSPERMOPSIN	0.973 Abs [0.9815] {1.2 C	0.002 µg/L [0.001]	R ² =0.99821, 99.08			20H3911
CYL Std 1	CYLINDROSPERMOPSIN	0.846 Abs	0.045 µg/L	R ² =0.99821, 86.15			20H3911
CYL Std 1	CYLINDROSPERMOPSIN	0.845 Abs [0.8455] {0.1 C	0.046 µg/L [0.046]	R ² =0.99821, 86.04			20H3911
CYL Std 2	CYLINDROSPERMOPSIN	0.736 Abs	0.102 µg/L	R ² =0.99821, 74.94			20H3911
CYL Std 2	CYLINDROSPERMOPSIN	0.740 Abs [0.7380] {0.4 C	0.099 µg/L [0.101]	R ² =0.99821, 75.35			20H3911
CYL Std 3	CYLINDROSPERMOPSIN	0.547 Abs	0.271 µg/L	R ² =0.99821, 55.70			20H3911
CYL Std 3	CYLINDROSPERMOPSIN	0.539 Abs [0.5430] {1.0 C	0.281 µg/L [0.276]	R ² =0.99821, 54.88			20H3911
CYL Std 4	CYLINDROSPERMOPSIN	0.441 Abs	0.445 µg/L	R ² =0.99821, 44.90			20H3911
CYL Std 4	CYLINDROSPERMOPSIN	0.431 Abs [0.4360] {1.6 C	0.467 µg/L [0.456]	R ² =0.99821, 43.85			20H3911
CYL Std 5	CYLINDROSPERMOPSIN	0.289 Abs	0.975 µg/L	R ² =0.99821, 29.43			20H3911
CYL Std 5	CYLINDROSPERMOPSIN	0.279 Abs [0.2840] {2.5 C	1.035 µg/L [1.005]	R ² =0.99821, 28.41			20H3911
CYL Std 6	CYLINDROSPERMOPSIN	0.181 Abs	> 2.000 µg/L	18.432 %Abs			20H3911
CYL Std 6	CYLINDROSPERMOPSIN	0.181 Abs [0.1810] {0.0 C	> 2.000 µg/L	18.432 %Abs			20H3911
CYL QCS	CYLINDROSPERMOPSIN	0.338 Abs	0.743 µg/L	34.420 %Abs			20H3911
CYL QCS	CYLINDROSPERMOPSIN	0.353 Abs [0.3455] {3.1 C	0.687 µg/L [0.715]	35.947 %Abs [35.1			20H3911

Note

Signature

David Jordan 6/29/2021

Test Report (by Request)

Test Information

 Request: 6/29/2021 3:06:05 PM
 Date: 6/29/2021

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
AB47694	CYLINDROSPERMOPSIN	0.947 Abs	0.009 µg/L	Low, 96.436 %Abs		0.050 - 2.000	20H3911
AB47694	CYLINDROSPERMOPSIN	0.916 Abs [0.9315] {2.4 C	0.019 µg/L [0.014]	Low, 93.279 %Abs		0.050 - 2.000	20H3911
AB47694MS	CYLINDROSPERMOPSIN	0.378 Abs	0.605 µg/L	38.493 %Abs		0.050 - 2.000	20H3911
AB47694MS	CYLINDROSPERMOPSIN	0.363 Abs [0.3705] {2.9 C	0.652 µg/L [0.628]	36.965 %Abs [37.7		0.050 - 2.000	20H3911
AB47694MSD	CYLINDROSPERMOPSIN	0.364 Abs	0.649 µg/L	37.067 %Abs		0.050 - 2.000	20H3911
AB47694MSD	CYLINDROSPERMOPSIN	0.356 Abs [0.3600] {1.6 C	0.676 µg/L [0.663]	36.253 %Abs [36.6		0.050 - 2.000	20H3911
AB47693	CYLINDROSPERMOPSIN	0.909 Abs	0.021 µg/L	Low, 92.566 %Abs		0.050 - 2.000	20H3911
AB47693	CYLINDROSPERMOPSIN	0.913 Abs [0.9110] {0.3 C	0.020 µg/L [0.021]	Low, 92.974 %Abs		0.050 - 2.000	20H3911
AB47697	CYLINDROSPERMOPSIN	0.912 Abs	0.020 µg/L	Low, 92.872 %Abs		0.050 - 2.000	20H3911
AB47697	CYLINDROSPERMOPSIN	0.899 Abs [0.9055] {1.0 C	0.025 µg/L [0.023]	Low, 91.548 %Abs		0.050 - 2.000	20H3911
AB47696	CYLINDROSPERMOPSIN	0.880 Abs	0.032 µg/L	Low, 89.613 %Abs		0.050 - 2.000	20H3911
AB47696	CYLINDROSPERMOPSIN	0.856 Abs [0.8680] {2.0 C	0.041 µg/L [0.036]	Low, 87.169 %Abs		0.050 - 2.000	20H3911
AB47695	CYLINDROSPERMOPSIN	0.858 Abs	0.040 µg/L	Low, 87.373 %Abs		0.050 - 2.000	20H3911
AB47695	CYLINDROSPERMOPSIN	0.890 Abs [0.8740] {2.6 C	0.028 µg/L [0.034]	Low, 90.631 %Abs		0.050 - 2.000	20H3911
AB47698	CYLINDROSPERMOPSIN	0.882 Abs	0.031 µg/L	Low, 89.817 %Abs		0.050 - 2.000	20H3911
AB47698	CYLINDROSPERMOPSIN	0.885 Abs [0.8835] {0.2 C	0.030 µg/L [0.030]	Low, 90.122 %Abs		0.050 - 2.000	20H3911
AB47699	CYLINDROSPERMOPSIN	0.923 Abs	0.017 µg/L	Low, 93.992 %Abs		0.050 - 2.000	20H3911
AB47699	CYLINDROSPERMOPSIN	0.899 Abs [0.9110] {1.9 C	0.025 µg/L [0.021]	Low, 91.548 %Abs		0.050 - 2.000	20H3911
AB47700	CYLINDROSPERMOPSIN	0.802 Abs	0.065 µg/L	81.670 %Abs		0.050 - 2.000	20H3911
AB47700	CYLINDROSPERMOPSIN	0.791 Abs [0.7965] {1.0 C	0.071 µg/L [0.068]	80.550 %Abs [81.1		0.050 - 2.000	20H3911
LFB 2	CYLINDROSPERMOPSIN	0.359 Abs	0.666 µg/L	36.558 %Abs		0.050 - 2.000	20H3911
LFB 2	CYLINDROSPERMOPSIN	0.346 Abs [0.3525] {2.6 C	0.712 µg/L [0.689]	35.234 %Abs [35.8		0.050 - 2.000	20H3911
LRB 2	CYLINDROSPERMOPSIN	0.895 Abs	0.026 µg/L	Low, 91.141 %Abs		0.050 - 2.000	20H3911
LRB 2	CYLINDROSPERMOPSIN	0.919 Abs [0.9070] {1.9 C	0.018 µg/L [0.022]	Low, 93.585 %Abs		0.050 - 2.000	20H3911

Note

 Signature *David Jordan*

David Jordan 6/29/2021

Assay Information

Assay Name: CYLINDROSPERMOPSPIN_
 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: 20H3911

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: "

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Name	Absorbance	Concentration	Interpretation	Position
6/29/2021 2:33:30 PM				
CYL Std 0	0.990 Abs	0.000 µg/L	R ² =0.99821, 100.815 %Abs	RK1:32->A07@2
CYL Std 0	0.973 Abs [0.9815] {1.2 CV}	0.002 µg/L [0.001] {141.4 CV}	R ² =0.99821, 99.084 %Abs	RK1:32->B07@2
CYL Std 1	0.846 Abs	0.045 µg/L	R ² =0.99821, 86.151 %Abs	RK1:33->C07@2
CYL Std 1	0.845 Abs [0.8455] {0.1 CV}	0.046 µg/L [0.046] {1.6 CV}	R ² =0.99821, 86.049 %Abs	RK1:33->D07@2
CYL Std 2	0.736 Abs	0.102 µg/L	R ² =0.99821, 74.949 %Abs	RK1:34->E07@2
CYL Std 2	0.740 Abs [0.7380] {0.4 CV}	0.099 µg/L [0.101] {2.1 CV}	R ² =0.99821, 75.356 %Abs	RK1:34->F07@3
CYL Std 3	0.547 Abs	0.271 µg/L	R ² =0.99821, 55.703 %Abs	RK1:35->G07@3
CYL Std 3	0.539 Abs [0.5430] {1.0 CV}	0.281 µg/L [0.276] {2.6 CV}	R ² =0.99821, 54.888 %Abs	RK1:35->H07@3
CYL Std 4	0.441 Abs	0.445 µg/L	R ² =0.99821, 44.908 %Abs	RK1:36->A08@2
CYL Std 4	0.431 Abs [0.4360] {1.6 CV}	0.467 µg/L [0.456] {3.4 CV}	R ² =0.99821, 43.890 %Abs	RK1:36->B08@2
CYL Std 5	0.289 Abs	0.975 µg/L	R ² =0.99821, 29.430 %Abs	RK1:37->C08@2
CYL Std 5	0.279 Abs [0.2840] {2.5 CV}	1.035 µg/L [1.005] {4.2 CV}	R ² =0.99821, 28.411 %Abs	RK1:37->D08@2
CYL Std 6	0.181 Abs	> 2.000 µg/L	18.432 %Abs	RK1:38->E08@2
CYL Std 6	0.181 Abs [0.1810] {0.0 CV}	> 2.000 µg/L	18.432 %Abs	RK1:38->F08@3

6/29/2021 2:33:30 PM				
CYL QCS	0.338 Abs	0.743 µg/L	34.420 %Abs	RK1:39->G08@3
CYL QCS	0.353 Abs [0.3455] {3.1 CV}	0.687 µg/L [0.715] {5.5 CV}	35.947 %Abs [35.183 %Abs]	RK1:39->H08@3

Statistic				
CYL Std 0 [MEAN]	0.9815	0.0010		
CYL Std 0 [SD]	0.0120	0.0014		
CYL Std 0 [%CV]	1.2247	141.4214		
CYL Std 1 [MEAN]	0.8455	0.0455		
CYL Std 1 [SD]	0.0007	0.0007		
CYL Std 1 [%CV]	0.0836	1.5541		
CYL Std 1 [%DIFF]		-9.0000		
CYL Std 2 [MEAN]	0.7380	0.1005		
CYL Std 2 [SD]	0.0028	0.0021		
CYL Std 2 [%CV]	0.3833	2.1108		
CYL Std 2 [%DIFF]		0.5000		
CYL Std 3 [MEAN]	0.5430	0.2760		
CYL Std 3 [SD]	0.0057	0.0071		
CYL Std 3 [%CV]	1.0418	2.5620		
CYL Std 3 [%DIFF]		10.4000		
CYL Std 4 [MEAN]	0.4360	0.4560		
CYL Std 4 [SD]	0.0071	0.0156		
CYL Std 4 [%CV]	1.6218	3.4115		
CYL Std 4 [%DIFF]		-8.8000		

Name	Absorbance	Concentration	Interpretation	Position
CYL Std 5 [MEAN]	0.2840	1.0050		
CYL Std 5 [SD]	0.0071	0.0424		
CYL Std 5 [%CV]	2.4898	4.2215		
CYL Std 5 [%DIFF]		0.5000		
CYL Std 6 [MEAN]	0.1810			
CYL Std 6 [SD]	0.0000			
CYL Std 6 [%CV]	0.0000			
CYL QCS [MEAN]	0.3455	0.7150		
CYL QCS [SD]	0.0106	0.0396		
CYL QCS [%CV]	3.0699	5.5382		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 0.98513
 B = 0.89284
 C = 0.32997
 D = 0.024447
 R2 coef = 0.99821
 50% = 0.352

