



Cylindrospermopsin ELISA Summary Report

Office of Water Quality - Watershed Assessment and Planning Branch

Sample #	Location	Date Collected	Date Analyzed	Conc. (ppb)	% Recovery
LRB 1	Lab Reagent Blank	8/27/2019	8/27/2019	<0.15	
LFB 1	Lab Fortified Blank (Spike = 0.6 ppb)	8/27/2019	8/27/2019	0.55	92
AB40164	Miami SRA at Mississinewa Lake	8/26/2019	8/27/2019	<0.15	
AB40165	Potato Creek SP	8/26/2019	8/27/2019	<0.15	
AB40165MS	Potato Creek SP MS (Spike = 0.6 ppb)	8/26/2019	8/27/2019	0.55	90
AB40165MSD	Potato Creek SP MSD (Spike = 0.6 ppb)	8/26/2019	8/27/2019	0.58	95
AB40166	Miami SRA at Mississinewa Lake	8/26/2019	8/27/2019	<0.15	
AB40167	Field Blank	8/26/2019	8/27/2019	<0.15	

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: 19A8753

Assay Calibration

Current Calibration Status: "

"

Name	Absorbance	Concentration	Interpretation	Position
8/27/2019 12:16:24 PM				
CYL Std 0	0.843 Abs		R ² =0.99958, 100.477 %Abs	RK1:32->A08@2
CYL Std 0	0.835 Abs [0.8390] {0.7 CV}		R ² =0.99958, 99.523 %Abs	RK1:32->B08@2
CYL Std 1	0.706 Abs		R ² =0.99958, 84.148 %Abs	RK1:33->C08@2
CYL Std 1	0.690 Abs [0.6980] {1.6 CV}		R ² =0.99958, 82.241 %Abs	RK1:33->D08@2
CYL Std 2	0.614 Abs		R ² =0.99958, 73.182 %Abs	RK1:34->E08@2
CYL Std 2	0.599 Abs [0.6065] {1.7 CV}		R ² =0.99958, 71.395 %Abs	RK1:34->F08@3
CYL Std 3	0.445 Abs		R ² =0.99958, 53.039 %Abs	RK1:35->G08@3
CYL Std 3	0.455 Abs [0.4500] {1.6 CV}		R ² =0.99958, 54.231 %Abs	RK1:35->H08@3
CYL Std 4	0.347 Abs		R ² =0.99958, 41.359 %Abs	RK1:36->A09@2
CYL Std 4	0.344 Abs [0.3455] {0.6 CV}		R ² =0.99958, 41.001 %Abs	RK1:36->B09@2
CYL Std 5	0.233 Abs		R ² =0.99958, 27.771 %Abs	RK1:37->C09@2
CYL Std 5	0.228 Abs [0.2305] {1.5 CV}		R ² =0.99958, 27.175 %Abs	RK1:37->D09@2
CYL Std 6	0.151 Abs		R ² =0.99958, 17.998 %Abs	RK1:38->E09@2
CYL Std 6	0.140 Abs [0.1455] {5.3 CV}		16.687 %Abs	RK1:38->F09@3

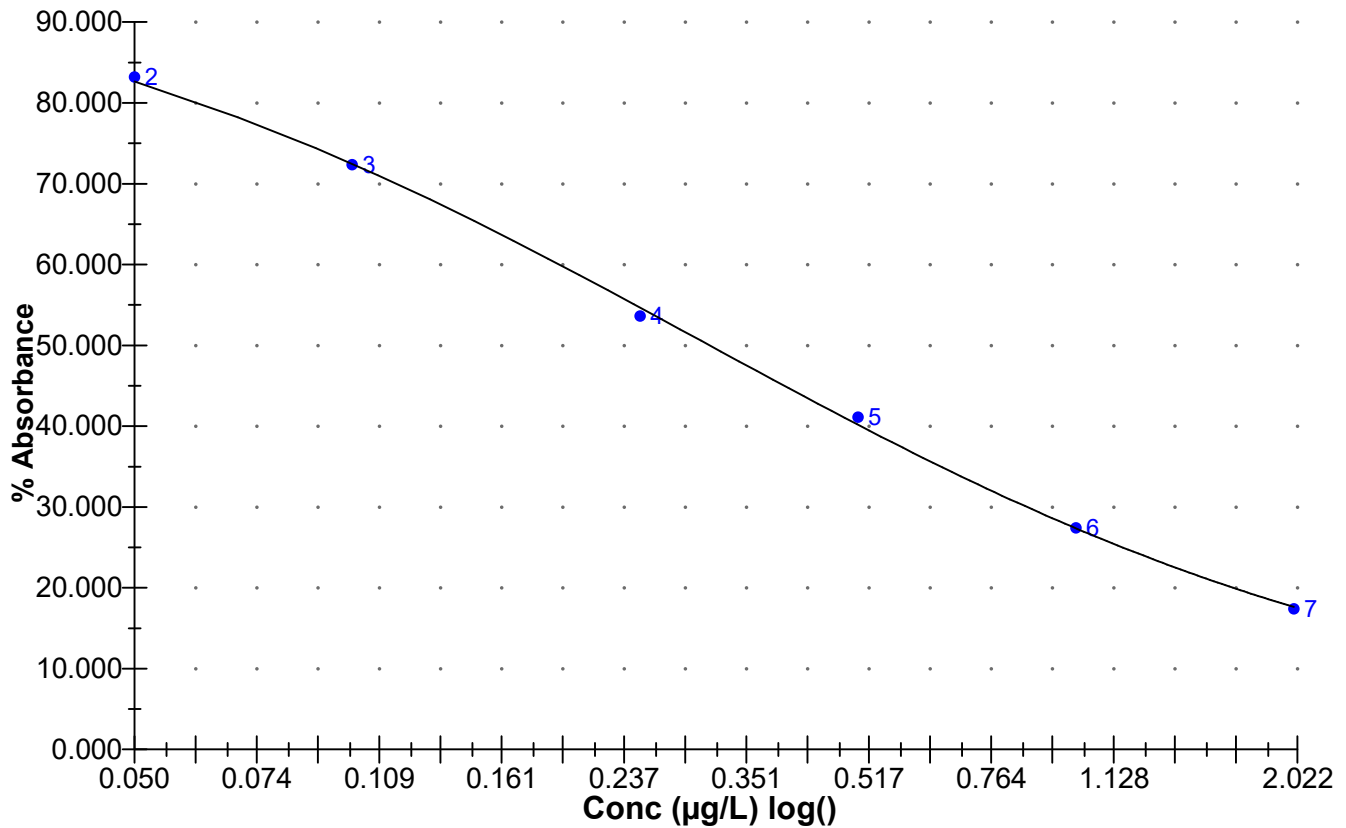
8/27/2019 12:16:24 PM				
CYL QCS	0.262 Abs		31.228 %Abs	RK1:39->G09@3
CYL QCS	0.264 Abs [0.2630] {0.5 CV}		31.466 %Abs [31.347 %Abs]	RK1:39->H09@3

Statistic				
CYL Std 0 [MEAN]	0.8390			
CYL Std 0 [SD]	0.0057			
CYL Std 0 [%CV]	0.6742			
CYL Std 1 [MEAN]	0.6980			
CYL Std 1 [SD]	0.0113			
CYL Std 1 [%CV]	1.6209			
CYL Std 1 [%DIFF]				
CYL Std 2 [MEAN]	0.6065			
CYL Std 2 [SD]	0.0106			
CYL Std 2 [%CV]	1.7488			
CYL Std 2 [%DIFF]				
CYL Std 3 [MEAN]	0.4500			
CYL Std 3 [SD]	0.0071			
CYL Std 3 [%CV]	1.5714			
CYL Std 3 [%DIFF]				
CYL Std 4 [MEAN]	0.3455			
CYL Std 4 [SD]	0.0021			
CYL Std 4 [%CV]	0.6140			
CYL Std 4 [%DIFF]				

Name	Absorbance	Concentration	Interpretation	Position	
CYL Std 5 [MEAN]	0.2305				
CYL Std 5 [SD]	0.0035				
CYL Std 5 [%CV]	1.5339				
CYL Std 5 [%DIFF]					
CYL Std 6 [MEAN]	0.1455				
CYL Std 6 [SD]	0.0078				
CYL Std 6 [%CV]	5.3458				
CYL QCS [MEAN]	0.2630				
CYL QCS [SD]	0.0014				
CYL QCS [%CV]	0.5377				

Assay Curve

$y = (A-D)/(1+(x/C)^B) + D$
 Weight: NONE
 A = 0.84018
 B = 0.85647
 C = 0.30110
 D = 0.011203
 R2 coef = 0.99958
 50% = 0.312



Test Information

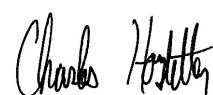
Request: 8/27/2019 12:16:24 PM
Date: 8/27/2019

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #	
CYL Std 0	CYLINDROSPERMOPSIN	0.843 Abs	0.000 µg/L	R^2=0.99958, 100.47		19A8753	
CYL Std 0	CYLINDROSPERMOPSIN	0.835 Abs [0.8390] {0.7 CV}	0.001 µg/L [0.001] {1}	R^2=0.99958, 99.523		19A8753	
CYL Std 1	CYLINDROSPERMOPSIN	0.706 Abs	0.044 µg/L	R^2=0.99958, 84.148		19A8753	
CYL Std 1	CYLINDROSPERMOPSIN	0.690 Abs [0.6980] {1.6 CV}	0.052 µg/L [0.048] {1}	R^2=0.99958, 82.241		19A8753	
CYL Std 2	CYLINDROSPERMOPSIN	0.614 Abs	0.096 µg/L	R^2=0.99958, 73.182		19A8753	
CYL Std 2	CYLINDROSPERMOPSIN	0.599 Abs [0.6065] {1.7 CV}	0.106 µg/L [0.101] {7}	R^2=0.99958, 71.395		19A8753	
CYL Std 3	CYLINDROSPERMOPSIN	0.445 Abs	0.270 µg/L	R^2=0.99958, 53.039		19A8753	
CYL Std 3	CYLINDROSPERMOPSIN	0.455 Abs [0.4500] {1.6 CV}	0.255 µg/L [0.262] {4}	R^2=0.99958, 54.231		19A8753	
CYL Std 4	CYLINDROSPERMOPSIN	0.347 Abs	0.472 µg/L	R^2=0.99958, 41.359		19A8753	
CYL Std 4	CYLINDROSPERMOPSIN	0.344 Abs [0.3455] {0.6 CV}	0.480 µg/L [0.476] {1}	R^2=0.99958, 41.001		19A8753	
CYL Std 5	CYLINDROSPERMOPSIN	0.233 Abs	0.976 µg/L	R^2=0.99958, 27.771		19A8753	
CYL Std 5	CYLINDROSPERMOPSIN	0.228 Abs [0.2305] {1.5 CV}	1.012 µg/L [0.994] {2}	R^2=0.99958, 27.175		19A8753	
CYL Std 6	CYLINDROSPERMOPSIN	0.151 Abs	1.939 µg/L	R^2=0.99958, 17.998		19A8753	
CYL Std 6	CYLINDROSPERMOPSIN	0.140 Abs [0.1455] {5.3 CV}	> 2.000 µg/L [1.939]	16.687 %Abs		19A8753	
CYL QCS	CYLINDROSPERMOPSIN	0.262 Abs	0.798 µg/L	31.228 %Abs		19A8753	
CYL QCS	CYLINDROSPERMOPSIN	0.264 Abs [0.2630] {0.5 CV}	0.788 µg/L [0.793] {0}	31.466 %Abs [31.347]		19A8753	

Test Information

Request: 8/27/2019 12:57:28 PM
Date: 8/27/2019

Name/ID	Assay	Absorbance	Concentration	Interpretation	Reference	Lot #
LRB	CYLINDROSPERMOPSIN	0.830 Abs	0.002 µg/L	LOW, 98.927 %ABS	0.050 - 2.000	19A8753
LRB	CYLINDROSPERMOPSIN	0.821 Abs [0.8255] {0.8 CV}	0.004 µg/L [0.003] {4}	LOW, 97.855 %ABS	0.050 - 2.000	19A8753
LFB	CYLINDROSPERMOPSIN	0.329 Abs	0.524 µg/L	39.213 %Abs	0.050 - 2.000	19A8753
LFB	CYLINDROSPERMOPSIN	0.314 Abs [0.3215] {3.3 CV}	0.574 µg/L [0.549] {6}	37.426 %Abs [38.315]	0.050 - 2.000	19A8753
AB40164	CYLINDROSPERMOPSIN	0.789 Abs	0.013 µg/L	LOW, 94.041 %ABS	0.050 - 2.000	19A8753
AB40164	CYLINDROSPERMOPSIN	0.786 Abs [0.7875] {0.3 CV}	0.013 µg/L [0.013] {0}	LOW, 93.683 %ABS	0.050 - 2.000	19A8753
AB40165	CYLINDROSPERMOPSIN	0.791 Abs	0.012 µg/L	LOW, 94.279 %ABS	0.050 - 2.000	19A8753
AB40165	CYLINDROSPERMOPSIN	0.799 Abs [0.7950] {0.7 CV}	0.010 µg/L [0.011] {1}	LOW, 95.232 %ABS	0.050 - 2.000	19A8753
AB40165MS	CYLINDROSPERMOPSIN	0.325 Abs	0.537 µg/L	38.737 %Abs	0.050 - 2.000	19A8753
AB40165MS	CYLINDROSPERMOPSIN	0.318 Abs [0.3215] {1.5 CV}	0.560 µg/L [0.549] {3}	37.902 %Abs [38.315]	0.050 - 2.000	19A8753
AB40165MSD	CYLINDROSPERMOPSIN	0.315 Abs	0.571 µg/L	37.545 %Abs	0.050 - 2.000	19A8753
AB40165MSD	CYLINDROSPERMOPSIN	0.309 Abs [0.3120] {1.4 CV}	0.592 µg/L [0.581] {2}	36.830 %Abs [37.187]	0.050 - 2.000	19A8753
AB40166	CYLINDROSPERMOPSIN	0.790 Abs	0.012 µg/L	LOW, 94.160 %ABS	0.050 - 2.000	19A8753
AB40166	CYLINDROSPERMOPSIN	0.786 Abs [0.7880] {0.4 CV}	0.013 µg/L [0.013] {5}	LOW, 93.683 %ABS	0.050 - 2.000	19A8753
AB40167	CYLINDROSPERMOPSIN	0.798 Abs	0.010 µg/L	LOW, 95.113 %ABS	0.050 - 2.000	19A8753
AB40167	CYLINDROSPERMOPSIN	0.819 Abs [0.8085] {1.8 CV}	0.004 µg/L [0.007] {6}	LOW, 97.616 %ABS	0.050 - 2.000	19A8753



Charles Hostetter 8/27/2019