

Bioassay Laboratory Report

**Sample SH-05-SS-00 was misidentified as
sample SH-06-SS-00 in the following
documents.**

***BIOLOGICAL TESTING RESULTS FOR
OAKLAND BAY SEDIMENT CHARACTERIZATION,
OAKLAND BAY, WASHINGTON***

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1.0 INTRODUCTION

NewFields conducted toxicity tests with sediment samples collected in Oakland Bay as part of a sediment characterization study. This study was performed under the Washington State Department of Ecology's Toxics Cleanup Program as part of the Puget Sound Initiative. Sediment samples were collected by Herrera Environmental Consultants, Inc. Biological effects were evaluated relative to the biological criteria defined in the Sediment Management Standards (SMS). This report presents the results of the toxicity testing portion of the Oakland Bay sediment characterization.

2.0 METHODS

Test methods followed guidance provided by the Puget Sound Estuary Program (PSEP 1995), the WDOE Sampling and Analysis Plan Appendix (SAPA; Ecology 2008), and the various updates presented during the Annual Sediment Management Review meetings (SMARM). Sediment toxicity was evaluated using three standard PSEP bioassays, the 10-day amphipod test, the 20-day juvenile polychaete test, the 48 to 96-hour larval development test, and the Microtox® porewater test. NewFields performed the amphipod, juvenile polychaete and benthic larval tests. The Microtox® test was performed by Nautilus Environmental LLC.

2.1 SAMPLE COLLECTION

Test sediment was collected from Oakland Bay by Herrera personnel between September 29 and October 5, 2008. Reference sediment was collected from three sites on October 9, 2008.

2.2 SAMPLE AND ANIMAL RECEIPT

Fifty test sediment samples and three reference sediment samples were received by NewFields and stored in a walk-in cold room at $4 \pm 2^{\circ}\text{C}$ in the dark until testing. Test sediment was not sieved prior to testing. All tests were conducted within the 8-week holding time.

The amphipods *Ampelisca abdita* were supplied by Brezina and Associates in Dillon Beach, California and held in native sediment at 20°C prior to test initiation. The amphipods *Eohaustorius estuarius* were supplied by Northwest Aquatic Sciences in Newport, Oregon and held in native sediment at 15°C prior to test initiation. Juvenile polychaete worms (*Neanthes arenaceodentata*) were supplied by Donald Reish, Ph.D., Long Beach, California. Juvenile polychaetes were held in seawater at 20°C (*Neanthes* are cultured in water-only and are not held in sediment prior to testing). *Mytilus* sp. (mussel) broodstock were supplied by Carlsbad Aquafarms, Carlsbad, California. Broodstock were held in unfiltered seawater from Hood Canal prior to spawning.

Native *E. estuarius* sediment from Yaquina Bay, Oregon was also provided by Northwest Aquatic Sciences for use as control sediment treatments for the amphipod test with *E. estuarius* and the juvenile polychaete test. Native *A. abdita* sediment from Tomales Bay, California was also provided by Brezina and Associates for use as a control sediment treatment for the amphipod test with *A. abdita*.

2.3 ULTRA-VIOLET LIGHT EXPOSURE

Test sediment samples from locations with water depths of less than 12 ft were exposed to ultra-violet (UV) light during the entire test exposure. All sediments evaluated in this study were tested under these conditions for all species (except Microtox). The UV light regime followed

guidance provided by Sub-Appendix D and in consultation with Ecology. UV light was provided by a fluorescent light ballast containing one Duro-Test Vita-Lite® (40W, 5500°K, 91 CRI) fluorescent bulb and one standard fluorescent bulb (Phillips F40CW). The UV bulbs were placed within 12" above the sediment surface. All test chambers in the UV exposures were left uncovered to prevent any UV loss. Tests were conducted on water-tables to ensure that the additional lighting did not alter water temperatures in the test chambers. In all other respects, the methods followed the standard testing protocols are summarized below.

2.4 SAMPLE BATCHING

The fifty sediment samples and the three reference samples were run in batches as shown in Table 1. Two batches were run for all tests except for Microtox®, which was conducted in 14 batches due to limitations in the testing apparatus. Each batch included the appropriate reference samples for the respective sediment treatments tested.

The two amphipod test batches utilized different species that were selected based on the grain size of the respective samples. Amphipod test Batch 1 included 20 samples having ≥ 60% fines as determined by the wet sieve grain size method (PSEP 1997) and utilized the species *A. abdita*. Reference sediments RF-01-SS-00 and RF-02-SS-00 were run concurrently with this batch. Amphipod test Batch 2 included 30 samples having < 60% fines as determined by the wet sieve grain size method and utilized the species *E. estuarius*. Reference sediments RF-02-SS-00 and RF-03-SS-00 were run concurrently with this batch.

Table 1. List of Samples with Collection Date, Receipt Date, and Test Initiation Date.

Sample	Date Collected	Date Received	Test Batch Number (Initiation Dates Shown Below)			
			Amphipod ^{1,2}	Polychaete	Larval	Microtox®
				<i>N. arenaceodentata</i>	<i>Mytilus sp.</i>	<i>V. fisheri</i>
RF-01-SS-00	10/9/2008	10/14/2008	1	1,2	1,2	6, 7, 8
RF-02-SS-00	10/9/2008	10/14/2008	1,2	1,2	1,2	9, 10, 11, 12, 13, 14
RF-03-SS-00	10/9/2008	10/14/2008	2	1,2	1,2	1, 2, 3, 4, 5
HI-02-SS-00	10/5/2008	10/6/2008	2	1	2	2
HI-03-SS-00	10/5/2008	10/6/2008	2	2	2	2
HI-04-SS-00	10/5/2008	10/6/2008	2	1	2	2
HI-05-SS-00	10/2/2008	10/3/2008	2	2	1	3
HI-06-SS-00	10/3/2008	10/6/2008	2	1	2	2
HI-07-SS-00	10/2/2008	10/3/2008	2	1	1	3
OB-01-SS-00	10/2/2008	10/3/2008	2	1	1	4
OB-02-SS-00	10/2/2008	10/3/2008	2	1	1	10
OB-03-SS-00	10/2/2008	10/3/2008	2	2	1	10
OB-04-SS-00	10/3/2008	10/6/2008	2	2	2	13
OB-05-SS-00	10/3/2008	10/6/2008	1	1	2	6
OB-06-SS-00	10/3/2008	10/6/2008	1	1	2	7
OB-07-SS-00	10/5/2008	10/6/2008	2	2	2	1
OB-08-SS-00	10/5/2008	10/6/2008	1	2	2	6
OB-09-SS-00	10/3/2008	10/6/2008	1	2	2	8
OB-10-SS-00	10/4/2008	10/6/2008	1	2	2	7
OB-11-SS-00	10/3/2008	10/6/2008	1	1	2	8
OB-12-SS-00	10/4/2008	10/6/2008	1	1	2	6
OB-13-SS-00	10/4/2008	10/6/2008	1	1	2	12

Sample	Date Collected	Date Received	Test Batch Number (Initiation Dates Shown Below)			
			Amphipod ^{1, 2}	Polychaete	Larval	Microtox®
				<i>N. arenaceodentata</i>	<i>Mytilus sp.</i>	<i>V. fisheri</i>
OB-14-SS-00	10/4/2008	10/6/2008	2	1	2	12
OB-17-WS-00	10/3/2008	10/6/2008	2	1	2	12
OB-18-WS-00	10/3/2008	10/6/2008	1	2	2	7
OB-19-WS-00	10/4/2008	10/6/2008	1	1	2	8
SH-01-SS-00	9/29/2008	10/3/2008	2	1	1	3
SH-02-SS-00	9/30/2008	10/3/2008	2	2	1	11
SH-03-SS-00	10/1/2008	10/3/2008	1	1	1	12
SH-04-SS-00	10/1/2008	10/3/2008	1	1	1	9
SH-06-SS-00	10/1/2008	10/3/2008	2	2	1	14
SH-07-SS-00	10/5/2008	10/6/2008	2	2	2	13
SH-09-SS-00	10/1/2008	10/3/2008	2	1	1	9
SH-10-SS-00	9/30/2008	10/3/2008	2	1	1	4
SH-11-SS-00	10/2/2008	10/3/2008	1	1	2	10
SH-12-SS-00	10/2/2008	10/3/2008	1	2	2	13
SH-13-SS-00	10/5/2008	10/6/2008	1	1	2	13
SH-14-SS-00	9/30/2008	10/3/2008	2	1	1	9
SH-15-SS-00	10/1/2008	10/3/2008	2	2	1	4
SH-16-SS-00	10/1/2008	10/3/2008	2	2	1	4
SH-18-WS-00	10/2/2008	10/3/2008	1	2	2	8
SH-19-WS-00	10/1/2008	10/3/2008	1	2	1	10
SH-20-WS-00	10/1/2008	10/3/2008	1	2	1	6
SH-21-WS-00	10/1/2008	10/3/2008	1	1	1	7
SH-22-WS-00	9/30/2008	10/3/2008	2	1	1	5
SH-23-WS-00	9/30/2008	10/3/2008	1	2	1	11
SH-24-WS-00	10/1/2008	10/3/2008	2	2	1	11
SH-25-WS-00	10/2/2008	10/3/2008	2	2	2	11
SH-26-WS-00	9/30/2008	10/3/2008	2	2	1	3
SH-27-WS-00	9/30/2008	10/3/2008	2	2	1	1
SH-28-WS-00	9/30/2008	10/3/2008	2	1	1	9
SH-29-WS-00	10/1/2008	10/3/2008	2	2	1	1
SH-30-WS-00	10/1/2008	10/3/2008	2	2	1	1
Batch Initiation Date	1	11/11/08	10/30/08	11/20/28	11/6/08 –	
	2	11/14/08	11/5/08	11/25/08	11/26/08	

¹ Amphipod test Batch 1 utilized the species *A. abdita*

² Amphipod test Batch 2 utilized the species *E. estuarius*

2.5 10-DAY AMPHIPOD BIOASSAY (*A. abdita*)

The 10-day acute toxicity test with *A. abdita* was initiated on November 11, 2008. Test exposures were prepared with approximately 175 mL of sediment placed in clean, acid and solvent-rinsed 1-L glass jars, which were then filled with 775 mL of 0.45-µm filtered seawater at 28 ppt. Seven replicate chambers were prepared for each test treatment, the two reference sediments, and the native control sediment. Five replicates were used to evaluate sediment toxicity while the remaining two replicates were designated as sacrificial surrogate chambers. One surrogate chamber was sacrificed at test initiation to measure porewater and overlying ammonia and sulfides. The remaining surrogate chamber was used for measuring daily water quality throughout the test, as well as porewater and overlying ammonia and sulfides at test

termination. Total ammonia as nitrogen was monitored using an Orion meter fitted with an ammonia ion-specific probe. Total sulfides as S^{2-} were monitored using a HACH DR/4000V Spectrophotometer.

Test chambers were placed in randomly assigned positions in a 20°C water bath and allowed to equilibrate overnight. Trickle-flow aeration was provided to prevent dissolved oxygen concentrations from dropping below acceptable levels.

Immediately prior to test initiation, water quality parameters were measured in the surrogate chamber for each treatment. Dissolved oxygen (DO), temperature, pH, and salinity were then monitored in the surrogate chambers daily until test termination. Target test parameters were:

Dissolved Oxygen:	≥5.0 mg/L
pH:	7.8 ± 0.5 units
Temperature:	20 ± 1°C
Salinity:	28 ± 2‰

The tests were initiated by randomly allocating 20 *A. abdita* into each test chamber, ensuring that each of the amphipods successfully buried into the sediment. Amphipods that did not bury within approximately one hour were replaced with healthy amphipods. The 10-day amphipod bioassay was conducted as a static test with no feeding during the exposure period. At test termination, sediment from each test chamber was sieved through a 0.5-mm screen and all recovered amphipods transferred into a Petri dish. The number of surviving and dead amphipods was then determined under a dissecting microscope. A water-only, 4-day reference-toxicant test was conducted concurrently with the sediment tests, using cadmium chloride. The cadmium reference-toxicant test was used to ensure animals used in the test were healthy and of similar sensitivity to prior tests.

2.6 10-DAY AMPHIPOD BIOASSAY (*E. estuarius*)

The 10-day acute toxicity test with *E. estuarius* was initiated on November 14, 2008. Test exposures were prepared with approximately 175 mL of sediment placed in clean, acid and solvent-rinsed 1-L glass jars, which were then filled with 775 mL of 0.45-µm filtered seawater at 28 ppt. Seven replicate chambers were prepared for each test treatment, the two reference sediments, and the native control sediment. Five replicates were used to evaluate sediment toxicity while the remaining two replicates were designated as sacrificial surrogate chambers. One surrogate chamber was sacrificed at test initiation to measure porewater and overlying ammonia and sulfides. The remaining surrogate chamber was used for measuring daily water quality throughout the test, as well as porewater and overlying ammonia and sulfides at test termination. Total ammonia as nitrogen was monitored using an Orion meter fitted with an ammonia ion-specific probe. Total sulfides as S^{2-} were monitored using a HACH DR/4000V Spectrophotometer.

Test chambers were placed in randomly assigned positions in a 15°C water bath and allowed to equilibrate overnight. Trickle-flow aeration was provided to prevent dissolved oxygen concentrations from dropping below acceptable levels.

Immediately prior to test initiation, water quality parameters were measured in the surrogate chamber for each treatment. Dissolved oxygen (DO), temperature, pH, and salinity were then monitored in the surrogate chambers daily until test termination. Target test parameters were:

Dissolved Oxygen:	≥5.0 mg/L
pH:	7.8 ± 0.5 units
Temperature:	15 ± 1°C
Salinity:	28 ± 2‰

The tests were initiated by randomly allocating 20 *E. estuarius* into each test chamber, ensuring that each of the amphipods successfully buried into the sediment. Amphipods that did not bury within approximately one hour were replaced with healthy amphipods. The 10-day amphipod bioassay was conducted as a static test with no feeding during the exposure period. At test termination, sediment from each test chamber was sieved through a 0.5-mm screen and all recovered amphipods transferred into a Petri dish. The number of surviving and dead amphipods was then determined under a dissecting microscope. A water-only, 4-day reference-toxicant test was conducted concurrently with the sediment tests, using cadmium chloride. The cadmium reference-toxicant test was used to ensure animals used in the test were healthy and of similar sensitivity to prior tests.

2.7 20-DAY JUVENILE POLYCHAETE BIOASSAY

The 20-day chronic toxicity tests with *N. arenaceodentata* were initiated in two batches on October 30 and November 5, 2008. Test exposures were prepared with approximately 175 mL of sediment placed in clean, acid and solvent-rinsed 1-L glass jars, which were then filled with 775 mL of 0.45- μ m filtered seawater at 28 ppt. Seven replicate chambers were prepared for each test treatment, the three reference sediments, and control sediment. The control sediment and reference treatments were tested with each batch of test treatments. Five replicates were used to evaluate sediment toxicity while the remaining two replicates were designated as sacrificial surrogate chambers. One surrogate chamber was sacrificed at test initiation to measure porewater and overlying ammonia and sulfides. The remaining surrogate chamber was used for measuring daily water quality throughout the test, as well as porewater and overlying ammonia and sulfides at test termination. Total ammonia as nitrogen was monitored using an Orion meter fitted with an ammonia ion-specific probe. Total sulfides as S²⁻ were monitored using a HACH DR/4000V Spectrophotometer.

Test chambers were placed in randomly assigned positions in a water bath at 20°C and allowed to equilibrate overnight. Trickle-flow aeration was provided to prevent dissolved oxygen concentrations from dropping below acceptable levels.

Immediately prior to test initiation, water quality parameters were measured. Dissolved oxygen, temperature, pH, and salinity were then monitored in the surrogates daily until test termination. Target test parameters were:

Dissolved Oxygen:	≥5.5 mg/L
pH:	7.8 ± 0.5 units
Temperature:	20 ± 1°C
Salinity:	28 ± 2‰

The juvenile polychaete test was initiated by randomly allocating five *N. arenaceodentata* into each test chamber, and observing whether each of the worms successfully buried into the sediment. Worms that did not bury within approximately one hour were replaced with healthy worms. The 20-day test was conducted as a static-renewal test, with exchanges of 300 mL of water occurring every third day. *N. arenaceodentata* were fed every other day with 40 mg of TetraMarin® (approximately 8 mg dry weight per worm). At test termination, sediment from each test chamber was sieved through a 0.5-mm screen and all recovered worms transferred

into a Petri dish. The number of surviving and dead worms was determined. All surviving worms were then transferred to pre-weighed, aluminum foil weigh-boats, and then dried in a drying oven at 60°C for approximately 24 hours. Each weigh-boat was removed, cooled in a dessicator, and then weighed on a microbalance to 0.001 mg. A water-only, 4-day reference-toxicant test was conducted concurrently with the sediment tests, using cadmium chloride. The cadmium reference-toxicant test was used to ensure animals used in the test were healthy and of similar sensitivity to prior tests.

2.8 LARVAL DEVELOPMENTAL BIOASSAY

Test sediment was evaluated using the benthic larval development test with the mussel, *Mytilus* sp. The larval tests were initiated in two batches on November 20 and 25, 2008. To prepare the test exposures, 18 g (\pm 0.5 g) of test sediment were placed in clean, acid and solvent-rinsed 1-L glass jars, which were then filled with 900 mL of 0.45- μ m of filtered seawater. Six replicate chambers were prepared for each test treatment, the three reference sediments, and a seawater control. The six control chambers contained filtered seawater without sediment. Five of the replicates were used to evaluate the test; the sixth replicate was used as a water quality surrogate. Each chamber was shaken for 10 seconds and then placed in predetermined randomly-assigned positions in a water bath at 16°C.

To collect gametes for each test, mussels were placed in clean seawater and acclimated at 12°C for approximately 20 minutes. The water bath temperature was then increased over a period of 15 minutes to 20°C. Mussels were held at 20°C and monitored for spawning individuals. Spawning females and males were removed from the water bath and placed in individual containers with seawater. These individuals were allowed to spawn until sufficient gametes were available to initiate the test. After the spawning period, eggs are transferred to fresh seawater and filtered through a .5 mm Nitex® mesh screen to remove large debris, feces, and excess gonadal matter. A composite is made of the sperm and diluted with fresh seawater. The fertilization process was initiated by adding sperm to the isolated egg containers. Egg-sperm solutions were periodically homogenized with a perforated plunger during the fertilization process and sub-samples observed under the microscope for egg and sperm viability. Approximately one to one and a half hours after fertilization, embryo solutions were checked for fertilization rate. Only those embryo stocks with >90% fertilization were used to initiate the tests. Embryo solutions were rinsed free of excess sperm and then combined to create one embryo stock solution. Density of the embryo stock solution was determined by counting the number of embryos in a subsample of homogenized stock solution. This was used to determine the volume of embryo stock solution to deliver approximately 27,000 embryos to each test chamber.

The test was initiated by randomly allocating an aliquot of the embryo stock solution into each test chamber four hours after sediments were shaken and within two hours of egg fertilization. Embryos were held in suspension during initiation using a perforated plunger. The actual stocking densities for the two batches were 36.6 and 28.9 embryos/mL respectively, within the target stocking density of 20 - 40 embryos/mL.

Dissolved oxygen, temperature, pH, and salinity were monitored in water quality surrogates to prevent loss or transfer of larvae by adhesion to water-quality probes. Overlying water ammonia and sulfides were measured on Day 0 and Day 2. Total ammonia as nitrogen was monitored using an Orion meter fitted with an ammonia ion-specific probe. Total sulfides as S²⁻ were monitored using a HACH DR/4000V Spectrophotometer. Target test parameters were as follows:

Dissolved Oxygen:	≥4.0 mg/L
pH:	7.8 ± 0.5 units
Temperature:	16 ± 1°C
Salinity:	28 ± 1‰

The 48-96 hour test was conducted as a static test without aeration. The test was terminated approximately 48 hours after initiation, when 90% of the control larvae had achieved the prodissoconch I stage. At termination, the overlying seawater was decanted into a clean 1-L jar and mixed with a perforated plunger. From this container, a 10 mL subsample was transferred to a scintillation vial and preserved in 5% buffered formalin. Larvae were subsequently stained with a dilute solution of Rose Bengal in 70% alcohol to help visualization of larvae. The number of normal and abnormal larvae was enumerated on an inverted microscope. Normal larvae included all D-shaped prodissoconch I stage larvae. Abnormal larvae included abnormally shaped prodissoconch I larvae and all early stage larvae. A 48-hour water-only reference-toxicant test with copper sulfate was conducted concurrently with the sediment test.

2.9 MICROTOX® BIOASSAY

The Microtox® test was performed by Nautilus Environmental LLC. The Microtox test exposed the luminescent marine bacterium *Vibrio fischeri* to porewater extracted from test sediments. Bacterial light output was measured using the Microtox Model 500 Analyzer at 5 and 15 minutes of exposure. Light output from the test porewater was compared to that of the reference treatments at both time intervals. A complete description of the Microtox test methods is presented in Appendix A.

2.10 DATA ANALYSIS AND QA/QC

All water quality and endpoint data were entered into Excel spreadsheets. Water quality parameters were summarized by calculating the mean, minimum, and maximum values for each test treatment. Endpoint data were calculated for each replicate and the mean and standard deviation were determined for each test treatment.

All hand-entered data were reviewed for data entry errors, any found were corrected prior to summary calculations. A minimum of 10% of all calculations and data sorting were reviewed for errors. Review counts were conducted on any apparent outliers.

The control normalized normal survival endpoint in the larval test was used to evaluate the test sediment. This was based on the number of normal larvae in the treatment and reference divided by the number of normal larvae in the control, as defined in Ecology (2005).

For SMS suitability determinations, comparisons were made according to SAPA (2008) and Fox et al. (1998). All data were tested for normality using the Wilk-Shapiro test and equality of variance using Levene's test. Determinations of statistical significance were based on one-tailed Student's t-tests with an alpha level of 0.05 for the amphipod and polychaete endpoints. A comparison of the larval endpoint, relative to the reference was made using an alpha level of 0.10. For samples failing to meet assumptions of normality, a Mann-Whitney test was conducted to determine significance. For those samples failing to meet the assumptions of normality and equality of variance, a t-test on rankits was used.

3.0 RESULTS

The results of the sediment testing, including a summary of test results and water quality observations are presented in this section. Summaries of water quality observations are presented in Appendix B, laboratory data sheets are included as Appendix C and statistical results are provided in Appendix D.

3.1 10-DAY AMPHIPOD BIOASSAY (*A. abdita*)

A summary of *A. abdita* test conditions is presented in Table 2. Mean percent mortality in the control sample was 9%, within the $\leq 10\%$ mortality acceptance criterion. This indicates that the test conditions were suitable for adequate amphipod survival. The LC_{50} value for the cadmium reference-toxicant test performed on the organisms was 0.32 mg Cd/L, within the control chart limits (0.13-1.14 mg Cd/L), indicating that the test organisms used in this study were of similar sensitivity of those previously tested at NewFields.

Minor deviations in temperature, salinity, and pH were observed during the test. Temperatures were slightly above limits on day 6 (max 23.8°C). Temperature control system was adjusted and succeeded in maintaining test temperatures within limits for the duration of the test. Salinities ranged between 27 and 35 ppt throughout both tests, rising slightly above the recommended limits of 28 ± 2 ppt. The UV light exposure method required the test jars to be uncovered during the exposure time to not impede light exposure. Some evaporation does occur over the course of the test which may explain the slight increase in salinity. These salinities are still within the tolerance range of the test organisms. The pH values were also above recommended limits, however remained within the tolerance range for these organisms. These deviations should not impact the significance of the test results.

Initial and final interstitial ammonia concentrations were all below the threshold concentration of 30 mg/L total ammonia (Barton 2002) that trigger ammonia reference toxicant testing. Initial and final sulfide concentrations were below 5 mg/L in both overlying and interstitial waters.

Mean mortality in all reference treatments met the SMS performance criteria (<25% mortality) and indicated that the reference sediment was acceptable for comparison. Mean mortality for all samples is shown in Table 3. Test sample SH-21-WS-00 had one replicate in which mortality was 100% whereas all other replicates had 5-25% mortality. It is possible that this replicate was not stocked with organisms at the beginning of the test. This replicate was shown to be a statistical outlier compared to the other replicates using Grubbs test (Grubbs 1969). Due to this anomaly, the mortality results from the water quality surrogate chamber were substituted for the outlier.

Table 2. Test Condition Summary for *A. abdita*.

Test Conditions: PSEP <i>A. abdita</i> (SMS)		
Sample Identification	See Table 1	
Date sampled	See Table 1	
Date received	See Table 1	
Sample storage conditions	4°C, dark	
Weeks of holding Recommended: ≤8 weeks (56 days)	Test 37-42 days; Ref 33 days	
Source of control sediment	Brezina and Associates (Tomales Bay, CA)	
Test Species	<i>A. abdita</i>	
Supplier	Brezina and Associates	
Date acquired	11/7/2008	
Acclimation/holding time	4 days	
Age class	3-5 mm	
Test Procedures	PSEP 1995 with SMARM revisions	
Regulatory Program	SMS	
Test location	NewFields Northwest Laboratory	
Test type/duration	10-Day static	
Test dates	11/11/08 – 11/21/08	
Control water	0.45 µm-filtered, North Hood Canal sweater, adjusted with DI water	
Test temperature	Recommended: 20 ± 1 °C	19.4 – 23.8 °C
Test Salinity	Recommended: 28 ± 2 ppt	27 – 35 ppt
Test dissolved oxygen	Recommended: > 5.0 mg/L	6.6 – 8.7 mg/L
Test pH	Recommended: 7.8 ± 0.5	7.6 – 8.8
SMS control performance standard	Recommended: Control ≤ 10% mortality	9% Pass
SMS reference performance standard	Recommended: Reference mortality < 25%	RF-02-SS-00 15% Pass, RF-03-SS-00 13% Pass
SMS pass/fail SQS	Significant Difference and Treatment – Reference > 25% mortality and statistically significant = FAIL	All Pass
SMS pass/fail CSL	Significant Difference and Treatment – Reference > 30% mortality and statistically significant = FAIL	All Pass
Reference Toxicant LC50	0.32 mg/L	
Acceptable Range	0.135-1.14 mg/L	
Test Lighting	Continuous	
Test chamber	1-Liter Glass Chamber	
Replicates/treatment	5 + 2 surrogates	
Organisms/replicate	20	
Exposure volume	175 mL sediment/ 775 mL water	
Feeding	None	
Water renewal	None	
Deviations from Test Protocol	Minor deviations in temperature, salinity, and pH	

Table 3. Summary of Test Results for *A. abdita*.

Sample	<i>A. Abdita</i>	
	Mean Mortality (%)	Standard Deviation
Control	9	5
RF-01-SS-00	15	5
RF-02-SS-00	13	7
OB-05-SS-00	9	7
OB-06-SS-00	14	4
OB-08-SS-00	8	8
OB-09-SS-00	10	11
OB-10-SS-00	6	7
OB-11-SS-00	11	10
OB-12-SS-00	21	19
OB-13-SS-00	10	7
OB-18-WS-00	12	8
OB-19-WS-00	8	8
SH-03-SS-00	14	7
SH-04-SS-00	9	10
SH-11-SS-00	7	6
SH-12-SS-00	11	7
SH-13-SS-00	8	7
SH-18-WS-00	10	9
SH-19-WS-00	15	9
SH-20-WS-00	10	4
SH-21-WS-00 ¹	14	8
SH-23-WS-00	18	8

¹ Surrogate results used for outlier replicate.

3.2 10-DAY AMPHIPOD BIOASSAY (*E. estuarius*)

A summary of *E. estuarius* test conditions is presented in Table 4. Mean percent mortality in the control sample was 1%, within the ≤10% mortality acceptance criterion. This indicates that the test conditions were suitable for adequate amphipod survival. The LC₅₀ values for the cadmium reference-toxicant tests performed on the organisms was 13.4 mg Cd/L, slightly above the control chart limits (4.0-12.2 mg Cd/L), indicating that the test organisms may be less sensitive than those previously tested at NewFields. Reference-toxicant tests performed on the same field population of organisms before and after this event Oct 28 and Dec 23 expressed LC₅₀ values within limits (6.9 and 8.0 mg Cd/L). Given the historical response of organisms collected from the same field site, and the ability of this able to detect a decrease in survival in one of the treatments (OB-03-SS-00), this deviation should not impact the significance of the test results.

All water quality parameters were within acceptable limits throughout all of the tests except for minor deviations in temperature and pH. The deviations were within the tolerance range for this species and would not be expected to affect the test results. Initial and final interstitial ammonia

concentrations were all below the threshold concentration of 30 mg/L total ammonia (Barton 2002). Sulfide concentrations were below 5 mg/L in both overlying and interstitial waters.

Mean mortality in all reference treatments met the SMS performance criteria (<25% mortality) and indicated that the reference sediment was acceptable for comparison. Mean mortality for all samples is shown in Table 5.

Replicate four of test sample OB-01-SS-00 resulted in 32 animals being recovered at the end of the test, indicating that this chamber may have been double-added (40 animals instead of 20). The water quality surrogate for this sample was sieved and provided 18 organisms (90% survival), similar to the other four replicates, all with 20 animals surviving (100% survival). The survival of the water quality surrogate was used in place of replicate four data for reporting purposes.

Table 4. Test Condition Summary for *E. estuarius*.

Test Conditions: PSEP <i>E. estuarius</i> (SMS)		
Sample Identification	See Table 1	
Date sampled	See Table 1	
Date received	See Table 1	
Sample storage conditions	4°C, dark	
Weeks of holding Recommended: ≤8 weeks (56 days)	Test 40-46 days; Ref 36 days	
Source of control sediment	Northwest Aquatic Sciences (Yaquina Bay, OR)	
Test Species	<i>E. estuarius</i>	
Supplier	Northwest Aquatic Sciences	
Date acquired	11/12/08	
Acclimation/holding time	2 days	
Age class	3-5 mm	
Test Procedures	PSEP 1995 with SMARM revisions	
Regulatory Program	SMS	
Test location	NewFields Northwest Laboratory	
Test type/duration	10-Day static	
Test dates	11/14/08 – 11/24/08	
Control water	0.45 µm-filtered, North Hood Canal sweater, adjusted with DI water	
Test temperature	Recommended: 15 ± 1 °C	15.0 – 16.9 °C
Test Salinity	Recommended: 28 ± 2 ppt	28 – 30 ppt
Test dissolved oxygen	Recommended: > 5 mg/L	6.4 – 9.7 mg/L
Test pH	Recommended: 7.8 ± 0.5	7.4 – 8.5
SMS control performance standard	Recommended: Control ≤ 10% mortality	1%, Pass
SMS reference performance standard	Recommended: Reference mortality < 25%	RF-02-SS-00 3% Pass, RF-03-SS-00 2% Pass
SMS pass/fail SQS	Significant Difference and Treatment – > 25% mortality and statistically significant = FAIL	OB-03-SS-00
SMS pass/fail CSL	Significant Difference and Treatment – Reference > 30% mortality and statistically significant = FAIL	All Pass
Reference Toxicant LC50	13.4 mg/L	
Acceptable Range	4.0-12.2 mg/L	
Test Lighting	Continuous	
Test chamber	1-Liter Glass Chamber	
Replicates/treatment	5 + 2 surrogates	
Organisms/replicate	20	
Exposure volume	175 mL sediment/ 775 mL water	
Feeding	None	
Water renewal	None	
Deviations from Test Protocol	Minor deviations in temperature and pH	

Table 5. Summary of Test Results for *E. estuarius*.

Sample	<i>E. estuarius</i>	
	Mean Mortality (%)	Standard Deviation
Control	1	2
RF-02-SS-00	3	4
RF-03-SS-00	2	4
HI-02-SS-00	4	4
HI-03-SS-00	17	17
HI-04-SS-00	2	4
HI-05-SS-00	1	2
HI-06-SS-00	7	6
HI-07-SS-00	2	3
OB-01-SS-00	11 ¹	25
OB-02-SS-00	21	13
OB-03-SS-00	29	12
OB-04-SS-00	5	6
OB-07-SS-00	14	16
OB-14-SS-00	10	8
OB-17-WS-00	10	5
SH-01-SS-00	10	4
SH-02-SS-00	6	4
SH-06-SS-00	15	12
SH-07-SS-00	5	5
SH-09-SS-00	12	8
SH-10-SS-00	7	3
SH-14-SS-00	18	11
SH-15-SS-00	3	4
SH-16-SS-00	2	3
SH-22-WS-00	10	9
SH-24-WS-00	18	12
SH-25-WS-00	21	8
SH-26-WS-00	13	10
SH-27-WS-00	8	10
SH-28-WS-00	6	4
SH-29-WS-00	4	4
SH-30-WS-00	9	10

¹ Surrogate results used for outlier replicate.

3.3 20-DAY JUVENILE POLYCHAETE BIOASSAY

A summary of *N. arenaceodentata* test conditions is shown in Table 6. No mortality was observed in the *N. arenaceodentata* control sediment and mean individual growth (MIG) in the

control sediment was 0.414 and 0.563 mg/ind/day, in the two batches. These values fall within the test acceptability criteria of <10% mean mortality and ≥ 0.38 mg/ind/day mean individual growth (Kendall 1996), indicating that the test conditions were suitable for adequate polychaete survival and growth.

Cadmium chloride reference-toxicant tests were performed on each batch of test organisms. LC₅₀ values for Batches 1 and 2 were 6.8 and 8.0 mg Cd/L, well within control chart limits at the time of testing. This indicates that the test organisms used in this study were of similar sensitivity to those previously tested at NewFields.

Minor deviations in water quality parameters were observed in both batches. The dissolved oxygen concentration in the surrogate chamber of sample OB-02-SS-00 (Batch 1) was 2.9 and 3.3 mg/L on days 19 and 20, respectively. Reference sample RF-02-SS-00 (Batch 2) also had a reduced dissolved oxygen concentration of 3.6 mg/L on day 3. These reduced concentrations were associated with constant airflow interruption to those chambers and was corrected upon discovery. Oxygen levels returned to the appropriate range for the remainder of the test (RF-02-SS-00) or the test reached termination (OB-02-SS-00). Temperatures in Batch 1 fell to approximately 12 degrees Celsius on day 4 of testing due to a malfunction on the temperature control system. Temperature control was restored upon discovery and temperatures were brought back within the recommended range over the course of 2 days to avoid shock. Temperatures remained within range for the remainder of the Batch 1 test. Temperatures were slightly below limits on day 15 of Batch 2 (18.4°C). Temperature control system was increased 0.5 °C and succeeded in maintaining test temperatures for the duration of Batch 2. Salinities ranged between 27 and 32 ppt throughout both tests, rising slightly above the recommended limits of 28 ± 2 ppt. The UV light exposure method required the test jars to be uncovered during the exposure time to not impede light exposure. Some evaporation does occur over the course of the test that may explain the slight increase in salinity. These salinities are still within the tolerance range of the test organisms. Water quality parameters were inadvertently not recorded on day 18 of the Batch 2 test. These deviations should not impact the significance of the test results.

All of the test treatments had ammonia levels below the NOEC (10 mg/L total ammonia) in the initial and final interstitial water. The highest ammonia value observed was 6.75 mg/L in the initial interstitial measurement for sample OB-07-SS-00. Initial sulfide concentrations in interstitial water were below the NOEC (3.47 mg/L; Kendall and Barton 2004) for all samples.

Mean individual growth for the reference treatments compared to the Controls were greater than 80% of the Control, meeting the recommended SMS performance standards (Ecology 2008), except in one instance. Reference RF-03-SS-00 in Batch 1 showed only 65.9% of Control growth. These results indicate that these reference sediments were acceptable for suitability determination with one exception. Mean individual growth for all control, reference, and test sediments are shown in Table 7. Mortality in the test treatments ranged from 0 to 44%; MIG in the test treatments ranged from 0.248 to 0.737 mg/ind/day.

During the course of organism addition at test initiation, some test chambers were incidentally stocked with a differing number of worms than the target of five animals per chamber. Treatments where the initial number of organisms differed from five were: RF-02-SS rep 4 (Batch 1, 6 worms), RF-01-SS rep 4 (Batch 2, 6 worms), OB-06-SS-00 rep 5 (6 worms), OB-11-SS-00 rep 5 (6 worms), and SH-01-SS-00 rep 5 (10 worms). In treatments where the initial number of stocked animals was known to be different, the number of initial animals stocked was adjusted when performing the endpoint calculations. Treatment SH-15-SS-00 rep 1 was not stocked with organisms at test initiation as was confirmed by the lack of technician mark on the test chamber and the absence of worms recovered at test termination. This replicate was

removed from the endpoint calculations. In two instances the number of worms used for determining dry weight differs from the survival count. These two samples, OB-01-SS-00 rep 2 and SH-06-SS-00 rep 5 both had five animals recovered at test termination, but one animal was lost during the transfer to the weight boat for subsequent drying. In these cases five animals were used for calculating the survival endpoint, while the replicate dry weight was divided by four to calculate the individual dry weight.

Indigenous polychaete worms differing from *N. arenaceodentata* were found in the Oakland Bay sediments during test termination. Often the presence of these worms was associated with reduced survival of the *N. arenaceodentata* stocked into the test chambers. The reduction in survival in these chambers was possibly due to predation by the indigenous worms or through competition for food resources. Indigenous worms were not included in the final number alive or in weight determinations. Treatments where indigenous polychaete were found associated with decreased survivors of *N. arenaceodentata* include: SH-03-SS-00 (rep 3), OB-12-SS-00 (rep 4), OB-13-SS-00 (rep 4), SH-25-WS-00 (rep 4), and SH-12-SS-00 (rep 1 and 3)

With the exception of SH-15-SS-00 (rep 1) mentioned above, Instances where zero animals were recovered at the test termination were considered to have 100% mortality. The addition of animals to these test chambers at test initiation was confirmed by the presence of a technician mark on the test chamber. The treatments where zero animals were recovered at test termination include SH-24-WS-00 (rep 1 and 3), OB-08-SS-00 (rep 2), SH-30-WS-00 (rep 4), SH-19-WS-00 (rep 3 and 5), and OB-03-SS-00 (rep 3). In all cases except SH-24-WS-00 replicate 1, indigenous polychaete worms of different species than *N. arenaceodentata* were also recovered from the chambers.

Table 6. Test Condition Summary for *N. arenaceodentata*.

Test Conditions: PSEP <i>N. arenaceodentata</i> (SMS)		Batch 1	Batch 2
Sample Identification		See Table 1	
Date sampled		See Table 1	
Date received at NewFields Northwest		See Table 1	
Sample storage conditions		4°C, dark	
Weeks of holding	Recommended: ≤8 weeks (56 days)	Test 25-31 days; Ref 21 days	Test 31-36 days; Ref 27 days
Source of control sediment		Yaquina Bay, OR	
Test Species		<i>N. arenaceodentata</i>	
Supplier		Don Reish/ CalState Long Beach	
Date acquired		10/25/08	11/3-4/08
Acclimation/holding time		5 days	1-2 days
Age class		Juvenile	
Test Procedures		PSEP 1995 with SMARM revisions	
Regulatory Program		SMS	
Test location		NewFields Northwest Laboratory	NewFields Northwest Laboratory
Test type/duration		20-Day static renewal	
Test dates		10/30/08 – 11/19/08	11/5/08 – 11/25/08
Control water		0.45 µm-filtered, North Hood Canal sweater, adjusted with DI water	
Test temperature	Recommended: 20 ± 1 °C	16.9 – 20.7	18.4-23.0
Test Salinity	Recommended: 28 ± 2 ppt	27-32	28-32
Test dissolved oxygen	Recommended: > 6.0 mg/L	2.9 – 10.7	3.6 – 14.2
Test pH	Recommended: 8.0 ± 1.0	7.1-8.8	7.6-8.9
Initial biomass	Recommended: 0.5 - 1.0 mg Minimum: 0.25 mg	0.672 mg	0.478 mg
SMS control performance standard: Mortality	Recommended: Control ≤ 10% mortality	0%	0%
SMS control performance standard: Mean Individual Growth - MIG	Recommended: > 0.72 mg/ind/day Minimum: > 0.38 mg/ind/day	0.563 mg/ind/day	0.414 mg/ind/day
SMS reference performance standard	Recommended: MIG _{Reference} /MIG _{Control} > 80%	RF-01-SS-00 91.7% Pass, RF-02-SS-00 96.3% Pass, RF-03-SS-00 65.9% Fail	RF-01-SS-00 135.5% Pass, RF-02-SS-00 106.8% Pass, RF-03-SS-00 95.2% Pass
SMS pass/fail SQS	SQS Acceptability: Statistical difference and MIG _{Treatment} /MIG _{Reference} ≥ 70%	19 Pass, 6 Fail SQS; see Table 11	15 Pass, 10 Fail SQS; see Table 11
SMS pass/fail CSL	CSL Acceptability: Statistical difference and MIG _{Treatment} /MIG _{Reference} ≥ 50%	25 Pass; see Table 11	22 Pass, 3 Fail CSL; see Table 11
Reference Toxicant LC50		6.8 mg/L	8.0 mg/L
Acceptable Range		2.4-16.9 mg/L	2.4-16.9 mg/L
Test Lighting		Continuous	
Test chamber		1-Liter Glass Chamber	
Replicates/treatment		5 + 2 surrogates for WQ	
Organisms/replicate		5	

Test Conditions: PSEP <i>N. arenaceodentata</i> (SMS)	Batch 1	Batch 2
Exposure volume	175 mL sed/ 775 mL water	
Feeding	40 mg/jar every other day (8mg/ind every other day)	
Water renewal	Water is renewed every third day (1/3 volume of exposure chamber)	
Deviations from Test Protocol	Minor deviations in temperature, salinity, DO	Minor deviations in temperature, salinity, DO

Table 7. Summary of Test Results for *N. arenaceodentata*.

Batch 1				Batch 2			
Sample	Mean Mortality (%)	MIG (mg/ind/day)	MIG Std Dev	Sample	Mean Mortality (%)	MIG (mg/ind/day)	MIG Std Dev
Control	0	0.563	0.089	Control	0	0.414	0.105
RF-01-SS-00	0	0.516	0.087	RF-01-SS-00	8	0.561	0.127
RF-02-SS-00	0	0.542	0.127	RF-02-SS-00	0	0.442	0.242
RF-03-SS-00	4	0.371	0.169	RF-03-SS-00	20	0.394	0.198
HI-02-SS-00	8	0.338	0.192	SH-06-SS-00	0	0.277	0.114
HI-04-SS-00	0	0.575	0.286	SH-25-WS-00	12	0.405	0.277
HI-06-SS-00	16	0.445	0.142	SH-12-SS-00	16	0.449	0.251
HI-07-SS-00	0	0.510	0.158	OB-10-SS-00	0	0.516	0.104
OB-01-SS-00	8	0.443	0.095	SH-20-WS-00	0	0.517	0.252
OB-02-SS-00	4	0.418	0.135	SH-26-WS-00	0	0.248	0.089
OB-05-SS-00	4	0.307	0.109	SH-15-SS-00	5	0.365	0.203
OB-06-SS-00	0	0.373	0.149	OB-04-SS-00	0	0.516	0.125
OB-11-SS-00	4	0.425	0.099	SH-24-WS-00	44	0.347	0.211
OB-12-SS-00	12	0.398	0.097	HI-05-SS-00	4	0.329	0.109
OB-13-SS-00	16	0.369	0.101	SH-23-WS-00	16	0.322	0.167
OB-14-SS-00	12	0.423	0.152	SH-27-WS-00	24	0.307	0.188
OB-17-WS-00	16	0.546	0.162	OB-07-SS-00	8	0.289	0.102
OB-19-WS-00	8	0.473	0.103	OB-09-SS-00	0	0.460	0.067
SH-01-SS-00	4	0.400	0.125	SH-18-WS-00	4	0.424	0.078
SH-03-SS-00	16	0.450	0.242	OB-08-SS-00	20	0.420	0.207
SH-04-SS-00	8	0.479	0.180	SH-30-WS-00	20	0.394	0.104
SH-09-SS-00	0	0.488	0.134	SH-19-WS-00	28	0.367	0.157
SH-10-SS-00	0	0.403	0.109	OB-18-WS-00	4	0.432	0.101
SH-11-SS-00	12	0.552	0.064	SH-16-SS-00	8	0.271	0.110
SH-13-SS-00	4	0.346	0.066	SH-02-SS-00	8	0.410	0.137
SH-14-SS-00	4	0.451	0.160	HI-03-SS-00	0	0.404	0.127
SH-21-WS-00	4	0.368	0.066	OB-03-SS-00	20	0.330	0.154
SH-22-WS-00	12	0.348	0.115	SH-29-WS-00	8	0.320	0.166
SH-28-WS-00	0	0.374	0.078	SH-07-SS-00	4	0.389	0.099

3.4 LARVAL DEVELOPMENT BIOASSAY

A summary of the test condition results from the *Mytilus* sp. test is presented in Table 8. Stocking densities were 36.6 and 28.9 embryos/ml for Batches 1 and 2, respectively. The larval

test was validated by mean normal survival in the control treatments of 84 and 100% (102.9%), within the acceptability criterion of $\geq 70\%$. Water quality parameters remained within the recommended limits throughout the ~48-hour test. Ammonia and sulfide values detected in the test chambers were below the NOEC values for *Mytilus* sp.

The EC₅₀ values for the copper reference-toxicant tests for proportion normal were 7.4 and 8.3 µg Cu/L for the two batches of test organisms, within the control chart limits at the time of testing. The results of the reference-toxicant test indicate that the test organisms used in this study were similar in sensitivity to those previously tested at NewFields. Mean control normalized normal survival in the reference sediments ranged from 40.3% to 100%. Test sample normal survival was variable and ranged from 21% to 100% as shown in Table 9.

Table 8. Test Condition Summary for *Mytilus* sp.

Test Conditions: PSEP <i>Mytilus</i> sp.		Batch 1	Batch 2
Sample Identification		See Table 1	
Date sampled		See Table 1	
Date received at NewFields Northwest		See Table 1	
Sample storage conditions		4°C, dark	
Weeks of holding	Recommended: ≤8 weeks (56 days)	Test 49-52 days; Ref 42 days	Test 51-53 days; Ref 47 days
Test Species		<i>Mytilus</i> sp.	
Supplier		Carlsbad Aquafarms	
Date acquired		11/18/08	11/22/08
Acclimation/holding time		2 day	4 day
Age class		<2-h old embryos	<2-h old embryos
Test Procedures		PSEP 1995 with SMARM revisions	
Regulatory Program		SMS	
Test location		NewFields Northwest Laboratory	
Test type/duration	Recommended: 48-96 Hour static test	48 hr	47 hr
Test dates		11/20/2008-11/22/2008	11/26/2008-11/27/2008
Control water		0.45 µm-filtered, North Hood Canal sweater, adjusted with DI water	
Test temperature	Recommended: 16 ± 1 °C	15.1-16.5	15.2-16.6
Test Salinity	Recommended: 28 ± 1 ppt	28	27-28
Test dissolved oxygen	Recommended: > 4.8 mg/L	5.2 – 9.7	6.0 – 8.8
Test pH	Recommended: 7.8 ± 0.5	7.3-8.0	7.5-8.2
Stocking Density (embryos/mL)	Recommended: 20 – 40	36.6	28.9
SMS control performance standard	Recommended: Normal survival $\geq 70\%$	84.0, Pass	102.9, Pass
SMS reference performance standard	Recommended: Reference/Control $\geq 65\%$	RF-01-SS-00 51.2% Fail, RF-02-SS-00 45.0% Fail, RF-03-SS-00 70.2% Pass	RF-01-SS-00 85.6% Pass, RF-02-SS-00 65.7% Pass, RF-03-SS-00 78.6% Pass
SMS pass/fail SQS (NSCA=Normal Survival Control Adjusted)	Statistical difference and NSCA _{Treatment} / NSCA _{Reference} > 0.85	17 Pass, 8 Fail SQS; see Table 12	13 Pass, 11 Fail SQS; see Table 12
SMS pass/fail CSL	Statistical difference and NSCA _{Treatment} / NSCA _{Reference} > 0.70	24 Pass, 2 Fail CSL; see Table 12	18 Pass, 6 Fail CSL; see Table 12
Reference Toxicant EC ₅₀		7.4 µg Cu/L	8.3 µg Cu/L
Acceptable Range		3.4 – 18.7 µg Cu/L	3.5 – 18.0 µg Cu/L
Test Lighting		14 light:10 Dark	
Test chamber		1-Liter Glass Chamber	

Test Conditions: PSEP <i>Mytilus</i> sp.	Batch 1	Batch 2
Replicates/treatment	5 + 1 WQ surrogate	
Exposure volume	18 g sed/900 mL water	
Feeding	None	
Water renewal	None	
Deviations from Test Protocol	None	None

Table 9. Summary of Test Results for *Mytilus* sp.

Batch 1				Batch 2			
Sample	Normalized Percent Normal	NCMA	Std Dev	Sample	Normalized Percent Normal	NCMA	Std Dev
Control	84.0	16.0	3.6	Control	102.9	0.7	0.2
RF-01-SS-00	51.2	48.8	4.1	RF-01-SS-00	85.6	14.4	0.8
RF-02-SS-00	45.0	55.0	6.3	RF-02-SS-00	65.7	34.3	1.2
RF-03-SS-00	70.2	29.8	12.1	RF-03-SS-00	78.6	21.4	2.0
HI-05-SS-00	92.4	7.6	9.1	HI-02-SS-00	87.4	12.6	0.5
HI-07-SS-00	88.2	11.8	9.6	HI-03-SS-00	81.6	18.4	0.2
OB-01-SS-00	78.2	21.8	2.8	HI-04-SS-00	83.0	17.0	0.4
OB-02-SS-00	73.8	26.2	6.9	HI-06-SS-00	76.1	23.9	0.7
OB-03-SS-00	69.6	30.4	7.9	OB-04-SS-00	49.9	50.1	0.9
SH-01-SS-00	65.7	34.3	7.7	OB-05-SS-00	63.0	37.0	0.8
SH-02-SS-00	34.4	65.6	15.7	OB-06-SS-00	58.1	41.9	1.4
SH-03-SS-00	34.4	65.6	13.6	OB-07-SS-00	81.9	18.1	0.6
SH-04-SS-00	44.1	55.9	5.3	OB-08-SS-00	79.8	20.2	2.7
SH-06-SS-00	18.1	81.9	4.3	OB-09-SS-00	67.7	32.3	0.8
SH-09-SS-00	71.2	28.8	5.6	OB-10-SS-00	46.4	53.6	4.7
SH-10-SS-00	75.0	25.0	8.9	OB-11-SS-00	76.7	23.3	0.5
SH-14-SS-00	56.0	44.0	11.5	OB-12-SS-00	71.8	28.2	0.7
SH-15-SS-00	85.4	14.6	14.3	OB-13-SS-00	45.1	54.9	0.8
SH-16-SS-00	78.9	21.1	6.5	OB-14-SS-00	51.3	48.7	2.4
SH-19-WS-00	40.9	59.1	6.8	OB-17-WS-00	75.8	24.2	0.2
SH-20-WS-00	73.0	27.0	6.0	OB-18-WS-00	47.8	52.2	5.3
SH-21-WS-00	37.5	62.5	4.5	OB-19-WS-00	47.5	52.5	6.8
SH-22-WS-00	44.2	55.8	4.7	SH-07-SS-00	43.8	56.2	4.5
SH-23-WS-00	60.7	39.3	12.9	SH-11-SS-00	75.9	24.1	1.3
SH-24-WS-00	32.8	67.2	5.9	SH-12-SS-00	66.1	33.9	2.1
SH-26-WS-00	58.1	41.9	7.1	SH-13-SS-00	73.8	26.2	2.3
SH-27-WS-00	87.5	12.5	9.0	SH-18-WS-00	72.6	27.4	2.0
SH-28-WS-00	69.3	30.7	9.0	SH-25-WS-00	71.0	29.0	1.6
SH-29-WS-00	90.2	9.8	7.2				
SH-30-WS-00	63.9	36.1	5.3				
Stocking Density	366.0			Stocking Density	289.0		

NCMA = Normalized Percent Combined Mortality and Abnormality

3.5 MICROTOX® BIOASSAY

See Table 3 In Appendix A.

4.0 DISCUSSION

Sediments were evaluated based on Sediment Management Standards (SMS) criteria. The biological criteria are based on both statistical significance (a statistical comparison) and the degree of biological response (a numerical comparison). The SMS criteria are stated in the Washington Department of Ecology Sampling and Analysis Plan Appendix (WDOE 2008). Comparisons were made for each treatment against each of the reference samples. Two numerical comparisons were made under SMS, the Sediment Quality Standards (SQS) and the Cleanup Standards Limit (CSL). All treatments were compared to each of the reference sediment treatments.

4.1 AMPHIPOD TEST SUITABILITY DETERMINATION

Under the SMS program, a test treatment fails SQS if mean mortality is statistically ($p \leq 0.05$) greater than that of the reference treatment and mean mortality in the test sediment is greater than 25%. Treatments fail the CSL if mean mortality is statistically ($p \leq 0.05$) greater than that of the reference treatment and mean mortality in the test sediment is more than 30% greater than the reference sediment mean mortality.

Sample OB-03-SS-00 failed to meet the SQS criteria when compared to the associated reference samples RF-02-SS-00 and RF-03-SS-00 (Table 10). This sample did not fail the CSL criteria.

Table 10. Suitability Comparisons for Amphipods

Test Batch	Sample	Mean Mortality (%)			Mortality Compared to Reference (%)			Statistically Significant ($p \leq 0.05$)			
		Sample	RF-01	RF-02	RF-03	RF-01	RF-02	RF-03	RF-01	RF-02	RF-03
2	HI-02-SS-00	4	NA	3	2	NA	1	2			
2	HI-03-SS-00	17	NA	3	2	NA	14	15			Y
2	HI-04-SS-00	2	NA	3	2	NA	-1	0			
2	HI-05-SS-00	1	NA	3	2	NA	-2	-1			
2	HI-06-SS-00	7	NA	3	2	NA	4	5			
2	HI-07-SS-00	2	NA	3	2	NA	-1	0			
2	OB-01-SS-00	11	NA	3	2	NA	8	9			
2	OB-02-SS-00	21	NA	3	2	NA	18	19		Y	Y
2	OB-03-SS-00	29	NA	3	2	NA	26	27		Y	Y
2	OB-04-SS-00	5	NA	3	2	NA	2	3			
1	OB-05-SS-00	9	15	13	NA	-6	-4	NA			
1	OB-06-SS-00	14	15	13	NA	-1	1	NA			
2	OB-07-SS-00	14	NA	3	2	NA	11	12			Y
1	OB-08-SS-00	8	15	13	NA	-7	-5	NA			
1	OB-09-SS-00	10	15	13	NA	-5	-3	NA			
1	OB-10-SS-00	6	15	13	NA	-9	-7	NA			
1	OB-11-SS-00	11	15	13	NA	-4	-2	NA			
1	OB-12-SS-00	21	15	13	NA	6	8	NA			
1	OB-13-SS-00	10	15	13	NA	-5	-3	NA			
2	OB-14-SS-00	10	NA	3	2	NA	7	8			Y
2	OB-17-WS-00	10	NA	3	2	NA	7	8		Y	Y
1	OB-18-WS-00	12	15	13	NA	-3	-1	NA			
1	OB-19-WS-00	8	15	13	NA	-7	-5	NA			
2	SH-01-SS-00	10	NA	3	2	NA	7	8		Y	Y
2	SH-02-SS-00	6	NA	3	2	NA	3	4			
1	SH-03-SS-00	14	15	13	NA	-1	1	NA			
1	SH-04-SS-00	9	15	13	NA	-6	-4	NA			
2	SH-06-SS-00	15	NA	3	2	NA	12	13		Y	Y
2	SH-07-SS-00	5	NA	3	2	NA	2	3			
2	SH-09-SS-00	12	NA	3	2	NA	9	10		Y	Y
2	SH-10-SS-00	7	NA	3	2	NA	4	5		Y	
1	SH-11-SS-00	7	15	13	NA	-8	-6	NA			
1	SH-12-SS-00	11	15	13	NA	-4	-2	NA			
1	SH-13-SS-00	8	15	13	NA	-7	-5	NA			
2	SH-14-SS-00	18	NA	3	2	NA	15	16		Y	Y
2	SH-15-SS-00	3	NA	3	2	NA	0	1			
2	SH-16-SS-00	2	NA	3	2	NA	-1	0			
1	SH-18-WS-00	10	15	13	NA	-5	-3	NA			
1	SH-19-WS-00	15	15	13	NA	0	2	NA			
1	SH-20-WS-00	10	15	13	NA	-5	-3	NA			
1	SH-21-WS-00	14	15	13	NA	-1	1	NA			
2	SH-22-WS-00	10	NA	3	2	NA	7	8			Y
1	SH-23-WS-00	18	15	13	NA	3	5	NA			
2	SH-24-WS-00	18	NA	3	2	NA	15	16		Y	Y
2	SH-25-WS-00	21	NA	3	2	NA	18	19		Y	Y
2	SH-26-WS-00	13	NA	3	2	NA	10	11		Y	Y
2	SH-27-WS-00	8	NA	3	2	NA	5	6			
2	SH-28-WS-00	6	NA	3	2	NA	3	4			
2	SH-29-WS-00	4	NA	3	2	NA	1	2			
2	SH-30-WS-00	9	NA	3	2	NA	6	7			

Shaded cells indicate samples not meeting SMS Criteria compared to at least one reference sample.
Bold indicates SQS Failure (>25)

4.2 JUVENILE POLYCHAETE TEST SUITABILITY DETERMINATION

Suitability determinations for the juvenile polychaete test were based on mean individual growth (MIG). A test treatment fails SQS criteria if MIG is statistically ($p \leq 0.05$) lower in the test treatment, relative to the reference, and MIG in the test treatment is $< 70\%$ that of the reference. A test treatment fails CSL criteria if MIG is statistically ($p \leq 0.05$) lower in the test treatment, relative to the reference, and MIG in the test treatment is $< 50\%$ that of the reference.

Eighteen samples failed to meet SQS criteria and three samples failed to meet CSL criteria relative to at least one of the reference samples as shown by the shaded cells in Table 11.

Reference treatment RF-03-SS-00 tested in Batch 1 did not meet the acceptability criterion of $\geq 80\%$ mean individual growth compared to control.

Table 11. Suitability Comparisons for *N. arenaceodentata*.

Test Batch	Sample	Mean Individual Growth Rate (mg/ind/day)				MIG Relative to Reference			Statistically Significant ($p \leq 0.05$)		
		Sample	RF-01	RF-02	RF-03	RF-01	RF-02	RF-03	RF-01	RF-02	RF-03
1	HI-02-SS-00	0.338	0.516	0.542	0.371	0.656	0.625	0.912	Y	Y	
2	HI-03-SS-00	0.404	0.561	0.442	0.394	0.720	0.914	1.028	Y		
1	HI-04-SS-00	0.575	0.516	0.542	0.371	1.115	1.062	1.551			
2	HI-05-SS-00	0.329	0.561	0.442	0.394	0.587	0.745	0.837	Y		
1	HI-06-SS-00	0.445	0.516	0.542	0.371	0.863	0.822	1.200			
1	HI-07-SS-00	0.510	0.516	0.542	0.371	0.988	0.941	1.374			
1	OB-01-SS-00	0.443	0.516	0.542	0.371	0.858	0.817	1.194			
1	OB-02-SS-00	0.418	0.516	0.542	0.371	0.810	0.771	1.127			
2	OB-03-SS-00	0.330	0.561	0.442	0.394	0.588	0.746	0.839			
2	OB-04-SS-00	0.516	0.561	0.442	0.394	0.920	1.167	1.312			
1	OB-05-SS-00	0.307	0.516	0.542	0.371	0.595	0.567	0.828	Y	Y	
1	OB-06-SS-00	0.373	0.516	0.542	0.371	0.724	0.689	1.007		Y	
2	OB-07-SS-00	0.289	0.561	0.442	0.394	0.515	0.653	0.734	Y		
2	OB-08-SS-00	0.420	0.561	0.442	0.394	0.748	0.949	1.067			
2	OB-09-SS-00	0.460	0.561	0.442	0.394	0.820	1.040	1.170			
2	OB-10-SS-00	0.516	0.561	0.442	0.394	0.919	1.166	1.311			
1	OB-11-SS-00	0.425	0.516	0.542	0.371	0.824	0.785	1.147			
1	OB-12-SS-00	0.398	0.516	0.542	0.371	0.771	0.735	1.073	Y	Y	
1	OB-13-SS-00	0.369	0.516	0.542	0.371	0.716	0.681	0.995	Y	Y	
1	OB-14-SS-00	0.423	0.516	0.542	0.371	0.821	0.782	1.142			
1	OB-17-WS-00	0.546	0.516	0.542	0.371	1.059	1.008	1.473			
2	OB-18-WS-00	0.432	0.561	0.442	0.394	0.770	0.977	1.099			
1	OB-19-WS-00	0.473	0.516	0.542	0.371	0.917	0.873	1.275			
1	SH-01-SS-00	0.400	0.516	0.542	0.371	0.776	0.739	1.079			
2	SH-02-SS-00	0.410	0.561	0.442	0.394	0.730	0.926	1.041			
1	SH-03-SS-00	0.450	0.516	0.542	0.371	0.872	0.831	1.213			
1	SH-04-SS-00	0.479	0.516	0.542	0.371	0.928	0.884	1.291			
2	SH-06-SS-00	0.277	0.561	0.442	0.394	0.494*	0.626	0.704	Y		
2	SH-07-SS-00	0.389	0.561	0.442	0.394	0.694	0.880	0.990	Y		
1	SH-09-SS-00	0.488	0.516	0.542	0.371	0.946	0.901	1.317			
1	SH-10-SS-00	0.403	0.516	0.542	0.371	0.781	0.744	1.087			
1	SH-11-SS-00	0.552	0.516	0.542	0.371	1.071	1.020	1.490			
2	SH-12-SS-00	0.449	0.561	0.442	0.394	0.799	1.014	1.140			
1	SH-13-SS-00	0.346	0.516	0.542	0.371	0.671	0.639	0.934	Y	Y	
1	SH-14-SS-00	0.451	0.516	0.542	0.371	0.874	0.833	1.216			
2	SH-15-SS-00	0.365	0.561	0.442	0.394	0.650	0.825	0.928			
2	SH-16-SS-00	0.271	0.561	0.442	0.394	0.483*	0.613	0.690	Y		
2	SH-18-WS-00	0.424	0.561	0.442	0.394	0.755	0.958	1.077	Y		
2	SH-19-WS-00	0.367	0.561	0.442	0.394	0.654	0.830	0.934	Y		
2	SH-20-WS-00	0.517	0.561	0.442	0.394	0.920	1.168	1.313			
1	SH-21-WS-00	0.368	0.516	0.542	0.371	0.714	0.680	0.993	Y	Y	
1	SH-22-WS-00	0.348	0.516	0.542	0.371	0.675	0.643	0.939	Y	Y	
2	SH-23-WS-00	0.322	0.561	0.442	0.394	0.573	0.727	0.817	Y		
2	SH-24-WS-00	0.347	0.561	0.442	0.394	0.618	0.785	0.882			
2	SH-25-WS-00	0.405	0.561	0.442	0.394	0.721	0.914	1.028			
2	SH-26-WS-00	0.248	0.561	0.442	0.394	0.442*	0.561	0.631	Y		

Test Batch	Sample	Mean Individual Growth Rate (mg/ind/day)				MIG Relative to Reference			Statistically Significant (p≤0.05)		
		Sample	RF-01	RF-02	RF-03	RF-01	RF-02	RF-03	RF-01	RF-02	RF-03
2	SH-27-WS-00	0.307	0.561	0.442	0.394	0.547	0.694	0.780	Y		
1	SH-28-WS-00	0.374	0.516	0.542	0.371	0.726	0.691	1.010	Y	Y	
2	SH-29-WS-00	0.320	0.561	0.442	0.394	0.571	0.724	0.814	Y		
2	SH-30-WS-00	0.394	0.561	0.442	0.394	0.702	0.891	1.002	Y		

Shaded cells indicate samples not meeting SMS Criteria compared to at least one reference sample.
Bold indicates SQS Failure (Statistical difference and <0.70),
Bold and asterisk (*) indicates CSL failure (Statistical difference and <0.50)
 Note: RF-03 in Batch 1 did not meet Reference Acceptability Criterion

4.3 LARVAL TEST SUITABILITY DETERMINATION

Larval test treatments fail SQS criteria if the percentage of normal larvae in the test treatment is significantly ($p \leq 0.10$) lower than that of the reference and if the normal larval development in the test treatment is less than 85% of the normal development in the reference. Treatments fail CSL criteria if the percentage of normal larvae in the test treatment is significantly ($p \leq 0.10$) lower than that of the reference and if the normal larval development in the test treatment is less than 70% of the normal development in the reference. As shown in Table 12, 20 of the project samples failed to meet SQS criteria (<0.85) and 15 project samples failed to meet CSL criteria (<0.70). Test treatment SH-18-WS-00 had a relative difference of 0.849 when compared to reference RF-01-SS-00, falling just below the 0.85 criterion. This sample is considered as failing to meet the SQS criteria for the purposes of this report.

Reference treatments RF-01-SS-00 and RF-02-SS-00 tested in Batch 1 did not meet the acceptability criterion of $\geq 65\%$ of control normality.

Note: Samples SH-02-SS-00 and SH-03-SS-00 had identical mean normal survivorship (34.4%); however, the replicate data for these two treatments differed. The similarity between the two samples is coincidental.

Table 12. Suitability Comparisons for *Mytilus* sp.

Test Batch	Sample	Mean Normal Development (%) Control Adjusted				Relative to Reference Development			Statistically Significant (p ≤ 0.1)		
		Sample	RF-01	RF-02	RF-03	RF-01	RF-02	RF-03	RF-01	RF-02	RF-03
2	HI-02-SS-00	87.4	85.6	65.7	78.6	1.02	1.33	1.11			
2	HI-03-SS-00	81.6	85.6	65.7	78.6	0.95	1.24	1.04			
2	HI-04-SS-00	83.0	85.6	65.7	78.6	0.97	1.26	1.06			
1	HI-05-SS-00	92.4	51.2	45.0	70.2	1.81	2.05	1.32			
2	HI-06-SS-00	76.1	85.6	65.7	78.6	0.89	1.16	0.97	Y		
1	HI-07-SS-00	88.2	51.2	45.0	70.2	1.72	1.96	1.26			
1	OB-01-SS-00	78.2	51.2	45.0	70.2	1.53	1.74	1.11			
1	OB-02-SS-00	73.8	51.2	45.0	70.2	1.44	1.64	1.05			
1	OB-03-SS-00	69.6	51.2	45.0	70.2	1.36	1.55	0.99			
2	OB-04-SS-00	49.9	85.6	65.7	78.6	0.58*	0.76	0.64*	Y	Y	Y
2	OB-05-SS-00	63.0	85.6	65.7	78.6	0.74	0.96	0.80	Y		Y
2	OB-06-SS-00	58.1	85.6	65.7	78.6	0.68*	0.88	0.74	Y	Y	Y
2	OB-07-SS-00	81.9	85.6	65.7	78.6	0.96	1.25	1.04	Y		
2	OB-08-SS-00	79.8	85.6	65.7	78.6	0.93	1.21	1.02	Y		
2	OB-09-SS-00	67.7	85.6	65.7	78.6	0.79	1.03	0.86	Y		Y
2	OB-10-SS-00	46.4	85.6	65.7	78.6	0.54*	0.71	0.59*	Y	Y	Y
2	OB-11-SS-00	76.7	85.6	65.7	78.6	0.90	1.17	0.98	Y		
2	OB-12-SS-00	71.8	85.6	65.7	78.6	0.84	1.09	0.91	Y		Y
2	OB-13-SS-00	45.1	85.6	65.7	78.6	0.53*	0.69*	0.57*	Y	Y	Y
2	OB-14-SS-00	51.3	85.6	65.7	78.6	0.60*	0.78	0.65*	Y	Y	Y
2	OB-17-WS-00	75.8	85.6	65.7	78.6	0.89	1.15	0.96	Y		
2	OB-18-WS-00	47.8	85.6	65.7	78.6	0.56*	0.73	0.61*	Y	Y	Y
2	OB-19-WS-00	47.5	85.6	65.7	78.6	0.55*	0.72	0.60*	Y	Y	Y
1	SH-01-SS-00	65.7	51.2	45.0	70.2	1.28	1.46	0.94			
1	SH-02-SS-00	34.4	51.2	45.0	70.2	0.67*	0.76	0.49*	Y		Y
1	SH-03-SS-00	34.4	51.2	45.0	70.2	0.67*	0.76	0.49*	Y	Y	Y
1	SH-04-SS-00	44.1	51.2	45.0	70.2	0.86	0.98	0.63*	Y		Y
1	SH-06-SS-00	18.1	51.2	45.0	70.2	0.35*	0.40*	0.26*	Y	Y	Y
2	SH-07-SS-00	43.8	85.6	65.7	78.6	0.51*	0.67*	0.56*	Y	Y	Y
1	SH-09-SS-00	71.2	51.2	45.0	70.2	1.39	1.58	1.01			
1	SH-10-SS-00	75.0	51.2	45.0	70.2	1.47	1.67	1.07			
2	SH-11-SS-00	75.9	85.6	65.7	78.6	0.89	1.16	0.97	Y		
2	SH-12-SS-00	66.1	85.6	65.7	78.6	0.77	1.01	0.84	Y		Y
2	SH-13-SS-00	73.8	85.6	65.7	78.6	0.86	1.12	0.94	Y		
1	SH-14-SS-00	56.0	51.2	45.0	70.2	1.09	1.24	0.80			Y
1	SH-15-SS-00	85.4	51.2	45.0	70.2	1.67	1.90	1.22			
1	SH-16-SS-00	78.9	51.2	45.0	70.2	1.54	1.75	1.12			
2	SH-18-WS-00	72.6	85.6	65.7	78.6	0.85	1.11	0.92	Y		Y
1	SH-19-WS-00	40.9	51.2	45.0	70.2	0.80	0.91	0.58*	Y		Y
1	SH-20-WS-00	73.0	51.2	45.0	70.2	1.43	1.62	1.04			
1	SH-21-WS-00	37.5	51.2	45.0	70.2	0.73	0.83	0.53*	Y	Y	Y
1	SH-22-WS-00	44.2	51.2	45.0	70.2	0.86	0.98	0.63*	Y		Y
1	SH-23-WS-00	60.7	51.2	45.0	70.2	1.19	1.35	0.86			
1	SH-24-WS-00	32.8	51.2	45.0	70.2	0.64*	0.73	0.47*	Y	Y	Y
2	SH-25-WS-00	71.0	85.6	65.7	78.6	0.83	1.08	0.90	Y		Y
1	SH-26-WS-00	58.1	51.2	45.0	70.2	1.14	1.29	0.83			Y
1	SH-27-WS-00	87.5	51.2	45.0	70.2	1.71	1.94	1.25			
1	SH-28-WS-00	69.3	51.2	45.0	70.2	1.35	1.54	0.99			
1	SH-29-WS-00	90.2	51.2	45.0	70.2	1.76	2.01	1.29			
1	SH-30-WS-00	63.9	51.2	45.0	70.2	1.25	1.42	0.91			

Shaded cells indicate samples not meeting SMS Criteria compared to at least one reference sample.
Bold indicates SQS Failure (SD and <0.85), Bold and asterisk (*) indicates CSL failure (SD and <0.70)
 Note: RF-01 and RF-02 in Batch 1 did not meet Reference Acceptability Criterion

4.4 MICROTOX® TEST SUITABILITY DETERMINATION

The SMS program criteria state that a test sediment fails the SQS criteria when the mean light output of the test sediment is less than 80% of the mean light output of the reference sediment and the two means are statistically different ($p \leq 0.05$). No criteria exist for the Microtox® test for CSL.

Test treatments were analyzed in 14 batches run concurrently with the associated reference sample for those respective treatments. Due to this test design, test sediments were compared to one reference only. In instances where the reference sediments did not meet acceptability criteria, the control response was used in its place for the suitability determination.

One sample (OB-05-SS-00) failed to meet SQS criteria and was significantly less than the associated reference RF-01-SS-00.

Table 13. Suitability Comparisons for Microtox® (*V. fischeri*)

Test Batch	Sample	Sample Mean % of Initial Light Output: Minute Reading		Comparison To:	Reference Mean % of Initial Light Output: Minute Reading		% Absolute Difference		Fails SQS: Statistically Different from Reference (or Control) and > 20% Different (Absolute)
		5	15		5	15	5	15	
2	HI-02-SS-00	107	111	RF-03-SS-00	98	98	-9	-13	
2	HI-03-SS-00	108	105	RF-03-SS-00	98	98	-10	-7	
2	HI-04-SS-00	115	121	RF-03-SS-00	98	98	-17	-23	
3	HI-05-SS-00	99	94	Control	91	84	-8	-10	
2	HI-06-SS-00	104	109	RF-03-SS-00	98	98	-6	-11	
3	HI-07-SS-00	97	96	Control	91	84	-6	-12	
4	OB-01-SS-00	98	93	RF-03-SS-00	78	75	-20	-18	
10	OB-02-SS-00	102	98	Control	95	89	-7	-9	
10	OB-03-SS-00	103	101	Control	95	89	-8	-12	
13	OB-04-SS-00	97	90	Control	95	89	-2	-1	
6	OB-05-SS-00	43	35	RF-01-SS-00	101	92	58	57	Y
7	OB-06-SS-00	104	95	RF-01-SS-00	101	94	-3	-1	
1	OB-07-SS-00	104	101	RF-03-SS-00	98	98	-6	-3	
6	OB-08-SS-00	101	92	RF-01-SS-00	101	92	0	0	
8	OB-09-SS-00	99	95	RF-01-SS-00	102	97	3	2	
7	OB-10-SS-00	103	97	RF-01-SS-00	101	94	-2	-3	
8	OB-11-SS-00	94	89	RF-01-SS-00	102	97	8	8	
6	OB-12-SS-00	101	92	RF-01-SS-00	101	92	0	0	
12	OB-13-SS-00	92	86	Control	91	85	-1	-1	
12	OB-14-SS-00	95	90	Control	91	85	-4	-5	
12	OB-17-WS-00	96	91	Control	91	85	-5	-6	
7	OB-18-WS-00	104	96	RF-01-SS-00	101	94	-3	-2	
8	OB-19-WS-00	100	95	RF-01-SS-00	102	97	2	2	
3	SH-01-SS-00	100	96	Control	91	84	-9	-12	
11	SH-02-SS-00	101	98	Control	93	84	-8	-14	
12	SH-03-SS-00	96	92	Control	91	85	-5	-7	
9	SH-04-SS-00	100	97	Control	95	92	-5	-5	
14	SH-06-SS-00	106	100	Control	95	83	-11	-17	
13	SH-07-SS-00	95	86	Control	89	83	-6	-3	
9	SH-09-SS-00	101	98	Control	95	92	-6	-6	
4	SH-10-SS-00	103	98	RF-03-SS-00	78	75	-25	-23	
10	SH-11-SS-00	100	96	Control	95	89	-5	-7	
13	SH-12-SS-00	95	86	Control	89	83	-6	-3	
13	SH-13-SS-00	94	87	Control	89	83	-5	-4	
9	SH-14-SS-00	103	103	Control	95	92	-8	-11	
4	SH-15-SS-00	101	97	RF-03-SS-00	78	75	-23	-22	
4	SH-16-SS-00	101	93	RF-03-SS-00	78	75	-23	-18	
8	SH-18-WS-00	100	95	RF-01-SS-00	102	97	2	2	
10	SH-19-WS-00	102	97	Control	95	89	-7	-8	
6	SH-20-WS-00	102	94	RF-01-SS-00	101	92	-1	-2	
7	SH-21-WS-00	102	94	RF-01-SS-00	101	94	-1	0	
5	SH-22-WS-00	110	104	RF-03-SS-00	100	93	-10	-11	
11	SH-23-WS-00	103	101	Control	93	84	-10	-17	
11	SH-24-WS-00	98	95	Control	93	84	-5	-11	
11	SH-25-WS-00	103	100	Control	93	84	-10	-16	
3	SH-26-WS-00	100	94	Control	91	84	-9	-10	
1	SH-27-WS-00	100	96	RF-03-SS-00	98	98	-2	2	
9	SH-28-WS-00	101	97	Control	95	92	-6	-5	
1	SH-29-WS-00	106	106	RF-03-SS-00	98	98	-8	-8	
1	SH-30-WS-00	106	100	RF-03-SS-00	98	98	-8	-2	

Shaded cells indicate samples not meeting SMS Criteria compare to reference.
Bold indicates SQS Failure (Statistical difference and >0.20)

4.5 SUMMARY

Thirty-four samples failed to meet SQS or CSL performance criteria for one or more of the toxicity tests performed on the Oakland Bay sediments (Table 14). Nine samples expressed failures for more than one species. These samples included OB-06-SS-00, OB-13-SS-00, SH-06-SS-00, SH-07-SS-00, SH-19-WS-00, SH-21-WS-00, SH-22-WS-00, and SH-26-WS-00, (juvenile polychaete and larval development) and OB-05-SS-00 (juvenile polychaete, larval development, and Microtox®).

Table 14. Summary of Samples Not Meeting SMS Criteria.

Sample	Sediment Quality Standards										Cleanup Screening Levels								
	Amphipod			Polychaete			Larval			Microtox®	Amphipod			Polychaete			Larval		
	RF-01	RF-02	RF-03	RF-01	RF-02	RF-03	RF-01	RF-02	RF-03		RF-01	RF-02	RF-03	RF-01	RF-02	RF-03	RF-01	RF-02	RF-03
HI-02-SS-00				X	X														
HI-05-SS-00				X															
OB-03-SS-00		X	X																
OB-04-SS-00							X	X	X								X		X
OB-05-SS-00				X	X		X		X	X									
OB-06-SS-00					X		X		X								X		
OB-07-SS-00				X															
OB-09-SS-00							X												
OB-10-SS-00							X	X	X								X		X
OB-12-SS-00							X												
OB-13-SS-00					X		X	X	X								X	X	X
OB-14-SS-00							X	X	X								X		X
OB-18-WS-00							X	X	X								X		X
OB-19-WS-00							X	X	X								X		X
SH-02-SS-00							X ¹		X								X ¹		X
SH-03-SS-00							X ¹	X ¹	X								X ¹		X
SH-04-SS-00									X										X
SH-06-SS-00				X			X ¹	X ¹	X				X				X ¹	X ¹	X
SH-07-SS-00				X			X	X	X								X	X	X
SH-12-SS-00							X		X										
SH-13-SS-00				X	X														
SH-14-SS-00									X										
SH-16-SS-00				X									X						
SH-18-WS-00							X												
SH-19-WS-00				X			X ¹		X										X
SH-21-WS-00					X		X ¹	X ¹	X										X
SH-22-WS-00				X	X				X										X
SH-23-WS-00				X															
SH-24-WS-00							X ¹	X ¹	X								X ¹		X
SH-25-WS-00							X												
SH-26-WS-00				X					X				X						
SH-27-WS-00				X															
SH-28-WS-00					X														
SH-29-WS-00				X															

X = Does not meet criterion

¹ Failure expressed when compared to reference treatment not meeting acceptability criteria.

5.0 REFERENCES

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Nautilus Environmental

**Toxicological Evaluation of Sediment
Oakland Bay**

Microtox

Report date: December 30, 2008

Submitted to:

NEWFIELDS NORTHWEST

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SIGNATURE PAGE



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This report has been prepared based on data and/or samples provided by our client and the results of this study are for their sole benefit. Any reliance on the data by a third party is at the sole and exclusive risk of that party.

1.0 INTRODUCTION

Sediment samples were collected and evaluated for toxicity as part of a project being conducted by NewFields Northwest. Sediment samples were tested for toxicity using Microtox tests.

2.0 METHODS

2.1 Samples

Fifty sediment and three reference site subsamples were collected by NewFields personnel on September 29, 30, October 1, 2, 3, 4, 5, and 9, 2008 and were delivered on October 28, 2008 to the Nautilus Environmental laboratory in Tacoma, WA. The condition of the sample containers was inspected upon receipt and the identities compared with the information provided on the chain-of-custody forms. The samples were stored at $4 \pm 2^\circ\text{C}$ in the dark prior to test initiation.

2.2 Test Procedures

The luminescent marine bacterium *Vibrio fischeri* was used as the test organism for the Microtox test. The bacteria were exposed to porewater extracted from sediment samples and light readings were measured after 5 minutes and 15 minutes of exposure. Test equipment included the Microtox Model 500 Analyzer, which measures light output and is equipped with a 15°C chamber to maintain test temperature in the samples and a 4°C chamber to keep the rehydrated bacteria chilled.

Vials of freeze-dried bacteria (Microtox® Acute Reagent Lot # 8H1052, Expiration date 8/2010 and Reagent Lot # 8K1031, Expiration date 10/2010) were obtained from Strategic Diagnostics, Inc. and stored at -20°C until use. On the day of the test, a vial was rehydrated with 1.0 ml of Microtox Reconstitution Solution, mixed thoroughly, and allowed to equilibrate for 30 minutes at 4°C . The bacteria were used within 2 hours of rehydration.

The tests were conducted in accordance with WDOE (2008) test protocol. These methods are summarized in Table 1. Approximately 50 ml of porewater was extracted from each sample by centrifuging for 30 minutes at 4500 G. The DO in each sample was between 50 and 100 percent saturation and, as a result, the samples did not require aeration. The pH was adjusted to 7.8 to 8.2 using NaOH or HCl, if necessary. Sample salinity was adjusted to 20 ± 2 ppt when

necessary using artificial seasalt. The control was deionized water adjusted to 20 ppt with artificial seasalt. Each porewater was tested within 3 hours of extraction.

Tests were conducted using five replicates. Disposable glass cuvettes were placed in the Microtox test wells and 1 ml of salinity adjusted porewater was added. The rehydrated bacteria (reagent) were thoroughly mixed and 10 μ l was added to each test cuvette. After an initial incubation period of 5 minutes, the control cuvette was placed in the read chamber of the Microtox Analyzer to set the instrument. Initial light readings (I_0) were then taken by placing each cuvette in the read chamber of the Microtox Analyzer and measurements were recorded on a data sheet. Light output was measured in each cuvette after an additional 5 minutes (I_5) and 15 minutes (I_{15}) of exposure.

Test acceptability criterion was final mean control light output greater than or equal to 80 percent of initial control mean output. The reference sample acceptability criterion was a final mean output greater than or equal to 80 percent of control final mean output. The test data that was less than 80 percent of acceptable reference or control were evaluated statistically by conducting one-tailed t-tests on the change in output over time for porewater extracts compared to the reference. Where the reference did not meet acceptability criteria, comparisons were made against the control.

A reference toxicant test using phenol was conducted in conjunction with the porewater tests to ensure that the sensitivity of the test was within the acceptable range of historical values determined in this laboratory.

Table 1 Summary of methods for the Microtox test.

Test dates	November 6, 10, 14 and 26, 2008
Test organism source	Strategic Diagnostics
Batch number and expiration date	Lot#8H1052, Expiry 8/2010 Lot #8K1031, Expiry 10/2010
Control	Saltwater (20 ppt) prepared with Crystal Sea artificial seasalt
Sample preparation	Centrifugation at 4500 G for 30 minutes; salinity adjustment to 20 ppt using Crystal Sea salt; pH adjustment to 7.8-8.2 ppt
Test chamber	Glass cuvette
Test volume	1 mL
Volume of inoculum/replicate	10 µL
Number of replicates/sample	5
Test temperature	15 ± 1°C
Aeration	None
Reference toxicant	Phenol

3.0 RESULTS

The results of toxicity tests conducted using Microtox are provided in Tables 2 and 3.

Table 2 Results of Microtox tests showing change in light output of samples as a percentage of change in light output of control after 5 and 15 minute of exposure.

Sample	Change in light output as a % of Control (5 minutes)	Change in light output as a % of Control (15 minutes)
Test #1		
RF-03-SS-00	107	118
OB-07-SS-00	113	122
SH-27-WS-00	109	115
SH-29-WS-00	116	128
SH-30-WS-00	115	120
Test #2		
RF-03-SS-00	104	108
HI-06-SS-00	104	111
HI-02-SS-00	107	113
HI-03-SS-00	107	107
HI-04-SS-00	114	123
Test #3		
RF-03-SS-00	76	79
SH-26-WS-00	110	113
HI-05-SS-00	109	113
HI-07-SS-00	107	114
SH-01-SS-00	110	115
Test #4		
RF-03-SS-00	84	89
SH-16-SS-00	108	111
SH-15-SS-00	108	115
OB-01-SS-00	105	110
SH-10-SS-00	110	116
Test #5		
RF-03-SS-00	98	107
SH-22-SS-00	108	120

Table 2, Cont. Results of Microtox tests showing change in light output of samples as a percentage of change in light output of control after 5 and 15 minute of exposure.

Sample	Change in light output as a % of Control (5 minutes)	Change in light output as a % of Control (15 minutes)
Test #6		
RF-01-SS-00	110	110
SH-20-WS-00	111	112
OB-08-SS-00	110	110
OB-12-SS-00	110	110
OB-05-SS-00	46	41
Test #7		
RF-01-SS-00	111	114
OB-06-SS-00	114	114
OB-10-SS-00	113	118
OB-18-WS-00	114	117
SH-21-WS-00	112	114
Test #8		
RF-01-SS-00	110	114
OB-09-SS-00	107	112
OB-11-SS-00	101	104
OB-19-WS-00	107	112
SH-18-WS-00	107	112
Test #9		
RF-02-SS-00	63	60
SH-28-WS-00	106	105
SH-09-SS-00	105	107
SH-04-SS-00	105	106
SH-14-SS-00	108	112
Test #10		
RF-02-SS-00	66	64
SH-11-SS-00	105	109
OB-02-SS-00	107	111
SH-19-WS-00	107	110
OB-03-SS-00	108	113

Table 2, Cont. Results of Microtox tests showing change in light output of samples as a percentage of change in light output of control after 5 and 15 minute of exposure.

Sample	Change in light output as a % of Control (5 minutes)	Change in light output as a % of Control (15 minutes)
Test #11		
RF-02-SS-00	63	61
SH-24-WS-00	105	113
SH-02-SS-00	108	116
SH-23-WS-00	110	120
SH-25-WS-00	110	119
Test #12		
RF-02-SS-00	61	59
OB-13-SS-00	101	101
SH-03-SS-00	105	108
OB-17-WS-00	105	106
OB-14-SS-00	104	106
Test #13		
RF-02-SS-00	65	60
SH-13-SS-00	106	106
OB-04-SS-00	109	109
SH-07-SS-00	106	104
SH-12-SS-00	107	104
Test #14		
RF-02-SS-00	68	67
SH-06-SS-00	112	120

Table 3 Shaded data indicates samples that exceed SQS guidelines (> 20% difference and statistically significant difference (p<0.05) relative to the control or reference).

Sample	<u>5-minute reading</u>		<u>15 minute reading</u>	
	Mean % of initial light output	Comparison To	Mean % of initial light output	Comparison To
<u>Test 1</u>				
Control	92 ± 3	---	83 ± 3	---
RF-03-SS-00	98 ± 5	---	98 ± 5	---
OB-07-SS-00	104 ± 2	RF-03-SS-00	101 ± 6	RF-03-SS-00
SH-27-WS-00	100 ± 3	RF-03-SS-00	96 ± 5	RF-03-SS-00
SH-29-WS-00	106 ± 2	RF-03-SS-00	106 ± 3	RF-03-SS-00
SH-30-WS-00	106 ± 2	RF-03-SS-00	100 ± 4	RF-03-SS-00
<u>Test 2</u>				
Control	100 ± 1	---	98 ± 3	---
RF-03-SS-00	105 ± 2	---	106 ± 4	---
HI-06-SS-00	104 ± 3	RF-03-SS-00	109 ± 7	RF-03-SS-00
HI-02-SS-00	107 ± 4	RF-03-SS-00	111 ± 5	RF-03-SS-00
HI-03-SS-00	108 ± 3	RF-03-SS-00	105 ± 2	RF-03-SS-00
HI-04-SS-00	115 ± 4	RF-03-SS-00	121 ± 3	RF-03-SS-00
<u>Test 3</u>				
Control	91 ± 1	---	84 ± 2	---
RF-03-SS-00 ¹	69 ± 3	---	66 ± 3	---
SH-26-WS-00	100 ± 2	Control	94 ± 3	Control
HI-05-SS-00	99 ± 1	Control	94 ± 3	Control
HI-07-SS-00	97 ± 2	Control	96 ± 1	Control
SH-01-SS-00	100 ± 3	Control	96 ± 3	Control
<u>Test 4</u>				
Control	93 ± 3	---	84 ± 3	---
RF-03-SS-00	78 ± 2	---	75 ± 2	---
SH-16-SS-00	101 ± 4	RF-03-SS-00	93 ± 2	RF-03-SS-00
SH-15-SS-00	101 ± 2	RF-03-SS-00	97 ± 3	RF-03-SS-00
OB-01-SS-00	98 ± 2	RF-03-SS-00	93 ± 3	RF-03-SS-00
SH-10-SS-00	103 ± 2	RF-03-SS-00	98 ± 2	RF-03-SS-00
<u>Test 5</u>				
Control	102 ± 3	---	87 ± 3	---
RF-03-SS-00	100 ± 3	---	93 ± 3	---
SH-22-SS-00	110 ± 4	RF-03-SS-00	104 ± 3	RF-03-SS-00

¹Reference did not meet acceptability criteria, comparison made against control

Table 3, Cont. Shaded data indicates samples that exceed SQS guidelines (> 20% difference and statistically significant difference (p<0.05) relative to the control or reference).

Sample	5-minute reading		15 minute reading	
	Mean % of initial light output	Comparison To	Mean % of initial light output	Comparison To
<u>Test 6</u>				
Control	92 ± 5	---	84 ± 2	---
RF-01-SS-00	101 ± 3	---	92 ± 2	---
SH-20-WS-00	102 ± 4	RF-01-SS-00	94 ± 5	RF-01-SS-00
OB-08-SS-00	101 ± 3	RF-01-SS-00	92 ± 3	RF-01-SS-00
OB-12-SS-00	101 ± 2	RF-01-SS-00	92 ± 2	RF-01-SS-00
OB-05-SS-00	43 ± 2	RF-01-SS-00	35 ± 1	RF-01-SS-00
<u>Test 7</u>				
Control	91 ± 2	---	83 ± 3	---
RF-01-SS-00	101 ± 2	---	94 ± 1	---
OB-06-SS-00	104 ± 4	RF-01-SS-00	95 ± 3	RF-01-SS-00
OB-10-SS-00	103 ± 4	RF-01-SS-00	97 ± 2	RF-01-SS-00
OB-18-WS-00	104 ± 2	RF-01-SS-00	96 ± 2	RF-01-SS-00
SH-21-WS-00	102 ± 3	RF-01-SS-00	94 ± 2	RF-01-SS-00
<u>Test 8</u>				
Control	93 ± 1	---	85 ± 2	---
RF-01-SS-00	102 ± 4	---	97 ± 5	---
OB-09-SS-00	99 ± 2	RF-01-SS-00	95 ± 2	RF-01-SS-00
OB-11-SS-00	94 ± 1	RF-01-SS-00	89 ± 1	RF-01-SS-00
OB-19-WS-00	100 ± 2	RF-01-SS-00	95 ± 2	RF-01-SS-00
SH-18-WS-00	100 ± 3	RF-01-SS-00	95 ± 2	RF-01-SS-00
<u>Test 9</u>				
Control	95 ± 2	---	92 ± 4	---
RF-02-SS-00 ¹	60 ± 2	---	55 ± 2	---
SH-28-WS-00	101 ± 1	Control	97 ± 1	Control
SH-09-SS-00	101 ± 1	Control	98 ± 2	Control
SH-04-SS-00	100 ± 2	Control	97 ± 3	Control
SH-14-SS-00	103 ± 1	Control	103 ± 3	Control
<u>Test 10</u>				
Control	95 ± 2	---	89 ± 4	---
RF-02-SS-00 ¹	63 ± 6	---	57 ± 7	---
SH-11-SS-00	100 ± 2	Control	96 ± 3	Control
OB-02-SS-00	102 ± 4	Control	98 ± 6	Control
SH-19-WS-00	102 ± 2	Control	97 ± 5	Control
OB-03-SS-00	103 ± 2	Control	101 ± 2	Control

¹Reference did not meet acceptability criteria, comparison made against control

Table 3, Cont. Shaded data indicates samples that exceed SQS guidelines (> 20% difference and statistically significant difference (p<0.05) relative to the control or reference).

Sample	<u>5-minute reading</u>		<u>15 minute reading</u>	
	Mean % of initial light output	Comparison To	Mean % of initial light output	Comparison To
<u>Test 11</u>				
Control	93 ± 2	---	84 ± 1	---
RF-02-SS-00 ¹	58 ± 4	---	52 ± 4	---
SH-24-WS-00	98 ± 2	Control	95 ± 0	Control
SH-02-SS-00	101 ± 2	Control	98 ± 2	Control
SH-23-WS-00	103 ± 1	Control	101 ± 2	Control
SH-25-WS-00	103 ± 2	Control	100 ± 5	Control
<u>Test 12</u>				
Control	91 ± 3	---	85 ± 4	---
RF-02-SS-00 ¹	55 ± 5	---	50 ± 6	---
OB-13-SS-00	92 ± 2	Control	86 ± 1	Control
SH-03-SS-00	96 ± 2	Control	92 ± 2	Control
OB-17-WS-00	96 ± 2	Control	91 ± 4	Control
OB-14-SS-00	95 ± 3	Control	90 ± 2	Control
<u>Test 13</u>				
Control	89 ± 2	---	83 ± 3	---
RF-02-SS-00 ¹	58 ± 3	---	49 ± 3	---
SH-13-SS-00	94 ± 1	Control	87 ± 2	Control
OB-04-SS-00	97 ± 2	Control	90 ± 2	Control
SH-07-SS-00	95 ± 2	Control	86 ± 3	Control
SH-12-SS-00	95 ± 2	Control	86 ± 1	Control
<u>Test 14</u>				
Control	95 ± 2	---	83 ± 1	---
RF-02-SS-00 ¹	65 ± 3	---	56 ± 3	---
SH-06-SS-00	106 ± 5	Control	100 ± 3	Control

¹Reference did not meet acceptability criteria, comparison made against control

3.1 QA/QC

The Microtox tests met control acceptance criteria and there were no deviations from protocol.

Results of reference toxicant tests conducted in conjunction with this testing program are provided in Table 8. The results of these tests fell within the range of mean \pm two standard deviations. This puts the results within the acceptable range of historical results for *Vibrio fischeri*, indicating that the sensitivity of the test organisms was appropriate.

Table 4 Reference toxicant test results.

Exposure Duration	Test date	Toxicant	EC50	Acceptable Range	CV (%)
5 Minutes	November 6, 2008	Phenol	34.3 mg/L	20.7 - 50.7	21.0
15 Minutes			59.0 mg/L	26.2 - 67.2	22.0
5 Minutes	November 10, 2008	Phenol	36.2 mg/L	20.8 - 50.8	20.9
15 Minutes			56.1 mg/L	26.8 - 68.1	21.7
5 Minutes	November 14, 2008	Phenol	31.3 mg/L	20.6 - 49.6	20.6
15 Minutes			51.2 mg/L	26.8 - 68.1	21.7
5 Minutes	November 26, 2008 11:39	Phenol	23.8 mg/L	23.2 - 42.7	14.8
15 Minutes			32.6 mg/L	26.0 - 68.7	22.6
5 Minutes	November 26, 2008 13:52	Phenol	29.2 mg/L	24.7 - 42.1	13.1
15 Minutes			39.8 mg/L	27.2 - 68.2	21.5

4.0 DISCUSSION

Sample OB-05-SS-00 exceeded sediment quality standards for microtox analysis per WDOE 2008 guidelines.

5.0 REFERENCES

- American Society of Testing and Materials (ASTM). 2000. Test Method for Measuring the Toxicity of Sediment-Associated Contaminants with Freshwater Invertebrates. ASTM Designation E 1706-00.
- U.S. Environmental Protection Agency (USEPA). 2000. Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates. EPA/600/R-99/064.
- Washington Department of Ecology (WDOE). 2008. Sediment Sampling and Analysis Plan Appendix: Guidance on the Development of Sediment Sampling and Analysis Plans Meeting the Requirements of the Sediment Management Standards Publication No. 03-09-043. Revised February 2008.

APPENDIX A - Results Summaries and Statistical Analysis

Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites: RF-03-SS, OB-07-SS, SH-27-WS, SH-29-WS, SH-30-WS
Client: NewFields
Test Date: 11/6/08

Site	Light Reading								$T_{(mean)}/C_{(mean)}$	Quality Control Steps	
	Reading	Replicate					Mean	St.Dev.		$F_{c(mean)}/I_{c(mean)}$	Evaluation of initial light output in site sediments
		1	2	3	4	5					
CON	$I_{(0)}$	92	92	87	91	90	90				
	$I_{(5)}$	86	85	80	86	79	83		0.92		
	$I_{(15)}$	77	77	75	76	70	75		0.83		
	$C_{(5)}$	0.93	0.92	0.92	0.95	0.88	0.92	0.03			
	$C_{(15)}$	0.84	0.84	0.86	0.84	0.78	0.83	0.03			
RF-03-SS-00	$I_{(0)}$	76	76	71	75	71	74				0.82
	$I_{(5)}$	69	77	72	73	72	73				
	$I_{(15)}$	70	78	70	70	74	72				
	$T_{(5)}$	0.91	1.01	1.01	0.97	1.01	0.98	0.05	1.07		
	$T_{(15)}$	0.92	1.03	0.99	0.93	1.04	0.98	0.05	1.18		
OB-07-SS-00	$I_{(0)}$	90	88	82	81	84	85				0.94
	$I_{(5)}$	90	91	87	85	87	88				
	$I_{(15)}$	86	85	84	89	85	86				
	$T_{(5)}$	1.00	1.03	1.06	1.05	1.04	1.04	0.02	1.13		
	$T_{(15)}$	0.96	0.97	1.02	1.10	1.01	1.01	0.06	1.22		
SH-27-WS-00	$I_{(0)}$	88	89	91	91	82	88				0.98
	$I_{(5)}$	84	88	93	92	84	88				
	$I_{(15)}$	80	89	82	88	83	84				
	$T_{(5)}$	0.95	0.99	1.02	1.01	1.02	1.00	0.03	1.09		
	$T_{(15)}$	0.91	1.00	0.90	0.97	1.01	0.96	0.05	1.15		
SH-29-WS-00	$I_{(0)}$	78	81	76	75	72	76				0.85
	$I_{(5)}$	84	85	79	82	76	81				
	$I_{(15)}$	82	85	77	82	79	81				
	$T_{(5)}$	1.08	1.05	1.04	1.09	1.06	1.06	0.02	1.16		
	$T_{(15)}$	1.05	1.05	1.01	1.09	1.10	1.06	0.03	1.28		
SH-30-WS-00	$I_{(0)}$	87	88	84	80	81	84				0.93
	$I_{(5)}$	92	92	86	86	88	89				
	$I_{(15)}$	85	89	79	81	84	84				
	$T_{(5)}$	1.06	1.05	1.02	1.08	1.09	1.06	0.02	1.15		
	$T_{(15)}$	0.98	1.01	0.94	1.01	1.04	1.00	0.04	1.20		

$I_{(0)}$ is the light reading after the initial five minute incubation period

$I_{(5)}$ is the light reading five minutes after $I_{(0)}$

$I_{(15)}$ is the light reading fifteen minutes after $I_{(0)}$

$C_{(0)}$, $R_{(0)}$, and $T_{(0)}$ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

$I_{(5)}:F_{c(mean)}/I_{c(mean)}:$ **92% YES**

$I_{(15)}:F_{c(mean)}/I_{c(mean)}:$ **83% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 $I_{T(mean)}/I_{C(mean)}:$ **82% YES**

S2 $I_{T(mean)}/I_{C(mean)}:$ **94% YES**

S3 $I_{T(mean)}/I_{C(mean)}:$ **98% YES**

S4 $I_{T(mean)}/I_{C(mean)}:$ **85% YES**

S5 $I_{T(mean)}/I_{C(mean)}:$ **93% YES**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites: RF-03-SS, HI-06-SS, HI-02-SS, HI-03-SS, HI-04-SS
Client: NewFields
Test Date: 11/6/08

Site	Light Reading								Quality Control Steps		
	Reading	Replicate					Mean	St.Dev.	$T_{(mean)}/C_{(mean)}$	Change in control light readings compared to initial control $F_{C(mean)}/I_{C(mean)}$	Evaluation of initial light output in site sediments $(I_{(0)}/I_{(5)})/C_{(mean)}$
		1	2	3	4	5					
CON	$I_{(0)}$	95	94	97	97	94	95				
	$I_{(5)}$	95	93	96	98	96	96		1.00		
	$I_{(15)}$	93	97	96	95	88	94		0.98		
	$C_{(5)}$	1.00	0.99	0.99	1.01	1.02	1.00	0.01			
	$C_{(15)}$	0.98	1.03	0.99	0.98	0.94	0.98	0.03			
RF-03-SS-00	$I_{(0)}$	85	83	81	83	86	84				0.88
	$I_{(5)}$	88	89	83	88	89	87				
	$I_{(15)}$	90	94	86	88	87	89				
	$T_{(5)}$	1.04	1.07	1.02	1.06	1.03	1.05	0.02	1.04		
	$T_{(15)}$	1.06	1.13	1.06	1.06	1.01	1.06	0.04	1.08		
HI-06-SS-00	$I_{(0)}$	94	97	92	94	90	93				0.98
	$I_{(5)}$	101	99	94	96	96	97				
	$I_{(15)}$	101	101	94	106	108	102				
	$T_{(5)}$	1.07	1.02	1.02	1.02	1.07	1.04	0.03	1.04		
	$T_{(15)}$	1.07	1.04	1.02	1.13	1.20	1.09	0.07	1.11		
HI-02-SS-00	$I_{(0)}$	92	89	93	90	90	91				0.95
	$I_{(5)}$	104	97	100	92	93	97				
	$I_{(15)}$	109	102	104	95	96	101				
	$T_{(5)}$	1.13	1.09	1.08	1.02	1.03	1.07	0.04	1.07		
	$T_{(15)}$	1.18	1.15	1.12	1.06	1.07	1.11	0.05	1.13		
HI-03-SS-00	$I_{(0)}$	91	91	98	94	93	93				0.98
	$I_{(5)}$	101	99	105	98	99	100				
	$I_{(15)}$	98	94	103	99	98	98				
	$T_{(5)}$	1.11	1.09	1.07	1.04	1.06	1.08	0.03	1.07		
	$T_{(15)}$	1.08	1.03	1.05	1.05	1.05	1.05	0.02	1.07		
HI-04-SS-00	$I_{(0)}$	90	88	87	85	87	87				0.92
	$I_{(5)}$	105	98	96	101	101	100				
	$I_{(15)}$	112	106	103	101	108	106				
	$T_{(5)}$	1.17	1.11	1.10	1.19	1.16	1.15	0.04	1.14		
	$T_{(15)}$	1.24	1.20	1.18	1.19	1.24	1.21	0.03	1.23		

$I_{(0)}$ is the light reading after the initial five minute incubation period

$I_{(5)}$ is the light reading five minutes after $I_{(0)}$

$I_{(15)}$ is the light reading fifteen minutes after $I_{(0)}$

$C_{(0)}$, $R_{(0)}$, and $T_{(0)}$ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

$I_{(5)} \cdot F_{C(mean)}/I_{C(mean)}$: **100% YES**

$I_{(15)} \cdot F_{C(mean)}/I_{C(mean)}$: **98% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 $I_{T(mean)}/I_{C(mean)}$: **88% YES**

S2 $I_{T(mean)}/I_{C(mean)}$: **98% YES**

S3 $I_{T(mean)}/I_{C(mean)}$: **95% YES**

S4 $I_{T(mean)}/I_{C(mean)}$: **98% YES**

S5 $I_{T(mean)}/I_{C(mean)}$: **92% YES**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

**Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites RF-03-SS, SH-26-WS, HI-05-SS, HI-07-SS, SH-01-SS**

**Client: NewFields
Test Date: 11/10/08**

Site	Light Reading								Quality Control Steps		
	Reading	Replicate					Mean	St.Dev.	$T_{(mean)}/C_{(mean)}$	Change in control light readings compared to initial control $F_{C(mean)}/I_{C(mean)}$	Evaluation of initial light output in site sediments $I_{(0)}/I_{(0)C(mean)}$
		1	2	3	4	5					
CON	$I_{(0)}$	96	88	94	87	90	91				
	$I_{(5)}$	86	79	86	79	83	83		0.91		
	$I_{(15)}$	81	72	81	72	75	76		0.84		
	$C_{(5)}$	0.90	0.90	0.91	0.91	0.92	0.91	0.01			
	$C_{(15)}$	0.84	0.82	0.86	0.83	0.83	0.84	0.02			
RF-03-SS-00	$I_{(0)}$	69	64	66	60	62	64				0.71
	$I_{(5)}$	67	64	62	59	62	63				
	$I_{(15)}$	64	60	59	58	59	60				
	$T_{(5)}$	0.74	0.70	0.68	0.65	0.68	0.69	0.03	0.76		
	$T_{(15)}$	0.70	0.66	0.65	0.64	0.65	0.66	0.03	0.79		
SH-26-WS-00	$I_{(0)}$	79	79	82	78	73	78				0.86
	$I_{(5)}$	80	76	82	79	74	78				
	$I_{(15)}$	76	72	76	74	71	74				
	$T_{(5)}$	1.01	0.96	1.00	1.01	1.01	1.00	0.02	1.10		
	$T_{(15)}$	0.96	0.91	0.93	0.95	0.97	0.94	0.03	1.13		
HI-05-SS-00	$I_{(0)}$	84	78	81	77	82	80				0.88
	$I_{(5)}$	83	77	79	77	80	79				
	$I_{(15)}$	79	72	75	72	81	76				
	$T_{(5)}$	0.99	0.99	0.98	1.00	0.98	0.99	0.01	1.09		
	$T_{(15)}$	0.94	0.92	0.93	0.94	0.99	0.94	0.03	1.13		
HI-07-SS-00	$I_{(0)}$	84	83	80	75	78	80				0.88
	$I_{(5)}$	82	79	76	75	77	78				
	$I_{(15)}$	81	81	75	72	74	77				
	$T_{(5)}$	0.98	0.95	0.95	1.00	0.99	0.97	0.02	1.07		
	$T_{(15)}$	0.96	0.98	0.94	0.96	0.95	0.96	0.01	1.14		
SH-01-SS-00	$I_{(0)}$	78	77	79	81	72	77				0.85
	$I_{(5)}$	78	78	75	81	74	77				
	$I_{(15)}$	72	76	74	78	72	74				
	$T_{(5)}$	1.00	1.01	0.95	1.00	1.03	1.00	0.03	1.10		
	$T_{(15)}$	0.92	0.99	0.94	0.96	1.00	0.96	0.03	1.15		

$I_{(0)}$ is the light reading after the initial five minute incubation period

$I_{(5)}$ is the light reading five minutes after $I_{(0)}$

$I_{(15)}$ is the light reading fifteen minutes after $I_{(0)}$

$C_{(0)}$, $R_{(0)}$, and $T_{(0)}$ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

$I_{(5)}:F_{C(mean)}/I_{C(mean)}$: **91% YES**

$I_{(15)}:F_{C(mean)}/I_{C(mean)}$: **84% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 $I_{T(mean)}/I_{C(mean)}$: **71% NO**

S2 $I_{T(mean)}/I_{C(mean)}$: **86% YES**

S3 $I_{T(mean)}/I_{C(mean)}$: **88% YES**

S4 $I_{T(mean)}/I_{C(mean)}$: **88% YES**

S5 $I_{T(mean)}/I_{C(mean)}$: **85% YES**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites: RF-03-SS, SH-16-SS, SH-15-SS, OB-01-SS, SH-10-SS
Client: NewFields
Test Date: 11/10/08

Site	Light Reading								T _(mean) / C _(mean)	Quality Control Steps	
	Reading	Replicate					Mean	St.Dev.		F _{c(mean)} /I _{c(mean)}	I ₀ (mean)/I ₀ (C)(mean)
		1	2	3	4	5					
CON	I ₍₀₎	92	97	94	100	100	97			0.93	
	I ₍₅₎	86	91	92	90	92	90					0.84
	I ₍₁₅₎	77	82	83	84	81	81				
	C ₍₅₎	0.93	0.94	0.98	0.90	0.92	0.93	0.03			
	C ₍₁₅₎	0.84	0.85	0.88	0.84	0.81	0.84	0.03			
RF-03-SS-00	I ₍₀₎	75	79	74	77	77	76				0.79
	I ₍₅₎	73	79	74	76	77	76				
	I ₍₁₅₎	70	75	70	73	74	72				
	T ₍₅₎	0.76	0.82	0.77	0.79	0.80	0.78	0.02	0.84		
	T ₍₁₅₎	0.72	0.78	0.72	0.76	0.77	0.75	0.02	0.89		
SH-16-SS-00	I ₍₀₎	89	94	95	91	93	92				0.96
	I ₍₅₎	89	92	97	97	90	93				
	I ₍₁₅₎	82	90	89	86	85	86				
	T ₍₅₎	1.00	0.98	1.02	1.07	0.97	1.01	0.04	1.08		
	T ₍₁₅₎	0.92	0.96	0.94	0.95	0.91	0.93	0.02	1.11		
SH-15-SS-00	I ₍₀₎	104	99	100	96	90	98				1.01
	I ₍₅₎	106	97	101	96	92	98				
	I ₍₁₅₎	104	97	93	93	87	95				
	T ₍₅₎	1.02	0.98	1.01	1.00	1.02	1.01	0.02	1.08		
	T ₍₁₅₎	1.00	0.98	0.93	0.97	0.97	0.97	0.03	1.15		
OB-01-SS-00	I ₍₀₎	94	96	101	93	97	96				1.00
	I ₍₅₎	92	96	98	92	93	94				
	I ₍₁₅₎	87	93	91	84	93	90				
	T ₍₅₎	0.98	1.00	0.97	0.99	0.96	0.98	0.02	1.05		
	T ₍₁₅₎	0.93	0.97	0.90	0.90	0.96	0.93	0.03	1.10		
SH-10-SS-00	I ₍₀₎	100	91	98	94	92	95				0.98
	I ₍₅₎	104	96	99	95	96	98				
	I ₍₁₅₎	97	88	94	91	93	93				
	T ₍₅₎	1.04	1.05	1.01	1.01	1.04	1.03	0.02	1.10		
	T ₍₁₅₎	0.97	0.97	0.96	0.97	1.01	0.98	0.02	1.16		

I₍₀₎ is the light reading after the initial five minute incubation period

I₍₅₎ is the light reading five minutes after I₍₀₎

I₍₁₅₎ is the light reading fifteen minutes after I₍₀₎

C₍₀₎, R₍₀₎, and T₍₀₎ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

I₍₅₎: F_{c(mean)}/I_{c(mean)}: **93% YES**

I₍₁₅₎: F_{c(mean)}/I_{c(mean)}: **84% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 I_{T(mean)}/I_{C(mean)}: **79% NO**

S2 I_{T(mean)}/I_{C(mean)}: **96% YES**

S3 I_{T(mean)}/I_{C(mean)}: **101% YES**

S4 I_{T(mean)}/I_{C(mean)}: **100% YES**

S5 I_{T(mean)}/I_{C(mean)}: **98% YES**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites: RF-03-SS, SH-22-SS
Client: NewFields
Test Date: 11/10/08

Site	Light Reading								T _(mean) / C _(mean)	Quality Control Steps	
	Reading	Replicate					Mean	St.Dev.		F _{c(mean)} /I _{c(mean)}	I _{(0)T_(mean)} /I _{(0)C_(mean)}
		1	2	3	4	5					
CON	I ₍₀₎	94	94	91	92	88	92				
	I ₍₅₎	92	99	92	92	91	93		1.02		
	I ₍₁₅₎	82	85	81	79	73	80		0.87		
	C ₍₅₎	0.98	1.05	1.01	1.00	1.03	1.02	0.03			
	C ₍₁₅₎	0.87	0.90	0.89	0.86	0.83	0.87	0.03			
RF-03-SS-00	I ₍₀₎	79	72	75	74	75	75				0.82
	I ₍₅₎	77	75	74	73	75	75				
	I ₍₁₅₎	70	69	71	68	70	70				
	T ₍₅₎	0.97	1.04	0.99	0.99	1.00	1.00	0.03	0.98		
	T ₍₁₅₎	0.89	0.96	0.95	0.92	0.93	0.93	0.03	1.07		
SH-22-SS-00	I ₍₀₎	86	84	85	89	83	85				0.93
	I ₍₅₎	97	91	91	94	95	94				
	I ₍₁₅₎	88	92	87	91	87	89				
	T ₍₅₎	1.13	1.08	1.07	1.06	1.14	1.10	0.04	1.08		
	T ₍₁₅₎	1.02	1.10	1.02	1.02	1.05	1.04	0.03	1.20		

I₍₀₎ is the light reading after the initial five minute incubation period

I₍₅₎ is the light reading five minutes after I₍₀₎

I₍₁₅₎ is the light reading fifteen minutes after I₍₀₎

C₍₀₎, R₍₀₎, and T₍₀₎ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

I₍₅₎:F_{c(mean)}/I_{c(mean)}: **102% YES**

I₍₁₅₎:F_{c(mean)}/I_{c(mean)}: **87% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 I_{T(mean)}/I_{C(mean)}: **82% YES**

S2 I_{T(mean)}/I_{C(mean)}: **93% YES**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites: RF-01-SS, SH-20-WS, OB-08-SS, OB-12-SS, OB-05-SS
Client: NewFields
Test Date: 11/14/08

Site	Light Reading								T _(mean) / C _(mean)	Quality Control Steps	
	Reading	Replicate					Mean	St.Dev.		F _{c(mean)} /I _{c(mean)}	I ₍₀₎ T _(mean) /I ₍₀₎ C _(mean)
		1	2	3	4	5					
CON	I ₍₀₎	95	95	99	96	95	96				
	I ₍₅₎	93	85	86	93	84	88			0.92	
	I ₍₁₅₎	78	82	81	83	79	81			0.84	
	C ₍₅₎	0.98	0.89	0.87	0.97	0.88	0.92	0.05			
	C ₍₁₅₎	0.82	0.86	0.82	0.86	0.83	0.84	0.02			
RF-01-SS-00	I ₍₀₎	90	93	92	88	88	90				0.94
	I ₍₅₎	87	93	94	93	89	91				
	I ₍₁₅₎	82	89	83	80	82	83				
	T ₍₅₎	0.97	1.00	1.02	1.06	1.01	1.01	0.03	1.10		
	T ₍₁₅₎	0.91	0.96	0.90	0.91	0.93	0.92	0.02	1.10		
SH-20-WS-00	I ₍₀₎	95	98	90	95	97	95				0.99
	I ₍₅₎	92	98	95	100	99	97				
	I ₍₁₅₎	83	95	83	94	93	90				
	T ₍₅₎	0.97	1.00	1.06	1.05	1.02	1.02	0.04	1.11		
	T ₍₁₅₎	0.87	0.97	0.92	0.99	0.96	0.94	0.05	1.12		
OB-08-SS-00	I ₍₀₎	87	93	89	87	87	89				0.92
	I ₍₅₎	87	93	89	92	86	89				
	I ₍₁₅₎	80	85	86	78	79	82				
	T ₍₅₎	1.00	1.00	1.00	1.06	0.99	1.01	0.03	1.10		
	T ₍₁₅₎	0.92	0.91	0.97	0.90	0.91	0.92	0.03	1.10		
OB-12-SS-00	I ₍₀₎	98	96	96	90	96	95				0.99
	I ₍₅₎	99	95	98	94	95	96				
	I ₍₁₅₎	87	88	91	85	88	88				
	T ₍₅₎	1.01	0.99	1.02	1.04	0.99	1.01	0.02	1.10		
	T ₍₁₅₎	0.89	0.92	0.95	0.94	0.92	0.92	0.02	1.10		
OB-05-SS-00	I ₍₀₎	51	50	46	51	45	49				0.51
	I ₍₅₎	43	42	38	42	39	41				
	I ₍₁₅₎	34	34	32	35	32	33				
	T ₍₅₎	0.45	0.44	0.40	0.44	0.41	0.43	0.02	0.46		
	T ₍₁₅₎	0.35	0.35	0.33	0.36	0.33	0.35	0.01	0.41		

I₍₀₎ is the light reading after the initial five minute incubation period

I₍₅₎ is the light reading five minutes after I₍₀₎

I₍₁₅₎ is the light reading fifteen minutes after I₍₀₎

C₍₀₎, R₍₀₎, and T₍₀₎ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

I₍₅₎:F_{c(mean)}/I_{c(mean)}: **92% YES**

I₍₁₅₎:F_{c(mean)}/I_{c(mean)}: **84% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 I_{T(mean)}/I_{C(mean)}: **94% YES**

S2 I_{T(mean)}/I_{C(mean)}: **99% YES**

S3 I_{T(mean)}/I_{C(mean)}: **92% YES**

S4 I_{T(mean)}/I_{C(mean)}: **99% YES**

S5 I_{T(mean)}/I_{C(mean)}: **51% NO**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

**Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites: RF-01-SS, OB-06-SS, OB-10-SS, OB-18-WS, SH-21-WS**

**Client: NewFields
Test Date: 11/14/08**

Site	Light Reading								$T_{(mean)}/C_{(mean)}$	Quality Control Steps	
	Reading	Replicate					Mean	St.Dev.		$F_{c(mean)}/I_{c(mean)}$	Evaluation of initial light output in site sediments
		1	2	3	4	5					
CON	$I_{(0)}$	100	107	101	101	99	102				
	$I_{(5)}$	93	95	94	93	88	93			0.91	
	$I_{(15)}$	83	84	85	83	85	84			0.83	
	$C_{(5)}$	0.93	0.89	0.93	0.92	0.89	0.91	0.02			
	$C_{(15)}$	0.83	0.79	0.84	0.82	0.86	0.83	0.03			
RF-01-SS-00	$I_{(0)}$	103	107	99	103	105	103				1.02
	$I_{(5)}$	101	108	101	106	107	105				
	$I_{(15)}$	96	99	94	98	100	97				
	$T_{(5)}$	0.98	1.01	1.02	1.03	1.02	1.01	0.02	1.11		
	$T_{(15)}$	0.93	0.93	0.95	0.95	0.95	0.94	0.01	1.14		
OB-06-SS-00	$I_{(0)}$	110	106	101	105	107	106				1.04
	$I_{(5)}$	116	109	111	107	108	110				
	$I_{(15)}$	99	102	100	100	99	100				
	$T_{(5)}$	1.05	1.03	1.10	1.02	1.01	1.04	0.04	1.14		
	$T_{(15)}$	0.90	0.96	0.99	0.95	0.93	0.95	0.03	1.14		
OB-10-SS-00	$I_{(0)}$	106	105	103	99	104	103				1.02
	$I_{(5)}$	108	107	111	104	102	106				
	$I_{(15)}$	105	100	103	94	102	101				
	$T_{(5)}$	1.02	1.02	1.08	1.05	0.98	1.03	0.04	1.13		
	$T_{(15)}$	0.99	0.95	1.00	0.95	0.98	0.97	0.02	1.18		
OB-18-WS-00	$I_{(0)}$	105	97	101	102	104	102				1.00
	$I_{(5)}$	107	102	107	105	106	105				
	$I_{(15)}$	101	93	101	97	99	98				
	$T_{(5)}$	1.02	1.05	1.06	1.03	1.02	1.04	0.02	1.14		
	$T_{(15)}$	0.96	0.96	1.00	0.95	0.95	0.96	0.02	1.17		
SH-21-WS-00	$I_{(0)}$	102	107	101	98	102	102				1.00
	$I_{(5)}$	103	108	108	99	102	104				
	$I_{(15)}$	94	101	99	91	94	96				
	$T_{(5)}$	1.01	1.01	1.07	1.01	1.00	1.02	0.03	1.12		
	$T_{(15)}$	0.92	0.94	0.98	0.93	0.92	0.94	0.02	1.14		

$I_{(0)}$ is the light reading after the initial five minute incubation period

$I_{(5)}$ is the light reading five minutes after $I_{(0)}$

$I_{(15)}$ is the light reading fifteen minutes after $I_{(0)}$

$C_{(0)}$, $R_{(0)}$, and $T_{(0)}$ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

$I_{(5)}:F_{c(mean)}/I_{c(mean)}$: **91% YES**

$I_{(15)}:F_{c(mean)}/I_{c(mean)}$: **83% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 $I_{T(mean)}/I_{C(mean)}$: **102% YES**

S2 $I_{T(mean)}/I_{C(mean)}$: **104% YES**

S3 $I_{T(mean)}/I_{C(mean)}$: **102% YES**

S4 $I_{T(mean)}/I_{C(mean)}$: **100% YES**

S5 $I_{T(mean)}/I_{C(mean)}$: **100% YES**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

**Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites: RF-01-SS, OB-09-SS, OB-11-SS, OB-19-WS, SH-18-WS**

**Client: NewFields
Test Date: 11/14/08**

Site	Light Reading								$T_{(mean)}/C_{(mean)}$	Quality Control Steps	
	Reading	Replicate					Mean	St.Dev.		Change in control light readings compared to initial control	Evaluation of initial light output in site sediments
		1	2	3	4	5					
CON	$I_{(0)}$	97	94	104	96	99	98			0.93 0.85	
	$I_{(5)}$	90	86	98	89	93	91				
	$I_{(15)}$	84	81	88	79	85	83				
	$C_{(5)}$	0.93	0.91	0.94	0.93	0.94	0.93	0.01			
	$C_{(15)}$	0.87	0.86	0.85	0.82	0.86	0.85	0.02			
RF-01-SS-00	$I_{(0)}$	95	90	87	85	89	89			0.91	
	$I_{(5)}$	92	94	87	91	90	91				
	$I_{(15)}$	87	88	85	89	83	86				
	$T_{(5)}$	0.97	1.04	1.00	1.07	1.01	1.02	0.04	1.10		
	$T_{(15)}$	0.92	0.98	0.98	1.05	0.93	0.97	0.05	1.14		
OB-09-SS-00	$I_{(0)}$	90	93	88	87	87	89			0.91	
	$I_{(5)}$	90	93	88	87	83	88				
	$I_{(15)}$	85	92	83	83	82	85				
	$T_{(5)}$	1.00	1.00	1.00	1.00	0.95	0.99	0.02	1.07		
	$T_{(15)}$	0.94	0.99	0.94	0.95	0.94	0.95	0.02	1.12		
OB-11-SS-00	$I_{(0)}$	82	83	80	77	79	80			0.82	
	$I_{(5)}$	76	78	75	73	76	76				
	$I_{(15)}$	71	73	72	68	71	71				
	$T_{(5)}$	0.93	0.94	0.94	0.95	0.96	0.94	0.01	1.01		
	$T_{(15)}$	0.87	0.88	0.90	0.88	0.90	0.89	0.01	1.04		
OB-19-WS-00	$I_{(0)}$	83	84	85	82	83	83			0.85	
	$I_{(5)}$	82	83	88	82	81	83				
	$I_{(15)}$	79	79	84	78	77	79				
	$T_{(5)}$	0.99	0.99	1.04	1.00	0.98	1.00	0.02	1.07		
	$T_{(15)}$	0.95	0.94	0.99	0.95	0.93	0.95	0.02	1.12		
SH-18-WS-00	$I_{(0)}$	91	87	86	82	83	86			0.88	
	$I_{(5)}$	89	84	84	85	85	85				
	$I_{(15)}$	86	80	81	80	81	82				
	$T_{(5)}$	0.98	0.97	0.98	1.04	1.02	1.00	0.03	1.07		
	$T_{(15)}$	0.95	0.92	0.94	0.98	0.98	0.95	0.02	1.12		

$I_{(0)}$ is the light reading after the initial five minute incubation period

$I_{(5)}$ is the light reading five minutes after $I_{(0)}$

$I_{(15)}$ is the light reading fifteen minutes after $I_{(0)}$

$C_{(0)}$, $R_{(0)}$, and $T_{(0)}$ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

$I_{(5)}:F_{c(mean)}/I_{c(mean)}$: **93% YES**

$I_{(15)}:F_{c(mean)}/I_{c(mean)}$: **85% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 $I_{T(mean)}/I_{C(mean)}$: **91% YES**

S2 $I_{T(mean)}/I_{C(mean)}$: **91% YES**

S3 $I_{T(mean)}/I_{C(mean)}$: **82% YES**

S4 $I_{T(mean)}/I_{C(mean)}$: **85% YES**

S5 $I_{T(mean)}/I_{C(mean)}$: **88% YES**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites: RF-02-SS, SH-28-WS, SH-09-SS, SH-04-SS, SH-14-SS
Client: NewFields
Test Date: 11/26/08

Site	Light Reading								T _(mean) / C _(mean)	Quality Control Steps	
	Reading	Replicate					Mean	St.Dev.		F _{c(mean)} /I _{c(mean)}	Evaluation of initial light output in site sediments
		1	2	3	4	5					
CON	I ₍₀₎	95	97	98	96	99	97				
	I ₍₅₎	90	94	96	90	93	93			0.95	
	I ₍₁₅₎	82	89	96	88	91	89			0.92	
	C ₍₅₎	0.95	0.97	0.98	0.94	0.94	0.95	0.02			
	C ₍₁₅₎	0.86	0.92	0.98	0.92	0.92	0.92	0.04			
RF-02-SS-00	I ₍₀₎	65	65	64	64	64	64				0.66
	I ₍₅₎	60	60	55	58	57	58				
	I ₍₁₅₎	55	54	50	52	55	53				
	T ₍₅₎	0.62	0.62	0.57	0.60	0.59	0.60	0.02	0.63		
	T ₍₁₅₎	0.57	0.56	0.52	0.54	0.57	0.55	0.02	0.60		
SH-28-WS-00	I ₍₀₎	94	89	86	89	87	89				0.92
	I ₍₅₎	95	89	87	90	88	90				
	I ₍₁₅₎	89	85	84	87	85	86				
	T ₍₅₎	1.01	1.00	1.01	1.01	1.01	1.01	0.01	1.06		
	T ₍₁₅₎	0.95	0.96	0.98	0.98	0.98	0.97	0.01	1.05		
SH-09-SS-00	I ₍₀₎	88	89	87	87	87	88				0.90
	I ₍₅₎	90	90	87	86	88	88				
	I ₍₁₅₎	85	90	86	83	86	86				
	T ₍₅₎	1.02	1.01	1.00	0.99	1.01	1.01	0.01	1.05		
	T ₍₁₅₎	0.97	1.01	0.99	0.95	0.99	0.98	0.02	1.07		
SH-04-SS-00	I ₍₀₎	85	88	88	86	85	86				0.89
	I ₍₅₎	83	90	86	87	87	87				
	I ₍₁₅₎	80	87	83	86	83	84				
	T ₍₅₎	0.98	1.02	0.98	1.01	1.02	1.00	0.02	1.05		
	T ₍₁₅₎	0.94	0.99	0.94	1.00	0.98	0.97	0.03	1.06		
SH-14-SS-00	I ₍₀₎	83	85	80	84	88	84				0.87
	I ₍₅₎	87	87	83	87	90	87				
	I ₍₁₅₎	89	87	81	88	88	87				
	T ₍₅₎	1.05	1.02	1.04	1.04	1.02	1.03	0.01	1.08		
	T ₍₁₅₎	1.07	1.02	1.01	1.05	1.00	1.03	0.03	1.12		

I₍₀₎ is the light reading after the Initial five minute incubation period

I₍₅₎ is the light reading five minutes after I₍₀₎

I₍₁₅₎ is the light reading fifteen minutes after I₍₀₎

C₍₀₎, R₍₀₎, and T₍₀₎ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

I₍₅₎: F_{c(mean)}/I_{c(mean)}: **95% YES**

I₍₁₅₎: F_{c(mean)}/I_{c(mean)}: **92% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 I_{T(mean)}/I_{C(mean)}: **66% NO**

S2 I_{T(mean)}/I_{C(mean)}: **92% YES**

S3 I_{T(mean)}/I_{C(mean)}: **90% YES**

S4 I_{T(mean)}/I_{C(mean)}: **89% YES**

S5 I_{T(mean)}/I_{C(mean)}: **87% YES**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

**Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites RF-02-SS, SH-11-SS, OB-02-SS, SH-19-WS, OB-03-SS**

**Client: NewFields
Test Date: 11/26/08**

Site	Light Reading							T _(mean) / C _(mean)	Quality Control Steps		
	Reading	Replicate					Mean		St.Dev.	Change in control light readings compared to initial control F _{C(mean)/I_{C(mean)}}	Evaluation of initial light output in site sediments I _{(0)T_(mean)/I_{(0)C_(mean)}}
		1	2	3	4	5					
CON	I ₍₀₎	93	96	93	93	92	93				
	I ₍₅₎	89	89	87	90	89	89		0.95		
	I ₍₁₅₎	87	81	80	81	85	83		0.89		
	C ₍₅₎	0.96	0.93	0.94	0.97	0.97	0.95	0.02			
	C ₍₁₅₎	0.94	0.84	0.86	0.87	0.92	0.89	0.04			
RF-02-SS-00	I ₍₀₎	66	67	64	56	67	64			0.69	
	I ₍₅₎	61	62	57	50	63	59				
	I ₍₁₅₎	57	57	51	43	57	53				
	T ₍₅₎	0.65	0.66	0.61	0.54	0.67	0.63	0.06	0.66		
	T ₍₁₅₎	0.61	0.61	0.55	0.46	0.61	0.57	0.07	0.64		
SH-11-SS-00	I ₍₀₎	95	85	90	86	83	88			0.94	
	I ₍₅₎	95	87	88	85	83	88				
	I ₍₁₅₎	91	86	87	79	80	85				
	T ₍₅₎	1.00	1.02	0.98	0.99	1.00	1.00	0.02	1.05		
	T ₍₁₅₎	0.96	1.01	0.97	0.92	0.96	0.96	0.03	1.09		
OB-02-SS-00	I ₍₀₎	91	92	86	85	84	88			0.94	
	I ₍₅₎	91	89	92	86	89	89				
	I ₍₁₅₎	82	92	90	79	87	86				
	T ₍₅₎	1.00	0.97	1.07	1.01	1.06	1.02	0.04	1.07		
	T ₍₁₅₎	0.90	1.00	1.05	0.93	1.04	0.98	0.06	1.11		
SH-19-WS-00	I ₍₀₎	91	90	88	83	84	87			0.93	
	I ₍₅₎	92	89	89	86	87	89				
	I ₍₁₅₎	88	81	88	86	81	85				
	T ₍₅₎	1.01	0.99	1.01	1.04	1.04	1.02	0.02	1.07		
	T ₍₁₅₎	0.97	0.90	1.00	1.04	0.96	0.97	0.05	1.10		
OB-03-SS-00	I ₍₀₎	91	93	86	83	92	89			0.95	
	I ₍₅₎	92	99	87	85	95	92				
	I ₍₁₅₎	92	97	84	82	92	89				
	T ₍₅₎	1.01	1.06	1.02	1.02	1.03	1.03	0.02	1.08		
	T ₍₁₅₎	1.01	1.04	0.99	0.99	1.00	1.01	0.02	1.13		

I₍₀₎ is the light reading after the initial five minute incubation period

I₍₅₎ is the light reading five minutes after I₍₀₎

I₍₁₅₎ is the light reading fifteen minutes after I₍₀₎

C₍₀₎, R₍₀₎, and T₍₀₎ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

I₍₅₎: F_{C(mean)/I_{C(mean)}}: **95% YES**

I₍₁₅₎: F_{C(mean)/I_{C(mean)}}: **89% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 I_{T(mean)/I_{C(mean)}}: **69% NO**

S2 I_{T(mean)/I_{C(mean)}}: **94% YES**

S3 I_{T(mean)/I_{C(mean)}}: **94% YES**

S4 I_{T(mean)/I_{C(mean)}}: **93% YES**

S5 I_{T(mean)/I_{C(mean)}}: **95% YES**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites: RF-02-SS, SH-24-WS, SH-02-SS, SH-23-WS, SH-25-WS

Client: NewFields

Test Date: 11/26/08

Site	Light Reading								T _(mean) / C _(mean)	Quality Control Steps Change in control light readings compared to initial control F _{C(mean)/C(mean)}	Evaluation of initial light output in site sediments (0)T _{(mean)/I₍₀₎C_(mean)}
	Reading	Replicate					Mean	St.Dev.			
		1	2	3	4	5					
CON	I ₍₀₎	96	95	94	95	97	95				
	I ₍₅₎	89	89	86	87	93	89			0.93	
	I ₍₁₅₎	81	81	80	81	80	81			0.84	
	C ₍₅₎	0.93	0.94	0.91	0.92	0.96	0.93	0.02			
	C ₍₁₅₎	0.84	0.85	0.85	0.85	0.82	0.84	0.01			
RF-02-SS-00	I ₍₀₎	64	64	57	68	64	63				0.66
	I ₍₅₎	57	56	50	60	55	56				
	I ₍₁₅₎	53	50	44	53	46	49				
	T ₍₅₎	0.60	0.59	0.52	0.63	0.58	0.58	0.04	0.63		
	T ₍₁₅₎	0.56	0.52	0.46	0.56	0.48	0.52	0.04	0.61		
SH-24-WS-00	I ₍₀₎	102	91	98	95	95	96				1.01
	I ₍₅₎	98	90	98	93	92	94				
	I ₍₁₅₎	97	87	93	91	90	92				
	T ₍₅₎	0.96	0.99	1.00	0.98	0.97	0.98	0.02	1.05		
	T ₍₁₅₎	0.95	0.96	0.95	0.96	0.95	0.95	0.00	1.13		
SH-02-SS-00	I ₍₀₎	97	93	92	92	91	93				0.97
	I ₍₅₎	95	96	92	94	92	94				
	I ₍₁₅₎	92	92	90	92	88	91				
	T ₍₅₎	0.98	1.03	1.00	1.02	1.01	1.01	0.02	1.08		
	T ₍₁₅₎	0.95	0.99	0.98	1.00	0.97	0.98	0.02	1.16		
SH-23-WS-00	I ₍₀₎	92	92	97	91	87	92				0.96
	I ₍₅₎	94	94	100	92	91	94				
	I ₍₁₅₎	93	92	98	90	91	93				
	T ₍₅₎	1.02	1.02	1.03	1.01	1.05	1.03	0.01	1.10		
	T ₍₁₅₎	1.01	1.00	1.01	0.99	1.05	1.01	0.02	1.20		
SH-25-WS-00	I ₍₀₎	87	87	82	90	91	87				0.92
	I ₍₅₎	91	92	83	91	91	90				
	I ₍₁₅₎	91	92	80	87	88	88				
	T ₍₅₎	1.05	1.06	1.01	1.01	1.00	1.03	0.02	1.10		
	T ₍₁₅₎	1.05	1.06	0.98	0.97	0.97	1.00	0.05	1.19		

I₍₀₎ is the light reading after the initial five minute incubation period

I₍₅₎ is the light reading five minutes after I₍₀₎

I₍₁₅₎ is the light reading fifteen minutes after I₍₀₎

C₍₀₎, R₍₀₎, and T₍₀₎ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

I₍₅₎: F_{C(mean)/C(mean)}: **93% YES**

I₍₁₅₎: F_{C(mean)/C(mean)}: **84% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 I_{T(mean)/I_{C(mean)}}: **66% NO**

S2 I_{T(mean)/I_{C(mean)}}: **101% YES**

S3 I_{T(mean)/I_{C(mean)}}: **97% YES**

S4 I_{T(mean)/I_{C(mean)}}: **96% YES**

S5 I_{T(mean)/I_{C(mean)}}: **92% YES**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites: RF-02-SS, OB-13-SS, SH-03-SS, OB-17-WS, OB-14-SS
Client: NewFields
Test Date: 11/26/08

Site	Light Reading								$T_{(mean)}/C_{(mean)}$	Quality Control Steps	
	Reading	Replicate					Mean	St.Dev.		$F_{c(mean)}/I_{c(mean)}$	Evaluation of initial light output in site sediments
		1	2	3	4	5					
CON	$I_{(0)}$	102	101	93	97	87	96				
	$I_{(5)}$	91	90	89	89	79	88			0.91	
	$I_{(15)}$	83	91	82	80	74	82			0.85	
	$C_{(5)}$	0.89	0.89	0.96	0.92	0.91	0.91	0.03			
	$C_{(15)}$	0.81	0.90	0.88	0.82	0.85	0.85	0.04			
RF-02-SS-00	$I_{(0)}$	56	63	66	64	55	61				0.63
	$I_{(5)}$	48	55	59	55	49	53				
	$I_{(15)}$	42	50	56	49	45	48				
	$T_{(5)}$	0.50	0.57	0.61	0.57	0.51	0.55	0.05	0.61		
	$T_{(15)}$	0.44	0.52	0.58	0.51	0.47	0.50	0.06	0.59		
OB-13-SS-00	$I_{(0)}$	91	94	89	92	94	92				0.96
	$I_{(5)}$	84	85	85	84	86	85				
	$I_{(15)}$	78	80	78	80	80	79				
	$T_{(5)}$	0.92	0.90	0.96	0.91	0.91	0.92	0.02	1.01		
	$T_{(15)}$	0.86	0.85	0.88	0.87	0.85	0.86	0.01	1.01		
SH-03-SS-00	$I_{(0)}$	91	93	88	93	89	91				0.95
	$I_{(5)}$	86	89	84	92	85	87				
	$I_{(15)}$	83	83	80	89	83	84				
	$T_{(5)}$	0.95	0.96	0.95	0.99	0.96	0.96	0.02	1.05		
	$T_{(15)}$	0.91	0.89	0.91	0.96	0.93	0.92	0.02	1.08		
OB-17-WS-00	$I_{(0)}$	98	93	94	92	90	93				0.97
	$I_{(5)}$	91	89	89	90	88	89				
	$I_{(15)}$	84	87	84	82	86	85				
	$T_{(5)}$	0.93	0.96	0.95	0.98	0.98	0.96	0.02	1.05		
	$T_{(15)}$	0.86	0.94	0.89	0.89	0.96	0.91	0.04	1.06		
OB-14-SS-00	$I_{(0)}$	93	96	91	89	98	93				0.97
	$I_{(5)}$	88	87	89	87	94	89				
	$I_{(15)}$	82	89	83	80	87	84				
	$T_{(5)}$	0.95	0.91	0.98	0.98	0.96	0.95	0.03	1.04		
	$T_{(15)}$	0.88	0.93	0.91	0.90	0.89	0.90	0.02	1.06		

$I_{(0)}$ is the light reading after the initial five minute incubation period

$I_{(5)}$ is the light reading five minutes after $I_{(0)}$

$I_{(15)}$ is the light reading fifteen minutes after $I_{(0)}$

$C_{(0)}$, $R_{(0)}$, and $T_{(0)}$ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

$I_{(5)} \cdot F_{c(mean)}/I_{c(mean)}$: **91% YES**

$I_{(15)} \cdot F_{c(mean)}/I_{c(mean)}$: **85% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 $I_{T(mean)}/I_{C(mean)}$: **63% NO**

S2 $I_{T(mean)}/I_{C(mean)}$: **96% YES**

S3 $I_{T(mean)}/I_{C(mean)}$: **95% YES**

S4 $I_{T(mean)}/I_{C(mean)}$: **97% YES**

S5 $I_{T(mean)}/I_{C(mean)}$: **97% YES**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

**Appendix Table A. Microtox 100 Percent Sediment Porewater Test
Sites:RF-02-SS, SH-13-SS, OB-04-SS, SH-07-SS, SH-12-SS**

**Client: NewFields
Test Date: 11/26/08**

Site	Light Reading								T _(mean) / C _(mean)	Quality Control Steps Change in control light readings compared to initial control F _{C(mean)/I_{C(mean)}}	Evaluation of initial light output in site sediments (0)T _{(mean)/I₀C_(mean)}
	Reading	Replicate					Mean	St.Dev.			
		1	2	3	4	5					
CON	I ₍₀₎	92	96	94	86	94	92				
	I ₍₅₎	85	84	83	76	85	83		0.89		
	I ₍₁₅₎	78	75	78	72	79	76		0.83		
	C ₍₅₎	0.92	0.88	0.88	0.88	0.90	0.89	0.02			
	C ₍₁₅₎	0.85	0.78	0.83	0.84	0.84	0.83	0.03			
RF-02-SS-00	I ₍₀₎	63	57	58	64	61	61				0.66
	I ₍₅₎	56	50	52	57	52	53				
	I ₍₁₅₎	47	43	45	49	44	46				
	T ₍₅₎	0.61	0.54	0.56	0.62	0.56	0.58	0.03	0.65		
	T ₍₁₅₎	0.51	0.47	0.49	0.53	0.48	0.49	0.03	0.60		
SH-13-SS-00	I ₍₀₎	83	85	84	87	89	86				0.93
	I ₍₅₎	78	81	79	83	83	81				
	I ₍₁₅₎	72	76	73	77	76	75				
	T ₍₅₎	0.94	0.95	0.94	0.95	0.93	0.94	0.01	1.06		
	T ₍₁₅₎	0.87	0.89	0.87	0.89	0.85	0.87	0.02	1.06		
OB-04-SS-00	I ₍₀₎	89	84	81	85	83	84				0.91
	I ₍₅₎	85	83	77	84	82	82				
	I ₍₁₅₎	78	76	71	77	77	76				
	T ₍₅₎	0.96	0.99	0.95	0.99	0.99	0.97	0.02	1.09		
	T ₍₁₅₎	0.88	0.90	0.88	0.91	0.93	0.90	0.02	1.09		
SH-07-SS-00	I ₍₀₎	92	90	89	90	85	89				0.97
	I ₍₅₎	90	86	84	86	78	85				
	I ₍₁₅₎	84	76	76	77	71	77				
	T ₍₅₎	0.98	0.96	0.94	0.96	0.92	0.95	0.02	1.06		
	T ₍₁₅₎	0.91	0.84	0.85	0.86	0.84	0.88	0.03	1.04		
SH-12-SS-00	I ₍₀₎	89	91	87	90	86	89				0.96
	I ₍₅₎	87	86	82	85	83	85				
	I ₍₁₅₎	79	78	75	77	73	76				
	T ₍₅₎	0.98	0.95	0.94	0.94	0.97	0.95	0.02	1.07		
	T ₍₁₅₎	0.89	0.86	0.86	0.86	0.85	0.86	0.01	1.04		

I₍₀₎ is the light reading after the initial five minute incubation period

I₍₅₎ is the light reading five minutes after I₍₀₎

I₍₁₅₎ is the light reading fifteen minutes after I₍₀₎

C₍₀₎, R₍₀₎, and T₍₀₎ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

I₍₅₎:F_{C(mean)/I_{C(mean)}: **89% YES**}

I₍₁₅₎:F_{C(mean)/I_{C(mean)}: **83% YES**}

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 I_{T(mean)/I_{C(mean)}: **66% NO**}

S2 I_{T(mean)/I_{C(mean)}: **93% YES**}

S3 I_{T(mean)/I_{C(mean)}: **91% YES**}

S4 I_{T(mean)/I_{C(mean)}: **97% YES**}

S5 I_{T(mean)/I_{C(mean)}: **96% YES**}

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

**Appendix Table A. Microtox 100 Percent Sediment Porewater Test
 Sites RF-02-SS, SH-06-SS
 Client: NewFields
 Test Date: 11/26/08**

Site	Light Reading								$T_{(mean)}/C_{(mean)}$	Quality Control Steps	
	Reading	Replicate					Mean	St.Dev.		Change in control light readings compared to initial control $F_{c(mean)}/I_{c(mean)}$	Evaluation of initial light output in site sediments $I_{(0)T(mean)}/I_{(0)C(mean)}$
		1	2	3	4	5					
CON	$I_{(0)}$	93	95	98	98	97	96			0.95 0.83	
	$I_{(5)}$	90	90	94	92	89	91				
	$I_{(15)}$	78	78	81	82	81	80				
	$C_{(5)}$	0.97	0.95	0.96	0.94	0.92	0.95	0.02			
	$C_{(15)}$	0.84	0.82	0.83	0.84	0.84	0.83	0.01			
RF-02-SS-00	$I_{(0)}$	71	65	67	62	70	67			0.70	
	$I_{(5)}$	66	59	62	59	65	62				
	$I_{(15)}$	54	57	52	49	56	54				
	$T_{(5)}$	0.69	0.61	0.64	0.61	0.68	0.65	0.03	0.68		
	$T_{(15)}$	0.56	0.59	0.54	0.51	0.58	0.56	0.03	0.67		
SH-06-SS-00	$I_{(0)}$	91	87	83	86	90	87			0.91	
	$I_{(5)}$	97	97	92	88	90	93				
	$I_{(15)}$	87	89	85	85	90	87				
	$T_{(5)}$	1.07	1.11	1.11	1.02	1.00	1.06	0.05	1.12		
	$T_{(15)}$	0.96	1.02	1.02	0.99	1.00	1.00	0.03	1.20		

$I_{(0)}$ is the light reading after the initial five minute incubation period

$I_{(5)}$ is the light reading five minutes after $I_{(0)}$

$I_{(15)}$ is the light reading fifteen minutes after $I_{(0)}$

$C_{(0)}$, $R_{(0)}$, and $T_{(0)}$ are the changes in light readings from the initial reading in each sample container for the control, reference sediment

Quality Control Steps:

1. Is control final mean output greater than or equal to 72% control initial mean output?

$I_{(5)}: F_{c(mean)}/I_{c(mean)}$: **95% YES**

$I_{(15)}: F_{c(mean)}/I_{c(mean)}$: **83% YES**

YES: Control results are acceptable and can be used for statistical analyses.

NO: Control results are unacceptable (retest required because there is no reference sediment to use instead of control).

2. Are test initial mean values greater than or equal to 80% of control initial mean values?

S1 $I_{T(mean)}/I_{C(mean)}$: **70% NO**

S2 $I_{T(mean)}/I_{C(mean)}$: **91% YES**

YES: Use initial site values to calculate change in final light readings

NO: Use control initial mean value to calculate change in final light readings for each site.

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Raw Data Sheet
 Microtox
 100% Sediment Porewater Toxicity

Client Name: Newfield Test Date: 11/6/08

Sample ID: RF-03-SS, OB-07-SS, SH-27-WS Test No.: 6811 - T071 → 084 - T074
SH-29-WS, SH-30-WS

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	92	92	87	91	90
	I ₍₅₎	10min	86	85	80	86	79
	I ₍₁₅₎	20 min	77	77	75	76	70
RF-03-SS	I ₍₀₎	5 min	76	76	71	75	71
	I ₍₅₎	10min	69	77	72	73	72
	I ₍₁₅₎	20 min	70	78	70	70	74
OB-07-SS	I ₍₀₎	5 min	90	88	82	81	84
	I ₍₅₎	10min	90	91	87	85	87
	I ₍₁₅₎	20 min	86	85	84	89	85
SH-27-WS	I ₍₀₎	5 min	88	89	91	91	82
	I ₍₅₎	10min	84	88	93	92	84
	I ₍₁₅₎	20 min	80	89	82	88	83
SH-29-WS	I ₍₀₎	5 min	78	81	76	75	72
	I ₍₅₎	10min	84	85	79	82	76
	I ₍₁₅₎	20 min	82	85	77	82	79
SH-30-WS	I ₍₀₎	5 min	87	88	84	80	81
	I ₍₅₎	10min	92	92	86	86	88
	I ₍₁₅₎	20 min	85	89	79	81	84

Comments: _____

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Raw Data Sheet
 Microtox
 100% Sediment Porewater Toxicity

Client Name: Newfields Test Date: 11/6/08

Sample ID: ~~RF-03-SS, HI-06-SS~~ RF-03-SS, HI-06-SS Test No.: 0811-T066 → 0811-T670
HI-02-SS, HI-03-SS, HI-04-SS

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	95	94	97	97	94
	I ₍₅₎	10min	95	93	96	98	96
	I ₍₁₅₎	20 min	93	97	96	95	88
RF-03	I ₍₀₎	5 min	85	83	81	83	86
	I ₍₅₎	10min	88	89	83	88	89
	I ₍₁₅₎	20 min	90	94	86	88	87
HI-06-SS	I ₍₀₎	5 min	94	97	92	94	90
	I ₍₅₎	10min	101	99	94	96	96
	I ₍₁₅₎	20 min	101	101	94	106	108
HI-02-SS	I ₍₀₎	5 min	92	89	93	90	90
	I ₍₅₎	10min	104	97	100	92	93
	I ₍₁₅₎	20 min	109	102	104	95	96
HI-03-SS	I ₍₀₎	5 min	91	91	98	94	93
	I ₍₅₎	10min	101	99	105	98	99
	I ₍₁₅₎	20 min	98	94	103	99	98
HI-04-SS	I ₍₀₎	5 min	90	88	87	85	87
	I ₍₅₎	10min	105	98	96	101	101
	I ₍₁₅₎	20 min	112	106	103	101	108

Comments: _____

Client Name: Newfields Test Date: 11/10/08

Sample ID: RF-03, SH-26-W5, HI-05-SS Test No.: 0811-T080 → 0811-T083
HI-07-SS, SH-01-SS

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	96	88	94	87	90
	I ₍₅₎	10min	86	79	86	79	83
	I ₍₁₅₎	20 min	81	72	81	72	75
RF-03	I ₍₀₎	5 min	69	64	66	60	62
	I ₍₅₎	10min	67	64	62	59	62
	I ₍₁₅₎	20 min	64	60	59	58	59
SH-26-W5	I ₍₀₎	5 min	79	79	82	78	73
	I ₍₅₎	10min	80	76	82	79	74
	I ₍₁₅₎	20 min	76	72	76	74	71
HI-05-SS	I ₍₀₎	5 min	84	78	81	77	82
	I ₍₅₎	10min	83	77	79	77	80
	I ₍₁₅₎	20 min	79	72	75	72	81
HI-07-SS	I ₍₀₎	5 min	84	83	80	75	78
	I ₍₅₎	10min	82	79	76	75	77
	I ₍₁₅₎	20 min	81	81	75	72	74
SH-01-SS	I ₍₀₎	5 min	78	77	79	81	72
	I ₍₅₎	10min	78	78	75	81	74
	I ₍₁₅₎	20 min	72	76	74	78	72

Comments: _____

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Raw Data Sheet
 Microtox
 100% Sediment Porewater Toxicity

Client Name: Newfields Test Date: 11/10/08

Sample ID: RF-03, SH-16-SS, SH-15-SS Test No.: 0811 - T076 → 0811 - T679
OB-01-SS, SH-10-SS

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	92	97	94	100	100
	I ₍₅₎	10min	86	91	92	90	92
	I ₍₁₅₎	20 min	77	82	83	84	81
RF-03	I ₍₀₎	5 min	75	79	74	77	77
	I ₍₅₎	10min	73	79	74	76	77
	I ₍₁₅₎	20 min	70	75	70	73	74
SH-16-SS	I ₍₀₎	5 min	89	94	95	91	93
	I ₍₅₎	10min	89	92	97	97	90
	I ₍₁₅₎	20 min	82	90	89	86	85
SH-15-SS	I ₍₀₎	5 min	104	99	100	96	90
	I ₍₅₎	10min	106	97	101	96	92
	I ₍₁₅₎	20 min	104	97	93	93	87
OB-01-SS	I ₍₀₎	5 min	94	96	101	93	97
	I ₍₅₎	10min	92	96	98	92	93
	I ₍₁₅₎	20 min	87	93	91	84	93
SH-10-SS	I ₍₀₎	5 min	100	91	98	94	92
	I ₍₅₎	10min	104	96	99	95	96
	I ₍₁₅₎	20 min	97	88	94	91	93

Comments: _____

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Raw Data Sheet
 Microtox
 100% Sediment Porewater Toxicity

Client Name: Newfields Test Date: 11/10/08

Sample ID: RF-03, SH-22-55 Test No.: 05811-T075

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	94	94	91	92	88
	I ₍₅₎	10min	92	99	92	92	91
	I ₍₁₅₎	20 min	82	85	81	79	73
RF-03	I ₍₀₎	5 min	79	72	75	74	75
	I ₍₅₎	10min	77	75	74	73	75
	I ₍₁₅₎	20 min	70	69	71	68	70
SH-22-55	I ₍₀₎	5 min	86	84	85	89	83
	I ₍₅₎	10min	97	91	91	94	95
	I ₍₁₅₎	20 min	88	92	87	91	87
	I ₍₀₎	5 min					
	I ₍₅₎	10min					
	I ₍₁₅₎	20 min					
	I ₍₀₎	5 min					
	I ₍₅₎	10min					
	I ₍₁₅₎	20 min					
	I ₍₀₎	5 min					
	I ₍₅₎	10min					
	I ₍₁₅₎	20 min					

Comments: _____

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Raw Data Sheet
 Microtox
 100% Sediment Porewater Toxicity

Client Name: Newfields

Test Date: 11/14/09

Sample ID: RF-01, SH-20-WS, OB-08-SS
OB-12-SS, OB-05-SS

Test No.: 6811 - T089 → 0811 - T092

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	95	95	99	96	95
	I ₍₅₎	10min	93	85	86	93	84
	I ₍₁₅₎	20 min	78	82	81	83	79
RF-01	I ₍₀₎	5 min	90	93	92	88	88
	I ₍₅₎	10min	87	93	94	93	89
	I ₍₁₅₎	20 min	82	89	83	80	82
SH-20-WS	I ₍₀₎	5 min	95	98	90	95	97
	I ₍₅₎	10min	92	98	95	100	99
	I ₍₁₅₎	20 min	83	95	83	94	93
OB-08-SS	I ₍₀₎	5 min	87	93	89	87	87
	I ₍₅₎	10min	87	93	89	92	86
	I ₍₁₅₎	20 min	80	85	86	78	79
OB-12-SS	I ₍₀₎	5 min	98	96	96	90	96
	I ₍₅₎	10min	99	95	98	94	95
	I ₍₁₅₎	20 min	87	88	91	85	88
OB-05-SS	I ₍₀₎	5 min	51	50	46	51	45
	I ₍₅₎	10min	43	42	38	42	39
	I ₍₁₅₎	20 min	34	34	32	35	32

Comments:

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Raw Data Sheet
 Microtox
 100% Sediment Porewater Toxicity

Client Name: Newfields Test Date: 11/14/08
 Sample ID: RF-01, OB-06-SS, OB-10-SS Test No.: 0811-T084 → 0811-T088
OB-18-WS, SH-21-WS

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	100	107	101	101	99
	I ₍₅₎	10min	93	95	94	93	88
	I ₍₁₅₎	20 min	83	84	85	83	85
RF-01	I ₍₀₎	5 min	103	107	99	103	105
	I ₍₅₎	10min	101	108	101	106	107
	I ₍₁₅₎	20 min	96	99	94	98	100
OB-06-SS	I ₍₀₎	5 min	110	106	101	105	107
	I ₍₅₎	10min	116	109	111	107	108
	I ₍₁₅₎	20 min	99	102	100	100	99
OB-10-SS	I ₍₀₎	5 min	106	105	103	99	104
	I ₍₅₎	10min	108	107	111	104	102
	I ₍₁₅₎	20 min	105	100	103	94	102
OB-18-WS	I ₍₀₎	5 min	105	97	101	102	104
	I ₍₅₎	10min	107	102 102	107	105	106
	I ₍₁₅₎	20 min	101	93	101	97	99
SH-21-WS	I ₍₀₎	5 min	102	107	101	98	102
	I ₍₅₎	10min	103	108	108	99	102
	I ₍₁₅₎	20 min	94	101	99	91	94

Comments: _____

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Raw Data Sheet
 Microtox
 100% Sediment Porewater Toxicity

Client Name:

Newfields

Test Date:

11/14/08

Sample ID:

RF-01, OB-09-SS, OB-11-SS
OB-19-WS, SH-18-WS

Test No.:

0811-T093 → 0811-T094

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	97	94	104	96	99
	I ₍₅₎	10min	90	86	98	89	93
	I ₍₁₅₎	20 min	84	81	88	79	85
RF-01	I ₍₀₎	5 min	95	90	87	85	89
	I ₍₅₎	10min	92	94	87	91	90
	I ₍₁₅₎	20 min	87	88	85	89	83
OB-09-SS	I ₍₀₎	5 min	90	93	88	87	87
	I ₍₅₎	10min	90	93	88	87	83
	I ₍₁₅₎	20 min	85	92	83	83	82
OB-11-SS	I ₍₀₎	5 min	82	83	80	77	79
	I ₍₅₎	10min	76	78	75	73	76
	I ₍₁₅₎	20 min	71	73	72	68	71
OB-19-WS	I ₍₀₎	5 min	83	84	85	82	83
	I ₍₅₎	10min	82	83	88	82	81
	I ₍₁₅₎	20 min	79	79	84	78	77
SH-18-WS	I ₍₀₎	5 min	91	87	86	82	83
	I ₍₅₎	10min	89	84	84	85	85
	I ₍₁₅₎	20 min	86	80	81	80	81

Comments:

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Raw Data Sheet
 Microtox
 100% Sediment Porewater Toxicity

Client Name: Newfields Test Date: 11/26/08
 Sample ID: RF-02, SH-28-WS, SH-09-SS, SH-04-SS, SH-14-SS Test No.: 0812-Total-Total

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	95	97	98	96	99
	I ₍₅₎	10min	90	94	96	90	93
	I ₍₁₅₎	20 min	82	89	96	88	91
RF-02 #1	I ₍₀₎	5 min	65	65	64	64	64
	I ₍₅₎	10min	60	60	55	58	57
	I ₍₁₅₎	20 min	55	54	50	52	55
SH-28-WS SH-25	I ₍₀₎	5 min	94	89	86	89	87
	I ₍₅₎	10min	95	89	87	90	88
	I ₍₁₅₎	20 min	89	85	84	87	85
SH-09-SS	I ₍₀₎	5 min	88	89	87	87	87
	I ₍₅₎	10min	90	90	87	86	88
	I ₍₁₅₎	20 min	85	90	86	83	86
SH-04-SS	I ₍₀₎	5 min	85	88	88	86	85
	I ₍₅₎	10min	83	90	86	87	87
	I ₍₁₅₎	20 min	80	87	83	86	83
SH-14-SS	I ₍₀₎	5 min	83	85	80	84	88
	I ₍₅₎	10min	87	87	83	87	90
	I ₍₁₅₎	20 min	89	87	81	88	88

Comments: _____

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Raw Data Sheet
 Microtox
 100% Sediment Porewater Toxicity

Client Name: Newfields Test Date: 11/26/08

Sample ID: RF-02, SH-11-SS, OB-02-SS Test No.: 0812-7021-7042
SH-19-WS, OB-03-SS

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	93	96	93	93	92
	I ₍₅₎	10min	89	89	87	90	89
	I ₍₁₅₎	20 min	87	81	80	81	85
RF-02 #1	I ₍₀₎	5 min	66	67	64	56	67
	I ₍₅₎	10min	61	62	57	50	63
	I ₍₁₅₎	20 min	57	57	51	43	57
SH-11-SS	I ₍₀₎	5 min	95	85	90	86	83
	I ₍₅₎	10min	95	87	88	85	83
	I ₍₁₅₎	20 min	91 91	86	87	79	80
OB-02-SS	I ₍₀₎	5 min	91	92	86	85	84
	I ₍₅₎	10min	91	89	92	86	89
	I ₍₁₅₎	20 min	82	92	90	79	87
SH-19-WS	I ₍₀₎	5 min	91	90	88	83	84
	I ₍₅₎	10min	92	89	89	86	87
	I ₍₁₅₎	20 min	88	81	88	86	81
OB-03-SS	I ₍₀₎	5 min	91	93	85	83	92
	I ₍₅₎	10min	92	99	87	85	95
	I ₍₁₅₎	20 min	92	97	84	82	92

Comments: _____

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Raw Data Sheet
 Microtox
 100% Sediment Porewater Toxicity

Client Name: Newfields Test Date: 11/26/08

Sample ID: RF-02, SH-24-WS, SH-02-SS Test No.: 0812-T021-T042
SH-23-WS, SH-25-WS

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	96	95	94	95	97
	I ₍₅₎	10min	89	89	86	87	93
	I ₍₁₅₎	20 min	81	81	80	81	80
RF-02#1	I ₍₀₎	5 min	64	64	57	68	64
	I ₍₅₎	10min	57	56	50	60	55
	I ₍₁₅₎	20 min	53	50	44	53	46
SH-24-WS	I ₍₀₎	5 min	102	91	98	85	95
	I ₍₅₎	10min	98	90	98	93	92
	I ₍₁₅₎	20 min	97	87	93	91	90
SH-02-SS	I ₍₀₎	5 min	97	93	92	92	91
	I ₍₅₎	10min	95	96	92	94	92
	I ₍₁₅₎	20 min	92	92	90	92	88
SH-23-WS	I ₍₀₎	5 min	92	92	97	91	87
	I ₍₅₎	10min	94	94	100	92	91
	I ₍₁₅₎	20 min	93	92	98	90	91
SH-25-WS	I ₍₀₎	5 min	87	87	82	90	91
	I ₍₅₎	10min	91	92	83	91	91
	I ₍₁₅₎	20 min	91	92	80	87	88

Comments: _____

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Raw Data Sheet
Microtox
 100% Sediment Porewater Toxicity

Client Name: Newfields Test Date: 11/26/08

Sample ID: RF-02, OB-13-SS, SH-03-SS Test No.: 0812-7021-7042
OB-17-W5, OB-14-SS

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	102	101	93	97	87
	I ₍₅₎	10min	91	90	89	89	79
	I ₍₁₅₎	20 min	83	91	82	80	74
RF-02 #2	I ₍₀₎	5 min	56	63	66	64	55
	I ₍₅₎	10min	48	55	59	55	49
	I ₍₁₅₎	20 min	42	50	56	49	45
OB-13-SS	I ₍₀₎	5 min	91	94	89	92	94
	I ₍₅₎	10min	84	85	85	84	86
	I ₍₁₅₎	20 min	78	80	78	80	80
SH-03-SS	I ₍₀₎	5 min	91	93	88	93	89
	I ₍₅₎	10min	86	89	84	92	85
	I ₍₁₅₎	20 min	83	83	80	89	83
OB-17-W5	I ₍₀₎	5 min	98	93	94	92	90
	I ₍₅₎	10min	91	89	89	90	88
	I ₍₁₅₎	20 min	84	87	84	82	86
OB-14-SS	I ₍₀₎	5 min	93	96	91	89	98
	I ₍₅₎	10min	88	87	89	87	94
	I ₍₁₅₎	20 min	82	89	83	80	87

Comments: _____

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Raw Data Sheet
 Microtox
 100% Sediment Porewater Toxicity

Client Name: Newfields Test Date: 11/26/08

Sample ID: RF-02, SH-13-SS, OB-04-SS Test No.: 0812-T021-T042
SH-07-SS, SH-12-SS

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CON	I ₍₀₎	5 min	92	96	94	86	94
	I ₍₅₎	10min	85	84	83	76	85
	I ₍₁₅₎	20 min	78	75	78	72	79
RF-02 #2	I ₍₀₎	5 min	63	57	58	64	61
	I ₍₅₎	10min	56	50	52	57	52
	I ₍₁₅₎	20 min	47	43	45	49	44
SH-13-SS	I ₍₀₎	5 min	83	85	84	87	89
	I ₍₅₎	10min	78	81	79	83	83
	I ₍₁₅₎	20 min	72	76	73	77	76
OB-04-SS	I ₍₀₎	5 min	89	84	81	85	83
	I ₍₅₎	10min	85	83	77	84	82
	I ₍₁₅₎	20 min	78	76	71	77	77
SH-07-SS	I ₍₀₎	5 min	92	90	89	90	85
	I ₍₅₎	10min	90	86	84	86	78
	I ₍₁₅₎	20 min	84	76	76	77	71
SH-12-SS	I ₍₀₎	5 min	89	91	87	90	86
	I ₍₅₎	10min	87	86	82	85	83
	I ₍₁₅₎	20 min	79	78	75	77	73

Comments: _____

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Raw Data Sheet
 Microtox
 100% Sediment Porewater Toxicity

Client Name: Newfuldes Test Date: 11/26/09

Sample ID: RF-02, SH-06-SS Test No.: 0812-7022

Site	Light Reading	Time	Replicate				
			1	2	3	4	5
CGN	I ₍₀₎	5 min	93	95	98	98	97
	I ₍₅₎	10min	90	90	94	92	89
	I ₍₁₅₎	20 min	78	78	81	82	81
RF-02 #2	I ₍₀₎	5 min	71	65	67	62	70
	I ₍₅₎	10min	66	59	62	59	65
	I ₍₁₅₎	20 min	54	57	52	49	56
SH-06-SS	I ₍₀₎	5 min	91	87	83	86	90
	I ₍₅₎	10min	97	97	92	88	90
	I ₍₁₅₎	20 min	87	89	85	85	90
	I ₍₀₎	5 min					
	I ₍₅₎	10min					
	I ₍₁₅₎	20 min					
	I ₍₀₎	5 min					
	I ₍₅₎	10min					
	I ₍₁₅₎	20 min					
	I ₍₀₎	5 min					
	I ₍₅₎	10min					
	I ₍₁₅₎	20 min					

Comments: _____

APPENDIX C - Water Quality Results

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Physical and Chemical
 Measurements of Porewaters
 Sediment Bioassays

Analyst: et

Client: Newfields

Test Date: 11/6/08

Test Type: Microtox 100% Porewater Toxicity Test

Test No: 0811-T066 - T074

Test Species: Vibrio fischeri

Site	Initial Salinity (ppt)	Final Salinity (ppt)	Initial D.O. (mg/L)	Final D.O. (mg/L)	Initial pH	Adjusted pH	NaOH or HCl Vol. Used	Final Porewater Conc.	Ammonia
CON	20.0	20.0	6.8	6.8	9.10	8.14	90μL 0.1N HCl	99.6	—
OB-07-SS	28.3	28.3	7.1	7.1	7.65	8.02	60μL 0.1N NaOH	99.8	16.1
RF-03	30.6	30.6	6.8	6.8	7.65	7.91	30μL 0.1N NaOH	99.9	41.4
SH-27-WS	29.4	29.4	7.2	7.2	7.69	8.01	50μL 0.1N NaOH	99.8	4.5
SH-29	29.5	29.4	6.9	6.9	7.79	7.99	30μL 0.1N NaOH	99.9	27.7
SH-30-WS	29.4	29.4	6.7	6.7	7.58	7.94	70μL 0.1N NaOH	99.7	12.5
HI-06-SS	29.5	29.5	6.9	6.9	7.80	7.99	15μL 0.1N NaOH	99.9	6.4

Sample Description: _____

Comments: _____

QA Check: NT

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Physical and Chemical
 Measurements of Porewaters
 Sediment Bioassays

Analyst: gt

Client: Newfields

Test Date: 11/6/08

Test Type: Microtox 100% Porewater Toxicity Test

Test No: 0811-T066-T074

Test Species: Vibrio fischeri

Site	Initial Salinity (ppt)	Final Salinity (ppt)	Initial D.O. (mg/L)	Final D.O. (mg/L)	Initial pH	Adjusted pH	NaOH or HCl Vol. Used	Final Porewater Conc.	Ammonia
HI-02-SS	29.5	29.5	7.0	7.0	7.73	7.91	30µL 0.1N NaOH	99.9	26.6
HI-03-SS	29.1	29.1	6.7	6.7	7.68	8.02	30µL 0.1N NaOH	99.9	6.3
HI-04-SS	28.5	28.5	6.8	6.8	7.90	—	—	100	37.8

Sample Description: _____

Comments: _____

QA Check: gt

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Physical and Chemical
 Measurements of Porewaters
 Sediment Bioassays

Analyst: ET

Client: GHW Newfields

Test Date: 11/10/08

Test Type: Microtox 100% Porewater Toxicity Test

Test No: 0811-T075-T083

Test Species: Vibrio fischeri

Site	Initial Salinity (ppt)	Final Salinity (ppt)	Initial D.O. (mg/L)	Final D.O. (mg/L)	Initial pH	Adjusted pH	NaOH or HCl Vol. Used	Final Porewater Conc.	Ammonia
CON	20.9	20.9	6.6	6.6	8.46	8.17	0.1N HCl 40µL	99.8	—
RF-03	31.3	31.3	6.7	6.7	7.84	8.00	20µL 0.1N NaOH	99.9	45.6
SH-26-WS	29.6	29.6	6.7	6.7	7.46	7.96	90µL 0.1N NaOH	99.6	12.5
HI-05-SS	29.6	29.6	6.9	6.9	7.72	8.08	60µL 0.1N NaOH	99.8	22.5
HI-07-SS	29.7	29.7	6.6	6.6	7.83	8.15	20µL 0.1N NaOH	99.9	5.2
SH-16-SS	29.9	29.9	6.1	6.1	7.86	8.10	10µL 0.1N NaOH	99.9	2.7
SH-01-SS	29.6	29.6	6.8	6.8	7.53	8.08	90µL 0.1N NaOH	99.6	7.4

Sample Description: _____

Comments: _____

QA Check: ML

Nautilus Environmental
 Washington Laboratory
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 Tacoma, WA 98424

Physical and Chemical
 Measurements of Porewaters
 Sediment Bioassays

Analyst: et

Client: Newfulda

Test Date: 11/10/08

Test Type: Microtox 100% Porewater Toxicity Test

Test No: 0811-T075-T083

Test Species: Vibrio fischeri

Site	Initial Salinity (ppt)	Final Salinity (ppt)	Initial D.O. (mg/L)	Final D.O. (mg/L)	Initial pH	Adjusted pH	NaOH or HCl Vol. Used	Final Porewater Conc.	Ammonia
OB-01-SS	29.9	29.9	6.7	6.7	7.76	8.04	30μL 0.1 N NaOH	99.9	6.0
SH-10-SS	29.8	29.8	6.6	6.6	7.50	7.91	60μL 0.1 N NaOH	99.8	3.1
SH-15-SS	29.5	29.5	6.9	6.9	8.03	—	—	100	5.1
SH-22-SS	29.3	29.3	6.7	6.7	7.22	7.92	180μL 0.1 N NaOH	99.3	21.8

Sample Description: _____

Comments: _____

QA Check: et

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Physical and Chemical
 Measurements of Porewaters
 Sediment Bioassays

Analyst: Et

Client: Newfields

Test Date: 11/14/08

Test Type: Microtox 100% Porewater Toxicity Test

Test No: 0811-T084-T096

Test Species: Vibrio fischeri

Site	Initial Salinity (ppt)	Final Salinity (ppt)	Initial D.O. (mg/L)	Final D.O. (mg/L)	Initial pH	Adjusted pH	NaOH or HCl Vol. Used	Final Porewater Conc.	Ammonia
CON	19.3	19.3	6.7	6.7	8.77	8.00	80ML 0.1N HCl	99.7	—
RF-01	31.1	31.1	6.5	6.5	7.53	7.91	75ML 0.1N NaOH	99.7	14.4
OB-09-SS	28.7	28.7	6.5	6.5	7.77	7.97	50ML 0.1N NaOH	99.8	14.0
OB-11-SS	18.2	18.2	6.3	6.3	7.60	8.12	75ML 0.1N NaOH	99.7	1.8
OB-19-WS	29.1	29.1	6.8	6.8	7.59	7.97	75ML 0.1N NaOH	99.7	10.5
SH-18-WS	28.0	28.0	6.6	6.6	7.41	7.90	100ML 0.1N NaOH	99.6	10.5
OB-06-SS	29.0	29.0	6.7	6.7	7.60	7.98	75ML 0.1N NaOH	99.7	9.3

Sample Description: _____

Comments: _____

QA Check: ML

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Physical and Chemical
 Measurements of Porewaters
 Sediment Bioassays

Analyst: ct

Client: Newfields

Test Date: 11/14/08

Test Type: Microtox 100% Porewater Toxicity Test

Test No: 0811-7084-7096

Test Species: Vibrio fischeri

Site	Initial Salinity (ppt)	Final Salinity (ppt)	Initial D.O. (mg/L)	Final D.O. (mg/L)	Initial pH	Adjusted pH	NaOH or HCl Vol. Used	Final Porewater Conc.	Ammonia
OB-10-SS	28.9	28.9	6.3	6.3	7.60	8.04	75μL 0.1N NaOH	99.7	10.3
OB-18-WS	28.5	28.5	6.7	6.7	7.17	7.90	175μL 0.1N NaOH	99.3	16.9
SH-21-WS	29.0	29.0	6.5	6.5	7.37	7.95	125μL 0.1N NaOH	99.5	10.8
SH-20-WS	28.7	28.7	6.5	6.5	7.56	7.94	75μL 0.1N NaOH	99.7	8.9
OB-08-SS	28.2	28.2	6.8	6.8	7.07	7.94	200μL 0.1N NaOH	99.2	8.0
OB-12-SS	27.1	27.1	6.7	6.7	7.34	8.15	150μL 0.1N NaOH	99.4	9.5
OB-05-SS	28.9	28.9 28.9ct	6.7	6.7	8.00	—	—	100	24.6

Sample Description: _____

Comments: _____

QA Check: none

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Physical and Chemical
 Measurements of Porewaters
 Sediment Bioassays

Analyst: 11/26/08 Maria / WT

Client: Newfields

Test Date: 11/26/08

Test Type: Microtox 100% Porewater Toxicity Test

Test No: 0912-T021-T042

Test Species: Vibrio fischeri

Site	Initial Salinity (ppt)	Final Salinity (ppt)	Initial D.O. (mg/L)	Final D.O. (mg/L)	Initial pH	Adjusted pH	NaOH or HCl Vol. Used	Final Porewater Conc.	Ammonia
CON	21.0	21.0	7.8 7.0 ^(M)	7.8 7.0 ^(M)	8.17	- 8.17 ^(M)	-	100	-
OB-02	29.7	29.7	7.0	7.0	7.20	7.96	120µL NaOH 0.1N	99.5	3.8
SH-11	28.8	28.8	6.8	6.8	7.34	7.99	120µL 0.1N NaOH	99.5	2.9
SH-14	29.3	29.3	6.7	6.7	7.71	7.90	40µL 0.1N NaOH	99.8	14.5
SH-04	28.0	28.0	6.8	6.8	7.19	7.91	160µL 0.1N NaOH	99.4	11.7
SH-09	29.1	29.1	6.8	6.8	7.35	7.98	160µL 0.1N NaOH	99.4	14.2
SH-28	29.1	29.1	6.7	6.7	7.46	8.06	120µL 0.1N NaOH	99.5	4.7

Sample Description: _____

Comments: _____

QA Check: WT

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Physical and Chemical
 Measurements of Porewaters
 Sediment Bioassays

Analyst: Maria / et

Client: Newfields

Test Date: 11/26/08

Test Type: Microtox 100% Porewater Toxicity Test

Test No: 0812 - T021 - T042

Test Species: Vibrio fischeri

Site	Initial Salinity (ppt)	Final Salinity (ppt)	Initial D.O. (mg/L)	Final D.O. (mg/L)	Initial pH	Adjusted pH	NaOH or HCl Vol. Used	Final Porewater Conc.	Ammonia
RF-02#1	30.6	30.6	6.6	6.6	7.52	7.96	120µL 0.1N NaOH	99.5	20.5
OB-03	29.2	29.2	6.8	6.8	7.59	8.15	120µL 0.1N NaOH	99.5	7.5
SH-19	28.5	28.5	6.9	6.9	7.47	7.96	120µL 0.1N NaOH	99.5	11.9
SH-25	28.8	28.8	6.7	6.7	7.51	8.11	120µL 0.1N NaOH	99.5	7.2
SH-23	28.9	28.9	6.8	6.8	7.41	7.91	160µL 0.1N NaOH	99.4	23.1
SH-02	29.5	29.5	6.9	6.9	7.38	8.01	160µL 0.1N NaOH	99.4	12.8
SH-24	29.0	29.0	6.7	6.7	7.26	7.94	160µL 0.1N NaOH	99.4	6.8

Sample Description: _____

Comments: _____

QA Check: ML

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Physical and Chemical
 Measurements of Porewaters
 Sediment Bioassays

Analyst: Marina / gt

Client: Newfields

Test Date: 11/26/08

Test Type: Microtox 100% Porewater Toxicity Test

Test No: 0812-T021-T042

Test Species: Vibrio fischeri

Site	Initial Salinity (ppt)	Final Salinity (ppt)	Initial D.O. (mg/L)	Final D.O. (mg/L)	Initial pH	Adjusted pH	NaOH or HCl Vol. Used	Final Porewater Conc.	Ammonia
OB-13	21.0	21.0	7.2	7.2	7.26	7.96	120 µl 0.1N NaOH	99.5	10.4
SH-03	28.5	28.5	7.2	7.2	7.13	7.90	240 µl 0.1N NaOH	99.0	20.1
OB-17	28.6	28.6	6.8	6.8	7.30	7.91	140 µl 0.1N NaOH	99.4	4.5
OB-14	26.2	26.2	6.6	6.6	6.89	8.08	300 µl 0.1N NaOH	98.8	3.3
SH-06	28.0	28.0	7.0	7.0	6.79	7.90	360 µl 0.1N NaOH	98.6	5.2
SH-12	27.0	27.0	6.8	6.8	7.27	7.90	140 µl 0.1N NaOH	99.4	12.8
RF-02 ^{#2}	30.9	30.9	7.1	7.1	7.45	7.92	120 µl 0.1N NaOH	99.5	22.2

Sample Description: _____

Comments: _____

QA Check:

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy. E., Suite 2
 Tacoma, WA 98424

Physical and Chemical
 Measurements of Porewaters
 Sediment Bioassays

Analyst: Marina / gt

Client: Newfields

Test Date: 11/26/08

Test Type: Microtox 100% Porewater Toxicity Test

Test No: 0812-T021-T042

Test Species: Vibrio fischeri

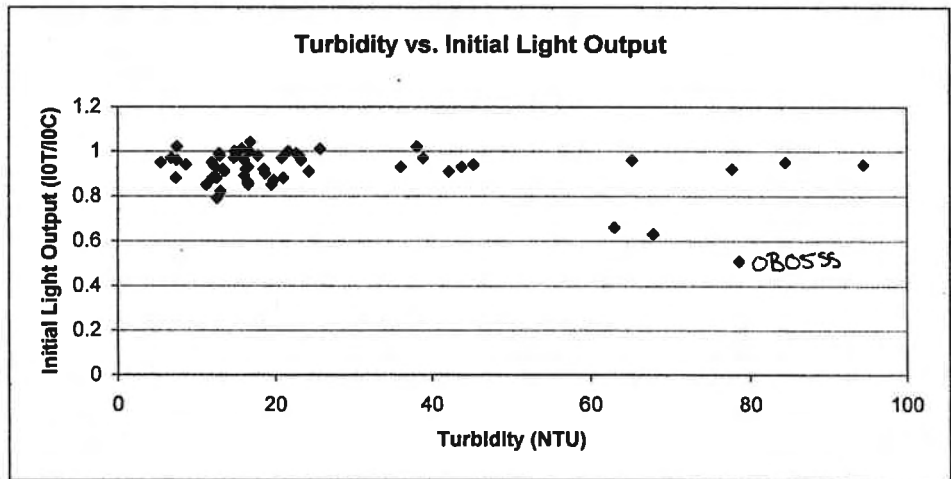
Site	Initial Salinity (ppt)	Final Salinity (ppt)	Initial D.O. (mg/L)	Final D.O. (mg/L)	Initial pH	Adjusted pH	NaOH or HCl Vol. Used	Final Porewater Conc.	Ammonia
SH-07	28.5	28.5	6.9	6.9	6.78	7.98	360.0ul 0.1 N NaOH	99.6	4.1
OB-04	29.1	29.1	6.8	6.8	7.38	8.01 7.3 @	160.0ul 0.1 N NaOH	99.4	9.0
SH-13	28.1	28.1	6.7	6.7	7.30	8.05	180.0ul 0.1 N NaOH	99.3	8.0

Sample Description: _____

Comments: _____

QA Check: _____

Sample	NTU	IoT/IoC
RF03	12.5	0.88
HI06SS	14.9	0.98
HI02SS	5.45	0.95
HI03SS	23	0.98
HI04SS	13.3	0.92
OB07SS	8.63	0.94
SH27WS	12.9	0.98
SH29WS	16.5	0.85
SH30WS	36.1	0.93
RF03	12.5	0.79
SH16SS	65.2	0.96
SH15SS	15.7	1.01
OB01SS	21.6	1
SH10SS	17.7	0.98
SH26WS	16.5	0.86
HI05SS	7.35	0.88
HI07SS	21	0.88
SH01SS	11.2	0.85
SH22SS	12.3	0.93
RF01	38.1	1.02
OB06SS	16.8	1.04
OB10SS	7.43	1.02
OB18WS	14.8	1
SH21WS	16.6	1
SH20WS	12.8	0.99
OB08SS	77.7	0.92
OB12SS	22.6	0.99
OB05SS	78.6	0.51
OB09SS	13.5	0.91
OB11SS	13	0.82
OB19WS	19.5	0.85
SH18WS	12	0.88
SH07SS	6.73	0.97
OB17WS	14.7	0.97
SH13SS	16.5	0.93
OB13SS	7.44	0.96
OB04SS	24.3	0.91
SH03SS	84.4	0.95
OB14SS	20.8	0.97
RF02	67.8	0.63
SH12SS	16	0.96
SH06SS	42.2	0.91
SH14SS	19.8	0.87
OB03SS	11.9	0.95
RF02	63	0.66
SH04SS	16	0.89
SH25WS	16.2	0.92
SH19WS	43.8	0.93
SH23WS	23.3	0.96
SH09SS	18.7	0.9
OB02SS	45.3	0.94
SH28WS	18.5	0.92
SH02SS	38.9	0.97
SH11SS	94.4	0.94
SH24WS	25.7	1.01



Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy E., Suite 2
 Tacoma, WA 98424

Turbidity Measurements

Client: Newfields
 Date: 11/17/08
 Analyst: JT

Sample ID	Measurement (NTU)
Standard 0-10	4.92
Standard 0-100	4.99
Standard 0-1000	485
DI	0.20
CON	0.27
RF-03	12.5
HI-06-SS	14.9
HI-02-SS	5.45
HI-03-SS	23.0
HI-04-SS	13.3
OB-07-SS	8.63
SH-27-WS	12.9
SH-29-WS	16.5
SH-30-WS	36.1
Standard 0-10	4.93
Standard 0-100	49.8
Standard 0-1000	484
DI	0.23

Measure standards and DI at beginning and end of analysis.

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy E., Suite 2
 Tacoma, WA 98424

Turbidity Measurements

Client: *Newfields*
 Date: *11/14/08*
 Analyst: *RT*

Sample ID	Measurement (NTU)
Standard 0-10	5.05
Standard 0-100	49.6
Standard 0-1000	483
DI	0.25
CON	1.14
RF-01	38.1
OB-06-SS	16.8
OB-10-SS	7.43
OB-18-WS	14.8
SH-21-WS	16.6
SH-20-WS	12.8
OB-08-SS	77.7
OB-12-SS	22.6
OB-05-SS	78.6
OB-09-SS	13.5
OB-11-SS	13.0
OB-19-WS	19.5
SH-18-WS	12.0
Standard 0-10	5.04
Standard 0-100	49.4
Standard 0-1000	483
DI	0.26

Measure standards and DI at beginning and end of analysis.

Nautilus Environmental
 Washington Laboratory
 5009 Pacific Hwy E., Suite 2
 Tacoma, WA 98424

Turbidity Measurements

Client: *Newfields*
 Date: *11/26/09*
 Analyst: *Ut*

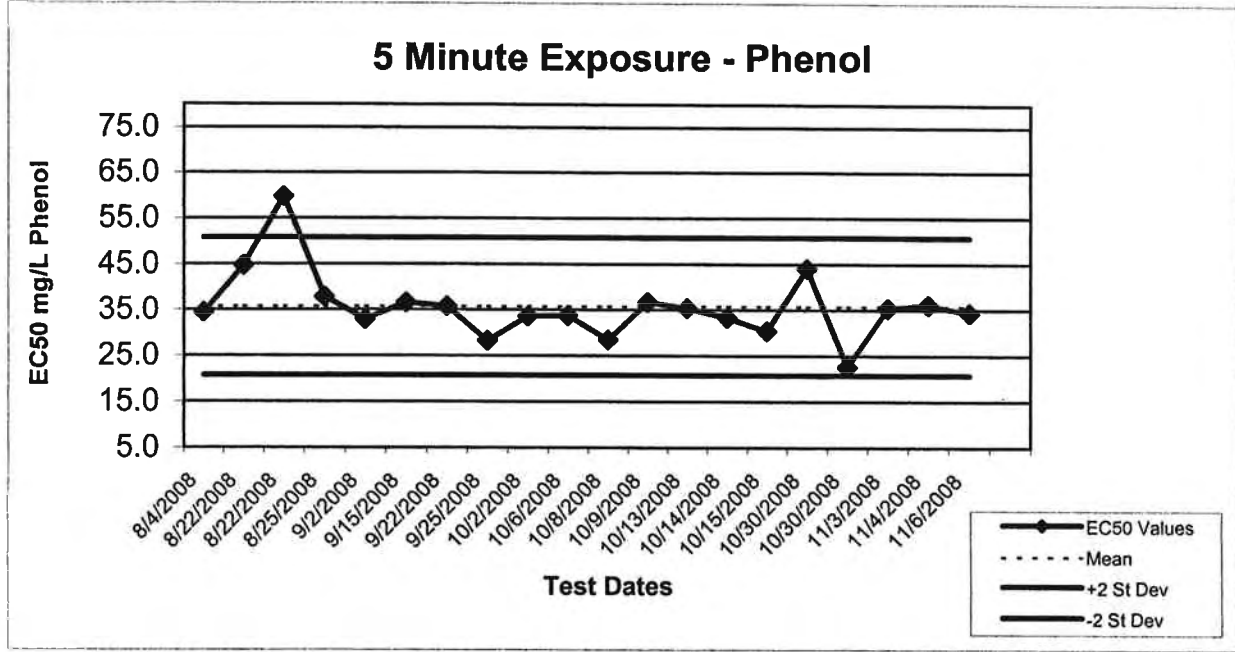
Sample ID	Measurement (NTU)
Standard 0-10	5.01
Standard 0-100	49.8
Standard 0-1000	484
DI	0.19
CON	0.18
SH-07	6.73
OB-17	14.7
SH-13	16.5
OB-13	7.44
OB-04	24.3
SH-03	84.4
OB-14	20.8
RF-02 #1	67.8
SH-12	16.0
SH-06	42.2
SH-14	19.8
OB-03	11.9
RF-02 #2	63.0
SH-04	16.0
SH-25	16.2
SH-19	43.8
SH-23	23.3
SH-09	18.7
OB-02	45.3
SH-28	18.5
SH-02	38.9
SH-11	94.4
SH-24	25.7
Standard 0-10	5.02
Standard 0-100	49.5
Standard 0-1000	484
DI	0.22

Measure standards and DI at beginning and end of analysis.

APPENDIX D - Reference Toxicant Tests

Reference Toxicant Control Chart Microtox 5-Minute Exposure

CV% = 21.0

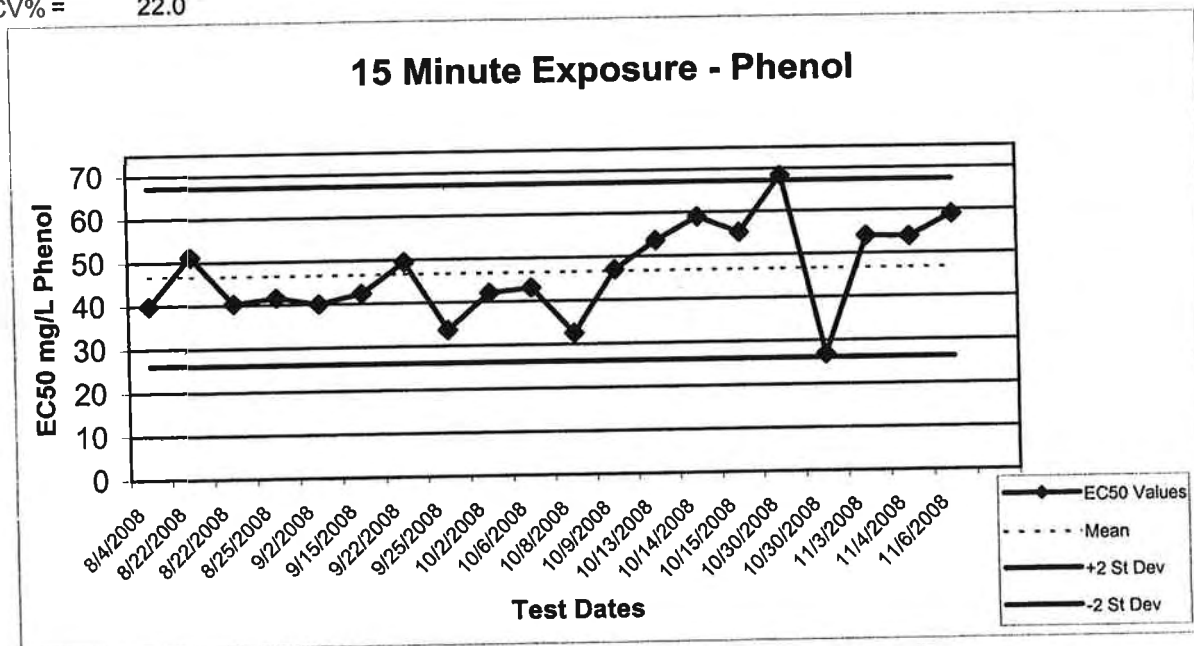


Date	Time	EC50 %	EC50 mg/L Phenol ^a	Mean	StDev	-2 SD	+2 SD
8/4/2008	1352	33.8	34.5	35.7	7.5	20.7	50.7
8/22/2008	856	43.8	44.7	35.7	7.5	20.7	50.7
8/22/2008	1108	58.6	59.8	35.7	7.5	20.7	50.7
8/25/2008	1343	37.1	37.8	35.7	7.5	20.7	50.7
9/2/2008	1327	32.3	32.9	35.7	7.5	20.7	50.7
9/15/2008	843	35.9	36.6	35.7	7.5	20.7	50.7
9/22/2008	1246	35.1	35.8	35.7	7.5	20.7	50.7
9/25/2008	1323	27.7	28.3	35.7	7.5	20.7	50.7
10/2/2008	1237	19.8	33.6	35.7	7.5	20.7	50.7
10/6/2008	1251	19.9	33.8	35.7	7.5	20.7	50.7
10/8/2008	1309	16.7	28.5	35.7	7.5	20.7	50.7
10/9/2008	1236	21.6	36.7	35.7	7.5	20.7	50.7
10/13/2008	1346	20.8	35.3	35.7	7.5	20.7	50.7
10/14/2008	1218	19.6	33.3	35.7	7.5	20.7	50.7
10/15/2008	1242	17.9	30.4	35.7	7.5	20.7	50.7
10/30/2008	1114	25.9	44.0	35.7	7.5	20.7	50.7
10/30/2008	1228	13.3	22.6	35.7	7.5	20.7	50.7
11/3/2008	1440	20.8	35.4	35.7	7.5	20.7	50.7
11/4/2008	1310	21.2	36.0	35.7	7.5	20.7	50.7
11/6/2008	1253	20.2	34.3	35.7	7.5	20.7	50.7

a - Highest concentration of Phenol is 170 mg/L as of 10/1/08, 102 mg/L previously

Reference Toxicant Control Chart Microtox 15-Minute Exposure

CV% = 22.0



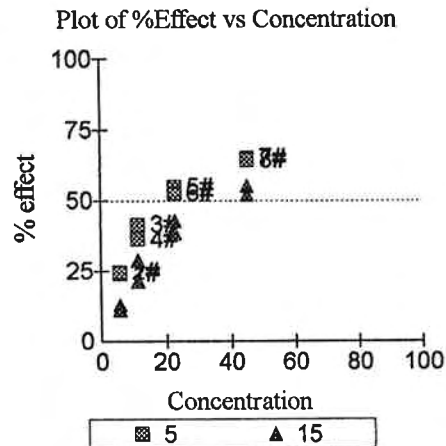
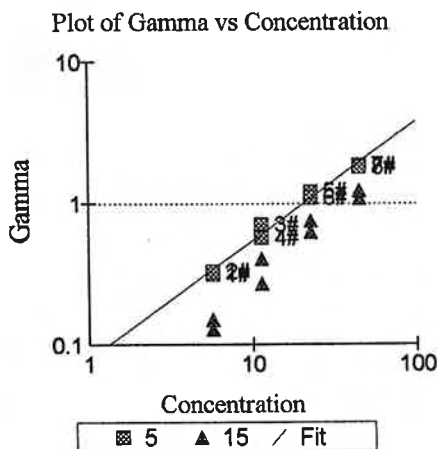
Date	Time	EC50 %	EC50 mg/L Phenol ^a	Mean	StDev	-2 SD	+2 SD
8/4/2008	1352	39.1	39.9	46.7	10.2	26.2	67.2
8/22/2008	856	50.2	51.2	46.7	10.2	26.2	67.2
8/22/2008	1108	39.6	40.4	46.7	10.2	26.2	67.2
8/25/2008	1343	40.8	41.6	46.7	10.2	26.2	67.2
9/2/2008	1327	39.3	40.1	46.7	10.2	26.2	67.2
9/15/2008	843	41.6	42.4	46.7	10.2	26.2	67.2
9/22/2008	1246	48.5	49.5	46.7	10.2	26.2	67.2
9/25/2008	1323	33.0	33.7	46.7	10.2	26.2	67.2
10/2/2008	1237	24.8	42.1	46.7	10.2	26.2	67.2
10/6/2008	1251	25.4	43.2	46.7	10.2	26.2	67.2
10/8/2008	1309	19.2	32.6	46.7	10.2	26.2	67.2
10/9/2008	1236	27.7	47.1	46.7	10.2	26.2	67.2
10/13/2008	1346	31.6	53.6	46.7	10.2	26.2	67.2
10/14/2008	1218	34.7	59.0	46.7	10.2	26.2	67.2
10/15/2008	1242	32.5	55.3	46.7	10.2	26.2	67.2
10/30/2008	1114	40.2	68.3	46.7	10.2	26.2	67.2
10/30/2008	1228	15.8	26.9	46.7	10.2	26.2	67.2
11/3/2008	1440	31.8	54.1	46.7	10.2	26.2	67.2
11/4/2008	1310	31.7	53.9	46.7	10.2	26.2	67.2
11/6/2008	1253	34.7	59.0	46.7	10.2	26.2	67.2

a - Highest concentration of Phenol is 170 mg/L as of 10/1/08, 102 mg/L previously

MicrotoxOmni Test Report

Date: 11/06/2008 12:53 PM

Test Protocol: Basic Test
 Sample: 170mg/L Phenol
 Toxicant: 170mg/L Phenol
 Reagent Lot no.: 8H1052
 Test description: Reference Toxicant
 Test name: RT110608VF
 Database file: \\Fif-ws3\alldata\Nautilus\former staff Folders\Karen\Microtox\MicrotoxOmni\Edge Analytical.mdb



Sample	Conc	5 Mins Data:				15 Mins Data:			
		Io	It	Gamma	% effect	It	Gamma	% effect	
Control	0.000	97.83	96.65	0.9879	#	61.74	0.6311	#	
Control	0.000	87.93	89.96	1.023	#	59.87	0.6809	#	
1	5.625	86.84	66.26	0.3178	#	24.12%	49.53	0.1501	#
2	5.625	87.68	66.30	0.3298	#	24.80%	50.97	0.1284	#
3	11.25	90.50	53.15	0.7121	#	41.59%	42.19	0.4071	#
4	11.25	88.95	56.82	0.5741	#	36.47%	45.86	0.2724	#
5	22.50	89.10	40.45	1.215	#	54.85%	33.37	0.7515	#
6	22.50	85.08	40.64	1.105	#	52.50%	34.27	0.6286	#
7	45.00	89.65	31.35	1.875	#	65.22%	26.32	1.234	#
8	45.00	90.58	32.41	1.810	#	64.42%	28.51	1.084	#

- used in calculation; * - invalid data; D - deleted from calcs.

Calculations on 5 Mins data:

EC50 Concentration: 20.22% (95% confidence range: 18.29 to 22.36)

95% Confidence Factor: 1.106

Estimating Equation: $\text{LOG C} = 1.174 \times \text{LOG G} + 1.306$

Coeff. of Determination (R^2): 0.9846

Slope: 0.8384

Correction Factor: 1.006

Calculations on 15 Mins data:

EC50 Concentration: 34.70% (95% confidence range: 28.23 to 42.66)

95% Confidence Factor: 1.229

Estimating Equation: $\text{LOG C} = 0.9445 \times \text{LOG G} + 1.540$

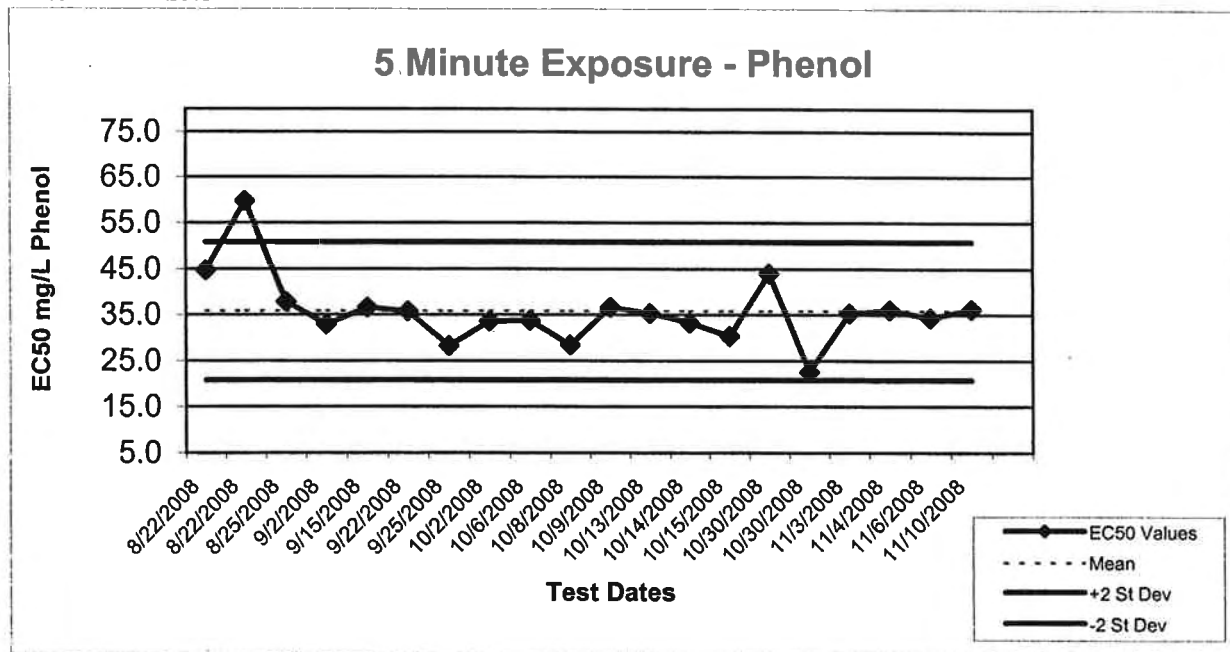
Coeff. of Determination (R^2): 0.9653

Slope: 1.022

Correction Factor: 0.6560

Reference Toxicant Control Chart Microtox 5-Minute Exposure

CV% = 20.9

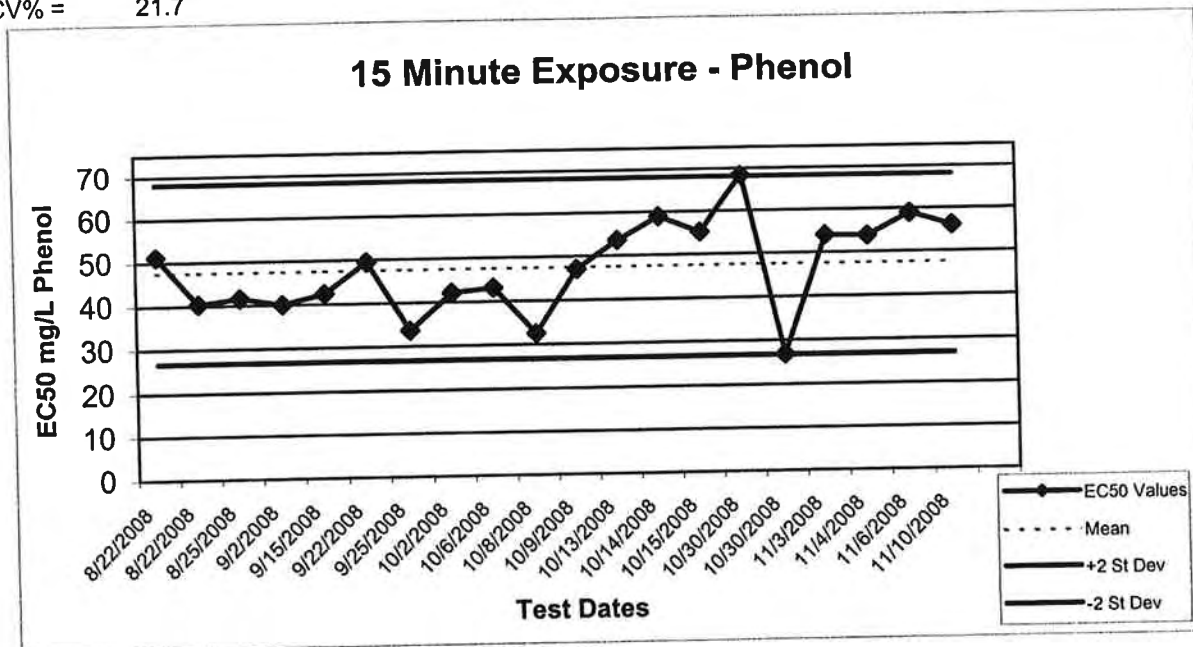


Date	Time	EC50 %	EC50 mg/L Phenol ^a	Mean	StDev	-2 SD	+2 SD
8/22/2008	856	43.8	44.7	35.8	7.5	20.8	50.8
8/22/2008	1108	58.6	59.8	35.8	7.5	20.8	50.8
8/25/2008	1343	37.1	37.8	35.8	7.5	20.8	50.8
9/2/2008	1327	32.3	32.9	35.8	7.5	20.8	50.8
9/15/2008	843	35.9	36.6	35.8	7.5	20.8	50.8
9/22/2008	1246	35.1	35.8	35.8	7.5	20.8	50.8
9/25/2008	1323	27.7	28.3	35.8	7.5	20.8	50.8
10/2/2008	1237	19.8	33.6	35.8	7.5	20.8	50.8
10/6/2008	1251	19.9	33.8	35.8	7.5	20.8	50.8
10/8/2008	1309	16.7	28.5	35.8	7.5	20.8	50.8
10/9/2008	1236	21.6	36.7	35.8	7.5	20.8	50.8
10/13/2008	1346	20.8	35.3	35.8	7.5	20.8	50.8
10/14/2008	1218	19.6	33.3	35.8	7.5	20.8	50.8
10/15/2008	1242	17.9	30.4	35.8	7.5	20.8	50.8
10/30/2008	1114	25.9	44.0	35.8	7.5	20.8	50.8
10/30/2008	1228	13.3	22.6	35.8	7.5	20.8	50.8
11/3/2008	1440	20.8	35.4	35.8	7.5	20.8	50.8
11/4/2008	1310	21.2	36.0	35.8	7.5	20.8	50.8
11/6/2008	1253	20.2	34.3	35.8	7.5	20.8	50.8
11/10/2008	1256	21.3	36.2	35.8	7.5	20.8	50.8

a - Highest concentration of Phenol is 170 mg/L as of 10/1/08, 102 mg/L previously

Reference Toxicant Control Chart Microtox 15-Minute Exposure

CV% = 21.7



Date	Time	EC50 %	EC50 mg/L Phenol ^a	Mean	StDev	-2 SD	+2 SD
8/22/2008	856	50.2	51.2	47.5	10.3	26.8	68.1
8/22/2008	1108	39.6	40.4	47.5	10.3	26.8	68.1
8/25/2008	1343	40.8	41.6	47.5	10.3	26.8	68.1
9/2/2008	1327	39.3	40.1	47.5	10.3	26.8	68.1
9/15/2008	843	41.6	42.4	47.5	10.3	26.8	68.1
9/22/2008	1246	48.5	49.5	47.5	10.3	26.8	68.1
9/25/2008	1323	33.0	33.7	47.5	10.3	26.8	68.1
10/2/2008	1237	24.8	42.1	47.5	10.3	26.8	68.1
10/6/2008	1251	25.4	43.2	47.5	10.3	26.8	68.1
10/8/2008	1309	19.2	32.6	47.5	10.3	26.8	68.1
10/9/2008	1236	27.7	47.1	47.5	10.3	26.8	68.1
10/13/2008	1346	31.6	53.6	47.5	10.3	26.8	68.1
10/14/2008	1218	34.7	59.0	47.5	10.3	26.8	68.1
10/15/2008	1242	32.5	55.3	47.5	10.3	26.8	68.1
10/30/2008	1114	40.2	68.3	47.5	10.3	26.8	68.1
10/30/2008	1228	15.8	26.9	47.5	10.3	26.8	68.1
11/3/2008	1440	31.8	54.1	47.5	10.3	26.8	68.1
11/4/2008	1310	31.7	53.9	47.5	10.3	26.8	68.1
11/6/2008	1253	34.7	59.0	47.5	10.3	26.8	68.1
11/10/2008	1256	33.0	56.1	47.5	10.3	26.8	68.1

a - Highest concentration of Phenol is 170 mg/L as of 10/1/08, 102 mg/L previously

MicrotoxOmni Test Report

Date: 11/10/2008 12:56 PM

Test Protocol: Basic Test

Sample: 170mg/L Phenol

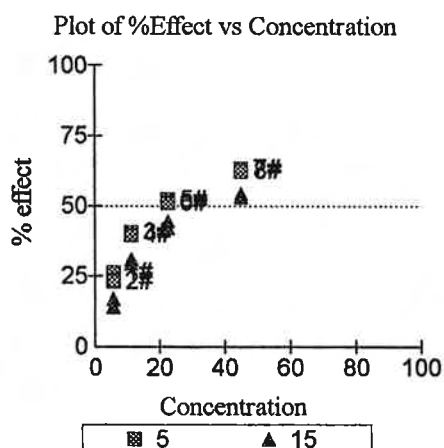
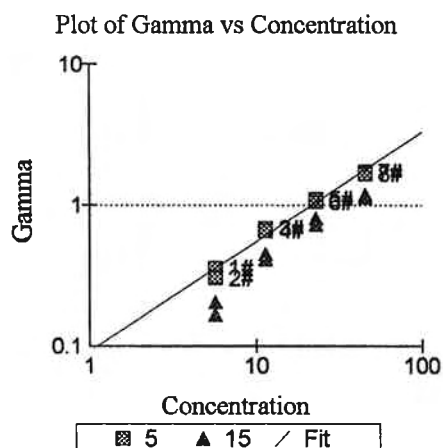
Toxicant: 170mg/L Phenol

Reagent Lot no.: 8H1052

Test description: Reference Toxicant

Test name: RT111008VF

Database file: \\Fif-ws3\alldata\Nautilus\former staff Folders\Karen\Microtox\MicrotoxOmni\Edge Analytical.mdb



Sample	Conc	5 Mins Data:				15 Mins Data:		
		Io	It	Gamma	% effect	It	Gamma	% effect
Control	0.000	96.26	91.81	0.9538 #		64.63	0.6714 #	
Control	0.000	98.14	99.12	1.010 #		70.90	0.7224 #	
1	5.625	107.27	77.63	0.3568 #	26.30%	62.06	0.2046 #	16.99%
2	5.625	101.28	76.30	0.3033 #	23.27%	60.49	0.1669 #	14.30%
3	11.25	106.65	62.17	0.6844 #	40.63%	51.37	0.4469 #	30.89%
4	11.25	104.80	62.17	0.6552 #	39.58%	51.70	0.4127 #	29.21%
5	22.50	107.17	50.23	1.095 #	52.27%	41.40	0.8041 #	44.57%
6	22.50	99.45	47.62	1.051 #	51.23%	40.16	0.7258 #	42.06%
7	45.00	100.97	36.44	1.721 #	63.24%	32.10	1.192 #	54.38%
8	45.00	101.43	37.37	1.665 #	62.48%	33.10	1.136 #	53.18%

- used in calculation; * - invalid data; D - deleted from calcs.

Calculations on 5 Mins data:

EC50 Concentration: 21.26% (95% confidence range: 19.03 to 23.75)

95% Confidence Factor: 1.117

Estimating Equation: $\text{LOG C} = 1.264 \times \text{LOG G} + 1.327$

Coeff. of Determination (R^2): 0.9821

Slope: 0.7769

Correction Factor: 0.9819

Calculations on 15 Mins data:

EC50 Concentration: 33.01% (95% confidence range: 27.29 to 39.93)

95% Confidence Factor: 1.210

Estimating Equation: $\text{LOG C} = 1.101 \times \text{LOG G} + 1.519$

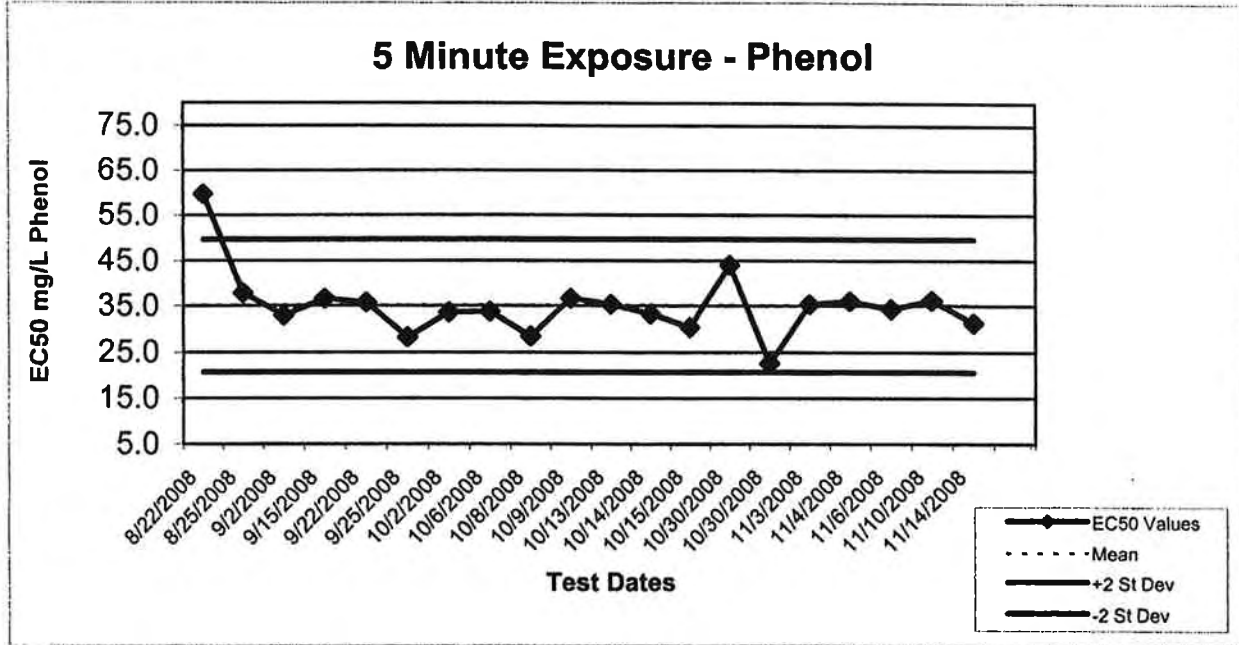
Coeff. of Determination (R^2): 0.9685

Slope: 0.8795

Correction Factor: 0.6969

Reference Toxicant Control Chart Microtox 5-Minute Exposure

CV% = 20.6

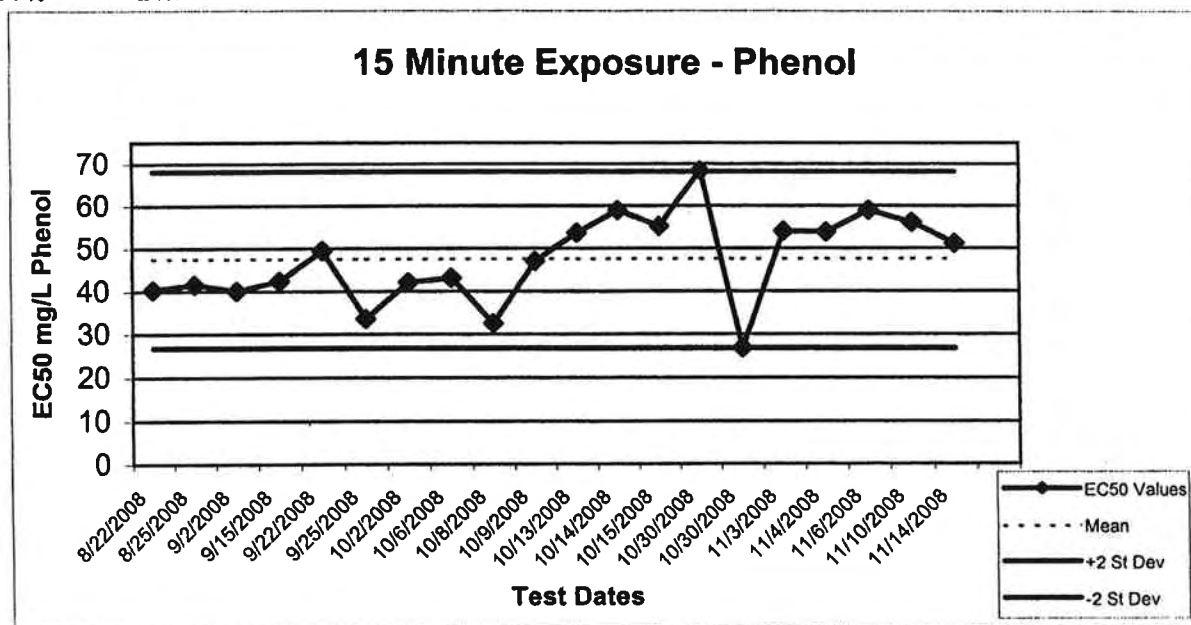


Date	Time	EC50 %	EC50 mg/L Phenol ^a	Mean	StDev	-2 SD	+2 SD
8/22/2008	1108	58.6	59.8	35.1	7.3	20.6	49.6
8/25/2008	1343	37.1	37.8	35.1	7.3	20.6	49.6
9/2/2008	1327	32.3	32.9	35.1	7.3	20.6	49.6
9/15/2008	843	35.9	36.6	35.1	7.3	20.6	49.6
9/22/2008	1246	35.1	35.8	35.1	7.3	20.6	49.6
9/25/2008	1323	27.7	28.3	35.1	7.3	20.6	49.6
10/2/2008	1237	19.8	33.6	35.1	7.3	20.6	49.6
10/6/2008	1251	19.9	33.8	35.1	7.3	20.6	49.6
10/8/2008	1309	16.7	28.5	35.1	7.3	20.6	49.6
10/9/2008	1236	21.6	36.7	35.1	7.3	20.6	49.6
10/13/2008	1346	20.8	35.3	35.1	7.3	20.6	49.6
10/14/2008	1218	19.6	33.3	35.1	7.3	20.6	49.6
10/15/2008	1242	17.9	30.4	35.1	7.3	20.6	49.6
10/30/2008	1114	25.9	44.0	35.1	7.3	20.6	49.6
10/30/2008	1228	13.3	22.6	35.1	7.3	20.6	49.6
11/3/2008	1440	20.8	35.4	35.1	7.3	20.6	49.6
11/4/2008	1310	21.2	36.0	35.1	7.3	20.6	49.6
11/6/2008	1253	20.2	34.3	35.1	7.3	20.6	49.6
11/10/2008	1256	21.3	36.2	35.1	7.3	20.6	49.6
11/14/2008	1313	18.4	31.3	35.1	7.3	20.6	49.6

a - Highest concentration of Phenol is 170 mg/L as of 10/1/08, 102 mg/L previously

Reference Toxicant Control Chart Microtox 15-Minute Exposure

CV% = 21.7



Date	Time	EC50 %	EC50 mg/L Phenol ^a	Mean	StDev	-2 SD	+2 SD
8/22/2008	1108	39.6	40.4	47.5	10.3	26.8	68.1
8/25/2008	1343	40.8	41.6	47.5	10.3	26.8	68.1
9/2/2008	1327	39.3	40.1	47.5	10.3	26.8	68.1
9/15/2008	843	41.6	42.4	47.5	10.3	26.8	68.1
9/22/2008	1246	48.5	49.5	47.5	10.3	26.8	68.1
9/25/2008	1323	33.0	33.7	47.5	10.3	26.8	68.1
10/2/2008	1237	24.8	42.1	47.5	10.3	26.8	68.1
10/6/2008	1251	25.4	43.2	47.5	10.3	26.8	68.1
10/8/2008	1309	19.2	32.6	47.5	10.3	26.8	68.1
10/9/2008	1236	27.7	47.1	47.5	10.3	26.8	68.1
10/13/2008	1346	31.6	53.6	47.5	10.3	26.8	68.1
10/14/2008	1218	34.7	59.0	47.5	10.3	26.8	68.1
10/15/2008	1242	32.5	55.3	47.5	10.3	26.8	68.1
10/30/2008	1114	40.2	68.3	47.5	10.3	26.8	68.1
10/30/2008	1228	15.8	26.9	47.5	10.3	26.8	68.1
11/3/2008	1440	31.8	54.1	47.5	10.3	26.8	68.1
11/4/2008	1310	31.7	53.9	47.5	10.3	26.8	68.1
11/6/2008	1253	34.7	59.0	47.5	10.3	26.8	68.1
11/10/2008	1256	33.0	56.1	47.5	10.3	26.8	68.1
11/14/2008	1313	30.1	51.2	47.5	10.3	26.8	68.1

a - Highest concentration of Phenol is 170 mg/L as of 10/1/08, 102 mg/L previously

MicrotoxOmni Test Report

Date: 11/14/2008 01:13 PM

Test Protocol: Basic Test

Sample: 170mg/L Phenol

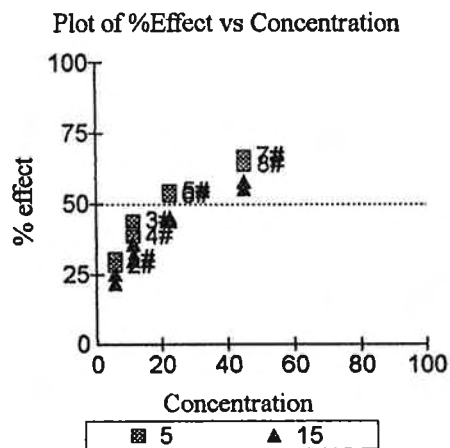
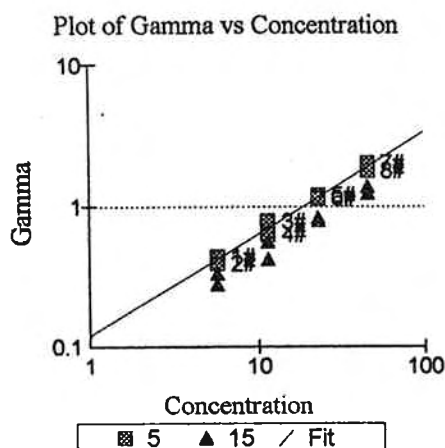
Toxicant: 170 mg/L Phenol

Reagent Lot no.: 8H1052

Test description: Reference Toxicant

Test name: RT111408Vf

Database file: \\Fif-ws3\alldata\Nautilus\former staff Folders\Karen\Microtox\MicrotoxOmni\Edge Analytical.mdb



	5 Mins Data:					15 Mins Data:		
Sample	Conc	Io	It	Gamma	% effect	It	Gamma	% effect
Control	0.000	92.14	84.56	0.9177 #		58.02	0.6297 #	
Control	0.000	101.04	92.21	0.9126 #		63.59	0.6294 #	
1	5.625	107.88	68.47	0.4419 #	30.65%	50.78	0.3374 #	25.23%
2	5.625	101.71	66.73	0.3949 #	28.31%	50.03	0.2798 #	21.86%
3	11.25	100.90	51.69	0.7864 #	44.02%	40.65	0.5626 #	36.00%
4	11.25	98.63	55.33	0.6314 #	38.70%	43.54	0.4260 #	29.88%
5	22.50	102.75	42.74	1.200 #	54.55%	35.26	0.8345 #	45.49%
6	22.50	103.65	44.42	1.135 #	53.17%	36.38	0.7936 #	44.25%
7	45.00	106.44	32.39	2.007 #	66.75%	28.19	1.377 #	57.93%
8	45.00	101.13	33.40	1.771 #	63.91%	28.37	1.244 #	55.44%

- used in calculation; * - invalid data; D - deleted from calcs.

Calculations on 5 Mins data:

EC50 Concentration: 18.43% (95% confidence range: 16.69 to 20.36)

95% Confidence Factor: 1.104

Estimating Equation: $\text{LOG C} = 1.357 \times \text{LOG G} + 1.266$

Coeff. of Determination (R^2): 0.9841

Slope: 0.7251

Correction Factor: 0.9152

Calculations on 15 Mins data:

EC50 Concentration: 30.07% (95% confidence range: 25.55 to 35.38)

95% Confidence Factor: 1.177

Estimating Equation: $\text{LOG C} = 1.390 \times \text{LOG G} + 1.478$

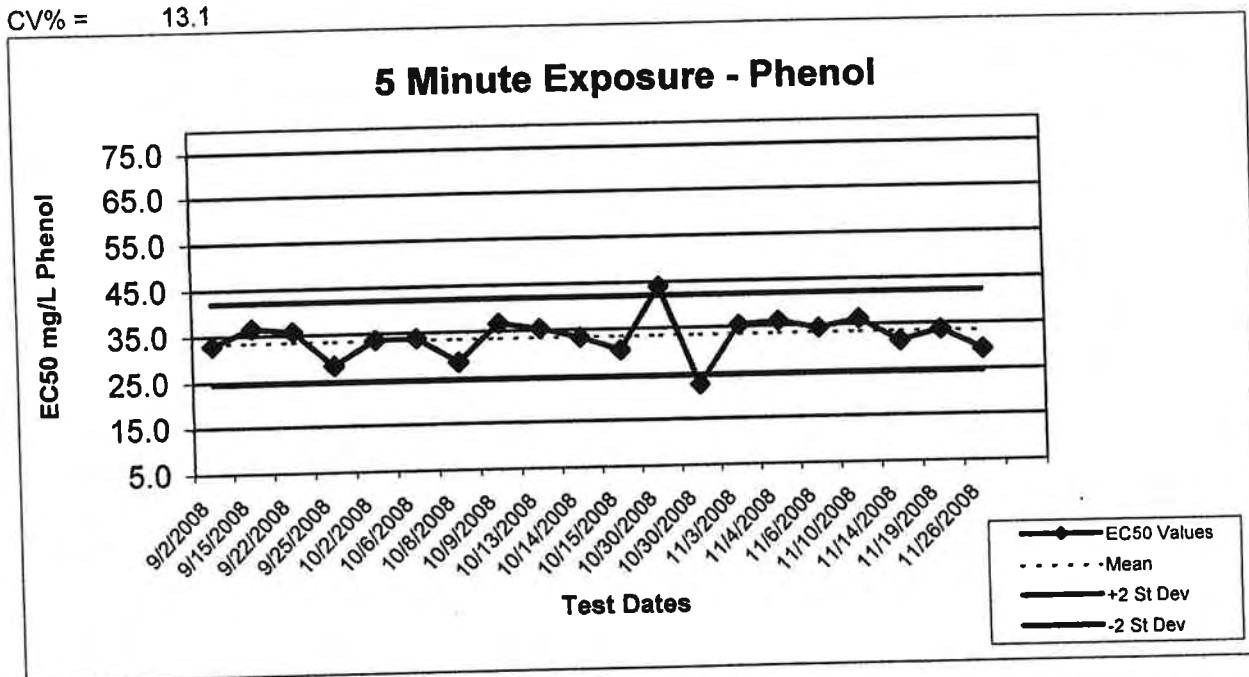
Coeff. of Determination (R^2): 0.9739

Slope: 0.7005

Correction Factor: 0.6295

Reference Toxicant Control Chart Microtox 5-Minute Exposure

CV% = 13.1

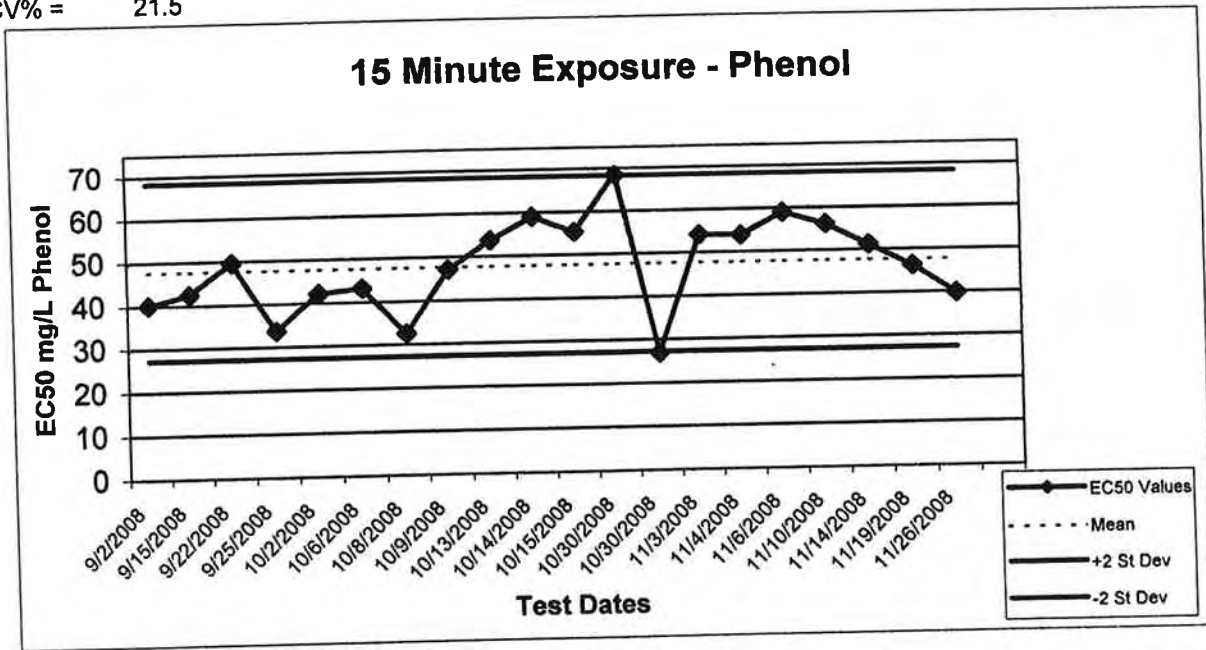


Date	Time	EC50 %	EC50 mg/L Phenol ^a	Mean	StDev	-2 SD	+2 SD
9/2/2008	1327	32.3	32.9	33.4	4.4	24.7	42.1
9/15/2008	843	35.9	36.6	33.4	4.4	24.7	42.1
9/22/2008	1246	35.1	35.8	33.4	4.4	24.7	42.1
9/25/2008	1323	27.7	28.3	33.4	4.4	24.7	42.1
10/2/2008	1237	19.8	33.6	33.4	4.4	24.7	42.1
10/6/2008	1251	19.9	33.8	33.4	4.4	24.7	42.1
10/8/2008	1309	16.7	28.5	33.4	4.4	24.7	42.1
10/9/2008	1236	21.6	36.7	33.4	4.4	24.7	42.1
10/13/2008	1346	20.8	35.3	33.4	4.4	24.7	42.1
10/14/2008	1218	19.6	33.3	33.4	4.4	24.7	42.1
10/15/2008	1242	17.9	30.4	33.4	4.4	24.7	42.1
10/30/2008	1114	25.9	44.0	33.4	4.4	24.7	42.1
10/30/2008	1228	13.3	22.6	33.4	4.4	24.7	42.1
11/3/2008	1440	20.8	35.4	33.4	4.4	24.7	42.1
11/4/2008	1310	21.2	36.0	33.4	4.4	24.7	42.1
11/6/2008	1253	20.2	34.3	33.4	4.4	24.7	42.1
11/10/2008	1256	21.3	36.2	33.4	4.4	24.7	42.1
11/14/2008	1313	18.4	31.3	33.4	4.4	24.7	42.1
11/19/2008	1223	19.8	33.7	33.4	4.4	24.7	42.1
11/26/2008	1352	17.2	29.2	33.4	4.4	24.7	42.1

a - Highest concentration of Phenol is 170 mg/L as of 10/1/08, 102 mg/L previously

Reference Toxicant Control Chart Microtox 15-Minute Exposure

CV% = 21.5



Date	Time	EC50 %	EC50 mg/L Phenol ^a	Mean	StDev	-2 SD	+2 SD
9/2/2008	1327	39.3	40.1	47.7	10.3	27.2	68.2
9/15/2008	843	41.6	42.4	47.7	10.3	27.2	68.2
9/22/2008	1246	48.5	49.5	47.7	10.3	27.2	68.2
9/25/2008	1323	33.0	33.7	47.7	10.3	27.2	68.2
10/2/2008	1237	24.8	42.1	47.7	10.3	27.2	68.2
10/6/2008	1251	25.4	43.2	47.7	10.3	27.2	68.2
10/8/2008	1309	19.2	32.6	47.7	10.3	27.2	68.2
10/9/2008	1236	27.7	47.1	47.7	10.3	27.2	68.2
10/13/2008	1346	31.6	53.6	47.7	10.3	27.2	68.2
10/14/2008	1218	34.7	59.0	47.7	10.3	27.2	68.2
10/15/2008	1242	32.5	55.3	47.7	10.3	27.2	68.2
10/30/2008	1114	40.2	68.3	47.7	10.3	27.2	68.2
10/30/2008	1228	15.8	26.9	47.7	10.3	27.2	68.2
11/3/2008	1440	31.8	54.1	47.7	10.3	27.2	68.2
11/4/2008	1310	31.7	53.9	47.7	10.3	27.2	68.2
11/6/2008	1253	34.7	59.0	47.7	10.3	27.2	68.2
11/10/2008	1256	33.0	56.1	47.7	10.3	27.2	68.2
11/14/2008	1313	30.1	51.2	47.7	10.3	27.2	68.2
11/19/2008	1223	27.2	46.2	47.7	10.3	27.2	68.2
11/26/2008	1352	23.4	39.8	47.7	10.3	27.2	68.2

a - Highest concentration of Phenol is 170 mg/L as of 10/1/08, 102 mg/L previously

MicrotoxOmni Test Report

Date: 11/26/2008 01:52 PM

Test Protocol: Basic Test

Sample: 170mg/L Phenol

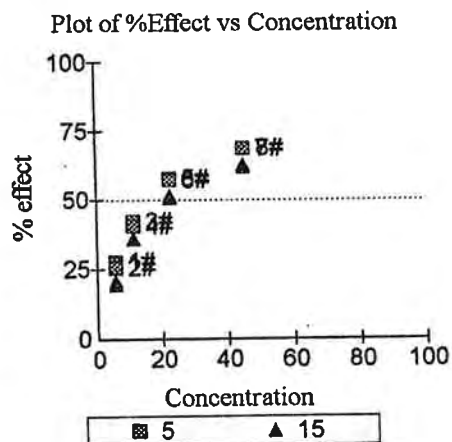
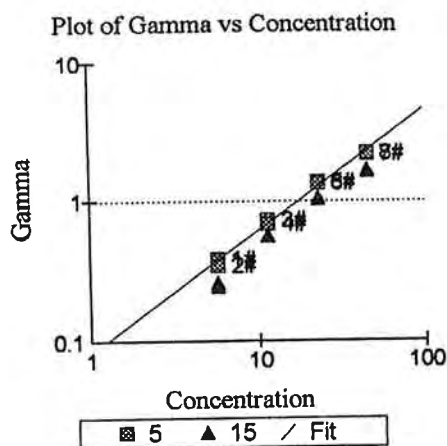
Toxicant: 170mg/l Phenol

Reagent Lot no.: 8K1031

Test description: Reference Toxicant

Test name: RT112608VF#2

Database file: \\Fif-ws3\alldata\Nautilus\former staff Folders\Karen\Microtox\MicrotoxOmni\Edge Analytical.mdb



Sample	Conc	5 Mins Data:				15 Mins Data:		
		Io	It	Gamma	% effect	It	Gamma	% effect
Control	0.000	100.05	96.56	0.9651 #		65.76	0.6573 #	
Control	0.000	107.21	103.62	0.9665 #		71.94	0.6710 #	
1	5.625	105.49	73.61	0.3841 #	27.75%	55.58	0.2605 #	20.67%
2	5.625	104.64	75.22	0.3436 #	25.57%	55.85	0.2443 #	19.64%
3	11.25	107.28	59.92	0.7292 #	42.17%	45.64	0.5611 #	35.94%
4	11.25	107.75	61.93	0.6804 #	40.49%	45.80	0.5625 #	36.00%
5	22.50	101.20	41.26	1.369 #	57.79%	32.63	1.060 #	51.45%
6	22.50	102.45	42.32	1.338 #	57.23%	33.56	1.027 #	50.68%
7	45.00	111.38	33.86	2.177 #	68.52%	27.65	1.675 #	62.62%
8	45.00	106.56	32.09	2.207 #	68.82%	27.00	1.621 #	61.85%

- used in calculation; * - invalid data; D - deleted from calcs.

Calculations on 5 Mins data:

EC50 Concentration: 17.21% (95% confidence range: 16.08 to 18.41)

95% Confidence Factor: 1.070

Estimating Equation: $\text{LOG C} = 1.138 \times \text{LOG G} + 1.236$

Coeff. of Determination (R^2): 0.9925

Slope: 0.8722

Correction Factor: 0.9658

Calculations on 15 Mins data:

EC50 Concentration: 23.39% (95% confidence range: 20.99 to 26.06)

95% Confidence Factor: 1.114

Estimating Equation: $\text{LOG C} = 1.092 \times \text{LOG G} + 1.369$

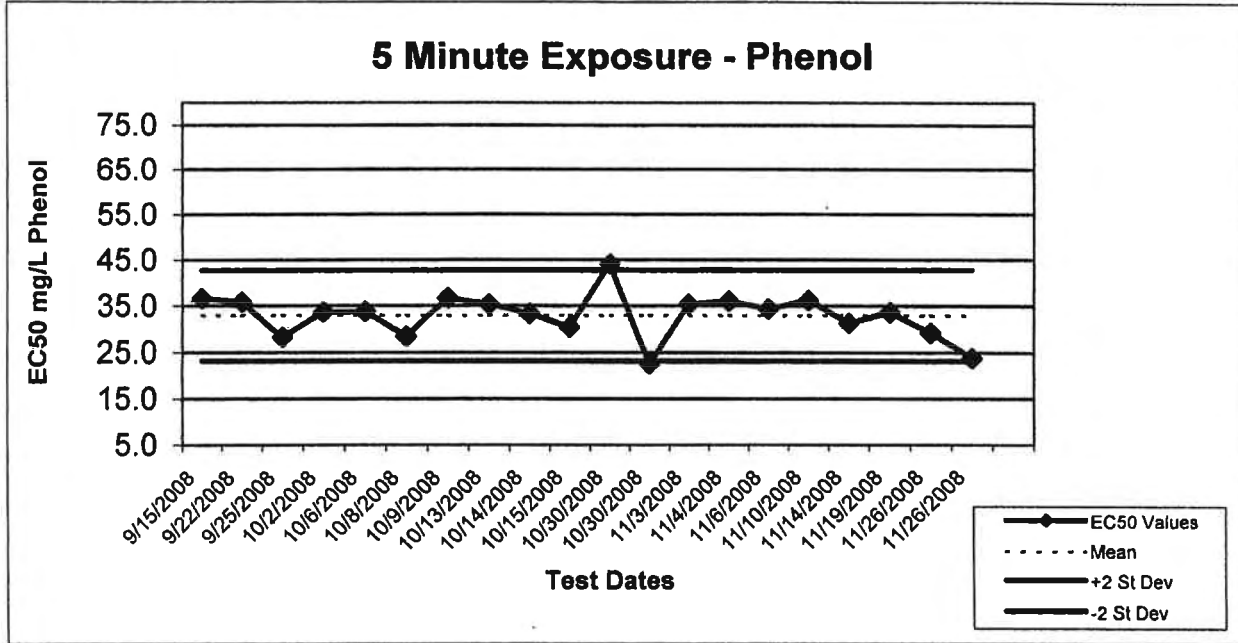
Coeff. of Determination (R^2): 0.9843

Slope: 0.9016

Correction Factor: 0.6641

Reference Toxicant Control Chart Microtox 5-Minute Exposure

CV% = 14.8

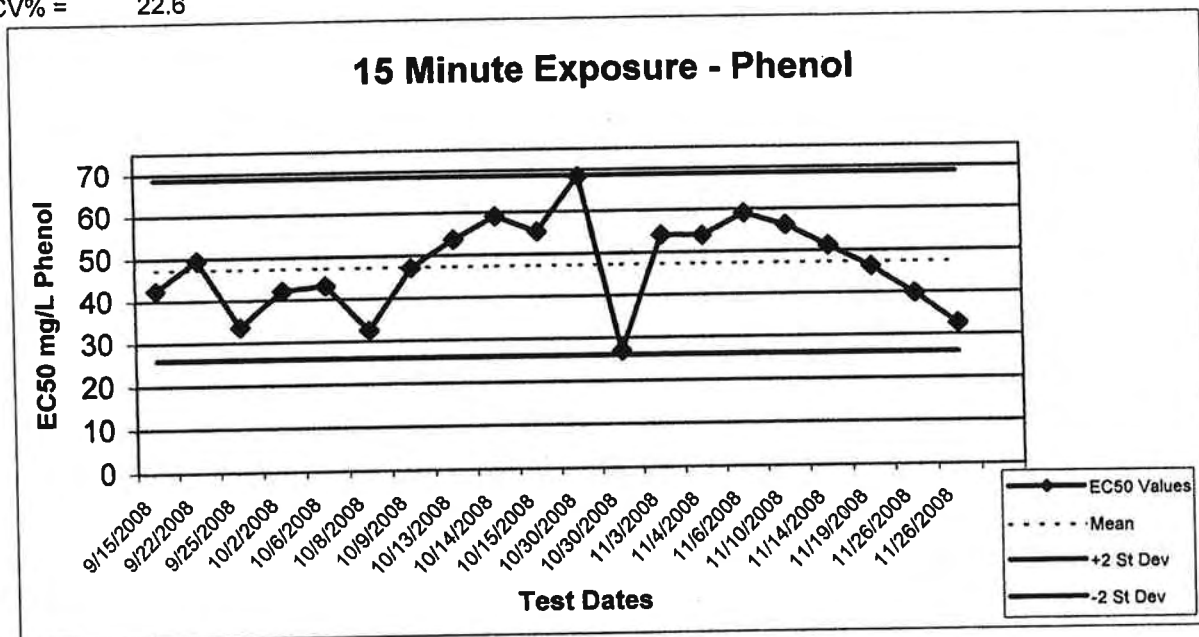


Date	Time	EC50 %	EC50 mg/L Phenol ^a	Mean	StDev	-2 SD	+2 SD
9/15/2008	843	35.9	36.6	32.9	4.9	23.2	42.7
9/22/2008	1246	35.1	35.8	32.9	4.9	23.2	42.7
9/25/2008	1323	27.7	28.3	32.9	4.9	23.2	42.7
10/2/2008	1237	19.8	33.6	32.9	4.9	23.2	42.7
10/6/2008	1251	19.9	33.8	32.9	4.9	23.2	42.7
10/8/2008	1309	16.7	28.5	32.9	4.9	23.2	42.7
10/9/2008	1236	21.6	36.7	32.9	4.9	23.2	42.7
10/13/2008	1346	20.8	35.3	32.9	4.9	23.2	42.7
10/14/2008	1218	19.6	33.3	32.9	4.9	23.2	42.7
10/15/2008	1242	17.9	30.4	32.9	4.9	23.2	42.7
10/30/2008	1114	25.9	44.0	32.9	4.9	23.2	42.7
10/30/2008	1228	13.3	22.6	32.9	4.9	23.2	42.7
11/3/2008	1440	20.8	35.4	32.9	4.9	23.2	42.7
11/4/2008	1310	21.2	36.0	32.9	4.9	23.2	42.7
11/6/2008	1253	20.2	34.3	32.9	4.9	23.2	42.7
11/10/2008	1256	21.3	36.2	32.9	4.9	23.2	42.7
11/14/2008	1313	18.4	31.3	32.9	4.9	23.2	42.7
11/19/2008	1223	19.8	33.7	32.9	4.9	23.2	42.7
11/26/2008	1352	17.2	29.2	32.9	4.9	23.2	42.7
11/26/2008	1139	14.0	23.8	32.9	4.9	23.2	42.7

a - Highest concentration of Phenol is 170 mg/L as of 10/1/08, 102 mg/L previously

Reference Toxicant Control Chart Microtox 15-Minute Exposure

CV% = 22.6



Date	Time	EC50 %	EC50 mg/L Phenol ^a	Mean	StDev	-2 SD	+2 SD
9/15/2008	843	41.6	42.4	47.3	10.7	26.0	68.7
9/22/2008	1246	48.5	49.5	47.3	10.7	26.0	68.7
9/25/2008	1323	33.0	33.7	47.3	10.7	26.0	68.7
10/2/2008	1237	24.8	42.1	47.3	10.7	26.0	68.7
10/6/2008	1251	25.4	43.2	47.3	10.7	26.0	68.7
10/8/2008	1309	19.2	32.6	47.3	10.7	26.0	68.7
10/9/2008	1236	27.7	47.1	47.3	10.7	26.0	68.7
10/13/2008	1346	31.6	53.6	47.3	10.7	26.0	68.7
10/14/2008	1218	34.7	59.0	47.3	10.7	26.0	68.7
10/15/2008	1242	32.5	55.3	47.3	10.7	26.0	68.7
10/30/2008	1114	40.2	68.3	47.3	10.7	26.0	68.7
10/30/2008	1228	15.8	26.9	47.3	10.7	26.0	68.7
11/3/2008	1440	31.8	54.1	47.3	10.7	26.0	68.7
11/4/2008	1310	31.7	53.9	47.3	10.7	26.0	68.7
11/6/2008	1253	34.7	59.0	47.3	10.7	26.0	68.7
11/10/2008	1256	33.0	56.1	47.3	10.7	26.0	68.7
11/14/2008	1313	30.1	51.2	47.3	10.7	26.0	68.7
11/19/2008	1223	27.2	46.2	47.3	10.7	26.0	68.7
11/26/2008	1352	23.4	39.8	47.3	10.7	26.0	68.7
11/26/2008	1139	19.2	32.6	47.3	10.7	26.0	68.7

a - Highest concentration of Phenol is 170 mg/L as of 10/1/08, 102 mg/L previously

MicrotoxOmni Test Report

Date: 11/26/2008 11:39 AM

Test Protocol: Basic Test

Sample: 170mg/LPhenol

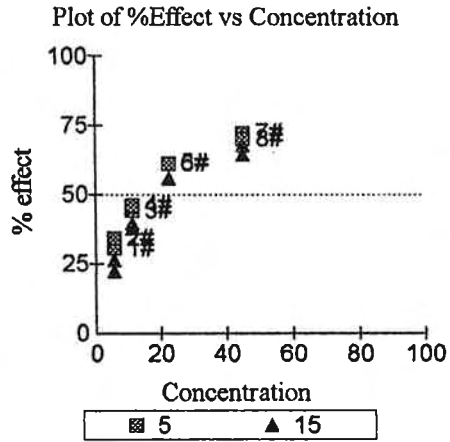
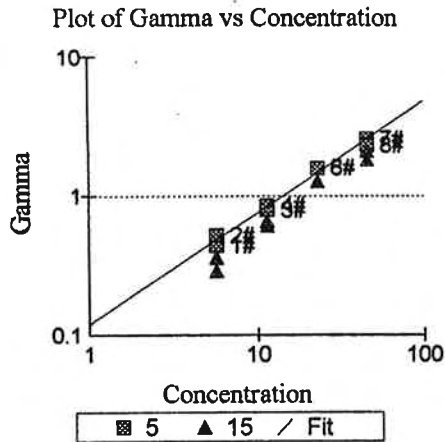
Toxicant: 170 mg/LPenol

Reagent Lot no.: 8K1031

Test description: Reference Toxicant

Test name: RT112608VF

Database file: \\Fif-ws3\alldata\Nautilus\former staff Folders\Karen\Microtox\MicrotoxOmni\Edge Analytical.mdb



Sample	Conc	5 Mins Data:				15 Mins Data:		
		Io	It	Gamma	% effect	It	Gamma	% effect
Control	0.000	94.48	81.94	0.8673	#	56.66	0.5997	#
Control	0.000	88.32	82.97	0.9394	#	57.25	0.6482	#
1	5.625	95.54	60.02	0.4380	#	46.28	0.2881	#
2	5.625	105.06	62.42	0.5204	#	48.20	0.3600	#
3	11.25	95.74	48.35	0.7888	#	37.10	0.6102	#
4	11.25	95.90	46.74	0.8535	#	36.20	0.6530	#
5	22.50	102.24	35.67	1.589	#	28.11	1.269	#
6	22.50	102.31	35.94	1.572	#	28.08	1.273	#
7	45.00	98.99	24.95	2.584	#	19.88	2.107	#
8	45.00	97.65	26.54	2.324	#	21.64	1.816	#

- used in calculation; * - invalid data; D - deleted from calcs.

Calculations on 5 Mins data:

EC50 Concentration: 14.00% (95% confidence range: 12.81 to 15.29)

95% Confidence Factor: 1.093

Estimating Equation: LOG C = 1.230 x LOG G + 1.146

Coeff. of Determination (R²): 0.9873

Slope: 0.8025

Correction Factor: 0.9033

Calculations on 15 Mins data:

EC50 Concentration: 19.23% (95% confidence range: 17.18 to 21.53)

95% Confidence Factor: 1.119

Estimating Equation: LOG C = 1.111 x LOG G + 1.284

Coeff. of Determination (R²): 0.9800

Slope: 0.8817

Correction Factor: 0.6240

APPENDIX E - Chain-of Custody Forms



NewFields Northwest, LLC.
 Shipping: 4729 NE View Dr.
 Mailing: P.O. Box 216
 Port Gamble, WA. 98364
 Tel: (360) 297-6040, Fax: (360)297-7268

CHAIN OF CUSTODY
13332 10f3

Destination Lab: Nautilus		Sample Originator: NewFields		Report Results To: NewFields		Phone: 11									
Destination Contact: Eric Tollefson		Contact Name: Brian Heste		Contact Name: Brian Heste		Fax: 11									
Date: 10/28/08		Address: See above		Address: 11		Email: 11									
Turn-Around-Time: Standard		Phone: 11		Involving To: NewFields		Matrix Codes									
Project Name: Oakland Bay Sediment Characterization Study		Fax: 11		Comments or Special Instructions: Reference Correlations will be emitted separately		FW = Fresh Water									
Contract/PO:		E-mail: bheste@newfields.com		Preservation: 4°C		WW = Waste Water									
No.		Sample ID		Matrix		No. & Type of Container		Date & Time		Analysis		Sample Temp Upon Receipt		LAB ID	
1	RF-01-SS-00	SS	16	10/9/08	X								7.0	508-170-173	
2	RF-02-SS-00												7.0	508-171-174	
3	RF-03-SS-00												5.2	508-172-175	
4	OB-07 11 "												5.1	508-176	
5	OB-08												6.8	508-177	
6	SH-07												5.7	508-178	
7	SH-13												5.1	508-179	
8	HI-02												6.0	508-180	
9	HI-03												7.8	508-181	
10	HI-04												6.1	508-182	
11	OB-11												5.8	508-183	
12	OB-09												5.9	508-184	
13	OB-05												5.0	508-185	
14	OB-17-WS-00												8.7	508-186	
15	OB-18												4.1	508-187	
16	OB-04												5.0	508-188	
17	OB-06												5.0	508-189	
18	HI-06												6.1	508-190	
19	OB-19-WS-00												8.3	508-191	
20	OB-10												7.9	508-192	

Print Name: **Brian Heste** Signature: *[Signature]* Affiliation: **NewFields** Date/Time: **10/28/08 07:20**

Relinquished by: *[Signature]* Print Name: **Brian Heste** Signature: *[Signature]* Affiliation: **NewFields** Date/Time: **10/28/08 07:20**

Received by: *[Signature]* Print Name: **Brian Heste** Signature: *[Signature]* Affiliation: **NewFields** Date/Time: **10/28/08 07:20**

Matrix Codes: FW = Fresh Water, WW = Waste Water, SB = Salt & Brackish Water, SS = Soil & Sediment, TS = plant & Animal Tissue, OT = Other

WHITE - return to originator • YELLOW - lab • PINK - retained by originator

NEWFIELDS

NewFields Northwest, LLC.
 Shipping: 4729 NE View Dr.
 Mailing: P.O. Box 216
 Port Gamble, WA. 98364
 Tel: (360) 297-6040, Fax: (360) 297-7268

CHAIN OF CUSTODY
 13333
 2673

Destination Lab:		Sample Originator:		Report Results To:	
Destination Contact:		Contact Name:		Contact Name:	
Date:		Address:		Address:	
Turn-Around-Time:		Phone:		Phone:	
Project Name:		Fax:		Fax:	
Contract/PO:		E-mail:		E-mail:	

No.	Sample ID	Matrix	No. & Type of Container	Date & Time	Analysis	Invoicing To:	Preservation	Sample Temp Upon Receipt	LAB ID
1	08-12-SS-00	SS	16	10/4/08	X Micortex		4°C	5.5	508-193
2	08-13-11			↓				7.9	508-194
3	08-14-11			10/1/08				7.7	508-195
4	SH-30-WS-00			10/2/08				8.2	508-196
5	H1-07-SS-00							5.2	508-197
6	SH-12-SS-00							5.0	508-198
7	SH-11-SS-00							6.1	508-199
8	SH-18-WS-00							6.7	508-200
9	SH-25-WS-00							5.7	508-201
10	H1-05-SS-00							5.4	508-202
11	08-02-SS-00							3.8	508-203
12	08-01-SS-00							5.6	508-204
13	08-03-SS-00							7.8	508-205
14	SH-01-SS-00			9/29/08				4.7	508-206
15	SH-02-SS-00			9/30/08				5.0	508-207
16	SH-10-SS-00							6.8	508-208
17	SH-14-SS-00							6.0	508-209
18	SH-22-WS-00							3.7	508-210
19	SH-23-WS-00							7.2	508-211
20	SH-26-WS-00							5.2	508-212

Print Name:	Brian Hester	Print Name:	
Signature:	<i>Brian Hester</i>	Signature:	
Affiliation:	New Fields	Affiliation:	
Date/Time:	10/20/08 0720	Date/Time:	

Print Name:	Myron Bunsel-Hester	Print Name:	
Signature:	<i>Myron Bunsel-Hester</i>	Signature:	
Affiliation:	New Fields	Affiliation:	
Date/Time:	10/28/08 0720	Date/Time:	

Matrix Codes:
 FW = Fresh Water
 WW = Waste Water
 SB = Soil & Brackish Water
 SS = Soil & Sediment
 TS = plant & Animal Tissue
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NEWFIELDS

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 Port Gamble, WA. 98364
 Tel: (360) 297-6040, Fax: (360)297-7268

CHAIN OF CUSTODY

13334

383

Destination Lab: Destination Contact: Date: Turn-Around-Time: Project Name: Contract/PO:		Sample Originator: Contact Name: Address: Phone: Fax: E-mail:		Report Results To: Contact Name: Address: Phone: Fax: Email:	
Invoicing To: Comments or Special Instructions:		Analysis		Invoicing To: Comments or Special Instructions:	
No.	Sample ID	Matrix	No. & Type of Container	Date & Time	LAB ID
1	SH-27-WS-00	SS	16	9/30/08	508-213
2	SH-28-WS-00			10/1/08	508-214
3	SH-06-SS-00				508-215
4	SH-04-SS-00				508-216
5	SH-03-SS-00				508-217
6	SH-09-SS-00				508-218
7	SH-21-WS-00				508-219
8	SH-20-WS-00				508-220
9	SH-19-WS-00				508-221
10	SH-24-WS-00				508-222
11	SH-15-SS-00				508-223
12	SH-29-WS-00				508-224
13	SH-16-SS-00				508-225
14					
15					
16					
17					
18					
19					
20					
Relinquished by: Print Name: <i>Brim Heste</i> Signature: <i>[Signature]</i> Affiliation: <i>NewFields</i> Date/Time: <i>10/20/08 0720</i>		Relinquished by: Print Name: <i>[Signature]</i> Signature: <i>[Signature]</i> Affiliation: <i>NewFields</i> Date/Time: <i>10/28/08 0720</i>		Relinquished by: Print Name: Signature: Affiliation: Date/Time:	
Matrix Codes FW = Fresh Water WW = Waste Water SB = Salt & Brackish Water SS = Soil & Sediment TS = Plant & Animal Tissue OT = Other		Received by: Print Name: Signature: Affiliation: Date/Time:		Received by: Print Name: Signature: Affiliation: Date/Time:	

***BIOLOGICAL TESTING RESULTS FOR
OAKLAND BAY SEDIMENT CHARACTERIZATION,
OAKLAND BAY, WASHINGTON***

APPENDIX B

WATER QUALITY SUMMARIES

Batch 1. Water Quality Summary for the 10-Day Acute Test with *Ampelisca abdita*.

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			Salinity (ppt)			pH (units)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	7.7	7.1	8.7	20.0	19.6	21.5	29.7	28	32	8.1	7.8	8.5
RF-01-SS-00	7.5	6.7	8.1	20.0	19.6	21.9	29.1	28	30	8.2	7.8	8.8
RF-02-SS-00	7.6	6.9	8.3	19.9	19.6	21.2	29.7	28	32	8.1	7.8	8.5
OB-06-SS-00	7.7	7.2	8.5	20.0	19.6	21.4	29.8	28	32	8.2	7.8	8.5
OB-09-SS-00	7.7	7.2	8.4	20.0	19.6	22.0	28.9	28	30	8.3	7.9	8.7
OB-19-WS-00	7.6	6.8	8.4	20.2	19.6	23.8	29.8	28	32	8.2	7.8	8.5
OB-18-WS-00	7.6	6.8	8.1	19.9	19.5	21.3	29.4	28	31	8.3	7.8	8.6
OB-10-SS-00	7.7	7.1	8.5	20.0	19.6	21.5	29.8	28	32	8.2	7.8	8.6
SH-18-WS-00	7.6	7.0	8.4	20.0	19.6	22.0	29.5	28	31	8.2	7.9	8.6
OB-08-SS-00	7.6	6.7	8.6	20.1	19.5	23.3	30.3	28	33	8.0	7.6	8.2
OB-12-SS-00	7.7	6.9	8.4	20.1	19.6	21.9	28.8	28	30	8.0	7.8	8.3
SH-20-WS-00	7.6	6.9	8.4	20.0	19.6	21.8	29.5	28	31	8.4	7.9	8.7
OB-05-SS-00	7.6	6.6	8.3	20.0	19.6	21.9	29.7	28	32	8.3	7.8	8.7
SH-21-WS-00	7.5	6.7	8.3	20.2	19.6	23.2	29.8	28	32	8.1	7.8	8.3
OB-11-SS-00	7.6	6.8	8.4	20.1	19.7	22.3	27.9	27	29	8.3	7.9	8.6
SH-19-WS-00	7.6	6.7	8.2	20.0	19.4	22.3	30.8	28	35	8.1	7.8	8.5
OB-13-SS-00	7.6	6.9	8.7	20.0	19.6	22.0	28.6	28	30	8.0	7.8	8.3
SH-04-SS-00	7.7	7.0	8.6	20.0	19.6	21.7	29.6	28	32	8.3	7.8	8.6
SH-03-SS-00	7.7	6.8	8.7	20.1	19.7	22.2	28.5	28	30	8.0	7.8	8.4
SH-13-SS-00	7.5	6.6	8.2	20.1	19.5	23.6	30.5	28	34	8.2	7.6	8.6
SH-23-WS-00	7.7	7.0	8.3	20.0	19.5	21.7	29.8	28	32	8.1	7.8	8.5
SH-11-SS-00	7.6	6.7	8.6	20.1	19.5	23.1	29.0	27	31	8.0	7.7	8.3
SH-12-SS-00	7.6	7.0	8.3	19.9	19.5	21.4	29.1	28	31	8.2	7.8	8.5

Batch 1. Ammonia and Sulfide Concentrations for the 10-Day Acute Test with *Ampelisca abdita*.

Treatment	Overlying Ammonia (mg/L Total)		Interstitial Ammonia (mg/L Total)		Overlying Sulfides (mg/L Total)		Interstitial Sulfides (mg/L Total)	
	Day 0	Day 10	Day 0	Day 10	Day 0	Day 10	Day 0	Day 10
Control	2.32	<0.5	8.34	7.74	0.120	0.025	0.041	0.057
RF-01-SS-00	0.918	<0.5	5.04	17.9	0.010	0.002	0.097	0.082
RF-02-SS-00	0.988	<0.5	3.98	6.00	0.049	0.003	0.152	0.178
OB-06-SS-00	<0.5	<0.5	0.803	<0.5	0.031	0.000	0.097	0.138
OB-09-SS-00	0.574	<0.5	1.65	<0.5	0.276	0.001	0.103	0.195
OB-19-WS-00	1.37	<0.5	2.85	1.22	0.007	0.008	0.091	0.118
OB-18-WS-00	0.817	<0.5	2.63	<0.5	0.016	0.000	0.040	0.173
OB-10-SS-00	0.742	<0.5	2.16	<0.5	0.019	0.000	0.068	0.089
SH-18-WS-00	<0.5	<0.5	1.69	<0.5	0.023	0.011	0.042	0.064
OB-08-SS-00	1.31	<0.5	2.01	<0.5	0.015	0.001	0.036	0.073
OB-12-SS-00	0.525	<0.5	1.58	5.46	0.012	0.004	0.059	0.036
SH-20-WS-00	<0.5	<0.5	0.788	<0.5	0.025	0.000	0.067	0.193
OB-05-SS-00	<0.5	<0.5	1.16	<0.5	0.011	0.007	0.054	0.048
SH-21-WS-00	<0.5	<0.5	1.58	NA	0.033	0.007	0.054	NA
OB-11-SS-00	<0.5	<0.5	0.902	<0.5	0.119	0.000	0.067	0.121
SH-19-WS-00	<0.5	<0.5	1.19	0.801	0.036	0.003	0.060	0.196
OB-13-SS-00	<0.5	<0.5	1.45	6.08	0.036	0.003	0.062	0.067
SH-04-SS-00	<0.5	<0.5	1.61	<0.5	0.011	0.000	0.081	0.102
SH-03-SS-00	0.507	<0.5	2.62	4.99	0.045	0.094	0.043	0.128
SH-13-SS-00	<0.5	<0.5	0.532	<0.5	0.015	0.002	0.016	0.167
SH-23-WS-00	<0.5	<0.5	1.25	<0.5	0.044	0.000	0.073	0.163
SH-11-SS-00	<0.5	<0.5	0.770	0.921	0.150	0.001	0.055	0.200
SH-12-SS-00	<0.5	<0.5	1.03	0.614	0.004	0.001	0.042	0.241

Batch 2. Water Quality Summary for the 10-Day Acute Test with *Eohaustorius estuarius*.

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			Salinity (ppt)			pH (units)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	8.5	8.1	9.7	15.3	15.1	15.6	28.5	28	29	8.0	7.8	8.2
RF-02-SS-00	8.3	7.9	8.8	15.4	15.2	15.6	28.6	28	29	8.0	7.8	8.1
RF-03-SS-00	8.5	8.1	9.6	15.3	15.1	15.6	28.6	28	29	8.1	7.8	8.2
SH-25-WS-00	8.5	8.1	9.6	15.3	15.1	15.6	28.6	28	29	8.0	7.9	8.2
OB-03-SS-00	8.4	8.0	9.3	15.4	15.0	16.6	28.7	28	29	8.0	7.9	8.1
SH-14-SS-00	8.2	7.3	9.1	15.4	15.1	16.9	28.6	28	29	8.1	7.8	8.5
OB-14-SS-00	8.4	8.1	9.1	15.5	15.1	16.9	28.4	28	29	7.9	7.6	8.2
OB-02-SS-00	8.4	7.8	9.0	15.5	15.2	16.8	28.6	28	29	8.0	7.8	8.1
SH-02-SS-00	8.2	7.2	9.0	15.6	15.1	16.8	29.0	28	30	7.8	7.5	8.2
SH-24-WS-00	8.3	7.9	9.4	15.3	15.1	15.6	28.5	28	29	8.0	7.8	8.1
SH-09-SS-00	8.4	7.8	9.3	15.4	15.0	16.7	29.1	28	30	8.0	7.7	8.2
OB-04-SS-00	8.4	7.9	9.3	15.4	15.1	16.7	29.1	28	30	8.0	7.7	8.1
SH-07-SS-00	8.5	8.1	9.7	15.2	15.1	15.5	28.6	28	29	8.0	7.8	8.1
OB-17-WS-00	8.4	8.0	9.3	15.4	15.1	16.8	28.6	28	29	8.0	7.7	8.1
SH-28-WS-00	8.4	8.1	9.2	15.4	15.1	16.8	28.6	28	29	8.0	7.8	8.1
SH-01-SS-00	8.5	8.1	9.6	15.3	15.1	15.5	28.7	28	29	8.0	7.8	8.1
SH-27-WS-00	8.4	7.7	9.2	15.4	15.1	16.7	28.7	28	29	8.0	7.8	8.1
OB-07-SS-00	8.4	8.1	9.4	15.4	15.2	15.7	28.6	28	29	8.0	7.8	8.1
SH-30-WS-00	8.4	8.0	9.2	15.4	15.2	16.8	28.6	28	29	8.0	7.7	8.1
SH-10-SS-00	8.4	7.9	9.1	15.4	15.1	16.8	28.6	28	29	8.0	7.7	8.2
SH-22-WS-00	8.0	6.4	9.0	15.5	15.2	16.9	28.6	28	29	8.0	7.7	8.2
HI-06-SS-00	8.4	8.1	9.5	15.3	15.1	15.5	28.6	28	29	8.0	7.8	8.1
SH-26-WS-00	8.5	8.0	9.2	15.4	15.0	16.7	28.7	28	29	8.0	7.8	8.1
HI-05-SS-00	8.3	7.4	9.2	15.5	15.2	16.9	28.6	28	29	8.0	7.8	8.1
OB-01-SS-00	8.4	7.8	9.1	15.5	15.2	16.8	28.7	28	29	8.0	7.7	8.2
HI-03-SS-00	8.2	6.9	9.1	15.5	15.2	16.9	28.6	28	29	8.0	7.8	8.1
HI-02-SS-00	8.3	7.4	9.1	15.4	15.1	16.8	28.5	28	29	8.0	7.8	8.2

Batch 2. Ammonia and Sulfide Concentrations for the 10-Day Acute Test with *Eohaustorius estuarius*.

Treatment	Overlying Ammonia (mg/L Total)		Interstitial Ammonia (mg/L Total)		Overlying Sulfides (mg/L Total)		Interstitial Sulfides (mg/L Total)	
	Day 0	Day 10	Day 0	Day 10	Day 0	Day 10	Day 0	Day 10
Control	<0.5	NA	<0.5	NA	0.000	NA	0.040	NA
RF-02-SS-00	1.50	NA	3.33	NA	0.021	NA	0.054	NA
RF-03-SS-00	1.89	NA	5.96	NA	0.010	NA	0.019	NA
SH-25-WS-00	0.626	NA	1.90	NA	0.002	NA	0.056	NA
OB-03-SS-00	0.373	NA	0.953	NA	0.015	NA	0.032	NA
SH-14-SS-00	0.739	NA	1.75	NA	0.001	NA	0.036	NA
OB-14-SS-00	0.364	NA	1.20	NA	0.024	NA	0.029	NA
OB-02-SS-00	1.02	NA	2.09	NA	0.016	NA	0.039	NA
SH-02-SS-00	0.688	NA	1.96	NA	0.020	NA	0.073	NA
SH-24-WS-00	0.966	NA	2.44	NA	0.001	NA	0.115	NA
SH-09-SS-00	0.743	NA	2.39	NA	0.003	NA	0.212	NA
OB-04-SS-00	0.646	NA	2.44	NA	0.010	NA	0.268	NA
SH-07-SS-00	1.02	NA	3.10	NA	0.005	NA	0.073	NA
OB-17-WS-00	<0.5	NA	1.40	NA	0.019	NA	0.316	NA
SH-28-WS-00	0.519	NA	1.61	NA	0.007	NA	0.202	NA
SH-01-SS-00	0.591	NA	1.85	NA	0.010	NA	0.105	NA
SH-27-WS-00	<0.5	NA	1.78	NA	0.017	NA	0.224	NA
OB-07-SS-00	1.13	NA	5.52	NA	0.005	NA	0.176	NA
SH-30-WS-00	0.735	NA	2.35	NA	0.025	NA	0.055	NA
SH-10-SS-00	0.521	NA	2.23	NA	0.009	NA	0.267	NA
SH-22-WS-00	1.40	NA	5.83	NA	0.006	NA	0.125	NA
HI-06-SS-00	0.588	NA	2.39	NA	0.029	NA	0.129	NA
SH-26-WS-00	0.301	NA	1.64	NA	0.003	NA	0.173	NA
HI-05-SS-00	0.859	NA	6.51	NA	0.020	NA	0.797	NA
OB-01-SS-00	0.939	NA	4.55	NA	0.028	NA	0.384	NA
HI-03-SS-00	0.688	NA	3.48	NA	0.015	NA	0.383	NA
HI-02-SS-00	1.48	NA	5.57	NA	0.020	NA	0.431	NA
SH-15-SS-00	<0.5	NA	2.29	NA	0.022	NA	0.474	NA
HI-04-SS-00	1.440	NA	8.79	NA	0.010	NA	0.358	NA
HI-07-SS-00	0.542	NA	3.89	NA	0.032	NA	0.230	NA
SH-16-SS-00	<0.5	NA	0.859	NA	0.010	NA	0.383	NA
SH-29-WS-00	1.03	NA	4.49	NA	0.029	NA	0.268	NA
SH-06-SS-00	<0.5	NA	1.54	NA	0.012	NA	0.069	NA

Batch 1. Water Quality Summary for the 20-Day Test with *Neanthes arenaceodentata*

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			Salinity (ppt)			pH (units)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	7.2	3.3	8.0	19.7	17.2	20.3	28.4	27	30	7.8	7.1	8.0
RF-01-SS-00	7.4	6.8	8.0	19.9	17.2	20.5	28.5	28	29	8.2	7.6	8.6
RF-02-SS-00	7.4	6.8	8.0	20.0	17.0	20.5	28.6	28	30	8.1	7.5	8.4
RF-03-SS-00	7.5	6.8	8.1	20.0	16.9	20.5	28.5	27	30	8.1	7.6	8.3
SH-28-WS-00	7.5	6.2	8.1	19.9	17.1	20.5	28.5	28	30	8.2	7.7	8.6
HI-04-SS-00	7.4	6.8	8.1	20.0	17.0	20.6	28.4	27	30	8.1	7.6	8.5
HI-06-SS-00	7.4	6.8	8.0	19.9	17.1	20.5	28.7	28	30	8.2	7.6	8.5
SH-09-SS-00	7.5	6.9	8.0	19.7	17.0	20.4	29.0	28	30	8.1	7.6	8.2
OB-06-SS-00	7.4	6.9	8.0	19.8	17.0	20.5	28.7	27	30	8.1	7.7	8.3
OB-11-SS-00	7.4	6.8	8.0	20.0	17.0	20.6	28.3	27	30	8.2	7.6	8.5
SH-03-SS-00	7.4	6.8	8.1	19.8	16.9	20.4	28.8	27	30	8.0	7.5	8.2
SH-22-WS-00	7.4	5.6	8.5	19.9	17.0	20.6	28.7	28	30	8.2	7.6	8.5
SH-13-SS-00	7.3	6.9	8.0	19.8	16.9	20.5	28.8	27	30	8.2	7.6	8.4
OB-19-WS-00	7.4	4.4	8.1	19.9	16.9	20.5	28.5	27	30	8.1	7.6	8.5
SH-10-SS-00	7.4	6.7	7.9	19.9	17.0	20.5	28.6	28	30	8.1	7.5	8.3
OB-01-SS-00	7.4	6.6	7.9	19.8	17.0	20.4	29.0	27	31	8.1	7.6	8.3
SH-04-SS-00	7.4	5.0	10.7	20.0	17.0	20.7	28.5	28	30	8.1	7.4	8.5
HI-07-SS-00	7.2	3.3	8.0	19.7	17.2	20.3	28.4	27	30	7.8	7.1	8.0
OB-05-SS-00	7.3	6.4	7.8	19.8	17.0	20.5	28.6	28	30	8.1	7.6	8.6
SH-14-SS-00	7.2	6.5	7.9	19.8	17.1	20.5	28.4	28	29	8.2	7.7	8.8
OB-17-WS-00	7.5	7.0	8.1	20.0	16.9	20.5	29.0	27	31	8.2	7.6	8.5
OB-02-SS-00	7.0	2.9	8.0	19.8	17.0	20.2	29.9	28	32	8.1	7.6	8.3
OB-12-SS-00	7.5	6.8	8.1	20.0	16.9	20.5	28.6	28	30	8.2	7.7	8.4
OB-14-SS-00	7.5	6.9	8.1	20.0	16.9	20.5	28.2	27	29	8.0	7.6	8.2
HI-02-SS-00	7.6	6.8	10.1	20.0	16.9	20.5	28.2	27	29	8.1	7.6	8.3
SH-11-SS-00	7.4	6.9	8.0	20.1	19.2	20.6	28.2	27	29	8.1	7.6	8.3
SH-01-SS-00	7.4	6.9	8.1	19.7	16.9	20.6	28.3	27	29	8.1	7.6	8.4
SH-21-WS-00	7.4	6.9	8.0	20.0	16.9	20.6	28.4	27	29	8.1	7.6	8.3
OB-13-SS-00	7.5	6.9	8.1	19.9	17.0	20.6	28.5	28	30	8.1	7.6	8.3

Batch 1. Ammonia and Sulfide Concentrations for the 20-Day Test with *Neanthes arenaceodentata*

Treatment	Overlying Ammonia (mg/L Total)		Interstitial Ammonia (mg/L Total)		Overlying Sulfides (mg/L)		Interstitial Sulfides (mg/L)	
	Day 0	Day 20	Day 0	Day 20	Day 0	Day20	Day 0	Day20
Control	<0.5	<0.5	<0.5	<0.5	0.000	0.002	0.006	0.022
RF-01-SS-00	<0.5	<0.5	2.26	<0.5	0.000	0.001	0.063	0.242
RF-02-SS-00	<0.5	<0.5	1.70	<0.5	0.001	0.010	0.053	0.054
RF-03-SS-00	0.745	<0.5	2.84	<0.5	0.004	0.001	0.159	0.178
SH-28-WS-00	<0.5	<0.5	1.40	0.742	0.010	0.004	0.063	0.086
HI-04-SS-00	<0.5	<0.5	6.17	<0.5	0.013	0.006	0.200	0.204
HI-06-SS-00	0.741	<0.5	1.78	<0.5	0.025	0.005	0.186	NA
SH-09-SS-00	<0.5	<0.5	2.68	<0.5	0.000	0.000	0.079	0.105
OB-06-SS-00	<0.5	<0.5	<0.5	<0.5	0.006	0.000	0.030	0.072
OB-11-SS-00	<0.5	<0.5	0.967	<0.5	0.014	0.001	0.037	0.091
SH-03-SS-00	<0.5	<0.5	1.43	<0.5	0.001	0.000	0.049	0.098
SH-22-WS-00	<0.5	<0.5	4.27	<0.5	0.006	0.002	0.172	0.080
SH-13-SS-00	<0.5	<0.5	0.632	<0.5	0.006	0.001	0.061	0.059
OB-19-WS-00	<0.5	<0.5	1.64	<0.5	0.003	0.005	0.063	0.036
SH-10-SS-00	0.508	<0.5	0.934	<0.5	0.003	0.006	0.183	0.183
OB-01-SS-00	<0.5	<0.5	3.26	2.32	0.016	0.002	0.172	0.136
SH-04-SS-00	<0.5	<0.5	0.745	<0.5	0.003	0.006	0.035	0.060
HI-07-SS-00	<0.5	<0.5	4.29	<0.5	0.019	0.004	0.222	0.392
OB-05-SS-00	<0.5	<0.5	0.939	<0.5	0.019	0.006	0.059	0.031
SH-14-SS-00	<0.5	<0.5	1.19	<0.5	0.026	0.001	0.050	0.044
OB-17-WS-00	<0.5	<0.5	0.836	<0.5	0.004	0.011	0.052	0.031
OB-02-SS-00	<0.5	<0.5	2.02	7.25	0.004	0.010	0.041	0.070
OB-12-SS-00	<0.5	<0.5	1.21	<0.5	0.005	0.003	0.027	0.035
OB-14-SS-00	<0.5	<0.5	0.636	0.500	0.007	0.004	0.053	0.120
HI-02-SS-00	0.696	<0.5	5.03	0.774	0.014	0.003	0.192	0.066
SH-11-SS-00	<0.5	<0.5	0.584	0.657	0.017	0.001	0.114	0.076
SH-01-SS-00	<0.5	<0.5	0.956	<0.5	0.001	0.007	0.032	0.081
SH-21-WS-00	<0.5	<0.5	0.624	<0.5	0.006	0.004	0.024	0.157
OB-13-SS-00	<0.5	<0.5	1.22	2.28	0.022	0.005	0.045	0.058

Batch 2. Water Quality Summary for the 20-Day Test with *Neanthes arenaceodentata*

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			Salinity (ppt)			pH (units)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	7.5	6.8	8.5	20.3	18.8	22.3	28.9	28	30	8.1	7.8	8.2
RF-01-SS-00	7.4	6.6	8.0	20.3	18.7	22.3	28.8	28	30	8.2	7.9	8.6
RF-02-SS-00	7.3	3.6	9.0	20.3	18.6	22.4	28.7	28	30	8.2	7.6	8.7
RF-03-SS-00	7.5	6.6	8.6	20.2	18.6	22.2	28.9	28	30	8.1	7.7	8.3
SH-06-SS-00	7.4	6.3	8.5	20.3	18.8	22.8	28.8	28	30	8.1	7.7	8.4
SH-25-WS-00	7.4	6.6	8.7	20.3	18.7	22.5	28.8	28	30	8.3	7.6	8.7
SH-12-SS-00	7.4	6.5	8.5	20.4	18.9	23.0	29.1	28	30	8.2	7.8	8.7
OB-10-SS-00	7.3	6.5	8.8	20.3	18.7	22.7	28.7	28	29	8.3	7.7	8.8
SH-20-WS-00	7.4	6.6	7.9	20.3	18.7	22.4	29.2	28	30	8.2	7.9	8.6
SH-26-WS-00	7.5	6.5	8.9	20.4	18.9	22.8	29.4	28	31	8.2	7.8	8.6
SH-15-SS-00	7.5	6.3	8.8	20.4	18.8	22.7	29.0	28	30	8.1	7.8	8.4
OB-04-SS-00	7.4	6.7	8.1	20.3	18.7	22.4	29.0	28	30	8.2	7.9	8.5
SH-24-WS-00	7.5	6.6	8.3	20.3	18.6	22.3	29.9	28	31	8.2	7.8	8.4
HI-05-SS-00	7.4	6.5	8.6	20.2	18.5	22.1	28.8	28	29	8.0	7.7	8.3
SH-23-WS-00	7.4	6.7	8.6	20.1	18.7	22.9	29.1	28	30	8.2	7.7	8.5
SH-27-WS-00	7.4	6.4	8.4	20.3	19.0	23.0	29.0	28	30	8.1	7.8	8.5
OB-07-SS-00	7.5	6.4	8.5	20.3	18.9	22.9	29.1	28	30	8.2	7.8	8.5
OB-09-SS-00	7.5	6.7	8.1	20.3	18.8	22.3	29.9	28	31	8.2	7.8	8.5
SH-18-WS-00	7.4	6.4	8.3	20.3	18.7	22.4	29.0	28	30	8.2	7.7	8.5
OB-08-SS-00	7.4	6.5	8.4	20.3	18.7	22.3	29.0	28	30	8.2	7.7	8.5
SH-30-WS-00	7.5	6.5	8.0	20.3	18.7	22.3	29.0	28	30	8.2	7.9	8.4
SH-19-WS-00	7.4	6.5	8.5	20.3	18.8	22.9	29.1	28	30	8.3	7.9	8.7
OB-18-WS-00	7.4	6.5	7.9	20.2	18.6	22.3	29.3	28	31	8.3	7.9	8.8
SH-16-SS-00	7.9	6.2	14.2	20.2	18.7	22.3	28.6	28	29	8.1	7.8	8.9
SH-02-SS-00	7.3	5.5	8.7	20.2	18.6	22.2	29.7	28	32	8.2	7.8	8.6
HI-03-SS-00	7.5	6.6	8.8	20.1	18.4	21.8	29.0	28	30	8.1	7.8	8.4
OB-03-SS-00	7.4	6.5	8.4	20.3	18.7	22.4	29.0	28	30	8.2	7.8	8.4
SH-29-WS-00	7.5	6.8	7.9	20.3	18.7	22.3	30.0	28	32	8.1	7.9	8.2
SH-07-SS-00	7.5	6.5	8.1	20.3	18.8	22.4	29.0	28	30	8.1	7.8	8.3

Batch 2. Ammonia and Sulfide Concentrations for the 20-Day Test with *Neanthes arenaceodentata*

Treatment	Overlying Ammonia (mg/L Total)		Interstitial Ammonia (mg/L Total)		Overlying Sulfides (mg/L)		Interstitial Sulfides (mg/L)	
	Day 0	Day 20	Day 0	Day 20	Day 0	Day20	Day 0	Day20
Control	<0.5	<0.5	<0.5	<0.5	0.000	0.004	0.000	0.034
RF-01-SS-00	1.92	<0.5	3.46	<0.5	0.010	0.000	0.015	0.073
RF-02-SS-00	1.24	<0.5	3.33	<0.5	0.018	0.000	0.029	0.098
RF-03-SS-00	2.88	<0.5	6.75	<0.5	0.012	0.004	0.122	0.251
SH-06-SS-00	0.570	<0.5	2.76	<0.5	0.000	0.001	0.040	0.106
SH-25-WS-00	<0.5	<0.5	1.65	<0.5	0.000	0.002	0.034	0.063
SH-12-SS-00	<0.5	<0.5	1.72	<0.5	0.000	0.009	0.037	0.076
OB-10-SS-00	0.579	<0.5	1.50	<0.5	0.002	0.003	18.000	0.042
SH-20-WS-00	<0.5	<0.5	1.17	<0.5	0.007	0.000	0.047	0.105
SH-26-WS-00	<0.5	<0.5	2.68	0.75	0.002	0.002	0.245	0.160
SH-15-SS-00	0.620	<0.5	2.60	<0.5	0.017	0.003	0.170	0.532
OB-04-SS-00	0.854	<0.5	2.63	<0.5	0.049	0.000	0.032	0.171
SH-24-WS-00	0.797	<0.5	2.68	<0.5	0.007	0.000	0.028	0.212
HI-05-SS-00	1.36	<0.5	5.49	<0.5	0.025	0.010	0.105	0.432
SH-23-WS-00	<0.5	<0.5	1.01	<0.5	0.005	0.005	0.026	0.106
SH-27-WS-00	<0.5	<0.5	1.43	<0.5	0.011	0.001	0.092	0.123
OB-07-SS-00	1.76	<0.5	8.92	0.88	0.008	0.003	0.053	0.290
OB-09-SS-00	0.656	<0.5	1.55	<0.5	0.007	0.009	0.008	0.138
SH-18-WS-00	0.592	<0.5	1.06	<0.5	0.004	0.000	0.031	0.227
OB-08-SS-00	1.52	<0.5	4.26	<0.5	0.000	0.000	0.015	0.086
SH-30-WS-00	0.846	<0.5	2.97	<0.5	0.014	0.001	0.115	0.163
SH-19-WS-00	<0.5	<0.5	1.30	<0.5	0.030	0.002	0.024	0.165
OB-18-WS-00	0.927	<0.5	2.70	<0.5	0.000	0.004	0.024	0.170
SH-16-SS-00	0.589	<0.5	2.15	<0.5	0.001	0.001	0.066	NA
SH-02-SS-00	0.786	<0.5	2.51	<0.5	0.003	0.000	0.021	0.196
HI-03-SS-00	1.28	<0.5	4.75	<0.5	0.024	0.000	0.040	0.226
OB-03-SS-00	<0.5	<0.5	1.26	<0.5	0.055	0.001	0.022	0.200
SH-29-WS-00	1.03	<0.5	4.48	<0.5	0.007	0.001	0.109	NA
SH-07-SS-00	1.03	<0.5	4.58	<0.5	0.000	0.001	0.026	0.182

Batch 1. Water Quality Summary for the Larval Development Test with *Mytilus* sp.

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			Salinity (ppt)			pH (units)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	8.1	7.9	8.6	15.6	15.5	15.7	28.0	28	28	7.8	7.7	7.8
RF-01-SS-00	7.1	6.2	8.7	15.6	15.3	15.9	28.0	28	28	7.7	7.7	7.7
RF-02-SS-00	7.2	6.3	8.8	15.5	15.2	15.8	28.0	28	28	7.7	7.7	7.8
RF-03-SS-00	7.2	6.6	8.4	15.7	15.3	15.9	28.0	28	28	7.7	7.7	7.7
HI-05-SS-00	7.5	6.8	8.9	15.7	15.5	15.9	28.0	28	28	7.8	7.7	7.8
HI-07-SS-00	7.3	6.6	8.6	15.6	15.4	15.8	28.0	28	28	7.7	7.7	7.8
OB-01-SS-00	6.9	6.1	8.3	15.9	15.6	16.2	28.0	28	28	7.7	7.7	7.8
OB-02-SS-00	6.8	5.8	8.5	15.6	15.3	15.8	28.0	28	28	7.7	7.7	7.7
OB-03-SS-00	6.7	5.9	8.2	15.9	15.4	16.1	28.0	28	28	7.7	7.5	7.9
SH-01-SS-00	7.0	5.7	8.8	15.7	15.1	16.1	28.0	28	28	7.6	7.3	7.7
SH-02-SS-00	6.8	5.7	8.6	15.6	15.1	15.9	28.0	28	28	7.6	7.6	7.6
SH-03-SS-00	6.7	5.7	8.3	15.8	15.5	16.0	28.0	28	28	7.6	7.6	7.7
SH-04-SS-00	6.4	5.6	8.1	15.7	15.4	15.9	28.0	28	28	7.7	7.6	7.7
SH-06-SS-00	7.0	6.3	8.3	15.7	15.5	15.8	28.0	28	28	7.6	7.6	7.7
SH-09-SS-00	6.5	5.6	8.2	15.7	15.4	15.9	28.0	28	28	7.7	7.6	7.7
SH-10-SS-00	6.6	5.7	8.3	15.6	15.1	16.0	28.0	28	28	7.6	7.4	7.7
SH-14-SS-00	6.5	5.6	8.0	15.5	15.2	15.8	28.0	28	28	7.7	7.7	7.8
SH-15-SS-00	7.7	6.7	9.2	15.8	15.3	16.2	28.0	28	28	7.7	7.7	7.7
SH-16-SS-00	8.2	7.3	9.6	15.7	15.4	15.9	28.0	28	28	7.7	7.7	7.7
SH-19-WS-00	6.5	5.4	8.3	15.7	15.3	16.0	28.0	28	28	7.6	7.5	7.7
SH-20-WS-00	6.1	5.6	7.0	15.8	15.4	16.0	28.0	28	28	7.6	7.6	7.7
SH-21-WS-00	6.6	5.8	8.2	15.5	15.2	15.8	28.0	28	28	7.7	7.7	7.7
SH-22-WS-00	6.6	5.5	8.4	15.6	15.2	15.8	28.0	28	28	7.7	7.6	7.7
SH-23-WS-00	6.2	5.2	7.8	16.0	15.5	16.5	28.0	28	28	7.6	7.6	7.7
SH-24-WS-00	7.0	6.2	8.4	15.7	15.3	15.9	28.0	28	28	7.7	7.6	7.7
SH-26-WS-00	7.1	5.8	9.0	15.5	15.2	15.7	28.0	28	28	7.7	7.7	7.7
SH-27-WS-00	7.1	5.8	9.0	15.6	15.2	15.8	28.0	28	28	7.7	7.6	7.7
SH-28-WS-00	7.1	5.8	9.0	16.0	15.5	16.5	28.0	28	28	7.6	7.6	7.7
SH-29-WS-00	7.1	5.8	9.0	15.7	15.3	15.9	28.0	28	28	7.7	7.6	7.7
SH-30-WS-00	7.1	5.8	9.0	15.5	15.2	15.7	28.0	28	28	7.7	7.7	7.7

Batch 1. Ammonia and Sulfide Concentrations for the for the Larval Development Test with *Mytilus* sp.

Treatment	Overlying Ammonia (mg/L Total)		Overlying Sulfides (mg/L Total)	
	Day 0	Day 2	Day 0	Day 2
Control	<0.5	<0.5	0.001	0.000
RF-01-SS-00	<0.5	<0.5	0.177	0.004
RF-02-SS-00	<0.5	<0.5	0.187	0.004
RF-03-SS-00	<0.5	<0.5	0.142	0.000
HI-05-SS-00	<0.5	<0.5	0.193	0.005
HI-07-SS-00	<0.5	<0.5	0.141	0.004
OB-01-SS-00	<0.5	<0.5	0.215	0.004
OB-02-SS-00	<0.5	<0.5	0.277	0.008
OB-03-SS-00	<0.5	<0.5	0.264	0.005
SH-01-SS-00	<0.5	<0.5	0.260	0.002
SH-02-SS-00	<0.5	<0.5	0.570	0.004
SH-03-SS-00	<0.5	<0.5	0.281	0.004
SH-04-SS-00	0.541	<0.5	0.129	0.000
SH-06-SS-00	<0.5	<0.5	0.204	0.003
SH-09-SS-00	<0.5	<0.5	0.181	0.002
SH-10-SS-00	<0.5	<0.5	0.212	0.005
SH-14-SS-00	<0.5	<0.5	0.213	0.002
SH-15-SS-00	<0.5	<0.5	0.137	0.004
SH-16-SS-00	<0.5	<0.5	0.051	0.002
SH-19-WS-00	<0.5	<0.5	0.215	0.007
SH-20-WS-00	<0.5	<0.5	0.174	0.003
SH-21-WS-00	<0.5	<0.5	0.152	0.002
SH-22-WS-00	<0.5	<0.5	0.195	0.001
SH-23-WS-00	<0.5	<0.5	0.212	0.004
SH-24-WS-00	<0.5	<0.5	0.255	0.004
SH-26-WS-00	<0.5	<0.5	0.148	0.002
SH-27-WS-00	<0.5	<0.5	0.264	0.002
SH-28-WS-00	<0.5	<0.5	0.215	0.006
SH-29-WS-00	<0.5	<0.5	0.088	0.003
SH-30-WS-00	<0.5	<0.5	0.238	0.007

Batch 2. Water Quality Summary for the Larval Development Test with *Mytilus* sp.

Treatment	Dissolved Oxygen (mg/L)			Temperature (°C)			Salinity (ppt)			pH (units)		
	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max	Mean	Min	Max
Control	8.4	8.1	8.8	15.9	15.6	16.2	27.7	27	28	7.9	7.8	8.0
RF-01-SS-00	7.0	6.5	7.6	15.8	15.2	16.3	28.0	28	28	7.9	7.8	8.0
RF-02-SS-00	7.4	6.6	8.3	15.9	15.2	16.5	28.0	28	28	7.9	7.8	8.1
RF-03-SS-00	7.4	7.0	8.2	16.0	15.5	16.4	27.7	27	28	7.8	7.6	7.9
SH-11-SS-00	6.8	6.1	7.9	16.0	15.5	16.4	27.3	27	28	7.7	7.7	7.8
SH-12-SS-00	7.0	6.4	7.7	15.8	15.4	16.2	28.0	28	28	7.9	7.7	8.2
SH-18-WS-00	6.3	6.0	6.8	15.9	15.7	16.3	28.0	28	28	7.9	7.7	8.2
SH-25-WS-00	7.1	6.4	8.1	16.1	15.6	16.4	28.0	28	28	7.7	7.6	7.8
HI-06-SS-00	6.9	6.3	7.9	15.9	15.5	16.4	28.0	28	28	7.8	7.7	7.9
OB-04-SS-00	6.8	6.3	7.5	15.9	15.5	16.2	27.0	27	27	7.8	7.7	8.0
OB-05-SS-00	7.1	6.2	8.3	16.1	15.9	16.4	28.0	28	28	7.8	7.7	7.9
OB-06-SS-00	7.0	6.3	7.7	16.1	15.8	16.4	28.0	28	28	7.7	7.5	8.0
OB-09-SS-00	6.5	6.1	7.3	16.0	15.4	16.5	28.0	28	28	7.9	7.7	8.1
OB-11-SS-00	6.6	6.2	7.4	15.9	15.4	16.4	27.3	27	28	7.8	7.7	8.0
OB-17-SS-00	6.8	6.3	7.8	16.1	15.7	16.4	28.0	28	28	7.7	7.6	7.9
OB-18-WS-00	6.6	6.0	7.4	16.0	15.4	16.5	27.0	27	27	7.7	7.7	7.8
OB-10-SS-00	7.0	6.3	7.8	16.0	15.4	16.5	27.3	27	28	7.7	7.7	7.8
OB-12-SS-00	7.1	6.3	8.1	16.2	15.8	16.6	27.0	27	27	7.7	7.5	7.8
OB-13-SS-00	7.0	6.3	7.9	16.0	15.5	16.4	27.3	27	28	7.6	7.5	7.8
OB-14-SS-00	6.9	6.4	7.7	16.1	15.7	16.3	27.3	27	28	7.7	7.6	7.9
OB-19-WS-00	7.6	6.7	8.4	15.9	15.4	16.4	27.0	27	27	7.9	7.7	8.1
HI-02-SS-00	6.8	6.3	7.5	15.9	15.4	16.2	27.7	27	28	7.9	7.8	8.0
HI-03-SS-00	7.0	6.4	7.9	15.9	15.4	16.3	27.0	27	27	7.8	7.6	8.1
HI-04-SS-00	7.2	6.7	7.9	15.9	15.6	16.1	28.0	28	28	7.9	7.8	8.1
OB-07-SS-00	7.1	6.5	8.0	15.9	15.5	16.2	27.0	27	27	7.7	7.7	7.8
OB-08-SS-00	6.8	6.3	7.7	16.0	15.7	16.2	27.7	27	28	7.6	7.5	7.8
SH-07-SS-00	6.6	6.3	7.3	15.9	15.4	16.4	27.7	27	28	7.8	7.7	7.9
SH-13-SS-00	6.6	6.3	7.3	15.9	15.6	16.1	28.0	28	28	7.9	7.8	8.1

Batch 2. Ammonia and Sulfide Concentrations for the for the Larval Development Test with *Mytilus* sp.

Treatment	Overlying Ammonia (mg/L Total)		Overlying Sulfides (mg/L Total)	
	Day 0	Day 2	Day 0	Day 2
Control	<0.5	NA	0.002	NA
RF-01-SS-00	<0.5	NA	0.108	NA
RF-02-SS-00	<0.5	NA	0.098	NA
RF-03-SS-00	<0.5	NA	0.070	NA
SH-11-SS-00	<0.5	NA	0.121	NA
SH-12-SS-00	<0.5	NA	0.083	NA
SH-18-WS-00	<0.5	NA	0.067	NA
SH-25-WS-00	<0.5	NA	0.062	NA
HI-06-SS-00	<0.5	NA	0.110	NA
OB-04-SS-00	<0.5	NA	0.112	NA
OB-05-SS-00	<0.5	NA	0.085	NA
OB-06-SS-00	<0.5	NA	0.064	NA
OB-09-SS-00	<0.5	NA	0.115	NA
OB-11-SS-00	<0.5	NA	0.069	NA
OB-17-SS-00	<0.5	NA	0.041	NA
OB-18-WS-00	<0.5	NA	0.102	NA
OB-10-SS-00	<0.5	NA	0.096	NA
OB-12-SS-00	<0.5	NA	0.112	NA
OB-13-SS-00	<0.5	NA	0.075	NA
OB-14-SS-00	<0.5	NA	0.024	NA
OB-19-WS-00	<0.5	NA	0.109	NA
HI-02-SS-00	<0.5	NA	0.058	NA
HI-03-SS-00	<0.5	NA	0.064	NA
HI-04-SS-00	<0.5	NA	0.088	NA
OB-07-SS-00	<0.5	NA	0.100	NA
OB-08-SS-00	<0.5	NA	0.049	NA
SH-07-SS-00	<0.5	NA	0.067	NA
SH-13-SS-00	<0.5	NA	0.124	NA

***BIOLOGICAL TESTING RESULTS FOR
OAKLAND BAY SEDIMENT CHARACTERIZATION,
OAKLAND BAY, WASHINGTON***

APPENDIX C

LABORATORY DOCUMENTS

***BIOLOGICAL TESTING RESULTS FOR
OAKLAND BAY SEDIMENT CHARACTERIZATION,
OAKLAND BAY, WASHINGTON***

AMPHIPOD TESTS

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera		PROJECT Oakland Bay		SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9		PROTOCOL PSEP 1995					
NEWFIELDS JOB NUMBER 1101-008-860		PROJECT MANAGER B. Hester		TEST START DATE 11-Nov-08		TEST END DATE 21-Nov-08							
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive
	20		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	
	Rep	Jar #	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	
Control	1	138	N	N	N	N	N	N	G	G	G	G	18
	2	18			IM			G	G	G			20
	3	144			N		N	N	G				18
	4	94			N			N	G				18
	5	48			N			N	G	↓	↓	↓	17
RF-01	1	28			N			N	N	N	G	G	17
	2	96											18
	3	151 84											16
	4	61 92											16
	5	33 88										↓	18
RF-02	1	128 45										G	18
	2	115 44											19
	3	30 89											16
	4	114											16
	5	105			↓	↓	↓	↓	↓			↓	18
OB-06-SS-00	1	137			IM	G	G	G	N		N	N	16
	2	23			N	N	N	N					18
	3	24			↓	G	G	G					17
	4	88			↓	N	N	N					18
	5	22			↓	G	G	G	↓	↓	↓	↓	17

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera		PROJECT Oakland Bay		SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9		PROTOCOL PSEP 1995					
NEWFIELDS JOB NUMBER 1101-008-860		PROJECT MANAGER B. Hester		TEST START DATE 11-Nov-08		TEST END DATE 21-Nov-08							
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive
	20		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	
	Rep	Jar #	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	
OB-09-SS-00	1	141	N	N	N	G	G	G	G	G	G	G	18
	2	121	↓	↓	↓	G	G	↓	↓	↓	↓	↓	20
	3	102	↓	↓	↓	G	G	↓	↓	↓	↓	↓	20
	4	117	↓	↓	2M	G	G	↓	↓	↓	↓	↓	15
	5	36	↓	↓	N	G	G	↓	↓	↓	↓	↓	17
OB-19-WS-00	1	84	G	G	G	G	G	↓	↓	↓	↓	↓	18
	2	56	N	N	N	G	G	↓	↓	↓	↓	↓	19
	3	126	↓	↓	↓	G	G	↓	↓	↓	↓	↓	16
	4	132	↓	↓	↓	G	G	↓	↓	↓	↓	↓	20
	5	70	↓	↓	↓	G	G	↓	↓	↓	↓	↓	19
OB-18-WS-00	1	140	↓	↓	3M	G	G	↓	↓	↓	↓	↓	15
	2	134	↓	↓	N	G	G	↓	↓	↓	↓	↓	19
	3	71	↓	↓	↓	G	G	↓	↓	↓	↓	↓	18
	4	143	↓	↓	↓	G	G	↓	↓	↓	↓	↓	18
	5	3	↓	↓	↓	G	G	↓	↓	↓	↓	↓	18
OB-10-SS-00	1	20	↓	↓	↓	N	N	N	↓	↓	↓	↓	20
	2	74	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	3	65	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	19
	4	12	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	18
	5	21	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	17



10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera			PROJECT Oakland Bay			SPECIES <i>Ampelisca abdita</i>			NEWFIELDS LABORATORY Port Gamble Bath 9			PROTOCOL PSEP 1995	
NEWFIELDS JOB NUMBER 1101-008-860			PROJECT MANAGER B. Hester			TEST START DATE 11-Nov-08			TEST END DATE 21-Nov-08				
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive
	20		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	
	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	
SH-18-WS-00	1	13	N	N	N	N	N	N	G	G	G	N	15
	2	153											19
	3	154											19
	4	152											19
	5	90											18
OB-08-SS-00	1	100							N			G	17
	2	45							N				18
	3	26							G				20
	4	4							N				20
	5	68							N				17
OB-12-SS-00	1	7							G			N	18
	2	97							G				19
	3	46						G	G				14
	4	145							N			N	18
	5	50						G	G			N	10
SH-20-WS-00	1	60							N			N	19
	2	47											18
	3	51											18
	4	139											18
	5	31							G	G		G	17

tworms

tworms

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera		PROJECT Oakland Bay		SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9		PROTOCOL PSEP 1995					
NEWFIELDS JOB NUMBER 1101-008-860		PROJECT MANAGER B. Hester		TEST START DATE 11-Nov-08		TEST END DATE 21-Nov-08							
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive
	20		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	
	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	
OB-05-SS-00	1	147	N	N	N	G	G	G	G	G	G	N	16
	2	76				N	N	N					19
	3	35				G	G	G					18
	4	38				N	N	N					19
	5	63				↓	N	N	↓				19
SH-21-WS-00	1	43				G	G	G	G				15
	2	62				N	N	N					18
	3	124				↓	↓	N					16
	4	87				G	G	G					19
	5	57				G	G	G		↓	↓		0
OB-11-SS-00	1	120				N	N	N	N	N	N		17
	2	69											19
	3	113											18
	4	109											20
	5	91											15
SH-19-WS-00	1	99											14
	2	161											19
	3	111											17
	4	146											18
	5	67											17

Surv=18

Digwom

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera		PROJECT Oakland Bay		SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9		PROTOCOL PSEP 1995					
NEWFIELDS JOB NUMBER 1101-008-860		PROJECT MANAGER B. Hester		TEST START DATE 11-Nov-08		TEST END DATE 21-Nov-08							
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive
	20		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	
	Rep	Jar #	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	
OB-13-SS-00	1	58	N	N	N	G	G	G	G	G	G	N	16
	2	158			N	N	N	N				G	18
	3	41			IM	G	G	G					18
	4	125			IM	G	G	G					18
	5	160			N	G	G	G					20
SH-04-SS-00	1	136			N	N	N	N	N	N	N	G	19
	2	14											20
	3	6											19
	4	129											18
	5	42				G	G	G	G	G	G		15
SH-03-SS-00	1	49				N	N	N	N	N	G	G	17
	2	112											16
	3	86											19
	4	93											18
	5	17									N		16
SH-13-SS-00	1	156										N	17
	2	130											19
	3	98											17
	4	54											20
	5	118											19

IM

IM

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera		PROJECT Oakland Bay		SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9		PROTOCOL PSEP 1995					
NEWFIELDS JOB NUMBER 1101-008-860		PROJECT MANAGER B. Hester		TEST START DATE 11-Nov-08		TEST END DATE 21-Nov-08							
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive
	20		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	
	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	
SH-23-WS-00	1	81	N	N	2m	N	N	N	G	G	G	G	19
	2	79			N	G	G	G					16
	3	52				G	G	G					17
	4	119				N	N	N					19
	5	75				G	G	G					15
SH-11-SS-00	1	101				N	N	N	N	N	N	N	17
	2	159											18
	3	27											19
	4	155											19
	5	5											20
SH-12-SS-00	1	77									G	N	18
	2	59									N		16
	3	66											19
	4	1											19
	5	40											17



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>	NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME 1430	TEST END DATE 21-Nov-08
		TIME 1000

Test Conditions				WATER QUALITY DATA									
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L)		Temperature (°C)		Salinity (ppt)		pH		Tech	Date
				meter	>5.0 mg/L	meter	20±1	meter	28±1	meter	7.8±0.5		
					mg/L		deg C		ppt		unit		
SH-13-SS-00	0	WQ	8	4	7.6	4	19.8	1	28	1	7.2 ^{7.6}	Jo	11/11/08
OB-08-SS-00	0	WQ	10	4	7.2	4	20.0	1	28	1	7.6		
SH-11-SS-00	0	WQ	11		7.6		20.0		28		7.7		
OB-19-WS-00	0	WQ	16		7.5		20.0		28		7.8		
SH-21-WS-00	0	WQ	19		7.5		20.0		28		7.8		
SH-19-WS-00	0	WQ	44		7.6		20.0		28		7.8		
SH-23-WS-00	0	WQ	72		7.7		20.0		28		7.8		
OB-05-SS-00	0	WQ	73		7.6		20.0		29		7.8		
RF-01	0	WQ	80		7.6		20.0		28		7.8		
OB-18-WS-00	0	WQ	82		7.6		20.0		28		7.8		
SH-12-SS-00	0	WQ	83		7.5		20.0		28		7.8		
RF-02	0	WQ	92		7.6		20.0		28		7.8		
OB-09-SS-00	0	WQ	103		7.6		20.0		28		7.9		
OB-10-SS-00	0	WQ	104		7.6		20.0		28		7.8		
SH-04-SS-00	0	WQ	106		7.6		20.0		28		7.8		
OB-06-SS-00	0	WQ	108		7.6		20.0		28		7.8		
Control	0	WQ	110		7.6		20.0		28		7.8		
OB-12-SS-00	0	WQ	116		7.6		20.0		28		7.8		
OB-13-SS-00	0	WQ	122		7.6		20.0		28		7.8		
SH-03-SS-00	0	WQ	131	↓	7.6	↓	20.0	↓	28	↓	7.8	↓	↓

① MR JHO 11/11/08



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08	TIME

Test Conditions				WATER QUALITY DATA									
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5		Tech	Date
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-18-WS-00	0	WQ	148	4	7.6	4	20.0	1	29	1	7.9	JO	4/11/08
SH-20-WS-00	0	WQ	149	↓	7.6	↓	20.0	↓	28	↓	7.9	↓	↓
OB-11-SS-00	0	WQ	150	↓	7.6	↓	20.0	↓	28	↓	7.9	↓	↓

SM dno 11/11/08



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-13-SS-00	1	WQ	8	3	7.3	3	19.8	3	28	3	7.9	BH	11/12/08
OB-08-SS-00	1	WQ	10	|	7.3	|	19.8	|	28	|	7.9	|	|
SH-11-SS-00	1	WQ	11	|	7.3	|	19.8	|	27	|	8.0	|	|
OB-19-WS-00	1	WQ	16	|	7.1	|	19.8	|	28	|	7.9	|	|
SH-21-WS-00	1	WQ	19	|	7.2	|	19.9	|	28	|	7.9	|	|
SH-19-WS-00	1	WQ	44	|	7.3	|	19.8	|	28	|	8.0	|	|
SH-23-WS-00	1	WQ	72	|	7.3	|	19.8	|	28	|	8.1	|	|
OB-05-SS-00	1	WQ	73	|	7.1	|	19.9	|	28	|	8.0	|	|
RF-01	1	WQ	80	|	7.0	|	19.8	|	28	|	7.9	|	|
OB-18-WS-00	1	WQ	82	|	7.2	|	19.8	|	28	|	8.0	|	|
SH-12-SS-00	1	WQ	83	|	7.3	|	19.8	|	28	|	8.0	|	|
RF-02	1	WQ	92	|	7.2	|	19.8	|	28	|	8.0	|	|
OB-09-SS-00	1	WQ	103	|	7.3	|	19.8	|	28	|	8.0	|	|
OB-10-SS-00	1	WQ	104	|	7.3	|	19.8	|	28	|	8.0	|	|
SH-04-SS-00	1	WQ	106	|	7.3	|	19.8	|	28	|	8.0	|	|
OB-06-SS-00	1	WQ	108	|	7.3	|	19.8	|	28	|	8.0	|	|
Control	1	WQ	110	|	7.3	|	19.8	|	28	|	7.9	|	|
OB-12-SS-00	1	WQ	116	|	7.4	|	19.8	|	28	|	7.9	|	|
OB-13-SS-00	1	WQ	122	|	7.2	|	19.8	|	28	|	7.9	|	|
SH-03-SS-00	1	WQ	131	↓	7.3	↓	19.8	↓	28	↓	7.9	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>	NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08

Test Conditions				WATER QUALITY DATA									
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5		Tech	Date
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-18-WS-00	1	WQ	148	3	7.2	3	19.8	3	28	3	8.0	BH	11/12/08
SH-20-WS-00	1	WQ	149	↓	7.3	↓	19.8	↓	28	↓	8.0	↓	↓
OB-11-SS-00	1	WQ	150	↓	7.2	↓	19.9	↓	27	↓	8.0	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>	NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08

WATER QUALITY DATA													
Test Conditions				DO (mg/L)		Temperature (°C)		Salinity (ppt)		pH		Tech	Date
				>5.0 mg/L		20±1		28±1		7.8±0.5			
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-13-SS-00	2	WQ	8	4	7.8	4	19.8	1	29	1	7.8	BH	11/13/08
OB-08-SS-00	2	WQ	10	↓	7.9	↓	19.9	↓	29	↓	7.8	↓	↓
SH-11-SS-00	2	WQ	11	↓	7.9	↓	19.9	↓	28	↓	7.8	↓	↓
OB-19-WS-00	2	WQ	16	↓	7.9	↓	19.9	↓	29	↓	7.9	↓	↓
SH-21-WS-00	2	WQ	19	↓	7.8	↓	20.0	↓	29	↓	7.9	↓	↓
SH-19-WS-00	2	WQ	44	↓	7.9	↓	20.0	↓	29	↓	7.9	↓	↓
SH-23-WS-00	2	WQ	72	↓	8.0	↓	19.9	↓	29	↓	7.9	↓	↓
OB-05-SS-00	2	WQ	73	↓	7.7	↓	20.0	↓	29	↓	7.9	↓	↓
RF-01	2	WQ	80	↓	7.6	↓	19.9	↓	29	↓	7.8	↓	↓
OB-18-WS-00	2	WQ	82	↓	7.9	↓	19.8	↓	29	↓	7.9	↓	↓
SH-12-SS-00	2	WQ	83	↓	7.9	↓	19.9	↓	28	↓	7.9	↓	↓
RF-02	2	WQ	92	↓	7.9	↓	19.9	↓	29	↓	7.9	↓	↓
OB-09-SS-00	2	WQ	103	↓	7.9	↓	19.9	↓	29	↓	7.9	↓	↓
OB-10-SS-00	2	WQ	104	↓	7.9	↓	19.9	↓	29	↓	7.9	↓	↓
SH-04-SS-00	2	WQ	106	↓	7.9	↓	19.9	↓	29	↓	7.9	↓	↓
OB-06-SS-00	2	WQ	108	↓	7.9	↓	19.9	↓	29	↓	7.9	↓	↓
Control	2	WQ	110	↓	7.9	↓	19.9	↓	29	↓	7.9	↓	↓
OB-12-SS-00	2	WQ	116	↓	7.8	↓	20.0	↓	28	↓	7.9	↓	↓
OB-13-SS-00	2	WQ	122	↓	7.9	↓	19.9	↓	28	↓	7.9	↓	↓
SH-03-SS-00	2	WQ	131	↓	7.8	↓	20.0	↓	28	↓	7.8	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>	NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08

Test Conditions				WATER QUALITY DATA									
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5		Tech	Date
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-18-WS-00	2	WQ	148	4	7.8	4	19.9	1	29	1	7.9	BH	11/13/08
SH-20-WS-00	2	WQ	149	↓	7.8	↓	19.9	↓	29	↓	8.0	↓	↓
OB-11-SS-00	2	WQ	150	↓	7.9	↓	20.0	↓	28	↓	8.0	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08	TIME

WATER QUALITY DATA													
Test Conditions				DO (mg/L)		Temperature (°C)		Salinity (ppt)		pH		Tech	Date
				>5.0 mg/L		20±1		28±1		7.8±0.5			
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-13-SS-00	3	WQ	8	4	7.9	4	19.9	1	29	1	7.9	BH	11/14/08
OB-08-SS-00	3	WQ	10	↓	7.8	↓	19.9	↓	29	↓	7.9		
SH-11-SS-00	3	WQ	11	↓	7.9	↓	19.9	↓	28	↓	7.9		
OB-19-WS-00	3	WQ	16	↓	7.9	↓	20.0	↓	29	↓	7.9		
SH-21-WS-00	3	WQ	19	↓	7.8	↓	20.0	↓	29	↓	8.0		
SH-19-WS-00	3	WQ	44	↓	7.8	↓	20.0	↓	29	↓	7.9		
SH-23-WS-00	3	WQ	72	↓	7.9	↓	20.0	↓	29	↓	8.0		
OB-05-SS-00	3	WQ	73	↓	7.6	↓	20.0	↓	29	↓	8.0		
RF-01	3	WQ	80	↓	7.7	↓	20.0	↓	28	↓	8.0		
OB-18-WS-00	3	WQ	82	↓	7.8	↓	19.9	↓	29	↓	8.2		
SH-12-SS-00	3	WQ	83	↓	7.7	↓	20.0	↓	28	↓	8.0		
RF-02	3	WQ	92	↓	7.8	↓	20.0	↓	29	↓	8.0		
OB-09-SS-00	3	WQ	103	↓	7.9	↓	20.0	↓	28	↓	8.0		
OB-10-SS-00	3	WQ	104	↓	7.8	↓	20.0	↓	29	↓	8.0		
SH-04-SS-00	3	WQ	106	↓	7.8	↓	20.0	↓	29	↓	8.1		
OB-06-SS-00	3	WQ	108	↓	7.9	↓	20.0	↓	29	↓	8.1		
Control	3	WQ	110	↓	7.8	↓	20.0	↓	29	↓	8.0		
OB-12-SS-00	3	WQ	116	↓	7.8	↓	20.0	↓	28	↓	8.0		
OB-13-SS-00	3	WQ	122	↓	7.8	↓	20.0	↓	28	↓	8.0		
SH-03-SS-00	3	WQ	131	↓	7.8	↓	20.0	↓	28	↓	7.9		



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>	NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08

WATER QUALITY DATA													
Test Conditions				DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5		Tech	Date
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-18-WS-00	3	WQ	148		7.9		20.6		28		8.1		
SH-20-WS-00	3	WQ	149		7.8		20.0		29		8.2		
OB-11-SS-00	3	WQ	150		7.8		20.1		27		8.1		



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>	NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-13-SS-00	4	WQ	8	4	7.8	4	20.0	1	30	1	8.0	JO	11/15
OB-08-SS-00	4	WQ	10	1	0.8 7.8	1	20.0	1	30	1	8.0	1	1
SH-11-SS-00	4	WQ	11	1	7.8	1	20.1	1	29	1	7.9	1	1
OB-19-WS-00	4	WQ	16	1	7.9	1	20.1	1	29	1	8.0	1	1
SH-21-WS-00	4	WQ	19	1	7.8	1	20.1	1	29	1	8.1	1	1
SH-19-WS-00	4	WQ	44	1	7.9	1	20.0	1	30	1	8.1	1	1
SH-23-WS-00	4	WQ	72	1	7.9	1	20.0	1	29	1	8.0	1	1
OB-05-SS-00	4	WQ	73	1	7.8	1	20.1	1	29	1	8.1	1	1
RF-01	4	WQ	80	1	7.8	1	20.1	1	29	1	8.1	1	1
OB-18-WS-00	4	WQ	82	1	7.7	1	20.1	1	29	1	8.5	1	1
SH-12-SS-00	4	WQ	83	1	7.8	1	20.1	1	29	1	8.2	1	1
RF-02	4	WQ	92	1	7.8	1	20.1	1	29	1	8.1	1	1
OB-09-SS-00	4	WQ	103	1	7.8	1	20.1	1	29	1	8.2	1	1
OB-10-SS-00	4	WQ	104	1	7.8	1	20.1	1	29	1	8.1	1	1
SH-04-SS-00	4	WQ	106	1	7.8	1	20.1	1	29	1	8.2	1	1
OB-06-SS-00	4	WQ	108	1	7.9	1	20.1	1	29	1	8.2	1	1
Control	4	WQ	110	1	7.9	1	20.1	1	29	1	8.1	1	1
OB-12-SS-00	4	WQ	116	1	7.8	1	20.1	1	29	1	8.0	1	1
OB-13-SS-00	4	WQ	122	1	7.8	1	20.1	1	28	1	8.0	1	1
SH-03-SS-00	4	WQ	131	1	7.8	1	20.1	1	28	1	8.0	1	1

① WC J40 11/15



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08	TIME

Test Conditions				WATER QUALITY DATA									
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5		Tech	Date
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-18-WS-00	4	WQ	148	4	7.8	4	20.1	1	29	1	8.2	JO	11/15
SH-20-WS-00	4	WQ	149	↓	7.8	↓	20.1	↓	29	↓	8.4	↓	↓
OB-11-SS-00	4	WQ	150	↓	7.8	↓	20.2	↓	28	↓	8.3	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>	NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-13-SS-00	5	WQ	8	3	8.0	3	19.7	3	30	3	8.0	TS	11/16
OB-08-SS-00	5	WQ	10	↓	8.0	↓	19.7	↓	30	↓	7.9	↓	↓
SH-11-SS-00	5	WQ	11	↓	8.0	↓	19.7	↓	28	↓	8.0	↓	↓
OB-19-WS-00	5	WQ	16	↓	8.0	↓	19.8	↓	29	↓	8.2	↓	↓
SH-21-WS-00	5	WQ	19	↓	8.0	↓	19.8	↓	29	↓	8.1	↓	↓
SH-19-WS-00	5	WQ	44	↓	8.0	↓	19.7	↓	29	↓	8.0	↓	↓
SH-23-WS-00	5	WQ	72	↓	8.0	↓	19.7	↓	29	↓	8.1	↓	↓
OB-05-SS-00	5	WQ	73	↓	8.0	↓	19.7	↓	29	↓	8.2	↓	↓
RF-01	5	WQ	80	↓	8.0	↓	19.7	↓	29	↓	8.1	↓	↓
OB-18-WS-00	5	WQ	82	↓	7.9	↓	19.6	↓	29	↓	8.6	↓	↓
SH-12-SS-00	5	WQ	83	↓	8.0	↓	19.6	↓	29	↓	8.2	↓	↓
RF-02	5	WQ	92	↓	7.2	↓	19.7	↓	29	↓	8.1	↓	↓
OB-09-SS-00	5	WQ	103	↓	8.0	↓	19.8	↓	28	↓	8.3	↓	↓
OB-10-SS-00	5	WQ	104	↓	8.0	↓	19.7	↓	29	↓	8.1	↓	↓
SH-04-SS-00	5	WQ	106	↓	8.0	↓	19.7	↓	29	↓	8.4	↓	↓
OB-06-SS-00	5	WQ	108	↓	7.7	↓	19.7	↓	29	↓	8.2	↓	↓
Control	5	WQ	110	↓	8.0	↓	19.8	↓	29	↓	8.1	↓	↓
OB-12-SS-00	5	WQ	116	↓	8.0	↓	19.8	↓	28	↓	8.0	↓	↓
OB-13-SS-00	5	WQ	122	↓	① 8.0 7.3	↓	19.8	↓	28	↓	8.0	↓	↓
SH-03-SS-00	5	WQ	131	↓	8.0	↓	19.8	↓	28	↓	8.0	↓	↓

① IE TS 11/16/08



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08	TIME

Test Conditions				WATER QUALITY DATA									
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5		Tech	Date
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-18-WS-00	5	WQ	148	3	8.0	3	19.7	3	29	3	8.3	TS	11/16
SH-20-WS-00	5	WQ	149	↓	8.0	↓	19.8	↓	29	↓	8.5	↓	↓
OB-11-SS-00	5	WQ	150	↓	8.0	↓	19.8	↓	27	↓	8.4	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>	NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L)		Temperature (°C)		Salinity (ppt)		pH			
				meter	>5.0 mg/L mg/L	meter	20±1 deg C	meter	28±1 ppt	meter	7.8±0.5 unit		
SH-13-SS-00	6	WQ	8	3	6.6	3	23.6	3	31	3	8.5	JR	11/17/08
OB-08-SS-00	6	WQ	10	↓	6.7	↓	23.3	↓	31	↓	8.0	↓	↓
SH-11-SS-00	6	WQ	11	↓	6.7	↓	23.1	↓	29	↓	8.0	↓	↓
OB-19-WS-00	6	WQ	16	↓	6.8	↓	23.8	↓	30	↓	8.4	↓	↓
SH-21-WS-00	6	WQ	19	↓	6.7	↓	23.2	↓	30	↓	8.2	↓	↓
SH-19-WS-00	6	WQ	44	↓	7.0	↓	22.3	↓	32	↓	8.0	↓	↓
SH-23-WS-00	6	WQ	72	↓	7.0	↓	21.7	↓	30	↓	8.2	↓	↓
OB-05-SS-00	6	WQ	73	↓	6.6 6.6	↓	21.9	↓	30	↓	8.4	↓	↓
RF-01	6	WQ	80	↓	6.7	↓	21.9	↓	29	↓	8.3	↓	↓
OB-18-WS-00	6	WQ	82	↓	6.8	↓	21.3	↓	30	↓	8.5	↓	↓
SH-12-SS-00	6	WQ	83	↓	7.0	↓	21.4	↓	29	↓	8.2	↓	↓
RF-02	6	WQ	92	↓	6.9	↓	21.2	↓	30	↓	8.2	↓	↓
OB-09-SS-00	6	WQ	103	↓	7.2	↓	22.0	↓	29	↓	8.7	↓	↓
OB-10-SS-00	6	WQ	104	↓	7.1	↓	21.5	↓	30	↓	8.2	↓	↓
SH-04-SS-00	6	WQ	106	↓	7.0	↓	21.7	↓	30	↓	8.4	↓	↓
OB-06-SS-00	6	WQ	108	↓	7.2	↓	21.4	↓	30	↓	8.2	↓	↓
Control	6	WQ	110	↓	7.1	↓	21.5	↓	30	↓	8.1	↓	↓
OB-12-SS-00	6	WQ	116	↓	6.9	↓	21.9	↓	29	↓	8.0	↓	↓
OB-13-SS-00	6	WQ	122	↓	6.9	↓	22.0	↓	29	↓	8.0	↓	↓
SH-03-SS-00	6	WQ	131	↓	6.8	↓	22.2	↓	29	↓	8.0	↓	↓

⓪ Incorrect entry JR 11/17/08



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08	TIME

Test Conditions				WATER QUALITY DATA									
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5		Tech	Date
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-18-WS-00	6	WQ	148	3	7.0	3	22.0	3	30	3	8.4	ZR	11/17/08
SH-20-WS-00	6	WQ	149	↓	6.9	↓	21.8	↓	30	↓	8.6	↓	↓
OB-11-SS-00	6	WQ	150	↓	6.8	↓	22.3	↓	28	↓	8.4	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-13-SS-00	7	WQ	8	3	7.4	3	19.7	3	31	3	8.4	JR	11/18/08
OB-08-SS-00	7	WQ	10	1	7.4	1	19.8	1	31	1	8.1		
SH-11-SS-00	7	WQ	11	1	7.4	1	19.8	1	30	1	8.1		
OB-19-WS-00	7	WQ	16	1	7.4	1	19.8	1	31	1	8.5		
SH-21-WS-00	7	WQ	19	1	7.3	1	19.8	1	31	1	8.2		
SH-19-WS-00	7	WQ	44	1	7.4	1	19.7	1	32	1	8.1		
SH-23-WS-00	7	WQ	72	1	7.4	1	19.8	1	31	1	8.2		
OB-05-SS-00	7	WQ	73	1	7.4	1	19.8	1	30	1	8.6		
RF-01	7	WQ	80	1	7.2	1	19.8	1	30	1	8.5		
OB-18-WS-00	7	WQ	82	1	7.4	1	19.7	1	30	1	8.5		
SH-12-SS-00	7	WQ	83	1	7.3	1	19.8	1	30	1	8.3		
RF-02	7	WQ	92	1	7.3	1	19.7	1	31	1	8.2		
OB-09-SS-00	7	WQ	103	1	7.4	1	19.8	1	29	1	8.6		
OB-10-SS-00	7	WQ	104	1	7.4	1	19.8	1	31	1	8.3		
SH-04-SS-00	7	WQ	106	1	7.4	1	19.8	1	30	1	8.6		
OB-06-SS-00	7	WQ	108	1	7.4	1	19.8	1	31	1	8.2		
Control	7	WQ	110	1	7.5	1	19.8	1	31	1	8.2		
OB-12-SS-00	7	WQ	116	1	7.4	1	19.9	1	29	1	8.0		
OB-13-SS-00	7	WQ	122	1	7.4	1	19.8	1	29	1	8.0		
SH-03-SS-00	7	WQ	131	✓	7.4	✓	19.9	✓	29	✓	8.0	✓	✓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>	NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08

WATER QUALITY DATA													
Test Conditions				DO (mg/L)		Temperature (°C)		Salinity (ppt)		pH		Tech	Date
				>5.0 mg/L		20±1		28±1		7.8±0.5			
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-18-WS-00	7	WQ	148	3	7.4	3	19.8	3	30	3	8.4	JR	11/19/08
SH-20-WS-00	7	WQ	149	↓	7.4	↓	19.8	↓	30	↓	8.6	↓	↓
OB-11-SS-00	7	WQ	150	↓	7.4	↓	19.9	↓	28	↓	8.5	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
				DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5			
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-13-SS-00	8	WQ	8	3	7.2	3	19.5	3	32	3	8.4	JR	11/19/08
OB-08-SS-00	8	WQ	10	1	7.3	1	19.6	1	32	1	8.0		
SH-11-SS-00	8	WQ	11	1	7.4	1	19.6	1	30	1	8.1		
OB-19-WS-00	8	WQ	16	1	7.4	1	19.7	1	31	1	8.4		
SH-21-WS-00	8	WQ	19	1	7.2	1	19.7	1	31	1	8.2		
SH-19-WS-00	8	WQ	44	1	7.3	1	19.6	1	33	1	8.1		
SH-23-WS-00	8	WQ	72	1	7.4	1	19.6	1	31	1	8.3		
OB-05-SS-00	8	WQ	73	1	7.3	1	19.6	1	31	1	8.5		
RF-01	8	WQ	80	1	7.1	1	19.6	1	30	1	8.6		
OB-18-WS-00	8	WQ	82	1	7.3	1	19.6	1	30	1	8.4		
SH-12-SS-00	8	WQ	83	1	7.3	1	19.6	1	30	1	8.3		
RF-02	8	WQ	92	1	7.3	1	19.6	1	31	1	8.3		
OB-09-SS-00	8	WQ	103	1	7.3	1	19.7	1	30	1	8.5		
OB-10-SS-00	8	WQ	104	1	7.4	1	19.7	1	31	1	8.4		
SH-04-SS-00	8	WQ	106	1	7.3	1	19.6	1	31	1	8.4		
OB-06-SS-00	8	WQ	108	1	7.3	1	19.6	1	31	1	8.3		
Control	8	WQ	110	1	7.4	1	19.6	1	31	1	8.3		
OB-12-SS-00	8	WQ	116	1	7.4	1	19.7	1	30	1	8.1		
OB-13-SS-00	8	WQ	122	1	7.3	1	19.7	1	29	1	8.1		
SH-03-SS-00	8	WQ	131	✓	7.4	✓	19.8	✓	29	✓	8.2	✓	✓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-13-SS-00	9	WQ	8	3	8.2	3	19.6	3	33	3	8.6	ZR	11/20/08
OB-08-SS-00	9	WQ	10	↓	8.6	↓	19.6	↓	32	↓	8.2	↓	↓
SH-11-SS-00	9	WQ	11	↓	8.6	↓	19.6	↓	31	↓	8.3	↓	↓
OB-19-WS-00	9	WQ	16	↓	8.4	↓	19.7	↓	32	↓	8.5	↓	↓
SH-21-WS-00	9	WQ	19	↓	8.3	↓	19.8	↓	32	↓	8.3	↓	↓
SH-19-WS-00	9	WQ	44	↓	8.2	↓	19.6	↓	34	↓	8.4	↓	↓
SH-23-WS-00	9	WQ	72	↓	8.3	↓	19.6	↓	32	↓	8.5	↓	↓
OB-05-SS-00	9	WQ	73	↓	8.3	↓	19.7	↓	31	↓	8.7	↓	↓
RF-01	9	WQ	80	↓	8.1	↓	19.6	↓	30	↓	8.8	↓	↓
OB-18-WS-00	9	WQ	82	↓	8.1	↓	19.6	↓	30	↓	8.5	↓	↓
SH-12-SS-00	9	WQ	83	↓	8.3	↓	19.7	↓	30	↓	8.5	↓	↓
RF-02	9	WQ	92	↓	8.3	↓	19.7	↓	31	↓	8.5	↓	↓
OB-09-SS-00	9	WQ	103	↓	8.4	↓	19.7	↓	30	↓	8.6	↓	↓
OB-10-SS-00	9	WQ	104	↓	8.5	↓	19.7	↓	32	↓	8.6	↓	↓
SH-04-SS-00	9	WQ	106	↓	8.6	↓	19.6	↓	31	↓	8.6	↓	↓
OB-06-SS-00	9	WQ	108	↓	8.5	↓	19.7	↓	32	↓	8.5	↓	↓
Control	9	WQ	110	↓	8.7	↓	19.7	↓	31	↓	8.5	↓	↓
OB-12-SS-00	9	WQ	116	↓	8.4	↓	19.8	↓	30	↓	8.3	↓	↓
OB-13-SS-00	9	WQ	122	↓	8.7	↓	19.7	↓	30	↓	8.3	↓	↓
SH-03-SS-00	9	WQ	131	✓	8.7	✓	19.8	✓	29	✓	8.4	✓	✓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08	TIME

WATER QUALITY DATA													
Test Conditions				DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5		Tech	Date
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-18-WS-00	9	WQ	148	3	8.4	3	19.7	3	31	3	8.6	JR	11/20/08
SH-20-WS-00	9	WQ	149	↓	8.4	↓	19.7	↓	31	↓	8.7	↓	↓
OB-11-SS-00	9	WQ	150	↓	8.4	↓	19.8	↓	29	↓	8.6	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>	NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08

WATER QUALITY DATA													
Test Conditions				DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5		Tech	Date
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-13-SS-00	10	WQ	8	3	7.1	3	19.5	3	34	3	8.6	2R	11/21/08
OB-08-SS-00	10	WQ	10	|	7.1	|	19.5	|	33	|	8.2	|	|
SH-11-SS-00	10	WQ	11	|	7.2	|	19.5	|	31	|	8.3	|	|
OB-19-WS-00	10	WQ	16	|	7.1	|	19.6	|	32	|	8.5	|	|
SH-21-WS-00	10	WQ	19	|	7.0	|	19.6	|	32	|	8.3	|	|
SH-19-WS-00	10	WQ	44	|	6.7	|	19.4	|	35	|	8.5	|	|
SH-23-WS-00	10	WQ	72	|	7.8	|	19.5	|	32	|	8.5	|	|
OB-05-SS-00	10	WQ	73	|	7.7	|	19.6	|	32	|	8.6	|	|
RF-01	10	WQ	80	|	7.5	|	19.6	|	30	|	8.8	|	|
OB-18-WS-00	10	WQ	82	|	7.5	|	19.5	|	31	|	8.5	|	|
SH-12-SS-00	10	WQ	83	|	7.6	|	19.5	|	31	|	8.5	|	|
RF-02	10	WQ	92	|	7.8	|	19.6	|	32	|	8.5	|	|
OB-09-SS-00	10	WQ	103	|	7.7	|	19.6	|	30	|	8.6	|	|
OB-10-SS-00	10	WQ	104	|	7.5	|	19.6	|	32	|	8.5	|	|
SH-04-SS-00	10	WQ	106	|	7.6	|	19.6	|	32	|	8.6	|	|
OB-06-SS-00	10	WQ	108	|	7.7	|	19.6	|	32	|	8.5	|	|
Control	10	WQ	110	|	7.8	|	19.6	|	32	|	8.5	|	|
OB-12-SS-00	10	WQ	116	|	7.8	|	19.6	|	30	|	8.3	|	|
OB-13-SS-00	10	WQ	122	|	7.8	|	19.6	|	30	|	8.3	|	|
SH-03-SS-00	10	WQ	131	✓	7.6	✓	19.7	✓	30	✓	8.4	✓	✓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Ampelisca abdita</i>		NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
TEST START DATE 11-Nov-08	TIME	TEST END DATE 21-Nov-08	TIME

Test Conditions				WATER QUALITY DATA									
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 20±1		Salinity (ppt) 28±1		pH 7.8±0.5		Tech	Date
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-18-WS-00	10	WQ	148	3	7.6	3	19.6	3	31	3	8.5	JR	11/21/08
SH-20-WS-00	10	WQ	149	↓	7.7	↓	19.6	↓	29 31 ¹⁰	↓	8.6	↓	↓
OB-11-SS-00	10	WQ	150	↓	7.5	↓	19.7	↓	29	↓	8.6	↓	↓

① IE JR 11/21/08



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: Herrera/Oakland Bay	Organism: Amps	NewFields Test ID:	Test Duration (days): 10
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PRETEST / INITIAL / FINAL / OTHER (circle one) **DAY of TEST:** 10
OVERLYING (OV) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
21 November 2008		

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp $^{\circ}\text{C}$	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
Control	Surr.	11/21/08 JR	40.5	25.0	11/21/08 JR	N			0.025
RF-01			40.5						0.002
RF-02			40.5						0.003
OB-06-SS-00			40.5						0.000
OB-09-SS-00			40.5						0.001
OB-19-WS-00			40.5						0.008
OB-18-WS-00			40.5						0.000
OB-10-SS-00			40.5						0.000
SH-18-WS-00			40.5						0.011
OB-08-SS-00			40.5						0.001
OB-12-SS-00			40.5						0.004
SH-20-WS-00			40.5						0.000
OB-05-SS-00			40.5						0.007
SH-21-WS-00			40.5						0.007
OB-11-SS-00			40.5						0.000
SH-19-WS-00			40.3						0.003

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
OB-13-SS-00	Surr.	11/21/08 JR	40.5	25°	11/21/08 JR	N	X	X	0.003
SH-04-SS-00	↓	↓	40.5	↓	↓	↓			0.000
SH-03-SS-00	↓	↓	40.5	↓	↓	↓			0.094
SH-13-SS-00	↓	↓	40.5	↓	↓	↓			0.002
SH-23-WS-00	↓	↓	40.5	↓	↓	↓			0.000
SH-11-SS-00	↓	↓	40.5	↓	↓	↓			0.001
SH-12-SS-00	↓	↓	40.5	↓	↓	↓			0.001



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: Herrera/Oakland Bay	Organism: Amps	NewFields Test ID:	Test Duration (days): 10
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PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: 10
 OVERLYING (OV) / FOREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
21 November 2008	22°	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L				
Control	Surr.	11/21/08 CR/LR	7.74	19.3	11/21/08 LR	N	7.0	31	0.052				
RF-01		↓	17.9	↓	↓		7.2	31	0.082				
RF-02			6.0				7.6	31	0.178				
OB-06-SS-00			40.5				7.4	30	0.136				
OB-09-SS-00			40.5				7.2	31	0.195				
OB-19-WS-00			1.22				7.3	32	0.118				
OB-18-WS-00			40.5				6.7	31	0.173				
OB-10-SS-00			40.5				7.0	33	0.089				
SH-18-WS-00			40.5				7.1	32	0.064				
OB-08-SS-00			40.5				7.2	33	0.073				
OB-12-SS-00			5.46				7.3	30	0.036				
SH-20-WS-00			40.5				6.9	31	0.193				
OB-05-SS-00			40.5				7.3	32	0.048				
SH-21-WS-00													
OB-11-SS-00			40.5				7.4	29	0.121				
SH-19-WS-00	↓		↓				0.801	↓	↓	↓	7.5	33	0.196

NEWFIELDS

Ammonia Analysis Total Ammonia (mg/L)

Client/Project: Herrera/Oakland Bay	Organism: Amps	NewFields Test ID:	Test Duration (days): 10
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PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: 0
OVERLYING (OV) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
11 November 2008	19°C	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
Control	Surr.	11/11/08 JHO	0.32 20.5	19.5	11/11/08 JHO	N			0.120
RF-01			0.918						0.010
RF-02			0.988						0.049
OB-06-SS-00			0.145						0.031
OB-09-SS-00			0.574						0.276
OB-19-WS-00			1.37						0.007
OB-18-WS-00			0.817						0.016
OB-10-SS-00			0.742						0.019
SH-18-WS-00			0.440						0.023
OB-08-SS-00			1.31						0.015
OB-12-SS-00			0.525						0.012
SH-20-WS-00			0.0777						0.025
OB-05-SS-00			0.280						0.011
SH-21-WS-00			0.179						0.033
OB-11-SS-00			0.0835						0.119
SH-19-WS-00			0.139						0.036

NEWFIELDS

Ammonia Analysis Total Ammonia (mg/L)

Client/Project: Herrera/Oakland Bay	Organism: Amps	NewFields Test ID:	Test Duration (days): 10
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PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: 6
OVERLYING (OV) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
11 November 2008	19	

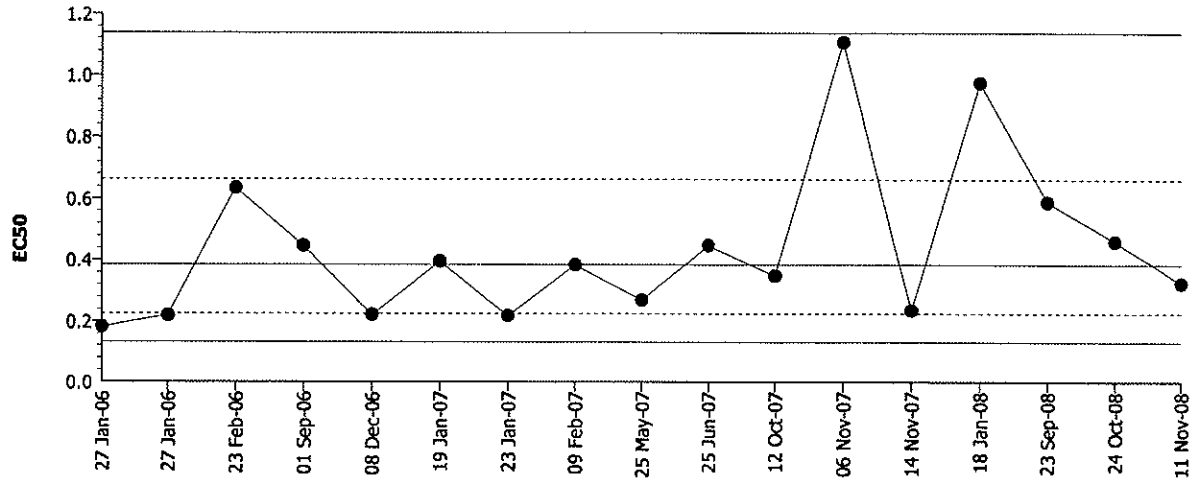
Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp $^{\circ}\text{C}$	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
Control	Surr.	11/11/08 ²⁰ ↓	8.34	20	11/11/08 ²⁰ ↓	N	6.7	30	0.041
RF-01		↓	5.04	↓	↓	↓	7.0	29	2.097
RF-02			3.98				7.4	30	0.152
OB-06-SS-00			0.803				7.4	29	0.097
OB-09-SS-00			1.65				7.2	29	0.103
OB-19-WS-00			2.85				7.3	29	0.091
OB-18-WS-00			2.63				7.2	29	0.040
OB-10-SS-00			2.16				7.4	29	0.068
SH-18-WS-00			1.69				7.4	28	0.042
OB-08-SS-00			2.01				7.4	29	0.036
OB-12-SS-00			1.58				7.3	28	0.059
SH-20-WS-00			0.788				7.3	29	0.067
OB-05-SS-00			1.16				7.5	29	0.054
SH-21-WS-00			1.58				7.4	29	0.054
OB-11-SS-00			0.902				7.4	27	0.067
SH-19-WS-00			1.19				7.4	29	0.060

CETIS QC Chart

Reference Toxicant 96-h Acute Survival Test

NewFields

Test Type: Survival Organism: *Ampelisca abdita* (Amphipod) Material: Cadmium chloride
 Protocol: PSEP (1995) Endpoint: Proportion Survived Source: Reference Toxicant-REF



Mean: 0.38554 Count: 16 -1s Warning Limit: 0.22436 -2s Action Limit: 0.13056
 Sigma: CV: 71.84% +1s Warning Limit: 0.66251 +2s Action Limit: 1.13846

Quality Control Data

Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Jan	27	0.18090	-0.20464	-1.39765	(-)		07-5435-8129	06-2014-1066
2			27	0.21846	-0.16707	-1.04917	(-)		02-3876-2955	12-1597-4541
3		Feb	23	0.63498	0.24944	0.92160			17-3687-3273	06-7672-2441
4		Sep	1	0.44694	0.06141	0.27299			11-8706-7493	01-2691-7469
5		Dec	8	0.22112	-0.16442	-1.02685	(-)		01-8163-5765	09-7294-9655
6	2007	Jan	19	0.39559	0.01005	0.04752			05-1919-0451	04-7876-6509
7			23	0.21727	-0.16827	-1.05928	(-)		13-4550-6899	02-3067-5161
8		Feb	9	0.38474	-0.00080	-0.00384			04-8872-6896	02-4257-0063
9		May	25	0.26923	-0.11631	-0.66325			16-5938-6055	08-1846-1770
10		Jun	25	0.44847	0.06293	0.27929			02-7818-3113	07-6434-4735
11		Oct	12	0.34850	-0.03703	-0.18654			07-2723-0368	03-4167-3848
12		Nov	6	1.10809	0.72256	1.95007	(+)		02-8822-1003	13-2266-5070
13			14	0.23515	-0.15039	-0.91326			10-0087-4493	11-2555-9069
14	2008	Jan	18	0.97369	0.58816	1.71124	(+)		16-7804-5373	13-2534-3341
15		Sep	23	0.58928	0.20375	0.78366			03-2847-7880	18-3138-3652
16		Oct	24	0.46182	0.07628	0.33346			14-6257-4714	01-6783-1439
17		Nov	11	0.32451	-0.06102	-0.31828			03-1179-3010	01-0386-6418

CETIS Analysis Detail

Reference Toxicant 96-h Acute Survival Test	NewFields
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Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Linear Regression	03-1179-3010	03-1179-3010	16 Jan-09 2:03 PM	CETISv1.1.2

Linear Regression Options						
Model Function	Threshold Option	Threshold	Threshold Opt	Reweighted	Pooled Groups	Het Corr
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.03333334	Yes	Yes	No	No

Regression Summary								
Iters	Log Likelihood	Mu	Sigma	G	Chi-Sq	Critical	P-Value	Decision(0.05)
11	-70.57110	2.67090	0.43643	0.09772	11.81824	22.36203	0.54260	Non-Significant Heterogeneity

Point Estimates			
% Effect	Conc-µg/L	95% LCL	95% UCL
10	0.08952191	0.04026723	0.1405919
15	0.1145264	0.05699932	0.1714611
20	0.1392922	0.07494207	0.2012646
25	0.1647659	0.09454104	0.231501
40	0.2515736	0.1670126	0.3348343
50	0.3245133	0.2308412	0.4259411

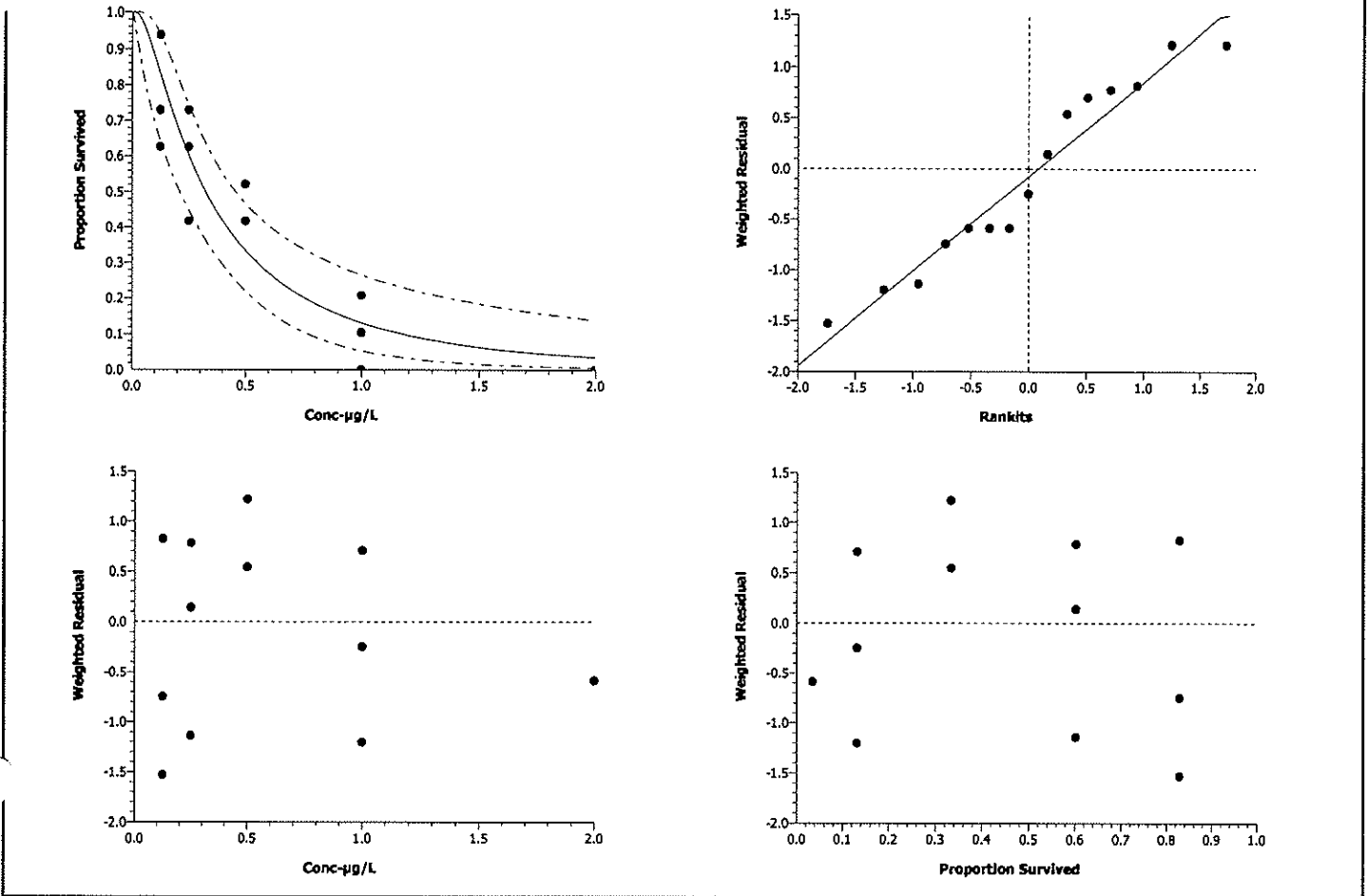
Regression Parameters							
Parameter	Estimate	Std Error	95% LCL	95% UCL	t Statistic	P-Value	Decision(0.05)
Threshold	0.04054284	0.03574943	-0.02952604	0.1106117	1.134	0.27724	Not Significant
Slope	2.291337	0.3654413	1.575072	3.007601	6.270	0.00003	Significant
Intercept	6.119931	0.1947191	5.738281	6.50158	31.430	0.00000	Significant

Residual Analysis					
Attribute	Method	Statistic	Critical	P-Value	Decision(0.05)
Variances	Modified Levene	11.86507	3.47805	0.00082	Unequal Variances
Distribution	Shapiro-Wilk W	0.9287723		0.26157	Normal Distribution

Data Summary		Calculated Variate(A/B)							
Conc-µg/L	Control Type	Count	Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.96667	0.90000	1.00000	0.01179	0.05773	29	30
0.125		3	0.73333	0.60000	0.90000	0.03118	0.15275	22	30
0.25		3	0.56667	0.40000	0.70000	0.03118	0.15275	17	30
0.5		3	0.46667	0.40000	0.50000	0.01179	0.05774	14	30
1		3	0.10000	0.00000	0.20000	0.02041	0.10000	3	30
2		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	30

CETIS Analysis Detail

Graphics



CETIS Analysis Detail

Reference Toxicant 96-h Acute Survival Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Comparison	03-1179-3010	03-1179-3010	16 Jan-09 2:02 PM	CETISv1.1.2

Method	Ait H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		<0.125	0.125		N/A	19.47%

Group Comparisons

Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		0.125	2.80957	2.46559	0.0286	0.27696	Significant Effect
		0.25	4.48417	2.46559	0.0020	0.27696	Significant Effect
		0.5	5.39350	2.46559	0.0005	0.27696	Significant Effect
		1	9.28482	2.46559	0.0000	0.27696	Significant Effect

ANOVA Table

Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	1.769496	0.4423739	4	23.37	0.00005	Significant Effect
Error	0.1892716	0.0189272	10			
Total	1.95876731	0.4613011	14			

ANOVA Assumptions

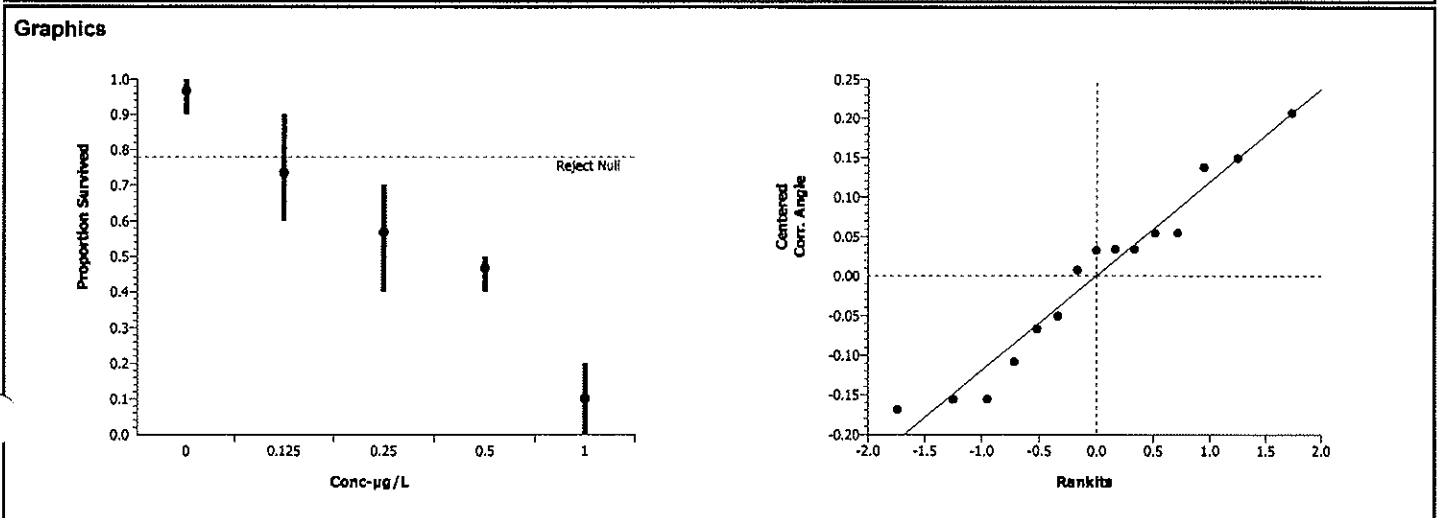
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	2.36180	13.27670	0.66954	Equal Variances
Distribution	Shapiro-Wilk W	0.94670		0.47400	Normal Distribution

Data Summary

Conc-µg/L	Control Type	Count	Original Data				Transformed Data			
			Mean	Minimum	Maximum	SD	Mean	Minimum	Maximum	SD
0	Dilution Water	3	0.96667	0.90000	1.00000	0.05773	1.35769	1.24905	1.41202	0.09409
0.125		3	0.73333	0.60000	0.90000	0.15275	1.04209	0.88608	1.24905	0.18677
0.25		3	0.56667	0.40000	0.70000	0.15275	0.85398	0.68472	0.99116	0.15572
0.5		3	0.46667	0.40000	0.50000	0.05774	0.75184	0.68472	0.78540	0.05813
1		3	0.10000	0.00000	0.20000	0.10000	0.31473	0.15878	0.46365	0.15256

Data Detail

Conc-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Dilution Water	0.90000	1.00000	1.00000							
0.125		0.60000	0.90000	0.70000							
0.25		0.70000	0.40000	0.60000							
0.5		0.50000	0.40000	0.50000							
1		0.10000	0.20000	0.00000							



CETIS Data Worksheet

Report Date: 16 Jan-09 2:01 PM

Link: 03-1179-3010

Reference Toxicant 96-h Acute Survival Test

NewFields

Start Date: 11 Nov-08 06:15 PM **Species:** Ampelisca abdita **Sample Code:** 1203419413
Ending Date: 15 Nov-08 04:00 PM **Protocol:** PSEP (1995) **Sample Source:** Reference Toxicant
Sample Date: 11 Nov-08 **Material:** Cadmium chloride **Sample Station:** P080418.32

Conc-µg/L	Code	Rep	Pos	# Exposed	# Survived	Notes
0	D	1	15	10	9	
0	D	2	2	10	10	
0	D	3	7	10	10	
0.125		1	4	10	6	
0.125		2	6	10	9	
0.125		3	18	10	7	
0.25		1	12	10	7	
0.25		2	11	10	4	
0.25		3	3	10	6	
0.5		1	16	10	5	
0.5		2	14	10	4	
0.5		3	1	10	5	
1		1	8	10	1	
1		2	5	10	2	
1		3	9	10	0	
2		1	13	10	0	
2		2	10	10	0	
2		3	17	10	0	



Cadmium Reference Toxicant Test Water Quality Data Sheet

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Ampelisca abdita</i>	NEWFIELDS LABORATORY Port Gamble Bath 9	PROTOCOL PSEP 1995
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	QUANTITY OF STOCK: 0.3 mL ACTUAL: 0.303g	QUANTITY OF OILUENT: 1500mL ACTUAL: 1500g	INIT MMB DATE PREP 11/11/08
TEST ID P080418.32	LOT #: 06510TC	TEST START DATE 11Nov08	TIME 1815	TEST END DATE 15Nov08 TIME 1600

WATER QUALITY DATA

DILTIN.WAT.BATCH		TEMP REC#	REFERENCE TOX. MATERIAL				REFERENCE TOXICANT			LOT NO.	96-H LC ₅₀				
Fsw11108.01		NA	cadmium chloride				cadmium								
TEST CONDITIONS				DO (mg/L)	TEMP(°C)		SAL (ppt)	pH		TECHNICIAN	AMMONIA		SULFIDES		
				2.5.0	20.6 ± 1		28 ± 1	8.0 ± 0.5			WQ TECH	AMMONIA		SULFIDES	
CLIENT/NEWFIELDS ID	CONCENTRATION		DAY	REP	D.O.		TEMP.		SALINITY			pH	AMMONIA		SULFIDES
	value	units			meter	mg/L	meter	°C	meter	ppt	meter		unit	meter	mg/L
Ref.Tox.-cadmium	0	mg/L	0	Stock	4	7.8	4	19.6	1	28	1	6.9	MMB		
			1	Surr	4	7.8	4	19.6	1	28	1	6.9			
			2	Surr	4	7.8	4	19.6	1	28	1	6.9			
			3	Surr	4	7.8	4	19.6	1	28	1	6.9			
			4	Surr	3	7.9	3	20.2	3	28	3	8.1	TS		
Ref.Tox.-cadmium	2.5	mg/L	0	Stock	4	8.0	4	19.5	1	28	1	7.2	MMB		
			1	Surr	4	8.0	4	19.5	1	28	1	7.2			
			2	Surr	4	8.0	4	19.5	1	28	1	7.2			
			3	Surr	4	8.0	4	19.5	1	28	1	7.2			
			4	Surr	3	7.9	3	20.2	3	28	3	8.1	TS		
Ref.Tox.-cadmium	5	mg/L	0	Stock	4	8.1	4	19.5	1	28	1	7.3	MMB		
			1	Surr	4	8.1	4	19.5	1	28	1	7.3			
			2	Surr	4	8.1	4	19.5	1	28	1	7.3			
			3	Surr	4	8.1	4	19.5	1	28	1	7.3			
			4	Surr		7.9		20.2		28		8.1			
Ref.Tox.-cadmium	10	mg/L	0	Stock	4	8.1	4	19.5	1	28	1	7.3	MMB		
			1	Surr	4	8.1	4	19.5	1	28	1	7.3			
			2	Surr	4	8.1	4	19.5	1	28	1	7.3			
			3	Surr	4	8.1	4	19.5	1	28	1	7.3			
			4	Surr	3	8.0	3	20.3	3	28	3	8.1	TS		
Ref.Tox.-cadmium	20	mg/L	0	Stock	4	8.1	4	19.5	1	28	1	7.4	MMB		
			1	Surr	4	8.1	4	19.5	1	28	1	7.4			
			2	Surr	4	8.1	4	19.5	1	28	1	7.4			
			3	Surr	4	8.1	4	19.5	1	28	1	7.4			
			4	Surr	3	8.0	3	20.4	3	28	3	8.1	TS		
Ref.Tox.-cadmium	40	mg/L	0	Stock	4	8.1	4	19.5	1	28	1	7.4	MMB		
			1	Surr	4	8.1	4	19.5	1	28	1	7.4			
			2	Surr	4	8.1	4	19.5	1	28	1	7.4			
			3	Surr	4	8.1	4	19.5	1	28	1	7.4			
			4	Surr	3	8.0	3	20.3	3	28	3	8.1	TS		



Cadmium Reference Toxicant Test Survival Data Sheet

SPECIES <i>Ampelisca abdita</i>
CLIENT: Herrera
PROJECT: Oakland Bay
NEWFIELDS JOB NO.: 1101-008-860
PROJECT MANAGER: B. Hester
NEWFIELDS LABORATORY: Port Gamble Bath 9
PROTOCOL: PSEP 1985

SURVIVAL & BEHAVIOR DATA

OBSERVATION KEY																
N = Normal LOE = Loss of equilibrium Q = Quinscent DC = Discoloration NB = No body F = Floating on surface				DATE			DATE			DATE			DATE			
				TECHNICIAN			TECHNICIAN			TECHNICIAN			TECHNICIAN			
				INITIAL # OF ORGANISMS												
				10												
CLIENT/ NEWFIELDS ID	CONC.		REP	INITIAL NUMBER												
	value	units			#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS
Ref.Tox.- cadmium	0 mg/L		1		10	0	3F	10	0	N	9	1	N	9	0	1F
			2		10	0	3F	10	0	N	10	0	N	10	0	1F
			3		10	0	1F	10	0	N	10	0	N	10	0	2F
Ref.Tox.- cadmium	25 mg/L 0.125		1		10	0	5F	10	0	2F	10	0	4F	6	4	N
			2		10	0	3F	10	0	2F	9	1	2F	9	0	3F
			3		10	0	5F	10	0	2F	9	1	2F	7	2	3F
Ref.Tox.- cadmium	5 mg/L 0.25		1		10	0	4F	9	1	1F	9	0	3F	7	2	2F
			2		10	0	5F	10	0	3F	9	1	3F	4	5	2F
			3		10	0	3F	9	1	2F	8	1	2F	6	2	3F
Ref.Tox.- cadmium	10 mg/L 0.5		1		10	0	5F	10	0	2F	9	1	1F	5	4	2F
			2		9	1	4F	9	0	1F	6	3	3F	4	2	3F
			3		9	1	5F	9	0	N	9	0	N	5	4	2F
Ref.Tox.- cadmium	20 mg/L 1		1		10	0	4F	10	0	2F	7	3	2F	1	6	2F
			2		10	0	8F	9	1	4F	5	4	2F	2	3	2F
			3		9	1	4F	9	0	2F	6	3	3F	0	6	4F
Ref.Tox.- cadmium	40 mg/L 2		1		10	0	5F	9	1	2F	4	5	1F/Q	0	4	NA
			2		10	0	3F	9	1	6F/Q	3	6	2F/Q	0	3	↓
			3		10	0	7F	8	2	3F/Q	1	7	3F/Q	0	1	↓

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera		PROJECT Oakland Bay		SPECIES <i>Eohaustorius estuarius</i>			NEWFIELDS LABORATORY Port Gamble Baths 1&2			PROTOCOL PSEP 1995			
NEWFIELDS JOB NUMBER 1101-008-860		PROJECT MANAGER B. Hester		TEST START DATE 14-Nov-08			TEST END DATE 24-Nov-08						
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive
			Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	
	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date		
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	
Control	1	20	N	N	N	N	N	N	N	N	N	N	20
	2	173	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	3	68	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	4	128	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	5	133	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	19
RF-02	1	78	↓	↓	↓	↓	↓	↓	↓	↓	↓	N	20
	2	73	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	18
	3	61	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	4	71	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	19
	5	153	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
RF-03	1	79	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	2	50	1E	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	3	4	N	↓	↓	↓	↓	↓	↓	↓	↓	↓	18
	4	89	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	5	96	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
SH-25-WS-00	1	170	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	16
	2	93	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	16
	3	17	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	13
	4	5	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	17
	5	185	1E	↓	↓	↓	↓	↓	↓	↓	↓	↓	17

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera		PROJECT Oakland Bay		SPECIES <i>Eohaustorius estuarius</i>			NEWFIELDS LABORATORY Port Gamble Baths 1&2			PROTOCOL PSEP 1995				
NEWFIELDS JOB NUMBER 1101-008-860		PROJECT MANAGER B. Hester		TEST START DATE 14-Nov-08			TEST END DATE 24-Nov-08							
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive	
	20		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10		
	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date		
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician		
OB-03-SS-00	1	179	N	N	N	N	N	N	N	N	N	N	16	1m
	2	110	IE, G	G					N				14	
	3	56	N	N					IE				16	
	4	2		IE					N				15	2m
	5	13		N					G				10	
SH-14-SS-00	1	178		IE	↓			N		N			18	
	2	94		N	IE								14	1m
	3	27			N								14	
	4	177						↓					18	
	5	88		↓				IE					18	1m
OB-14-SS-00	1	44		IE				N					17	1m
	2	144		N									16	
	3	16		↓									18	
	4	142		IE									20	
	5	70		N									19	
OB-02-SS-00	1	30		↓									19	
	2	60		↓									12	2m
	3	186		2E									15	
	4	126		N	↓								16	1m
	5	183		IE	IE				↓				17	

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera		PROJECT Oakland Bay		SPECIES <i>Eohaustorius estuarius</i>			NEWFIELDS LABORATORY Port Gamble Baths 1&2			PROTOCOL PSEP 1995			
NEWFIELDS JOB NUMBER 1101-008-860		PROJECT MANAGER B. Hester		TEST START DATE 14-Nov-08			TEST END DATE 24-Nov-08						
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive
	20		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	
	Rep	Jar #	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
Client/NewFields ID		Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	
SH-02-SS-00	1	172	N	N	N	N	N	N	N	N	N	N	18
	2	107	① IEN	↓	↓	↓	↓	↓	↓	↓	↓	↓	18
	3	163	① IEN	↓	↓	↓	↓	↓	↓	↓	↓	↓	19
	4	69	N	IE	↓	↓	↓	↓	↓	↓	↓	↓	19
	5	85	N	N	↓	↓	↓	↓	↓	↓	↓	↓	20
SH-24-WS-00	1	108	N	3E	↓	↓	↓	↓	↓	↓	↓	↓	17
	2	134	IE	2E	↓	IE	↓	↓	↓	↓	↓	↓	19
	3	135	IE	N	↓	N	↓	↓	↓	↓	↓	↓	18
	4	164	IE	4E	2E	↓	↓	↓	↓	↓	↓	↓	15
	5	59	N	N	N	↓	↓	↓	↓	↓	↓	↓	13
SH-09-SS-00	1	158	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	2	92	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	18
	3	120	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	17
	4	33	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	17
	5	143	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	16
OB-04-SS-00	1	103	IE	↓	↓	IE	N	↓	↓	↓	↓	↓	19
	2	115	N	↓	↓	N	↓	↓	↓	↓	↓	↓	19
	3	166	N	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	4	64	IE	IE	↓	↓	IE	↓	↓	↓	↓	↓	17
	5	155	N	N	IE	↓	N	↓	↓	↓	↓	↓	20

① IE 11/15/08 TB

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera			PROJECT Oakland Bay			SPECIES <i>Eohaustorius estuarius</i>			NEWFIELDS LABORATORY Port Gamble Baths 1&2			PROTOCOL PSEP 1995	
NEWFIELDS JOB NUMBER 1101-008-860			PROJECT MANAGER B. Hester			TEST START DATE 14-Nov-08			TEST END DATE 24-Nov-08				
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive
	Rep	Jar #	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	
			Date	Date	Date	Date	Date	Date	Date	Date	Date	Date		Date
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	
SH-07-SS-00	1	174	N	N	N	N	N	N	N	N	N	N	20
	2	26	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	3	25	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	18
	4	75	↓	↓	↓	↓	IE	↓	↓	↓	↓	↓	19
	5	31	IE	↓	↓	↓	2	↓	↓	↓	↓	↓	18
OB-17-WS-00	1	97	2	↓	↓	↓	2	↓	↓	↓	↓	↓	19
	2	151	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	17
	3	90	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	17
	4	101	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	18
	5	82	↓	IE	↓	↓	↓	↓	↓	↓	↓	↓	19
SH-28-WS-00	1	154	↓	IE	↓	↓	2	↓	↓	↓	↓	↓	18
	2	34	↓	2	↓	↓	2	↓	↓	↓	↓	↓	19
	3	157	↓	2	↓	↓	IE	↓	↓	↓	↓	↓	18
	4	83	↓	IE	↓	IE	2	↓	↓	↓	↓	↓	20
	5	42	↓	2	↓	N	2	↓	↓	↓	↓	↓	19
SH-01-SS-00	1	159	↓	↓	↓	↓	2	↓	↓	↓	↓	↓	18
	2	147	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	17
	3	119	↓	2E	↓	↓	↓	↓	↓	↓	↓	↓	19
	4	35	↓	2	↓	↓	↓	↓	↓	↓	↓	↓	18
	5	102	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	18

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera			PROJECT Oakland Bay			SPECIES <i>Eohaustorius estuarius</i>			NEWFIELDS LABORATORY Port Gamble Baths 1&2			PROTOCOL PSEP 1995	
NEWFIELDS JOB NUMBER 1101-008-860			PROJECT MANAGER B. Hester			TEST START DATE 14-Nov-08			TEST END DATE 24-Nov-08				
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive
	Rep	Jar #	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	
			Date	Date	Date	Date	Date	Date	Date	Date	Date	Date		Date
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician
SH-27-WS-00	1	99	N	N	N	N	N	N	N	N	N	N	19
	2	65	|	|	|	N	|	|	|	|	|	|	15
	3	36	|	|	|	N	|	|	|	|	|	|	19
	4	140	|	|	|	IE	|	|	|	|	|	|	19
	5	48	|	|	|	N	↓	|	|	|	|	|	20
OB-07-SS-00	1	74	↓	|	|	|	IE	|	|	|	|	|	19
	2	76	IE	|	|	|	N	|	|	|	|	|	19
	3	41	N	|	|	|	|	|	|	|	|	|	16
	4	8	|	|	|	|	|	|	|	|	|	|	20
	5	192	|	|	|	|	↓	|	|	|	|	|	12
SH-30-WS-00	1	39	|	↓	|	|	N	|	|	|	|	|	20
	2	194	|	IE	|	|	IE	|	|	|	|	|	18
	3	72	|	N	|	|	N	|	|	|	|	|	15
	4	136	|	↓	|	|	N	|	|	|	|	|	19
	5	184	|	2E	|	|	N	|	|	|	|	|	19
SH-10-SS-00	1	39	|	N	|	|	N	|	|	|	|	|	19
	2	194	|	|	|	|	|	|	|	|	|	|	18
	3	72	|	|	|	|	|	|	|	|	|	|	19
	4	136	|	|	|	|	|	|	↓	|	|	|	19
	5	184	↓	↓	↓	↓	↓	↓	IE	↓	↓	↓	18

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera		PROJECT Oakland Bay		SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995					
NEWFIELDS JOB NUMBER 1101-008-860		PROJECT MANAGER B. Hester		TEST START DATE 14-Nov-08		TEST END DATE 24-Nov-08							
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive
	Rep	Jar #	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	
			Date	Date	Date	Date	Date	Date	Date	Date	Date	Date		Date
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	
SH-22-WS-00	1	15	1E	N	N	N	N	N	N	N	N	N	18
	2	57	N	↓	N	↓	↓	↓	↓	N	↓	↓	15
	3	53	N	2E	N	↓	↓	↓	↓	1E	↓	↓	18
	4	152	1E	3E	2E	↓	↓	↓	↓	N	↓	↓	19
	5	55	1E	N	N	↓	↓	↓	↓	N	↓	↓	20
HI-06-SS-00	1	66	N	4E	2E	↓	↓	↓	↓	N	↓	↓	18
	2	181	N	N	N	↓	↓	↓	↓	↓	↓	↓	17
	3	130	G	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	4	81	N	↓	↓	↓	↓	↓	↓	↓	↓	↓	19
	5	169	↓	↓	↓	↓	↓	↓	↓	↓	↓	G	19
SH-26-WS-00	1	98	↓	↓	↓	↓	↓	↓	↓	↓	↓	N	16
	2	19	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	15
	3	141	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	18
	4	24	1E	↓	↓	↓	↓	↓	↓	↓	↓	↓	18
	5	23	N	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
HI-05-SS-00	1	43	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	2	191	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	3	46	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	4	86	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	19
	5	3	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20

4m

1m

1m

1m

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera			PROJECT Oakland Bay			SPECIES <i>Eohaustorius estuarius</i>			NEWFIELDS LABORATORY Port Gamble Baths 1&2			PROTOCOL PSEP 1995		
NEWFIELDS JOB NUMBER 1101-008-860			PROJECT MANAGER B. Hester			TEST START DATE 14-Nov-08			TEST END DATE 24-Nov-08					
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive	
	20	Rep	Jar #	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9		Day 10
				Date	Date	Date	Date	Date	Date	Date	Date	Date		Date	Date
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	
OB-01-SS-00	1	150	N	N	N	N	N	N	N	N	N	N	20	
	2	145	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20	
	3	156	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20	
	4	91	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	32	
	5	21	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20	
HI-03-SS-00	1	161	↓	29	↓	↓	↓	↓	↓	↓	↓	↓	20	
	2	168	↓	N	↓	↓	↓	↓	↓	↓	↓	↓	13	
	3	37	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	13	
	4	139	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	19	
	5	148	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	18	
HI-02-SS-00	1	121	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	18	
	2	28	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20	
	3	117	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	19	
	4	113	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	19	
	5	18	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20	
SH-15-SS-00	1	149	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20	
	2	187	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	19	
	3	188	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20	
	4	47	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	18	
	5	111	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20	

Surv 18

3m

2m

1m

1m

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera		PROJECT Oakland Bay		SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995					
NEWFIELDS JOB NUMBER 1101-008-860		PROJECT MANAGER B. Hester		TEST START DATE 14-Nov-08		TEST END DATE 24-Nov-08							
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive
	20	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10		
		Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	
HI-04-SS-00	1	109	N	G	G	G	G	G	G	G	G	G	20
	2	62	↓	G	↓	↓	↓	↓	↓	↓	↓	↓	18
	3	22	G	G	↓	↓	↓	↓	↓	↓	↓	↓	20
	4	105	G	G	↓	↓	↓	↓	↓	↓	↓	↓	20
	5	137	G	G	↓	↓	↓	↓	↓	↓	↓	↓	20
HI-07-SS-00	1	6	N	N	N	N	N	N	N	N	N	N	19
	2	14	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	19
	3	51	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	4	198	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
	5	77	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	20
SH-16-SS-00	1	118	↓	↓	G	G	G	G	G	G	G	G	20
	2	138	G	G	↓	↓	↓	↓	↓	↓	↓	↓	20
	3	127	G	G	↓	↓	↓	↓	↓	↓	↓	↓	20
	4	132	G	G	↓	↓	↓	↓	↓	↓	↓	↓	19
	5	9	N	N	N	N	N	N	N	N	N	N	19
SH-29-WS-00	1	162	N	N	N	N	N	G	G	G	G	G	19
	2	131	G	G	G	G	G	↓	↓	↓	↓	↓	19
	3	114	G	G	↓	↓	↓	↓	↓	↓	↓	↓	20
	4	167	G	G	↓	↓	↓	↓	↓	↓	↓	↓	18
	5	123	G	G	↓	↓	↓	↓	↓	↓	↓	↓	20

1M
1M

10-DAY SOLID PHASE TEST OBSERVATION DATA

CLIENT Herrera			PROJECT Oakland Bay				SPECIES <i>Eohaustorius estuarius</i>				NEWFIELDS LABORATORY Port Gamble Baths 1&2				PROTOCOL PSEP 1995	
NEWFIELDS JOB NUMBER 1101-008-860			PROJECT MANAGER B. Hester				TEST START DATE 14-Nov-08				TEST END DATE 24-Nov-08					
#E = Emergence #M = Number of Mortality G = Growth (fungal, bacterial, or algal) D = No Air Flow (DO?) N = Normal	Initial # of Organisms		ENDPOINT DATA AND OBSERVATIONS										Number Alive			
	20		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10				
	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date				
Client/NewFields ID	Rep	Jar #	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician	Technician		
SH-06-SS-00	1	32	N	1E	N	N	N	N	N	N	N	N	N	14	1m	
	2	29	N	N	N	↓	↓	1E	↓	↓	↓	↓	↓	18		
	3	146	1E	3E	1E	↓	↓	N	↓	↓	↓	↓	↓	18		
	4	11	N	N	N	↓	↓	↓	↓	↓	↓	↓	↓	15	1m	
	5	112	N	↓	N	↓	↓	↓	↓	↓	↓	↓	↓	20		



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME 1330	TEST END DATE 24-Nov-08	TIME 1000

Test Conditions				WATER QUALITY DATA								Tech	Date
				DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-02-SS-00	0	WQ	1	4	8.1	4	16.1	1	28	1	7.5	TS	11/14
SH-06-SS-00	0	WQ	7	|	8.3	|	15.8	|	28	|	7.4	|	|
OB-14-SS-00	0	WQ	10	|	8.4	|	15.7	|	28	|	7.6	|	|
OB-01-SS-00	0	WQ	12	|	8.4	|	15.6	|	28	|	7.7	|	|
SH-10-SS-00	0	WQ	38	|	8.4	|	15.5	|	28	|	7.7	|	|
HI-02-SS-00	0	WQ	40	|	8.4	|	15.6	|	28	|	7.8	|	|
SH-22-WS-00	0	WQ	45	|	8.4	|	15.6	|	28	|	7.7	|	|
HI-03-SS-00	0	WQ	49	|	8.5	|	15.5	|	28	|	7.8	|	|
OB-02-SS-00	0	WQ	52	|	8.5	|	15.6	|	28	|	7.8	|	|
HI-05-SS-00	0	WQ	58	|	8.4	|	15.6	|	28	|	7.8	|	|
SH-30-WS-00	0	WQ	63	|	8.3	|	15.6	|	28	|	7.7	|	|
SH-15-SS-00	0	WQ	67	|	8.4	|	15.6	|	28	|	7.7	|	|
OB-04-SS-00	0	WQ	80	|	8.1	|	16.1	|	28	|	7.7	|	|
SH-09-SS-00	0	WQ	84	|	8.4	|	15.7	|	28	|	7.7	|	|
SH-14-SS-00	0	WQ	95	|	8.4	|	15.6	|	28	|	7.8	|	|
SH-28-WS-00	0	WQ	100	|	8.3	|	15.7	|	28	|	7.8	|	|
OB-17-WS-00	0	WQ	104	|	8.3	|	15.6	|	28	|	7.7	|	|
SH-16-SS-00	0	WQ	106	|	8.5	|	15.6	|	28	|	7.7	|	|
HI-04-SS-00	0	WQ	116	|	8.4	|	15.6	|	28	|	7.7	|	|
SH-26-WS-00	0	WQ	122	|	8.5	|	15.4	|	28	|	7.8	|	|
SH-27-WS-00	0	WQ	124	|	8.5	|	15.5	|	28	|	7.8	|	|
OB-03-SS-00	0	WQ	129	|	8.4	|	15.5	|	28	|	7.9	|	|
SH-29-WS-00	0	WQ	165	↓	8.3	↓	15.8	↓	28	↓	7.7	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME	

Test Conditions				WATER QUALITY DATA								Tech	Date
				DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
OB-07-SS-00	0	WQ	175	4	8.4	4	15.7	1	28	1	7.8	TS	11/14
SH-24-WS-00	0	WQ	176	↓	8.3	↓	15.6	↓	28	↓	7.8	↓	↓
RF-02	0	WQ	180	↓	8.3	↓	15.6	↓	28	↓	7.8	↓	↓
HI-07-SS-00	0	WQ	182	↓	8.3	↓	15.7	↓	28	↓	7.8	↓	↓
Control	0	WQ	189	↓	8.4	↓	15.6	↓	28	↓	7.8	↓	↓
SH-07-SS-00	0	WQ	190	↓	8.5	↓	15.5	↓	28	↓	7.8	↓	↓
HI-06-SS-00	0	WQ	193	↓	8.4	↓	15.5	↓	28	↓	7.8	↓	↓
SH-01-SS-00	0	WQ	195	↓	8.5	↓	15.5	↓	28	↓	7.8	↓	↓
RF-03	0	WQ	196	↓	8.5	↓	15.6	↓	28	↓	7.8	↓	↓
SH-25-WS-00	0	WQ	197	↓	8.5	↓	15.6	↓	28	↓	7.9	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME	

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-02-SS-00	1	WQ	1	4	8.4	4	15.9	1	28	1	7.7	Jo	11/15
SH-06-SS-00	1	WQ	7	|	8.5	|	15.7	|	28	|	7.8	|	|
OB-14-SS-00	1	WQ	10	|	8.5	|	15.6	|	28	|	7.8	|	|
OB-01-SS-00	1	WQ	12	|	8.5	|	15.6	|	28	|	7.9	|	|
SH-10-SS-00	1	WQ	38	|	8.5	|	15.5	|	28	|	7.9	|	|
HI-02-SS-00	1	WQ	40	|	8.6	|	15.5	|	28	|	7.9	|	|
SH-22-WS-00	1	WQ	45	|	8.3	|	15.5	|	28	|	7.9	|	|
HI-03-SS-00	1	WQ	49	|	8.4	|	15.5	|	28	|	7.9	|	|
OB-02-SS-00	1	WQ	52	|	8.5	|	15.5	|	28	|	7.9	|	|
HI-05-SS-00	1	WQ	58	|	8.5	|	15.5	|	28	|	7.9	|	|
SH-30-WS-00	1	WQ	63	|	8.4	|	15.5	|	28	|	7.9	|	|
SH-15-SS-00	1	WQ	67	|	8.5	|	15.5	|	28	|	7.9	|	|
OB-04-SS-00	1	WQ	80	|	8.6	|	15.5	|	28	|	7.9	|	|
SH-09-SS-00	1	WQ	84	|	8.6	|	15.4	|	28	|	7.9	|	|
SH-14-SS-00	1	WQ	95	|	8.5	|	15.4	|	28	|	7.9	|	|
SH-28-WS-00	1	WQ	100	|	8.5	|	15.4	|	28	|	7.9	|	|
OB-17-WS-00	1	WQ	104	|	8.5	|	15.4	|	28	|	7.9	|	|
SH-16-SS-00	1	WQ	106	|	8.6	|	15.4	|	28	|	7.9	|	|
HI-04-SS-00	1	WQ	116	|	8.6	|	15.4	|	28	|	8.0	|	|
SH-26-WS-00	1	WQ	122	|	8.6	|	15.4	|	28	|	7.9	|	|
SH-27-WS-00	1	WQ	124	|	8.6	|	15.4	|	28	|	7.9	|	|
OB-03-SS-00	1	WQ	129	|	8.6	|	15.4	|	28	|	7.9	|	|
SH-29-WS-00	1	WQ	165	|	8.5	|	15.6	|	28	|	7.9	|	|



**10 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATA SHEET**

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
OB-07-SS-00	1	WQ	175	4	8.5	4	15.5	1	28	1	8.0	JO	11/15
SH-24-WS-00	1	WQ	176	1	8.3	1	15.5	1	28	1	7.9	↓	↓
RF-02	1	WQ	180	1	8.3	1	15.4	1	28	1	7.9	↓	↓
HI-07-SS-00	1	WQ	182	1	8.5	1	15.4	1	28	1	7.9	↓	↓
Control	1	WQ	189	1	8.6	1	15.4	1	28	1	7.9	↓	↓
SH-07-SS-00	1	WQ	190	1	8.6	1	15.3	1	28	1	7.9	↓	↓
HI-06-SS-00	1	WQ	193	1	8.5	1	15.4	1	28	1	7.9	↓	↓
SH-01-SS-00	1	WQ	195	1	8.5	1	15.4	1	28	1	7.9	↓	↓
RF-03	1	WQ	196	1	8.6	1	15.4	1	28	1	8.0	↓	↓
SH-25-WS-00	1	WQ	197	✓	8.6	✓	15.4	✓	28	✓	8.0	✓	✓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>	NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08
		TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
				DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-02-SS-00	2	WQ	1	3	8.2	3	15.4	3	28	3	8.2	J5	11/14
SH-06-SS-00	2	WQ	7	|	8.4	|	15.3	|	29	|	8.2	|	|
OB-14-SS-00	2	WQ	10	|	8.3	|	15.2	|	28	|	8.2	|	|
OB-01-SS-00	2	WQ	12	|	8.2	|	15.2	|	28	|	8.2	|	|
SH-10-SS-00	2	WQ	38	|	8.7	|	15.2	|	28	|	8.2	|	|
HI-02-SS-00	2	WQ	40	|	8.3	|	15.1	|	28	|	8.2	|	|
SH-22-WS-00	2	WQ	45	|	8.1	|	15.3	|	28	|	8.1	|	|
HI-03-SS-00	2	WQ	49	|	8.0	|	15.3	|	28	|	8.1	|	|
OB-02-SS-00	2	WQ	52	|	8.2	|	15.2	|	28	|	8.1	|	|
HI-05-SS-00	2	WQ	58	|	8.3	|	15.2	|	28	|	8.1	|	|
SH-30-WS-00	2	WQ	63	|	8.3	|	15.2	|	28	|	8.1	|	|
SH-15-SS-00	2	WQ	67	|	8.3	|	15.2	|	28	|	8.1	|	|
OB-04-SS-00	2	WQ	80	|	8.3	|	15.1	|	28	|	8.1	|	|
SH-09-SS-00	2	WQ	84	|	8.4	|	15.1	|	28	|	8.1	|	|
SH-14-SS-00	2	WQ	95	|	8.4	|	15.1	|	28	|	8.1	|	|
SH-28-WS-00	2	WQ	100	|	8.3	|	15.1	|	28	|	8.0	|	|
OB-17-WS-00	2	WQ	104	|	8.5	|	15.2	|	28	|	8.0	|	|
SH-16-SS-00	2	WQ	106	|	8.4	|	15.1	|	28	|	8.0	|	|
HI-04-SS-00	2	WQ	116	|	8.5	|	15.1	|	28	|	8.1	|	|
SH-26-WS-00	2	WQ	122	|	8.4	|	15.1	|	28	|	8.1	|	|
SH-27-WS-00	2	WQ	124	|	8.2	|	15.1	|	28	|	8.0	|	|
OB-03-SS-00	2	WQ	129	∩	8.2	∩	15.1	∩	28	∩	8.0	∩	∩
SH-29-WS-00	2	WQ	165	∩	7.9	∩	15.2	∩	28	∩	8.0	∩	∩



**10 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATA SHEET**

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
OB-07-SS-00	2	WQ	175	3	8.1	3	15.2	3	28	3	8.0	TK	11/16
SH-24-WS-00	2	WQ	176	|	8.1	|	15.2	|	28	|	8.0	|	|
RF-02	2	WQ	180	|	7.9	|	15.2	|	28	|	8.0	|	|
HI-07-SS-00	2	WQ	182	|	8.1	|	15.3	|	28	|	8.0	|	|
Control	2	WQ	189	|	8.2	|	15.1	|	28	|	8.0	|	|
SH-07-SS-00	2	WQ	190	|	8.1	|	15.1	|	28	|	8.0	|	|
HI-06-SS-00	2	WQ	193	|	8.2	|	15.1	|	28	|	8.0	|	|
SH-01-SS-00	2	WQ	195	|	8.1	|	15.1	|	28	|	8.0	|	|
RF-03	2	WQ	196	|	8.1	|	15.1	|	28	|	8.0	|	|
SH-25-WS-00	2	WQ	197	↓	8.1	↓	15.1	↓	28	↓	8.0	↓	↓



**10 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATA SHEET**

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995	
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME		

Test Conditions				WATER QUALITY DATA									
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L)		Temperature (°C)		Salinity (ppt)		pH		Tech	Date
				meter	>5.0 mg/L	meter	deg C	meter	ppt	meter	unit		
SH-02-SS-00	3	WQ	1	3	8.2	3	15.2	3	29	3	7.9	ZR	11/17/08
SH-06-SS-00	3	WQ	7	1	8.1	1	15.2	1	29	1	7.8	ZR	
OB-14-SS-00	3	WQ	10		8.1		15.3		28		7.8		
OB-01-SS-00	3	WQ	12		8.3		15.2		29		7.9		
SH-10-SS-00	3	WQ	38		8.1		15.2		29		7.9		
HI-02-SS-00	3	WQ	40		8.2		15.2		29		8.0		
SH-22-WS-00	3	WQ	45	1	6.4 ^⓪		15.6		29		7.8		
HI-03-SS-00	3	WQ	49		8.4		15.3		29		8.0		
OB-02-SS-00	3	WQ	52		8.2		15.3		29		8.0		
HI-05-SS-00	3	WQ	58		8.4		15.3		29		8.0		
SH-30-WS-00	3	WQ	63		8.5		15.2		29		7.9		
SH-15-SS-00	3	WQ	67		8.3		15.2		28		8.0		
OB-04-SS-00	3	WQ	80		8.2		15.2		29		8.0		
SH-09-SS-00	3	WQ	84		7.8		15.2		29		8.0		
SH-14-SS-00	3	WQ	95		8.0		15.2		29		8.0		
SH-28-WS-00	3	WQ	100		8.2		15.2		29		7.9		
OB-17-WS-00	3	WQ	104		8.2		15.2		29		8.0		
SH-16-SS-00	3	WQ	106		8.3		15.2		29		8.0		
HI-04-SS-00	3	WQ	116		8.0		15.2		28		8.1		
SH-26-WS-00	3	WQ	122		8.3		15.2		29		8.0		
SH-27-WS-00	3	WQ	124		7.7		15.2		29		8.0		
OB-03-SS-00	3	WQ	129		8.0		15.2		29		8.0		
SH-29-WS-00	3	WQ	165	↓	8.0	↓	15.3	↓	28	↓	7.9	↓	↓

⓪ Airline out of chamber, replaced. DO still w/i limits. 11/17/08 ZR



**10 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATA SHEET**

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
OB-07-SS-00	3	WQ	175	3	8.1	3	15.3	3	29	3	8.0	JR	11/17/08
SH-24-WS-00	3	WQ	176	1	8.1	1	15.3	1	29	1	7.9		
RF-02	3	WQ	180	1	8.3	1	15.2	1	29	1	7.9		
HI-07-SS-00	3	WQ	182	1	8.3	1	15.2	1	28	1	8.0		
Control	3	WQ	189	1	8.5	1	15.2	1	29	1	7.9		
SH-07-SS-00	3	WQ	190	1	8.4	1	15.1	1	29	1	7.9		
HI-06-SS-00	3	WQ	193	1	8.3	1	15.2	1	29	1	7.9		
SH-01-SS-00	3	WQ	195	1	8.5	1	15.2	1	29	1	7.9		
RF-03	3	WQ	196	1	8.4	1	15.2	1	29	1	8.1		
SH-25-WS-00	3	WQ	197	↓	8.3	↓	15.3	↓	29	↓	7.9		



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME	

Test Conditions				WATER QUALITY DATA									
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5		Tech	Date
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-02-SS-00	4	WQ	1	3	7.2	3	15.2	3	29	3	7.6	2R	11/18/08
SH-06-SS-00	4	WQ	7	1	7.2	1	15.2	1	29	1	7.7	1	1
OB-14-SS-00	4	WQ	10	1	8.1	1	15.4	1	28	1	7.8	1	1
OB-01-SS-00	4	WQ	12	1	8.1	1	15.3	1	29	1	8.0	1	1
SH-10-SS-00	4	WQ	38	1	8.2	1	15.2	1	29	1	7.9	1	1
HI-02-SS-00	4	WQ	40	1	7.4	1	15.2	1	29	1	7.9	1	1
SH-22-WS-00	4	WQ	45	1	8.0	1	15.2	1	29	1	7.9	1	1
HI-03-SS-00	4	WQ	49	1	8.2	1	15.2	1	29	1	7.9	1	1
OB-02-SS-00	4	WQ	52	1	8.2	1	15.2	1	29	1	7.9	1	1
HI-05-SS-00	4	WQ	58	1	8.2	1	15.3	1	29	1	7.9	1	1
SH-30-WS-00	4	WQ	63	1	8.2	1	15.2	1	29	1	7.9	1	1
SH-15-SS-00	4	WQ	67	1	8.3	1	15.2	1	28	1	7.9	1	1
OB-04-SS-00	4	WQ	80	1	8.2	1	15.2	1	29	1	7.9	1	1
SH-09-SS-00	4	WQ	84	1	8.2	1	15.2	1	29	1	7.9	1	1
SH-14-SS-00	4	WQ	95	1	8.1	1	15.2	1	29	1	7.9	1	1
SH-28-WS-00	4	WQ	100	1	8.1	1	15.2	1	29	1	7.9	1	1
OB-17-WS-00	4	WQ	104	1	8.2	1	15.2	1	29	1	7.9	1	1
SH-16-SS-00	4	WQ	106	1	8.2	1	15.2	1	28	1	7.9	1	1
HI-04-SS-00	4	WQ	116	1	8.2	1	15.2	1	28	1	8.0	1	1
SH-26-WS-00	4	WQ	122	1	8.3	1	15.2	1	29	1	7.9	1	1
SH-27-WS-00	4	WQ	124	1	8.2	1	15.2	1	29	1	7.9	1	1
OB-03-SS-00	4	WQ	129	1	8.1	1	15.2	1	29	1	7.9	1	1
SH-29-WS-00	4	WQ	165	✓	8.1	✓	15.3	✓	28	✓	7.9	✓	✓



**10 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATA SHEET**

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
OB-07-SS-00	4	WQ	175	3	8.1	3	15.3	3	29	3	8.0	ZR	11/18/08
SH-24-WS-00	4	WQ	176	|	8.0	|	15.2	|	29	|	8.0	|	|
RF-02	4	WQ	180	|	8.1	|	15.3	|	29	|	7.9	|	|
HI-07-SS-00	4	WQ	182	|	8.1	|	15.2	|	28	|	8.0	|	|
Control	4	WQ	189	|	8.4	|	15.2	|	29	|	8.0	|	|
SH-07-SS-00	4	WQ	190	|	8.4	|	15.2	|	29	|	7.9	|	|
HI-06-SS-00	4	WQ	193	|	8.3	|	15.2	|	29	|	7.9	|	|
SH-01-SS-00	4	WQ	195	|	8.4	|	15.2	|	29	|	7.9	|	|
RF-03	4	WQ	196	|	8.2	|	15.2	|	29	|	8.0	|	|
SH-25-WS-00	4	WQ	197	✓	8.2	✓	15.2	✓	29	✓	7.9	✓	✓



**10 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATA SHEET**

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995	
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME		

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-02-SS-00	5	WQ	1	3	8.1	3	15.5	3	29	3	7.8	JRC	11/19/08
SH-06-SS-00	5	WQ	7	1	8.0	1	15.4	1	29	1	7.8		
OB-14-SS-00	5	WQ	10	1	8.1	1	15.4	1	29	1	7.8		
OB-01-SS-00	5	WQ	12	1	8.2	1	15.3	1	29	1	8.0		
SH-10-SS-00	5	WQ	38	1	8.1	1	15.2	1	29	1	8.0		
HI-02-SS-00	5	WQ	40	1	8.1	1	15.3	1	29	1	8.0		
SH-22-WS-00	5	WQ	45	1	8.0	1	15.3	1	29	1	8.0		
HI-03-SS-00	5	WQ	49	1	7.9	1	15.5	1	29	1	8.0		
OB-02-SS-00	5	WQ	52	1	8.2	1	15.3	1	29	1	8.0		
HI-05-SS-00	5	WQ	58	1	8.1	1	15.3	1	29	1	8.0		
SH-30-WS-00	5	WQ	63	1	8.2	1	15.2	1	29	1	7.9		
SH-15-SS-00	5	WQ	67	1	8.2	1	15.2	1	29	1	8.0		
OB-04-SS-00	5	WQ	80	1	8.3	1	15.2	1	29	1	8.0		
SH-09-SS-00	5	WQ	84	1	8.4	1	15.2	1	29	1	8.0		
SH-14-SS-00	5	WQ	95	1	8.1	1	15.2	1	29	1	8.0		
SH-28-WS-00	5	WQ	100	1	8.2	1	15.2	1	29	1	8.0		
OB-17-WS-00	5	WQ	104	1	8.3	1	15.2	1	29	1	8.0		
SH-16-SS-00	5	WQ	106	1	8.3	1	15.2	1	29	1	8.0		
HI-04-SS-00	5	WQ	116	1	8.2	1	15.2	1	29	1	8.1		
SH-26-WS-00	5	WQ	122	1	8.2	1	15.2	1	29	1	8.0		
SH-27-WS-00	5	WQ	124	1	8.3	1	15.2	1	29	1	8.0		
OB-03-SS-00	5	WQ	129	1	8.2	1	15.2	1	29	1	8.0		
SH-29-WS-00	5	WQ	165	1	8.1	1	15.3	1	29	1	8.0		



**10 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATA SHEET**

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
OB-07-SS-00	5	WQ	175	3	8.2	3	15.3	3	29	3	8.0	JR	11/19/08
SH-24-WS-00	5	WQ	176	1	7.9	1	15.3	1	29	1	8.0		
RF-02	5	WQ	180	1	7.9	1	15.4	1	29	1	8.0		
HI-07-SS-00	5	WQ	182	1	8.1	1	15.3	1	28	1	8.0		
Control	5	WQ	189	1	8.3	1	15.3	1	29	1	8.0		
SH-07-SS-00	5	WQ	190	1	8.2	1	15.2	1	29	1	8.0		
HI-06-SS-00	5	WQ	193	1	8.1	1	15.2	1	29	1	8.0		
SH-01-SS-00	5	WQ	195	1	8.2	1	15.3	1	29	1	7.9		
RF-03	5	WQ	196	1	8.2	1	15.3	1	29	1	8.1		
SH-25-WS-00	5	WQ	197	✓	8.1	✓	15.3	✓	29	✓	8.0	✓	✓



**10 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATA SHEET**

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-02-SS-00	6	WQ	1	3	9.0	3	16.8	3	29	3	7.9	JR	11/20/08
SH-06-SS-00	6	WQ	7	1	8.1	1	16.9	1	29	1	7.8		
OB-14-SS-00	6	WQ	10	1	9.1	1	16.9	1	29	1	8.0		
OB-01-SS-00	6	WQ	12	1	9.1	1	16.8	1	29	1	8.2		
SH-10-SS-00	6	WQ	38	1	9.1	1	16.8	1	29	1	8.1		
HI-02-SS-00	6	WQ	40	1	9.0	1	16.8	1	29	1	8.1		
SH-22-WS-00	6	WQ	45	1	8.9	1	16.9	1	29	1	8.1		
HI-03-SS-00	6	WQ	49	1	9.0	1	16.9	1	29	1	8.1		
OB-02-SS-00	6	WQ	52	1	9.1	1	16.8	1	29	1	8.1		
HI-05-SS-00	6	WQ	58	1	9.0	1	16.9	1	29	1	8.1		
SH-30-WS-00	6	WQ	63	1	9.2	1	16.8	1	29	1	8.1		
SH-15-SS-00	6	WQ	67	1	9.2	1	16.8	1	29	1	8.1		
OB-04-SS-00	6	WQ	80	1	9.3	1	16.7	1	30	1	8.1		
SH-09-SS-00	6	WQ	84	1	9.3	1	16.7	1	30	1	8.1		
SH-14-SS-00	6	WQ	95	1	9.1	1	16.6	1	29	1	8.2		
SH-28-WS-00	6	WQ	100	1	9.2	1	16.8	1	29	1	8.1		
OB-17-WS-00	6	WQ	104	1	9.3	1	16.8	1	29	1	8.1		
SH-16-SS-00	6	WQ	106	1	9.3	1	16.7	1	29	1	8.2		
HI-04-SS-00	6	WQ	116	1	9.3	1	16.7	1	29	1	8.2		
SH-26-WS-00	6	WQ	122	1	9.2	1	16.7	1	29	1	8.1		
SH-27-WS-00	6	WQ	124	1	9.2	1	16.7	1	29	1	8.1		
OB-03-SS-00	6	WQ	129	1	9.3	1	16.6	1	29	1	8.1		
SH-29-WS-00	6	WQ	165	✓	9.4	✓	15.4	✓	28	✓	8.1	✓	✓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
OB-07-SS-00	6	WQ	175	3	9.4	3	15.3	3	29	3	8.1	ZR	11/24/08
SH-24-WS-00	6	WQ	176	1	9.4	1	15.2	1	29	1	8.1		
RF-02	6	WQ	180		8.8		15.5		29		8.1		
HI-07-SS-00	6	WQ	182		9.3		15.2		29		8.1		
Control	6	WQ	189		9.7		15.2		29		8.2		
SH-07-SS-00	6	WQ	190		9.7		15.2		29		8.1		
HI-06-SS-00	6	WQ	193		9.5		15.2		29		8.1		
SH-01-SS-00	6	WQ	195		9.6		15.2		29		8.1		
RF-03	6	WQ	196		9.6		15.2		29		8.2		
SH-25-WS-00	6	WQ	197	✓	9.6	✓	15.2	✓	29	✓	8.1	✓	✓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME	

Test Conditions				WATER QUALITY DATA								Tech	Date
				DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-02-SS-00	7	WQ	1	3	8.3	3	15.3	3	30	3	7.9	AR	11/21/08
SH-06-SS-00	7	WQ	7	|	6.5	|	15.6	|	29	|	7.8	|	|
OB-14-SS-00	7	WQ	10	|	8.4	|	15.3	|	29	|	7.9	|	|
OB-01-SS-00	7	WQ	12	|	7.8	|	15.3	|	29	|	8.1	|	|
SH-10-SS-00	7	WQ	38	|	7.9	|	15.2	|	29	|	8.0	|	|
HI-02-SS-00	7	WQ	40	|	7.8	|	15.3	|	29	|	8.1	|	|
SH-22-WS-00	7	WQ	45	|	7.6	|	15.3	|	29	|	8.2	|	|
HI-03-SS-00	7	WQ	49	|	7.6	|	15.4	|	29	|	8.1	|	|
OB-02-SS-00	7	WQ	52	|	7.8	|	15.3	|	29	|	8.1	|	|
HI-05-SS-00	7	WQ	58	|	7.4	|	15.6	|	29	|	8.1	|	|
SH-30-WS-00	7	WQ	63	|	8.0	|	15.3	|	29	|	8.1	|	|
SH-15-SS-00	7	WQ	67	|	7.9	|	15.3	|	29	|	8.1	|	|
OB-04-SS-00	7	WQ	80	|	7.9	|	15.2	|	30	|	8.1	|	|
SH-09-SS-00	7	WQ	84	|	8.0	|	15.2	|	30	|	8.2	|	|
SH-14-SS-00	7	WQ	95	|	7.8	|	15.3	|	29	|	8.3	|	|
SH-28-WS-00	7	WQ	100	|	8.1	|	15.3	|	29	|	8.1	|	|
OB-17-WS-00	7	WQ	104	|	8.0	|	15.3	|	29	|	8.1	|	|
SH-16-SS-00	7	WQ	106	|	8.0	|	15.2	|	29	|	8.1	|	|
HI-04-SS-00	7	WQ	116	|	7.9	|	15.2	|	29	|	8.2	|	|
SH-26-WS-00	7	WQ	122	|	8.0	|	15.2	|	29	|	8.1	|	|
SH-27-WS-00	7	WQ	124	|	8.3	|	15.2	|	29	|	8.1	|	|
OB-03-SS-00	7	WQ	129	|	8.4	|	15.2	|	29	|	8.1	|	|
SH-29-WS-00	7	WQ	165	✓	8.2	✓	15.4	✓	29	✓	8.1	✓	✓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
OB-07-SS-00	7	WQ	175	3	8.2	3	15.4	3	29	3	8.1	HR	11/21/08
SH-24-WS-00	7	WQ	176	1	8.2	1	15.4	1	29	1	8.1	↓	↓
RF-02	7	WQ	180	1	7.3	1	15.5	1	29	1	8.1	↓	↓
HI-07-SS-00	7	WQ	182	1	8.0	1	15.3	1	29	1	8.1	↓	↓
Control	7	WQ	189	1	8.0	1	15.3	1	29	1	8.1	↓	↓
SH-07-SS-00	7	WQ	190	1	7.9	1	15.3	1	29	1	8.1	↓	↓
HI-06-SS-00	7	WQ	193	1	7.9	1	15.3	1	29	1	8.1	↓	↓
SH-01-SS-00	7	WQ	195	1	7.9	1	15.3	1	29	1	8.1	↓	↓
RF-03	7	WQ	196	1	8.0	1	15.3	1	29	1	8.2	↓	↓
SH-25-WS-00	7	WQ	197	↓	8.4	↓	15.4	↓	29	↓	8.1	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995	
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME		

Test Conditions				WATER QUALITY DATA								Tech	Date
				DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-02-SS-00	8	WQ	1	3	8.3	3	15.2	3	30	3	7.9	dlr	11/22/08
SH-06-SS-00	8	WQ	7	1	8.1	1	15.2	1	29	1	7.9		
OB-14-SS-00	8	WQ	10	1	8.2	1	15.2	1	29	1	7.9		
OB-01-SS-00	8	WQ	12	1	8.3	1	15.2	1	29	1	8.1		
SH-10-SS-00	8	WQ	38	1	8.4	1	15.1	1	29	1	8.0		
HI-02-SS-00	8	WQ	40	1	8.3	1	15.2	1	29	1	8.1		
SH-22-WS-00	8	WQ	45	1	8.2	1	15.2	1	29	1	8.2		
HI-03-SS-00	8	WQ	49	1	6.9	1	15.4	1	29	1	8.0		
OB-02-SS-00	8	WQ	52	1	8.3	1	15.2	1	29	1	8.1		
HI-05-SS-00	8	WQ	58	1	8.1	1	15.3	1	29	1	8.1		
SH-30-WS-00	8	WQ	63	1	8.6	1	15.2	1	29	1	8.1		
SH-15-SS-00	8	WQ	67	1	8.4	1	15.2	1	29	1	8.1		
OB-04-SS-00	8	WQ	80	1	8.4	1	15.1	1	30	1	8.1		
SH-09-SS-00	8	WQ	84	1	8.4	1	15.1	1	30	1	8.1		
SH-14-SS-00	8	WQ	95	1	8.1	1	15.2	1	29	1	8.4		
SH-28-WS-00	8	WQ	100	1	8.4	1	15.2	1	29	1	8.1		
OB-17-WS-00	8	WQ	104	1	8.4	1	15.2	1	29	1	8.1		
SH-16-SS-00	8	WQ	106	1	8.5	1	15.1	1	29	1	8.2		
HI-04-SS-00	8	WQ	116	1	8.5	1	15.1	1	29	1	8.2		
SH-26-WS-00	8	WQ	122	1	8.5	1	15.1	1	29	1	8.1		
SH-27-WS-00	8	WQ	124	1	8.7	1	15.1	1	29	1	8.1		
OB-03-SS-00	8	WQ	129	1	8.2	1	15.1	1	29	1	8.1		
SH-29-WS-00	8	WQ	165	✓	8.2	✓	15.3	✓	29	✓	8.1	✓	✓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME	

Test Conditions				WATER QUALITY DATA									
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 1±1		Salinity (ppt) 2±1		pH 7.8±0.5		Tech	Date
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
OB-07-SS-00	8	WQ	175	3	8.1	3	15.3	3	29	3	8.1	JRL	11/22/08
SH-24-WS-00	8	WQ	176	|	8.1	|	15.3	|	29	|	8.1	|	|
RF-02	8	WQ	180	|	8.1	|	15.2	|	29	|	8.1	|	|
HI-07-SS-00	8	WQ	182	|	8.2	|	15.2	|	29	|	8.1	|	|
Control	8	WQ	189	|	8.2	|	15.2	|	29	|	8.1	|	|
SH-07-SS-00	8	WQ	190	|	8.1	|	15.1	|	29	|	8.0	|	|
HI-06-SS-00	8	WQ	193	|	8.3	|	15.2	|	29	|	8.1	|	|
SH-01-SS-00	8	WQ	195	|	8.3	|	15.2	|	29	|	8.0	|	|
RF-03	8	WQ	196	|	8.3	|	15.2	|	29	|	8.2	|	|
SH-25-WS-00	8	WQ	197	↓	8.2	↓	15.2	↓	29	↓	8.1	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995	
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME		

Test Conditions				WATER QUALITY DATA								Tech	Date
				DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-02-SS-00	9	WQ	1	4	8.4	4	15.6	1	29	L	7.9	BH	11/23/08
SH-06-SS-00	9	WQ	7		8.5		15.4		28		7.9		
OB-14-SS-00	9	WQ	10		8.5		15.4		28		8.1		
OB-01-SS-00	9	WQ	12		8.5		15.3		29		8.0		
SH-10-SS-00	9	WQ	38		8.5		15.3		28		8.0		
HI-02-SS-00	9	WQ	40		8.5		15.4		28		8.1		
SH-22-WS-00	9	WQ	45		8.4		15.5		28		8.2		
HI-03-SS-00	9	WQ	49		8.5		15.4		28		8.1		
OB-02-SS-00	9	WQ	52		8.5		15.4		28		8.1		
HI-05-SS-00	9	WQ	58		8.4		15.6		28		8.1		
SH-30-WS-00	9	WQ	63		8.5		15.4		28		8.0		
SH-15-SS-00	9	WQ	67		8.5		15.4		28		8.0		
OB-04-SS-00	9	WQ	80		8.5		15.4		29		8.0		
SH-09-SS-00	9	WQ	84		8.5		15.4		29		8.1		
SH-14-SS-00	9	WQ	95		8.4		15.5		28		8.5		
SH-28-WS-00	9	WQ	100		8.4		15.5		28		8.1		
OB-17-WS-00	9	WQ	104		8.5		15.5		28		8.1		
SH-16-SS-00	9	WQ	106		8.5		15.4		29		8.1		
HI-04-SS-00	9	WQ	116		8.5		15.4		28		8.1		
SH-26-WS-00	9	WQ	122		8.5		15.4		29		8.1		
SH-27-WS-00	9	WQ	124		8.5		15.4		29		8.1		
OB-03-SS-00	9	WQ	129		8.5		15.4		29		8.0		
SH-29-WS-00	9	WQ	165	↓	8.5	↓	15.4	↓	28	↓	8.1	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME	

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
OB-07-SS-00	9	WQ	175	4	8.5	4	15.6	1	28	1	8.1	BH	11/23/08
SH-24-WS-00	9	WQ	176	|	8.4	|	15.5	|	28	|	8.1	|	|
RF-02	9	WQ	180	|	8.4	|	15.4	|	28	|	8.1	|	|
HI-07-SS-00	9	WQ	182	|	8.3	|	15.5	|	28	|	8.1	|	|
Control	9	WQ	189	|	8.5	|	15.4	|	28	|	8.0	|	|
SH-07-SS-00	9	WQ	190	|	8.6	|	15.4	|	28	|	7.9	|	|
HI-06-SS-00	9	WQ	193	|	8.5	|	15.4	|	28	|	8.0	|	|
SH-01-SS-00	9	WQ	195	|	8.5	|	15.4	|	29	|	8.0	|	|
RF-03	9	WQ	196	|	8.5	|	15.5	|	28	|	8.1	|	|
SH-25-WS-00	9	WQ	197	↓	8.5	↓	15.5	↓	28	↓	8.1	↓	↓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2		PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME	

Test Conditions				WATER QUALITY DATA								Tech	Date
				DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
Client/NewFields ID	Day	Rep	Jar#	meter	mg/L	meter	deg C	meter	ppt	meter	unit		
SH-02-SS-00	10	WQ	1	3	8.4	3	15.1	3	30	3	7.9	2R	11/24/08
SH-06-SS-00	10	WQ	7	1	8.4	1	15.1	1	28	1	7.9	1	1
OB-14-SS-00	10	WQ	10	1	8.6	1	15.1	1	28	1	7.9	1	1
OB-01-SS-00	10	WQ	12	1	8.5	1	15.2	1	29	1	8.0	1	1
SH-10-SS-00	10	WQ	38	1	8.5	1	15.1	1	29	1	8.0	1	1
HI-02-SS-00	10	WQ	40	1	8.5	1	15.2	1	28	1	8.0	1	1
SH-22-WS-00	10	WQ	45	1	8.1	1	15.2	1	29	1	8.1	1	1
HI-03-SS-00	10	WQ	49	1	8.4	1	15.2	1	29	1	8.1	1	1
OB-02-SS-00	10	WQ	52	1	8.5	1	15.2	1	29	1	8.1	1	1
HI-05-SS-00	10	WQ	58	1	8.0	1	15.4	1	29	1	8.0	1	1
SH-30-WS-00	10	WQ	63	1	8.5	1	15.2	1	29	1	8.0	1	1
SH-15-SS-00	10	WQ	67	1	8.5	1	15.2	1	28	1	8.0	1	1
OB-04-SS-00	10	WQ	80	1	8.5	1	15.1	1	30	1	8.0	1	1
SH-09-SS-00	10	WQ	84	1	8.6	1	15.0	1	30	1	8.1	1	1
SH-14-SS-00	10	WQ	95	1	7.3	1	15.2	1	29	1	8.4	1	1
SH-28-WS-00	10	WQ	100	1	8.4	1	15.1	1	29	1	8.1	1	1
OB-17-WS-00	10	WQ	104	1	8.3	1	15.1	1	29.	1	8.1	1	1
SH-16-SS-00	10	WQ	106	1	8.9	1	15.0	1	29	1	8.1	1	1
HI-04-SS-00	10	WQ	116	1	8.9	1	15.1	1	28	1	8.1	1	1
SH-26-WS-00	10	WQ	122	1	8.8	1	15.0	1	29	1	8.0	1	1
SH-27-WS-00	10	WQ	124	1	8.8	1	15.1	1	29	1	8.0	1	1
OB-03-SS-00	10	WQ	129	1	8.8	1	15.0	1	29	1	8.1	1	1
SH-29-WS-00	10	WQ	165	✓	8.7	✓	15.2	✓	28	✓	8.1	✓	✓



10 DAY SOLID PHASE BIOASSAY WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester

SPECIES <i>Eohaustorius estuarius</i>		NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995
TEST START DATE 14-Nov-08	TIME	TEST END DATE 24-Nov-08	TIME

Test Conditions				WATER QUALITY DATA								Tech	Date
Client/NewFields ID	Day	Rep	Jar#	DO (mg/L) >5.0 mg/L		Temperature (°C) 15±1		Salinity (ppt) 28±1		pH 7.8±0.5			
				meter	mg/L	meter	deg C	meter	ppt	meter	unit		
OB-07-SS-00	10	WQ	175	3	8.7	3	15.2	3	29	3	8.1	ZR	11/24/08
SH-24-WS-00	10	WQ	176	|	8.7	|	15.1	|	28	|	8.1	|	|
RF-02	10	WQ	180	|	8.7	|	15.2	|	29	|	8.1	|	|
HI-07-SS-00	10	WQ	182	|	8.7	|	15.2	|	28	|	8.0	|	|
Control	10	WQ	189	|	8.8	|	15.1	|	28	|	8.0	|	|
SH-07-SS-00	10	WQ	190	|	8.8	|	15.1	|	29	|	7.9	|	|
HI-06-SS-00	10	WQ	193	|	8.7	|	15.1	|	29	|	8.1	|	|
SH-01-SS-00	10	WQ	195	|	8.7	|	15.1	|	29	|	8.0	|	|
RF-03	10	WQ	196	|	8.8	|	15.1	|	29	|	8.1	|	|
SH-25-WS-00	10	WQ	197	✓	8.8	✓	15.1	✓	29	✓	8.2	✓	✓

NEWFIELDS

Ammonia Analysis

Total Ammonia (mg/L)

Client/Project: Herrera/Oakland Bay	Organism: Eohs	NewFields Test ID:	Test Duration (days): 10
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PRETEST (INITIAL) / FINAL / OTHER (circle one) DAY of TEST: 0
(OVERLYING (OV)) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
11/14	20	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp $^{\circ}\text{C}$	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
Control	Surr.	11/14 JO	0.00	19.5	11/14 JO	N			0.000
RF-02			1.50						0.021
RF-03			1.89						0.010
SH-25-WS-00			0.626						0.002
OB-03-SS-00			0.373						0.015
SH-14-SS-00			0.739						0.001
OB-14-SS-00			0.364						0.024
OB-02-SS-00			1.02						0.016
SH-02-SS-00			0.688						0.020
SH-24-WS-00			0.966						0.001
SH-09-SS-00			0.743						0.003
OB-04-SS-00			0.646						0.010
SH-07-SS-00			1.02						0.005
OB-17-WS-00			0.327						0.019
SH-28-WS-00			0.519						0.007
SH-01-SS-00			0.591						0.010

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
SH-27-WS-00	Surr.	11/14 JB	0.221	19.5	11/14 JB	N			0.017
OB-07-SS-00			1.13						0.005
SH-30-WS-00			0.735						0.025
SH-10-SS-00			0.521						0.009
SH-22-WS-00			1.40						0.006
HI-06-SS-00			0.588						0.029
SH-26-WS-00			0.301						0.003
HI-05-SS-00			0.859						0.020
OB-01-SS-00			0.939						0.028
HI-03-SS-00			0.688						0.015
HI-02-SS-00			1.48						0.020
SH-15-SS-00			0.435						0.022
HI-04-SS-00			1.44						0.010
HI-07-SS-00			0.542						0.032
SH-16-SS-00			0.0556						0.010
SH-29-WS-00			0.103						0.029
SH-06-SS-00			0.325						0.012

MR JB 11/14

NEWFIELDS

Ammonia Analysis Total Ammonia (mg/L)

Client/Project: Herrera/Oakland Bay	Organism: Eohs	NewFields Test ID:	Test Duration (days): 10
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PRETEST INITIAL / FINAL / OTHER (circle one) DAY of TEST: ☒
OVERLYING (OV) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
11/14	20	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp $^{\circ}\text{C}$	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
Control	Surr.	11/14 MMB	0.109	20	11/14 Jo	N	7.6 6.9	28	0.040
RF-02		|	3.33	|	|	|	7.6	28	0.054
RF-03			5.96				7.3	28	0.190
SH-25-WS-00			1.90				7.7	28	0.056
OB-03-SS-00			0.953				7.7	28	0.032
SH-14-SS-00			1.75				7.7	28	0.036
OB-14-SS-00			1.20				7.6	27	0.029
OB-02-SS-00			2.09				7.6	28	0.039
SH-02-SS-00			1.96				7.7	28	0.073
SH-24-WS-00			2.44				7.6	28	0.115
SH-09-SS-00			2.39				7.6	28	0.212
OB-04-SS-00			2.44				7.6	28	0.268
SH-07-SS-00			3.10				7.5	28	0.073
OB-17-WS-00			1.40				7.5	28	0.316
SH-28-WS-00			1.61				7.6	28	0.202
SH-01-SS-00			N				1.85	✓	↓	N	7.6	28	0.105

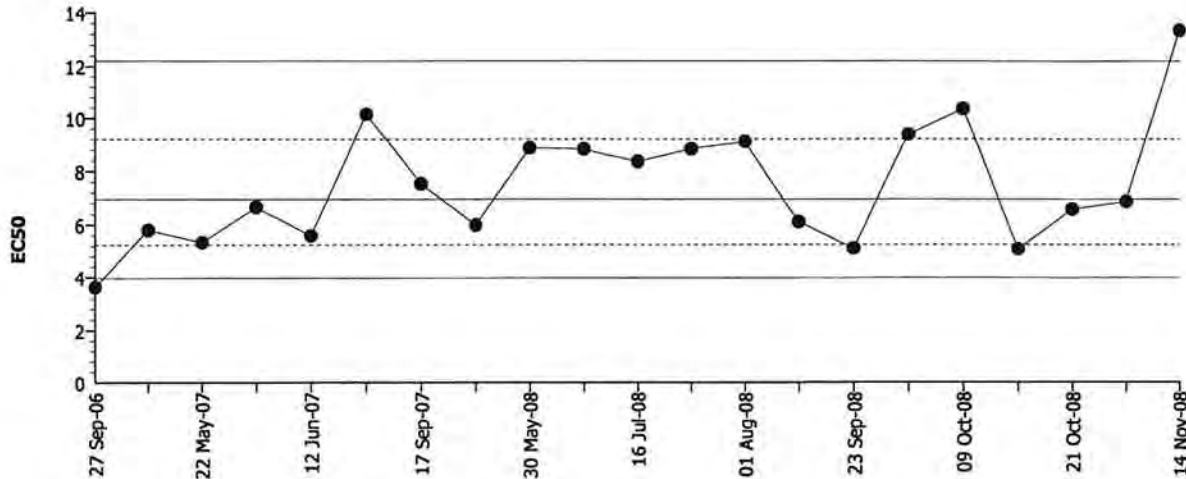
Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
SH-27-WS-00	Surr.	11/14 MMB	1.78	20	11/14 JHe	N	7.6	28	0.224
OB-07-SS-00		|	5.52	|	|	|	7.6	28	0.176
SH-30-WS-00		|	2.35	|	|	|	7.6	28	0.055
SH-10-SS-00		|	2.23	|	|	|	7.6	28	0.267
SH-22-WS-00		|	5.83	|	|	|	7.4	28	0.125
HI-06-SS-00		|	2.39	|	|	|	7.6	28	0.129
SH-26-WS-00		|	1.64	|	|	|	7.5	28	0.173
HI-05-SS-00		|	6.51	|	|	|	7.5	28	0.797
OB-01-SS-00		|	4.55	|	|	|	7.6	28	0.384
HI-03-SS-00		|	3.48	|	|	|	7.6	28	0.383
HI-02-SS-00		|	5.57	|	|	|	7.6	28	0.431
SH-15-SS-00		|	2.29	|	|	|	7.5	28	0.474
HI-04-SS-00		|	8.79	|	|	|	7.5	28	0.358
HI-07-SS-00		|	3.89	|	|	|	7.5	28	0.230
SH-16-SS-00		|	0.859	|	|	|	7.6	28	0.385
SH-29-WS-00		|	4.49	|	|	|	7.5	28	0.268
SH-06-SS-00		↓	1.54	↓	↓	↓	7.4	28	0.069

CETIS QC Chart

Eohaustorius 10-d Survival and Reburial Sediment Test

NewFields

Test Type: Survival-Reburial Organism: Eohaustorius estuarius (Amphipod) Material: Cadmium chloride
 Protocol: EPA/600/R-94/025 (1994) Endpoint: Proportion Survived Source: Reference Toxicant-REF



Mean: 6.94572 Count: 20 -1s Warning Limit: 5.24199 -2s Action Limit: 3.95617
 Sigma: CV: 32.50% +1s Warning Limit: 9.20318 +2s Action Limit: 12.1944

Quality Control Data

Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Sep	27	3.60821	-3.33751	-2.32714	(-)	(-)	14-2711-1162	15-3243-2698
2	2007	May	18	5.78633	-1.15938	-0.64894			10-9949-6658	01-0514-6184
3			22	5.32422	-1.62150	-0.94469			02-6215-7262	07-0555-3037
4		Jun	8	6.65260	-0.29312	-0.15321			08-1478-6281	07-1616-4889
5			12	5.57512	-1.37059	-0.78107			12-4873-2529	01-1576-1244
6		Jul	20	10.14752	3.20180	1.34709	(+)		03-1740-6698	15-0085-4047
7		Sep	17	7.52045	0.57473	0.28249			13-0115-1998	01-0589-8584
8		Oct	23	5.97296	-0.97276	-0.53614			06-8083-9702	00-5598-3388
9	2008	May	30	8.87317	1.92745	0.87024			13-3382-4100	20-7672-2429
10		Jun	27	8.83113	1.88542	0.85337			14-3368-4084	04-4152-2772
11		Jul	16	8.35797	1.41226	0.65769			09-4785-0917	05-8512-9332
12			26	8.84336	1.89765	0.85828			04-2285-3356	06-1210-3839
13		Aug	1	9.11399	2.16827	0.96539			16-8866-7768	08-6766-3207
14			26	6.09565	-0.85006	-0.46389			05-3187-8218	10-7868-4568
15		Sep	23	5.09679	-1.84893	-1.09981	(-)		02-2340-6976	12-6046-2683
16		Oct	3	9.37148	2.42577	1.06439	(+)		12-9882-1875	12-8093-3143
17			9	10.36136	3.41564	1.42119	(+)		07-7236-5738	09-5362-0444
18			10	5.07151	-1.87420	-1.11748	(-)		08-5307-5163	12-8225-3680
19			21	6.56493	-0.38079	-0.20035			02-5567-7485	08-9907-2675
20			28	6.85362	-0.09210	-0.04743			11-3814-9085	05-5479-4141
21		Nov	14	13.35570	6.40998	2.32325	(+)	(+)	10-0142-7604	10-4633-3899

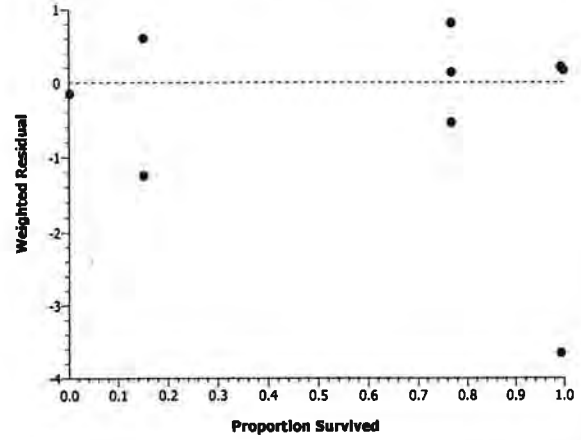
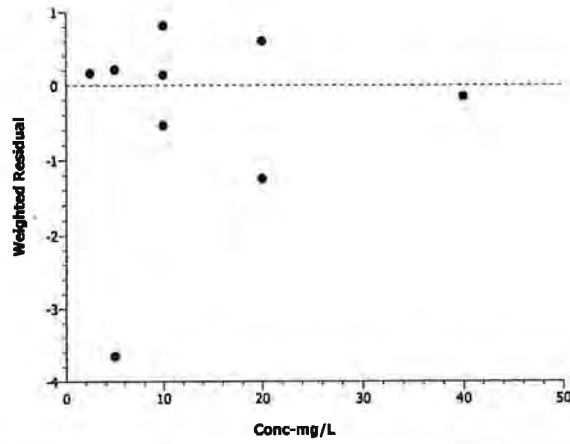
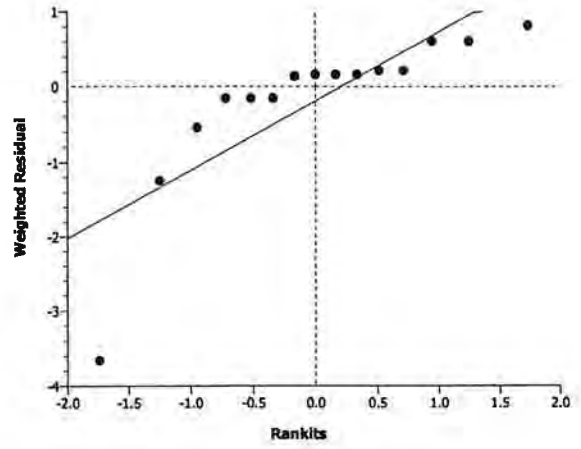
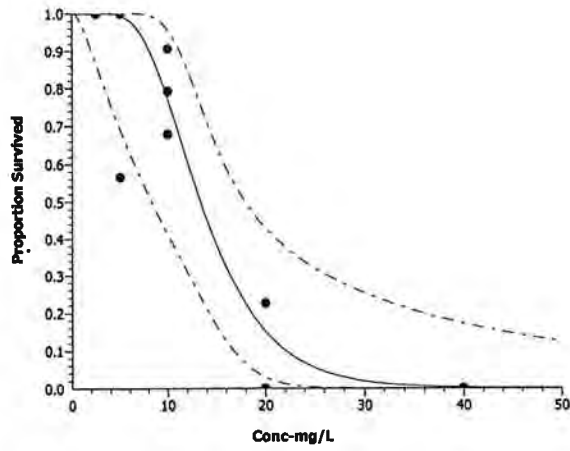
CETIS Analysis Detail

Linear Regression: Page 1 of 2
 Report Date: 14 Jan-09 9:24 AM
 Analysis: 10-4633-3899

Eohaustorius 10-d Survival and Reburial Sediment Test										NewFields	
Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version						
Proportion Survived	Linear Regression	10-0142-7604	10-0142-7604	14 Jan-09 9:24 AM	CETISv1.1.2						
Linear Regression Options											
Model Function	Threshold Option	Threshold	Threshold Opt	Reweighted	Pooled Groups	Het Corr					
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.03333334	Yes	Yes	No	No					
Regression Summary											
Iters	Log Likelihood	Mu	Sigma	G	Chi-Sq	Critical	P-Value	Decision(0.05)			
41	-50.41504	-0.27262	0.17061	0.19286	16.86548	22.36203	0.20553	Non-Significant Heterogeneity			
Point Estimates											
% Effect	Conc-mg/L	95% LCL	95% UCL								
10	8.072755	4.666975	10.30039								
15	8.888762	5.500021	11.09553								
20	9.595731	6.256672	11.79032								
25	10.2469	6.977205	12.44063								
40	12.09047	9.090325	14.38739								
50	13.3557	10.54189	15.87614								
Test Acceptability											
Attribute	Statistic	TAC Range	Overlap	Decision							
Control Response	0.96667	0.9 - NL	Yes	Passes acceptability criteria							
Regression Parameters											
Parameter	Estimate	Std Error	95% LCL	95% UCL	t Statistic	P-Value	Decision(0.05)				
Threshold	0.1164091	0.03499722	0.0478145	0.1850036	3.326	0.00546	Significant				
Slope	5.861336	1.313281	3.287305	8.435367	4.463	0.00064	Significant				
Intercept	-1.597911	1.506637	-4.550919	1.355097	-1.061	0.30819	Not Significant				
Residual Analysis											
Attribute	Method	Statistic	Critical	P-Value	Decision(0.05)						
Variances	Modified Levene	1.842031	3.47805	0.19749	Equal Variances						
Distribution	Shapiro-Wilk W	0.6862889		0.00018	Non-normal Distribution						
Data Summary											
Conc-mg/	Control Type	Count	Calculated Variate(A/B)							A	B
			Mean	Minimum	Maximum	SE	SD				
0	Dilution Water	3	0.96667	0.90000	1.00000	0.01179	0.05773	29	30		
2.5		3	0.90000	0.90000	0.90000	0.00003	0.00015	27	30		
5		3	0.76667	0.50000	0.90000	0.04714	0.23094	23	30		
10		3	0.70000	0.60000	0.80000	0.02041	0.10000	21	30		
20		3	0.13333	0.00000	0.20000	0.02357	0.11547	4	30		
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	30		

CETIS Analysis Detail

Graphics



CETIS Analysis Detail

Comparisons: Page 1 of 2
 Report Date: 14 Jan-09 9:24 AM
 Analysis: 05-0925-4475

Eohaustorius 10-d Survival and Reburial Sediment Test							NewFields			
Endpoint	Analysis Type		Sample Link	Control Link	Date Analyzed	Version				
Proportion Survived	Comparison		10-0142-7604	10-0142-7604	14 Jan-09 9:24 AM	CETISv1.1.2				
Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD		
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		5	10	20	7.07107	22.97%		
Group Comparisons										
Control	vs	Conc-mg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)			
Dilution Water		2.5	0.84592	2.46559	0.4532	0.31667	Non-Significant Effect			
		5	2.04924	2.46559	0.0962	0.31667	Non-Significant Effect			
		10	2.82552	2.46559	0.0279	0.31667	Significant Effect			
		20	7.75223	2.46559	0.0000	0.31667	Significant Effect			
Test Acceptability										
Attribute	Statistic	TAC Range	Overlap	Decision						
Control Response	0.96667	0.9 - NL	Yes	Passes acceptability criteria						
ANOVA Table										
Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)				
Between	1.815787	0.4539468	4	18.35	0.00013	Significant Effect				
Error	0.2474379	0.0247438	10							
Total	2.06322508	0.4786906	14							
ANOVA Assumptions										
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)					
Variances	Bartlett	54.16927	13.27670	0.00000	Unequal Variances					
Distribution	Shapiro-Wilk W	0.90464		0.11207	Normal Distribution					
Data Summary										
			Original Data				Transformed Data			
Conc-mg/L	Control Type	Count	Mean	Minimum	Maximum	SD	Mean	Minimum	Maximum	SD
0	Dilution Water	3	0.96667	0.90000	1.00000	0.05773	1.35769	1.24905	1.41202	0.09409
2.5		3	0.90000	0.90000	0.90000	0.00015	1.24905	1.24905	1.24905	0.00016
5		3	0.76667	0.50000	0.90000	0.23094	1.09450	0.78540	1.24905	0.26769
10		3	0.70000	0.60000	0.80000	0.10000	0.99479	0.88608	1.10715	0.11058
20		3	0.13333	0.00000	0.20000	0.11547	0.36203	0.15878	0.46365	0.17602

CETIS Analysis Detail

Comparisons: Page 2 of 2
Report Date: 14 Jan-09 9:24 AM
Analysis: 05-0925-4475

Data Detail											
Conc-mg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Dilution Water	1.00000	1.00000	0.90000							
2.5		0.90000	0.90000	0.90000							
5		0.50000	0.90000	0.90000							
10		0.70000	0.80000	0.60000							
20		0.20000	0.00000	0.20000							



Cadmium Reference Toxicant Test Survival Data Sheet

			SPECIES <i>Eohaustorius estuarius</i>		
CLIENT Herrera	PROJECT Oakland Bay	NEWFIELDS JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995

SURVIVAL & BEHAVIOR DATA

OBSERVATION KEY N = Normal LOE = Loss of equilibrium Q = Quinscent DC = Discoloration NB = No body F = Floating on surface				DAY 1			DAY 2			DAY 3			DAY 4			
				DATE			DATE			DATE			DATE			
				TECHNICIAN			TECHNICIAN			TECHNICIAN			TECHNICIAN			
				11/15/08	11/16/08	11/17/08	11/18/08									
				TS	TS	BH	MMB									
CLIENT/NEWFIELDS ID	CONC.		REP	INITIAL NUMBER												
	value	units			#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS
Ref.Tox.- cadmium	0 mg/L		1	10	10	0	2F	10	0	2F	10	0	1F	10	0	1F
			2		10	0	3F	10	0	1F	10	0	N	10	0	1F
			3		9	1	3F	9	0	N	9	0	N	9	0	N
Ref.Tox.- cadmium	2.5 mg/L		1		10	0	1F	10	0	1F	10	0	N	9	1	2F
			2		10	0	2F	10	0	1F	9	1	N	9	0	2F
			3		10	0	4F	10	0	1F	10	0	N	9	1	1F
Ref.Tox.- cadmium	5 mg/L		1		10	0	6F	6	4	5F	5	1	N	5	0	1F
			2		10	0	5F	9	1	5F	9	0	5F	9	0	5F
			3		10	0	5F	10	0	4F	9	1	N	9	0	1F
Ref.Tox.- cadmium	10 mg/L		1		10	0	3F	10	0	2F	7	3	DC/Q	7	0	2F/Q
			2		10	0	5F	9	1	5F	8	1	DC/R	8	0	2F/Q
			3		10	0	4F	8	2	4F	7	1	DC/Q	6	1	Q
Ref.Tox.- cadmium	20 mg/L		1		10	0	2F	8	2	1F	6	2	DC/Q	2	4	DC/Q
			2		7	3NB	2F	7	0	1F	1	6	DC/Q	0	0	Q
			3		10	0	6F	8	2	1F	4	4	DC/Q	2	2	Q
Ref.Tox.- cadmium	40 mg/L		1		9	1	4F	6	3	3F	0	6	DC			
			2		9	1	3F	5	4	2F	0	5	DC			
			3		9	1	2F	6	3	1F	0	6	DC			

① WC, 20 mg/L, Rep. 2: 0 Alive, 1 Dead MMB 11/18/08



Cadmium Reference Toxicant Test Water Quality Data Sheet

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Eohaustorius estuarius</i>	NEWFIELDS LABORATORY Port Gamble Baths 1&2	PROTOCOL PSEP 1995
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	QUANTITY OF STOCK: 6.0mL ACTUAL: 6.00 mL	QUANTITY OF DILUENT: 1600mL ACTUAL: 1500.1 mL	INIT CR DATE PREP 11/14/08
TEST ID P080418.33	LOT #: 06S10TC	TEST START DATE 14Nov08	TIME 1630	TEST END DATE 18Nov08
				TIME 1450

WATER QUALITY DATA

DILTIN.WAT.BATCH		TEMP REC#		REFERENCE TOX. MATERIAL				REFERENCE TOXICANT				LOT NO.		96-H LC ₅₀			
0				cadmium chloride				cadmium									
TEST CONDITIONS				DO (mg/L)	TEMP(°C)		SAL (ppt)		pH		TECHNICIAN	AMMONIA		SULFIDES			
				≥ 5.0	15 ± 1		28 ± 1		8.0 ± 0.5								
CLIENT/NEWFIELDS ID	CONCENTRATION		DAY	REP	D.O.		TEMP.		SALINITY		pH		WG TECH	AMMONIA		SULFIDES	
	value	units			meter	mg/L	meter	°C	meter	ppt	meter	unit		meter	mg/L	Tech	meter	mg/L	Tech
Ref.Tox.-cadmium	0	mg/L	0	Stock	4	7.3	4	15.9	1	28	1	7.7	TS				
			1	Surr	3	8.2	3	15.6	3	27	3	7.4	TS				
			2	Surr	3	7.1	3	15.5	3	28	3	8.1	TS				
			3	Surr	3	7.8	3	15.6	3	28	3	8.0	BH				
			4	Surr	4	7.2	4	16.1	1	27	1	7.5	MMB				
Ref.Tox.-cadmium	2.5	mg/L	0	Stock	4	7.4	4	15.9	1	28	1	7.6	TS				
			1	Surr	3	8.8	3	15.3	3	27	3	7.5	TS				
			2	Surr	3	7.2	3	15.3	3	28	3	8.1	TS				
			3	Surr	3	7.7	3	15.5	3	28	3	8.0	BH				
			4	Surr	4	7.5	4	15.8	1	27	1	7.6	MMB				
Ref.Tox.-cadmium	5	mg/L	0	Stock	4	7.4	4	16.0	1	28	1	7.6	TS				
			1	Surr	3	8.9	3	15.2	3	27	3	7.6	TS				
			2	Surr	3	8.0	3	15.2	3	27	3	8.1	TS				
			3	Surr	3	7.9	3	15.5	3	28	3	8.1	BH				
			4	Surr	4	7.9	4	15.6	1	27	1	7.7	MMB				
Ref.Tox.-cadmium	10	mg/L	0	Stock	4	7.4	4	16.0	1	28	1	7.6	TS				
			1	Surr	3	8.9	3	15.2	3	28	3	7.6	TS				
			2	Surr	3	7.9	3	15.2	3	28	3	8.0	TS				
			3	Surr	3	7.9	3	15.2	3	28	3	8.1	BH				
			4	Surr	4	8.6	4	15.5	1	27	1	7.7	MMB				
Ref.Tox.-cadmium	20	mg/L	0	Stock	4	7.3	4	16.0	1	28	1	7.6	TS				
			1	Surr	3	8.8	3	15.1	3	28	3	7.6	TS				
			2	Surr	3	7.6	3	15.1	3	28	3	8.0	TS				
			3	Surr	3	8.1	3	15.4	3	28	3	8.1	BH				
			4	Surr	4	7.9	4	15.4	1	27	1	7.7	MMB				
Ref.Tox.-cadmium	40	mg/L	0	Stock	4	7.4	4	16.0	1	28	1	7.5	TS				
			1	Surr	3	8.9	3	15.1	3	28	3	7.6	TS				
			2	Surr	3	7.8	3	15.2	3	28	3	7.9	TS				
			3	Surr	3	7.9	3	15.5	3	28	3	7.9	BH				
			4	Surr													

***BIOLOGICAL TESTING RESULTS FOR
OAKLAND BAY SEDIMENT CHARACTERIZATION,
OAKLAND BAY, WASHINGTON***

POLYCHAETE TESTS



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

COPY

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 3	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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CLIENT/NEWFIELDS ID		REP	JAR	INITIAL # OF ORGANISMS	ENDPOINT DATA & OBSERVATIONS																				NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)	
				5	Date and Initials	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
Control /	1	91	5	5	10/31 MMB	F	N	N	N	F	Z	N	G	Z	G	Z	N	G	G	G	G	G	G	G	G	5	1	126.80	184.04
	2	124	5	5	11/1 CR									N	Z	Z	N									5	2	139.64	205.64
	3	160	5	5	11/2 CR									G	F	G	G									5	3	181.72	239.28
	4	31	5	5	11/3 ✓									G	Z	Z	Z	G								5	4	151.80	199.11
	5	150	5	5	11/4 MMB									Z	G	Z	Z	G								5	5	135.89	206.14
RF-01-SS-00 /	1	44	5	5	11/5 MMB								G	G	G	G									5	6	142.34	210.83	
	2	27	5	5	11/6 BK																				5	7	185.16	230.16	
	3	128	5	5	11/7 IS																				5	8	165.73	221.89	
	4	66	5	5	11/8 MMB																				5	9	149.09	203.34	
	5	87	5	5	11/9 MMB																				5	10	153.28	204.08	
RF-02-SS-00 /	1	62	5	5	11/10 CR																				5	11	142.01	192.44	
	2	42	5	5	11/11 SO																				5	12	163.93	238.45	
	3	83	5	5	11/12 CR																				5	13	148.22	200.69	
	4	94	5	5	11/13 BH																				5	14	125.58	177.73	
	5	161	5	5	11/14 TS																				5	15	193.93	260.65	



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 3	PROTOCOL PSEP 1995	SPECIES <i>Naeanthes arenaceodentata</i>
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CLIENT/NEWFIELDS ID		REP	JAR	INITIALS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
RF-03-SS-00 /	1	28	S	S	N	N	N	N	N	N	N	G	N	G	G	G	G	G	G	G	G	G	G	G	5	16	190.24	207.75
	2	151												G											4	7	190.50	220.92
	3	120												N											5	18	205.65	236.59
	4	51											N	N											5	19	144.90	192.67
	5	169												N	N	N	N	N	N						5	20	173.49	234.45
SH-28-WS-00 /	1	112								G	G	G	G	G	G	G	G	G	G						5	21	168.00	215.52
	2	81								N	N		N	N	N	N	N	N	N						5	22	215.01	260.91
	3	63								N	N		G	G	G	G	G	G	G						5	23	172.34	202.38
	4	89								G	G														5	24	156.71	191.73
	5	5								N	N														5	25	199.87	205.36
HI-04-SS-00 /	1	148								G	G														5	26	180.60	234.94
	2	14								N	N														5	27	179.37	236.75
	3	115								G	G														5	28	141.44	172.11
	4	137								N	G														5	29	166.35	219.93
	5	13								N	N														5	30	171.89	280.32



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

COPY

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 3	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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CLIENT/NEWFIELDS ID		REP	JAR	INITIAL #	ENDPOINT DATA & OBSERVATIONS																				NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
HI-06-SS-00 /	1	134	5	5	N	N	N	N	5	G	G	G	G	G	G	G	G	G	G	G	G	G	5	31	154.32	206.16		
	2	10							5	G	G												4	32	187.6	215.03		
	3	114							5	G	G												5	33	138.85	195.53		
	4	168							5	Z	Z												5	34	152.85	184.86		
	5	2								Z	Z												2	35	120.74	146.54		
SH-09-SS-00 /	1	164								Z	G												5	36	209.11	280.53		
	2	96								G	G												5	37	145.14	191.02		
	3	101								Z	Z												5	38	142.90	192.28		
	4	165									G												5	39	148.53	206.79		
	5	172									Z												5	40	179.02	214.71		
OB-06-SS-00 /	1	126								G	G												5	41	114.53	136.17		
	2	74								G	G												5	42	138.65	239.99		
	3	9								Z	Z												5	43	151.38	194.94		
	4	127								G	G												5	44	172.38	217.32		
	5	49									G												6	45	176.13	214.95		



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gambie Bath 3	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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CLIENT/NEWFIELDS ID		REP	JAR	INITIAL #	ENDPOINT DATA & OBSERVATIONS																				NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
OB-11-SS-00 /	1	86	5	5	N	N	N	N	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	5	46	210.88	266.73	
	2	103	1	5					G	G	G													5	47	177.26	209.12	
	3	110	1	5					G	G	G													4	48	200.22	241.60	
	4	158	1	5					G	G	G													5	49	197.34	247.78	
	5	36	6	5					G	G	G													6	50	140.10	187.53	
SH-03-SS-00 /	1	24	5	5					G	G	G													5	51	156.70	219.27	
	2	22	1	5					G	G	G													5	52	195.74	268.10	
	3	125	1	5					G	G	G													2	53	198.80	206.42	
	4	25	1	5					G	G	G													4	54	185.92	235.59	
	5	153	1	5					G	G	G													5	55	219.54	245.26	
SH-22-WS-00 /	1	45	1	5					G	G	G													4	56	134.58	208.24	
	2	52	1	5					G	G	G													5	57	154.03	206.43	
	3	167	1	5					G	G	G													3	58	150.77	167.03	
	4	171	1	5					G	G	G													5	59	149.62	175.25	
	5	84	1	5					G	G	G													5	60	127.86	171.48	

① 1 worm present in treatment, mms 11/19/08



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 3	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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CLIENT/NEWFIELDS ID		REP	JAR	INITIAL #	ENDPOINT DATA & OBSERVATIONS																				INITIAL # OF ORGANISMS 5	Date and Initials	NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20						
SH-13-SS-00 /	1	121	5	3	N	N	N	3	G	G	G	G	G	G	G	G	G	G	G	G	G	G	50	61	143.55	178.46				
	2	95						5	2														5	62	156.32	182.11				
	3	93						3	G														4	63	151.04	180.12				
	4	59						3	G														5	64	134.96	172.87				
	5	107						5	2														5	65	177.31	226.32				
OB-19-WS-00 /	1	11						5	G														5	66	179.46	235.57				
	2	100						5	G														4	67	152.48	200.54				
	3	104					64	3	G														4	68	150.45	194.60				
	4	138					N	3	G														5	69	223.68	252.61				
	5	145					G	5	G														5	70	141.96	189.92				
SH-10-SS-00 /	1	92						N	3	G													5	71	141.43	193.78				
	2	162						5	G														5	72	145.28	201.05				
	3	113					64	5	G														5	73	149.44	172.74				
	4	60					N	3	G														5	74	167.98	208.20				
	5	98					64	5	2														5	75	162.44	204.06				

① FB, MMB 11/19/08



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 3	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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CLIENT/NEWFIELDS ID		REP	JAR	INITIAL #	ENDPOINT DATA & OBSERVATIONS																			NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
					Date and Initials	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18					19	20
OB-01-SS-00 /	1	37	5	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3	76	127.41	159.56	
	2	111																					5 ⁰	77	153.96	183.56	
	3	106																					5	78	157.07	196.80	
	4	53																					5	79	140.59	200.55	
	5	57																					5	80	172.71	220.56	
SH-04-SS-00 /	1	15																					5	81	144.26	225.30	
	2	17																					4	82	151.86	196.23	
	3	77																					5	83	182.02	224.24	
	4	135																					5	84	123.80	161.92	
	5	155																					4	85	162.17	193.57	
HI-07-SS-00 /	1	66																					5	86	154.49	198.08	
	2	73																					5	87	169.77	217.98	
	3	7																					5	88	173.43	240.20	
	4	16																					5	89	200.17	275.35	
	5	142																					5	90	195.23	236.07	

① 1 animal lost during transfer. weight count will be 4. tot 11.18.08BH



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 3	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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CLIENT/NEWFIELDS ID		REP	JAA	INITIAL #	ENDPOINT DATA & OBSERVATIONS																				NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
OB-05-SS-00 /	1	29	5	5	N	N	N	N	N	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	5	91	189.51	219.52
	2	132								N	N														5	92	175.74	194.51
	3	166																							5	93	179.24	212.09
	4	69																							5	94	177.14	218.74
	5	38									G	G													4	95	147.55	185.20
SH-14-SS-00 /	1	157								N	N														4	96	156.91	189.99
	2	133								G	G														5	97	148.76	200.64
	3	30								N	N														5	98	142.77	177.92
	4	64																							5	99	184.25	223.21
	5	72																							5	100	211.59	286.49
OB-17-WS-00 /	1	152																							3	101	202.40	241.13
	2	116								G	G														5	102	138.59	191.09
	3	139								G	G														5	103	149.34	183.86
	4	18								N	N														5	104	167.73	246.42
	5	19									G	G													3	105	150.52	186.29



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

COPY

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 3	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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CLIENT/NEWFIELDS ID		REP	JAR	INITIAL #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)	
OB-02-SS-00 /	1	4	5	5	N	N	N	N	S	Z	Z	G	G	G	G	G	G	G	G	G	G	G	G	G	5	106	178.80	256.43	
	2	156								Z	Z														4	107	179.44	207.54	
	3	58								Z	G															5	108	144.55	195.17
	4	143								Z	Z															5	109	207.67	263.12
	5	131								Z	G															5	110	164.42	191.27
OB-12-SS-00 /	1	65								Z	Z															4	111	212.00	259.57
	2	90																								5	112	143.68	181.20
	3	21																								5	113	158.69	206.40
	4	75																								5	114	181.24	211.03
	5	149								G	G															5	115	157.62	186.57
OB-14-SS-00 /	1	12								Z	Z															5	116	154.92	198.59
	2	20								Z	G															5	117	181.52	222.36
	3	71								Z	Z															5	118	177.72	241.24
	4	85								Z	Z															5	119	179.12	198.74
	5	6								Z	Z															5	120	168.95	225.40

3 + 2 other worms
Nephtys
@wc 12/10/82



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET



CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 3	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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CLIENT NEWFIELDS ID		REP	JAR	INITIAL #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
HI-02-SS-00 /	1	141	5	N	N	N	N	N	N	N	N	G	G	G	G	G	G	G	G	G	G	G	G	G	5	121	163.00	193.18
	2	47																							4	122	163.89	216.01
	3	130																							5	123	196.10	213.82
	4	67																							4	124	193.86	223.65
	5	147																							5	125	179.79	224.42
SH-11-SS-00 /	1	55																							4	126	182.37	225.18
	2	70																							5	127	154.33	206.28
	3	8																							4	128	179.55	230.19
	4	3																							5	129	174.04	241.01
	5	39																							4	130	189.18	234.98
SH-01-SS-00 /	1	108																							5	131	151.83	204.72
	2	144																							5	132	163.91	202.75
	3	54																							5	133	148.79	208.69
	4	117																							4	134	157.70	182.21
	5	136		10																					10	135	139.68	208.99



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

COPY

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 3	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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CLIENT/NEWFIELDS ID		REP	JAR	INITIAL #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
SH-21-WS-00/	1	40	5	5	N	N	N	N	N	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	5	136 140	139.05	189.04
	2	35						↓		G															5	137	151.12	188.29
	3	105						G		G															5	138	195.25	222.38
	4	146						N		G															5	139	147.90	181.12
	5	76								G				↓											4	140	162.05	196.84
OB-13-SS-00/	1	102								N	N		N												4	141	163.03	191.61
	2	119							↓	N	N		N												4	142	166.41	192.54
	3	43						G	G	G	G		G												5	143	138.99	196.10
	4	82						N	N	N	N		N												4	144	158.66	192.34
	5	34								N	G	G		G											4	145	142.42	169.41

Initial weights
Tare (mg) Final (mg)

① 49.44 54.09
 ② 49.45 52.84
 ③ 49.21 51.25

146 148.66
 147 177.28
 148 146.63
 149 155.38
 150 151.31

1 other worm

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB0#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)	TEMP (C)	SALINITY (ppt)	pH		WATER RENEWAL	Feeding	TECH/DATE			
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0	20 ± 1	28 ± 1	8.0 ± 1.0							
				D.O.	TEMP	SALINITY	pH							
				meter	meter	meter	meter	unit						
Control /	0	Surr	163	4	8.0	4	19.5	1	28	1	7.7		MMB	MMB 10/30
Control /	1	Surr	163	4	7.4	4	20.5	1	28	1	7.7			MMB 10/31
Control /	2	Surr	163	3	6.8	3	20.2	3	28	3	7.9		CR	CR 11/1
Control /	3	Surr	163	4	8.1	4	17.1	1	28	1	8.0	CR		CR 11/2
Control /	4	Surr	163	3	7.7	3	19.4	3	28	3	7.6		JO	JO 11/3
Control /	5	Surr	163	3	7.0	3	20.2	3	28	3	8.1			JO 11/4
Control /	6	Surr	163	3	7.1	3	19.9	3	28	3	8.0	JO	JO	JO 11/5
Control /	7	Surr	163	3	7.3	3	20.0	3	28	3	8.1			JO 11/6
Control /	8	Surr	163	3	7.3	3	20.1	3	28	3	8.2		TS	JO 11/7
Control /	9	Surr	163	3	7.2	3	20.2	3	28	3	8.1	JO		JO 11/8
Control /	10	Surr	163	4	7.7	4	20.3	1	28	1	8.1		MMB	JO 11/9
Control /	11	Surr	163	4	7.8	4	20.3	1	29	1	8.1			JO 11/10
Control /	12	Surr	163	4	7.7	4	20.3	1	29	1	8.1	JO	JO	JO 11/11
Control /	13	Surr	163	4	7.5	4	20.5	1	29	1	8.0			CR 11/12
Control /	14	Surr	163	4	7.8	4	20.2	1	29	1	8.0		JO	JO 11/13
Control /	15	Surr	163	4	7.8	4	20.3	1	29	1	8.0	TS		TS 11/14
Control /	16	Surr	163	4	7.8	4	20.3	1	29	1	8.1		TS	JO 11/15
Control /	17	Surr	163	3	7.4	3	20.0	3	28	3	8.0			CR 11/16
Control /	18	Surr	163	3	7.2	3	20.0	3	29	3	8.1	CR	CR	CR 11/17
Control /	19	Surr	163	3	7.0	3	20.1	3	29	3	7.8			CR 11/18
Control /	20	Surr	163	3	6.8	3	20.0	3	29	3	7.9			CR 11/19



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0 D.O.		20±1 TEMP		28±1 SALINITY		8.0±1.0 pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
RF-01-SS-00 /	0	Surr	32	4	7.9	4	19.4	1	28	1	7.7		MMB	MMB 10/30
RF-01-SS-00 /	1	Surr	32	4	7.4	4	20.5	1	28	1	7.7			MMB 10/31
RF-01-SS-00 /	2	Surr	32	3	7.1	3	20.2	3	28	1	7.6		CR	CR 11/1
RF-01-SS-00 /	3	Surr	32	4	8.0	4	17.2	1	28	1	7.9	CR		CR 11/2
RF-01-SS-00 /	4	Surr	32	3	7.3	3	18.5	3	28	3	7.6		JO	JO 11/3
RF-01-SS-00 /	5	Surr	32	3	6.8	3	20.2	3	28	3	8.2			JO 11/4
RF-01-SS-00 /	6	Surr	32	3	6.8	3	19.9	3	28	3	8.4	JO	JO	JO 11/5
RF-01-SS-00 /	7	Surr	32	3	7.0	3	20.1	3	28	3	8.4			JO 11/6
RF-01-SS-00 /	8	Surr	32	3	7.1	3	20.1	3	28	3	8.6		D	JO 11/7
RF-01-SS-00 /	9	Surr	32	3	7.1	3	20.2	3	28	3	8.6	JO		JO 11/8
RF-01-SS-00 /	10	Surr	32	4	7.6	4	20.3	1	29	1	8.6		MMB	JO 11/9
RF-01-SS-00 /	11	Surr	32	4	7.9	4	20.3	1	29	1	8.5			JO 11/10
RF-01-SS-00 /	12	Surr	32	4	7.7	4	20.2	1	29	1	8.5	JO	JO	JO 11/11
RF-01-SS-00 /	13	Surr	32	4	7.7	4	20.4	1	29	1	8.3			CR 11/12
RF-01-SS-00 /	14	Surr	32	4	8.0	4	20.0	1	29	1	8.2		JO	JO 11/13
RF-01-SS-00 /	15	Surr	32	4	7.9	4	20.0	1	29	1	8.2	TS		TS 11/14
RF-01-SS-00 /	16	Surr	32	4	8.0	4	20.1	1	29	1	8.3		TS	JO 11/15
RF-01-SS-00 /	17	Surr	32	3	7.4	3	20.0	3	28	3	8.3			TS 11/16
RF-01-SS-00 /	18	Surr	32	3	7.3	3	20.1	3	29	3	8.2	CR	CR	DR 11/17
RF-01-SS-00 /	19	Surr	32	3	7.2	3	20.2	3	29	3	8.0			DR 11/18
RF-01-SS-00 /	20	Surr	32	3	7.0	3	20.1	3	29	3	8.0			DR 11/19



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	unit			
RF-02-SS-00 /	0	Surr	154	4	8.6	4	19.3	1	28	1	7.7		MMB	MMB 10/30
RF-02-SS-00 /	1	Surr	154	4	7.4	4	20.5	1	28	1	7.7			MMB 10/31
RF-02-SS-00 /	2	Surr	154	3	6.8	3	20.2	3	28	3	7.9		CR	CR 11/1
RF-02-SS-00 /	3	Surr	154	4	7.9	4	17.0	1	28	1	7.9	CR		CR 11/2
RF-02-SS-00 /	4	Surr	154	3	7.0	3	19.3	3	28	3	7.5		JO	JO 11/2
RF-02-SS-00 /	5	Surr	154	3	6.9	3	20.2	3	28	3	8.1			JO 4/4
RF-02-SS-00 /	6	Surr	154	3	7.0	3	20.0	3	28	3	8.1	JO	JO	JO 4/5
RF-02-SS-00 /	7	Surr	154	3	7.0	3	20.0	3	28	3	8.1			JO 11/6
RF-02-SS-00 /	8	Surr	154	3	7.0	3	20.2	3	28	3	8.3		TS	JO 11/7
RF-02-SS-00 /	9	Surr	154	3	7.1	3	20.2	3	29	3	8.4	JO		JO 11/8
RF-02-SS-00 /	10	Surr	154	4	7.7	4	20.3	1	28	1	8.3		MMB	JO 11/9
RF-02-SS-00 /	11	Surr	154	4	7.9	4	20.4	1	29	1	8.3			JO 11/10
RF-02-SS-00 /	12	Surr	154	4	7.8	4	20.3	1	29	1	8.4	JO	JO	JO 11/11
RF-02-SS-00 /	13	Surr	154	4	7.7	4	20.5	1	29	1	8.2			CR 11/12
RF-02-SS-00 /	14	Surr	154	4	8.0	4	20.2	1	29	1	8.1		JO	JO 11/13
RF-02-SS-00 /	15	Surr	154	4	7.8	4	20.3	1	29	1	8.1	TS		TS 11/14
RF-02-SS-00 /	16	Surr	154	4	7.9	4	20.3	1	29	1	8.2		TS	JO 11/15
RF-02-SS-00 /	17	Surr	154	3	7.4	3	20.1	3	29	3	8.1			TS 11/16
RF-02-SS-00 /	18	Surr	154	3	7.2	3	20.1	3	30	3	8.1	CR	CR	2R 11/17
RF-02-SS-00 /	19	Surr	154	3	7.0	3	20.1	3	29	3	7.9			2R 11/18
RF-02-SS-00 /	20	Surr	154	3	6.8	3	20.0	3	29	3	8.0			2R 11/19

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	ppt	meter	unit			
RF-03-SS-00 /	0	Surr	123	4	8.0	4	19.4	1	27	1	7.6		MMB	MMB 10/30
RF-03-SS-00 /	1	Surr	123	4	7.6	4	20.5	1	28	1	7.8			MMB 10/31
RF-03-SS-00 /	2	Surr	123	3	7.3	3	20.2	3	28	3	7.9		CR	CR 11/1
RF-03-SS-00 /	3	Surr	123	4	8.1	4	16.9	1	28	1	8.0	CR		CR 11/2
RF-03-SS-00 /	4	Surr	123	3	7.1	3	19.3	3	28	3	7.6		JO	JO 11/3
RF-03-SS-00 /	5	Surr	123	3	7.2	3	20.2	3	28	3	8.1			JO 11/4
RF-03-SS-00 /	6	Surr	123	3	6.8	3	20.0	3	28	3	8.1	JO	JO	JO 11/5
RF-03-SS-00 /	7	Surr	123	3	7.0	3	20.1	3	28	3	8.1			JO 11/6
RF-03-SS-00 /	8	Surr	123	3	7.0	3	20.2	3	29-28	3	8.2		TS	JO 11/7
RF-03-SS-00 /	9	Surr	123	3	7.2	3	20.2	3	28	3	8.1	JO		JO 11/8
RF-03-SS-00 /	10	Surr	123	4	7.6	4	20.3	1	28	1	8.1		MMB	JO 11/9
RF-03-SS-00 /	11	Surr	123	4	7.7	4	20.3	1	29	1	8.1			JO 11/10
RF-03-SS-00 /	12	Surr	123	4	7.7	4	20.3	4	29	1	8.2	JO	JO	JO 11/11
RF-03-SS-00 /	13	Surr	123	4	7.5	4	20.5	1	29	1	8.1			CR 11/12
RF-03-SS-00 /	14	Surr	123	4	8.0	4	20.2	1	29	1	8.1		JO	JO 11/13
RF-03-SS-00 /	15	Surr	123	4	7.9	4	20.3	1	29	1	8.2	TS		TS 11/14
RF-03-SS-00 /	16	Surr	123	4	7.9	4	20.3	1	29	1	8.3		TS	JO 11/15
RF-03-SS-00 /	17	Surr	123	3	7.4	3	20.1	3	29	3	8.3			TS 11/16
RF-03-SS-00 /	18	Surr	123	3	7.3	3	20.1	3	30	3	8.3	CR	CR	2R 11/17
RF-03-SS-00 /	19	Surr	123	3	7.3	3	20.2	3	29	3	8.0			2R 11/18
RF-03-SS-00 /	20	Surr	123	3	7.0	3	20.0	3	29	3	8.1			2R 11/19

① MR JAO 11/7
② DE JAO 11/11

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
SH-28-WS-00 /	0	Surr	26	4	7.9	4	19.3	1	28	1	7.7		MMB	MMB 10/30
SH-28-WS-00 /	1	Surr	26	4	7.5	4	20.5	1	28	1	7.7			MMB 10/31
SH-28-WS-00 /	2	Surr	26	3	6.8	3	20.2	3	28	3	7.9		CR	CR 11/1
SH-28-WS-00 /	3	Surr	26	4	8.0	4	17.1	1	28	1	7.9	CR		CR 11/2
SH-28-WS-00 /	4	Surr	26	3	7.2	3	18.6	3	28	3	7.7		JO	JO 11/3
SH-28-WS-00 /	5	Surr	26	3	6.2	3	20.2	3	28	3	8.2			JO 11/4
SH-28-WS-00 /	6	Surr	26	3	7.3	3	19.9	3	28	3	8.2	JO	JO	JO 11/5
SH-28-WS-00 /	7	Surr	26	3	6.9	3	20.1	3	28	3	8.2			JO 11/6
SH-28-WS-00 /	8	Surr	26	3	7.1	3	20.2	3	28	3	8.4		TS	JO 11/7
SH-28-WS-00 /	9	Surr	26	3	6.9	3	20.3	3	28	3	8.5	JO		JO 11/8
SH-28-WS-00 /	10	Surr	26	3	7.7	4	20.3	1	28	1	8.4		MMB	JO 11/9
SH-28-WS-00 /	11	Surr	26	4	7.9	4	20.2	1	29	1	8.4			JO 11/10
SH-28-WS-00 /	12	Surr	26	4	7.8	4	20.2	1	29	1	8.4	JO	JO	JO 11/11
SH-28-WS-00 /	13	Surr	26	4	7.7	4	20.3	1	29	1	8.3			CR 11/12
SH-28-WS-00 /	14	Surr	26	4	8.1	4	19.9	1	29	1	8.3		JO	JO 11/13
SH-28-WS-00 /	15	Surr	26	4	8.0	4	20.0	1	29	1	8.3	TS		TS 11/14
SH-28-WS-00 /	16	Surr	26	4	8.0	4	20.1	1	29	1	8.3		TS	JO 11/15
SH-28-WS-00 /	17	Surr	26	3	7.1	3	20.0	3	29	3	8.3			TS 11/16
SH-28-WS-00 /	18	Surr	26	3	7.3	3	20.1	3	30	3	8.3	CR	CR	CR 11/17
SH-28-WS-00 /	19	Surr	26	3	7.1	3	20.0	3	29	3	8.0			CR 11/18
SH-28-WS-00 /	20	Surr	26	3	7.1	3	20.1	3	29	3	8.1			CR 11/19

0 IE J#0 11/9

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB0#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0 D.O.		20 ± 1 TEMP		28 ± 1 SALINITY		8.0 ± 1.0 pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
HI-04-SS-00 /	0	Surr	50	4	7.8	4	19.4	1	27	1	7.6		MMB	MMB 10/30
HI-04-SS-00 /	1	Surr	50	4	7.4	4	20.6	1	27	1	7.8			MMB 10/31
HI-04-SS-00 /	2	Surr	50	3	7.0	3	20.3	3	27	3	7.9		CR	CR 11/1
HI-04-SS-00 /	3	Surr	50	4	8.1	4	17.0	1	28	1	8.1	CR		CR 11/2
HI-04-SS-00 /	4	Surr	50	3	7.1	3	18.9	3	28	3	7.7		JO	JO 11/3
HI-04-SS-00 /	5	Surr	50	3	6.8	3	20.2	3	28	3	8.1			JO 11/4
HI-04-SS-00 /	6	Surr	50	3	6.8	3	20.1	3	28	3	8.1	JO	JO	JO 11/5
HI-04-SS-00 /	7	Surr	50	3	7.1	3	20.1	3	28	3	8.1			JO 11/6
HI-04-SS-00 /	8	Surr	50	3	7.2	3	20.2	3	28	3	8.3		⊥	JO 11/7
HI-04-SS-00 /	9	Surr	50	3	7.1	3	20.3	3	28	3	8.1	JO		JO 11/8
HI-04-SS-00 /	10	Surr	50	4	7.7	4	20.3	1	28	1	8.2		MMB	JO 11/9
HI-04-SS-00 /	11	Surr	50	4	7.8	4	20.3	1	29	1	8.2			JO 11/10
HI-04-SS-00 /	12	Surr	50	4	7.8	4	20.3	1	29	1	8.4	JO	JO	JO 11/11
HI-04-SS-00 /	13	Surr	50	4	7.7	4	20.3	1	29	1	8.1			CR 11/12
HI-04-SS-00 /	14	Surr	50	4	8.0	4	20.1	1	29	1	8.3		JO	JO 11/13
HI-04-SS-00 /	15	Surr	50	4	7.9	4	20.2	1	29	1	8.4	⊥		⊥ 11/14
HI-04-SS-00 /	16	Surr	50	4	8.0	4	20.3	1	29	1	8.5		MS	JO 11/15
HI-04-SS-00 /	17	Surr	50	3	7.4	3	20.1	3	29	3	8.4			⊥ 11/16
HI-04-SS-00 /	18	Surr	50	3	7.4	3	20.1	3	30	3	8.3	CR	CR	⊥ 11/17
HI-04-SS-00 /	19	Surr	50	3	7.2	3	20.2	3	29	3	8.1			⊥ 11/18
HI-04-SS-00 /	20	Surr	50	3	7.0	3	20.2	3	29	3	8.2			⊥ 11/19



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0 D.O.	20 ± 1 TEMP	28 ± 1 SALINITY	8.0 ± 1.0 pH	meter	meter	meter	meter			
				mg/L	°C	ppt	unit							
HI-06-SS-00 /	0	Surr	33	4 7.9	4 19.4	1 28	1 7.7						MMB	MMB 10/30
HI-06-SS-00 /	1	Surr	33	4 7.3	4 20.5	1 28	1 7.7							MMB 10/31
HI-06-SS-00 /	2	Surr	33	3 6.8	3 20.3	1 28	1 7.8						CR	CR 11/1
HI-06-SS-00 /	3	Surr	33	4 8.0	4 17.1	1 28	1 7.9				CR			CR 11/2
HI-06-SS-00 /	4	Surr	33	3 7.1	3 18.6	3 28	3 7.6						JO	JO 11/3
HI-06-SS-00 /	5	Surr	33	3 6.9	3 20.2	3 28	3 8.1							JO 11/4
HI-06-SS-00 /	6	Surr	33	3 6.8	3 19.9	3 28	3 8.2				JO		JO	JO 11/5
HI-06-SS-00 /	7	Surr	33	3 7.0	3 20.0	3 28	3 8.2							JO 11/6
HI-06-SS-00 /	8	Surr	33	3 7.2	3 20.2	3 28	3 8.4						TS	JO 11/7
HI-06-SS-00 /	9	Surr	33	3 6.9	3 20.2	3 29	3 8.3				JO			JO 11/8
HI-06-SS-00 /	10	Surr	33	4 7.6 7.7	4 20.3	1 29 29	1 8.5 8.5						MMB	JO 11/9
HI-06-SS-00 /	11	Surr	33	4 7.9	4 20.3	1 29	1 8.4							JO 11/10
HI-06-SS-00 /	12	Surr	33	4 7.7	4 20.3	1 29	1 8.5				JO		JO	JO 11/10
HI-06-SS-00 /	13	Surr	33	4 7.7	4 20.4	1 29	1 8.3							CR 11/12
HI-06-SS-00 /	14	Surr	33	4 8.0	4 20.0	1 29	1 8.2						JO	JO 11/13
HI-06-SS-00 /	15	Surr	33	4 8.0	4 20.0	1 30	1 8.3				TS			TS 11/14
HI-06-SS-00 /	16	Surr	33	4 8.0	4 20.2	1 29	1 8.4						FG	JO 11/15
HI-06-SS-00 /	17	Surr	33	3 7.4	3 20.0	3 29	3 8.4							TS 11/16
HI-06-SS-00 /	18	Surr	33	3 7.2	3 20.0	3 30	3 8.3				CR		CR	CR 11/17
HI-06-SS-00 /	19	Surr	33	3 7.3	3 20.2	3 29	3 8.1							CR 11/18
HI-06-SS-00 /	20	Surr	33	3 7.1	3 20.1	3 30	3 8.2							CR 11/19

① WC JAO 11/9 - wrong cell on wrong page.

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0 D.O.	20 ± 1 TEMP	28 ± 1 SALINITY	8.0 ± 1.0 pH	meter	meter	meter	meter			
				mg/L	°C	ppt	unit							
SH-09-SS-00 /	0	Surr	173	4	7.9	4	19.2	1	28	1	7.7		MMB	MMB 10/30
SH-09-SS-00 /	1	Surr	173	4	7.5	4	20.4	1	28	1	7.8			MMB 10/31
SH-09-SS-00 /	2	Surr	173	3	6.9	3	20.1	3	28	3	7.9		CR	CR 11/1
SH-09-SS-00 /	3	Surr	173	4	8.0	4	17.0	1	28	1	8.0	CR		CR 11/2
SH-09-SS-00 /	4	Surr	173	3	7.7	3	18.8	3	29	3	7.6		JO	JO 11/3
SH-09-SS-00 /	5	Surr	173	3	7.1	3	19.9	3	28	3	8.2			JO 11/4
SH-09-SS-00 /	6	Surr	173	3	7.3	3	19.6	3	29	3	8.2	JO	JO	JO 11/5
SH-09-SS-00 /	7	Surr	173	3	7.1	3	19.8	3	29	3	8.2			JO 11/6
SH-09-SS-00 /	8	Surr	173	3	7.8	3	19.8	3	29	3	8.2		TS	JO 11/7
SH-09-SS-00 /	9	Surr	173	3	7.0	3	20.0	3	29	3	8.2	JO		JO 11/8
SH-09-SS-00 /	10	Surr	173	4	7.7	4	20.1	1	29	1	8.2		MMB	JO 11/9
SH-09-SS-00 /	11	Surr	173	4	7.7	4	20.1	1	30	1	8.2			JO 11/10
SH-09-SS-00 /	12	Surr	173	4	7.6	4	20.1	1	30	1	8.2	JO	JO	JO 11/11
SH-09-SS-00 /	13	Surr	173	4	7.5	4	20.3	1	29	1	8.1			CR 11/12
SH-09-SS-00 /	14	Surr	173	4	7.8	4	19.9	1	30	1	8.1		JO	JO 11/13
SH-09-SS-00 /	15	Surr	173	4	7.8	4	20.0	1	30	1	8.1	TS		TS 11/14
SH-09-SS-00 /	16	Surr	173	4	7.8	4	20.0	1	30	1	8.2		TS	JO 11/15
SH-09-SS-00 /	17	Surr	173	3	7.3	3	19.7	3	29	3	8.2			TS 11/16
SH-09-SS-00 /	18	Surr	173	3	7.2	3	19.8	3	30	3	8.2	CR	CR	DR 11/17
SH-09-SS-00 /	19	Surr	173	3	7.0	3	19.9	3	29	3	7.9			DR 11/18
SH-09-SS-00 /	20	Surr	173	3	6.9	3	19.8	3	30	3	8.1			DR 11/19



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)	TEMP (C)	SALINITY (ppt)	pH					
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0	20 ± 1	28 ± 1	8.0 ± 1.0					
				D.O.	TEMP	SALINITY	pH		WATER RENEWAL	Feeding	TECH/DATE	
				meter	meter	meter	meter	unit				
OB-06-SS-00/	0	Surr	80	4	19.6	1	27	1	7.7		MMB	MMB 10/30
OB-06-SS-00/	1	Surr	80	4	20.5	1	28	1	7.8			MMB 10/31
OB-06-SS-00/	2	Surr	80	3	20.2	3	28	3	8.0		CR	CR 11/1
OB-06-SS-00/	3	Surr	80	4	17.0	1	28	1	8.0	CR		CR 11/2
OB-06-SS-00/	4	Surr	80	3	18.7	3	28	3	7.7		JO	JO 11/3
OB-06-SS-00/	5	Surr	80	3	20.1	3	28	3	8.2			JO 11/4
OB-06-SS-00/	6	Surr	80	3	19.7	3	28	3	8.2	JO	JO	JO 11/5
OB-06-SS-00/	7	Surr	80	3	19.9	3	28	3	8.1			JO 11/6
OB-06-SS-00/	8	Surr	80	3	20.0	3	28	3	8.3		JS	JO 11/7
OB-06-SS-00/	9	Surr	80	3	20.0	3	29	3	8.3	JO		JO 11/8
OB-06-SS-00/	10	Surr	80	4	20.1	1	28	1	8.3		MMB	JO 11/9
OB-06-SS-00/	11	Surr	80	4	20.1	1	29	1	8.3			JO 11/10
OB-06-SS-00/	12	Surr	80	4	20.0	1	30	1	8.3	JO	JO	JO 11/11
OB-06-SS-00/	13	Surr	80	4	20.3	1	29	1	8.2			CR 11/12
OB-06-SS-00/	14	Surr	80	4	19.8	1	29	1	8.1		JS	JO 11/13
OB-06-SS-00/	15	Surr	80	4	19.9	1	30	1	8.2	JS		JS 11/14
OB-06-SS-00/	16	Surr	80	4	20.1	1	29	1	8.2		JS	JO 11/15
OB-06-SS-00/	17	Surr	80	3	19.8	3	29	3	8.2			JS 11/16
OB-06-SS-00/	18	Surr	80	3	19.9	3	30	3	8.2	CR	CR	2R 11/17
OB-06-SS-00/	19	Surr	80	3	20.1	3	29	3	8.0			2R 11/18
OB-06-SS-00/	20	Surr	80	3	20.0	3	30	3	8.1			2R 11/19

① entry incorrect, 2R 11/17/08

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB0#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0		20±1		28±1		8.0±1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
OB-11-SS-00/	0	Surr	56	4	7.6	4	19.4	1	27	1	7.6		MMB	MMB 10/30
OB-11-SS-00/	1	Surr	56	4	7.5	4	20.6	1	27	1	7.8			MMB 10/31
OB-11-SS-00/	2	Surr	56	3	6.9	3	20.3	3	27	3	8.0		CR	CR 11/1
OB-11-SS-00/	3	Surr	56	4	8.0	4	20 17.0	1	27	1	8.0	CR		CR 11/2
OB-11-SS-00/	4	Surr	56	3	7.3	3	18.9	3	27	3	7.7		JO	JO 11/3
OB-11-SS-00/	5	Surr	56	3	6.9	3	20.2	3	27	3	8.1			JO 11/4
OB-11-SS-00/	6	Surr	56	3	6.8	3	20.1	3	28	3	8.2	JO	JO	JO 11/5
OB-11-SS-00/	7	Surr	56	3	7.0	3	20.2	3	28	3	8.3			JO 11/6
OB-11-SS-00/	8	Surr	56	3	7.2	3	20.3	3	28	3	8.4		TS	JO 11/7
OB-11-SS-00/	9	Surr	56	3	7.0	3	20.3	3	28	3	8.4	JO		JO 11/8
OB-11-SS-00/	10	Surr	56	4	7.7	4	20.4	1	28	1	8.5		MMB	JO 11/9
OB-11-SS-00/	11	Surr	56	4	7.7	4	20.4	1	29	1	8.4			JO 11/10
OB-11-SS-00/	12	Surr	56	4	7.8	4	20.4	1	29	1	8.4	JO	JO	JO 11/11
OB-11-SS-00/	13	Surr	56	4	7.7	4	20.5	1	29	1	8.4			CR 11/12
OB-11-SS-00/	14	Surr	56	4	8.0	4	20.2	1	29	1	8.3		JO	JO 11/13
OB-11-SS-00/	15	Surr	56	4	7.9	4	20.2	1	29	1	8.4	TS		TS 11/14
OB-11-SS-00/	16	Surr	56	4	8.0	4	20.3	1	29	1	8.5		TS	JO 11/15
OB-11-SS-00/	17	Surr	56	3	7.2	3	20.1	3	29	3	8.4			TS 11/16
OB-11-SS-00/	18	Surr	56	3	7.1	3	20.1	3	30	3	8.5	CR	CR	2R 11/17
OB-11-SS-00/	19	Surr	56	3	7.3	3	20.2	3	29	3	8.2			2R 11/18
OB-11-SS-00/	20	Surr	56	3	7.1	3	20.1	3	30	3	8.3			2R 11/19

① WC CR 11/2
② IE JO 11/9

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOW#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0 D.O.		20 ± 1 TEMP		28 ± 1 SALINITY		8.0 ± 1.0 pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
SH-03-SS-00 /	0	Surr	88	4	7.9	4	19.6	1	27	1	7.7		MMB	MMB 10/30
SH-03-SS-00 /	1	Surr	88	4	7.6	4	20.4	1	28	1	7.8			MMB 10/31
SH-03-SS-00 /	2	Surr	88	3	7.0	3	20.2	3	28	3	7.9		CR	CR 11/1
SH-03-SS-00 /	3	Surr	88	4	8.1	4	16.9	1	28	1	7.9	CR		CR 11/2
SH-03-SS-00 /	4	Surr	88	3	7.2	3	19.1	3	28	3	7.5		JO	JO 11/3
SH-03-SS-00 /	5	Surr	88	3	7.0	3	20.1	3	28	3	8.0			JO 11/4
SH-03-SS-00 /	6	Surr	88	3	6.8	3	19.6	3	28	3	7.9	JO	JO	JO 11/5
SH-03-SS-00 /	7	Surr	88	3	7.4	3	19.9	3	28	3	7.8			JO 11/6
SH-03-SS-00 /	8	Surr	88	3	7.1	3	20.0	3	29	3	8.1		JS	JO 11/7
SH-03-SS-00 /	9	Surr	88	3	7.0	3	20.0	3	29	3	8.1	JO		JO 11/8
SH-03-SS-00 /	10	Surr	88	4	7.6	4	20.2	1	29	1	8.1		MMB	JO 11/9
SH-03-SS-00 /	11	Surr	88	4	7.8 7.8	4	20.2 20.2	1	29 29	1	8.3 8.0			JO 11/10
SH-03-SS-00 /	12	Surr	88	4	7.6	4	20.1	1	30	1	8.1	JO	JO	JO 11/11
SH-03-SS-00 /	13	Surr	88	4	7.6	4	20.2	1	29	1	8.1			CR 11/12
SH-03-SS-00 /	14	Surr	88	4	8.0	4	19.8	1	29	1	8.0		JO	JO 11/13
SH-03-SS-00 /	15	Surr	88	4	7.9	4	20.0	1	30	1	8.1	TS		TS 11/14
SH-03-SS-00 /	16	Surr	88	4	7.9	4	20.1	1	29	1	8.2		TS	JO 11/15
SH-03-SS-00 /	17	Surr	88	3	7.4	3	19.8	3	29	3	8.0			TS 11/16
SH-03-SS-00 /	18	Surr	88	3	7.3	3	19.9	3	30	3	8.0	CR	CR	JR 11/17
SH-03-SS-00 /	19	Surr	88	3	7.2	3	19.9	3	29	3	8.0			JR 11/18
SH-03-SS-00 /	20	Surr	88	3	6.9	3	19.8	3	30	3	8.0			JR 11/19

① wrong page #10 11/10

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0 D.O.		20±1 TEMP		28±1 SALINITY		8.0±1.0 pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
SH-22-WS-00 /	0	Surr	48	4	7.5	4	19.2	1	28	1	7.6		MMS	MMS 10/30
SH-22-WS-00 /	1	Surr	48	4	7.5	4	20.6	1	28	1	7.7			MMS 10/31
SH-22-WS-00 /	2	Surr	48	3	7.0	3	20.2	3	28	3	7.7		CR	CR 11/1
SH-22-WS-00 /	3	Surr	48	4	8.1	4	17.0	1	28	1	8.1	CR		CR 11/2
SH-22-WS-00 /	4	Surr	48	3	7.1	3	18.8	3	28	3	7.8		JO	JO 11/3
SH-22-WS-00 /	5	Surr	48	3	7.0	3	20.2	3	28	3	8.4			JO 11/4
SH-22-WS-00 /	6	Surr	48	3	6.5	3	20.0	3	28	3	8.4	JO	JO	JO 11/5
SH-22-WS-00 /	7	Surr	48	3	7.0	3	20.1	3	28	3	8.4			JO 11/6
SH-22-WS-00 /	8	Surr	48	3	7.4	3	20.1	3	28	3	8.5		TS	JO 11/7
SH-22-WS-00 /	9	Surr	48	3	7.0	3	20.2	3	29	3	8.4	JO		JO 11/8
SH-22-WS-00 /	10	Surr	48	4	7.7	4	20.3	1	29	1	8.4		MMP	JO 11/9
SH-22-WS-00 /	11	Surr	48	4	7.8	4	20.2	1	29	1	8.4			JO 11/10
SH-22-WS-00 /	12	Surr	48	4	7.7	4	20.3	1	29	1	8.5	JO	JO	JO 11/11
SH-22-WS-00 /	13	Surr	48	4	8.5	4	20.5	1	29	1	8.4			CR 11/12
SH-22-WS-00 /	14	Surr	48	4	8.0	4	20.1	1	29	1	8.3		JO	JO 11/13
SH-22-WS-00 /	15	Surr	48	4	7.9	4	20.1	1	30	1	8.4	TS		TS 11/14
SH-22-WS-00 /	16	Surr	48	4	8.0	4	20.3	1	29	1	8.4		TS	JO 11/15
SH-22-WS-00 /	17	Surr	48	3	8.2	3	20.1	3	29	3	8.4			JS 11/16
SH-22-WS-00 /	18	Surr	48	3	7.3	3	20.0	3	30	3	8.4	CR	CR	JR 11/17
SH-22-WS-00 /	19	Surr	48	3	5.6 ^{OH}	3	20.2	3	29	3	8.1			JR 11/18
SH-22-WS-00 /	20	Surr	48	3	7.0	3	20.1	3	29	3	8.2			JR 11/19

① increased air flow JR 11/18/08
pulled out of sediment, re-measured @ 7.0

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB0#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)	TEMP (C)	SALINITY (ppt)	pH		WATER RENEWAL	Feeding	TECH/DATE			
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0	20 ± 1	28 ± 1	8.0 ± 1.0							
				D.O.	TEMP	SALINITY	meter	unit						
				meter	meter	meter	meter							
SH-13-SS-00 /	0	Surr	78	4	7.7	4	19.6	1	27	1	7.6		MMB	MMB 10/30
SH-13-SS-00 /	1	Surr	78	4	7.5	4	20.5	1	27	1	7.8			MMB 10/31
SH-13-SS-00 /	2	Surr	78	3	6.9	3	20.2	3	28	3	8.0		CR	CR 11/1
SH-13-SS-00 /	3	Surr	78	4	8.0	4	16.9	1	28	1	8.1	CR		CR 11/2
SH-13-SS-00 /	4	Surr	78	3	7.3	3	18.6	3	28	3	7.7		JO	JO 11/3
SH-13-SS-00 /	5	Surr	78	3	7.0	3	20.1	3	28	3	8.3			JO 11/4
SH-13-SS-00 /	6	Surr	78	3	7.1	3	19.7	3	28	3	8.3	JO	JO	JO 11/5
SH-13-SS-00 /	7	Surr	78	3	7.0	3	19.8	3	28	3	8.2			JO 11/6
SH-13-SS-00 /	8	Surr	78	3	7.0	3	20.1	3	28	3	8.4		TS	JO 11/7
SH-13-SS-00 /	9	Surr	78	3	7.0	3	20.1	3	29	3	8.3	JO		JO 11/8
SH-13-SS-00 /	10	Surr	78	4	7.6	4	20.2	1	29	1	8.4		MMB	JO 11/9
SH-13-SS-00 /	11	Surr	78	4	7.6	4	20.2	1	29	1	8.4			JO 11/10
SH-13-SS-00 /	12	Surr	78	4	7.7	4	20.4	1	30	1	8.4	JO	JO	JO 11/11
SH-13-SS-00 /	13	Surr	78	4	7.3	4	20.3	1	29	1	8.3			CR 11/12
SH-13-SS-00 /	14	Surr	78	4	7.7	4	20.0	1	30	1	8.2		JO	JO 11/13
SH-13-SS-00 /	15	Surr	78	4	7.7	4	20.0	1	30	1	8.4	TS		TS 11/14
SH-13-SS-00 /	16	Surr	78	4	7.7	4	20.1	1	30	1	8.4		TS	JO 11/15
SH-13-SS-00 /	17	Surr	78	3	7.5	3	19.8	3	29	3	8.3			TS 11/16
SH-13-SS-00 /	18	Surr	78	3	7.1	3	19.9	3	30	3	8.4	CR	CR	ZR 11/17
SH-13-SS-00 /	19	Surr	78	3	6.9	3	20.0	3	30	3	8.1			ZR 11/18
SH-13-SS-00 /	20	Surr	78	3	6.9	3	19.9	3	30	3	8.2			ZR 11/19



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
OB-19-WS-00 /	0	Surr	97	4	7.8	4	19.5	1	27	1	7.7		MMB	MMB 10/30
OB-19-WS-00 /	1	Surr	97	4	7.5	4	20.5	1	28	1	7.7			MMB 10/31
OB-19-WS-00 /	2	Surr	97	3	4.4 ⁰	3	20.3	3	28	3	7.6		CR	CR 11/1
OB-19-WS-00 /	3	Surr	97	4	8.1	4	16.9	1	28	1	8.0	CR		CR 11/2
OB-19-WS-00 /	4	Surr	97	3	7.2	3	19.1	3	28	3	7.6		JO	JO 11/3
OB-19-WS-00 /	5	Surr	97	3	7.1	3	20.2	3	28	3	8.1			JO 11/4
OB-19-WS-00 /	6	Surr	97	3	7.5	3	19.8	3	28	3	8.2	JO	JO	JO 11/5
OB-19-WS-00 /	7	Surr	97	3	7.3	3	20.0	3	28	3	8.2			JO 11/6
OB-19-WS-00 /	8	Surr	97	3	7.3	3	20.1	3	28	3	8.5		TS	JO 11/7
OB-19-WS-00 /	9	Surr	97	3	6.9	3	20.2	3	29	3	8.3	JO		JO 11/8
OB-19-WS-00 /	10	Surr	97	4	7.7	4	20.2	1	28	1	8.4		MMB	JO 11/9
OB-19-WS-00 /	11	Surr	97	4	7.8	4	20.3	1	29	1	8.3			JO 11/10
OB-19-WS-00 /	12	Surr	97	4	7.9	4	20.3	1	29	1	8.4	JO	JO	JO 11/11
OB-19-WS-00 /	13	Surr	97	4	7.6	4	20.4	1	29	1	8.2			CR 11/12
OB-19-WS-00 /	14	Surr	97	4	8.0	4	20.0	1	29	1	8.2		JO	JO 11/13
OB-19-WS-00 /	15	Surr	97	4	7.9	4	20.1	1	29	1	8.3	TS		TS 11/14
OB-19-WS-00 /	16	Surr	97	4	7.9	4	20.2	1	29	1	8.3		TS	JO 11/15
OB-19-WS-00 /	17	Surr	97	3	7.5	3	20.0	3	29	3	8.4			TS 11/16
OB-19-WS-00 /	18	Surr	97	3	7.1	3	20.0	3	30	3	8.3	CR	CR	ZR 11/17
OB-19-WS-00 /	19	Surr	97	3	7.2	3	20.1	3	29	3	8.0			ZR 11/18
OB-19-WS-00 /	20	Surr	97	3	7.0	3	19.9	3	29	3	8.1			ZR 11/19

@ Aeration increased CR 11/1

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0 D.O.	20 ± 1 TEMP	28 ± 1 SALINITY	8.0 ± 1.0 pH	meter	meter	meter	meter			
				mg/L	°C	ppt	unit							
SH-10-SS-00 /	0	Surr	159	4	7.9	4	19.4	1	28	1	7.7		MMB	MMB 10/30
SH-10-SS-00 /	1	Surr	159	4	7.7	4	20.5	1	28	1	7.7			MMB 10/31
SH-10-SS-00 /	2	Surr	159	3	6.8	3	20.0	3	28	3	7.8		CR	CR 11/1
SH-10-SS-00 /	3	Surr	159	4	7.9	4	17.0	1	28	1	7.9	CR		CR 11/2
SH-10-SS-00 /	4	Surr	159	3	6.7	3	19.3	3	28	3	7.5		JO	JO 11/3
SH-10-SS-00 /	5	Surr	159	3	6.9	3	20.1	3	28	3	8.1			JO 11/4
SH-10-SS-00 /	6	Surr	159	3	7.6	3	19.9	3	28	3	8.0	JO	JO	JO 11/5
SH-10-SS-00 /	7	Surr	159	3	7.1	3	20.0	3	28	3	8.1			JO 11/6
SH-10-SS-00 /	8	Surr	159	3	7.0	3	20.1	3	28	3	8.2		TS	JO 11/7
SH-10-SS-00 /	9	Surr	159	3	7.2	3	20.2	3	29	3	8.3	JO		JO 11/8
SH-10-SS-00 /	10	Surr	159	4	7.8	4	20.3	1	29	1	8.3		MMB	JO 11/9
SH-10-SS-00 /	11	Surr	159	4	7.8	4	20.3	1	29	1	8.2			JO 11/10
SH-10-SS-00 /	12	Surr	159	4	7.8	4	20.3	1	30	1	8.3	JO	JO	JO 11/11
SH-10-SS-00 /	13	Surr	159	4	7.4	4	20.5	1	29	1	8.1			CR 11/12
SH-10-SS-00 /	14	Surr	159	4	7.7	4	20.1	1	29	1	8.0		JO	JO 11/13
SH-10-SS-00 /	15	Surr	159	4	8.1 7.7	4	20.3	1	29	1	8.1	TS		TS 11/14
SH-10-SS-00 /	16	Surr	159	4	7.9	4	20.3	1	29	1	8.2		TS	JO 11/15
SH-10-SS-00 /	17	Surr	159	3	7.2	3	20.1	3	29	3	8.2			TS 11/16
SH-10-SS-00 /	18	Surr	159	3	7.2	3	20.1	3	29	3	8.3	CR	CR	CR 11/17
SH-10-SS-00 /	19	Surr	159	3	7.2	3	20.0	3	29	3	8.1			CR 11/18
SH-10-SS-00 /	20	Surr	159	3	7.1	3	19.9	3	29	3	8.2			CR 11/19

① IE TS 11/14/08



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
OB-01-SS-00/	0	Surr	79	4	7.8	4	19.6	1	27	1	7.6		MMB	MMB 10/30
OB-01-SS-00/	1	Surr	79	4	7.7	4	20.4	1	28	1	7.9			MMB 10/31
OB-01-SS-00/	2	Surr	79	3	7.2	3	20.1	3	28	3	8.0		CR	CR 11/1
OB-01-SS-00/	3	Surr	79	4	7.9	4	17.0	1	28	1	8.0	CR		CR 11/2
OB-01-SS-00/	4	Surr	79	3	7.9	3	18.7	3	28	3	7.7		JO	JO 11/3
OB-01-SS-00/	5	Surr	79	3	6.8	3	20.0	3	28	3	7.9			JO 11/4
OB-01-SS-00/	6	Surr	79	3	7.7	3	19.7	3	28	3	8.1	JO	JO	JO 11/5
OB-01-SS-00/	7	Surr	79	3	6.9	3	19.8	3	28	3	8.1			JO 11/6
OB-01-SS-00/	8	Surr	79	3	7.1	3	20.0	3	29	3	8.2		T	JO 11/7
OB-01-SS-00/	9	Surr	79	3	6.6	3	19.9	3	29	3	8.1	JO		JO 11/8
OB-01-SS-00/	10	Surr	79	4	7.2	4	20.1	1	29	1	8.2		MMB	JO 11/9
OB-01-SS-00/	11	Surr	79	4	7.7	4	20.1	1	29	1	8.1			JO 11/10
OB-01-SS-00/	12	Surr	79	4	7.6	4	20.0	1	30	1	8.2	JO	JO	JO 11/11
OB-01-SS-00/	13	Surr	79	4	7.5	4	20.3	1	30	1	8.2			CR 11/12
OB-01-SS-00/	14	Surr	79	4	7.8	4	19.9	1	30	1	8.1		JO	JO 11/13
OB-01-SS-00/	15	Surr	79	4	7.8	4	19.9	1	30	1	8.2	T		T 11/14
OB-01-SS-00/	16	Surr	79	4	7.8	4	20.1	1	30	1	8.3		T	JO 11/15
OB-01-SS-00/	17	Surr	79	3	7.3	3	19.8	3	30	3	8.2			T 11/16
OB-01-SS-00/	18	Surr	79	3	7.4	3	19.8	3	31	3	8.2	CR	CR	2R 11/17
OB-01-SS-00/	19	Surr	79	3	7.1	3	20.0	3	30	3	8.0			2R 11/18
OB-01-SS-00/	20	Surr	79	3	7.0	3	19.9	3	30	3	8.1			2R 11/19

① WD was 11/7

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB0#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
SH-04-SS-00 /	0	Surr	46	4	7.4	4	19.2	1	28	1	7.6		MMB	MMB 10/30
SH-04-SS-00 /	1	Surr	46	4	5.0 ^①	4	20.7	1	28	1	7.4			MMB 10/31
SH-04-SS-00 /	2	Surr	46	3	6.9	3	20.2	3	28	3	7.7		CR	CR 11/1
SH-04-SS-00 /	3	Surr	46	4	8.1	4	17.0	1	28	1	8.0	CR		CR 11/2
SH-04-SS-00 /	4	Surr	46	3	7.2	3	18.9	3	28	3	7.8		JO	Jo 11/3
SH-04-SS-00 /	5	Surr	46	3	7.0	3	20.2	3	28	3	8.4			Jo 11/4
SH-04-SS-00 /	6	Surr	46	3	7.0	3	20.0	3	28	3	8.5	JO	JO	Jo 11/5
SH-04-SS-00 /	7	Surr	46	3	7.1	3	20.1	3	28	3	8.4			Jo 11/6
SH-04-SS-00 /	8	Surr	46	3	7.1	3	20.2	3	28	3	8.5		TS	Jo 11/7
SH-04-SS-00 /	9	Surr	46	3	6.8	3	20.3	3	28	3	8.4	JO		Jo 11/8
SH-04-SS-00 /	10	Surr	46	4	7.7	4	20.3	4	28	1	8.5		MMB	Jo 11/9
SH-04-SS-00 /	11	Surr	46	4	7.7	4	20.3	1	29	1	8.4			Jo 11/10
SH-04-SS-00 /	12	Surr	46	4	7.7	4	20.3	1	29	1	8.3	JO	JO	Jo 11/11
SH-04-SS-00 /	13	Surr	46	4	7.7	4	20.4	1	29	1	8.2			CR 11/12
SH-04-SS-00 /	14	Surr	46	4	8.0	4	20.1	1	29	1	8.1		JO	Jo 11/13
SH-04-SS-00 /	15	Surr	46	4	7.9	4	20.1	1	29	1	8.1	TS		TS 11/14
SH-04-SS-00 /	16	Surr	46	4	10.7	4	20.3	1	29	1	8.3		TS	Jo 11/15
SH-04-SS-00 /	17	Surr	46	3	7.2	3	20.0	3	29	3	8.2			TS 11/16
SH-04-SS-00 /	18	Surr	46	3	7.3	3	20.1	3	30	3	8.1	CR	CR	CR 11/17
SH-04-SS-00 /	19	Surr	46	3	7.1	3	20.2	3	29	3	8.0			CR 11/18
SH-04-SS-00 /	20	Surr	46	3	6.8	3	20.1	3	29	3	8.0			CR 11/19

① Air flow increased, MMB 10/31/08

② IE JHO 11/9

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0 D.O.		20 ± 1 TEMP		28 ± 1 SALINITY		8.0 ± 1.0 pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
HI-07-SS-00 /	0	Surr	1	4	7.7	4	19.5	1	27	1	7.7		MMB	MMB 10/30
HI-07-SS-00 /	1	Surr	1	4	7.5	4	20.3	1	27	1	7.7			MMB 10/31
HI-07-SS-00 /	2	Surr	1	3	3.3/7.0	3	22.0/20.1	3	28	3	7.6		CR	CR 11/1
HI-07-SS-00 /	3	Surr	1	3	8.0	3	12.7/17.2	3	28	3	7.8	CR		CR 11/2
HI-07-SS-00 /	4	Surr	1	3	7.9	3	16.4	3	27	3	7.6		JO	JO 11/3
HI-07-SS-00 /	5	Surr	1	3	6.9	3	20.0	3	28	3	7.9			JO 11/4
HI-07-SS-00 /	6	Surr	1	3	7.2	3	19.8	3	28	3	8.0	JO	JO	JO 11/5
HI-07-SS-00 /	7	Surr	1	3	7.0	3	20.0	3	28	3	7.9			JO 11/6
HI-07-SS-00 /	8	Surr	1	3	7.1	3	20.1	3	28	3	8.0		TS	JO 11/7
HI-07-SS-00 /	9	Surr	1	3	6.9	3	20.1	3	28	3	7.7	JO		JO 11/8
HI-07-SS-00 /	10	Surr	1	4	7.6	4	20.0	1	29	1	7.9		MMB	JO 11/9
HI-07-SS-00 /	11	Surr	1	4	7.7	4	19.8	1	29	1	7.9			JO 11/10
HI-07-SS-00 /	12	Surr	1	4	7.6	4	19.9	1	29	1	7.5	JO	JO	JO 11/11
HI-07-SS-00 /	13	Surr	1	4	7.3	4	20.0	1	29	1	7.6			CR 11/12
HI-07-SS-00 /	14	Surr	1	4	7.9	4	19.5	1	29	1	7.1		JO	JO 11/13
HI-07-SS-00 /	15	Surr	1	4	7.7	4	19.8	1	29	1	7.6	TS		TS 11/14
HI-07-SS-00 /	16	Surr	1	4	7.9	4	19.3	1	29	1	7.9		TS	JO 11/15
HI-07-SS-00 /	17	Surr	1	3	7.2	3	19.8	3	29	3	8.0			TS 11/16
HI-07-SS-00 /	18	Surr	1	3	7.1	3	19.9	3	30	3	7.9	CR	CR	CR 11/17
HI-07-SS-00 /	19	Surr	1	3	7.0	3	20.0	3	29	3	7.8			CR 11/18
HI-07-SS-00 /	20	Surr	1	3	7.1	3	19.9	3	29	3	8.0			CR 11/19

① Aeration not functioning - aeration turned on CR 11/1
 ② W/C CR 11/1
 D.O. = 7.0 that afternoon
 ③

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
OB-05-SS-00 /	0	Surr	170	4	7.8	4	19.2	1	28	1	7.6		MMB	MMB 10/20
OB-05-SS-00 /	1	Surr	170	4	7.7	4	20.5	1	28	1	7.8			MMB 10/31
OB-05-SS-00 /	2	Surr	170	3	7.0	3	20.1	3	28	3	7.9		CR	CR 11/1
OB-05-SS-00 /	3	Surr	170	4	7.8	4	17.0	1	28	1	8.0	CR		CR 11/2
OB-05-SS-00 /	4	Surr	170	3	6.4	3	18.8	3	28	3	7.6		JO	JO 11/3
OB-05-SS-00 /	5	Surr	170	3	6.5	3	20.0	3	28	3	8.4			JO 11/4
OB-05-SS-00 /	6	Surr	170	3	6.6	3	19.7	3	28	3	8.6	JO	JO	JO 11/5
OB-05-SS-00 /	7	Surr	170	3	7.1	3	19.8	3	28	3	8.4			JO 11/6
OB-05-SS-00 /	8	Surr	170	3	7.0	3	20.0	3	28	3	8.5		TS	JO 11/7
OB-05-SS-00 /	9	Surr	170	3	6.9	3	20.0	3	28	3	8.4	JO		JO 11/8
OB-05-SS-00 /	10	Surr	170	4	7.7	4	20.2	1	28	1	8.4		MMB	JO 11/9
OB-05-SS-00 /	11	Surr	170	4	7.8	4	20.1	1	29	1	8.3			JO 11/10
OB-05-SS-00 /	12	Surr	170	4	7.6	4	20.1	1	29	1	8.3	JO	JO	JO 11/11
OB-05-SS-00 /	13	Surr	170	4	7.5	4	20.3	1	29	1	8.2			CR 11/12
OB-05-SS-00 /	14	Surr	170	4	7.8	4	20.0	1	29	1	8.1		JO	JO 11/13
OB-05-SS-00 /	15	Surr	170	4	7.8	4	20.1	1	30	1	8.2	TS		TS 11/14
OB-05-SS-00 /	16	Surr	170	4	7.8	4	20.1	1	29	1	8.2		TS	JO 11/15
OB-05-SS-00 /	17	Surr	170	3	7.3	3	19.9	3	29	3	8.1			TS 11/16
OB-05-SS-00 /	18	Surr	170	3	7.0	3	19.7	3	30	3	8.2	CR	CR	JR 11/17
OB-05-SS-00 /	19	Surr	170	3	6.9	3	19.9	3	29	3	7.9			AL 11/18
OB-05-SS-00 /	20	Surr	170	3	6.9	3	19.8	3	30	3	8.0			AL 11/19



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB0#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
SH-14-SS-00/	0	Surr	174	4	7.7	4	19.0	1	28	1	7.7		MMB	MMB 10/30
SH-14-SS-00/	1	Surr	174	4	7.4	4	20.5	1	28	1	7.7			MMB 10/31
SH-14-SS-00/	2	Surr	174	3	6.7	3	20.2	3	28	3	7.8		CR	CR 11/1
SH-14-SS-00/	3	Surr	174	4	7.9	4	17.1	1	28	1	8.0	CR		CR 11/2
SH-14-SS-00/	4	Surr	174	3	7.4	3	18.9	3	28	3	7.7		JO	JO 11/3
SH-14-SS-00/	5	Surr	174	3	6.6	3	20.0	3	28	3	8.6			JO 11/4
SH-14-SS-00/	6	Surr	174	3	6.5	3	19.7	3	28	3	8.7	JO	JO	JO 11/5
SH-14-SS-00/	7	Surr	174	3	6.7	3	19.9	3	28	3	8.7			JO 11/6
SH-14-SS-00/	8	Surr	174	3	7.0	3	20.1	3	28	3	8.8		TS	JO 11/7
SH-14-SS-00/	9	Surr	174	3	6.9	3	20.0	3	28 28	3	8.8	JO		JO 11/8
SH-14-SS-00/	10	Surr	174	4	7.7	4	20.2	1	28	1	8.6		MMB	JO 11/9
SH-14-SS-00/	11	Surr	174	4	7.7	4	20.2	1	29	1	8.5			JO 11/10
SH-14-SS-00/	12	Surr	174	4	7.6	4	20.1	1	29	1	8.3	JO	JO	JO 11/11
SH-14-SS-00/	13	Surr	174	4	7.1	4	20.3	1	29	1	8.1			CR 11/12
SH-14-SS-00/	14	Surr	174	4	7.7	4	19.9	1	29	1	8.1		JO	JO 11/13
SH-14-SS-00/	15	Surr	174	4	7.6	4	20.0	1	29	1	8.2	TS		TS 11/14
SH-14-SS-00/	16	Surr	174	4	7.6	4	20.1	1	29	1	8.2		TS	JO 11/15
SH-14-SS-00/	17	Surr	174	3	7.1	3	20.0	3	28	3	8.2			TS 11/16
SH-14-SS-00/	18	Surr	174	3	7.0	3	19.8	3	29	3	8.2	CR	CR	CR 11/17
SH-14-SS-00/	19	Surr	174	3	6.8	3	19.9	3	29	3	7.9			CR 11/18
SH-14-SS-00/	20	Surr	174	3	6.8	3	19.8	3	29	3	8.1			CR 11/19

01E JO 11/8

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)	TEMP (C)	SALINITY (ppt)	pH							
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0	20 ± 1	28 ± 1	8.0 ± 1.0			WATER RENEWAL	Feeding	TECH/DATE		
				D.O.	TEMP	SALINITY	pH	meter	meter				meter	meter
				mg/L	°C	ppt	unit							
OB-17-WS-00 /	0	Surr	109	4	7.9	4	19.6	1	27	1	7.7		MMB	MMB 10/30
OB-17-WS-00 /	1	Surr	109	4	7.6	4	20.5	1	28	1	7.7			MMB 10/31
OB-17-WS-00 /	2	Surr	109	3	7.0	3	20.0	3	28	3	7.8		CR	CR 11/1
OB-17-WS-00 /	3	Surr	109	4	8.1	4	16.9	1	28	1	8.0	CR		CR 11/2
OB-17-WS-00 /	4	Surr	109	3	7.4	3	19.4	3	28	3	7.6		JO	JO 11/3
OB-17-WS-00 /	5	Surr	109	3	7.0	3	20.2	3	28	3	8.1			JO 11/4
OB-17-WS-00 /	6	Surr	109	3	7.2	3	19.9	3	28	3	8.2	JO	JO	JO 11/5
OB-17-WS-00 /	7	Surr	109	3	7.1	3	20.0	3	28	3	8.2			JO 11/6
OB-17-WS-00 /	8	Surr	109	3	7.2	3	20.2	3	29	3	8.4		TS	JO 11/7
OB-17-WS-00 /	9	Surr	109	3	7.0	3	20.3	3	29	3	8.4	JO		JO 11/8
OB-17-WS-00 /	10	Surr	109	4	7.7	4	20.3	1	28	1	8.3		MMB	JO 11/9
OB-17-WS-00 /	11	Surr	109	4	7.8	4	20.3	1	30	1	8.4			JO 11/10
OB-17-WS-00 /	12	Surr	109	4	7.8	4	20.3	1	30	1	8.4	JO	JO	JO 11/11
OB-17-WS-00 /	13	Surr	109	4	7.7	4	20.4	1	29	1	8.3			CR 11/12
OB-17-WS-00 /	14	Surr	109	4	8.0	4	20.1	1	30	1	8.3		JO	JO 11/13
OB-17-WS-00 /	15	Surr	109	4	8.0	4	20.2	1	30	1	8.4	TS		TS 11/14
OB-17-WS-00 /	16	Surr	109	4	8.0	4	20.2	1	30	1	8.5		TS	JO 11/15
OB-17-WS-00 /	17	Surr	109	3	7.3	3	20.1	3	30	3	8.4			TS 11/16
OB-17-WS-00 /	18	Surr	109	3	7.1	3	20.1	3	31	3	8.4	CR	CR	CR 11/17
OB-17-WS-00 /	19	Surr	109	3	7.2	3	20.1	3	30	3	8.1			CR 11/18
OB-17-WS-00 /	20	Surr	109	3	7.0	3	20.0	3	30	3	8.2			CR 11/19

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)	TEMP (C)	SALINITY (ppt)	pH							
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0	20 ± 1	28 ± 1	8.0 ± 1.0							
				D.O.	TEMP	SALINITY	pH							
				meter	meter	meter	meter	unit	WATER RENEWAL	Feeding	TECH/DATE			
OB-02-SS-00 /	0	Surr	23	4	7.9	4	19.3	1	28	1	7.7		MMB	MMB 10/30
OB-02-SS-00 /	1	Surr	23	4	6.8	4	20.3	1	29	1	7.4			MMB 10/31
OB-02-SS-00 /	2	Surr	23	3	6.7	3	20.1	3	29	3	7.6		CR	CR 11/1
OB-02-SS-00 /	3	Surr	23	4	8.0	4	17.0	1	29	1	7.8	CR		CR 11/2
OB-02-SS-00 /	4	Surr	23	3	7.2	3	18.4	3	28	3	7.7		JO	JO 11/3
OB-02-SS-00 /	5	Surr	23	3	7.0	3	20.0	3	29	3	7.9			JO 11/3 ^⑥
OB-02-SS-00 /	6	Surr	23	3	6.8	3	19.9	3	29	3	8.1	JO	JO	JO 11/5
OB-02-SS-00 /	7	Surr	23	3	7.0	3	20.0	3	29	3	8.2			JO 11/6
OB-02-SS-00 /	8	Surr	23	3	6.7	3	20.1	3	29	3	8.2		B	JO 11/7
OB-02-SS-00 /	9	Surr	23	3	7.0	3	20.1	3	29	3	8.3	JO		JO 11/8
OB-02-SS-00 /	10	Surr	23	4	7.8	4	20.1	1	29	1	8.3		MMB	JO 11/9
OB-02-SS-00 /	11	Surr	23	4	7.9	4	20.0	1	30 ^③	1	8.3			JO 11/10
OB-02-SS-00 /	12	Surr	23	4	7.7	4	20.0	1	31	1	8.3	JO	JO	JO 11/11
OB-02-SS-00 /	13	Surr	23	4	7.7	4	20.2	1	31	1	8.2			CR 11/12
OB-02-SS-00 /	14	Surr	23	4	8.0	4	19.7	1	32	1	8.2		JO	JO 11/13
OB-02-SS-00 /	15	Surr	23	4	8.0	4	20.0	1	32	1	8.2	B		TS 11/14
OB-02-SS-00 /	16	Surr	23	4	8.0	4	19.8	1	32 31 ^④	1	8.2		TS	JO 11/15
OB-02-SS-00 /	17	Surr	23	3	7.2	3	19.9	3	31	3	8.2			B 11/16
OB-02-SS-00 /	18	Surr	23	3	7.1	3	20.0	3	32	3	8.1	CR	CR	CR 11/17
OB-02-SS-00 /	19	Surr	23	3	2.9 ^⑤	3	20.1	3	30	3	7.7			CR 11/18
OB-02-SS-00 /	20	Surr	23	3	3.3 ^⑥	3	20.1	3	31	3	8.0			CR 11/19

① was 11/4/08 JHO 11/4/08

② WC - value missing from log JHO 11/8/08

③ Double checked with refractometer = 30 ppt

④ IE V40 11/15

⑤ Increased air flow 2R 11/18/08 re-measured @ 7.1

⑥ 11 @ 6.6 2R 11/19/08

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
OB-12-SS-00/	0	Surr	118	4	7.9	4	19.6	1	28	1	7.7		MMB	MMB 10/30
OB-12-SS-00/	1	Surr	118	4	7.7	4	20.5	1	28	1	7.8			MMB 10/31
OB-12-SS-00/	2	Surr	118	3	7.1	3	20.2	3	28	3	7.9		CR	CR 11/1
OB-12-SS-00/	3	Surr	118	4	8.1	4	16.9	1	28	1	8.0	CR		CR 11/2
OB-12-SS-00/	4	Surr	118	3	7.3	3	19.3	3	28	3	7.6		JO	JO 11/3
OB-12-SS-00/	5	Surr	118	3	7.1	3	20.2	3	28	3	8.1			JO 11/4
OB-12-SS-00/	6	Surr	118	3	7.6	3	19.9	3	28	3	8.1	JO	JO	JO 11/5
OB-12-SS-00/	7	Surr	118	3	7.3	3	20.0	3	28	3	8.2			JO 11/6
OB-12-SS-00/	8	Surr	118	3	7.2	3	20.3	3	29	3	8.3		J	JO 11/7
OB-12-SS-00/	9	Surr	118	3	6.8	3	20.3	3	29	3	8.3	JO		JO 11/8
OB-12-SS-00/	10	Surr	118	4	7.7	4	20.3	1	28	1	8.2		MMB	JO 11/9
OB-12-SS-00/	11	Surr	118	4	7.8	4	20.4	1	29	1	8.3			JO 11/10
OB-12-SS-00/	12	Surr	118	4	7.7	4	20.3	1	29	1	8.4	JO	JO	JO 11/11
OB-12-SS-00/	13	Surr	118	4	7.7	4	20.5	1	29	1	8.4			CR 11/12
OB-12-SS-00/	14	Surr	118	4	7.9	4	20.2	1	29	1	8.2		JO	JO 11/13
OB-12-SS-00/	15	Surr	118	4	7.8	4	20.1	1	30	1	8.3	TS		J 11/14
OB-12-SS-00/	16	Surr	118	4	7.9	4	20.3	1	29	1	8.4		TS	JO 11/15
OB-12-SS-00/	17	Surr	118	3	7.2	3	20.1	3	29	3	8.3			J 11/16
OB-12-SS-00/	18	Surr	118	3	7.2	3	20.1	3	30	3	8.3	CR	CR	CR 11/17
OB-12-SS-00/	19	Surr	118	3	7.2	3	20.1	3	29	3	8.1			CR 11/18
OB-12-SS-00/	20	Surr	118	3	7.0	3	20.0	3	30	3	8.2			CR 11/19

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
OB-14-SS-00 /	0	Surr	122	4	8.0	4	19.4	1	27	1	7.6		NMB	NMB 10/30
OB-14-SS-00 /	1	Surr	122	4	7.6	4	20.5	1	27	1	7.8			NMB 10/31
OB-14-SS-00 /	2	Surr	122	3	6.9	3	20.3	3	27	3	7.9		CR	CR 11/1
OB-14-SS-00 /	3	Surr	122	4	8.1	4	16.9	1	28	1	8.0	CR		CR 11/2
OB-14-SS-00 /	4	Surr	122	3	7.2	3	19.2	3	27	3	7.6		JO	JO 11/3
OB-14-SS-00 /	5	Surr	122	3	7.2	3	20.2	3	28	3	8.1			JO 11/4
OB-14-SS-00 /	6	Surr	122	3	7.4	3	20.0	3	28	3	8.0	JO	JO	JO 11/5
OB-14-SS-00 /	7	Surr	122	3	7.0	3	20.1	3	28	3	8.1			JO 11/6
OB-14-SS-00 /	8	Surr	122	3	7.2	3	20.3	3	28	3	8.2		TS	JO 11/7
OB-14-SS-00 /	9	Surr	122	3	7.1	3	20.3	3	28	3	8.1	JO		JO 11/8
OB-14-SS-00 /	10	Surr	122	4	7.7	4	20.4	1	28	1	8.1		NMB	JO 11/8 11/9
OB-14-SS-00 /	11	Surr	122	4	7.7	4	20.4	1	28	1	8.1			JO 11/10
OB-14-SS-00 /	12	Surr	122	4	7.7	4	20.3	1	29	1	8.2	JO	JO	JO 11/11
OB-14-SS-00 /	13	Surr	122	4	7.6	4	20.5	1	29	1	8.1			CR 11/12
OB-14-SS-00 /	14	Surr	122	4	7.9	4	20.2	1	29	1	8.0		JO	JO 11/13
OB-14-SS-00 /	15	Surr	122	4	7.8	4	20.3	1	29	1	8.1	TS		TS 11/14
OB-14-SS-00 /	16	Surr	122	4	7.9	4	20.3	1	29	1	8.2		TS	JO 11/15
OB-14-SS-00 /	17	Surr	122	3	7.3	3	20.1	3	29	3	8.1			TS 11/16
OB-14-SS-00 /	18	Surr	122	3	7.1	3	20.1	3	29	3	8.1	CR	CR	CR 11/17
OB-14-SS-00 /	19	Surr	122	3	7.1	3	20.2	3	29	3	8.0			CR 11/18
OB-14-SS-00 /	20	Surr	122	3	7.0	3	20.1	3	29	3	8.0			CR 11/19

① WD JO 11/9

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0 D.O.	20±1 TEMP	28±1 SALINITY	8.0±1.0 pH	meter	meter	meter	meter			
				mg/L	°C	ppt	unit							
HI-02-SS-00 /	0	Surr	129	4	8.0	4	19.3	1	27	1	7.6		MWB	MWB 10/30
HI-02-SS-00 /	1	Surr	129	4	7.4	4	20.5	1	27	1	7.7			MWB 10/31
HI-02-SS-00 /	2	Surr	129	3	6.8	3	20.3	3	27	3	7.9		CR	CR 11/1
HI-02-SS-00 /	3	Surr	129	4	8.0	4	19.9	1	28	1	8.0	CR		CR 11/2
HI-02-SS-00 /	4	Surr	129	3	7.1	3	19.3	3	27	3	7.6		JO	JO 11/3
HI-02-SS-00 /	5	Surr	129	3	6.9	3	20.2	3	28	3	8.1			JO 11/4
HI-02-SS-00 /	6	Surr	129	3	7.1	3	20.0	3	28	3	8.1	JO	JO	JO 11/5
HI-02-SS-00 /	7	Surr	129	3	7.0	3	20.1	3	28	3	8.1			JO 11/6
HI-02-SS-00 /	8	Surr	129	3	7.0	3	20.1	3	28	3	8.0		TS	JO 11/7
HI-02-SS-00 /	9	Surr	129	3	7.1	3	20.3	3	28	3	8.1	JO		JO 11/8
HI-02-SS-00 /	10	Surr	129	4	7.7	4	20.3	1	28	1	8.1		MWB	JO 11/9
HI-02-SS-00 /	11	Surr	129	4	7.8	4	20.4	1	29	1	8.1			JO 11/10
HI-02-SS-00 /	12	Surr	129	4	10.1	4	20.4	1	29	1	8.3	JO	JO	JO 11/11
HI-02-SS-00 /	13	Surr	129	4	7.7	4	20.5	1	29	1	8.2			CR 11/12
HI-02-SS-00 /	14	Surr	129	4	8.6	4	20.2	1	29	1	8.3		JO	JO 11/13
HI-02-SS-00 /	15	Surr	129	4	7.8	4	20.3	1	29	1	8.2	TS		TS 11/14
HI-02-SS-00 /	16	Surr	129	4	7.9	4	20.3	1	29	1	8.3		TS	JO 11/15
HI-02-SS-00 /	17	Surr	129		7.5		20.1		28		8.2			TS 11/16
HI-02-SS-00 /	18	Surr	129	3	7.3	3	20.1	3	29	3	8.2	CR	CR	CR 11/17
HI-02-SS-00 /	19	Surr	129	3	7.1	3	20.2	3	29	3	8.0			CR 11/18
HI-02-SS-00 /	20	Surr	129	3	8.1	3	20.1	3	29	3	8.1			CR 11/19



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0		20±1		28±1		8.0±1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
SH-11-SS-00/	0	Surr	140	4	8.0	4	19.4	1	27	1	7.7		MMB	MUB 10/30
SH-11-SS-00/	1	Surr	140	4	7.5	4	20.5	1	27	1	7.7			MUB 10/31
SH-11-SS-00/	2	Surr	140	3	6.9	3	20.2	3	27	3	7.8		CR	CR 11/1
SH-11-SS-00/	3	Surr	140	4	8.0	4	16.9	1	28	1	8.0	CR		CR 11/2
SH-11-SS-00/	4	Surr	140	3	7.4	3	19.2	3	27	3	7.6		JO	JO 11/3
SH-11-SS-00/	5	Surr	140	3	6.9	3	20.2	3	28	3	8.1			JO 11/4
SH-11-SS-00/	6	Surr	140	3	6.9	3	20.0	3	28	3	8.2	JO	JO	JO 11/5
SH-11-SS-00/	7	Surr	140	3	7.2	3	20.1	3	28	3	8.2			JO 11/6
SH-11-SS-00/	8	Surr	140	3	7.1	3	20.2	3	28	3	8.3		TS	JO 11/7
SH-11-SS-00/	9	Surr	140	3	7.2	3	20.3	3	28	3	8.3	JO		JO 11/8
SH-11-SS-00/	10	Surr	140	4	7.7	4	20.4	1	28	1	8.3		MUB	JO 11/9
SH-11-SS-00/	11	Surr	140	4	7.8	4	20.4	1	29	1	8.3			JO 11/10
SH-11-SS-00/	12	Surr	140	4	7.9	4	20.3	1	29	1	8.3	JO	JO	JO 11/11
SH-11-SS-00/	13	Surr	140	4	7.5	4	20.6	1	29	1	8.2			CR 11/12
SH-11-SS-00/	14	Surr	140	4	7.8	4	20.3	1	29	1	8.1		JO	JO 11/13
SH-11-SS-00/	15	Surr	140	4	7.8	4	20.3	1	29	1	8.2	TS		TS 11/14
SH-11-SS-00/	16	Surr	140	4	7.9	4	20.3	1	29	1	8.2		TS	JO 11/15
SH-11-SS-00/	17	Surr	140	3	7.4	3	20.1	3	29	3	8.2			TS 11/16
SH-11-SS-00/	18	Surr	140	3	7.2	3	20.1	3	29	3	8.2	CR	CR	CR 11/17
SH-11-SS-00/	19	Surr	140	3	5.77 ^{20.2} _{7.3}	3	20.2	3	29	3	8.1			CR 11/18
SH-11-SS-00/	20	Surr	140	3	7.2	3	20.0	3	29	3	8.2			CR 11/19

① IE CR 11/18/08



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)	TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE	
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0	20 ± 1	28 ± 1	8.0 ± 1.0							
				D.O.	TEMP	SALINITY	pH							
				meter	meter	meter	meter	meter	unit					
SH-01-SS-00/	0	Surr	99	4	7.9	4	19.4	1	27	1	7.6		MMB	MMB 10/30
SH-01-SS-00/	1	Surr	99	4	7.6	4	20.5	1	28	1	7.7			MMB 10/31
SH-01-SS-00/	2	Surr	99	3	7.2	3	20.1	3	28	3	7.8		CR	CR 11/1
SH-01-SS-00/	3	Surr	99	4	8.1	4	16.9	1	28	1	8.0	CR		CR 11/2
SH-01-SS-00/	4	Surr	99	3	7.3	3	18.9	3	27	3	7.6		JO	JO 11/3
SH-01-SS-00/	5	Surr	99	3	6.9	3	20.2	3	28	3	8.1			JO 11/4
SH-01-SS-00/	6	Surr	99	3	7.6	3	19.9	3	28	3	8.1	JO	JO	JO 11/5
SH-01-SS-00/	7	Surr	99	3	7.1	3	20.0	3	28	3	8.1			JO 11/6
SH-01-SS-00/	8	Surr	99	3	7.0	3	20.2	3	28	3	8.3		TS	JO 11/7
SH-01-SS-00/	9	Surr	99	3	7.0	3	20.3	3	28	3	8.2	JO		JO 11/8
SH-01-SS-00/	10	Surr	99	4	7.6	4	20.2	1	28	1	8.2		MMB	JO 11/9
SH-01-SS-00/	11	Surr	99	4	7.9	4	20.3	1	29	1	8.2			JO 11/10
SH-01-SS-00/	12	Surr	99	4	7.8	4	20.3	1	29	1	8.4	JO	JO	JO 11/11
SH-01-SS-00/	13	Surr	99	4	7.7	4	20.4	1	29	1	8.2			CR 11/12
SH-01-SS-00/	14	Surr	99	4	8.0	4	20.1	1	29	1	8.2		JO	JO 11/13
SH-01-SS-00/	15	Surr	99	4	8.0	4	20.1	1	29	1	8.2	TS		TS 11/14
SH-01-SS-00/	16	Surr	99	4	8.0	4	20.2	1	29	1	8.3		TS	JO 11/15
SH-01-SS-00/	17	Surr	99	3	7.5	3	20.1	3	28	3	8.3			TS 11/16
SH-01-SS-00/	18	Surr	99	3	7.0	3	20.1	3	29	3	8.2	CR	CR	CR 11/17
SH-01-SS-00/	19	Surr	99	3	7.2	3	20.2	3	29	3	8.0			CR 11/18
SH-01-SS-00/	20	Surr	99	3	6.9	3	20.0	3	29	3	8.1			CR 11/19



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0		20±1		28±1		8.0±1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
SH-21-WS-00 /	0	Surr	61	4	7.5	4	19.5	1	27	1	7.6		MMB	MMB 10/30
SH-21-WS-00 /	1	Surr	61	4	7.5	4	20.6	1	28	1	7.8			MMB 10/31
SH-21-WS-00 /	2	Surr	61	4	7.7	4	20.0	1	28	1	7.9		CR	CR 11/1
SH-21-WS-00 /	3	Surr	61	4	7.9	4	16.9	1	28	1	8.1	CR		CR 11/2
SH-21-WS-00 /	4	Surr	61	3	7.1	3	19.4	3	28	3	7.8		JO	JO 11/2
SH-21-WS-00 /	5	Surr	61	3	7.0	3	20.3	3	28	3	8.3			JO 11/4
SH-21-WS-00 /	6	Surr	61	3	7.3	3	20.2	3	28	3	8.3	JO	JO	JO 11/5
SH-21-WS-00 /	7	Surr	61	3	6.9	3	20.2	3	28	3	8.3			JO 11/6
SH-21-WS-00 /	8	Surr	61	3	7.2	3	20.3	3	28	3	8.3		TS	JO 11/7
SH-21-WS-00 /	9	Surr	61	3	6.9	3	20.3	3	28	3	8.2	JO		JO 11/8
SH-21-WS-00 /	10	Surr	61	4	7.6	4	20.4	1	28	1	8.3		MMB	JO 11/9
SH-21-WS-00 /	11	Surr	61	4	7.8	4	20.4	1	29	1	8.2			JO 11/10
SH-21-WS-00 /	12	Surr	61	4	7.7	4	20.4	1	29	1	8.3	JO	JO	JO 11/11
SH-21-WS-00 /	13	Surr	61	4	7.7	4	20.5	1	29	1	8.3			CR 11/12
SH-21-WS-00 /	14	Surr	61	4	8.0	4	20.3	1	29	1	8.2		JO	JO 11/13
SH-21-WS-00 /	15	Surr	61	4	7.9	4	20.2	1	29	1	8.2	TS		TS 11/14
SH-21-WS-00 /	16	Surr	61	4	7.9	4	20.3	1	29	1	8.3		TS	JO 11/15
SH-21-WS-00 /	17	Surr	61	3	7.2	3	20.1	3	29	3	8.2			TS 11/16
SH-21-WS-00 /	18	Surr	61	3	7.3	3	20.1	3	29	3	8.1	CR	CR	2R 11/17
SH-21-WS-00 /	19	Surr	61	3	7.1	3	20.2	3	29	3	8.0			2R 11/18
SH-21-WS-00 /	20	Surr	61	3	6.9	3	20.2	3	29	3	7.9			2R 11/19

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW102908.01	PROTOCOL PSEP 1995	TEST START DATE 30-Oct-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 19-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0 D.O.		20±1 TEMP		28±1 SALINITY		8.0±1.0 pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
OB-13-SS-00 /	0	Surr	41	4	7.9	4	19.3	1	28	1	7.7		MMB	MMB 10/30
OB-13-SS-00 /	1	Surr	41	4	7.7	4	20.6	1	28	1	7.8			MMB 10/31
OB-13-SS-00 /	2	Surr	41	3	7.0	3	20.2	3	28	3	7.9		CR	CR 11/1
OB-13-SS-00 /	3	Surr	41	4	8.1	4	17.0	1	28	1	7.9	CR		CR 11/2
OB-13-SS-00 /	4	Surr	41	3	7.3	3	18.7	3	28	3	7.6		JO	JO 11/3
OB-13-SS-00 /	5	Surr	41	3	6.9	3	20.1	3	28	3	8.1			JO 11/4
OB-13-SS-00 /	6	Surr	41	3	7.1	3	19.9	3	28	3	8.1	JO	JO	JO 11/5
OB-13-SS-00 /	7	Surr	41	3	7.1	3	20.6	3	28	3	8.1			JO 11/6
OB-13-SS-00 /	8	Surr	41	3	7.2	3	20.2	3	28	3	8.2		TS	JO 11/7
OB-13-SS-00 /	9	Surr	41	3	6.9	3	20.2	3	28	3	8.1	JO		JO 11/8
OB-13-SS-00 /	10	Surr	41	4	7.7	4	20.3	1	28	1	8.2		MMB	JO 11/9
OB-13-SS-00 /	11	Surr	41	4	7.7	4	20.3	1	29	1	8.2			JO 11/10
OB-13-SS-00 /	12	Surr	41	4	7.7	4	20.2	1	29	1	8.3	JO	JO	JO 11/11
OB-13-SS-00 /	13	Surr	41	4	7.7	4	20.4	1	29	1	8.2			CR 11/12
OB-13-SS-00 /	14	Surr	41	4	8.0	4	20.0	1	29	1	8.1		JO	JO 11/13
OB-13-SS-00 /	15	Surr	41	4	8.0	4	20.1	1	29	1	8.2	TS		TS 11/14
OB-13-SS-00 /	16	Surr	41	4	8.0	4	20.2	1	29	1	8.2		TS	JO 11/15
OB-13-SS-00 /	17	Surr	41	3	7.4	3	20.0	3	29	3	8.2			TS 11/16
OB-13-SS-00 /	18	Surr	41	3	7.3	3	20.0	3	30	3	8.2	CR	CR	JR 11/17
OB-13-SS-00 /	19	Surr	41	3	7.2	3	20.2	3	29	3	8.0			JR 11/18
OB-13-SS-00 /	20	Surr	41	3	7.1	3	20.1	3	29	3	8.1			JR 11/19



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: <i>Oakland Bay</i>	Organism: <i>Neanthes</i>	NewFields Test ID:	Test Duration (days): <i>20d</i>
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PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: 10/30/08 *Day 0*
OVERLYING (OV) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
<i>10/30/08</i>	<i>20.0</i>	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
<i>Ø</i>	<i>Surf</i>	<i>T5 10/30/08</i>	<i>ND</i>	<i>19.5</i>	<i>10/30/08 T5</i>	<i>N</i>	<i>NA →</i>		<i>0.000</i>
<i>RF-0Ø</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.000</i>
<i>02</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.001</i>
<i>03</i>	|	|	<i>0.745</i>	|	|	|	|	|	<i>0.004</i>
<i>OB-01</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.016</i>
<i>02</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.004</i>
<i>05</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.019</i>
<i>06</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.006</i>
<i>11</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.014</i>
<i>12</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.005</i>
<i>13</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.022</i>
<i>14</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.007</i>
<i>17</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.004</i>
<i>19</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.003</i>
<i>SH-01</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.004</i>
<i>03</i>	|	|	<i>ND</i>	|	|	|	|	|	<i>0.004</i>



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: Dalland Bay	Organism: Neanthes	NewFields Test ID:	Test Duration (days): 20d
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PRETEST INITIAL / FINAL / OTHER (circle one) DAY of TEST: 10/30/08 Day 0
 OVERLYING (OV) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
10/30/08	20.0	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp $^{\circ}\text{C}$	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
∅	SURV	10/30/08 TS	ND	20.0	10/30/08 TS	N	7.3	26	2.226
RF- 01	↓	↓	2.26	↓	↓	↓	7.6	26	0.063
02	↓	↓	1.70	↓	↓	↓	7.7	27	0.063
03	↓	↓	2.84	↓	↓	↓	7.7	26	0.159
OB- 01	↓	↓	3.26	↓	↓	↓	7.3	26	0.197
02	↓	↓	2.02	↓	↓	↓	7.8	27	0.091
05	↓	↓	0.939	↓	↓	↓	7.9	26	0.059
06	↓	↓	ND	↓	↓	↓	7.8	27	0.030
11	↓	↓	0.967	↓	↓	↓	7.8	25	0.037
12	↓	↓	1.21	↓	↓	↓	7.6	26	0.027
13	↓	↓	1.22	↓	↓	↓	7.6	26	0.045
14	↓	↓	0.636	↓	↓	↓	7.6	26	0.053
17	↓	↓	0.836	↓	↓	↓	7.7	26	0.052
19	↓	↓	1.64	↓	↓	↓	7.7	27	0.063
SH- 01	↓	↓	0.956	↓	↓	↓	7.7	27	0.032
03	↓	↓	1.43	↓	↓	↓	7.6	27	0.049

Oakland Bay Wetlands Initial PW

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
SH- 04	Surr	10/30/08 TS	0.745	20.0	10/30/08 TS	N	7.6	26	0.035
09	|	|	2.68	|	|	|	7.6	27	0.079
10	|	|	0.934	|	|	|	7.6	26	0.183
11	|	|	0.584	|	|	|	7.6	26	0.114
13	|	|	0.632	|	|	|	7.6	26	0.099
14	|	|	1.19	|	|	|	7.6	27	0.050
21	|	|	0.624	|	|	|	7.6	27	0.024
28	|	|	1.40	|	|	|	7.6	27	0.063
HI- 02	|	|	5.03	|	|	|	7.6	26	0.192
04	|	|	6.17	|	|	|	7.5	26	0.200
06	|	|	1.78	|	|	|	7.5	26	0.186
07	↓	↓	4.29	|	↓	↓	7.5	27	0.222
SH-22	↓	↓	4.27	↓	↓	↓	7.5	27	0.172

NEWFIELDS

Ammonia Analysis Total Ammonia (mg/L)

Client/Project: Herrera/Oakland Bay	Organism: Neanthes	NewFields Test ID:	Test Duration (days): 20
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PRETEST / ~~INITIAL~~ / ~~FINAL~~ / OTHER (circle one) DAY of TEST: 20
~~OVERLYING (OV)~~ / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
1/19/08	22 ^o	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp $^{\circ}\text{C}$	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
Cont.	Surr	11/19/08 JR	< 0.5	20 ^o	11/19/08 JR/CE	N			0.002
RF-01	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.001
RF-02	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.010
RF-03	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.001
SH-28	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.004
HI-04	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.006
SH-22	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.002
HI-06	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.005
SH-09	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.000
OB-06	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.000
OB-11	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.001
SH-03	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.000
SH-13	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.001
OB-19	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.005
SH-10	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.006
OB-01	↓	↓	< 0.5	↓	↓	↓	↓	↓	0.002

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
SH-04	Surr	11/19/08 ZR	< 0.05 ^①	20°C	11/19/08 L.R.K.R	N			0.006
HI-07			< 0.05						0.004
OB-05			< 0.05						0.006
SH-14			< 0.05						0.001
OB-17			< 0.05						0.011
OB-02			< 0.05						0.010
OB-12			< 0.05						0.003
OB-14			< 0.05						0.004
OB-13			< 0.05						0.005
HI-02			< 0.5						0.003
SH-11			< 0.5						0.001
SH-01			< 0.5						0.007
SH-21			< 0.5						0.004

① Correct value is < 0.5 ZR 11/19/09



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: <i>Oakland Bay</i>	Organism: <i>Necthes</i>	NewFields Test ID:	Test Duration (days): <i>20</i>
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PRETEST / INITIAL (FINAL) / OTHER (circle one) DAY of TEST: 20
OVERLYING (OV) / (POREWATER (PW)) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
<i>1/19/08</i>	<i>22.0</i>	

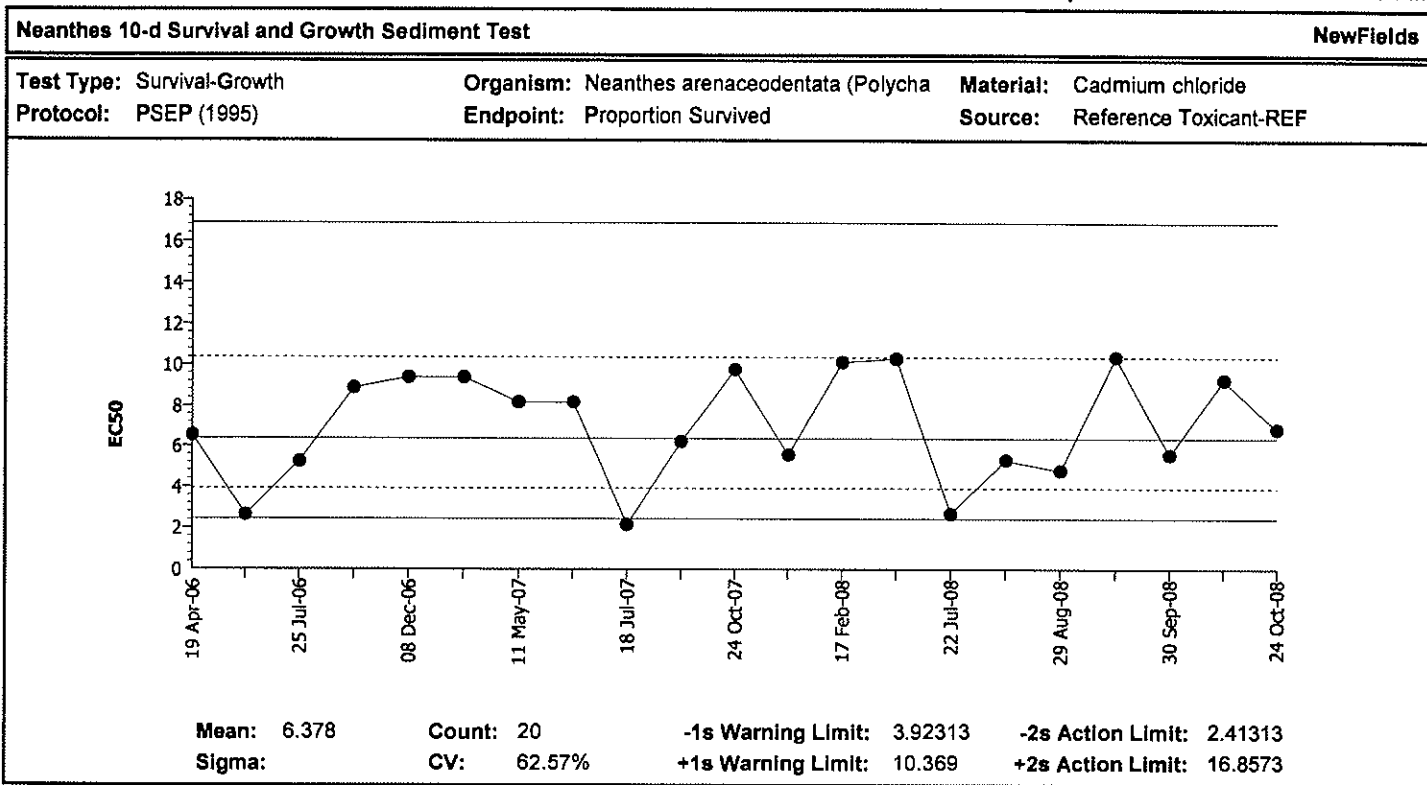
Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp $^{\circ}\text{C}$	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
<i>Control</i>	<i>Surr</i>	<i>1/19/08 CR/LR</i>	<i><0.5</i>	<i>25.0</i>	<i>1/19/08 CR/LR</i>	<i>N</i>	<i>6.8</i>	<i>30</i>	<i>0.022</i>
<i>RF-01</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>7.0</i>	<i>28</i>	<i>0.242</i>
<i>RF-02</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>7.0</i>	<i>28</i>	<i>0.054</i>
<i>RF-03</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>6.9</i>	<i>29</i>	<i>0.178</i>
<i>SH-28</i>	<i>↓</i>	<i>↓</i>	<i>0.742</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>6.6</i>	<i>29</i>	<i>0.086</i>
<i>HI-04</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>6.5</i>	<i>30</i>	<i>0.204</i>
<i>SH-22</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>6.9</i>	<i>30</i>	<i>0.080</i>
<i>HI-06</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>7.0</i>	<i>31</i>	<i>—</i>
<i>SH-09</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>6.5</i>	<i>31</i>	<i>0.105</i>
<i>OB-06</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>6.4</i>	<i>31</i>	<i>0.072</i>
<i>OB-11</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>6.7</i>	<i>30</i>	<i>0.091</i>
<i>SH-03</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>6.9</i>	<i>29</i>	<i>0.098</i>
<i>SH-13</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>6.2</i>	<i>32</i>	<i>0.059</i>
<i>OB-19</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>6.4</i>	<i>30</i>	<i>0.036</i>
<i>SH-10</i>	<i>↓</i>	<i>↓</i>	<i><0.5</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>6.8</i>	<i>27</i>	<i>0.183</i>
<i>OB-01</i>	<i>↓</i>	<i>↓</i>	<i>2.32</i>	<i>↓</i>	<i>↓</i>	<i>↓</i>	<i>6.9</i>	<i>31</i>	<i>0.136</i>

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
SH-04	Surr	11/19/08 CR/LR	40.5	25.0°	11/19/08 CR/LR	N	6.6	29	0.060
HI-07	↓	↓	40.5	↓	↓	↓	7.2	27	0.392
OB-05	↓	↓	40.5	↓	↓	↓	6.6	28	0.031
SH-14	↓	↓	40.5	↓	↓	↓	6.7	29	0.041 ^⑤ 0.057 ^⑥
OB-17	↓	↓	40.5	↓	↓	↓	6.6	30	0.031
OB-02	↓	↓	7.25 ^⑦ 40.5	↓	↓	↓	6.7	30	0.070
OB-12	↓	↓	40.5	↓	↓	↓	6.8	30	0.035
OB-14	↓	↓	0.500 40.5	↓	↓	↓	6.9	28	0.120
OB-13	↓	↓	2.28 ^⑧ 40.5	↓	↓	↓	6.7 ^⑨ 2/30	2/30	0.058
HI-02	↓	↓	0.774 ^⑩ 40.5	↓	↓	↓	7.3	29	0.066
SH-11	↓	↓	0.657 ^⑪ 40.5	↓	↓	↓	7.3	28	0.076
SH-01	↓	↓	40.5 ^⑫	↓	↓	↓	7.1	27	0.081
SH-21	↓	↓	40.5	↓	↓	↓	7.0	29	0.157

① MC CR 11/18
 ② Correct value is ~~2.28~~ 7R 11/19/08
 ③ Correct value is 40.5 7R 11/19/08
 ④ wrong entry 7R 11/19

⑤ IE 7R 11/19/08
 ⑥ IE 7R 11/19/08
 ⑦ IE 7R 11/19/08
 ⑧ IE 7R 11/19/08

CETIS QC Chart



Quality Control Data										
Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Apr	19	6.52448	0.14649	0.04673			06-6982-0696	07-7843-7824
2		Jun	23	2.61220	-3.76580	-1.83688	(-)		11-2423-7791	08-2080-8513
3		Jul	25	5.22653	-1.15147	-0.40971			15-7582-9934	07-9049-7308
4		Aug	31	8.86577	2.48777	0.67771			16-7169-3504	00-9849-6979
5		Dec	8	9.37175	2.99376	0.79192			10-5822-0812	10-0140-9364
6			8	9.37175	2.99376	0.79192			10-5822-0812	08-7192-3895
7	2007	May	11	8.16253	1.78453	0.50765			03-7778-9913	06-1785-2165
8		Jun	26	8.16258	1.78459	0.50766			09-6212-3109	14-8493-4946
9		Jul	18	2.13748	-4.24052	-2.24960	(-)	(-)	09-5163-0637	11-9760-1230
10		Sep	25	6.20193	-0.17607	-0.05760			06-6354-6111	12-2113-4941
11		Oct	24	9.76006	3.38207	0.87546			05-9113-1606	14-0319-5260
12			30	5.55412	-0.82388	-0.28462			03-0327-1386	13-6201-5780
13	2008	Feb	17	10.12762	3.74962	0.95153			11-6935-8907	04-7495-8038
14		Jul	2	10.30107	3.92307	0.98648			07-0160-7176	03-3190-0644
15			22	2.65108	-3.72691	-1.80648	(-)		12-3989-8103	10-4556-3131
16		Aug	5	5.30308	-1.07491	-0.37979			12-5764-3928	08-5080-2403
17			29	4.77241	-1.60559	-0.59676			04-2068-8020	17-2391-7369
18		Sep	26	10.37648	3.99848	1.00149	(+)		12-2518-6391	15-3142-3234
19			30	5.55412	-0.82388	-0.28462			14-9908-4079	13-4530-5299
20		Oct	9	9.26124	2.88325	0.76751			06-2717-9387	09-3671-8537
21			24	6.83792	0.45992	0.14328			19-3732-1210	15-3671-1948

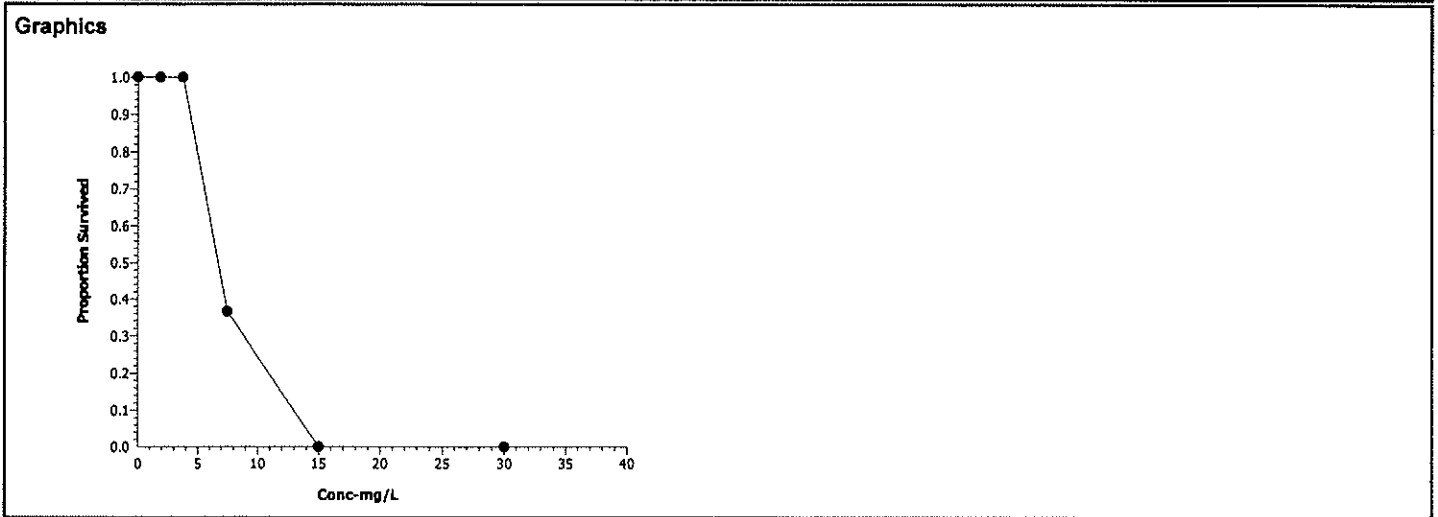
CETIS Analysis Detail

Neanthes 10-d Survival and Growth Sediment Test **NewFields**

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Trimmed Spearman-Kärber	19-3732-1210	19-3732-1210	21 Jan-09 2:24 PM	CETISv1.1.2

Spearman-Kärber Options					Point Estimates		
Threshold Option	Lower Threshold	Trim	Mu	Sigma	EC50/LC50	95% LCL	95% UCL
Control Threshold	0	0.00%	0.8349239	0.02648506	6.83792	6.05276	7.72492

Data Summary			Calculated Variate(A/B)						
Conc-mg/	Control Type	Count	Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	1.00000	1.00000	1.00000	0.00000	0.00000	30	30
1.875		3	1.00000	1.00000	1.00000	0.00000	0.00000	30	30
3.75		3	1.00000	1.00000	1.00000	0.00000	0.00000	30	30
7.5		3	0.36667	0.30000	0.40000	0.01179	0.05774	11	30
15		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	30
30		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	30



CETIS Analysis Detail

Neanthes 10-d Survival and Growth Sediment Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Comparison	19-3732-1210	19-3732-1210	21 Jan-09 2:24 PM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Fisher Exact	C > T	Untransformed		3.75	7.5	26.6667	5.30330	

Group Comparisons

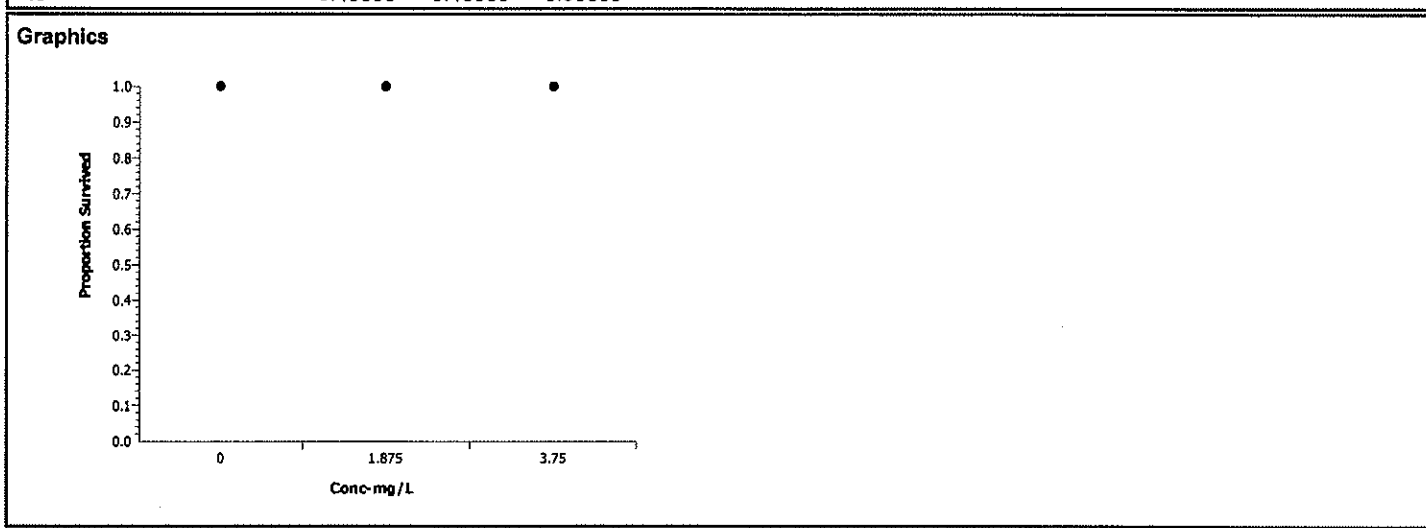
Control	vs	Conc-mg/L	Statistic	P-Value	Decision(0.05)
Dilution Water		1.875	1.00000	1.00000	Non-Significant Effect
Dilution Water		3.75	1.00000	1.00000	Non-Significant Effect
Dilution Water		7.5	0.00000	0.00000	Significant Effect

Data Summary

Conc-mg/L	Control Type	Non-Responders	Responders	Total Observed
0	Dilution Water	30	0	30
1.875		30	0	30
3.75		30	0	30
7.5		11	19	30

Data Detail

Conc-mg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Dilution Water	1.00000	1.00000	1.00000							
1.875		1.00000	1.00000	1.00000							
3.75		1.00000	1.00000	1.00000							
7.5		0.40000	0.40000	0.30000							



CETIS Data Worksheet

Report Date: 21 Jan-09 2:25 PM

Link: 19-3732-1210

Neanthes 10-d Survival and Growth Sediment Test										NewFields		
Start Date:		24 Oct-08 02:45 PM		Species:			Neanthes arenaceodentata			Sample Code:		1538938844
Ending Date:		28 Oct-08 03:00 PM		Protocol:			PSEP (1995)			Sample Source:		Reference Toxicant
Sample Date:		24 Oct-08 02:45 PM		Material:			Cadmium chloride			Sample Station:		P080418.27
Conc-mg/L	Code	Rep	Pos	# Exposed	# Survived	Total Weight-mg	Tare Weight-mg	Pan Count	Mean Length-mm	Notes		
0	D	1	14	10	10		0					
0	D	2	1	10	10		0					
0	D	3	17	10	10		0					
1.875		1	10	10	10		0					
1.875		2	12	10	10		0					
1.875		3	9	10	10		0					
3.75		1	18	10	10		0					
3.75		2	11	10	10		0					
3.75		3	8	10	10		0					
7.5		1	4	10	4		0					
7.5		2	16	10	4		0					
7.5		3	15	10	3		0					
15		1	5	10	0		0					
15		2	13	10	0		0					
15		3	7	10	0		0					
30		1	2	10	0		0					
30		2	6	10	0		0					
30		3	3	10	0		0					



96-HOUR REFERENCE TOXICANT TEST OBSERVATION DATASHEET

SPECIES <i>Neanthes arenaceodentata</i>
CLIENT: WDOE
PROJECT: Port Gardner
NEWFIELDS JOB #: 0
PROJECT MANAGER: Collin Ray
NEWFIELDS LAB: Port Gamble
PROTOCOL: PSEP 1995

SURVIVAL & BEHAVIOR DATA

#S= Number on the Surface #M= Number of Mortality L=Anoxic Surface F=Fungal Patches D=No Air Flow (DO?) U=Excess food N=Normal B=No Burrows				DAY 1			DAY 2			DAY 3			DAY 4			
				DATE			DATE			DATE			DATE			
				TECHNICIAN			TECHNICIAN			TECHNICIAN			TECHNICIAN			
INITIAL # OF ORGANISMS 10				10/25	10/26	10/27	10/28									
				L	MRP	BKH	BKH									
CLIENT/NEWFIELDS ID	CONC.		REP	INITIAL NUMBER	DAY 1			DAY 2			DAY 3			DAY 4		
	value	units			#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS
Ref.Tox.-cadmium	0	mg/L	1		10	0	N	10	0	N	10	0	N	10	0	N
			2		10	0	N	10	0	N	10	0	N	10	0	N
			3		10	0	N	10	0	N	10	0	N	10	0	N
Ref.Tox.-cadmium	1.875	mg/L	1		10	0	N	10	0	N	10	0	N	10	0	N
			2		10	0	N	10	0	N	10	0	N	10	0	N
			3		10	0	N	10	0	N	10	0	N	10	0	N
Ref.Tox.-cadmium	3.75	mg/L	1		10	0	N	10	0	N	10	0	N	10	0	N
			2		10	0	N	10	0	N	10	0	N	10	0	N
			3		10	0	N	10	0	N	10	0	N	10	0	N
Ref.Tox.-cadmium	7.5	mg/L	1		10	0	N	10	0	N	10	0	Q	4	6	Q
			2		10	0	N	10	0	N	10	0	Q	4	6	Q
			3		10	0	N	10	0	N	10	0	Q	3	7	Q
Ref.Tox.-cadmium	15	mg/L	1		10	0	N	10	0	N	6	4	Q	0	6	—
			2		10	0	N	10	0	N	5	5	Q	0	5	—
			3		10	0	N	10	0	N	6	4	Q	0	6	—
Ref.Tox.-cadmium	30	mg/L	1		10	0	N	0	10	—	—	—	—	—	—	—
			2		10	0	N	0	10	—	—	—	—	—	—	
			3		10	0	N	0	10	—	—	—	—	—	—	



96-HOUR REFERENCE TOXICANT TEST WATER QUALITY DATASHEET

CLIENT WDOE	PROJECT Port Gardner	SPECIES <i>Neanthes arenaceodentata</i>	NEWFIELDS LABORATORY Port Gamble	PROTOCOL PSEP 1995
NEWFIELDS JOB NUMBER 0	PROJECT MANAGER Collin Ray	QUANTITY OF STOCK : 4.5 mL ACTUAL: 4.51202	QUANTITY OF DILUENT: 1500mL ACTUAL: 1500.0	INIT TS DATE PREP 10/24/08
Test ID P080418.27	LOT #: 06510 TC	TEST START DATE: 24 ²³ Oct08	TIME 1445	TEST END DATE 28 ²⁷ Oct08
				TIME 1500

WATER QUALITY DATA

DILTIN.WAT.BATCH		TEMP REC#		REFERENCE TOX. MATERIAL						REFERENCE TOXICANT			
FSW102308.01				cadmium chloride						cadmium			
TEST CONDITIONS				DO (mg/L)		TEMP(C)		SAL (ppt)		pH		TECHNICIAN	
				> 6.0		20 ± 1		28 ± 1		8.00 ± 1			
CLIENT/ NEWFIELDS ID	CONCENTRATION		DAY	REP	D.O.		TEMP.		SALINITY		pH		WQ TECH
	value	units			meter	mg/L	meter	°C	meter	ppt	meter	unit	
Ref.Tox.-cadmium	0	mg/L	0	Stock	3	9.9	3	19.6	3	28	3	8.3	TS
			4	Rep	4	7.8	4	20.0	1	29	1	7.7	BH
Ref.Tox.-cadmium	1.875	mg/L	0	Stock	3	10.0	3	19.5	3	28	3	8.2	TS
			4	Rep	4	7.8	4	20.1	1	29	1	7.8	BH
Ref.Tox.-cadmium	3.75	mg/L	0	Stock	3	10.0	3	19.5	3	28	3	8.1	TS
			4	Rep	4	7.8	4	20.2	1	29	1	7.8	BH
Ref.Tox.-cadmium	7.5	mg/L	0	Stock	3	10.0	3	19.6	3	28	3	8.0	TS
			4	Rep	4	7.5	4	20.0	1	29	1	7.7	CR
Ref.Tox.-cadmium	15	mg/L	0	Stock	3	10.1	3	19.5	3	28	3	7.9	TS
			4	Rep	4	7.5	4	20.2	1	29	1	7.7	CR
Ref.Tox.-cadmium	30	mg/L	0	Stock	3	10.1	3	19.4	3	28	3	7.8	TS
			4	Rep	4	—	4	—	1	—	1	—	CR

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gambie Bath 4	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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			ENDPOINT DATA & OBSERVATIONS																									
CLIENT/NEWFIELDS ID	REP	JAR	INITIAL #	Date and Initials	11/6 BH	11/7 TS	11/8 MMNB	11/9 MMNB	11/10 CR	11/11 do	11/12 CR	11/13 BH	11/14 TS	11/15 T	11/14 TS	11/17 CR	11/18 MMNB	11/19 MMNB	11/20 CR	11/21 MMNB	11/22 BH	11/23 BH	11/24 MMNB	11/25 BH	NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
					INITIAL # OF ORGANISMS 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20			
Control /	1	154	5	N	N	N	N	N	N	N	N	N	N	G	G	G	N	N	G	G	G	G	G	G	5	1	175.05	207.82
	2	86												N	N		N	N							5	2	167.64	199.79
	3	49												N	N		G	G							5	3	184.48	238.17
	4	76												N	G	G									5	4	193.96	243.13
	5	42												G	G	G									5	5	174.71	225.79
RF-01-SS-00 /	1	109								N	N		G	G	G									G	3	6	200.57	234.19
	2	24											N	N	N										5	7	175.19	246.78
	3	63											N	G	G										5	8	159.21	231.22
	4	93											G	G											6	9	219.00	275.35
	5	47												G											5	10	200.96	246.22
RF-02-SS-00 /	1	120											N	G			G	G	IS					G	5	11	190.41	227.52
	2	5											N	N	N	N	N	N							5	12	217.13	301.01
	3	132											G	G	G	G	G	G							5	13	231.79	270.53
	4	172														G									5	14	210.40	264.55
	5	107											N	N		G									5	15	209.98	229.29

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 4	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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		ENDPOINT DATA & OBSERVATIONS																				NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)			
CLIENT/NEWFIELDS ID	REP	JAR	INITIAL #	11/6 BH	11/7 JS	11/8 MMB	11/9 MMB	11/10 CR	11/11 DO	11/12 CR	11/13 BH	11/14 JS	11/15 JS	11/16 JS	11/17 CR	11/18 MMB	11/19 MMB	11/20 CR	11/21 MMB	11/22/2004 BH	11/23 BH					11/24 MMB	11/25 BH	
RF-03-SS-00 /	1	147	S	N	N	N	N	N	N	N	N	N	N	N	N	G	G	G	G	G	G	G	G	G	4	16	216.89	239.13
	2	136							N				N	G	G										5	17	173.45	220.41
	3	152							N					G											5	18	227.74	251.65
	4	168							N					G											4	19	209.58	238.95
	5	17							N					N	N	N									2	20	211.00	240.34
SH-06-SS-00 /	1	126				N	G	G	G	G	G	G	G	G	G										5	21	197.69	217.31
	2	68					G																		5	22	211.94	251.63
	3	34					G																		5	23	217.88	238.33
	4	156				G	G																		5	24	219.50	263.97
	5	102				N	G																		5	25	218.45	239.49
SH-25-WS-00 /	1	6				N	N	N																	5	26	208.89	281.20
	2	8						G																	5	27	166.47	239.81
	3	85						N																	4	28	201.21	223.48
	4	157																							4	29	197.41	217.03
	5	141																							4	30	188.18	201.17

① 1 animal lost wt. count will be 4 11/25/08 BH
 ② 1 other worm present in sample mmb 11/25/08



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 4	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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ENDPOINT DATA & OBSERVATIONS

CLIENT/NEWFIELDS ID	REP	JAR	INITIAL #	Date and Initials																				NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
				11/6 BH	11/7 TS	11/8 MMB	11/9 MMB	11/10 CR	11/11 80	11/12 CR	11/13 BH	11/14 TS	11/15 TS	11/16 JS	11/17 CR	11/18 MMB	11/19 MMB	11/20 CR	11/21 MMB	11/22 BH	11/23 BH	11/24 MMB	11/25 BH				
SH-12-SS-00 /	1	7	5	N	N	N	N	N	N	N	G	G	G	G	G	G	G	G	G	G	50	31	157.45	234.72			
	2	108									↓										50	32	218.75	272.36			
	3	4									N										2	33	157.56	163.82			
	4	80										G									4	34	180.34	202.81			
	5	30						↓	↓	G	G											5	35	176.02	237.66		
OB-10-SS-00 /	1	81						G	G	N	N										5	36	192.60	248.33			
	2	32						N	N	G	G										5	37	153.29	203.91			
	3	29							U	G	G										5	38	156.28	214.23			
	4	59							N	N	N										5	39	179.91	218.58			
	5	12								N	N										5	40	208.11	275.12			
SH-20-WS-00 /	1	13								U	N										5	41	226.60	254.25			
	2	65								↓											5	42	230.91	260.37			
	3	11							U	G	U	G									5	43	190.94	277.44			
	4	16						G	N	N	N										5	44	166.13	232.23			
	5	40						N	↓	G	G										5	45	232.93	293.56			

① other worms present 11-25-08 BH
② 2 very big other worms (nephthys sp.)



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 4	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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ENDPOINT DATA & OBSERVATIONS

CLIENT/NEWFIELDS ID	REP	JAR	INITIAL #	Date and Initials	11/6 BH	11/7 TS	11/8 MMB	11/9 MMB	11/10 CR	11/11 DO	11/12 CR	11/13 BH	11/14 TS	11/15 TS	11/16 TS	11/17 CR	11/18 MMB	11/19 MMB	11/20 CR	11/21 MMB	11/22 BH	11/23 BH	11/24 MMB	11/25 BH	NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
					5																							
SH-26-WS-00 /	1	153	5	N	N	N	N	G	G	N	G	G	G	G	G	G	G	G	G	G	G	G	G	G	5	46 195.63	206.49	
	2	14	↓					G		G															5	47 211.90	231.34	
	3	55	↓					G		G															5	48 194.30	230.56	
	4	75	↓					N		N															5	49 218.71	256.37	
	5	106	↓					G		G															5	50 199.71	220.65	
SH-15-SS-00 /	1	158	0					U		U		N	G												00	51 223.81	-	
	2	53	5					G		G		G													4	52 240.94	277.01	
	3	138	↓					G																	50	53 179.44	188.90	
	4	35	↓					N																	5	54 231.35	276.61	
	5	31	↓					G																	5	55 174.74	230.55	
OB-04-SS-00 /	1	66	5					N			G	G													5	56 229.54	250.19	
	2	118	↓					G			G	U													5	57 199.41	234.30	
	3	61	↓					N			G														5	58 177.93	235.42	
	4	124	↓					G			G														5	59 156.20	220.44	
	5	21	↓																						5	60 176.78	241.66	

① No animals added no x on jar jar indicating addition
 ② very small *Neanthes* recovered compared to other reps.



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gambi'e Bath 4	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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ENDPOINT DATA & OBSERVATIONS

CLIENT/NEWFIELDS ID	REP	JAR	INITIAL #	Date and Initials																				NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
				9/6 BH	11/7 TS	11/8 MMB	11/9 MMB	11/10 CR	11/11 DO	11/12 CR	11/13 BH	11/14 TS	11/15 TS	11/16 JJ	11/17 CR	11/18 MMB	11/19 MMB	11/20 CR	11/21 MMB	11/22 BH	11/23 BH	11/24 MMB	11/25 BH				
SH-24-WS-00 /	1	70	5	N	N	N	N	N	N	N	N	G	G	G	G	G	G	G	G	G	G	0 ⁽²⁾	61	237.18	-		
	2	67							N	N	N											4 ⁽³⁾	62	245.45	252.42		
	3	22							G	G	G											0 ⁽⁴⁾	63	164.96	-		
	4	115							N	N	N											5	64	191.60	248.76		
	5	146							G	G	G											5	65	249.12	282.64		
HI-05-SS-00 /	1	71							N	N	N											5	66	232.82	276.71		
	2	98							N	N												5	67	199.89	248.79		
	3	122							G	N												4	68	198.42	209.69		
	4	60							G ⁽¹⁾	N												5	69	193.17	225.72		
	5	119							G	N	V											5	70	217.88	240.14		
SH-23-WS-00 /	1	10							V	V	G	G										5	71	209.76	269.47		
	2	169							V	V	G											5	72	201.84	228.67		
	3	2							N	N	N											2	73	183.73	193.97		
	4	73							V	V	G											4	74	179.88	194.83		
	5	128							V	V	G											5	75	163.80	204.65		

(1) we saw 11/11
 (2) x on jar, but no animals recovered
 (3) 1 big other worm (Nephtys)
 (4) other worms



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 4	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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ENDPOINT DATA & OBSERVATIONS

CLIENT/NEWFIELDS ID	REP	JAR	INITIAL #	Date and Initials																				NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
				11/6 BH	11/7 TS	11/8 MMB	11/9 MMB	11/10 CR	11/11 DO	11/12 CR	11/13 BH	11/14 TS	11/15 TS	11/16 ↑	11/17 CR	11/18 MMB	11/19 MMB	11/20 CR	11/21 MMB	11/22 BH	11/23 BH	11/24 MMB	11/25 BH				
SH-27-WS-00 /	1	44	5	N	N	N	N	N	N	G	G	G	G	G	G	G	G	G	G	G	G	G	4	76	193.97	222.58	
	2	92																					4	77	212.29	252.82	
	3	91																					4	78	188.73	199.47	
	4	20																					5	79	162.43	213.98	
	5	19																					2	80	211.36	216.97	
OB-07-SS-00 /	1	103																					5	81	169.84	197.66	
	2	134																					3	82	184.21	198.20	
	3	113																					5	83	225.14	256.81	
	4	3																					5	84	186.71	235.33	
	5	167																					5	85	164.87	189.84	
OB-09-SS-00 /	1	163																					5	86	153.05	193.52	
	2	18																					5	87	153.88	208.36	
	3	15																					5	88	236.29	286.57	
	4	97																					5	89	190.43	232.77	
	5	48																					5	90	167.55	222.12	



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 4	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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CLIENT/NEWFIELDS ID		REP	JAR	INITIAL #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
SH-18-WS-00 /	1	173	5	N	N	N	N	N	N	N	G	G	G	G	G	G	G	G	G	G	G	G	G	G	5	91	209.36	256.04
	2	170									G														4	92	222.41	266.55
	3	38									G														5	93	173.18	210.90
	4	101									G														5	94	219.13	255.42
	5	45									N	N													5	95	244.60	292.72
OB-08-SS-00 /	1	159									N	N													5	96	221.48	291.64
	2	162											N												0	97	166.68	-
	3	151											G												5	98	202.21	222.05
	4	104																							5	99	178.06	225.22
	5	23																							5	100	175.35	215.74
SH-30-WS-00 /	1	39									G	G													5	101	148.01	173.68
	2	77									N														5	102	196.24	230.05
	3	37									G														5	103	205.25	261.49
	4	26									G														0	104	150.94	-
	5	123									G														5	105	173.76	208.24

- ① 1 big weight
- ② 2 animals lost during transfer wt. count will be out of 3 animals
- ③ lotter worn. x is on jar

20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 4	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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ENDPOINT DATA & OBSERVATIONS

CLIENT/NEWFIELDS ID	REP	JAR	INITIAL #	Date and Initials																				NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
SH-19-WS-00 /	1	121	5	N	N	N	N	N	N	G	G	G	G	G	G	G	G	G	G	G	G	5	106	149.85	184.12		
	2	1								N	N	N										5	107	160.44	218.80		
	3	46								G	G	G										30	108	168.59	178.38		
	4	27								N	G											4	109	179.38	210.67		
	5	144				G	G	G	G	G	G												10	110	171.85	181.36	
OB-18-WS-00 /	1	100				G	G	G	G		G											5	111	167.30	208.48		
	2	110				N	N	G														5	112	197.43	232.46		
	3	72					N	G														5	113	164.57	221.75		
	4	125					N	G														4	114	190.21	205.49		
	5	149					G	G	G	G												5	115	166.01	217.20		
SH-16-SS-00 /	1	57					N	N	N	G												5	116	162.67	205.48		
	2	140						G	G	G												4	117	212.67	237.37		
	3	36						N	N	N	G											5	118	185.21	219.32		
	4	143						N	N	G	G											4	119	227.28	237.63		
	5	54						G	G	G	G											5	120	184.35	211.29		

① other worm present
② other worms present



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 4	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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ENDPOINT DATA & OBSERVATIONS

CLIENT/NEWFIELDS ID	REP	JAR	INITIAL #	Date and Initials																				NUMBER ALIVE	WEIGHT BOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
				11/6 BH	11/7 TS	11/8 MMB	11/9 MMB	11/10 CR	11/11 JO	11/12 CR	11/13 BH	11/14 TS	11/15 TS	11/16 TS	11/17 CR	11/18 MMB	11/19 MMB	11/20 CR	11/21 MMB	11/22 BH	11/23 BH	11/24 MMB	11/25 BH				
SH-02-SS-00 /	1	114	5	N	N	N	N	N	N	N	N	G	G	G	G	G	G	G	G	G	G	5	121	157.60	208.77		
	2	87						N	N	N	G											5	122	150.32	186.78		
	3	171						G	G	G	G											5	123	160.70	196.51		
	4	166						G	G		G											5	124	147.76	172.84		
	5	112						N	N		G											5	125	196.41	242.92 143.10		
HI-03-SS-00 /	1	64						N	G		G											5	126	175.03	228.13		
	2	150						G														5	127	187.36	241.47		
	3	142						G	G													5	128	192.86	206.25		
	4	28						N	G													5	129	175.24	213.16		
	5	116						N	G													5	130	160.42	206.08		
OB-03-SS-00 /	1	160						G	G	G		G										5	131	202.90	228.30		
	2	174						G	G													5	132	134.27	182.49		
	3	139						G	G													5	133	194.99	-		
	4	79						G	G													5	134	196.88	245.81		
	5	62						G	G													5	135	182.97	202.07		

① 16. reweighed 12.22.08 15x
② WC ③ 1 other worm present



20-DAY SOLID PHASE BIOASSAY
OBSERVATION DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	JOB NO. 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY Port Gamble Bath 4	PROTOCOL PSEP 1995	SPECIES <i>Neanthes arenaceodentata</i>
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ENDPOINT DATA & OBSERVATIONS

CLIENT/NEWFIELDS ID	REP	JAR	INITIAL #	Date and Initials																				NUMBER ALIVE	WEIGHT SOAT NUMBER	TARE WEIGHT (mg)	TOTAL WEIGHT (mg)
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
SH-29-WS-00 /	1	127	5	N	N	N	N	G	G	G	G	G	G	G	G	G	G	G	G	G	G	5	136	171.69	193.02		
	2	58						G		G												5	137	198.74	220.21		
	3	78						G		N												5	138	167.60	220.61		
	4	74						G		N												4	139	159.58	199.61		
	5	130						G		G													4	140	157.75	170.76	
SH-07-SS-00 /	1	89						N	N	N	N											5	141	161.03	200.27		
	2	95																				4	142	159.55	191.47		
	3	84																				5	143	150.78	198.94		
	4	105																				5	144	150.90	203.58		
	5	88																				5	145	176.50	203.21		

Zero time Neanthes weights

#animals	Soat	tare wt (mg)	final dry wt (mg)
5	96	45.51	47.47
5	97	45.44.08	47.50
5	98	45.60	48.39

1.96
~~3.42~~ 2.42
 2.79
~~8.17~~ / 5/3 = ~~0.545~~ mg
 7.17 0.478 mg

146 - 140.85
 147 - 129.21
 148 - 121.34
 149 - 141.02
 150 - 126.85

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
Control /	0	Surr	145	4	7.8	4	20.0	1	28	1	7.9		JO	CR 11/5/08
Control /	1	Surr	145	3	7.0	3	20.0	3	28	3	7.9			JO 11/6
Control /	2	Surr	145	3	7.0	3	20.2	3	28	3	8.1		TS	JO 11/7
Control /	3	Surr	145	3	6.8	3	20.3	3	28	3	8.0	JO		JO 11/8
Control /	4	Surr	145	4	7.8	4	20.4	1	28	1	8.0		NOB	JO 11/9
Control /	5	Surr	145	4	7.8	4	20.4	1	29	1	8.0			JO 11/10
Control /	6	Surr	145	4	7.7	4	20.5	1	29	1	8.1	JO	JO	JO 11/11
Control /	7	Surr	145	4	7.7	4	20.6	1	29	1	8.1			CR 11/12
Control /	8	Surr	145	4	8.0	4	20.5	1	29	1	8.0		JO	BH 11/12
Control /	9	Surr	145	4	7.8	4	20.4	1	29	1	8.1	TS		TS 11/14
Control /	10	Surr	145	4	8.0	4	20.4	1	29	1	8.2		TS	JO 11/15
Control /	11	Surr	145	3	7.4	3	20.2	3	29	3	8.1			TS 11/16
Control /	12	Surr	145	3	6.9	3	22.3	3	30	3	8.1	CR	CR	JR 11/17
Control /	13	Surr	145	3	7.4	3	20.2	3	29	3	8.0			JR 11/18
Control /	14	Surr	145	3	7.3	3	19.9	3	29	3	8.1		JO	JR 11/19
Control /	15	Surr	145	3	8.5	3	18.8	3	30	3	8.2	BH/CR		JR 11/20
Control /	16	Surr	145	3	7.6	3	20.1	3	30	3	8.2		JR	JR 11/21
Control /	17	Surr	145	3	7.3	3	20.2	3	30	3	8.1			JR 11/22
Control /	18	Surr	145	4	7.8	4	20.3	1	29	1	8.1	BH	BH	BH 11/23
Control /	19	Surr	145	3	7.1	3	20.1	3	29	3	7.8			JR 11/24
Control /	20	Surr	145	3	7.5	3	20.2	3	29	3	8.1			JR 11/25



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0 D.O.		20 ± 1 TEMP		28 ± 1 SALINITY		8.0 ± 1.0 pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
RF-01-SS-00/	0	Surr	165	4	7.8	4	20.2	1	28	1	8.0		Jo	CS 11/5/08
RF-01-SS-00/	1	Surr	165	3	7.0	3	20.0	3	28	3	8.1			Jo 11/6
RF-01-SS-00/	2	Surr	165	3	6.9	3	20.2	3	28	3	8.1		TS	Jo 11/7
RF-01-SS-00/	3	Surr	165	3	6.6	3	20.3	3	28	3	8.1	Jo		Jo 11/8
RF-01-SS-00/	4	Surr	165	4	7.7	4	20.5	1	28	1	8.1		MBS	Jo 11/9
RF-01-SS-00/	5	Surr	165	4	7.7	4	20.5	1	29	1	8.2			Jo 11/10
RF-01-SS-00/	6	Surr	165	4	7.3	4	20.5	1	29	1	8.4	Jo	Jo	Jo 11/11
RF-01-SS-00/	7	Surr	165	4	7.5	4	20.5	1	29	1	8.6			CR 11/12
RF-01-SS-00/	8	Surr	165	4	7.7	4	20.5	1	29	1	8.4		Jo	BH 11/13
RF-01-SS-00/	9	Surr	165	4	7.8	4	20.4	1	29	1	8.5	TS		TS 11/14
RF-01-SS-00/	10	Surr	165	4	7.8	4	20.5	1	29	1	8.5		TS	Jo 11/15
RF-01-SS-00/	11	Surr	165	3	7.4	3	20.2	3	29	3	8.4			F 11/16
RF-01-SS-00/	12	Surr	165	3	6.9	3	22.3	3	29	3	8.4	CR	CR	LR 11/17
RF-01-SS-00/	13	Surr	165	3	7.4	3	20.2	3	29	3	8.2			LR 11/18
RF-01-SS-00/	14	Surr	165	3	7.2	3	20.0	3	29	3	8.2		LR	LR 11/19
RF-01-SS-00/	15	Surr	165	3	8.0	3	18.7	3	29	3	8.3	BH/LR		LR 11/20
RF-01-SS-00/	16	Surr	165	3	7.5	3	20.1	3	29	3	8.2		LR	LR 11/21
RF-01-SS-00/	17	Surr	165	3	7.3	3	20.1	3	30	3	8.2			LR 11/22
RF-01-SS-00/	18	Surr	165	4	7.8	4	20.3	1	29	1	8.1	BH	BH	BH 11/23
RF-01-SS-00/	19	Surr	165	3	7.0	3	20.1	3	29	3	7.9			LR 11/24
RF-01-SS-00/	20	Surr	165	3	7.7	3	20.2	3	29	3	8.2			LR 11/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
RF-02-SS-00 /	0	Surr	82	4	7.4	4	20.3	1	28	1	7.7		JO	aw 11/5/08
RF-02-SS-00 /	1	Surr	82	3	7.0	3	19.8	3	28	3	7.8			JO 11/6
RF-02-SS-00 /	2	Surr	82	3	6.2	3	20.2	3	28	3	7.9		TS	JO 11/7
RF-02-SS-00 /	3	Surr	82	3	3.6 ^①	3	20.3	3	28	3	7.6	JO		JO 11/8
RF-02-SS-00 /	4	Surr	82	4	7.6	4	20.5	1	28	1	8.0		MWB	JO 11/9
RF-02-SS-00 /	5	Surr	82	4	7.7	4	20.5	1	29	1	8.0			JO 11/10
RF-02-SS-00 /	6	Surr	82	4	7.4	4	20.4	1	29	1	8.0	JO	JO	JO 11/11
RF-02-SS-00 /	7	Surr	82	4	7.5	4	20.6	1	29	1	8.2			CR 11/12
RF-02-SS-00 /	8	Surr	82	4	7.9	4	20.5	1	29	1	8.1		JO	BH 11/13
RF-02-SS-00 /	9	Surr	82	4	7.8	4	20.3	1	29	1	8.3	TS		TS 11/14
RF-02-SS-00 /	10	Surr	82	4	7.8	4	20.4	1	29	1	8.3		YS	JO 11/15
RF-02-SS-00 /	11	Surr	82	3	7.3	3	20.1	3	29	3	8.3			TS 11/16
RF-02-SS-00 /	12	Surr	82	3	7.0	3	22.4	3	29	3	8.4	CR	CR	JR 11/17
RF-02-SS-00 /	13	Surr	82	3	7.5	3	20.1	3	29	3	8.3			JR 11/18
RF-02-SS-00 /	14	Surr	82	3	7.6	3	19.9	3	29	3	8.5		JR	JR 11/19
RF-02-SS-00 /	15	Surr	82	3	9.0	3	18.6	3	29	3	8.7	BH/LR		JR 11/20
RF-02-SS-00 /	16	Surr	82	3	7.4	3	20.1	3	29	3	8.5		JR	JR 11/21
RF-02-SS-00 /	17	Surr	82	3	7.3	3	20.1	3	30	3	8.3			JR 11/22
RF-02-SS-00 /	18	Surr	82	4	7.9	4	20.3	1	29	1	8.2	BH	BH	BH 11/23
RF-02-SS-00 /	19	Surr	82	3	7.1	3	20.0	3	28	3	8.0			JR 11/24
RF-02-SS-00 /	20	Surr	82	3	7.5	3	20.2	3	28	3	8.3			JR 11/25

① denatation tube out of jar. Replaced.

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB0#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0 D.O.		20 ± 1 TEMP		28 ± 1 SALINITY		8.0 ± 1.0 pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
RF-03-SS-00 /	0	Surr	96	4	7.8	4	20.3	1	28	1	8.0		JO	CR 11/5/08
RF-03-SS-00 /	1	Surr	96	3	6.8	3	20.0	3	28	3	7.9			JO 11/6
RF-03-SS-00 /	2	Surr	96	3	7.0	3	19.8	3	28	3	7.7		TS	JO 11/7
RF-03-SS-00 /	3	Surr	96	3	6.6	3	20.2	3	28	3	8.1	JO		JO 11/8
RF-03-SS-00 /	4	Surr	96	4	7.7	4	20.4	1	28	1	8.1		MNB	JO 11/9
RF-03-SS-00 /	5	Surr	96	4	7.8	4	20.4	1	29	1	8.1			JO 11/10
RF-03-SS-00 /	6	Surr	96	4	7.6	4	20.4	1	29	1	8.1	JO	JO	JO 11/11
RF-03-SS-00 /	7	Surr	96	4	7.7	4	20.5	1	29	1	8.1			CR 11/12
RF-03-SS-00 /	8	Surr	96	4	7.9	4	20.5	1	29	1	8.0		JO	BH 11/13
RF-03-SS-00 /	9	Surr	96	4	7.8	4	20.3	1	29	1	8.0	TS		TS 11/14
RF-03-SS-00 /	10	Surr	96	4	7.8	4	20.3	1	29	1	8.1		TS	JO 11/15
RF-03-SS-00 /	11	Surr	96	3	7.3	3	20.1	3	29	3	8.1			TS 11/16
RF-03-SS-00 /	12	Surr	96	3	8.1 ^{CR} 6.8	3	22.2	3	30	3	8.1	CR	CR	2R 11/17
RF-03-SS-00 /	13	Surr	96	3	7.2	3	20.1	3	29	3	8.0			2R 11/18
RF-03-SS-00 /	14	Surr	96	3	7.2	3	19.9	3	29	3	8.2		2R	2R 11/19
RF-03-SS-00 /	15	Surr	96	3	8.6	3	18.6	3	30	3	8.3	BH/LR		2R 11/20
RF-03-SS-00 /	16	Surr	96	3	7.3	3	20.1	3	29	3	8.3		2R	2R 11/21
RF-03-SS-00 /	17	Surr	96	3	7.3	3	20.1	3	30	3	8.3			2R 11/22
RF-03-SS-00 /	18	Surr	96	4	7.8	4	20.2	1	29	1	8.2	BH	BH	BH 11/23
RF-03-SS-00 /	19	Surr	96	3	7.0	3	20.0	3	28	3	8.0			2R 11/24
RF-03-SS-00 /	20	Surr	96	3	7.7	3	20.2	3	29	3	8.3			2R 11/25

⓪ Incorrect entry 2R 11/17/07

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)	TEMP (C)	SALINITY (ppt)	pH		WATER RENEWAL	Feeding	TECH/DATE			
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0	20 ± 1	28 ± 1	8.0 ± 1.0							
				D.O.	TEMP	SALINITY	pH							
				meter	meter	meter	meter	unit						
SH-06-SS-00 /	0	Surr	41	4	7.6	4	20.3	1	28	1	7.7		Jo	Car 11/5/08
SH-06-SS-00 /	1	Surr	41	3	6.7	3	20.0	3	28	3	7.8			Jo 11/6
SH-06-SS-00 /	2	Surr	41	3	6.7	3	20.2	3	28	3	8.0		TS	Jo 11/7
SH-06-SS-00 /	3	Surr	41	3	6.3	3	20.3	3	28	3	7.9	Jo		Jo 11/8
SH-06-SS-00 /	4	Surr	41	4	7.6	4	20.5	1	28	1	8.0		MMO	Jo 11/9
SH-06-SS-00 /	5	Surr	41	4	7.6	4	20.5	1	29	1	7.9			Jo 11/10
SH-06-SS-00 /	6	Surr	41	4	7.6	4	20.5	1	29	1	8.0	Jo	Jo	to 11/11
SH-06-SS-00 /	7	Surr	41	4	7.7	4	20.6	1	29	1	8.1			CR 11/12
SH-06-SS-00 /	8	Surr	41	4	7.9	4	20.6	1	29	1	8.1		Jo	BH 11/13
SH-06-SS-00 /	9	Surr	41	4	7.8	4	20.3	1	29	1	8.0	TS		TS 11/14
SH-06-SS-00 /	10	Surr	41	4	7.9	4	20.4	1	29	1	8.2		TS	Jo 11/15
SH-06-SS-00 /	11	Surr	41	3	7.8	3	20.2	3	28	3	8.3			TS 11/16
SH-06-SS-00 /	12	Surr	41	3	6.9	3	22.8	3	29	3	8.3	CR	CR	JR 11/17
SH-06-SS-00 /	13	Surr	41	3	7.4	3	20.2	3	29	3	8.2			JR 11/18
SH-06-SS-00 /	14	Surr	41	3	7.3	3	20.1	3	29	3	8.3		JR	JR 11/19
SH-06-SS-00 /	15	Surr	41	3	8.5	3	18.8	3	29	3	8.3	BH/LR		JR 11/20
SH-06-SS-00 /	16	Surr	41	3	7.2	3	20.2	3	29	3	8.3		JR	JR 11/21
SH-06-SS-00 /	17	Surr	41	3	7.3	3	20.2	3	30	3	8.3			JR 11/22
SH-06-SS-00 /	18	Surr	41	4	7.9	4	20.3	1	29	1	8.2	BH	BH	BH 11/23
SH-06-SS-00 /	19	Surr	41	3	7.0	3	20.0	3	29	3	8.1			JR 11/24
SH-06-SS-00 /	20	Surr	41	3	7.1	3	20.2	3	29	3	8.4			JR 11/25

① IE JHO 11/7/08
② Wrong page JHO 11/10



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB0#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
SH-25-WS-00 /	0	Surr	69	4	7.6	4	20.2	1	28	1	7.6		JO	aw 11/5/08
SH-25-WS-00 /	1	Surr	69	3	6.8	3	19.8	3	28	3	7.7			JO 11/6
SH-25-WS-00 /	2	Surr	69	3	6.7	3	20.2	3	28	3	7.9		TS	JO 11/7
SH-25-WS-00 /	3	Surr	69	3	6.6	3	20.3	3	28	3	7.9	JO		JO 11/8
SH-25-WS-00 /	4	Surr	69	4	7.6	4	20.9	1	28	1	8.0		NMB	JO 11/9
SH-25-WS-00 /	5	Surr	69	4	7.7	4	20.5	1	29	1	8.1			JO 11/10
SH-25-WS-00 /	6	Surr	69	4	7.6	4	20.4	1	29	1	8.1	JO	JO	JO 11/11
SH-25-WS-00 /	7	Surr	69	4	7.6	4	20.6	1	29	1	8.3			CR 11/12
SH-25-WS-00 /	8	Surr	69	4	7.9	4	20.5	1	29	1	8.3		JO	BH 11/13
SH-25-WS-00 /	9	Surr	69	4	7.7	4	20.2	1	29	1	8.1		TS	TS 11/14
SH-25-WS-00 /	10	Surr	69	4	7.7	4	20.4	1	29	1	8.3		TS	JO 11/15
SH-25-WS-00 /	11	Surr	69	3	7.4	3	20.1	3	29	3	8.4			TS 11/16
SH-25-WS-00 /	12	Surr	69	3	7.0	3	22.5	3	29	3	8.5	CR	CR	JR 11/17
SH-25-WS-00 /	13	Surr	69	3	7.5	3	20.2	3	29	3	8.4			JR 11/18
SH-25-WS-00 /	14	Surr	69	3	7.3	3	20.0	3	29	3	8.5		JR	JR 11/19
SH-25-WS-00 /	15	Surr	69	3	8.7	3	18.7	3	29	3	8.7	BH/LR		JR 11/20
SH-25-WS-00 /	16	Surr	69	3	7.4	3	20.1	3	29	3	8.5		JR	JR 11/21
SH-25-WS-00 /	17	Surr	69	3	7.3	3	20.1	3	30	3	8.5			JR 11/22
SH-25-WS-00 /	18	Surr	69	4	7.8	4	20.3	1	29	1	8.4	BH	BH	BH 11/23
SH-25-WS-00 /	19	Surr	69	3	6.9	3	20.0	3	28	3	8.1			JR 11/24
SH-25-WS-00 /	20	Surr	69	3	7.3	3	20.2	3	29	3	8.4			JR 11/25

① WC JHO 11/11



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
SH-12-SS-00/	0	Surr	50	4	7.6	4	20.4	1	28	1	7.8		Jo	CW 11/5/08
SH-12-SS-00/	1	Surr	50	3	6.8	3	20.1	3	28	3	7.8			Jo 11/6
SH-12-SS-00/	2	Surr	50	3	6.6	3	20.2	3	28	3	8.0		TS	Jo 11/7
SH-12-SS-00/	3	Surr	50	3	6.5	3	20.4	3	28	3	8.0	Jo		Jo 11/8
SH-12-SS-00/	4	Surr	50	4	7.6	4	20.5	1	28	1	8.1		MMO	Jo 11/9
SH-12-SS-00/	5	Surr	50	4	7.6	4	20.5	1	29	1	8.1			Jo 11/10
SH-12-SS-00/	6	Surr	50	4	7.4	4	20.5	1	29	1	8.2	Jo	Jo	Jo 11/11
SH-12-SS-00/	7	Surr	50	4	7.6	4	20.5	1	29	1	8.2			CR 11/12
SH-12-SS-00/	8	Surr	50	4	7.9	4	20.6	1	29	1	8.1		Jo	BH 11/13
SH-12-SS-00/	9	Surr	50	4	7.8	4	20.4	1	29	1	8.2	TS		TS 11/14
SH-12-SS-00/	10	Surr	50	4	7.9	4	20.4	1	29	1	8.4		TS	Jo 11/15
SH-12-SS-00/	11	Surr	50	3	7.9	3	20.2	3	29	3	8.4			TS 11/16
SH-12-SS-00/	12	Surr	50	3	6.8	3	23.0	3	30	3	8.5	CR	CR	2R 11/17
SH-12-SS-00/	13	Surr	50	3	7.5	3	20.2	3	29	3	8.4			2R 11/18
SH-12-SS-00/	14	Surr	50	3	7.2	3	20.1	3	30	3	8.5		2R	2R 11/19
SH-12-SS-00/	15	Surr	50	3	8.5	3	18.9	3	30	3	8.7	BH/CR		2R 11/20
SH-12-SS-00/	16	Surr	50	3	7.3	3	20.1	3	30	3	8.5		2R	2R 11/21
SH-12-SS-00/	17	Surr	50	3	7.3	3	20.1	3	30	3	8.4			2R 11/22
SH-12-SS-00/	18	Surr	50	4	7.8	4	20.3	1	30	1	8.3	BH	BH	BH 11/23
SH-12-SS-00/	19	Surr	50	3	6.6	3	20.1	3	29	3	8.1			2R 11/24
SH-12-SS-00/	20	Surr	50	3	7.3	3	20.2	3	30	3	8.4			2R 11/25



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB0#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
OB-10-SS-00/	0	Surr	56	4	7.4	4	20.3	1	28	1	7.7		JO	CW 11/5/08
OB-10-SS-00/	1	Surr	56	3	6.6	3	20.0	3	28	3	7.7			JO 11/6
OB-10-SS-00/	2	Surr	56	3	7.0	3	20.1	3	28	3	7.9		TS	JO 11/7
OB-10-SS-00/	3	Surr	56	3	6.5	3	20.3	3	28	3	7.9	JO		JO 11/8
OB-10-SS-00/	4	Surr	56	4	7.5	4	20.5	1	28	1	8.0		BH/B	JO 11/9
OB-10-SS-00/	5	Surr	56	4	7.6	4	20.5	1	29	1	8.1			JO 11/10
OB-10-SS-00/	6	Surr	56	4	7.4	4	20.5	1	29	1	8.0	JO	JO	JO 11/11
OB-10-SS-00/	7	Surr	56	4	7.5	4	20.5	1	29	1	8.3			CR 11/12
OB-10-SS-00/	8	Surr	56	4	7.8	4	20.6	1	29	1	8.4		JO	BH 11/13
OB-10-SS-00/	9	Surr	56	4	7.4	4	20.4	1	29	1	8.4	TS		TS 11/14
OB-10-SS-00/	10	Surr	56	4	7.6	4	20.4	1	29	1	8.4		TS	JO 11/15
OB-10-SS-00/	11	Surr	56	3	7.2	3	20.2	3	28	3	8.5			TS 11/16
OB-10-SS-00/	12	Surr	56	3	6.9	3	22.7	3	29	3	8.6	CR	CR	ZR 11/17
OB-10-SS-00/	13	Surr	56	3	7.5	3	20.2	3	29	3	8.6			ZR 11/18
OB-10-SS-00/	14	Surr	56	3	7.2	3	20.1	3	29	3	8.6		ZR	ZR 11/19
OB-10-SS-00/	15	Surr	56	3	8.8	3	18.7	3	29	3	8.8	BH/LR		ZR 11/20
OB-10-SS-00/	16	Surr	56	3	7.3	3	20.2	3	29	3	8.7		ZR	ZR 11/21
OB-10-SS-00/	17	Surr	56	3	7.4	3	20.1	3	29	3	8.7			ZR 11/22
OB-10-SS-00/	18	Surr	56	4	7.8	4	20.3	1	29	1	8.6	BH	BH	BH 11/23
OB-10-SS-00/	19	Surr	56	3	6.8	3	20.1	3	28	3	8.3			ZR 11/24
OB-10-SS-00/	20	Surr	56	3	7.1	3	20.2	3	29	3	8.5			ZR 11/25



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
SH-20-WS-00 /	0	Surr	164	4	7.5	4	20.2	1	28	1	7.9		JO	CSW 11/5/08
SH-20-WS-00 /	1	Surr	164	3	7.0	3	19.9	3	28	3	8.0			JO 4/6
SH-20-WS-00 /	2	Surr	164	3	7.2	3	20.1	3	28	3	8.1		TS	JO 11/7
SH-20-WS-00 /	3	Surr	164	3	6.6	3	20.3	3	29	3	8.2	JO		JO 11/8
SH-20-WS-00 /	4	Surr	164	4	7.7	4	20.4	1	28	1	8.2		MYN	JO 11/9
SH-20-WS-00 /	5	Surr	164	4	7.7	4	20.5	1	29	1	8.4			JO 11/10
SH-20-WS-00 /	6	Surr	164	4	7.6	4	20.5	1	29	1	8.4	JO	JO	JO 11/11
SH-20-WS-00 /	7	Surr	164	4	7.7	4	20.6	1	29	1	8.6			CR 11/12
SH-20-WS-00 /	8	Surr	164	4	7.9	4	20.5	1	29	1	8.4		JO	BH 11/13
SH-20-WS-00 /	9	Surr	164	4	7.8	4	20.4	1	30	1	8.4	TS		TS 11/14
SH-20-WS-00 /	10	Surr	164	4	7.8	4	20.4	1	29	1	8.3		TS	JO 11/15
SH-20-WS-00 /	11	Surr	164	3	7.2	3	20.2	3	29	3	8.3			TS 11/16
SH-20-WS-00 /	12	Surr	164	3	6.9	3	22.4	3	30	3	8.3	CR	CR	JR 11/17
SH-20-WS-00 /	13	Surr	164	3	7.2	3	20.2	3	30	3	8.1			JR 11/18
SH-20-WS-00 /	14	Surr	164	3	7.2	3	19.9	3	30	3	8.2		JR	JR 11/19
SH-20-WS-00 /	15	Surr	164	3	7.9	3	18.7	3	30	3	8.4	BH/LR		JR 11/20
SH-20-WS-00 /	16	Surr	164	3	7.6	3	20.1	3	30	3	8.3		TR	JR 11/21
SH-20-WS-00 /	17	Surr	164	3	7.3	3	20.1	3	30	3	8.2			JR 11/22
SH-20-WS-00 /	18	Surr	164	4	7.8	4	20.3	1	30	1	8.1	BH	BH	BH 11/23
SH-20-WS-00 /	19	Surr	164	3	7.1	3	20.1	3	29	3	8.0			JR 11/24
SH-20-WS-00 /	20	Surr	164	3	7.5	3	20.1	3	30	3	8.2			JR 11/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0 D.O.	20±1 TEMP	28±1 SALINITY	8.0±1.0 pH	meter	meter	meter	meter			
				mg/L	°C	ppt	unit							
SH-26-WS-00 /	0	Surr	43	4 7.6	4 20.4	1 28	1 7.8						Jo	cw 11/5/08
SH-26-WS-00 /	1	Surr	43	3 7.0	3 20.0	3 28	3 7.9							Jo 11/6
SH-26-WS-00 /	2	Surr	43	3 7.0	3 20.2	3 28	3 8.0						F	Jo 11/7
SH-26-WS-00 /	3	Surr	43	3 6.5	3 20.3	3 29	3 8.0				Jo			Jo 11/8
SH-26-WS-00 /	4	Surr	43	4 7.6	4 20.5	1 28	1 8.0						MMB	Jo 11/9
SH-26-WS-00 /	5	Surr	43	4 7.6	4 20.5	1 29	1 8.1							Jo 11/10
SH-26-WS-00 /	6	Surr	43	4 7.6	4 20.5	1 30	1 8.0				Jo		Jo	Jo 11/11
SH-26-WS-00 /	7	Surr	43	4 7.7	4 20.6	1 29	1 8.2							CR 11/12
SH-26-WS-00 /	8	Surr	43	4 8.0	4 20.6	1 30	1 8.1						Jo	BH 11/13
SH-26-WS-00 /	9	Surr	43	4 7.8	4 20.4	1 30	1 8.1				F			J 11/14
SH-26-WS-00 /	10	Surr	43	4 7.9	4 20.4	1 30	1 8.2						F	Jo 11/15
SH-26-WS-00 /	11	Surr	43	3 7.7	3 20.2	3 29	3 8.3							F 11/16
SH-26-WS-00 /	12	Surr	43	3 6.9	3 22.8	3 30	3 8.4				CR		CR	JR 11/17
SH-26-WS-00 /	13	Surr	43	3 7.5	3 20.2	3 30	3 8.2							JR 11/18
SH-26-WS-00 /	14	Surr	43	3 7.3	3 20.1	3 30	3 8.3						JR	JR 11/19
SH-26-WS-00 /	15	Surr	43	3 8.9	3 18.9	3 30	3 8.6				BH/LR			JR 11/20
SH-26-WS-00 /	16	Surr	43	3 8.2	3 20.2	3 30	3 8.4						JR	JR 11/21
SH-26-WS-00 /	17	Surr	43	3 7.3	3 20.1	3 31	3 8.3							JR 11/22
SH-26-WS-00 /	18	Surr	43	4 7.9	4 20.3	1 30	1 8.3				BH	BH	BH	BH 11/23
SH-26-WS-00 /	19	Surr	43	3 6.8	3 20.1	3 29	3 8.1							JR 11/24
SH-26-WS-00 /	20	Surr	43	3 7.3	3 20.2	3 30	3 8.3							JR 11/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0		20±1		28±1		8.0±1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
SH-15-SS-00 /	0	Surr	52	4	7.7	4	20.4	1	28	1	7.9		JO	aw 11/5/08
SH-15-SS-00 /	1	Surr	52	3	6.8	3	20.1	3	28	3	7.8			JO 11/6
SH-15-SS-00 /	2	Surr	52	3	6.9	3	20.2	3	28	3	8.0		TS	JO 11/7
SH-15-SS-00 /	3	Surr	52	3	6.3	3	20.4	3	28	3	7.9	JO		JO 11/8
SH-15-SS-00 /	4	Surr	52	4	7.5	4	20.5	1	28	1	8.0		MWB	JO 11/9
SH-15-SS-00 /	5	Surr	52	4	7.6	4	20.5	1	29	1	8.0			JO 11/10
SH-15-SS-00 /	6	Surr	52	4	7.5	4	20.5	1	29	1	8.0	JO	JO	JO 11/11
SH-15-SS-00 /	7	Surr	52	4	7.6	4	20.6	1	29	1	8.1			CR 11/12
SH-15-SS-00 /	8	Surr	52	4	7.9	4	20.6	1	29	1	8.0		JO	BH 11/13
SH-15-SS-00 /	9	Surr	52	4	7.8	4	20.4	1	29	1	8.1	TS		TS 11/14
SH-15-SS-00 /	10	Surr	52	4	7.9	4	20.4	1	29	1	8.3		TS	JO 11/15
SH-15-SS-00 /	11	Surr	52	3	7.6	3	20.2	3	29	3	8.2			TS 11/16
SH-15-SS-00 /	12	Surr	52	3	6.9	3	22.7	3	30	3	8.3	CR	CR	2R 11/17
SH-15-SS-00 /	13	Surr	52	3	7.5	3	20.2	3	29	3	8.2			2R 11/18
SH-15-SS-00 /	14	Surr	52	3	7.5	3	20.1	3	29	3	8.3		2R	2R 11/19
SH-15-SS-00 /	15	Surr	52	3	8.8	3	18.8	3	30	3	8.4	BH/LR		2R 11/20
SH-15-SS-00 /	16	Surr	52	3	7.4	3	20.2	3	30	3	8.3		2R	2R 11/21
SH-15-SS-00 /	17	Surr	52	3	7.3	3	20.1	3	30	3	8.2			2R 11/22
SH-15-SS-00 /	18	Surr	52	4	7.8	4	20.4	1	29	1	8.2	BH	BH	BH 11/23
SH-15-SS-00 /	19	Surr	52	3	7.0	3	20.1	3	29	3	8.0			2R 11/24
SH-15-SS-00 /	20	Surr	52	3	7.3	3	20.2	3	29	3	8.4			2R 11/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0 D.O.	20 ± 1 TEMP	28 ± 1 SALINITY	8.0 ± 1.0 pH	meter	meter	meter	meter			
				mg/L	°C	ppt	unit							
OB-04-SS-00 /	0	Surr	133	4 7.8	4 20.0	1 28	1 8.0						Jo	Cw 11/5/08
OB-04-SS-00 /	1	Surr	133	3 7.0	3 20.0	3 28	3 7.9							Jo 11/6
OB-04-SS-00 /	2	Surr	133	3 7.0	3 20.2	3 28	3 8.0						TS	Jo 11/7
OB-04-SS-00 /	3	Surr	133	3 6.9	3 20.2	3 28	3 8.0			Jo				Jo 11/8
OB-04-SS-00 /	4	Surr	133	4 7.7	4 20.4	1 28	1 8.1						WME	Jo 11/9
OB-04-SS-00 /	5	Surr	133	4 7.7	4 20.4	1 29	1 8.1							Jo 11/10
OB-04-SS-00 /	6	Surr	133	4 7.6	4 20.4	1 29	1 8.1			Jo		Jo		Jo 11/11
OB-04-SS-00 /	7	Surr	133	4 7.7	4 20.5	1 29	1 8.3							CR 11/12
OB-04-SS-00 /	8	Surr	133	4 7.8	4 20.6	1 29	1 8.2						Jo	BH 11/13
OB-04-SS-00 /	9	Surr	133	4 7.8	4 20.4	1 29	1 8.3					TS		TS 11/14
OB-04-SS-00 /	10	Surr	133	4 7.8	4 20.4	1 29	1 8.3						TS	Jo 11/15
OB-04-SS-00 /	11	Surr	133	3 7.1	3 20.1	3 30	3 8.3							TS 11/16
OB-04-SS-00 /	12	Surr	133	3 6.7	3 22.4	3 30	3 8.4			CR		CR		JR 11/17
OB-04-SS-00 /	13	Surr	133	3 7.3	3 20.2	3 29	3 8.3							JR 11/18
OB-04-SS-00 /	14	Surr	133	3 7.2	3 20.0	3 29	3 8.4						AL	JR 11/19
OB-04-SS-00 /	15	Surr	133	3 8.1	3 18.7	3 30	3 8.5			BH/LR				JR 11/20
OB-04-SS-00 /	16	Surr	133	3 7.4	3 20.1	3 29	3 8.5						AL	AR 11/21
OB-04-SS-00 /	17	Surr	133	3 7.2	3 20.2	3 30	3 8.5							AR 11/22
OB-04-SS-00 /	18	Surr	133	4 7.9	4 20.3	1 29	1 8.4					BH	BH	BH 11/23
OB-04-SS-00 /	19	Surr	133	3 7.0	3 20.1	3 29	3 8.1							AR 11/24
OB-04-SS-00 /	20	Surr	133	3 7.4	3 20.2	3 29	3 8.4							AR 11/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES Neanthes arenaceodentata	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
SH-24-WS-00 /	0	Surr	131	4	7.6	4	20.2	1	28	1	7.9		JO	CR 11/5/08
SH-24-WS-00 /	1	Surr	131	3	6.7	3	20.0	3	28	3	7.8			JO 11/6
SH-24-WS-00 /	2	Surr	131	3	6.9	3	20.1	3	29	3	8.0		TS	JO 11/7
SH-24-WS-00 /	3	Surr	131	3	6.6	3	20.2	3	29	3	8.0	JO		JO 11/8
SH-24-WS-00 /	4	Surr	131	4	7.7	4	20.4	1	29	1	8.1		MR	JO 11/9
SH-24-WS-00 /	5	Surr	131	4	7.7	4	20.5	1	29.30 ^①	1	8.1			JO 11/10
SH-24-WS-00 /	6	Surr	131	4	7.6	4	20.4	1	30	1	8.2	JO	JO	JO 11/11
SH-24-WS-00 /	7	Surr	131	4	7.7	4	20.5	1	30	1	8.3			CR 11/12
SH-24-WS-00 /	8	Surr	131	4	8.0	4	20.5	1	30	1	8.2		JO	BH 11/13
SH-24-WS-00 /	9	Surr	131	4	7.9	4	20.4	1	30	1	8.3	TS		TS 11/14
SH-24-WS-00 /	10	Surr	131	4	7.9	4	20.3	1	30	1	8.4		TS	JO 11/15
SH-24-WS-00 /	11	Surr	131	3	7.1	3	20.1	3	29	3	8.3			TS 11/16
SH-24-WS-00 /	12	Surr	131	3	7.0	3	22.3	3	31	3	8.3	CR	CR	2R 11/17
SH-24-WS-00 /	13	Surr	131	3	7.4	3	20.2	3	30	3	8.2			2R 11/18
SH-24-WS-00 /	14	Surr	131	3	7.3	3	19.8	3	30	3	8.3		2R	2R 11/19
SH-24-WS-00 /	15	Surr	131	3	8.3	3	18.6	3	31	3	8.3	BH/LR		2R 11/20
SH-24-WS-00 /	16	Surr	131	3	7.4	3	20.1	3	31	3	8.4		2R	2R 11/21
SH-24-WS-00 /	17	Surr	131	3	7.2	3	20.2	3	31	3	8.3			2R 11/22
SH-24-WS-00 /	18	Surr	131	4	7.8	4	20.3	1	31	1	8.2	BH	BH	BH 11/23
SH-24-WS-00 /	19	Surr	131	3	7.2	3	20.1	3	30	3	8.0			2R 11/24
SH-24-WS-00 /	20	Surr	131	3	7.6	3	20.1	3	31	3	8.3			2R 11/25

① MR 040 11/10



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBOW#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0 D.O.	20±1 TEMP	28±1 SALINITY	8.0±1.0 pH	meter	meter	meter	meter			
				mg/L	°C	ppt	unit							
HI-05-SS-00 /	0	Surr	94	4	7.7	4	20.3	1	28	1	7.8		JO	CW 11/5/08
HI-05-SS-00 /	1	Surr	94	3	6.7	3	19.9	3	28	3	7.7			JO 11/6
HI-05-SS-00 /	2	Surr	94	3	6.9	3	20.1	3	28	3	8.0		TS	JO 11/7
HI-05-SS-00 /	3	Surr	94	3	6.5	3	20.2	3	28	3	8.1	JO		JO 11/8
HI-05-SS-00 /	4	Surr	94	4	7.6	4	20.3	1	28	1	8.0		MWB	JO 11/9
HI-05-SS-00 /	5	Surr	94	4	7.7	4	20.3	1	29	1	8.0			JO 11/10
HI-05-SS-00 /	6	Surr	94	4	7.6	4	20.3	1	29	1	8.0	JO	JO	JO 11/11
HI-05-SS-00 /	7	Surr	94	4	7.7	4	20.4	1	29	1	8.1			CR 11/12
HI-05-SS-00 /	8	Surr	94	4	7.9	4	20.4	1	29	1	7.9		JO	BH 11/13
HI-05-SS-00 /	9	Surr	94	4	7.8	4	20.2	1	29	1	8.0	TS		TS 11/14
HI-05-SS-00 /	10	Surr	94	4	7.8	4	20.3	1	29	1	8.1		TS	JO 11/15
HI-05-SS-00 /	11	Surr	94	3	7.5	3	20.1	3	29	3	8.1			TS 11/16
HI-05-SS-00 /	12	Surr	94	3	6.9	3	22.1	3	29	3	8.0	CR	CR	JR 11/17
HI-05-SS-00 /	13	Surr	94	3	7.1	3	20.1	3	29	3	8.0			JR 11/18
HI-05-SS-00 /	14	Surr	94	3	7.2	3	19.8	3	29	3	8.1		JR	JR 11/19
HI-05-SS-00 /	15	Surr	94	3	8.6	3	18.5	3	29	3	8.2	BH/LR		JR 11/20
HI-05-SS-00 /	16	Surr	94	3	7.4	3	20.0	3	29	3	8.2		JR	JR 11/21
HI-05-SS-00 /	17	Surr	94	3	7.4	3	20.1	3	29	3	8.2			JR 11/22
HI-05-SS-00 /	18	Surr	94	4	7.8	4	20.2	1	29	1	8.2	BH	BH	BH 11/23
HI-05-SS-00 /	19	Surr	94	3	6.8	3	19.9	3	29	3	8.0			JR 11/24
HI-05-SS-00 /	20	Surr	94	3	7.7	3	20.2	3	29	3	8.3			JR 11/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
SH-23-WS-00 /	0	Surr	9	4	7.7	4	20.1	1	28	1	7.7		Jo	CR 11/5/08
SH-23-WS-00 /	1	Surr	9	3	6.8	3	20.0	3	28	3	7.9			Jo 11/6
SH-23-WS-00 /	2	Surr	9	3	7.1	3	19.9	3	28	3	8.0		TS	Jo 11/7
SH-23-WS-00 /	3	Surr	9	3	6.9	3	20.1	3	28	3	8.0	Jo		Jo 11/8
SH-23-WS-00 /	4	Surr	9	4	7.7	4	20.2	1	28	1	8.2		MMB	Jo 11/9
SH-23-WS-00 /	5	Surr	9	4	7.6	4	20.2	1	29	1	8.1			Jo 11/10
SH-23-WS-00 /	6	Surr	9	4	7.4	4	20.2	1	29	1	8.2	Jo	Jo	Jo 11/11
SH-23-WS-00 /	7	Surr	9	4	7.6	4	20.3	1	29	1	8.4			CR 11/12
SH-23-WS-00 /	8	Surr	9	4	7.7	4	20.4	1	29	1	8.3		Jo	BH 11/13
SH-23-WS-00 /	9	Surr	9	4	7.8	4	20.0	1	29	1	8.3	TS		TS 11/14
SH-23-WS-00 /	10	Surr	9	4	7.9	4	20.2	1	29	1	8.3		TS	Jo 11/15
SH-23-WS-00 /	11	Surr	9	3	7.2	3	20.0	3	27	3	8.3			TS 11/16
SH-23-WS-00 /	12	Surr	9	3	6.8	3	22.9	3	30	3	8.5	CR	CR	JR 11/17
SH-23-WS-00 /	13	Surr	9	3	7.4	3	20.0	3	29	3	8.1			JR 11/18
SH-23-WS-00 /	14	Surr	9	3	7.0	3	19.9	3	30	3	8.2		CR	ZR 11/19
SH-23-WS-00 /	15	Surr	9	3	8.6	3	18.7	3	30	3	8.3	BH/CR		ZR 11/20
SH-23-WS-00 /	16	Surr	9	3	7.2	3	20.1	3	30	3	8.3		CR	ZR 11/21
SH-23-WS-00 /	17	Surr	9	3	7.5	3	19.8	3	30	3	8.3			ZR 11/22
SH-23-WS-00 /	18	Surr	9	4	7.9	4	19.4	1	30	1	8.2	BH	BH	BH 11/23
SH-23-WS-00 /	19	Surr	9	3	6.7	3	19.9	3	29	3	8.1			CR 11/24
SH-23-WS-00 /	20	Surr	9	3	7.3	3	20.1	3	30	3	8.2			CR 11/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0		20±1		28±1		8.0±1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
SH-27-WS-00/	0	Surr	25	4	7.6	4	20.4	1	28	1	7.8		JO	CW 11/5/08
SH-27-WS-00/	1	Surr	25	3	6.7	3	20.0	3	28	3	7.8			JO 11/6
SH-27-WS-00/	2	Surr	25	3	6.6	3	20.2	3	28	3	8.0		TS	JO 11/7
SH-27-WS-00/	3	Surr	25	3	6.7	3	20.2	3	28	3	8.0	JO		JO 11/8
SH-27-WS-00/	4	Surr	25	4	7.6	4	20.4	1	28	1	8.1		MMS	JO 11/9
SH-27-WS-00/	5	Surr	25	4	7.4	4	20.4	1	29	1	7.9			JO 11/10
SH-27-WS-00/	6	Surr	25	4	7.3	4	20.3	1	29	1	8.0	JO	JO	JO 11/11
SH-27-WS-00/	7	Surr	25	4	7.7	4	20.5	1	29	1	8.2			CR 11/12
SH-27-WS-00/	8	Surr	25	4	8.0	4	20.5	1	29	1	8.2		JO	BH 11/13
SH-27-WS-00/	9	Surr	25	4	8.1	4	20.2	1	29	1	8.3	TS		TS 11/14
SH-27-WS-00/	10	Surr	25	4	8.1	4	20.4	1	29	1	8.4		TS	JO 11/15
SH-27-WS-00/	11	Surr	25	3	7.8	3	20.1	3	29	3	8.4			TS 11/16
SH-27-WS-00/	12	Surr	25	3	6.9	3	23.0	3	30	3	8.5	CR	CR	ZR 11/17
SH-27-WS-00/	13	Surr	25	3	7.5	3	20.1	3	29	3	8.2			ZR 11/18
SH-27-WS-00/	14	Surr	25	3	7.3	3	20.1	3	30	3	8.3		ZR	ZR 11/19
SH-27-WS-00/	15	Surr	25	3	8.4	3	19.0	3	30	3	8.3	BH/LR		ZR 11/20
SH-27-WS-00/	16	Surr	25	3	7.1	3	20.1	3	30	3	8.3		ZR	ZR 11/21
SH-27-WS-00/	17	Surr	25	3	7.0	3	20.0	3	30	3	8.1			ZR 11/22
SH-27-WS-00/	18	Surr	25	4	7.5	4	19.9	1	30	1	8.1	BH	BH	BH 11/23
SH-27-WS-00/	19	Surr	25	3	6.7	3	20.0	3	29	3	8.0			ZR 11/24
SH-27-WS-00/	20	Surr	25	3	6.4	3	20.1	3	29	3	8.2			ZR 11/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
OB-07-SS-00/	0	Surr	33	4	7.6	4	20.4	1	28	1	7.8		JO	CW 11/5/08
OB-07-SS-00/	1	Surr	33	3	6.5	3	20.0	3	28	3	7.8			JO 11/6
OB-07-SS-00/	2	Surr	33	3	7.3	3	20.1	3	28	3	8.0		TS	JO 11/7
OB-07-SS-00/	3	Surr	33	3	6.4	3	20.3	3	28	3	8.1	JO		JO 11/8
OB-07-SS-00/	4	Surr	33	4	7.7	4	20.5	1	28	1	8.1		MMB	JO 11/9
OB-07-SS-00/	5	Surr	33	4	7.4	4	20.5	1	29	1	7.9			JO 11/10
OB-07-SS-00/	6	Surr	33	4	7.5	4	20.4	1	29	1	8.0	JO	JO	JO 11/11
OB-07-SS-00/	7	Surr	33	4	7.7	4	20.5	1	29	1	8.2			CR 11/12
OB-07-SS-00/	8	Surr	33	4	8.1	4	20.6	1	29	1	8.2		JO	SH 11/13
OB-07-SS-00/	9	Surr	33	4	7.7	4	20.4	1	29	1	8.1	TS		TS 11/14
OB-07-SS-00/	10	Surr	33	4	8.0	4	20.4	1	29	1	8.3		TS	JO 11/15
OB-07-SS-00/	11	Surr	33	3	7.9	3	20.2	3	29	3	8.3			TS 11/16
OB-07-SS-00/	12	Surr	33	3	6.9	3	22.9	3	30	3	8.3	CR	CR	JR 11/17
OB-07-SS-00/	13	Surr	33	3	7.6	3	20.2	3	29	3	8.2			JR 11/18
OB-07-SS-00/	14	Surr	33	3	7.5	3	20.1	3	30	3	8.4		JR	JR 11/19
OB-07-SS-00/	15	Surr	33	3	8.5	3	18.9	3	30	3	8.3	BR/LR		JR 11/20
OB-07-SS-00/	16	Surr	33	3	7.4	3	20.2	3	30	3	8.4		JR	JR 11/21
OB-07-SS-00/	17	Surr	33	3	7.4	3	20.1	3	30	3	8.4			JR 11/22
OB-07-SS-00/	18	Surr	33	4	8.1	4	20.3	1	30	1	8.5	BR	BR	BR 11/23
OB-07-SS-00/	19	Surr	33	3	7.0	3	20.1	3	29	3	8.1			JR 11/24
OB-07-SS-00/	20	Surr	33	3	6.7	3	20.1	3	30	3	8.4			JR 11/25

① DE JO 11/19

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
OB-09-SS-00/	0	Surr	155	4	7.7	4	20.1	4	20	1	7.8		JO	CR 11/5/08
OB-09-SS-00/	1	Surr	155	3	7.0	3	20.0	3	28	3	8.0			JO 11/6
OB-09-SS-00/	2	Surr	155	3	7.2	3	20.1	3	29	3	8.1		TS	JO 11/7
OB-09-SS-00/	3	Surr	155	3	6.7	3	20.3	3	29	3	8.2	JO		JO 11/8
OB-09-SS-00/	4	Surr	155	4	7.7	4	20.5	1	29	1	8.3		MMB	JO 11/9
OB-09-SS-00/	5	Surr	155	4	7.7	4	20.5	1	30	1	8.4			JO 11/10
OB-09-SS-00/	6	Surr	155	4	7.7	4	20.5	1	31	1	8.5	JO	JO	JO 11/11
OB-09-SS-00/	7	Surr	155	4	7.8	4	20.6	1	30	1	8.5			CR 11/12
OB-09-SS-00/	8	Surr	155	4	7.9	4	20.6	1	30	1	8.3		JO	BH 11/13
OB-09-SS-00/	9	Surr	155	4	7.8	4	20.4	1	31	1	8.4	TS		TS 11/14
OB-09-SS-00/	10	Surr	155	4	7.8	4	20.4	1	30	1	8.4		TS	JO 11/15
OB-09-SS-00/	11	Surr	155	3	7.2	3	20.2	3	30	3	8.4			TS 11/16
OB-09-SS-00/	12	Surr	155	3	6.9	3	22.3	3	31	3	8.3	CR	CR	ZR 11/17
OB-09-SS-00/	13	Surr	155	3	7.4	3	20.2	3	30	3	8.1			ZR 11/18
OB-09-SS-00/	14	Surr	155	3	7.2	3	20.1	3	30	3	8.1		YL	ZR 11/19
OB-09-SS-00/	15	Surr	155	3	7.9	3	18.8	3	30	3	8.2	BH/LR		ZR 11/20
OB-09-SS-00/	16	Surr	155	3	7.4	3	20.2	3	30	3	8.2		YL	ZR 11/21
OB-09-SS-00/	17	Surr	155	3	7.2	3	20.2	3	31	3	8.2			ZR 11/22
OB-09-SS-00/	18	Surr	155	4	7.8	4	20.3	1	30	1	8.2	BH	BH	BH 11/23
OB-09-SS-00/	19	Surr	155	3	7.1	3	20.1	3	30	3	8.0			ZR 11/24
OB-09-SS-00/	20	Surr	155	3	8.1	3	20.1	3	30	3	8.2			ZR 11/25



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB0#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) > 6.0		TEMP (C) 20 ± 1		SALINITY (ppt) 28 ± 1		pH 8.0 ± 1.0		WATER RENEWAL	Feeding	TECH/DATE
CLIENT\NEWFIELDS ID	DAY	REP	JAR	D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
SH-18-WS-00/	0	Surr	129	4	7.5	4	20.1	1	28	1	7.8		JO	CW 11/5/08
SH-18-WS-00/	1	Surr	129	3	6.4	3	19.9	3	28	3	7.7			JO 11/6
SH-18-WS-00/	2	Surr	129	3	6.7	3	20.1	3	28	3	7.9		TS	JO 11/7
SH-18-WS-00/	3	Surr	129	3	6.5	3	20.3	3	28	3	8.0	JO		JO 11/8
SH-18-WS-00/	4	Surr	129	4	7.6	4	20.4	1	28	1	8.3		MMAB	JO 11/9
SH-18-WS-00/	5	Surr	129	4	7.6	4	20.5	1	29	1	8.4			JO 11/10
SH-18-WS-00/	6	Surr	129	4	7.4	4	20.4	1	29	1	8.4	JO	JO	JO 11/11
SH-18-WS-00/	7	Surr	129	4	7.6	4	20.5	1	29	1	8.5			CR 11/12
SH-18-WS-00/	8	Surr	129	4	7.9	4	20.5	1	29	1	8.4		JO	BH 11/13
SH-18-WS-00/	9	Surr	129	4	7.4	4	20.3	1	29	1	8.4	TS		TS 11/14
SH-18-WS-00/	10	Surr	129	4	7.9	4	20.4	1	29	1	8.3		TS	JO 11/15
SH-18-WS-00/	11	Surr	129	3	7.4	3	20.1	3	29	3	8.3			TS 11/16
SH-18-WS-00/	12	Surr	129	3	6.9	3	22.4	3	30	3	8.2	CR	CR	JR 11/17
SH-18-WS-00/	13	Surr	129	3	7.4	3	20.2	3	29	3	8.1			JR 11/18
SH-18-WS-00/	14	Surr	129	3	7.2	3	19.9	3	30	3	8.2		JR	JR 11/19
SH-18-WS-00/	15	Surr	129	3	8.3	3	18.7	3	30	3	8.3	BH/LR		JR 11/20
SH-18-WS-00/	16	Surr	129	3	7.5	3	20.1	3	30	3	8.2		JR	JR 11/21
SH-18-WS-00/	17	Surr	129	3	7.4	3	20.2	3	30	3	8.2			JR 11/22
SH-18-WS-00/	18	Surr	129	4		4		1		1		BH	BH	BH 11/23
SH-18-WS-00/	19	Surr	129	3	7.0	3	20.1	3	29	3	7.8			JR 11/24
SH-18-WS-00/	20	Surr	129	3	7.7	3	20.2	3	29	3	8.2			JR 11/25



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB0#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
OB-08-SS-00 /	0	Surr	117	4	7.2	4	20.0	1	28	1	7.7		JO	CR 11/5/08
OB-08-SS-00 /	1	Surr	117	3	6.6	3	20.0	3	28	3	7.7			JO 11/6
OB-08-SS-00 /	2	Surr	117	3	6.8	3	20.1	3	28	3	7.9		TS	JO 11/7
OB-08-SS-00 /	3	Surr	117	3	6.5	3	20.3	3	28	3	8.0	JO		JO 11/8
OB-08-SS-00 /	4	Surr	117	4	7.6	4	20.4	1	28	1	8.0		MAB	JO 11/9
OB-08-SS-00 /	5	Surr	117	4	7.7	4	20.5	1	29	1	8.0			JO 11/10
OB-08-SS-00 /	6	Surr	117	4	7.6	4	20.5	1	29	1	8.2	JO	JO	JO 11/11
OB-08-SS-00 /	7	Surr	117	4	7.7	4	20.6	1	29	1	8.1			CR 11/12
OB-08-SS-00 /	8	Surr	117	4	8.0	4	20.4	1	29	1	8.1		JO	BH 11/13
OB-08-SS-00 /	9	Surr	117	4	8.0	4	20.4	1	29	1	8.3	TS		TS 11/14
OB-08-SS-00 /	10	Surr	117	4	7.9	4	20.4	1	29	1	8.3		TS	JO 11/15
OB-08-SS-00 /	11	Surr	117	3	7.3	3	20.2	3	29	3	8.4			TS 11/16
OB-08-SS-00 /	12	Surr	117	3	7.0	3	22.3	3	30	3	8.3	CR	CR	ZR 11/17
OB-08-SS-00 /	13	Surr	117	3	7.4	3	20.2	3	29	3	8.2			ZR 11/18
OB-08-SS-00 /	14	Surr	117	3	7.2	3	19.9	3	29	3	8.4		ZR	ZR 11/19
OB-08-SS-00 /	15	Surr	117	3	8.4	3	19.7	3	30	3	8.5	BH/LR		ZR 11/20
OB-08-SS-00 /	16	Surr	117	3	7.3	3	20.1	3	30	3	8.5		ZR	ZR 11/21
OB-08-SS-00 /	17	Surr	117	3	7.4	3	20.1	3	30	3	8.4			ZR 11/22
OB-08-SS-00 /	18	Surr	117	4	7.8	4	20.2	1	30	1	8.4	BH	BH	BH 11/23
OB-08-SS-00 /	19	Surr	117	3	7.1	3	20.1	3	29	3	8.2			ZR 11/24
OB-08-SS-00 /	20	Surr	117	3	7.7	3	20.2	3	30	3	8.5			ZR 11/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0		20±1		28±1		8.0±1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
SH-30-WS-00 /	0	Surr	135	4	7.6	4	20.1	1	28	1	7.9		Jo	aw 11/5/08
SH-30-WS-00 /	1	Surr	135	3	6.9	3	20.0	3	28	3	7.9			Jo 11/6
SH-30-WS-00 /	2	Surr	135	3	6.9	3	20.1	3	28	3	8.0		B	Jo 11/7
SH-30-WS-00 /	3	Surr	135	3	6.5	3	20.2	3	29	3	8.0	Jo		Jo 11/8
SH-30-WS-00 /	4	Surr	135	4	7.7	4	20.4	1	28	1	8.0		MWB	Jo 11/9
SH-30-WS-00 /	5	Surr	135	4	7.7	4	20.5	1	29	1	8.1			Jo 11/10
SH-30-WS-00 /	6	Surr	135	4	7.6	4	20.4	1	29	1	8.1	Jo	Jo	Jo 11/11
SH-30-WS-00 /	7	Surr	135	4	7.7	4	20.5	1	29	1	8.3			CR 11/12
SH-30-WS-00 /	8	Surr	135	4	7.9	4	20.4	1	29	1	8.2		Jo	BH 11/13
SH-30-WS-00 /	9	Surr	135	4	7.8	4	20.4	1	29	1	8.3	TS		TS 11/14
SH-30-WS-00 /	10	Surr	135	4	7.8	4	20.4	1	29	1	8.3		TS	Jo 11/15
SH-30-WS-00 /	11	Surr	135	3	7.5	3	20.1	3	29	3	8.3			TS 11/16
SH-30-WS-00 /	12	Surr	135	3	6.8	3	22.3	3	30	3	8.3	CR	CR	2R 11/17
SH-30-WS-00 /	13	Surr	135	3	7.5	3	20.2	3	29	3	8.2			2R 11/18
SH-30-WS-00 /	14	Surr	135	3	7.3	3	19.9	3	29	3	8.3		2R	2R 11/19
SH-30-WS-00 /	15	Surr	135	3	8.0	3	19.7	3	30	3	8.4	BH/LR		2R 11/20
SH-30-WS-00 /	16	Surr	135	3	7.4	3	20.2	3	30	3	8.3		2R	2R 11/21
SH-30-WS-00 /	17	Surr	135	3	7.3	3	20.2	3	30	3	8.3			2R 11/22
SH-30-WS-00 /	18	Surr	135	4	7.8	4	20.2	1	30	1	8.3	BH	BH	BH 11/23
SH-30-WS-00 /	19	Surr	135	3	7.3	3	20.2	3	28	3	8.1			2R 11/24
SH-30-WS-00 /	20	Surr	135	3	7.5	3	20.2	3	29	3	8.3			2R 11/25



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
SH-19-WS-00 /	0	Surr	51	4	7.5	4	20.4	1	28	1	7.8		JO	cw 11/5/08
SH-19-WS-00 /	1	Surr	51	3	6.9	3	20.1	3	28	3	7.8			Jo 11/6
SH-19-WS-00 /	2	Surr	51	3	6.9	3	20.1	3	28	3	8.0		TS	JO 11/7
SH-19-WS-00 /	3	Surr	51	3	6.5	3	20.3	3	29	3	7.9	JO		JO 11/8
SH-19-WS-00 /	4	Surr	51	4	7.6	4	20.5	1	28	1	8.0		MMMS	Jo 11/9
SH-19-WS-00 /	5	Surr	51	4	7.7	4	20.5	1	29	1	8.1			Jo 11/10
SH-19-WS-00 /	6	Surr	51	4	7.5	4	20.5	1	29	1	8.1	JO	JO	JO 11/11
SH-19-WS-00 /	7	Surr	51	4	7.6	4	20.6	1	29	1	8.2			CR 11/12
SH-19-WS-00 /	8	Surr	51	4	7.8	4	20.6	1	29	1	8.2		JO	BH 11/13
SH-19-WS-00 /	9	Surr	51	4	7.7	4	20.4	1	30	1	8.3	TS		TS 11/14
SH-19-WS-00 /	10	Surr	51	4	7.9	4	20.4	1	29	1	8.4		TS	JO 11/15
SH-19-WS-00 /	11	Surr	51	3	7.7	3	20.2	3	29	3	8.5			TS 11/16
SH-19-WS-00 /	12	Surr	51	3	6.8	3	22.9	3	30	3	8.5	CR	CR	ZR 11/17
SH-19-WS-00 /	13	Surr	51	3	7.4	3	20.2	3	29	3	8.3			ZR 11/18
SH-19-WS-00 /	14	Surr	51	3	7.1	3	20.1	3	30	3	8.4		ZR	ZR 11/19
SH-19-WS-00 /	15	Surr	51	3	8.5	3	18.8	3	30	3	8.6	BH/CR		ZR 11/20
SH-19-WS-00 /	16	Surr	51	3	7.2	3	20.0	3	30	3	8.5		ZR	ZR 11/21
SH-19-WS-00 /	17	Surr	51	3	7.3	3	20.1	3	30	3	8.4			ZR 11/22
SH-19-WS-00 /	18	Surr	51	4	7.9	4	20.3	1	30	1	8.4	BH	BH	BH 11/23
SH-19-WS-00 /	19	Surr	51	3	6.9	3	20.1	3	29	3	8.1			ZR 11/24
SH-19-WS-00 /	20	Surr	51	3	7.3	3	20.2	3	29	3	8.4			ZR 11/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
OB-18-WS-00 /	0	Surr	148	4	7.7	4	20.2	1	28	1	7.9		JO	CR 11/5/08
OB-18-WS-00 /	1	Surr	148	3	6.7	3	20.1	3	28	3	7.9			JO 11/6
OB-18-WS-00 /	2	Surr	148	3	6.9	3	20.2	3	28	3	8.2		TS	JO 11/7
OB-18-WS-00 /	3	Surr	148	3	6.5	3	20.3	3	29	3	8.4	JO		JO 11/8
OB-18-WS-00 /	4	Surr	148	4	7.6	4	20.4	1	28	1	8.6		MWB	JO 11/9
OB-18-WS-00 /	5	Surr	148	4	7.6	4	20.5	1	29	1	8.7			JO 11/10
OB-18-WS-00 /	6	Surr	148	4	7.6	4	20.5	1	30	1	8.7	JO	JO	JO 11/11
OB-18-WS-00 /	7	Surr	148	4	7.9	4	20.6	1	29	1	8.8			CR 11/12
OB-18-WS-00 /	8	Surr	148	4	7.9	4	20.6	1	29	1	8.4		JO	BH 11/13
OB-18-WS-00 /	9	Surr	148	4	7.8	4	20.5	1	30	1	8.3	TS		TS 11/14
OB-18-WS-00 /	10	Surr	148	4	7.7	4	20.4	1	29	1	8.3		TS	JO 11/15
OB-18-WS-00 /	11	Surr	148	3	7.0	3	20.2	3	29	3	8.3			TS 11/16
OB-18-WS-00 /	12	Surr	148	3	6.5	3	22.3	3	30	3	8.3	CR	CR	JR 11/17
OB-18-WS-00 /	13	Surr	148	3	7.2	3	20.2	3	29	3	8.1			JR 11/18
OB-18-WS-00 /	14	Surr	148	3	7.1	3	20.0	3	30	3	8.2		JR	JR 11/19
OB-18-WS-00 /	15	Surr	148	3	7.9	3	19.8	3	30	3	8.4	BH/LR		JR 11/20
OB-18-WS-00 /	16	Surr	148	3	7.3	3	20.2	3	30	3	8.4		JR	JR 11/21
OB-18-WS-00 /	17	Surr	148	3	7.3	3	20.2	3	30	3	8.3			JR 11/22
OB-18-WS-00 /	18	Surr	148	4	7.8	4	20.3	1	30	1	8.1	BH	BH	BH 11/23
OB-18-WS-00 /	19	Surr	148	3	7.1	3	20.2	3	29	3	8.0			JR 11/24
OB-18-WS-00 /	20	Surr	148	3	7.5	3	20.2	3	29	3	8.2			JR 11/25



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				D.O.		TEMP		SALINITY		pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
SH-16-SS-00 /	0	Surr	83	4	7.7	4	20.3	1	28	1	7.8		JO	cw 11/5/08
SH-16-SS-00 /	1	Surr	83	3	7.1	3	19.8	3	28	3	7.9			JO 11/6
SH-16-SS-00 /	2	Surr	83	3	6.9	3	20.1	3	28	3	7.9		TS	JO 11/7
SH-16-SS-00 /	3	Surr	83	3	6.2	3	20.2	3	28	3	7.8	JO		JO 11/8
SH-16-SS-00 /	4	Surr	83	4	7.6	4	20.5	1	28	1	8.0		MMS	JO 11/9
SH-16-SS-00 /	5	Surr	83	4	7.6	4	20.5	1	29	1	8.0			JO 11/10
SH-16-SS-00 /	6	Surr	83	4	7.5	4	20.4	1	29	1	8.0	JO	JO	JO 11/11
SH-16-SS-00 /	7	Surr	83	4	7.6	4	20.5	1	29	1	8.1			CR 11/12
SH-16-SS-00 /	8	Surr	83	4	7.8	4	20.5	1	29	1	8.0		JO	BH 11/13
SH-16-SS-00 /	9	Surr	83	4	7.8	4	20.3	1	29	1	8.1	TS		TS 11/14
SH-16-SS-00 /	10	Surr	83	4	7.8	4	20.4	1	29	1	8.3		TS	JO 11/15
SH-16-SS-00 /	11	Surr	83	3	7.3	3	20.1	3	28	3	8.2			TS 11/16
SH-16-SS-00 /	12	Surr	83	3	7.1	3	22.3	3	29	3	8.3	CR	CR	ZR 11/17
SH-16-SS-00 /	13	Surr	83	3	11.6	3	20.0	3	29	3	8.4			ZR 11/18
SH-16-SS-00 /	14	Surr	83	3	8.2	3	19.8	3	29	3	8.5		ZR	ZR 11/19
SH-16-SS-00 /	15	Surr	83	3	14.2	3	18.7	3	29	3	8.9	BH/LR		ZR 11/20
SH-16-SS-00 /	16	Surr	83	3	7.5	3	20.0	3	29	3	8.4		ZR	ZR 11/21
SH-16-SS-00 /	17	Surr	83	3	7.4	3	20.1	3	29	3	8.3			ZR 11/22
SH-16-SS-00 /	18	Surr	83	4	7.8	4	20.3	1	29	1	8.2	BH	BH	BH 11/23
SH-16-SS-00 /	19	Surr	83	3	6.8	3	20.0	3	28	3	7.8			ZR 11/24
SH-16-SS-00 /	20	Surr	83	3	7.0	3	20.2	3	29	3	8.1			ZR 11/25

20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
SH-02-SS-00/	0	Surr	99	4	7.5	4	20.4	1	28	1	7.8		JO	aw 11/5/08
SH-02-SS-00/	1	Surr	99	3	6.7	3	19.9	3	28	3	7.8			JO 11/6
SH-02-SS-00/	2	Surr	99	3	7.0	3	20.1	3	28	3	7.9		TS	JO 11/7
SH-02-SS-00/	3	Surr	99	3	6.5	3	20.3	3	28	3	8.0	JO		JO 11/8
SH-02-SS-00/	4	Surr	99	4	7.6	4	20.4	1	28	1	8.1		MMD	JO 11/9
SH-02-SS-00/	5	Surr	99	4	5.5 ①	4	20.5	1	29	1	8.0			JO 11/10
SH-02-SS-00/	6	Surr	99	4	7.6	4	20.4	1	29	1	8.1	JO	JO	JO 11/11
SH-02-SS-00/	7	Surr	99	4	7.7	4	20.5	1	29	1	8.1			CR 11/12
SH-02-SS-00/	8	Surr	99	4	7.8	4	20.5	1	29	1	8.0		JO	BH 11/13
SH-02-SS-00/	9	Surr	99	4	7.8	4	20.3	1	30	1	8.1	TS		TS 11/14
SH-02-SS-00/	10	Surr	99	4	7.8	4	20.3	1	30	1	8.1		TS	JO 11/15
SH-02-SS-00/	11	Surr	99	3	7.3	3	20.1	3	30	3	8.2			TS 11/16
SH-02-SS-00/	12	Surr	99	3	6.9	3	22.2	3	31	3	8.3	CR	CR	ZR 11/17
SH-02-SS-00/	13	Surr	99	3	7.5	3	20.2	3	30	3	8.2			ZR 11/18
SH-02-SS-00/	14	Surr	99	3	7.3	3	19.9	3	31	3	8.4		ZR	ZR 11/19
SH-02-SS-00/	15	Surr	99	3	8.7	3	18.6	3	31	3	8.6	BH/LR		ZR 11/20
SH-02-SS-00/	16	Surr	99	3	7.3	3	20.1	3	31	3	8.5		ZR	ZR 11/21
SH-02-SS-00/	17	Surr	99	3	7.3	3	20.1	3	32	3	8.4			ZR 11/22
SH-02-SS-00/	18	Surr	99	4	7.7	4	20.2	1	31	1	8.4	BH	BH	BH 11/23
SH-02-SS-00/	19	Surr	99	3	7.2	3	20.0	3	30	3	8.2			ZR 11/24
SH-02-SS-00/	20	Surr	99	3	7.4	3	20.1	3	31	3	8.4			ZR 11/25

① No air coming out of tube. Increased aeration flow 11/10 JHO



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOB#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
HI-03-SS-00 /	0	Surr	90	4	7.7	4	20.2	1	28	1	7.8		JO	CW 11/5/08
HI-03-SS-00 /	1	Surr	90	3	6.8	3	19.8	3	28	3	7.7-7.8			JO 11/6
HI-03-SS-00 /	2	Surr	90	3	7.0	3	19.9	3	28	3	7.9		TS	JO 11/7
HI-03-SS-00 /	3	Surr	90	3	6.6	3	20.1	3	28	3	8.0	JO		JO 11/7
HI-03-SS-00 /	4	Surr	90	4	7.7	4	20.2	1	28	1	7.9		MWB	JO 11/9
HI-03-SS-00 /	5	Surr	90	4	7.8	4	20.2	1	29	1	8.0			JO 11/10
HI-03-SS-00 /	6	Surr	90	4	7.6	4	20.2	1	29	1	8.0	JO	JO	JO 11/11
HI-03-SS-00 /	7	Surr	90	4	7.7	4	20.4	1	29	1	8.1			CR 11/12
HI-03-SS-00 /	8	Surr	90	4	7.8	4	20.3	1	29	1	8.0		JO	BH 11/13
HI-03-SS-00 /	9	Surr	90	4	7.7	4	20.2	1	29	1	8.1	TS		TS 11/14
HI-03-SS-00 /	10	Surr	90	4	7.8	4	20.3	1	29	1	8.2		TS	JO 11/15
HI-03-SS-00 /	11	Surr	90	3	7.2	3	20.0	3	29	3	8.2			TS 11/16
HI-03-SS-00 /	12	Surr	90	3	6.8	3	21.8	3	30	3	8.2	CR	CR	ZR 11/17
HI-03-SS-00 /	13	Surr	90	3	7.2	3	19.8	3	29	3	8.1			ZR 11/18
HI-03-SS-00 /	14	Surr	90	3	7.2	3	19.8	3	30	3	8.2		ZR	ZR 11/19
HI-03-SS-00 /	15	Surr	90	3	8.8	3	18.4	3	30	3	8.3	BH/LR		ZR 11/20
HI-03-SS-00 /	16	Surr	90	3	7.4	3	19.8	3	30	3	8.3		ZR	ZR 11/21
HI-03-SS-00 /	17	Surr	90	3	7.4	3	19.9	3	30	3	8.3			ZR 11/22
HI-03-SS-00 /	18	Surr	90	4	7.9	4	20.0	1	29	1	8.3	BH	BH	BH 11/23
HI-03-SS-00 /	19	Surr	90	3	7.2	3	19.8	3	29	3	8.0			ZR 11/24
HI-03-SS-00 /	20	Surr	90	3	7.8	3	20.1	3	29	3	8.4			ZR 11/25

MR JHO 11/6



**20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET**

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	>6.0 D.O.		20±1 TEMP		28±1 SALINITY		8.0±1.0 pH				
				meter	mg/L	meter	°C	meter	ppt	meter	unit			
OB-03-SS-00 /	0	Surr	111	4	7.7	4	20.0	1	28	1	7.9		Jo	cw 11/5/08
OB-03-SS-00 /	1	Surr	111	3	6.8	3	20.0	3	28	3	7.8			Jo 11/6
OB-03-SS-00 /	2	Surr	111	3	6.9	3	20.2	3	28	3	8.0		TS	Jo 11/7
OB-03-SS-00 /	3	Surr	111	3	6.5	3	20.3	3	28	3	8.1	Jo		Jo 11/8
OB-03-SS-00 /	4	Surr	111	4	7.6	4	20.4	1	28	1	8.2		any B	Jo 11/9
OB-03-SS-00 /	5	Surr	111	4	7.6	4	20.6	1	29	1	8.2			Jo 11/10
OB-03-SS-00 /	6	Surr	111	4	7.7	4	20.4	1	29	1	8.4	Jo	Jo	Jo 11/11
OB-03-SS-00 /	7	Surr	111	4	7.8	4	20.5	1	29	1	8.4			CR 11/12
OB-03-SS-00 /	8	Surr	111	4	7.9	4	20.5	1	29	1	8.2		Jo	BH 11/13
OB-03-SS-00 /	9	Surr	111	4	7.8	4	20.3	1	29	1	8.2	TS		TS 11/14
OB-03-SS-00 /	10	Surr	111	4	7.9	4	20.4	1	29	1	8.3		TS	Jo 11/15
OB-03-SS-00 /	11	Surr	111	3	7.2	3	20.2	3	29	3	8.3			TS 11/16
OB-03-SS-00 /	12	Surr	111	3	6.9	3	22.4	3	30	3	8.4	CR	CR	2R 11/17
OB-03-SS-00 /	13	Surr	111	3	7.4	3	20.2	3	29	3	8.3			2R 11/18
OB-03-SS-00 /	14	Surr	111	3	7.2	3	20.0	3	29	3	8.3		2R	2R 11/19
OB-03-SS-00 /	15	Surr	111	3	8.4	3	19.7	3	30	3	8.4	BH/LR		2R 11/20
OB-03-SS-00 /	16	Surr	111	3	7.1	3	20.1	3	30	3	8.4		2R	2R 11/21
OB-03-SS-00 /	17	Surr	111	3	7.3	3	20.2	3	30	3	8.4			2R 11/22
OB-03-SS-00 /	18	Surr	111	4	7.8	4	20.2	1	29	1	8.3	BH	BH	BH 11/23
OB-03-SS-00 /	19	Surr	111	3	7.0	3	20.0	3	29	3	8.1			2R 11/24
OB-03-SS-00 /	20	Surr	111	3	7.6	3	20.1	3	29	3	8.4			2R 11/25



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0		20 ± 1		28 ± 1		8.0 ± 1.0				
				meter	mg/L	meter	TEMP °C	meter	SALINITY ppt	meter	pH unit			
SH-29-WS-00 /	0	Surr	161	4	7.8	4	20.2	1	28	1	7.9		JO	aw 11/5/08
SH-29-WS-00 /	1	Surr	161	3	6.9	3	20.0	3	28	3	8.0			JO 11/6
SH-29-WS-00 /	2	Surr	161	3	7.2	3	20.1	3	28	3	8.1		TS	JO 11/7
SH-29-WS-00 /	3	Surr	161	3	6.8	3	20.2	3	29	3	8.1	JO		JO 11/8
SH-29-WS-00 /	4	Surr	161	4	7.7	4	20.4	1	29	1	8.1		MMW	JO 11/9
SH-29-WS-00 /	5	Surr	161	4	7.8	4	20.4	1	30	1	8.2			JO 11/10
SH-29-WS-00 /	6	Surr	161	4	7.6	4	20.4	1	30	1	8.2	JO	JO	JO 11/11
SH-29-WS-00 /	7	Surr	161	4	7.7	4	20.6	1	30	1	8.2			CR 11/12
SH-29-WS-00 /	8	Surr	161	4	7.9	4	20.4	1	30	1	8.0		JO	BH 11/13
SH-29-WS-00 /	9	Surr	161	4	7.9	4	20.3	1	31	1	8.1	TS		TS 11/14
SH-29-WS-00 /	10	Surr	161	4	7.9	4	20.4	1	30	1	8.2		TS	JO 11/15
SH-29-WS-00 /	11	Surr	161	3	7.3	3	20.2	3	30	3	8.2			TS 11/16
SH-29-WS-00 /	12	Surr	161	3	7.0	3	22.3	3	31	3	8.1	CR	CR	ZR 11/17
SH-29-WS-00 /	13	Surr	161	3	7.4	3	20.2	3	30	3	8.1			ZR 11/18
SH-29-WS-00 /	14	Surr	161	3	7.2	3	19.9	3	31	3	8.1		ZR	ZR 11/19
SH-29-WS-00 /	15	Surr	161	3	7.9	3	18.7	3	31	3	8.2	BH/OR		ZR 11/20
SH-29-WS-00 /	16	Surr	161	3	7.6	3	20.1	3	31	3	8.2		ZR	ZR 11/21
SH-29-WS-00 /	17	Surr	161	3	7.4	3	20.1	3	32	3	8.2			ZR 11/22
SH-29-WS-00 /	18	Surr	161	4	7.8	4	20.3	1	31	1	8.1	BH	BH	BH 11/23
SH-29-WS-00 /	19	Surr	161	3	7.2	3	20.0	3	30	3	8.0			ZR 11/24
SH-29-WS-00 /	20	Surr	161	3	7.9	3	20.1	3	31	3	8.2			ZR 11/25



20 DAY SOLID PHASE BIOASSAY
WATER QUALITY DATASHEET

CLIENT Herrera	PROJECT Oakland Bay	START TIME/ END TIME /	DILUTION WATER BATCH FSW110408.01	PROTOCOL PSEP 1995	TEST START DATE 5-Nov-2008
JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LABORATORY	TEMP. RECDR./HOBO#	TEST SPECIES <i>Neanthes arenaceodentata</i>	TEST END DATE 25-Nov-2008

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L)		TEMP (C)		SALINITY (ppt)		pH		WATER RENEWAL	Feeding	TECH/DATE
CLIENT/NEWFIELDS ID	DAY	REP	JAR	> 6.0 D.O.	20 ± 1 TEMP	28 ± 1 SALINITY	8.0 ± 1.0 pH	meter	meter	meter	meter			
				mg/L	°C	ppt	unit							
SH-07-SS-00 /	0	Surr	137	4	7.7	4	20.0	1	28	1	7.8		JO	CS 11/5/08
SH-07-SS-00 /	1	Surr	137	3	7.0	3	20.0	3	28	3	7.8			JO 11/6
SH-07-SS-00 /	2	Surr	137	3 ⁰	6.8	3	20.2	3	28	3	8.0		TS	JO 11/7
SH-07-SS-00 /	3	Surr	137	3	6.5	3	20.3	3	29	3	8.0	JO		JO 11/8
SH-07-SS-00 /	4	Surr	137	4	7.7	4	20.4	1	28	1	8.0		MMB	JO 11/9
SH-07-SS-00 /	5	Surr	137	4	7.7	4	20.5	1	29	1	8.0			JO 11/10
SH-07-SS-00 /	6	Surr	137	4	7.6	4	20.5	1	29	1	8.0	JO	JO	JO 11/11
SH-07-SS-00 /	7	Surr	137	4	7.7	4	20.6	1	29	1	8.1			CR 11/12
SH-07-SS-00 /	8	Surr	137	4	7.9	4	20.6	1	29	1	8.0		JO	BH 11/13
SH-07-SS-00 /	9	Surr	137	4	7.8	4	20.4	1	29	1	8.1	TS		TS 11/14
SH-07-SS-00 /	10	Surr	137	4	7.9	4	20.4	1	29	1	8.2		TS	JO 11/15
SH-07-SS-00 /	11	Surr	137	3	7.3	3	20.2	3	29	3	8.1			TS 11/16
SH-07-SS-00 /	12	Surr	137	3	6.8	3	22.4	3	30	3	8.1	CR	CR	2R 11/17
SH-07-SS-00 /	13	Surr	137	3	7.4	3	20.2	3	29	3	8.1			2R 11/18
SH-07-SS-00 /	14	Surr	137	3	7.3	3	20.0	3	29	3	8.1		2R	2R 11/19
SH-07-SS-00 /	15	Surr	137	3	8.1	3	19.8	3	29	3	8.2	BH/UR		2R 11/20
SH-07-SS-00 /	16	Surr	137	3	7.6	3	20.2	3	29	3	8.2		2R	2R 11/21
SH-07-SS-00 /	17	Surr	137	3	7.2	3	20.2	3	30	3	8.2			2R 11/22
SH-07-SS-00 /	18	Surr	137	4	7.0	4	20.3	1	30	1	8.1	BH	BH	BH 11/23
SH-07-SS-00 /	19	Surr	137	3	7.8 ⁶	3	20.2	3	29	3	8.0			2R 11/24
SH-07-SS-00 /	20	Surr	137	3	7.7	3	20.1	3	29	3	8.3			2R 11/25

① MAKE JO 11/7
② IF 2R 11/24



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: Oakland Bay	Organism: nearthes Batch 2	NewFields Test ID:	Test Duration (days): 20d
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PRETEST / INITIAL / FINAL / OTHER (circle one) **DAY of TEST:** 11/5/08 Day 0
OVERLYING (OV) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
11/5/08	20.0	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
∅	Surf	11/5/08 TS	<0.5	20.0	11/5/08 TS	N	NA →		0.0
RF-01	|	|	① 1.92 6.7	|	|	|	|		0.010
RF-02	|	|	② 1.24 6.7	|	|	|		0.018	
RF-03	|	|	① 2.88 6.7	|	|	|		0.012	
HI-03	|	|	1.28	|	|	|		0.024	
05	|	|	1.36	|	|	|		0.025	
OB-03	|	|	<0.5	|	|	|		0.055	
04	|	|	0.854	|	|	|		0.049	
07	|	|	1.76	|	|	|		0.008	
08	|	|	1.52	|	|	|		0.0	
09	|	|	0.656	|	|	|		0.007	
10	|	|	0.579	|	|	|		0.002	
18	|	|	0.927	|	|	|		0.000	
SH-02	|	|	0.786	|	|	|		6.003	
06	|	|	0.570	|	|	|		0.000	
07	✓	✓	1.03	✓	✓	✓		✓	0.000

Oakland Bay, near the Batch 2 CV Initial 0

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
SH - 12	6urr	11/5/08 JS	20.5	20.0	11/5/08 JS	N	NA →		0.000
15	↓	↓	0.620	↓	↓	↓	↓		0.017
16	↓	↓	0.589	↓	↓	↓	↓		0.001
18	↓	↓	0.592	↓	↓	↓	↓		0.004
19	↓	↓	20.5	↓	↓	↓	↓		0.030
20	↓	↓	20.5	↓	↓	↓	↓		0.007
23	↓	↓	20.5	↓	↓	↓	↓		0.005
24	↓	↓	0.797	↓	↓	↓	↓		0.007
25	↓	↓	20.5	↓	↓	↓	↓		0.000
26	↓	↓	20.5	↓	↓	↓	↓		0.002
27	↓	↓	20.5	↓	↓	↓	↓		0.011
29	↓	↓	1.03	↓	↓	↓	↓		0.007
30	↓	↓	0.846	↓	↓	↓	↓		0.014

NEWFIELDS

**Ammonia Analysis
Total Ammonia (mg/L)**

Client/Project: Oakland Bay	Organism: Neanthes Batch 2	NewFields Test ID:	Test Duration (days): 20d
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PRETEST / INITIAL / FINAL / OTHER (circle one) **DAY of TEST:** 11/5/08 Day 0
OVERLYING (OV) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
11/5/08	20.0	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
Ø	SURF	11/5/08 TS	20.5	19.0	11/5/08 TS	N	7.3	29	Ø
RF-01	↓	↓	3.46	19.0	↓	↓	7.6	29	0.015
RF-02			3.33	7.6			29	0.029	
RF-03			6.75	7.6			29	0.122	
HI-03			4.75	7.6			29	0.040	
05			5.99	7.6			28	0.105	
OB -03			1.26	7.6			29	0.022	
04			2.63	7.6			29	0.032	
07			8.92	7.7			29	0.053	
08			4.26	7.7			29	0.015	
09			1.55	7.7			29	0.008	
10			1.50	7.7			29	0.018	
18			2.70	7.7			29	0.024	
SH - 02			2.51	7.7			29	0.021	
06			2.76	7.6			29	0.040	
07			4.58	7.5			29	0.026	

Oakland Bay Nematodes Batch 2 PW Initials

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
SH- 12	Surr	11/5/08 TS	1.72	19.0	11/5/08 TS	N	7.5	28	0.037
15			2.60				7.5	29	0.170
16			2.15				7.5	29	0.066
18			1.06				7.5	28	0.031
19			1.30				7.6	29	0.024
20			1.17				7.5	28	0.047
23			1.01				7.5	28	0.026
24			2.68				7.6	29	0.028
25			1.65				7.6	28	0.034
26			2.68				7.6	29	0.045
27			1.43				7.6	29	0.092
29			4.48				7.6	28	0.109
30			2.97				7.6	29	0.115

NEWFIELDS

Ammonia Analysis Total Ammonia (mg/L)

Client/Project: Herrera/Oakland Bay	Organism: Neanthes B2	NewFields Test ID:	Test Duration (days): 20
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PRETEST / INITIAL / FINAL / OTHER (circle one) **DAY of TEST: 20**
OVERLYING (OV) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
11 Dec. '08	19.0	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp $^{\circ}\text{C}$	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
Control	Surr.	12/11/08, MMB	<0.5	18.0	12/11/08, CR	N			0.004
RF-01-SS-00	↓	↓	<0.5	↓	↓	↓			0.000
RF-02-SS-00	↓	↓	<0.5	↓	↓	↓			0.00
RF-03-SS-00	↓	↓	<0.5	↓	↓	↓			0.004
SH-06-SS-00	↓	↓	<0.5	↓	↓	↓			0.001
SH-25-WS-00	↓	↓	<0.5	↓	↓	↓			0.002
SH-12-SS-00	↓	↓	<0.5	↓	↓	↓			0.009
OB-10-SS-00	↓	↓	<0.5	↓	↓	↓			0.003
SH-20-WS-00	↓	↓	<0.5	↓	↓	↓			0.00
SH-26-WS-00	↓	↓	<0.5	↓	↓	↓			0.002
SH-15-SS-00	↓	↓	<0.5	↓	↓	↓			0.003
OB-04-SS-00	↓	↓	<0.5	↓	↓	↓			0.000
SH-24-WS-00	↓	↓	<0.5	↓	↓	↓			0.000
HI-05-SS-00	↓	↓	<0.5	↓	↓	↓			0.010
SH-23-WS-00	↓	↓	<0.5	↓	↓	↓			0.005
SH-27-WS-00	↓	↓	<0.5	↓	↓	↓			0.001

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
OB-07-SS-00	Surr.	12/1/08 mmh	<0.5	18.0	12/1/08 CR	Y			0.003
OB-09-SS-00	|	|	<0.5	|	|	|			0.009
SH-18-WS-00	|	|	<0.5	|	|	|			0.000
OB-08-SS-00	|	|	<0.5	|	|	|			0.000
SH-30-WS-00	|	|	<0.5	|	|	|			0.001
SH-19-WS-00	|	|	<0.5	|	|	|			2.002
OB-18-WS-00	|	|	<0.5	|	|	|			0.004
SH-16-SS-00	|	|	<0.5	|	|	|			0.001
SH-02-SS-00	|	|	<0.5	|	|	|			0.000
HI-03-SS-00	|	|	<0.5	|	|	|			0.000
OB-03-SS-00	|	|	<0.5	|	|	|			0.001
SH-29-WS-00	|	|	<0.5	|	|	|			0.001
SH-07-SS-00	|	|	<0.5	|	|	|			0.001



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: Herrera/Oakland Bay	Organism: Neanthes B2	NewFields Test ID:	Test Duration (days): 20
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PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: 20
OVERLYING (OV) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^\circ\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
12 Dec. '08	18.5	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp $^\circ\text{C}$	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
Control	Surr.	12/12/08 MMB	40.5	18.0	12/12/08 MMB	N	6.9	31.0	0.034
RF-01-SS-00	↓	↓	40.5	↓	↓	↓	6.9	31	0.073
RF-02-SS-00	↓	↓	40.5	↓	↓	↓	6.9	30	0.098
RF-03-SS-00	↓	↓	40.5	↓	↓	↓	6.9	31	0.251
SH-06-SS-00	↓	↓	40.5	↓	↓	↓	6.7	31	0.106
SH-25-WS-00	↓	↓	40.5	↓	↓	↓	6.9	30	0.063
SH-12-SS-00	↓	↓	40.5	↓	↓	↓	6.9	32	0.076
OB-10-SS-00	↓	↓	40.5	↓	↓	↓	7.0	30	0.042
SH-20-WS-00	↓	↓	40.5	↓	↓	↓	7.0	33	0.105
SH-26-WS-00	↓	↓	0.754	↓	↓	↓	6.9	33	0.116 ²
SH-15-SS-00	↓	↓	40.5	↓	↓	↓	7.0	32	0.532
OB-04-SS-00	↓	↓	40.5	↓	↓	↓	6.9	31	0.171
SH-24-WS-00	↓	↓	40.5	↓	↓	↓	7.0	34	0.212 ²
HI-05-SS-00	↓	↓	40.5	↓	↓	↓	7.2	31	0.432 ²
SH-23-WS-00	↓	↓	40.5	↓	↓	↓	7.2	34	0.106
SH-27-WS-00	↓	↓	40.5	↓	↓	↓	7.2	31	0.123

² Used 2 x multiplier using half sample size. MMB 12/12/08

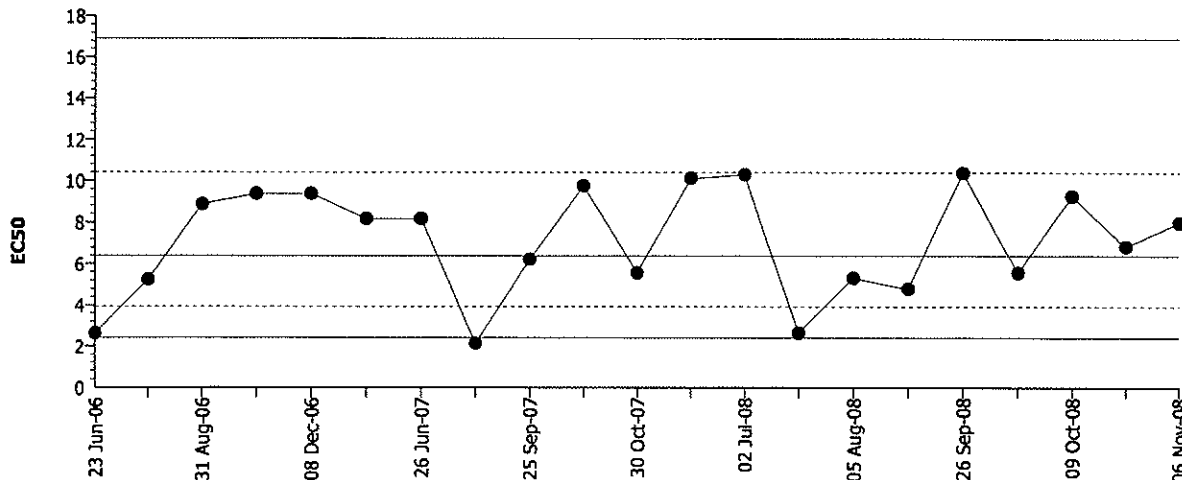
Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
OB-07-SS-00	Surr.	12/12/08 MMB	0.883	18.0	12/12/08 MMB	N	7.2	32	② 0.290
OB-09-SS-00	↓	↓	<0.5	↓	↓	↓	7.2	32	0.138
SH-18-WS-00	↓	↓	<0.5	↓	↓	↓	7.0	31	0.227
OB-08-SS-00	↓	↓	<0.5	↓	↓	↓	6.9	32	0.086
SH-30-WS-00	↓	↓	<0.5	↓	↓	↓	6.8	32	0.163
SH-19-WS-00	↓	↓	<0.5	↓	↓	↓	6.9	31	0.165
OB-18-WS-00	↓	↓	<0.5	↓	↓	↓	6.8	32	0.170
SH-16-SS-00	↓	↓	<0.5	↓	↓	↓	7.0	30	①
SH-02-SS-00	↓	↓	<0.5	↓	↓	↓	6.9	32	② 0.196
HI-03-SS-00	↓	↓	<0.5	↓	↓	↓	6.8	32	② 0.226
OB-03-SS-00	↓	↓	<0.5	↓	↓	↓	6.8	31	0.200
SH-29-WS-00	↓	↓	<0.5	↓	↓	↓	7.1	34	①
SH-07-SS-00	↓	↓	<0.5	↓	↓	↓	7.1	33	② 0.182

① No measurement, not enough of a sample. MMB 12/12/08

CETIS QC Chart

Neanthes 10-d Survival and Growth Sediment Test NewFields

Test Type: Survival-Growth Organism: Neanthes arenaceodentata (Polycha) Material: Cadmium chloride
 Protocol: PSEP (1995) Endpoint: Proportion Survived Source: Reference Toxicant-REF



Mean: 6.39298 Count: 20 -1s Warning Limit: 3.93144 -2s Action Limit: 2.41769
 Sigma: CV: 62.61% +1s Warning Limit: 10.3957 +2s Action Limit: 16.9046

Quality Control Data

Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Jun	23	2.61220	-3.78078	-1.84085	(-)		11-2423-7791	08-2080-8513
2		Jul	25	5.22653	-1.16645	-0.41435			15-7582-9934	07-9049-7308
3		Aug	31	8.86577	2.47279	0.67257			16-7169-3504	00-9849-6979
4		Dec	8	9.37175	2.97878	0.78672			10-5822-0812	10-0140-9364
5			8	9.37175	2.97878	0.78672			10-5822-0812	08-7192-3895
6	2007	May	11	8.16253	1.76955	0.50259			03-7778-9913	06-1785-2165
7		Jun	26	8.16258	1.76961	0.50260			09-6212-3109	14-8493-4946
8		Jul	18	2.13748	-4.25550	-2.25337	(-)	(-)	09-5163-0637	11-9760-1230
9		Sep	25	6.20193	-0.19105	-0.06240			06-6354-6111	12-2113-4941
10		Oct	24	9.76006	3.36709	0.87023			05-9113-1606	14-0319-5260
11			30	5.55412	-0.83886	-0.28931			03-0327-1386	13-6201-5780
12	2008	Feb	17	10.12762	3.73464	0.94626			11-6935-8907	04-7495-8038
13		Jul	2	10.30107	3.90809	0.98119			07-0160-7176	03-3190-0644
14			22	2.65108	-3.74189	-1.81045	(-)		12-3989-8103	10-4556-3131
15		Aug	5	5.30308	-1.08989	-0.38444			12-5764-3928	08-5080-2403
16			29	4.77241	-1.62057	-0.60130			04-2068-8020	17-2391-7369
17		Sep	26	10.37648	3.98350	0.99619			12-2518-6391	15-3142-3234
18			30	5.55412	-0.83886	-0.28931			14-9908-4079	13-4530-5299
19		Oct	9	9.26124	2.86827	0.76233			06-2717-9387	09-3671-8537
20			24	6.83792	0.44494	0.13839			19-3732-1210	15-3671-1948
21		Nov	6	7.98431	1.59134	0.45718			15-0302-5653	02-0509-3199

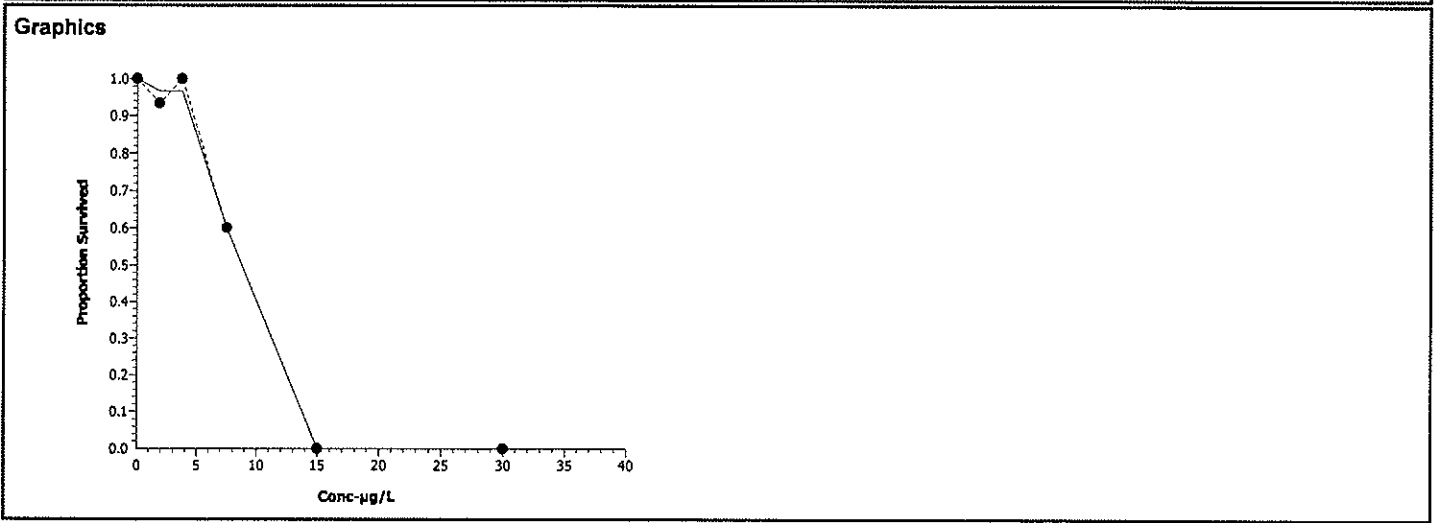
CETIS Analysis Detail

Neanthes 10-d Survival and Growth Sediment Test						NewFields
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Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Trimmed Spearman-Kärber	15-0302-5653	15-0302-5653	21 Jan-09 1:51 PM	CETISv1.1.2

Spearman-Kärber Options					Point Estimates		
Threshold Option	Lower Threshold	Trim	Mu	Sigma	EC50/LC50	95% LCL	95% UCL
Control Threshold	0	3.33%	0.9022376	0.04141455	7.98431	6.59794	9.66199

Data Summary			Calculated Variate(A/B)						
Conc-µg/L	Control Type	Count	Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	1.00000	1.00000	1.00000	0.00000	0.00000	15	15
1.875		3	0.93333	0.80000	1.00000	0.02357	0.11547	14	15
3.75		3	1.00000	1.00000	1.00000	0.00000	0.00000	15	15
7.5		3	0.60000	0.40000	0.80000	0.04082	0.20000	9	15
15		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	15
30		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	15



CETIS Analysis Detail

Neanthes 10-d Survival and Growth Sediment Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Survived	Comparison	15-0302-5653	15-0302-5653	21 Jan-09 1:49 PM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		3.75	7.5	26.6667	5.30330	20.85%

Group Comparisons

Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		1.875	0.77131	2.41651	0.4317	0.24869	Non-Significant Effect
		3.75	0	2.41651	0.7500	0.24869	Non-Significant Effect
		7.5	4.39822	2.41651	0.0029	0.24869	Significant Effect

ANOVA Table

Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	0.4212587	0.1404196	3	8.84	0.00641	Significant Effect
Error	0.1270934	0.0158867	8			
Total	0.54835211	0.1563062	11			

ANOVA Assumptions

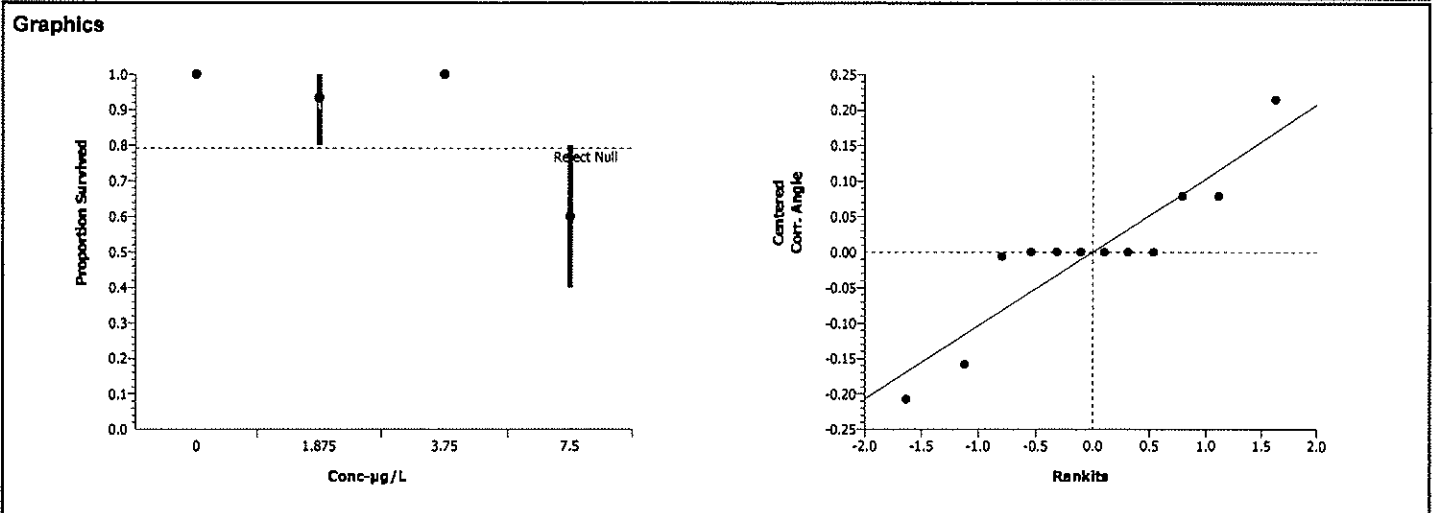
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Modified Levene	7.58624	7.59099	0.01002	Equal Variances
Distribution	Shapiro-Wilk W	0.86002		0.04891	Normal Distribution

Data Summary

Conc-µg/L	Control Type	Count	Original Data				Transformed Data			
			Mean	Minimum	Maximum	SD	Mean	Minimum	Maximum	SD
0	Dilution Water	3	1.00000	1.00000	1.00000	0.00000	1.34528	1.34528	1.34528	0.00022
1.875		3	0.93333	0.80000	1.00000	0.11547	1.26590	1.10715	1.34528	0.13749
3.75		3	1.00000	1.00000	1.00000	0.00000	1.34528	1.34528	1.34528	0.00022
7.5		3	0.60000	0.40000	0.80000	0.20000	0.89265	0.68472	1.10715	0.21129

Data Detail

Conc-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Dilution Water	1.00000	1.00000	1.00000							
1.875		0.80000	1.00000	1.00000							
3.75		1.00000	1.00000	1.00000							
7.5		0.60000	0.80000	0.40000							



CETIS Data Worksheet

Report Date: 21 Jan-09 1:52 PM

Link: 15-0302-5653

Neanthes 10-d Survival and Growth Sediment Test										NewFields
Start Date: 06 Nov-08 03:50 PM		Species: Neanthes arenaceodentata			Sample Code: 644610730					
Ending Date: 10 Nov-08 05:45 PM		Protocol: PSEP (1995)			Sample Source: Reference Toxicant					
Sample Date: 06 Nov-08		Material: Cadmium chloride			Sample Station: P080418.31					
Conc-µg/L	Code	Rep	Pos	# Exposed	# Survived	Total Weight-mg	Tare Weight-mg	Pan Count	Mean Length-mm	Notes
0	D	1	3	5	5		0			
0	D	2	11	5	5		0			
0	D	3	8	5	5		0			
1.875		1	10	5	4		0			
1.875		2	15	5	5		0			
1.875		3	7	5	5		0			
3.75		1	2	5	5		0			
3.75		2	14	5	5		0			
3.75		3	17	5	5		0			
7.5		1	9	5	3		0			
7.5		2	13	5	4		0			
7.5		3	5	5	2		0			
15		1	18	5	0		0			
15		2	1	5	0		0			
15		3	6	5	0		0			
30		1	16	5	0		0			
30		2	12	5	0		0			
30		3	4	5	0		0			



96-HOUR REFERENCE TOXICANT TEST WATER QUALITY DATA SHEET

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Neanthes arenaceodentata</i>	NEWFIELDS LABORATORY Port Gamble Bath 4	PROTOCOL PSEP 1995
NEWFIELDS JOB NUMBER 1101-008-860	PROJECT MANAGER B. Hester	QUANTITY OF STOCK : 4.5 mL ACTUAL: 4.518 g	QUANTITY OF DILUENT: 1500mL ACTUAL: 1500.3 g	INIT MMB DATE PREP 11/6/08
Test ID P080418.31	LOT #: 06510TC	TEST START DATE: 6 Nov 08	TIME 1550	TEST END DATE 10 Nov 08 TIME 1745

WATER QUALITY DATA

DILTN.WAT.BATCH		TEMP REC#		REFERENCE TOX. MATERIAL						REFERENCE TOXICANT			
FSW110408.01				cadmium chloride						cadmium			
TEST CONDITIONS				DO (mg/L)		TEMP (C)		SAL (ppt)		pH		TECHNICIAN	
				> 6.0		20 ± 1		28 ± 1		8.00 ± 1			
CLIENT/ NEWFIELDS ID	CONCENTRATION		DAY	REP	D.O.		TEMP.		SALINITY		pH		WQ TECH
	value	units			meter	mg/L	meter	°C	meter	ppt	meter	unit	
Ref.Tox.-cadmium	0	mg/L	0	Stock	4	8.0	4	19.7	1	28	1	7.3	MMB
			1	Rep 1	3	7.0	3	20.0	3	28	3	7.8	JO
			2	Rep 3	4	7.5	4	19.9	1	28	1	7.5	JO
			3	Rep 2	4	7.7	4	20.2	1	28	1	7.9	JO
			4	Rep 1	4	7.8	4	19.8	1	29	1	7.9	JO
Ref.Tox.-cadmium	1.875	mg/L	0	Stock	4	8.1	4	19.9	1	28	1	7.4	MMB
			1	Rep 1	3	7.3	3	20.1	3	28	3	7.9	JO
			2	Rep 3	4	7.7	4	20.2	1	28	1	7.7	JO
			3	Rep 2	4	7.5	4	20.3	1	28	1	8.0	JO
			4	Rep 1	4	7.6	4	20.1	1	29	1	7.9	JO
Ref.Tox.-cadmium	3.75	mg/L	0	Stock	4	8.1	4	20.0	1	28	1	7.5	MMB
			1	Rep 1	3	7.1	3	20.1	3	28	3	8.0	JO
			2	Rep 3	4	7.7	4	20.3	1	28	1	7.8	JO
			3	Rep 2	4	7.6	4	20.3	1	28	1	8.0	JO
			4	Rep 1	4	7.7	4	20.2	1	29	1	7.9	JO
Ref.Tox.-cadmium	7.5	mg/L	0	Stock	4	8.1	4	20.0	1	28	1	7.6	MMB
			1	Rep 1	3	7.0	3	20.1	3	28	3	8.0	JO
			2	Rep 3	4	7.6	4	20.3	1	28	1	7.9	JO
			3	Rep 2	4	7.7	4	20.3	1	28	1	8.0	JO
			4	Rep 1	4	7.7	4	20.2	1	29	1	7.9	JO
Ref.Tox.-cadmium	15	mg/L	0	Stock	4	8.1	4	20.0	1	28	1	7.6	MMB
			1	Rep 1	3	7.1	3	20.0	3	28	3	8.0	JO
			2	Rep 3	4	7.7 7.2	4	20.4	1	28	1	7.9	JO
			3	Rep									
			4	Rep									
Ref.Tox.-cadmium	30	mg/L	0	Stock	4	8.1	4	20.0	1	28	1	7.6	MMB
			1	Rep 1	3	7.1	3	20.0	3	28	3	8.0	JO
			2	Rep 3									
			3	Rep									
			4	Rep									

① WC SHO 11/7



96-HOUR REFERENCE TOXICANT TEST OBSERVATION DATASHEET

SPECIES
Neanthes arenaceodentata

CLIENT Herrera	PROJECT Oakland Bay	NEWFIELDS JOB # 1101-008-860	PROJECT MANAGER B. Hester	NEWFIELDS LAB Port Gamble Bath 4	PROTOCOL FSEP 1995
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SURVIVAL & BEHAVIOR DATA

#S= Number on the Surface #M= Number of Mortality L=Anoxic Surface F=Fungal Patches D=No Air Flow (DO?) U=Excess food N=Normal B=No Burrows				DAY 1			DAY 2			DAY 3			DAY 4			
				DATE			DATE			DATE			DATE			
				TECHNICIAN			TECHNICIAN			TECHNICIAN			TECHNICIAN			
INITIAL # OF ORGANISMS <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">5</div>				11/7			11/8			11/9			11/10			
				IS			MMB			MMB			CR			
CLIENT/ NEWFIELDS ID	CONC.		REP	INITIAL NUMBER	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS	#ALIVE	#DEAD	OBS
	value	units														
Ref. Tox.- cadmium	0	mg/L	1		5	0	N	5	0	N	5	0	N	5	0	N
			2		5	0	↓	5	0	↓	5	0	↓	5	0	N
			3		5	0	↓	5	0	↓	5	0	↓	5	0	N
Ref. Tox.- cadmium	1.875	mg/L	1		5	0	N	5	0	N	4	0	MB	4	0	N
			2		5	0	↓	5	0	↓	5	0	N	5	0	N
			3		5	0	↓	5	0	↓	5	0	N	5	0	N
Ref. Tox.- cadmium	3.75	mg/L	1		5	0	N	5	0	N	5	0	N	5	0	N
			2		5	0	↓	5	0	↓	5	0	↓	5	0	N
			3		5	0	↓	5	0	↓	5	0	↓	5	0	N
Ref. Tox.- cadmium	7.5	mg/L	1		5	0	N	5	0	N	5	0	N	3	2	N
			2		5	0	↓	5	0	↓	5	0	Q	4	1	N
			3		5	0	↓	5	0	↓	4	1	Q	2	2	N
Ref. Tox.- cadmium	15	mg/L	1		5	0	Q	1	4	Q	0	1	N	—————		
			2		5	0	↓	0	5	N	—————					
			3		5	0	↓	1	4	Q	0	1	N	—————		
Ref. Tox.- cadmium	30	mg/L	1		0	5	NA	X			X			X		
			2		0	5	↓	X			X			X		
			3		0	5	↓	X			X			X		

***BIOLOGICAL TESTING RESULTS FOR
OAKLAND BAY SEDIMENT CHARACTERIZATION,
OAKLAND BAY, WASHINGTON***

LARVAL TESTS

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT OBSERVATIONS



<small>SPECIES</small> <i>Dendroaster excentricus</i>	<i>mytilus sp.</i>
<small>CLIENT</small> Herrera	<small>PROJECT</small> Oakland Bay
<small>JOB NUMBER</small> 0	<small>PROJECT MANAGER</small> M. Pinza
<small>NEWFIELDS LAB / LOCATION</small> Port Gamble / Bath 3	<small>PROTOCOL</small> PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT / NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
STOCKING DENSITY	1		395	12/15/08	↓	
	2		358	↓	↓	
	3		355	↓	↓	
	4		323	↓	↓	
	5		399	↓	↓	
307.6 Control /	1	298	13	12/1/08	BT	
	2	299	12	12/6/08	+	
	3	312	8	↓	↓	
	4	300	8	↓	↓	
	5	329	13	↓	↓	
Sand Control /	1	182	0	12/15/08	↓	16151
	2	274	7	↓	↓	
	3	176	2	↓	↓	
	4	263	6	↓	↓	
	5	315	6	↓	↓	
RF-01 /	1	157	9	12/8/08	+	116
	2	140	10	↓	↓	
	3	157	35	↓	↓	
	4	157	20	↓	↓	
	5	176	23	↓	↓	
RF-02 /	1	120	26	↓	↓	1611
	2	132	48	↓	↓	
	3	145	58	↓	↓	
	4	169	57	↓	↓	
		126	34			

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT OBSERVATIONS



SPECIES <i>Dendroaster excentricus</i> <i>Mytilus</i> sp.
CLIENT: Herrera
PROJECT: Oakland Bay
JOB NUMBER: 0
PROJECT MANAGER: M. Pinza
NEWFIELDS LAB / LOCATION: Port Gamble / Bath 3
PROTOCOL: PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
RF-03 /	1	244	19	12/8/08	J	
	2	157	21			
	3	202	18			
	4	245	16			
	5	232	6			
HI-05-SS-00 /	1	304	5			
	2	237	8			
	3	294	5			
	4	304	5			
	5	282	7			
HI-07-SS-00 /	1	241	5			
	2	287	5			
	3	281	6			
	4	240	10			
	5	307	5			
OB-01-SS-00 /	1	229	5			
	2	234	2			
	3	248	1			
	4	248	8			
	5	293	5			

2116

2621

3126

3631

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT OBSERVATIONS



SPECIES
Dendroaster excentricus *Mytilus* sp.

CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 0	PROJECT MANAGER M. Pinza	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
OB-02-SS-00 /	1	222	5	12/8/08	↓	41 36
	2	202	34			
	3	231	17			
	4	260	16			
	5	220	13			
OB-03-SS-00 /	1	179	24			46 41
	2	212	23			
	3	233	19			
	4	241	19			
	5	206	32			
SH-01-SS-00 /	1	224	23			51 46
	2	211	34			
	3	221	29			
	4	186	51			
	5	169	47	↓	↓	
SH-02-SS-00 /	1	144	62	12/9/08	↓	56 51
	2	162	65			
	3	72	111			
	4	46	55			
	5	105	81	↓	↓	

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT OBSERVATIONS



SPECIES <i>Dendroaster excentricus</i> <i>Mytilus</i> sp.
PROJECT MANAGER M. Pinza
NEWFIELDS LAB / LOCATION Port Gamble / Bath 3
PROTOCOL PSEP (1995)

CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 0
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
SH-03-SS-00 /	1	76	108	12/9/08	↓	#56
	2	94	108			
	3	60	122			
	4	155	67			
	5	144	98			
SH-04-SS-00 /	1	135	100			#66
	2	126	105			
	3	115	113			
	4	155	119			
	5	148	116			
SH-06-SS-00 /	1	70	72			#66
	2	42	53			
	3	51	125			
	4	46	126			
	5	70	132			
SH-09-SS-00 /	1	219	39	12/10/08	↓	#71
	2	234	39			
	3	190	54			
	4	230	46			
	5	222	46			

**SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT
OBSERVATIONS**



SPECIES <i>Dendroaster excentricus</i> <i>Mytilus</i> sp.
CLIENT Herrera
PROJECT Oakland Bay
JOB NUMBER 0
PROJECT MANAGER M. Pinza
NEWFIELDS LAB / LOCATION Port Gamble / Bath 3
PROTOCOL PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER		DATE	TECHNICIAN	COMMENTS
		NORMAL	ABNORMAL			
SH-10-SS-00 /	1	217	62	12/10/08	L	87 76
	2	267	20			
	3	247	15			
	4	196	13			
	5	226	17			
SH-14-SS-00 /	1	139	43			86 81
	2	212	26			
	3	188	23			
	4	191	35			
	5	131	54			
SH-15-SS-00 /	1	273	12			91 86
	2	294	6			
	3	287	6			
	4	186	10			
	5	274	4			
SH-16-SS-00 /	1	269	11			96 91
	2	235	6			
	3	215	4			
	4	251	10			
	5	243	6			

**SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT
OBSERVATIONS**



SPECIES <i>Dendroaster excentricus</i> <i>Mytilus</i> sp.
CLIENT Herrera
PROJECT Oakland Bay
JOB NUMBER 0
PROJECT MANAGER M. Pinza
NEWFIELDS LAB / LOCATION Port Gamble / Bath 3
PROTOCOL PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
SH-19-WS-00 /	1	158	89	12/10/06	J	106 96
	2	132	87	↓	↓	
	3	122	44			
	4	113	83			
	5	104	99			
SH-20-WS-00 /	1	249	44	↓	↓	106 101
	2	222	75			
	3	206	62			
	4	209	61			
	5	237	64			
SH-21-WS-00 /	1	98	98	12/15/08	J	HT 106
	2	134	99	↓	↓	
	3	108	90			
	4	114	94			
	5	123	105			
SH-22-WS-00 /	1	146	70	↓	↓	HT 111
	2	141	63			
	3	111	43			
	4	137	60			
	5	145	31			

**SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT
OBSERVATIONS**



SPECIES <i>Dendroaster excentricus</i> <i>Mytilus</i> sp.		
CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 0
PROJECT MANAGER M. Pinza	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
SH-23-WS-00 /	1	235	21	2/15/08	↓	
	2	193	47			
	3	210	64			
	4	160	77			
	5	135	56			
SH-24-WS-00 /	1	118	73			12+116
	2	121	94			
	3	93	123			
	4	79	113			
	5	93	109			
SH-26-WS-00 /	1	201	44			126 121
	2	190	37			
	3	158	40			
	4	192	45			
	5	153	23			
SH-27-WS-00 /	1	298	8			13+ 126
	2	295	5			
	3	269	6			
	4	245	12			
	5	238	17			

**SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT
OBSERVATIONS**



SPECIES <i>Dendraster excentricus</i> <i>Mytilus</i> sp.		
CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 0
PROJECT MANAGER M. Pinza	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)

LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
SH-28-WS-00 /	1	210	18	12/15/08	J	146 136
	2	193	12			
	3	205	14			
	4	261	12			
	5	197	24			
SH-29-WS-00 /	1	307	4			146 141
	2	280	7			
	3	289	3			
	4	255	4			
	5	257	3			
SH-30-WS-00 /	1	222	31			146 146
	2	185	17			
	3	181	22			
	4	202	21			
	5	193	33			



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	TEST START DATE 20Nov08	TIME 1935	TEST END DATE 11/22

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
Control /	0		WQ Surr	3	8.6	3	15.5 15.8	3	28	3	7.7					CR	11/20
Control /	1		WQ Surr	3	7.9	3	15.7	3	28	3	7.8					JR	11/21
Control /	2		WQ Surr	3	7.9	3	15.5	3	28	3	7.8					JR	11/22
Control /	3*		WQ Surr														
Sand Control /	0		WQ Surr	3	9.7	3	15.2	3	28	3	7.5					CR	11/20
Sand Control /	1		WQ Surr	3	8.2	3	16.0	3	28	3	7.8					JR	11/21
Sand Control /	2		WQ Surr	3	8.2	3	15.7	3	28	3	8.0					JR	11/22
Sand Control /	3*		WQ Surr														
RF-01 /	0		WQ Surr	3	8.7	3	15.3	3	28	3	7.7					CR	11/20
RF-01 /	1		WQ Surr	3	6.3	3	15.9	3	28	3	7.7					JR	11/21
RF-01 /	2		WQ Surr	3	6.2	3	15.6	3	29	3	7.7					JR	11/22
RF-01 /	3		WQ Surr														

① WC, MMB 11/20/08



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	TEST START DATE 20Nov08	TIME	TEST END DATE TIME

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
RF-02 /	0		WQ Surr	3	8.8	3	15.2	3	28	3	7.7					CR	11/20
RF-02 /	1		WQ Surr	3	6.4	3	15.8	3	28	3	7.8					JR	11/21
RF-02 /	2		WQ Surr	3	6.3	3	15.6	3	28	3	7.7					JR	11/20
RF-02 /	3*		WQ Surr														
RF-03 /	0		WQ Surr	3	8.4	3	15.3	3	28	3	7.7					CR	11/20
RF-03 /	1		WQ Surr	3	6.6	3	15.8	3	28	3	7.7					JR	11/21
RF-03 /	2		WQ Surr	3	6.7	3	15.9	3	28	3	7.7					JR	11/21
RF-03 /	3		WQ Surr														
HI-05-SS-00 /	0		WQ Surr	3	8.9	3	15.5	3	28	3	7.7					CR	11/20
HI-05-SS-00 /	1		WQ Surr	3	6.9	3	15.9	3	28	3	7.8					JR	11/21
HI-05-SS-00 /	2		WQ Surr	3	6.8	3	15.7	3	28	3	7.8					JR	11/22
HI-05-SS-00 /	3*		WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	TEST START DATE 20Nov08	TIME	TEST END DATE TIME

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
HI-07-SS-00 /	0		WQ Surr	3	8.6	3	15.4	3	28	3	7.7					CR	11/20
HI-07-SS-00 /	1		WQ Surr	3	6.7	3	15.8	3	28	3	7.7					JR	11/21
HI-07-SS-00 /	2		WQ Surr	3	6.6	3	15.7	3	28	3	7.8					JR	11/22
HI-07-SS-00 /	3		WQ Surr														
OB-01-SS-00 /	0		WQ Surr	3	8.3	3	15.6	3	28	3	7.7					CR	11/20
OB-01-SS-00 /	1		WQ Surr	3	6.3	3	16.2	3	28	3	7.7					JR	11/21
OB-01-SS-00 /	2		WQ Surr	3	6.1	3	15.8	3	28	3	7.8					JR	11/22
OB-01-SS-00 /	3*		WQ Surr														
OB-02-SS-00 /	0		WQ Surr	3	8.5	3	15.3	3	28	3	7.7					CR	11/20
OB-02-SS-00 /	1		WQ Surr	3	6.1	3	15.8	3	28	3	7.7					JR	11/21
OB-02-SS-00 /	2		WQ Surr	3	5.8	3	15.6	3	28	3	7.7					JR	11/22
OB-02-SS-00 /	3*		WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	TEST START DATE 20Nov08	TIME	TEST END DATE TIME

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
OB-03-SS-00 /	0		WQ Surr	3	8.2	3	15.4	3	28	3	7.5					OR	11/20
OB-03-SS-00 /	1		WQ Surr	3	6.1	3	16.1	3	28	3	7.7					JR	11/21
OB-03-SS-00 /	2		WQ Surr	3	5.9	3	16.1	3	28	3	7.9					JR	11/22
OB-03-SS-00 /	3		WQ Surr														
SH-01-SS-00 /	0		WQ Surr	3	8.8	3	15.1	3	28	3	7.3					OR	11/20
SH-01-SS-00 /	1		WQ Surr	3	6.4	3	16.1	3	28	3	7.7					JR	11/21
SH-01-SS-00 /	2		WQ Surr	3	5.7	3	15.8	3	28	3	7.7					JR	11/22
SH-01-SS-00 /	3*		WQ Surr														
SH-02-SS-00 /	0		WQ Surr	3	8.6	3	15.1	3	28	3	7.6					OR	11/20
SH-02-SS-00 /	1		WQ Surr	3	6.1	3	15.9	3	28	3	7.6					JR	11/21
SH-02-SS-00 /	2		WQ Surr	3	5.7	3	15.7	3	28	3	7.6					JR	11/22
SH-02-SS-00 /	3		WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	TEST START DATE 20Nov08	TIME	TEST END DATE

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
SH-03-SS-00 /	0		WQ Surr	3	8.3	3	15.5	3	28	3	7.7					CR	11/20
SH-03-SS-00 /	1		WQ Surr	3	6.0	3	16.0	3	28	3	7.6					JR	11/21
SH-03-SS-00 /	2		WQ Surr	3	5.7	3	16.0	3	28	3	7.6					JR	11/22
SH-03-SS-00 /	3		WQ Surr														
SH-04-SS-00 /	0		WQ Surr	3	8.1	3	15.4	3	28	3	7.6					CR	11/20
SH-04-SS-00 /	1		WQ Surr	3	5.6	3	15.9	3	28	3	7.7					JR	11/21
SH-04-SS-00 /	2		WQ Surr	3	5.6	3	15.7	3	28	3	7.7					JR	11/22
SH-04-SS-00 /	3		WQ Surr														
SH-06-SS-00 /	0		WQ Surr	3	8.3	3	15.7	3	28	3	7.7					CR	11/20
SH-06-SS-00 /	1		WQ Surr	3	6.5	3	15.8	3	28	3	7.6					JR	11/21
SH-06-SS-00 /	2		WQ Surr	3	6.3	3	15.5	3	28	3	7.6					JR	11/22
SH-06-SS-00 /	3		WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	TEST START DATE 20Nov08	TIME	TEST END DATE TIME

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WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
SH-09-SS-00 /	0		WQ Surr	3	8.2	3	15.4	3	28	3	7.6					CR	11/20
SH-09-SS-00 /	1		WQ Surr	3	5.6	3	15.9	3	28	3	7.7					JR	11/21
SH-09-SS-00 /	2		WQ Surr	3	5.7	3	15.7	3	28	3	7.7					JR	11/22
SH-09-SS-00 /	3		WQ Surr														
SH-10-SS-00 /	0		WQ Surr	3	8.3	3	15.1	3	28	3	7.4					CR	11/20
SH-10-SS-00 /	1		WQ Surr	3	5.8	3	16.0	3	28	3	7.7					JR	11/21
SH-10-SS-00 /	2		WQ Surr	3	5.7	3	15.8	3	28	3	7.7					JR	11/22
SH-10-SS-00 /	3		WQ Surr														
SH-14-SS-00 /	0		WQ Surr	3	8.0	3	15.2	3	28	3	7.8					CR	11/20
SH-14-SS-00 /	1		WQ Surr	3	5.8	3	15.8	3	28	3	7.7					JR	11/21
SH-14-SS-00 /	2		WQ Surr	3	5.6	3	15.6	3	28	3	7.7					JR	11/22
SH-14-SS-00 /	3		WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	TEST START DATE 20Nov08	TIME	TEST END DATE TIME

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
SH-15-SS-00 /	0		WQ Surr	3	9.2	3	15.3	3	28	3	7.7					CR	11/20
SH-15-SS-00 /	1		WQ Surr	3	7.1	3	16.2	3	28	3	7.7					JR	11/21
SH-15-SS-00 /	2		WQ Surr	3	6.7	3	15.9	3	28	3	7.7					JR	11/22
SH-15-SS-00 /	3		WQ Surr														
SH-16-SS-00 /	0		WQ Surr	3	9.6	3	15.4	3	28	3	7.7					CR	11/20
SH-16-SS-00 /	1		WQ Surr	3	7.7	3	15.9	3	28	3	7.7					JR	11/21
SH-16-SS-00 /	2		WQ Surr	3	7.3	3	15.8	3	28	3	7.7					JR	11/22
SH-16-SS-00 /	3		WQ Surr														
SH-19-WS-00 /	0		WQ Surr	3	8.3	3	15.3	3	28	3	7.5					CR	11/20
SH-19-WS-00 /	1		WQ Surr	3	5.9	3	15.9	3	28	3	7.7					JR	11/21
SH-19-WS-00 /	2		WQ Surr	3	5.4	3	16.0	3	28	3	7.6					JR	11/22
SH-19-WS-00 /	3		WQ Surr														

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT
WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	TEST START DATE 20Nov08	TEST END DATE	TIME

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
SH-20-WS-00 /	0		WQ Surr	3	7.2	3	15.4	3	28	3	7.6					CR	11/20
SH-20-WS-00 /	1		WQ Surr	3	5.6	3	15.8	3	28	3	7.7					JR	11/21
SH-20-WS-00 /	2		WQ Surr	3	5.6	3	15.7	3	28	3	7.7					JR	11/22
SH-20-WS-00 /	3		WQ Surr														
SH-21-WS-00	0		WQ Surr	3	7.0	3	15.4	3	28	3	7.7					CR	11/20
SH-21-WS-00	1		WQ Surr	3	5.6	3	16.0	3	28	3	7.6					JR	11/21
SH-21-WS-00	2		WQ Surr	3	5.6	3	15.9	3	28	3	7.6					JR	11/22
SH-21-WS-00	3		WQ Surr														
SH-22-WS-00	0		WQ Surr	3	8.2	3	15.2	3	28	3	7.7					CR	11/20
SH-22-WS-00	1		WQ Surr	3	5.8	3	15.8	3	28	3	7.7					JR	11/21
SH-22-WS-00	2		WQ Surr	3	5.8	3	15.6	3	28	3	7.7					JR	11/22
SH-22-WS-00	3		WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gambie / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	TEST START DATE 20Nov08	TIME	TEST END DATE TIME

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
SH-23-WS-00	0		WQ Surr		8.4		15.2		28		7.6					CR	11/20
SH-23-WS-00	1		WQ Surr	3	6.0	3	15.8	3	28	3	7.7					JR	11/21
SH-23-WS-00	2		WQ Surr	3	5.5	3	15.7	3	28	3	7.7					JR	11/22
SH-23-WS-00	3		WQ Surr														
SH-24-WS-00	0		WQ Surr		7.8		15.5		28		7.7					CR	11/20
SH-24-WS-00	1		WQ Surr	3	5.2	3	16.5	3	28	3	7.6					JR	11/21
SH-24-WS-00	2		WQ Surr	3	5.7	3	16.0	3	28	3	7.6					JR	11/22
SH-24-WS-00	3		WQ Surr														
SH-26-WS-00	0		WQ Surr		8.4		15.3		28		7.7					CR	11/20
SH-26-WS-00	1		WQ Surr	3	6.3	3	15.9	3	28	3	7.6					JR	11/21
SH-26-WS-00	2		WQ Surr	3	6.2	3	15.8	3	28	3	7.7					JR	11/22
SH-26-WS-00	3		WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	TEST START DATE 20Nov08	TIME	TEST END DATE TIME

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WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
SH-27-WS-00	0		WQ Surr		9.0		15.2		28		7.7					CR	11/20
SH-27-WS-00	1		WQ Surr	3	6.4	3	15.7	3	28	3	7.7					JR	11/21
SH-27-WS-00	2		WQ Surr	3	5.8	3	15.6	3	28	3	7.7					JR	11/22
SH-27-WS-00	3		WQ Surr														
SH-28-WS-00	0		WQ Surr		8.6		15.5		28		7.7					CR	11/20
SH-28-WS-00	1		WQ Surr	3	6.2	3	15.8	3	28	3	7.7					JR	11/21
SH-28-WS-00	2		WQ Surr	3	6.0	3	15.6	3	28	3	7.7					JR	11/22
SH-28-WS-00	3		WQ Surr														
SH-29-WS-00	0		WQ Surr		9.2		15.4		28		7.3					CR	11/20
SH-29-WS-00	1		WQ Surr	3	6.9	3	16.1	3	28	3	7.7					JR	11/21
SH-29-WS-00	2		WQ Surr	3	6.7	3	15.9	3	28	3	7.8					JR	11/22
SH-29-WS-00	3		WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	TEST START DATE 20Nov08	TIME	TEST END DATE

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WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
SH-30-WS-00	0		WQ Surr		8.3		15.5		28		7.7					OR	11/20
SH-30-WS-00	1		WQ Surr		36.0		316.0		328		37.7					pk	11/21
SH-30-WS-00	2		WQ Surr		35.7		315.7		328		37.6					pk	11/22
SH-30-WS-00	3		WQ Surr														



Ammonia Analysis Total Ammonia (mg/L)

Client/Project: Herrera / Oakland Bay	Organism: Mytilus (larval)	NewFields Test ID:	Test Duration (days):
---	--------------------------------------	---------------------------	------------------------------

PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: 8
OVERLYING (OV) / POREWATER (PW) (circle one)

Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
21 Nov. '08	20.0	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp $^{\circ}\text{C}$	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
Cont.	Surr	11/20/08 LR	50.5 0.000	25.0	11/21/08 LR	Y			0.001
Secl. Cont			0.738						0.004
Ref-01			40.5						0.177
Ref-02			40.5						0.187
Ref-03			40.5						0.142
HI-05			40.5						0.193
HI-07			40.5						0.141
OB-01			40.5						0.215
OB-02			40.5						0.277
OB-03			40.5						0.264
SH-01			40.5						0.260
SH-02			40.5						0.257
SH-03			40.5						0.281
SH-04			0.541						0.129
SH-06			40.5						0.204
SH-09	✓	✓	40.5		✓	✓			0.181

① IE LR 11/21/08

NEWFIELDS

Ammonia Analysis

Total Ammonia (mg/L)

Client/Project: <u>Oakland Bay</u>	Organism: <u>Mytilus</u>	NewFields Test ID:	Test Duration (days): <u>2</u>
---------------------------------------	-----------------------------	--------------------	-----------------------------------

PRETEST / INITIAL / FINAL / OTHER (circle one) DAY of TEST: 2
OVERLYING (OV) / POREWATER (PW) (circle one)

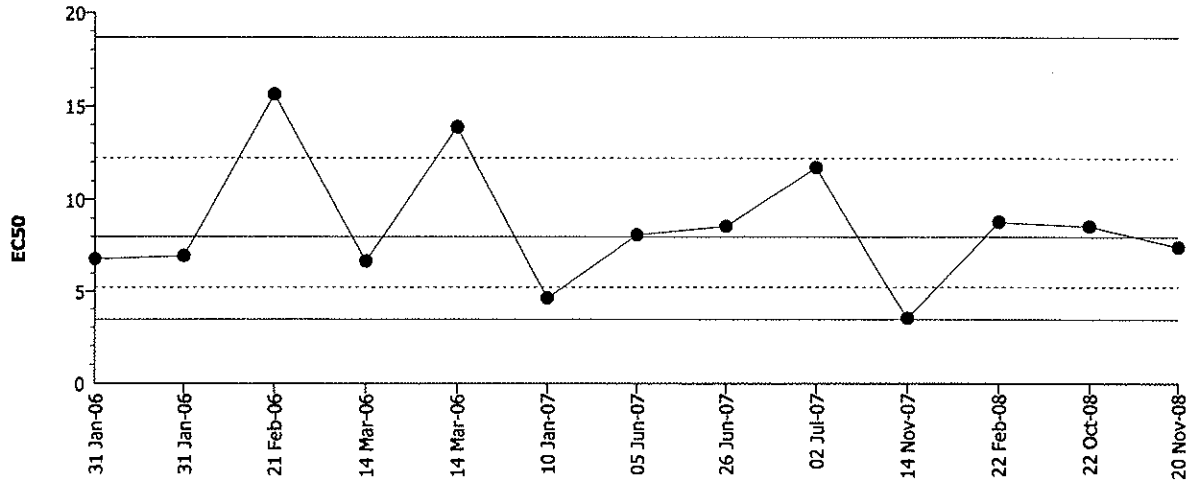
Calibration Standards Temperature		Sample temperature should be within $\pm 1^{\circ}\text{C}$ of standards temperature at time and date of analysis.
Date:	Temperature:	
<u>11/22/08</u>	<u>20°</u>	

Sample ID or Description	Conc. or Rep	Date of Sampling and Initials	Ammonia Value (mg/L)	Temp °C	Date of Reading and Initials	Sample Preserved (Y/N)	pH	Sal (ppt)	Sulf. mg/L
Cont.	Surr	11/22/08 BH	40.5	20°	11/22/08 LR	N			0.000
Sand Cont.			40.5						0.000
RF-01			40.5						0.004
RF-02			40.5						0.004
RF-03			40.5						0.000
HI-05			40.5						0.005
HI-07			40.5						0.004
OB-01			40.5						0.004
OB-02			40.5						0.008
OB-03			40.5						0.005
SH-01			40.5						0.002
SH-02			40.5						0.004
SH-03			40.5						0.004
SH-04			40.5						0.000
SH-06			40.5						0.003
SH-09			40.5						0.002

CETIS QC Chart

NewFields

Test Type: Development-Survival Organism: Mytilus species (Mussel) Material: Copper sulfate
 Protocol: EPA/600/R-95/136 (1995) Endpoint: Proportion Normal Source: Reference Toxicant-REF



Mean: 7.99338 Count: 12 -1s Warning Limit: 5.22741 -2s Action Limit: 3.41855
 Sigma: CV: 52.91% +1s Warning Limit: 12.2229 +2s Action Limit: 18.6904

Quality Control Data

Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Jan	31	6.78635	-1.20703	-0.38545			13-7720-1086	09-2249-8461
2			31	6.95016	-1.04322	-0.32929			07-7532-7374	01-6476-6154
3		Feb	21	15.63050	7.63712	1.57902	(+)		13-4991-4803	11-1130-3991
4		Mar	14	6.66272	-1.33066	-0.42874			06-2606-4386	10-2179-5612
5			14	13.87779	5.88441	1.29898	(+)		04-5028-3346	13-6407-7819
6	2007	Jan	10	4.61926	-3.37413	-1.29122	(-)		14-3905-0090	10-4591-2581
7		Jun	5	8.10135	0.10797	0.03159			13-7829-5492	06-3241-4206
8			26	8.58591	0.59252	0.16837			01-3435-1614	05-9641-3061
9		Jul	2	11.74293	3.74955	0.90567			05-4911-0140	17-0573-9257
10		Nov	14	3.49998	-4.49340	-1.94457	(-)		15-3555-7493	11-5553-6060
11	2008	Feb	22	8.81298	0.81960	0.22984			06-6162-8975	04-7060-4398
12		Oct	22	8.57651	0.58313	0.16579			13-5164-0440	04-9649-9989
13		Nov	20	7.44064	-0.55275	-0.16873			09-2389-8810	12-8844-8525

CETIS Analysis Detail

Mussel Shell Development Test NewFields

Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version
Proportion Normal	Comparison	09-2389-8810	09-2389-8810	23 Jan-09 2:43 PM	CETISv1.1.2

Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		5	10	20	7.07107	3.26%

Group Comparisons

Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)
Dilution Water		2.5	0.16069	2.41651	0.6900	0.07425	Non-Significant Effect
		5	1.40213	2.41651	0.2105	0.07425	Non-Significant Effect
		10	37.3051	2.41651	0.0000	0.07425	Significant Effect

Test Acceptability

Attribute	Statistic	TAC Range	Overlap	Decision
Control Response	0.96642	0.9 - NL	Yes	Passes acceptability criteria

ANOVA Table

Source	Sum of Squares	Mean Square	DF	F Statistic	P-Value	Decision(0.05)
Between	2.87792	0.9593065	3	677.32	0.00000	Significant Effect
Error	0.0113306	0.0014163	8			
Total	2.88925028	0.9607229	11			

ANOVA Assumptions

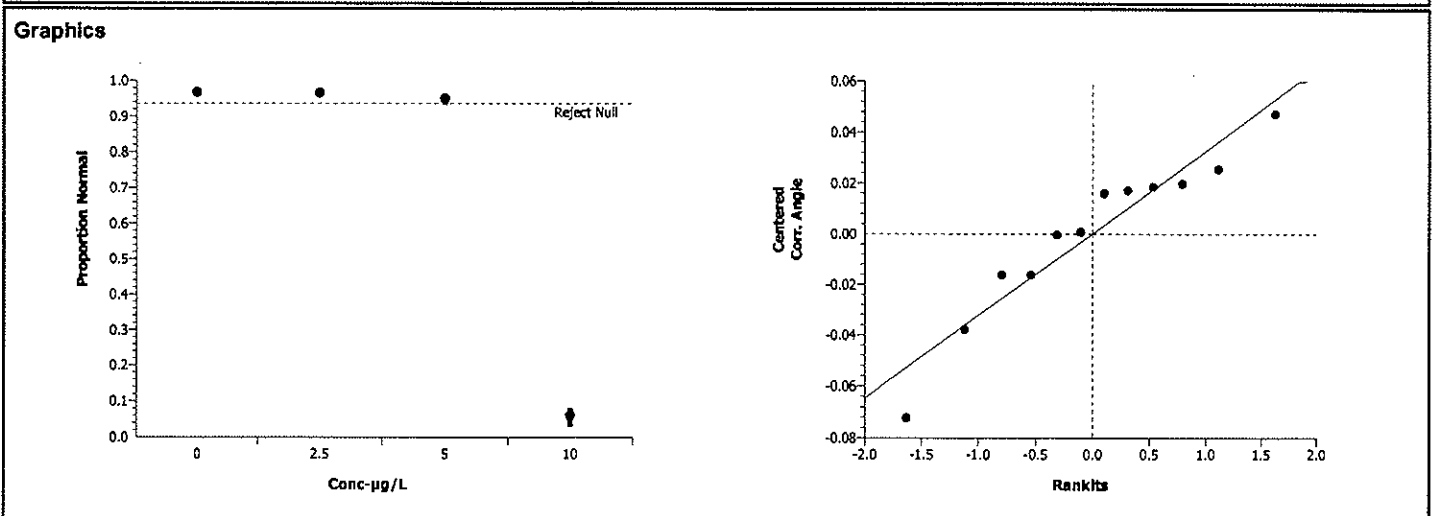
Attribute	Test	Statistic	Critical	P-Value	Decision(0.01)
Variances	Bartlett	4.19799	11.34487	0.24086	Equal Variances
Distribution	Shapiro-Wilk W	0.92662		0.34569	Normal Distribution

Data Summary

Conc-µg/L	Control Type	Count	Original Data				Transformed Data			
			Mean	Minimum	Maximum	SD	Mean	Minimum	Maximum	SD
0	Dilution Water	3	0.96642	0.96043	0.97241	0.00599	1.38699	1.37054	1.40393	0.01670
2.5		3	0.96464	0.95848	0.97039	0.00597	1.38205	1.36559	1.39787	0.01615
5		3	0.94875	0.93146	0.95765	0.01498	1.34391	1.30592	1.36354	0.03291
10		3	0.05923	0.02807	0.08051	0.02758	0.24068	0.16834	0.28769	0.06358

Data Detail

Conc-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Dilution Water	0.96043	0.96642	0.97241							
2.5		0.96503	0.95848	0.97039							
5		0.95765	0.93146	0.95714							
10		0.06911	0.08051	0.02807							

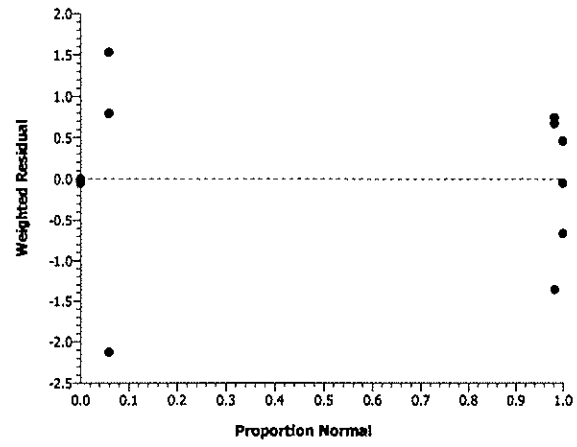
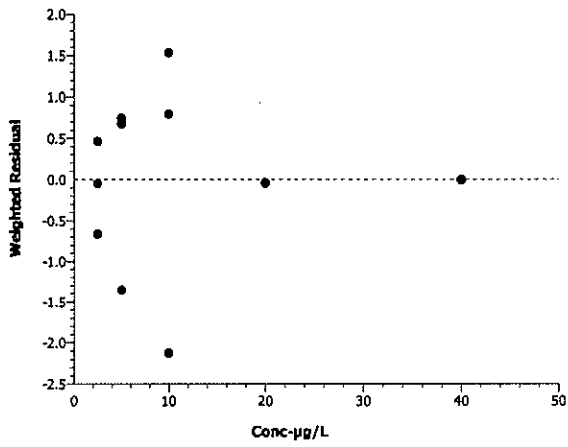
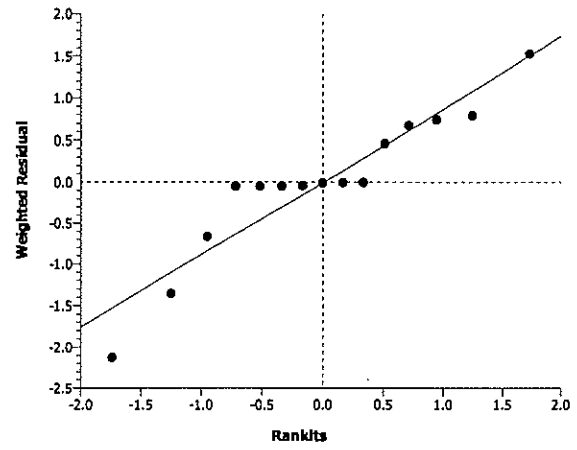
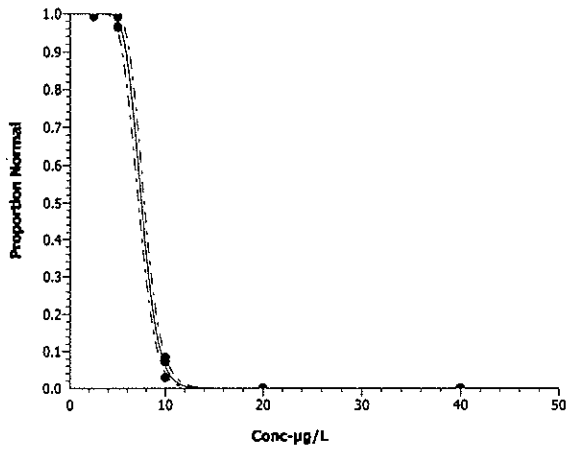


CETIS Analysis Detail

Mussel Shell Development Test							NewFields		
Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version				
Proportion Normal	Linear Regression	09-2389-8810	09-2389-8810	23 Jan-09 2:43 PM	CETISv1.1.2				
Linear Regression Options									
Model Function	Threshold Option	Threshold	Threshold Opt	Reweighted	Pooled Groups	Het Corr			
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.03349282	Yes	Yes	No	No			
Regression Summary									
Iters	Log Likelihood	Mu	Sigma	G	Chi-Sq	Critical	P-Value	Decision(0.05)	
6	-281.13190	-0.46004	0.08231	0.01288	10.99593	22.36203	0.61116	Non-Significant Heterogeneity	
Point Estimates									
% Effect	Conc-µg/L	95% LCL	95% UCL						
10	5.836067	5.470351	6.15222						
15	6.113599	5.761207	6.418203						
20	6.343556	6.002843	6.638345						
25	6.547719	6.217738	6.833732						
40	7.091794	6.79112	7.355047						
50	7.440637	7.158296	7.690762						
Test Acceptability									
Attribute	Statistic	TAC Range	Overlap	Decision					
Control Response	0.96642	0.9 - NL	Yes	Passes acceptability criteria					
Regression Parameters									
Parameter	Estimate	Std Error	95% LCL	95% UCL	t Statistic	P-Value	Decision(0.05)		
Threshold	0.03439768	0.004401224	0.02577128	0.04302408	7.815	0.00000	Significant		
Slope	12.14857	0.7033547	10.77	13.52715	17.272	0.00000	Significant		
Intercept	-5.58882	0.5970802	-6.759097	-4.418543	-9.360	0.00000	Significant		
Residual Analysis									
Attribute	Method	Statistic	Critical	P-Value	Decision(0.05)				
Variances	Bartlett	37.40196	9.48773	0.00000	Unequal Variances				
Distribution	Shapiro-Wilk W	0.9053606		0.11496	Normal Distribution				
Data Summary									
Conc-µg/L	Control Type	Count	Calculated Variate(A/B)						
			Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.96642	0.96043	0.97241	0.00122	0.00599	808	836
2.5		3	0.96464	0.95848	0.97039	0.00122	0.00597	848	879
5		3	0.94875	0.93146	0.95765	0.00306	0.01498	861	908
10		3	0.05923	0.02807	0.08051	0.00563	0.02758	44	767
20		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	706
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	16

CETIS Analysis Detail

Graphics



CETIS Data Worksheet

Report Date: 23 Jan-09 2:44 PM

Link: 09-2389-8810/P070930.95

Mussel Shell Development Test

NewFields

Start Date: 20 Nov-08 07:55 PM Species: Mytilus species Sample Code: P070930.95
 Ending Date: 22 Nov-08 07:30 PM Protocol: EPA/600/R-95/136 (1995) Sample Source: Reference Toxicant
 Sample Date: 20 Nov-08 Material: Copper sulfate Sample Station: P070930.95

Conc-µg/L	Code	Rep	Pos	Initial Density	Final Density	# Counted	# Normal	Notes
0	D	1	14	303	278	278	267	
0	D	2	3	303	268	268	259	
0	D	3	18	303	290	290	282	
2.5		1	6	303	286	286	276	
2.5		2	9	303	289	289	277	
2.5		3	18	303	304	304	295	
5		1	4	303	307	307	294	
5		2	13	303	321	321	299	
5		3	1	303	280	280	268	
10		1	8	303	246	246	17	
10		2	17	303	236	236	19	
10		3	11	303	285	285	8	
20		1	15	303	265	265	0	
20		2	7	303	201	201	0	
20		3	2	303	240	240	0	
40		1	5	303	12	12	0	
40		2	10	303	1	1	0	
40		3	12	303	3	3	0	

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT REF TOX OBSERVATIONS

Batch #1

NEWFIELDS

SPECIES
Dendroaster excentricus *Mytilus sp.*

CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 0	PROJECT MANAGER M. Pinza	NEWFIELDS LAB / LOCATION Port Gamble / Incubator	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/NEWFIELDS ID	CONC.		VIAL NUMBER	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
	value	units							
Ref.Tox. - Copper	0	µg/L		1	267	11	12/20/08	J	
				2	259	9			
				3	282	8			
Ref.Tox. - Copper	2.5	µg/L		1	276	10			
				2	277	12			
				3	295	9			
Ref.Tox. - Copper	5	µg/L		1	294	13			
				2	299	22			
				3	268	12			
Ref.Tox. - Copper	10	µg/L		1	17	229			
				2	19	217			
				3	8	237			
Ref.Tox. - Copper	20	µg/L		1	Ø	265			
				2	Ø	201			
				3	Ø	240			
Ref.Tox. - Copper	40	µg/L		1	Ø	12			
				2	Ø	1			
				3	Ø	3			
STOCKING DENSITY				1		329			
				2		293			
				3		286			

$\bar{x} = 302.7$



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT REF TOX WQ

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	QUANTITY OF TOXICANT: 0.039 mL 0.039	QUANTITY OF DILUENT: 500mL ACTUAL: 500.66 500.0	INIT BH
TEST ID P070930.95	LOT #: 1704237	TEST START DATE: 11/20/08	TIME 1935 1900 1930 MSS	TEST END DATE 11/22/08

WATER QUALITY DATA

DILTIN.WAT.BATCH			TEMP REC#				REFERENCE TOX. MATERIAL				REFERENCE TOXICANT				
0							Copper Sulfate				Copper				
TEST CONDITIONS					DO (mg/L)		TEMP(C)		SAL (ppt)		pH		TECH.	DATE	
					>4.8		16.15 ± 1		28 ± 1		7.8 ± 0.5				
CLIENT/ NEWFIELDS ID	CONCENTRATION		DAY	REP	D.O.		TEMP.		SALINITY		pH				
	value	units			meter	mg/L	meter	°C	meter	ppt	meter	unit			
Ref.Tox.-Copper	0	µg/L	0	Stock	3	8.6	3	14.8	3	28	3	7.5	CR	11/20	
			1	Stock	3	7.3	3	15.9	3	28	3	8.0	BH	11/21	
			2	Stock	3	7.2	3	15.8	3	28	3	7.9	BH	11/22	
			3	Stock											
			4	Stock											
Ref.Tox.-Copper	2.5	µg/L	0	Stock	3	9.1	3	14.6	3	28	3	7.6	CR	11/20	
			1	Stock	3	7.3	3	15.9	3	28	3	8.1	BH	11/21	
			2	Stock	3	7.4	3	15.8	3	28	3	7.9	BH	11/22	
			3	Stock											
			4	Stock											
Ref.Tox.-Copper	5	µg/L	0	Stock	3	9.1	3	14.6	3	28	3	7.6	CR	11/20	
			1	Stock	3	7.0	3	15.7	3	28	3	8.0	BH	11/21	
			2	Stock	3	7.4	3	15.8	3	28	3	7.9	BH	11/22	
			3	Stock											
			4	Stock											

① WT. MSS 11/21/08
11/21/2008 Oakland Bay PSEP Larval Test Cu RTWQ



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT REF TOX WQ

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus sp.</i> <i>Dendroaster excentricus</i>	NEWFIELDS LAB / LOCATION Port Gamble Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 0	PROJECT MANAGER M. Pinza	QUANTITY OF TOXICANT: 0.039 mL 0.039	QUANTITY OF DILUENT: 500mL ACTUAL: 500.06 500.0	INIT BKH
TEST ID 10709W.95	LOT #: 1704237	TEST START DATE: 11/20/08	TIME 1930 1958 1955	TEST END DATE 11/22/08
				TIME 1930

WATER QUALITY DATA

DILTIN.WAT.BATCH		TEMP REC#		REFERENCE TOX. MATERIAL				REFERENCE TOXICANT						
0				Copper Sulfate				Copper						
TEST CONDITIONS				DO (mg/L)		TEMP(C)		SAL (ppt)		pH		TECH.	DATE	
				>4.8		15 ± 1		28 ± 1		7.8 ± 0.5				
CLIENT/ NEWFIELDS ID	CONCENTRATION		DAY	REP	D.O.		TEMP.		SALINITY		pH			
	value	units			meter	mg/L	meter	°C	meter	ppt	meter	unit		
Ref.Tox.-Copper	10	µg/L	0	Stock	3	9.1	3	14.7	3	28	3	7.6	CR	11/20
			1	Stock	3	7.4	3	15.5	3	29	3	8.0	CR	11/21
			2	Stock	3	7.6	3	15.8	3	28	3	7.9	BKH	11/22
			3	Stock										
			4	Stock										
Ref.Tox.-Copper	20	µg/L	0	Stock	3	9.2	3	14.6	3	28	3	7.7	CR	11/20
			1	Stock	3	7.2	3	15.4	3	29	3	8.0	CR	11/21
			2	Stock	3	7.5	3	15.9	3	28	3	8.0	BKH	11/22
			3	Stock										
			4	Stock										
Ref.Tox.-Copper	40	µg/L	0	Stock	3	9.3	3	14.7	3	28	3	7.7	CR	11/20
			1	Stock	3	7.4	3	15.3	3	29	3	8.0	CR	11/21
			2	Stock	3	7.4	3	16.1	3	28	3	8.0	BKH	11/22
			3	Stock										
			4	Stock										

**SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT
OBSERVATIONS**



SPECIES
Mytilus edulis (mussel)

CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
STOCKING DENSITY	1		286	11/28/02	BSH	
	2		291			
	3		311			
	4		274			
	5		283			
Control /	1	310	3			
	2	287	3			
	3	302	2			
	4	308	3			
	5	281	2			
REF-02 /	1	182	1			
	2	197	7			
	3	218	5			
	4	178	3			
	5	203	1			
REF-03 /	1	215	13	12/31/08	J	
	2	238	5			
	3	240	4			
	4	231	3			
	5	245	2			

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT OBSERVATIONS



SPECIES
Mytilus edulis (mussel)

CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1095)
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LARVAL OBSERVATION DATA

CLIENT/NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
SH-11 /	1	217	6	12/31/08	J	
	2	202	8	↓	↓	
	3	242	4	↓	↓	
	4	247	6	↓	↓	
	5	226	12	↓	↓	
SH-12 /	1	207	18	↓	↓	
	2	192	7	↓	↓	
	3	189	18	↓	↓	
	4	186	11	↓	↓	
	5	209	14	↓	↓	
SH-18 /	1	222	3	↓	↓	
	2	188	10	↓	↓	
	3	215	9	↓	↓	
	4	227	7	↓	↓	
	5	229	16	↓	↓	
SH-25 /	1	191	10	1/2/09	BH	
	2	246	2	↓	↓	
	3	229	6	↓	↓	
	4	182	8	↓	↓	
	5	208	5	↓	↓	

16

21

26

31

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT OBSERVATIONS



SPECIES
Mytilus edulis (muschel)

CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
HI-06 /	1	235	0	1/2/09	BH	
	2	208	2			
	3	239	3			
	4	237	1			
	5	214	4			
OB-04 /	1	162	2			
	2	148	1			
	3	157	4			
	4	113	3			
	5	163	2			
OB-05 /	1	185	2			
	2	172	5			
	3	159	3			
	4	208	2			
	5	213	2			
OB-06 /	1	202	3			
	2	145	7			
	3	179	4			
	4	174	7			
	5	165	3	↓	↓	

36

41

46

51

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT OBSERVATIONS



SPECIES
Mytilus edulis (mussel)

CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
OB-09 /	1	202	1	1/2/09	BH	56
	2	188	4	↓	↓	
	3	208	1			
	4	200	0			
	5	209	2			
OB-11 /	1	234	1			↓	↓	61
	2	241	0			
	3	202	0			
	4	235	3			
	5	230	1			
OB-17 /	1	228	1	↓	↓	66
	2	247	2			
	3	215	1			
	4	223	1			
	5	215	2			
OB-18 /	1	137	31	1/2/09	BH	71
	2	168	36	↓	↓	
	3	140	30			
	4	113	45			
	5	154	26			

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT OBSERVATIONS



SPECIES
Mytilus edulis (muscle)

CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT / NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
OB-10 /	1	135	30	1/2/09	J	
	2	163	43			
	3	118	52			
	4	128	34			
	5	147	44			
OB-12 /	1	184	20			
	2	228	27			
	3	234	25			
	4	213	20			
	5	209	22			
OB-13 /	1	123	6			
	2	138	7			
	3	130	7			
	4	261 131	9			
	5	149	7			
OB-14 /	1	137	17			
	2	169	12			
	3	142	16			
	4	144	10			
	5	171	10			

76

81

86

91

① 12 1/2/09 J

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT OBSERVATIONS



SPECIES
Mytilus edulis (mussel)

CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
OB-19 /	1	133	29	1/5/09	BH	
	2	158	19	↓	↓	
	3	167	7	↓	↓	
	4	166	24	↓	↓	
	5	83	23	↓	↓	
HI-02 /	1	260	3	↑	↑	
	2	251	5	↑	↑	
	3	287	2	↑	↑	
	4	217	4	↑	↑	
	5	285	3	↑	↑	
HI-03 /	1	267	1	↑	↑	
	2	271	0	↑	↑	
	3	212	1	↑	↑	
	4	238	0	↑	↑	
	5	226	0	↑	↑	
HI-04 /	1	233	1	↑	↑	
	2	285	4	↑	↑	
	3	275	2	↑	↑	
	4	225	1	↑	↑	
	5	217	1	↑	↑	

96

101

106

111

**SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT
OBSERVATIONS**



SPECIES <i>Mytilus edulis (mussel)</i>
PROJECT MANAGER Brian Hester
NEWFIELDS LAB / LOCATION Port Gamble / Bath 3
PROTOCOL PSEP (1995)

CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 1101-008-860
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
OB-07 /	1	261	1	12/6/07	↓	
	2	233	4			
	3	250	2			
	4	243	1			
	5	231	1			
OB-08 /	1	218	21			
	2	230	14			
	3	237	11			
	4	270	7			
	5	232	22			
SH-07 /	1	112	27			
	2	165	20			
	3	130	28			
	4	135	23			
	5	110	32			
SH-13 /	1	248	35			
	2	167	22			
	3	221	21			
	4	243	18			
	5	219	27			

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121

126

131

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT OBSERVATIONS



SPECIES
Mytilus edulis (mussel)

CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

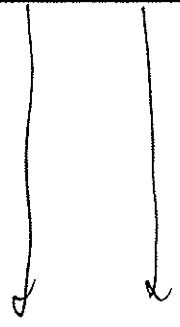
CLIENT/ NEWFIELDS ID	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
Sediment Control /	1	268	9	1/6/09	J	
	2	213	5			
	3	241	15			
	4	271	2			
	5	278	3			

136

Ref 01

256	6
262	9
260	11
265	8
231	5

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SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	TEST START DATE 25Nov08	TIME 2355	TEST END DATE 11/27/08

WATER QUALITY DATA

* Day 3 observations needed only if development endpoint not met by day 2

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
Control /	0	172	WQ Surr	3	8.8	3	15.6	3	28	3	8.0	BH	<0.5	BH	0.002	BH	11/25
Control /	1	172	WQ Surr	4	8.3	4	15.9	1	28	1	7.9					CW	11/26
Control /	2	172	WQ Surr	4	8.1	4	16.2	1	27	1	7.8					BH	11/27
Control /	3*	172	WQ Surr														
REF-01 /	0	117	WQ Surr	3	7.6	3	15.2	3	28	3	8.0	BH	20.5	BH	0.108	BH	11/25
REF-01 /	1	117	WQ Surr	4	6.8	4	15.8	1	28	1	7.8					CW	11/26
REF-01 /	2	117	WQ Surr	4	6.5	4	16.3	1	28	1	7.8					BH	11/27
REF-01 /	3*	117	WQ Surr														
REF-02 /	0	153	WQ Surr	3	8.3	3	15.2	3	28	3	8.1	BH	<0.5	BH	0.098	BH	11/25
REF-02 /	1	153	WQ Surr	4	7.3	4	15.9	1	28	1	7.8					CW	11/26
REF-02 /	2	153	WQ Surr	4	6.6	4	16.5	1	28	1	7.8					BH	11/27
REF-02 /	3	153	WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	TEST START DATE 25Nov08	TIME	TEST END DATE

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
REF-03 /	0	137	WQ Surr	3	8.2	3	15.5	3	28	3	7.9	BH	40.5	BH	0.070	BH	11/25
REF-03 /	1	137	WQ Surr	4	7.0	4	16.0	1	28	1	7.6					CW	11/26
REF-03 /	2	137	WQ Surr	4	7.1	4	16.4	1	27	1	7.8					BH	11/27
REF-03 /	3*	137	WQ Surr														
SH-11 /	0	51	WQ Surr	3	7.9	3	15.5	3	28	3	7.8	BH	40.5	BH	0.121	BH	11/25
SH-11 /	1	51	WQ Surr	4	6.3	4	16.0	1	27	1	7.7					CW	11/26
SH-11 /	2	51	WQ Surr	4	6.1	4	16.4	1	27	1	7.7					BH	11/27
SH-11 /	3	51	WQ Surr														
SH-12 /	0	145	WQ Surr	3	7.7	3	15.4	3	28	3	8.2	BH	40.5	BH	0.083	BH	11/25
SH-12 /	1	145	WQ Surr	4	6.8	4	15.8	1	28	1	7.7					CW	11/26
SH-12 /	2	145	WQ Surr	4	6.4	4	16.2	1	28	1	7.7					BH	11/27
SH-12 /	3*	145	WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	TEST START DATE 25Nov08	TEST END DATE TIME
PROTOCOL PSEP (1995)			

WATER QUALITY DATA

* Day 3 observations needed only if development endpoint not met by day 2

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
SH-18 /	0	150	WQ Surr	3	6.8	3	15.7	3	28	3	8.2	BH	40.5	BH	0.067	BH	11/25
SH-18 /	1	150	WQ Surr	4	6.0	4	15.8	1	28	1	7.7					aw	11/26
SH-18 /	2	150	WQ Surr	4	6.1	4	16.3	1	28	1	7.7					BH	11/27
SH-18 /	3	150	WQ Surr														
SH-25 /	0	1	WQ Surr	3	8.1	3	15.6	3	28	3	7.8	BH	40.5	BH	0.062	BH	11/25
SH-25 /	1	1	WQ Surr	4	6.8	4	16.4	1	28	1	7.6					aw	11/26
SH-25 /	2	1	WQ Surr	4	6.4	4	16.4	1	28	1	7.7					BH	11/27
SH-25 /	3*	1	WQ Surr														
HI-06 /	0	58	WQ Surr	3	7.9	3	15.5	3	28	3	7.9	BH	40.5	BH	0.110	BH	11/25
HI-06 /	1	58	WQ Surr	4	6.4	4	15.9	1	28	1	7.8					aw	11/26
HI-06 /	2	58	WQ Surr	4	6.3	4	16.4	1	28	1	7.7					BH	11/27
HI-06 /	3*	58	WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	TEST START DATE 25Nov08	TIME	TEST END DATE

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
OB-04 /	0	90	WQ Surr	3	7.5	3	15.5	3	27	3	8.0	BH	<0.5	BH	0.112	BH	11/25
OB-04 /	1	90	WQ Surr	4	6.6	4	15.9	1	27	1	7.7					CW	11/26
OB-04 /	2	90	WQ Surr	4	6.3	4	16.2	1	27	1	7.7					BH	11/27
OB-04 /	3	90	WQ Surr														
OB-05 /	0	12	WQ Surr	3	8.3	3	15.9	3	28	3	7.9	BH	<0.5	BH	0.085	BH	11/25
OB-05 /	1	12	WQ Surr	4	6.7	4	16.1	1	28	1	7.7					CW	11/26
OB-05 /	2	12	WQ Surr	4	6.2	4	16.4	1	28	1	7.7					BH	11/27
OB-05 /	3*	12	WQ Surr														
OB-06 /	0	91	WQ Surr	3	7.7	3	15.8	3	28	3	8.0	BH	<0.5	BH	0.064	BH	11/25
OB-06 /	1	91	WQ Surr	4	7.0	4	16.1	1	28	1	7.5					CW	11/26
OB-06 /	2	91	WQ Surr	4	6.3	4	16.4	1	28	1	7.7					BH	11/27
OB-06 /	3	91	WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	TEST START DATE 25Nov08	TEST END DATE	TIME

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
OB-09 /	0	163	WQ Surr	3	7.3	3	15.4	3	28	3	8.1	BH	<0.5	BH	0.115	BH	11/25
OB-09 /	1	163	WQ Surr	4	6.1	4	16.0	1	28	1	7.8					cw	11/26
OB-09 /	2	163	WQ Surr	4	6.1	4	16.5	1	28	1	7.7					BH	11/27
OB-09 /	3	163	WQ Surr														
OB-11 /	0	115	WQ Surr	3	7.4	3	15.4	3	28	3	8.0	BH	<0.5	BH	0.069	BH	11/25
OB-11 /	1	115	WQ Surr	4	6.2	4	15.9	1	27	1	7.8					cw	11/26
OB-11 /	2	115	WQ Surr	4	6.3	4	16.4	1	27	1	7.7					BH	11/27
OB-11 /	3	115	WQ Surr														
OB-17 /	0	3	WQ Surr	3	7.8	3	15.7	3	28	3	7.9	BH	<0.5	BH	0.041	BH	11/25
OB-17 /	1	3	WQ Surr	4	6.4	4	16.2	1	28	1	7.6					cw	11/26
OB-17 /	2	3	WQ Surr	4	6.3	4	16.4	1	28	1	7.7					BH	11/27
OB-17 /	3	3	WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	TEST START DATE 25Nov08	TIME	TEST END DATE

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
OB-18 /	0	67	WQ Surr	3	7.4	3	15.4	3	27	3	7.8	BH	<0.5	BH	0.102	BH	11/25
OB-18 /	1	67	WQ Surr	4	6.5	4	16.0	1	27	1	7.7					CW	11/26
OB-18 /	2	67	WQ Surr	4	6.0	4	16.5	1	27	1	7.7					BH	11/27
OB-18 /	3	67	WQ Surr														
OB-10 /	0	71	WQ Surr	3	7.8	3	15.4	3	27	3	7.8	BH	<0.5	BH	0.096	BH	11/25
OB-10 /	1	71	WQ Surr	4	7.0	4	16.0	1	27	1	7.7					CW	11/26
OB-10 /	2	71	WQ Surr	4	6.3	4	16.5	1	28	1	7.7					BH	11/27
OB-10 /	3	71	WQ Surr														
OB-12 /	0	21	WQ Surr	3	8.1	3	15.8	3	27	3	7.8	BH	<0.5	BH	0.112	BH	11/25
OB-12 /	1	21	WQ Surr	4	6.9	4	16.1	1	27	1	7.5					CW	11/26
OB-12 /	2	21	WQ Surr	4	6.3	4	16.6	1	27	1	7.7					BH	11/27
OB-12 /	3	21	WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	TEST START DATE 25Nov08	TIME	TEST END DATE TIME

WATER QUALITY DATA

* Day 3 observations needed only if development endpoint not met by day 2

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
OB-13 /	0	2	WQ Surr	3	7.9	3	15.5	3	28	3	7.8	BH	<0.5	BH	0.075	BH	11/25
OB-13 /	1	2	WQ Surr	4	6.3	4	16.1	1	27	1	7.5					CW	11/26
OB-13 /	2	2	WQ Surr	4	6.7	4	16.4	1	27	1	7.6					BH	11/27
OB-13 /	3	2	WQ Surr														
OB-14 /	0	16	WQ Surr	3	7.7	3	15.7	3	28	3	7.9	BH	<0.5	BH	0.024	BH	11/25
OB-14 /	1	16	WQ Surr	4	6.4	4	16.2	1	27	1	7.6					CW	11/26
OB-14 /	2	16	WQ Surr	4	6.7	4	16.3	1	27	1	7.7					BH	11/27
OB-14 /	3	16	WQ Surr														
OB-19 /	0	158	WQ Surr	3	8.4	3	15.4	3	27	3	8.1	BH	<0.5	BH	0.109	BH	11/25
OB-19 /	1	158	WQ Surr	4	7.6	4	15.9	1	27	1	7.8					CW	11/26
OB-19 /	2	158	WQ Surr	4	6.7	4	16.4	1	27	1	7.7					BH	11/27
OB-19 /	3	158	WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	TEST START DATE 25Nov08	TIME	TEST END DATE

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
HI-02	0	102	WQ Surr	3	8.0	3	15.5	3	28	3	8.0	BH	<0.5	BH	0.058	BH	11/25
HI-02	1	102	WQ Surr	4	7.3	4	15.9	1	27	1	7.8					CW	11/26
HI-02	2	102	WQ Surr	4	7.0	4	16.2	1	28	1	7.7					BH	11/27
HI-02	3	102	WQ Surr														
HI-03	0	87	WQ Surr	3	7.5	3	15.4	3	28	3	8.0	BH	<0.5	BH	0.064	BH	11/25
HI-03	1	87	WQ Surr	4	6.6	4	16.0	1	27	1	7.8					CW	11/26
HI-03	2	87	WQ Surr	4	6.3	4	16.2	1	28	1	7.8					BH	11/27
HI-03	3	87	WQ Surr														
HI-04	0	152	WQ Surr	3	7.9	3	15.4	3	27	3	8.1	BH	<0.5	BH	0.088	BH	11/25
HI-04	1	152	WQ Surr	4	6.8	4	15.9	1	27	1	7.6					CW	11/26
HI-04	2	152	WQ Surr	4	6.4	4	16.3	1	27	1	7.7					BH	11/27
HI-04	3	152	WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	TEST START DATE 25Nov08	TIME	TEST END DATE

WATER QUALITY DATA

* Day 3 observations needed only if development endpoint not met by day 2

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
OB-07	0	86	WQ Surr	3	7.9	3	15.6	3	28	3	8.1	BH	60.5	BH	0.100	BH	11/25
OB-07	1	86	WQ Surr	4	6.9	4	16.0	1	28	1	7.8					BH	11/26
OB-07	2	86	WQ Surr	4	6.7	4	16.1	1	28	1	7.8					BH	11/27
OB-07	3	86	WQ Surr														



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	TEST START DATE 25Nov08	TIME	TEST END DATE

* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
OB-08	0	73	WQ Surr	3	8.0	3	15.5	3	27	3	7.8	BH	0.5	BH	0.049	BH	11/25
OB-08	1	73	WQ Surr	4	6.7 7.7	4	15.9	1	27	1	7.7					CW	11/26
OB-08	2	73	WQ Surr	4	6.5	4	16.2	1	27	1	7.7					BH	11/27
OB-08	3	73	WQ Surr														
SH-07	0	28	WQ Surr	3	7.7	3	15.7	3	28	3	7.8	BH	0.5	BH	0.067	BH	11/25
SH-07	1	28	WQ Surr	4	6.3	4	16.2	1	27	1	7.5					CW	11/26
SH-07	2	28	WQ Surr	4	6.3	4	16.2	1	28	1	7.6					BH	11/27
SH-07	3	28	WQ Surr														
SH-13	0	134	WQ Surr	3	7.3	3	15.4	3	28	3	7.9	BH	0.5	BH	0.124	BH	11/25
SH-13	1	134	WQ Surr	4	6.3	4	15.8	1	28	1	7.7					CW	11/26
SH-13	2	134	WQ Surr	4	6.3	4	16.4	1	27	1	7.7					BH	11/27
SH-13	3	134	WQ Surr														

① wrong entry cw



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT WATER QUALITY DATA

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble / Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	TEST START DATE 25Nov08	TIME	TEST END DATE TIME

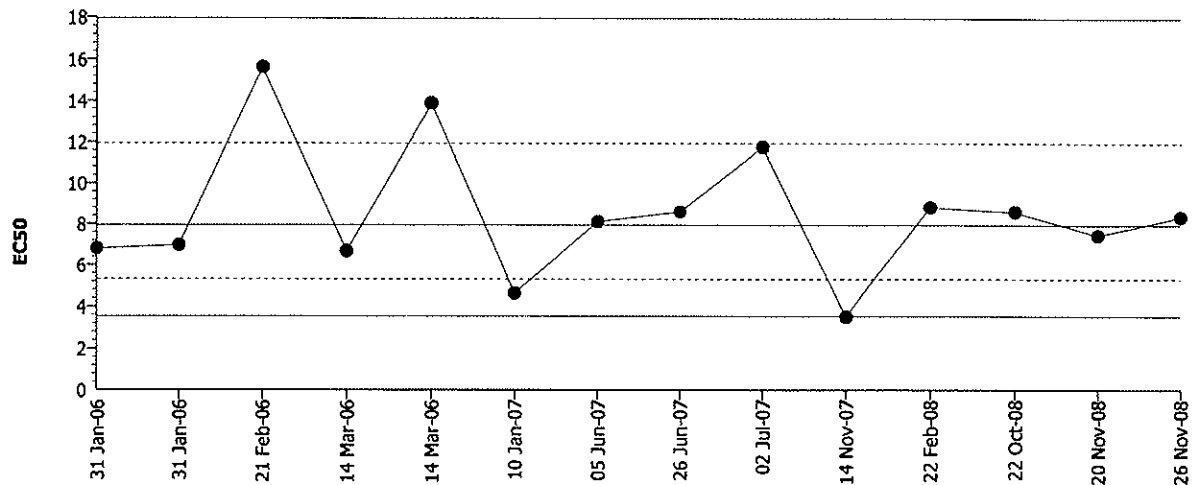
* Day 3 observations needed only if development endpoint not met by day 2

WATER QUALITY DATA

TEST CONDITIONS				DO (mg/L) >4.8		Temp (°C) 16 ± 1		Sal (ppt) 28 ± 1		pH 7.8 ± 0.5		Ammonia NA		Sulfide NA		TECH	DATE
CLIENT/ NEWFIELDS ID	DAY	Random #	REP	D.O.		TEMP.		SALINITY		pH		AMMONIA		SULFIDE			
				meter	mg/L	meter	°C	meter	ppt	meter	unit	Techn.	mg/L (total)	Techn.	ug/L (Total)		
Sediment Control	0	166	WQ Surr	3	8.7	3	15.4	3	27	3	8.0	AM	CO.5	BH	0.008	BH	11/25
Sediment Control	1	166	WQ Surr	4	8.1	4	16.0	1	27	1	7.7					ew	11/26
Sediment Control	2	166	WQ Surr	4	8.1	4	16.3	1	27	1	7.8					BH	11/27
Sediment Control	3	166	WQ Surr														

Mussel Shell Development Test NewFields

Test Type: Development-Survival Organism: Mytilus species (Mussel) Material: Copper sulfate
 Protocol: EPA/600/R-95/136 (1995) Endpoint: Proportion Normal Source: Reference Toxicant-REF



Mean: 7.94944 Count: 13 -1s Warning Limit: 5.29095 -2s Action Limit: 3.52153
 Sigma: CV: 50.25% +1s Warning Limit: 11.9437 +2s Action Limit: 17.945

Quality Control Data

Point	Year	Month	Day	Data	Delta	Sigma	Warning	Action	Test Link	Analysis
1	2006	Jan	31	6.78635	-1.16309	-0.38857			13-7720-1086	09-2249-8461
2			31	6.95016	-0.99928	-0.32998			07-7532-7374	01-6476-6154
3		Feb	21	15.63050	7.68106	1.66081	(+)		13-4991-4803	11-1130-3991
4		Mar	14	6.66272	-1.28672	-0.43373			06-2606-4386	10-2179-5612
5			14	13.87779	5.92835	1.36866	(+)		04-5028-3346	13-6407-7819
6	2007	Jan	10	4.61926	-3.33019	-1.33349	(-)		14-3905-0090	10-4591-2581
7		Jun	5	8.10135	0.15191	0.04650			13-7829-5492	06-3241-4206
8			26	8.58591	0.63646	0.18919			01-3435-1614	05-9641-3061
9		Jul	2	11.74293	3.79349	0.95835			05-4911-0140	17-0573-9257
10		Nov	14	3.49998	-4.44946	-2.01507	(-)	(-)	15-3555-7493	11-5553-6060
11	2008	Feb	22	8.81298	0.86354	0.25331			06-6162-8975	04-7060-4398
12		Oct	22	8.57651	0.62707	0.18650			13-5164-0440	04-9649-9989
13		Nov	20	7.44064	-0.50881	-0.16248			09-2389-8810	12-8844-8525
14			26	8.32463	0.37519	0.11328			15-3498-9291	08-5675-1151

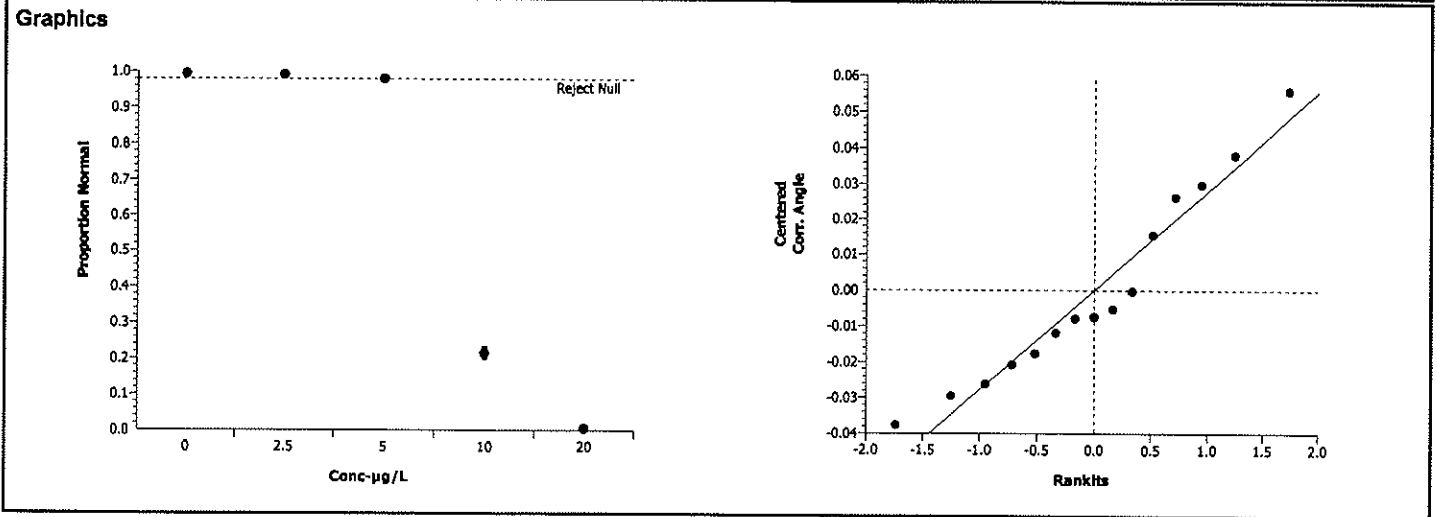
CETIS Analysis Detail

Comparisons: Page 1 of 2
 Report Date: 23 Jan-09 3:42 PM
 Analysis: 07-8919-1462/P070930.87

Mussel Shell Development Test							NewFields			
Endpoint	Analysis Type		Sample Link	Control Link	Date Analyzed	Version				
Proportion Normal	Comparison		15-3498-9291	15-3498-9291	23 Jan-09 3:42 PM	CETISv1.1.2				
Method	Alt H	Data Transform	Zeta	NOEL	LOEL	Toxic Units	ChV	PMSD		
Dunnett's Multiple Comparison	C > T	Angular (Corrected)		5	10	20	7.07107	1.41%		
Group Comparisons										
Control	vs	Conc-µg/L	Statistic	Critical	P-Value	MSD	Decision(0.05)			
Dilution Water		2.5	0.44631	2.46559	0.6293	0.06493	Non-Significant Effect			
		5	2.36586	2.46559	0.0587	0.06493	Non-Significant Effect			
		10	38.4581	2.46559	0.0000	0.06493	Significant Effect			
		20	54.4508	2.46559	0.0000	0.06493	Significant Effect			
Test Acceptability										
Attribute	Statistic		TAC Range	Overlap	Decision					
Control Response	0.99392		0.9 - NL	Yes	Passes acceptability criteria					
ANOVA Table										
Source	Sum of Squares		Mean Square	DF	F Statistic	P-Value	Decision(0.05)			
Between	5.444431		1.361108	4	1308.60	0.00000	Significant Effect			
Error	0.0104012		0.0010401	10						
Total	5.45483206		1.3621478	14						
ANOVA Assumptions										
Attribute	Test		Statistic	Critical	P-Value	Decision(0.01)				
Variances	Bartlett		2.77703	13.27670	0.59580	Equal Variances				
Distribution	Shapiro-Wilk W		0.94180		0.40559	Normal Distribution				
Data Summary										
			Original Data				Transformed Data			
Conc-µg/L	Control Type	Count	Mean	Minimum	Maximum	SD	Mean	Minimum	Maximum	SD
0	Dilution Water	3	0.99392	0.99275	0.99617	0.00195	1.49348	1.48557	1.50886	0.01332
2.5		3	0.99165	0.98864	0.99648	0.00422	1.48173	1.46399	1.51142	0.02587
5		3	0.97971	0.96887	0.98973	0.01045	1.43118	1.39344	1.46926	0.03791
10		3	0.21409	0.19703	0.23577	0.01978	0.48078	0.45992	0.50701	0.02400
20		3	0.00442	0.00000	0.01327	0.00766	0.05964	0.03005	0.11547	0.04838

CETIS Analysis Detail

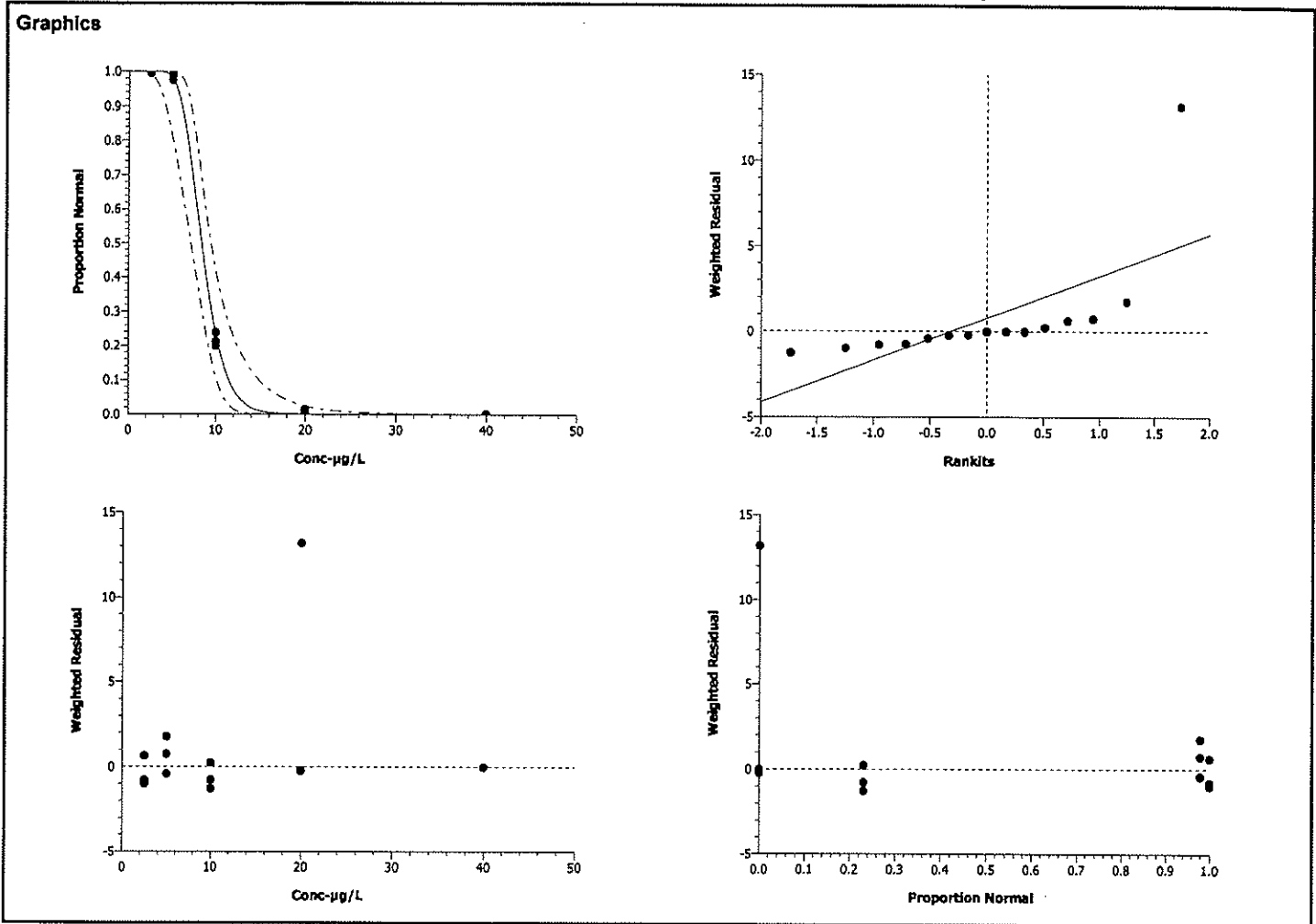
Data Detail											
Conc-µg/L	Control Type	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Rep 6	Rep 7	Rep 8	Rep 9	Rep 10
0	Dilution Water	0.99617	0.99283	0.99275							
2.5		0.98864	0.99648	0.98983							
5		0.96887	0.98054	0.98973							
10		0.19703	0.23577	0.20949							
20		0.01327	0.00000	0.00000							



CETIS Analysis Detail

Mussel Shell Development Test							NewFields		
Endpoint	Analysis Type	Sample Link	Control Link	Date Analyzed	Version				
Proportion Normal	Linear Regression	15-3498-9291	15-3498-9291	23 Jan-09 3:43 PM	CETISv1.1.2				
Linear Regression Options									
Model Function	Threshold Option	Threshold	Threshold Opt	Reweighted	Pooled Groups	Het Corr			
Log-Normal [NED=A+B*log(X)]	Control Threshold	0.00612745	Yes	Yes	No	No			
Regression Summary									
Iters	Log Likelihood	Mu	Sigma	G	Chi-Sq	Critical	P-Value	Decision(0.05)	
12	-512.25350	-0.37830	0.10841	0.00820	3.68275	3.84146	0.05498	Non-Significant Heterogeneity	
Point Estimates									
% Effect	Conc-µg/L	95% LCL	95% UCL						
10	6.04545	5.767123	6.294501						
15	6.426914	6.162774	6.66395						
20	6.747185	6.495251	6.974317						
25	7.034638	6.793519	7.253388						
40	7.814459	7.598891	8.015955						
50	8.324631	8.119448	8.52247						
Test Acceptability									
Attribute	Statistic	TAC Range	Overlap	Decision					
Control Response	0.99392	0.9 - NL	Yes	Passes acceptability criteria					
Regression Parameters									
Parameter	Estimate	Std Error	95% LCL	95% UCL	t Statistic	P-Value	Decision(0.05)		
Threshold	0.006457424	0.001964583	0.002606842	0.01030801	3.287	0.00589	Significant		
Slope	9.224019	0.4262854	8.3885	10.05954	21.638	0.00000	Significant		
Intercept	-3.489464	0.3929989	-4.259742	-2.719187	-8.879	0.00000	Significant		
Residual Analysis									
Attribute	Method	Statistic	Critical	P-Value	Decision(0.05)				
Variances	Modified Levene	1.980744	3.47805	0.17358	Equal Variances				
Distribution	Shapiro-Wilk W	0.4805932		0.00000	Non-normal Distribution				
Data Summary									
Conc-µg/L	Control Type	Count	Calculated Variate(A/B)						
			Mean	Minimum	Maximum	SE	SD	A	B
0	Dilution Water	3	0.99392	0.99275	0.99617	0.00040	0.00195	811	816
2.5		3	0.99165	0.98864	0.99648	0.00086	0.00422	836	843
5		3	0.97971	0.96887	0.98973	0.00213	0.01045	790	806
10		3	0.21409	0.19703	0.23577	0.00404	0.01978	164	768
20		3	0.00442	0.00000	0.01327	0.00156	0.00766	3	727
40		3	0.00000	0.00000	0.00000	0.00000	0.00000	0	179

CETIS Analysis Detail



CETIS Data Worksheet

Report Date: 23 Jan-09 3:43 PM

Link: 15-3498-9291/P070930.87

Mussel Shell Development Test								NewFields
Start Date: 26 Nov-08 12:15 AM		Species: Mytilus species		Sample Code: P070930.87				
Ending Date: 27 Nov-08 10:30 PM		Protocol: EPA/600/R-95/136 (1995)		Sample Source: Reference Toxicant				
Sample Date: 06 Nov-08		Material: Copper sulfate		Sample Station: P070930.87				
Conc-µg/L	Code	Rep	Pos	Initial Density	Final Density	# Counted	# Normal	Notes
0	D	1	14	288	261	261	260	
0	D	2	3	288	279	279	277	
0	D	3	16	288	276	276	274	
2.5		1	6	288	264	264	261	
2.5		2	9	288	284	284	283	
2.5		3	18	288	295	295	292	
5		1	4	288	257	257	249	
5		2	13	288	257	257	252	
5		3	1	288	292	292	289	
10		1	8	288	269	269	53	
10		2	17	288	246	246	58	
10		3	11	288	253	253	53	
20		1	15	288	228	226	3	
20		2	7	288	277	277	0	
20		3	2	288	224	224	0	
40		1	5	288	43	43	0	
40		2	10	288	67	87	0	
40		3	12	288	69	89	0	

SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT REF TOX OBSERVATIONS



SPECIES
Mytilus edulis (muscle)

CLIENT Herrera	PROJECT Oakland Bay	JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	NEWFIELDS LAB / LOCATION Port Gamble / Incubator	PROTOCOL PSEP (1995)
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LARVAL OBSERVATION DATA

CLIENT/ NEWFIELDS ID	CONC.		VIAL NUMBER	REP	NUMBER NORMAL	NUMBER ABNORMAL	DATE	TECHNICIAN	COMMENTS
	value	units							
Ref.Tox. - Copper	0	µg/L		1	277	2	1/23/09	CR	
			2	274	2				
			3	260	1				
Ref.Tox. - Copper	2.5	µg/L		1	261	3			
			2	283	1				
			3	292	3				
Ref.Tox. - Copper	5	µg/L		1	249	8			
			2	252	5				
			3	289	3				
Ref.Tox. - Copper	10	µg/L		1	53	216			
			2	58	188				
			3	53	200				
Ref.Tox. - Copper	20	µg/L		1	3	223			
			2	0	277				
			3	0	224				
Ref.Tox. - Copper	40	µg/L		1	0	43			
			2	0	67				
			3	0	69				

STOCKING DENSITY		1		270	1/23/09	CR	
		2		280			
		3		314			

$\bar{x} = 208$



SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT REF TOX WQ

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble Bath 3		PROTOCOL PSEP (1995)
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	QUANTITY OF TOXICANT: 0.039 mL <i>0.039 mL</i>	QUANTITY OF DILUENT: 500mL 500.00 <i>500.0 g</i>		INIT <i>BH</i>
TEST ID <i>P070930.82</i>	LOT #: <i>1704237</i>	TEST START DATE: <i>11/25/08 11/26/08</i>	TIME <i>0015</i>	TEST END DATE <i>11/27/08</i>	TIME <i>2230</i>

WATER QUALITY DATA

DILTIN.WAT.BATCH		TEMP REC#		REFERENCE TOX. MATERIAL				REFERENCE TOXICANT				TECH.	DATE	
0				Copper Sulfate				Copper						
TEST CONDITIONS				DO (mg/L)		TEMP(C)		SAL (ppt)		pH				
CLIENT/ NEWFIELDS ID		CONCENTRATION value units		DAY	REP	D.O.		TEMP.		SALINITY		pH		
						meter	mg/L	meter	°C	meter	ppt	meter	unit	
Ref.Tox.-Copper	0	µg/L	0	Stock	3	9.2	3	15.0	3	27	3	7.9	BH	11/25
			1	Stock	4	8.1	4	17.0	1	27	1	7.6	cw	11/26
			2	Stock	4	8.2	4	16.5	1	28	1	7.8	BH	11/27
			3	Stock										
Ref.Tox.-Copper	2.5	µg/L	0	Stock	3	9.3	3	15.0	3	27	3	7.9	BH	11/25
			1	Stock	4	8.2	4	16.7	1	27	1	7.7	cw	11/26
			2	Stock	4	8.3	4	16.4	1	27	1	7.9	BH	11/27
			3	Stock										
Ref.Tox.-Copper	5	µg/L	0	Stock	3	9.3	3	15.0	3	27	3	7.9	BH	11/25
			1	Stock	4	8.2	4	16.7	1	27	1	7.7	cw	11/26
			2	Stock	4	8.3	4	16.3	1	28	1	7.9	BH	11/27
			3	Stock										

**SEDIMENT BIOASSAY TEST - EMBRYO DEVELOPMENT
REF TOX WQ**

CLIENT Herrera	PROJECT Oakland Bay	SPECIES <i>Mytilus edulis (mussel)</i>	NEWFIELDS LAB / LOCATION Port Gamble Bath 3	PROTOCOL PSEP (1995)
JOB NUMBER 1101-008-860	PROJECT MANAGER Brian Hester	QUANTITY OF TOXICANT: 0.039 mL 0.039 mL	QUANTITY OF DILUENT: 500 mL ACTUAL: 500.05 500.0g	INIT BH
TEST ID P070930.87	LOT #: 1704237	TEST START DATE 11/26/08	TIME 0015	TEST END DATE 11/27/08
				TIME 2230

WATER QUALITY DATA

DILTIN.WAT.BATCH			TEMP REC#		REFERENCE TOX. MATERIAL				REFERENCE TOXICANT					
0					Copper Sulfate				Copper					
TEST CONDITIONS					DO (mg/L)		TEMP(C)		SAL (ppt)		pH		TECH.	DATE
					>4.8		16 18 ± 1		28 ± 1		7.8 ± 0.5			
CLIENT/ NEWFIELDS ID		CONCENTRATION		DAY	REP	D.O.		TEMP.		SALINITY		pH		
value	units					meter	mg/L	meter	°C	meter	ppt	meter	unit	
Ref.Tox.-Copper	10	µg/L	0	Stock	3	9.3	3	14.9	3	27	3	7.9	BH	11/25
			1	Stock	4	8.2	4	16.7	1	27	1	7.7	CW	11/26
			2	Stock	4	8.3	4	16.4	1	28	1	7.9	BH	11/27
			3	Stock										
Ref.Tox.-Copper	20	µg/L	0	Stock	3	9.3	3	14.9	3	27	3	7.9	BH	11/25
			1	Stock	4	8.3	4	16.5	1	27	1	7.7	CW	11/26
			2	Stock	4	8.3	4	16.4	1	27	1	7.9	BH	11/27
			3	Stock										
Ref.Tox.-Copper	40	µg/L	0	Stock	3	9.4	3	14.8	3	27	3	7.9	BH	11/25
			1	Stock	4	8.3	4	16.1	1	27	1	7.8	CW	11/26
			2	Stock	4	8.3	4	16.3	1	28	1	7.9	BH	11/27
			3	Stock										

***BIOLOGICAL TESTING RESULTS FOR
OAKLAND BAY SEDIMENT CHARACTERIZATION,
OAKLAND BAY, WASHINGTON***

CHAIN OF CUSTODY

NEW FIELDS

NewFields Northwest, LLC.

Shipping: 4729 NE View Dr.

Mailing: P.O. Box 216

Port Gamble, WA. 98364

Tel: (360) 297-6040, Fax: (360) 297-7268

CHAIN OF CUSTODY

13313

Destination Lab:		Sample Originator: Herrera		Report Results To: Gina Catarra		Phone: 206 441 9080									
Destination Contact: Brian Hester		Contact Name: Gina Catarra		Contact Name: Herrera		Fax:									
Date: 9/30/08		Address: 2200 Sixth Ave Ste 1100 Seattle WA 98121		Address: Same		Email: gcatarra@herrerainc.com									
Turn-Around-Time: Standard		Phone: 206 441 9080		Analysis:		Invoicing To: Herrera									
Project Name: Oakland Bay Sediment		Fax:		<input type="checkbox"/> amphipod <input type="checkbox"/> 10-day <input type="checkbox"/> 48-hr larval <input type="checkbox"/> 80-day polychaete <input type="checkbox"/> Microtox		Comments or Special Instructions: Follow protocol in Sediment Sampling Plan Appendix									
Contract/PO: 06-03386-007		E-mail: gcatarra@herrerainc.com		Preservation		Sample Temp Upon Receipt									
LAB ID															
No.	Sample ID	Matrix	No. & Type of Container	Date & Time	amphipod	10-day	48-hr larval	80-day polychaete	Microtox	Preservation	Sample Temp Upon Receipt	LAB ID			
1	SH-01-SS-00	Sed	bag + 16oz	9/29 1805	X	X	X	X		Ice					
2	SH-02-SS-00			9/30 1030											
3	SH-10-SS-00			1340											
4	SH-14-SS-00			1505											
5	SH-22-WS-00			1648											
6	SH-23-WS-00			1543											
7	SH-26-WS-00			1250											
8	SH-27-WS-00			1155											
9	SH-28-WS-00			1429											
10	SH-06-SS-00	Sed	bag + 16oz	10/1/08 0911	X	X	X	X							
11	SH-04-SS-00			0950											
12	SH-03-SS-00			1020											
13	SH-09-SS-00			1121											
14	SH-21-WS-00			1145											
15	SH-20-WS-00			1228											
16	SH-19-WS-00			1252											
17	SH-24-WS-00			1332											
18	SH-15-SS-00			1544											
19	SH-29-WS-00			1619											
20	SH-16-SS-00			1654											
Relinquished by:				Received by:				Relinquished by:				Received by:			
Print Name: Gina Catarra				Print Name: BRIAN HESTER				Print Name:				Print Name:			
Signature: <i>Gina Catarra</i>				Signature: <i>Brian Hester</i>				Signature:				Signature:			
Affiliation: Herrera				Affiliation: New Fields				Affiliation:				Affiliation:			
Date/Time: 10/2/08 20:00				Date/Time: 10/3/08 0905				Date/Time:				Date/Time:			

Matrix Codes
 FW = Fresh Water
 WW = Waste Water
 SB = Salt & Brackish Water
 SS = Soil & Sediment
 TS = plant & Animal Tissue
 OT = Other



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CHAIN OF CUSTODY
 13314

Destination Lab: Destination Contact: Date: Turn-Around-Time:	Sample Originator: Contact Name: Address: Phone: Fax: E-mail:	Report Results To: Contact Name: Address: Analysis:	Phone: Fax: Email:
Brian Hester 10/1/08 Std.	Herrera Gina Catarra 2200 Sixth Ave Ste. 1100 Seattle WA 98121 200 441 9080 gcatarra@herrerainc.com	Gina Catarra Herrera Same	206 441 9080 gcatarra@herrerainc.com
Project Name: Oakland Bay	Invoicing To: Herrera		Comments or Special Instructions: Follow SSAPA protocol.

No.	Sample ID	Matrix	No. & Type of Container	Date & Time	amphipod 10-day	48-hr Larval	30-day Polychaeta	Microtox	Preservation	Sample Temp Upon Receipt	LAB ID
1	SH-30-WS-00	Sed	bag 1102	10/1/08 1715	X	X	X	X	Ice		
2	HI-07-SS-00			10/2/08 0848							
3	SH-12-SS-00			0940							
4	SH-11-SS-00			1032							
5	SH-18-WS-00			1115							
6	SH-25-WS-00			1205							
7	HI-05-SS-00			1324							
8	OB-02-SS-00			1430							
9	OB-01-SS-00			1523							
10	OB-03-SS-00			1610							
11	Ice										
12	Ice										
13	Ice										
14	Ice										
15	Ice										
16	Ice										
17	Ice										
18	Ice										
19	Ice										
20	Ice										

Relinquished by: Print Name: Signature: Affiliation: Date/Time:	Received by: Print Name: Signature: Affiliation: Date/Time:	Relinquished by: Print Name: Signature: Affiliation: Date/Time:	Received by: Print Name: Signature: Affiliation: Date/Time:	Matrix Codes FW = Fresh Water WW = Waste Water SB = Salt & Brackish Water SS = Soil & Sediment TS = plant & Animal Tissue OT = Other
Gina Catarra G. Catarra Herrera 10/2/08 20:00	BRIAN HESTER NewFields 10/3/08 0905			

NEW FIELDS

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CHAIN OF CUSTODY

13319

Destination Lab:	Sample Originator: <i>Herrera Environmental</i>	Report Results To: <i>Herrera</i>	Phone: <i>206 441 9080</i>				
Destination Contact:	Contact Name: <i>Gina Catarra</i>	Contact Name: <i>Gina Catarra</i>	Fax:				
Date:	Address: <i>2200 Sixth Ave Ste 1100 Seattle WA 98121</i>	Address: <i>2200 Sixth Ave Ste 1100 Seattle WA 98121</i>	E-mail: <i>gcatarra@herrerainc.com</i>				
Turn-Around-Time:	Phone: <i>206 441 9080</i>	Analysis:	Invoicing To: <i>Herrera</i>				
Project Name:	Fax:	<table border="1"> <tr> <td>10-day amphipod</td> <td>48-hr larval</td> <td>20-day polychaete</td> <td>Microtox</td> </tr> </table>	10-day amphipod	48-hr larval	20-day polychaete	Microtox	Comments or Special Instructions: <i>Shells in OB-11-SS-00</i>
10-day amphipod	48-hr larval		20-day polychaete	Microtox			
Contract/PO:	E-mail: <i>gcatarra@herrerainc.com</i>	Preservation	Sample Temp Upon Receipt				

No.	Sample ID	Matrix	No. & Type of Container	Date & Time	10-day amphipod	48-hr larval	20-day polychaete	Microtox	Preservation	Sample Temp Upon Receipt	LAB ID
1	<i>OB-11-SS-00</i>	<i>sed</i>	<i>bag+16oz</i>	<i>10/3/08 0940</i>	X	X	X	X			
2	<i>OB-09-SS-00</i>	↓	↓	<i>1115</i>	↓	↓	↓	↓			
3	<i>OB-05-SS-00</i>	↓	↓	<i>1155</i>	↓	↓	↓	↓			
4	<i>OB-17-SS-00</i>	↓	↓	<i>1304</i>	↓	↓	↓	↓			
5	<i>OB-18-WS-00</i>	↓	↓	<i>1350</i>	↓	↓	↓	↓			
6	<i>OB-04-SS-00</i>	↓	↓	<i>1452</i>	↓	↓	↓	↓			
7	<i>OB-06-SS-00</i>	↓	↓	<i>1535</i>	↓	↓	↓	↓			
8	<i>HI-06-SS-00</i>	↓	↓	<i>1612</i>	↓	↓	↓	↓			
9	<i>OB-19-WS-00</i>	<i>sed</i>	<i>bag+16oz</i>	<i>10/4/08 0913</i>	X	X	X	X			
10	<i>OB-10-SS-00</i>	↓	↓	<i>0951</i>	↓	↓	↓	↓			
11	<i>OB-12-SS-00</i>	↓	↓	<i>1034</i>	↓	↓	↓	↓			
12	<i>OB-13-SS-00</i>	↓	↓	<i>1124</i>	↓	↓	↓	↓			
13	<i>OB-14-SS-00</i>	↓	↓	<i>1325</i>	↓	↓	↓	↓			
14											
15											
16											
17											
18											
19											
20											

Relinquished by:	Received by:	Relinquished by:	Received by:	Matrix Codes
Print Name: <i>Gina Catarra</i>	Print Name: <i>BRIAN HESTER</i>	Print Name:	Print Name:	FW = Fresh Water
Signature: <i>[Signature]</i>	Signature: <i>[Signature]</i>	Signature:	Signature:	WW = Waste Water
Affiliation: <i>Herrera</i>	Affiliation: <i>New Fields</i>	Affiliation:	Affiliation:	SB = Salt & Brackish Water
Date/Time: <i>10/5/08 2125</i>	Date/Time: <i>10/6/08 0830</i>	Date/Time:	Date/Time:	SS = Soil & Sediment
				TS = plant & Animal Tissue
				OT = Other

WHITE - return to originator • YELLOW - lab • PINK - retained by originator



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CHAIN OF CUSTODY
 13315

Destination Lab:		Sample Originator: <u>Herrera</u>		Report Results To: <u>Herrera</u>		Phone: <u>206 441 9080</u>					
Destination Contact:		Contact Name: <u>Gina Catarra</u>		Contact Name: <u>Gina Catarra</u>		Fax:					
Date:		Address: <u>2200 6th Ave Ste 1100</u>		Address: <u>same</u>		Email: <u>gcatarra@herrerainc.com</u>					
Turn-Around-Time:		Phone: <u>206 441 9080</u>		Analysis		Invoicing To: <u>Herrera</u>					
Project Name:		Fax:		16-day amplified		Comments or Special Instructions:					
Contract/PO:		E-mail: <u>gcatarra@herrerainc.com</u>		48-hr larval		Preservation					
				20-day polychaetes		Sample Temp Upon Receipt					
				Microtox		LAB ID					
No.	Sample ID	Matrix	No. & Type of Container	Date & Time	16-day amplified	48-hr larval	20-day polychaetes	Microtox	Preservation	Sample Temp Upon Receipt	LAB ID
1	OB-07-SS-00	Sed	bag #802	10/5/08 0746	X	X	X	X			
2	OB-08-SS-00	↓	↓	1122	↓	↓	↓	↓			
3	SH-07-SS-00	↓	↓	1221	↓	↓	↓	↓			
4	SH-13-SS-00	↓	↓	1321	↓	↓	↓	↓			
5	H1-02-SS-00	↓	↓	1435	↓	↓	↓	↓			
6	H1-03-SS-00	↓	↓	1526	↓	↓	↓	↓			
7	H1-04-SS-00	↓	↓	1611	↓	↓	↓	↓			
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
Relinquished by:		Received by:		Relinquished by:		Received by:		Matrix Codes			
Print Name: <u>Gina Catarra</u>		Print Name: <u>BRAN HESTER</u>		Print Name:		Print Name:		FW = Fresh Water			
Signature: <u>[Signature]</u>		Signature: <u>[Signature]</u>		Signature:		Signature:		WW = Waste Water			
Affiliation: <u>Herrera</u>		Affiliation: <u>NewFields</u>		Affiliation:		Affiliation:		SB = Salt & Brackish Water			
Date/Time: <u>10/5/08 2125</u>		Date/Time: <u>10/6/08 0830</u>		Date/Time:		Date/Time:		SS = Soil & Sediment			
								TS = plant & Animal Tissue			
								OT = Other			

WHITE - return to originator • YELLOW - lab • PINK - retained by originator



NewFields Northwest, LLC.
 Shipping: 4729 NE View Dr.
 Mailing: P.O. Box 216
 Port Gamble, WA. 98364
 Tel: (360) 297-6040, Fax: (360)297-7268

CHAIN OF CUSTODY
 13318

Destination Lab:		Sample Originator: Herrera Environ.		Report Results To: Gina Catarras		Phone: 206 441 9080					
Destination Contact:		Contact Name: Gina Catarras		Contact Name: Herrera		Fax:					
Date:		Address: 2200 Sixth Ave Ste 100 Seattle, WA 98121		Address: Same		Email: gcatarras@herrerainc.com					
Turn-Around-Time:		Phone: 206 441-9080		Analysis		Invoicing To: Herrera					
Project Name: OAKLAND BAY		Fax:		48-hr		Comments or Special Instructions:					
Contract/PO:		E-mail: gcatarras@herrerainc.com		10-day		Sample Temp Upon Receipt					
				20-day		LAB ID					
				Microtox							
No.	Sample ID	Matrix	No. & Type of Container	Date & Time	48-hr	10-day	20-day	Microtox	Preservation	Sample Temp Upon Receipt	LAB ID
1	RF-01-SS-00	Sed	bag/16oz	10/9/08 1100	X	X	X	X	NONE		
2	RF-02-SS-00	↓	↓	↓ 145	X	X	X	X	↓		
3	RF-03-SS-00	↓	↓	↓ 1530	X	X	X	X			
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
Relinquished by:		Received by:		Relinquished by:		Received by:		Matrix Codes			
Print Name: Bruce A. Carpenter		Print Name: Mary Bacon		Print Name:		Print Name:		FW = Fresh Water			
Signature: [Signature]		Signature: [Signature]		Signature:		Signature:		WW = Waste Water			
Affiliation: Herrera Environmental		Affiliation: NewFields		Affiliation:		Affiliation:		SB = Salt & Brackish Water			
Date/Time: 10/14/08 8:15		Date/Time: 10/14/08 0815		Date/Time:		Date/Time:		SS = Soil & Sediment			
								TS = plant & Animal Tissue			
								OT = Other			

WHITE - return to originator • YELLOW - lab • PINK - retained by originator

***BIOLOGICAL TESTING RESULTS FOR
OAKLAND BAY SEDIMENT CHARACTERIZATION,
OAKLAND BAY, WASHINGTON***

ORGANISM RECEIPT LOGS



ORGANISM RECEIPT LOG

Date: 11/7/08		Time: 1700		NewFields Batch No. JB 8773	
Organism: Amps			Source: John Brezina		
Address: On File				Invoice Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Phone: On File			Contact: On File		
No. Ordered: 2500		No. Received: 2500f		Source Batch: Field	
Condition of Organisms: Good			Approximate Size or Age: Vary ~ 2-4mm		
Shipper: FedEx			B of L (Tracking No.) 8662 6888 8773		
Condition of Container: Good			Received By: MMB		
Confirmation of ID of Organism: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Technician (Initials): MMB	
Notes:					
pH (Units)		Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)
6.8		16.2	720	30 ppt	BH
Notes:					



ORGANISM RECEIPT LOG

Date: 11/12/08		Time: 1510		NewFields Batch No. NWA 9741	
Organism: Eohaustorius			Source: Northwest Aquatic Sciences		
Address: On File				Invoice Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Phone: On File			Contact: GAY		
No. Ordered: 5000		No. Received: 5000 + 10%		Source Batch: Field Collected	
Condition of Organisms: Good			Approximate Size or Age: 3-5mm		
Shipper: FedEx			B of L (Tracking No.) 8662 60769741		
Condition of Container: Good			Received By: BH		
Confirmation of ID of Organism: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Technician (Initials):	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
*	15.0	*	30	BH	
Notes: * shipped in wet sand, not enough water for full measurements. see attached for supplier info					



ORGANISM RECEIPT LOG

Date: 10/25/08		Time: 1100		NewFields Batch No. DR 9735	
Organism: Neurthes			Source: Don Reish		
Address: Same				Invoice Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Phone: ↓		Contact: Don Reish			
No. Ordered: 1200		No. Received: 1200+		Source Batch: Cultured	
Condition of Organisms: Good			Approximate Size or Age: juvenile		
Shipper: Fed ex			B of L (Tracking No.) 8659 4822 9735		
Condition of Container: Good			Received By: J		
Confirmation of ID of Organism: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Technician (Initials): —	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
7.0	20.1	7.6	36 ppt	J	
Notes:					



ORGANISM RECEIPT LOG

Date: 11/3/08		Time: 1445		NewFields Batch No. DR 9665	
Organism: Neanthes			Source: Don Reish		
Address: On File				Invoice Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Phone: On File		Contact: Don Reish			
No. Ordered: 650		No. Received: 650 + ?		Source Batch: NA	
Condition of Organisms: Good			Approximate Size or Age: Juvenile		
Shipper: FedEx			B of L (Tracking No.) 8659 4822 9665		
Condition of Container: Good			Received By: BH		
Confirmation of ID of Organism: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Technician (Initials):	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
7.2	16.3	7.6	36	BH	
Notes:					



ORGANISM RECEIPT LOG

Date: 11/4/08		Time: 1710		NewFields Batch No. DR 9687	
Organism: Neanthes			Source: Don Reish		
Address: On File				Invoice Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Phone: On File			Contact: On File		
No. Ordered: 650		No. Received: 650		Source Batch: Cultwre	
Condition of Organisms: Good			Approximate Size or Age: Juvenile		
Shipper: Fed Ex			B of L (Tracking No.) 8659 4822 9687		
Condition of Container: Good			Received By: MMB		
Confirmation of ID of Organism: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Technician (Initials): MMB	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
6.9	18.2	6.8	35ppt	MMB	
Notes:					



ORGANISM RECEIPT LOG

Date: 11/18/08		Time: 1630		NewFields Batch No. CA 8786	
Organism: Mytilus sp.			Source: Carlsbad Aquifers		
Address: On File				Invoice Attached <input checked="" type="radio"/> Yes <input type="radio"/> No	
Phone: On File			Contact: John Davis		
No. Ordered: 1 Batch		No. Received: 1 Batch		Source Batch: Field	
Condition of Organisms: Good			Approximate Size or Age: Adult		
Shipper: FedEx			B of L (Tracking No.): 7971 16768786		
Condition of Container: Good			Received By: BH		
Confirmation of ID of Organism: Yes <input checked="" type="radio"/> No				Technician (Initials):	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
*			---	BH	
Notes: * shipped dry					



ORGANISM RECEIPT LOG

Date: 11/22/08		Time: 1 130		NewFields Batch No. CA 2469	
Organism: Mytilus sp.			Source: Carlsbad Aquafarms		
Address: On File				Invoice Attached Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Phone: On File			Contact: John Davis		
No. Ordered: 1 batch		No. Received: 1 batch		Source Batch: Field	
Condition of Organisms: Good			Approximate Size or Age: Adult		
Shipper: FedEx			B of L (Tracking No.) 7971 8437 2469		
Condition of Container: Good			Received By:		
Confirmation of ID of Organism: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				Technician (Initials):	
Notes:					
pH (Units)	Temp. (°C)	D.O. (mg/L)	Conductivity or Salinity (Include Units)	Technician (Initials)	
*			→	BM	
Notes: * shipped dry					

***BIOLOGICAL TESTING RESULTS FOR
OAKLAND BAY SEDIMENT CHARACTERIZATION,
OAKLAND BAY, WASHINGTON***

APPENDIX D

STATISTICAL COMPARISONS

Test	Endpoint	Treatment	Comparison	Probability N	Probability H	Test Type	Test Pro	Significant?	One-Tail Comparison
Ampelisca 10-day	Percentage Survival	RF-01-SS-00	Control	0.028	0.290	Mann-Whitney	0.089		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	RF-02-SS-00	Control	0.087	0.607	T-test Equal Var	0.165		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-05-SS-00	RF-01-SS-00	0.034	0.431	Mann-Whitney	0.918		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-06-SS-00	RF-01-SS-00	0.092	0.587	T-test Equal Var	0.620		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-08-SS-00	RF-01-SS-00	0.261	0.002	T-test Unequal Var	0.929		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-09-SS-00	RF-01-SS-00	0.578	0.008	T-test Unequal Var	0.874		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-10-SS-00	RF-01-SS-00	0.700	0.025	T-test Unequal Var	0.967		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-11-SS-00	RF-01-SS-00	0.575	0.132	T-test Equal Var	0.842		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-12-SS-00	RF-01-SS-00	0.582	0.017	T-test Unequal Var	0.322		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-13-SS-00	RF-01-SS-00	0.120	0.312	T-test Equal Var	0.885		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-18-WS-00	RF-01-SS-00	0.437	0.689	T-test Equal Var	0.796		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-19-WS-00	RF-01-SS-00	0.623	0.275	T-test Equal Var	0.944		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-03-SS-00	RF-01-SS-00	0.241	0.382	T-test Equal Var	0.631		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-04-SS-00	RF-01-SS-00	0.495	0.223	T-test Equal Var	0.912		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-11-SS-00	RF-01-SS-00	0.575	0.379	T-test Equal Var	0.968		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-12-SS-00	RF-01-SS-00	0.246	0.353	T-test Equal Var	0.864		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-13-SS-00	RF-01-SS-00	0.415	0.211	T-test Equal Var	0.946		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-18-WS-00	RF-01-SS-00	0.020	0.332	Mann-Whitney	0.885		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-19-WS-00	RF-01-SS-00	0.758	0.459	T-test Equal Var	0.554		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-20-WS-00	RF-01-SS-00	0.135	0.418	T-test Equal Var	0.946		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-21-WS-00	RF-01-SS-00	0.670	0.160	T-test Equal Var	0.636		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-23-WS-00	RF-01-SS-00	0.198	0.333	T-test Equal Var	0.309		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-05-SS-00	RF-02-SS-00	0.278	0.918	T-test Equal Var	0.831		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-06-SS-00	RF-02-SS-00	0.415	0.158	T-test Equal Var	0.350		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-08-SS-00	RF-02-SS-00	0.134	0.013	T-test Unequal Var	0.882		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-09-SS-00	RF-02-SS-00	0.595	0.027	T-test Unequal Var	0.810		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-10-SS-00	RF-02-SS-00	0.464	0.104	T-test Equal Var	0.946		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-11-SS-00	RF-02-SS-00	0.781	0.289	T-test Equal Var	0.736		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-12-SS-00	RF-02-SS-00	0.420	0.052	T-test Unequal Var	0.235		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-13-SS-00	RF-02-SS-00	0.377	0.588	T-test Equal Var	0.783		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-18-WS-00	RF-02-SS-00	0.247	0.777	T-test Equal Var	0.593		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	OB-19-WS-00	RF-02-SS-00	0.805	0.547	T-test Equal Var	0.879		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-03-SS-00	RF-02-SS-00	0.139	0.923	T-test Equal Var	0.410		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-04-SS-00	RF-02-SS-00	0.740	0.433	T-test Equal Var	0.835		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-11-SS-00	RF-02-SS-00	0.564	0.734	T-test Equal Var	0.919		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-12-SS-00	RF-02-SS-00	0.307	0.989	T-test Equal Var	0.682		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-13-SS-00	RF-02-SS-00	0.267	0.476	T-test Equal Var	0.880		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-18-WS-00	RF-02-SS-00	0.217	0.781	T-test Equal Var	0.760		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-19-WS-00	RF-02-SS-00	0.814	0.906	T-test Equal Var	0.371		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-20-WS-00	RF-02-SS-00	0.484	0.135	T-test Equal Var	0.770		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-21-WS-00	RF-02-SS-00	0.194	0.641	T-test Equal Var	0.435		Treatment >= Comparison
Ampelisca 10-day	Percentage Survival	SH-23-WS-00	RF-02-SS-00	0.115	0.818	T-test Equal Var	0.188		Treatment >= Comparison

Test	Endpoint	Treatment	Comparison	Probability N	Probability H	Test Type	Test Pro	Significant?	One-Tail Comparison
Eohaustorius 10-day	Percentage Survival	RF-02-SS-00	Control	0.013	0.118	Mann-Whitney	0.267		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	RF-03-SS-00	Control	0.000	0.532	Mann-Whitney	0.500		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	HI-02-SS-00	RF-02-SS-00	0.079	0.802	T-test Equal Var	0.324		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	HI-03-SS-00	RF-02-SS-00	0.258	0.196	T-test Equal Var	0.054		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	HI-04-SS-00	RF-02-SS-00	0.004	0.533	Mann-Whitney	0.646		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	HI-05-SS-00	RF-02-SS-00	0.013	0.118	Mann-Whitney	0.733		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	HI-06-SS-00	RF-02-SS-00	0.696	0.543	T-test Equal Var	0.115		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	HI-07-SS-00	RF-02-SS-00	0.004	0.347	Mann-Whitney	0.546		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	OB-01-SS-00	RF-02-SS-00	0.001	0.781	Mann-Whitney	0.599		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	OB-02-SS-00	RF-02-SS-00	0.533	0.800	T-test Equal Var	0.004	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	OB-03-SS-00	RF-02-SS-00	0.010	0.407	Mann-Whitney	0.016	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	OB-04-SS-00	RF-02-SS-00	0.116	0.914	T-test Equal Var	0.286		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	OB-07-SS-00	RF-02-SS-00	0.319	0.273	T-test Equal Var	0.080		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	OB-14-SS-00	RF-02-SS-00	0.513	0.939	T-test Equal Var	0.072		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	OB-17-WS-00	RF-02-SS-00	0.061	0.045	T-test Unequal Var	0.020	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-01-SS-00	RF-02-SS-00	0.149	0.011	T-test Unequal Var	0.018	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-02-SS-00	RF-02-SS-00	0.605	0.351	T-test Equal Var	0.130		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-06-SS-00	RF-02-SS-00	0.365	0.651	T-test Equal Var	0.043	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-07-SS-00	RF-02-SS-00	0.081	0.806	T-test Equal Var	0.270		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-09-SS-00	RF-02-SS-00	0.469	0.933	T-test Equal Var	0.045	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-10-SS-00	RF-02-SS-00	0.166	0.003	T-test Unequal Var	0.044	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-14-SS-00	RF-02-SS-00	0.002	0.760	Mann-Whitney	0.023	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-15-SS-00	RF-02-SS-00	0.001	1.000	Mann-Whitney	0.500		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-16-SS-00	RF-02-SS-00	0.004	0.347	Mann-Whitney	0.546		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-22-WS-00	RF-02-SS-00	0.717	0.983	T-test Equal Var	0.080		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-24-WS-00	RF-02-SS-00	0.118	0.905	T-test Equal Var	0.007	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-25-WS-00	RF-02-SS-00	0.047	0.093	Rankit Equal Var	0.001	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-26-WS-00	RF-02-SS-00	0.445	0.968	T-test Equal Var	0.047	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-27-WS-00	RF-02-SS-00	0.472	0.787	T-test Equal Var	0.131		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-28-WS-00	RF-02-SS-00	0.605	0.351	T-test Equal Var	0.130		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-29-WS-00	RF-02-SS-00	0.079	0.802	T-test Equal Var	0.324		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-30-WS-00	RF-02-SS-00	0.689	0.992	T-test Equal Var	0.103		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	HI-02-SS-00	RF-03-SS-00	0.178	0.653	T-test Equal Var	0.177		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	HI-03-SS-00	RF-03-SS-00	0.058	0.137	T-test Equal Var	0.031	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	HI-04-SS-00	RF-03-SS-00	0.000	1.000	Mann-Whitney	0.500		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	HI-05-SS-00	RF-03-SS-00	0.000	0.532	Mann-Whitney	0.500		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	HI-06-SS-00	RF-03-SS-00	0.380	0.968	T-test Equal Var	0.052		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	HI-07-SS-00	RF-03-SS-00	0.002	0.899	Mann-Whitney	0.401		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	OB-01-SS-00	RF-03-SS-00	0.000	0.521	Mann-Whitney	0.500		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	OB-02-SS-00	RF-03-SS-00	0.101	0.811	T-test Equal Var	0.002	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	OB-03-SS-00	RF-03-SS-00	0.001	0.890	Mann-Whitney	0.014	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	OB-04-SS-00	RF-03-SS-00	0.108	0.543	T-test Equal Var	0.161		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	OB-07-SS-00	RF-03-SS-00	0.123	0.187	T-test Equal Var	0.046	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	OB-14-SS-00	RF-03-SS-00	0.321	0.599	T-test Equal Var	0.034	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	OB-17-WS-00	RF-03-SS-00	0.007	0.458	Mann-Whitney	0.034	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-01-SS-00	RF-03-SS-00	0.006	0.168	Mann-Whitney	0.032	Yes	Treatment < Comparison

Test	Endpoint	Treatment	Comparison	Probability N	Probability H	Test Type	Test Pro	Significant?	One-Tail Comparison
Eohaustorius 10-day	Percentage Survival	SH-02-SS-00	RF-03-SS-00	0.434	0.787	T-test Equal Var	0.057		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-06-SS-00	RF-03-SS-00	0.100	0.442	T-test Equal Var	0.023	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-07-SS-00	RF-03-SS-00	0.215	0.443	T-test Equal Var	0.147		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-09-SS-00	RF-03-SS-00	0.474	0.728	T-test Equal Var	0.021	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-10-SS-00	RF-03-SS-00	0.001	0.183	Mann-Whitney	0.055		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-14-SS-00	RF-03-SS-00	0.003	0.622	Mann-Whitney	0.022	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-15-SS-00	RF-03-SS-00	0.004	0.533	Mann-Whitney	0.354		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-16-SS-00	RF-03-SS-00	0.002	0.899	Mann-Whitney	0.401		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-22-WS-00	RF-03-SS-00	0.118	0.663	T-test Equal Var	0.040	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-24-WS-00	RF-03-SS-00	0.096	0.664	T-test Equal Var	0.003	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-25-WS-00	RF-03-SS-00	0.001	0.449	Mann-Whitney	0.014	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-26-WS-00	RF-03-SS-00	0.274	0.679	T-test Equal Var	0.023	Yes	Treatment < Comparison
Eohaustorius 10-day	Percentage Survival	SH-27-WS-00	RF-03-SS-00	0.022	0.888	Mann-Whitney	0.104		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-28-WS-00	RF-03-SS-00	0.434	0.787	T-test Equal Var	0.057		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-29-WS-00	RF-03-SS-00	0.178	0.653	T-test Equal Var	0.177		Treatment >= Comparison
Eohaustorius 10-day	Percentage Survival	SH-30-WS-00	RF-03-SS-00	0.058	0.686	T-test Equal Var	0.052		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	RF-01-SS-00	Control	0.817	0.800	T-test Equal Var	0.209		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	RF-02-SS-00	Control	0.694	0.256	T-test Equal Var	0.382		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	RF-03-SS-00	Control	0.949	0.177	T-test Equal Var	0.027	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	HI-02-SS-00	RF-01-SS-00	0.728	0.165	T-test Equal Var	0.048	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	HI-04-SS-00	RF-01-SS-00	0.046	0.181	Mann-Whitney	0.580		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	HI-06-SS-00	RF-01-SS-00	0.817	0.128	T-test Equal Var	0.185		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	HI-07-SS-00	RF-01-SS-00	0.358	0.063	T-test Unequal Var	0.470		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-01-SS-00	RF-01-SS-00	0.450	0.660	T-test Equal Var	0.120		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-02-SS-00	RF-01-SS-00	0.674	0.136	T-test Equal Var	0.104		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-05-SS-00	RF-01-SS-00	0.718	0.545	T-test Equal Var	0.005	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-06-SS-00	RF-01-SS-00	0.973	0.278	T-test Equal Var	0.051		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-11-SS-00	RF-01-SS-00	0.987	0.483	T-test Equal Var	0.081		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-12-SS-00	RF-01-SS-00	0.994	0.522	T-test Equal Var	0.039	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-13-SS-00	RF-01-SS-00	0.124	0.674	T-test Equal Var	0.020	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-14-SS-00	RF-01-SS-00	0.819	0.255	T-test Equal Var	0.137		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-17-WS-00	RF-01-SS-00	0.958	0.296	T-test Equal Var	0.639		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-19-WS-00	RF-01-SS-00	0.983	0.616	T-test Equal Var	0.248		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-01-SS-00	RF-01-SS-00	0.422	0.200	T-test Equal Var	0.064		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-03-SS-00	RF-01-SS-00	0.668	0.005	T-test Unequal Var	0.293		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-04-SS-00	RF-01-SS-00	0.112	0.162	T-test Equal Var	0.344		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-09-SS-00	RF-01-SS-00	0.911	0.334	T-test Equal Var	0.355		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-10-SS-00	RF-01-SS-00	0.727	0.517	T-test Equal Var	0.054		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-11-SS-00	RF-01-SS-00	0.845	0.813	T-test Equal Var	0.765		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-13-SS-00	RF-01-SS-00	0.246	0.649	T-test Equal Var	0.004	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-14-SS-00	RF-01-SS-00	0.182	0.234	T-test Equal Var	0.224		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-21-WS-00	RF-01-SS-00	0.615	0.821	T-test Equal Var	0.008	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-22-WS-00	RF-01-SS-00	0.488	0.306	T-test Equal Var	0.016	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-28-WS-00	RF-01-SS-00	0.851	0.804	T-test Equal Var	0.013	Yes	Treatment < Comparison

Test	Endpoint	Treatment	Comparison	Probability N	Probability H	Test Type	Test Pro	Significant?	One-Tail Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	HI-02-SS-00	RF-02-SS-00	0.657	0.503	T-test Equal Var	0.042	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	HI-04-SS-00	RF-02-SS-00	0.138	0.364	T-test Equal Var	0.592		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	HI-06-SS-00	RF-02-SS-00	0.211	0.699	T-test Equal Var	0.145		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	HI-07-SS-00	RF-02-SS-00	0.090	0.403	T-test Equal Var	0.367		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-01-SS-00	RF-02-SS-00	0.579	0.344	T-test Equal Var	0.101		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-02-SS-00	RF-02-SS-00	0.452	0.790	T-test Equal Var	0.087		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-05-SS-00	RF-02-SS-00	0.596	0.530	T-test Equal Var	0.007	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-06-SS-00	RF-02-SS-00	0.846	0.886	T-test Equal Var	0.046	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-11-SS-00	RF-02-SS-00	0.454	0.430	T-test Equal Var	0.072		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-12-SS-00	RF-02-SS-00	0.464	0.394	T-test Equal Var	0.040	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-13-SS-00	RF-02-SS-00	0.117	0.398	T-test Equal Var	0.022	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-14-SS-00	RF-02-SS-00	0.581	0.833	T-test Equal Var	0.110		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-17-WS-00	RF-02-SS-00	0.953	0.830	T-test Equal Var	0.519		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-19-WS-00	RF-02-SS-00	0.818	0.438	T-test Equal Var	0.188		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-01-SS-00	RF-02-SS-00	0.122	0.981	T-test Equal Var	0.057		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-03-SS-00	RF-02-SS-00	0.508	0.024	T-test Unequal Var	0.239		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-04-SS-00	RF-02-SS-00	0.116	0.536	T-test Equal Var	0.271		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-09-SS-00	RF-02-SS-00	0.493	0.931	T-test Equal Var	0.268		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-10-SS-00	RF-02-SS-00	0.518	0.539	T-test Equal Var	0.051		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-11-SS-00	RF-02-SS-00	0.659	0.069	T-test Unequal Var	0.564		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-13-SS-00	RF-02-SS-00	0.550	0.073	T-test Unequal Var	0.011	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-14-SS-00	RF-02-SS-00	0.164	0.754	T-test Equal Var	0.175		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-21-WS-00	RF-02-SS-00	0.615	0.078	T-test Unequal Var	0.018	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-22-WS-00	RF-02-SS-00	0.357	0.737	T-test Equal Var	0.018	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-28-WS-00	RF-02-SS-00	0.671	0.156	T-test Equal Var	0.018	Yes	Treatment < Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	HI-02-SS-00	RF-03-SS-00	0.548	0.868	T-test Equal Var	0.391		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	HI-04-SS-00	RF-03-SS-00	0.366	0.548	T-test Equal Var	0.897		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	HI-06-SS-00	RF-03-SS-00	0.750	0.769	T-test Equal Var	0.763		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	HI-07-SS-00	RF-03-SS-00	0.363	0.968	T-test Equal Var	0.891		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-01-SS-00	RF-03-SS-00	0.979	0.221	T-test Equal Var	0.784		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-02-SS-00	RF-03-SS-00	0.645	0.684	T-test Equal Var	0.680		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-05-SS-00	RF-03-SS-00	0.976	0.317	T-test Equal Var	0.250		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-06-SS-00	RF-03-SS-00	0.680	0.712	T-test Equal Var	0.509		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-11-SS-00	RF-03-SS-00	0.977	0.263	T-test Equal Var	0.724		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-12-SS-00	RF-03-SS-00	0.981	0.247	T-test Equal Var	0.618		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-13-SS-00	RF-03-SS-00	0.728	0.248	T-test Equal Var	0.492		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-14-SS-00	RF-03-SS-00	0.610	0.754	T-test Equal Var	0.690		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-17-WS-00	RF-03-SS-00	0.776	0.794	T-test Equal Var	0.933		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	OB-19-WS-00	RF-03-SS-00	0.928	0.268	T-test Equal Var	0.858		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-01-SS-00	RF-03-SS-00	0.733	0.541	T-test Equal Var	0.619		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-03-SS-00	RF-03-SS-00	0.302	0.145	T-test Equal Var	0.712		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-04-SS-00	RF-03-SS-00	0.383	0.935	T-test Equal Var	0.821		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-09-SS-00	RF-03-SS-00	0.812	0.562	T-test Equal Var	0.870		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-10-SS-00	RF-03-SS-00	0.914	0.320	T-test Equal Var	0.635		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-11-SS-00	RF-03-SS-00	0.980	0.080	T-test Unequal Var	0.963		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-13-SS-00	RF-03-SS-00	0.799	0.073	T-test Unequal Var	0.387		Treatment >= Comparison

Test	Endpoint	Treatment	Comparison	Probability N	Probability H	Test Type	Test Pro	Significant?	One-Tail Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-14-SS-00	RF-03-SS-00	0.447	0.834	T-test Equal Var	0.768		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-21-WS-00	RF-03-SS-00	0.910	0.084	T-test Unequal Var	0.488		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-22-WS-00	RF-03-SS-00	0.931	0.413	T-test Equal Var	0.405		Treatment >= Comparison
Neanthes Growth -Batch 1	Individual Growth Rate (mg/ind/d)	SH-28-WS-00	RF-03-SS-00	0.978	0.135	T-test Equal Var	0.516		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	RF-01-SS-00	Control	0.066	0.533	T-test Equal Var	0.960		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	RF-02-SS-00	Control	0.396	0.191	T-test Equal Var	0.593		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	RF-03-SS-00	Control	0.289	0.292	T-test Equal Var	0.422		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	HI-03-SS-00	RF-01-SS-00	0.299	0.815	T-test Equal Var	0.043	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	HI-05-SS-00	RF-01-SS-00	0.072	0.563	T-test Equal Var	0.007	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-03-SS-00	RF-01-SS-00	0.023	0.363	Mann-Whitney	0.107		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-04-SS-00	RF-01-SS-00	0.295	0.821	T-test Equal Var	0.294		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-07-SS-00	RF-01-SS-00	0.196	0.350	T-test Equal Var	0.003	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-08-SS-00	RF-01-SS-00	0.975	0.562	T-test Equal Var	0.123		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-09-SS-00	RF-01-SS-00	0.526	0.063	T-test Unequal Var	0.083		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-10-SS-00	RF-01-SS-00	0.257	0.394	T-test Equal Var	0.277		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-18-WS-00	RF-01-SS-00	0.195	0.378	T-test Equal Var	0.057		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-02-SS-00	RF-01-SS-00	0.418	0.939	T-test Equal Var	0.054		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-06-SS-00	RF-01-SS-00	0.044	0.710	Mann-Whitney	0.017	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-07-SS-00	RF-01-SS-00	0.224	0.341	T-test Equal Var	0.022	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-12-SS-00	RF-01-SS-00	0.890	0.099	T-test Unequal Var	0.202		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-15-SS-00	RF-01-SS-00	0.362	0.470	T-test Equal Var	0.059		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-16-SS-00	RF-01-SS-00	0.297	0.450	T-test Equal Var	0.002	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-18-WS-00	RF-01-SS-00	0.350	0.134	T-test Equal Var	0.037	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-19-WS-00	RF-01-SS-00	0.860	0.925	T-test Equal Var	0.032	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-20-WS-00	RF-01-SS-00	0.676	0.098	T-test Unequal Var	0.368		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-23-WS-00	RF-01-SS-00	0.289	0.591	T-test Equal Var	0.017	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-24-WS-00	RF-01-SS-00	0.738	0.465	T-test Equal Var	0.058		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-25-WS-00	RF-01-SS-00	0.279	0.007	T-test Unequal Var	0.148		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-26-WS-00	RF-01-SS-00	0.107	0.250	T-test Equal Var	0.001	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-27-WS-00	RF-01-SS-00	0.170	0.239	T-test Equal Var	0.018	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-29-WS-00	RF-01-SS-00	0.129	0.411	T-test Equal Var	0.016	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-30-WS-00	RF-01-SS-00	0.117	0.415	T-test Equal Var	0.036	Yes	Treatment < Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	HI-03-SS-00	RF-02-SS-00	0.808	0.261	T-test Equal Var	0.382		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	HI-05-SS-00	RF-02-SS-00	0.656	0.196	T-test Equal Var	0.184		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-03-SS-00	RF-02-SS-00	0.667	0.520	T-test Equal Var	0.225		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-04-SS-00	RF-02-SS-00	0.773	0.259	T-test Equal Var	0.719		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-07-SS-00	RF-02-SS-00	0.341	0.147	T-test Equal Var	0.114		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-08-SS-00	RF-02-SS-00	0.678	0.694	T-test Equal Var	0.444		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-09-SS-00	RF-02-SS-00	0.233	0.082	T-test Unequal Var	0.560		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-10-SS-00	RF-02-SS-00	0.803	0.158	T-test Equal Var	0.725		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-18-WS-00	RF-02-SS-00	0.689	0.156	T-test Equal Var	0.467		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-02-SS-00	RF-02-SS-00	0.825	0.326	T-test Equal Var	0.400		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-06-SS-00	RF-02-SS-00	0.459	0.224	T-test Equal Var	0.102		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-07-SS-00	RF-02-SS-00	0.697	0.146	T-test Equal Var	0.331		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-12-SS-00	RF-02-SS-00	0.762	0.764	T-test Equal Var	0.515		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-15-SS-00	RF-02-SS-00	0.711	0.717	T-test Equal Var	0.313		Treatment >= Comparison

Test	Endpoint	Treatment	Comparison	Probability N	Probability H	Test Type	Test Pro	Significant?	One-Tail Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-16-SS-00	RF-02-SS-00	0.843	0.172	T-test Equal Var	0.094		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-18-WS-00	RF-02-SS-00	0.347	0.101	T-test Equal Var	0.438		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-19-WS-00	RF-02-SS-00	0.889	0.387	T-test Equal Var	0.288		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-20-WS-00	RF-02-SS-00	0.331	0.754	T-test Equal Var	0.676		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-23-WS-00	RF-02-SS-00	0.359	0.509	T-test Equal Var	0.192		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-24-WS-00	RF-02-SS-00	0.874	0.748	T-test Equal Var	0.297		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-25-WS-00	RF-02-SS-00	0.122	0.399	T-test Equal Var	0.412		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-26-WS-00	RF-02-SS-00	0.265	0.139	T-test Equal Var	0.066		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-27-WS-00	RF-02-SS-00	0.769	0.735	T-test Equal Var	0.176		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-29-WS-00	RF-02-SS-00	0.819	0.548	T-test Equal Var	0.190		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-30-WS-00	RF-02-SS-00	0.433	0.205	T-test Equal Var	0.362		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	HI-03-SS-00	RF-03-SS-00	0.590	0.407	T-test Equal Var	0.540		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	HI-05-SS-00	RF-03-SS-00	0.449	0.300	T-test Equal Var	0.272		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-03-SS-00	RF-03-SS-00	0.318	0.791	T-test Equal Var	0.308		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-04-SS-00	RF-03-SS-00	0.537	0.406	T-test Equal Var	0.863		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-07-SS-00	RF-03-SS-00	0.258	0.216	T-test Equal Var	0.162		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-08-SS-00	RF-03-SS-00	0.558	0.956	T-test Equal Var	0.574		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-09-SS-00	RF-03-SS-00	0.230	0.106	T-test Equal Var	0.753		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-10-SS-00	RF-03-SS-00	0.446	0.234	T-test Equal Var	0.872		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	OB-18-WS-00	RF-03-SS-00	0.441	0.230	T-test Equal Var	0.647		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-02-SS-00	RF-03-SS-00	0.526	0.516	T-test Equal Var	0.558		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-06-SS-00	RF-03-SS-00	0.398	0.349	T-test Equal Var	0.143		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-07-SS-00	RF-03-SS-00	0.429	0.214	T-test Equal Var	0.484		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-12-SS-00	RF-03-SS-00	0.671	0.437	T-test Equal Var	0.645		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-15-SS-00	RF-03-SS-00	0.955	1.000	T-test Equal Var	0.419		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-16-SS-00	RF-03-SS-00	0.459	0.257	T-test Equal Var	0.131		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-18-WS-00	RF-03-SS-00	0.384	0.138	T-test Equal Var	0.622		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-19-WS-00	RF-03-SS-00	0.869	0.591	T-test Equal Var	0.411		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-20-WS-00	RF-03-SS-00	0.387	0.431	T-test Equal Var	0.793		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-23-WS-00	RF-03-SS-00	0.111	0.783	T-test Equal Var	0.276		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-24-WS-00	RF-03-SS-00	0.688	0.996	T-test Equal Var	0.382		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-25-WS-00	RF-03-SS-00	0.046	0.149	Mann-Whitney	0.420		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-26-WS-00	RF-03-SS-00	0.287	0.201	T-test Equal Var	0.087		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-27-WS-00	RF-03-SS-00	0.284	0.900	T-test Equal Var	0.249		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-29-WS-00	RF-03-SS-00	0.274	0.859	T-test Equal Var	0.272		Treatment >= Comparison
Neanthes Growth -Batch 2	Individual Growth Rate (mg/ind/d)	SH-30-WS-00	RF-03-SS-00	0.393	0.283	T-test Equal Var	0.503		Treatment >= Comparison

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Larval Dev - Batch 1	Percent Normal Survival	RF-01	Control	0.305	0.420	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	RF-02	Control	0.071	0.658	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	RF-03	Control	0.197	0.068	T-test Unequal Var	0.023	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	HI-05-S	RF-01	0.146	0.050	T-test Unequal Var	0.999		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	HI-07-S	RF-01	0.184	0.047	T-test Unequal Var	0.998		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	OB-01-S	RF-01	0.863	0.820	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	OB-02-S	RF-01	0.458	0.264	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	OB-03-S	RF-01	0.700	0.137	T-test Equal Var	0.999		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-01-S	RF-01	0.467	0.059	T-test Unequal Var	0.995		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-02-S	RF-01	0.791	0.026	T-test Unequal Var	0.040	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-03-S	RF-01	0.858	0.009	T-test Unequal Var	0.026	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-04-S	RF-01	0.384	0.386	T-test Equal Var	0.024	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-06-S	RF-01	0.117	0.190	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-09-S	RF-01	0.192	0.481	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-10-S	RF-01	0.806	0.068	T-test Unequal Var	0.998		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-14-S	RF-01	0.714	0.012	T-test Unequal Var	0.794		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-15-S	RF-01	0.023	0.102	Mann-Whitney	0.984		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-16-S	RF-01	0.813	0.247	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-19-W	RF-01	0.597	0.269	T-test Equal Var	0.010	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-20-W	RF-01	0.436	0.154	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-21-W	RF-01	0.324	0.560	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-22-W	RF-01	0.297	0.662	T-test Equal Var	0.019	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-23-W	RF-01	0.927	0.037	T-test Unequal Var	0.910		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-24-W	RF-01	0.353	0.160	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-26-W	RF-01	0.426	0.058	T-test Unequal Var	0.949		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-27-W	RF-01	0.655	0.011	T-test Unequal Var	0.999		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-28-W	RF-01	0.022	0.170	Mann-Whitney	0.984		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-29-W	RF-01	0.166	0.071	T-test Unequal Var	0.999		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-30-W	RF-01	0.375	0.385	T-test Equal Var	0.998		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	HI-05-S	RF-02	0.235	0.124	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	HI-07-S	RF-02	0.534	0.104	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	OB-01-S	RF-02	0.431	0.222	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	OB-02-S	RF-02	0.328	0.776	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	OB-03-S	RF-02	0.667	0.527	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-01-S	RF-02	0.812	0.377	T-test Equal Var	0.999		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-02-S	RF-02	0.984	0.067	T-test Unequal Var	0.106		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-03-S	RF-02	0.756	0.036	T-test Unequal Var	0.082	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-04-S	RF-02	0.711	0.702	T-test Equal Var	0.412		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-06-S	RF-02	0.183	0.947	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-09-S	RF-02	1.000	0.751	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-10-S	RF-02	0.814	0.262	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-14-S	RF-02	0.913	0.065	T-test Unequal Var	0.946		Treatment >= Comparison

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-15-S	RF-02	0.068	0.200	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-16-S	RF-02	0.763	0.762	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-19-W	RF-02	0.180	0.929	T-test Equal Var	0.174		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-20-W	RF-02	0.198	0.763	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-21-W	RF-02	0.512	0.484	T-test Equal Var	0.031	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-22-W	RF-02	0.854	0.458	T-test Equal Var	0.415		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-23-W	RF-02	0.999	0.123	T-test Equal Var	0.979		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-24-W	RF-02	0.412	0.872	T-test Equal Var	0.007	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-26-W	RF-02	0.601	0.484	T-test Equal Var	0.993		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-27-W	RF-02	0.656	0.042	T-test Unequal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-28-W	RF-02	0.022	0.476	Mann-Whitney	0.983		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-29-W	RF-02	0.408	0.171	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-30-W	RF-02	0.128	0.755	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	HI-05-S	RF-03	0.107	0.708	T-test Equal Var	0.996		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	HI-07-S	RF-03	0.496	0.544	T-test Equal Var	0.983		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	OB-01-S	RF-03	0.229	0.027	T-test Unequal Var	0.892		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	OB-02-S	RF-03	0.683	0.233	T-test Equal Var	0.701		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	OB-03-S	RF-03	0.210	0.304	T-test Equal Var	0.449		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-01-S	RF-03	0.173	0.278	T-test Equal Var	0.236		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-02-S	RF-03	0.517	0.523	T-test Equal Var	0.002	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-03-S	RF-03	0.496	0.649	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-04-S	RF-03	0.308	0.072	T-test Unequal Var	0.003	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-06-S	RF-03	0.188	0.088	T-test Unequal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-09-S	RF-03	0.249	0.095	T-test Unequal Var	0.540		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-10-S	RF-03	0.663	0.582	T-test Equal Var	0.751		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-14-S	RF-03	0.194	0.884	T-test Equal Var	0.044	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-15-S	RF-03	0.053	0.715	T-test Equal Var	0.962		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-16-S	RF-03	0.428	0.227	T-test Equal Var	0.905		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-19-W	RF-03	0.309	0.145	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-20-W	RF-03	0.223	0.153	T-test Equal Var	0.658		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-21-W	RF-03	0.300	0.051	T-test Unequal Var	0.001	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-22-W	RF-03	0.231	0.051	T-test Unequal Var	0.003	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-23-W	RF-03	0.505	0.960	T-test Equal Var	0.127		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-24-W	RF-03	0.236	0.119	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-26-W	RF-03	0.184	0.188	T-test Equal Var	0.042	Yes	Treatment < Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-27-W	RF-03	0.428	0.649	T-test Equal Var	0.985		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-28-W	RF-03	0.834	0.479	T-test Equal Var	0.445		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-29-W	RF-03	0.918	0.833	T-test Equal Var	0.993		Treatment >= Comparison
Larval Dev - Batch 1	Percent Normal Survival	SH-30-W	RF-03	0.246	0.082	T-test Unequal Var	0.153		Treatment >= Comparison

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Larval Dev - Batch 2	Percent Normal Survival	REF-01	Control	0.008	0.470	Mann-Whitney	0.016	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	REF-02	Control	0.486	0.447	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	REF-03	Control	0.055	0.213	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	HI-02	RF-01	0.860	0.086	T-test Unequal Var	0.713		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	HI-03	RF-01	0.828	0.077	T-test Unequal Var	0.219		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	HI-04	RF-01	0.573	0.011	T-test Unequal Var	0.393		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	HI-06	RF-01	0.031	0.757	Mann-Whitney	0.046	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-04	RF-01	0.003	0.819	Mann-Whitney	0.017	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-05	RF-01	0.543	0.375	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-06	RF-01	0.463	0.816	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-07	RF-01	0.763	0.991	T-test Equal Var	0.100	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-08	RF-01	0.748	0.581	T-test Equal Var	0.080	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-09	RF-01	0.042	0.301	Mann-Whitney	0.017	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-10	RF-01	0.839	0.908	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-11	RF-01	0.004	0.927	Mann-Whitney	0.046	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-12	RF-01	0.142	0.718	T-test Equal Var	0.002	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-13	RF-01	0.186	0.390	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-14	RF-01	0.437	0.829	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-17	RF-01	0.954	0.851	T-test Equal Var	0.004	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-18	RF-01	0.281	0.775	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-19	RF-01	0.065	0.195	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-07	RF-01	0.784	0.710	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-11	RF-01	0.234	0.687	T-test Equal Var	0.008	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-12	RF-01	0.149	0.593	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-13	RF-01	0.210	0.372	T-test Equal Var	0.021	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-18	RF-01	0.006	0.971	Mann-Whitney	0.017	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-25	RF-01	0.635	0.204	T-test Equal Var	0.005	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	HI-02	RF-02	0.732	0.079	T-test Unequal Var	0.995		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	HI-03	RF-02	0.805	0.060	T-test Unequal Var	0.992		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	HI-04	RF-02	0.715	0.007	T-test Unequal Var	0.985		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	HI-06	RF-02	0.290	0.770	T-test Equal Var	0.994		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-04	RF-02	0.563	0.847	T-test Equal Var	0.002	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-05	RF-02	0.488	0.347	T-test Equal Var	0.271		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-06	RF-02	0.903	0.843	T-test Equal Var	0.046	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-07	RF-02	0.193	0.928	T-test Equal Var	1.000		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-08	RF-02	0.272	0.587	T-test Equal Var	0.996		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-09	RF-02	0.520	0.184	T-test Equal Var	0.744		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-10	RF-02	0.417	0.954	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-11	RF-02	0.609	0.865	T-test Equal Var	0.995		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-12	RF-02	0.836	0.734	T-test Equal Var	0.926		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-13	RF-02	0.941	0.257	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-14	RF-02	0.236	0.861	T-test Equal Var	0.002	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-17	RF-02	0.234	0.772	T-test Equal Var	0.993		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-18	RF-02	0.910	0.798	T-test Equal Var	0.001	Yes	Treatment < Comparison

Test	Endpoint	Treatment	Comparison	Probability Normal	Probability Homogeneous	Test Type	Test Probability	Significant?	One-Tail Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-19	RF-02	0.124	0.184	T-test Equal Var	0.007	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-07	RF-02	0.269	0.726	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-11	RF-02	0.649	0.695	T-test Equal Var	0.989		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-12	RF-02	0.813	0.440	T-test Equal Var	0.538		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-13	RF-02	0.403	0.371	T-test Equal Var	0.921		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-18	RF-02	0.802	0.979	T-test Equal Var	0.960		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-25	RF-02	0.910	0.181	T-test Equal Var	0.858		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	HI-02	RF-03	0.760	0.049	T-test Unequal Var	0.946		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	HI-03	RF-03	0.933	0.027	T-test Unequal Var	0.776		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	HI-04	RF-03	0.723	0.003	T-test Unequal Var	0.822		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	HI-06	RF-03	0.056	0.328	T-test Equal Var	0.205		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-04	RF-03	0.029	0.555	Mann-Whitney	0.017	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-05	RF-03	0.884	0.162	T-test Equal Var	0.002	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-06	RF-03	0.877	0.557	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-07	RF-03	0.911	0.670	T-test Equal Var	0.886		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-08	RF-03	0.300	0.388	T-test Equal Var	0.657		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-09	RF-03	0.297	0.362	T-test Equal Var	0.001	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-10	RF-03	0.875	0.570	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-11	RF-03	0.039	0.793	Mann-Whitney	0.273		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-12	RF-03	0.686	0.452	T-test Equal Var	0.039	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-13	RF-03	0.702	0.505	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-14	RF-03	0.600	0.386	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-17	RF-03	0.980	0.857	T-test Equal Var	0.168		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-18	RF-03	0.810	0.498	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	OB-19	RF-03	0.103	0.113	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-07	RF-03	0.446	0.462	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-11	RF-03	0.601	0.385	T-test Equal Var	0.218		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-12	RF-03	0.474	0.856	T-test Equal Var	0.000	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-13	RF-03	0.283	0.260	T-test Equal Var	0.198		Treatment >= Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-18	RF-03	0.052	0.677	T-test Equal Var	0.041	Yes	Treatment < Comparison
Larval Dev - Batch 2	Percent Normal Survival	SH-25	RF-03	0.892	0.090	T-test Unequal Var	0.070	Yes	Treatment < Comparison

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=RF-02-SS-00 -----

The TTEST Procedure

Variable: result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
Control	5	1.2982	0.1559	0.0697	1.1731	1.5708
Reference	5	1.2115	0.1031	0.0461	1.1071	1.3453
Diff (1-2)		0.0867	0.1321	0.0836		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
Control		1.2982	1.1046 1.4918	0.1559	0.0934 0.4480
Reference		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Diff (1-2)	Pooled	0.0867	-0.1061 0.2794	0.1321	0.0893 0.2532
Diff (1-2)	Satterthwaite	0.0867	-0.1113 0.2847		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.04	0.3301
Satterthwaite	Unequal	6.9362	1.04	0.3345

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.29	0.4426

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=RF-01-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Control	5	34.50	27.50	4.456581	6.90
Reference	5	20.50	27.50	4.456581	4.10

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 34.5000

Normal Approximation

Z 1.4585
One-Sided Pr > Z 0.0723
Two-Sided Pr > |Z| 0.1447

t Approximation

One-Sided Pr > Z 0.0893
Two-Sided Pr > |Z| 0.1787

Z includes a continuity correction of 0.5.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=RF-01-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	2.4671
DF	1
Pr > Chi-Square	0.1162

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.1903	0.0600	0.0268	1.1071	1.2490
Diff (1-2)		-0.0132	0.0657	0.0416		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.1903	1.1158 1.2648	0.0600	0.0360 0.1725
Diff (1-2)	Pooled	-0.0132	-0.1091 0.0827	0.0657	0.0444 0.1259
Diff (1-2)	Satterthwaite	-0.0132	-0.1095 0.0831		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.32	0.7592
Satterthwaite	Unequal	7.7848	-0.32	0.7594

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.40	0.7529

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-08-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.3474	0.2063	0.0923	1.1731	1.5708
Diff (1-2)		-0.1703	0.1543	0.0976		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.3474	1.0912 1.6035	0.2063	0.1236 0.5928
Diff (1-2)	Pooled	-0.1703	-0.3953 0.0547	0.1543	0.1042 0.2956
Diff (1-2)	Satterthwaite	-0.1703	-0.4221 0.0816		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.75	0.1191
Satterthwaite	Unequal	4.934	-1.75	0.1422

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	8.45	0.0625

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-09-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.3222	0.2381	0.1065	1.0472	1.5708
Diff (1-2)		-0.1451	0.1757	0.1111		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.3222	1.0265 1.6179	0.2381	0.1427 0.6843
Diff (1-2)	Pooled	-0.1451	-0.4013 0.1112	0.1757	0.1187 0.3366
Diff (1-2)	Satterthwaite	-0.1451	-0.4362 0.1460		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.31	0.2280
Satterthwaite	Unequal	4.7053	-1.31	0.2519

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	11.25	0.0378

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-10-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.3818	0.1830	0.0818	1.1731	1.5708
Diff (1-2)		-0.2047	0.1388	0.0878		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01-SS-00		1.1771	1.0890	1.2652	0.0710	0.0425	0.2040
Test		1.3818	1.1546	1.6090	0.1830	0.1096	0.5259
Diff (1-2)	Pooled	-0.2047	-0.4071	-0.00228	0.1388	0.0937	0.2659
Diff (1-2)	Satterthwaite	-0.2047	-0.4281	0.0186			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-2.33	0.0480
Satterthwaite	Unequal	5.177	-2.33	0.0653

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.65	0.0937

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-11-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.2771	0.1971	0.0881	1.0472	1.5708
Diff (1-2)		-0.1000	0.1481	0.0937		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.2771	1.0324 1.5218	0.1971	0.1181 0.5663
Diff (1-2)	Pooled	-0.1000	-0.3160 0.1160	0.1481	0.1000 0.2838
Diff (1-2)	Satterthwaite	-0.1000	-0.3405 0.1405		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.07	0.3170
Satterthwaite	Unequal	5.0206	-1.07	0.3344

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	7.71	0.0731

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-12-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.1240	0.2305	0.1031	0.7854	1.3453
Diff (1-2)		0.0531	0.1705	0.1079		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.1240	0.8378 1.4102	0.2305	0.1381 0.6624
Diff (1-2)	Pooled	0.0531	-0.1956 0.3018	0.1705	0.1152 0.3267
Diff (1-2)	Satterthwaite	0.0531	-0.2286 0.3348		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.49	0.6357
Satterthwaite	Unequal	4.7519	0.49	0.6443

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	10.55	0.0424

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-13-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.2850	0.1712	0.0765	1.1071	1.5708
Diff (1-2)		-0.1079	0.1310	0.0829		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.2850	1.0725 1.4975	0.1712	0.1026 0.4918
Diff (1-2)	Pooled	-0.1079	-0.2990 0.0832	0.1310	0.0885 0.2510
Diff (1-2)	Satterthwaite	-0.1079	-0.3170 0.1011		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.30	0.2291
Satterthwaite	Unequal	5.3364	-1.30	0.2462

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.81	0.1166

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-18-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.2279	0.1093	0.0489	1.0472	1.3453
Diff (1-2)		-0.0508	0.0921	0.0583		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.2279	1.0922 1.3636	0.1093	0.0655 0.3140
Diff (1-2)	Pooled	-0.0508	-0.1852 0.0836	0.0921	0.0622 0.1765
Diff (1-2)	Satterthwaite	-0.0508	-0.1892 0.0875		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.87	0.4086
Satterthwaite	Unequal	6.8651	-0.87	0.4126

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.37	0.4237

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-19-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.3235	0.1692	0.0756	1.1071	1.5708
Diff (1-2)		-0.1464	0.1297	0.0820		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.3235	1.1135 1.5335	0.1692	0.1013 0.4861
Diff (1-2)	Pooled	-0.1464	-0.3356 0.0428	0.1297	0.0876 0.2485
Diff (1-2)	Satterthwaite	-0.1464	-0.3530 0.0602		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.78	0.1121
Satterthwaite	Unequal	5.3664	-1.78	0.1304

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.68	0.1211

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.1963	0.1018	0.0455	1.1071	1.3453
Diff (1-2)		-0.0192	0.0877	0.0555		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.1963	1.0700 1.3227	0.1018	0.0610 0.2924
Diff (1-2)	Pooled	-0.0192	-0.1472 0.1087	0.0877	0.0593 0.1681
Diff (1-2)	Satterthwaite	-0.0192	-0.1499 0.1114		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.35	0.7376
Satterthwaite	Unequal	7.1479	-0.35	0.7387

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.05	0.5027

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.3115	0.1893	0.0846	1.0472	1.5708
Diff (1-2)		-0.1344	0.1429	0.0904		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.3115	1.0765 1.5465	0.1893	0.1134 0.5438
Diff (1-2)	Pooled	-0.1344	-0.3429 0.0740	0.1429	0.0965 0.2738
Diff (1-2)	Satterthwaite	-0.1344	-0.3654 0.0965		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.49	0.1753
Satterthwaite	Unequal	5.1035	-1.49	0.1960

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	7.11	0.0838

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-11-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.3367	0.1495	0.0669	1.1731	1.5708
Diff (1-2)		-0.1596	0.1170	0.0740		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.3367	1.1511 1.5223	0.1495	0.0896 0.4296
Diff (1-2)	Pooled	-0.1596	-0.3303 0.0111	0.1170	0.0790 0.2242
Diff (1-2)	Satterthwaite	-0.1596	-0.3429 0.0237		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-2.16	0.0631
Satterthwaite	Unequal	5.7164	-2.16	0.0767

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.44	0.1782

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-12-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.2440	0.1052	0.0471	1.1071	1.3453
Diff (1-2)		-0.0669	0.0898	0.0568		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.2440	1.1133 1.3746	0.1052	0.0630 0.3024
Diff (1-2)	Pooled	-0.0669	-0.1978 0.0640	0.0898	0.0606 0.1720
Diff (1-2)	Satterthwaite	-0.0669	-0.2010 0.0673		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.18	0.2726
Satterthwaite	Unequal	7.0156	-1.18	0.2772

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.20	0.4644

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-13-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.3215	0.1638	0.0733	1.1731	1.5708
Diff (1-2)		-0.1444	0.1262	0.0798		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.3215	1.1181 1.5249	0.1638	0.0981 0.4707
Diff (1-2)	Pooled	-0.1444	-0.3285 0.0397	0.1262	0.0853 0.2418
Diff (1-2)	Satterthwaite	-0.1444	-0.3446 0.0558		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.81	0.1081
Satterthwaite	Unequal	5.4511	-1.81	0.1254

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.33	0.1342

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-19-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.1863	0.1300	0.0582	0.9912	1.3453
Diff (1-2)		-0.00924	0.1048	0.0663		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.1863	1.0249 1.3478	0.1300	0.0779 0.3737
Diff (1-2)	Pooled	-0.00924	-0.1620 0.1435	0.1048	0.0708 0.2007
Diff (1-2)	Satterthwaite	-0.00924	-0.1702 0.1517		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.14	0.8925
Satterthwaite	Unequal	6.1893	-0.14	0.8935

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.36	0.2678

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-21-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.1995	0.1203	0.0538	1.0472	1.3453
Diff (1-2)		-0.0224	0.0988	0.0625		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.1995	1.0502 1.3489	0.1203	0.0721 0.3457
Diff (1-2)	Pooled	-0.0224	-0.1665 0.1216	0.0988	0.0667 0.1892
Diff (1-2)	Satterthwaite	-0.0224	-0.1726 0.1277		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.36	0.7286
Satterthwaite	Unequal	6.4842	-0.36	0.7308

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.87	0.3313

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-23-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.1440	0.1240	0.0554	1.0472	1.3453
Diff (1-2)		0.0331	0.1010	0.0639		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.1440	0.9901 1.2979	0.1240	0.0743 0.3562
Diff (1-2)	Pooled	0.0331	-0.1142 0.1804	0.1010	0.0682 0.1935
Diff (1-2)	Satterthwaite	0.0331	-0.1210 0.1873		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.52	0.6182
Satterthwaite	Unequal	6.3687	0.52	0.6217

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.05	0.3057

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-20-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	1.1771	0.0710	0.0317	1.1071	1.2490
Test	5	1.2531	0.0611	0.0273	1.1731	1.3453
Diff (1-2)		-0.0760	0.0662	0.0419		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		1.1771	1.0890 1.2652	0.0710	0.0425 0.2040
Test		1.2531	1.1772 1.3290	0.0611	0.0366 0.1757
Diff (1-2)	Pooled	-0.0760	-0.1726 0.0206	0.0662	0.0447 0.1269
Diff (1-2)	Satterthwaite	-0.0760	-0.1730 0.0210		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.81	0.1072
Satterthwaite	Unequal	7.8277	-1.81	0.1080

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.35	0.7791

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-05-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-01-SS-00	5	20.0	27.50	4.609772	4.0
Test	5	35.0	27.50	4.609772	7.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 20.0000

Normal Approximation

Z -1.5185
One-Sided Pr < Z 0.0644
Two-Sided Pr > |Z| 0.1289

t Approximation

One-Sided Pr < Z 0.0816
Two-Sided Pr > |Z| 0.1632

Z includes a continuity correction of 0.5.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-05-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	2.6471
DF	1
Pr > Chi-Square	0.1037

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-18-WS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-01-SS-00	5	21.0	27.50	4.654747	4.20
Test	5	34.0	27.50	4.654747	6.80

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 21.0000

Normal Approximation

Z -1.2890
One-Sided Pr < Z 0.0987
Two-Sided Pr > |Z| 0.1974

t Approximation

One-Sided Pr < Z 0.1148
Two-Sided Pr > |Z| 0.2295

Z includes a continuity correction of 0.5.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-18-WS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	1.9500
DF	1
Pr > Chi-Square	0.1626

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-05-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.2784	0.1044	0.0467	1.1071	1.3453
Diff (1-2)		-0.0669	0.1037	0.0656		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.2784	1.1488 1.4081	0.1044	0.0626 0.3000
Diff (1-2)	Pooled	-0.0669	-0.2182 0.0844	0.1037	0.0701 0.1988
Diff (1-2)	Satterthwaite	-0.0669	-0.2182 0.0844		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.02	0.3379
Satterthwaite	Unequal	7.9987	-1.02	0.3379

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.03	0.9806

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.1903	0.0600	0.0268	1.1071	1.2490
Diff (1-2)		0.0212	0.0843	0.0533		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.1903	1.1158 1.2648	0.0600	0.0360 0.1725
Diff (1-2)	Pooled	0.0212	-0.1018 0.1443	0.0843	0.0570 0.1616
Diff (1-2)	Satterthwaite	0.0212	-0.1072 0.1497		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.40	0.7008
Satterthwaite	Unequal	6.4327	0.40	0.7033

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.95	0.3197

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-08-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.3474	0.2063	0.0923	1.1731	1.5708
Diff (1-2)		-0.1358	0.1631	0.1031		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.3474	1.0912 1.6035	0.2063	0.1236 0.5928
Diff (1-2)	Pooled	-0.1358	-0.3737 0.1020	0.1631	0.1101 0.3124
Diff (1-2)	Satterthwaite	-0.1358	-0.3895 0.1178		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.32	0.2243
Satterthwaite	Unequal	5.8798	-1.32	0.2368

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.01	0.2075

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-09-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.3222	0.2381	0.1065	1.0472	1.5708
Diff (1-2)		-0.1107	0.1835	0.1160		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.3222	1.0265 1.6179	0.2381	0.1427 0.6843
Diff (1-2)	Pooled	-0.1107	-0.3782 0.1569	0.1835	0.1239 0.3515
Diff (1-2)	Satterthwaite	-0.1107	-0.4017 0.1804		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.95	0.3682
Satterthwaite	Unequal	5.4481	-0.95	0.3807

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.34	0.1337

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-10-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.3818	0.1830	0.0818	1.1731	1.5708
Diff (1-2)		-0.1703	0.1485	0.0939		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.3818	1.1546 1.6090	0.1830	0.1096 0.5259
Diff (1-2)	Pooled	-0.1703	-0.3869 0.0463	0.1485	0.1003 0.2845
Diff (1-2)	Satterthwaite	-0.1703	-0.3974 0.0569		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.81	0.1074
Satterthwaite	Unequal	6.3059	-1.81	0.1174

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.15	0.2921

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-11-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.2771	0.1971	0.0881	1.0472	1.5708
Diff (1-2)		-0.0655	0.1573	0.0995		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.2771	1.0324 1.5218	0.1971	0.1181 0.5663
Diff (1-2)	Pooled	-0.0655	-0.2949 0.1638	0.1573	0.1062 0.3013
Diff (1-2)	Satterthwaite	-0.0655	-0.3086 0.1775		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.66	0.5284
Satterthwaite	Unequal	6.0359	-0.66	0.5342

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.66	0.2371

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-12-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.1240	0.2305	0.1031	0.7854	1.3453
Diff (1-2)		0.0875	0.1785	0.1129		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.1240	0.8378 1.4102	0.2305	0.1381 0.6624
Diff (1-2)	Pooled	0.0875	-0.1729 0.3480	0.1785	0.1206 0.3421
Diff (1-2)	Satterthwaite	0.0875	-0.1944 0.3695		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.78	0.4605
Satterthwaite	Unequal	5.5381	0.78	0.4700

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.00	0.1481

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-13-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.2850	0.1712	0.0765	1.1071	1.5708
Diff (1-2)		-0.0735	0.1413	0.0894		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.2850	1.0725 1.4975	0.1712	0.1026 0.4918
Diff (1-2)	Pooled	-0.0735	-0.2795 0.1326	0.1413	0.0954 0.2707
Diff (1-2)	Satterthwaite	-0.0735	-0.2877 0.1407		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.82	0.4347
Satterthwaite	Unequal	6.5639	-0.82	0.4397

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.76	0.3495

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-18-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.2279	0.1093	0.0489	1.0472	1.3453
Diff (1-2)		-0.0164	0.1062	0.0672		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.2279	1.0922 1.3636	0.1093	0.0655 0.3140
Diff (1-2)	Pooled	-0.0164	-0.1713 0.1385	0.1062	0.0718 0.2035
Diff (1-2)	Satterthwaite	-0.0164	-0.1714 0.1386		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.24	0.8134
Satterthwaite	Unequal	7.9727	-0.24	0.8134

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.12	0.9124

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-19-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.3235	0.1692	0.0756	1.1071	1.5708
Diff (1-2)		-0.1120	0.1401	0.0886		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.3235	1.1135 1.5335	0.1692	0.1013 0.4861
Diff (1-2)	Pooled	-0.1120	-0.3163 0.0923	0.1401	0.0946 0.2683
Diff (1-2)	Satterthwaite	-0.1120	-0.3240 0.1000		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.26	0.2418
Satterthwaite	Unequal	6.6104	-1.26	0.2490

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.69	0.3605

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.1963	0.1018	0.0455	1.1071	1.3453
Diff (1-2)		0.0152	0.1024	0.0648		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.1963	1.0700 1.3227	0.1018	0.0610 0.2924
Diff (1-2)	Pooled	0.0152	-0.1342 0.1646	0.1024	0.0692 0.1962
Diff (1-2)	Satterthwaite	0.0152	-0.1342 0.1646		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.23	0.8205
Satterthwaite	Unequal	7.9987	0.23	0.8205

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.03	0.9806

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.3115	0.1893	0.0846	1.0472	1.5708
Diff (1-2)		-0.1000	0.1524	0.0964		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.3115	1.0765 1.5465	0.1893	0.1134 0.5438
Diff (1-2)	Pooled	-0.1000	-0.3222 0.1223	0.1524	0.1029 0.2919
Diff (1-2)	Satterthwaite	-0.1000	-0.3341 0.1342		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.04	0.3299
Satterthwaite	Unequal	6.181	-1.04	0.3384

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.37	0.2661

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-11-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.3367	0.1495	0.0669	1.1731	1.5708
Diff (1-2)		-0.1252	0.1284	0.0812		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.3367	1.1511 1.5223	0.1495	0.0896 0.4296
Diff (1-2)	Pooled	-0.1252	-0.3124 0.0621	0.1284	0.0867 0.2460
Diff (1-2)	Satterthwaite	-0.1252	-0.3166 0.0663		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.54	0.1618
Satterthwaite	Unequal	7.1019	-1.54	0.1665

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.10	0.4891

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-12-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.2440	0.1052	0.0471	1.1071	1.3453
Diff (1-2)		-0.0324	0.1042	0.0659		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.2440	1.1133 1.3746	0.1052	0.0630 0.3024
Diff (1-2)	Pooled	-0.0324	-0.1843 0.1195	0.1042	0.0704 0.1995
Diff (1-2)	Satterthwaite	-0.0324	-0.1844 0.1195		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.49	0.6357
Satterthwaite	Unequal	7.9966	-0.49	0.6357

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.04	0.9689

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-13-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.3215	0.1638	0.0733	1.1731	1.5708
Diff (1-2)		-0.1100	0.1368	0.0866		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.3215	1.1181 1.5249	0.1638	0.0981 0.4707
Diff (1-2)	Pooled	-0.1100	-0.3096 0.0896	0.1368	0.0924 0.2622
Diff (1-2)	Satterthwaite	-0.1100	-0.3163 0.0963		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.27	0.2396
Satterthwaite	Unequal	6.7383	-1.27	0.2460

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.53	0.3914

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-18-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.2664	0.1294	0.0579	1.0472	1.3453
Diff (1-2)		-0.0549	0.1170	0.0740		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.2664	1.1057 1.4271	0.1294	0.0776 0.3720
Diff (1-2)	Pooled	-0.0549	-0.2255 0.1158	0.1170	0.0790 0.2241
Diff (1-2)	Satterthwaite	-0.0549	-0.2270 0.1173		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.74	0.4795
Satterthwaite	Unequal	7.618	-0.74	0.4805

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.58	0.6697

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-19-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.1863	0.1300	0.0582	0.9912	1.3453
Diff (1-2)		0.0252	0.1173	0.0742		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.1863	1.0249 1.3478	0.1300	0.0779 0.3737
Diff (1-2)	Pooled	0.0252	-0.1459 0.1963	0.1173	0.0793 0.2248
Diff (1-2)	Satterthwaite	0.0252	-0.1475 0.1979		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.34	0.7429
Satterthwaite	Unequal	7.6036	0.34	0.7434

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.59	0.6635

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-20-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.2531	0.0611	0.0273	1.1731	1.3453
Diff (1-2)		-0.0416	0.0847	0.0536		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.2531	1.1772 1.3290	0.0611	0.0366 0.1757
Diff (1-2)	Pooled	-0.0416	-0.1652 0.0820	0.0847	0.0572 0.1623
Diff (1-2)	Satterthwaite	-0.0416	-0.1703 0.0871		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.78	0.4603
Satterthwaite	Unequal	6.5041	-0.78	0.4652

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.84	0.3358

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-21-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.1995	0.1203	0.0538	1.0472	1.3453
Diff (1-2)		0.0120	0.1120	0.0708		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.1995	1.0502 1.3489	0.1203	0.0721 0.3457
Diff (1-2)	Pooled	0.0120	-0.1514 0.1754	0.1120	0.0757 0.2146
Diff (1-2)	Satterthwaite	0.0120	-0.1521 0.1760		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.17	0.8698
Satterthwaite	Unequal	7.8162	0.17	0.8699

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.36	0.7718

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-23-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.2115	0.1031	0.0461	1.1071	1.3453
Test	5	1.1440	0.1240	0.0554	1.0472	1.3453
Diff (1-2)		0.0675	0.1140	0.0721		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.2115	1.0836 1.3395	0.1031	0.0618 0.2962
Test		1.1440	0.9901 1.2979	0.1240	0.0743 0.3562
Diff (1-2)	Pooled	0.0675	-0.0987 0.2338	0.1140	0.0770 0.2184
Diff (1-2)	Satterthwaite	0.0675	-0.0997 0.2348		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.94	0.3762
Satterthwaite	Unequal	7.7423	0.94	0.3771

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.45	0.7294

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.1903	0.0600	0.0268	1.1071	1.2490
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.1903	1.1158 1.2648	0.0600	0.0360 0.1725
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-09-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.3222	0.2381	0.1065	1.0472	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.3222	1.0265 1.6179	0.2381	0.1427 0.6843
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-10-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.3818	0.1830	0.0818	1.1731	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.3818	1.1546 1.6090	0.1830	0.1096 0.5259
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-11-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.2771	0.1971	0.0881	1.0472	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.2771	1.0324 1.5218	0.1971	0.1181 0.5663
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-12-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.1240	0.2305	0.1031	0.7854	1.3453
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.1240	0.8378 1.4102	0.2305	0.1381 0.6624
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-13-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.2850	0.1712	0.0765	1.1071	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.2850	1.0725 1.4975	0.1712	0.1026 0.4918
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-18-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.2279	0.1093	0.0489	1.0472	1.3453
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.2279	1.0922 1.3636	0.1093	0.0655 0.3140
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-19-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.3235	0.1692	0.0756	1.1071	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.3235	1.1135 1.5335	0.1692	0.1013 0.4861
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.1963	0.1018	0.0455	1.1071	1.3453
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.1963	1.0700 1.3227	0.1018	0.0610 0.2924
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.3115	0.1893	0.0846	1.0472	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.3115	1.0765 1.5465	0.1893	0.1134 0.5438
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-11-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.3367	0.1495	0.0669	1.1731	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.3367	1.1511 1.5223	0.1495	0.0896 0.4296
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-12-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.2440	0.1052	0.0471	1.1071	1.3453
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.2440	1.1133 1.3746	0.1052	0.0630 0.3024
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-13-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.3215	0.1638	0.0733	1.1731	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.3215	1.1181 1.5249	0.1638	0.0981 0.4707
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-19-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.1863	0.1300	0.0582	0.9912	1.3453
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.1863	1.0249 1.3478	0.1300	0.0779 0.3737
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-20-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.2531	0.0611	0.0273	1.1731	1.3453
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.2531	1.1772 1.3290	0.0611	0.0366 0.1757
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-21-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.1995	0.1203	0.0538	1.0472	1.3453
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.1995	1.0502 1.3489	0.1203	0.0721 0.3457
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-23-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	1.1440	0.1240	0.0554	1.0472	1.3453
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		1.1440	0.9901 1.2979	0.1240	0.0743 0.3562
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-05-SS-00 -----

The TTEST Procedure

Variable: rankit (Rank for Variable Result)

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	-445E-19	0.8026	0.3589	-1.1798	0.5590
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		-445E-19	-0.9965 0.9965	0.8026	0.4808 2.3062
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=OB-08-SS-00 -----

The TTEST Procedure

Variable: rankit (Rank for Variable Result)

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	-222E-19	0.8385	0.3750	-0.8385	0.8385
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		-222E-19	-1.0411 1.0411	0.8385	0.5024 2.4094
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Ampelisca 10-day Endpoint=Percentage Survival Treatment=SH-18-WS-00 -----

The TTEST Procedure

Variable: rankit (Rank for Variable Result)

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	0	.	.	.	.	.
Test	5	-445E-19	0.8026	0.3589	-1.1798	0.5590
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		.	.	.	.
Test		-445E-19	-0.9965 0.9965	0.8026	0.4808 2.3062
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=RF-02-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Control	5	30.50	27.50	3.872983	6.10
Reference	5	24.50	27.50	3.872983	4.90

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 30.5000

Normal Approximation

Z 0.6455
One-Sided Pr > Z 0.2593
Two-Sided Pr > |Z| 0.5186

t Approximation

One-Sided Pr > Z 0.2674
Two-Sided Pr > |Z| 0.5347

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=RF-02-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.6000
DF	1
Pr > Chi-Square	0.4386

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=RF-03-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Control	5	28.0	27.50	3.354102	5.60
Reference	5	27.0	27.50	3.354102	5.40

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 28.0000

Normal Approximation

Z 0.0000

One-Sided Pr < Z 0.5000

Two-Sided Pr > |Z| 1.0000

t Approximation

One-Sided Pr < Z 0.5000

Two-Sided Pr > |Z| 1.0000

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=RF-03-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.0222
DF	1
Pr > Chi-Square	0.8815

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.4162	0.1465	0.0655	1.2490	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.4162	1.2344 1.5981	0.1465	0.0877 0.4209
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.2081	0.2731	0.1221	0.9377	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.2081	0.8691 1.5472	0.2731	0.1636 0.7846
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.3367	0.1495	0.0669	1.1731	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.3367	1.1511 1.5223	0.1495	0.0896 0.4296
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.1118	0.1684	0.0753	0.8861	1.3453
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.1118	0.9027 1.3208	0.1684	0.1009 0.4839
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.0076	0.1333	0.0596	0.7854	1.1071
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.0076	0.8421 1.1731	0.1333	0.0798 0.3829
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.4011	0.1702	0.0761	1.1731	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.4011	1.1898 1.6123	0.1702	0.1019 0.4889
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.2509	0.2617	0.1170	0.8861	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.2509	0.9260 1.5758	0.2617	0.1568 0.7520
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-14-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.2891	0.1807	0.0808	1.1071	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.2891	1.0646 1.5135	0.1807	0.1083 0.5194
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-17-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.2572	0.0862	0.0386	1.1731	1.3453
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.2572	1.1501 1.3642	0.0862	0.0517 0.2477
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-01-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.2531	0.0611	0.0273	1.1731	1.3453
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.2531	1.1772 1.3290	0.0611	0.0366 0.1757
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.3519	0.1315	0.0588	1.2490	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.3519	1.1886 1.5152	0.1315	0.0788 0.3779
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.2214	0.2275	0.1017	0.9912	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.2214	0.9390 1.5039	0.2275	0.1363 0.6536
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.3970	0.1635	0.0731	1.2490	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.3970	1.1940 1.5999	0.1635	0.0979 0.4697
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-09-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.2546	0.1837	0.0822	1.1071	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.2546	1.0265 1.4828	0.1837	0.1101 0.5280
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-22-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.2923	0.1899	0.0849	1.0472	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.2923	1.0565 1.5280	0.1899	0.1138 0.5456
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-24-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.1505	0.1613	0.0721	0.9377	1.3453
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.1505	0.9502 1.3508	0.1613	0.0967 0.4636
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-25-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.0996	0.0963	0.0431	0.9377	1.1731
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.0996	0.9800 1.2193	0.0963	0.0577 0.2768
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-26-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.2446	0.2027	0.0906	1.0472	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.2446	0.9930 1.4963	0.2027	0.1214 0.5824
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-27-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.3308	0.1862	0.0833	1.0472	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.3308	1.0996 1.5619	0.1862	0.1115 0.5350
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-28-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.3519	0.1315	0.0588	1.2490	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.3519	1.1886 1.5152	0.1315	0.0788 0.3779
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-29-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.4162	0.1465	0.0655	1.2490	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.4162	1.2344 1.5981	0.1465	0.0877 0.4209
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-30-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.3115	0.1893	0.0846	1.0472	1.5708
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.3115	1.0765 1.5465	0.1893	0.1134 0.5438
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-04-SS-00 -----

The TTEST Procedure

Variable: rankit (Rank for Variable Result)

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.11E-17	0.6595	0.2949	-1.1798	0.2949
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.11E-17	-0.8189 0.8189	0.6595	0.3951 1.8951
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-05-SS-00 -----

The TTEST Procedure

Variable: rankit (Rank for Variable Result)

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.11E-17	0.6595	0.2949	-1.1798	0.2949
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.11E-17	-0.8189 0.8189	0.6595	0.3951 1.8951
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-07-SS-00 -----

The TTEST Procedure

Variable: rankit (Rank for Variable Result)

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	-222E-19	0.7654	0.3423	-0.8385	0.5590
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		-222E-19	-0.9504 0.9504	0.7654	0.4586 2.1995
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-01-SS-00 -----

The TTEST Procedure

Variable: rankit (Rank for Variable Result)

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	1.11E-17	0.6595	0.2949	-1.1798	0.2949
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		1.11E-17	-0.8189 0.8189	0.6595	0.3951 1.8951
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-10-SS-00 -----

The TTEST Procedure

Variable: rankit (Rank for Variable Result)

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	2.22E-17	0.7654	0.3423	-0.8385	0.5590
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		2.22E-17	-0.9504 0.9504	0.7654	0.4586 2.1995
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-14-SS-00 -----

The TTEST Procedure

Variable: rankit (Rank for Variable Result)

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	2.22E-17	0.7654	0.3423	-0.8385	0.5590
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		2.22E-17	-0.9504 0.9504	0.7654	0.4586 2.1995
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-15-SS-00 -----

The TTEST Procedure

Variable: rankit (Rank for Variable Result)

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	2.22E-17	0.8026	0.3589	-1.1798	0.5590
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		2.22E-17	-0.9965 0.9965	0.8026	0.4808 2.3062
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-16-SS-00 -----

The TTEST Procedure

Variable: rankit (Rank for Variable Result)

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	0	.	.	.	.	.
Test	5	2.22E-17	0.7654	0.3423	-0.8385	0.5590
Diff (1-2)		.	.	.		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		.	.	.	.
Test		2.22E-17	-0.9504 0.9504	0.7654	0.4586 2.1995
Diff (1-2)	Pooled	.	.	.	.
Diff (1-2)	Satterthwaite	.	.	.	.

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	0	.	.
Satterthwaite	Unequal	0	.	.

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	0	.	.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.4162	0.1465	0.0655	1.2490	1.5708
Diff (1-2)		0.0451	0.1501	0.0949		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.4162	1.2344 1.5981	0.1465	0.0877 0.4209
Diff (1-2)	Pooled	0.0451	-0.1738 0.2640	0.1501	0.1014 0.2876
Diff (1-2)	Satterthwaite	0.0451	-0.1739 0.2641		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.48	0.6474
Satterthwaite	Unequal	7.9815	0.48	0.6475

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.10	0.9278

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.2081	0.2731	0.1221	0.9377	1.5708
Diff (1-2)		0.2532	0.2216	0.1401		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.2081	0.8691 1.5472	0.2731	0.1636 0.7846
Diff (1-2)	Pooled	0.2532	-0.0699 0.5764	0.2216	0.1497 0.4245
Diff (1-2)	Satterthwaite	0.2532	-0.0857 0.5921		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.81	0.1084
Satterthwaite	Unequal	6.3033	1.81	0.1184

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.16	0.2916

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.3367	0.1495	0.0669	1.1731	1.5708
Diff (1-2)		0.1246	0.1516	0.0959		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.3367	1.1511 1.5223	0.1495	0.0896 0.4296
Diff (1-2)	Pooled	0.1246	-0.0965 0.3458	0.1516	0.1024 0.2904
Diff (1-2)	Satterthwaite	0.1246	-0.0965 0.3458		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.30	0.2298
Satterthwaite	Unequal	7.9939	1.30	0.2299

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.06	0.9585

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.1118	0.1684	0.0753	0.8861	1.3453
Diff (1-2)		0.3496	0.1612	0.1020		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.1118	0.9027 1.3208	0.1684	0.1009 0.4839
Diff (1-2)	Pooled	0.3496	0.1145 0.5847	0.1612	0.1089 0.3088
Diff (1-2)	Satterthwaite	0.3496	0.1141 0.5850		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.43	0.0090
Satterthwaite	Unequal	7.9342	3.43	0.0091

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.20	0.8637

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.4011	0.1702	0.0761	1.1731	1.5708
Diff (1-2)		0.0603	0.1621	0.1025		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.4011	1.1898 1.6123	0.1702	0.1019 0.4889
Diff (1-2)	Pooled	0.0603	-0.1762 0.2968	0.1621	0.1095 0.3106
Diff (1-2)	Satterthwaite	0.0603	-0.1766 0.2972		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.59	0.5728
Satterthwaite	Unequal	7.9185	0.59	0.5729

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.23	0.8484

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.2509	0.2617	0.1170	0.8861	1.5708
Diff (1-2)		0.2104	0.2146	0.1357		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.2509	0.9260 1.5758	0.2617	0.1568 0.7520
Diff (1-2)	Pooled	0.2104	-0.1025 0.5234	0.2146	0.1449 0.4111
Diff (1-2)	Satterthwaite	0.2104	-0.1159 0.5368		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.55	0.1596
Satterthwaite	Unequal	6.466	1.55	0.1685

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.90	0.3272

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-14-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.2891	0.1807	0.0808	1.1071	1.5708
Diff (1-2)		0.1723	0.1678	0.1061		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.2891	1.0646 1.5135	0.1807	0.1083 0.5194
Diff (1-2)	Pooled	0.1723	-0.0724 0.4169	0.1678	0.1133 0.3214
Diff (1-2)	Satterthwaite	0.1723	-0.0735 0.4180		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.62	0.1431
Satterthwaite	Unequal	7.7985	1.62	0.1441

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.38	0.7609

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-17-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.2572	0.0862	0.0386	1.1731	1.3453
Diff (1-2)		0.2042	0.1246	0.0788		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.2572	1.1501 1.3642	0.0862	0.0517 0.2477
Diff (1-2)	Pooled	0.2042	0.0225 0.3859	0.1246	0.0842 0.2387
Diff (1-2)	Satterthwaite	0.2042	0.0135 0.3949		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.59	0.0321
Satterthwaite	Unequal	6.2906	2.59	0.0394

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.18	0.2889

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-01-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.2531	0.0611	0.0273	1.1731	1.3453
Diff (1-2)		0.2082	0.1170	0.0740		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.2531	1.1772 1.3290	0.0611	0.0366 0.1757
Diff (1-2)	Pooled	0.2082	0.0377 0.3788	0.1170	0.0790 0.2241
Diff (1-2)	Satterthwaite	0.2082	0.0206 0.3958		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.82	0.0227
Satterthwaite	Unequal	5.2348	2.82	0.0355

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.32	0.1018

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.3519	0.1315	0.0588	1.2490	1.5708
Diff (1-2)		0.1095	0.1430	0.0905		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.3519	1.1886 1.5152	0.1315	0.0788 0.3779
Diff (1-2)	Pooled	0.1095	-0.0991 0.3180	0.1430	0.0966 0.2740
Diff (1-2)	Satterthwaite	0.1095	-0.1000 0.3189		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.21	0.2608
Satterthwaite	Unequal	7.813	1.21	0.2616

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.37	0.7698

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.2214	0.2275	0.1017	0.9912	1.5708
Diff (1-2)		0.2399	0.1941	0.1228		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.2214	0.9390 1.5039	0.2275	0.1363 0.6536
Diff (1-2)	Pooled	0.2399	-0.0432 0.5230	0.1941	0.1311 0.3719
Diff (1-2)	Satterthwaite	0.2399	-0.0502 0.5300		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.95	0.0865
Satterthwaite	Unequal	7.0222	1.95	0.0915

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.19	0.4663

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-04-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-02-SS-00	5	25.50	27.50	3.872983	5.10
Test	5	29.50	27.50	3.872983	5.90

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 25.5000

Normal Approximation

Z -0.3873
One-Sided Pr < Z 0.3493
Two-Sided Pr > |Z| 0.6985

t Approximation

One-Sided Pr < Z 0.3538
Two-Sided Pr > |Z| 0.7075

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-04-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.2667
DF	1
Pr > Chi-Square	0.6056

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-05-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-02-SS-00	5	24.50	27.50	3.872983	4.90
Test	5	30.50	27.50	3.872983	6.10

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 24.5000

Normal Approximation

Z -0.6455
One-Sided Pr < Z 0.2593
Two-Sided Pr > |Z| 0.5186

t Approximation

One-Sided Pr < Z 0.2674
Two-Sided Pr > |Z| 0.5347

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-05-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.6000
DF	1
Pr > Chi-Square	0.4386

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-07-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-02-SS-00	5	26.50	27.50	4.183300	5.30
Test	5	28.50	27.50	4.183300	5.70

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 26.5000

Normal Approximation

Z -0.1195
One-Sided Pr < Z 0.4524
Two-Sided Pr > |Z| 0.9049

t Approximation

One-Sided Pr < Z 0.4537
Two-Sided Pr > |Z| 0.9075

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-07-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.0571
DF	1
Pr > Chi-Square	0.8111

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-01-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-02-SS-00	5	26.0	27.50	3.890873	5.20
Test	5	29.0	27.50	3.890873	5.80

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 26.0000

Normal Approximation

Z -0.2570
One-Sided Pr < Z 0.3986
Two-Sided Pr > |Z| 0.7972

t Approximation

One-Sided Pr < Z 0.4015
Two-Sided Pr > |Z| 0.8029

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-01-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.1486
DF	1
Pr > Chi-Square	0.6999

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-03-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-02-SS-00	5	40.0	27.50	4.714045	8.0
Test	5	15.0	27.50	4.714045	3.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 40.0000

Normal Approximation

Z 2.5456
One-Sided Pr > Z 0.0055
Two-Sided Pr > |Z| 0.0109

t Approximation

One-Sided Pr > Z 0.0157
Two-Sided Pr > |Z| 0.0314

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-03-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	7.0313
DF	1
Pr > Chi-Square	0.0080

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-14-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-02-SS-00	5	38.50	27.50	4.564355	7.70
Test	5	16.50	27.50	4.564355	3.30

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 38.5000

Normal Approximation

Z 2.3004
One-Sided Pr > Z 0.0107
Two-Sided Pr > |Z| 0.0214

t Approximation

One-Sided Pr > Z 0.0235
Two-Sided Pr > |Z| 0.0470

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-14-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	5.8080
DF	1
Pr > Chi-Square	0.0160

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-15-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-02-SS-00	5	27.50	27.50	4.216370	5.50
Test	5	27.50	27.50	4.216370	5.50

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 27.5000

Normal Approximation

Z 0.0000
One-Sided Pr < Z 0.5000
Two-Sided Pr > |Z| 1.0000

t Approximation

One-Sided Pr < Z 0.5000
Two-Sided Pr > |Z| 1.0000

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-15-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.0000
DF	1
Pr > Chi-Square	1.0000

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-16-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-02-SS-00	5	26.50	27.50	4.183300	5.30
Test	5	28.50	27.50	4.183300	5.70

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 26.5000

Normal Approximation

Z -0.1195
One-Sided Pr < Z 0.4524
Two-Sided Pr > |Z| 0.9049

t Approximation

One-Sided Pr < Z 0.4537
Two-Sided Pr > |Z| 0.9075

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-16-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.0571
DF	1
Pr > Chi-Square	0.8111

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-25-WS-00 -----

The TTEST Procedure

Variable: rankit (Rank for Variable Result)

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.7401	0.4571	0.2044	0.1226	1.0675
Test	5	-0.7401	0.5358	0.2396	-1.5466	-0.2490
Diff (1-2)		1.4802	0.4980	0.3150		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.7401	0.1725 1.3077	0.4571	0.2739 1.3136
Test		-0.7401	-1.4054 -0.0749	0.5358	0.3210 1.5396
Diff (1-2)	Pooled	1.4802	0.7539 2.2066	0.4980	0.3364 0.9541
Diff (1-2)	Satterthwaite	1.4802	0.7508 2.2097		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	4.70	0.0015
Satterthwaite	Unequal	7.8065	4.70	0.0016

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.37	0.7658

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.3970	0.1635	0.0731	1.2490	1.5708
Diff (1-2)		0.0644	0.1586	0.1003		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.3970	1.1940 1.5999	0.1635	0.0979 0.4697
Diff (1-2)	Pooled	0.0644	-0.1670 0.2957	0.1586	0.1072 0.3039
Diff (1-2)	Satterthwaite	0.0644	-0.1672 0.2959		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.64	0.5392
Satterthwaite	Unequal	7.9698	0.64	0.5393

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.13	0.9078

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-09-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.2546	0.1837	0.0822	1.1071	1.5708
Diff (1-2)		0.2067	0.1694	0.1071		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.2546	1.0265 1.4828	0.1837	0.1101 0.5280
Diff (1-2)	Pooled	0.2067	-0.0403 0.4537	0.1694	0.1144 0.3245
Diff (1-2)	Satterthwaite	0.2067	-0.0417 0.4551		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.93	0.0898
Satterthwaite	Unequal	7.7578	1.93	0.0909

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.43	0.7377

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-10-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.3068	0.0527	0.0236	1.2490	1.3453
Diff (1-2)		0.1546	0.1149	0.0727		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.3068	1.2413 1.3722	0.0527	0.0316 0.1515
Diff (1-2)	Pooled	0.1546	-0.0130 0.3221	0.1149	0.0776 0.2201
Diff (1-2)	Satterthwaite	0.1546	-0.0330 0.3422		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.13	0.0661
Satterthwaite	Unequal	4.9282	2.13	0.0875

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	8.50	0.0618

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-22-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.2923	0.1899	0.0849	1.0472	1.5708
Diff (1-2)		0.1691	0.1727	0.1092		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.2923	1.0565 1.5280	0.1899	0.1138 0.5456
Diff (1-2)	Pooled	0.1691	-0.0828 0.4210	0.1727	0.1167 0.3309
Diff (1-2)	Satterthwaite	0.1691	-0.0848 0.4229		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.55	0.1603
Satterthwaite	Unequal	7.6674	1.55	0.1619

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.53	0.6921

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-24-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.1505	0.1613	0.0721	0.9377	1.3453
Diff (1-2)		0.3109	0.1576	0.0996		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.1505	0.9502 1.3508	0.1613	0.0967 0.4636
Diff (1-2)	Pooled	0.3109	0.0811 0.5406	0.1576	0.1064 0.3018
Diff (1-2)	Satterthwaite	0.3109	0.0810 0.5407		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.12	0.0142
Satterthwaite	Unequal	7.9813	3.12	0.0143

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.10	0.9274

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-26-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.2446	0.2027	0.0906	1.0472	1.5708
Diff (1-2)		0.2167	0.1799	0.1138		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.2446	0.9930 1.4963	0.2027	0.1214 0.5824
Diff (1-2)	Pooled	0.2167	-0.0456 0.4790	0.1799	0.1215 0.3446
Diff (1-2)	Satterthwaite	0.2167	-0.0490 0.4824		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.91	0.0932
Satterthwaite	Unequal	7.4571	1.91	0.0959

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.74	0.6051

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-27-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.3308	0.1862	0.0833	1.0472	1.5708
Diff (1-2)		0.1306	0.1707	0.1080		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.3308	1.0996 1.5619	0.1862	0.1115 0.5350
Diff (1-2)	Pooled	0.1306	-0.1184 0.3795	0.1707	0.1153 0.3270
Diff (1-2)	Satterthwaite	0.1306	-0.1200 0.3811		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.21	0.2610
Satterthwaite	Unequal	7.7227	1.21	0.2622

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.47	0.7192

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-28-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.3519	0.1315	0.0588	1.2490	1.5708
Diff (1-2)		0.1095	0.1430	0.0905		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.3519	1.1886 1.5152	0.1315	0.0788 0.3779
Diff (1-2)	Pooled	0.1095	-0.0991 0.3180	0.1430	0.0966 0.2740
Diff (1-2)	Satterthwaite	0.1095	-0.1000 0.3189		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.21	0.2608
Satterthwaite	Unequal	7.813	1.21	0.2616

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.37	0.7698

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-29-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.4162	0.1465	0.0655	1.2490	1.5708
Diff (1-2)		0.0451	0.1501	0.0949		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.4162	1.2344 1.5981	0.1465	0.0877 0.4209
Diff (1-2)	Pooled	0.0451	-0.1738 0.2640	0.1501	0.1014 0.2876
Diff (1-2)	Satterthwaite	0.0451	-0.1739 0.2641		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.48	0.6474
Satterthwaite	Unequal	7.9815	0.48	0.6475

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.10	0.9278

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-30-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	1.4613	0.1537	0.0687	1.2490	1.5708
Test	5	1.3115	0.1893	0.0846	1.0472	1.5708
Diff (1-2)		0.1498	0.1724	0.1090		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		1.4613	1.2705 1.6522	0.1537	0.0921 0.4416
Test		1.3115	1.0765 1.5465	0.1893	0.1134 0.5438
Diff (1-2)	Pooled	0.1498	-0.1016 0.4012	0.1724	0.1164 0.3303
Diff (1-2)	Satterthwaite	0.1498	-0.1035 0.4031		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.37	0.2067
Satterthwaite	Unequal	7.6767	1.37	0.2082

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.52	0.6965

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.4162	0.1465	0.0655	1.2490	1.5708
Diff (1-2)		0.0902	0.1452	0.0918		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.4162	1.2344 1.5981	0.1465	0.0877 0.4209
Diff (1-2)	Pooled	0.0902	-0.1215 0.3019	0.1452	0.0981 0.2781
Diff (1-2)	Satterthwaite	0.0902	-0.1215 0.3020		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.98	0.3547
Satterthwaite	Unequal	7.9975	0.98	0.3547

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.04	0.9735

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.2081	0.2731	0.1221	0.9377	1.5708
Diff (1-2)		0.2983	0.2182	0.1380		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.2081	0.8691 1.5472	0.2731	0.1636 0.7846
Diff (1-2)	Pooled	0.2983	-0.0200 0.6166	0.2182	0.1474 0.4181
Diff (1-2)	Satterthwaite	0.2983	-0.0386 0.6352		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.16	0.0627
Satterthwaite	Unequal	6.0626	2.16	0.0735

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.60	0.2424

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.3367	0.1495	0.0669	1.1731	1.5708
Diff (1-2)		0.1697	0.1467	0.0928		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.3367	1.1511 1.5223	0.1495	0.0896 0.4296
Diff (1-2)	Pooled	0.1697	-0.0442 0.3837	0.1467	0.0991 0.2811
Diff (1-2)	Satterthwaite	0.1697	-0.0443 0.3838		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.83	0.1048
Satterthwaite	Unequal	7.9883	1.83	0.1048

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.08	0.9427

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.1118	0.1684	0.0753	0.8861	1.3453
Diff (1-2)		0.3947	0.1566	0.0991		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.1118	0.9027 1.3208	0.1684	0.1009 0.4839
Diff (1-2)	Pooled	0.3947	0.1663 0.6231	0.1566	0.1058 0.3000
Diff (1-2)	Satterthwaite	0.3947	0.1653 0.6241		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.98	0.0040
Satterthwaite	Unequal	7.8101	3.98	0.0042

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.37	0.7680

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.4011	0.1702	0.0761	1.1731	1.5708
Diff (1-2)		0.1054	0.1576	0.0997		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.4011	1.1898 1.6123	0.1702	0.1019 0.4889
Diff (1-2)	Pooled	0.1054	-0.1244 0.3352	0.1576	0.1064 0.3019
Diff (1-2)	Satterthwaite	0.1054	-0.1255 0.3363		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.06	0.3211
Satterthwaite	Unequal	7.7852	1.06	0.3220

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.40	0.7531

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.2509	0.2617	0.1170	0.8861	1.5708
Diff (1-2)		0.2555	0.2112	0.1336		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.2509	0.9260 1.5758	0.2617	0.1568 0.7520
Diff (1-2)	Pooled	0.2555	-0.0524 0.5635	0.2112	0.1426 0.4045
Diff (1-2)	Satterthwaite	0.2555	-0.0685 0.5796		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.91	0.0921
Satterthwaite	Unequal	6.2162	1.91	0.1025

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.31	0.2733

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-14-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.2891	0.1807	0.0808	1.1071	1.5708
Diff (1-2)		0.2174	0.1634	0.1033		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.2891	1.0646 1.5135	0.1807	0.1083 0.5194
Diff (1-2)	Pooled	0.2174	-0.0209 0.4556	0.1634	0.1103 0.3130
Diff (1-2)	Satterthwaite	0.2174	-0.0230 0.4577		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.10	0.0685
Satterthwaite	Unequal	7.6172	2.10	0.0703

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.58	0.6694

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.3519	0.1315	0.0588	1.2490	1.5708
Diff (1-2)		0.1546	0.1378	0.0872		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.3519	1.1886 1.5152	0.1315	0.0788 0.3779
Diff (1-2)	Pooled	0.1546	-0.0465 0.3556	0.1378	0.0931 0.2641
Diff (1-2)	Satterthwaite	0.1546	-0.0467 0.3559		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.77	0.1142
Satterthwaite	Unequal	7.9359	1.77	0.1145

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.20	0.8656

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.2214	0.2275	0.1017	0.9912	1.5708
Diff (1-2)		0.2850	0.1903	0.1204		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.2214	0.9390 1.5039	0.2275	0.1363 0.6536
Diff (1-2)	Pooled	0.2850	0.00742 0.5626	0.1903	0.1286 0.3646
Diff (1-2)	Satterthwaite	0.2850	-0.00170 0.5717		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.37	0.0454
Satterthwaite	Unequal	6.7594	2.37	0.0510

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.50	0.3967

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.3970	0.1635	0.0731	1.2490	1.5708
Diff (1-2)		0.1095	0.1540	0.0974		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.3970	1.1940 1.5999	0.1635	0.0979 0.4697
Diff (1-2)	Pooled	0.1095	-0.1151 0.3340	0.1540	0.1040 0.2950
Diff (1-2)	Satterthwaite	0.1095	-0.1158 0.3347		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.12	0.2936
Satterthwaite	Unequal	7.8735	1.12	0.2942

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.29	0.8109

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-09-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.2546	0.1837	0.0822	1.1071	1.5708
Diff (1-2)		0.2518	0.1650	0.1044		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.2546	1.0265 1.4828	0.1837	0.1101 0.5280
Diff (1-2)	Pooled	0.2518	0.0111 0.4925	0.1650	0.1115 0.3161
Diff (1-2)	Satterthwaite	0.2518	0.00871 0.4949		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.41	0.0423
Satterthwaite	Unequal	7.5653	2.41	0.0440

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.63	0.6473

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-22-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.2923	0.1899	0.0849	1.0472	1.5708
Diff (1-2)		0.2142	0.1684	0.1065		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.2923	1.0565 1.5280	0.1899	0.1138 0.5456
Diff (1-2)	Pooled	0.2142	-0.0315 0.4598	0.1684	0.1138 0.3227
Diff (1-2)	Satterthwaite	0.2142	-0.0347 0.4630		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.01	0.0792
Satterthwaite	Unequal	7.4552	2.01	0.0818

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.74	0.6044

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-24-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.1505	0.1613	0.0721	0.9377	1.3453
Diff (1-2)		0.3560	0.1529	0.0967		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.1505	0.9502 1.3508	0.1613	0.0967 0.4636
Diff (1-2)	Pooled	0.3560	0.1330 0.5789	0.1529	0.1032 0.2928
Diff (1-2)	Satterthwaite	0.3560	0.1325 0.5794		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.68	0.0062
Satterthwaite	Unequal	7.8976	3.68	0.0063

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.26	0.8300

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-26-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.2446	0.2027	0.0906	1.0472	1.5708
Diff (1-2)		0.2618	0.1758	0.1112		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.2446	0.9930 1.4963	0.2027	0.1214 0.5824
Diff (1-2)	Pooled	0.2618	0.00547 0.5181	0.1758	0.1187 0.3367
Diff (1-2)	Satterthwaite	0.2618	0.000535 0.5231		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.36	0.0463
Satterthwaite	Unequal	7.2155	2.36	0.0496

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.98	0.5233

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-28-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.3519	0.1315	0.0588	1.2490	1.5708
Diff (1-2)		0.1546	0.1378	0.0872		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.3519	1.1886 1.5152	0.1315	0.0788 0.3779
Diff (1-2)	Pooled	0.1546	-0.0465 0.3556	0.1378	0.0931 0.2641
Diff (1-2)	Satterthwaite	0.1546	-0.0467 0.3559		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.77	0.1142
Satterthwaite	Unequal	7.9359	1.77	0.1145

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.20	0.8656

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-29-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.4162	0.1465	0.0655	1.2490	1.5708
Diff (1-2)		0.0902	0.1452	0.0918		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.4162	1.2344 1.5981	0.1465	0.0877 0.4209
Diff (1-2)	Pooled	0.0902	-0.1215 0.3019	0.1452	0.0981 0.2781
Diff (1-2)	Satterthwaite	0.0902	-0.1215 0.3020		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.98	0.3547
Satterthwaite	Unequal	7.9975	0.98	0.3547

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.04	0.9735

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-30-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	1.5064	0.1439	0.0644	1.2490	1.5708
Test	5	1.3115	0.1893	0.0846	1.0472	1.5708
Diff (1-2)		0.1949	0.1681	0.1063		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		1.5064	1.3278 1.6851	0.1439	0.0862 0.4135
Test		1.3115	1.0765 1.5465	0.1893	0.1134 0.5438
Diff (1-2)	Pooled	0.1949	-0.0503 0.4401	0.1681	0.1136 0.3221
Diff (1-2)	Satterthwaite	0.1949	-0.0533 0.4432		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.83	0.1041
Satterthwaite	Unequal	7.4662	1.83	0.1068

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.73	0.6085

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-04-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	27.50	27.50	3.333333	5.50
Test	5	27.50	27.50	3.333333	5.50

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 27.5000

Normal Approximation

Z 0.0000
One-Sided Pr < Z 0.5000
Two-Sided Pr > |Z| 1.0000

t Approximation

One-Sided Pr < Z 0.5000
Two-Sided Pr > |Z| 1.0000

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-04-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.0000
DF	1
Pr > Chi-Square	1.0000

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-05-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	27.0	27.50	3.354102	5.40
Test	5	28.0	27.50	3.354102	5.60

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 27.0000

Normal Approximation

Z 0.0000
One-Sided Pr < Z 0.5000
Two-Sided Pr > |Z| 1.0000

t Approximation

One-Sided Pr < Z 0.5000
Two-Sided Pr > |Z| 1.0000

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-05-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.0222
DF	1
Pr > Chi-Square	0.8815

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-07-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	29.0	27.50	3.872983	5.80
Test	5	26.0	27.50	3.872983	5.20

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 29.0000

Normal Approximation

Z 0.2582
One-Sided Pr > Z 0.3981
Two-Sided Pr > |Z| 0.7963

t Approximation

One-Sided Pr > Z 0.4010
Two-Sided Pr > |Z| 0.8021

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=HI-07-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.1500
DF	1
Pr > Chi-Square	0.6985

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-01-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	28.0	27.50	3.354102	5.60
Test	5	27.0	27.50	3.354102	5.40

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 28.0000

Normal Approximation

Z 0.0000
One-Sided Pr < Z 0.5000
Two-Sided Pr > |Z| 1.0000

t Approximation

One-Sided Pr < Z 0.5000
Two-Sided Pr > |Z| 1.0000

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-01-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.0222
DF	1
Pr > Chi-Square	0.8815

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-03-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	40.0	27.50	4.624812	8.0
Test	5	15.0	27.50	4.624812	3.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 40.0000

Normal Approximation

Z 2.5947
One-Sided Pr > Z 0.0047
Two-Sided Pr > |Z| 0.0095

t Approximation

One-Sided Pr > Z 0.0145
Two-Sided Pr > |Z| 0.0290

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-03-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	7.3052
DF	1
Pr > Chi-Square	0.0069

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-17-WS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	37.50	27.50	4.594683	7.50
Test	5	17.50	27.50	4.594683	3.50

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 37.5000

Normal Approximation

Z 2.0676
One-Sided Pr > Z 0.0193
Two-Sided Pr > |Z| 0.0387

t Approximation

One-Sided Pr > Z 0.0343
Two-Sided Pr > |Z| 0.0686

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=OB-17-WS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	4.7368
DF	1
Pr > Chi-Square	0.0295

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-01-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	37.50	27.50	4.487637	7.50
Test	5	17.50	27.50	4.487637	3.50

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 37.5000

Normal Approximation

Z 2.1169
One-Sided Pr > Z 0.0171
Two-Sided Pr > |Z| 0.0343

t Approximation

One-Sided Pr > Z 0.0317
Two-Sided Pr > |Z| 0.0634

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-01-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	4.9655
DF	1
Pr > Chi-Square	0.0259

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-10-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	36.0	27.50	4.518481	7.20
Test	5	19.0	27.50	4.518481	3.80

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 36.0000

Normal Approximation

Z 1.7705
One-Sided Pr > Z 0.0383
Two-Sided Pr > |Z| 0.0766

t Approximation

One-Sided Pr > Z 0.0552
Two-Sided Pr > |Z| 0.1104

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-10-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	3.5388
DF	1
Pr > Chi-Square	0.0599

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-14-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	38.50	27.50	4.472136	7.70
Test	5	16.50	27.50	4.472136	3.30

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 38.5000

Normal Approximation

Z 2.3479
One-Sided Pr > Z 0.0094
Two-Sided Pr > |Z| 0.0189

t Approximation

One-Sided Pr > Z 0.0217
Two-Sided Pr > |Z| 0.0435

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-14-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	6.0500
DF	1
Pr > Chi-Square	0.0139

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-15-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	29.50	27.50	3.872983	5.90
Test	5	25.50	27.50	3.872983	5.10

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 29.5000

Normal Approximation

Z 0.3873
One-Sided Pr > Z 0.3493
Two-Sided Pr > |Z| 0.6985

t Approximation

One-Sided Pr > Z 0.3538
Two-Sided Pr > |Z| 0.7075

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-15-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.2667
DF	1
Pr > Chi-Square	0.6056

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-16-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	29.0	27.50	3.872983	5.80
Test	5	26.0	27.50	3.872983	5.20

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 29.0000

Normal Approximation

Z 0.2582
One-Sided Pr > Z 0.3981
Two-Sided Pr > |Z| 0.7963

t Approximation

One-Sided Pr > Z 0.4010
Two-Sided Pr > |Z| 0.8021

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-16-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.1500
DF	1
Pr > Chi-Square	0.6985

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-25-WS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	40.0	27.50	4.609772	8.0
Test	5	15.0	27.50	4.609772	3.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 40.0000

Normal Approximation

Z 2.6032
One-Sided Pr > Z 0.0046
Two-Sided Pr > |Z| 0.0092

t Approximation

One-Sided Pr > Z 0.0143
Two-Sided Pr > |Z| 0.0286

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-25-WS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	7.3529
DF	1
Pr > Chi-Square	0.0067

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-27-WS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	34.0	27.50	4.425306	6.80
Test	5	21.0	27.50	4.425306	4.20

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 34.0000

Normal Approximation

Z 1.3558
One-Sided Pr > Z 0.0876
Two-Sided Pr > |Z| 0.1752

t Approximation

One-Sided Pr > Z 0.1041
Two-Sided Pr > |Z| 0.2082

Z includes a continuity correction of 0.5.

----- Test=Eohaustorius 10-day Endpoint=Percentage Survival Treatment=SH-27-WS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	2.1574
DF	1
Pr > Chi-Square	0.1419

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=RF-01-SS-00 -----

The TTEST Procedure

Variable: result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
Control	5	0.5631	0.0888	0.0397	0.4395	0.6689
Reference	5	0.5158	0.0868	0.0388	0.4164	0.6513
Diff (1-2)		0.0473	0.0878	0.0555		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
Control		0.5631	0.4529 0.6733	0.0888	0.0532 0.2551
Reference		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Diff (1-2)	Pooled	0.0473	-0.0807 0.1754	0.0878	0.0593 0.1682
Diff (1-2)	Satterthwaite	0.0473	-0.0807 0.1754		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.85	0.4189
Satterthwaite	Unequal	7.9961	0.85	0.4189

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.05	0.9669

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=RF-02-SS-00 -----

The TTEST Procedure

Variable: result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
Control	5	0.5631	0.0888	0.0397	0.4395	0.6689
Reference	5	0.5416	0.1272	0.0569	0.4010	0.7116
Diff (1-2)		0.0215	0.1097	0.0694		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
Control		0.5631	0.4529 0.6733	0.0888	0.0532 0.2551
Reference		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Diff (1-2)	Pooled	0.0215	-0.1384 0.1815	0.1097	0.0741 0.2101
Diff (1-2)	Satterthwaite	0.0215	-0.1418 0.1849		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.31	0.7643
Satterthwaite	Unequal	7.149	0.31	0.7652

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.05	0.5030

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=RF-03-SS-00 -----

The TTEST Procedure

Variable: result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
Control	5	0.5631	0.0888	0.0397	0.4395	0.6689
Reference	5	0.3708	0.1694	0.0758	0.1615	0.5960
Diff (1-2)		0.1923	0.1352	0.0855		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
Control		0.5631	0.4529 0.6733	0.0888	0.0532 0.2551
Reference		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Diff (1-2)	Pooled	0.1923	-0.00493 0.3895	0.1352	0.0913 0.2591
Diff (1-2)	Satterthwaite	0.1923	-0.0166 0.4012		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.25	0.0547
Satterthwaite	Unequal	6.0421	2.25	0.0653

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.64	0.2384

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.3382	0.1915	0.0857	0.1536	0.6179
Diff (1-2)		0.1776	0.1487	0.0941		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.3382	0.1004 0.5761	0.1915	0.1148 0.5504
Diff (1-2)	Pooled	0.1776	-0.0393 0.3944	0.1487	0.1004 0.2849
Diff (1-2)	Satterthwaite	0.1776	-0.0569 0.4120		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.89	0.0957
Satterthwaite	Unequal	5.577	1.89	0.1116

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.87	0.1545

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.4449	0.1421	0.0635	0.2865	0.6114
Diff (1-2)		0.0709	0.1177	0.0745		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.4449	0.2685 0.6213	0.1421	0.0851 0.4082
Diff (1-2)	Pooled	0.0709	-0.1008 0.2426	0.1177	0.0795 0.2255
Diff (1-2)	Satterthwaite	0.0709	-0.1073 0.2490		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.95	0.3691
Satterthwaite	Unequal	6.622	0.95	0.3747

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.68	0.3632

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.5096	0.1579	0.0706	0.3723	0.7182
Diff (1-2)		0.00622	0.1274	0.0806		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.5096	0.3135 0.7057	0.1579	0.0946 0.4538
Diff (1-2)	Pooled	0.00622	-0.1796 0.1921	0.1274	0.0861 0.2441
Diff (1-2)	Satterthwaite	0.00622	-0.1894 0.2018		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.08	0.9404
Satterthwaite	Unequal	6.2153	0.08	0.9409

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.31	0.2732

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-01-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.4426	0.0953	0.0426	0.3364	0.5660
Diff (1-2)		0.0732	0.0911	0.0576		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.4426	0.3244 0.5609	0.0953	0.0571 0.2737
Diff (1-2)	Pooled	0.0732	-0.0598 0.2061	0.0911	0.0616 0.1746
Diff (1-2)	Satterthwaite	0.0732	-0.0600 0.2063		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.27	0.2401
Satterthwaite	Unequal	7.9322	1.27	0.2403

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.20	0.8617

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.4178	0.1348	0.0603	0.2349	0.5427
Diff (1-2)		0.0981	0.1134	0.0717		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.4178	0.2503 0.5852	0.1348	0.0808 0.3874
Diff (1-2)	Pooled	0.0981	-0.0673 0.2634	0.1134	0.0766 0.2172
Diff (1-2)	Satterthwaite	0.0981	-0.0724 0.2685		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.37	0.2087
Satterthwaite	Unequal	6.8305	1.37	0.2149

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.41	0.4148

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-05-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.3070	0.1093	0.0489	0.1541	0.4370
Diff (1-2)		0.2088	0.0987	0.0624		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.3070	0.1713 0.4427	0.1093	0.0655 0.3140
Diff (1-2)	Pooled	0.2088	0.0649 0.3527	0.0987	0.0667 0.1891
Diff (1-2)	Satterthwaite	0.2088	0.0636 0.3540		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.35	0.0101
Satterthwaite	Unequal	7.6113	3.35	0.0109

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.58	0.6668

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.3732	0.1494	0.0668	0.1828	0.5798
Diff (1-2)		0.1426	0.1222	0.0773		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.3732	0.1878 0.5587	0.1494	0.0895 0.4292
Diff (1-2)	Pooled	0.1426	-0.0356 0.3207	0.1222	0.0825 0.2340
Diff (1-2)	Satterthwaite	0.1426	-0.0435 0.3286		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.85	0.1022
Satterthwaite	Unequal	6.4262	1.85	0.1113

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.96	0.3183

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-11-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.4252	0.0989	0.0442	0.2850	0.5249
Diff (1-2)		0.0906	0.0931	0.0589		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.4252	0.3024 0.5480	0.0989	0.0593 0.2842
Diff (1-2)	Pooled	0.0906	-0.0451 0.2263	0.0931	0.0629 0.1783
Diff (1-2)	Satterthwaite	0.0906	-0.0455 0.2267		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.54	0.1623
Satterthwaite	Unequal	7.8678	1.54	0.1629

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.30	0.8067

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-12-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.3979	0.0969	0.0433	0.2553	0.4860
Diff (1-2)		0.1179	0.0920	0.0582		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.3979	0.2775 0.5182	0.0969	0.0581 0.2785
Diff (1-2)	Pooled	0.1179	-0.0163 0.2521	0.0920	0.0621 0.1763
Diff (1-2)	Satterthwaite	0.1179	-0.0165 0.2524		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.03	0.0773
Satterthwaite	Unequal	7.905	2.03	0.0777

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.25	0.8362

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-13-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.3691	0.1010	0.0452	0.2930	0.5375
Diff (1-2)		0.1467	0.0942	0.0596		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.3691	0.2436 0.4945	0.1010	0.0605 0.2903
Diff (1-2)	Pooled	0.1467	0.00937 0.2841	0.0942	0.0636 0.1804
Diff (1-2)	Satterthwaite	0.1467	0.00883 0.2846		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.46	0.0391
Satterthwaite	Unequal	7.8234	2.46	0.0398

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.35	0.7763

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-14-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.4235	0.1524	0.0682	0.2069	0.6016
Diff (1-2)		0.0923	0.1241	0.0785		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.4235	0.2342 0.6127	0.1524	0.0913 0.4381
Diff (1-2)	Pooled	0.0923	-0.0886 0.2733	0.1241	0.0838 0.2377
Diff (1-2)	Satterthwaite	0.0923	-0.0971 0.2818		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.18	0.2730
Satterthwaite	Unequal	6.3478	1.18	0.2815

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.08	0.3011

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-17-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.5462	0.1624	0.0726	0.3116	0.7533
Diff (1-2)		-0.0304	0.1302	0.0824		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.5462	0.3445 0.7478	0.1624	0.0973 0.4667
Diff (1-2)	Pooled	-0.0304	-0.2203 0.1596	0.1302	0.0880 0.2495
Diff (1-2)	Satterthwaite	-0.0304	-0.2310 0.1703		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.37	0.7220
Satterthwaite	Unequal	6.1134	-0.37	0.7249

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.50	0.2524

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-19-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.4728	0.1031	0.0461	0.3057	0.5672
Diff (1-2)		0.0430	0.0953	0.0603		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.4728	0.3448 0.6008	0.1031	0.0618 0.2963
Diff (1-2)	Pooled	0.0430	-0.0960 0.1820	0.0953	0.0644 0.1826
Diff (1-2)	Satterthwaite	0.0430	-0.0967 0.1827		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.71	0.4960
Satterthwaite	Unequal	7.7743	0.71	0.4966

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.41	0.7469

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-01-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.4002	0.1247	0.0558	0.2728	0.5654
Diff (1-2)		0.1156	0.1075	0.0680		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.4002	0.2454 0.5551	0.1247	0.0747 0.3585
Diff (1-2)	Pooled	0.1156	-0.0412 0.2723	0.1075	0.0726 0.2059
Diff (1-2)	Satterthwaite	0.1156	-0.0445 0.2756		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.70	0.1275
Satterthwaite	Unequal	7.1387	1.70	0.1321

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.06	0.4999

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.4484	0.2442	0.1092	0.1489	0.6900
Diff (1-2)		0.0674	0.1833	0.1159		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.4484	0.1452 0.7516	0.2442	0.1463 0.7017
Diff (1-2)	Pooled	0.0674	-0.1999 0.3347	0.1833	0.1238 0.3511
Diff (1-2)	Satterthwaite	0.0674	-0.2306 0.3655		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.58	0.5768
Satterthwaite	Unequal	4.9953	0.58	0.5860

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	7.91	0.0699

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.4786	0.1805	0.0807	0.3476	0.7768
Diff (1-2)		0.0372	0.1416	0.0896		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.4786	0.2545 0.7027	0.1805	0.1081 0.5187
Diff (1-2)	Pooled	0.0372	-0.1693 0.2438	0.1416	0.0957 0.2713
Diff (1-2)	Satterthwaite	0.0372	-0.1842 0.2587		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.42	0.6887
Satterthwaite	Unequal	5.7569	0.42	0.6928

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.32	0.1853

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-09-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.4882	0.1345	0.0601	0.3233	0.6806
Diff (1-2)		0.0276	0.1132	0.0716		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.4882	0.3212 0.6552	0.1345	0.0806 0.3864
Diff (1-2)	Pooled	0.0276	-0.1375 0.1927	0.1132	0.0765 0.2168
Diff (1-2)	Satterthwaite	0.0276	-0.1425 0.1977		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.39	0.7097
Satterthwaite	Unequal	6.8409	0.39	0.7113

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.40	0.4174

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-10-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.4029	0.1089	0.0487	0.2494	0.5241
Diff (1-2)		0.1129	0.0985	0.0623		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.4029	0.2677 0.5381	0.1089	0.0652 0.3128
Diff (1-2)	Pooled	0.1129	-0.0307 0.2565	0.0985	0.0665 0.1886
Diff (1-2)	Satterthwaite	0.1129	-0.0320 0.2577		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.81	0.1075
Satterthwaite	Unequal	7.6226	1.81	0.1093

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.57	0.6717

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-11-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.5524	0.0640	0.0286	0.4859	0.6361
Diff (1-2)		-0.0366	0.0763	0.0482		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.5524	0.4728 0.6319	0.0640	0.0384 0.1840
Diff (1-2)	Pooled	-0.0366	-0.1478 0.0747	0.0763	0.0515 0.1461
Diff (1-2)	Satterthwaite	-0.0366	-0.1495 0.0764		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.76	0.4703
Satterthwaite	Unequal	7.3588	-0.76	0.4721

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.84	0.5701

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-13-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.3463	0.0656	0.0293	0.2843	0.4565
Diff (1-2)		0.1695	0.0769	0.0487		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.3463	0.2649 0.4278	0.0656	0.0393 0.1885
Diff (1-2)	Pooled	0.1695	0.0572 0.2817	0.0769	0.0520 0.1474
Diff (1-2)	Satterthwaite	0.1695	0.0558 0.2831		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.48	0.0083
Satterthwaite	Unequal	7.4438	3.48	0.0093

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.75	0.6002

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-14-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.4509	0.1604	0.0717	0.3179	0.7154
Diff (1-2)		0.0649	0.1289	0.0816		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.4509	0.2518 0.6500	0.1604	0.0961 0.4608
Diff (1-2)	Pooled	0.0649	-0.1231 0.2530	0.1289	0.0871 0.2470
Diff (1-2)	Satterthwaite	0.0649	-0.1334 0.2632		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.80	0.4490
Satterthwaite	Unequal	6.1592	0.80	0.4556

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.41	0.2617

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-21-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.3683	0.0660	0.0295	0.2986	0.4663
Diff (1-2)		0.1475	0.0771	0.0488		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.3683	0.2863 0.4503	0.0660	0.0395 0.1897
Diff (1-2)	Pooled	0.1475	0.0350 0.2600	0.0771	0.0521 0.1477
Diff (1-2)	Satterthwaite	0.1475	0.0336 0.2614		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.02	0.0165
Satterthwaite	Unequal	7.4661	3.02	0.0178

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.73	0.6085

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-22-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.3481	0.1148	0.0513	0.2227	0.4904
Diff (1-2)		0.1678	0.1018	0.0644		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.3481	0.2055 0.4906	0.1148	0.0688 0.3299
Diff (1-2)	Pooled	0.1678	0.0193 0.3162	0.1018	0.0687 0.1950
Diff (1-2)	Satterthwaite	0.1678	0.0174 0.3181		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.61	0.0313
Satterthwaite	Unequal	7.4475	2.61	0.0333

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.75	0.6015

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-28-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5158	0.0868	0.0388	0.4164	0.6513
Test	5	0.3743	0.0778	0.0348	0.2668	0.4416
Diff (1-2)		0.1415	0.0825	0.0521		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5158	0.4080 0.6236	0.0868	0.0520 0.2495
Test		0.3743	0.2777 0.4710	0.0778	0.0466 0.2237
Diff (1-2)	Pooled	0.1415	0.0212 0.2617	0.0825	0.0557 0.1580
Diff (1-2)	Satterthwaite	0.1415	0.0210 0.2620		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.71	0.0265
Satterthwaite	Unequal	7.9064	2.71	0.0268

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.24	0.8375

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-04-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-01-SS-00	5	26.0	27.50	4.787136	5.20
Test	5	29.0	27.50	4.787136	5.80

Wilcoxon Two-Sample Test

Statistic 26.0000

Normal Approximation

Z -0.2089

One-Sided Pr < Z 0.4173

Two-Sided Pr > |Z| 0.8345

t Approximation

One-Sided Pr < Z 0.4196

Two-Sided Pr > |Z| 0.8392

Z includes a continuity correction of 0.5.

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-04-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.0982
DF	1
Pr > Chi-Square	0.7540

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.3382	0.1915	0.0857	0.1536	0.6179
Diff (1-2)		0.2034	0.1626	0.1028		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.3382	0.1004 0.5761	0.1915	0.1148 0.5504
Diff (1-2)	Pooled	0.2034	-0.0338 0.4405	0.1626	0.1098 0.3115
Diff (1-2)	Satterthwaite	0.2034	-0.0401 0.4468		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.98	0.0833
Satterthwaite	Unequal	6.9534	1.98	0.0888

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.27	0.4472

Oakland Bay Statistical Comparison
 T-test Results, This is a 2-tailed result
 See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.5752	0.2864	0.1281	0.2731	1.0507
Diff (1-2)		-0.0336	0.2216	0.1402		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.5752	0.2195 0.9309	0.2864	0.1716 0.8231
Diff (1-2)	Pooled	-0.0336	-0.3568 0.2896	0.2216	0.1497 0.4246
Diff (1-2)	Satterthwaite	-0.0336	-0.3840 0.3167		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.24	0.8166
Satterthwaite	Unequal	5.5184	-0.24	0.8192

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.07	0.1449

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.4449	0.1421	0.0635	0.2865	0.6114
Diff (1-2)		0.0967	0.1348	0.0853		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.4449	0.2685 0.6213	0.1421	0.0851 0.4082
Diff (1-2)	Pooled	0.0967	-0.1000 0.2933	0.1348	0.0911 0.2583
Diff (1-2)	Satterthwaite	0.0967	-0.1004 0.2937		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.13	0.2898
Satterthwaite	Unequal	7.9041	1.13	0.2902

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.25	0.8355

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.5096	0.1579	0.0706	0.3723	0.7182
Diff (1-2)		0.0320	0.1434	0.0907		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.5096	0.3135 0.7057	0.1579	0.0946 0.4538
Diff (1-2)	Pooled	0.0320	-0.1771 0.2411	0.1434	0.0969 0.2747
Diff (1-2)	Satterthwaite	0.0320	-0.1788 0.2428		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.35	0.7332
Satterthwaite	Unequal	7.6524	0.35	0.7336

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.54	0.6852

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-01-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.4426	0.0953	0.0426	0.3364	0.5660
Diff (1-2)		0.0990	0.1124	0.0711		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.4426	0.3244 0.5609	0.0953	0.0571 0.2737
Diff (1-2)	Pooled	0.0990	-0.0649 0.2628	0.1124	0.0759 0.2153
Diff (1-2)	Satterthwaite	0.0990	-0.0672 0.2651		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.39	0.2013
Satterthwaite	Unequal	7.4131	1.39	0.2042

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.78	0.5891

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.4178	0.1348	0.0603	0.2349	0.5427
Diff (1-2)		0.1238	0.1311	0.0829		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.4178	0.2503 0.5852	0.1348	0.0808 0.3874
Diff (1-2)	Pooled	0.1238	-0.0673 0.3150	0.1311	0.0885 0.2511
Diff (1-2)	Satterthwaite	0.1238	-0.0674 0.3151		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.49	0.1735
Satterthwaite	Unequal	7.973	1.49	0.1736

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.12	0.9128

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-05-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.3070	0.1093	0.0489	0.1541	0.4370
Diff (1-2)		0.2346	0.1186	0.0750		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.3070	0.1713 0.4427	0.1093	0.0655 0.3140
Diff (1-2)	Pooled	0.2346	0.0617 0.4075	0.1186	0.0801 0.2272
Diff (1-2)	Satterthwaite	0.2346	0.0610 0.4082		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.13	0.0140
Satterthwaite	Unequal	7.8222	3.13	0.0144

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.36	0.7756

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.3732	0.1494	0.0668	0.1828	0.5798
Diff (1-2)		0.1684	0.1387	0.0877		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.3732	0.1878 0.5587	0.1494	0.0895 0.4292
Diff (1-2)	Pooled	0.1684	-0.0339 0.3707	0.1387	0.0937 0.2658
Diff (1-2)	Satterthwaite	0.1684	-0.0348 0.3716		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.92	0.0912
Satterthwaite	Unequal	7.8021	1.92	0.0922

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.38	0.7631

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-11-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.4252	0.0989	0.0442	0.2850	0.5249
Diff (1-2)		0.1164	0.1139	0.0721		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.4252	0.3024 0.5480	0.0989	0.0593 0.2842
Diff (1-2)	Pooled	0.1164	-0.0498 0.2826	0.1139	0.0770 0.2183
Diff (1-2)	Satterthwaite	0.1164	-0.0515 0.2843		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.62	0.1449
Satterthwaite	Unequal	7.5422	1.62	0.1472

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.65	0.6379

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-12-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.3979	0.0969	0.0433	0.2553	0.4860
Diff (1-2)		0.1437	0.1131	0.0715		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.3979	0.2775 0.5182	0.0969	0.0581 0.2785
Diff (1-2)	Pooled	0.1437	-0.0212 0.3086	0.1131	0.0764 0.2166
Diff (1-2)	Satterthwaite	0.1437	-0.0232 0.3107		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.01	0.0793
Satterthwaite	Unequal	7.4739	2.01	0.0818

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.72	0.6114

Oakland Bay Statistical Comparison
 T-test Results, This is a 2-tailed result
 See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-13-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.3691	0.1010	0.0452	0.2930	0.5375
Diff (1-2)		0.1725	0.1149	0.0726		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.3691	0.2436 0.4945	0.1010	0.0605 0.2903
Diff (1-2)	Pooled	0.1725	0.00502 0.3400	0.1149	0.0776 0.2200
Diff (1-2)	Satterthwaite	0.1725	0.00351 0.3415		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.38	0.0449
Satterthwaite	Unequal	7.6097	2.38	0.0464

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.59	0.6661

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-14-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.4235	0.1524	0.0682	0.2069	0.6016
Diff (1-2)		0.1181	0.1404	0.0888		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.4235	0.2342 0.6127	0.1524	0.0913 0.4381
Diff (1-2)	Pooled	0.1181	-0.0866 0.3229	0.1404	0.0948 0.2690
Diff (1-2)	Satterthwaite	0.1181	-0.0878 0.3240		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.33	0.2200
Satterthwaite	Unequal	7.7513	1.33	0.2212

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.44	0.7342

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-17-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.5462	0.1624	0.0726	0.3116	0.7533
Diff (1-2)		-0.00456	0.1459	0.0923		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.5462	0.3445 0.7478	0.1624	0.0973 0.4667
Diff (1-2)	Pooled	-0.00456	-0.2173 0.2082	0.1459	0.0985 0.2795
Diff (1-2)	Satterthwaite	-0.00456	-0.2194 0.2103		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.05	0.9618
Satterthwaite	Unequal	7.5654	-0.05	0.9619

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.63	0.6474

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-19-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.4728	0.1031	0.0461	0.3057	0.5672
Diff (1-2)		0.0688	0.1158	0.0732		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.4728	0.3448 0.6008	0.1031	0.0618 0.2963
Diff (1-2)	Pooled	0.0688	-0.1001 0.2377	0.1158	0.0782 0.2218
Diff (1-2)	Satterthwaite	0.0688	-0.1013 0.2389		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.94	0.3750
Satterthwaite	Unequal	7.672	0.94	0.3762

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.52	0.6943

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-01-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.4002	0.1247	0.0558	0.2728	0.5654
Diff (1-2)		0.1414	0.1260	0.0797		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.4002	0.2454 0.5551	0.1247	0.0747 0.3585
Diff (1-2)	Pooled	0.1414	-0.0424 0.3251	0.1260	0.0851 0.2413
Diff (1-2)	Satterthwaite	0.1414	-0.0424 0.3251		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.77	0.1140
Satterthwaite	Unequal	7.997	1.77	0.1140

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.04	0.9708

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.4484	0.2442	0.1092	0.1489	0.6900
Diff (1-2)		0.0932	0.1947	0.1231		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.4484	0.1452 0.7516	0.2442	0.1463 0.7017
Diff (1-2)	Pooled	0.0932	-0.1907 0.3772	0.1947	0.1315 0.3730
Diff (1-2)	Satterthwaite	0.0932	-0.2078 0.3943		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.76	0.4707
Satterthwaite	Unequal	6.0215	0.76	0.4776

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.69	0.2344

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.4786	0.1805	0.0807	0.3476	0.7768
Diff (1-2)		0.0630	0.1561	0.0987		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.4786	0.2545 0.7027	0.1805	0.1081 0.5187
Diff (1-2)	Pooled	0.0630	-0.1647 0.2907	0.1561	0.1055 0.2991
Diff (1-2)	Satterthwaite	0.0630	-0.1693 0.2953		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.64	0.5412
Satterthwaite	Unequal	7.1869	0.64	0.5432

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.01	0.5145

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-09-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.4882	0.1345	0.0601	0.3233	0.6806
Diff (1-2)		0.0534	0.1309	0.0828		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.4882	0.3212 0.6552	0.1345	0.0806 0.3864
Diff (1-2)	Pooled	0.0534	-0.1375 0.2443	0.1309	0.0884 0.2508
Diff (1-2)	Satterthwaite	0.0534	-0.1376 0.2444		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.65	0.5368
Satterthwaite	Unequal	7.9753	0.65	0.5369

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.12	0.9166

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-10-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.4029	0.1089	0.0487	0.2494	0.5241
Diff (1-2)		0.1387	0.1184	0.0749		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.4029	0.2677 0.5381	0.1089	0.0652 0.3128
Diff (1-2)	Pooled	0.1387	-0.0340 0.3113	0.1184	0.0800 0.2268
Diff (1-2)	Satterthwaite	0.1387	-0.0347 0.3121		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.85	0.1011
Satterthwaite	Unequal	7.8139	1.85	0.1020

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.37	0.7703

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-11-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.5524	0.0640	0.0286	0.4859	0.6361
Diff (1-2)		-0.0108	0.1007	0.0637		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.5524	0.4728 0.6319	0.0640	0.0384 0.1840
Diff (1-2)	Pooled	-0.0108	-0.1576 0.1361	0.1007	0.0680 0.1929
Diff (1-2)	Satterthwaite	-0.0108	-0.1672 0.1457		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.17	0.8699
Satterthwaite	Unequal	5.9058	-0.17	0.8714

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.94	0.2124

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-13-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.3463	0.0656	0.0293	0.2843	0.4565
Diff (1-2)		0.1953	0.1012	0.0640		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.3463	0.2649 0.4278	0.0656	0.0393 0.1885
Diff (1-2)	Pooled	0.1953	0.0477 0.3428	0.1012	0.0684 0.1939
Diff (1-2)	Satterthwaite	0.1953	0.0386 0.3519		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.05	0.0158
Satterthwaite	Unequal	5.9866	3.05	0.0226

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.76	0.2276

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-14-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.4509	0.1604	0.0717	0.3179	0.7154
Diff (1-2)		0.0907	0.1447	0.0915		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.4509	0.2518 0.6500	0.1604	0.0961 0.4608
Diff (1-2)	Pooled	0.0907	-0.1204 0.3018	0.1447	0.0978 0.2773
Diff (1-2)	Satterthwaite	0.0907	-0.1223 0.3037		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.99	0.3507
Satterthwaite	Unequal	7.6057	0.99	0.3522

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.59	0.6644

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-21-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.3683	0.0660	0.0295	0.2986	0.4663
Diff (1-2)		0.1733	0.1013	0.0641		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.3683	0.2863 0.4503	0.0660	0.0395 0.1897
Diff (1-2)	Pooled	0.1733	0.0255 0.3211	0.1013	0.0684 0.1941
Diff (1-2)	Satterthwaite	0.1733	0.0165 0.3301		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.70	0.0269
Satterthwaite	Unequal	6.0088	2.70	0.0353

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.71	0.2319

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-22-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.3481	0.1148	0.0513	0.2227	0.4904
Diff (1-2)		0.1935	0.1212	0.0766		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.3481	0.2055 0.4906	0.1148	0.0688 0.3299
Diff (1-2)	Pooled	0.1935	0.0168 0.3703	0.1212	0.0818 0.2321
Diff (1-2)	Satterthwaite	0.1935	0.0165 0.3706		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.53	0.0355
Satterthwaite	Unequal	7.9175	2.53	0.0358

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.23	0.8474

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-28-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.5416	0.1272	0.0569	0.4010	0.7116
Test	5	0.3743	0.0778	0.0348	0.2668	0.4416
Diff (1-2)		0.1673	0.1054	0.0667		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.5416	0.3837 0.6995	0.1272	0.0762 0.3655
Test		0.3743	0.2777 0.4710	0.0778	0.0466 0.2237
Diff (1-2)	Pooled	0.1673	0.0135 0.3210	0.1054	0.0712 0.2020
Diff (1-2)	Satterthwaite	0.1673	0.00775 0.3268		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.51	0.0365
Satterthwaite	Unequal	6.6275	2.51	0.0424

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.67	0.3645

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.3382	0.1915	0.0857	0.1536	0.6179
Diff (1-2)		0.0326	0.1808	0.1144		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.3382	0.1004 0.5761	0.1915	0.1148 0.5504
Diff (1-2)	Pooled	0.0326	-0.2311 0.2963	0.1808	0.1221 0.3464
Diff (1-2)	Satterthwaite	0.0326	-0.2318 0.2970		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.28	0.7830
Satterthwaite	Unequal	7.8823	0.28	0.7831

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.28	0.8176

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.5752	0.2864	0.1281	0.2731	1.0507
Diff (1-2)		-0.2044	0.2353	0.1488		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.5752	0.2195 0.9309	0.2864	0.1716 0.8231
Diff (1-2)	Pooled	-0.2044	-0.5476 0.1388	0.2353	0.1589 0.4508
Diff (1-2)	Satterthwaite	-0.2044	-0.5620 0.1532		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.37	0.2069
Satterthwaite	Unequal	6.4933	-1.37	0.2152

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.86	0.3333

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.4449	0.1421	0.0635	0.2865	0.6114
Diff (1-2)		-0.0741	0.1563	0.0989		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.4449	0.2685 0.6213	0.1421	0.0851 0.4082
Diff (1-2)	Pooled	-0.0741	-0.3021 0.1539	0.1563	0.1056 0.2995
Diff (1-2)	Satterthwaite	-0.0741	-0.3033 0.1551		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.75	0.4749
Satterthwaite	Unequal	7.7643	-0.75	0.4756

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.42	0.7413

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.5096	0.1579	0.0706	0.3723	0.7182
Diff (1-2)		-0.1388	0.1638	0.1036		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.5096	0.3135 0.7057	0.1579	0.0946 0.4538
Diff (1-2)	Pooled	-0.1388	-0.3776 0.1001	0.1638	0.1106 0.3137
Diff (1-2)	Satterthwaite	-0.1388	-0.3778 0.1003		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.34	0.2171
Satterthwaite	Unequal	7.9609	-1.34	0.2173

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.15	0.8951

Oakland Bay Statistical Comparison
 T-test Results, This is a 2-tailed result
 See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-01-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.4426	0.0953	0.0426	0.3364	0.5660
Diff (1-2)		-0.0718	0.1374	0.0869		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.4426	0.3244 0.5609	0.0953	0.0571 0.2737
Diff (1-2)	Pooled	-0.0718	-0.2723 0.1286	0.1374	0.0928 0.2633
Diff (1-2)	Satterthwaite	-0.0718	-0.2821 0.1384		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.83	0.4325
Satterthwaite	Unequal	6.2993	-0.83	0.4387

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.16	0.2907

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.4178	0.1348	0.0603	0.2349	0.5427
Diff (1-2)		-0.0469	0.1531	0.0968		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.4178	0.2503 0.5852	0.1348	0.0808 0.3874
Diff (1-2)	Pooled	-0.0469	-0.2702 0.1763	0.1531	0.1034 0.2933
Diff (1-2)	Satterthwaite	-0.0469	-0.2722 0.1783		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.48	0.6408
Satterthwaite	Unequal	7.6163	-0.48	0.6415

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.58	0.6690

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-12-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.3979	0.0969	0.0433	0.2553	0.4860
Diff (1-2)		-0.0271	0.1380	0.0873		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.3979	0.2775 0.5182	0.0969	0.0581 0.2785
Diff (1-2)	Pooled	-0.0271	-0.2283 0.1742	0.1380	0.0932 0.2644
Diff (1-2)	Satterthwaite	-0.0271	-0.2377 0.1836		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.31	0.7645
Satterthwaite	Unequal	6.3651	-0.31	0.7665

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.06	0.3049

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-13-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.3691	0.1010	0.0452	0.2930	0.5375
Diff (1-2)		0.00174	0.1395	0.0882		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.3691	0.2436 0.4945	0.1010	0.0605 0.2903
Diff (1-2)	Pooled	0.00174	-0.2017 0.2051	0.1395	0.0942 0.2672
Diff (1-2)	Satterthwaite	0.00174	-0.2100 0.2134		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.02	0.9847
Satterthwaite	Unequal	6.525	0.02	0.9849

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.81	0.3406

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-14-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.4235	0.1524	0.0682	0.2069	0.6016
Diff (1-2)		-0.0527	0.1612	0.1019		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.4235	0.2342 0.6127	0.1524	0.0913 0.4381
Diff (1-2)	Pooled	-0.0527	-0.2877 0.1824	0.1612	0.1089 0.3087
Diff (1-2)	Satterthwaite	-0.0527	-0.2881 0.1828		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.52	0.6194
Satterthwaite	Unequal	7.9125	-0.52	0.6196

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.23	0.8429

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-17-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.5462	0.1624	0.0726	0.3116	0.7533
Diff (1-2)		-0.1753	0.1660	0.1050		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.5462	0.3445 0.7478	0.1624	0.0973 0.4667
Diff (1-2)	Pooled	-0.1753	-0.4174 0.0667	0.1660	0.1121 0.3179
Diff (1-2)	Satterthwaite	-0.1753	-0.4174 0.0668		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.67	0.1333
Satterthwaite	Unequal	7.9858	-1.67	0.1334

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.09	0.9368

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-19-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.4728	0.1031	0.0461	0.3057	0.5672
Diff (1-2)		-0.1020	0.1402	0.0887		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.4728	0.3448 0.6008	0.1031	0.0618 0.2963
Diff (1-2)	Pooled	-0.1020	-0.3065 0.1025	0.1402	0.0947 0.2687
Diff (1-2)	Satterthwaite	-0.1020	-0.3143 0.1103		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.15	0.2834
Satterthwaite	Unequal	6.6064	-1.15	0.2901

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.70	0.3595

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-01-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.4002	0.1247	0.0558	0.2728	0.5654
Diff (1-2)		-0.0294	0.1488	0.0941		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.4002	0.2454 0.5551	0.1247	0.0747 0.3585
Diff (1-2)	Pooled	-0.0294	-0.2464 0.1875	0.1488	0.1005 0.2850
Diff (1-2)	Satterthwaite	-0.0294	-0.2498 0.1909		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.31	0.7624
Satterthwaite	Unequal	7.3522	-0.31	0.7631

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.84	0.5678

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.4484	0.2442	0.1092	0.1489	0.6900
Diff (1-2)		-0.0776	0.2102	0.1329		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.4484	0.1452 0.7516	0.2442	0.1463 0.7017
Diff (1-2)	Pooled	-0.0776	-0.3841 0.2289	0.2102	0.1420 0.4026
Diff (1-2)	Satterthwaite	-0.0776	-0.3907 0.2356		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.58	0.5756
Satterthwaite	Unequal	7.1261	-0.58	0.5775

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.08	0.4962

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.4786	0.1805	0.0807	0.3476	0.7768
Diff (1-2)		-0.1078	0.1750	0.1107		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.4786	0.2545 0.7027	0.1805	0.1081 0.5187
Diff (1-2)	Pooled	-0.1078	-0.3631 0.1475	0.1750	0.1182 0.3353
Diff (1-2)	Satterthwaite	-0.1078	-0.3632 0.1477		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.97	0.3588
Satterthwaite	Unequal	7.9681	-0.97	0.3589

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.14	0.9052

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-09-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.4882	0.1345	0.0601	0.3233	0.6806
Diff (1-2)		-0.1174	0.1529	0.0967		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.4882	0.3212 0.6552	0.1345	0.0806 0.3864
Diff (1-2)	Pooled	-0.1174	-0.3404 0.1057	0.1529	0.1033 0.2930
Diff (1-2)	Satterthwaite	-0.1174	-0.3424 0.1077		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.21	0.2596
Satterthwaite	Unequal	7.6083	-1.21	0.2613

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.59	0.6655

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-10-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.4029	0.1089	0.0487	0.2494	0.5241
Diff (1-2)		-0.0321	0.1424	0.0901		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.4029	0.2677 0.5381	0.1089	0.0652 0.3128
Diff (1-2)	Pooled	-0.0321	-0.2398 0.1756	0.1424	0.0962 0.2728
Diff (1-2)	Satterthwaite	-0.0321	-0.2462 0.1820		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.36	0.7307
Satterthwaite	Unequal	6.8224	-0.36	0.7322

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.42	0.4127

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-11-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.5524	0.0640	0.0286	0.4859	0.6361
Diff (1-2)		-0.1816	0.1281	0.0810		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.5524	0.4728 0.6319	0.0640	0.0384 0.1840
Diff (1-2)	Pooled	-0.1816	-0.3683 0.00522	0.1281	0.0865 0.2453
Diff (1-2)	Satterthwaite	-0.1816	-0.3883 0.0252		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-2.24	0.0553
Satterthwaite	Unequal	5.1205	-2.24	0.0738

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	7.00	0.0860

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-13-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.3463	0.0656	0.0293	0.2843	0.4565
Diff (1-2)		0.0245	0.1285	0.0812		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.3463	0.2649 0.4278	0.0656	0.0393 0.1885
Diff (1-2)	Pooled	0.0245	-0.1629 0.2118	0.1285	0.0868 0.2461
Diff (1-2)	Satterthwaite	0.0245	-0.1823 0.2312		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.30	0.7709
Satterthwaite	Unequal	5.1727	0.30	0.7750

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.67	0.0931

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-14-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.4509	0.1604	0.0717	0.3179	0.7154
Diff (1-2)		-0.0801	0.1650	0.1043		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.4509	0.2518 0.6500	0.1604	0.0961 0.4608
Diff (1-2)	Pooled	-0.0801	-0.3206 0.1605	0.1650	0.1114 0.3160
Diff (1-2)	Satterthwaite	-0.0801	-0.3208 0.1606		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.77	0.4648
Satterthwaite	Unequal	7.9761	-0.77	0.4649

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.12	0.9179

----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-21-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.3683	0.0660	0.0295	0.2986	0.4663
Diff (1-2)		0.00251	0.1286	0.0813		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.3683	0.2863 0.4503	0.0660	0.0395 0.1897
Diff (1-2)	Pooled	0.00251	-0.1850 0.1900	0.1286	0.0868 0.2463
Diff (1-2)	Satterthwaite	0.00251	-0.2043 0.2093		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.03	0.9761
Satterthwaite	Unequal	5.1871	0.03	0.9765

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.59	0.0951

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-22-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.3481	0.1148	0.0513	0.2227	0.4904
Diff (1-2)		0.0228	0.1447	0.0915		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.3481	0.2055 0.4906	0.1148	0.0688 0.3299
Diff (1-2)	Pooled	0.0228	-0.1883 0.2338	0.1447	0.0977 0.2772
Diff (1-2)	Satterthwaite	0.0228	-0.1934 0.2390		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.25	0.8099
Satterthwaite	Unequal	7.0342	0.25	0.8107

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.18	0.4696

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-28-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.3743	0.0778	0.0348	0.2668	0.4416
Diff (1-2)		-0.00353	0.1318	0.0834		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.3743	0.2777 0.4710	0.0778	0.0466 0.2237
Diff (1-2)	Pooled	-0.00353	-0.1958 0.1887	0.1318	0.0890 0.2526
Diff (1-2)	Satterthwaite	-0.00353	-0.2110 0.2039		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.04	0.9673
Satterthwaite	Unequal	5.6168	-0.04	0.9677

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.74	0.1611

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-05-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.3070	0.1093	0.0489	0.1541	0.4370
Diff (1-2)		0.0638	0.1425	0.0902		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.3070	0.1713 0.4427	0.1093	0.0655 0.3140
Diff (1-2)	Pooled	0.0638	-0.1441 0.2717	0.1425	0.0963 0.2731
Diff (1-2)	Satterthwaite	0.0638	-0.1504 0.2780		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.71	0.4991
Satterthwaite	Unequal	6.837	0.71	0.5024

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.40	0.4164

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.3732	0.1494	0.0668	0.1828	0.5798
Diff (1-2)		-0.00242	0.1597	0.1010		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.3732	0.1878 0.5587	0.1494	0.0895 0.4292
Diff (1-2)	Pooled	-0.00242	-0.2353 0.2305	0.1597	0.1079 0.3059
Diff (1-2)	Satterthwaite	-0.00242	-0.2360 0.2311		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.02	0.9815
Satterthwaite	Unequal	7.8763	-0.02	0.9815

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.29	0.8130

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 1 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-11-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3708	0.1694	0.0758	0.1615	0.5960
Test	5	0.4252	0.0989	0.0442	0.2850	0.5249
Diff (1-2)		-0.0544	0.1387	0.0877		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3708	0.1605 0.5812	0.1694	0.1015 0.4868
Test		0.4252	0.3024 0.5480	0.0989	0.0593 0.2842
Diff (1-2)	Pooled	-0.0544	-0.2567 0.1479	0.1387	0.0937 0.2657
Diff (1-2)	Satterthwaite	-0.0544	-0.2655 0.1567		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.62	0.5525
Satterthwaite	Unequal	6.443	-0.62	0.5566

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.93	0.3220

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=RF-01-SS-00 -----

The TTEST Procedure

Variable: result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
Control	5	0.4138	0.1045	0.0467	0.2976	0.5130
Reference	5	0.5615	0.1275	0.0570	0.4287	0.6962
Diff (1-2)		-0.1477	0.1166	0.0737		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
Control		0.4138	0.2840 0.5436	0.1045	0.0626 0.3004
Reference		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Diff (1-2)	Pooled	-0.1477	-0.3176 0.0223	0.1166	0.0787 0.2233
Diff (1-2)	Satterthwaite	-0.1477	-0.3188 0.0235		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-2.00	0.0802
Satterthwaite	Unequal	7.7045	-2.00	0.0815

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.49	0.7100

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=RF-02-SS-00 -----

The TTEST Procedure

Variable: result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
Control	5	0.4138	0.1045	0.0467	0.2976	0.5130
Reference	5	0.4425	0.2420	0.1082	0.1692	0.8149
Diff (1-2)		-0.0287	0.1864	0.1179		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
Control		0.4138	0.2840 0.5436	0.1045	0.0626 0.3004
Reference		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Diff (1-2)	Pooled	-0.0287	-0.3006 0.2432	0.1864	0.1259 0.3572
Diff (1-2)	Satterthwaite	-0.0287	-0.3245 0.2672		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.24	0.8141
Satterthwaite	Unequal	5.4418	-0.24	0.8168

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.36	0.1327

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=RF-03-SS-00 -----

The TTEST Procedure

Variable: result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
Control	5	0.4138	0.1045	0.0467	0.2976	0.5130
Reference	5	0.3936	0.1977	0.0884	0.2152	0.7096
Diff (1-2)		0.0202	0.1581	0.1000		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
Control		0.4138	0.2840 0.5436	0.1045	0.0626 0.3004
Reference		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Diff (1-2)	Pooled	0.0202	-0.2104 0.2509	0.1581	0.1068 0.3030
Diff (1-2)	Satterthwaite	0.0202	-0.2238 0.2642		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.20	0.8448
Satterthwaite	Unequal	6.074	0.20	0.8463

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.58	0.2446

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.4045	0.1268	0.0567	0.2100	0.5172
Diff (1-2)		0.1570	0.1271	0.0804		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.4045	0.2471 0.5619	0.1268	0.0759 0.3643
Diff (1-2)	Pooled	0.1570	-0.0284 0.3424	0.1271	0.0859 0.2435
Diff (1-2)	Satterthwaite	0.1570	-0.0284 0.3424		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.95	0.0866
Satterthwaite	Unequal	7.9998	1.95	0.0866

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.01	0.9917

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-05-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.3295	0.1090	0.0487	0.1987	0.4651
Diff (1-2)		0.2320	0.1186	0.0750		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.3295	0.1942 0.4648	0.1090	0.0653 0.3131
Diff (1-2)	Pooled	0.2320	0.0591 0.4049	0.1186	0.0801 0.2272
Diff (1-2)	Satterthwaite	0.2320	0.0583 0.4057		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.09	0.0148
Satterthwaite	Unequal	7.811	3.09	0.0153

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.37	0.7686

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.5164	0.1254	0.0561	0.3250	0.6249
Diff (1-2)		0.0451	0.1264	0.0800		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.5164	0.3607 0.6721	0.1254	0.0751 0.3604
Diff (1-2)	Pooled	0.0451	-0.1393 0.2295	0.1264	0.0854 0.2422
Diff (1-2)	Satterthwaite	0.0451	-0.1394 0.2295		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.56	0.5885
Satterthwaite	Unequal	7.9979	0.56	0.5885

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.03	0.9757

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.2889	0.1020	0.0456	0.2093	0.4623
Diff (1-2)		0.2726	0.1154	0.0730		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.2889	0.1623 0.4155	0.1020	0.0611 0.2931
Diff (1-2)	Pooled	0.2726	0.1042 0.4409	0.1154	0.0780 0.2211
Diff (1-2)	Satterthwaite	0.2726	0.1028 0.4423		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.73	0.0058
Satterthwaite	Unequal	7.6326	3.73	0.0063

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.56	0.6762

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-08-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	4	0.4200	0.2074	0.1037	0.1745	0.6777
Diff (1-2)		0.1415	0.1665	0.1117		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.4200	0.0900 0.7500	0.2074	0.1175 0.7733
Diff (1-2)	Pooled	0.1415	-0.1226 0.4056	0.1665	0.1101 0.3389
Diff (1-2)	Satterthwaite	0.1415	-0.1674 0.4503		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	7	1.27	0.2457
Satterthwaite	Unequal	4.7609	1.20	0.2879

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	3	4	2.65	0.3703

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-09-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.4604	0.0667	0.0298	0.3808	0.5218
Diff (1-2)		0.1011	0.1017	0.0643		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.4604	0.3775 0.5432	0.0667	0.0400 0.1918
Diff (1-2)	Pooled	0.1011	-0.0473 0.2495	0.1017	0.0687 0.1949
Diff (1-2)	Satterthwaite	0.1011	-0.0561 0.2583		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.57	0.1548
Satterthwaite	Unequal	6.0399	1.57	0.1669

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.65	0.2379

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-10-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.5161	0.1042	0.0466	0.3628	0.6462
Diff (1-2)		0.0454	0.1164	0.0736		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.5161	0.3867 0.6454	0.1042	0.0624 0.2994
Diff (1-2)	Pooled	0.0454	-0.1244 0.2152	0.1164	0.0786 0.2230
Diff (1-2)	Satterthwaite	0.0454	-0.1256 0.2164		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.62	0.5545
Satterthwaite	Unequal	7.6956	0.62	0.5552

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.50	0.7056

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-18-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.4325	0.1009	0.0451	0.2921	0.5479
Diff (1-2)		0.1290	0.1150	0.0727		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.4325	0.3071 0.5578	0.1009	0.0605 0.2901
Diff (1-2)	Pooled	0.1290	-0.0387 0.2967	0.1150	0.0777 0.2203
Diff (1-2)	Satterthwaite	0.1290	-0.0402 0.2982		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.77	0.1140
Satterthwaite	Unequal	7.6008	1.77	0.1159

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.59	0.6622

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.4099	0.1370	0.0613	0.2269	0.5729
Diff (1-2)		0.1516	0.1323	0.0837		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.4099	0.2398 0.5800	0.1370	0.0821 0.3936
Diff (1-2)	Pooled	0.1516	-0.0414 0.3446	0.1323	0.0894 0.2535
Diff (1-2)	Satterthwaite	0.1516	-0.0415 0.3447		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.81	0.1076
Satterthwaite	Unequal	7.9589	1.81	0.1078

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.15	0.8923

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.3895	0.0995	0.0445	0.2432	0.5029
Diff (1-2)		0.1720	0.1143	0.0723		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.3895	0.2660 0.5130	0.0995	0.0596 0.2858
Diff (1-2)	Pooled	0.1720	0.00526 0.3387	0.1143	0.0772 0.2190
Diff (1-2)	Satterthwaite	0.1720	0.00353 0.3405		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.38	0.0446
Satterthwaite	Unequal	7.5532	2.38	0.0464

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.64	0.6424

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-12-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.4486	0.2507	0.1121	0.1326	0.7488
Diff (1-2)		0.1129	0.1989	0.1258		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.4486	0.1373 0.7599	0.2507	0.1502 0.7205
Diff (1-2)	Pooled	0.1129	-0.1772 0.4029	0.1989	0.1343 0.3810
Diff (1-2)	Satterthwaite	0.1129	-0.1957 0.4214		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.90	0.3958
Satterthwaite	Unequal	5.9383	0.90	0.4045

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.87	0.2184

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-15-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	4	0.3651	0.2026	0.1013	0.0707	0.5342
Diff (1-2)		0.1963	0.1639	0.1100		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.3651	0.0428 0.6875	0.2026	0.1148 0.7554
Diff (1-2)	Pooled	0.1963	-0.0637 0.4564	0.1639	0.1084 0.3337
Diff (1-2)	Satterthwaite	0.1963	-0.1055 0.4982		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	7	1.79	0.1174
Satterthwaite	Unequal	4.8371	1.69	0.1540

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	3	4	2.53	0.3921

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-16-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.2714	0.1097	0.0490	0.1055	0.4042
Diff (1-2)		0.2900	0.1189	0.0752		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.2714	0.1353 0.4076	0.1097	0.0657 0.3152
Diff (1-2)	Pooled	0.2900	0.1166 0.4634	0.1189	0.0803 0.2278
Diff (1-2)	Satterthwaite	0.2900	0.1159 0.4641		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.86	0.0048
Satterthwaite	Unequal	7.8258	3.86	0.0050

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.35	0.7779

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-18-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.4241	0.0782	0.0350	0.3390	0.5279
Diff (1-2)		0.1374	0.1058	0.0669		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.4241	0.3269 0.5212	0.0782	0.0469 0.2248
Diff (1-2)	Pooled	0.1374	-0.0168 0.2916	0.1058	0.0714 0.2026
Diff (1-2)	Satterthwaite	0.1374	-0.0225 0.2973		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.05	0.0740
Satterthwaite	Unequal	6.6385	2.05	0.0812

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.66	0.3671

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-19-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.3675	0.1569	0.0702	0.1393	0.5597
Diff (1-2)		0.1940	0.1429	0.0904		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.3675	0.1726 0.5623	0.1569	0.0940 0.4509
Diff (1-2)	Pooled	0.1940	-0.0145 0.4025	0.1429	0.0966 0.2739
Diff (1-2)	Satterthwaite	0.1940	-0.0160 0.4040		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.15	0.0642
Satterthwaite	Unequal	7.6778	2.15	0.0656

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.52	0.6970

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-20-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.5168	0.2521	0.1128	0.2526	0.8411
Diff (1-2)		0.0447	0.1998	0.1264		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.5168	0.2037 0.8299	0.2521	0.1511 0.7246
Diff (1-2)	Pooled	0.0447	-0.2467 0.3361	0.1998	0.1349 0.3827
Diff (1-2)	Satterthwaite	0.0447	-0.2655 0.3549		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.35	0.7327
Satterthwaite	Unequal	5.9191	0.35	0.7358

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.91	0.2148

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-23-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.3217	0.1669	0.0746	0.1630	0.5832
Diff (1-2)		0.2398	0.1485	0.0939		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.3217	0.1145 0.5289	0.1669	0.1000 0.4795
Diff (1-2)	Pooled	0.2398	0.0233 0.4564	0.1485	0.1003 0.2845
Diff (1-2)	Satterthwaite	0.2398	0.0206 0.4590		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.55	0.0340
Satterthwaite	Unequal	7.4823	2.55	0.0359

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.71	0.6146

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-24-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	3	0.3472	0.2105	0.1215	0.1257	0.5447
Diff (1-2)		0.2142	0.1600	0.1169		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.3472	-0.1757 0.8702	0.2105	0.1096 1.3231
Diff (1-2)	Pooled	0.2142	-0.0717 0.5002	0.1600	0.1031 0.3524
Diff (1-2)	Satterthwaite	0.2142	-0.2209 0.6494		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	6	1.83	0.1165
Satterthwaite	Unequal	2.9063	1.60	0.2117

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	2	4	2.73	0.3579

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-25-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.4046	0.2769	0.1238	0.1385	0.7095
Diff (1-2)		0.1569	0.2155	0.1363		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.4046	0.0608 0.7484	0.2769	0.1659 0.7957
Diff (1-2)	Pooled	0.1569	-0.1575 0.4712	0.2155	0.1456 0.4129
Diff (1-2)	Satterthwaite	0.1569	-0.1822 0.4959		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.15	0.2831
Satterthwaite	Unequal	5.6224	1.15	0.2964

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.72	0.1621

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-26-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.2484	0.0894	0.0400	0.1705	0.3527
Diff (1-2)		0.3131	0.1101	0.0696		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.2484	0.1374 0.3594	0.0894	0.0536 0.2568
Diff (1-2)	Pooled	0.3131	0.1525 0.4736	0.1101	0.0744 0.2109
Diff (1-2)	Satterthwaite	0.3131	0.1492 0.4769		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	4.50	0.0020
Satterthwaite	Unequal	7.1678	4.50	0.0026

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.03	0.5087

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-27-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.3070	0.1875	0.0839	0.1104	0.4916
Diff (1-2)		0.2545	0.1603	0.1014		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.3070	0.0741 0.5398	0.1875	0.1124 0.5389
Diff (1-2)	Pooled	0.2545	0.0207 0.4884	0.1603	0.1083 0.3072
Diff (1-2)	Satterthwaite	0.2545	0.0150 0.4940		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.51	0.0364
Satterthwaite	Unequal	7.0457	2.51	0.0402

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.16	0.4729

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-29-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	5	0.3203	0.1658	0.0741	0.1387	0.5062
Diff (1-2)		0.2412	0.1479	0.0935		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.3203	0.1145 0.5262	0.1658	0.0993 0.4764
Diff (1-2)	Pooled	0.2412	0.0255 0.4568	0.1479	0.0999 0.2833
Diff (1-2)	Satterthwaite	0.2412	0.0230 0.4593		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.58	0.0327
Satterthwaite	Unequal	7.5048	2.58	0.0345

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.69	0.6232

Oakland Bay Statistical Comparison
 T-test Results, This is a 2-tailed result
 See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-30-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01-SS-00	5	0.5615	0.1275	0.0570	0.4287	0.6962
Test	4	0.3944	0.1044	0.0522	0.3142	0.5385
Diff (1-2)		0.1671	0.1181	0.0792		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01-SS-00		0.5615	0.4032 0.7197	0.1275	0.0764 0.3663
Test		0.3944	0.2283 0.5605	0.1044	0.0591 0.3892
Diff (1-2)	Pooled	0.1671	-0.0203 0.3545	0.1181	0.0781 0.2404
Diff (1-2)	Satterthwaite	0.1671	-0.0158 0.3500		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	7	2.11	0.0729
Satterthwaite	Unequal	6.9785	2.16	0.0675

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	3	1.49	0.7736

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-03-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-01-SS-00	5	31.0	25.0	4.082483	6.20
Test	4	14.0	20.0	4.082483	3.50

Wilcoxon Two-Sample Test

Statistic 14.0000

Normal Approximation

Z -1.3472

One-Sided Pr < Z 0.0890

Two-Sided Pr > |Z| 0.1779

t Approximation

One-Sided Pr < Z 0.1074

Two-Sided Pr > |Z| 0.2148

Z includes a continuity correction of 0.5.

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-03-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	2.1600
DF	1
Pr > Chi-Square	0.1416

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-06-SS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-01-SS-00	5	40.0	27.50	4.787136	8.0
Test	5	15.0	27.50	4.787136	3.0

Wilcoxon Two-Sample Test

Statistic 40.0000

Normal Approximation

Z 2.5067

One-Sided Pr > Z 0.0061

Two-Sided Pr > |Z| 0.0122

t Approximation

One-Sided Pr > Z 0.0167

Two-Sided Pr > |Z| 0.0335

Z includes a continuity correction of 0.5.

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-06-SS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	6.8182
DF	1
Pr > Chi-Square	0.0090

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.4045	0.1268	0.0567	0.2100	0.5172
Diff (1-2)		0.0380	0.1932	0.1222		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.4045	0.2471 0.5619	0.1268	0.0759 0.3643
Diff (1-2)	Pooled	0.0380	-0.2438 0.3198	0.1932	0.1305 0.3701
Diff (1-2)	Satterthwaite	0.0380	-0.2605 0.3365		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.31	0.7636
Satterthwaite	Unequal	6.0407	0.31	0.7661

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.65	0.2381

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-05-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.3295	0.1090	0.0487	0.1987	0.4651
Diff (1-2)		0.1130	0.1877	0.1187		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.3295	0.1942 0.4648	0.1090	0.0653 0.3131
Diff (1-2)	Pooled	0.1130	-0.1607 0.3867	0.1877	0.1268 0.3596
Diff (1-2)	Satterthwaite	0.1130	-0.1832 0.4092		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.95	0.3690
Satterthwaite	Unequal	5.5574	0.95	0.3807

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.93	0.1512

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	4	0.3302	0.1542	0.0771	0.1671	0.4654
Diff (1-2)		0.1123	0.2090	0.1402		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.3302	0.0849 0.5756	0.1542	0.0873 0.5749
Diff (1-2)	Pooled	0.1123	-0.2192 0.4437	0.2090	0.1382 0.4253
Diff (1-2)	Satterthwaite	0.1123	-0.2042 0.4287		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	7	0.80	0.4496
Satterthwaite	Unequal	6.7658	0.84	0.4271

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	3	2.46	0.4846

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.5164	0.1254	0.0561	0.3250	0.6249
Diff (1-2)		-0.0739	0.1928	0.1219		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.5164	0.3607 0.6721	0.1254	0.0751 0.3604
Diff (1-2)	Pooled	-0.0739	-0.3551 0.2072	0.1928	0.1302 0.3693
Diff (1-2)	Satterthwaite	-0.0739	-0.3722 0.2243		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.61	0.5611
Satterthwaite	Unequal	6.0036	-0.61	0.5665

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.72	0.2309

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.2889	0.1020	0.0456	0.2093	0.4623
Diff (1-2)		0.1536	0.1857	0.1175		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.2889	0.1623 0.4155	0.1020	0.0611 0.2931
Diff (1-2)	Pooled	0.1536	-0.1173 0.4245	0.1857	0.1254 0.3558
Diff (1-2)	Satterthwaite	0.1536	-0.1421 0.4493		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.31	0.2273
Satterthwaite	Unequal	5.3769	1.31	0.2441

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.63	0.1227

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-08-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	4	0.4200	0.2074	0.1037	0.1745	0.6777
Diff (1-2)		0.0225	0.2278	0.1528		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.4200	0.0900 0.7500	0.2074	0.1175 0.7733
Diff (1-2)	Pooled	0.0225	-0.3389 0.3839	0.2278	0.1506 0.4637
Diff (1-2)	Satterthwaite	0.0225	-0.3327 0.3777		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	7	0.15	0.8871
Satterthwaite	Unequal	6.9293	0.15	0.8849

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	3	1.36	0.8327

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-09-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.4604	0.0667	0.0298	0.3808	0.5218
Diff (1-2)		-0.0179	0.1775	0.1123		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.4604	0.3775 0.5432	0.0667	0.0400 0.1918
Diff (1-2)	Pooled	-0.0179	-0.2768 0.2410	0.1775	0.1199 0.3401
Diff (1-2)	Satterthwaite	-0.0179	-0.3141 0.2783		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.16	0.8773
Satterthwaite	Unequal	4.6048	-0.16	0.8801

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	13.15	0.0285

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-10-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.5161	0.1042	0.0466	0.3628	0.6462
Diff (1-2)		-0.0736	0.1863	0.1178		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.5161	0.3867 0.6454	0.1042	0.0624 0.2994
Diff (1-2)	Pooled	-0.0736	-0.3453 0.1982	0.1863	0.1259 0.3570
Diff (1-2)	Satterthwaite	-0.0736	-0.3694 0.2222		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.62	0.5498
Satterthwaite	Unequal	5.4334	-0.62	0.5577

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.40	0.1314

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-18-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.4325	0.1009	0.0451	0.2921	0.5479
Diff (1-2)		0.0100	0.1854	0.1173		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.4325	0.3071 0.5578	0.1009	0.0605 0.2901
Diff (1-2)	Pooled	0.0100	-0.2604 0.2805	0.1854	0.1253 0.3553
Diff (1-2)	Satterthwaite	0.0100	-0.2856 0.3057		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.09	0.9340
Satterthwaite	Unequal	5.3505	0.09	0.9350

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.75	0.1187

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.4099	0.1370	0.0613	0.2269	0.5729
Diff (1-2)		0.0326	0.1967	0.1244		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.4099	0.2398 0.5800	0.1370	0.0821 0.3936
Diff (1-2)	Pooled	0.0326	-0.2542 0.3194	0.1967	0.1328 0.3768
Diff (1-2)	Satterthwaite	0.0326	-0.2680 0.3332		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.26	0.7998
Satterthwaite	Unequal	6.324	0.26	0.8015

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.12	0.2960

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.2772	0.1135	0.0508	0.1724	0.4208
Diff (1-2)		0.1653	0.1890	0.1196		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.2772	0.1362 0.4182	0.1135	0.0680 0.3263
Diff (1-2)	Pooled	0.1653	-0.1104 0.4410	0.1890	0.1277 0.3622
Diff (1-2)	Satterthwaite	0.1653	-0.1313 0.4619		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.38	0.2042
Satterthwaite	Unequal	5.6791	1.38	0.2187

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.54	0.1717

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.3895	0.0995	0.0445	0.2432	0.5029
Diff (1-2)		0.0530	0.1850	0.1170		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.3895	0.2660 0.5130	0.0995	0.0596 0.2858
Diff (1-2)	Pooled	0.0530	-0.2169 0.3229	0.1850	0.1250 0.3545
Diff (1-2)	Satterthwaite	0.0530	-0.2426 0.3486		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.45	0.6627
Satterthwaite	Unequal	5.3132	0.45	0.6685

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.92	0.1131

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-12-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.4486	0.2507	0.1121	0.1326	0.7488
Diff (1-2)		-0.00614	0.2464	0.1559		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.4486	0.1373 0.7599	0.2507	0.1502 0.7205
Diff (1-2)	Pooled	-0.00614	-0.3655 0.3533	0.2464	0.1664 0.4721
Diff (1-2)	Satterthwaite	-0.00614	-0.3656 0.3533		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.04	0.9696
Satterthwaite	Unequal	7.9901	-0.04	0.9696

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.07	0.9472

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-15-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	4	0.3651	0.2026	0.1013	0.0707	0.5342
Diff (1-2)		0.0773	0.2260	0.1516		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.3651	0.0428 0.6875	0.2026	0.1148 0.7554
Diff (1-2)	Pooled	0.0773	-0.2811 0.4358	0.2260	0.1494 0.4599
Diff (1-2)	Satterthwaite	0.0773	-0.2736 0.4283		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	7	0.51	0.6256
Satterthwaite	Unequal	6.9583	0.52	0.6181

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	3	1.43	0.8019

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-16-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.2714	0.1097	0.0490	0.1055	0.4042
Diff (1-2)		0.1710	0.1879	0.1188		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.2714	0.1353 0.4076	0.1097	0.0657 0.3152
Diff (1-2)	Pooled	0.1710	-0.1030 0.4451	0.1879	0.1269 0.3600
Diff (1-2)	Satterthwaite	0.1710	-0.1252 0.4673		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.44	0.1880
Satterthwaite	Unequal	5.5762	1.44	0.2038

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.87	0.1543

Oakland Bay Statistical Comparison
 T-test Results, This is a 2-tailed result
 See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-18-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.4241	0.0782	0.0350	0.3390	0.5279
Diff (1-2)		0.0184	0.1799	0.1138		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.4241	0.3269 0.5212	0.0782	0.0469 0.2248
Diff (1-2)	Pooled	0.0184	-0.2439 0.2807	0.1799	0.1215 0.3446
Diff (1-2)	Satterthwaite	0.0184	-0.2772 0.3140		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.16	0.8754
Satterthwaite	Unequal	4.8265	0.16	0.8780

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	9.57	0.0503

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-19-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.3675	0.1569	0.0702	0.1393	0.5597
Diff (1-2)		0.0750	0.2040	0.1290		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.3675	0.1726 0.5623	0.1569	0.0940 0.4509
Diff (1-2)	Pooled	0.0750	-0.2225 0.3725	0.2040	0.1378 0.3908
Diff (1-2)	Satterthwaite	0.0750	-0.2313 0.3813		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.58	0.5769
Satterthwaite	Unequal	6.8573	0.58	0.5795

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.38	0.4217

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-20-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.5168	0.2521	0.1128	0.2526	0.8411
Diff (1-2)		-0.0743	0.2471	0.1563		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.5168	0.2037 0.8299	0.2521	0.1511 0.7246
Diff (1-2)	Pooled	-0.0743	-0.4347 0.2861	0.2471	0.1669 0.4735
Diff (1-2)	Satterthwaite	-0.0743	-0.4349 0.2863		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.48	0.6473
Satterthwaite	Unequal	7.9867	-0.48	0.6473

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.09	0.9387

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-23-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.3217	0.1669	0.0746	0.1630	0.5832
Diff (1-2)		0.1208	0.2079	0.1315		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.3217	0.1145 0.5289	0.1669	0.1000 0.4795
Diff (1-2)	Pooled	0.1208	-0.1824 0.4240	0.2079	0.1404 0.3983
Diff (1-2)	Satterthwaite	0.1208	-0.1892 0.4308		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.92	0.3850
Satterthwaite	Unequal	7.1017	0.92	0.3882

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.10	0.4890

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-24-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	3	0.3472	0.2105	0.1215	0.1257	0.5447
Diff (1-2)		0.0952	0.2320	0.1694		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.3472	-0.1757 0.8702	0.2105	0.1096 1.3231
Diff (1-2)	Pooled	0.0952	-0.3194 0.5098	0.2320	0.1495 0.5109
Diff (1-2)	Satterthwaite	0.0952	-0.3259 0.5164		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	6	0.56	0.5944
Satterthwaite	Unequal	4.892	0.59	0.5844

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	2	1.32	0.9471

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-25-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.4046	0.2769	0.1238	0.1385	0.7095
Diff (1-2)		0.0379	0.2601	0.1645		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.4046	0.0608 0.7484	0.2769	0.1659 0.7957
Diff (1-2)	Pooled	0.0379	-0.3414 0.4172	0.2601	0.1757 0.4982
Diff (1-2)	Satterthwaite	0.0379	-0.3426 0.4183		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.23	0.8236
Satterthwaite	Unequal	7.8594	0.23	0.8237

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.31	0.8006

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-26-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.2484	0.0894	0.0400	0.1705	0.3527
Diff (1-2)		0.1941	0.1824	0.1154		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.2484	0.1374 0.3594	0.0894	0.0536 0.2568
Diff (1-2)	Pooled	0.1941	-0.0720 0.4601	0.1824	0.1232 0.3495
Diff (1-2)	Satterthwaite	0.1941	-0.1013 0.4894		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.68	0.1311
Satterthwaite	Unequal	5.0711	1.68	0.1526

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	7.33	0.0795

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-27-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.3070	0.1875	0.0839	0.1104	0.4916
Diff (1-2)		0.1355	0.2165	0.1369		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.3070	0.0741 0.5398	0.1875	0.1124 0.5389
Diff (1-2)	Pooled	0.1355	-0.1802 0.4513	0.2165	0.1462 0.4148
Diff (1-2)	Satterthwaite	0.1355	-0.1837 0.4548		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.99	0.3513
Satterthwaite	Unequal	7.5304	0.99	0.3530

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.67	0.6332

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-29-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	5	0.3203	0.1658	0.0741	0.1387	0.5062
Diff (1-2)		0.1222	0.2074	0.1312		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.3203	0.1145 0.5262	0.1658	0.0993 0.4764
Diff (1-2)	Pooled	0.1222	-0.1804 0.4247	0.2074	0.1401 0.3974
Diff (1-2)	Satterthwaite	0.1222	-0.1874 0.4317		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.93	0.3790
Satterthwaite	Unequal	7.0759	0.93	0.3825

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.13	0.4815

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-30-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02-SS-00	5	0.4425	0.2420	0.1082	0.1692	0.8149
Test	4	0.3944	0.1044	0.0522	0.3142	0.5385
Diff (1-2)		0.0481	0.1953	0.1310		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02-SS-00		0.4425	0.1419 0.7430	0.2420	0.1450 0.6955
Test		0.3944	0.2283 0.5605	0.1044	0.0591 0.3892
Diff (1-2)	Pooled	0.0481	-0.2617 0.3579	0.1953	0.1291 0.3975
Diff (1-2)	Satterthwaite	0.0481	-0.2502 0.3464		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	7	0.37	0.7244
Satterthwaite	Unequal	5.6677	0.40	0.7036

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	3	5.38	0.1984

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.4045	0.1268	0.0567	0.2100	0.5172
Diff (1-2)		-0.0109	0.1661	0.1050		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.4045	0.2471 0.5619	0.1268	0.0759 0.3643
Diff (1-2)	Pooled	-0.0109	-0.2531 0.2313	0.1661	0.1122 0.3182
Diff (1-2)	Satterthwaite	-0.0109	-0.2606 0.2389		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.10	0.9201
Satterthwaite	Unequal	6.8132	-0.10	0.9206

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.43	0.4103

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=HI-05-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.3295	0.1090	0.0487	0.1987	0.4651
Diff (1-2)		0.0641	0.1596	0.1010		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.3295	0.1942 0.4648	0.1090	0.0653 0.3131
Diff (1-2)	Pooled	0.0641	-0.1687 0.2969	0.1596	0.1078 0.3058
Diff (1-2)	Satterthwaite	0.0641	-0.1808 0.3090		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.64	0.5431
Satterthwaite	Unequal	6.2247	0.64	0.5480

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.29	0.2751

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-03-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	4	0.3302	0.1542	0.0771	0.1671	0.4654
Diff (1-2)		0.0634	0.1803	0.1210		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.3302	0.0849 0.5756	0.1542	0.0873 0.5749
Diff (1-2)	Pooled	0.0634	-0.2227 0.3494	0.1803	0.1192 0.3671
Diff (1-2)	Satterthwaite	0.0634	-0.2140 0.3408		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	7	0.52	0.6166
Satterthwaite	Unequal	6.9997	0.54	0.6058

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	3	1.64	0.7118

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-04-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.5164	0.1254	0.0561	0.3250	0.6249
Diff (1-2)		-0.1228	0.1656	0.1047		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.5164	0.3607 0.6721	0.1254	0.0751 0.3604
Diff (1-2)	Pooled	-0.1228	-0.3643 0.1187	0.1656	0.1118 0.3172
Diff (1-2)	Satterthwaite	-0.1228	-0.3721 0.1265		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.17	0.2746
Satterthwaite	Unequal	6.7707	-1.17	0.2805

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.48	0.3995

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.2889	0.1020	0.0456	0.2093	0.4623
Diff (1-2)		0.1047	0.1573	0.0995		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.2889	0.1623 0.4155	0.1020	0.0611 0.2931
Diff (1-2)	Pooled	0.1047	-0.1247 0.3341	0.1573	0.1063 0.3014
Diff (1-2)	Satterthwaite	0.1047	-0.1389 0.3483		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.05	0.3234
Satterthwaite	Unequal	5.9878	1.05	0.3332

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.76	0.2279

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-08-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	4	0.4200	0.2074	0.1037	0.1745	0.6777
Diff (1-2)		-0.0264	0.2019	0.1355		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.4200	0.0900 0.7500	0.2074	0.1175 0.7733
Diff (1-2)	Pooled	-0.0264	-0.3467 0.2939	0.2019	0.1335 0.4110
Diff (1-2)	Satterthwaite	-0.0264	-0.3548 0.3020		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	7	-0.19	0.8511
Satterthwaite	Unequal	6.4076	-0.19	0.8525

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	3	4	1.10	0.8922

Oakland Bay Statistical Comparison
 T-test Results, This is a 2-tailed result
 See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-09-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.4604	0.0667	0.0298	0.3808	0.5218
Diff (1-2)		-0.0668	0.1476	0.0933		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.4604	0.3775 0.5432	0.0667	0.0400 0.1918
Diff (1-2)	Pooled	-0.0668	-0.2820 0.1484	0.1476	0.0997 0.2827
Diff (1-2)	Satterthwaite	-0.0668	-0.3082 0.1746		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.72	0.4945
Satterthwaite	Unequal	4.8999	-0.72	0.5068

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	8.78	0.0585

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-10-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.5161	0.1042	0.0466	0.3628	0.6462
Diff (1-2)		-0.1225	0.1580	0.0999		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.5161	0.3867 0.6454	0.1042	0.0624 0.2994
Diff (1-2)	Pooled	-0.1225	-0.3529 0.1080	0.1580	0.1067 0.3028
Diff (1-2)	Satterthwaite	-0.1225	-0.3664 0.1215		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.23	0.2553
Satterthwaite	Unequal	6.0629	-1.23	0.2659

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.60	0.2424

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=OB-18-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.4325	0.1009	0.0451	0.2921	0.5479
Diff (1-2)		-0.0389	0.1570	0.0993		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.4325	0.3071 0.5578	0.1009	0.0605 0.2901
Diff (1-2)	Pooled	-0.0389	-0.2678 0.1901	0.1570	0.1060 0.3007
Diff (1-2)	Satterthwaite	-0.0389	-0.2823 0.2045		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.39	0.7056
Satterthwaite	Unequal	5.9526	-0.39	0.7090

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.84	0.2211

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-02-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.4099	0.1370	0.0613	0.2269	0.5729
Diff (1-2)		-0.0163	0.1701	0.1076		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.4099	0.2398 0.5800	0.1370	0.0821 0.3936
Diff (1-2)	Pooled	-0.0163	-0.2643 0.2318	0.1701	0.1149 0.3258
Diff (1-2)	Satterthwaite	-0.0163	-0.2698 0.2372		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.15	0.8835
Satterthwaite	Unequal	7.1212	-0.15	0.8839

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.08	0.4947

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-06-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.2772	0.1135	0.0508	0.1724	0.4208
Diff (1-2)		0.1164	0.1612	0.1020		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.2772	0.1362 0.4182	0.1135	0.0680 0.3263
Diff (1-2)	Pooled	0.1164	-0.1187 0.3515	0.1612	0.1089 0.3089
Diff (1-2)	Satterthwaite	0.1164	-0.1295 0.3623		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.14	0.2866
Satterthwaite	Unequal	6.3795	1.14	0.2946

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.03	0.3080

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-07-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.3895	0.0995	0.0445	0.2432	0.5029
Diff (1-2)		0.00411	0.1565	0.0990		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.3895	0.2660 0.5130	0.0995	0.0596 0.2858
Diff (1-2)	Pooled	0.00411	-0.2241 0.2323	0.1565	0.1057 0.2998
Diff (1-2)	Satterthwaite	0.00411	-0.2390 0.2473		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.04	0.9679
Satterthwaite	Unequal	5.9024	0.04	0.9682

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.95	0.2117

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-12-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.4486	0.2507	0.1121	0.1326	0.7488
Diff (1-2)		-0.0550	0.2258	0.1428		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.4486	0.1373 0.7599	0.2507	0.1502 0.7205
Diff (1-2)	Pooled	-0.0550	-0.3843 0.2743	0.2258	0.1525 0.4325
Diff (1-2)	Satterthwaite	-0.0550	-0.3875 0.2774		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.39	0.7100
Satterthwaite	Unequal	7.5875	-0.39	0.7106

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.61	0.6566

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-15-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	4	0.3651	0.2026	0.1013	0.0707	0.5342
Diff (1-2)		0.0284	0.1998	0.1340		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.3651	0.0428 0.6875	0.2026	0.1148 0.7554
Diff (1-2)	Pooled	0.0284	-0.2885 0.3454	0.1998	0.1321 0.4067
Diff (1-2)	Satterthwaite	0.0284	-0.2947 0.3516		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	7	0.21	0.8380
Satterthwaite	Unequal	6.4881	0.21	0.8389

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	3	4	1.05	0.9244

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-16-SS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.2714	0.1097	0.0490	0.1055	0.4042
Diff (1-2)		0.1221	0.1599	0.1011		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.2714	0.1353 0.4076	0.1097	0.0657 0.3152
Diff (1-2)	Pooled	0.1221	-0.1110 0.3553	0.1599	0.1080 0.3063
Diff (1-2)	Satterthwaite	0.1221	-0.1229 0.3672		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.21	0.2615
Satterthwaite	Unequal	6.2489	1.21	0.2708

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.25	0.2801

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-18-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.4241	0.0782	0.0350	0.3390	0.5279
Diff (1-2)		-0.0305	0.1503	0.0951		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.4241	0.3269 0.5212	0.0782	0.0469 0.2248
Diff (1-2)	Pooled	-0.0305	-0.2498 0.1888	0.1503	0.1016 0.2880
Diff (1-2)	Satterthwaite	-0.0305	-0.2718 0.2109		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.32	0.7568
Satterthwaite	Unequal	5.2223	-0.32	0.7610

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.39	0.1000

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-19-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.3675	0.1569	0.0702	0.1393	0.5597
Diff (1-2)		0.0261	0.1785	0.1129		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.3675	0.1726 0.5623	0.1569	0.0940 0.4509
Diff (1-2)	Pooled	0.0261	-0.2342 0.2864	0.1785	0.1206 0.3419
Diff (1-2)	Satterthwaite	0.0261	-0.2365 0.2888		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.23	0.8228
Satterthwaite	Unequal	7.6075	0.23	0.8231

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.59	0.6651

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-20-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.5168	0.2521	0.1128	0.2526	0.8411
Diff (1-2)		-0.1232	0.2266	0.1433		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.5168	0.2037 0.8299	0.2521	0.1511 0.7246
Diff (1-2)	Pooled	-0.1232	-0.4536 0.2073	0.2266	0.1530 0.4341
Diff (1-2)	Satterthwaite	-0.1232	-0.4569 0.2106		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.86	0.4150
Satterthwaite	Unequal	7.5694	-0.86	0.4164

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.63	0.6490

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-23-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.3217	0.1669	0.0746	0.1630	0.5832
Diff (1-2)		0.0719	0.1829	0.1157		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.3217	0.1145 0.5289	0.1669	0.1000 0.4795
Diff (1-2)	Pooled	0.0719	-0.1949 0.3387	0.1829	0.1236 0.3505
Diff (1-2)	Satterthwaite	0.0719	-0.1962 0.3401		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.62	0.5514
Satterthwaite	Unequal	7.7804	0.62	0.5519

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.40	0.7504

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-24-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	3	0.3472	0.2105	0.1215	0.1257	0.5447
Diff (1-2)		0.0463	0.2021	0.1476		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.3472	-0.1757 0.8702	0.2105	0.1096 1.3231
Diff (1-2)	Pooled	0.0463	-0.3147 0.4074	0.2021	0.1302 0.4450
Diff (1-2)	Satterthwaite	0.0463	-0.3669 0.4596		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	6	0.31	0.7641
Satterthwaite	Unequal	4.1025	0.31	0.7728

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	2	4	1.13	0.8146

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-26-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.2484	0.0894	0.0400	0.1705	0.3527
Diff (1-2)		0.1452	0.1534	0.0970		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.2484	0.1374 0.3594	0.0894	0.0536 0.2568
Diff (1-2)	Pooled	0.1452	-0.0786 0.3689	0.1534	0.1036 0.2939
Diff (1-2)	Satterthwaite	0.1452	-0.0968 0.3871		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.50	0.1730
Satterthwaite	Unequal	5.5695	1.50	0.1890

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.89	0.1532

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-27-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.3070	0.1875	0.0839	0.1104	0.4916
Diff (1-2)		0.0866	0.1927	0.1219		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.3070	0.0741 0.5398	0.1875	0.1124 0.5389
Diff (1-2)	Pooled	0.0866	-0.1944 0.3677	0.1927	0.1302 0.3692
Diff (1-2)	Satterthwaite	0.0866	-0.1945 0.3678		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.71	0.4973
Satterthwaite	Unequal	7.9778	0.71	0.4974

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.11	0.9209

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-29-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	5	0.3203	0.1658	0.0741	0.1387	0.5062
Diff (1-2)		0.0733	0.1824	0.1154		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.3203	0.1145 0.5262	0.1658	0.0993 0.4764
Diff (1-2)	Pooled	0.0733	-0.1928 0.3394	0.1824	0.1232 0.3495
Diff (1-2)	Satterthwaite	0.0733	-0.1942 0.3408		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.63	0.5432
Satterthwaite	Unequal	7.7639	0.63	0.5437

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.42	0.7411

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-30-WS-00 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03-SS-00	5	0.3936	0.1977	0.0884	0.2152	0.7096
Test	4	0.3944	0.1044	0.0522	0.3142	0.5385
Diff (1-2)		-0.00079	0.1643	0.1102		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03-SS-00		0.3936	0.1481 0.6391	0.1977	0.1185 0.5681
Test		0.3944	0.2283 0.5605	0.1044	0.0591 0.3892
Diff (1-2)	Pooled	-0.00079	-0.2615 0.2599	0.1643	0.1087 0.3345
Diff (1-2)	Satterthwaite	-0.00079	-0.2495 0.2479		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	7	-0.01	0.9945
Satterthwaite	Unequal	6.2599	-0.01	0.9941

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	3	3.59	0.3222

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-25-WS-00 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03-SS-00	5	29.0	27.50	4.787136	5.80
Test	5	26.0	27.50	4.787136	5.20

Wilcoxon Two-Sample Test

Statistic 29.0000

Normal Approximation

Z 0.2089

One-Sided Pr > Z 0.4173

Two-Sided Pr > |Z| 0.8345

t Approximation

One-Sided Pr > Z 0.4196

Two-Sided Pr > |Z| 0.8392

Z includes a continuity correction of 0.5.

----- Test=Neanthes Growth -Batch 2 Endpoint=Individual Growth Rate (mg/ind/d) Treatment=SH-25-WS-00 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.0982
DF	1
Pr > Chi-Square	0.7540

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=RF-01 -----

The TTEST Procedure

Variable: result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
Control	5	1.1620	0.0520	0.0233	1.1252	1.2472
Reference	5	0.7971	0.0415	0.0186	0.7405	0.8578
Diff (1-2)		0.3648	0.0471	0.0298		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
Control		1.1620	1.0974 1.2266	0.0520	0.0312 0.1495
Reference		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Diff (1-2)	Pooled	0.3648	0.2962 0.4335	0.0471	0.0318 0.0902
Diff (1-2)	Satterthwaite	0.3648	0.2956 0.4341		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	12.25	<.0001
Satterthwaite	Unequal	7.625	12.25	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.57	0.6728

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=RF-02 -----

The TTEST Procedure

Variable: result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
Control	5	1.1620	0.0520	0.0233	1.1252	1.2472
Reference	5	0.7350	0.0636	0.0284	0.6746	0.8349
Diff (1-2)		0.4269	0.0581	0.0367		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
Control		1.1620	1.0974 1.2266	0.0520	0.0312 0.1495
Reference		0.7350	0.6561 0.8140	0.0636	0.0381 0.1827
Diff (1-2)	Pooled	0.4269	0.3422 0.5117	0.0581	0.0392 0.1113
Diff (1-2)	Satterthwaite	0.4269	0.3416 0.5123		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	11.62	<.0001
Satterthwaite	Unequal	7.6991	11.62	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.49	0.7073

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=RF-03 -----

The TTEST Procedure

Variable: result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
Control	5	1.1620	0.0520	0.0233	1.1252	1.2472
Reference	5	0.9988	0.1302	0.0582	0.7958	1.1028
Diff (1-2)		0.1631	0.0991	0.0627		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
Control		1.1620	1.0974 1.2266	0.0520	0.0312 0.1495
Reference		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Diff (1-2)	Pooled	0.1631	0.0186 0.3077	0.0991	0.0670 0.1899
Diff (1-2)	Satterthwaite	0.1631	0.00423 0.3220		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.60	0.0315
Satterthwaite	Unequal	5.2467	2.60	0.0460

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.26	0.1035

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=HI-05-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	1.3266	0.1624	0.0726	1.0712	1.4624
Diff (1-2)		-0.5295	0.1185	0.0750		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		0.7971	0.7456	0.8487	0.0415	0.0249	0.1193
Test		1.3266	1.1250	1.5283	0.1624	0.0973	0.4667
Diff (1-2)	Pooled	-0.5295	-0.7024	-0.3566	0.1185	0.0801	0.2271
Diff (1-2)	Satterthwaite	-0.5295	-0.7285	-0.3305			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-7.06	0.0001
Satterthwaite	Unequal	4.5208	-7.06	0.0013

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	15.29	0.0217

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=HI-07-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	1.2555	0.1836	0.0821	1.0829	1.5266
Diff (1-2)		-0.4584	0.1331	0.0842		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		0.7971	0.7456	0.8487	0.0415	0.0249	0.1193
Test		1.2555	1.0275	1.4836	0.1836	0.1100	0.5277
Diff (1-2)	Pooled	-0.4584	-0.6526	-0.2642	0.1331	0.0899	0.2551
Diff (1-2)	Satterthwaite	-0.4584	-0.6839	-0.2329			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-5.44	0.0006
Satterthwaite	Unequal	4.408	-5.44	0.0042

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	19.56	0.0137

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=OB-01-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	1.0851	0.0335	0.0150	1.0408	1.1150
Diff (1-2)		-0.2879	0.0377	0.0239		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		0.7971	0.7456	0.8487	0.0415	0.0249	0.1193
Test		1.0851	1.0435	1.1266	0.0335	0.0201	0.0962
Diff (1-2)	Pooled	-0.2879	-0.3429	-0.2329	0.0377	0.0255	0.0723
Diff (1-2)	Satterthwaite	-0.2879	-0.3434	-0.2325			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-12.07	<.0001
Satterthwaite	Unequal	7.6562	-12.07	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.54	0.6869

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=OB-02-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	1.0365	0.0817	0.0366	0.9448	1.1665
Diff (1-2)		-0.2394	0.0648	0.0410		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		1.0365	0.9350 1.1380	0.0817	0.0490 0.2349
Diff (1-2)	Pooled	-0.2394	-0.3339 -0.1448	0.0648	0.0438 0.1242
Diff (1-2)	Satterthwaite	-0.2394	-0.3400 -0.1388		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-5.84	0.0004
Satterthwaite	Unequal	5.936	-5.84	0.0012

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.87	0.2180

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=OB-03-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.9897	0.0863	0.0386	0.8677	1.0868
Diff (1-2)		-0.1925	0.0677	0.0428		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		0.7971	0.7456	0.8487	0.0415	0.0249	0.1193
Test		0.9897	0.8826	1.0968	0.0863	0.0517	0.2479
Diff (1-2)	Pooled	-0.1925	-0.2913	-0.0938	0.0677	0.0457	0.1297
Diff (1-2)	Satterthwaite	-0.1925	-0.2984	-0.0867			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-4.50	0.0020
Satterthwaite	Unequal	5.7593	-4.50	0.0046

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.32	0.1857

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-01-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.9471	0.0812	0.0363	0.8349	1.0224
Diff (1-2)		-0.1500	0.0645	0.0408		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.9471	0.8462 1.0480	0.0812	0.0487 0.2334
Diff (1-2)	Pooled	-0.1500	-0.2441 -0.0559	0.0645	0.0436 0.1236
Diff (1-2)	Satterthwaite	-0.1500	-0.2500 -0.0500		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-3.68	0.0063
Satterthwaite	Unequal	5.9569	-3.68	0.0105

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.83	0.2220

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-02-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.6183	0.1715	0.0767	0.3971	0.8121
Diff (1-2)		0.1788	0.1248	0.0789		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.6183	0.4054 0.8313	0.1715	0.1027 0.4928
Diff (1-2)	Pooled	0.1788	-0.00315 0.3608	0.1248	0.0843 0.2390
Diff (1-2)	Satterthwaite	0.1788	-0.0315 0.3892		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.27	0.0532
Satterthwaite	Unequal	4.4675	2.27	0.0791

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	17.05	0.0177

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-03-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.6212	0.1449	0.0648	0.4574	0.7893
Diff (1-2)		0.1759	0.1066	0.0674		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.6212	0.4413 0.8012	0.1449	0.0868 0.4165
Diff (1-2)	Pooled	0.1759	0.0204 0.3314	0.1066	0.0720 0.2043
Diff (1-2)	Satterthwaite	0.1759	-0.00140 0.3532		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.61	0.0312
Satterthwaite	Unequal	4.6523	2.61	0.0512

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	12.18	0.0328

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-04-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.7265	0.0531	0.0238	0.6579	0.7893
Diff (1-2)		0.0707	0.0477	0.0302		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.7265	0.6605 0.7924	0.0531	0.0318 0.1526
Diff (1-2)	Pooled	0.0707	0.00114 0.1402	0.0477	0.0322 0.0913
Diff (1-2)	Satterthwaite	0.0707	0.000428 0.1409		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.34	0.0471
Satterthwaite	Unequal	7.5603	2.34	0.0489

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.64	0.6453

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-06-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.4379	0.0561	0.0251	0.3785	0.4973
Diff (1-2)		0.3592	0.0494	0.0312		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.4379	0.3682 0.5076	0.0561	0.0336 0.1612
Diff (1-2)	Pooled	0.3592	0.2873 0.4312	0.0494	0.0333 0.0946
Diff (1-2)	Satterthwaite	0.3592	0.2862 0.4323		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	11.51	<.0001
Satterthwaite	Unequal	7.3708	11.51	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.83	0.5742

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-09-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	1.0056	0.0609	0.0272	0.9042	1.0597
Diff (1-2)		-0.2084	0.0521	0.0330		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		0.7971	0.7456	0.8487	0.0415	0.0249	0.1193
Test		1.0056	0.9300	1.0811	0.0609	0.0365	0.1749
Diff (1-2)	Pooled	-0.2084	-0.2844	-0.1324	0.0521	0.0352	0.0998
Diff (1-2)	Satterthwaite	-0.2084	-0.2862	-0.1306			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-6.33	0.0002
Satterthwaite	Unequal	7.0611	-6.33	0.0004

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.15	0.4773

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-10-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	1.0522	0.1059	0.0474	0.9244	1.1990
Diff (1-2)		-0.2551	0.0804	0.0509		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		1.0522	0.9207 1.1837	0.1059	0.0635 0.3043
Diff (1-2)	Pooled	-0.2551	-0.3724 -0.1378	0.0804	0.0543 0.1541
Diff (1-2)	Satterthwaite	-0.2551	-0.3844 -0.1258		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-5.01	0.0010
Satterthwaite	Unequal	5.2016	-5.01	0.0036

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.50	0.0971

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-14-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.8465	0.1165	0.0521	0.7110	0.9794
Diff (1-2)		-0.0494	0.0875	0.0553		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.8465	0.7019 0.9912	0.1165	0.0698 0.3348
Diff (1-2)	Pooled	-0.0494	-0.1770 0.0782	0.0875	0.0591 0.1676
Diff (1-2)	Satterthwaite	-0.0494	-0.1916 0.0928		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.89	0.3979
Satterthwaite	Unequal	5.0001	-0.89	0.4128

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	7.87	0.0705

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-16-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	1.0969	0.0806	0.0360	0.9900	1.2087
Diff (1-2)		-0.2997	0.0641	0.0405		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		1.0969	0.9968 1.1969	0.0806	0.0483 0.2316
Diff (1-2)	Pooled	-0.2997	-0.3932 -0.2063	0.0641	0.0433 0.1228
Diff (1-2)	Satterthwaite	-0.2997	-0.3990 -0.2005		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-7.39	<.0001
Satterthwaite	Unequal	5.9848	-7.39	0.0003

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.77	0.2273

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-19-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.6933	0.0686	0.0307	0.6205	0.7991
Diff (1-2)		0.1039	0.0567	0.0359		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.6933	0.6080 0.7785	0.0686	0.0411 0.1972
Diff (1-2)	Pooled	0.1039	0.0212 0.1866	0.0567	0.0383 0.1087
Diff (1-2)	Satterthwaite	0.1039	0.0180 0.1898		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.90	0.0200
Satterthwaite	Unequal	6.5829	2.90	0.0248

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.73	0.3540

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-20-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	1.0266	0.0683	0.0305	0.9585	1.1191
Diff (1-2)		-0.2294	0.0565	0.0357		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		0.7971	0.7456	0.8487	0.0415	0.0249	0.1193
Test		1.0266	0.9418	1.1113	0.0683	0.0409	0.1961
Diff (1-2)	Pooled	-0.2294	-0.3118	-0.1470	0.0565	0.0382	0.1082
Diff (1-2)	Satterthwaite	-0.2294	-0.3150	-0.1439			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-6.42	0.0002
Satterthwaite	Unequal	6.6045	-6.42	0.0005

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.70	0.3591

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-21-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.6588	0.0464	0.0208	0.5998	0.7208
Diff (1-2)		0.1384	0.0440	0.0279		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.6588	0.6011 0.7164	0.0464	0.0278 0.1334
Diff (1-2)	Pooled	0.1384	0.0741 0.2026	0.0440	0.0298 0.0844
Diff (1-2)	Satterthwaite	0.1384	0.0740 0.2027		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	4.97	0.0011
Satterthwaite	Unequal	7.9024	4.97	0.0011

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.25	0.8340

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-22-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.7271	0.0477	0.0213	0.6444	0.7600
Diff (1-2)		0.0700	0.0447	0.0283		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.7271	0.6679 0.7863	0.0477	0.0286 0.1370
Diff (1-2)	Pooled	0.0700	0.00481 0.1352	0.0447	0.0302 0.0857
Diff (1-2)	Satterthwaite	0.0700	0.00459 0.1354		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.48	0.0383
Satterthwaite	Unequal	7.852	2.48	0.0389

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.32	0.7953

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-23-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.8960	0.1341	0.0600	0.7241	1.0635
Diff (1-2)		-0.0988	0.0993	0.0628		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.8960	0.7294 1.0625	0.1341	0.0804 0.3854
Diff (1-2)	Pooled	-0.0988	-0.2436 0.0460	0.0993	0.0671 0.1902
Diff (1-2)	Satterthwaite	-0.0988	-0.2627 0.0650		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.57	0.1541
Satterthwaite	Unequal	4.7601	-1.57	0.1792

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	10.43	0.0433

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-24-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.6083	0.0626	0.0280	0.5314	0.6779
Diff (1-2)		0.1888	0.0531	0.0336		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.6083	0.5306 0.6861	0.0626	0.0375 0.1799
Diff (1-2)	Pooled	0.1888	0.1113 0.2663	0.0531	0.0359 0.1018
Diff (1-2)	Satterthwaite	0.1888	0.1092 0.2684		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	5.62	0.0005
Satterthwaite	Unequal	6.9494	5.62	0.0008

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.27	0.4462

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-26-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.8677	0.0717	0.0321	0.7828	0.9414
Diff (1-2)		-0.0705	0.0586	0.0370		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.8677	0.7787 0.9566	0.0717	0.0429 0.2059
Diff (1-2)	Pooled	-0.0705	-0.1559 0.0149	0.0586	0.0396 0.1122
Diff (1-2)	Satterthwaite	-0.0705	-0.1598 0.0187		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.90	0.0934
Satterthwaite	Unequal	6.4141	-1.90	0.1025

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.98	0.3156

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-27-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	1.2293	0.1467	0.0656	1.0751	1.3932
Diff (1-2)		-0.4322	0.1078	0.0682		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		0.7971	0.7456	0.8487	0.0415	0.0249	0.1193
Test		1.2293	1.0472	1.4115	0.1467	0.0879	0.4215
Diff (1-2)	Pooled	-0.4322	-0.5894	-0.2750	0.1078	0.0728	0.2065
Diff (1-2)	Satterthwaite	-0.4322	-0.6116	-0.2528			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-6.34	0.0002
Satterthwaite	Unequal	4.6373	-6.34	0.0019

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	12.47	0.0314

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-29-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	1.2826	0.1559	0.0697	1.1445	1.5266
Diff (1-2)		-0.4855	0.1141	0.0721		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		0.7971	0.7456	0.8487	0.0415	0.0249	0.1193
Test		1.2826	1.0891	1.4762	0.1559	0.0934	0.4480
Diff (1-2)	Pooled	-0.4855	-0.6519	-0.3191	0.1141	0.0771	0.2185
Diff (1-2)	Satterthwaite	-0.4855	-0.6764	-0.2946			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-6.73	0.0001
Satterthwaite	Unequal	4.5649	-6.73	0.0016

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	14.09	0.0252

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-30-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	0.7971	0.0415	0.0186	0.7405	0.8578
Test	5	0.9272	0.0561	0.0251	0.8743	1.0151
Diff (1-2)		-0.1301	0.0493	0.0312		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		0.7971	0.7456 0.8487	0.0415	0.0249 0.1193
Test		0.9272	0.8576 0.9968	0.0561	0.0336 0.1611
Diff (1-2)	Pooled	-0.1301	-0.2020 -0.0581	0.0493	0.0333 0.0945
Diff (1-2)	Satterthwaite	-0.1301	-0.2031 -0.0570		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-4.17	0.0031
Satterthwaite	Unequal	7.3732	-4.17	0.0037

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.82	0.5751

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-15-S -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-01	5	15.0	27.50	4.728754	3.0
Test	5	40.0	27.50	4.728754	8.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 15.0000

Normal Approximation

Z -2.5377
One-Sided Pr < Z 0.0056
Two-Sided Pr > |Z| 0.0112

t Approximation

One-Sided Pr < Z 0.0159
Two-Sided Pr > |Z| 0.0318

Z includes a continuity correction of 0.5.

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-15-S -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	6.9876
DF	1
Pr > Chi-Square	0.0082

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-28-W -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-01	5	15.0	27.50	4.728754	3.0
Test	5	40.0	27.50	4.728754	8.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 15.0000

Normal Approximation

Z -2.5377
One-Sided Pr < Z 0.0056
Two-Sided Pr > |Z| 0.0112

t Approximation

One-Sided Pr < Z 0.0159
Two-Sided Pr > |Z| 0.0318

Z includes a continuity correction of 0.5.

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-28-W -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	6.9876
DF	1
Pr > Chi-Square	0.0082

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=HI-05-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	1.3266	0.1624	0.0726	1.0712	1.4624
Diff (1-2)		-0.5916	0.1233	0.0780		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		1.3266	1.1250	1.5283	0.1624	0.0973	0.4667
Diff (1-2)	Pooled	-0.5916	-0.7715	-0.4117	0.1233	0.0833	0.2363
Diff (1-2)	Satterthwaite	-0.5916	-0.7898	-0.3934			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-7.58	<.0001
Satterthwaite	Unequal	5.1977	-7.58	0.0005

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.53	0.0965

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=HI-07-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	1.2555	0.1836	0.0821	1.0829	1.5266
Diff (1-2)		-0.5205	0.1374	0.0869		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		1.2555	1.0275	1.4836	0.1836	0.1100	0.5277
Diff (1-2)	Pooled	-0.5205	-0.7209	-0.3201	0.1374	0.0928	0.2633
Diff (1-2)	Satterthwaite	-0.5205	-0.7447	-0.2963			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-5.99	0.0003
Satterthwaite	Unequal	4.9451	-5.99	0.0019

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	8.34	0.0638

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=OB-01-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	1.0851	0.0335	0.0150	1.0408	1.1150
Diff (1-2)		-0.3500	0.0508	0.0321		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		1.0851	1.0435	1.1266	0.0335	0.0201	0.0962
Diff (1-2)	Pooled	-0.3500	-0.4241	-0.2759	0.0508	0.0343	0.0973
Diff (1-2)	Satterthwaite	-0.3500	-0.4285	-0.2716			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-10.89	<.0001
Satterthwaite	Unequal	6.0612	-10.89	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.60	0.2421

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=OB-02-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	1.0365	0.0817	0.0366	0.9448	1.1665
Diff (1-2)		-0.3015	0.0732	0.0463		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		1.0365	0.9350	1.1380	0.0817	0.0490	0.2349
Diff (1-2)	Pooled	-0.3015	-0.4083	-0.1947	0.0732	0.0495	0.1403
Diff (1-2)	Satterthwaite	-0.3015	-0.4094	-0.1936			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-6.51	0.0002
Satterthwaite	Unequal	7.5429	-6.51	0.0002

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.65	0.6382

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=OB-03-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.9897	0.0863	0.0386	0.8677	1.0868
Diff (1-2)		-0.2547	0.0758	0.0479		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		0.9897	0.8826	1.0968	0.0863	0.0517	0.2479
Diff (1-2)	Pooled	-0.2547	-0.3652	-0.1441	0.0758	0.0512	0.1452
Diff (1-2)	Satterthwaite	-0.2547	-0.3669	-0.1424			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-5.31	0.0007
Satterthwaite	Unequal	7.355	-5.31	0.0009

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.84	0.5688

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-01-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.9471	0.0812	0.0363	0.8349	1.0224
Diff (1-2)		-0.2121	0.0729	0.0461		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		0.9471	0.8462	1.0480	0.0812	0.0487	0.2334
Diff (1-2)	Pooled	-0.2121	-0.3185	-0.1057	0.0729	0.0493	0.1397
Diff (1-2)	Satterthwaite	-0.2121	-0.3196	-0.1046			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-4.60	0.0018
Satterthwaite	Unequal	7.563	-4.60	0.0020

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.63	0.6464

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-02-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.6183	0.1715	0.0767	0.3971	0.8121
Diff (1-2)		0.1167	0.1293	0.0818		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.7350	0.6561 0.8140	0.0636	0.0381 0.1827
Test		0.6183	0.4054 0.8313	0.1715	0.1027 0.4928
Diff (1-2)	Pooled	0.1167	-0.0719 0.3053	0.1293	0.0874 0.2478
Diff (1-2)	Satterthwaite	0.1167	-0.0926 0.3260		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.43	0.1915
Satterthwaite	Unequal	5.079	1.43	0.2121

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	7.28	0.0805

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-03-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.6212	0.1449	0.0648	0.4574	0.7893
Diff (1-2)		0.1138	0.1119	0.0708		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.7350	0.6561 0.8140	0.0636	0.0381 0.1827
Test		0.6212	0.4413 0.8012	0.1449	0.0868 0.4165
Diff (1-2)	Pooled	0.1138	-0.0494 0.2770	0.1119	0.0756 0.2144
Diff (1-2)	Satterthwaite	0.1138	-0.0634 0.2910		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.61	0.1466
Satterthwaite	Unequal	5.4841	1.61	0.1637

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.20	0.1394

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-04-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.7265	0.0531	0.0238	0.6579	0.7893
Diff (1-2)		0.00854	0.0586	0.0370		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.7350	0.6561 0.8140	0.0636	0.0381 0.1827
Test		0.7265	0.6605 0.7924	0.0531	0.0318 0.1526
Diff (1-2)	Pooled	0.00854	-0.0769 0.0940	0.0586	0.0396 0.1122
Diff (1-2)	Satterthwaite	0.00854	-0.0774 0.0944		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.23	0.8234
Satterthwaite	Unequal	7.7545	0.23	0.8236

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.43	0.7359

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-06-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.4379	0.0561	0.0251	0.3785	0.4973
Diff (1-2)		0.2971	0.0600	0.0379		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.7350	0.6561 0.8140	0.0636	0.0381 0.1827
Test		0.4379	0.3682 0.5076	0.0561	0.0336 0.1612
Diff (1-2)	Pooled	0.2971	0.2097 0.3846	0.0600	0.0405 0.1149
Diff (1-2)	Satterthwaite	0.2971	0.2094 0.3848		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	7.84	<.0001
Satterthwaite	Unequal	7.8784	7.84	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.28	0.8146

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-09-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	1.0056	0.0609	0.0272	0.9042	1.0597
Diff (1-2)		-0.2706	0.0622	0.0394		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		1.0056	0.9300	1.0811	0.0609	0.0365	0.1749
Diff (1-2)	Pooled	-0.2706	-0.3613	-0.1798	0.0622	0.0420	0.1192
Diff (1-2)	Satterthwaite	-0.2706	-0.3613	-0.1798			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-6.87	0.0001
Satterthwaite	Unequal	7.9849	-6.87	0.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.09	0.9347

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-10-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	1.0522	0.1059	0.0474	0.9244	1.1990
Diff (1-2)		-0.3172	0.0873	0.0552		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		1.0522	0.9207	1.1837	0.1059	0.0635	0.3043
Diff (1-2)	Pooled	-0.3172	-0.4446	-0.1898	0.0873	0.0590	0.1673
Diff (1-2)	Satterthwaite	-0.3172	-0.4497	-0.1847			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-5.74	0.0004
Satterthwaite	Unequal	6.5513	-5.74	0.0009

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.78	0.3466

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-14-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.8465	0.1165	0.0521	0.7110	0.9794
Diff (1-2)		-0.1115	0.0939	0.0594		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.7350	0.6561 0.8140	0.0636	0.0381 0.1827
Test		0.8465	0.7019 0.9912	0.1165	0.0698 0.3348
Diff (1-2)	Pooled	-0.1115	-0.2484 0.0254	0.0939	0.0634 0.1798
Diff (1-2)	Satterthwaite	-0.1115	-0.2557 0.0327		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.88	0.0971
Satterthwaite	Unequal	6.1877	-1.88	0.1079

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.36	0.2675

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-15-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	1.2043	0.1834	0.0820	0.8909	1.3589
Diff (1-2)		-0.4693	0.1373	0.0868		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		1.2043	0.9765	1.4321	0.1834	0.1099	0.5271
Diff (1-2)	Pooled	-0.4693	-0.6695	-0.2691	0.1373	0.0927	0.2630
Diff (1-2)	Satterthwaite	-0.4693	-0.6932	-0.2454			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-5.41	0.0006
Satterthwaite	Unequal	4.9472	-5.41	0.0030

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	8.33	0.0641

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-16-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	1.0969	0.0806	0.0360	0.9900	1.2087
Diff (1-2)		-0.3619	0.0726	0.0459		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		1.0969	0.9968	1.1969	0.0806	0.0483	0.2316
Diff (1-2)	Pooled	-0.3619	-0.4677	-0.2560	0.0726	0.0490	0.1390
Diff (1-2)	Satterthwaite	-0.3619	-0.4687	-0.2550			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-7.88	<.0001
Satterthwaite	Unequal	7.589	-7.88	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.61	0.6572

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-19-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.6933	0.0686	0.0307	0.6205	0.7991
Diff (1-2)		0.0418	0.0662	0.0418		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.7350	0.6561 0.8140	0.0636	0.0381 0.1827
Test		0.6933	0.6080 0.7785	0.0686	0.0411 0.1972
Diff (1-2)	Pooled	0.0418	-0.0547 0.1382	0.0662	0.0447 0.1267
Diff (1-2)	Satterthwaite	0.0418	-0.0548 0.1383		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.00	0.3474
Satterthwaite	Unequal	7.9536	1.00	0.3476

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.17	0.8856

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-20-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	1.0266	0.0683	0.0305	0.9585	1.1191
Diff (1-2)		-0.2916	0.0660	0.0417		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.7350	0.6561 0.8140	0.0636	0.0381 0.1827
Test		1.0266	0.9418 1.1113	0.0683	0.0409 0.1961
Diff (1-2)	Pooled	-0.2916	-0.3878 -0.1954	0.0660	0.0446 0.1264
Diff (1-2)	Satterthwaite	-0.2916	-0.3878 -0.1953		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-6.99	0.0001
Satterthwaite	Unequal	7.9599	-6.99	0.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.15	0.8937

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-21-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.6588	0.0464	0.0208	0.5998	0.7208
Diff (1-2)		0.0762	0.0557	0.0352		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.7350	0.6561 0.8140	0.0636	0.0381 0.1827
Test		0.6588	0.6011 0.7164	0.0464	0.0278 0.1334
Diff (1-2)	Pooled	0.0762	-0.00496 0.1574	0.0557	0.0376 0.1066
Diff (1-2)	Satterthwaite	0.0762	-0.00628 0.1587		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.17	0.0623
Satterthwaite	Unequal	7.3221	2.17	0.0654

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.87	0.5577

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-22-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.7271	0.0477	0.0213	0.6444	0.7600
Diff (1-2)		0.00790	0.0562	0.0355		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.7350	0.6561 0.8140	0.0636	0.0381 0.1827
Test		0.7271	0.6679 0.7863	0.0477	0.0286 0.1370
Diff (1-2)	Pooled	0.00790	-0.0741 0.0899	0.0562	0.0380 0.1077
Diff (1-2)	Satterthwaite	0.00790	-0.0752 0.0910		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.22	0.8298
Satterthwaite	Unequal	7.4185	0.22	0.8302

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.78	0.5910

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-23-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.8960	0.1341	0.0600	0.7241	1.0635
Diff (1-2)		-0.1610	0.1050	0.0664		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		0.8960	0.7294	1.0625	0.1341	0.0804	0.3854
Diff (1-2)	Pooled	-0.1610	-0.3140	-0.00789	0.1050	0.0709	0.2011
Diff (1-2)	Satterthwaite	-0.1610	-0.3254	0.00347			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-2.42	0.0415
Satterthwaite	Unequal	5.7112	-2.42	0.0536

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.45	0.1773

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-24-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.6083	0.0626	0.0280	0.5314	0.6779
Diff (1-2)		0.1267	0.0631	0.0399		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.7350	0.6561 0.8140	0.0636	0.0381 0.1827
Test		0.6083	0.5306 0.6861	0.0626	0.0375 0.1799
Diff (1-2)	Pooled	0.1267	0.0347 0.2187	0.0631	0.0426 0.1209
Diff (1-2)	Satterthwaite	0.1267	0.0347 0.2187		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.17	0.0131
Satterthwaite	Unequal	7.9981	3.17	0.0131

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.03	0.9769

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-26-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.8677	0.0717	0.0321	0.7828	0.9414
Diff (1-2)		-0.1326	0.0677	0.0428		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.7350	0.6561 0.8140	0.0636	0.0381 0.1827
Test		0.8677	0.7787 0.9566	0.0717	0.0429 0.2059
Diff (1-2)	Pooled	-0.1326	-0.2314 -0.0338	0.0677	0.0458 0.1298
Diff (1-2)	Satterthwaite	-0.1326	-0.2317 -0.0336		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-3.10	0.0148
Satterthwaite	Unequal	7.8878	-3.10	0.0150

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.27	0.8220

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-27-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	1.2293	0.1467	0.0656	1.0751	1.3932
Diff (1-2)		-0.4943	0.1130	0.0715		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		1.2293	1.0472	1.4115	0.1467	0.0879	0.4215
Diff (1-2)	Pooled	-0.4943	-0.6592	-0.3295	0.1130	0.0763	0.2165
Diff (1-2)	Satterthwaite	-0.4943	-0.6736	-0.3150			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-6.91	0.0001
Satterthwaite	Unequal	5.4519	-6.91	0.0007

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.32	0.1343

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-29-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	1.2826	0.1559	0.0697	1.1445	1.5266
Diff (1-2)		-0.5476	0.1190	0.0753		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		1.2826	1.0891	1.4762	0.1559	0.0934	0.4480
Diff (1-2)	Pooled	-0.5476	-0.7212	-0.3740	0.1190	0.0804	0.2281
Diff (1-2)	Satterthwaite	-0.5476	-0.7380	-0.3573			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-7.27	<.0001
Satterthwaite	Unequal	5.2947	-7.27	0.0006

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.01	0.1104

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-30-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.7350	0.0636	0.0284	0.6746	0.8349
Test	5	0.9272	0.0561	0.0251	0.8743	1.0151
Diff (1-2)		-0.1922	0.0599	0.0379		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.7350	0.6561	0.8140	0.0636	0.0381	0.1827
Test		0.9272	0.8576	0.9968	0.0561	0.0336	0.1611
Diff (1-2)	Pooled	-0.1922	-0.2796	-0.1048	0.0599	0.0405	0.1148
Diff (1-2)	Satterthwaite	-0.1922	-0.2798	-0.1045			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-5.07	0.0010
Satterthwaite	Unequal	7.8771	-5.07	0.0010

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.29	0.8136

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-28-W -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-02	5	15.0	27.50	4.787136	3.0
Test	5	40.0	27.50	4.787136	8.0

Wilcoxon Two-Sample Test

Statistic 15.0000

Normal Approximation

Z -2.5067

One-Sided Pr < Z 0.0061

Two-Sided Pr > |Z| 0.0122

t Approximation

One-Sided Pr < Z 0.0167

Two-Sided Pr > |Z| 0.0335

Z includes a continuity correction of 0.5.

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-28-W -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	6.8182
DF	1
Pr > Chi-Square	0.0090

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=HI-05-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	1.3266	0.1624	0.0726	1.0712	1.4624
Diff (1-2)		-0.3278	0.1472	0.0931		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		0.9988	0.8372	1.1605	0.1302	0.0780	0.3740
Test		1.3266	1.1250	1.5283	0.1624	0.0973	0.4667
Diff (1-2)	Pooled	-0.3278	-0.5424	-0.1131	0.1472	0.0994	0.2819
Diff (1-2)	Satterthwaite	-0.3278	-0.5442	-0.1113			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-3.52	0.0078
Satterthwaite	Unequal	7.6376	-3.52	0.0084

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.56	0.6784

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=HI-07-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	1.2555	0.1836	0.0821	1.0829	1.5266
Diff (1-2)		-0.2567	0.1592	0.1007		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		0.9988	0.8372	1.1605	0.1302	0.0780	0.3740
Test		1.2555	1.0275	1.4836	0.1836	0.1100	0.5277
Diff (1-2)	Pooled	-0.2567	-0.4888	-0.0246	0.1592	0.1075	0.3049
Diff (1-2)	Satterthwaite	-0.2567	-0.4933	-0.0200			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-2.55	0.0342
Satterthwaite	Unequal	7.2089	-2.55	0.0372

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.99	0.5213

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=OB-01-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	1.0851	0.0335	0.0150	1.0408	1.1150
Diff (1-2)		-0.0862	0.0950	0.0601		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		1.0851	1.0435 1.1266	0.0335	0.0201 0.0962
Diff (1-2)	Pooled	-0.0862	-0.2248 0.0524	0.0950	0.0642 0.1821
Diff (1-2)	Satterthwaite	-0.0862	-0.2457 0.0733		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.43	0.1894
Satterthwaite	Unequal	4.5273	-1.43	0.2168

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	15.11	0.0222

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=OB-02-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	1.0365	0.0817	0.0366	0.9448	1.1665
Diff (1-2)		-0.0377	0.1087	0.0687		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		1.0365	0.9350 1.1380	0.0817	0.0490 0.2349
Diff (1-2)	Pooled	-0.0377	-0.1962 0.1208	0.1087	0.0734 0.2082
Diff (1-2)	Satterthwaite	-0.0377	-0.2015 0.1262		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.55	0.5985
Satterthwaite	Unequal	6.7305	-0.55	0.6013

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.54	0.3895

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=OB-03-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.9897	0.0863	0.0386	0.8677	1.0868
Diff (1-2)		0.00917	0.1104	0.0698		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		0.9897	0.8826 1.0968	0.0863	0.0517 0.2479
Diff (1-2)	Pooled	0.00917	-0.1519 0.1702	0.1104	0.0746 0.2115
Diff (1-2)	Satterthwaite	0.00917	-0.1562 0.1746		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.13	0.8988
Satterthwaite	Unequal	6.946	0.13	0.8993

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.28	0.4452

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-01-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.9471	0.0812	0.0363	0.8349	1.0224
Diff (1-2)		0.0517	0.1085	0.0686		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		0.9471	0.8462 1.0480	0.0812	0.0487 0.2334
Diff (1-2)	Pooled	0.0517	-0.1065 0.2100	0.1085	0.0733 0.2078
Diff (1-2)	Satterthwaite	0.0517	-0.1120 0.2154		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.75	0.4725
Satterthwaite	Unequal	6.7059	0.75	0.4766

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.57	0.3834

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-02-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.6183	0.1715	0.0767	0.3971	0.8121
Diff (1-2)		0.3805	0.1522	0.0963		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		0.9988	0.8372	1.1605	0.1302	0.0780	0.3740
Test		0.6183	0.4054	0.8313	0.1715	0.1027	0.4928
Diff (1-2)	Pooled	0.3805	0.1585	0.6025	0.1522	0.1028	0.2917
Diff (1-2)	Satterthwaite	0.3805	0.1557	0.6054			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.95	0.0042
Satterthwaite	Unequal	7.4601	3.95	0.0049

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.74	0.6062

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-03-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.6212	0.1449	0.0648	0.4574	0.7893
Diff (1-2)		0.3776	0.1378	0.0871		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		0.9988	0.8372	1.1605	0.1302	0.0780	0.3740
Test		0.6212	0.4413	0.8012	0.1449	0.0868	0.4165
Diff (1-2)	Pooled	0.3776	0.1767	0.5785	0.1378	0.0930	0.2639
Diff (1-2)	Satterthwaite	0.3776	0.1763	0.5789			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	4.33	0.0025
Satterthwaite	Unequal	7.9091	4.33	0.0026

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.24	0.8398

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-04-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.7265	0.0531	0.0238	0.6579	0.7893
Diff (1-2)		0.2724	0.0994	0.0629		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		0.9988	0.8372	1.1605	0.1302	0.0780	0.3740
Test		0.7265	0.6605	0.7924	0.0531	0.0318	0.1526
Diff (1-2)	Pooled	0.2724	0.1274	0.4173	0.0994	0.0671	0.1904
Diff (1-2)	Satterthwaite	0.2724	0.1134	0.4313			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	4.33	0.0025
Satterthwaite	Unequal	5.2961	4.33	0.0066

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.01	0.1106

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-06-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.4379	0.0561	0.0251	0.3785	0.4973
Diff (1-2)		0.5609	0.1002	0.0634		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		0.9988	0.8372	1.1605	0.1302	0.0780	0.3740
Test		0.4379	0.3682	0.5076	0.0561	0.0336	0.1612
Diff (1-2)	Pooled	0.5609	0.4148	0.7071	0.1002	0.0677	0.1920
Diff (1-2)	Satterthwaite	0.5609	0.4019	0.7200			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	8.85	<.0001
Satterthwaite	Unequal	5.4371	8.85	0.0002

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.38	0.1320

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-09-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	1.0056	0.0609	0.0272	0.9042	1.0597
Diff (1-2)		-0.00673	0.1016	0.0643		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		1.0056	0.9300 1.0811	0.0609	0.0365 0.1749
Diff (1-2)	Pooled	-0.00673	-0.1549 0.1415	0.1016	0.0686 0.1946
Diff (1-2)	Satterthwaite	-0.00673	-0.1662 0.1528		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.10	0.9192
Satterthwaite	Unequal	5.6695	-0.10	0.9202

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.57	0.1701

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-10-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	1.0522	0.1059	0.0474	0.9244	1.1990
Diff (1-2)		-0.0534	0.1187	0.0750		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		1.0522	0.9207 1.1837	0.1059	0.0635 0.3043
Diff (1-2)	Pooled	-0.0534	-0.2264 0.1197	0.1187	0.0801 0.2273
Diff (1-2)	Satterthwaite	-0.0534	-0.2277 0.1209		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.71	0.4971
Satterthwaite	Unequal	7.6825	-0.71	0.4979

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.51	0.6993

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-14-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.8465	0.1165	0.0521	0.7110	0.9794
Diff (1-2)		0.1523	0.1235	0.0781		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		0.8465	0.7019 0.9912	0.1165	0.0698 0.3348
Diff (1-2)	Pooled	0.1523	-0.0279 0.3325	0.1235	0.0834 0.2367
Diff (1-2)	Satterthwaite	0.1523	-0.0282 0.3328		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.95	0.0871
Satterthwaite	Unequal	7.9039	1.95	0.0875

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.25	0.8353

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-15-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	1.2043	0.1834	0.0820	0.8909	1.3589
Diff (1-2)		-0.2055	0.1590	0.1006		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		1.2043	0.9765 1.4321	0.1834	0.1099 0.5271
Diff (1-2)	Pooled	-0.2055	-0.4374 0.0265	0.1590	0.1074 0.3047
Diff (1-2)	Satterthwaite	-0.2055	-0.4419 0.0310		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-2.04	0.0754
Satterthwaite	Unequal	7.2131	-2.04	0.0792

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.99	0.5226

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-16-S -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	1.0969	0.0806	0.0360	0.9900	1.2087
Diff (1-2)		-0.0980	0.1082	0.0685		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		1.0969	0.9968 1.1969	0.0806	0.0483 0.2316
Diff (1-2)	Pooled	-0.0980	-0.2559 0.0598	0.1082	0.0731 0.2074
Diff (1-2)	Satterthwaite	-0.0980	-0.2615 0.0655		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.43	0.1900
Satterthwaite	Unequal	6.6736	-1.43	0.1972

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.61	0.3756

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-19-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.6933	0.0686	0.0307	0.6205	0.7991
Diff (1-2)		0.3056	0.1040	0.0658		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		0.9988	0.8372	1.1605	0.1302	0.0780	0.3740
Test		0.6933	0.6080	0.7785	0.0686	0.0411	0.1972
Diff (1-2)	Pooled	0.3056	0.1538	0.4573	0.1040	0.0703	0.1993
Diff (1-2)	Satterthwaite	0.3056	0.1450	0.4662			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	4.64	0.0017
Satterthwaite	Unequal	6.0647	4.64	0.0034

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.60	0.2428

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-20-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	1.0266	0.0683	0.0305	0.9585	1.1191
Diff (1-2)		-0.0277	0.1039	0.0657		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		1.0266	0.9418 1.1113	0.0683	0.0409 0.1961
Diff (1-2)	Pooled	-0.0277	-0.1793 0.1238	0.1039	0.0702 0.1991
Diff (1-2)	Satterthwaite	-0.0277	-0.1883 0.1328		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.42	0.6841
Satterthwaite	Unequal	6.0454	-0.42	0.6876

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.64	0.2390

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-21-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.6588	0.0464	0.0208	0.5998	0.7208
Diff (1-2)		0.3401	0.0977	0.0618		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		0.9988	0.8372	1.1605	0.1302	0.0780	0.3740
Test		0.6588	0.6011	0.7164	0.0464	0.0278	0.1334
Diff (1-2)	Pooled	0.3401	0.1975	0.4826	0.0977	0.0660	0.1872
Diff (1-2)	Satterthwaite	0.3401	0.1812	0.4989			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	5.50	0.0006
Satterthwaite	Unequal	5.0019	5.50	0.0027

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	7.86	0.0707

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-22-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.7271	0.0477	0.0213	0.6444	0.7600
Diff (1-2)		0.2717	0.0980	0.0620		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		0.7271	0.6679 0.7863	0.0477	0.0286 0.1370
Diff (1-2)	Pooled	0.2717	0.1288 0.4147	0.0980	0.0662 0.1878
Diff (1-2)	Satterthwaite	0.2717	0.1129 0.4306		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	4.38	0.0023
Satterthwaite	Unequal	5.0546	4.38	0.0070

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	7.45	0.0774

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-23-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.8960	0.1341	0.0600	0.7241	1.0635
Diff (1-2)		0.1029	0.1322	0.0836		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		0.8960	0.7294 1.0625	0.1341	0.0804 0.3854
Diff (1-2)	Pooled	0.1029	-0.0899 0.2956	0.1322	0.0893 0.2532
Diff (1-2)	Satterthwaite	0.1029	-0.0899 0.2956		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.23	0.2534
Satterthwaite	Unequal	7.9928	1.23	0.2534

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.06	0.9551

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-24-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.6083	0.0626	0.0280	0.5314	0.6779
Diff (1-2)		0.3905	0.1021	0.0646		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		0.9988	0.8372	1.1605	0.1302	0.0780	0.3740
Test		0.6083	0.5306	0.6861	0.0626	0.0375	0.1799
Diff (1-2)	Pooled	0.3905	0.2415	0.5394	0.1021	0.0690	0.1957
Diff (1-2)	Satterthwaite	0.3905	0.2308	0.5502			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	6.05	0.0003
Satterthwaite	Unequal	5.7566	6.05	0.0011

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.32	0.1852

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-26-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.8677	0.0717	0.0321	0.7828	0.9414
Diff (1-2)		0.1312	0.1051	0.0664		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		0.8677	0.7787 0.9566	0.0717	0.0429 0.2059
Diff (1-2)	Pooled	0.1312	-0.0221 0.2844	0.1051	0.0710 0.2013
Diff (1-2)	Satterthwaite	0.1312	-0.0300 0.2924		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.97	0.0838
Satterthwaite	Unequal	6.2212	1.97	0.0941

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.30	0.2744

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-27-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	1.2293	0.1467	0.0656	1.0751	1.3932
Diff (1-2)		-0.2305	0.1387	0.0877		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		0.9988	0.8372	1.1605	0.1302	0.0780	0.3740
Test		1.2293	1.0472	1.4115	0.1467	0.0879	0.4215
Diff (1-2)	Pooled	-0.2305	-0.4327	-0.0283	0.1387	0.0937	0.2656
Diff (1-2)	Satterthwaite	-0.2305	-0.4332	-0.0278			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-2.63	0.0303
Satterthwaite	Unequal	7.8886	-2.63	0.0306

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.27	0.8226

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-28-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.9881	0.1047	0.0468	0.9143	1.1710
Diff (1-2)		0.0107	0.1181	0.0747		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		0.9881	0.8581 1.1182	0.1047	0.0628 0.3010
Diff (1-2)	Pooled	0.0107	-0.1616 0.1830	0.1181	0.0798 0.2263
Diff (1-2)	Satterthwaite	0.0107	-0.1629 0.1844		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.14	0.8894
Satterthwaite	Unequal	7.65	0.14	0.8895

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.54	0.6840

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-29-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	1.2826	0.1559	0.0697	1.1445	1.5266
Diff (1-2)		-0.2838	0.1436	0.0908		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		0.9988	0.8372	1.1605	0.1302	0.0780	0.3740
Test		1.2826	1.0891	1.4762	0.1559	0.0934	0.4480
Diff (1-2)	Pooled	-0.2838	-0.4932	-0.0744	0.1436	0.0970	0.2751
Diff (1-2)	Satterthwaite	-0.2838	-0.4944	-0.0732			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-3.12	0.0141
Satterthwaite	Unequal	7.7531	-3.12	0.0147

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.43	0.7351

----- Test=Larval Dev - Batch 1 Endpoint=Percent Normal Survival Treatment=SH-30-W -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	0.9988	0.1302	0.0582	0.7958	1.1028
Test	5	0.9272	0.0561	0.0251	0.8743	1.0151
Diff (1-2)		0.0716	0.1002	0.0634		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		0.9988	0.8372 1.1605	0.1302	0.0780 0.3740
Test		0.9272	0.8576 0.9968	0.0561	0.0336 0.1611
Diff (1-2)	Pooled	0.0716	-0.0745 0.2178	0.1002	0.0677 0.1920
Diff (1-2)	Satterthwaite	0.0716	-0.0874 0.2307		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.13	0.2911
Satterthwaite	Unequal	5.4353	1.13	0.3057

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.39	0.1317

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=REF-02 -----

The TTEST Procedure

Variable: result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
Control	5	1.5207	0.0747	0.0334	1.4036	1.5708
Reference	5	0.9463	0.0579	0.0259	0.8842	1.0272
Diff (1-2)		0.5744	0.0669	0.0423		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
Control		1.5207	1.4279 1.6135	0.0747	0.0448 0.2147
Reference		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Diff (1-2)	Pooled	0.5744	0.4769 0.6719	0.0669	0.0452 0.1281
Diff (1-2)	Satterthwaite	0.5744	0.4758 0.6730		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	13.59	<.0001
Satterthwaite	Unequal	7.5323	13.59	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.66	0.6340

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=REF-03 -----

The TTEST Procedure

Variable: result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
Control	5	1.5207	0.0747	0.0334	1.4036	1.5708
Reference	5	1.0906	0.0468	0.0209	1.0159	1.1369
Diff (1-2)		0.4301	0.0623	0.0394		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
Control		1.5207	1.4279 1.6135	0.0747	0.0448 0.2147
Reference		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Diff (1-2)	Pooled	0.4301	0.3392 0.5210	0.0623	0.0421 0.1194
Diff (1-2)	Satterthwaite	0.4301	0.3361 0.5241		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	10.91	<.0001
Satterthwaite	Unequal	6.7169	10.91	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.55	0.3862

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=REF-01 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
Control	5	40.0	27.50	4.728754	8.0
Reference	5	15.0	27.50	4.728754	3.0

Average scores were used for ties.

Wilcoxon Two-Sample Test

Statistic 40.0000

Normal Approximation

Z 2.5377

One-Sided Pr > Z 0.0056

Two-Sided Pr > |Z| 0.0112

t Approximation

One-Sided Pr > Z 0.0159

Two-Sided Pr > |Z| 0.0318

Z includes a continuity correction of 0.5.

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=REF-01 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	6.9876
DF	1
Pr > Chi-Square	0.0082

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-02 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	1.2279	0.1484	0.0664	1.0235	1.3809
Diff (1-2)		-0.0430	0.1137	0.0719		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		1.1848	1.1079 1.2618	0.0620	0.0371 0.1781
Test		1.2279	1.0436 1.4122	0.1484	0.0889 0.4265
Diff (1-2)	Pooled	-0.0430	-0.2089 0.1228	0.1137	0.0768 0.2179
Diff (1-2)	Satterthwaite	-0.0430	-0.2243 0.1383		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.60	0.5662
Satterthwaite	Unequal	5.3537	-0.60	0.5741

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	5.74	0.1192

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-03 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	1.1362	0.1152	0.0515	1.0047	1.2672
Diff (1-2)		0.0486	0.0925	0.0585		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		1.1848	1.1079 1.2618	0.0620	0.0371 0.1781
Test		1.1362	0.9932 1.2793	0.1152	0.0690 0.3311
Diff (1-2)	Pooled	0.0486	-0.0863 0.1835	0.0925	0.0625 0.1772
Diff (1-2)	Satterthwaite	0.0486	-0.0938 0.1910		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.83	0.4304
Satterthwaite	Unequal	6.136	0.83	0.4375

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.46	0.2570

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-04 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	1.1638	0.1533	0.0685	1.0235	1.3636
Diff (1-2)		0.0210	0.1169	0.0739		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		1.1848	1.1079 1.2618	0.0620	0.0371 0.1781
Test		1.1638	0.9735 1.3541	0.1533	0.0918 0.4404
Diff (1-2)	Pooled	0.0210	-0.1495 0.1915	0.1169	0.0790 0.2240
Diff (1-2)	Satterthwaite	0.0210	-0.1661 0.2082		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.28	0.7833
Satterthwaite	Unequal	5.2739	0.28	0.7869

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.12	0.1074

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-05 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	0.9180	0.0807	0.0361	0.8197	1.0084
Diff (1-2)		0.2668	0.0720	0.0455		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		1.1848	1.1079	1.2618	0.0620	0.0371	0.1781
Test		0.9180	0.8178	1.0183	0.0807	0.0484	0.2320
Diff (1-2)	Pooled	0.2668	0.1618	0.3718	0.0720	0.0486	0.1379
Diff (1-2)	Satterthwaite	0.2668	0.1606	0.3730			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	5.86	0.0004
Satterthwaite	Unequal	7.4993	5.86	0.0005

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.70	0.6210

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-06 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	0.8678	0.0713	0.0319	0.7726	0.9682
Diff (1-2)		0.3171	0.0668	0.0422		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		1.1848	1.1079	1.2618	0.0620	0.0371	0.1781
Test		0.8678	0.7793	0.9563	0.0713	0.0427	0.2048
Diff (1-2)	Pooled	0.3171	0.2197	0.4145	0.0668	0.0451	0.1279
Diff (1-2)	Satterthwaite	0.3171	0.2193	0.4148			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	7.51	<.0001
Satterthwaite	Unequal	7.8489	7.51	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.32	0.7932

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-07 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	1.1328	0.0553	0.0248	1.0780	1.2125
Diff (1-2)		0.0520	0.0588	0.0372		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		1.1848	1.1079	1.2618	0.0620	0.0371	0.1781
Test		1.1328	1.0641	1.2016	0.0553	0.0332	0.1590
Diff (1-2)	Pooled	0.0520	-0.0337	0.1377	0.0588	0.0397	0.1126
Diff (1-2)	Satterthwaite	0.0520	-0.0339	0.1379			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.40	0.1993
Satterthwaite	Unequal	7.8998	1.40	0.1998

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.25	0.8318

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-08 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	1.1095	0.0893	0.0399	1.0272	1.2613
Diff (1-2)		0.0754	0.0768	0.0486		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		1.1848	1.1079 1.2618	0.0620	0.0371 0.1781
Test		1.1095	0.9986 1.2203	0.0893	0.0535 0.2565
Diff (1-2)	Pooled	0.0754	-0.0367 0.1874	0.0768	0.0519 0.1472
Diff (1-2)	Satterthwaite	0.0754	-0.0391 0.1899		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.55	0.1596
Satterthwaite	Unequal	7.1287	1.55	0.1642

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.08	0.4970

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-10 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	0.7496	0.0588	0.0263	0.6811	0.8332
Diff (1-2)		0.4352	0.0604	0.0382		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		1.1848	1.1079	1.2618	0.0620	0.0371	0.1781
Test		0.7496	0.6765	0.8226	0.0588	0.0353	0.1691
Diff (1-2)	Pooled	0.4352	0.3471	0.5234	0.0604	0.0408	0.1158
Diff (1-2)	Satterthwaite	0.4352	0.3471	0.5234			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	11.39	<.0001
Satterthwaite	Unequal	7.9785	11.39	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.11	0.9222

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-12 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	1.0126	0.0722	0.0323	0.9048	1.0902
Diff (1-2)		0.1722	0.0673	0.0426		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		1.1848	1.1079	1.2618	0.0620	0.0371	0.1781
Test		1.0126	0.9229	1.1023	0.0722	0.0433	0.2076
Diff (1-2)	Pooled	0.1722	0.0740	0.2704	0.0673	0.0455	0.1289
Diff (1-2)	Satterthwaite	0.1722	0.0736	0.2708			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	4.05	0.0037
Satterthwaite	Unequal	7.8192	4.05	0.0039

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.36	0.7737

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-13 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	0.7362	0.0332	0.0148	0.6983	0.7861
Diff (1-2)		0.4486	0.0497	0.0314		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		1.1848	1.1079 1.2618	0.0620	0.0371 0.1781
Test		0.7362	0.6950 0.7774	0.0332	0.0199 0.0954
Diff (1-2)	Pooled	0.4486	0.3761 0.5212	0.0497	0.0336 0.0952
Diff (1-2)	Satterthwaite	0.4486	0.3721 0.5252		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	14.27	<.0001
Satterthwaite	Unequal	6.1205	14.27	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.49	0.2539

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-14 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	0.7983	0.0543	0.0243	0.7457	0.8603
Diff (1-2)		0.3866	0.0582	0.0368		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		1.1848	1.1079 1.2618	0.0620	0.0371 0.1781
Test		0.7983	0.7309 0.8656	0.0543	0.0325 0.1559
Diff (1-2)	Pooled	0.3866	0.3016 0.4715	0.0582	0.0393 0.1116
Diff (1-2)	Satterthwaite	0.3866	0.3014 0.4718		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	10.49	<.0001
Satterthwaite	Unequal	7.8624	10.49	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.30	0.8027

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-17 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	1.0580	0.0535	0.0239	1.0159	1.1458
Diff (1-2)		0.1268	0.0579	0.0366		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		1.1848	1.1079	1.2618	0.0620	0.0371	0.1781
Test		1.0580	0.9916	1.1244	0.0535	0.0320	0.1537
Diff (1-2)	Pooled	0.1268	0.0424	0.2112	0.0579	0.0391	0.1109
Diff (1-2)	Satterthwaite	0.1268	0.0421	0.2116			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.46	0.0085
Satterthwaite	Unequal	7.8324	3.46	0.0088

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.34	0.7821

Oakland Bay Statistical Comparison
 T-test Results, This is a 2-tailed result
 See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-18 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	0.7637	0.0695	0.0311	0.6639	0.8501
Diff (1-2)		0.4211	0.0659	0.0417		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		1.1848	1.1079	1.2618	0.0620	0.0371	0.1781
Test		0.7637	0.6773	0.8500	0.0695	0.0417	0.1998
Diff (1-2)	Pooled	0.4211	0.3251	0.5172	0.0659	0.0445	0.1262
Diff (1-2)	Satterthwaite	0.4211	0.3249	0.5174			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	10.11	<.0001
Satterthwaite	Unequal	7.8963	10.11	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.26	0.8288

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-19 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	0.7590	0.1223	0.0547	0.5564	0.8467
Diff (1-2)		0.4258	0.0970	0.0613		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		1.1848	1.1079	1.2618	0.0620	0.0371	0.1781
Test		0.7590	0.6071	0.9109	0.1223	0.0733	0.3515
Diff (1-2)	Pooled	0.4258	0.2844	0.5673	0.0970	0.0655	0.1858
Diff (1-2)	Satterthwaite	0.4258	0.2753	0.5764			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	6.94	0.0001
Satterthwaite	Unequal	5.9263	6.94	0.0005

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.90	0.2162

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-07 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	0.7230	0.0753	0.0337	0.6535	0.8399
Diff (1-2)		0.4618	0.0690	0.0436		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		1.1848	1.1079 1.2618	0.0620	0.0371 0.1781
Test		0.7230	0.6295 0.8165	0.0753	0.0451 0.2164
Diff (1-2)	Pooled	0.4618	0.3613 0.5624	0.0690	0.0466 0.1321
Diff (1-2)	Satterthwaite	0.4618	0.3606 0.5631		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	10.59	<.0001
Satterthwaite	Unequal	7.7151	10.59	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.48	0.7153

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-11 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	1.0604	0.0680	0.0304	0.9682	1.1282
Diff (1-2)		0.1245	0.0650	0.0411		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		1.1848	1.1079	1.2618	0.0620	0.0371	0.1781
Test		1.0604	0.9760	1.1448	0.0680	0.0407	0.1953
Diff (1-2)	Pooled	0.1245	0.0296	0.2193	0.0650	0.0439	0.1246
Diff (1-2)	Satterthwaite	0.1245	0.0295	0.2195			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.03	0.0164
Satterthwaite	Unequal	7.9327	3.03	0.0166

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.20	0.8622

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-12 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	0.9493	0.0380	0.0170	0.9117	0.9937
Diff (1-2)		0.2355	0.0514	0.0325		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		1.1848	1.1079 1.2618	0.0620	0.0371 0.1781
Test		0.9493	0.9022 0.9964	0.0380	0.0227 0.1091
Diff (1-2)	Pooled	0.2355	0.1606 0.3105	0.0514	0.0347 0.0984
Diff (1-2)	Satterthwaite	0.2355	0.1578 0.3132		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	7.25	<.0001
Satterthwaite	Unequal	6.6298	7.25	0.0002

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.67	0.3651

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-13 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	1.0390	0.1198	0.0536	0.8467	1.1503
Diff (1-2)		0.1459	0.0953	0.0603		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-01		1.1848	1.1079 1.2618	0.0620	0.0371 0.1781
Test		1.0390	0.8903 1.1877	0.1198	0.0718 0.3441
Diff (1-2)	Pooled	0.1459	0.00679 0.2849	0.0953	0.0644 0.1827
Diff (1-2)	Satterthwaite	0.1459	-0.00171 0.2934		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.42	0.0419
Satterthwaite	Unequal	5.9992	2.42	0.0520

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.73	0.2301

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-25 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-01	5	1.1848	0.0620	0.0277	1.0780	1.2335
Test	5	1.0057	0.1003	0.0449	0.8979	1.1413
Diff (1-2)		0.1791	0.0834	0.0527		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-01		1.1848	1.1079	1.2618	0.0620	0.0371	0.1781
Test		1.0057	0.8811	1.1302	0.1003	0.0601	0.2883
Diff (1-2)	Pooled	0.1791	0.0575	0.3008	0.0834	0.0563	0.1597
Diff (1-2)	Satterthwaite	0.1791	0.0532	0.3051			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.40	0.0094
Satterthwaite	Unequal	6.6654	3.40	0.0124

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.62	0.3736

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-06 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-01	5	37.0	27.50	4.787136	7.40
Test	5	18.0	27.50	4.787136	3.60

Wilcoxon Two-Sample Test

Statistic 37.0000

Normal Approximation

Z 1.8800

One-Sided Pr > Z 0.0301

Two-Sided Pr > |Z| 0.0601

t Approximation

One-Sided Pr > Z 0.0464

Two-Sided Pr > |Z| 0.0928

Z includes a continuity correction of 0.5.

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-06 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	3.9382
DF	1
Pr > Chi-Square	0.0472

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-04 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-01	5	40.0	27.50	4.787136	8.0
Test	5	15.0	27.50	4.787136	3.0

Wilcoxon Two-Sample Test

Statistic 40.0000

Normal Approximation

Z 2.5067

One-Sided Pr > Z 0.0061

Two-Sided Pr > |Z| 0.0122

t Approximation

One-Sided Pr > Z 0.0167

Two-Sided Pr > |Z| 0.0335

Z includes a continuity correction of 0.5.

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-04 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	6.8182
DF	1
Pr > Chi-Square	0.0090

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-09 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-01	5	40.0	27.50	4.787136	8.0
Test	5	15.0	27.50	4.787136	3.0

Wilcoxon Two-Sample Test

Statistic 40.0000

Normal Approximation

Z 2.5067

One-Sided Pr > Z 0.0061

Two-Sided Pr > |Z| 0.0122

t Approximation

One-Sided Pr > Z 0.0167

Two-Sided Pr > |Z| 0.0335

Z includes a continuity correction of 0.5.

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-09 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	6.8182
DF	1
Pr > Chi-Square	0.0090

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-11 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-01	5	37.0	27.50	4.787136	7.40
Test	5	18.0	27.50	4.787136	3.60

Wilcoxon Two-Sample Test

Statistic 37.0000

Normal Approximation

Z 1.8800

One-Sided Pr > Z 0.0301

Two-Sided Pr > |Z| 0.0601

t Approximation

One-Sided Pr > Z 0.0464

Two-Sided Pr > |Z| 0.0928

Z includes a continuity correction of 0.5.

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-11 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	3.9382
DF	1
Pr > Chi-Square	0.0472

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-18 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-01	5	40.0	27.50	4.787136	8.0
Test	5	15.0	27.50	4.787136	3.0

Wilcoxon Two-Sample Test

Statistic 40.0000

Normal Approximation

Z 2.5067

One-Sided Pr > Z 0.0061

Two-Sided Pr > |Z| 0.0122

t Approximation

One-Sided Pr > Z 0.0167

Two-Sided Pr > |Z| 0.0335

Z includes a continuity correction of 0.5.

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-18 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	6.8182
DF	1
Pr > Chi-Square	0.0090

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-02 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.2279	0.1484	0.0664	1.0235	1.3809
Diff (1-2)		-0.2816	0.1127	0.0713		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.9463	0.8744	1.0182	0.0579	0.0347	0.1665
Test		1.2279	1.0436	1.4122	0.1484	0.0889	0.4265
Diff (1-2)	Pooled	-0.2816	-0.4459	-0.1173	0.1127	0.0761	0.2158
Diff (1-2)	Satterthwaite	-0.2816	-0.4627	-0.1004			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-3.95	0.0042
Satterthwaite	Unequal	5.1909	-3.95	0.0101

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.57	0.0956

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-03 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.1362	0.1152	0.0515	1.0047	1.2672
Diff (1-2)		-0.1900	0.0912	0.0577		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.9463	0.8744	1.0182	0.0579	0.0347	0.1665
Test		1.1362	0.9932	1.2793	0.1152	0.0690	0.3311
Diff (1-2)	Pooled	-0.1900	-0.3229	-0.0570	0.0912	0.0616	0.1747
Diff (1-2)	Satterthwaite	-0.1900	-0.3317	-0.0483			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-3.29	0.0110
Satterthwaite	Unequal	5.9008	-3.29	0.0169

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.96	0.2114

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-04 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.1638	0.1533	0.0685	1.0235	1.3636
Diff (1-2)		-0.2175	0.1159	0.0733		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		1.1638	0.9735 1.3541	0.1533	0.0918 0.4404
Diff (1-2)	Pooled	-0.2175	-0.3865 -0.0485	0.1159	0.0783 0.2220
Diff (1-2)	Satterthwaite	-0.2175	-0.4046 -0.0305		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-2.97	0.0179
Satterthwaite	Unequal	5.1199	-2.97	0.0303

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	7.00	0.0859

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-06 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.0620	0.0565	0.0253	0.9900	1.1110
Diff (1-2)		-0.1157	0.0572	0.0362		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.9463	0.8744	1.0182	0.0579	0.0347	0.1665
Test		1.0620	0.9919	1.1322	0.0565	0.0338	0.1623
Diff (1-2)	Pooled	-0.1157	-0.1992	-0.0323	0.0572	0.0386	0.1096
Diff (1-2)	Satterthwaite	-0.1157	-0.1992	-0.0323			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-3.20	0.0126
Satterthwaite	Unequal	7.995	-3.20	0.0127

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.05	0.9625

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-04 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	0.7845	0.0703	0.0314	0.6639	0.8332
Diff (1-2)		0.1618	0.0644	0.0407		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		0.7845	0.6972 0.8718	0.0703	0.0421 0.2021
Diff (1-2)	Pooled	0.1618	0.0678 0.2557	0.0644	0.0435 0.1234
Diff (1-2)	Satterthwaite	0.1618	0.0672 0.2563		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.97	0.0041
Satterthwaite	Unequal	7.7172	3.97	0.0044

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.47	0.7164

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-05 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	0.9180	0.0807	0.0361	0.8197	1.0084
Diff (1-2)		0.0283	0.0703	0.0444		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		0.9180	0.8178 1.0183	0.0807	0.0484 0.2320
Diff (1-2)	Pooled	0.0283	-0.0742 0.1307	0.0703	0.0475 0.1346
Diff (1-2)	Satterthwaite	0.0283	-0.0761 0.1326		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.64	0.5424
Satterthwaite	Unequal	7.2558	0.64	0.5441

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.94	0.5360

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-06 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	0.8678	0.0713	0.0319	0.7726	0.9682
Diff (1-2)		0.0785	0.0649	0.0411		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		0.8678	0.7793 0.9563	0.0713	0.0427 0.2048
Diff (1-2)	Pooled	0.0785	-0.0162 0.1732	0.0649	0.0439 0.1244
Diff (1-2)	Satterthwaite	0.0785	-0.0169 0.1739		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.91	0.0923
Satterthwaite	Unequal	7.6796	1.91	0.0938

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.51	0.6979

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-07 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.1328	0.0553	0.0248	1.0780	1.2125
Diff (1-2)		-0.1865	0.0567	0.0358		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.9463	0.8744	1.0182	0.0579	0.0347	0.1665
Test		1.1328	1.0641	1.2016	0.0553	0.0332	0.1590
Diff (1-2)	Pooled	-0.1865	-0.2692	-0.1039	0.0567	0.0383	0.1085
Diff (1-2)	Satterthwaite	-0.1865	-0.2692	-0.1039			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-5.21	0.0008
Satterthwaite	Unequal	7.9835	-5.21	0.0008

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.10	0.9318

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-08 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.1095	0.0893	0.0399	1.0272	1.2613
Diff (1-2)		-0.1632	0.0753	0.0476		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		1.1095	0.9986 1.2203	0.0893	0.0535 0.2565
Diff (1-2)	Pooled	-0.1632	-0.2729 -0.0534	0.0753	0.0508 0.1442
Diff (1-2)	Satterthwaite	-0.1632	-0.2762 -0.0502		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-3.43	0.0090
Satterthwaite	Unequal	6.8611	-3.43	0.0114

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.38	0.4227

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-09 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	0.9663	0.0300	0.0134	0.9187	0.9937
Diff (1-2)		-0.0200	0.0461	0.0292		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		0.9663	0.9290 1.0036	0.0300	0.0180 0.0863
Diff (1-2)	Pooled	-0.0200	-0.0873 0.0473	0.0461	0.0312 0.0884
Diff (1-2)	Satterthwaite	-0.0200	-0.0914 0.0514		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.69	0.5120
Satterthwaite	Unequal	6.005	-0.69	0.5182

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.72	0.2312

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-10 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	0.7496	0.0588	0.0263	0.6811	0.8332
Diff (1-2)		0.1967	0.0584	0.0369		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		0.7496	0.6765 0.8226	0.0588	0.0353 0.1691
Diff (1-2)	Pooled	0.1967	0.1116 0.2819	0.0584	0.0394 0.1119
Diff (1-2)	Satterthwaite	0.1967	0.1115 0.2819		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	5.33	0.0007
Satterthwaite	Unequal	7.9981	5.33	0.0007

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.03	0.9766

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-11 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.0693	0.0588	0.0263	0.9682	1.1195
Diff (1-2)		-0.1230	0.0584	0.0369		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.9463	0.8744	1.0182	0.0579	0.0347	0.1665
Test		1.0693	0.9963	1.1423	0.0588	0.0352	0.1690
Diff (1-2)	Pooled	-0.1230	-0.2081	-0.0378	0.0584	0.0394	0.1118
Diff (1-2)	Satterthwaite	-0.1230	-0.2081	-0.0378			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-3.33	0.0104
Satterthwaite	Unequal	7.9982	-3.33	0.0104

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.03	0.9776

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-12 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.0126	0.0722	0.0323	0.9048	1.0902
Diff (1-2)		-0.0663	0.0655	0.0414		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		1.0126	0.9229 1.1023	0.0722	0.0433 0.2076
Diff (1-2)	Pooled	-0.0663	-0.1618 0.0292	0.0655	0.0442 0.1254
Diff (1-2)	Satterthwaite	-0.0663	-0.1626 0.0299		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.60	0.1478
Satterthwaite	Unequal	7.6394	-1.60	0.1496

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.56	0.6792

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-13 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	0.7362	0.0332	0.0148	0.6983	0.7861
Diff (1-2)		0.2101	0.0472	0.0299		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		0.7362	0.6950 0.7774	0.0332	0.0199 0.0954
Diff (1-2)	Pooled	0.2101	0.1413 0.2790	0.0472	0.0319 0.0904
Diff (1-2)	Satterthwaite	0.2101	0.1381 0.2822		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	7.04	0.0001
Satterthwaite	Unequal	6.3712	7.04	0.0003

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.05	0.3062

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-14 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	0.7983	0.0543	0.0243	0.7457	0.8603
Diff (1-2)		0.1480	0.0561	0.0355		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		0.7983	0.7309 0.8656	0.0543	0.0325 0.1559
Diff (1-2)	Pooled	0.1480	0.0662 0.2299	0.0561	0.0379 0.1075
Diff (1-2)	Satterthwaite	0.1480	0.0661 0.2299		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	4.17	0.0031
Satterthwaite	Unequal	7.9659	4.17	0.0031

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.14	0.9020

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-17 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.0580	0.0535	0.0239	1.0159	1.1458
Diff (1-2)		-0.1117	0.0558	0.0353		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		1.0580	0.9916 1.1244	0.0535	0.0320 0.1537
Diff (1-2)	Pooled	-0.1117	-0.1930 -0.0304	0.0558	0.0377 0.1068
Diff (1-2)	Satterthwaite	-0.1117	-0.1931 -0.0303		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-3.17	0.0132
Satterthwaite	Unequal	7.9496	-3.17	0.0133

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.17	0.8808

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-18 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	0.7637	0.0695	0.0311	0.6639	0.8501
Diff (1-2)		0.1826	0.0640	0.0405		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		0.7637	0.6773 0.8500	0.0695	0.0417 0.1998
Diff (1-2)	Pooled	0.1826	0.0893 0.2759	0.0640	0.0432 0.1226
Diff (1-2)	Satterthwaite	0.1826	0.0887 0.2765		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	4.51	0.0020
Satterthwaite	Unequal	7.7471	4.51	0.0021

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.44	0.7320

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-19 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	0.7590	0.1223	0.0547	0.5564	0.8467
Diff (1-2)		0.1873	0.0957	0.0605		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		0.7590	0.6071 0.9109	0.1223	0.0733 0.3515
Diff (1-2)	Pooled	0.1873	0.0477 0.3269	0.0957	0.0647 0.1834
Diff (1-2)	Satterthwaite	0.1873	0.0373 0.3373		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	3.09	0.0148
Satterthwaite	Unequal	5.7079	3.09	0.0227

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.46	0.1767

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-07 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	0.7230	0.0753	0.0337	0.6535	0.8399
Diff (1-2)		0.2233	0.0672	0.0425		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		0.7230	0.6295 0.8165	0.0753	0.0451 0.2164
Diff (1-2)	Pooled	0.2233	0.1253 0.3213	0.0672	0.0454 0.1287
Diff (1-2)	Satterthwaite	0.2233	0.1242 0.3224		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	5.26	0.0008
Satterthwaite	Unequal	7.5069	5.26	0.0009

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.69	0.6240

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-11 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.0604	0.0680	0.0304	0.9682	1.1282
Diff (1-2)		-0.1141	0.0632	0.0399		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-02		0.9463	0.8744	1.0182	0.0579	0.0347	0.1665
Test		1.0604	0.9760	1.1448	0.0680	0.0407	0.1953
Diff (1-2)	Pooled	-0.1141	-0.2062	-0.0220	0.0632	0.0427	0.1210
Diff (1-2)	Satterthwaite	-0.1141	-0.2066	-0.0216			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-2.86	0.0213
Satterthwaite	Unequal	7.8038	-2.86	0.0218

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.38	0.7641

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-12 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	0.9493	0.0380	0.0170	0.9117	0.9937
Diff (1-2)		-0.00302	0.0490	0.0310		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		0.9493	0.9022 0.9964	0.0380	0.0227 0.1091
Diff (1-2)	Pooled	-0.00302	-0.0744 0.0684	0.0490	0.0331 0.0938
Diff (1-2)	Satterthwaite	-0.00302	-0.0765 0.0704		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.10	0.9246
Satterthwaite	Unequal	6.8993	-0.10	0.9250

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.33	0.4327

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-13 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.0390	0.1198	0.0536	0.8467	1.1503
Diff (1-2)		-0.0927	0.0941	0.0595		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		1.0390	0.8903 1.1877	0.1198	0.0718 0.3441
Diff (1-2)	Pooled	-0.0927	-0.2299 0.0445	0.0941	0.0635 0.1802
Diff (1-2)	Satterthwaite	-0.0927	-0.2396 0.0543		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.56	0.1579
Satterthwaite	Unequal	5.7747	-1.56	0.1722

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.27	0.1885

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-18 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.0219	0.0613	0.0274	0.9187	1.0700
Diff (1-2)		-0.0756	0.0597	0.0377		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		1.0219	0.9457 1.0980	0.0613	0.0367 0.1762
Diff (1-2)	Pooled	-0.0756	-0.1626 0.0114	0.0597	0.0403 0.1143
Diff (1-2)	Satterthwaite	-0.0756	-0.1626 0.0115		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-2.00	0.0802
Satterthwaite	Unequal	7.9742	-2.00	0.0803

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.12	0.9148

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-25 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-02	5	0.9463	0.0579	0.0259	0.8842	1.0272
Test	5	1.0057	0.1003	0.0449	0.8979	1.1413
Diff (1-2)		-0.0594	0.0819	0.0518		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-02		0.9463	0.8744 1.0182	0.0579	0.0347 0.1665
Test		1.0057	0.8811 1.1302	0.1003	0.0601 0.2883
Diff (1-2)	Pooled	-0.0594	-0.1788 0.0601	0.0819	0.0553 0.1569
Diff (1-2)	Satterthwaite	-0.0594	-0.1842 0.0655		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.15	0.2848
Satterthwaite	Unequal	6.4009	-1.15	0.2927

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.00	0.3127

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-02 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	1.2279	0.1484	0.0664	1.0235	1.3809
Diff (1-2)		-0.1373	0.1100	0.0696		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		1.2279	1.0436 1.4122	0.1484	0.0889 0.4265
Diff (1-2)	Pooled	-0.1373	-0.2978 0.0232	0.1100	0.0743 0.2108
Diff (1-2)	Satterthwaite	-0.1373	-0.3186 0.0441		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.97	0.0840
Satterthwaite	Unequal	4.7865	-1.97	0.1081

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	10.07	0.0460

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-03 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	1.1362	0.1152	0.0515	1.0047	1.2672
Diff (1-2)		-0.0457	0.0879	0.0556		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		1.1362	0.9932 1.2793	0.1152	0.0690 0.3311
Diff (1-2)	Pooled	-0.0457	-0.1739 0.0826	0.0879	0.0594 0.1684
Diff (1-2)	Satterthwaite	-0.0457	-0.1863 0.0950		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.82	0.4354
Satterthwaite	Unequal	5.2832	-0.82	0.4470

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.07	0.1087

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-04 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	1.1638	0.1533	0.0685	1.0235	1.3636
Diff (1-2)		-0.0732	0.1133	0.0717		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		1.1638	0.9735 1.3541	0.1533	0.0918 0.4404
Diff (1-2)	Pooled	-0.0732	-0.2385 0.0921	0.1133	0.0765 0.2171
Diff (1-2)	Satterthwaite	-0.0732	-0.2605 0.1141		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.02	0.3369
Satterthwaite	Unequal	4.7384	-1.02	0.3563

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	10.74	0.0411

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=HI-06 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	1.0620	0.0565	0.0253	0.9900	1.1110
Diff (1-2)		0.0286	0.0519	0.0328		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		1.0620	0.9919 1.1322	0.0565	0.0338 0.1623
Diff (1-2)	Pooled	0.0286	-0.0471 0.1042	0.0519	0.0350 0.0994
Diff (1-2)	Satterthwaite	0.0286	-0.0475 0.1047		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.87	0.4093
Satterthwaite	Unequal	7.7303	0.87	0.4102

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.46	0.7231

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-05 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	0.9180	0.0807	0.0361	0.8197	1.0084
Diff (1-2)		0.1726	0.0660	0.0417		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		0.9180	0.8178 1.0183	0.0807	0.0484 0.2320
Diff (1-2)	Pooled	0.1726	0.0764 0.2688	0.0660	0.0446 0.1264
Diff (1-2)	Satterthwaite	0.1726	0.0720 0.2731		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	4.14	0.0033
Satterthwaite	Unequal	6.4128	4.14	0.0053

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.98	0.3153

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-06 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	0.8678	0.0713	0.0319	0.7726	0.9682
Diff (1-2)		0.2228	0.0603	0.0381		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		0.8678	0.7793 0.9563	0.0713	0.0427 0.2048
Diff (1-2)	Pooled	0.2228	0.1349 0.3107	0.0603	0.0407 0.1155
Diff (1-2)	Satterthwaite	0.2228	0.1324 0.3132		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	5.85	0.0004
Satterthwaite	Unequal	6.9063	5.85	0.0007

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.32	0.4346

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-07 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	1.1328	0.0553	0.0248	1.0780	1.2125
Diff (1-2)		-0.0422	0.0512	0.0324		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		1.1328	1.0641 1.2016	0.0553	0.0332 0.1590
Diff (1-2)	Pooled	-0.0422	-0.1170 0.0325	0.0512	0.0346 0.0982
Diff (1-2)	Satterthwaite	-0.0422	-0.1173 0.0328		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-1.30	0.2286
Satterthwaite	Unequal	7.7832	-1.30	0.2296

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.40	0.7520

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-08 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	1.1095	0.0893	0.0399	1.0272	1.2613
Diff (1-2)		-0.0189	0.0713	0.0451		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		1.1095	0.9986 1.2203	0.0893	0.0535 0.2565
Diff (1-2)	Pooled	-0.0189	-0.1228 0.0851	0.0713	0.0481 0.1365
Diff (1-2)	Satterthwaite	-0.0189	-0.1290 0.0912		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.42	0.6864
Satterthwaite	Unequal	6.0416	-0.42	0.6899

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	3.64	0.2383

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-09 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	0.9663	0.0300	0.0134	0.9187	0.9937
Diff (1-2)		0.1243	0.0393	0.0249		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		0.9663	0.9290 1.0036	0.0300	0.0180 0.0863
Diff (1-2)	Pooled	0.1243	0.0670 0.1816	0.0393	0.0265 0.0753
Diff (1-2)	Satterthwaite	0.1243	0.0652 0.1834		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	5.00	0.0011
Satterthwaite	Unequal	6.8191	5.00	0.0017

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.43	0.4118

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-10 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	0.7496	0.0588	0.0263	0.6811	0.8332
Diff (1-2)		0.3410	0.0531	0.0336		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		1.0906	1.0325	1.1487	0.0468	0.0280	0.1344
Test		0.7496	0.6765	0.8226	0.0588	0.0353	0.1691
Diff (1-2)	Pooled	0.3410	0.2635	0.4185	0.0531	0.0359	0.1018
Diff (1-2)	Satterthwaite	0.3410	0.2628	0.4192			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	10.14	<.0001
Satterthwaite	Unequal	7.6123	10.14	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.58	0.6672

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-12 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	1.0126	0.0722	0.0323	0.9048	1.0902
Diff (1-2)		0.0780	0.0609	0.0385		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		1.0126	0.9229 1.1023	0.0722	0.0433 0.2076
Diff (1-2)	Pooled	0.0780	-0.0108 0.1667	0.0609	0.0411 0.1166
Diff (1-2)	Satterthwaite	0.0780	-0.0135 0.1694		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	2.03	0.0774
Satterthwaite	Unequal	6.8519	2.03	0.0833

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.39	0.4203

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-13 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	0.7362	0.0332	0.0148	0.6983	0.7861
Diff (1-2)		0.3544	0.0406	0.0256		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		0.7362	0.6950 0.7774	0.0332	0.0199 0.0954
Diff (1-2)	Pooled	0.3544	0.2953 0.4135	0.0406	0.0274 0.0777
Diff (1-2)	Satterthwaite	0.3544	0.2941 0.4147		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	13.82	<.0001
Satterthwaite	Unequal	7.2145	13.82	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.98	0.5230

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-14 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	0.7983	0.0543	0.0243	0.7457	0.8603
Diff (1-2)		0.2923	0.0506	0.0320		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		0.7983	0.7309 0.8656	0.0543	0.0325 0.1559
Diff (1-2)	Pooled	0.2923	0.2185 0.3662	0.0506	0.0342 0.0970
Diff (1-2)	Satterthwaite	0.2923	0.2182 0.3665		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	9.13	<.0001
Satterthwaite	Unequal	7.8299	9.13	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.35	0.7805

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-17 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	1.0580	0.0535	0.0239	1.0159	1.1458
Diff (1-2)		0.0326	0.0502	0.0318		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		1.0580	0.9916 1.1244	0.0535	0.0320 0.1537
Diff (1-2)	Pooled	0.0326	-0.0407 0.1058	0.0502	0.0339 0.0962
Diff (1-2)	Satterthwaite	0.0326	-0.0409 0.1061		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.03	0.3353
Satterthwaite	Unequal	7.8601	1.03	0.3358

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.31	0.8010

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-18 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	0.7637	0.0695	0.0311	0.6639	0.8501
Diff (1-2)		0.3269	0.0593	0.0375		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		0.7637	0.6773 0.8500	0.0695	0.0417 0.1998
Diff (1-2)	Pooled	0.3269	0.2405 0.4133	0.0593	0.0400 0.1135
Diff (1-2)	Satterthwaite	0.3269	0.2383 0.4155		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	8.72	<.0001
Satterthwaite	Unequal	7.0039	8.72	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.21	0.4611

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-19 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	0.7590	0.1223	0.0547	0.5564	0.8467
Diff (1-2)		0.3316	0.0926	0.0586		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		0.7590	0.6071 0.9109	0.1223	0.0733 0.3515
Diff (1-2)	Pooled	0.3316	0.1965 0.4667	0.0926	0.0626 0.1774
Diff (1-2)	Satterthwaite	0.3316	0.1823 0.4809		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	5.66	0.0005
Satterthwaite	Unequal	5.1447	5.66	0.0022

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.84	0.0893

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-07 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	0.7230	0.0753	0.0337	0.6535	0.8399
Diff (1-2)		0.3676	0.0627	0.0396		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		0.7230	0.6295 0.8165	0.0753	0.0451 0.2164
Diff (1-2)	Pooled	0.3676	0.2762 0.4590	0.0627	0.0423 0.1201
Diff (1-2)	Satterthwaite	0.3676	0.2730 0.4622		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	9.27	<.0001
Satterthwaite	Unequal	6.6867	9.27	<.0001

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.59	0.3788

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-11 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	1.0604	0.0680	0.0304	0.9682	1.1282
Diff (1-2)		0.0302	0.0583	0.0369		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		1.0604	0.9760 1.1448	0.0680	0.0407 0.1953
Diff (1-2)	Pooled	0.0302	-0.0549 0.1153	0.0583	0.0394 0.1118
Diff (1-2)	Satterthwaite	0.0302	-0.0568 0.1173		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.82	0.4364
Satterthwaite	Unequal	7.0937	0.82	0.4393

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	2.11	0.4867

Oakland Bay Statistical Comparison
T-test Results, This is a 2-tailed result
See Summary Page for 1-tail Result

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----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-12 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	0.9493	0.0380	0.0170	0.9117	0.9937
Diff (1-2)		0.1413	0.0426	0.0269		

group	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
RF-03		1.0906	1.0325	1.1487	0.0468	0.0280	0.1344
Test		0.9493	0.9022	0.9964	0.0380	0.0227	0.1091
Diff (1-2)	Pooled	0.1413	0.0792	0.2034	0.0426	0.0288	0.0816
Diff (1-2)	Satterthwaite	0.1413	0.0787	0.2038			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	5.24	0.0008
Satterthwaite	Unequal	7.6746	5.24	0.0009

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.52	0.6955

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-13 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	1.0390	0.1198	0.0536	0.8467	1.1503
Diff (1-2)		0.0516	0.0909	0.0575		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		1.0390	0.8903 1.1877	0.1198	0.0718 0.3441
Diff (1-2)	Pooled	0.0516	-0.0810 0.1842	0.0909	0.0614 0.1742
Diff (1-2)	Satterthwaite	0.0516	-0.0946 0.1978		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	0.90	0.3956
Satterthwaite	Unequal	5.1923	0.90	0.4091

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	6.56	0.0958

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-18 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	1.0219	0.0613	0.0274	0.9187	1.0700
Diff (1-2)		0.0687	0.0545	0.0345		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		1.0219	0.9457 1.0980	0.0613	0.0367 0.1762
Diff (1-2)	Pooled	0.0687	-0.0108 0.1483	0.0545	0.0368 0.1045
Diff (1-2)	Satterthwaite	0.0687	-0.0118 0.1492		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.99	0.0814
Satterthwaite	Unequal	7.4768	1.99	0.0839

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.72	0.6124

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=SH-25 -----

The TTEST Procedure

Variable: Result

group	N	Mean	Std Dev	Std Err	Minimum	Maximum
RF-03	5	1.0906	0.0468	0.0209	1.0159	1.1369
Test	5	1.0057	0.1003	0.0449	0.8979	1.1413
Diff (1-2)		0.0849	0.0783	0.0495		

group	Method	Mean	95% CL Mean	Std Dev	95% CL Std Dev
RF-03		1.0906	1.0325 1.1487	0.0468	0.0280 0.1344
Test		1.0057	0.8811 1.1302	0.1003	0.0601 0.2883
Diff (1-2)	Pooled	0.0849	-0.0292 0.1990	0.0783	0.0529 0.1499
Diff (1-2)	Satterthwaite	0.0849	-0.0380 0.2078		

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	1.72	0.1246
Satterthwaite	Unequal	5.6604	1.72	0.1401

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	4.60	0.1685

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-04 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03	5	40.0	27.50	4.787136	8.0
Test	5	15.0	27.50	4.787136	3.0

Wilcoxon Two-Sample Test

Statistic 40.0000

Normal Approximation

Z 2.5067

One-Sided Pr > Z 0.0061

Two-Sided Pr > |Z| 0.0122

t Approximation

One-Sided Pr > Z 0.0167

Two-Sided Pr > |Z| 0.0335

Z includes a continuity correction of 0.5.

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-04 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	6.8182
DF	1
Pr > Chi-Square	0.0090

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-11 -----

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable Result
Classified by Variable group

group	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
RF-03	5	31.0	27.50	4.787136	6.20
Test	5	24.0	27.50	4.787136	4.80

Wilcoxon Two-Sample Test

Statistic 31.0000

Normal Approximation

Z 0.6267

One-Sided Pr > Z 0.2654

Two-Sided Pr > |Z| 0.5309

t Approximation

One-Sided Pr > Z 0.2732

Two-Sided Pr > |Z| 0.5464

Z includes a continuity correction of 0.5.

----- Test=Larval Dev - Batch 2 Endpoint=Percent Normal Survival Treatment=OB-11 -----

The NPAR1WAY Procedure

Kruskal-Wallis Test

Chi-Square	0.5345
DF	1
Pr > Chi-Square	0.4647