



Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)
AB52048	Raccoon Lake SRA	7/11/2022	7/14/2022	< 0.15
AB52050	Cagles Mill Lake Beach	7/11/2022	7/14/2022	< 0.15
AB52051	Paynetown SRA	7/11/2022	7/14/2022	< 0.15
AB52052	Fairfax SRA	7/11/2022	7/14/2022	< 0.15
AB52053	Starve Hollow SRA	7/11/2022	7/14/2022	< 0.15
AB52054	Whitewater Memorial SP	7/12/2022	7/14/2022	< 0.15
AB52055	Quakertown SRA	7/12/2022	7/14/2022	< 0.15
AB52056	Mounds SRA	7/12/2022	7/14/2022	< 0.15
AB52057	Hardy Lake SRA	7/12/2022	7/14/2022	< 0.15
AB52049	Deam Lake SRA	7/12/2022	7/14/2022	< 0.15
AB52069	Fairfax SRA (Field Duplicate)	7/11/2022	7/14/2022	< 0.15
AB52070	Field Blank	7/11/2022	7/14/2022	< 0.15
AB52071	Ft. Ben Harrison SP Dog Lake	7/12/2022	7/14/2022	< 0.15

Test Report (by Request)

Test Information

Request: 7/14/2022 10:12:20 AM
Date: 7/14/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
CYL Std 0	CYLINDROSPERMOPSIN	1.718 Abs	0.001 µg/L	R^2=0.99721, 99.8%			M22A1121
CYL Std 0	CYLINDROSPERMOPSIN	1.722 Abs [1.7200] {0.2 C	0.000 µg/L [0.001]	R^2=0.99721, 100.1%			M22A1121
CYL Std 1	CYLINDROSPERMOPSIN	1.512 Abs	0.051 µg/L	R^2=0.99721, 87.9%			M22A1121
CYL Std 1	CYLINDROSPERMOPSIN	1.500 Abs [1.5060] {0.6 C	0.055 µg/L [0.053]	R^2=0.99721, 87.2%			M22A1121
CYL Std 2	CYLINDROSPERMOPSIN	1.394 Abs	0.087 µg/L	R^2=0.99721, 81.0%			M22A1121
CYL Std 2	CYLINDROSPERMOPSIN	1.393 Abs [1.3935] {0.1 C	0.088 µg/L [0.087]	R^2=0.99721, 80.9%			M22A1121
CYL Std 3	CYLINDROSPERMOPSIN	1.006 Abs	0.272 µg/L	R^2=0.99721, 58.4%			M22A1121
CYL Std 3	CYLINDROSPERMOPSIN	0.978 Abs [0.9920] {2.0 C	0.292 µg/L [0.282]	R^2=0.99721, 56.8%			M22A1121
CYL Std 4	CYLINDROSPERMOPSIN	0.792 Abs	0.463 µg/L	R^2=0.99721, 46.0%			M22A1121
CYL Std 4	CYLINDROSPERMOPSIN	0.785 Abs [0.7885] {0.6 C	0.471 µg/L [0.467]	R^2=0.99721, 45.6%			M22A1121
CYL Std 5	CYLINDROSPERMOPSIN	0.528 Abs	0.961 µg/L	R^2=0.99721, 30.6%			M22A1121
CYL Std 5	CYLINDROSPERMOPSIN	0.512 Abs [0.5200] {2.2 C	1.012 µg/L [0.987]	R^2=0.99721, 29.7%			M22A1121
CYL Std 6	CYLINDROSPERMOPSIN	0.339 Abs	> 2.000 µg/L	19.709 %Abs			M22A1121
CYL Std 6	CYLINDROSPERMOPSIN	0.326 Abs [0.3325] {2.8 C	> 2.000 µg/L	18.953 %Abs			M22A1121
CYL QCS	CYLINDROSPERMOPSIN	0.691 Abs	0.601 µg/L	40.174 %Abs			M22A1121
CYL QCS	CYLINDROSPERMOPSIN	0.605 Abs [0.6480] {9.4 C	0.762 µg/L [0.682]	35.174 %Abs [37.6			M22A1121

Note

Signature

David Jordan

David Jordan 7/14/2022

Test Information

Request: 7/14/2022 10:13:45 AM
Date: 7/14/2022

Name/ID	Assay	Absorbance	Concentration	Interpretation	Note	Reference	Lot#
LRB (CYL)	CYLINDROSPERMOPSIN	1.704 Abs	0.004 µg/L	Low, 99.070 %Abs		0.050 - 2.000	M22A1121
LRB (CYL)	CYLINDROSPERMOPSIN	1.689 Abs [1.6965] {0.6 C	0.007 µg/L [0.006]	Low, 98.198 %Abs		0.050 - 2.000	M22A1121
LFB (CYL)	CYLINDROSPERMOPSIN	0.728 Abs	0.545 µg/L	42.326 %Abs		0.050 - 2.000	M22A1121
LFB (CYL)	CYLINDROSPERMOPSIN	0.702 Abs [0.7150] {2.6 C	0.584 µg/L [0.564]	40.814 %Abs [41.5		0.050 - 2.000	M22A1121
AB52048	CYLINDROSPERMOPSIN	1.630 Abs	0.021 µg/L	Low, 94.767 %Abs		0.050 - 2.000	M22A1121
AB52048	CYLINDROSPERMOPSIN	1.641 Abs [1.6355] {0.5 C	0.018 µg/L [0.019]	Low, 95.407 %Abs		0.050 - 2.000	M22A1121
AB52050	CYLINDROSPERMOPSIN	1.647 Abs	0.017 µg/L	Low, 95.756 %Abs		0.050 - 2.000	M22A1121
AB52050	CYLINDROSPERMOPSIN	1.641 Abs [1.6440] {0.3 C	0.018 µg/L [0.018]	Low, 95.407 %Abs		0.050 - 2.000	M22A1121
AB52051	CYLINDROSPERMOPSIN	1.681 Abs	0.009 µg/L	Low, 97.733 %Abs		0.050 - 2.000	M22A1121
AB52051	CYLINDROSPERMOPSIN	1.615 Abs [1.6480] {2.8 C	0.024 µg/L [0.017]	Low, 93.895 %Abs		0.050 - 2.000	M22A1121
AB52052	CYLINDROSPERMOPSIN	1.645 Abs	0.017 µg/L	Low, 95.640 %Abs		0.050 - 2.000	M22A1121
AB52052	CYLINDROSPERMOPSIN	1.658 Abs [1.6515] {0.6 C	0.014 µg/L [0.016]	Low, 96.395 %Abs		0.050 - 2.000	M22A1121
AB52053	CYLINDROSPERMOPSIN	1.643 Abs	0.018 µg/L	Low, 95.523 %Abs		0.050 - 2.000	M22A1121
AB52053	CYLINDROSPERMOPSIN	1.593 Abs [1.6180] {2.2 C	0.030 µg/L [0.024]	Low, 92.616 %Abs		0.050 - 2.000	M22A1121
AB52054	CYLINDROSPERMOPSIN	1.619 Abs	0.023 µg/L	Low, 94.128 %Abs		0.050 - 2.000	M22A1121
AB52054	CYLINDROSPERMOPSIN	1.584 Abs [1.6015] {1.5 C	0.032 µg/L [0.027]	Low, 92.093 %Abs		0.050 - 2.000	M22A1121
AB52054MS	CYLINDROSPERMOPSIN	0.703 Abs	0.582 µg/L	40.872 %Abs		0.050 - 2.000	M22A1121
AB52054MS	CYLINDROSPERMOPSIN	0.684 Abs [0.6935] {1.9 C	0.612 µg/L [0.597]	39.767 %Abs [40.3		0.050 - 2.000	M22A1121
AB52054MSD	CYLINDROSPERMOPSIN	0.691 Abs	0.601 µg/L	40.174 %Abs		0.050 - 2.000	M22A1121
AB52054MSD	CYLINDROSPERMOPSIN	0.688 Abs [0.6895] {0.3 C	0.606 µg/L [0.604]	40.000 %Abs [40.0		0.050 - 2.000	M22A1121
AB52055	CYLINDROSPERMOPSIN	1.588 Abs	0.031 µg/L	Low, 92.326 %Abs		0.050 - 2.000	M22A1121
AB52055	CYLINDROSPERMOPSIN	1.539 Abs [1.5635] {2.2 C	0.044 µg/L [0.038]	Low, 89.477 %Abs		0.050 - 2.000	M22A1121
AB52056	CYLINDROSPERMOPSIN	1.570 Abs	0.036 µg/L	Low, 91.279 %Abs		0.050 - 2.000	M22A1121
AB52056	CYLINDROSPERMOPSIN	1.558 Abs [1.5640] {0.5 C	0.039 µg/L [0.038]	Low, 90.581 %Abs		0.050 - 2.000	M22A1121
AB52057	CYLINDROSPERMOPSIN	1.570 Abs	0.036 µg/L	Low, 91.279 %Abs		0.050 - 2.000	M22A1121
AB52057	CYLINDROSPERMOPSIN	1.531 Abs [1.5505] {1.8 C	0.046 µg/L [0.041]	Low, 89.012 %Abs		0.050 - 2.000	M22A1121
AB52049	CYLINDROSPERMOPSIN	1.499 Abs	0.055 µg/L	87.151 %Abs		0.050 - 2.000	M22A1121
AB52049	CYLINDROSPERMOPSIN	1.490 Abs [1.4945] {0.4 C	0.058 µg/L [0.056]	86.628 %Abs [86.8		0.050 - 2.000	M22A1121
AB52069	CYLINDROSPERMOPSIN	1.527 Abs	0.047 µg/L	Low, 88.779 %Abs		0.050 - 2.000	M22A1121
AB52069	CYLINDROSPERMOPSIN	1.508 Abs [1.5175] {0.9 C	0.053 µg/L [0.050]	87.674 %Abs [88.2		0.050 - 2.000	M22A1121
AB52070	CYLINDROSPERMOPSIN	1.559 Abs	0.039 µg/L	Low, 90.640 %Abs		0.050 - 2.000	M22A1121
AB52070	CYLINDROSPERMOPSIN	1.512 Abs [1.5355] {2.2 C	0.051 µg/L [0.045]	87.907 %Abs [Low,		0.050 - 2.000	M22A1121
AB52071	CYLINDROSPERMOPSIN	1.412 Abs	0.082 µg/L	82.093 %Abs		0.050 - 2.000	M22A1121
AB52071	CYLINDROSPERMOPSIN	1.331 Abs [1.3715] {4.2 C	0.110 µg/L [0.096]	77.384 %Abs [79.7		0.050 - 2.000	M22A1121

Note

Signature 

David Jordan 7/14/2022

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: 9/30/2020 10:05:41 AM

Normal: 0.050 - 2.000

of decimals: 3

Kit Lot Number: M22A1121

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
7/14/2022 10:12:20 AM				
CYL Std 0	1.718 Abs	0.001 µg/L	R ² =0.99721, 99.884 %Abs	RK1:23->A01@2
CYL Std 0	1.722 Abs [1.7200] {0.2 CV}	0.000 µg/L [0.001] {141.4 CV}	R ² =0.99721, 100.116 %Abs	RK1:23->B01@2
CYL Std 1	1.512 Abs	0.051 µg/L	R ² =0.99721, 87.907 %Abs	RK1:24->C01@2
CYL Std 1	1.500 Abs [1.5060] {0.6 CV}	0.055 µg/L [0.053] {5.3 CV}	R ² =0.99721, 87.209 %Abs	RK1:24->D01@2
CYL Std 2	1.394 Abs	0.087 µg/L	R ² =0.99721, 81.047 %Abs	RK1:25->E01@2
CYL Std 2	1.393 Abs [1.3935] {0.1 CV}	0.088 µg/L [0.087] {0.8 CV}	R ² =0.99721, 80.988 %Abs	RK1:25->F01@3
CYL Std 3	1.006 Abs	0.272 µg/L	R ² =0.99721, 58.488 %Abs	RK1:26->G01@3
CYL Std 3	0.978 Abs [0.9920] {2.0 CV}	0.292 µg/L [0.282] {5.0 CV}	R ² =0.99721, 56.860 %Abs	RK1:26->H01@3
CYL Std 4	0.792 Abs	0.463 µg/L	R ² =0.99721, 46.047 %Abs	RK1:27->A02@2
CYL Std 4	0.785 Abs [0.7885] {0.6 CV}	0.471 µg/L [0.467] {1.2 CV}	R ² =0.99721, 45.640 %Abs	RK1:27->B02@2
CYL Std 5	0.528 Abs	0.961 µg/L	R ² =0.99721, 30.698 %Abs	RK1:28->C02@2
CYL Std 5	0.512 Abs [0.5200] {2.2 CV}	1.012 µg/L [0.987] {3.7 CV}	R ² =0.99721, 29.767 %Abs	RK1:28->D02@2
CYL Std 6	0.339 Abs	> 2.000 µg/L	19.709 %Abs	RK1:29->E02@2
CYL Std 6	0.326 Abs [0.3325] {2.8 CV}	> 2.000 µg/L	18.953 %Abs	RK1:29->F02@3

7/14/2022 10:12:20 AM				
CYL QCS	0.691 Abs	0.601 µg/L	40.174 %Abs	RK1:30->G02@3
CYL QCS	0.605 Abs [0.6480] {9.4 CV}	0.762 µg/L [0.682] {16.7 CV}	35.174 %Abs [37.674 %Abs]	RK1:30->H02@3

Statistic				
CYL Std 0 [MEAN]	1.7200	0.0005		
CYL Std 0 [SD]	0.0028	0.0007		
CYL Std 0 [%CV]	0.1644	141.4214		
CYL Std 1 [MEAN]	1.5060	0.0530		
CYL Std 1 [SD]	0.0085	0.0028		
CYL Std 1 [%CV]	0.5634	5.3367		
CYL Std 1 [%DIFF]		6.0000		
CYL Std 2 [MEAN]	1.3935	0.0875		
CYL Std 2 [SD]	0.0007	0.0007		
CYL Std 2 [%CV]	0.0507	0.8081		
CYL Std 2 [%DIFF]		-12.5000		
CYL Std 3 [MEAN]	0.9920	0.2820		
CYL Std 3 [SD]	0.0198	0.0141		
CYL Std 3 [%CV]	1.9959	5.0149		
CYL Std 3 [%DIFF]		12.8000		
CYL Std 4 [MEAN]	0.7885	0.4670		
CYL Std 4 [SD]	0.0049	0.0057		
CYL Std 4 [%CV]	0.6277	1.2113		
CYL Std 4 [%DIFF]		-6.6000		

Name	Absorbance	Concentration	Interpretation	Position
CYL Std 5 [MEAN]	0.5200	0.9865		
CYL Std 5 [SD]	0.0113	0.0361		
CYL Std 5 [%CV]	2.1757	3.6556		
CYL Std 5 [%DIFF]		-1.3500		
CYL Std 6 [MEAN]	0.3325			
CYL Std 6 [SD]	0.0092			
CYL Std 6 [%CV]	2.7646			
CYL QCS [MEAN]	0.6480	0.6815		
CYL QCS [SD]	0.0608	0.1138		
CYL QCS [%CV]	9.3844	16.7049		

Assay Curve

$$y = (A-D)/(1+(x/C)^B) + D$$

Weight: NONE

A = 1.7221

B = 1.0023

C = 0.34324

D = 0.10269

R2 coef = 0.99721

50% = 0.391

