LELAP Certificate No.: 02027

Biomonitoring Report
***Menidia beryllina* (EPA Method 1006) &**
***Americamysis bahia* (EPA Method 1007)**

prepared for
Corrosion Innovations
Client Contact: Jim Knocke

CHLOR*RID SP8 & CHLOR*RID SP8 Rinse
Run-off from Treated Plate Metal.

Non-protocol.

M. beryllina; EE USA Project No.: Q-625-13

SURVIVAL 7-Day NOEC/LOEC = 25.0%/35.0% Lab Sample (LS)
GROWTH 7-Day NOEC/LOEC = <12.0%/12.03% LS
% CV = 6.4

A. bahia; EE USA Project No.: Q-626-13

SURVIVAL 7-Day NOEC/LOEC = 1.1%/1.8% LS
GROWTH 7-Day NOEC/LOEC = 0.6%/1.1% LS
% CV = 14.9

Report Date: August 04, 2023
by
ENVIRONMENTAL ENTERPRISES USA, INC.
58485 PEARL ACRES ROAD, SUITE D
SLIDELL, LOUISIANA 70461
(800) 966-2788

This report contains seven pages plus seven appendices, A – G. This report must not be reproduced in part, only in whole. The results and conclusions presented in this report apply only to the sample(s) tested. All results should be considered valid unless otherwise noted in the report.

This is an amended report. The original report identified the product as "Corr-Ze 200 & Corr-Ze 100". At the client's request, the product name has been updated to CHLOR*RID SP8 & CHLOR*RID SP8 Rinse.

Michele Ellis
Effluents Testing Supervisor

8/4/23
DATE

David L. Daniel
President
QA/QC Officer

8/4/23
DATE

SWORN TO AND SUBSCRIBED BEFORE ME THIS 4 DAY OF August 20 23
Marie Betts #159677
Louisiana Notary Public Commissioned for Life
St. Tammany Parish * Statewide Jurisdiction

INLAND SILVERSIDE (*Menidia beryllina*) LARVAL SURVIVAL & GROWTH TEST EPA-821-R-02-014: METHOD 1006

TEST OVERVIEW

A 7-day static-renewal toxicity test was conducted by Environmental Enterprises USA, Inc. (EE USA) to determine toxicity of LS CHLOR*RID SP8 & CHLOR*RID SP8 RINSE to *Menidia beryllina* larvae. Methods, materials, and results are presented in this document. Test organisms were cultured at EE USA and were 11-days-old when this test was initiated. Synthetic seawater was used as the laboratory performance control (LPC) solution and diluent in this test. Five replicates of the LPC solution and five LS concentrations were prepared initially and renewed daily. LS concentrations tested were 12.0, 17.0, 25.0, 35.0, and 50.0%. Test concentrations were determined from a range finding test that was initiated August 29, 2023 (Appendix G) This test was initiated September 23, 2013, at 14:23 and completed September 30, 2013, at 09:27.

MATERIALS AND METHODS

Materials and methods for the work performed are stated in EPA-821-R-02-014: Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. Actual materials and methods are detailed below. This test was performed with strict adherence to the requirements of Method 1006 and/or the Western Gulf of Mexico OCS General Permit. The recommendations and suggestions made elsewhere in EPA-821-R-02-014 were incorporated whenever applicable to optimize the experimental design. Dilution water was prepared with hw-MARINEMIX + Bio-elements and Crystal Sea Marinemix Bioassay Laboratory Formula sea salts (80:20) and deionized water and adjusted to 25 parts per thousand (ppt) salinity.

M. beryllina was cultured and maintained at 24±1°C and 25 ppt salinity. Several clutches from different females comprised the embryo pool from which test organism population hatched. Test organisms were fed 200 – 300 µl of a standardized suspension of less than 24-hour-old *Artemia* nauplii twice daily by replicate. The standard suspension is equal to 0.05 g wet weight strained nauplii per ml synthetic seawater. Test organisms were not fed on Day 7. One day prior to test initiation, eight inland silverside minnows were transferred randomly into 30 test chambers with 250 ml synthetic seawater. These test chambers were then placed in the environmental chamber.

Sensitivity of test organisms to a known toxicant was determined by performing a chronic Standard Reference Toxicant (SRT) test, MN1310, with potassium chloride (Sigma Chemical, Lot SLBC2414V). The SRT test was initiated on September 04, 2013, with 11-day-old *M. beryllina* larvae. Appendix F contains *M. beryllina* SRT control charts.

	SURVIVAL	GROWTH
NOEC:	980 mg/L	980 mg/L
LOEC:	1400 mg/L	>980 mg/L

The sample used in this test was delivered to EE USA on September 20, 2013 (Appendix E). This sample was stored at 0.1 to 6°C and used to prepare the initial and subsequent renewal test solutions. Test chambers were labeled with replicate identification, and EE USA's project number. Six treatments, five LS concentrations and a LPC were prepared and pH was measured in the undiluted LS sample daily (Appendix A, page 1).

Each treatment was poured into a new acid-washed 1-gallon plastic container and placed in an environmental chamber to warm up to test temperature. After the test solutions reached test temperature, initial water quality parameters (temperature, dissolved oxygen (DO), and salinity) were measured. At the end of each 24-hour exposure period, prior to renewal, the ending DO, temperature, salinity, and pH in each treatment were recorded also (Appendix A, pages 4 - 7). Alkalinity, pH, and salinity were measured in the LPC September 23, September 25, and September 27, 2013 (Appendix A, page 1).

On Day 0, the preloaded replicate test chambers were removed from the environmental chamber and carefully examined. Dead or injured larvae were replaced with organisms from the same batch and this test was initiated by renewal: excess food and debris was removed by pipette and 90% of the treatment solution was poured out of each replicate. Aliquots of freshly prepared treatments were poured gently into each replicate as appropriate and then this test was placed in the environmental chamber. Surviving test organisms were disturbed as little as possible during renewal. On Days 1 - 6, the test was renewed.

Every 24 hours, survival was recorded (Appendix A, pages 2 - 4). After seven days, the final survival data were recorded and this test was terminated. Surviving *M. beryllina* were rinsed in deionized water, placed on a tared weighing dish, and dried at 60+/-4°C for 24 hours by replicate. After cooling for at least 30 minutes, dried *M. beryllina* were weighed and the average individual dry weight for each replicate was calculated (Appendix C, page 3). The average individual dry weight is equal to the replicate weight divided by the number of original larvae.

Summary of Experimental Conditions

Test Organisms:	11-day-old *Menidia beryllina* larvae.
Dilution Water:	Synthetic seawater, 25 ppt salinity.
Temperature:	25±1°C.
Photoperiod:	16 hours light; 8 hours dark.
Test Chambers:	Rectangular Pyrex dish, 21 cm x 11 cm x 7 cm. Total volume = 1.45 L.
Test Solution Volume:	500 ml.
Aeration:	Yes. On Day 1.
Test Solution Renewal:	Yes.

Test acceptability criteria (TAC) include minimum LPC survival, 80%, minimum mean dry weight for surviving *M. beryllina* in the LPC, ≥0.50 mg, and maximum percent coefficient of variation (%CV) in the LPC and critical dilution for survival and growth, ≤40. The %CV was calculated using the number of surviving *M. beryllina* in each replicate. This test met all TAC. Survival in the concurrent LPC was 100.0%. The mean dry weight of surviving *M. beryllina* in the LPC was 1.148 mg and the highest %CV for survival and growth in the LPC and critical dilution was 6.4 (Appendix C, pages 2 & 4).

RESULTS AND CONCLUSION

The response used in statistical analysis of survival data was the proportion of surviving test organisms per replicate. These proportions were transformed by the Arc Sine Square Root Transformation and then tested for normal distribution and homogeneity of variance using Shapiro-Wilk's and Bartlett's tests, respectively. Survival data were normally distributed, unequal in variance, and further evaluated by the nonparametric alternative, Steel's Many-One Rank Test. The No Observed Effect Concentration (NOEC) for impaired *M. beryllina* survival was 25.0% LS. The Lowest Observed Effect Concentration (LOEC) was 35.0% LS. For this *M. beryllina* survival data set, the minimum statistically significant percent difference (MSDp) was 10.0 (Appendix C, page 2).

The response used in growth data analysis was the average individual dry weight for each replicate: replicate weight divided by the number of original larvae. Growth data were not transformed and concentrations demonstrating significant mortality are routinely excluded from subsequent data analysis. Growth data were tested for normal distribution and homogeneity of variance using Shapiro-Wilk's and Bartlett's tests, respectively. Growth data were normally distributed, equal in variance, and further evaluated by the parametric alternative, Dunnett's Test. The NOEC for impaired *M. beryllina* growth was <12.0% LS. The LOEC was 12.0% LS. For this *M. beryllina* growth data set, the MSDp was 15.5 (Appendix C, page 3).

Survival of *M. beryllina* larvae exposed to CHLOR*RID SP8 & CHLOR*RID SP8 RINSE was reduced significantly at 35.0% LS (the LOEC). Growth was reduced significantly at 12.0% LS (the LOEC). Survival and growth data summary statistics are presented in Appendix C.

MYSID (*Americamysis bahia*) SURVIVAL, GROWTH, AND FECUNDITY TEST EPA-821-R-02-014: METHOD 1007

TEST OVERVIEW

A 7-day static-renewal toxicity test was conducted by EE USA to determine toxicity of LS CHLOR*RID SP8 & CHLOR*RID SP8 RINSE to *Americamysis bahia* juveniles. Methods, materials, and results are presented in this document. Organisms used in this test were cultured at EE USA and 7-days-old when this test was initiated. Synthetic seawater was used as the LPC solution and diluent in this test. Eight replicates of the LPC solution and five LS concentrations were prepared initially and renewed daily. LS concentrations tested were 0.6, 1.1, 1.8, 3.0, and 5.0%. Test concentrations tested were determined from a range finding test that was initiated August 29 and September 03, 2013 (Appendix G). This test was initiated September 23, 2013, at 14:22 and completed September 30, 2013, at 10:20.

MATERIALS AND METHODS

Materials and methods for the work performed are stated in EPA-821-R-02-014: Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. Actual materials and methods are detailed below. This test was performed with strict adherence to the requirements of Method 1007 and/or the Western Gulf of Mexico OCS General Permit. The recommendations and suggestions made elsewhere in EPA-821-R-02-014 were incorporated whenever applicable to optimize the experimental design. Dilution water was prepared with hw-MARINEMIX + Bio-elements and Crystal Sea Marinemix Bioassay Laboratory Formula sea salts (80:20) and deionized water and adjusted to 25 ppt salinity.

A. bahia was cultured and maintained at 24±1°C and 25 ppt salinity. Six days before initiating this test, approximately 500, 12- to 24-hour-old mysids were collected from breeding cultures, moved to a holding system, and acclimated to 26±1°C. Test organisms were fed 100 – 175 µl of a standardized suspension of less than 24-hour-old *Artemia* nauplii twice daily by replicate. The standard suspension is equal to 0.05 g wet weight strained nauplii per ml synthetic seawater.

Sensitivity of test organisms to a known toxicant was determined by performing a chronic Standard Reference Toxicant (SRT) test AB1310, with potassium chloride (Sigma Chemical, Lot SLBC2414V). The SRT test was initiated on September 04, 2013, with 7-day-old *A. bahia*. Appendix F contains *A. bahia* SRT control charts.

	SURVIVAL	GROWTH
NOEC:	416 mg/L	416 mg/L
LOEC:	694 mg/L	>416 mg/L

The sample used in this test was delivered to EE USA on September 20, 2013 (Appendix E). This sample was stored at 0.1 to 6°C and used to prepare the initial and subsequent renewal test solutions. Test chambers were labeled with replicate identification, and EE USA's project number. Six treatments, five LS concentrations and a LPC were prepared and pH was measured in the undiluted LS sample daily (Appendix B, page 1).

Each treatment was poured into a new acid-washed 1-gallon plastic container and placed in an environmental chamber to warm up to test temperature. After the test solutions reached test temperature, initial water quality parameters (temperature, DO, and salinity) were measured. At the end of each 24-hour exposure period, prior to renewal, the ending DO, temperature, salinity, and pH in each treatment were recorded also (Appendix B, pages 4 - 7). Alkalinity, pH, and salinity were measured in the LPC September 23, September 25, and September 27, 2013 (Appendix B, page 1).

On Day 0, the treatments were poured into their respective test chambers, five *A. bahia* juveniles were distributed randomly to each, and then this test was placed in the environmental chamber. On Days 1 - 6, the test was renewed: excess food and debris was removed by pipette and 90% of the treatment solution was poured out of each replicate. Aliquots of freshly prepared treatments were poured gently into each replicate as appropriate. Surviving test organisms were disturbed as little as possible during renewal.

Every 24 hours, survival was recorded (Appendix B, pages 2 - 4). After seven days, the final survival data were recorded and this test was terminated. Surviving *A. bahia* were rinsed in deionized water, placed on a tared weighing dish, and dried at 60+/-4°C for 24 hours by replicate. After cooling for at least 30 minutes, dried *A. bahia* were weighed and the average individual dry weight for each replicate was calculated (Appendix D, page 4). The average individual dry weight is equal to the replicate weight divided by the number of original mysids.

Summary of Experimental Conditions

Test Organisms:	7-day-old *Americamysis bahia* juveniles.
Dilution Water:	Synthetic seawater, 25 ppt salinity.
Temperature:	26±1°C.
Photoperiod:	16 hours light; 8 hours dark.
Test Chambers:	Disposable plastic cups, 9 cm in diameter. Total volume = 300 ml.
Test Solution Volume:	150 ml.
Aeration:	Yes. On Day 1.
Test Solution Renewal:	Yes.

TAC include minimum LPC survival, 80%, minimum mean dry weight for surviving *A. bahia* in the LPC, ≥0.20 mg, and maximum %CV in the LPC and critical dilution for survival and growth, ≤40. The %CV was calculated using the number of surviving *A. bahia* in each replicate. This test met all TAC. Survival in the concurrent LPC was 100.0%. The mean dry weight of surviving *A. bahia* in the LPC was 0.322 mg and the highest %CV for survival and growth in the LPC and critical dilution was 14.9 (Appendix D, pages 3 & 5).

RESULTS AND CONCLUSION

The response used in statistical analysis of survival data was the proportion of surviving test organisms per replicate. These proportions were transformed by the Arc Sine Square Root Transformation and then tested for normal distribution and homogeneity of variance using Shapiro-Wilk's and Bartlett's tests, respectively. Survival data were not normally distributed and were further evaluated by the nonparametric alternative, Steel's Many-One Rank Test. The NOEC for impaired *A. bahia* survival was 1.1% LS. The LOEC was 1.8% LS. For this *A. bahia* survival data set, the MSDp was 13.4 (Appendix D, page 3).

The response used in growth data analysis was the average individual dry weight for each replicate: replicate weight divided by the number of original larvae. Growth data were not transformed and concentrations demonstrating significant mortality are routinely excluded from subsequent data analysis. Growth data were tested for normal distribution and homogeneity of variance using Shapiro-Wilk's and Bartlett's tests, respectively. Growth data were not normally distributed, equal in variance, and further evaluated by the nonparametric alternative, Steel's Many-One Rank Test. The NOEC for impaired *A. bahia* growth was 0.6% LS. The LOEC was 1.1% LS. For this *A. bahia* growth data set, the MSDp was 14.6 (Appendix D, page 4).

Survival of *A. bahia* exposed to CHLOR*RID SP8 & CHLOR*RID SP8 RINSE was reduced significantly at 1.8% LS (the LOEC). Growth was reduced significantly at 1.1% LS (the LOEC). Survival and growth data summary statistics are presented in Appendix D.

REFERENCES

Environmental Enterprises USA, Quality Assurance Plan, June 2012 (or most recent version).

Environmental Enterprises USA, Standard Operating Procedures, December 2012 (or most recent version).

NELAC Institute. TNI Standard, Environmental Laboratory Sector, adopted September 8, 2009. Management and Technical Requirements for Laboratories Performing Environmental Analysis. Volume 1. EL-V1-2009-ISO. Weatherford, TX 76086.

Tidepool Scientific Software. 2007. ToxCalc™ Toxicity Data Analysis Software. Version 5.0.32. McKinleyville, CA.

U.S. Environmental Protection Agency. June 2000. Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program. EPA 833-R-00-003. Office of Wastewater Management (4203). Washington, DC 20460.

U.S. Environmental Protection Agency. July 2000. Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR Part 136). EPA 821-B-00-004. Office of Water (4303). Washington, DC 20460.

U.S. Environmental Protection Agency. October 2002. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA-821-R-02-014, Method 1006 and Method 1007. 3rd Edition. Office of Water (4303T). Washington, DC 20460.

U.S. Environmental Protection Agency Region VI, Effective: October 1, 2012. Final NPDES General Permit for New and Existing Sources and New Dischargers in the Offshore Subcategory of the Oil and Gas Extraction Category for the Western Portion of the Outer Continental Shelf of the Gulf of Mexico (GMG290000). FR Volume 77, No. 196, p. 61605, October 10, 2012.

Environmental Enterprises USA, Inc.

APPENDIX A

CorrLine International – CorrX
Run-off from treated metal plate
Barbara Tompkins-Brown

Test Concentrations, % Lab Sample (LS)

Menidia beryllina	Total Volume/ Concentration, ml	Color Code	ml LS	ml DH_2O
50.0	2500.00	Black	1250.00	1250.00
35.0	"	Red	875.00	1625.00
25.0	"	Yellow	625.00	1875.00
17.0	"	Green	425.00	2075.00
12.0	"	Blue	300.00	2200.00
0 LPC	"	White	0.00	2500.00
		Total Volume (ml) of LS needed per day=		3475.00
		Total Volume (ml) of LS needed for test duration=		24325.00

Data Pages & Calculations by: Veronica Mc Ian QA/QC Check by: Michelle Collins

M. beryllina = 5 Reps x 500 ml
= 2500 ml

DH_2O = Dilution Water = **Synthetic Seawater, 25 ppt**

	LPC	M #	LPC	M #	LPC	M #	LS #1	M #
Date	09/23		09/25		09/27		09/23	
Alkalinity	104	//	100	//	(A)	//		//
Salinity	24.9	1B	25.3	1B	25.0	1B		
pH	8.0	A93	8.1	A93	8.0	A93		
	MR		CMB		JE		(A)	

Artemia Lot #
042012-2
Initial: ME

LPC: Laboratory Performance Control, synthetic seawater
Alkalinity: mg/l as $CaCO_3$ Salinity: ppt pH: su M#: meter number

Prep Date	09/23	09/24	09/25	09/26	09/27	09/28	09/29
DH_2O Lot #	25R-264 -13	25R-265 -13	25R-266 -13	25R-267 -13	25R-268 -13	25R-269 -13	25R-270 -13
Sample #	1	1	1	1	1	1	1
pH	6.5	6.6	6.6	6.4	6.5	6.2	6.3
Meter #	A93	A93	A93	A93	A93	A93	A93
Initial	JH	CM	JH	CMB	JAG	JA	JA

Comments: (A) Data not recorded 100213 ME

Inland Silverside Minnow, *Menidia beryllina*
Larval Survival and Growth Test, Method 1006

CorrLine International – CorrX
Run-off from treated metal plate

Test Organisms Age: 11 Days Old Test Organisms Source: EE
Test Initiation At: 1423 on 9 /23 /13
Counted by: _____ QC/QA by: Miranda Robbin
Loaded by: Miranda Robbin Organism Lot # MN-255.13
Exposure Chamber: 1.5 L Pyrex dish. **Feeding**: *Artemia* nauplii 250 to 500 µl 2X / day / replicate.

M. beryllina Daily Survival Data

Treatment: **0 % LS**								**White**
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	8	8	8	8	8	8	8	8
2	8	8	8	8	8	8	8	8
3	8	8	8	8	8	8	8	8
4	8	8	8	8	8	8	8	8
5	8	8	8	8	8	8	8	8
Initials	MR	JA	CMB	AG	SAG	[illegible]	[illegible]	SAG

Treatment: **12.0 % LS**								**Blue**
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
6	8	8	7	7	7	7	7	7
7	8	8	7	7	7	7	7	7
8	8	8	8	8	8	8	7	7
9	8	8	8	7	7	7	7	7
10	8	8	8	8	8	8	8	8
Initials	MR	JA	CMB	AG	SAG	[illegible]	[illegible]	SAG

Comments: _____

M. beryllina Daily Survival Data Cont.

Treatment: **17.0 % LS**								**Green**
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
11	8	8	8	8	8	8	8	8
12	8	8	8	8	8	8	7	7
13	8	8	8	8	8	8	8	8
14	8	8	8	8	8	8	7	7
15	8	8	8	8	8	8	8	8
Initials	MR	JA	CMB	Cy	JAG	[illegible]	[illegible]	JAG

Treatment: **25.0 % LS**								**Yellow**
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
16	8	8	8	8	8	7	7	7
17	8	8	7	7	7	6	5	5
18	8	8	8	8	8	7	6	6
19	8	8	8	8	8	8	8	8
20	8	8	8	7	6	5	5	5
Initials	MR	JA	CMB	Cy	JAG	[illegible]	[illegible]	JAG

Treatment: **35.0 % LS**								**Red**
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
21	8	8	8	5	4	3	2	2
22	8	8	8	5	2	2	2	2
23	8	8	7	3	2	2	2	2
24	8	8	8	6	4	3	2	2
25	8	8	7	6	5	4	1	0
Initials	MR	JA	CMB	Cy	JAG	[illegible]	[illegible]	JAG

Comments: _____

CorrX, Run-off from treated metal plate

Q-625-13
NOEC/LOEC

M. beryllina Daily Survival Data Cont.

Treatment: **50.0 % LS**								**Black**
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
26	8	8	8	0	0	0	0	0
27	8	8	6	0	0	0	0	0
28	8	8	6	0	0	0	0	0
29	8	8	5	0	0	0	0	0
30	8	8	4	2	0	0	0	0
Initials	MR	JA	CMB	Cy	JAG	fc	fc	JAG
Time	1423	1030	1121	1048	1040	0916	0955	0927

Test Completed on: 09/30/13

M. beryllina Water Quality Data

All Treatments: Initial Temp., 24.5 to 26.4°C. Final Temp., 23.5 to 26.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I**: initial water quality. **F**: final water quality.

Day 0	Treatment % LS						
09/23/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO I	7.2	7.2	7.2	7.2	7.1	7.2	57
Temp I	24.5	24.5	24.5	24.5	24.9	24.5	1B
Salinity I	24.9	25.1	25.0	25.3	25.3	25.4	1B
Tech Initials: JA					Time: 1401		

Comments

Day 1	Treatment % LS						
09/24/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO F	6.3	3.1	1.8	0.9	0.7	0.7	57
Temp F	24.9	24.8	24.9	25.0	24.8	24.9	1B
Salinity F	25.3	25.3	25.3	25.3	25.8 25.5	25.5	1B
pH F	8.0	7.6	7.5	7.5	7.5	7.4	A93
Tech Initials: Cy CMB					Time: 0837		

Comments (A) wrong data 9/24/13 dg

DO: mg/l pH: su Salinity: ppt Temp: °C

CorrX, Run-off from treated metal plate

Q-625-13
NOEC/LOEC

M. beryllina Water Quality Data Cont.

All Treatments: Initial Temp., 24.5 to 26.4°C. Final Temp., 23.5 to 26.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I**: initial water quality. **F:** final water quality.

Day 1	Treatment % LS						
09/24/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO I	6.9	6.6	6.5	6.1	5.8	5.6	S7
Temp I	25.2	24.9	24.6	24.9	24.8	25.0	1B
Salinity I	25.1	25.2	25.2	25.3	25.3	25.4	1B
Tech Initials: CMB					Time: 0942		

Comments Aerated at 39 mls per min

Day 2	Treatment % LS						
09/25/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO F	7.1	6.6	6.0	5.1	4.7	5.4	S7
Temp F	24.9	24.8	25.0	25.0	25.1	25.0	1B
Salinity F	25.3	25.5	25.4	25.5	25.6	25.7	1B
pH F	8.0	7.9	7.9	7.8	7.7	7.9	A93
Tech Initials: CY CMB					Time: 0839		

Comments

Day 2	Treatment % LS						
09/25/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO I	7.3	6.9	6.8	6.2	6.0	5.2	S7
Temp I	25.1	26.0	25.1	25.5	25.3	25.7	1B
Salinity I	25.3	25.3	25.2	25.3	25.3	25.3	1B
Tech Initials: CMB					Time: 0933		

Comments

Day 3	Treatment % LS						
09/26/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO F	6.8	6.3	4.8	5.9	5.2	5.3	S7
Temp F	24.6	24.6	24.7	25.1	24.8	24.7	1B
Salinity F	25.6	25.6	25.5	25.6	25.7	25.6	1B
pH F	8.0	8.0	7.8	8.0	8.0	8.0	A93
Tech Initials: MEC M					Time: 0845		

Comments

DO: mg/l pH: su Salinity: ppt Temp: °C

CorrX, Run-off from treated metal plate

Q-625-13
NOEC/LOEC

M. beryllina Water Quality Data Cont.

All Treatments: Initial Temp., 24.5 to 26.4°C. Final Temp., 23.5 to 26.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I:** initial water quality. **F:** final water quality.

Day 3	Treatment % LS						
09/26/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO I	7.1	6.9	6.8	6.5	6.1	5.5	S7
Temp I	24.5	25.0	26.4	25.0	25.4	25.1	1B
Salinity I	25.0	25.1	25.2	25.0	25.2	25.3	1B
Tech Initials: CM CMB				Time: 1007			

Comments_____

Day 4	Treatment % LS						
09/27/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO F	6.9	6.1	5.9	5.7	5.6	5.2	S7
Temp F	25.2	25.0	25.0	25.0	25.1	25.0	1B
Salinity F	25.1	25.5	25.5	25.6	25.6	25.7	1B
pH F	8.0	8.1	8.1	8.2	8.1	8.0	AQB
Tech Initials: CM CMB				Time: 0832			

Comments_____

Day 4	Treatment % LS						
09/27/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO I	7.2	7.0	7.0	6.9	6.5	6.0	S7
Temp I	25.3	25.7	26.1	26.0	25.0	24.6	1B
Salinity I	25.0	25.1	25.2	25.2	25.2	25.3	1B
Tech Initials: CM CMB				Time: 0927			

Comments_____

Day 5	Treatment % LS						
09/28/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO F	6.8	5.6	5.8	5.6	5.3	–	S7
Temp F	24.8	25.1	24.6	24.6	24.7	–	1B
Salinity F	25.3	25.3	25.5	25.5	25.5	–	1B
pH F	8.0	8.1	8.2	8.1	8.1	–	AQB
Tech Initials: CM				Time: 0739			

Comments_____

DO: mg/l pH: su Salinity: ppt Temp: °C

CorrX, Run-off from treated metal plate

Q-625-13
NOEC/LOEC

M. beryllina Water Quality Data Cont.

All Treatments: Initial Temp., 24.5 to 26.4°C. Final Temp., 23.5 to 26.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I:** initial water quality. **F:** final water quality.

Day 5	Treatment % LS						
09/28/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO I	7.0	6.9	6.9	6.6	6.5	—	57
Temp I	25.1	24.5	24.5	25.1	25.5	—	1B
Salinity I	25.0	24.9	25.0	25.0	25.0	—	1B
Tech Initials: CG					Time: 0824		

Comments_____

Day 6	Treatment % LS						
09/29/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO F	6.8	6.2	5.2	5.2	5.4	—	57
Temp F	24.8	24.5	24.7	24.8	24.7	—	1B
Salinity F	25.4	25.4	25.4	25.3	25.5	—	1B
pH F	8.0	8.0	8.0	8.2	8.2	—	A93
Tech Initials: MEMS					Time: 0728		

Comments_____

Day 6	Treatment % LS						
09/29/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO I	7.1	6.9	6.7	6.4	6.4	—	57
Temp I	24.8	24.8	25.1	24.6	24.8	—	1B
Salinity I	24.9	25.0	25.0	25.0	25.1	—	1B
Tech Initials: CG					Time: 0833		

Comments_____

Day 7	Treatment % LS						
09/30/13	LPC	12.0	17.0	25.0	35.0	50.0	Meter #
DO F	7.0	5.8	6.2	6.1	5.7	—	57
Temp F	24.4	24.6	24.7	24.7	24.6	—	1B
Salinity F	25.3	25.4	25.3	25.4	25.6	—	1B
pH F	8.1	8.2	8.2	8.2	8.2	—	A93
Tech Initials: CG CMB					Time: 0828		

Comments_____

DO: mg/l pH: su Salinity: ppt Temp: °C

CorrX, Run-off from treated metal plate

Q-625-13
NOEC/LOEC

7 Day *M. beryllina* Growth Data

Rep #	Treatment % LS	A Final Weight (mg)	B Initial Weight (mg)	C No. of Orig. Larvae	D No. of Surv. Larvae
1	0	17.52	8.45	8	8
2	"	18.47	9.30	8	8
3	"	19.26	9.13	8	8
4	"	17.58	8.54	8	8
5	"	16.09	8.17	8	8
6	12.0	13.46	8.40	8	7
7	"	17.91	10.97	8	7
8	"	15.05	10.09	8	7
9	"	13.01	9.24	8	7
10	"	18.25	11.04	8	8
11	17.0	13.95	9.01	8	8
12	"	14.17	10.56	8	7
13	"	13.01	8.48	8	8
14	"	15.28	10.09	8	7
15	"	16.70	10.10	8	8

Comments:_____

_____

_____

_____

_____

7 Day *M. beryllina* Growth Data Cont.

Rep #	Treatment % LS	A Final Weight (mg)	B Initial Weight (mg)	C No. of Orig. Larvae	D No. of Surv. Larvae
16	25.0	11.70	8.09	8	7
17	"	12.01	9.70	8	5
18	"	11.31	9.50	8	6
19	"	13.90	9.70	8	8
20	"	13.52	10.08	8	5
21	35.0	8.87	7.15	8	2
22	"	9.70	8.97	8	2
23	"	10.08	9.09	8	2
24	"	8.72	8.06	8	2
25	"	—	9.21	8	0
26	50.0	—	8.18	8	0
27	"	—	9.01	8	0
28	"	—	9.00	8	0
29	"	—	9.08	8	0
30	"	—	7.95	8	0

Initial Foil Wts at 0834 on 9 / 27 /2013 (MR) Scale#: R09

Oven Temp. 63.0 °C Therm. #: T159

Begin Drying Survivors at 0927 on 09 / 30 /2013 (JAG) Oven #: 1V

Finish Drying Survivors at 0828 on 10 / 01 /2013 (MR)

Final Foil Wts. at 0909 on 10 / 01 /2013 (MR) Scale #: R09

Data Entry by: Veronica McNew

Double Data Entry by: Veronica McNew or

QA/QC Officer: Mary A. O'Neil

QA/QC Data Pages

- ☑ Company name & contact matches client file.
- ☑ Sample matches client file.
- ☑ Dilution series is correct:

12, 17, 25, 35, 50.

- ☑ Calculations on mixing page are correct. (sign mixing page)
- ☑ Dates, dilutions, test method, # of replicates, replicate volume, sample, acceptance limits, data analysis endpoint, and test organisms are correct throughout data pages.
- ☑ Format correct. (spaces for all entries, page numeration, no split pages, etc.)

ME Initials 9/23/13 Date

QA/QC Chain-of-Custody

Ⓐ Section incomplete 100213 ME

- ☐ Sample on COC matches sample bottle.
- ☐ Sample on COC matches test data pages.
- ☐ Lab # on COC matches sample bottle.
- ☐ Lab # on COC matches test data pages.
- ☐ Sample volume is sufficient for test duration. (Sample volume in container(s) checked against sample volume on mixing page)

Sample volume available: _____ ml

Sample volume needed: _____ ml

(Sample volume insufficient if sample volume available < sample volume needed)

_____ Initials _____ Date

QA/QC Jugs & Labels

- ☑ Lab # on jug and labels matches test data pages.
- ☑ Dilution water type is on jug. (i.e. 25 ppt, 20 ppt, MHSF, etc.)
- ☑ Dilutions on jugs and labels match dilutions on test data pages.
- ☑ Jugs are color-coded. (see mixing page for appropriate color code sequence)

ME Initials 9/23/13 Date

QC/QA Raw Data: Michelle 10/2/13

Environmental Enterprises USA, Inc.

APPENDIX B

CorrLine International – CorrX
Run-off from treated metal plate
Barbara Tompkins-Brown

Test Concentrations, % Produced Water (LS)

	Mysidopsis bahia	Total Volume/ Concentration, ml	Color Code	ml LS	ml DH_2O
5.0		1200.00	Black	60.00	1140.00
3.0		"	Red	36.00	1164.00
1.8		"	Yellow	21.60	1178.40
1.1		"	Green	13.20	1186.80
0.6		"	Blue	7.20	1192.80
0 LPC		"	White	0.00	1200.00
			Total Volume (ml) of LS needed per day=		138.00
			Total Volume (ml) of LS needed for test duration=		966.00

Data Pages & Calculations by: Veronica M. Mew QA/QC Check by: Michelle Zolin

M. bahia = 8 Reps x 150 ml
= 1200 ml

DH_2O = Dilution Water = **Synthetic Seawater, 25 ppt**

	LPC	M #	LPC	M #	LPC	M #	LS #1	M #
Date	09/23		09/25		09/27		09/23	
Alkalinity	104	//	100	//	(B)	//		//
Salinity	24.9	IB	25.1	IB	25.0	IB		
pH	8.0	A93	8.1	A93	8.0	A93		
	MR		CMB				(B)	

Artemia Lot #	
042012-2	
Initial	VME

LPC: Laboratory Performance Control, synthetic seawater
Alkalinity: mg/l as $CaCO_3$ Salinity: ppt pH: su M#: meter number

Prep Date	09/23	09/24	09/25	09/26	09/27	09/28	09/29
DH_2O Lot #	25R-264 -13	25R-265 -13	25R-266 -13	25R-267 -13	25R-268 -13	25R-269 -13	25R-270 -13
Sample #	1	1	1	1	1	1	1
pH	6.5	6.6	6.5	6.4	6.5	6.2	6.3
Meter #	A93	A93	A93	A93	A93	A93	A93
Initial	JA	CM	JA	@ CMB JAG	JAG	K	K

Comments: @Lowering Data JAG, 9-26-13
(B) Data not recorded 10-2-13 MZ

Mysid, *Mysidopsis bahia*
Survival, Growth, and Fecundity Test, Method 1007

CorrLine International – CorrX
Run-off from treated metal plate

Test Organisms Age: 7 Days Old Test Organisms Source: EE
Test Initiation At: 1422 on 9/23/13
Counted by: Miranda Robbins QC/QA by: [illegible]
Loaded by: [illegible] Organism Lot # MG-508-13

Exposure Chamber: 300 ml plastic cup. **Feeding**: *Artemia* nauplii 150 to 250 µl 2X / day / replicate.

M. bahia Daily Survival Data

Treatment: **0 % LS**								**White**
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1/2	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/5
3/4	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/5
5/6	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/5
7/8	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/5
Initials	JA	MR	JAG	CMB	JAG	JA	JA	MR

Treatment: **0.6 % LS**								**Blue**
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
9/10	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/5
11/12	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/4
13/14	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/5
15/16	5/5	5/5	5/5	5/5	5/3	5/3	5/5	5/3
Initials	JA	MR	JAG	CMB	JAG	JA	JA	MR

Comments: _____

M. bahia Daily Survival Data Cont.

Treatment: **1.1 % LS**								Green
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
17/18	5/5	5/5	5/5	5/5	5/5	5/5	5/5	4/5
19/20	5/5	5/5	5/5	5/5	5/5	5/5	5/5	4/5
21/22	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/5
23/24	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/5
Initials	JA	MR	JAG	CMB	JAG	JA	JA	MR

Treatment: **1.8 % LS**								Yellow
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
25/26	5/5	5/5	5/5	5/5	5/5	5/5	5/5	2/4
27/28	5/5	5/5	5/5	5/5	5/5	5/5	3/5	1/3
29/30	5/5	5/5	5/5	5/5	5/5	5/5	5/5	2/0
31/32	5/5	5/5	5/5	5/5	5/5	5/5	5/5	4/4
Initials	JA	MR	JAG	CMB	JAG	JA	JA	MR

Treatment: **3.0 % LS** (A)								Red
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
33/34	5/5	5/5	5/5	5/4	3/1	03/0	0/0	0/0
35/36	5/5	5/5	5/5	4/2	04/2	0	0/0	0/0
37/38	5/4	5/4	5/4	4/2	04/2	0	0/0	0/0
39/40	5/5	5/5	5/5	3/3	03/3		0/0	0/0
Initials	JA	MR	JAG	CMB	JAG	JA	JA	MR

Comments: (A) wrong DATA 9-29-13 JA

CorrX, Run-off from treated metal plate

Q-626-13
NOEC/LOEC

M. bahia Daily Survival Data Cont.

Treatment: **5.0 % LS**								**Black**
Rep.	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
41/42	5/5	5/5	5/5	0/2	0/0	0/0	0/-	0/0
43/44	5/5	5/5	5/5	3/3	0/0	0/0	0/0	0/0
45/46	5/5	5/5	5/5	2/2	0/0	0/0	0/0	0/0
47/48	5/5	5/5	5/5	1/4	0/0	0/0	0/0	0/0
Initials	JA	MR	JAG	CMB	JAG	0946	1013	MR
Time	1422	1039	1118	1156	1122	0946	JM	1020

Test Completed on: 9/30/13

M. bahia Water Quality Data

All Treatments: Initial Temp., 24.5 to 26.4°C. Final Temp., 24.5 to 27.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I**: initial water quality. **F:** final water quality.

Day 0	Treatment % LS						
09/23/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO I	7.0	7.2	7.2	7.1	7.1	7.1	57
Temp I	24.5	24.8	24.6	24.8	25.0	24.8	1B
Salinity I	24.9	25.1	25.3	25.1	25.0	25.0	1B
Tech Initials: JA				Time: 1406			

Comments_____

Day 1	Treatment % LS						
09/24/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO F	5.8	5.6	5.0	4.6	3.2	2.0	57
Temp F	25.3	25.2	25.3	25.2	25.4	24.9	1B
Salinity F	26.1	25.8	26.0	26.0	26.0	26.0	1B
pH F	7.9	7.8	7.8	7.7	7.6	7.5	AA3
Tech Initials: CMB				Time: 0833			

Comments TEST CREATED @ 1039 MR 9/23/2013 DAY 1 9/24/13 MR

DO: mg/l pH: su Salinity: ppt Temp: °C

M. bahia Water Quality Data Cont.

All Treatments: Initial Temp., 24.5 to 26.4°C. Final Temp., 24.5 to 27.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I**: initial water quality. **F:** final water quality.

Day 1	Treatment % LS						
09/24/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO I	6.9	7.0	6.9	6.9	6.9	6.9	S7
Temp I	25.4	25.5	25.5	25.4	25.4	25.4	IB
Salinity I	25.1	25.1	25.2	25.1	25.2	25.2	IB
Tech Initials: CJ CMB					Time: 0921		

Comments_____

Day 2	Treatment % LS						
09/25/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO F	7.0	6.9	6.9	6.9	6.9	6.8	S7
Temp F	25.0	24.8	25.1	25.1	25.3	24.8	IB
Salinity F	26.7	26.5	26.6	26.3	26.9	26.8	IB
pH F	8.1	8.1	8.1	8.1	8.2	8.2	A93
Tech Initials: CJ CMB					Time: 0841		

Comments_____

Day 2	Treatment % LS						
09/25/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO I	7.2	7.2	7.1	7.1	7.1	7.1	S7
Temp I	25.7	26.4	25.8	26.2	26.4	26.3	IB
Salinity I	25.1	25.1	25.1	25.0	25.1	25.1	IB
Tech Initials: CMB CM					Time: 1003		

Comments_____

Day 3	Treatment % LS						
09/26/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO F	6.7	6.8	6.8	6.9	6.8	6.8	S7
Temp F	24.8	24.9	24.8	24.6	25.1	24.8	IB
Salinity F	26.7	26.5	26.6	26.5	26.7	26.5	IB
pH F	8.0	8.1	8.1	8.1	8.1	8.2	A93
Tech Initials: MEC M					Time: 0830		

Comments_____

DO: mg/l pH: su Salinity: ppt Temp: °C

CorrX, Run-off from treated metal plate

Q-626-13
NOEC/LOEC

M. bahia Water Quality Data Cont.

All Treatments: Initial Temp., 24.5 to 26.4°C. Final Temp., 24.5 to 27.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I:** initial water quality. **F:** final water quality.

Day 3	Treatment % LS						
09/26/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO I	7.1	7.0	7.1	7.1	7.1	7.0	S7
Temp I	24.9	25.1	25.0	24.9	24.9	24.9	1B
Salinity I	25.1	25.0	25.0	24.9	25.0	25.0	1B
Tech Initials: CM CMB					Time: 0959		

Comments

Day 4	Treatment % LS						
09/27/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO F	6.8	6.8	6.9	6.9	6.3	6.8	S7
Temp F	25.2	25.1	25.0	25.0	24.8	24.8	1B
Salinity F	26.8	26.4	26.9	26.4	27.1	26.5	1B
pH F	8.1	8.1	8.1	8.1	7.9	8.2	AQB
Tech Initials: CM CMB					Time: 0833		

Comments

Day 4	Treatment % LS						
09/27/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO I	7.3	7.2	7.3	7.2	7.2	7.2	S7
Temp I	24.7	24.7	24.7	24.8	24.7	24.9	1B
Salinity I	25.0	25.1	25.1	25.0	25.0	25.1	1B
Tech Initials: CM CMB					Time: 0920		

Comments

Day 5	Treatment % LS						
09/28/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO F	6.8	6.7	6.8	6.6	6.7	6.7	S7
Temp F	25.2	24.8	24.9	25.0	24.9	24.8	1B
Salinity F	26.3	26.0	26.3	26.1	26.5	26.1	1B
pH F	8.1	8.0	8.1	8.1	8.1	8.1	AQB
Tech Initials: CG					Time: 0737		

Comments

DO: mg/l pH: su Salinity: ppt Temp: °C

CorrX, Run-off from treated metal plate

Q-626-13
NOEC/LOEC

M. bahia Water Quality Data Cont.

All Treatments: Initial Temp., 24.5 to 26.4°C. Final Temp., 24.5 to 27.4°C. Initial & Final Dissolvved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I:** initial water quality. **F:** final water quality.

Day 5	Treatment % LS						
09/28/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO I	7.0	6.9	6.9	6.9	6.9	–	57
Temp I	25.4	25.4	25.5	25.5	25.4	–	1B
Salinity I	25.0	25.0	25.0	25.0	25.0	–	1B
Tech Initials: CG					Time: 0828		

Comments_____

Day 6	Treatment % LS						
09/29/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO F	7.0	7.0	7.0	6.9	–	–	57
Temp F	24.9	24.6	25.0	24.9	–	–	1B
Salinity F	27.0	27.1	26.7	26.7	–	–	1B
pH F	8.1	8.1	8.1	8.1	–	–	A93
Tech Initials: ME CG					Time: 0913		

Comments_____

Day 6	Treatment % LS						
09/29/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO I	7.2	7.0	7.1	7.1	–	–	57
Temp I	24.6	24.7	24.6	24.8	–	–	1B
Salinity I	24.9	25.0	25.0	25.0	–	–	1B
Tech Initials: CG					Time: 0824		

Comments_____

Day 7	Treatment % LS						
09/30/13	LPC	0.6	1.1	1.8	3.0	5.0	Meter #
DO F	6.7	6.7	6.8	6.8	–	–	57
Temp F	25.0	25.0	25.1	25.1	–	–	1B
Salinity F	27.1	26.8	27.1	26.7	–	–	1B
pH F	8.1	8.0	8.1	8.1	–	–	A93
Tech Initials: CG CMB					Time: 0829		

Comments_____

DO: mg/l pH: su Salinity: ppt Temp: °C

CorrX, Run-off from treated metal plate

Q-626-13
NOEC/LOEC

7 Day *M. bahia* Growth Data

Rep #	Treatment % LS	A Final Weight (mg)	B Initial Weight (mg)	C No. of Orig. Larvae	D No. of Surv. Larvae
1	0	11.04	9.45	5	5
2	"	10.13	9.05	5	5
3	"	10.64	8.80	5	5
4	"	8.85	7.30	5	5
5	"	10.51	8.07	5	5
6	"	10.02	8.94	5	5
7	"	9.47	7.80	5	5
8	"	9.10	7.49	5	5
9	0.6	8.90	7.03	5	5
10	"	8.52	6.41	5	5
11	"	8.31	6.00	5	5
12	"	7.31	5.63	5	4
13	"	9.74	7.92	5	5
14	"	9.43	7.80	5	5
15	"	9.14	7.35	5	5
16	"	7.94	6.84	5	3
17	1.1	9.30	7.95	5	4
18	"	9.09	7.57	5	5
19	"	8.51	7.18	5	4
20	"	7.14	6.06	5	5
21	"	8.33	6.93	5	5
22	"	8.91	7.03	5	5
23	"	9.33	7.82	5	5
24	"	9.07	7.00	5	5

7 Day *M. bahia* Growth Data Cont.

Rep #	Treatment % LS	A Final Weight (mg)	B Initial Weight (mg)	C No. of Orig. Larvae	D No. of Surv. Larvae
25	1.8	7.53	7.24	5	2
26	"	9.00	8.09	5	4
27	"	7.12	7.00	5	1
28	"	7.32	6.85	5	3
29	"	8.27	7.88	5	2
30	"	—	6.19	5	0
31	"	7.13	6.29	5	4
32	"	6.71	5.93	5	4
33	3.0	—	7.32	5	0
34	"	—	8.34	5	0
35	"	—	7.28	5	0
36	"	—	7.07	5	0
37	"	—	6.72	5	0
38	"	—	7.18	5	0
39	"	—	6.30	5	0
40	"	—	6.75	5	0
41	5.0	—	7.59	5	0
42	"	—	7.75	5	0
43	"	—	7.27	5	0
44	"	—	6.67	5	0
45	"	—	7.19	5	0
46	"	—	8.96	5	0
47	"	—	7.00	5	0
48	"	—	6.76	5	0

Initial Foil Wts at 0f40 on 9 /27 /2013 (MR) Scale#: R9

Oven Temp. 63.0 °C Therm. #: T159

Begin Drying Survivors at 1020 on 9 /30 /2013 (MR) Oven #: 1V

Finish Drying Survivors at 0921 on 10 /01 /2013 (MR)

Final Foil Wts. at 1343 on 10 /01 /2013 (MR) Scale #: R9

Data Entry by: Veronica McNew

Double Data Entry by: Veronica McNew or

QA/QC Officer: Mary A. O'Neill

Comments:

QA/QC Data Pages

- ☑ Company name & contact matches client file.
- ☑ Sample matches client file.
- ☑ Dilution series is correct:

0.6, 1.1, 1.8, 3.0, 5.0.

- ☑ Calculations on mixing page are correct. (sign mixing page)
- ☑ Dates, dilutions, test method, # of replicates, replicate volume, sample, acceptance limits, data analysis endpoint, and test organisms are correct throughout data pages.
- ☑ Format correct. (spaces for all entries, page numeration, no split pages, etc.)

ME Initials 9/23/13 Date

QA/QC Chain-of-Custody

Section incomplete 100213 ME

- ☐ Sample on COC matches sample bottle.
- ☐ Sample on COC matches test data pages.
- ☐ Lab # on COC matches sample bottle.
- ☐ Lab # on COC matches test data pages.
- ☐ Sample volume is sufficient for test duration. (Sample volume in container(s) checked against sample volume on mixing page)

Sample volume available: _____ ml

Sample volume needed: _____ ml

(Sample volume insufficient if sample volume available < sample volume needed)

_____ Initials _____ Date

QA/QC Jugs & Labels

- ☑ Lab # on jug and labels matches test data pages.
- ☑ Dilution water type is on jug. (i.e. 25 ppt, 20 ppt, MHSF, etc.)
- ☑ Dilutions on jugs and labels match dilutions on test data pages.
- ☐ Jugs are color-coded. (see mixing page for appropriate color code sequence)

ME Initials 9/23/13 Date

QC/QA Raw Data: Veronica McMen 10/02/13

Environmental Enterprises USA, Inc.

APPENDIX C

Test: LF-Larval Fish Growth and Survival Test | Test ID: mn62513
Species: MB-Menidia beryllina | Protocol: EPAM 02-EPA Marine
Sample ID: GMG290000-NPDES Permit # | Sample Type: PRD-Product
Start Date: 9/23/2013 End Date: 9/30/2013 | Lab ID: EE-Environmental Enterprises USA

Pos	ID	Rep	Group	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Total Wgt(	Tare Wgt(	Wgt Count
	1	1	LPC-LP Contro	8							8	17.52	8.45	8
	2	2	LPC-LP Contro	8							8	18.47	9.3	8
	3	3	LPC-LP Contro	8							8	19.26	9.13	8
	4	4	LPC-LP Contro	8							8	17.58	8.54	8
	5	5	LPC-LP Contro	8							8	16.69	8.17	8
	6	1	12	8							7	13.66	8.4	8
	7	2	12	8							7	17.91	10.97	8
	8	3	12	8							7	15.05	10.09	8
	9	4	12	8							7	13.61	9.24	8
	10	5	12	8							8	18.25	11.04	8
	11	1	17	8							8	13.95	9.01	8
	12	2	17	8							7	14.17	10.56	8
	13	3	17	8							8	13.61	8.48	8
	14	4	17	8							7	15.28	10.09	8
	15	5	17	8							8	16.7	10.1	8
	16	1	25	8							7	11.76	8.09	8
	17	2	25	8							5	12.01	9.7	8
	18	3	25	8							6	11.31	9.5	8
	19	4	25	8							8	13.96	9.7	8
	20	5	25	8							5	13.52	10.08	8
	21	1	35	8							2	8.87	7.15	8
	22	2	35	8							2	9.7	8.97	8
	23	3	35	8							2	10.68	9.69	8
	24	4	35	8							2	8.72	8.06	8
	25	5	35	8							0			8
	26	1	50	8							0			8
	27	2	50	8							0			8
	28	3	50	8							0			8
	29	4	50	8							0			8
	30	5	50	8							0			8

Comments:

Larval Fish Growth and Survival Test-7 Day Survival

Start Date:	9/23/2013	Test ID:	mn62513	Sample ID:	GMG290000-NPDES Permit #
End Date:	9/30/2013	Lab ID:	EE-Environmental Enterprise	Sample Type:	PRD-Product
Sample Date:		Protocol:	EPAM 02-EPA Marine	Test Species:	MB-Menidia beryllina
Comments:					

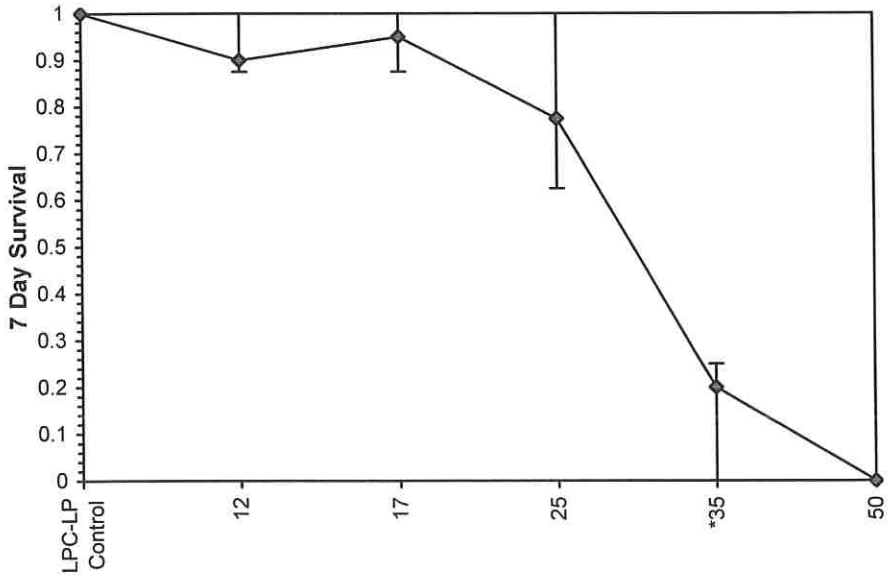
Conc-%	1	2	3	4	5
PC-LP Control	1.0000	1.0000	1.0000	1.0000	1.0000
12	0.8750	0.8750	0.8750	0.8750	1.0000
17	1.0000	0.8750	1.0000	0.8750	1.0000
25	0.8750	0.6250	0.7500	1.0000	0.6250
35	0.2500	0.2500	0.2500	0.2500	0.0000
50	0.0000	0.0000	0.0000	0.0000	0.0000

			Transform: Arcsin Square Root					Rank	1-Tailed
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
PC-LP Control	1.0000	1.0000	1.3931	1.3931	1.3931	0.000	5		
12	0.9000	0.9000	1.2462	1.2094	1.3931	6.591	5	17.50	17.00
17	0.9500	0.9500	1.3196	1.2094	1.3931	7.623	5	22.50	17.00
25	0.7750	0.7750	1.0946	0.9117	1.3931	18.911	5	17.50	17.00
*35	0.2000	0.2000	0.4544	0.1777	0.5236	34.040	5	15.00	17.00
50	0.0000	0.0000	0.1777	0.1777	0.1777	0.000	5		

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)	0.95154	0.918	-0.0722	1.31124
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Steel's Many-One Rank Test	25	35	29.5804	4
Treatments vs LPC-LP Control				

Dose-Response Plot



Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	17	25	20.6155	5.88235	0.09673	0.09985	0.71536	0.01673	1.6E-09	4, 20
Treatments vs LPC-LP Control										

Larval Fish Growth and Survival Test-7 Day Growth

Start Date:	9/23/2013	Test ID:	mn62513	Sample ID:	GMG290000-NPDES Permit #
End Date:	9/30/2013	Lab ID:	EE-Environmental Enterprise	Sample Type:	PRD-Product
Sample Date:		Protocol:	EPAM 02-EPA Marine	Test Species:	MB-Menidia beryllina
Comments:					

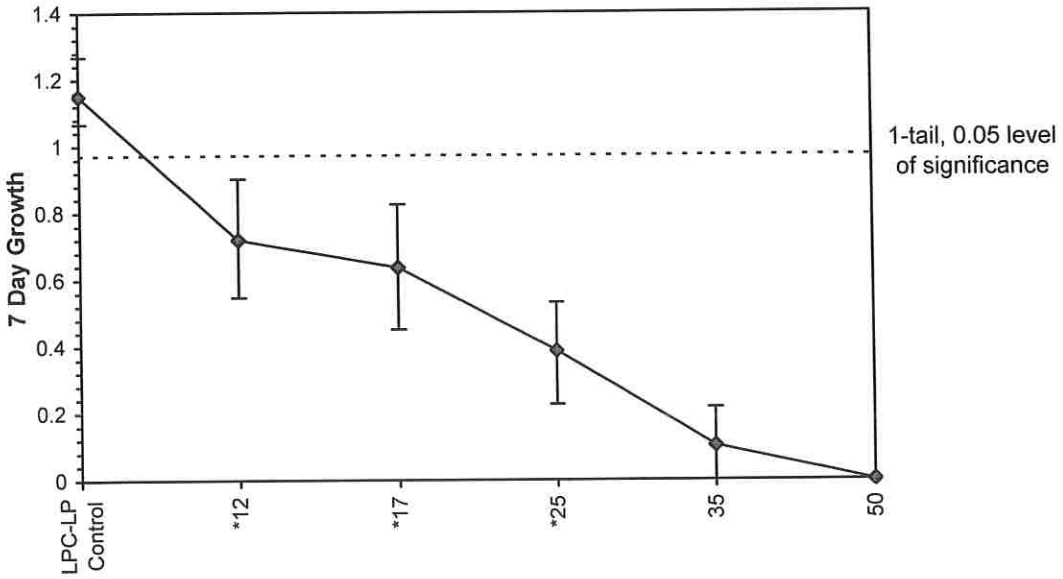
Conc-%	1	2	3	4	5
PC-LP Control	1.1338	1.1463	1.2663	1.1300	1.0650
12	0.6575	0.8675	0.6200	0.5463	0.9013
17	0.6175	0.4513	0.6413	0.6488	0.8250
25	0.4588	0.2888	0.2263	0.5325	0.4300
35	0.2150	0.0912	0.1238	0.0825	0.0000
50	0.0000	0.0000	0.0000	0.0000	0.0000

			Transform: Untransformed					1-Tailed		
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD
PC-LP Control	1.1483	1.0000	1.1483	1.0650	1.2663	6.370	5			
*12	0.7185	0.6257	0.7185	0.5463	0.9013	21.862	5	5.392	2.230	0.1777
*17	0.6368	0.5545	0.6368	0.4513	0.8250	20.832	5	6.417	2.230	0.1777
*25	0.3873	0.3373	0.3873	0.2263	0.5325	32.577	5	9.547	2.230	0.1777
35	0.1025	0.0893	0.1025	0.0000	0.2150	75.791	5			
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	5			

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)	0.95355	0.905	0.10724	-0.9068
Bartlett's Test indicates equal variances (p = 0.58)	1.96827	11.3449		

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test Treatments vs LPC-LP Control	<12	12			0.17775	0.1548	0.50171	0.01588	5.9E-07	3, 16

Dose-Response Plot



Larval Fish Growth and Survival Test-7 Day Growth

Start Date:	9/23/2013	Test ID:	mn62513cv	Sample ID:	GMG290000-NPDES Permit #
End Date:	9/30/2013	Lab ID:	EE-Environmental Enterprise	Sample Type:	PRD-Product
Sample Date:		Protocol:	EPAM 02-EPA Marine	Test Species:	MB-Menidia beryllina
Comments:					

Conc-%	1	2	3	4	5
PC-LP Control	1.1338	1.1463	1.2663	1.1300	1.0650
12	0.7514	0.9914	0.7086	0.6243	0.9013
17	0.6175	0.5157	0.6413	0.7414	0.8250
25	0.5243	0.4620	0.3017	0.5325	0.6880
35	0.8600	0.3650	0.4950	0.3300	

			Transform: Untransformed				
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N
PC-LP Control	1.1483	1.0000	1.1483	1.0650	1.2663	6.370	5
12	0.7954	0.6927	0.7954	0.6243	0.9914	18.689	5
17	0.6682	0.5819	0.6682	0.5157	0.8250	17.787	5
25	0.5017	0.4369	0.5017	0.3017	0.6880	27.791	5
35	0.5125	0.4463	0.5125	0.3300	0.8600	47.278	4

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)	0.95407	0.916	0.68572	0.44254
Bartlett's Test indicates equal variances (p = 0.33)	4.57127	13.2767		

Environmental Enterprises USA, Inc.

APPENDIX D

Test: ACU-Acute Toxicity Test
Species: MY-Mysidopsis bahia
Sample ID: GMG290000-NPDES Permit #
Start Date: 9/23/2013 End Date: 9/30/2013

Test ID: mb62613
Protocol: EPAA 02-EPA Acute
Sample Type: PRD-Product
Lab ID: EE-Environmental Enterprises USA

Pos	ID	Rep	Group	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Total Wgt(	Tare Wgt((	Wgt Coun	Female Cc	Females w/ Eggs	Notes
	1	1	LPC-LP Contro	5							5	11.04	9.45	5			
	2	2	LPC-LP Contro	5							5	10.13	9.05	5			
	3	3	LPC-LP Contro	5							5	10.64	8.8	5			
	4	4	LPC-LP Contro	5							5	8.85	7.3	5			
	5	5	LPC-LP Contro	5							5	10.51	8.67	5			
	6	6	LPC-LP Contro	5							5	10.62	8.94	5			
	7	7	LPC-LP Contro	5							5	9.47	7.8	5			
	8	8	LPC-LP Contro	5							5	9.1	7.49	5			
	9	1	0.6	5							5	8.9	7.03	5			
	10	2	0.6	5							5	8.52	6.41	5			
	11	3	0.6	5							5	8.31	6.6	5			
	12	4	0.6	5							4	7.31	5.63	5			
	13	5	0.6	5							5	9.74	7.92	5			
	14	6	0.6	5							5	9.43	7.8	5			
	15	7	0.6	5							5	9.14	7.35	5			
	16	8	0.6	5							3	7.94	6.84	5			
	17	1	1.1	5							4	9.3	7.95	5			
	18	2	1.1	5							5	9.09	7.57	5			
	19	3	1.1	5							4	8.51	7.18	5			
	20	4	1.1	5							5	7.14	6.06	5			
	21	5	1.1	5							5	8.33	6.93	5			
	22	6	1.1	5							5	8.91	7.63	5			
	23	7	1.1	5							5	9.33	7.82	5			
	24	8	1.1	5							5	9.07	7.6	5			
	25	1	1.8	5							2	7.53	7.24	5			
	26	2	1.8	5							4	9	8.09	5			
	27	3	1.8	5							1	7.12	7	5			
	28	4	1.8	5							3	7.32	6.85	5			
	29	5	1.8	5							2	8.27	7.88	5			
	30	6	1.8	5							0			5			
	31	7	1.8	5							4	7.13	6.29	5			
	32	8	1.8	5							4	6.71	5.93	5			
	33	1	3	5							0			5			
	34	2	3	5							0			5			
	35	3	3	5							0			5			
	36	4	3	5							0			5			
	37	5	3	5							0			5			
	38	6	3	5							0			5			

ToxCalc 5.0

Reviewed by: MA

Test: ACU-Acute Toxicity Test
Species: MY-Mysidopsis bahia
Sample ID: GMG290000-NPDES Permit #
Start Date: 9/23/2013 End Date: 9/30/2013

Test ID: mb62613
Protocol: EPAA 02-EPA Acute
Sample Type: PRD-Product
Lab ID: EE-Environmental Enterprises USA

Pos	ID	Rep	Group	Day 0	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Total Wgt(	Tare Wgt(	Wgt Coun	Female Cc	Females w/ Eggs	Notes
	39	7	3	5							0			5			
	40	8	3	5							0			5			
	41	1	5	5							0			5			
	42	2	5	5							0			5			
	43	3	5	5							0			5			
	44	4	5	5							0			5			
	45	5	5	5							0			5			
	46	6	5	5							0			5			
	47	7	5	5							0			5			
	48	8	5	5							0			5			

Comments:

Reviewed by: MA

Acute Toxicity Test-7 Day Survival

Start Date:	9/23/2013	Test ID:	mb62613	Sample ID:	GMG290000-NPDES Permit #
End Date:	9/30/2013	Lab ID:	EE-Environmental Enterprise	Sample Type:	PRD-Product
Sample Date:		Protocol:	EPAA 02-EPA Acute	Test Species:	MY-Mysidopsis bahia
Comments:					

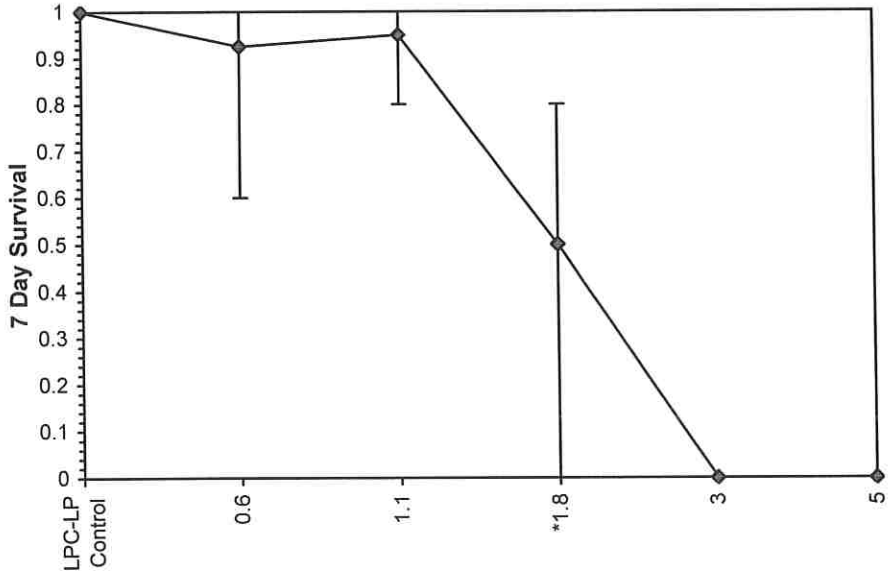
Conc-%	1	2	3	4	5	6	7	8
PC-LP Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
0.6	1.0000	1.0000	1.0000	0.8000	1.0000	1.0000	1.0000	0.6000
1.1	0.8000	1.0000	0.8000	1.0000	1.0000	1.0000	1.0000	1.0000
1.8	0.4000	0.8000	0.2000	0.6000	0.4000	0.0000	0.8000	0.8000
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

			Transform: Arcsin Square Root					Rank	1-Tailed
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
PC-LP Control	1.0000	1.0000	1.3453	1.3453	1.3453	0.000	8		
0.6	0.9250	0.9250	1.2581	0.8861	1.3453	13.661	8	60.00	48.00
1.1	0.9500	0.9500	1.2857	1.1071	1.3453	8.574	8	60.00	48.00
*1.8	0.5000	0.5000	0.7833	0.2255	1.1071	42.011	8	36.00	48.00
3	0.0000	0.0000	0.2255	0.2255	0.2255	0.000	8		
5	0.0000	0.0000	0.2255	0.2255	0.2255	0.000	8		

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.05)	0.88118	0.93	-0.9174	2.23982
Equality of variance cannot be confirmed				

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Steel's Many-One Rank Test	1.1	1.8	1.40712	90.9091
Treatments vs LPC-LP Control				

Dose-Response Plot



Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test	1.1	1.8	1.40712	90.9091	0.12699	0.13367	0.53716	0.03749	7.6E-06	3, 28
Treatments vs LPC-LP Control										

Acute Toxicity Test-7 Day Growth

Start Date:	9/23/2013	Test ID:	mb62613	Sample ID:	GMG290000-NPDES Permit #
End Date:	9/30/2013	Lab ID:	EE-Environmental Enterprise	Sample Type:	PRD-Product
Sample Date:		Protocol:	EPAA 02-EPA Acute	Test Species:	MY-Mysidopsis bahia
Comments:					

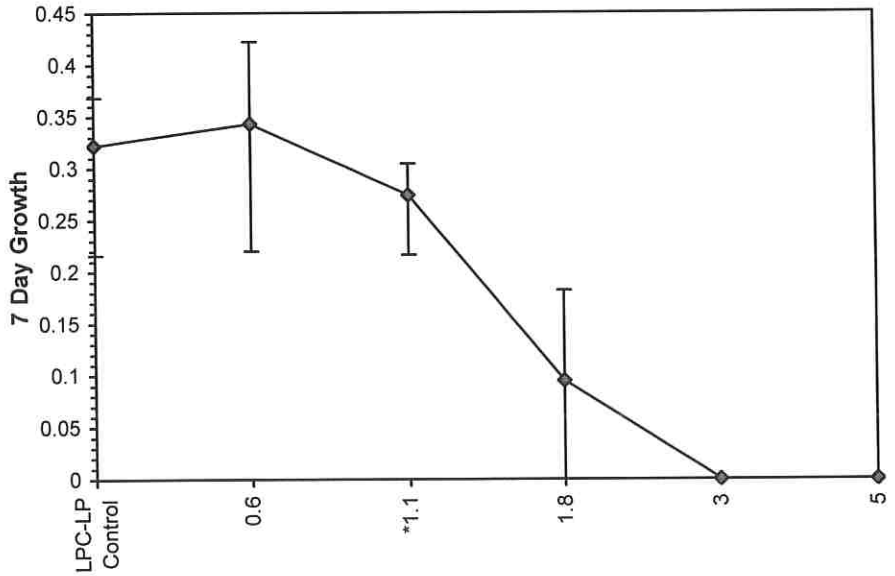
Conc-%	1	2	3	4	5	6	7	8
PC-LP Control	0.3180	0.2160	0.3680	0.3100	0.3680	0.3360	0.3340	0.3220
0.6	0.3740	0.4220	0.3420	0.3360	0.3640	0.3260	0.3580	0.2200
1.1	0.2700	0.3040	0.2660	0.2160	0.2800	0.2560	0.3020	0.2940
1.8	0.0580	0.1820	0.0240	0.0940	0.0780	0.0000	0.1680	0.1560
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

			Transform: Untransformed					Rank	1-Tailed
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical
PC-LP Control	0.3215	1.0000	0.3215	0.2160	0.3680	14.855	8		
0.6	0.3428	1.0661	0.3428	0.2200	0.4220	16.845	8	80.50	49.00
*1.1	0.2735	0.8507	0.2735	0.2160	0.3040	10.602	8	43.50	49.00
1.8	0.0950	0.2955	0.0950	0.0000	0.1820	71.552	8		
3	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	8		
5	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	8		

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates non-normal distribution (p <= 0.05)	0.87321	0.916	-1.3172	2.61852
Bartlett's Test indicates equal variances (p = 0.23)	2.91989	9.21034		

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU
Steel's Many-One Rank Test Treatments vs LPC-LP Control	0.6	1.1	0.8124	166.667

Dose-Response Plot



Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	MSDu	MSDp	MSB	MSE	F-Prob	df
Dunnett's Test Treatments vs LPC-LP Control	0.6	1.1	0.8124	166.667	0.04695	0.14604	0.01007	0.00215	0.02087	2, 21

Acute Toxicity Test-7 Day Growth

Start Date:	9/23/2013	Test ID:	mb62613cv	Sample ID:	GMG290000-NPDES Permit #
End Date:	9/30/2013	Lab ID:	EE-Environmental Enterprise	Sample Type:	PRD-Product
Sample Date:		Protocol:	EPAA 02-EPA Acute	Test Species:	MY-Mysidopsis bahia
Comments:					

Conc-%	1	2	3	4	5	6	7	8
PC-LP Control	0.3180	0.2160	0.3680	0.3100	0.3680	0.3360	0.3340	0.3220
0.6	0.3740	0.4220	0.3420	0.4200	0.3640	0.3260	0.3580	0.3667
1.1	0.3375	0.3040	0.3325	0.2160	0.2800	0.2560	0.3020	0.2940
1.8	0.1450	0.2275	0.1200	0.1567	0.1950	0.2100	0.1950	

			Transform: Untransformed				
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N
PC-LP Control	0.3215	1.0000	0.3215	0.2160	0.3680	14.855	8
0.6	0.3716	1.1558	0.3716	0.3260	0.4220	9.161	8
1.1	0.2903	0.9028	0.2903	0.2160	0.3375	13.750	8
1.8	0.1785	0.5551	0.1785	0.1200	0.2275	21.654	7

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)	0.93636	0.929	-0.7603	0.62603
Bartlett's Test indicates equal variances (p = 0.85)	0.78367	11.3449		

Environmental Enterprises USA, Inc.

APPENDIX E

COC Initiated by T. O'Reilly @ EE on 9-20-13 @ 1040

ENVIRONMENTAL ENTERPRISES USA, INC.
58485 Pearl Acres Rd., Suite D
Slidell, Louisiana 70461
(985) 646-2787

Kit No. 159A TO 157A

CHAIN - OF - CUSTODY RECORD

Client: Corr Line
Contact Person: Barbara Tompkins-Brown
Address:
Phone#:
P.O. #
FAX #:
Project:

Special Handling Request
( ) RUSH
( ) VERBAL
( ) OTHER

Lab Sample Description	Date Collected	Time Collected	No. of Containers	Analysis Request	S/R No.	Lab No.
Corr X			4	Mn/Mb chronic		Q-625-13 mn
						Q-626-13 mb

Collected By:	Date	Time	Relinquished By:	Date	Time
Received By:	Date	Time	Relinquished By:	Date	Time
E.E. T. O'Reilly	9-20-13	1044	T O'Reilly E.E.	9-20-13	1045
Received By: Veronica McKee	Date 09/20/13	Time 1047	Relinquished By:	Date	Time
Received By:	Date	Time	Relinquished By:	Date	Time
Received By:	Date	Time	Relinquished By:	Date	Time

F. EX 8995 9499 7491
8995 9499 7480

E-MAILED
10/1/13
mw

Kit # 158A TO

MUR4

FedEx Express® NEW Package US Airbill

FedEx Tracking Number 8995 9499 7491

Form ID No. 0215

RECIPIENT: PEEL HERE

fedex.com 1.800.GoFedEx 1.800.463.3339

1 From This portion can be removed for Recipient's records.

Date 9/19/13 FedEx Tracking Number 899594997491

Sender's Name Kirk Chrisman Phone

Company Gardline Inc

Address 6 Greenway Blvd #910 Dept/Floor/Suite/Room

City Houston State TX ZIP 77046

2 Your Internal Billing Reference

3 To

Recipient's Name SHIPPING AND RECEIVING Phone 985 645-3787

Company ENVIRONMENTAL ENTERPRISES USA

Address 58485 PEARL ACRES RD STE D

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept/Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City SLIDELL State LA ZIP 70461-5400

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

0100055469

8995 9499 7491

4 Express Package Service *To most locations.

NOTE: Service order has changed! Please select carefully.

Packages up to 150 lbs. *For packages over 150 lbs., use the new FedEx Express Freight US Airbill.*

Next Business Day

- [x] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging *Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

Signature options:

- [x] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. [ ]

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [x] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

[redacted] 24

Total Packages ____ Total Weight ____ lbs. Credit Card Auth. [redacted]

Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

Rev. Date 11/10 • Part #163134 • ©1994–2010 FedEx • PRINTED IN U.S.A. SRS

fedex.com 1.800.GoFedEx 1.800.463.3339

R.I.# 157A

FedEx Express NEW Package US Airbill

FedEx Tracking Number 8995 9499 7480

MUR4

Form ID No. 0215

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.

Date 9/19/13 FedEx Tracking Number 899594997480

Sender's Name Kirk Chrisman Phone

Company CorLinc Int'l

Address 8 Greenway Blvd. #910

Dept./Floor/Suite/Room

City Houston State TX ZIP 77046

2 Your Internal Billing Reference

3 To

Recipient's Name SHIPPING AND RECEIVING Phone 985 646-2787

Company ENVIRONMENTAL ENTERPRISES USA

Address 58483 PEARL ACRES RD STE D

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City SLIDELL State LA ZIP 70461-5400

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

0100055469

8995 9499 7480

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

* Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

- [x] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.
- [ ] Indirect Signature — If no one is available at recipient address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. acct. No. [ ]

- [ ] Sender — Acct. No. in Section 1 will be billed
- [x] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

[redacted] 24 [redacted]

Total Packages 1 Total Weight 74 lbs. Credit Card Auth.

Your liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

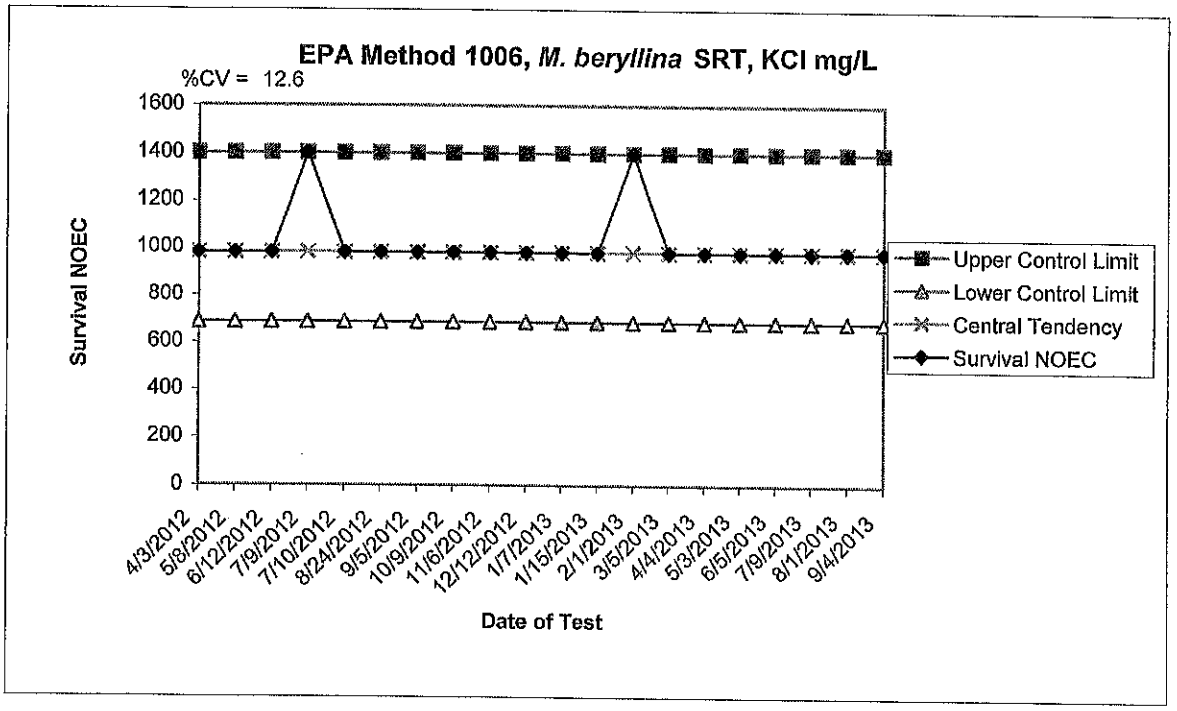
611

Rev. Date 11/10 • Part #163134 • ©1994–2010 FedEx • PRINTED IN U.S.A. SRS

fedex.com 1.800.GoFedEx 1.800.463.3339

fedex.com 1.800.GoFedEx 1.800.463.3339

APPENDIX F

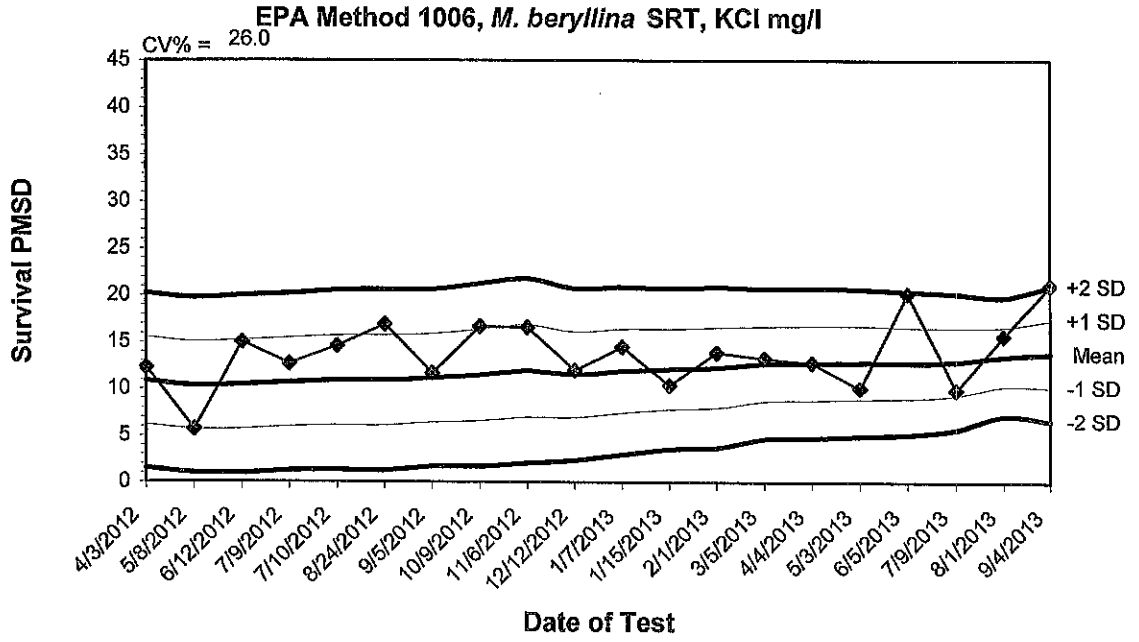


Dilution Series = 480, 686, 980, 1400, & 2000 mg/l KCl; Dilution Factor = 0.7

Test #	Test Date	Survival NOEC	% Control Survival	Survival PMSD	Upper Control Limit	Lower Control Limit	Central Tendency	SRT Lot #
MN1205	4/3/2012	980	92.5	12.3	1400	686	980	060M0116V
MN1206	5/8/2012	980	97.5	5.7	1400	686	980	021M0113V
MN1207	6/12/2012	980	95.0	15.0	1400	686	980	081M0170V
MN1208	7/9/2012	1400	95.0	12.7	1400	686	980	081M0170V
MN1209	7/10/2012	980	95.0	14.6	1400	686	980	081M0170V
MN1210	8/24/2012	980	90.0	16.9	1400	686	980	081M0170V
MN1211	9/5/2012	980	92.5	11.7	1400	686	980	081M0170V
MN1212	10/9/2012	980	97.5	16.7	1400	686	980	081M0170V
MN1213	11/6/2012	980	95.0	16.6	1400	686	980	081M0170V
MN1214	12/12/2012	980	97.5	12.0	1400	686	980	081M0170V
MN1301	1/7/2013	980	97.5	14.5	1400	686	980	081M0170V
MN1302	1/15/2013	980	97.5	10.4	1400	686	980	081M0170V
MN1303	2/1/2013	1400	100.0	13.9	1400	686	980	SLBD2389V
MN1304	3/5/2013	980	92.5	13.3	1400	686	980	081M0170V
MN1305	4/4/2013	980	95.0	12.8	1400	686	980	SLBD2389V
MN1306	5/3/2013	980	92.5	10.1	1400	686	980	SLBD2389V
MN1307	6/5/2013	980	95.0	20.2	1400	686	980	SLBC2414V
MN1308	7/9/2013	980	100.0	9.9	1400	686	980	SLBC2414V
MN1309	8/1/2013	980	87.5	15.7	1400	686	980	SLBC2414V
MN1310	9/4/2013	980	92.5	21.1	1400	686	980	SLBC2414V

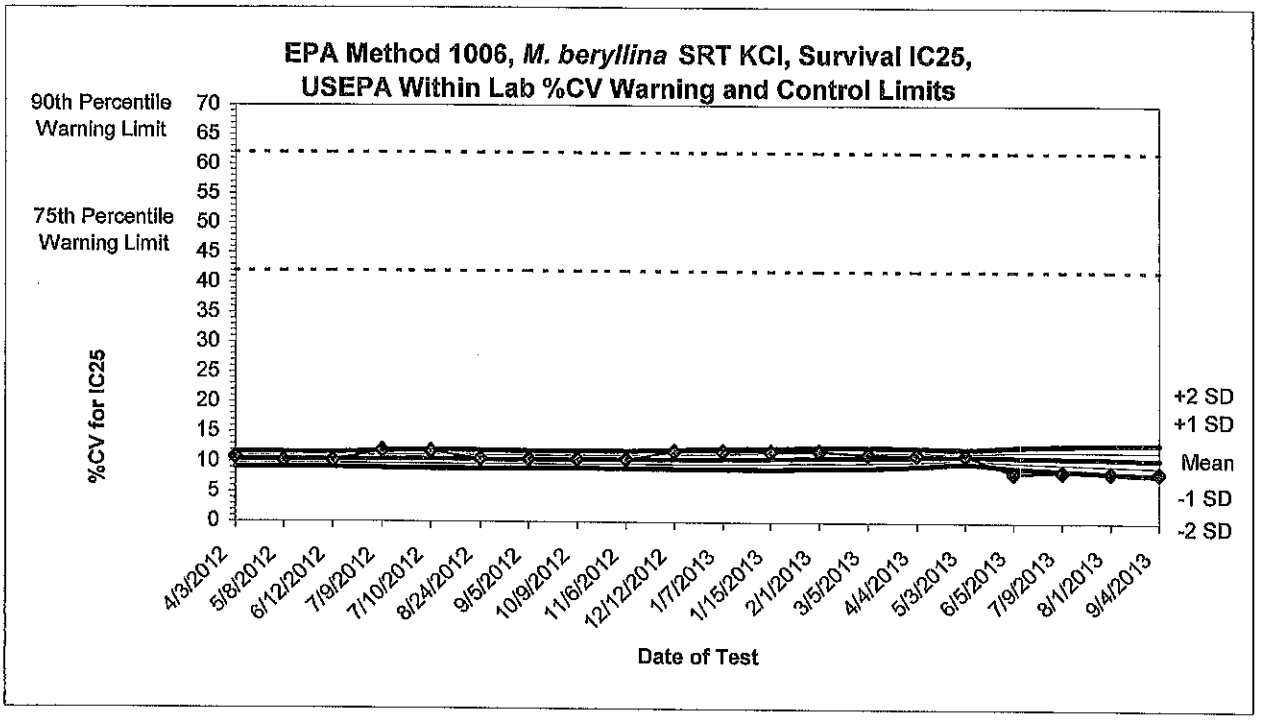
MN1208 - Out of house organisms. Aquatic Indicators.

QAQC by: MKO 9/16/13



Test #	Test Date	Survival PMSD	Mean	-1 SD	-2 SD	+1 SD	+2 SD	SRT Lot #
MN1205	4/3/2012	12.3	10.9	6.2	1.5	15.6	20.3	060M0116V
MN1206	5/8/2012	5.7	10.4	5.7	1.0	15.1	19.8	021M0113V
MN1207	6/12/2012	15.0	10.5	5.7	1.0	15.2	20.0	081M0170V
MN1208	7/9/2012	12.7	10.7	6.0	1.2	15.5	20.2	081M0170V
MN1209	7/10/2012	14.6	10.9	6.1	1.3	15.7	20.6	081M0170V
MN1210	8/24/2012	16.9	10.9	6.1	1.2	15.8	20.6	081M0170V
MN1211	9/5/2012	11.7	11.2	6.4	1.7	15.9	20.7	081M0170V
MN1212	10/9/2012	16.7	11.5	6.6	1.7	16.4	21.3	081M0170V
MN1213	11/6/2012	16.6	11.9	7.0	2.1	16.9	21.8	081M0170V
MN1214	12/12/2012	12.0	11.6	7.0	2.4	16.1	20.7	081M0170V
MN1301	1/7/2013	14.5	11.9	7.5	3.0	16.4	20.9	081M0170V
MN1302	1/15/2013	10.4	12.2	7.9	3.6	16.4	20.7	081M0170V
MN1303	2/1/2013	13.9	12.3	8.0	3.7	16.6	20.9	SLBD2389V
MN1304	3/5/2013	13.3	12.7	8.7	4.7	16.7	20.7	081M0170V
MN1305	4/4/2013	12.8	12.8	8.8	4.8	16.8	20.8	SLBD2389V
MN1306	5/3/2013	10.1	12.9	8.9	5.0	16.8	20.7	SLBD2389V
MN1307	6/5/2013	20.2	12.8	9.0	5.2	16.6	20.4	SLBC2414V
MN1308	7/9/2013	9.9	13.0	9.3	5.7	16.6	20.2	SLBC2414V
MN1309	8/1/2013	15.7	13.5	10.3	7.2	16.6	19.8	SLBC2414V
MN1310	9/4/2013	21.1	13.8	10.2	6.6	17.4	21.0	SLBC2414V

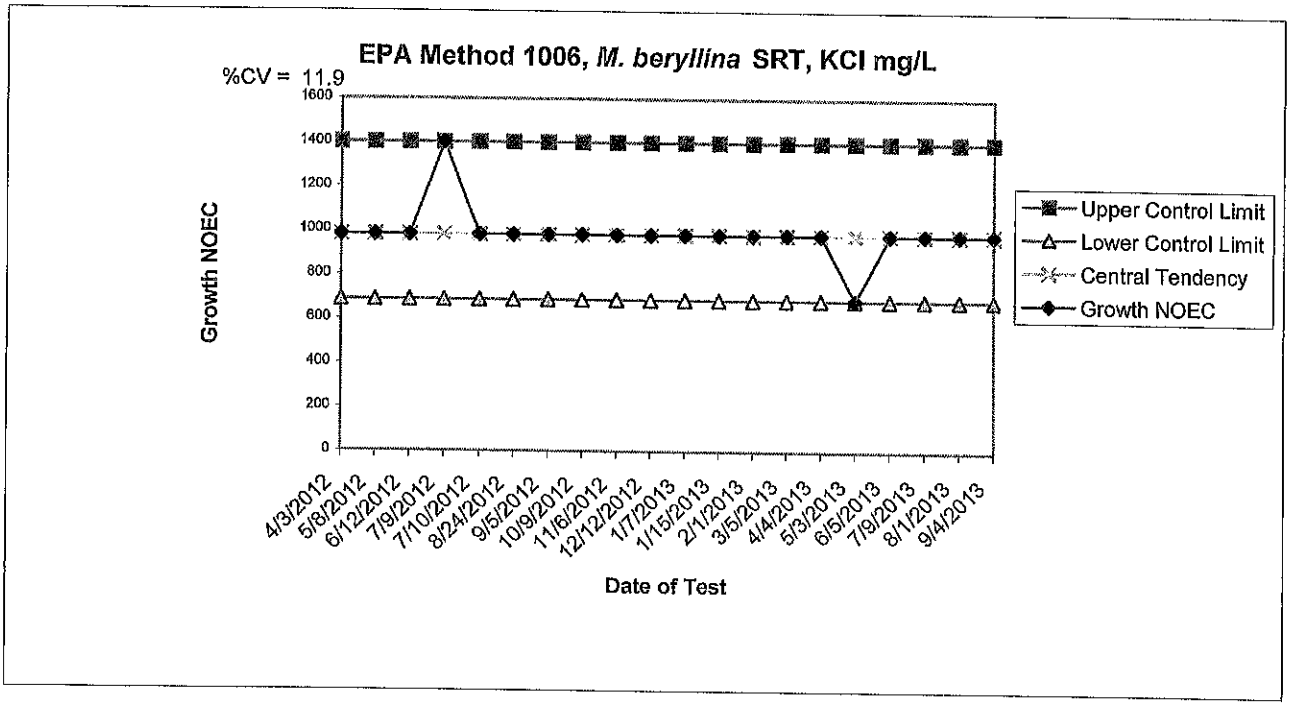
QAQC by: MMO 9/16/13



15%CV = 10th percentile, 22%CV = 25th percentile, 35%CV = 50th percentile

Test #	Test Date	%CV for IC25	Mean %CV	-1 SD	-2 SD	+1 SD	+2 SD	75th Warning Limit	90th Warning Limit	SRT Lot #
MN1205	4/3/2012	10.8	10.4	9.8	9.1	11.1	11.7	42.0	62.0	060M0116V
MN1206	5/8/2012	10.2	10.4	9.8	9.1	11.0	11.7	42.0	62.0	021M0113V
MN1207	6/12/2012	10.2	10.4	9.7	9.1	11.0	11.6	42.0	62.0	081M0170V
MN1208	7/9/2012	11.9	10.4	9.7	9.0	11.2	11.9	42.0	62.0	081M0170V
MN1209	7/10/2012	11.8	10.5	9.7	8.9	11.3	12.0	42.0	62.0	081M0170V
MN1210	8/24/2012	10.5	10.4	9.7	8.9	11.2	12.0	42.0	62.0	081M0170V
MN1211	9/5/2012	10.5	10.4	9.7	8.9	11.2	11.9	42.0	62.0	081M0170V
MN1212	10/9/2012	10.5	10.4	9.7	8.9	11.2	11.9	42.0	62.0	081M0170V
MN1213	11/6/2012	10.5	10.4	9.7	8.9	11.2	11.9	42.0	62.0	081M0170V
MN1214	12/12/2012	11.8	10.5	9.7	8.9	11.3	12.1	42.0	62.0	081M0170V
MN1301	1/7/2013	11.9	10.6	9.7	8.9	11.4	12.3	42.0	62.0	081M0170V
MN1302	1/15/2013	11.8	10.6	9.7	8.9	11.5	12.4	42.0	62.0	081M0170V
MN1303	2/1/2013	11.9	10.8	9.9	9.0	11.7	12.5	42.0	62.0	SLBD2389V
MN1304	3/5/2013	11.4	10.8	10.0	9.1	11.7	12.6	42.0	62.0	081M0170V
MN1305	4/4/2013	11.3	11.0	10.2	9.4	11.7	12.5	42.0	62.0	SLBD2389V
MN1306	5/3/2013	11.3	11.1	10.5	9.8	11.7	12.3	42.0	62.0	SLBD2389V
MN1307	6/5/2013	8.3	11.0	10.1	9.2	11.8	12.7	42.0	62.0	SLBC2414V
MN1308	7/9/2013	8.5	10.8	9.8	8.8	11.9	12.9	42.0	62.0	SLBC2414V
MN1309	8/1/2013	8.4	10.7	9.5	8.4	11.9	13.1	42.0	62.0	SLBC2414V
MN1310	9/4/2013	8.4	10.6	9.3	8.0	11.9	13.2	42.0	62.0	SLBC2414V

QAQC by: MAO 9/16/13



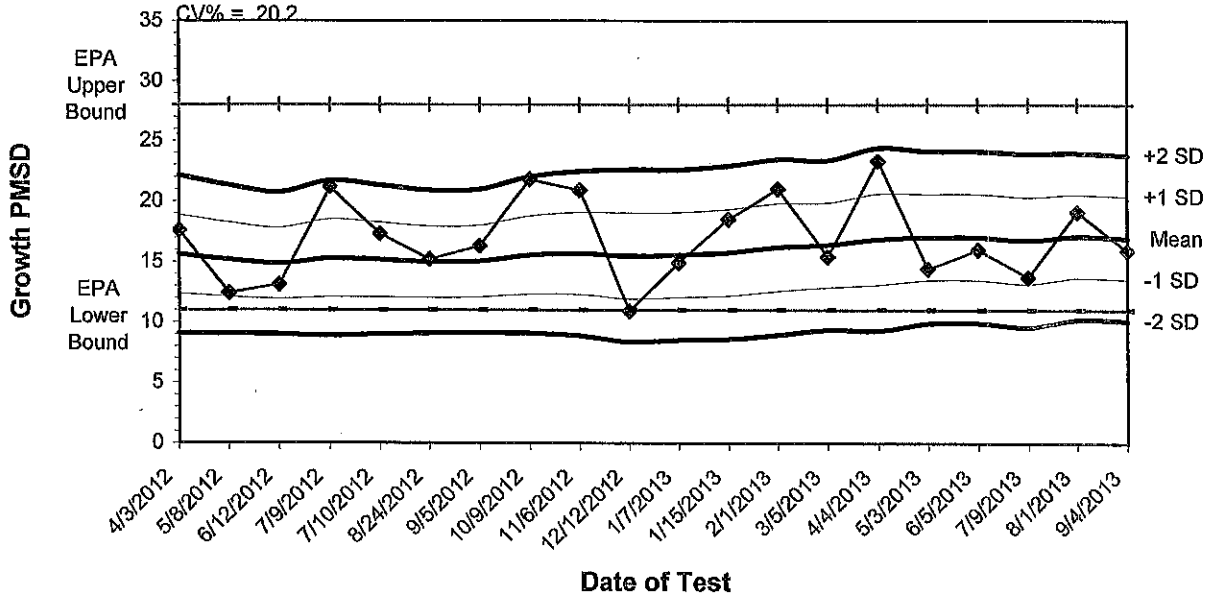
Dilution Series = 480, 686, 980, 1400, & 2000 mg/l KCl; Dilution Factor = 0.7

Test #	Test Date	Growth NOEC	Mean Control Growth	Growth PMSD	Upper Control Limit	Lower Control Limit	Central Tendency	SRT Lot #
MN1205	4/3/2012	980	1.465	17.6	1400	686	980	060M0116V
MN1206	5/8/2012	980	1.613	12.4	1400	686	980	021M0113V
MN1207	6/12/2012	980	1.557	13.1	1400	686	980	081M0170V
MN1208	7/9/2012	1400	1.526	21.2	1400	686	980	081M0170V
MN1209	7/10/2012	980	0.975	17.3	1400	686	980	081M0170V
MN1210	8/24/2012	980	1.069	15.2	1400	686	980	081M0170V
MN1211	9/5/2012	980	1.348	16.3	1400	686	980	081M0170V
MN1212	10/9/2012	980	1.122	21.8	1400	686	980	081M0170V
MN1213	11/6/2012	980	1.069	20.9	1400	686	980	081M0170V
MN1214	12/12/2012	980	1.426	10.9	1400	686	980	081M0170V
MN1301	1/7/2013	980	1.309	14.9	1400	686	980	081M0170V
MN1302	1/15/2013	980	1.165	18.5	1400	686	980	081M0170V
MN1303	2/1/2013	980	1.223	21.0	1400	686	980	SLBD2389V
MN1304	3/5/2013	980	1.153	15.4	1400	686	980	081M0170V
MN1305	4/4/2013	980	1.281	23.3	1400	686	980	SLBD2389V
MN1306	5/3/2013	686	1.616	14.4	1400	686	980	SLBD2389V
MN1307	6/5/2013	980	0.953	16.0	1400	686	980	SLBC2414V
MN1308	7/9/2013	980	1.107	13.7	1400	686	980	SLBC2414V
MN1309	8/1/2013	980	0.917	19.1	1400	686	980	SLBC2414V
MN1310	9/4/2013	980	1.013	15.9	1400	686	980	SLBC2414V

MN1208 - Out of house organisms. Aquatic Indicators.

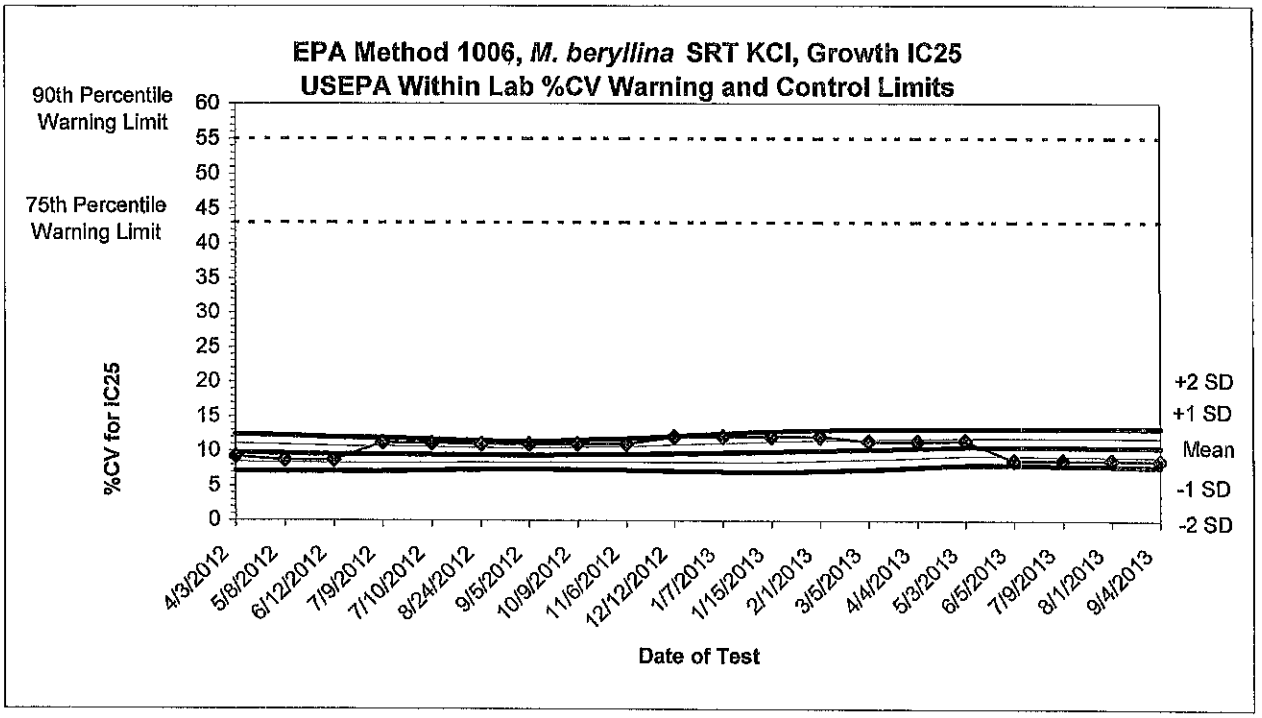
QAQC by: MMO 9/16/13

EPA Method 1006, *M. beryllina* SRT Growth PMSD



Test #	Test Date	Growth PMSD	Mean PMSD	-1 SD	-2 SD	+1 SD	+2 SD	Upper PMSD Bound	Lower PMSD Bound	SRT Lot #
MN1205	4/3/2012	17.6	15.6	12.3	9.1	18.9	22.1	28	11	060M0116V
MN1206	5/8/2012	12.4	15.2	12.1	9.0	18.3	21.3	28	11	021M0113V
MN1207	6/12/2012	13.1	14.9	11.9	9.0	17.8	20.7	28	11	081M0170V
MN1208	7/9/2012	21.2	15.3	12.1	8.9	18.5	21.7	28	11	081M0170V
MN1209	7/10/2012	17.3	15.2	12.1	9.0	18.2	21.3	28	11	081M0170V
MN1210	8/24/2012	15.2	15.0	12.0	9.1	17.9	20.9	28	11	081M0170V
MN1211	9/5/2012	16.3	15.1	12.1	9.1	18.0	21.0	28	11	081M0170V
MN1212	10/9/2012	21.8	15.5	12.3	9.1	18.8	22.0	28	11	081M0170V
MN1213	11/6/2012	20.9	15.7	12.3	8.9	19.1	22.5	28	11	081M0170V
MN1214	12/12/2012	10.9	15.5	11.9	8.4	19.0	22.6	28	11	081M0170V
MN1301	1/7/2013	14.9	15.6	12.0	8.5	19.1	22.6	28	11	081M0170V
MN1302	1/15/2013	18.5	15.7	12.2	8.6	19.3	22.9	28	11	081M0170V
MN1303	2/1/2013	21.0	16.2	12.6	8.9	19.8	23.5	28	11	SLBD2389V
MN1304	3/5/2013	15.4	16.4	12.9	9.4	19.9	23.4	28	11	081M0170V
MN1305	4/4/2013	23.3	16.8	13.1	9.3	20.6	24.4	28	11	SLBD2389V
MN1306	5/3/2013	14.4	17.0	13.5	9.9	20.6	24.1	28	11	SLBD2389V
MN1307	6/5/2013	16.0	17.0	13.5	9.9	20.6	24.1	28	11	SLBC2414V
MN1308	7/9/2013	13.7	16.7	13.2	9.6	20.3	23.9	28	11	SLBC2414V
MN1309	8/1/2013	19.1	17.1	13.7	10.2	20.5	24.0	28	11	SLBC2414V
MN1310	9/4/2013	15.9	16.9	13.5	10.1	20.4	23.8	28	11	SLBC2414V

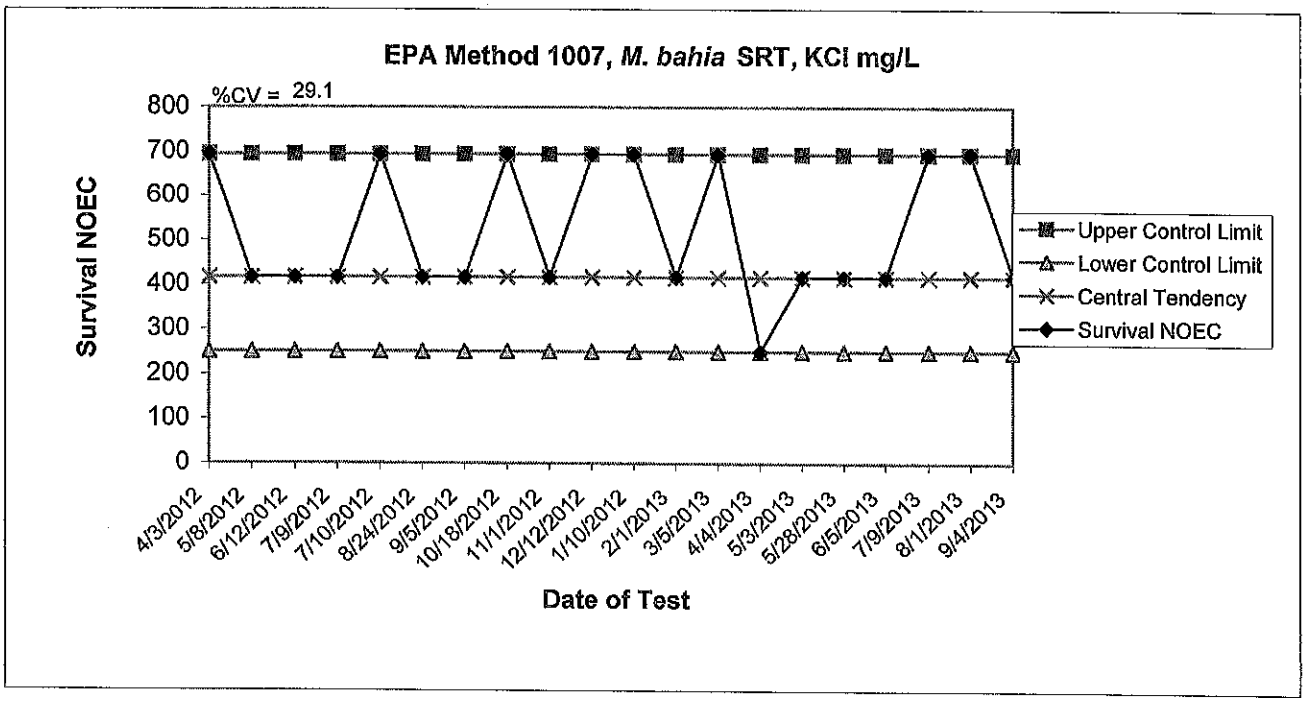
QAQC by: MAO 9/16/13



5%CV = 10th percentile, 18%CV = 25th percentile, 27%CV = 50th percentile

Test #	Test Date	%CV for IC25	Mean %CV	-1 SD	-2 SD	+1 SD	+2 SD	75th Warning Limit	90th Warning Limit	SRT Lot #
MN1205	4/3/2012	9.2	9.8	8.4	7.1	11.1	12.4	43.0	55.0	060M0116V
MN1206	5/8/2012	8.7	9.6	8.3	7.0	10.9	12.2	43.0	55.0	021M0113V
MN1207	6/12/2012	8.7	9.5	8.3	7.0	10.7	12.0	43.0	55.0	081M0170V
MN1208	7/9/2012	11.2	9.5	8.3	7.1	10.7	11.9	43.0	55.0	081M0170V
MN1209	7/10/2012	11.1	9.4	8.3	7.2	10.6	11.7	43.0	55.0	081M0170V
MN1210	8/24/2012	11.0	9.4	8.3	7.3	10.4	11.5	43.0	55.0	081M0170V
MN1211	9/5/2012	11.0	9.4	8.4	7.4	10.4	11.4	43.0	55.0	081M0170V
MN1212	10/9/2012	11.0	9.5	8.4	7.3	10.5	11.6	43.0	55.0	081M0170V
MN1213	11/6/2012	11.0	9.5	8.4	7.3	10.7	11.8	43.0	55.0	081M0170V
MN1214	12/12/2012	12.0	9.6	8.4	7.1	10.9	12.2	43.0	55.0	081M0170V
MN1301	1/7/2013	12.1	9.8	8.4	7.0	11.1	12.5	43.0	55.0	081M0170V
MN1302	1/15/2013	12.0	9.9	8.4	7.0	11.4	12.8	43.0	55.0	081M0170V
MN1303	2/1/2013	12.1	10.1	8.6	7.2	11.6	13.0	43.0	55.0	SLBD2389V
MN1304	3/5/2013	11.4	10.2	8.8	7.3	11.7	13.1	43.0	55.0	081M0170V
MN1305	4/4/2013	11.4	10.4	9.0	7.7	11.8	13.2	43.0	55.0	SLBD2389V
MN1306	5/3/2013	11.5	10.6	9.3	8.0	11.9	13.1	43.0	55.0	SLBD2389V
MN1307	6/5/2013	8.6	10.6	9.3	8.0	11.9	13.2	43.0	55.0	SLBC2414V
MN1308	7/9/2013	8.6	10.5	9.2	7.9	11.9	13.2	43.0	55.0	SLBC2414V
MN1309	8/1/2013	8.7	10.5	9.2	7.8	11.9	13.2	43.0	55.0	SLBC2414V
MN1310	9/4/2013	8.6	10.5	9.1	7.7	11.9	13.3	43.0	55.0	SLBC2414V

QAQC by: MAO 9/16/13



Dilution Series = 150, 250, 416, 694, & 1157 mg/l KCl; Dilution Factor = 0.60

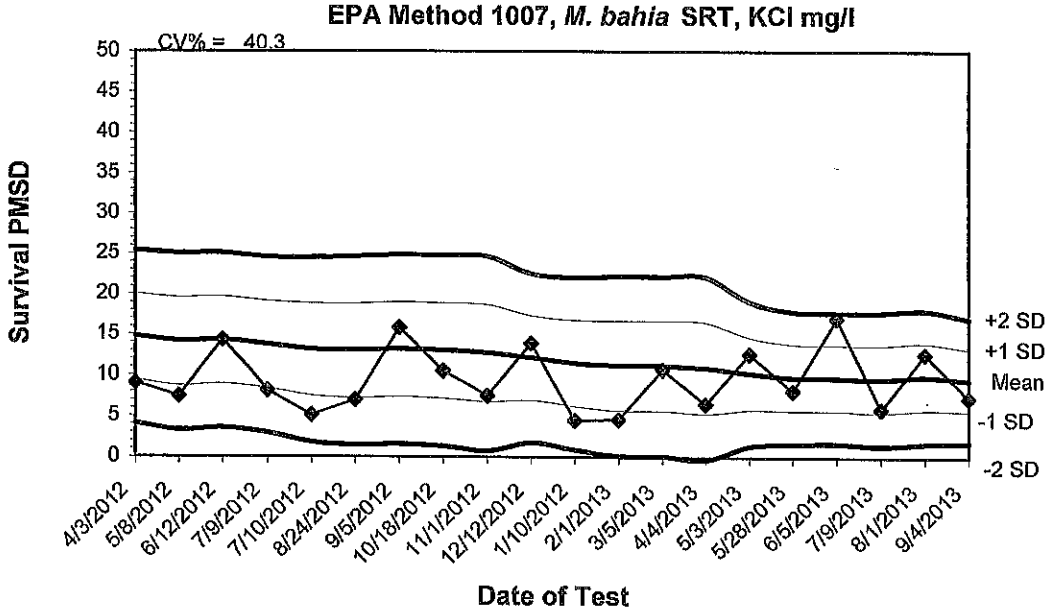
Test #	Test Date	Survival NOEC	% Control Survival	Survival PMSD	Upper Control Limit	Lower Control Limit	Central Tendency	SRT Lot #
MB1204	4/3/2012	694	97.5	9.0	694	250	416	060M0116V
MB1205	5/8/2012	416	97.5	7.4	694	250	416	021M0113V
MB1206	6/12/2012	416	97.5	14.3	694	250	416	081M0170V
MB1208	7/9/2012	416	95.0	8.1	694	250	416	081M0170V
MB1209	7/10/2012	694	100.0	5.1	694	250	416	081M0170V
MB1210	8/24/2012	416	100.0	7.0	694	250	416	081M0170V
MB1211	9/5/2012	416	95.0	15.8	694	250	416	081M0170V
MB1212	10/18/2012	694	97.5	10.5	694	250	416	081M0170V
MB1213	11/1/2012	416	100.0	7.5	694	250	416	081M0170V
MB1214	12/12/2012	694	100.0	13.9	694	250	416	081M0170V
MB1301	1/10/2012	694	100.0	4.5	694	250	416	081M0170V
MB1302	2/1/2013	416	100.0	4.6	694	250	416	SLBD2389V
MB1303	3/5/2013	694	100.0	10.7	694	250	416	081M0170V
MB1304	4/4/2013	250	100.0	6.5	694	250	416	SLBD2389V
MB1305	5/3/2013	416	100.0	12.6	694	250	416	SLBD2389V
MB1306	5/28/2013	416	97.5	8.1	694	250	416	SLBD2389V
MB1307	6/5/2013	416	94.3	17.0	694	250	416	SLBD2389V
MB1308	7/9/2013	694	100.0	5.9	694	250	416	SLBC2414V
MB1309	8/1/2013	694	100.0	12.6	694	250	416	SLBC2414V
MB1310	9/4/2013	416	100.0	7.3	694	250	416	SLBC2414V

MB1207 - Number was not used.

MB1208 - Out of house organisms. Marinco Bioassay Laboratories.

MB1307 - Lot# SLBD2389V was used to mix Day 0, Day 1 - 6 was mixed with Lot# SLBC2414V.

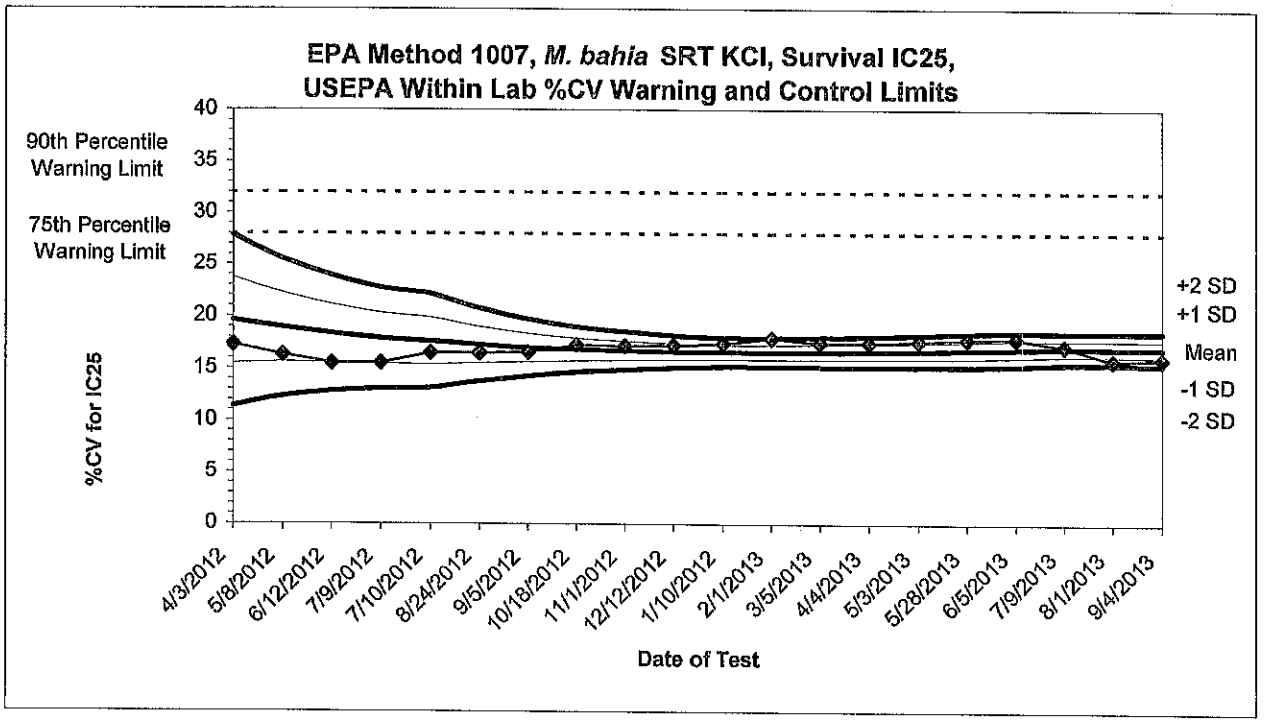
QAQC by: MAO 9/17/13



Test #	Test Date	Survival PMSD	Mean PMSD	-1 SD	-2 SD	+1 SD	+2 SD	SRT Lot #
MB1204	4/3/2012	9.0	14.8	9.4	4.1	20.1	25.4	060M0116V
MB1205	5/8/2012	7.4	14.2	8.7	3.3	19.6	25.0	021M0113V
MB1206	6/12/2012	14.3	14.3	8.9	3.5	19.7	25.1	081M0170V
MB1208	7/9/2012	8.1	13.7	8.3	2.9	19.1	24.5	081M0170V
MB1209	7/10/2012	5.1	13.1	7.5	1.8	18.8	24.5	081M0170V
MB1210	8/24/2012	7.0	13.0	7.2	1.4	18.8	24.6	081M0170V
MB1211	9/5/2012	15.8	13.2	7.4	1.5	19.0	24.8	081M0170V
MB1212	10/18/2012	10.5	13.0	7.2	1.3	18.9	24.7	081M0170V
MB1213	11/1/2012	7.5	12.7	6.7	0.8	18.7	24.7	081M0170V
MB1214	12/12/2012	13.9	12.1	6.9	1.8	17.3	22.5	081M0170V
MB1301	1/10/2012	4.5	11.5	6.2	0.9	16.8	22.1	081M0170V
MB1302	2/1/2013	4.6	11.2	5.7	0.2	16.7	22.2	SLBD2389V
MB1303	3/5/2013	10.7	11.1	5.6	0.1	16.7	22.2	081M0170V
MB1304	4/4/2013	6.5	10.9	5.3	-0.3	16.5	22.1	SLBD2389V
MB1305	5/3/2013	12.6	10.2	5.8	1.4	14.7	19.1	SLBD2389V
MB1306	5/28/2013	8.1	9.7	5.7	1.6	13.8	17.8	SLBD2389V
MB1307	6/5/2013	17.0	9.7	5.7	1.7	13.7	17.7	SLBD2389V
MB1308	7/9/2013	5.9	9.6	5.5	1.4	13.7	17.8	SLBC2414V
MB1309	8/1/2013	12.6	9.9	5.8	1.7	14.0	18.0	SLBC2414V
MB1310	9/4/2013	7.3	9.4	5.6	1.8	13.2	17.0	SLBC2414V

MB1307 - Lot# SLBD2389V was used to mix Day 0, Day 1 - 6 was mixed with Lot# SLBC2414V.

QAQC by: MM 9/17/13

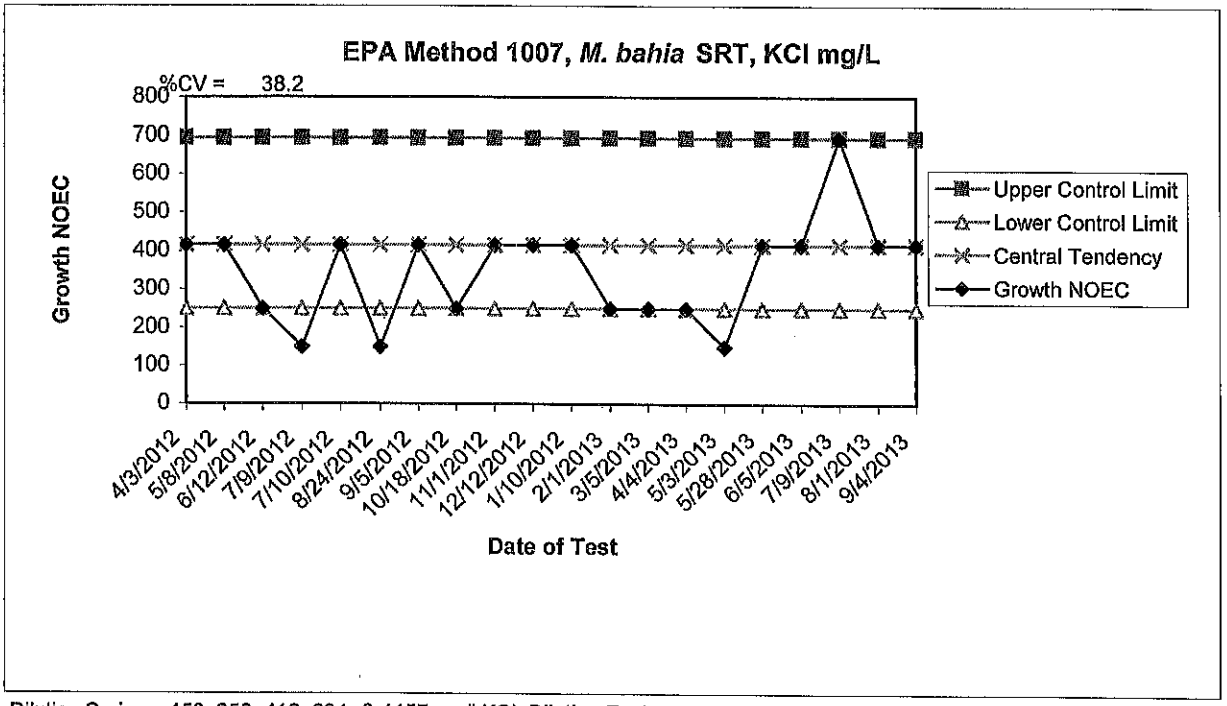


17%CV = 10th percentile, 17%CV = 25th percentile, 21%CV = 50th percentile

Test #	Test Date	%CV for IC25	Mean %CV	-1 SD	-2 SD	+1 SD	+2 SD	75th Warning Limit	90th Warning Limit	SRT Lot #
MB1204	4/3/2012	17.3	19.6	15.5	11.4	23.7	27.9	28.0	32.0	060M0116V
MB1205	5/8/2012	16.3	18.9	15.6	12.3	22.2	25.5	28.0	32.0	021M0113V
MB1206	6/12/2012	15.5	18.3	15.6	12.8	21.1	23.9	28.0	32.0	081M0170V
MB1208	7/9/2012	15.5	17.9	15.5	13.0	20.3	22.7	28.0	32.0	081M0170V
MB1209	7/10/2012	16.5	17.6	15.4	13.1	19.8	22.1	28.0	32.0	081M0170V
MB1210	8/24/2012	16.5	17.2	15.5	13.8	19.0	20.7	28.0	32.0	081M0170V
MB1211	9/5/2012	16.6	17.0	15.6	14.3	18.3	19.7	28.0	32.0	081M0170V
MB1212	10/18/2012	17.3	16.8	15.7	14.6	17.9	19.0	28.0	32.0	081M0170V
MB1213	11/1/2012	17.2	16.7	15.8	14.9	17.6	18.6	28.0	32.0	081M0170V
MB1214	12/12/2012	17.2	16.6	15.8	15.1	17.4	18.2	28.0	32.0	081M0170V
MB1301	1/10/2012	17.4	16.6	15.9	15.2	17.3	18.0	28.0	32.0	081M0170V
MB1302	2/1/2013	17.9	16.6	15.9	15.2	17.3	18.0	28.0	32.0	SLBD2389V
MB1303	3/5/2013	17.5	16.6	15.9	15.2	17.3	18.0	28.0	32.0	081M0170V
MB1304	4/4/2013	17.5	16.6	15.9	15.2	17.4	18.1	28.0	32.0	SLBD2389V
MB1305	5/3/2013	17.6	16.7	15.9	15.2	17.5	18.2	28.0	32.0	SLBD2389V
MB1306	5/28/2013	17.8	16.8	16.0	15.2	17.6	18.4	28.0	32.0	SLBD2389V
MB1307	6/5/2013	17.9	16.9	16.1	15.3	17.7	18.5	28.0	32.0	SLBD2389V
MB1308	7/9/2013	17.2	17.0	16.2	15.5	17.7	18.5	28.0	32.0	SLBC2414V
MB1309	8/1/2013	15.8	17.0	16.2	15.5	17.7	18.5	28.0	32.0	SLBC2414V
MB1310	9/4/2013	16.0	16.9	16.1	15.3	17.7	18.5	28.0	32.0	SLBC2414V

MB1307 - Lot# SLBD2389V was used to mix Day 0, Day 1 - 6 was mixed with Lot# SLBC2414V.

QAQC by: MAO 9/17/13



Dilution Series = 150, 250, 416, 694, & 1157 mg/l KCl; Dilution Factor = 0.60

Test #	Test Date	Growth NOEC	Mean Control Growth	Growth PMSD	Upper Control Limit	Lower Control Limit	Central Tendency	SRT Lot #
MB1204	4/3/2012	416	0.335	18.1	694	250	416	060M0116V
MB1205	5/8/2012	416	0.329	17.1	694	250	416	021M0113V
MB1206	6/12/2012	250	0.347	13.1	694	250	416	081M0170V
MB1208	7/9/2012	150	0.239	13.2	694	250	416	081M0170V
MB1209	7/10/2012	416	0.369	18.2	694	250	416	081M0170V
MB1210	8/24/2012	150	0.212	12.8	694	250	416	081M0170V
MB1211	9/5/2012	416	0.364	16.1	694	250	416	081M0170V
MB1212	10/18/2012	250	0.343	13.2	694	250	416	081M0170V
MB1213	11/1/2012	416	0.312	11.5	694	250	416	081M0170V
MB1214	12/12/2012	416	0.321	21.8	694	250	416	081M0170V
MB1301	1/10/2012	416	0.230	14.8	694	250	416	081M0170V
MB1302	2/1/2013	250	0.376	8.1	694	250	416	SLBD2389V
MB1303	3/5/2013	250	0.326	17.0	694	250	416	081M0170V
MB1304	4/4/2013	250	0.307	12.6	694	250	416	SLBD2389V
MB1305	5/3/2013	150	0.318	9.4	694	250	416	SLBD2389V
MB1306	5/28/2013	416	0.301	14.7	694	250	416	SLBD2389V
MB1307	6/5/2013	416	0.309	14.4	694	250	416	SLBD2389V
MB1308	7/9/2013	694	0.277	25.3	694	250	416	SLBC2414V
MB1309	8/1/2013	416	0.296	18.7	694	250	416	SLBC2414V
MB1310	9/4/2013	416	0.371	13.2	694	250	416	SLBC2414V

MB1207 - Number was not used.

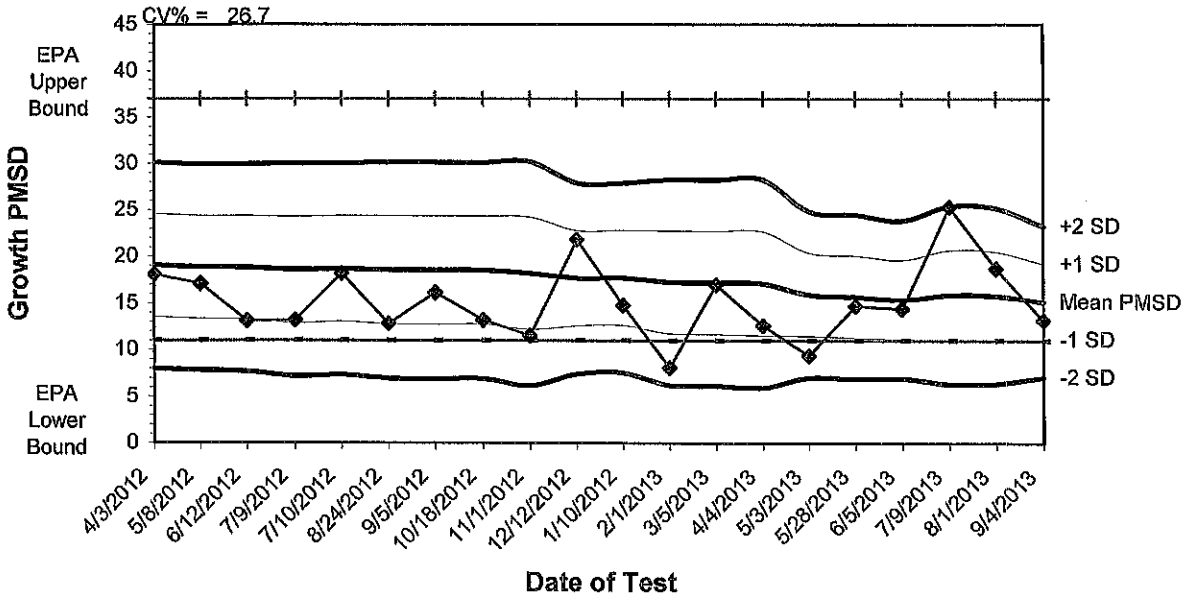
MB1208 - Out of house organisms. Marinco Bioassay Laboratories. This is a valid result.

MB1305 - Growth NOEC was less than the lower control limit. An additional test will be completed in May.

MB1307 - Lot# SLBD2389V was used to mix Day 0, Day 1 - 6 was mixed with Lot# SLBC2414V.

QAQC by: MM 9/17/13

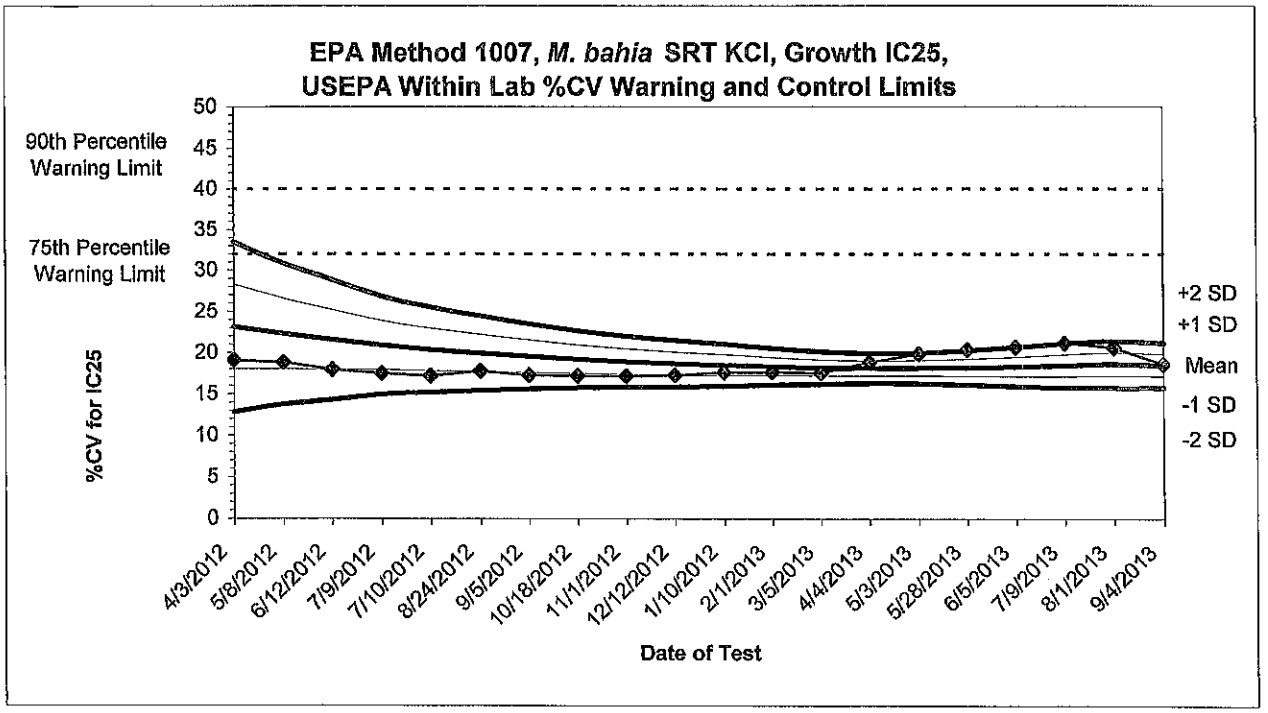
EPA Method 1007, *M. bahia* SRT Growth PMSD



Test #	Test Date	Growth PMSD	Mean PMSD	-1 SD	-2 SD	+1 SD	+2 SD	Upper PMSD Bound	Lower PMSD Bound	SRT Lot #
MB1204	4/3/2012	18.1	19.1	13.5	8.0	24.6	30.1	37	11	060M0116V
MB1205	5/8/2012	17.1	18.9	13.4	7.8	24.4	29.9	37	11	021M0113V
MB1206	6/12/2012	13.1	18.8	13.3	7.7	24.4	30.0	37	11	081M0170V
MB1208	7/9/2012	13.2	18.6	12.9	7.2	24.3	30.0	37	11	081M0170V
MB1209	7/10/2012	18.2	18.7	13.0	7.4	24.4	30.1	37	11	081M0170V
MB1210	8/24/2012	12.8	18.6	12.8	7.0	24.4	30.1	37	11	081M0170V
MB1211	9/5/2012	16.1	18.5	12.7	6.9	24.3	30.1	37	11	081M0170V
MB1212	10/18/2012	13.2	18.5	12.7	6.9	24.3	30.1	37	11	081M0170V
MB1213	11/1/2012	11.5	18.2	12.2	6.2	24.2	30.2	37	11	081M0170V
MB1214	12/12/2012	21.8	17.7	12.6	7.4	22.8	27.9	37	11	081M0170V
MB1301	1/10/2012	14.8	17.7	12.7	7.6	22.8	27.9	37	11	081M0170V
MB1302	2/1/2013	8.1	17.3	11.7	6.2	22.8	28.3	37	11	SLBD2389V
MB1303	3/5/2013	17.0	17.2	11.7	6.2	22.7	28.2	37	11	081M0170V
MB1304	4/4/2013	12.6	17.1	11.5	6.0	22.7	28.3	37	11	SLBD2389V
MB1305	5/3/2013	9.4	15.9	11.5	7.0	20.4	24.9	37	11	SLBD2389V
MB1306	5/28/2013	14.7	15.7	11.3	6.9	20.1	24.5	37	11	SLBD2389V
MB1307	6/5/2013	14.4	15.4	11.2	6.9	19.6	23.8	37	11	SLBD2389V
MB1308	7/9/2013	25.3	15.9	11.1	6.4	20.7	25.4	37	11	SLBC2414V
MB1309	8/1/2013	18.7	15.8	11.1	6.4	20.5	25.2	37	11	SLBC2414V
MB1310	9/4/2013	13.2	15.2	11.1	7.1	19.2	23.3	37	11	SLBC2414V

MB1307 - Lot# SLBD2389V was used to mix Day 0, Day 1 - 6 was mixed with Lot# SLBC2414V.

QAQC by: MMO 9/17/13



21%CV = 10th percentile, 24%CV = 25th percentile, 28%CV = 50th percentile

Test #	Test Date	%CV for IC25	Mean %CV	-1 SD	-2 SD	+1 SD	+2 SD	75th Warning Limit	90th Warning Limit	SRT Lot #
MB1204	4/3/2012	19.1	23.2	18.0	12.8	28.3	33.5	32.0	40.0	060M0116V
MB1205	5/8/2012	18.8	22.3	18.0	13.8	26.6	30.8	32.0	40.0	021M0113V
MB1206	6/12/2012	17.9	21.6	17.9	14.3	25.2	28.8	32.0	40.0	081M0170V
MB1208	7/9/2012	17.5	20.9	17.9	14.9	23.9	26.8	32.0	40.0	081M0170V
MB1209	7/10/2012	17.2	20.4	17.8	15.2	22.9	25.5	32.0	40.0	081M0170V
MB1210	8/24/2012	17.7	19.9	17.7	15.4	22.2	24.5	32.0	40.0	081M0170V
MB1211	9/5/2012	17.2	19.5	17.6	15.6	21.5	23.5	32.0	40.0	081M0170V
MB1212	10/18/2012	17.2	19.2	17.5	15.7	20.9	22.6	32.0	40.0	081M0170V
MB1213	11/1/2012	17.1	18.9	17.4	15.8	20.4	22.0	32.0	40.0	081M0170V
MB1214	12/12/2012	17.2	18.7	17.3	15.9	20.1	21.5	32.0	40.0	081M0170V
MB1301	1/10/2012	17.6	18.5	17.2	15.9	19.8	21.0	32.0	40.0	081M0170V
MB1302	2/1/2013	17.6	18.3	17.2	16.1	19.4	20.5	32.0	40.0	SLBD2389V
MB1303	3/5/2013	17.5	18.1	17.2	16.2	19.1	20.1	32.0	40.0	081M0170V
MB1304	4/4/2013	18.8	18.1	17.2	16.3	19.0	19.9	32.0	40.0	SLBD2389V
MB1305	5/3/2013	19.8	18.1	17.2	16.2	19.0	20.0	32.0	40.0	SLBD2389V
MB1306	5/28/2013	20.4	18.2	17.1	16.1	19.2	20.3	32.0	40.0	SLBD2389V
MB1307	6/5/2013	20.7	18.3	17.1	15.9	19.5	20.7	32.0	40.0	SLBD2389V
MB1308	7/9/2013	21.1	18.4	17.1	15.7	19.8	21.1	32.0	40.0	SLBC2414V
MB1309	8/1/2013	20.6	18.6	17.1	15.7	20.0	21.4	32.0	40.0	SLBC2414V
MB1310	9/4/2013	18.6	18.5	17.1	15.8	19.8	21.2	32.0	40.0	SLBC2414V

MB1307 - Lot# SLBD2389V was used to mix Day 0, Day 1 - 6 was mixed with Lot# SLBC2414V.

QAQC by: MKO 9/17/13

APPENDIX G

CorrLine International – CorrX
Run-off from treated metal plate

Barbara Tompkins-Brown

Test Concentrations, % Prepared Chemically Treated Seawater (CTS)

Menidia beryllina	*Mysidopsis bahia*	Total Volume/ Concentration, ml	Color Code	ml CTS	ml DH_2O
0.30		800.00	Black	2.40	797.60
0.10		"	Red	0.80	799.20
0.03		"	Yellow	0.24	799.76
0.01		"	Green	0.08	799.92
0.003		"	Blue	0.02	799.98
0.0		"	White	0.00	800.00
Total Volume (ml) of CTS needed per day=					3.54
Total Volume (ml) of CTS needed for test duration=					7.08

Data Pages & Calculations by: Veronica M[illegible] QA/QC Check by: Michelle [illegible]

M. beryllina = 2 Reps x 200 ml = 400 ml

M. bahia = 2 Reps x 200 ml = 400 ml

DH_2O = Dilution Water = **Synthetic Seawater, 25 ppt**

	LPC	M #	LPC	M #
Date	8/29		8/31	
Alkalinity	108	//	104	//
Salinity	24.8	1B	24.7	1B
pH	8.0	AB3	8.0	AB
	ay		ME	

Artemia Lot #	
042012-2	
Initial	ME

LPC: Laboratory Performance Control, synthetic seawater
Alkalinity: mg/l as $CaCO_3$ Salinity: ppt pH: su M#: meter number

Prep Date	8/29	8/31
DH_2O Lot #	25R- 239 -13	25R- 240 -13
Sample #	1	1
Initial	CM	JC

Inlandsilverside Minnow, *Menidia beryllina*
Acute Static-Renewal 48-Hour Definitive Test
EPA-821-R-02-012: Section 9 Method 2006

CorrLine International – CorrX
Run-off from treated metal plate

Test Organisms Age: 12 Days Old Test Organisms Source: EE
Test Initiation At: 1711 on 8/29/13
Counted by: _____ QC/QA by: Judy Strenio
Loaded by: Judy Strenio Organism Lot # mm-227-13

Exposure Chamber: 16 oz. plastic cups. **Feeding**: None.

Survival Data

Time	Treatment % CTS												Initials
	REP	LPC White	REP	6.25 Blue	REP	12.5 Green	REP	25.0 Yellow	REP	50.0 Red	REP	100.0 Black	
0 HR	1	8	3	8	5	8	7	8	9	8	11	8	8/29/13
1711	2	8	4	8	6	8	8	8	10	8	12	8	JAG
		///		///		///		///		///		///	
24 HR	1	8	3	8	5	8	7	8	9	0	11	0	8/30/13
1024	2	8	4	8	6	8	8	8	10	0	12	0	VA
		///		///		///		///		///		///	
48 HR	1	8	3	8	5	8	7	8	9	0	11	0	8/31/13
1316	2	8	4	8	6	8	8	8	10	0	12	0	CMB
		///		///		///		///		///		///	
72 HR	1	8	3	8	5	8	7	8	9	0	11	0	9/1/13
1114	2	8	4	8	6	8	8	8	10	0	12	0	JA
		///		///		///		///		///		///	
96 HR	1	8	3	8	5	8	7	8	9	0	11	0	9/2/13
1511	2	8	4	8	6	8	8	8	10	0	12	0	CH
		///		///		///		///		///		///	
% Surv		100		100		100		100		0		0	

Data Entry by: Veronica McNew
Double Data Entry: Veronica McNew or
QA/QC Officer: Mary A. O'Neill

M. beryllina Water Quality Data

All Treatments: Temp., 23.5 to 26.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I**: initial water quality. **F:** final water quality.

0 HR	Treatment % CTS						
8/29/13	LPC	6.25	12.5	25.0	50.0	100.0	Meter #
DO I	7.3	7.2	7.2	7.1	7.2	7.3	S7
Temp I	24.2	24.0	24.8	25.8	24.3	23.8	1B
Salinity I	24.8	24.6	24.0	23.7	22.6	20.9	1B
Tech Initials: ~~TK~~				Time: 1705			

Comments

24 HR	Treatment % CTS						
8/30/13	LPC	6.25	12.5	25.0	50.0	100.0	Meter #
DO F	5.8	4.4	3.6	3.3	6.3	6.3	S7
Temp F	25.6	25.6	25.5	25.6	25.4	25.1	1B
Salinity F	25.1	24.9	24.6	24.1	23.3	21.5	1B
pH F	7.7	7.3	7.1	7.7	7.5	4.2	1193
Tech Initials: CYJ CMB				Time: 0946			

Comments Initiated aeration at 8 ml/min on Day 1. 08/30/13 LB

48 HR	Treatment % CTS						
8/31/13	LPC	6.25	12.5	25.0	50.0	100.0	Meter #
DO F	6.6	6.6	6.0	5.9			S7
Temp F	25.3 ~~26.0~~ 25.3 (A)	26.3	25.7	26.2			1B
Salinity F	26.0 ~~25.3~~ 25.3 (A)	25.1	25.3	24.3			1B
pH F	8.0 (A)	8.0	7.8	7.6			1193
Tech Initials: CMB				Time: 0811			

Comments

DO: mg/l pH: su Salinity: ppt Temp: °C

CorrX, Run-off from treated metal plate

M. beryllina Water Quality Data

All Treatments: Temp., 23.5 to 26.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I**: initial water quality. **F:** final water quality.

48 HR	Treatment % CTS						
8/31/13	LPC	6.25	12.5	25.0	50.0	100.0	Meter #
DO I	7.1	7.4	7.4	7.2			S7
Temp I	24.7	24.3	24.7	24.6			1B
Salinity I	24.7	26.9	27.2	26.2			1B
Tech Initials: CMB				Time: 1113			

Comments

72 HR (A)	Treatment % CTS						
9/1/13	LPC	6.25	12.5	25.0	50.0	100.0	Meter #
DO F							
Temp F							
Salinity F							
pH F							
Tech Initials:				Time:			

Comments (A) date not recorded 09/02/13 VZ

96 HR	Treatment % CTS						
9/2/13	LPC	6.25	12.5	25.0	50.0	100.0	Meter #
DO F	6.9	6.9	3.1	2.9			S7
Temp F	26.5	26.5	26.3	26.4			1B
Salinity F	25.3	27.5	27.4	27.1			1B
pH F	8.0	8.2	7.8	7.7			A93
Tech Initials: CMB ME				Time: 0822			

Comments

DO: mg/l pH: su Salinity: ppt Temp: °C

Mysid, *Mysidopsis bahia*

Acute Static-Renewal 48-Hour Definitive Test
EPA-821-R-02-012: Section 9 Method 2007

CorrX, Run-off from treated metal plate

Q-582-13
NOEC/LOEC; LC50

CorrLine International – CorrX
Run-off from treated metal plate

Test Organisms Age: 5 Days Old Test Organisms Source: EE
Test Initiation At: M13 on 08 / 29 /13
Counted by: _____ QC/QA by: Veronica Mc New
Loaded by: Veronica Mc New Organism Lot # MB-361-13

Exposure Chamber: 16 oz. plastic cups. **Feeding**: None.

Survival Data

Time	REP	LPC White	REP	6.25 Blue	REP	12.5 Green	REP	25.0 Yellow	REP	50.0 Red	REP	100.0 Black	Initials
	Treatment % CTS												
0 HR	1	8	3	8	5	8	7	8	9	8	11	8	8/29/13
M13	2	8	4	8	6	8	8	8	10	8	12	8	VL
		///		///		///		///		///		///	
24 HR	1	8	3	8	5	8	7	2	9	0	11	0	8/30/13
1020	2	8	4	8	6	7	8	2	10	0	12	0	VL
		///		///		///		///		///		///	
48 HR	1	8	3	6	5	(A) 23	7	0	9	0	11	0	8/31/13
1320	2	8	4	8	6	4	8	0	10	0	12	0	CMB
		///		///		///		///		///		///	
72 HR	1	8	3	2	5	0	7	0	9	0	11	0	9/1/13
1117	2	8	4	1	6	0	8	0	10	0	12	0	JA
		///		///		///		///		///		///	
96 HR	1	8	3	0	5	0	7	0	9	0	11	0	9/2/13
1513	2	7	4	0	6	0	8	0	10	0	12	0	CH
		///		///		///		///		///		///	
% Surv		93.8		0		0		0		0		0	

Data Entry by: Veronica Mc New
Double Data Entry: Veronica Mc New or
QA/QC Officer: Mary A. O'Neill

(A) wrong data 08-31-13 CMB

M. bahia Water Quality Data

All Treatments: Temp., 23.5 to 26.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I**: initial water quality. **F**: final water quality.

0 HR	Treatment % CTS						
8/29/13	LPC	6.25	12.5	25.0	50.0	100.0	Meter #
DO I	7.3	7.2	7.2	7.1	7.2	7.3	S7
Temp I	24.2	24.0	24.8	25.8	24.3	23.8	1B
Salinity I	24.8	24.6	24.0	23.7	22.6	20.9	1B
Tech Initials: TK					Time: 1705		

Comments

24 HR	Treatment % CTS						
8/30/13	LPC	6.25	12.5	25.0	50.0	100.0	Meter #
DO F	5.1	3.2	2.6	3.0	6.5	6.1	S7
Temp F	24.9	25.7	25.0	25.5	25.2	25.7	1B
Salinity F	25.1	24.9	24.6	24.0	23.1	21.2	1B
pH F	7.6	7.2	7.0	6.6	4.4	4.2	A93
Tech Initials: CY CMB					Time: 0949		

Comments Initated aeration at 8 ml/min on Day 1. 08/30/13 VL

48 HR	Treatment % CTS						
8/31/13	LPC	6.25	12.5	25.0	50.0	100.0	Meter #
DO F	6.8	6.7	6.5	6.4			S7
Temp F	25.6	26.3	26.3	26.3			1B
Salinity F	26.0	25.1	24.7	24.2			1B
pH F	8.0	8.0	7.9	7.7			A93
Tech Initials: CMB					Time: 0813		

Comments

DO: mg/l pH: su Salinity: ppt Temp: °C

CorrX, Run-off from treated metal plate

Q-582-13
NOEC/LOEC; LC50

M. bahia Water Quality Data

All Treatments: Temp., 23.5 to 26.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I**: initial water quality. **F:** final water quality.

48 HR	Treatment % CTS						
8/31/13	LPC	6.25	12.5	25.0	50.0	100.0	Meter #
DO I	7.1	7.4	7.4	7.2			S7
Temp I	24.7	24.3	24.7	24.6			1B
Salinity I	24.7	26.9	27.2	26.2			1B
Tech Initials: CMB				Time: 1113			

Comments_____

72 HR	Treatment % CTS						
9/1/13 (A)	LPC	6.25	12.5	25.0	50.0	100.0	Meter #
DO F							
Temp F							
Salinity F							
pH F							
Tech Initials:				Time:			

Comments (A) data not recorded 09/02/13 VL

96 HR	Treatment % CTS						
9/2/13	LPC	6.25	12.5	25.0	50.0	100.0	Meter #
DO F	6.9	6.8					S7
Temp F	25.6	26.4					1B
Salinity F	25.8	27.2					1B
pH F	8.0	8.2					A93
Tech Initials: MECMB				Time: 0821			

Comments_____

DO: mg/l pH: su Salinity: ppt Temp: °C

CorrX, Run-off from treated metal plate

Q-582-13
NOEC/LOEC; LC50

Acute Toxicity Test-96 Hr Survival

Start Date:	8/29/2013	Test ID:	mn58213	Sample ID:	LAB-Lab Sample
End Date:	9/2/2013	Lab ID:	EE-Environmental Enterprise	Sample Type:	PRD-Product
Sample Date:		Protocol:	EPAM 02-EPA Marine	Test Species:	MB-Menidia beryllina
Comments:					

Conc-%	1	2
PC-LP Control	1.0000	1.0000
6.25	1.0000	1.0000
12.5	1.0000	1.0000
25	1.0000	1.0000
50	0.0000	0.0000
100	0.0000	0.0000

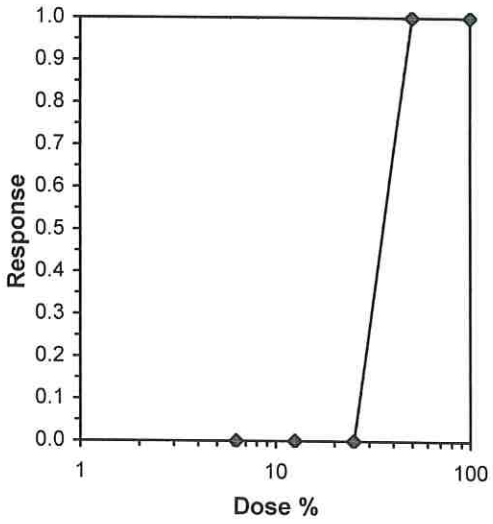
			Transform: Untransformed					Number	Total
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	Resp	Number
PC-LP Control	1.0000	1.0000	1.0000	1.0000	1.0000	0.000	2	0	16
6.25	1.0000	1.0000	1.0000	1.0000	1.0000	0.000	2	0	16
12.5	1.0000	1.0000	1.0000	1.0000	1.0000	0.000	2	0	16
25	1.0000	1.0000	1.0000	1.0000	1.0000	0.000	2	0	16
50	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	2	16	16
100	0.0000	0.0000	0.0000	0.0000	0.0000	0.000	2	16	16

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Normality of the data set cannot be confirmed				
Equality of variance cannot be confirmed				

Graphical Method

Trim Level	EC50
0.0%	35.355

35.355



Acute Toxicity Test-96 Hr Survival

Start Date:	8/29/2013	Test ID:	mb58213	Sample ID:	LAB-Lab Sample
End Date:	9/2/2013	Lab ID:	EE-Environmental Enterprise	Sample Type:	PRD-Product
Sample Date:		Protocol:	EPAM 02-EPA Marine	Test Species:	MY-Mysidopsis bahia
Comments:					

Conc-%	1	2
PC-LP Control	1.0000	0.8750
6.25	0.0000	0.0000
12.5	0.0000	0.0000
25	0.0000	0.0000
50	0.0000	0.0000
100	0.0000	0.0000

			Transform: Untransformed				
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N

CorrLine International – CorrX
Run-off from treated metal plate

Barbara Tompkins-Brown

Test Concentrations, % Prepared Chemically Treated Seawater (CTS)

	Mysidopsis bahia	Total Volume/ Concentration, ml	Color Code	ml CTS	ml DH_2O
8.00		400.00	Black	32.00	368.00
4.00		"	Red	16.00	374.00
2.00		"	Yellow	8.00	392.00
1.00		"	Green	4.00	396.00
0.10		"	Blue	0.40	399.60
0.0		"	White	0.00	400.00
Total Volume (ml) of CTS needed per day=					60.40
Total Volume (ml) of CTS needed for test duration=					120.80

Data Pages & Calculations by: Veronica M. Fenn QA/QC Check by: Miranda Robbins

M. bahia = 2 Reps x 200 ml
= 400 ml

DH_2O = Dilution Water = **Synthetic Seawater, 25 ppt**

	LPC	M #	LPC	M #
Date	9/3		9/5	
Alkalinity	104	//	106	//
Salinity	249	16	245	16
pH	8.0	A93	8.0	A93
	CMB		CMB	

Artemia Lot #	
042012-2	
Initial	MR

LPC: Laboratory Performance Control, synthetic seawater
Alkalinity: mg/l as $CaCO_3$ Salinity: ppt pH: su M#: meter number

Prep Date	9/3	9/5
DH_2O Lot #	25R- 244 -13	25R- 246 -13
Sample #	1	1
Initial	Qy	CMB

Mysid, *Mysidopsis bahia*

Acute Static-Renewal 48-Hour Definitive Test
EPA-821-R-02-012: Section 9 Method 2007

CorrLine International – CorrX
Run-off from treated metal plate

Test Organisms Age: 5 Days Old Test Organisms Source: EE
Test Initiation At: (A) on 9/3/13
Counted by: Carla Young QC/QA by:
Loaded by: Organism Lot # mb-4713

Exposure Chamber: 16 oz. plastic cups. **Feeding**: None.

Survival Data

Time	REP	LPC White	REP	0.10 Blue	REP	1.00 Green	REP	2.00 Yellow	REP	4.00 Red	REP	8.00 Black	Initials
		Treatment % CTS											
0 HR	1	8	3	8	5	8	7	8	9	8	11	8	9/3/13
	2	8	4	8	6	8	8	8	10	8	12	8	
(A)		///		///		///		///		///		///	(A)
24 HR	1	8	3	8	5	8	7	8	9	8	11	8	9/4/13
	2	8	4	8	6	8	8	8	10	8	12	8	
1014		///		///		///		///		///		///	JA
48 HR	1	8	3	8	5	8	7	8	9	8	11	8	9/5/13
	2	8	4	8	6	8	8	8	10	8	12	8	
1327		///		///		///		///		///		///	MR
72 HR	1	8	3	8	5	8	7	8	9	7	11	4	9/6/13
	2	7	4	8	6	8	8	8	10	4	12	0	
1341		///		///		///		///		///		///	JA
96 HR	1	8	3	8	5	8	7	8	9	3	11	1	9/7/13
	2	7	4	8	6	8	8	8	10	2	12	0	
1154		///		///		///		///		///		///	ME
% Surv		93.8		100		100		100		31.3~~37.5~~ (A)		6.3	

Data Entry by: Veronica McMeen
Double Data Entry: Veronica McMeen or
QA/QC Officer: Matt O'Neil

(A) Wrong data 09/13/13 ME

(A) Data not recorded 09/10/13 ME

M. bahia Water Quality Data

All Treatments: Temp., 23.5 to 26.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I**: initial water quality. **F:** final water quality.

0 HR	Treatment % CTS						
9/3/13	LPC	0.10	1.00	2.00	4.00	8.00	Meter #
DO I	7.1	7.2	7.2	7.0	7.1	7.0	S7
Temp I	24.5	24.5	24.5	24.4	24.0	24.5	1B
Salinity I	24.9	25.0	24.8	24.5	24.0	23.2	1B
Tech Initials: CMB				Time: 1330			

Comments_____

24 HR	Treatment % CTS						
9/4/13	LPC	0.10	1.00	2.00	4.00	8.00	Meter #
DO F	6.7	6.6	5.5	4.9	3.8	2.6	S7
Temp F	26.0	25.9	25.9	25.8	25.9	25.9	1B
Salinity F	24.9	25.2	25.0	24.7	24.2	23.4	1B
pH F	8.0	7.9	7.8	7.5	7.4	7.2	A93
Tech Initials: CY CMB				Time: 0849			

Comments began Aeration at 34 mls per min ON DAY 4 9-4-13 JA

48 HR	Treatment % CTS						
9/5/13	LPC	0.10	1.00	2.00	4.00	8.00	Meter #
DO F	6.6	6.8	7.0	6.9	6.9	6.8	S7
Temp F	24.9	25.2	25.1	25.1	25.2	25.0	1B
Salinity F	25.2	25.3	25.3	24.9	24.5	23.8	1B
pH F	7.9	8.0	8.0	8.0	8.0	8.0	A93
Tech Initials: CMB CY				Time: 0834			

Comments_____

DO: mg/l pH: su Salinity: ppt Temp: °C

CorrX, Run-off from treated metal plate

Q-582I-13
NOEC/LOEC; LC50

M. bahia Water Quality Data

All Treatments: Temp., 23.5 to 26.4°C. Initial & Final Dissolved Oxygen (DO): 4.0 to 7.5 mg/l.
LPC: Initial Salinity, 24.5 to 25.4 ppt. **I**: initial water quality. **F:** final water quality.

48 HR	Treatment % CTS						
9/5/13	LPC	0.10	1.00	2.00	4.00	8.00	Meter #
DO I	7.0	7.0	7.0	7.0	7.0	7.1	S7
Temp I	24.5	24.5	24.5	24.5	24.5	24.5	13
Salinity I	24.5	24.9	24.8	24.5	24.1	23.1	13
Tech Initials: Cy					Time: 0958		

Comments_____

72 HR	Treatment % CTS						
9/6/13	LPC	0.10	1.00	2.00	4.00	8.00	Meter #
DO F	6.9	7.0	7.0	7.0	7.0	6.9	S7
Temp F	24.9	24.9	25.1	25.0	24.8	25.0	13
Salinity F	24.8	25.2	25.0	24.9	24.6	23.4	13
pH F	7.9	7.9	8.0	8.0	7.9	7.9	A93
Tech Initials: Cy CMB					Time: 0841		

Comments_____

96 HR	Treatment % CTS						
9/7/13	LPC	0.10	1.00	2.00	4.00	8.00	Meter #
DO F	6.3	6.4	6.5	6.7	6.7	6.5	S7
Temp F	25.2	25.3	25.4	25.4	25.5	25.6	1B
Salinity F	25.1	25.7	25.9	25.3	24.3	23.5	1B
pH F	7.8	7.8	7.9	8.0	8.0	7.9	A93
Tech Initials: CM MR					Time: 0739		

Comments_____

DO: mg/l pH: su Salinity: ppt Temp: °C

CorrX, Run-off from treated metal plate

Q-582I-13
NOEC/LOEC; LC50

Acute Toxicity Test-96 Hr Survival

Start Date:	9/3/2013	Test ID:	mb582I13	Sample ID:	LAB-Lab Sample
End Date:	9/7/2013	Lab ID:	EE-Environmental Enterprise	Sample Type:	PRD-Product
Sample Date:		Protocol:	EPAM 02-EPA Marine	Test Species:	MY-Mysidopsis bahia
Comments:					

Conc-%	1	2
PC-LP Control	1.0000	0.8750
0.1	1.0000	1.0000
1	1.0000	1.0000
2	1.0000	1.0000
4	0.3750	0.2500
8	0.1250	0.0000

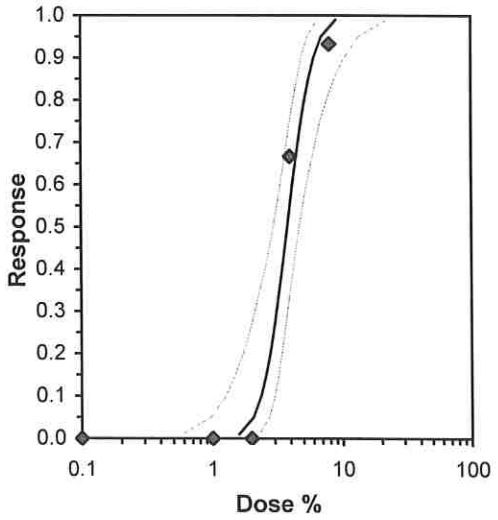
			Transform: Untransformed					Number	Total
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	Resp	Number
PC-LP Control	0.9375	1.0000	0.9375	0.8750	1.0000	9.428	2	1	16
0.1	1.0000	1.0667	1.0000	1.0000	1.0000	0.000	2	0	16
1	1.0000	1.0667	1.0000	1.0000	1.0000	0.000	2	0	16
2	1.0000	1.0667	1.0000	1.0000	1.0000	0.000	2	0	16
4	0.3125	0.3333	0.3125	0.2500	0.3750	28.284	2	11	16
8	0.0625	0.0667	0.0625	0.0000	0.1250	141.421	2	15	16

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Normality of the data set cannot be confirmed				
Equality of variance cannot be confirmed				

Maximum Likelihood-Probit

Parameter	Value	SE	95% Fiducial Limits		Control	Chi-Sq	Critical	P-value	Mu	Sigma	Iter
Slope	6.1687	1.61618	3.00098	9.33642	0.0625	3.7048	7.81473	0.29516	0.57873	0.16211	11
Intercept	1.42999	0.99971	-0.5295	3.38943							
TSCR	0.01635	0.01821	-0.0193	0.05204							

Point	Probits	%	95% Fiducial Limits	
EC01	2.674	1.59078	0.57785	2.26299
EC05	3.355	2.05156	0.96144	2.71429
EC10	3.718	2.34952	1.25567	3.00384
EC15	3.964	2.57463	1.49888	3.2264
EC20	4.158	2.76883	1.72075	3.42413
EC25	4.326	2.94706	1.93199	3.6129
EC40	4.747	3.44874	2.54316	4.2066
EC50	**5.000**	**3.79079**	**2.94753**	**4.69249**
EC60	5.253	4.16678	3.35552	5.32916
EC75	5.674	4.87608	4.00447	6.8441
EC80	5.842	5.18997	4.25159	7.63666
EC85	6.036	5.58143	4.53637	8.72024
EC90	6.282	6.11619	4.89531	10.3607
EC95	6.645	7.00447	5.44099	13.473
EC99	7.326	9.03341	6.55239	22.3269



ENVIRONMENTAL ENTERPRISES USA, INC.
58485 Pearl Acres Rd., Suite D
Slidell, Louisiana 70461
(985) 646-2787

Kit No. 480A WPS

CHAIN - OF - CUSTODY RECORD

Client: CorrLine International
Address: 8 East Greenway Plaza
Suite 910
Houston, Texas, 77046
FedxT# 9995 9499 7160

Contact Person: Barbara Tompkins-Brown
Phone#: 713 625 7519
P.O. #
Email: btompkins-brown@corrline.com
Project:

Spec

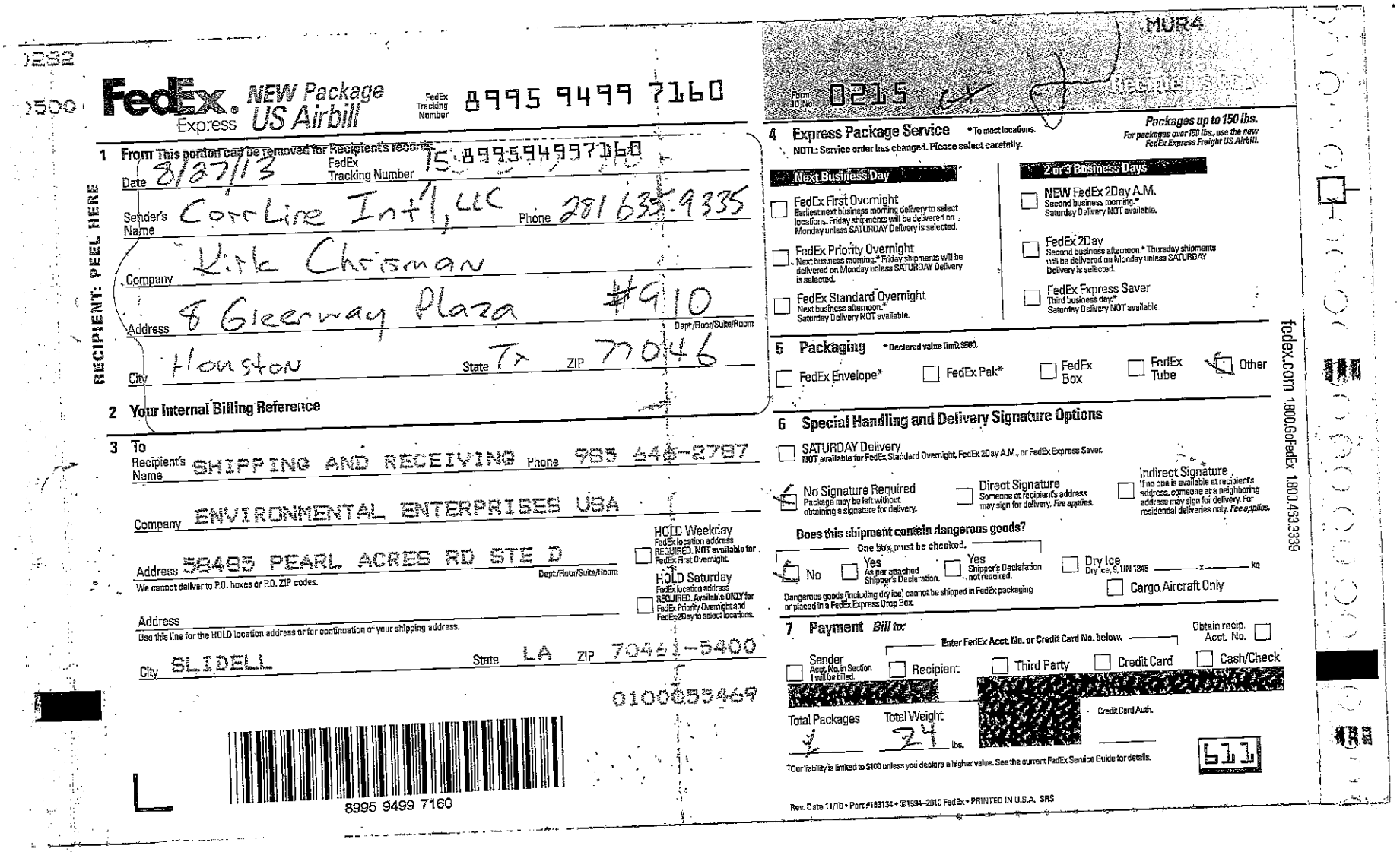
Product Sample Description	Date Collected	Time Collected	No. of Containers	Analysis Request	S/R No.	
CorrX Runoff from treated metal plate	8/27	6:15	1	*M. bahia* 96-hr Acute RFT, Method 2007.0 & *M. beryllina* 96-hr Acute RFT, Method 2006.0	Q-582-13 mm mb	Q-582-13 mb
				M. bahia 7-day Chronic, Method 1007.0 & *M. beryllina* 7-day Chronic, Method 1006.0	Q-625-13 mm Q-626-13 mb	used 2nd sample received 09/20/13 KL

Collected By: Kirk Chrisman — Date & Time 8/27 6:20 — Relinquished By:

Received By: Nicole Bailey — Date & Time 8/28/13 0915 — Relinquished By: Nicole Bailey 8/28/13 0919

Received By: Veronica M. Reyes — Date & Time 08/28/13 0920 — Relinquished By:

Received By: — Date & Time — Relinquished By: E-MAILED 10/1/13



FedEx Express NEW Package US Airbill

FedEx Tracking Number 8995 9499 7160

Form ID No. 0215

MUR4

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records

Date 8/27/13

FedEx Tracking Number 15 8995 9499 7160

Sender's Name CorLine Int'l, LLC Phone 281 635-9335

Company Kirk Chrisman

Address 8 Greenway Plaza #910

Dept/Floor/Suite/Room

City Houston State TX ZIP 77046

2 Your Internal Billing Reference

3 To

Recipient's Name SHIPPING AND RECEIVING Phone 985 646-2787

Company ENVIRONMENTAL ENTERPRISES USA

Address 58485 PEARL ACRES RD STE D

Dept/Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City SLIDELL State LA ZIP 70461-5400

0100055469

8995 9499 7160

4 Express Package Service *To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.

For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

- FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

FedEx Envelope* | FedEx Pak* | FedEx Box | FedEx Tube | Other

6 Special Handling and Delivery Signature Options

SATURDAY Delivery NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

No Signature Required — Package may be left without obtaining a signature for delivery.

Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.

Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods? One box must be checked.

No | Yes As per attached Shipper's Declaration | Yes Shipper's Declaration not required | Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

Cargo Aircraft Only

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No.

Sender Acct. No. in Section 1 will be billed. | Recipient | Third Party | Credit Card | Cash/Check

Total Packages 1 Total Weight 24 lbs.

Credit Card Auth.

611

*Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

Rev. Date 11/10 • Part #183134 • ©1994–2010 FedEx • PRINTED IN U.S.A. SRS

fedex.com 1.800.GoFedEx 1.800.463.3339

ENVIRONMENTAL ENTERPRISES USA, INC.
SAMPLE RECEIPT / ACCEPTANCE (SRA) FORM

CLIENT: Cook Inlet **KIT NO.** 158A
DATE RECEIVED: 9-20-13 **CL NO.** P808 **LAB NO.**
LOCATION: N/A NA

SAMPLE RECEIPT:

1. Sample Kit Supplied by: EE USA..✓.., Client....., ???....., Other.....
   Ice Chest..✓.., Cardboard Box....., Styrofoam Box....., Other..... How many containers in kit? ....2....
2. Ice chest received... Circle one; *delivered by Hot Shot, FEDEX, UPS, Client, etc. mark NA.
   *NA or SB: Fridge, Ice & H_2O, [Dry, H_2O, Ice packs, Other, (Temp.....°C, Temp ID#....)]
   At EE USA: Ice & H_20, Dry, H_2O, Ice packs (Frozen? Yes....or No....), Other.....
   If Ice & H_20 received... How? Loose, Bagged, Bottled, or Other...Comment: FEX 5998 9499 7...
3. Sample container(s) in good condition (sealed & unbroken)? YES..✓.. NO.....
4. Sample container label(s) filled out completely? YES..... NO..✓.. N/A.....
   If not, mark all that apply. For O&G (PW) OCSG & Well #'s N/A. For O&G (WF) OCSG N/A
   a) Date & time collected..... ✓
   b) Collected by .....
   c) OCSG number.....
   d) Well number .....
5. Chain-of-Custody form (COC) filled out completely? YES..... NO..✓..
   If not, mark all that apply.
   a) No COC.....
   b) Collected by .....
   c) Relinquished by.....
   d) Location.....
   e) Company name.....
   f) Date & time collected.....
   g) Received by.....
   h) Date and/or time of transfer...
   i) Waste type.....
6. Custody seal(s) received with this sample kit? YES..... NO..✓..
   Were custody seals used? YES..... NO..... And if used, were they intact? YES.....NO.....

COMMENTS:

Information recorded by: [signature] 9/20/13

SAMPLE ACCEPTANCE: **TOX: EFF___ CTS___ PW___ DF___; ANALY ____ BIOD ____;**
O&G: PW___ WF___; PROD.: NCP___ WAF___ SBF___;
ADD.: DF___ CTS___;OTHER:

7. Was each sample container appropriate (EPA Protocol)? YES..... NO.....
   Plastic..... Glass..... Number of samples for location?.....
8. Does the recorded information on the COC and label agree? YES..... NO.....
   Client Sample ID, Collection location, date, & time. Collected by.
9. Was sufficient amount of each sample received? YES..... NO.....
   Container size....., Estimated Volume....., Head space..... (mls or liters).
10. Was each sample received within the proper holding time? YES..... NO.....
11. Was each sample received at the proper temperature? (See COC for temp) YES..... NO.....

Oil & Grease Lab Only:

12. Sample verified for proper acid preservation & temp within 1 hour of sample receipt? YES..... NO.....
13. Is the initial pH <2 su? YES..... NO.....
    If no, how many mls of 6NHCL was added to make pH <2 su? .....mls.....OL#

COMMENTS & CLIENT CONTACT INFO (name, date, instructions):

Information recorded by: ___/___/13

NA=not applicable, SB=Shorebase, or CL=Certified Lot Number, PW= Produced Water, WF=Well Fluid

Kit # 158A TO

FedEx Express NEW Package US Airbill

FedEx Tracking Number 8995 9499 7491

Form ID No. 0215

MUR4

Recipient's Copy

RECIPIENT: PEEL HERE

fedex.com 1.800.GoFedEx 1.800.463.3339

1 From This portion can be removed for Recipient's records.

Date 9/19/13 FedEx Tracking Number 899594997491

Sender's Name Kirk Chrisman Phone

Company Garlock Tank

Address 8 Greenway Blvd #910

Dept./Floor/Suite/Room

City Houston State TX ZIP 77046

2 Your Internal Billing Reference

3 To

Recipient's Name SHIPPING AND RECEIVING Phone 985 646-2787

Company ENVIRONMENTAL ENTERPRISES USA

Address 58485 PEARL ACRES RD STE B

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City SLIDELL State LA ZIP 70461-5400

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

0100055469

8995 9499 7491

4 Express Package Service * To most locations.

NOTE: Service order has changed: Please select carefully.

Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

- [x] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

- [x] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. Fee applies.
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. Fee applies.

Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

- [ ] Cargo Aircraft Only

7 Payment Bill to:

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. [ ]

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [x] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Total Packages Total Weight ____ lbs. Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

611

Rev. Date 11/10 • Part #163134 • ©1994–2010 FedEx • PRINTED IN U.S.A. SRS

fedex.com 1.800.GoFedEx 1.800.463.3339

ENVIRONMENTAL ENTERPRISES USA, INC.
SAMPLE RECEIPT / ACCEPTANCE (SRA) FORM

CLIENT: ConLine
DATE RECEIVED: 9-20-13
LOCATION: 1/4

KIT NO. 157A
CL NO. F808 / D808
LAB NO. Q-626-13 / Q-625-13

SAMPLE RECEIPT:

1. Sample Kit Supplied by: EE USA..., Client..., ???..., Other...
   Ice Chest..., Cardboard Box..., Styrofoam Box..., Other... How many containers in kit? ...7
2. Ice chest received... Circle one; *delivered by Hot Shot, FEDEX, UPS, Client, etc. mark NA.
   *NA or SB: Fridge, Ice & H_2O, [Dry, H_2O, Ice packs, Other, (Temp.....°C, Temp ID#....)]
   At EE USA: Ice & H_20, Dry, H_2O, Ice packs (Frozen? Yes....or No....), Other.....
   If Ice & H_20 received... How? Loose, Bagged, Bottled, or Other...Comment: 8995499 7480
3. Sample container(s) in good condition (sealed & unbroken)? YES...✓... NO.....
4. Sample container label(s) filled out completely? YES..... NO...✓... N/A.....
   If not, mark all that apply. For O&G (PW) OCSG & Well #'s N/A. For O&G (WF) OCSG N/A
   a) Date & time collected..... ✓ c) OCSG number..... ____
   b) Collected by ..... ____ d) Well number ..... ____
5. Chain-of-Custody form (COC) filled out completely? YES..... NO...✓...
   If not, mark all that apply.
   a) No COC..... ✓ f) Date & time collected..... ____
   b) Collected by ..... ____ g) Received by..... ____
   c) Relinquished by..... ____ h) Date and/or time of transfer... ____
   d) Location..... ____ i) Waste type..... ____
   e) Company name..... ____
6. Custody seal(s) received with this sample kit? YES..... NO...✓...
   Were custody seals used? YES..... NO..... And if used, were they intact? YES.....NO.....

COMMENTS:

Information recorded by: [signature] 9/20/13

SAMPLE ACCEPTANCE: TOX: EFF___ CTS___ PW___ DF___; ANALY ____ BIOD ____;
O&G: PW___ WF___; PROD.: NCP___ WAF___ SBF___;
ADD.: DF___ CTS___;OTHER: product

7. Was each sample container appropriate (EPA Protocol)? YES...✓... NO.....
   Plastic...✓... Glass..... Number of samples for location?....7.....
8. Does the recorded information on the COC and label agree? YES...✓... NO.....
   Client Sample ID, Collection location, date, & time. Collected by.
9. Was sufficient amount of each sample received? YES...✓... NO.....
   Container size 4,20....., Estimated Volume...80....., Head space...0..... (mls or liters).
10. Was each sample received within the proper holding time? YES..... NO.....N/A
11. Was each sample received at the proper temperature? (See COC for temp) YES..... NO.....N/A

Oil & Grease Lab Only:

12. Sample verified for proper acid preservation & temp within 1 hour of sample receipt? YES..... NO.....
13. Is the initial pH <2 su? YES..... NO.....
    If no, how many mls of 6NHCL was added to make pH <2 su? .....mls.....OL#

COMMENTS & CLIENT CONTACT INFO (name, date, instructions):

Information recorded by: VL 09/20/13

NA=not applicable, SB=Shorebase, or CL=Certified Lot Number, PW= Produced Water, WF=Well Fluid

R, I # 157A

3314

3500

FedEx Express **NEW** Package US Airbill

FedEx Tracking Number 8995 9499 7480

MUR4

Form ID No. 0215

Recipient's Copy

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.

Date 9/19/13 FedEx Tracking Number 899594997480

Sender's Name Kirk Chrisman Phone

Company Coastline Int'l

Address 8 Greenway Blvd. #910 Dept./Floor/Suite/Room

City Houston State TX ZIP 77046

2 Your Internal Billing Reference

3 To

Recipient's Name SHIPPING AND RECEIVING Phone 985 646-2787

Company ENVIRONMENTAL ENTERPRISES USA

Address 58485 PEARL ACRES RD STE D Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City SLIDELL State LA ZIP 70461-5400

HOLD Weekday FedEx location address REQUIRED. **NOT available for** FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. **Available ONLY for** FedEx Priority Overnight and FedEx 2Day to select locations.

0100055469

8995 9499 7480

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs.
For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

- [x] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] **NEW** FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — **NOT available for** FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient address, someone at a neighboring address may sign for delivery. *Fee applies.* For residential deliveries only.

Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. [ ]

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [x] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

[redacted] 24

Total Packages 1 Total Weight 74 lbs. Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

611

Rev. Date 11/10 • Part #163134 • ©1994–2010 FedEx • PRINTED IN U.S.A. SRS

fedex.com 1.800.GoFedEx 1.800.463.3339

fedex.com 1.800.GoFedEx 1.800.463.3339

ENVIRONMENTAL ENTERPRISES USA, INC.
SAMPLE RECEIPT / ACCEPTANCE (SRA) FORM

CLIENT: Corline **KIT NO.** 480A
DATE RECEIVED: 8/28/13 **CL NO.** P811 **LAB NO.** _____
LOCATION: Corrx

SAMPLE RECEIPT:

1. Sample Kit Supplied by: EE USA....., Client....., ???....., Other.....
   Ice Chest....., Cardboard Box....., Styrofoam Box....., Other..... How many containers in kit? ....1.....
2. Ice chest received... Circle one; *delivered by Hot Shot, FEDEX, UPS, Client, etc. mark NA.
   *NA or SB: Fridge, Ice & H_2O, [Dry, H_2O, Ice packs, Other, (Temp.....°C, Temp ID#....)]
   At EE USA: Ice & H_2O, Dry, H_2O, Ice packs (Frozen? Yes....or No....), Other.....
   If Ice & H_2O received... How? Loose, Bagged, Bottled, or Other...Comment: _____
3. Sample container(s) in good condition (sealed & unbroken)? YES..... NO.....
4. Sample container label(s) filled out completely? YES..... NO..... N/A.....
   If not, mark all that apply. For O&G (PW) OCSG & Well #'s N/A. For O&G (WF) OCSG N/A
   a) Date & time collected..... _____ c) OCSG number..... _____
   b) Collected by ..... _____ d) Well number ..... _____
5. Chain-of-Custody form (COC) filled out completely? YES..... NO.....
   If not, mark all that apply.
   a) No COC..... _____ f) Date & time collected..... _____
   b) Collected by ..... _____ g) Received by..... _____
   c) Relinquished by..... _____ h) Date and/or time of transfer... _____
   d) Location..... _____ i) Waste type..... _____
   e) Company name..... _____
6. Custody seal(s) received with this sample kit? YES..... NO.....
   Were custody seals used? YES..... NO..... And if used, were they intact? YES.....NO.....

COMMENTS: (4) Blank

Information recorded by: NPB 8/28/13

SAMPLE ACCEPTANCE: **TOX: EFF___ CTS___ PW___ DF___; ANALY ____ BIOD ____;**
O&G: PW___ WF___; PROD.: NCP___ WAF___ SBF___;
ADD.: DF___ CTS___;OTHER: _____

7. Was each sample container appropriate (EPA Protocol)? YES..... NO.....
   Plastic..... Glass..... Number of samples for location?.....
8. Does the recorded information on the COC and label agree? YES..... NO.....
   Client Sample ID, Collection location, date, & time. Collected by.
9. Was sufficient amount of each sample received? YES..... NO.....
   Container size....., Estimated Volume....., Head space..... (mls or liters).
10. Was each sample received within the proper holding time? YES..... NO.....
11. Was each sample received at the proper temperature? (See COC for temp) YES..... NO.....

Oil & Grease Lab Only:

12. Sample verified for proper acid preservation & temp within 1 hour of sample receipt? YES..... NO.....
13. Is the initial pH <2 su? YES..... NO.....
    If no, how many mls of 6NHCL was added to make pH <2 su? .....mls.....OL#

COMMENTS & CLIENT CONTACT INFO (name, date, instructions): _____

Information recorded by: _____ ___/___/13

NA=not applicable, SB=Shorebase, or CL=Certified Lot Number, PW= Produced Water, WF=Well Fluid

)282

)500

FedEx Express **NEW** Package US Airbill

FedEx Tracking Number 8995 9499 7160

MUR4

Form ID No. 0215

Recipient's Copy

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.

Date 8/27/13 FedEx Tracking Number 15 8995 9499 7160

Sender's Name CorrLine Int'l, LLC Phone 281 635.9335

Company Kirk Chrisman

Address 8 Greenway Plaza #910 Dept./Floor/Suite/Room

City Houston State TX ZIP 77046

2 Your Internal Billing Reference

3 To

Recipient's Name SHIPPING AND RECEIVING Phone 985 646-2787

Company ENVIRONMENTAL ENTERPRISES USA

Address 58485 PEARL ACRES RD STE D Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City SLIDELL State LA ZIP 70461-5400

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

0100055469

8995 9499 7160

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

- ☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- ☐ NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- ☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- ☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☑ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☑ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods? One box must be checked.

☑ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box. ☐ Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

☐ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

[redacted]

Total Packages 1 Total Weight 24 lbs. Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

611

Rev. Date 11/10 • Part #163134 • ©1994–2010 FedEx • PRINTED IN U.S.A. SRS

fedex.com 1.800.GoFedEx 1.800.463.3339