



Cylindrospermopsin Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB43405	Summit Lake - State Park	7/6/2020	7/9/2020	<0.15
AB43406	Kunkel Beach @ Ouabache State Park	7/6/2020	7/9/2020	<0.15
AB43407	Pokagon State Park	7/6/2020	7/9/2020	<0.15
AB43408	Potawatomi Inn's Beach	7/6/2020	7/9/2020	<0.15
AB43409	Chain O'Lakes SP	7/6/2020	7/9/2020	<0.15
AB43410	Potato Creek State Park	7/7/2020	7/9/2020	<0.15
AB43411	Lost Bridge West SRA	7/7/2020	7/9/2020	<0.15
AB43412	Mississinewa Lake Miami SRA	7/7/2020	7/9/2020	<0.15
AB43413	Field Blank	7/6/2020	7/9/2020	<0.15
AB43414	Kunkel Beach @ Ouabache State Park (Field Duplicate)	7/6/2020	7/9/2020	<0.15

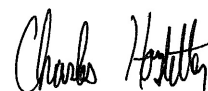
Test Information

Request: 7/9/2020 1:01:49 PM
Date: 7/9/2020 - 7/9/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
CYL Std 0	CYLINDROSPERMOPSIN	0.533 Abs	0.000 µg/L	R^2=0.99949, 100.37		19G0261
CYL Std 0	CYLINDROSPERMOPSIN	0.529 Abs [0.5310] {0.5 CV}	0.002 µg/L [0.001] {1.8 CV}	R^2=0.99949, 99.623		19G0261
CYL Std 1	CYLINDROSPERMOPSIN	0.495 Abs	0.040 µg/L	R^2=0.99949, 93.220		19G0261
CYL Std 1	CYLINDROSPERMOPSIN	0.491 Abs [0.4930] {0.6 CV}	0.045 µg/L [0.043] {8.2 CV}	R^2=0.99949, 92.467		19G0261
CYL Std 2	CYLINDROSPERMOPSIN	0.454 Abs	0.107 µg/L	R^2=0.99949, 85.499		19G0261
CYL Std 2	CYLINDROSPERMOPSIN	0.452 Abs [0.4530] {0.3 CV}	0.110 µg/L [0.109] {2.2 CV}	R^2=0.99949, 85.122		19G0261
CYL Std 3	CYLINDROSPERMOPSIN	0.387 Abs	0.268 µg/L	R^2=0.99949, 72.881		19G0261
CYL Std 3	CYLINDROSPERMOPSIN	0.397 Abs [0.3920] {1.8 CV}	0.239 µg/L [0.253] {8.2 CV}	R^2=0.99949, 74.765		19G0261
CYL Std 4	CYLINDROSPERMOPSIN	0.325 Abs	0.500 µg/L	R^2=0.99949, 61.205		19G0261
CYL Std 4	CYLINDROSPERMOPSIN	0.329 Abs [0.3270] {0.9 CV}	0.482 µg/L [0.491] {2.2 CV}	R^2=0.99949, 61.959		19G0261
CYL Std 5	CYLINDROSPERMOPSIN	0.248 Abs	0.994 µg/L	R^2=0.99949, 46.704		19G0261
CYL Std 5	CYLINDROSPERMOPSIN	0.245 Abs [0.2465] {0.9 CV}	1.021 µg/L [1.008] {1.8 CV}	R^2=0.99949, 46.139		19G0261
CYL Std 6	CYLINDROSPERMOPSIN	0.174 Abs	1.964 µg/L	R^2=0.99949, 32.768		19G0261
CYL Std 6	CYLINDROSPERMOPSIN	0.171 Abs [0.1725] {1.2 CV}	> 2.000 µg/L [1.964]	32.203 %Abs		19G0261
CYL QCS	CYLINDROSPERMOPSIN	0.284 Abs	0.724 µg/L	53.484 %Abs		19G0261
CYL QCS	CYLINDROSPERMOPSIN	0.295 Abs [0.2895] {2.7 CV}	0.657 µg/L [0.691] {6.2 CV}	55.556 %Abs [54.520]		19G0261

Note

Signature



Charles Hostetter 7/9/2020

Test Information

Request: 7/9/2020 1:02:55 PM
Date: 7/9/2020 - 7/9/2020

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
LRB	CYLINDROSPERMOPSIN	0.537 Abs	0.000 µg/L	LOW, 101.130 %ABS	0.050 - 2.000	19G0261
LRB	CYLINDROSPERMOPSIN	0.539 Abs [0.5380] {0.3 CV}	0.000 µg/L [0.000]		0.050 - 2.000	19G0261
LFB	CYLINDROSPERMOPSIN	0.292 Abs	0.674 µg/L	54.991 %Abs	0.050 - 2.000	19G0261
LFB	CYLINDROSPERMOPSIN	0.294 Abs [0.2930] {0.5 CV}	0.662 µg/L [0.668] {1}	55.367 %Abs [55.175]	0.050 - 2.000	19G0261
AB43405	CYLINDROSPERMOPSIN	0.509 Abs	0.022 µg/L	LOW, 95.857 %ABS	0.050 - 2.000	19G0261
AB43405	CYLINDROSPERMOPSIN	0.502 Abs [0.5055] {1.0 CV}	0.031 µg/L [0.026] {2}		0.050 - 2.000	19G0261
AB43405MS	CYLINDROSPERMOPSIN	0.289 Abs	0.693 µg/L	54.426 %Abs	0.050 - 2.000	19G0261
AB43405MS	CYLINDROSPERMOPSIN	0.300 Abs [0.2945] {2.6 CV}	0.628 µg/L [0.661] {7}	56.497 %Abs [55.461]	0.050 - 2.000	19G0261
AB43405MSD	CYLINDROSPERMOPSIN	0.281 Abs	0.743 µg/L	52.919 %Abs	0.050 - 2.000	19G0261
AB43405MSD	CYLINDROSPERMOPSIN	0.282 Abs [0.2815] {0.3 CV}	0.737 µg/L [0.740] {0}	53.107 %Abs [53.013]	0.050 - 2.000	19G0261
AB43406	CYLINDROSPERMOPSIN	0.520 Abs	0.010 µg/L	LOW, 97.928 %ABS	0.050 - 2.000	19G0261
AB43406	CYLINDROSPERMOPSIN	0.517 Abs [0.5185] {0.4 CV}	0.013 µg/L [0.012] {1}		0.050 - 2.000	19G0261
AB43407	CYLINDROSPERMOPSIN	0.510 Abs	0.021 µg/L	LOW, 96.045 %ABS	0.050 - 2.000	19G0261
AB43407	CYLINDROSPERMOPSIN	0.526 Abs [0.5180] {2.2 CV}	0.004 µg/L [0.013] {9}		0.050 - 2.000	19G0261
AB43408	CYLINDROSPERMOPSIN	0.529 Abs	0.002 µg/L	LOW, 99.623 %ABS	0.050 - 2.000	19G0261
AB43408	CYLINDROSPERMOPSIN	0.562 Abs [0.5455] {4.3 CV}	0.000 µg/L [0.001] {1}		0.050 - 2.000	19G0261
AB43409	CYLINDROSPERMOPSIN	0.509 Abs	0.022 µg/L	LOW, 95.857 %ABS	0.050 - 2.000	19G0261
AB43409	CYLINDROSPERMOPSIN	0.519 Abs [0.5140] {1.4 CV}	0.011 µg/L [0.017] {4}		0.050 - 2.000	19G0261
AB43410	CYLINDROSPERMOPSIN	0.511 Abs	0.020 µg/L	LOW, 96.234 %ABS	0.050 - 2.000	19G0261
AB43410	CYLINDROSPERMOPSIN	0.528 Abs [0.5195] {2.3 CV}	0.003 µg/L [0.012] {1}		0.050 - 2.000	19G0261
AB43411	CYLINDROSPERMOPSIN	0.513 Abs	0.017 µg/L	LOW, 96.610 %ABS	0.050 - 2.000	19G0261
AB43411	CYLINDROSPERMOPSIN	0.515 Abs [0.5140] {0.3 CV}	0.015 µg/L [0.016] {8}		0.050 - 2.000	19G0261
AB43412	CYLINDROSPERMOPSIN	0.533 Abs	0.000 µg/L	LOW, 100.377 %ABS	0.050 - 2.000	19G0261
AB43412	CYLINDROSPERMOPSIN	0.563 Abs [0.5480] {3.9 CV}	0.000 µg/L [0.000]		0.050 - 2.000	19G0261
AB43413	CYLINDROSPERMOPSIN	0.534 Abs	0.000 µg/L	LOW, 100.565 %ABS	0.050 - 2.000	19G0261
AB43413	CYLINDROSPERMOPSIN	0.563 Abs [0.5485] {3.7 CV}	0.000 µg/L [0.000]		0.050 - 2.000	19G0261
AB43414	CYLINDROSPERMOPSIN	0.529 Abs	0.002 µg/L	LOW, 99.623 %ABS	0.050 - 2.000	19G0261
AB43414	CYLINDROSPERMOPSIN	0.530 Abs [0.5295] {0.1 CV}	0.001 µg/L [0.002] {4}		0.050 - 2.000	19G0261

Note

Signature _____

* 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 (6.4.1.1073/1085/1.00/0.95) 7/9/2020 1:27:57 PM

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:
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 Mode: 4-Parameter Logistic Weight by:None

Well Type: Flat bottom

Last Modified On: 8/15/2019 12:26:24 PM

Normal: 0.050 - 2.000

of decimals: 3

Kit Lot Number: 19G0261

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
7/9/2020 1:01:49 PM				
CYL Std 0	0.533 Abs		R^2=0.99949, 100.377 %Abs	RK1:32->A07@2
CYL Std 0	0.529 Abs [0.5310] {0.5 CV}		R^2=0.99949, 99.623 %Abs	RK1:32->B07@2
CYL Std 1	0.495 Abs		R^2=0.99949, 93.220 %Abs	RK1:33->C07@2
CYL Std 1	0.491 Abs [0.4930] {0.6 CV}		R^2=0.99949, 92.467 %Abs	RK1:33->D07@2
CYL Std 2	0.454 Abs		R^2=0.99949, 85.499 %Abs	RK1:34->E07@2
CYL Std 2	0.452 Abs [0.4530] {0.3 CV}		R^2=0.99949, 85.122 %Abs	RK1:34->F07@3
CYL Std 3	0.387 Abs		R^2=0.99949, 72.881 %Abs	RK1:35->G07@3
CYL Std 3	0.397 Abs [0.3920] {1.8 CV}		R^2=0.99949, 74.765 %Abs	RK1:35->H07@3
CYL Std 4	0.325 Abs		R^2=0.99949, 61.205 %Abs	RK1:36->A08@2
CYL Std 4	0.329 Abs [0.3270] {0.9 CV}		R^2=0.99949, 61.959 %Abs	RK1:36->B08@2
CYL Std 5	0.248 Abs		R^2=0.99949, 46.704 %Abs	RK1:37->C08@2
CYL Std 5	0.245 Abs [0.2465] {0.9 CV}		R^2=0.99949, 46.139 %Abs	RK1:37->D08@2
CYL Std 6	0.174 Abs		R^2=0.99949, 32.768 %Abs	RK1:38->E08@2
CYL Std 6	0.171 Abs [0.1725] {1.2 CV}		32.203 %Abs	RK1:38->F08@3

7/9/2020 1:01:49 PM				
CYL QCS	0.284 Abs		53.484 %Abs	RK1:39->G08@3
CYL QCS	0.295 Abs [0.2895] {2.7 CV}		55.556 %Abs [54.520 %Abs]	RK1:39->H08@3

Statistic				
CYL Std 0 [MEAN]	0.5310			
CYL Std 0 [SD]	0.0028			
CYL Std 0 [%CV]	0.5327			
CYL Std 1 [MEAN]	0.4930			
CYL Std 1 [SD]	0.0028			
CYL Std 1 [%CV]	0.5737			
CYL Std 1 [%DIFF]				
CYL Std 2 [MEAN]	0.4530			
CYL Std 2 [SD]	0.0014			
CYL Std 2 [%CV]	0.3122			
CYL Std 2 [%DIFF]				
CYL Std 3 [MEAN]	0.3920			
CYL Std 3 [SD]	0.0071			
CYL Std 3 [%CV]	1.8038			
CYL Std 3 [%DIFF]				
CYL Std 4 [MEAN]	0.3270			
CYL Std 4 [SD]	0.0028			
CYL Std 4 [%CV]	0.8650			
CYL Std 4 [%DIFF]				

Name	Absorbance	Concentration	Interpretation	Position	
CYL Std 5 [MEAN]	0.2465				
CYL Std 5 [SD]	0.0021				
CYL Std 5 [%CV]	0.8606				
CYL Std 5 [%DIFF]					
CYL Std 6 [MEAN]	0.1725				
CYL Std 6 [SD]	0.0021				
CYL Std 6 [%CV]	1.2297				
CYL QCS [MEAN]	0.2895				
CYL QCS [SD]	0.0078				
CYL QCS [%CV]	2.6868				

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 0.53207
 B = 0.84398
 C = 0.87384
 D = -0.0067441
 R2 coef = 0.99949
 50% = 0.852

