



Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AC03737	Potato Creek SP - Worster Lake Beach	7/31/2023	8/1/2023	< 0.15
AC03738	Chain O'Lakes SP - Sand Lake Beach	7/31/2023	8/1/2023	< 0.15
AC03739	Mississinewa Lake - Miami SRA Beach	7/31/2023	8/1/2023	< 0.15
AC03740	Salamonie Lake - Lost Bridge West SRA Beach	7/31/2023	8/1/2023	< 0.15
AC03741	Mississinewa Lake - Miami SRA Beach (Field Duplicate)	7/31/2023	8/1/2023	< 0.15
AC03742	Field Blank	7/31/2023	8/1/2023	< 0.15
AC03743	Ferdinand State Forest - Ferdinand Lake Beach	7/31/2023	8/1/2023	< 0.15
AC03744	Patoka Lake - Newton Stewart SRA	7/31/2023	8/1/2023	< 0.15

Test Information

 Request: 8/1/2023 3:55:19 PM
 Date: 8/1/2023

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	1.300 Abs	0.000 µg/L	R ² =0.99927, 101.9		0.000	Kit:P23C0
CYL Std 0	CYLINDROSPERMOPSIN	1.250 Abs [1.2750] {2.8 C	0.004 µg/L [0.002]	R ² =0.99927, 98.03		0.000	Kit:P23C0
CYL Std 1	CYLINDROSPERMOPSIN	1.010 Abs	0.044 µg/L	R ² =0.99927, 79.21		0.050	Kit:P23C0
CYL Std 1	CYLINDROSPERMOPSIN	0.974 Abs [0.9920] {2.6 C	0.051 µg/L [0.048]	R ² =0.99927, 76.35		0.050	Kit:P23C0
CYL Std 2	CYLINDROSPERMOPSIN	0.793 Abs	0.102 µg/L	R ² =0.99927, 62.15		0.100	Kit:P23C0
CYL Std 2	CYLINDROSPERMOPSIN	0.786 Abs [0.7895] {0.6 C	0.105 µg/L [0.104]	R ² =0.99927, 61.64		0.100	Kit:P23C0
CYL Std 3	CYLINDROSPERMOPSIN	0.514 Abs	0.259 µg/L	R ² =0.99927, 40.31		0.250	Kit:P23C0
CYL Std 3	CYLINDROSPERMOPSIN	0.508 Abs [0.5110] {0.8 C	0.264 µg/L [0.262]	R ² =0.99927, 39.84		0.250	Kit:P23C0
CYL Std 4	CYLINDROSPERMOPSIN	0.371 Abs	0.444 µg/L	R ² =0.99927, 29.05		0.500	Kit:P23C0
CYL Std 4	CYLINDROSPERMOPSIN	0.352 Abs [0.3615] {3.7 C	0.482 µg/L [0.463]	R ² =0.99927, 27.60		0.500	Kit:P23C0
CYL Std 5	CYLINDROSPERMOPSIN	0.220 Abs	0.978 µg/L	R ² =0.99927, 17.25		1.000	Kit:P23C0
CYL Std 5	CYLINDROSPERMOPSIN	0.215 Abs [0.2175] {1.6 C	1.012 µg/L [0.995]	R ² =0.99927, 16.86		1.000	Kit:P23C0
CYL Std 6	CYLINDROSPERMOPSIN	0.139 Abs	> 2.000 µg/L	10.902 %Abs		2.000	Kit:P23C0
CYL Std 6	CYLINDROSPERMOPSIN	0.125 Abs [0.1320] {7.5 C	> 2.000 µg/L	9.804 %Abs		2.000	Kit:P23C0
CYL QCS	CYLINDROSPERMOPSIN	0.253 Abs	0.794 µg/L	19.843 %Abs			Kit:P23C0
CYL QCS	CYLINDROSPERMOPSIN	0.260 Abs [0.2565] {1.9 C	0.762 µg/L [0.778]	20.392 %Abs [20.1			Kit:P23C0

Note

Signature

David Jordan 8/1/2023

Test Report (by Request)

Test Information

 Request: 8/1/2023 4:31:44 PM
 Date: 8/1/2023

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB (CYL)	CYLINDROSPERMOPSIN	1.249 Abs	0.004 µg/L	Low, 97.961 %Abs		0.050 - 2.000	Kit:P23C0
LRB (CYL)	CYLINDROSPERMOPSIN	1.213 Abs [1.2310] {2.1 C	0.009 µg/L [0.007]	Low, 95.137 %Abs		0.050 - 2.000	Kit:P23C0
LFB (CYL)	CYLINDROSPERMOPSIN	0.302 Abs	0.609 µg/L	23.686 %Abs		0.050 - 2.000	Kit:P23C0
LFB (CYL)	CYLINDROSPERMOPSIN	0.298 Abs [0.3000] {0.9 C	0.621 µg/L [0.615]	23.373 %Abs [23.5		0.050 - 2.000	Kit:P23C0
AC03737	CYLINDROSPERMOPSIN	1.167 Abs	0.015 µg/L	Low, 91.529 %Abs		0.050 - 2.000	Kit:P23C0
AC03737	CYLINDROSPERMOPSIN	1.172 Abs [1.1695] {0.3 C	0.015 µg/L [0.015]	Low, 91.922 %Abs		0.050 - 2.000	Kit:P23C0
AC03737MS	CYLINDROSPERMOPSIN	0.311 Abs	0.582 µg/L	24.392 %Abs		0.050 - 2.000	Kit:P23C0
AC03737MS	CYLINDROSPERMOPSIN	0.318 Abs [0.3145] {1.6 C	0.563 µg/L [0.573]	24.941 %Abs [24.6		0.050 - 2.000	Kit:P23C0
AC03737MSD	CYLINDROSPERMOPSIN	0.344 Abs	0.499 µg/L	26.980 %Abs		0.050 - 2.000	Kit:P23C0
AC03737MSD	CYLINDROSPERMOPSIN	0.336 Abs [0.3400] {1.7 C	0.518 µg/L [0.509]	26.353 %Abs [26.6		0.050 - 2.000	Kit:P23C0
AC03738	CYLINDROSPERMOPSIN	1.169 Abs	0.015 µg/L	Low, 91.686 %Abs		0.050 - 2.000	Kit:P23C0
AC03738	CYLINDROSPERMOPSIN	1.170 Abs [1.1695] {0.1 C	0.015 µg/L [0.015]	Low, 91.765 %Abs		0.050 - 2.000	Kit:P23C0
AC03739	CYLINDROSPERMOPSIN	1.182 Abs	0.013 µg/L	Low, 92.706 %Abs		0.050 - 2.000	Kit:P23C0
AC03739	CYLINDROSPERMOPSIN	1.159 Abs [1.1705] {1.4 C	0.017 µg/L [0.015]	Low, 90.902 %Abs		0.050 - 2.000	Kit:P23C0
AC03740	CYLINDROSPERMOPSIN	1.195 Abs	0.011 µg/L	Low, 93.725 %Abs		0.050 - 2.000	Kit:P23C0
AC03740	CYLINDROSPERMOPSIN	1.238 Abs [1.2165] {2.5 C	0.005 µg/L [0.008]	Low, 97.098 %Abs		0.050 - 2.000	Kit:P23C0
AC03741	CYLINDROSPERMOPSIN	1.236 Abs	0.005 µg/L	Low, 96.941 %Abs		0.050 - 2.000	Kit:P23C0
AC03741	CYLINDROSPERMOPSIN	1.237 Abs [1.2365] {0.1 C	0.005 µg/L [0.005]	Low, 97.020 %Abs		0.050 - 2.000	Kit:P23C0
AC03742	CYLINDROSPERMOPSIN	1.245 Abs	0.004 µg/L	Low, 97.647 %Abs		0.050 - 2.000	Kit:P23C0
AC03742	CYLINDROSPERMOPSIN	1.250 Abs [1.2475] {0.3 C	0.004 µg/L [0.004]	Low, 98.039 %Abs		0.050 - 2.000	Kit:P23C0
AC03743	CYLINDROSPERMOPSIN	1.225 Abs	0.007 µg/L	Low, 96.078 %Abs		0.050 - 2.000	Kit:P23C0
AC03743	CYLINDROSPERMOPSIN	1.214 Abs [1.2195] {0.6 C	0.009 µg/L [0.008]	Low, 95.216 %Abs		0.050 - 2.000	Kit:P23C0
AC03744	CYLINDROSPERMOPSIN	1.216 Abs	0.008 µg/L	Low, 95.373 %Abs		0.050 - 2.000	Kit:P23C0
AC03744	CYLINDROSPERMOPSIN	1.234 Abs [1.2250] {1.0 C	0.006 µg/L [0.007]	Low, 96.784 %Abs		0.050 - 2.000	Kit:P23C0

Note

 Signature *David Jordan*

David Jordan 8/1/2023

Assay Information

Assay Name: CYLINDROSPERMOPSIS_
 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: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
8/1/2023 3:55:19 PM				
CYL Std 0	1.300 Abs	0.000 µg/L	R ² =0.99927, 101.961 %Abs	RK1:32->A07@2
CYL Std 0	1.250 Abs [1.2750] {2.8 CV}	0.004 µg/L [0.002] {141.4 CV}	R ² =0.99927, 98.039 %Abs	RK1:32->B07@2
CYL Std 1	1.010 Abs	0.044 µg/L	R ² =0.99927, 79.216 %Abs	RK1:33->C07@2
CYL Std 1	0.974 Abs [0.9920] {2.6 CV}	0.051 µg/L [0.048] {10.4 CV}	R ² =0.99927, 76.392 %Abs	RK1:33->D07@2
CYL Std 2	0.793 Abs	0.102 µg/L	R ² =0.99927, 62.196 %Abs	RK1:34->E07@2
CYL Std 2	0.786 Abs [0.7895] {0.6 CV}	0.105 µg/L [0.104] {2.0 CV}	R ² =0.99927, 61.647 %Abs	RK1:34->F07@3
CYL Std 3	0.514 Abs	0.259 µg/L	R ² =0.99927, 40.314 %Abs	RK1:35->G07@3
CYL Std 3	0.508 Abs [0.5110] {0.8 CV}	0.264 µg/L [0.262] {1.4 CV}	R ² =0.99927, 39.843 %Abs	RK1:35->H07@3
CYL Std 4	0.371 Abs	0.444 µg/L	R ² =0.99927, 29.098 %Abs	RK1:36->A08@2
CYL Std 4	0.352 Abs [0.3615] {3.7 CV}	0.482 µg/L [0.463] {5.8 CV}	R ² =0.99927, 27.608 %Abs	RK1:36->B08@2
CYL Std 5	0.220 Abs	0.978 µg/L	R ² =0.99927, 17.255 %Abs	RK1:37->C08@2
CYL Std 5	0.215 Abs [0.2175] {1.6 CV}	1.012 µg/L [0.995] {2.4 CV}	R ² =0.99927, 16.863 %Abs	RK1:37->D08@2
CYL Std 6	0.139 Abs	> 2.000 µg/L	10.902 %Abs	RK1:38->E08@2
CYL Std 6	0.125 Abs [0.1320] {7.5 CV}	> 2.000 µg/L	9.804 %Abs	RK1:38->F08@3

8/1/2023 3:55:19 PM				
CYL QCS	0.253 Abs	0.794 µg/L	19.843 %Abs	RK1:39->G08@3
CYL QCS	0.260 Abs [0.2565] {1.9 CV}	0.762 µg/L [0.778] {2.9 CV}	20.392 %Abs [20.118 %Abs]	RK1:39->H08@3

Statistic				
CYL Std 0 [MEAN]	1.2750	0.0020		
CYL Std 0 [SD]	0.0354	0.0028		
CYL Std 0 [%CV]	2.7730	141.4214		
CYL Std 1 [MEAN]	0.9920	0.0475		
CYL Std 1 [SD]	0.0255	0.0049		
CYL Std 1 [%CV]	2.5661	10.4205		
CYL Std 1 [%DIFF]		-5.0000		
CYL Std 2 [MEAN]	0.7895	0.1035		
CYL Std 2 [SD]	0.0049	0.0021		
CYL Std 2 [%CV]	0.6269	2.0496		
CYL Std 2 [%DIFF]		3.5000		
CYL Std 3 [MEAN]	0.5110	0.2615		
CYL Std 3 [SD]	0.0042	0.0035		
CYL Std 3 [%CV]	0.8303	1.3520		
CYL Std 3 [%DIFF]		4.6000		
CYL Std 4 [MEAN]	0.3615	0.4630		
CYL Std 4 [SD]	0.0134	0.0269		
CYL Std 4 [%CV]	3.7165	5.8035		
CYL Std 4 [%DIFF]		-7.4000		

Name	Absorbance	Concentration	Interpretation	Position
CYL Std 5 [MEAN]	0.2175	0.9950		
CYL Std 5 [SD]	0.0035	0.0240		
CYL Std 5 [%CV]	1.6255	2.4162		
CYL Std 5 [%DIFF]		-0.5000		
CYL Std 6 [MEAN]	0.1320			
CYL Std 6 [SD]	0.0099			
CYL Std 6 [%CV]	7.4996			
CYL QCS [MEAN]	0.2565	0.7780		
CYL QCS [SD]	0.0049	0.0226		
CYL QCS [%CV]	1.9297	2.9084		

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 1.2776
 B = 0.99582
 C = 0.15724
 D = 0.048587
 R2 coef = 0.99927
 50% = 0.171

